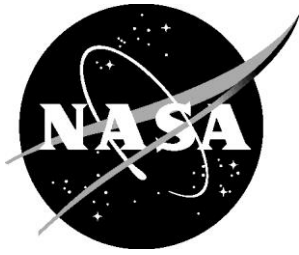


NASA/TM-2015-218770



NASA DOEPOD NDE Capabilities Data Book

Edward R. Generazio
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July 2015

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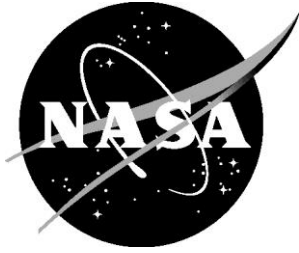
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Overview

This data book contains the Directed Design of Experiments for Validating Probability of Detection (POD) Capability of NDE Systems (DOEPOD) analyses of the nondestructive inspection data presented in the NTIAC, Nondestructive Evaluation (NDE) Capabilities Data Book [1]. DOEPOD is designed as a decision support system to validate inspection system, personnel, and protocol demonstrating 0.90 POD with 95% confidence at critical flaw sizes, $a_{90/95}$. Although 0.90 POD with 95% confidence at critical flaw sizes is often stated as an inspection requirement in inspection documents, including NASA Standards [2], NASA critical aerospace applications have historically only accepted 0.978 POD or better with a 95% one-sided lower confidence bound exceeding 0.90 at critical flaw sizes, $a_{90/95}$. (see Figure 11 of [3]).

The test methodology used in DOEPOD is based on the field of statistical sequential analysis founded by Abraham Wald,

“Sequential analysis is a method of statistical inference whose characteristic feature is that the number of observations required by the procedure is not determined in advance of the experiment. The decision to terminate the experiment depends, at each stage, on the results of the observations previously made. A merit of the sequential method, as applied to testing statistical hypotheses, is that test procedures can be constructed which require, on average, a substantially smaller number of observations than equally reliable test procedures based on a predetermined number of observations.” A. Wald [4]

Details of the analysis methods used in DOEPOD are fully described in the DOEPOD [5] manual, and “Directed Design of Experiments for Validating Probability of Detection Capability of a Testing System” US Patent Serial Number: US 8,108,178. Additional details are available on the operation [6] [7] and proof property validation [7] of DOEPOD.

The critical importance of validating methodologies used for establishing POD have been highlighted [3] and this data book provides the DOEPOD validation of POD capabilities for NDE systems, materials, structures, and flaw types presented in the NTIAC, Nondestructive Evaluation (NDE) Capabilities Data Book [1].











The maximum likelihood estimation (MLE) method used in DOEPOD to estimate the probability of detection using a two parameter logit model (MLE-Logit) are identical to that used in NTIAC [1]. This MLE method was chosen as a verification of data integrity so that the MLE POD plots in NTIAC [1] and this data book are identical except where this data book provides a correction to NTIAC [1] analysis. Corrections to NTIAC [1] are indicated in the Errata listed at the end of this document. Other MLE-Logit methods may be used, and a simple grid search for maximizing parameters has been demonstrated [3] to be effective. The POD analysis methods of NTIAC [1] and a military handbook [8] use a predetermined number of observations.

It is noted here that the MLE-Logit POD curve fit plots shown in this data book and NTIAC [1] are not validated for implementation [3]. Internal and external validation of MLE-Logit POD estimates is required prior to implementation and initial guidance on validation procedures is provide elsewhere [3]. In contrast, if CASE 1, CASE 1+, CASE 1# identifications are identified by DOEPOD analyses of test data, then the system, personnel, and inspection protocol maybe considered for acceptance by engineering authority for implementation application on relevant systems

437 NTIAC data sets are analyzed by DOEPOD to yield a CASE identification for each data set. Possible CASE identifications are listed in Table 1. The reader is referred to the DOEPOD manual [5] for definitions of the parameters in Table 1, and for design of experiment instructions on how to proceed to validate systems and personnel inspection capability. The DOEPOD analysis highlights 72 NTIAC data sets has CASE 1, CASE 1+, or CASE 1# data sets all exhibit 0.978 POD or better with a 95% one-sided lower confidence bound exceeding 0.90 at critical flaw sizes and meet the historical NASA acceptance criteria when actions in Table 1 are addressed.

DOEPOD acronyms are defined at the end of this overview.

Table 1

	Is 90/95 POD at X_{pod} reached? (i.e., lower confidence bound, X_{Best_LCL} , is equal to or greater than 0.9)	DOEPOD Analysis Summary and Recommendations
CASE 1		90/95 POD at X_{pod} has been reached. Actions: Address any false call warnings.
CASE 1+		90/95 POD at X_{pod} has been reached. Actions: Misses above X_{pod} need to be explained and resolved. Address any false call warnings.
CASE 1#		90/95 POD at X_{pod} has been reached. Actions: Further validation at flaw sizes greater than X_{pod} is required. Add large flaws. Address any false call warnings.
CASE 1*		90/95 POD at X_{pod} has been reached. Actions: Further validation at flaw sizes greater than X_{pod} is required. Add large flaws. Misses above X_{pod} need to be explained and resolved. Address any false call warnings.
CASE 2		90/95 POD at X_{pod} has been reached, however, there are an excessive number Misses above X_{pod} . Actions: Additional validation at identified flaw sizes is required. Add flaws per instructions.
CASE 4		90/95 POD at X_{pod} has not been reached. Actions: Increase number of flaws at $X_{POH=1}$ or X_{Best_LCL} .
CASE 5		90/95 POD at X_{pod} has not been reached and there are Misses above X_{Best_LCL} . Actions: Increase the number of flaws at $X_{POH=1}$.
CASE 6		90/95 POD at X_{pod} has not been reached. The POH is fluctuating above X_{Best_LCL} and X_{POH} is greater than $X_i/3$. The inspection system is unstable for the flaw size range analyzed. Actions: Increase the flaw size range by a factor of two.
CASE 7		90/95 POD at X_{pod} has not been reached. The inspection system is unstable for the entire flaw size range analyzed. Actions: The inspection system may not be appropriate or increase the flaw size range by a factor of two.
SURVEY CASES		The optimized class width exceeds $1/3 XL$ and X_{pod} has not been reached. The class width optimization has determined that there is a class width for which the smallest $X_{POH=1}$ class length is identified. Actions: Add flaws at Survey/Optimum X_{POH}



= YES



= NO

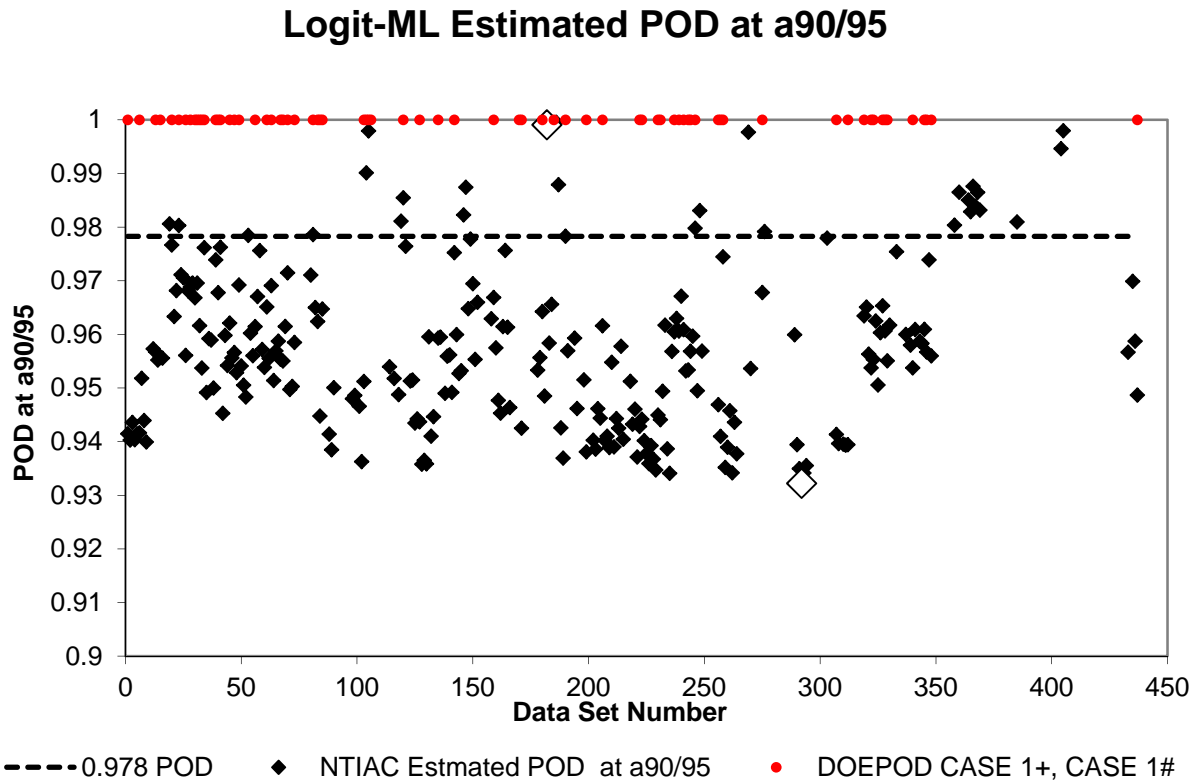


Figure 1. Logit-ML Estimated POD at critical flaw size, a90/95, from NTIAC (1997). Open diamonds refer to data sets each having 325 samples. The horizontal dashed line is the NASA minimum binomial estimated POD (0.978) accepted in practice at a flaw size, X_{pod} , for failure critical applications. DOEPOD analyses identified 72 (red disk) data NTIAC data sets that are classified as CASE 1+, or CASE 1# having estimated POD exceeding 0.978 at a flaw size, X_{pod} . Note that X_{pod} and a90/95 are flaw size inspection capability labelling designations for DOEPOD and NTIAC Data Books, respectively. X_{pod} and a90/95 do not necessarily refer to the same flaw size for the same data sets.

A top level summary of the DOEPOD analyses of the nondestructive inspection data presented in the NTIAC Data Book [1] is provide in Table 2. CASE 1+, CASE 1#, CASE 1*, and CASE 2 all exhibit at least one singular point where the one-sided lower 95% confidence bound on POD exceeds 0.90 at a critical flaw size and additional actions are needed per Table 2 instructions to complete the validation over a range of larger flaw sizes. CASE 4 data sets represent data sets that are similar to CASE 2 data sets, however additional data at selected flaws sizes is needed to move a CASE 4 data set to a CASE 2 data set. The CASE 5 data sets have excessive false negatives in the flaw size range tested, therefore data for larger flaw sizes is needed. CASE 6 data sets exhibit local instability over a portion of the flaw sizes tested, therefore, therefore data for larger flaw sizes is needed or the inspection system is inappropriate for the inspection required. CASE 7 data sets exhibit instability over the entire the flaw size range tested, therefore, therefore data for larger flaw sizes is needed or the inspection system is inappropriate for the

inspection required.

Table 2

CASE ID	Number of Data Sets	Action Needed
CASE 1+	2	Explain of observed false negatives
CASE 1#	71	Further validation at larger flaws. Add test specimens with larger flaws.
CASE 1*	80	Further validation at larger flaw. Add test specimens with larger flaws. Explain observed false negatives.
CASE 2	46	Add test specimens at identified flaw sizes to demonstrate POD to be monotonically increasing with flaw size
CASE 4	37	Increase amount of relevant data by adding test specimens at identified flaw sizes to establish acceptable POD
CASE 5	12	Add test specimens with increased flaw sizes to address excessive false negatives at smaller flaw sizes.
CASE 6	91	Add test specimens with flaw sizes at least twice as large to address local inspection system oscillation instability or utilize a different inspection system or method.
CASE 7	98	Add test specimens with flaw sizes at least twice as large to address global inspection system instability or utilize a different inspection system or method.

A summary of the output of parameter values from the DOEPOD analysis of nondestructive inspection data and methods presented in the NTIAC Data Book [1] is listed in Table 3. The descriptions of the parameters in Table 3 are detailed in reference [5]. The data file name is in column 3 of Table 3 and is used to identify the companion DOEPOD analysis output file. The printouts of the DOEPOD analysis output files follow in alphabetic in order to facilitate location. The electronic DOEPOD analysis output files and a searchable summary of parameter values from the DOEPOD analysis (Table 3) are available in the companion CD-ROM entitled “NASA DOEPOD Nondestructive Evaluation (NDE) Capabilities Data Book” which may be obtained upon request from the publisher.

DOEPOD software is available from NASA by contacting Kathy A. Dezern, phone: 757.864.5704, email: kathy.a.dezern@nasa.gov

Example

As an illustrative example we examine the first data set A1001AL. The multi-parameter maximum likelihood analysis in the NTIAC NDE Capabilities Data Book indicates the inspection system to have a 0.94 POD with lower single-sided 95% confidence bound that exceeds 0.9 at 0.27" flaw size (column labeled "NTIAC 90/95 occurs at POD (inch)"). In contrast, the NASA DOEPOD point estimate based method (no curve fitting) indicates that the acceptable capability of this inspection system is at or above the 0.61" flaws size (column labeled Xpod CLASSLENGTH) where 1.0 POD is estimated (column labeled POH or POD @Xpod) with a single-sided lower 95% confidence bound that exceeds 0.9 at 0.61" flaw size.

Examining the data analyses for A1001AL (page 20). There are five Misses (Xs) for the 72 flaws larger than the 0.27" flaw size yielding a 0.93 point estimate of POD for these grouped larger flaws with a single-sided lower 95% confidence bound of 0.83. The multi-parameter POD curve fit does not highlight these Misses as important. DOEPOD indicates that the POD capability for this system and for fracture critical inspections is at or above the 0.61" flaw size. Even then, DOEPOD analysis indicates [RED notes in chart] that additional large flaw data is needed to complete the validation before accepting the 0.61" flaw size capability of this inspection system, and that false call analysis is also required.

Accepting the 0.27" flaw size identified by multi-parameter maximum likelihood method as the detection capability of this inspection system for fracture critical inspections adds known risk as highlighted by the 0.93 point estimate of POD with a single-sided lower bound of 0.83 for the largest flaws. DOEPOD analysis indicates that the POD capability for this system and for fracture critical inspections is at or above the 0.61" flaw size.

DOEPOD DEFINITIONS

C_L	Class length, e.g., inspection parameter (length, depth, area, etc.)
C_W	Class width (width of the moving class; all flaws within the range C_L to $C_L - C_W$, inclusively, are group together)
Hit	Flaw is detected
Miss	Flaw is not detected
MLE	Maximum Likelihood Estimate of POD using a two parameter statistical model. The MLE is included in DOEPOD as a user request for comparison. <i>The included method is that of the NDE Capabilities Data Book, 3rd ed., Nov. 1997, NTIAC DB-97-02, DoD. The use of MLE estimated POD is not recommend unless a full validation of the estimated POD is performed (see Generazio, E. R., Interrelationships Between Receiver/Relative Operating Characteristics Display, Binomial, Logit, and Bayes' Rule Probability of Detection Methodologies, NASA-TM-2014-21818, April 2014.</i>
Need	Add new samples to the existing specimen set in order to reach the number of samples required at the class length. Note that a single specimen may contain more than one flaw, so that “add samples” refers to “add flaws”.
LCL	Lower confidence bound (value) of POH @ 95% confidence
Opt. X_{POH}	Optimum X_{POH} is identified for non-survey data sets. Optimum X_{POH} is the smallest class length and largest class width at which the minimum $X_{POH} = 1$ occurs. Optimum X_{POH} may be more aggressive than optional, X_{PODopt} , or $X_{BestLCL}$, when the class width is constrained to the companion Optimum X_{POH} class width listed. DOEPOD does not force use of Optimum X_{POH} over X_{PODopt} , or $X_{BestLCL}$. Stability has not been demonstrated at Optimum X_{POH} , therefore there is an additional risk that Optimum X_{POH} can not be satisfied to reach X_{POD}
POH	Estimate of Probability of Hit (Number of Hits in Class Length/Total Number of Trials in Class Length)
POD	Probability of Detection (the true POD obtained if an infinite number of samples are used)
Signal Amplitude	Scalar amplitude output of NDE inspection system

Survey Data Sets	Survey Data Sets are data sets that have a sparse or disperse collection of samples. The moving class width optimization has identified this data set as having limited applications where the classwidth has exceeded $X_L/3$ <u>and</u> X_{POD} has not been reached. An alternate optimization of X_{POH} is used to provide guidance. The Survey Set is the recommended initial set for DOEPOD.
Survey X_{POH}	Survey X_{POH} is only identified for data sets determined to be Survey Data Sets. Survey X_{POH} is the smallest class length and largest class width at which the minimum $X_{POH} = 1$ class length occurs. Survey X_{POH} is the minimum class length at which X_{POD} may be achieved when the class width is constrained to the companion survey class width listed. Survey X_{POH} is utilized in all cases in which a Survey Set is identified by DOEPOD.
$X_{Best\ LCL}$	Class length exhibiting the maximum or “best” LCL. The best class length is determined by increasing the moving class width until a maximum LCL is obtained
X_i	Class length X at point “i”
X_L	Largest class length in entire data set
X_m	Class length near the mid-point between the largest and the smallest class lengths having no Misses
X_p	90/95 POD or greater is achieved, by grouping numbers of specimens, for the range X_p to X_L . X_p is only provided when X_{POD} has been identified. For inspector qualification, X_p cannot be less than the largest flaw Missed. The class width of flaw set used for inspector qualification is listed as Inspector Classwidth @ X_p in the charts. The flaw sizes used for inspector qualification range from X_p to (X_p - Classwidth @ X_p).
X_{POD}	Class length at which the lower confidence bound (value) is 0.90 (90/95 POD) @ 95% confidence.
$X_{POH=1}, X_{POH}$	Class length where there are no Misses above this class length, and $POH = 1$ above this class length.
X_{PODopt}	Optional existing smaller class length where X_{POD} may also be achieved if additional samples are added and Hits are identified.
X_S	Smallest class length in the data set
UCL	Upper confidence bound (value) of the false call rate @ 95% confidence

****Validated** 90/95 POD has been reached at a classlength, X_{POD} . In order to achieve 90/95 POD for the class length range between X_{POD} and the largest class length in the data set, X_L , inclusively, validation at a classlength near the mid-point and largest classlength is required^ξ. If, in addition, there exists a class length, X_P , where 90/95 POD or greater exists for all class lengths in the range X_P to X_L , and $X_P = X_{POD}$, and there is a sufficient number and adequate range and distribution of classlengths greater than X_{POD} , then the validation extends from X_{POD} to X_L . When this occurs, validation at a classlength near the mid-point and largest classlength is satisfied. ^ξ**WARNING:** There are inspection systems that exhibit an oscillating or non-uniform POD. For example when the flaws are greater than the eddy current footprint, when large flaws are loaded to closure, or when the physics of the inspection processes changes modes over the flaw size range of interest. If flaws in these ranges or conditions are to be detected with a 90/95 POD, then samples in these ranges need to be included. When multiple base parameters are combined, e.g., (length)x(width) = area, and the combine parameter (e.g., area) is used as the class length, then 90/95 POD is only valid if the inspection technology has been validated to quantitatively measure each of the base parameters, or if the inspection technology is validated to quantitatively measure the new combine parameter. When all CASE 1 or CASE 1+ requirements are met, and the above warnings have been evaluated and the upper confidence bound of the false call rate is not excessive, then the inspection system is validated between X_{POD} and the largest class length X_L for the flaw types, materials, and structure of the test specimen set. Validated is defined here to be: “This confidence bound procedure has a probability of at least 0.95 to give a lower bound for the 90% POD point that exceeds true (unknown) 90% POD point. This is referred to as 90/95 POD, and for larger flaws in the evaluation range 90/95 POD is met or exceeded. DOEPOD SOFTWARE AND ANY ACCOMPANYING DOCUMENTATION IS RELEASED "AS IS". THE U.S. GOVERNMENT MAKES NO WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL THE U.S. GOVERNMENT BE LIABLE FOR ANY DAMAGES, INCLUDING ANY LOST PROFITS, LOST SAVINGS, OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE, OR INABILITY TO USE THIS SOFTWARE OR ANY ACCOMPANYING DOCUMENTATION, EVEN IF INFORMED IN ADVANCE OF THE POSSIBILITY OF SUCH DAMAGES. THIS SOFTWARE MAY NOT BE MODIFIED, DISTRIBUTED, OR REPRODUCED.

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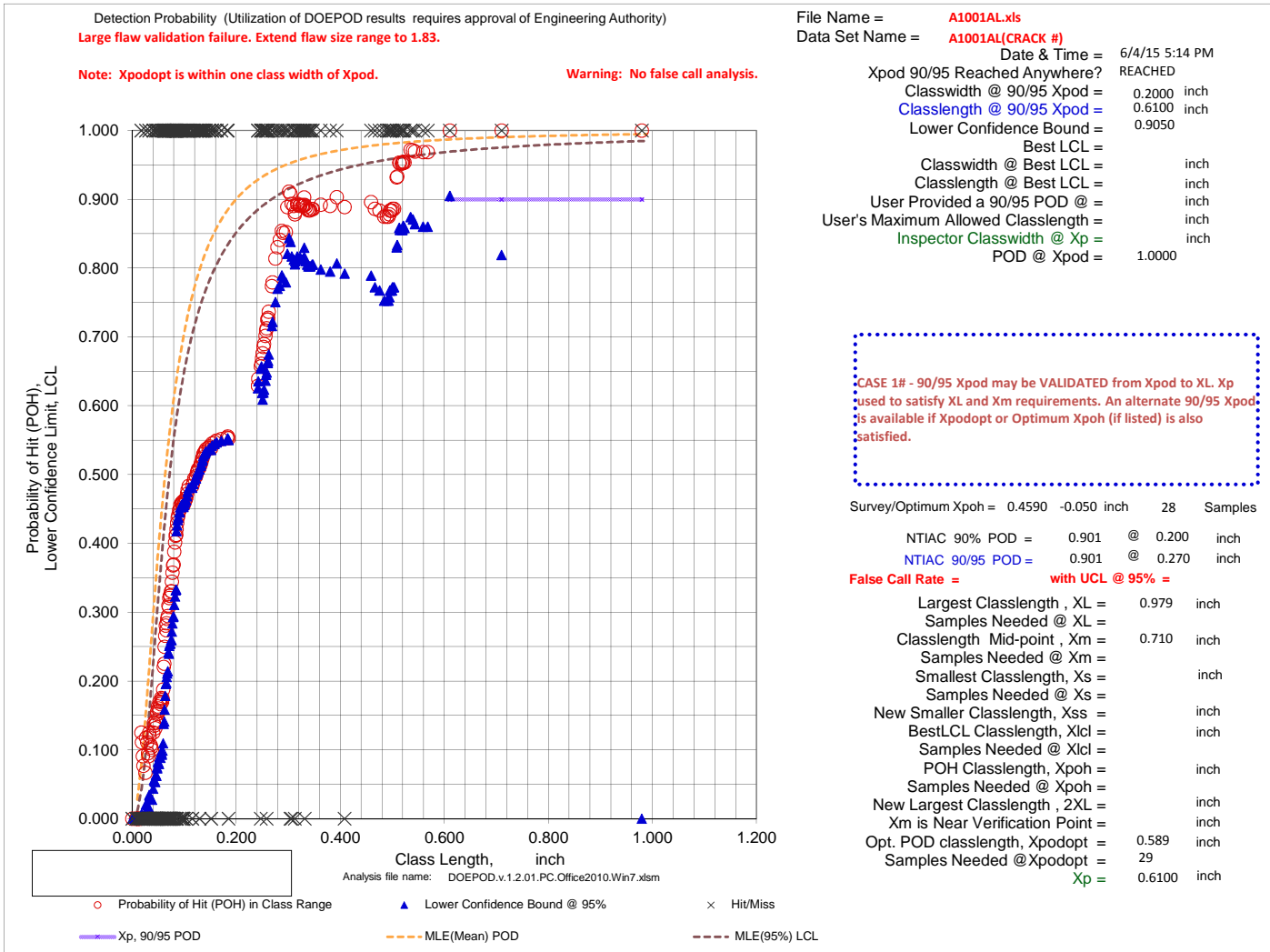
- [1] **W. D. Rummel and G. Matzkanin, *Nondestructive Evaluation (NDE) Capabilities Data Book*, 3rd ed., Vols. NTIAC DB-97-02, Austin, Texas, 1997.**
- [2] **NASA, "NASA-STD-5009, Nondestructive Evaluation Requirements for Fracture Critical Metallic Components," 4 April 2008.**
- [3] **E. R. Generazio, "NASA/TM–2014-218183, Interrelationships Between Receiver/Relative Operating Characteristics Display, Binomial, Logit, and Bayes' Rule Probability of Detection Methodologies," *NASA/TM-2014-218183*, April 2014.**
- [4] **A. Wald, *Sequential Analysis*, New York, New York: John Wiley & Sons, Inc., 1947, p. 1.**
- [5] **E. R. Generazio, "NASA/TM–2015-218696, Directed Design of Experiments for Validating Probability of Detection Capability of NDE Systems (DOEPOD)," March 2015.**
- [6] **E. R. Generazio, "Design of Experiments for Validating Probability of Detection Capability of NDT Systems and for Qualification of Inspectors," *Materials Evaluation*, vol. 67, no. No. 6, pp. 730-738, June 2009.**
- [7] **E. R. Generazio, "Validating Design of Experiments for Determining Probability of Detection Capability for Fracture CRitical Applications," *Materials Evaluation*, vol. 69, no. No.2, pp. 1399-1407, December 2011.**
- [8] **Department of Defense, "MIL-HDBK-1823A, Nondestructive Evaluation System Reliability Assessment," 7 April 2009.**

DOEPOD CAPABILITIES DATA BOOK - SUMMARY

TABLE 3*

MATERIAL	STRUCTURE	FILE NAME	Analysis Date/Time	CASE ID	Xpod CLASS-LENGTH	Xpod CLASS-WIDTH	LCL	Best LCL CLASS-WIDTH	Best LCL CLASS-LENGTH	XL	XL #	Xm	Xm #	Xs	Xs #	Xtcl	Xtcl #	Xpoh	Xpoh #	ZKL	ZKL #	Xss	Xss #	Xpodopt	Xpodopt #	False Call UCL	False Call Rate	False Call Length (in)	False Call Area (in*2)	Length or Area per Inspection (in or in*2) =	False Call Opportunities	False Calls	False Call Flag	MLE flag	NTIAC 90% POD occurs at (in)	NTIAC 90% POD occurs at (in)	XP	POI or POD @ Xpod	METHO D		
2219 AI T-87		F8001(3D).xls	6/5/15 5:49 AM	CASE 7				0.6075	0.0050	0.1780										0.4300	29										Warning: No false call analysis.							RT			
2219 AI T-87	weld LFC	F8001(3L).xls	6/5/15 5:50 AM	CASE 7				0.6076	0.0070	0.0790										2.3760	29											Warning: No false call analysis.							RT		
2219 AI T-87	weld LFC	F8002(3D).xls	6/5/15 5:52 AM	CASE 7				0.5709	0.0420	0.2150										0.4300	29											Warning: No false call analysis.							RT		
2219 AI T-87	weld LFC	F6002(3L).xls	6/5/15 5:53 AM	CASE 6				0.6070	0.0050	0.5030	1.1880	26						1.1880	26	2.3760	29											Warning: No false call analysis.							RT		
2219 AI T-87	weld LFC	F8003(3D).xls	6/5/15 5:55 AM	CASE 4				0.8666	0.0620	0.2150	0.2150	8						0.2150	8	0.4300	29											Warning: No false call analysis.							RT		
2219 AI T-87	weld LFC	F8003(3L).xls	6/5/15 5:56 AM	CASE 4				0.8195	0.3000	1.1880	1.1880	14						1.1880	14	0.9810	26	2.3760	29									Warning: No false call analysis.							RT		
2219 AI T-87	weld TFC	F7001(3D).xls	6/5/15 5:58 AM	CASE 4				0.6076	0.0420	0.2350	0.2350	23						0.2350	23	0.2350	26	0.4700	29									Warning: No false call analysis.							RT		
2219 AI T-87	weld TFC	F7001(3L).xls	6/5/15 5:59 AM	CASE 6				0.6070	0.0130	0.2730	1.4350	26							1.4350	26	2.8700	29										Warning: No false call analysis.							RT		
2219 AI T-87	weld TFC	F7002(3D).xls	6/5/15 6:01 AM	CASE 4				0.6070	0.0420	0.2350	0.2350	23						0.2350	23	0.2350	26	0.4700	29									Warning: No false call analysis.							RT		
2219 AI T-87	weld TFC	F7002(3L).xls	6/5/15 6:03 AM	CASE 6				0.6070	0.0130	0.2730	1.4350	26							1.4350	26	2.8700	29										Warning: No false call analysis.							RT		
2219 AI T-87	weld TFC	F7003(3D).xls	6/5/15 6:05 AM	CASE 6				0.8195	0.0050	0.0480	0.2350	26						0.2350	26	0.4700	29											Warning: No false call analysis.							RT		
2219 AI T-87	weld TFC	F7003(3L).xls	6/5/15 6:06 AM	CASE 6				0.7933	0.0240	0.3060	1.4350	26							1.4350	26	2.8700	29										Warning: No false call analysis.							RT		
2219 AI T-87	weld flush LFC	F8001(3D).xls	6/5/15 6:08 AM	CASE 4				0.8444	0.0610	0.2760	0.2760	11						0.2760	11	0.2760	29	0.5520	29									Warning: No false call analysis.							RT		
2219 AI T-87	weld flush LFC	F8001(3L).xls	6/5/15 6:09 AM	CASE 7				0.8739	0.6000	1.5620										3.1240	29											Warning: No false call analysis.			MLE Divergence Warning: Initial results listed.				RT		
2219 AI T-87	weld flush LFC	F8002(3D).xls	6/5/15 6:11 AM	CASE 4				0.8931	0.0690	0.2760	0.2760	2						0.2760	2	0.2760	29	0.5520	29									Warning: No false call analysis.			MLE Divergence Warning: Initial results listed.				RT		
2219 AI T-87	weld flush LFC	F8002(3L).xls	6/5/15 6:12 AM	CASE 4				0.8813	0.5000	1.5620	1.5620	5						1.5620	5	1.5620	29	3.1240	29									Warning: No false call analysis.			MLE Divergence Warning: Initial results listed.				RT		
2219 AI T-87	weld flush LFC	F8003(3D).xls	6/5/15 6:15 AM	CASE 4				0.8931	0.0690	0.2760	0.2760	2						0.2760	2	0.2760	29	0.5520	29									Warning: No false call analysis.			MLE Divergence Warning: Initial results listed.				RT		
2219 AI T-87	weld flush LFC	F8003(3L).xls	6/5/15 6:17 AM	CASE 11	0.3530	0.0300	0.9050				1.5620	1.1190																				Warning: No false call analysis.						1.061	1.000	RT	
2219 AI T-87	weld flush TFC	F9000CD.XLS	6/5/15 6:18 AM	CASE 7				0.5619	0.0120	0.0540										0.1080	29											Warning: No false call analysis.							RT		
2219 AI T-87	weld flush TFC	F9001(3D).xls		CASE 7																0.4300	29											Warning: No false call analysis.			MLE Divergence Warning: Initial results listed.				RT		
2219 AI T-87	weld flush TFC	F9001(3L).xls		CASE 7																0.9900	29											Warning: No false call analysis.			MLE Divergence Warning: Initial results listed.				RT		
2219 AI T-87	weld flush TFC	F9002(3D).xls	6/5/15 6:19 AM	CASE 4				0.3684	0.0010	0.2150	0.2150	26						0.2150	26	0.2150	29	0.4300	29									Warning: No false call analysis.			MLE Divergence Warning: Initial results listed.				RT		
2219 AI T-87	weld flush TFC	F9002(3L).xls	6/5/15 6:20 AM	CASE 4				0.3684	0.0010	0.4950	0.4950	26						0.4950	26	0.4950	29	0.9900	29									Warning: No false call analysis.			MLE Divergence Warning: Initial results listed.	0.56			RT		
2219 AI T-87	weld flush TFC	F9003(3D).xls	6/5/15 6:21 AM	CASE 4				0.3684	0.0010	0.2150	0.2150	26						0.2150	26	0.2150	29	0.4300	29									Warning: No false call analysis.			MLE Divergence Warning: Initial results listed.				RT		
2219 AI T-87	weld flush TFC	F9003(3L).xls	6/5/15 6:22 AM	CASE 4				0.3684	0.0010	0.4950	0.4950	26						0.4950	26	0.4950	29	0.9900	29									Warning: No false call analysis.			MLE Divergence Warning: Initial results listed.	0.56			RT		
2219 AI T-87	plate	G10003AA.XLS	6/5/15 6:23 AM	CASE 7				0.8514	0.0930	0.8333										1.8333	29											Warning: No false call analysis.					0.64			HT	
2219 AI T-87	plate	G10003AD.XLS	6/5/15 6:25 AM	CASE 4				0.8195	0.0480	0.1260	0.1780	28						0.1260	14	0.1260	29											Warning: No false call analysis.					0.095			HT	
2219 AI T-87	plate	G10003AL.XLS	6/5/15 6:26 AM	CASE 11	0.3220	0.0750	0.9001				0.6100	0.5350																				Warning: No false call analysis.					0.245	0.4	0.475	1.000	HT
2219 AI T-87	plate	G10003BA.XLS	6/5/15 6:27 AM	CASE 7				0.6532	0.2000	0.6833										1.6182	29											Warning: No false call analysis.							HT		
2219 AI T-87	plate	G10003BD.XLS	6/5/15 6:28 AM	CASE 7				0.8074	0.0300	0.1260										0.3560	29											Warning: No false call analysis.					0.105	0.17		HT	
2219 AI T-87	plate	G10003BL.XLS	6/5/15 6:30 AM	CASE 6				0.7794	0.0530	0.2950	0.6100	27						0.5680	23	1.2200	29											Warning: No false call analysis.					0.46	0.63		HT	
SS AMS 355	hole	G2001L.XLS	6/5/15 6:31 AM	CASE 18	0.0845	0.0260	0.9001				0.2425	0.1694														0.0774	21					Warning: No false call analysis.				0.075	0.1	0.0845	1.000	HT	

*All lengths are in inches



File Name = A1001AL.xls
 Data Set Name = A1001AL(CRACK #)

Directed DOE Options

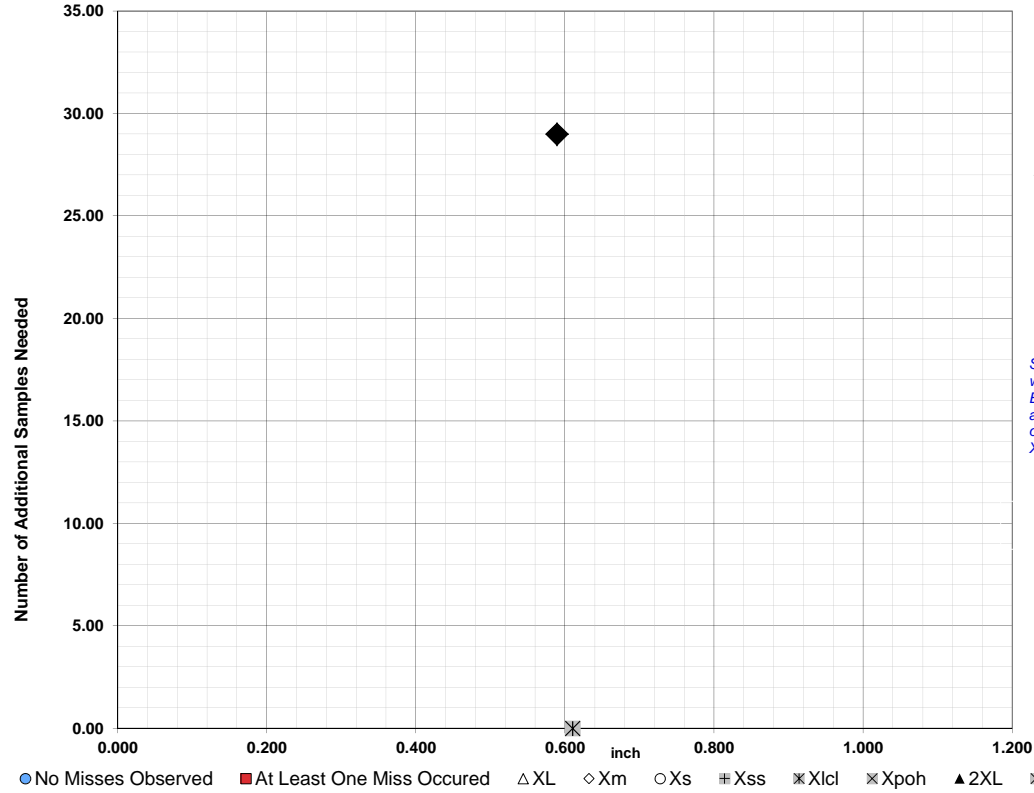


TABLE C

Class Length	Additional Samples
XL =	0.979
Xm =	0.710
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.589 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

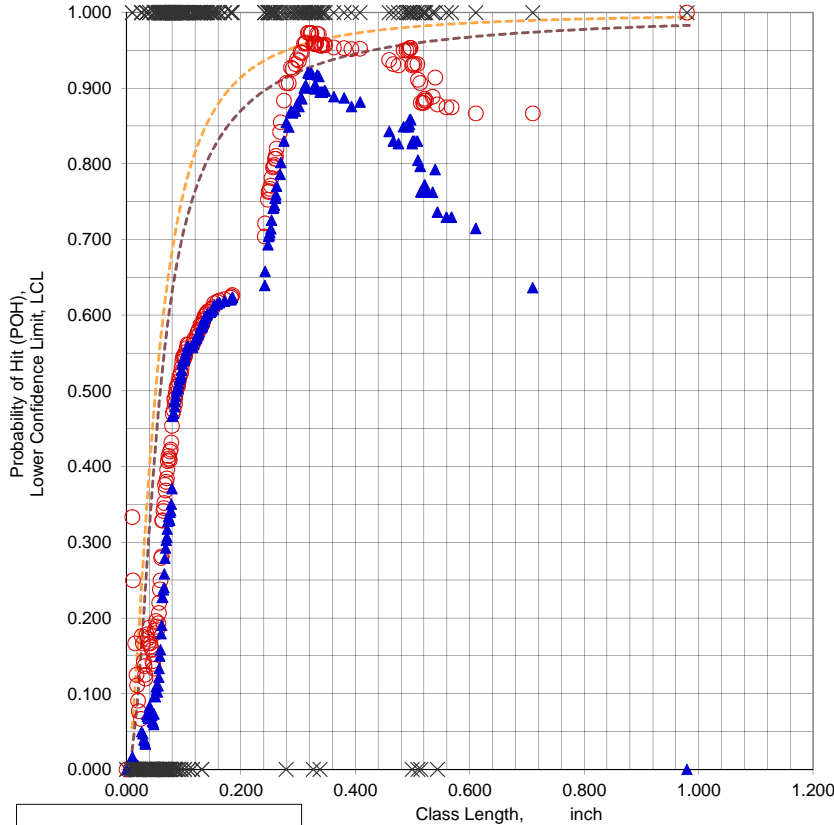
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Need 12 more large flaws.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **A1001BL.XLS**
 Data Set Name = **A1001BL(CRACK #)**
 Date & Time = 6/4/15 5:16 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.2000 inch
 Classlength @ 90/95 Xpod = 0.3130 inch
 Lower Confidence Bound = 0.9040
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 0.9605

CASE 2 - 90/95 Xpod is reached at a class length. Xp used to reduce XL requirements. Recommend satisfying XL, Xm and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in Table A.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.903 @ 0.185 inch
 NTIAC 90/95 POD = 0.902 @ 0.250 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.979 inch
 Samples Needed @ XL = 24
 Classlength Mid-point , Xm = 0.646 inch
 Samples Needed @ Xm = 29
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A1001BL.XLS
 Data Set Name = A1001BL(CRACK #)

Directed DOE Options

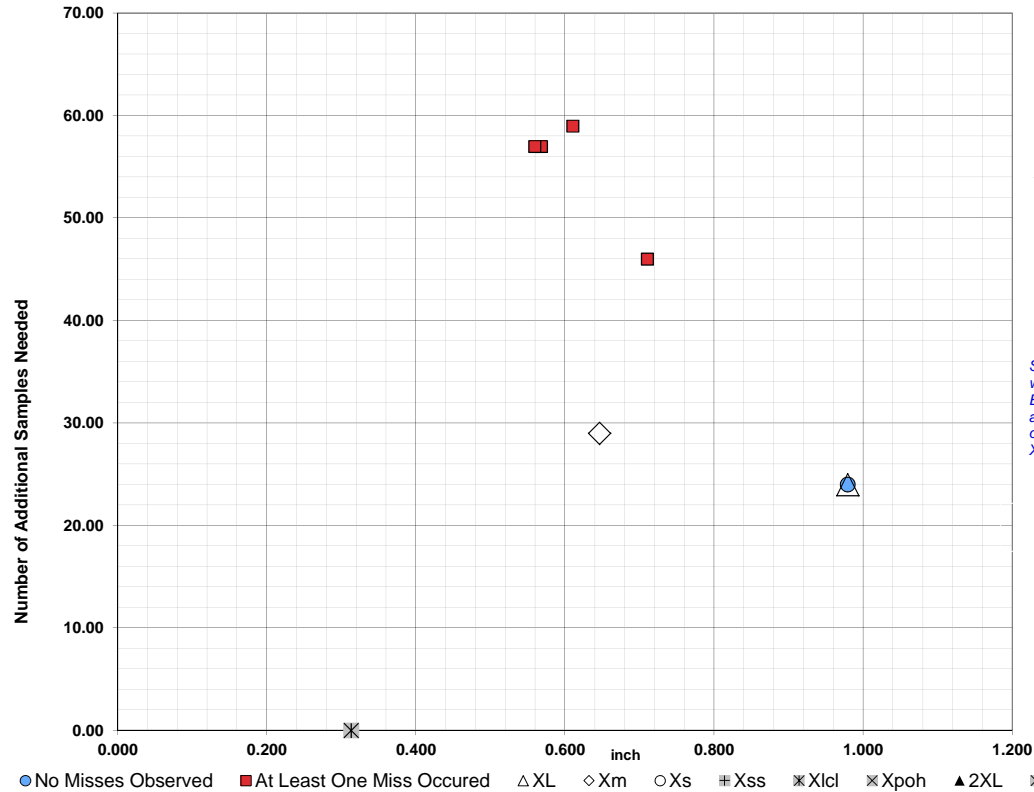


TABLE C

Class Length	Additional Samples
XL =	0.979 24
Xm =	0.646 29
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

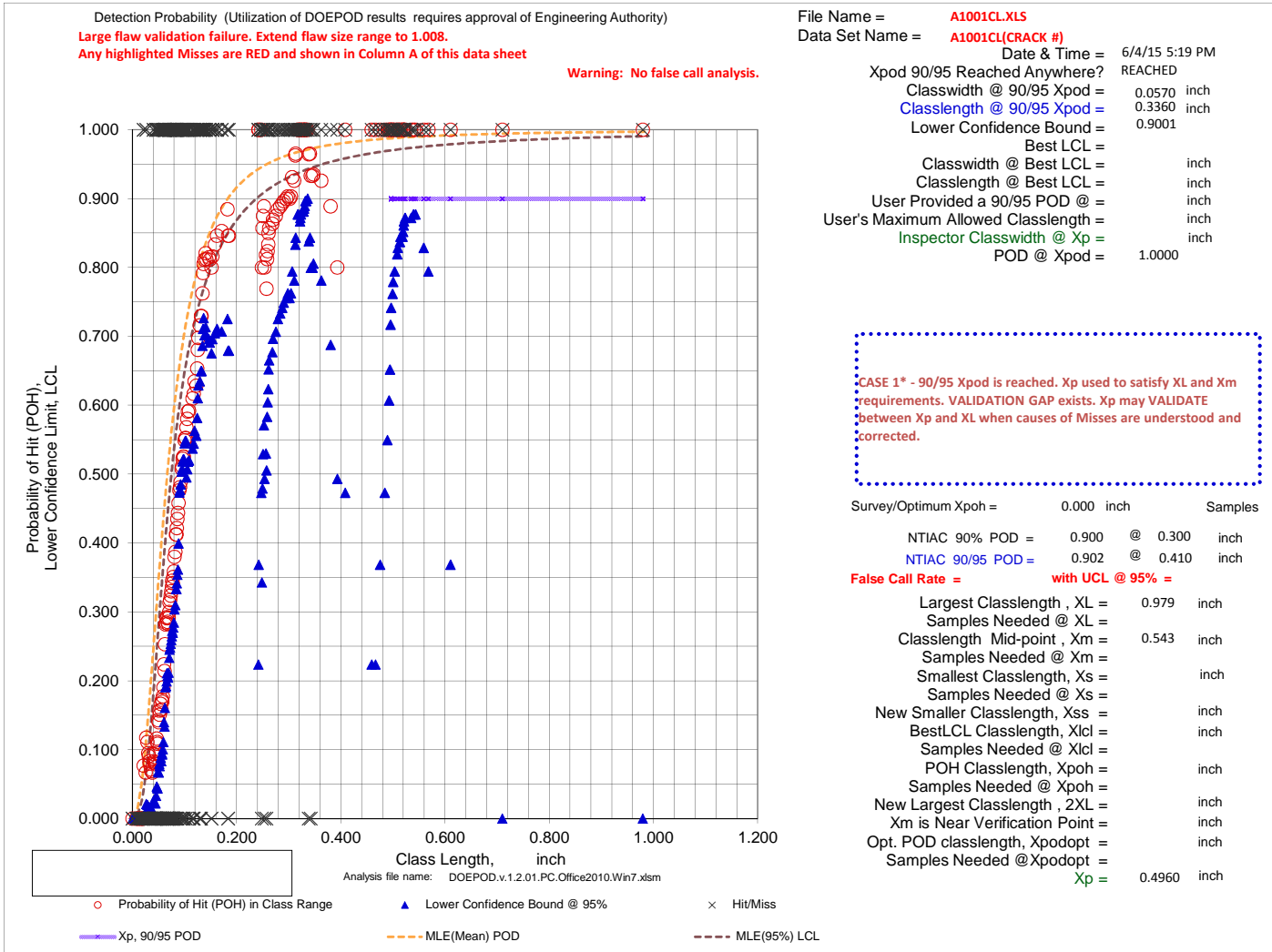
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.7100	46	0.9790	24
0.6100	59		
0.5680	57		
0.5590	57		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A1001CL.XLS
 Data Set Name = A1001CL(CRACK #)

Directed DOE Options

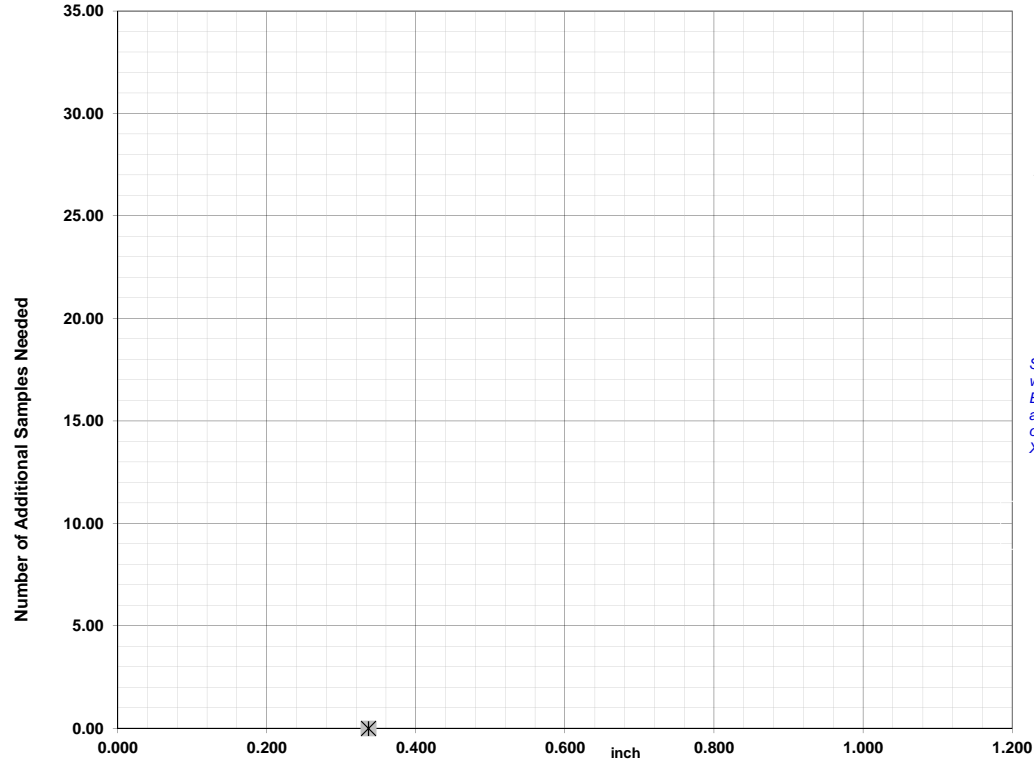


TABLE C

Class Length Additional Samples

XL = 0.979
 Xm = 0.543
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

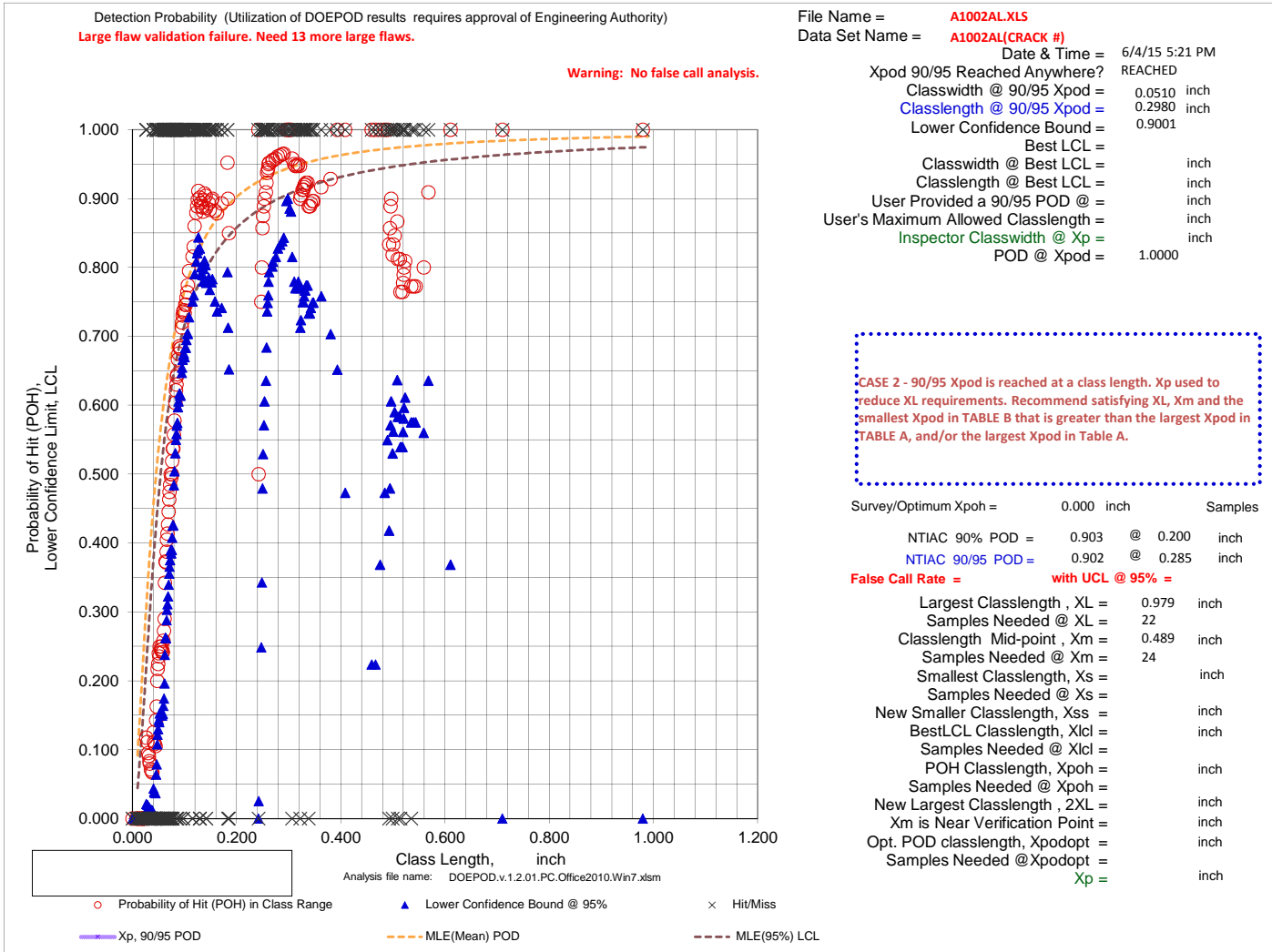
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A1002AL.XLS
 Data Set Name = A1002AL(CRACK #)

Directed DOE Options

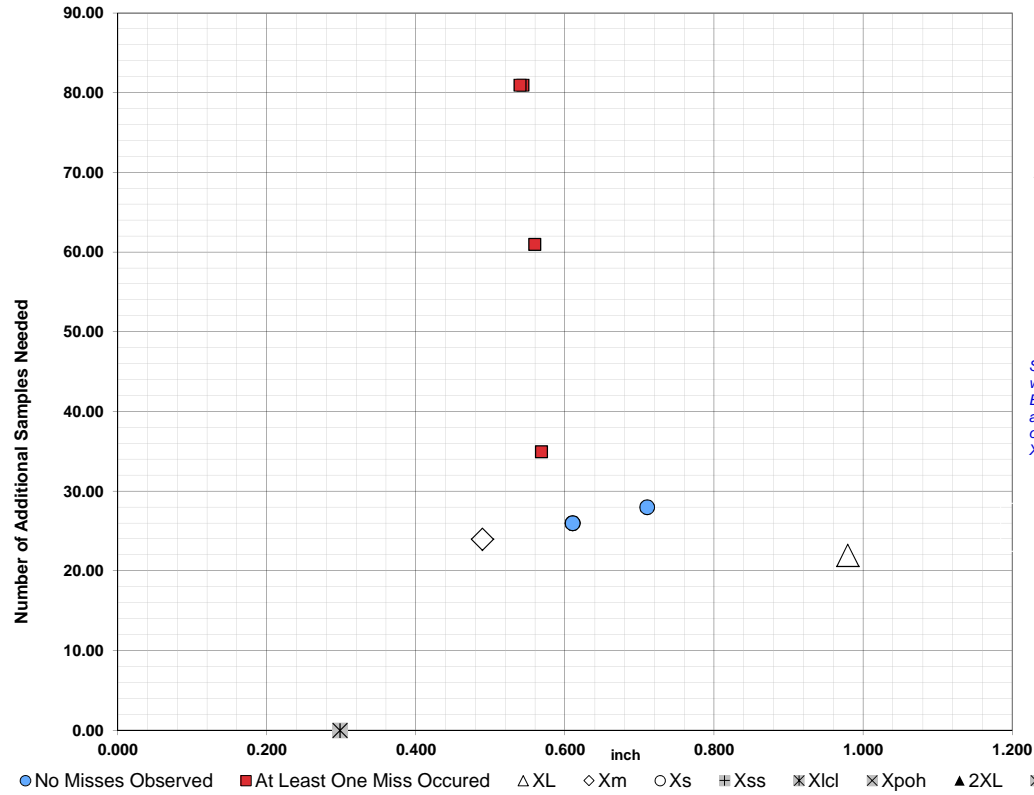


TABLE C

Class Length	Additional Samples
XL =	0.979 22
Xm =	0.489 24
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

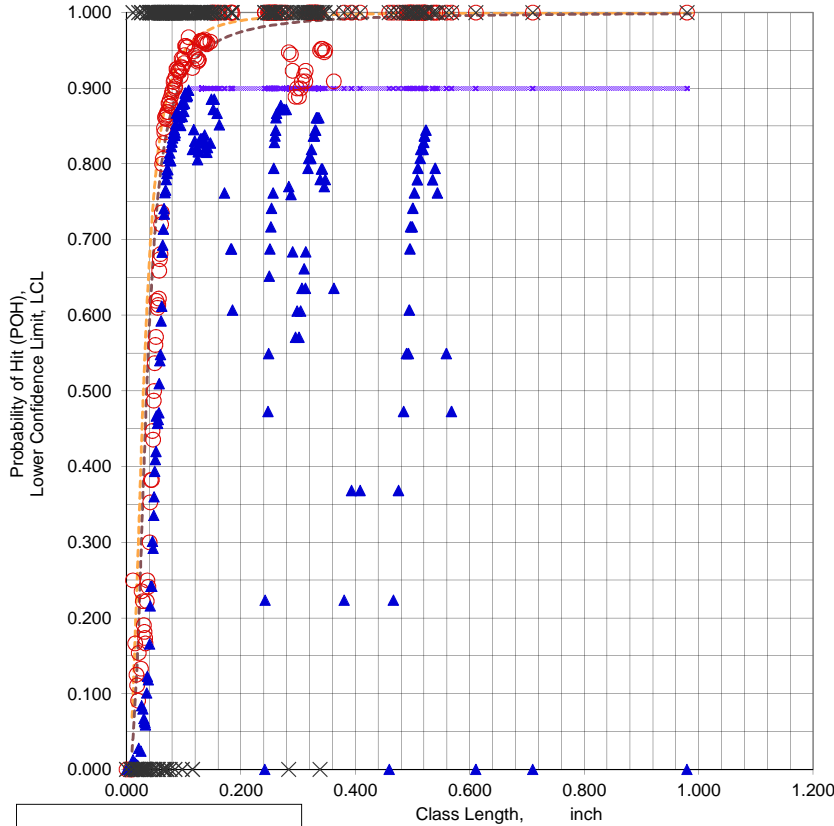
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.5680	35	0.7100	28
0.5590	61	0.6100	26
0.5430	81	0.6100	26
0.5390	81		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
 Large flaw validation failure. Need 10 more large flaws.
 Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **A1002BL.XLS**
 Data Set Name = **A1002BL(CRACK #)**
 Date & Time = 6/4/15 5:22 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0310 inch
 Classlength @ 90/95 Xpod = 0.1080 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 0.9672

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.902 @ 0.075 inch
 NTIAC 90/95 POD = 0.907 @ 0.095 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.979 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.336 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.1310 inch

File Name = A1002BL.XLS
 Data Set Name = A1002BL(CRACK #)

Directed DOE Options



TABLE C

Class Length Additional Samples

XL = 0.979
 Xm = 0.336
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

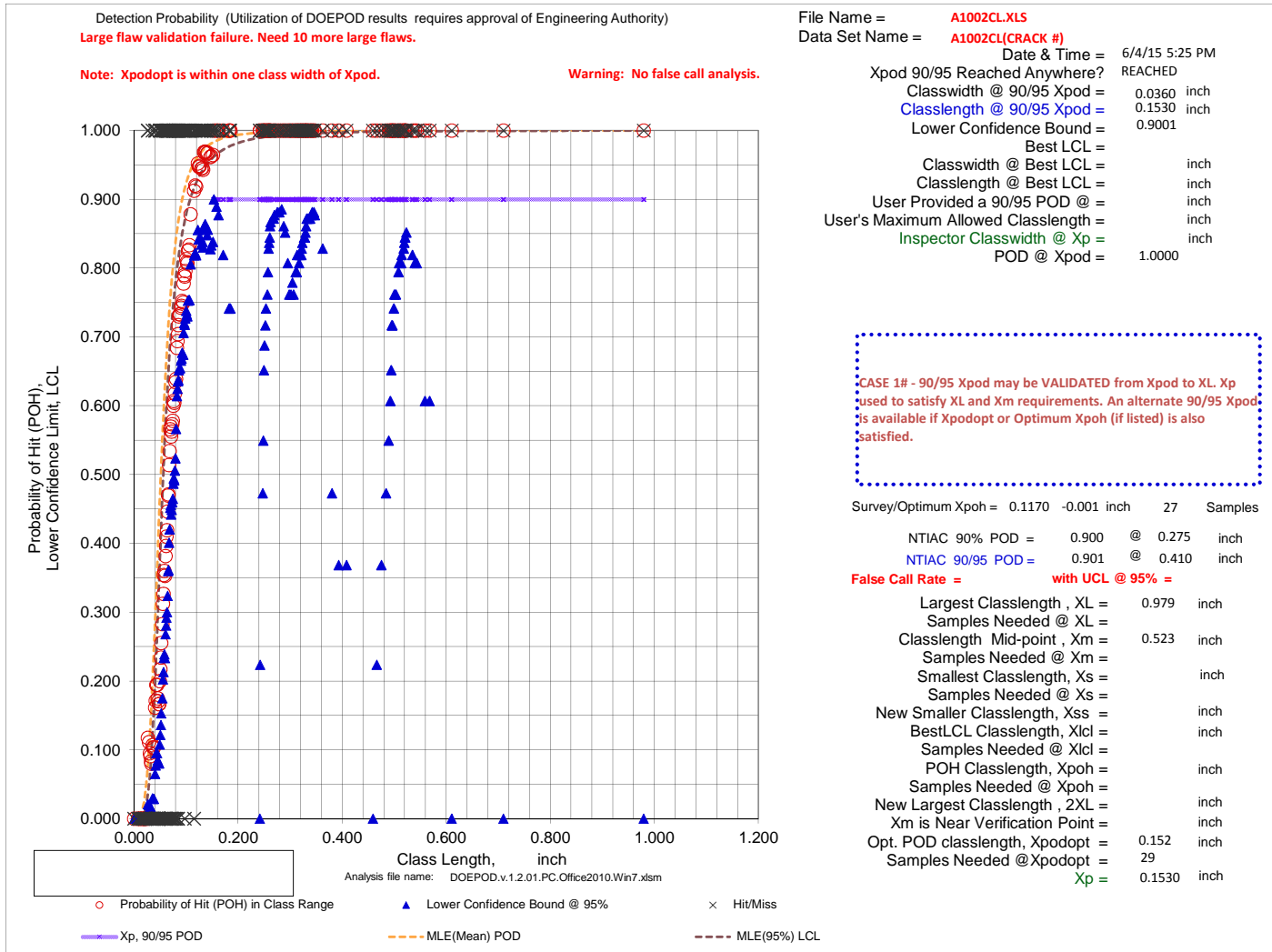
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A1002CL.XLS
 Data Set Name = A1002CL(CRACK #)

Directed DOE Options

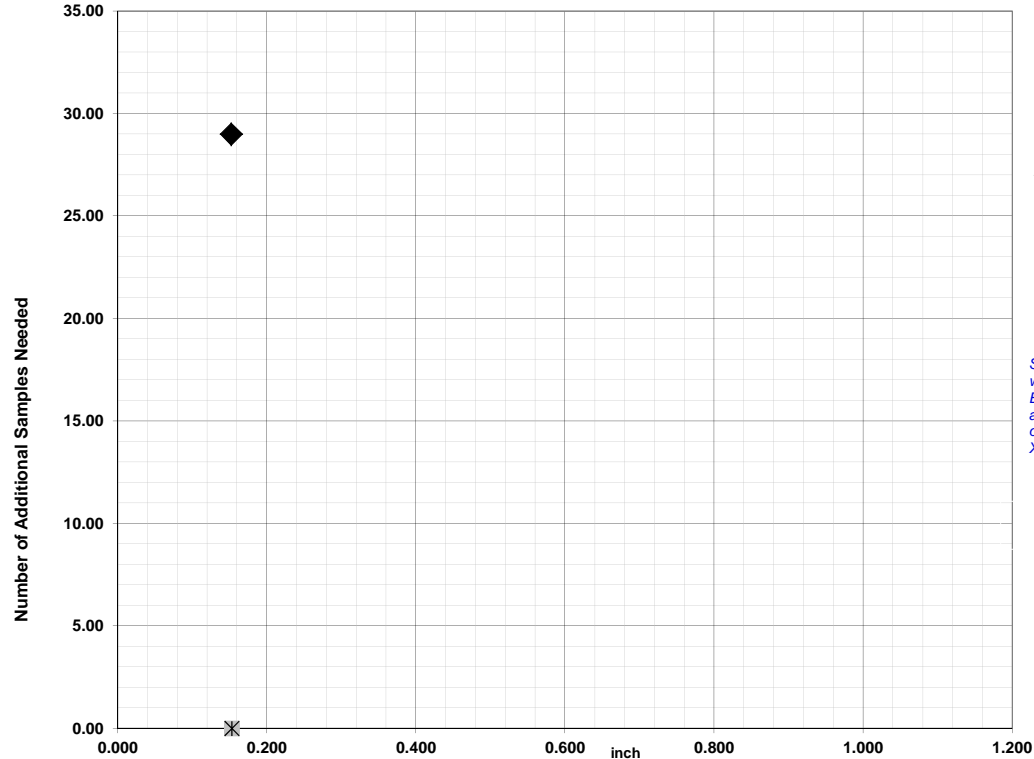


TABLE C

Class Length	Additional Samples
XL =	0.979
Xm =	0.523
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.152 29

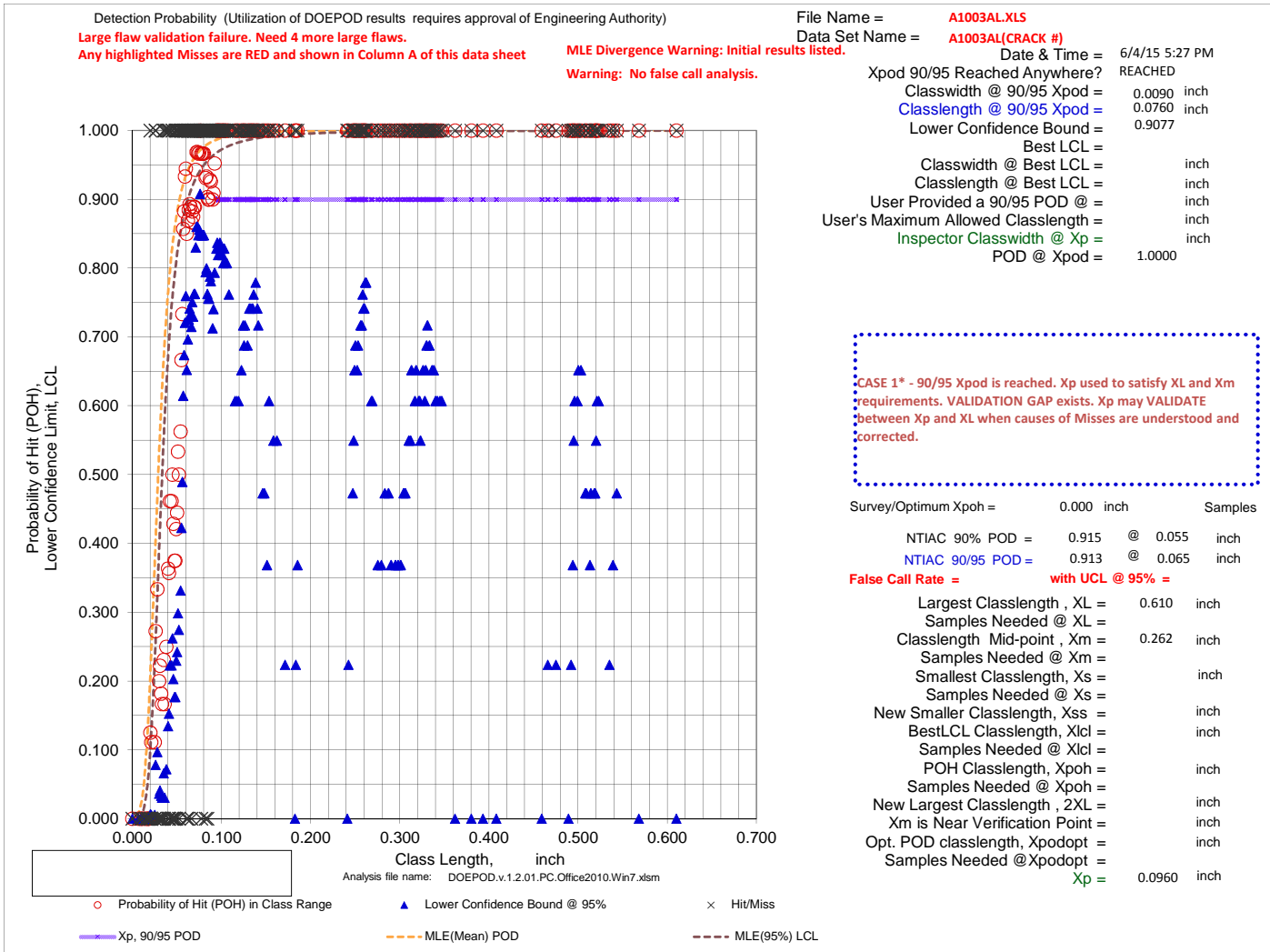
TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A1003AL.XLS
 Data Set Name = A1003AL(CRACK #)

Directed DOE Options

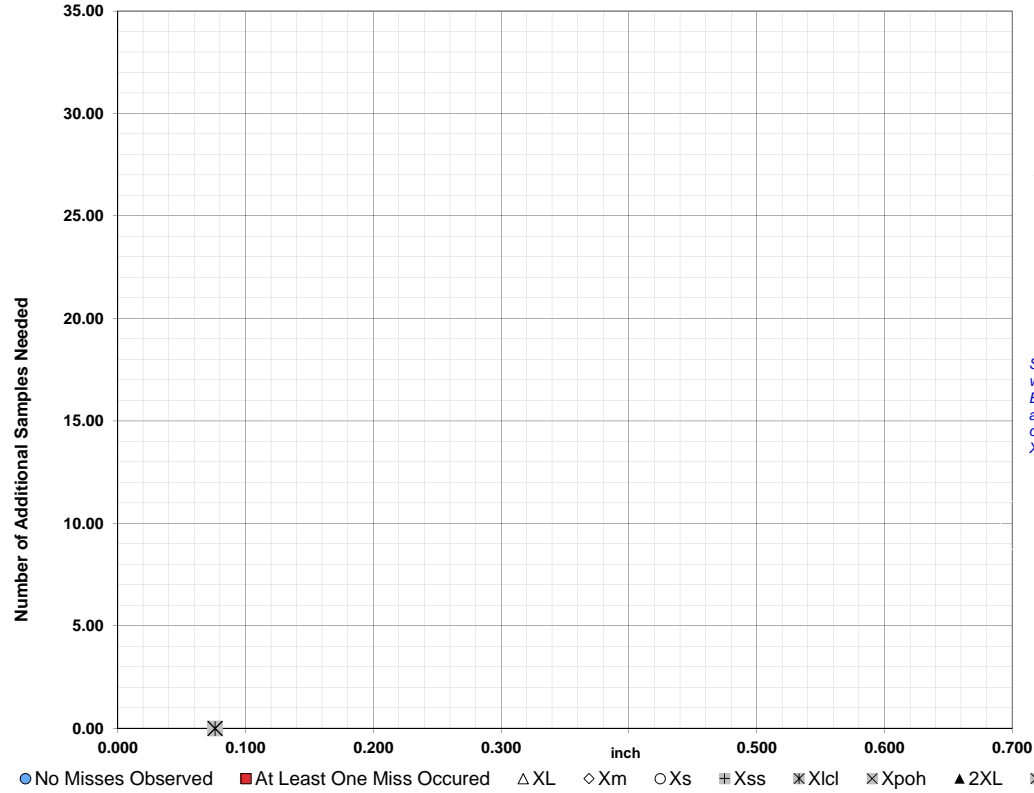


TABLE C

Class Length Additional Samples

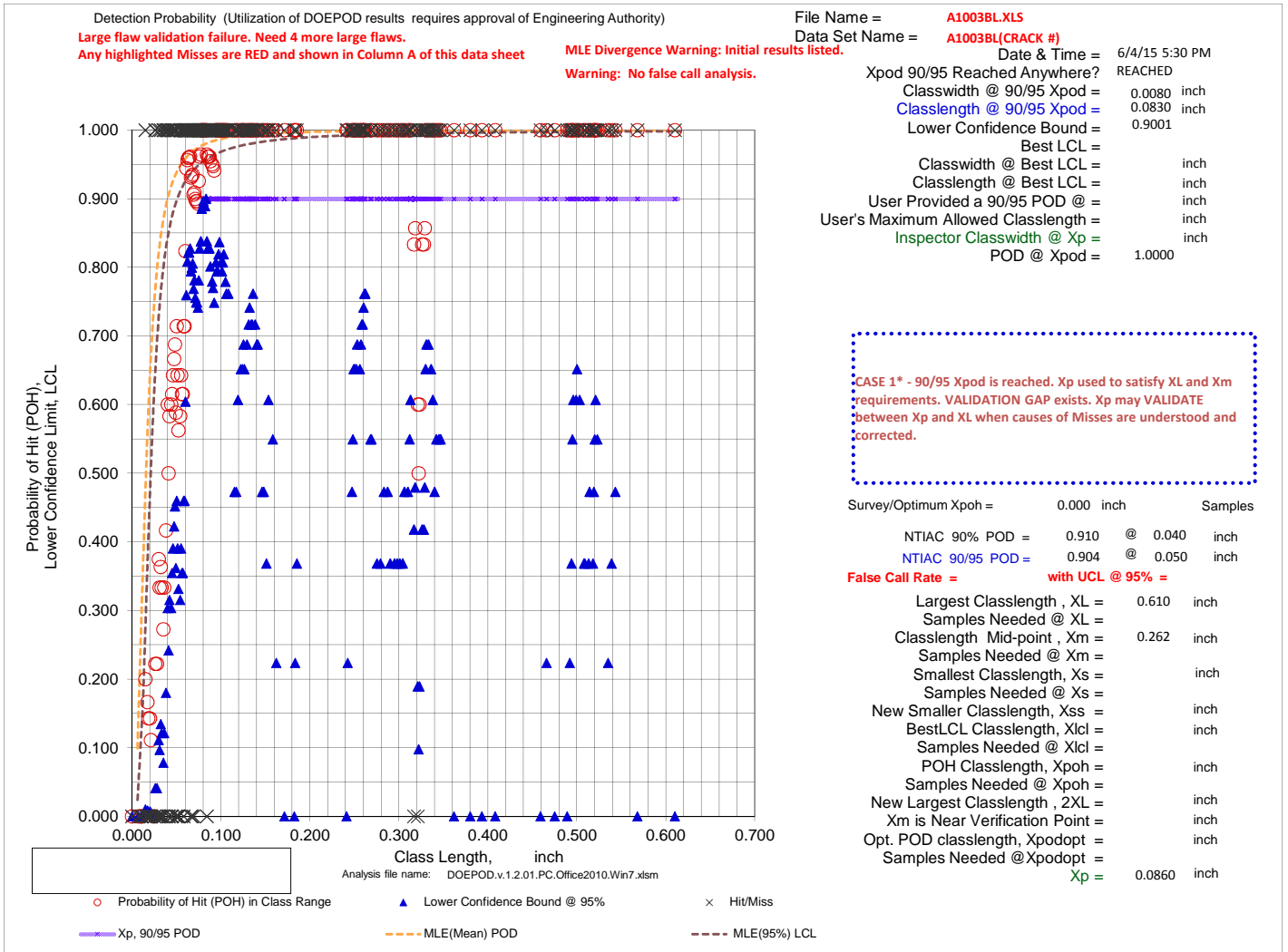
XL = 0.610
 Xm = 0.262
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A1003BL.XLS
 Data Set Name = A1003BL(CRACK #)

Directed DOE Options

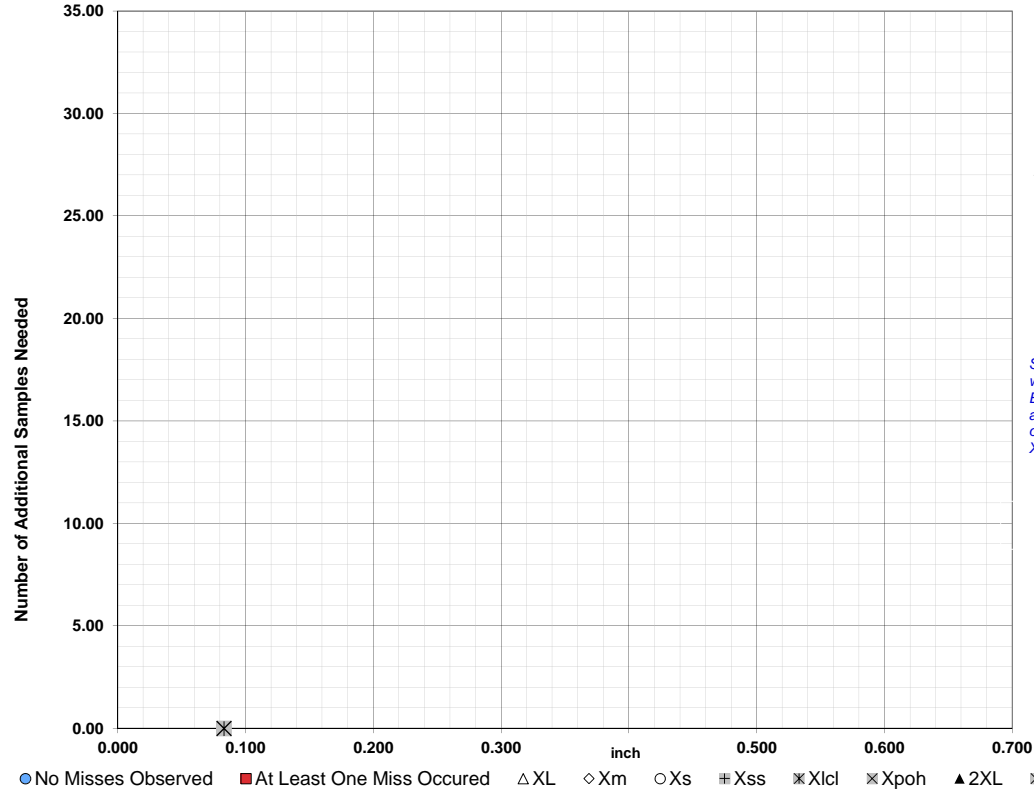


TABLE C

Class Length Additional Samples

XL = 0.610
 Xm = 0.262
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

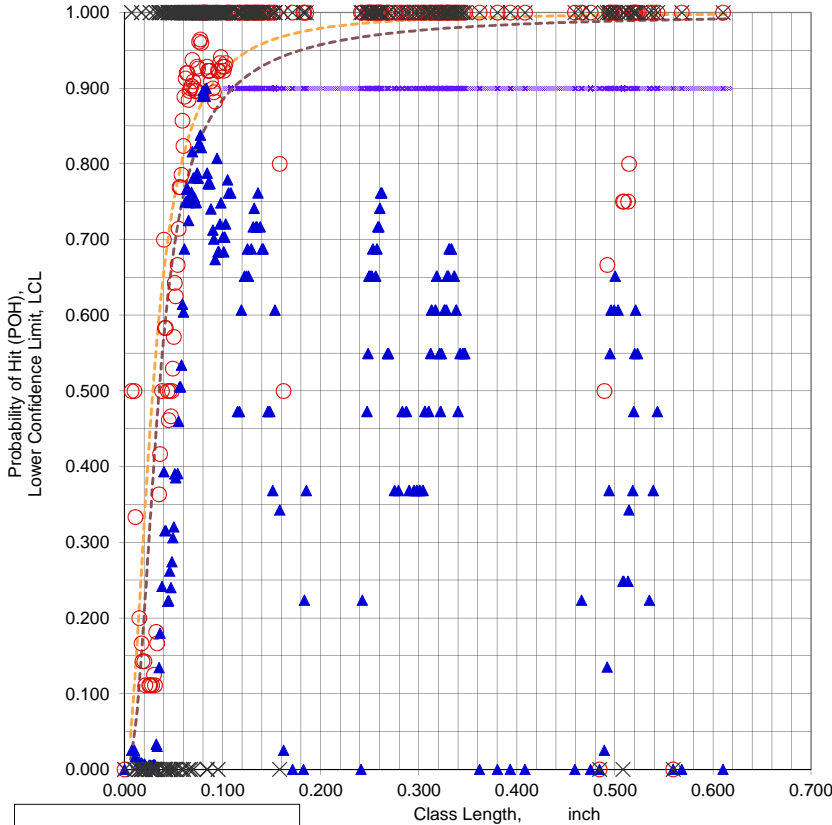
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 4 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss

— Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **A1003CL.XLS**
 Data Set Name = **A1003CL(CRACK #)**
 Date & Time = 6/4/15 5:34 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0080 inch
 Classlength @ 90/95 Xpod = 0.0830 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples

NTIAC 90% POD = 0.906 @ 0.090 inch
 NTIAC 90/95 POD = 0.906 @ 0.115 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.610 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.262 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.1080 inch

File Name = A1003CL.XLS
 Data Set Name = A1003CL(CRACK #)

Directed DOE Options

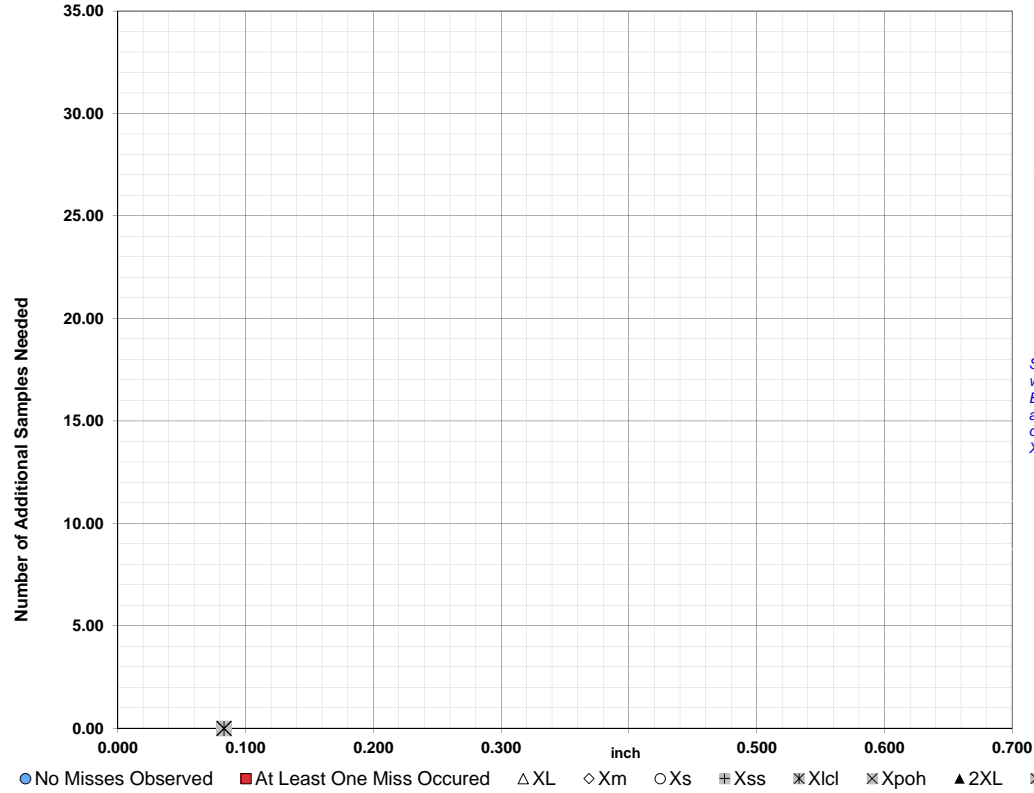


TABLE C

Class Length Additional Samples

XL = 0.610
 Xm = 0.262
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

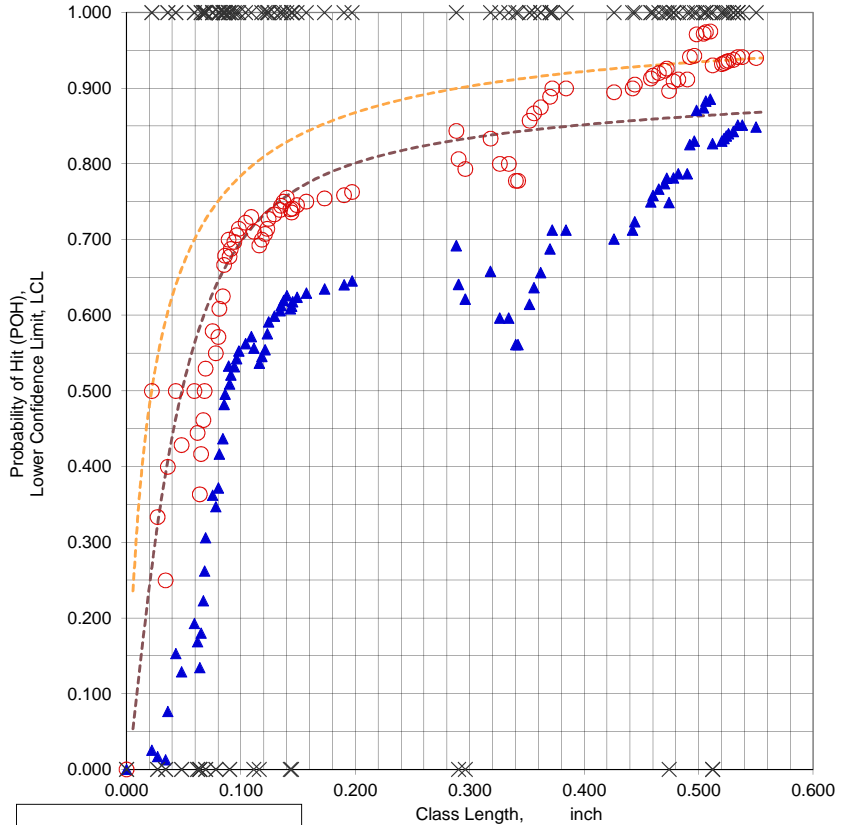
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **A2002AL.XLS**
 Data Set Name = **A2002AL(CRACK #)**
 Date & Time = 6/4/15 5:36 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8853
 Classwidth @ Best LCL = 0.2000 inch
 Classlength @ Best LCL = 0.5100 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.5200 -0.007 inch 27 Samples
 NTIAC 90% POD = 0.900 @ 0.290 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 1.100 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A2002AL.XLS
 Data Set Name = A2002AL(CRACK #)

Directed DOE Options

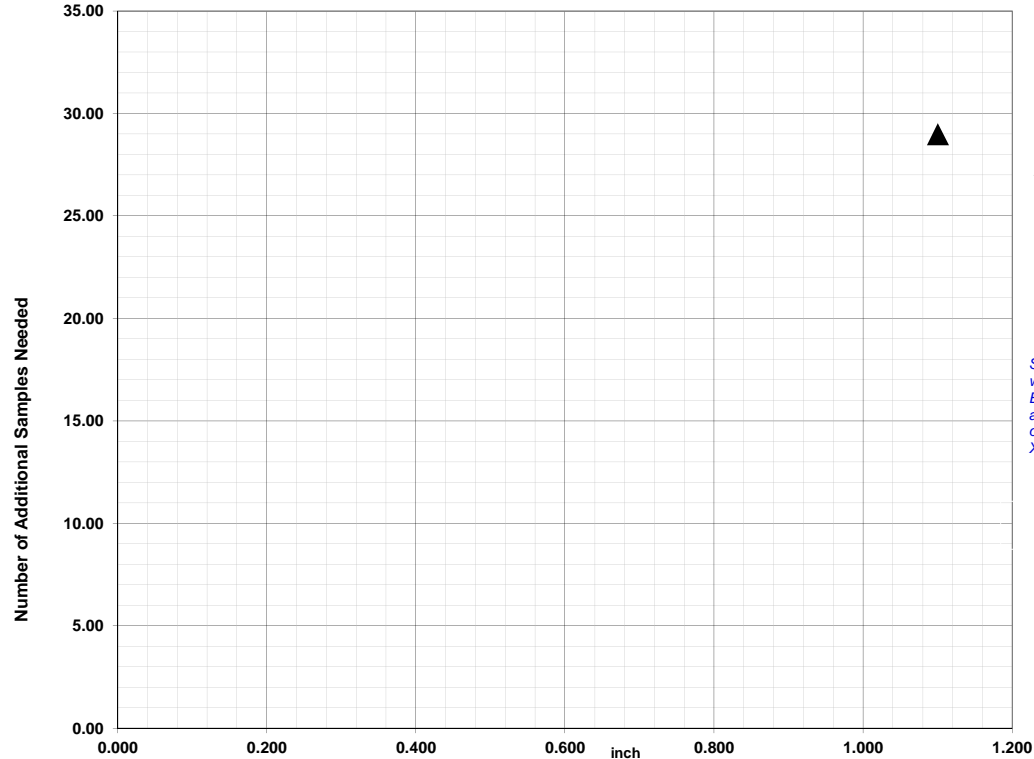


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 1.100	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 1.100 29
 **Alternate Xm =
 Xpodopt =

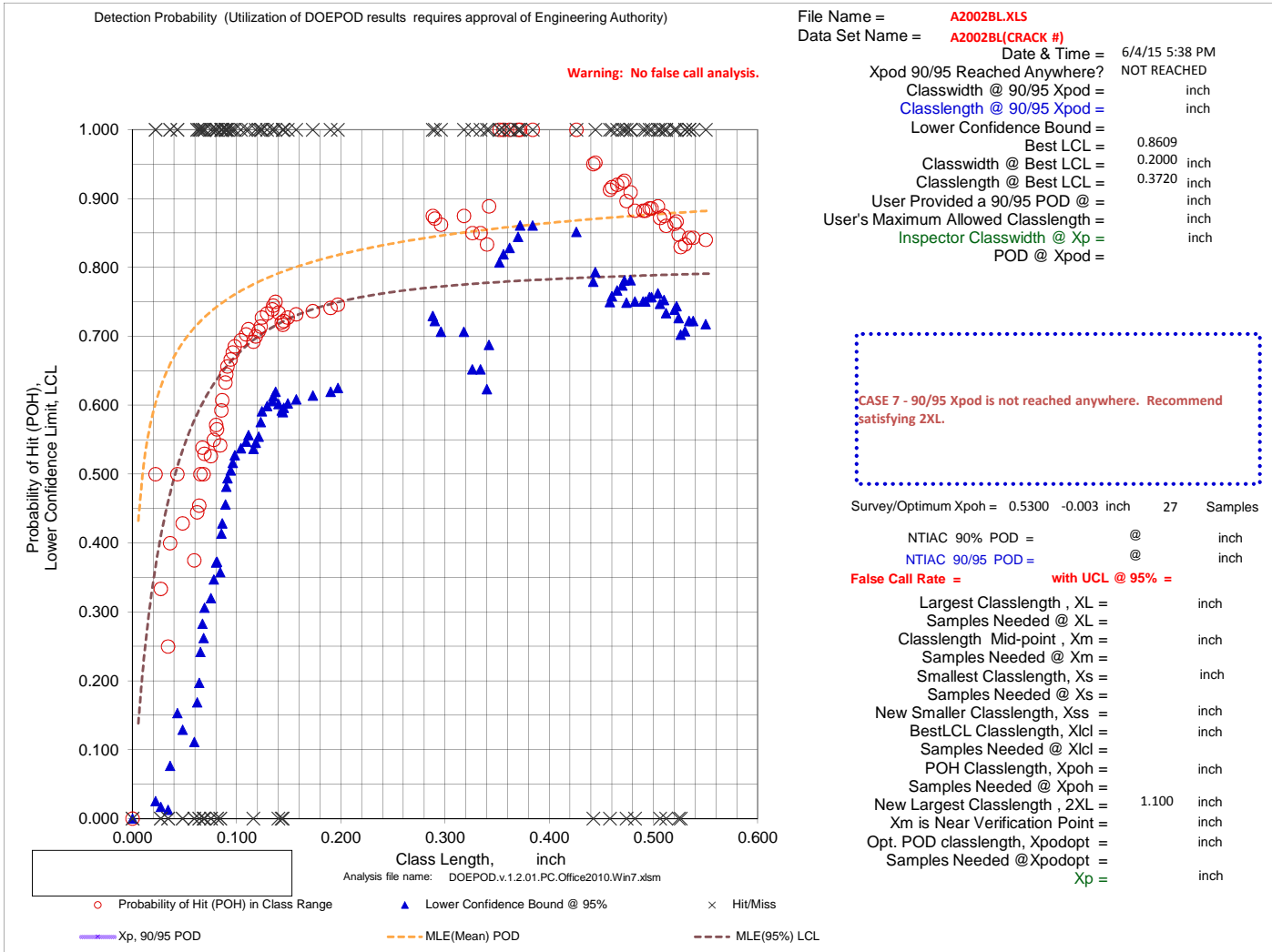
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A2002BL.XLS
 Data Set Name = A2002BL(CRACK #)

Directed DOE Options

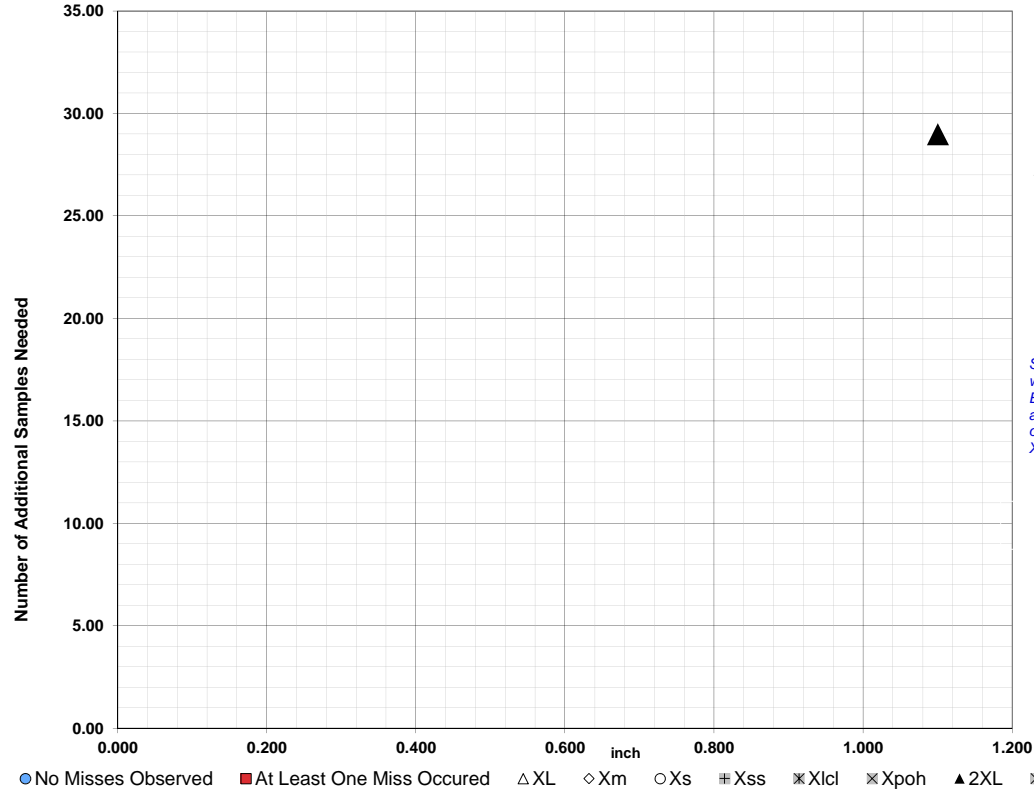


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 1.100	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 1.100 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

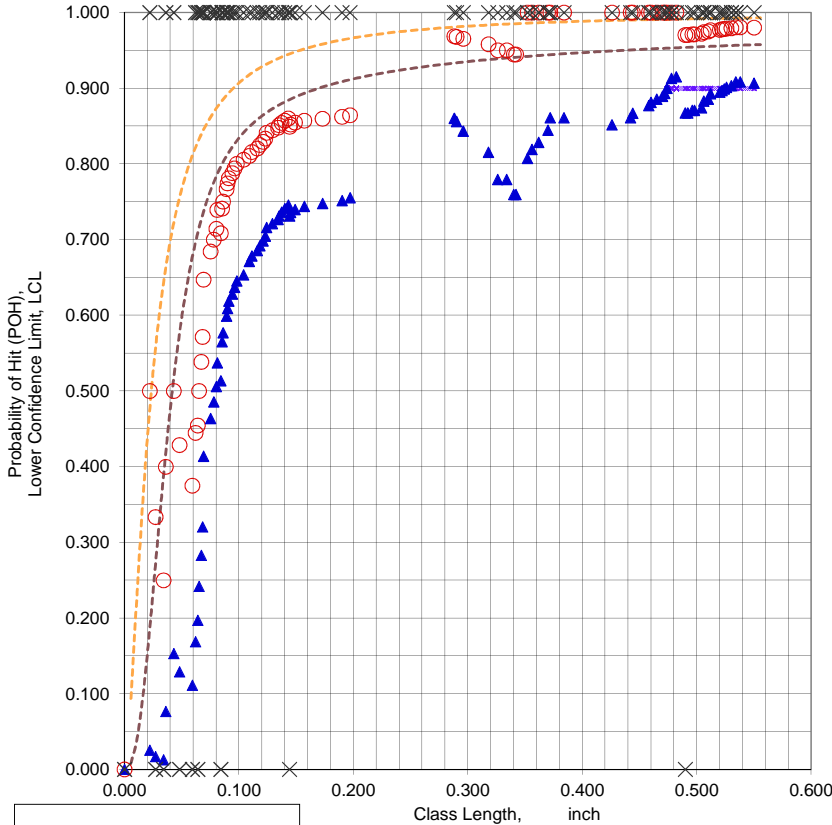
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Extend flaw size range to 1.422.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **A2002CL.XLS**
 Data Set Name = **A2002CL(CRACK #)**
 Date & Time = 6/4/15 5:39 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.2000 inch
 Classlength @ 90/95 Xpod = 0.4740 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy alternate Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.900 @ 0.095 inch
 NTIAC 90/95 POD = 0.900 @ 0.170 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.550 inch
 Samples Needed @ XL = 0
 Classlength Mid-point , Xm = 0.496 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.4740 inch

File Name = A2002CL.XLS
 Data Set Name = A2002CL(CRACK #)

Directed DOE Options

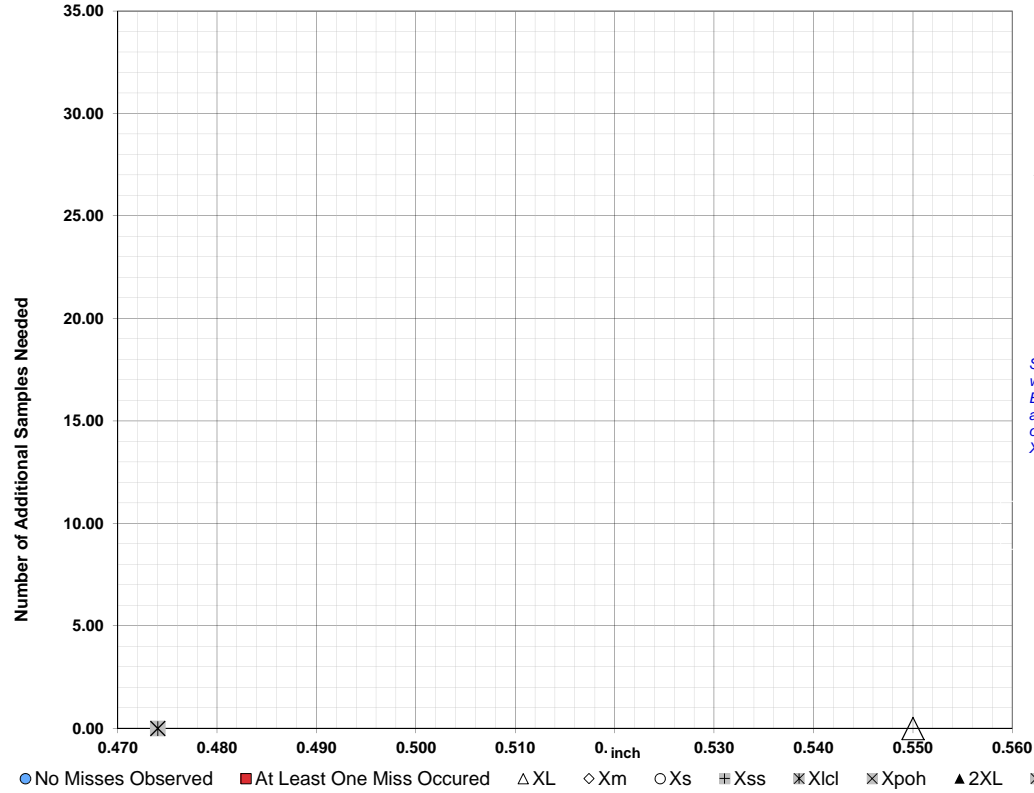


TABLE C

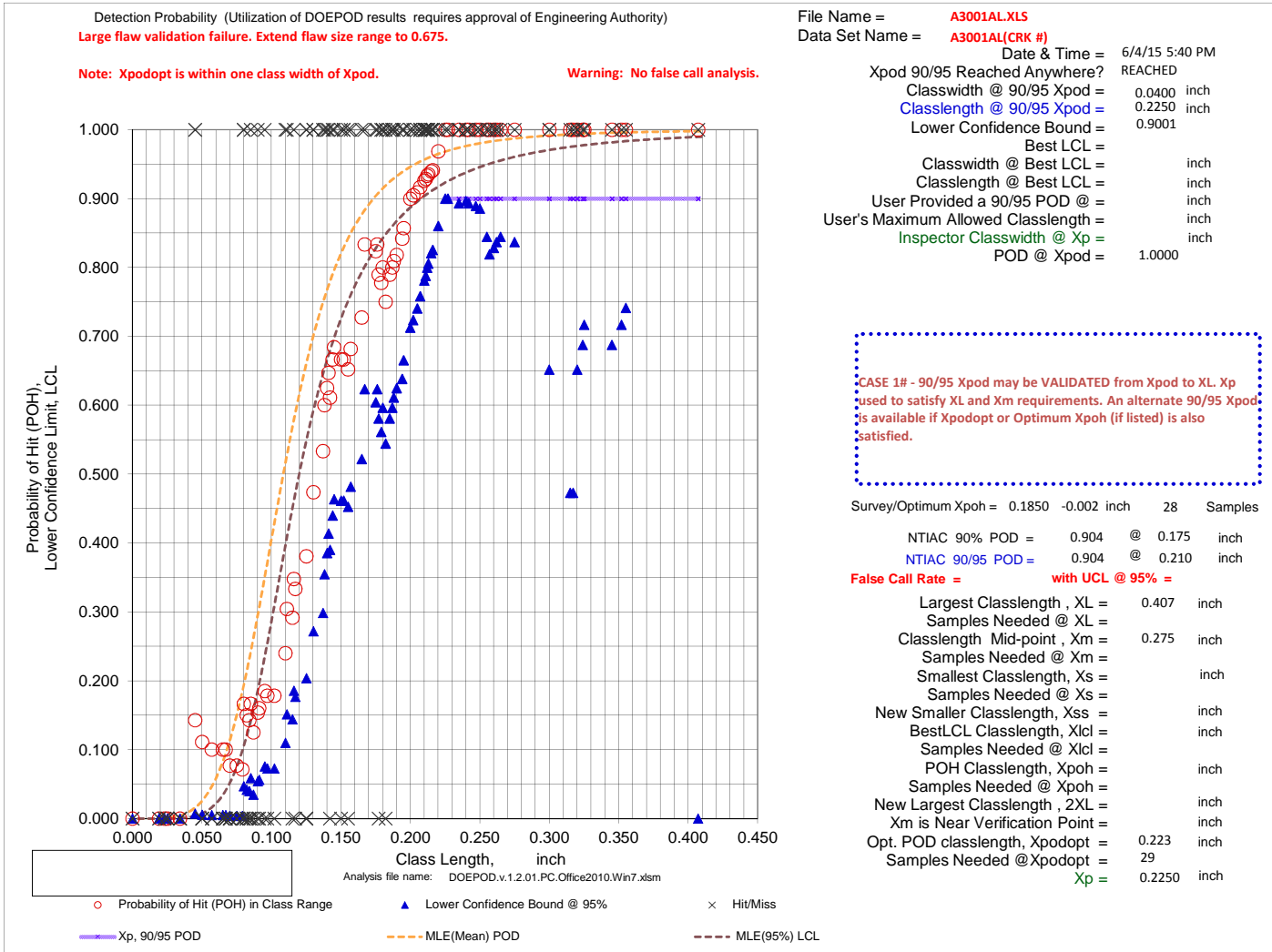
Class Length	Additional Samples
XL =	0.550
Xm =	0.496
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A3001AL.XLS
 Data Set Name = A3001AL(CRK #)

Directed DOE Options

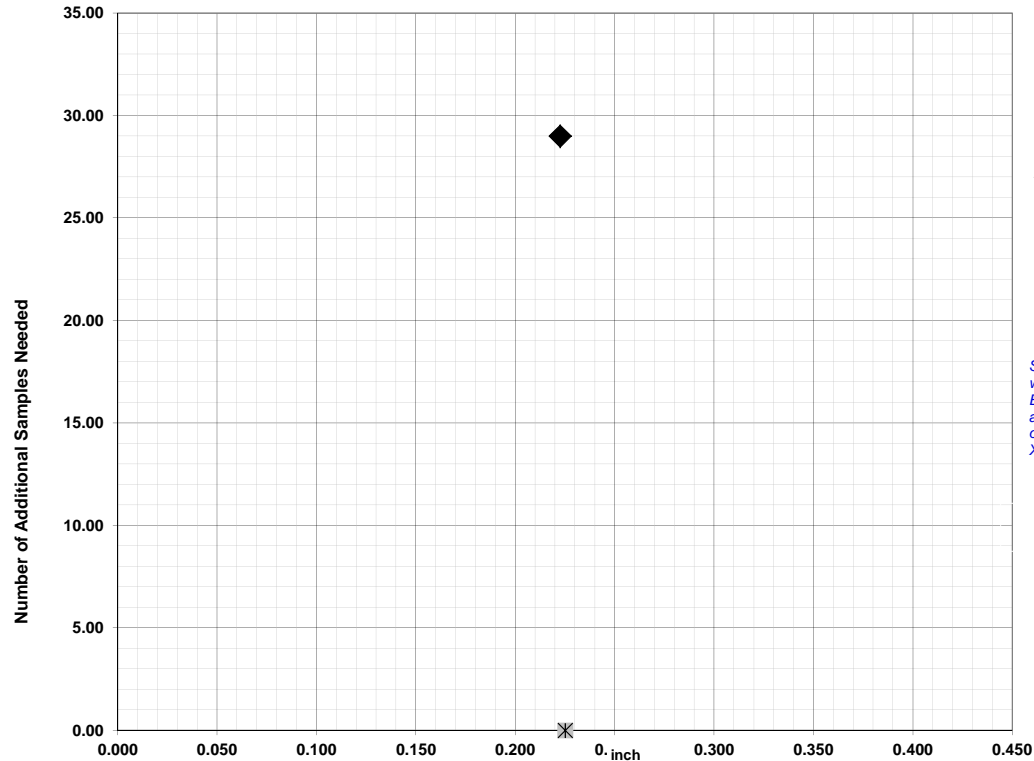


TABLE C

Class Length	Additional Samples
XL =	0.407
Xm =	0.275
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.223 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

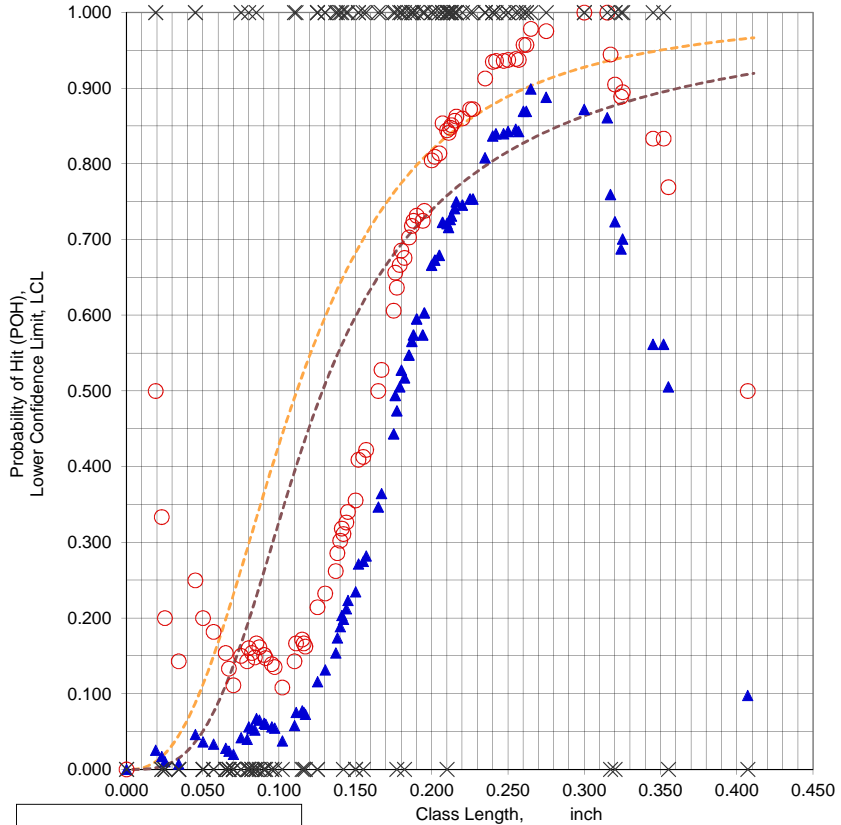
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✱ Xlcl ✱ Xpoh ▲ 2XL ✱ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 0.795.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 ┆ Xp, 90/95 POD ┆ MLE(Mean) POD ┆ MLE(95%) LCL

File Name = **A3001BL.XLS**
 Data Set Name = **A3001BL(CRK #)**
 Date & Time = 6/4/15 5:41 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0800 inch
 Classlength @ 90/95 Xpod = 0.2650 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 0.9783

CASE 2 - 90/95 Xpod is reached at a class length. Further VALIDATION is required. Recommend satisfying XL and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in Table A.

Survey/Optimum Xpoh = 0.000 inch Samples

NTIAC 90% POD = 0.903 @ 0.265 inch
 NTIAC 90/95 POD = 0.902 @ 0.365 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.407 inch
 Samples Needed @ XL = 57
 Classlength Mid-point , Xm = 0.315 inch
 Samples Needed @ Xm = 9
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A3001BL.XLS
 Data Set Name = A3001BL(CRK #)

Directed DOE Options

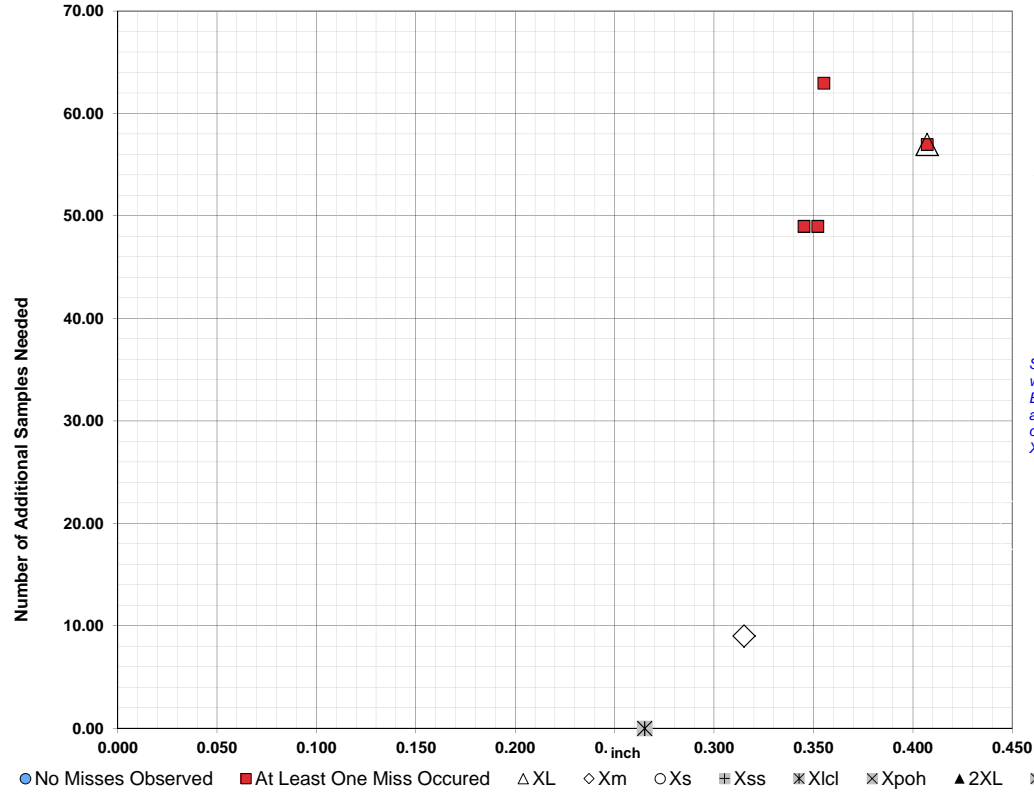


TABLE C

Class Length	Additional Samples
XL = 0.407	57
Xm = 0.315	9
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

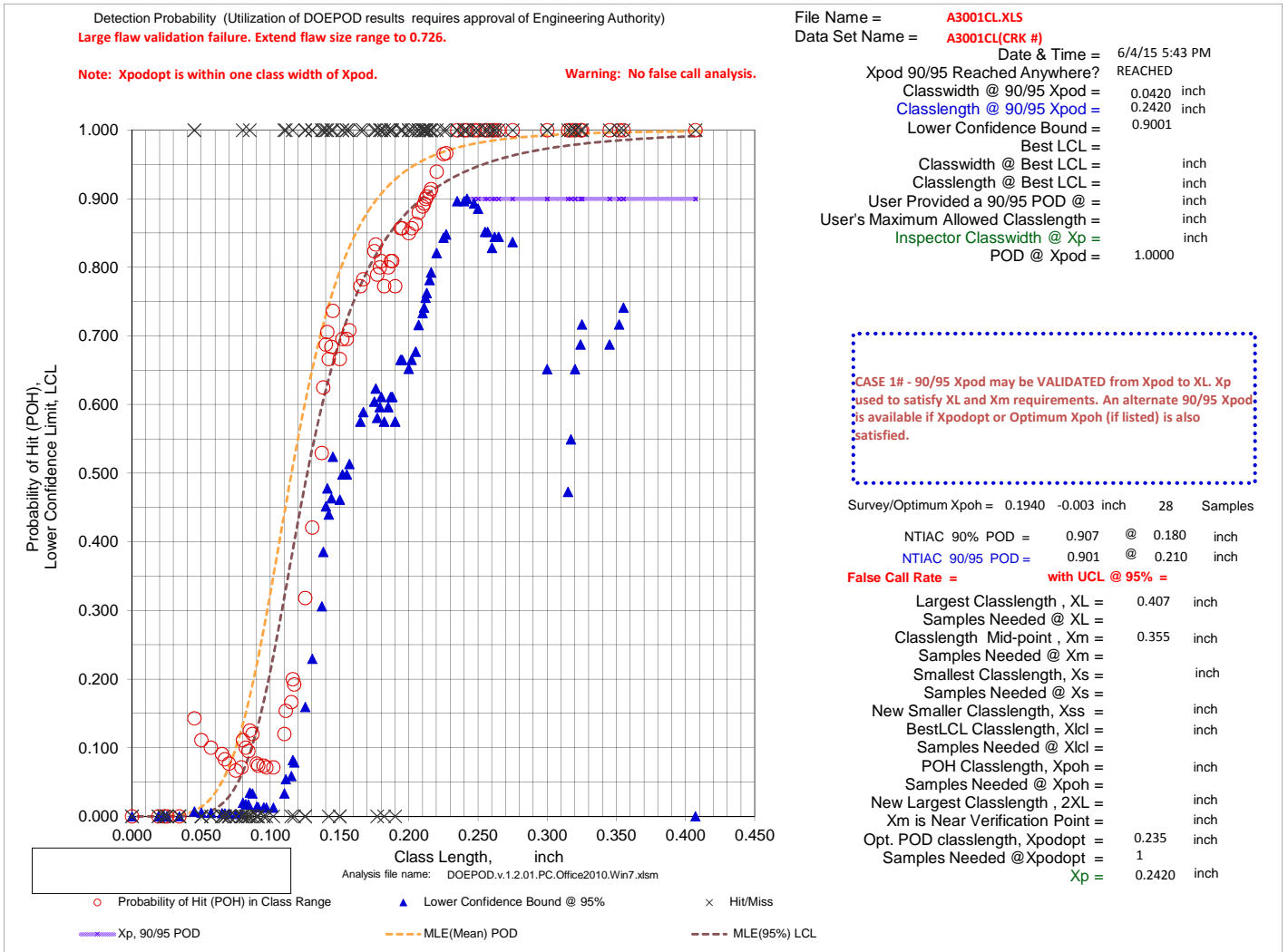
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.4070	57		
0.3550	63		
0.3520	49		
0.3450	49		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A3001CL.XLS
 Data Set Name = A3001CL(CRK #)

Directed DOE Options

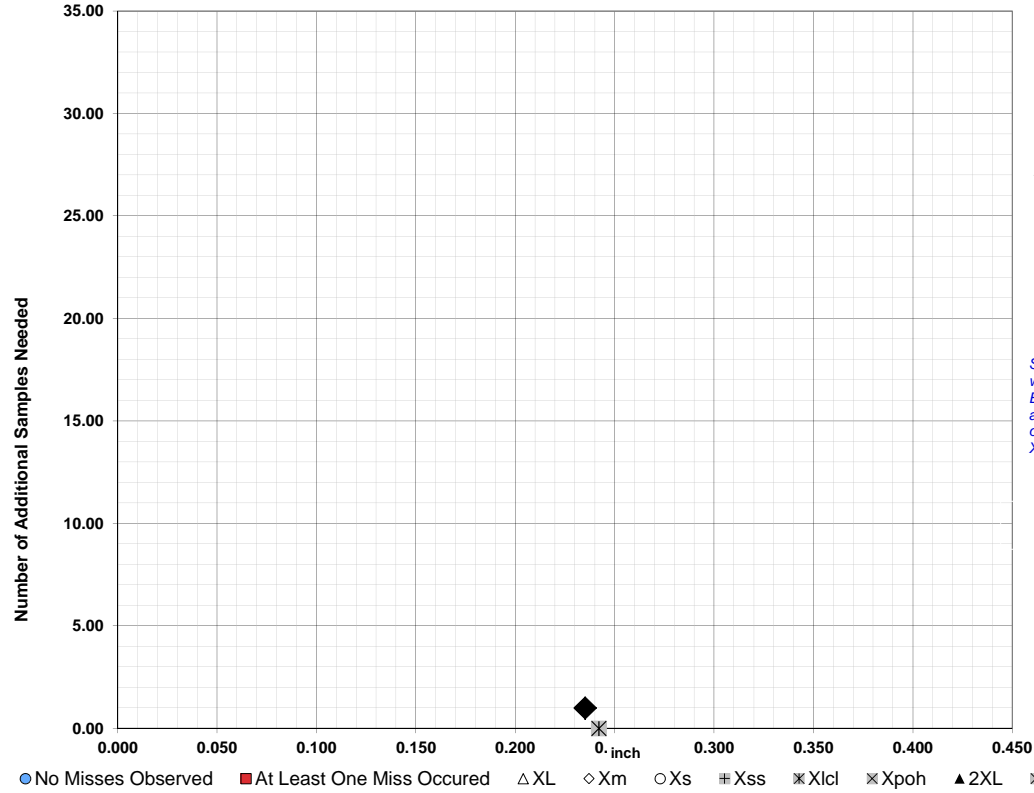


TABLE C

Class Length	Additional Samples
XL =	0.407
Xm =	0.355
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.235 1

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

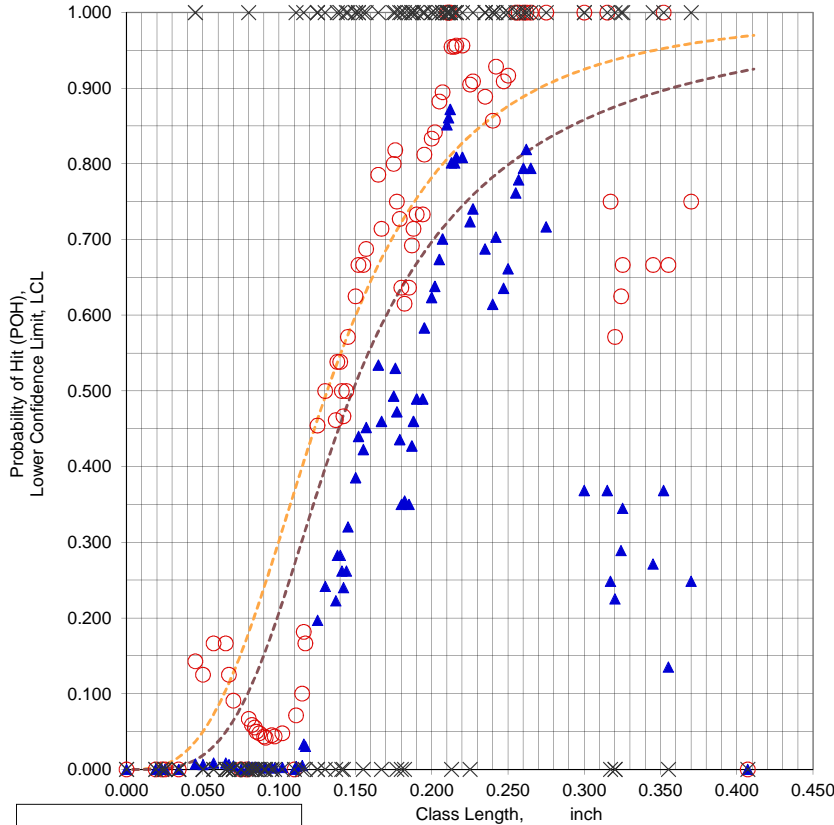
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **A3003AL.XLS**
 Data Set Name = **A3003AL(CRK #)**
 Date & Time = 6/4/15 5:43 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8719
 Classwidth @ Best LCL = 0.0270 inch
 Classlength @ Best LCL = 0.2120 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.905 @ 0.275 inch
 NTIAC 90/95 POD = 0.902 @ 0.360 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.814 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A3003AL.XLS
 Data Set Name = A3003AL(CRK #)

Directed DOE Options

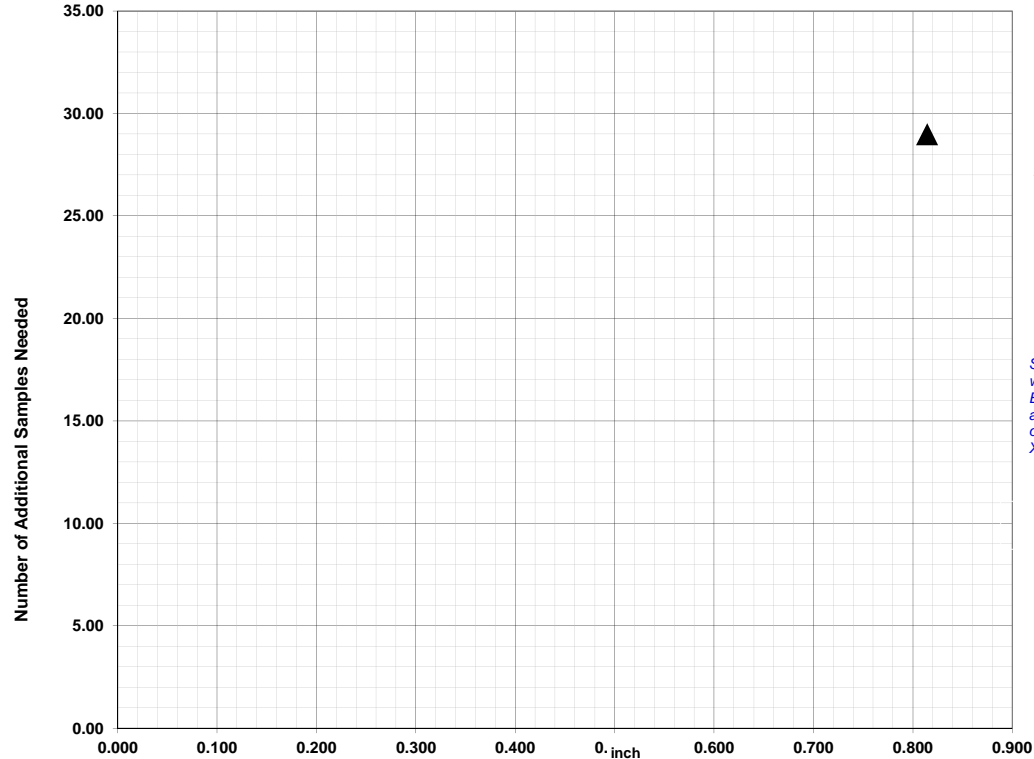


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.814	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.814 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

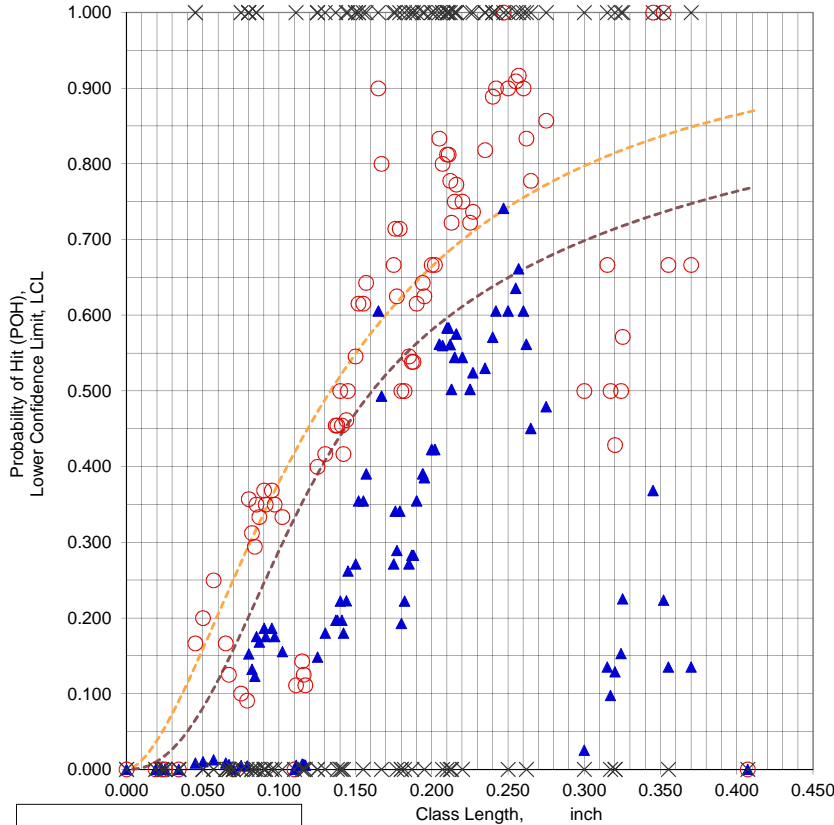
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **A3003BL.XLS**
 Data Set Name = **A3003BL(CRK #)**
 Date & Time = 6/4/15 5:45 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7411
 Classwidth @ Best LCL = 0.0220 inch
 Classlength @ Best LCL = 0.2470 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.900 @ 0.490 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.814 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = A3003BL.XLS
 Data Set Name = A3003BL(CRK #)

Directed DOE Options

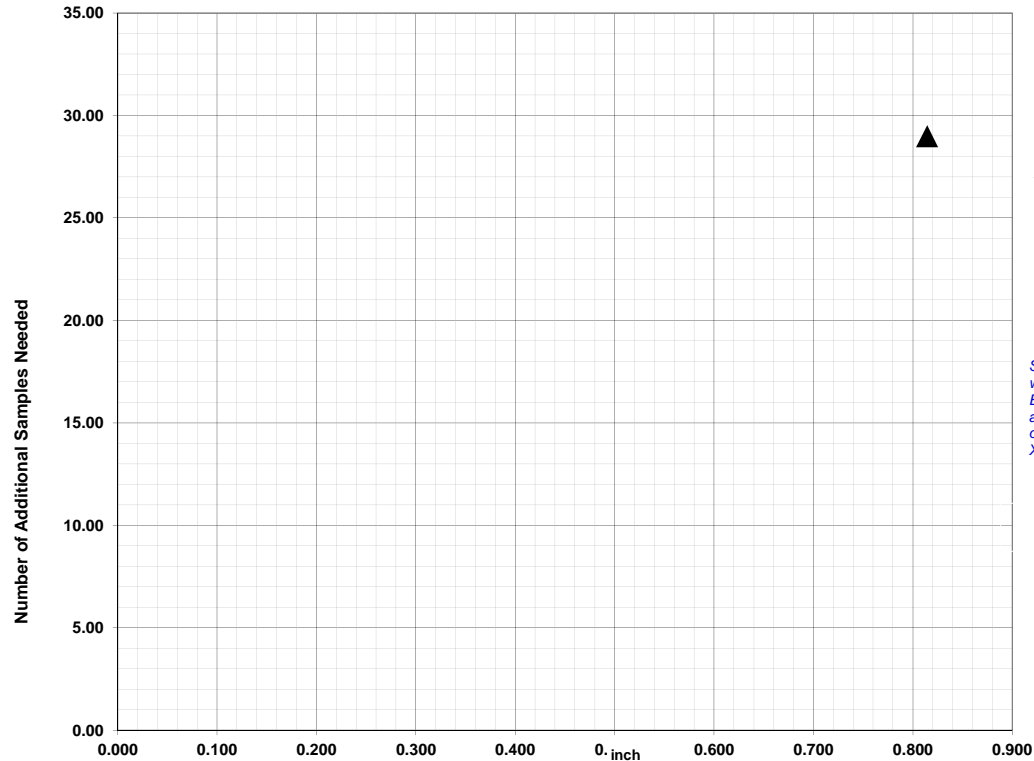


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.814	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.814 29
 **Alternate Xm =
 Xpodopt =

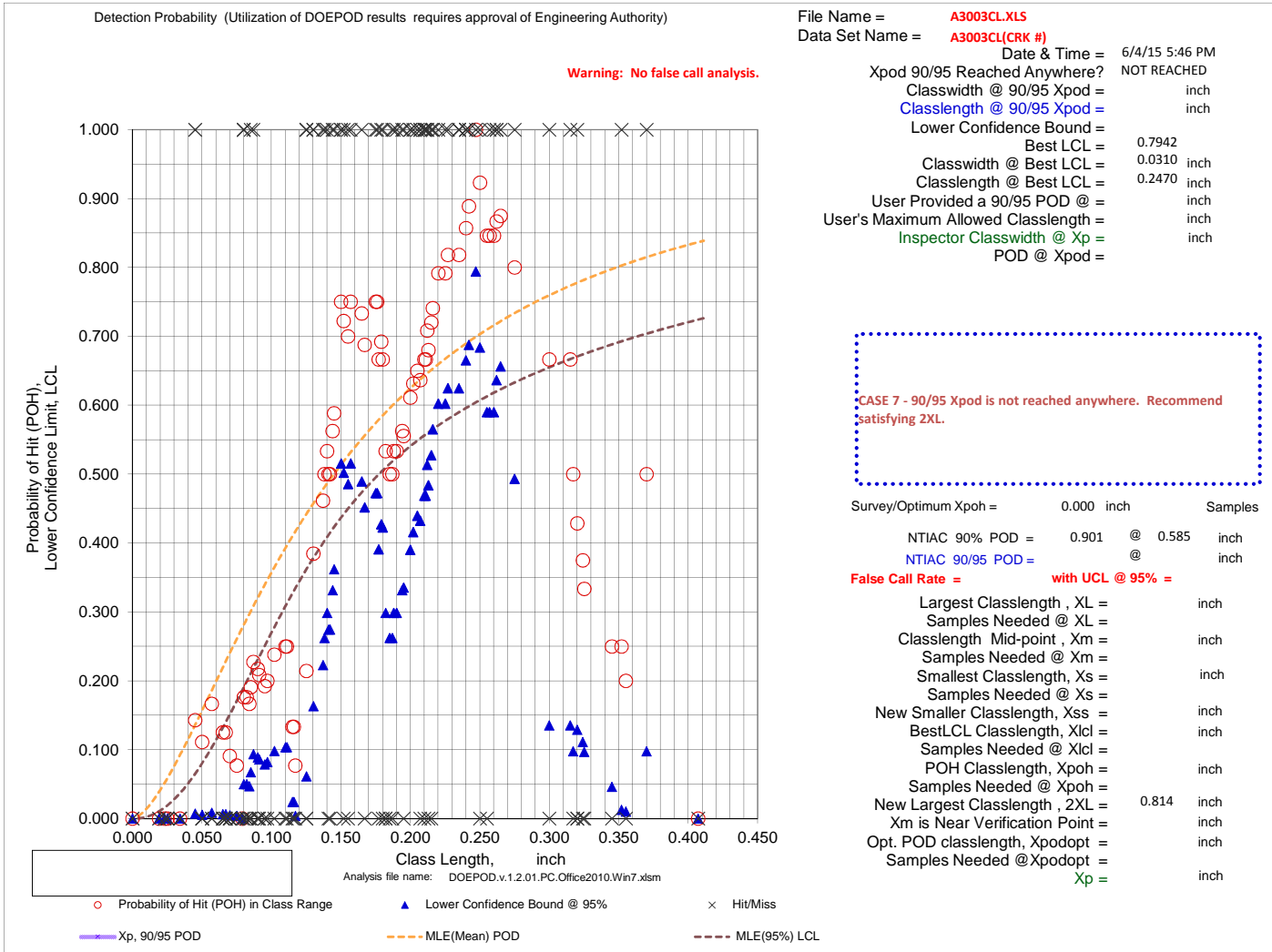
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A3003CL.XLS
 Data Set Name = A3003CL(CRK #)

Directed DOE Options

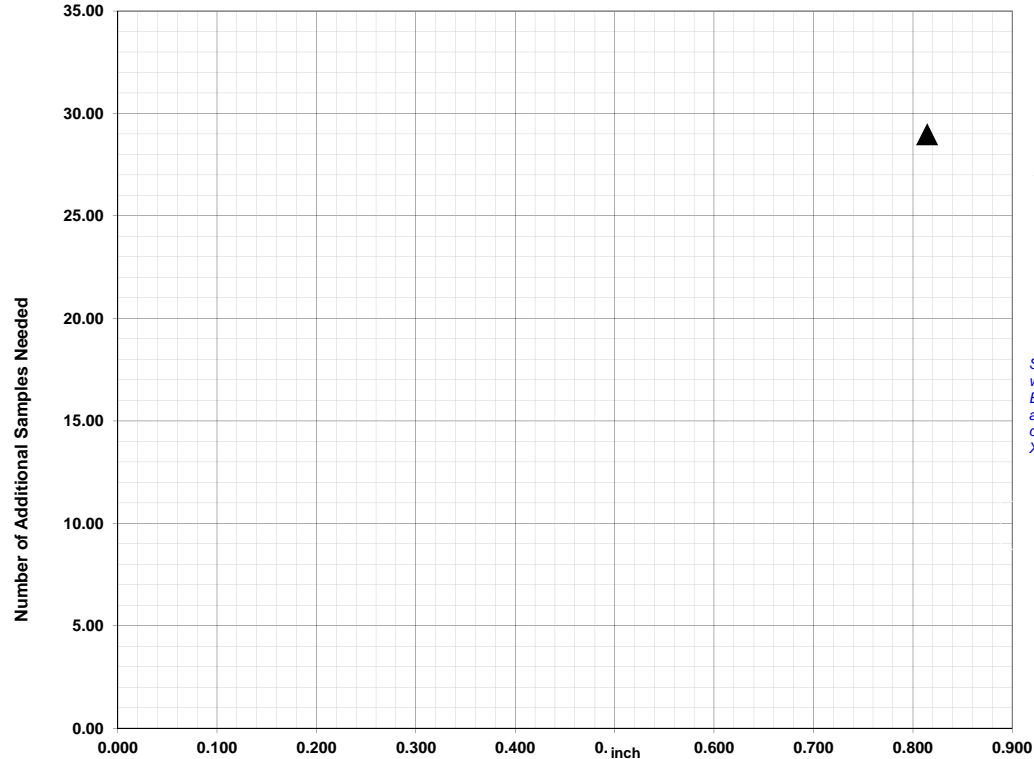


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.814	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.814 29
 **Alternate Xm =
 Xpodopt =

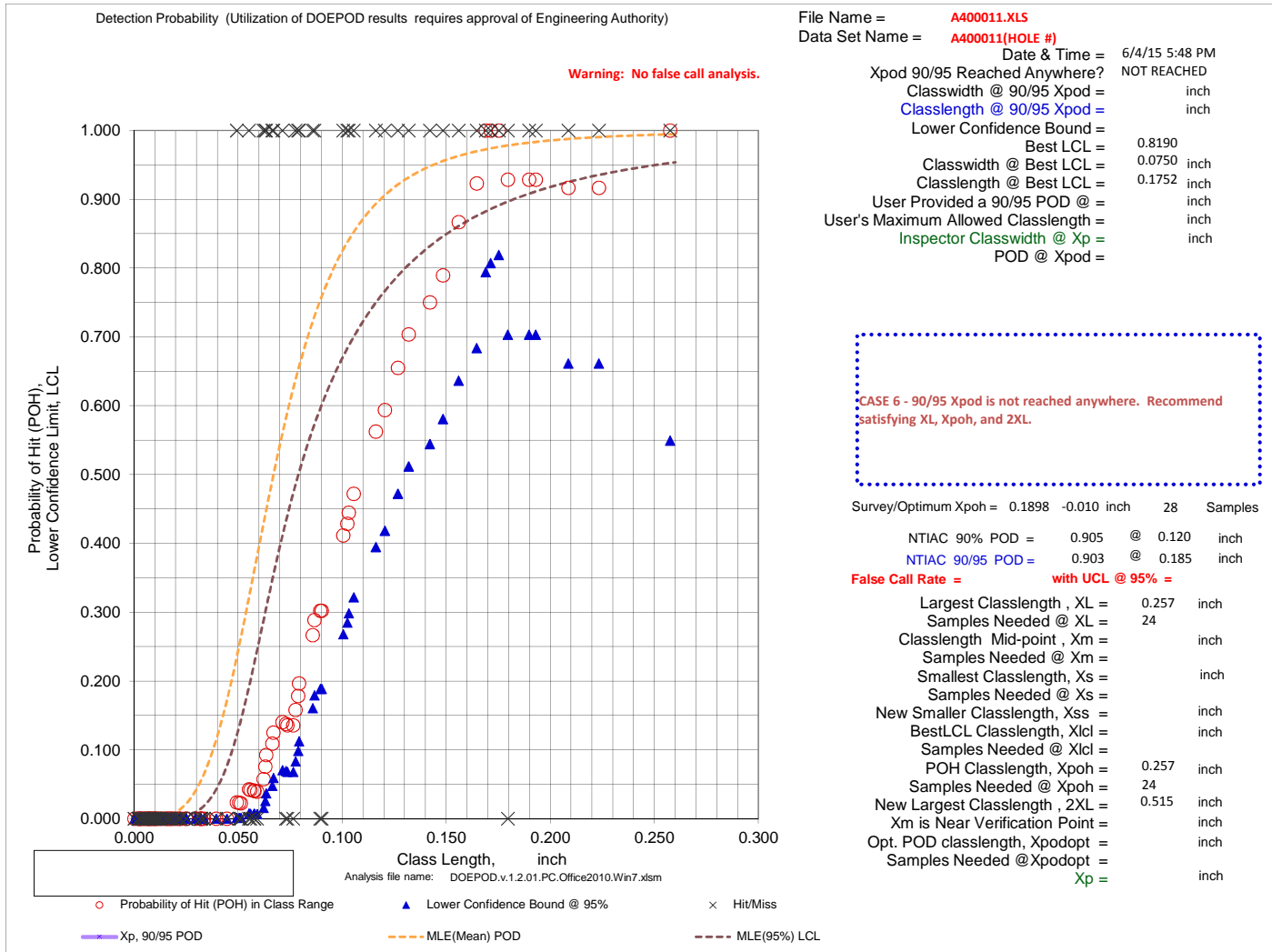
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A400011.XLS
 Data Set Name = A400011(HOLE #)

Directed DOE Options

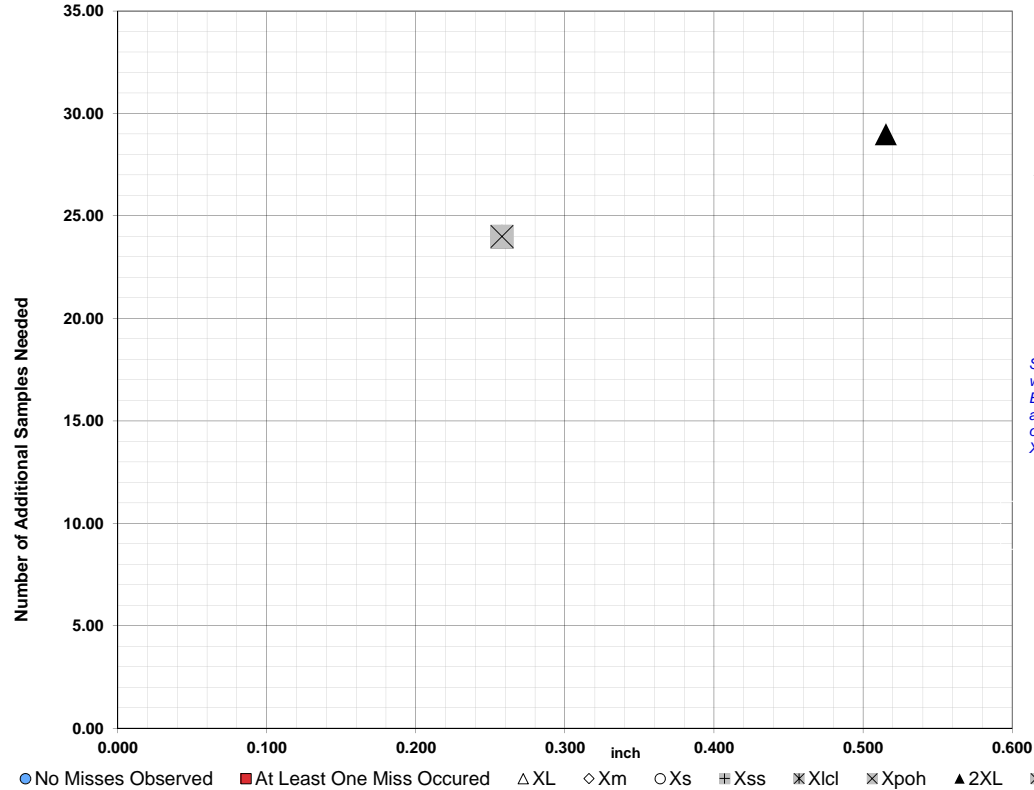


TABLE C

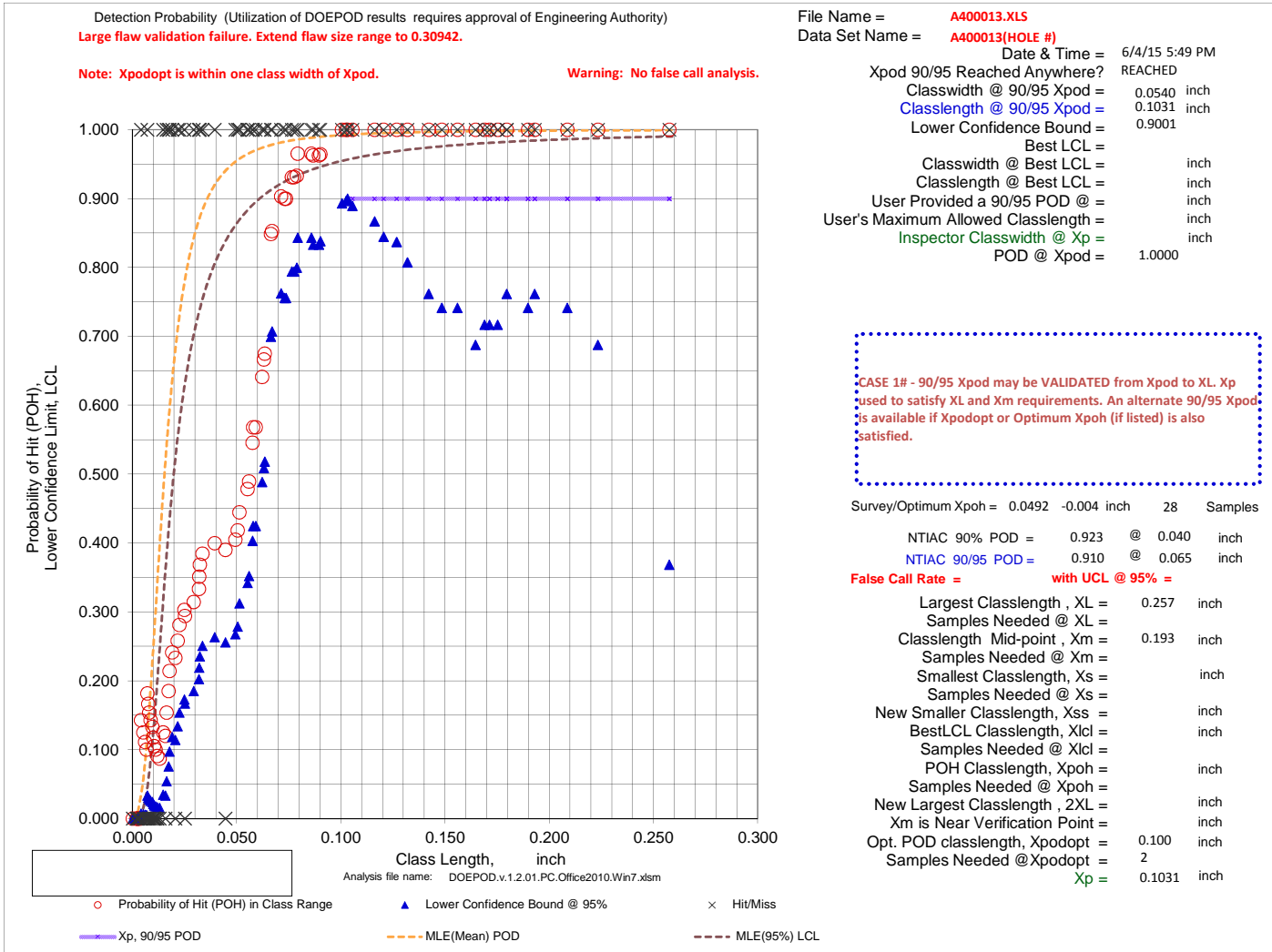
Class Length	Additional Samples
XL = 0.257	24
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.257	24
2XL = 0.515	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A400013.XLS
 Data Set Name = A400013(HOLE #)

Directed DOE Options

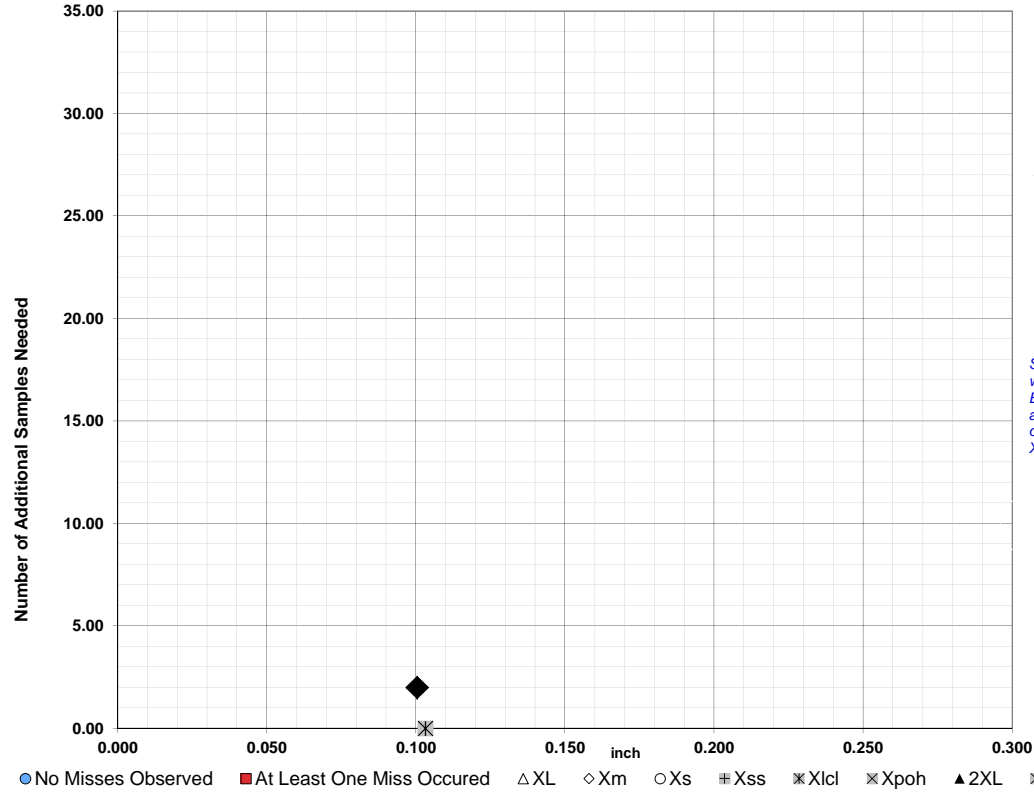


TABLE C

Class Length	Additional Samples
XL =	0.257
Xm =	0.193
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.100 2

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

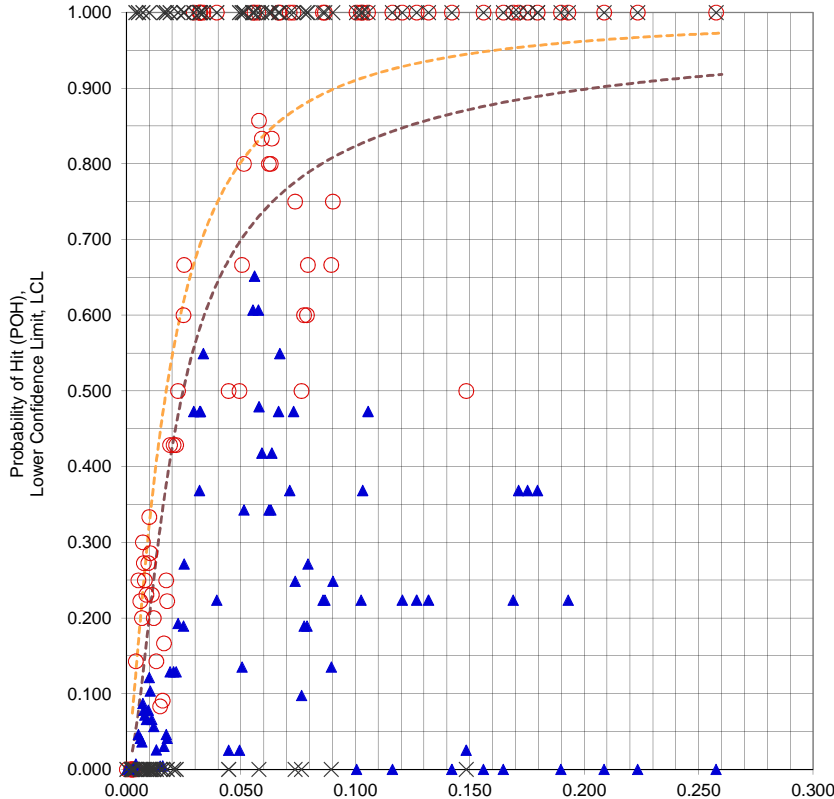
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



--> Optimum Xpoh Available; Using Best LCL

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = **A400014.XLS**
 Data Set Name = **A400014(HOLE #)**
 Date & Time = 6/4/15 5:50 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6518
 Classwidth @ Best LCL = 0.0070 inch
 Classlength @ Best LCL = 0.0559 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.1559 -0.007 inch 28 Samples
 NTIAC 90% POD = 0.905 @ 0.095 inch
 NTIAC 90/95 POD = 0.901 @ 0.205 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.257 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.156 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 0.515 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A400014.XLS
 Data Set Name = A400014(HOLE #)

Directed DOE Options

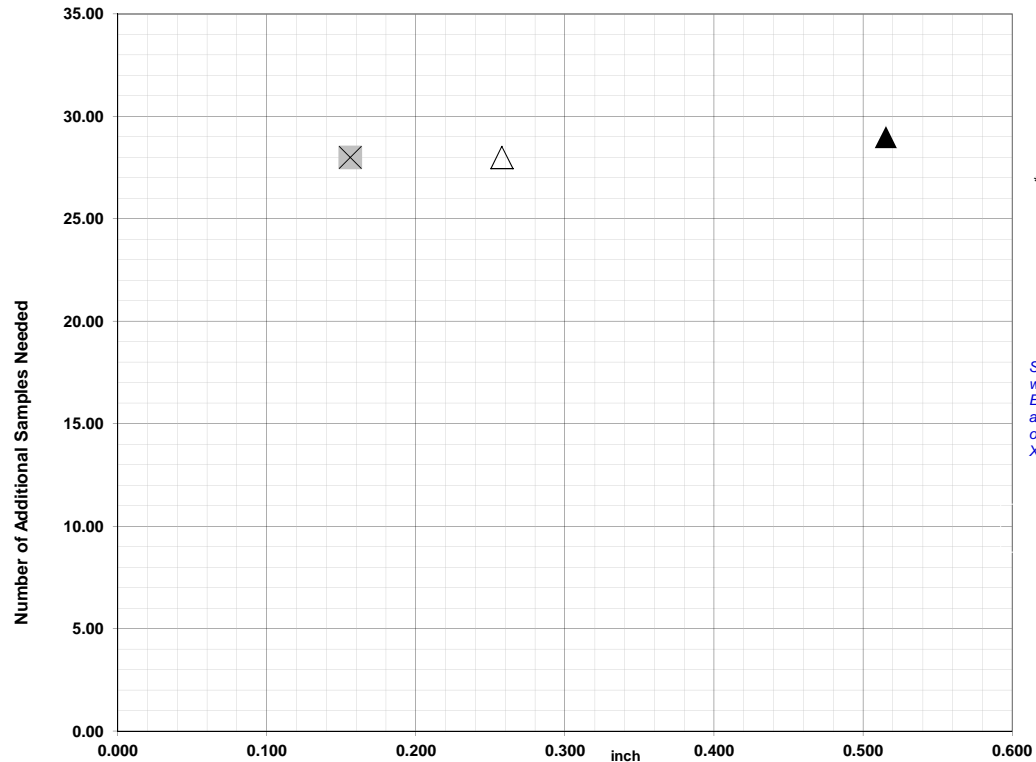


TABLE C

Class Length Additional Samples

XL = 0.257 28
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh = 0.156 28
 2XL = 0.515 29

**Alternate Xm =
 Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs # Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

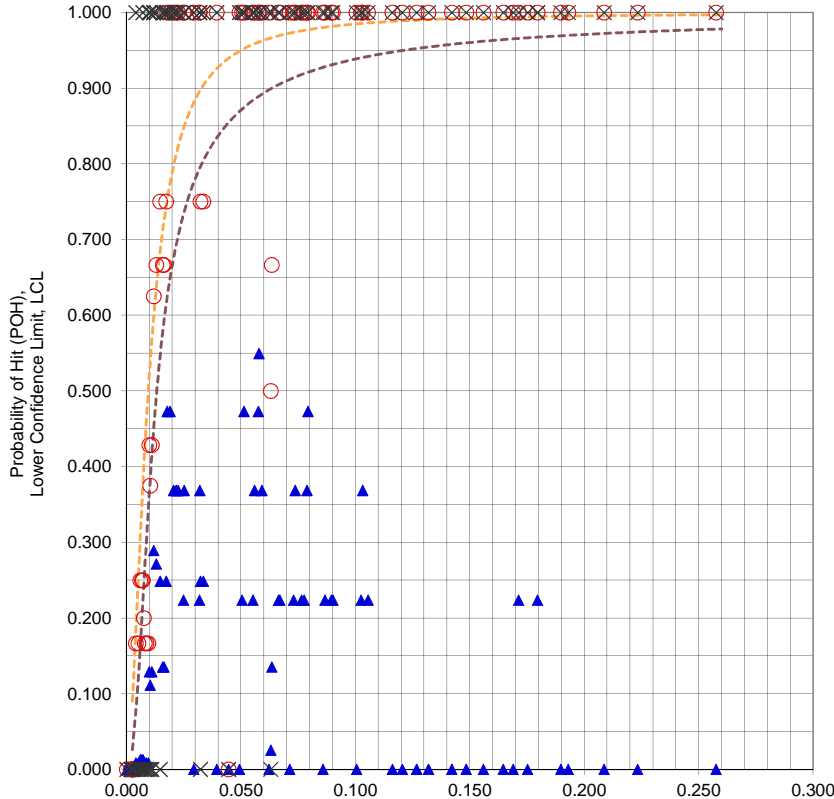
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **A400015.XLS**
 Data Set Name = **A400015(HOLE #)**
 Date & Time = 6/4/15 5:51 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.5493
 Classwidth @ Best LCL = 0.0030 inch
 Classlength @ Best LCL = 0.0579 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 5 - This is a survey data set. 90/95 Xpod is not reached anywhere. Recommend satisfying XL and Survey Xpoh (if listed)

Survey/Optimum Xpoh = 0.0663 -0.003 inch 28 Samples

NTIAC 90% POD = 0.910 @ 0.035 inch
 NTIAC 90/95 POD = 0.903 @ 0.065 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.257 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.066 inch
 Samples Needed @ Xpoh = 27
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

--> Survey Data Set; System Set Class Width

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = A400015.XLS
 Data Set Name = A400015(HOLE #)

Directed DOE Options

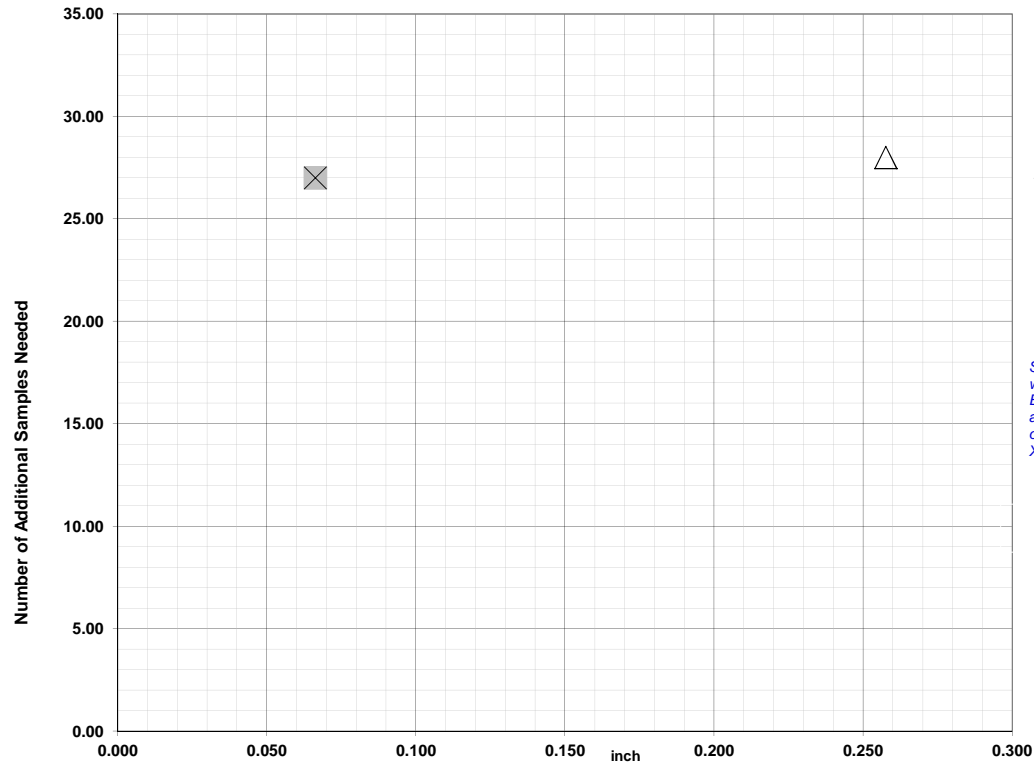


TABLE C

Class Length	Additional Samples
XL = 0.257	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.066	27
2XL =	
**Alternate Xm =	
Xpodopt =	

**Alternate Xm =
 Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 # Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

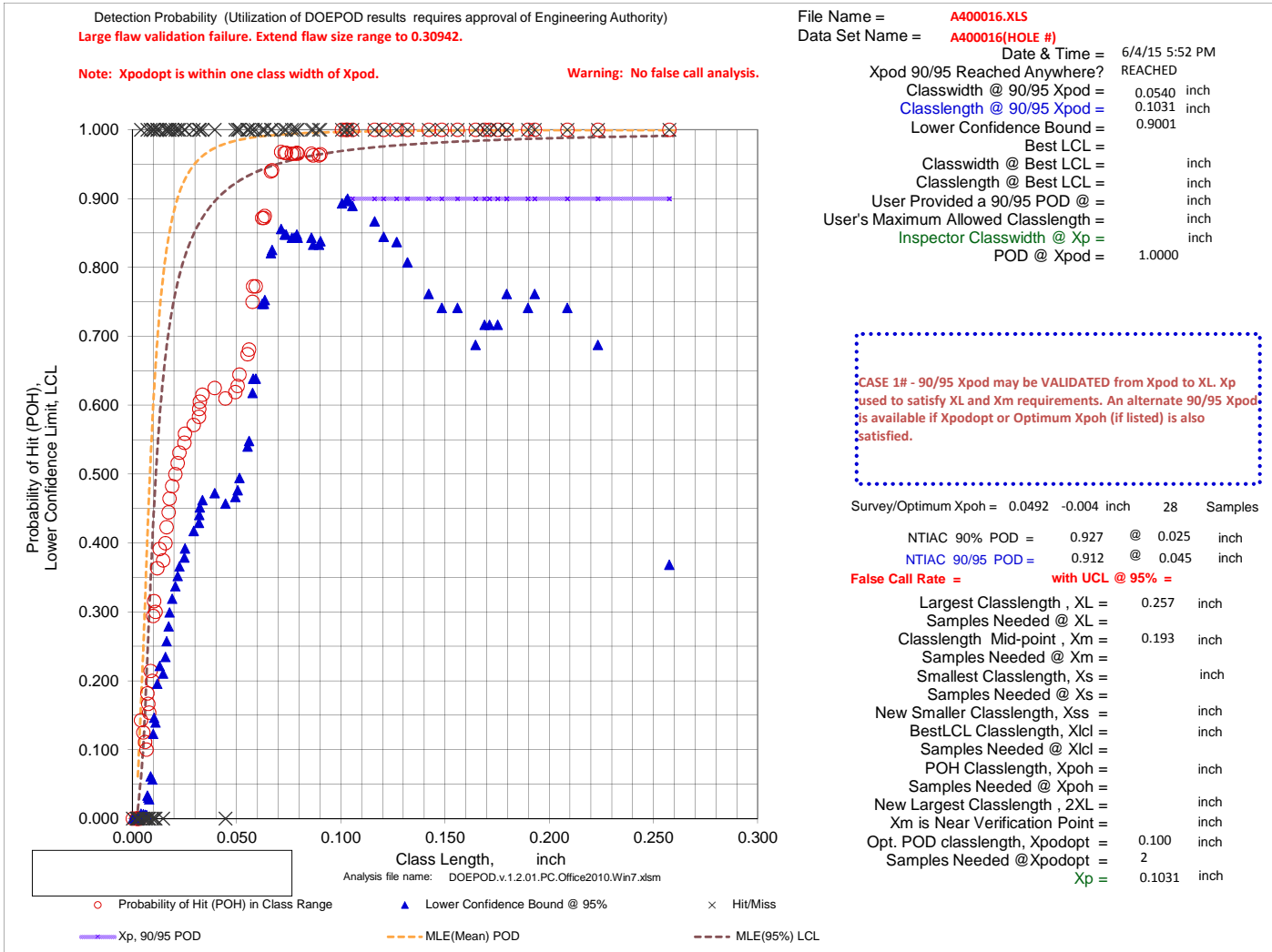
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A400016.XLS
 Data Set Name = A400016(HOLE #)

Directed DOE Options



TABLE C

Class Length	Additional Samples
XL =	0.257
Xm =	0.193
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.100 2

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

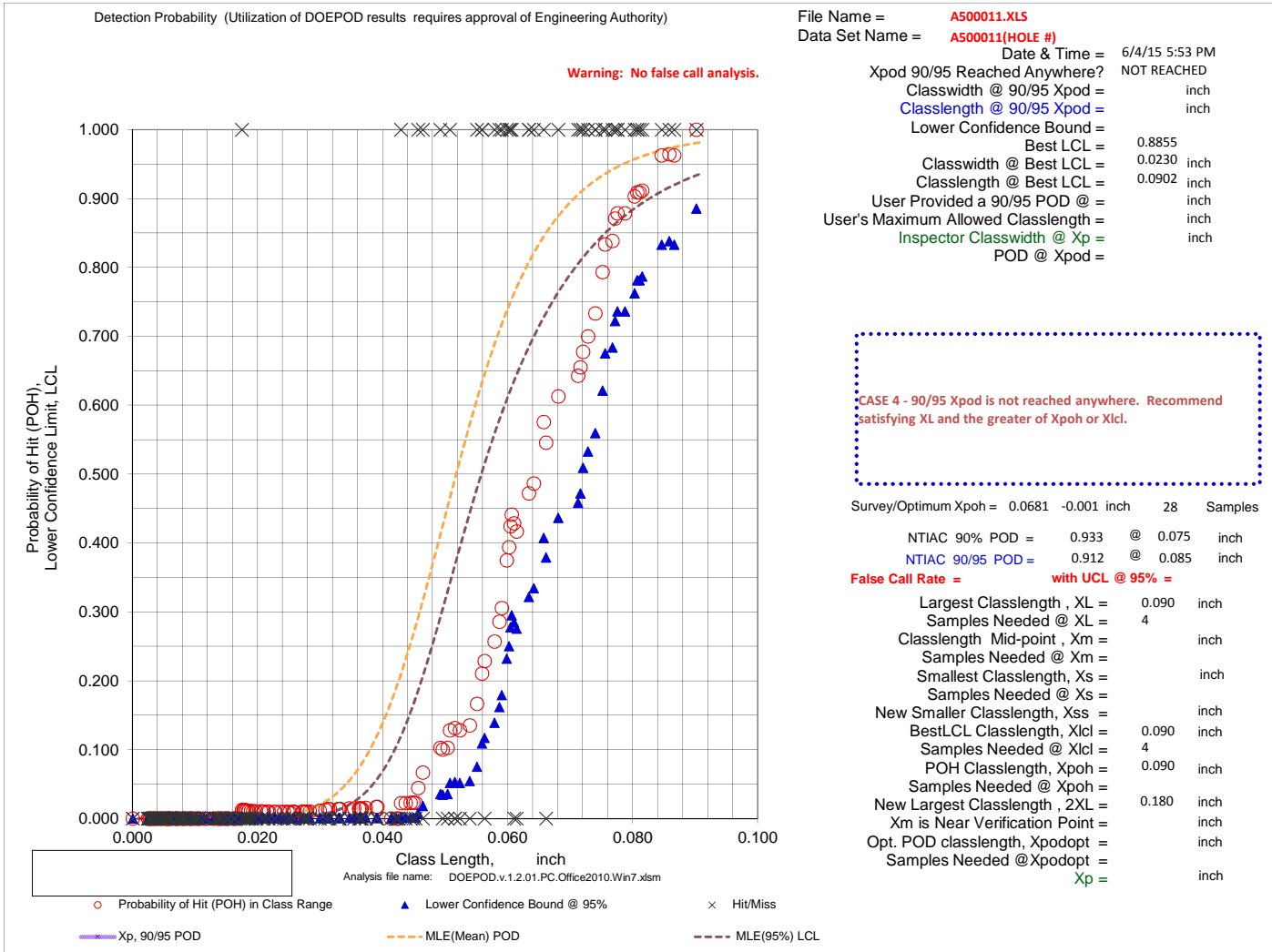
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A500011.XLS
 Data Set Name = A500011(HOLE #)

Directed DOE Options

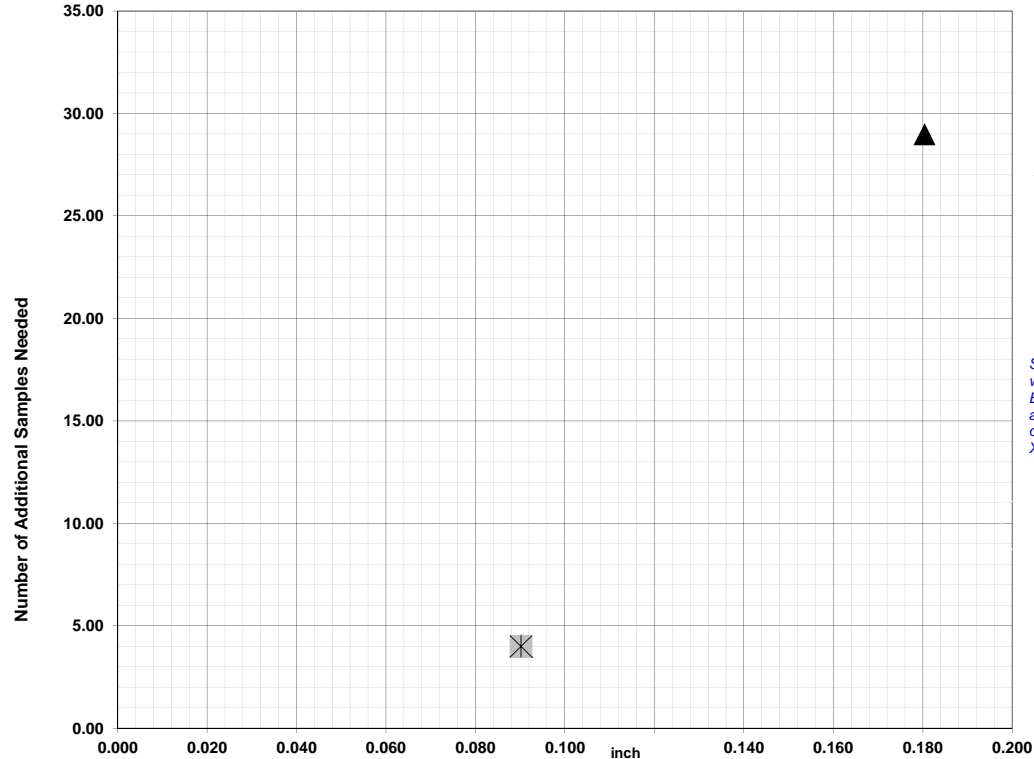


TABLE C

Class Length	Additional Samples
XL = 0.090	4
Xm =	
Xs =	
Xss =	
Xlcl = 0.090	4
Xpoh = 0.090	
2XL = 0.180	29
**Alternate Xm =	
Xpodopt =	

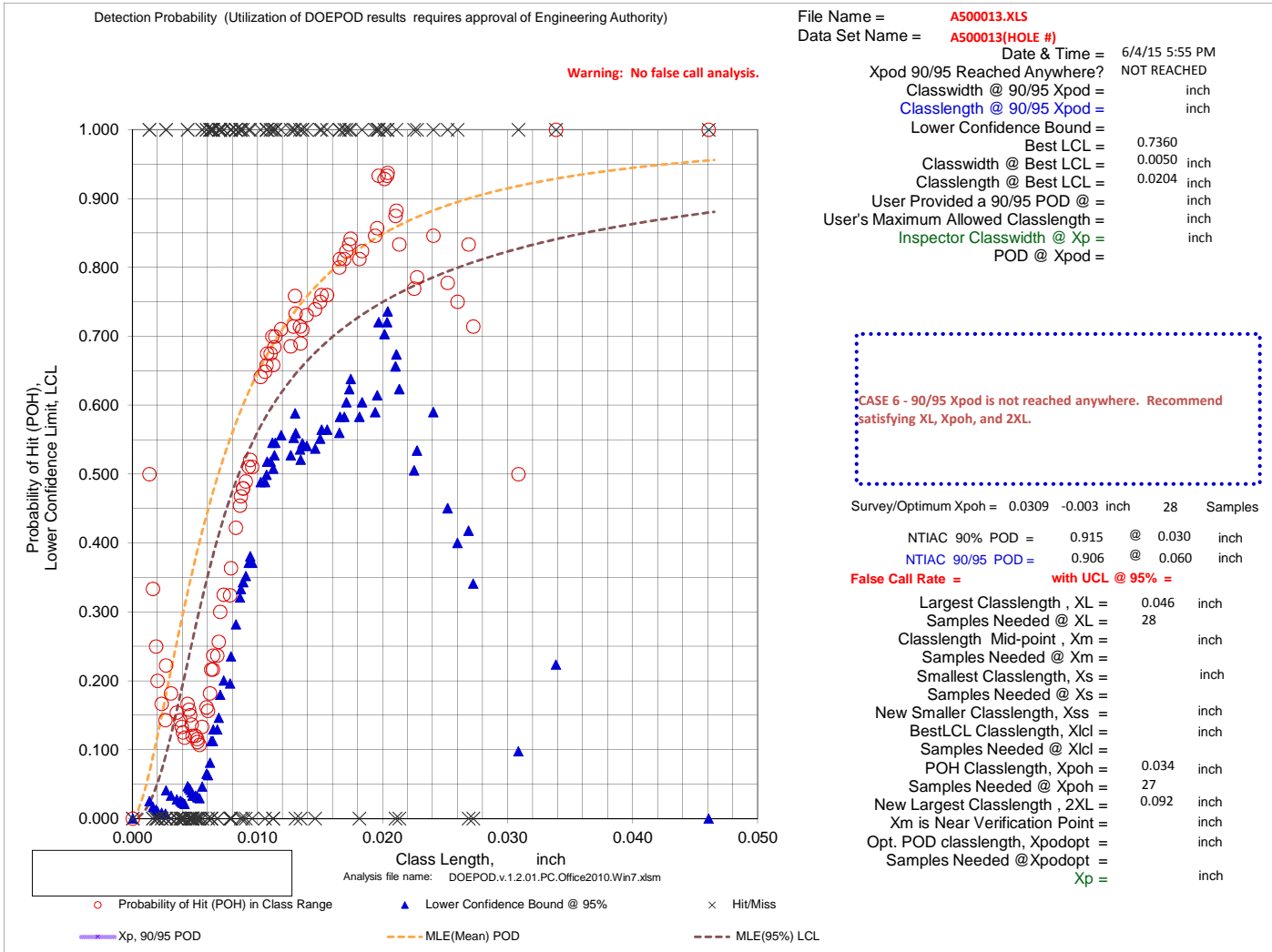
TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A500013.XLS
 Data Set Name = A500013(HOLE #)

Directed DOE Options

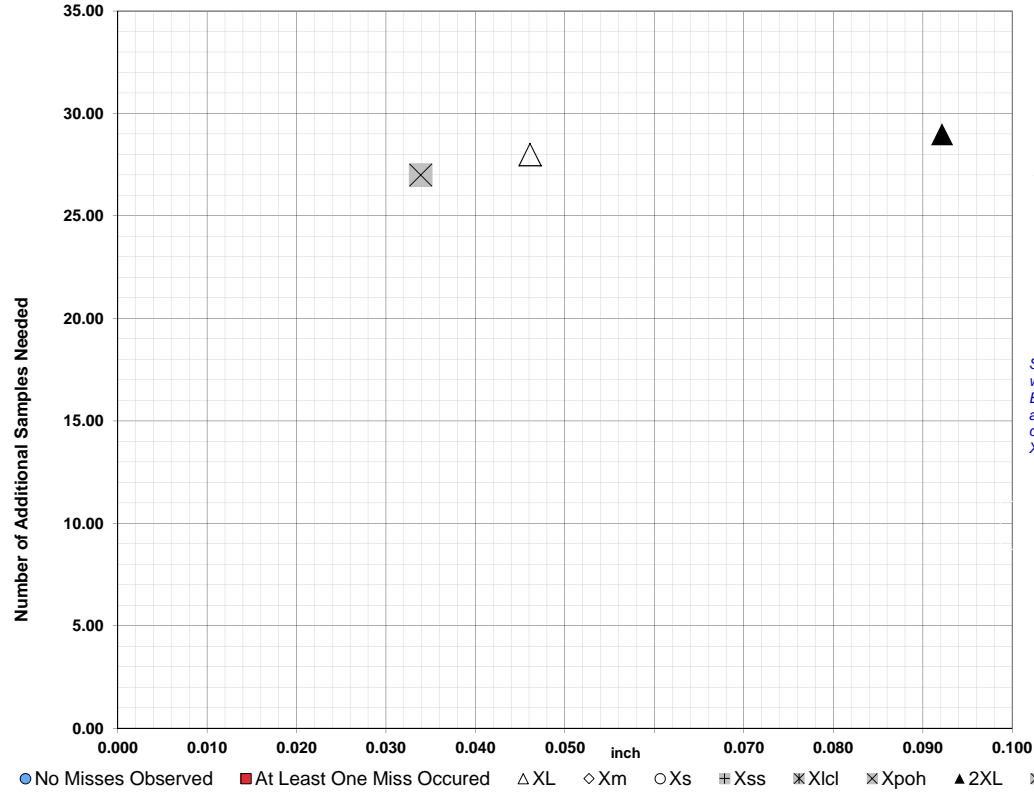


TABLE C

Class Length	Additional Samples
XL = 0.046	28
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 0.034	27
2XL = 0.092	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

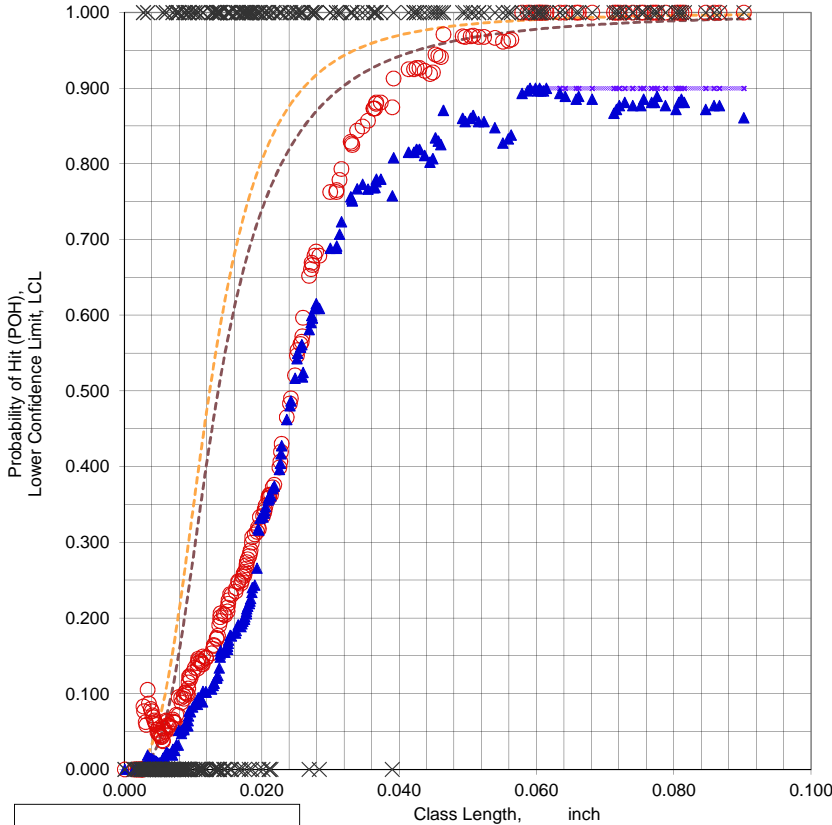
TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 0.17715.

Note: Xpodopt is within one class width of Xpod. **Warning: No false call analysis.**



File Name = **A500014.XLS**
 Data Set Name = **A500014(HOLE #)**
 Date & Time = 6/4/15 5:56 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0180 inch
 Classlength @ 90/95 Xpod = 0.0591 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1# - 90/95 Xpod may be VALIDATED from Xpod to XL. Xp used to satisfy XL and Xm requirements. An alternate 90/95 Xpod is available if Xpodopt or Optimum Xpoh (if listed) is also satisfied.

Survey/Optimum Xpoh = 0.0413 -0.002 inch 28 Samples
 NTIAC 90% POD = 0.932 @ 0.030 inch
 NTIAC 90/95 POD = 0.921 @ 0.035 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.090 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.078 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = 0.058 inch
 Samples Needed @ Xpodopt = 2
 Xp = 0.0591 inch

File Name = A500014.XLS
 Data Set Name = A500014(HOLE #)

Directed DOE Options

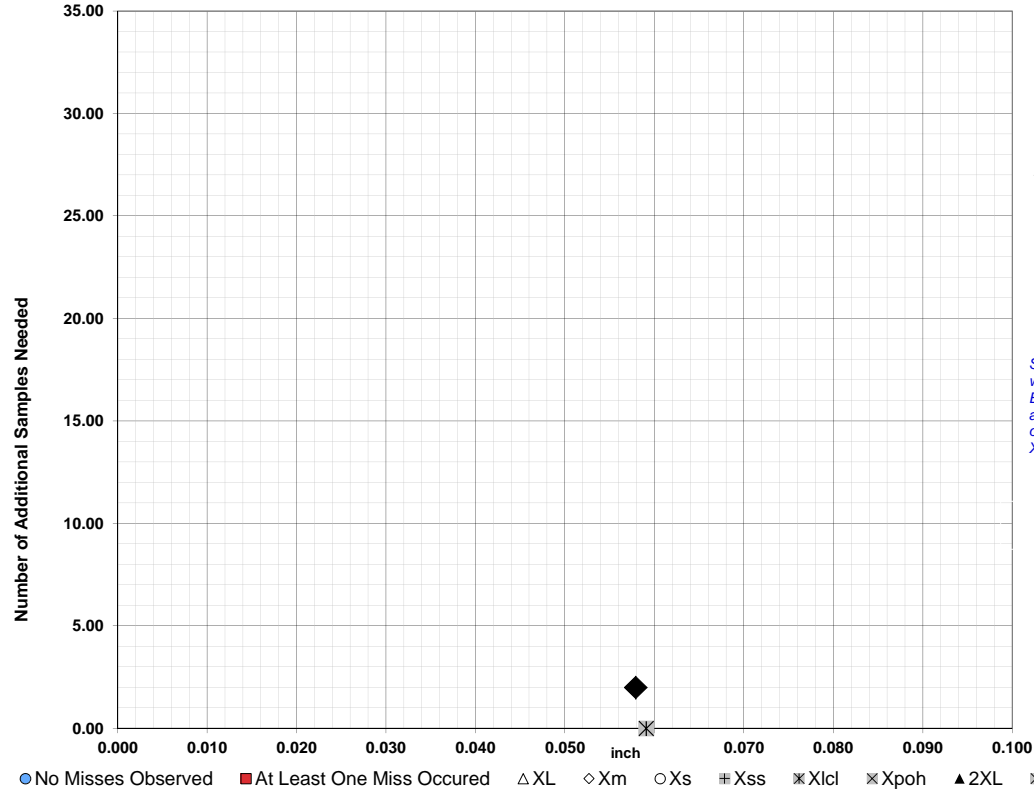


TABLE C

Class Length	Additional Samples
XL =	0.090
Xm =	0.078
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.058 2

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

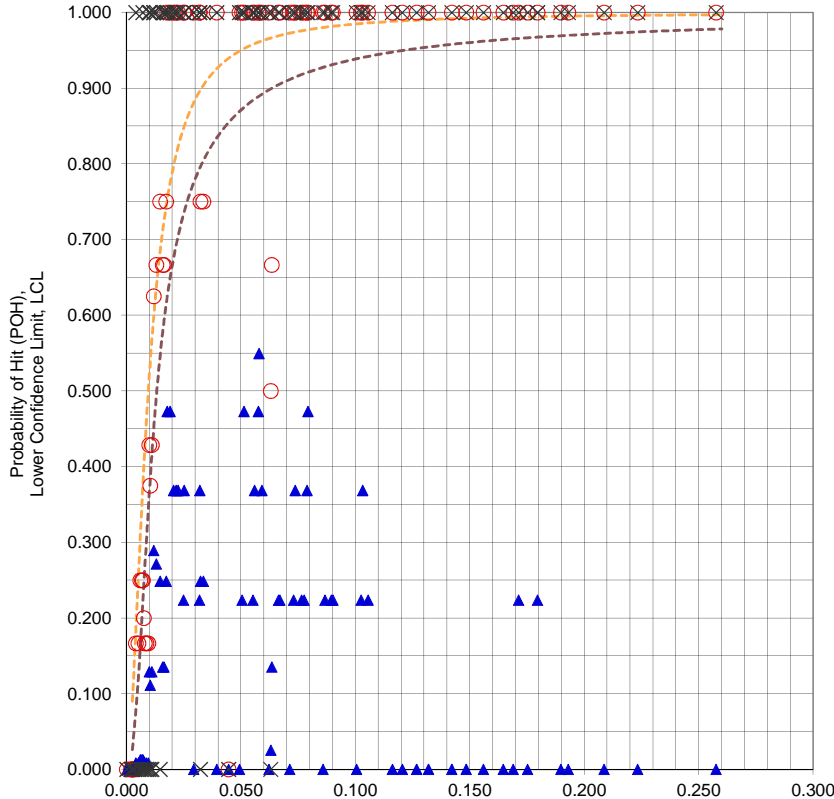
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



--> Survey Data Set; System Set Class Width

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = A500015.XLS
 Data Set Name = A500015(HOLE #)
 Date & Time = 6/4/15 5:57 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.5493
 Classwidth @ Best LCL = 0.0030 inch
 Classlength @ Best LCL = 0.0579 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 5 - This is a survey data set. 90/95 Xpod is not reached anywhere. Recommend satisfying XL and Survey Xpoh (if listed)

Survey/Optimum Xpoh = 0.0663 -0.003 inch 28 Samples
 NTIAC 90% POD = 0.910 @ 0.035 inch
 NTIAC 90/95 POD = 0.903 @ 0.065 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.257 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.066 inch
 Samples Needed @ Xpoh = 27
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A500015.XLS
 Data Set Name = A500015(HOLE #)

Directed DOE Options

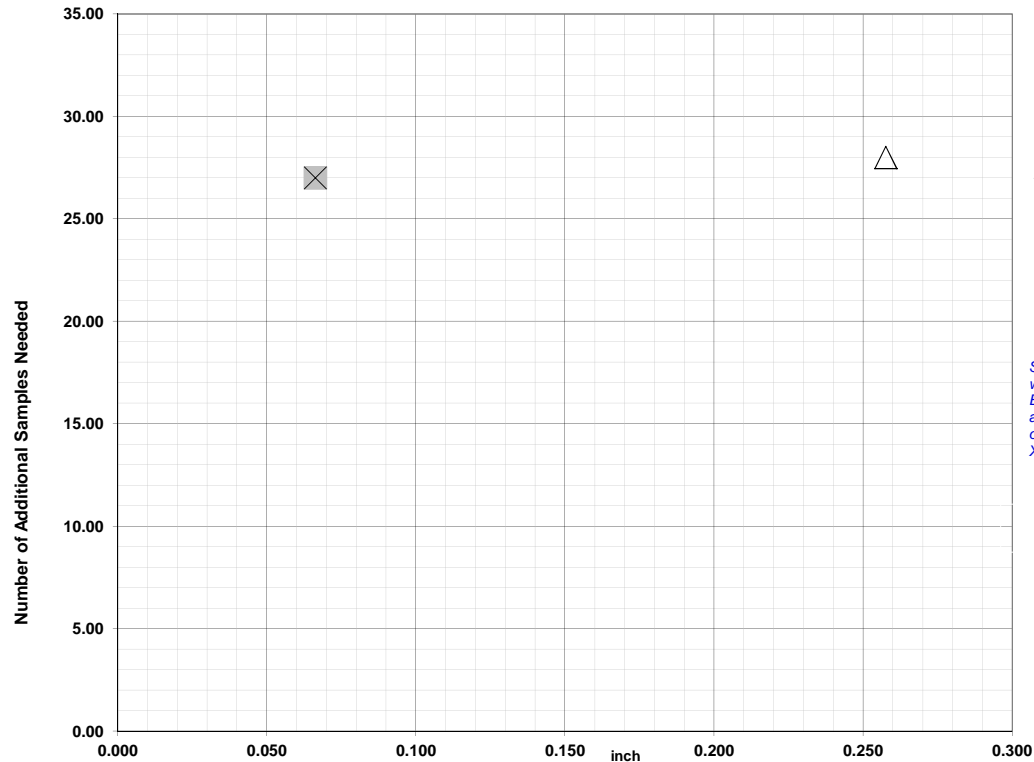


TABLE C

Class Length	Additional Samples
XL = 0.257	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.066	27
2XL =	
**Alternate Xm =	
Xpodopt =	

**Alternate Xm =
 Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 # Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

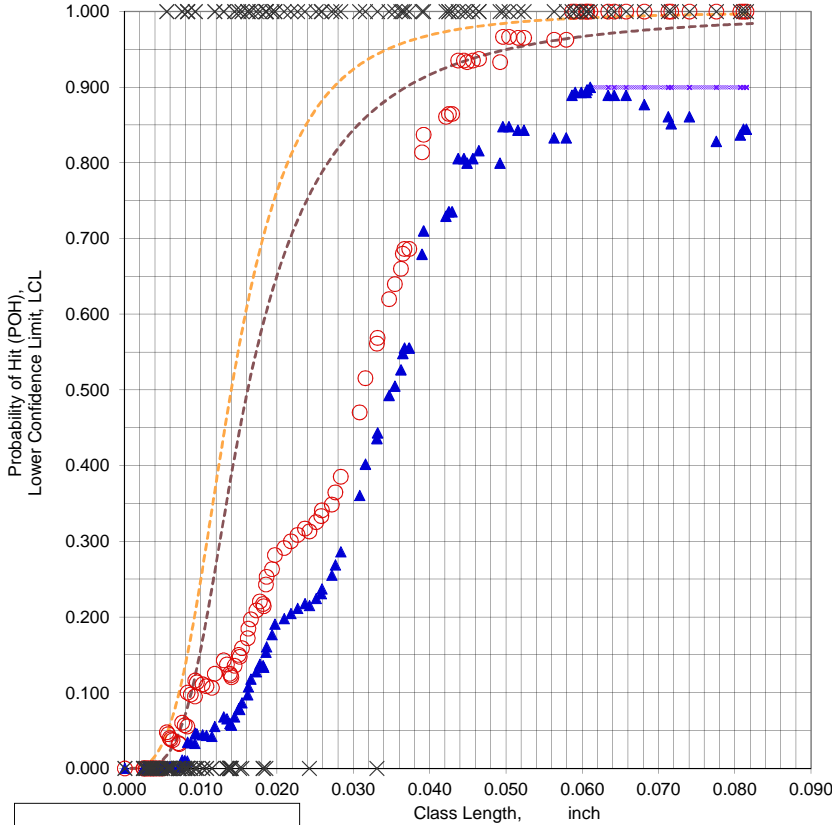
**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 0.18306.

Note: Xpodopt is within one class width of Xpod.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **A500016.XLS**
 Data Set Name = **A500016(HOLE #)**
 Date & Time = 6/4/15 5:58 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0250 inch
 Classlength @ 90/95 Xpod = 0.0610 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1# - 90/95 Xpod may be VALIDATED from Xpod to XL. Xp used to satisfy XL and Xm requirements. An alternate 90/95 Xpod is available if Xpodopt or Optimum Xpoh (if listed) is also satisfied.

Survey/Optimum Xpoh = 0.0346 -0.001 inch 28 Samples

NTIAC 90% POD = 0.924 @ 0.030 inch
 NTIAC 90/95 POD = 0.917 @ 0.040 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.081 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.068 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = 0.059 inch
 Samples Needed @ Xpodopt = 3
 Xp = 0.0610 inch

File Name = A500016.XLS
 Data Set Name = A500016(HOLE #)

Directed DOE Options

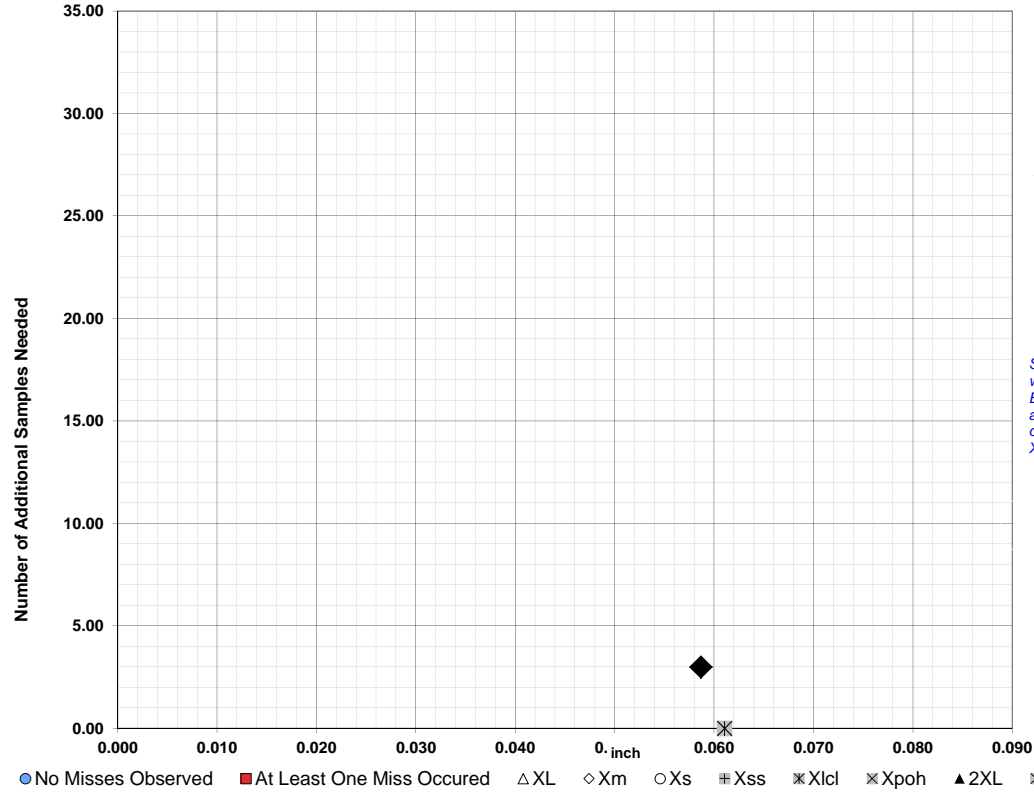


TABLE C

Class Length	Additional Samples
XL =	0.081
Xm =	0.068
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.059 3

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

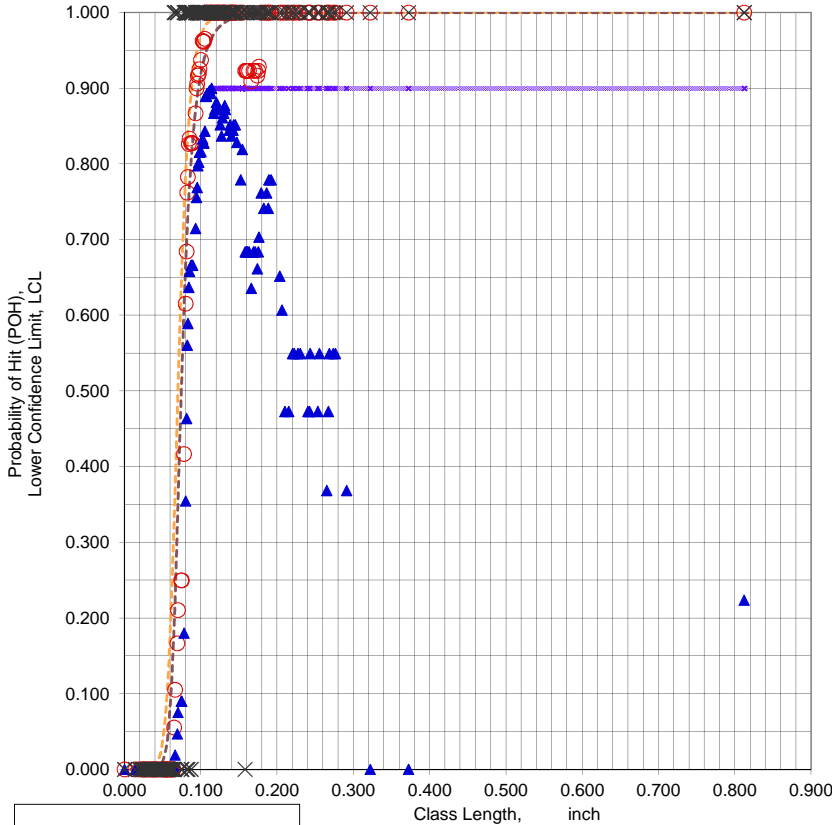
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 16 more large flaws.
Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
— Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **A6001A.XLS**
Data Set Name = **A6001A(SITE CODE)**
Date & Time = 6/4/15 5:59 PM
Xpod 90/95 Reached Anywhere? REACHED
Classwidth @ 90/95 Xpod = 0.0180 inch
Classlength @ 90/95 Xpod = 0.1140 inch
Lower Confidence Bound = 0.9001
Best LCL =
Classwidth @ Best LCL = inch
Classlength @ Best LCL = inch
User Provided a 90/95 POD @ = inch
User's Maximum Allowed Classlength = inch
Inspector Classwidth @ Xp = inch
POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
NTIAC 90% POD = 0.920 @ 0.090 inch
NTIAC 90/95 POD = 0.919 @ 0.100 inch
False Call Rate = with UCL @ 95% =
Largest Classlength , XL = 0.812 inch
Samples Needed @ XL =
Classlength Mid-point , Xm = 0.291 inch
Samples Needed @ Xm =
Smallest Classlength, Xs = inch
Samples Needed @ Xs =
New Smaller Classlength, Xss = inch
BestLCL Classlength, Xlcl = inch
Samples Needed @ Xlcl =
POH Classlength, Xpoh = inch
Samples Needed @ Xpoh =
New Largest Classlength , 2XL = inch
Xm is Near Verification Point = inch
Opt. POD classlength, Xpodopt = inch
Samples Needed @ Xpodopt =
Xp = 0.1140 inch

File Name = A6001A.XLS
 Data Set Name = A6001A(SITE CODE)

Directed DOE Options

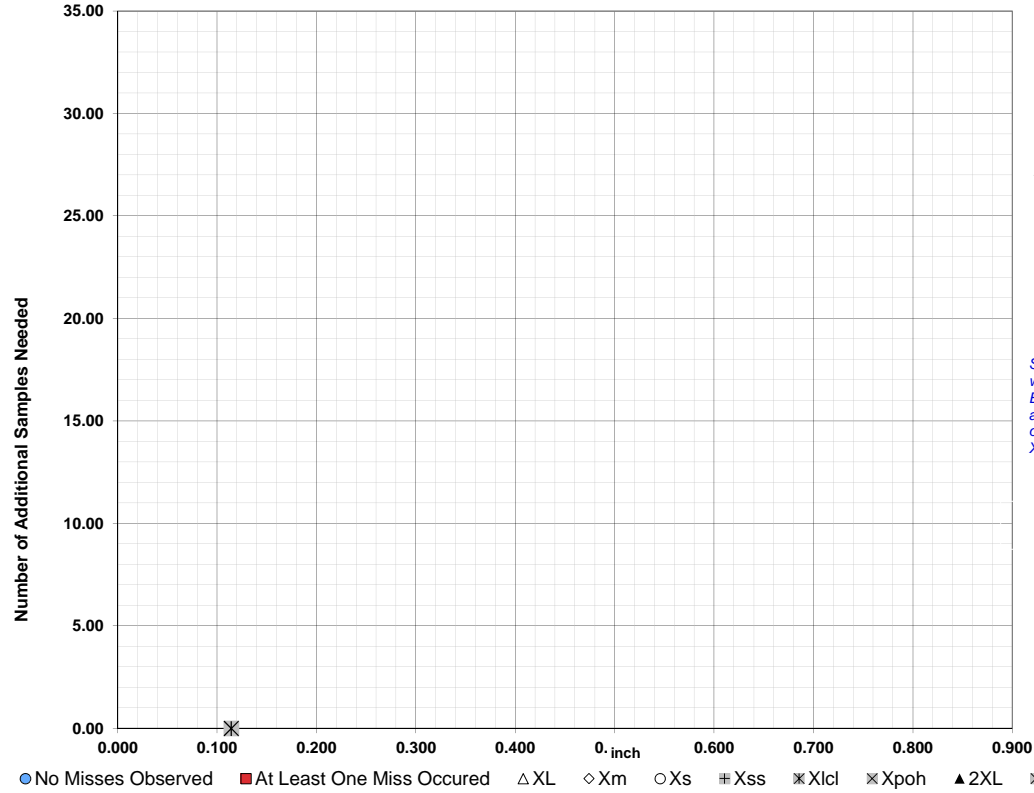


TABLE C

Class Length Additional Samples

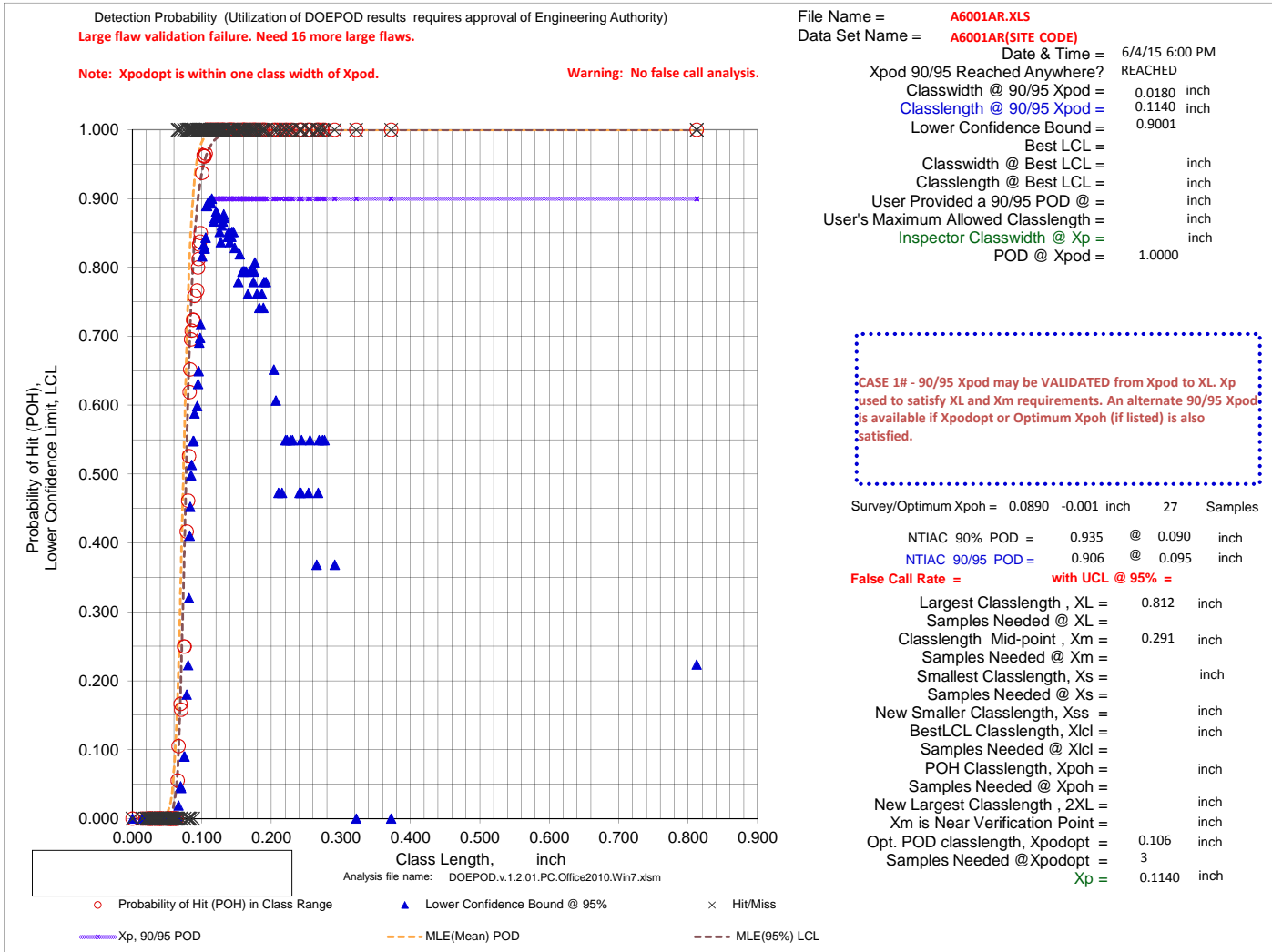
XL = 0.812
 Xm = 0.291
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6001AR.XLS
 Data Set Name = A6001AR(SITE CODE)

Directed DOE Options

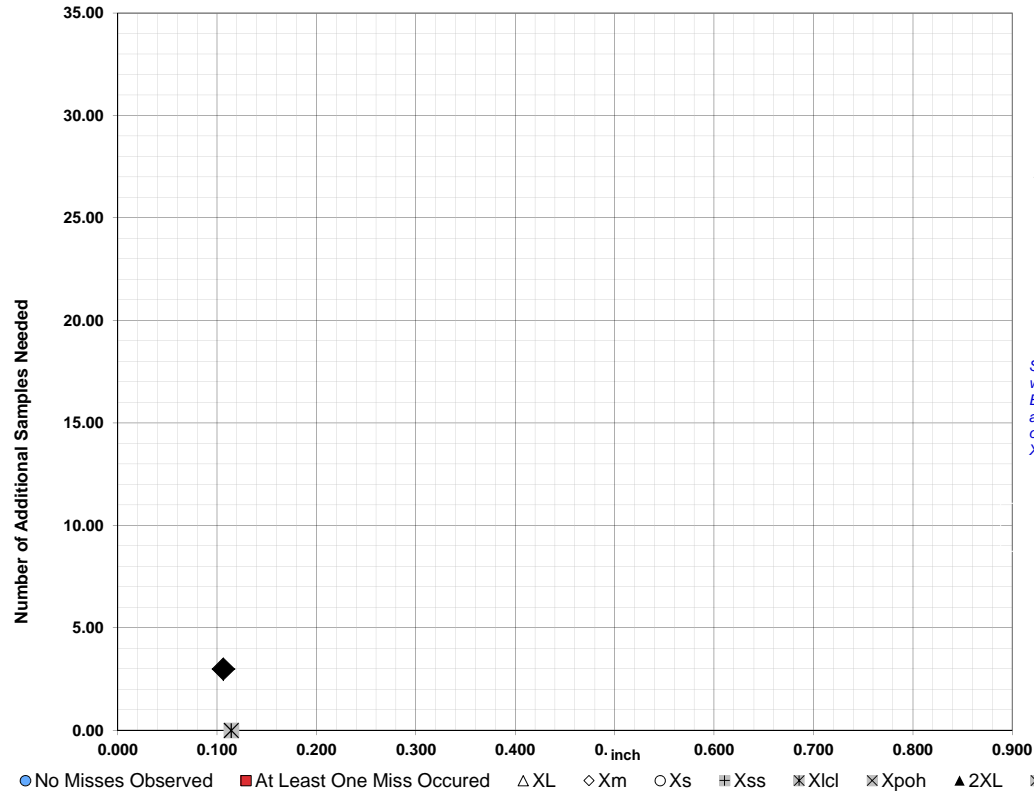


TABLE C

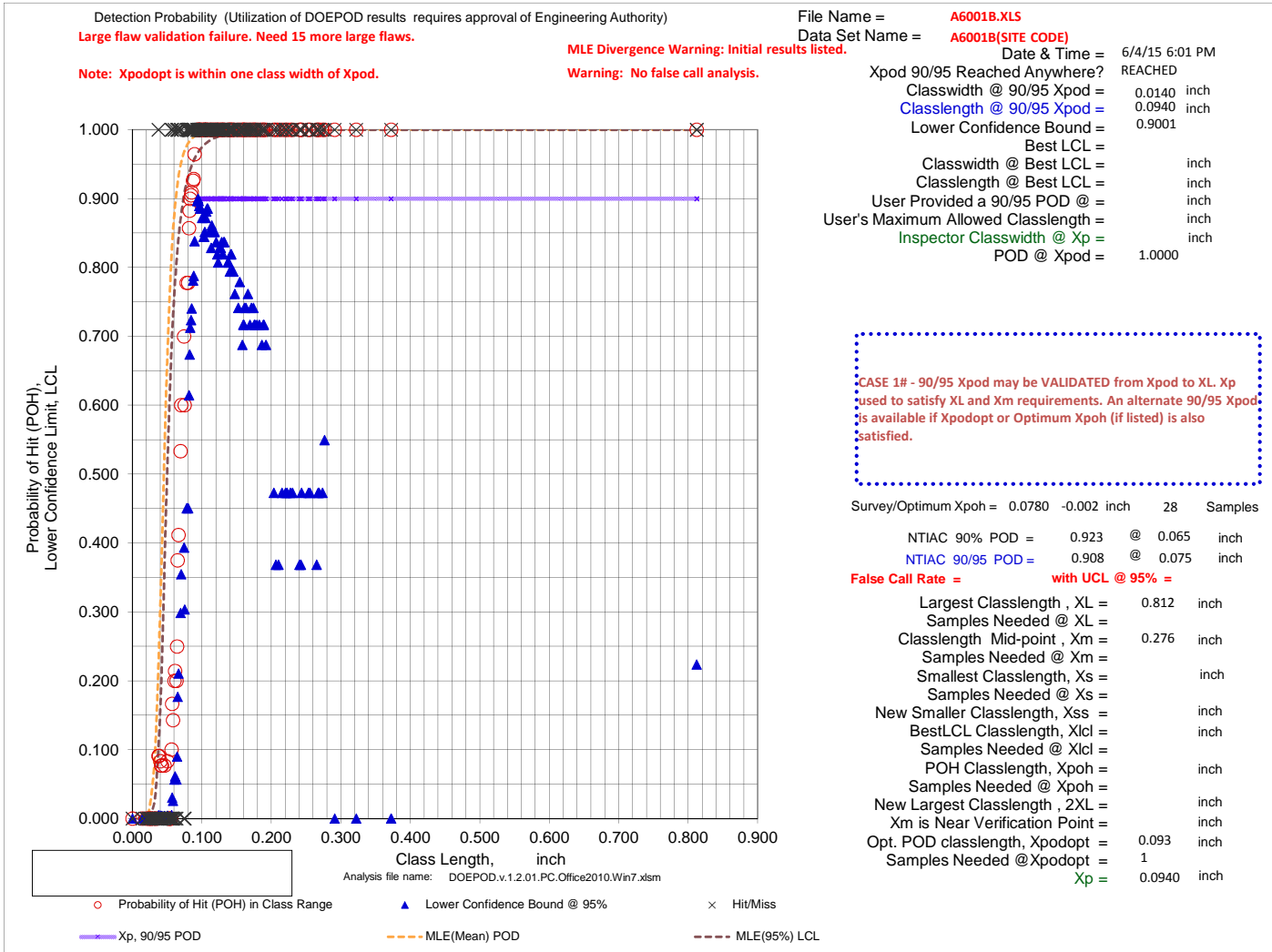
Class Length	Additional Samples
XL =	0.812
Xm =	0.291
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.106 3

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6001B.XLS
 Data Set Name = A6001B(SITE CODE)

Directed DOE Options

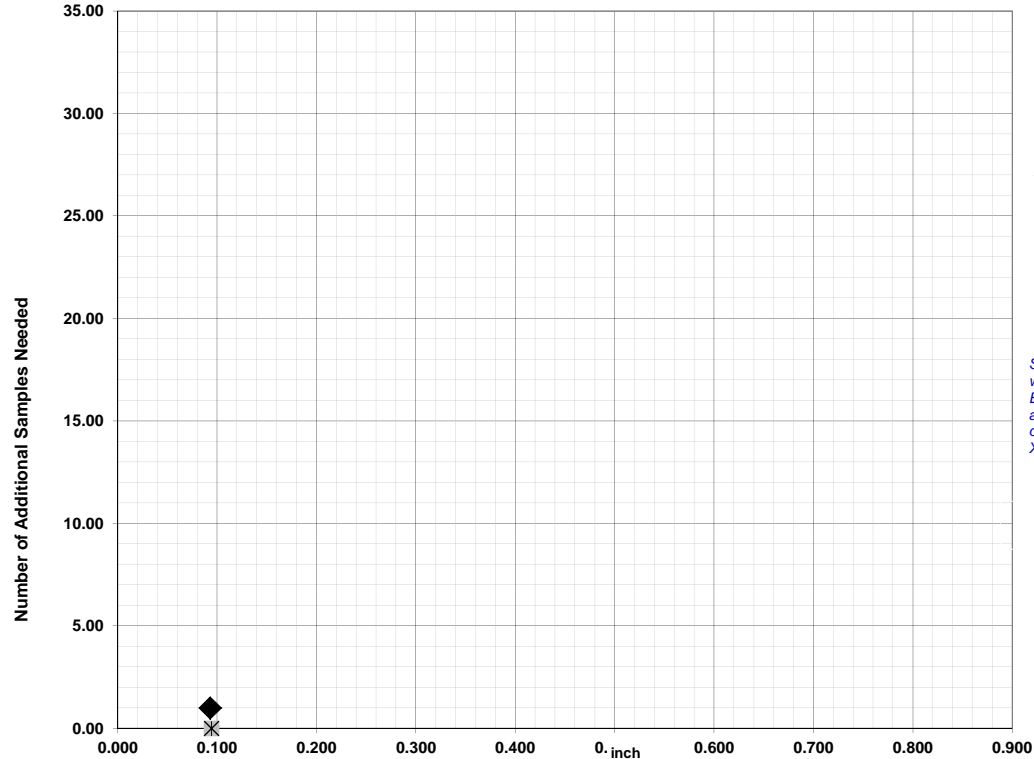


TABLE C

Class Length	Additional Samples
XL =	0.812
Xm =	0.276
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.093 1

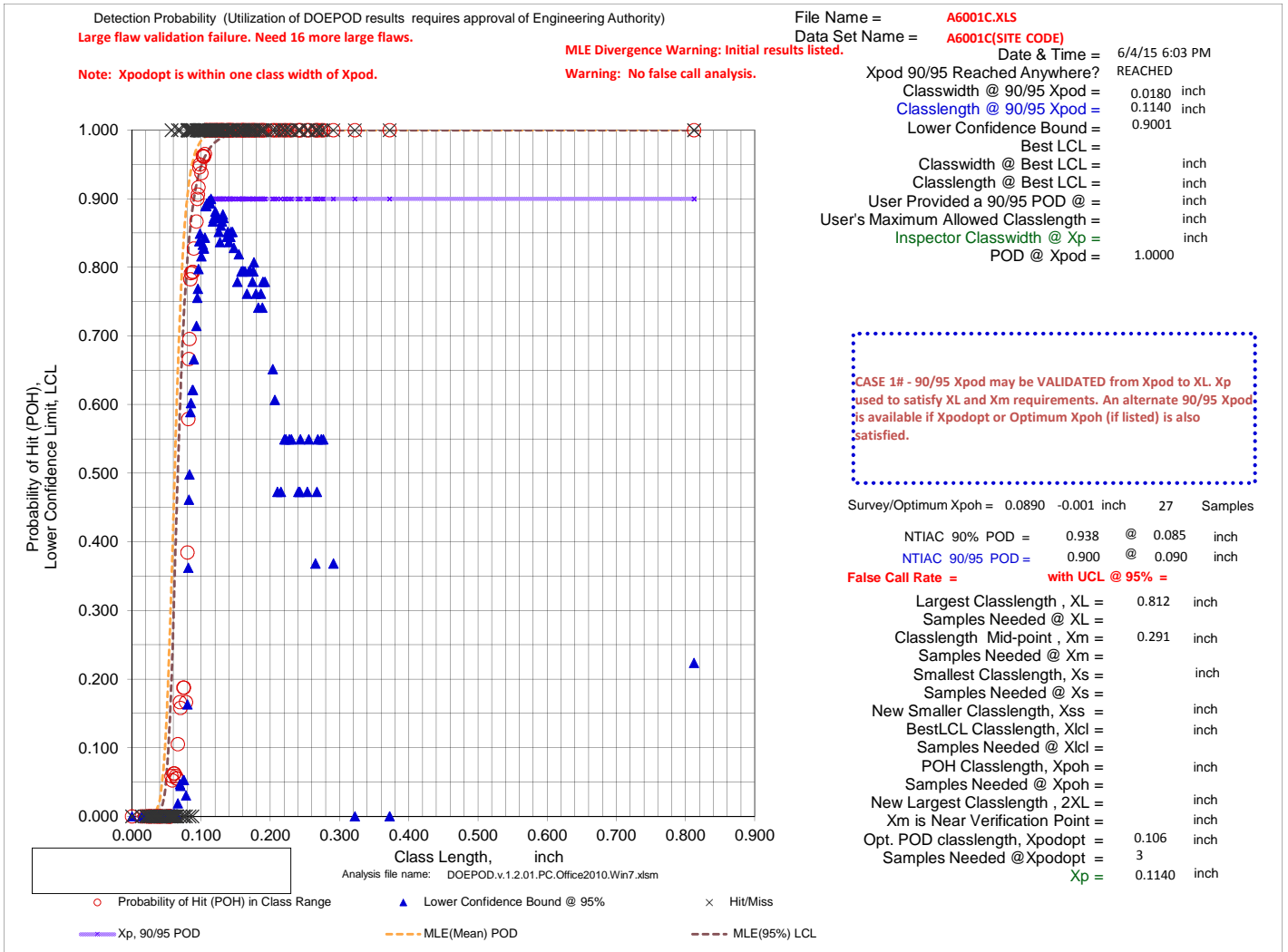
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6001C.XLS
 Data Set Name = A6001C(SITE CODE)

Directed DOE Options

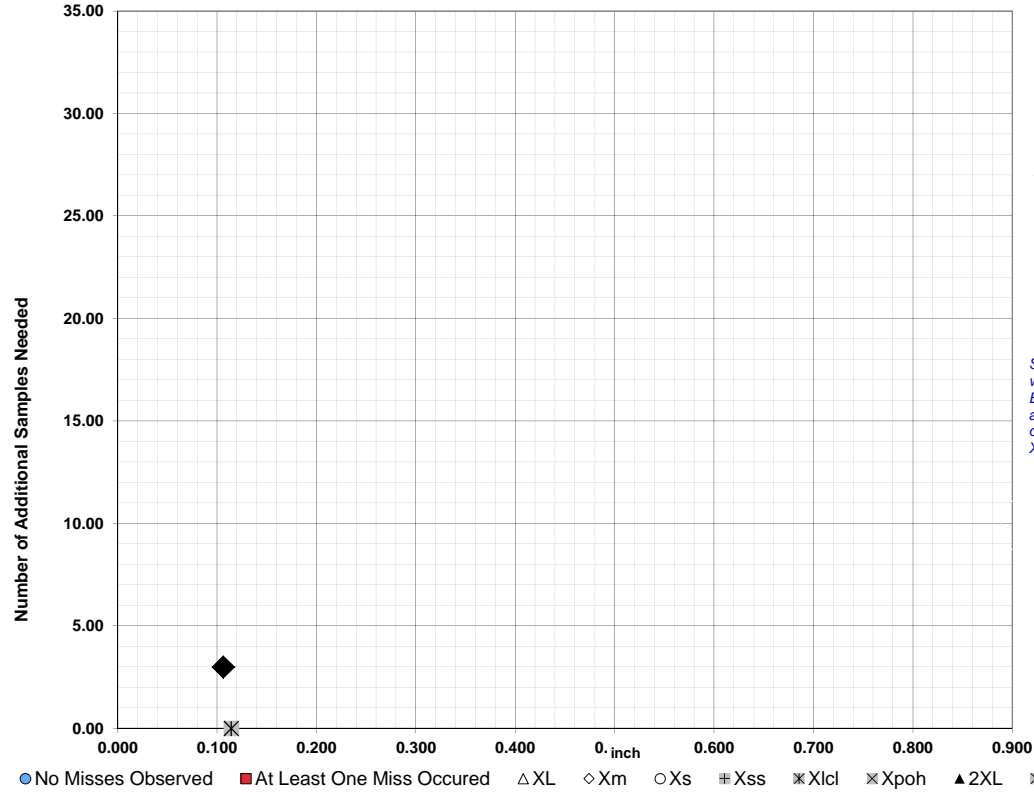


TABLE C

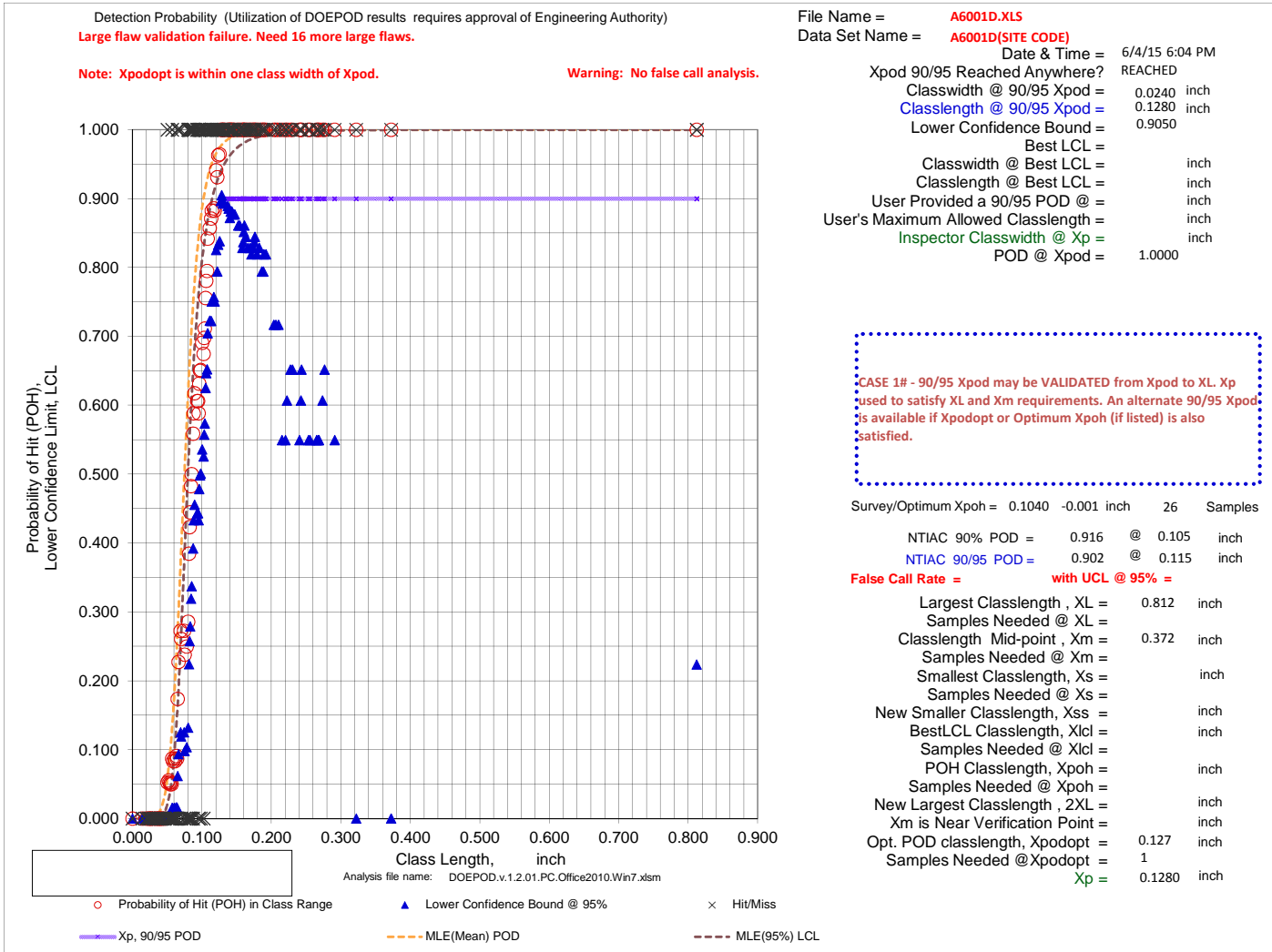
Class Length	Additional Samples
XL =	0.812
Xm =	0.291
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.106 3

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6001D.XLS
 Data Set Name = A6001D(SITE CODE)

Directed DOE Options

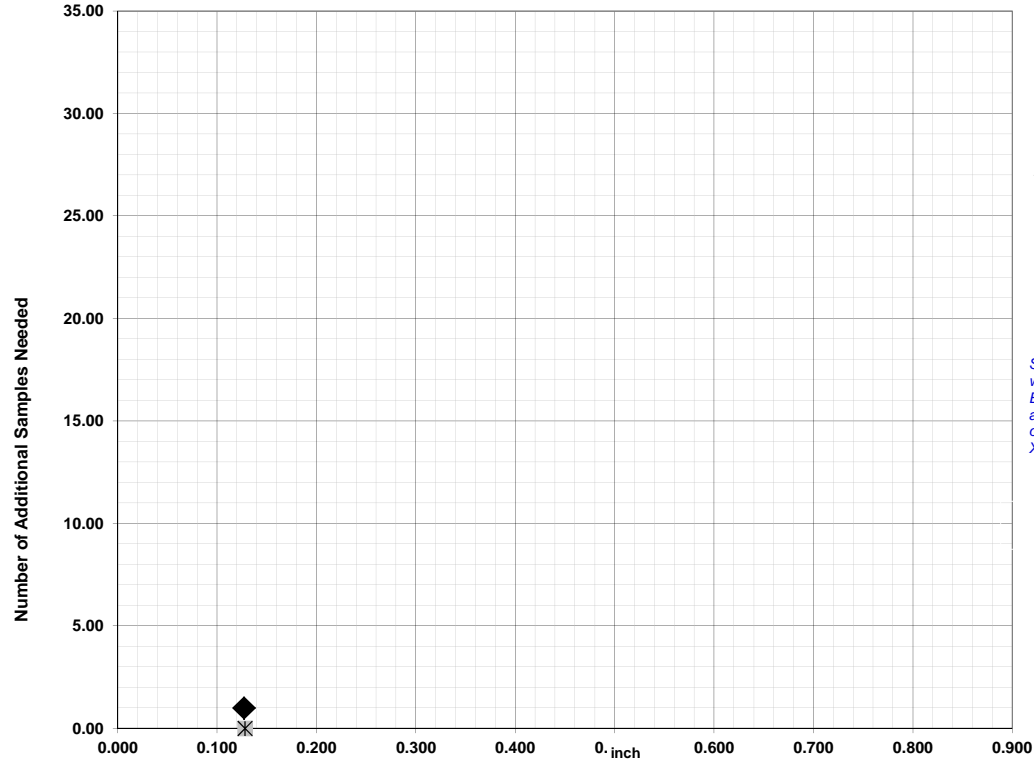


TABLE C

Class Length	Additional Samples
XL =	0.812
Xm =	0.372
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.127 1

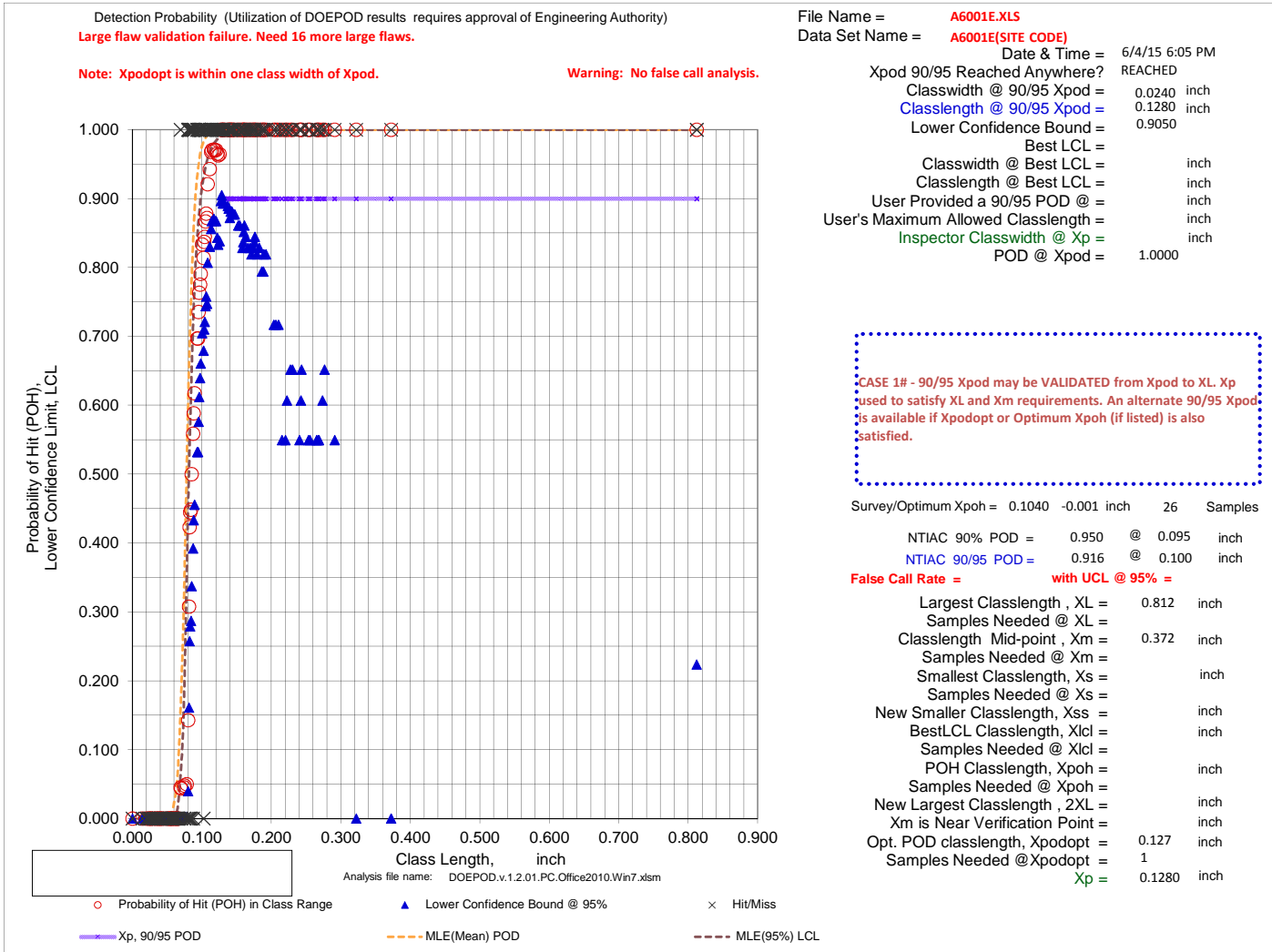
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6001E.XLS
 Data Set Name = A6001E(SITE CODE)

Directed DOE Options

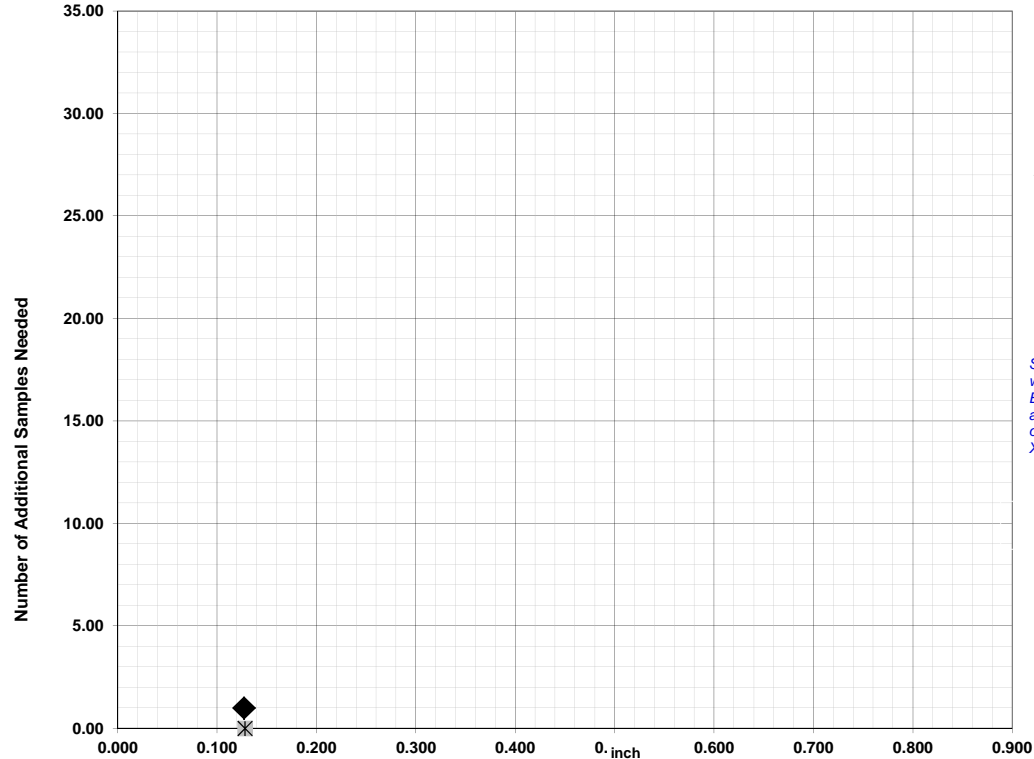


TABLE C

Class Length	Additional Samples
XL =	0.812
Xm =	0.372
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.127 1

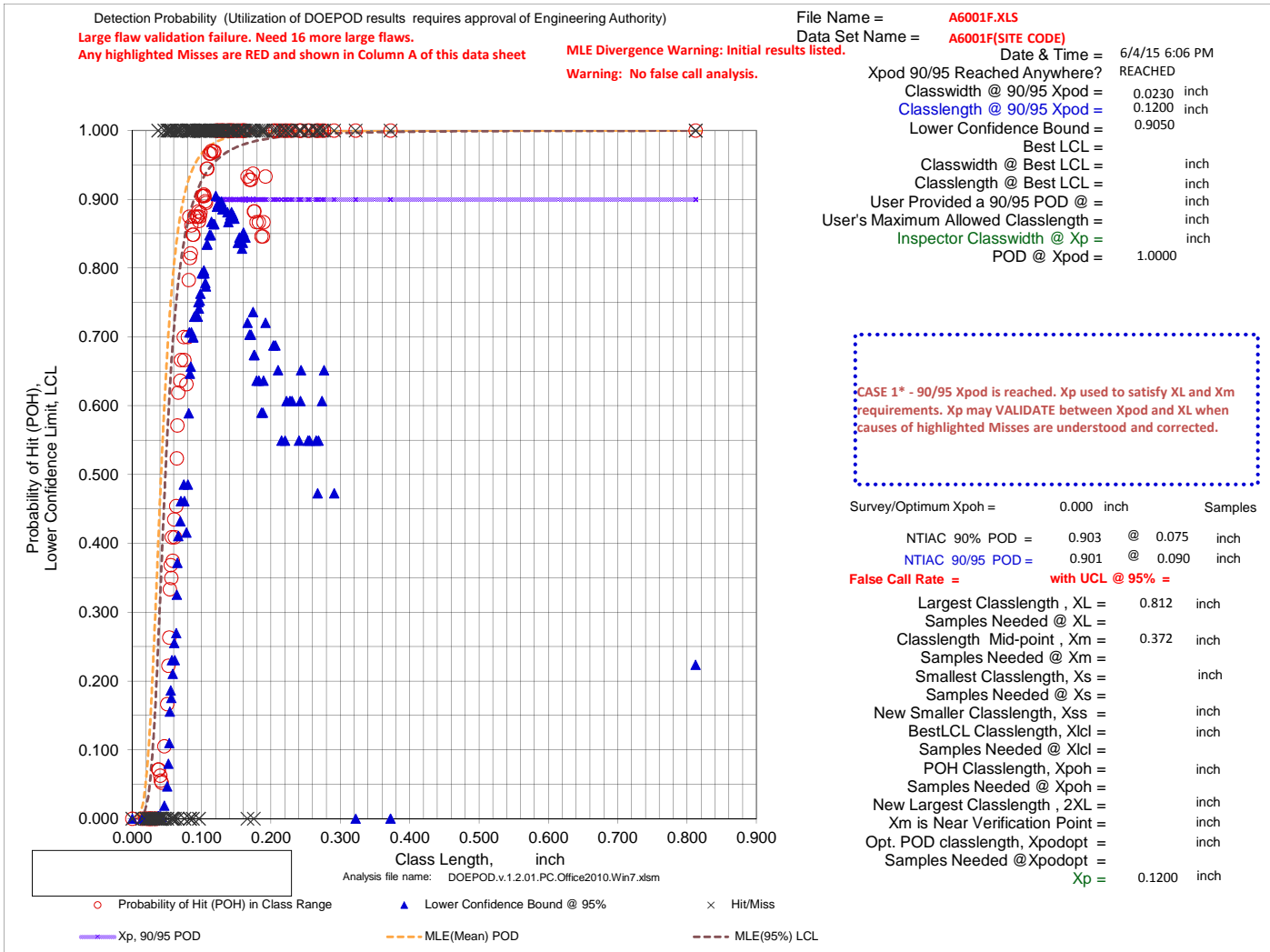
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6001F.XLS
 Data Set Name = A6001F(SITE CODE)

Directed DOE Options

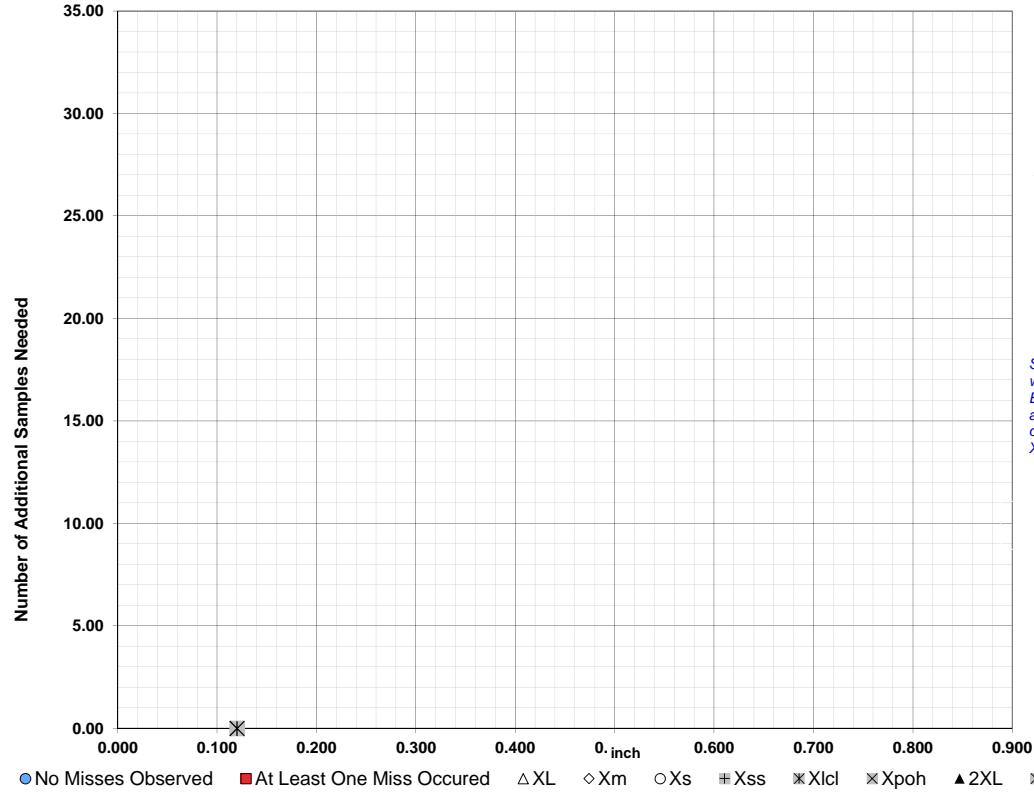


TABLE C

Class Length Additional Samples

XL = 0.812
 Xm = 0.372
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

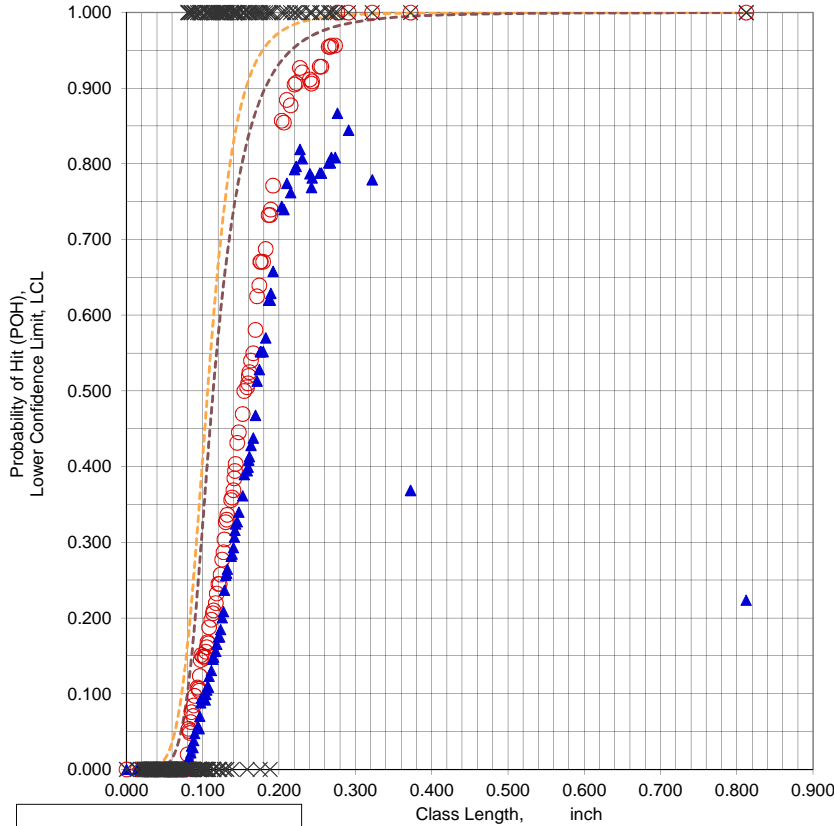
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **A6001G.XLS**
 Data Set Name = **A6001G(SITE CODE)**
 Date & Time = 6/4/15 6:07 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8666
 Classwidth @ Best LCL = 0.0870 inch
 Classlength @ Best LCL = 0.2760 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.1920 -0.003 inch 28 Samples

NTIAC 90% POD = 0.911 @ 0.160 inch
 NTIAC 90/95 POD = 0.907 @ 0.185 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.812 inch
 Samples Needed @ XL = 27
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.276 inch
 Samples Needed @ Xlcl = 8
 POH Classlength, Xpoh = 0.276 inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

File Name = A6001G.XLS
 Data Set Name = A6001G(SITE CODE)

Directed DOE Options

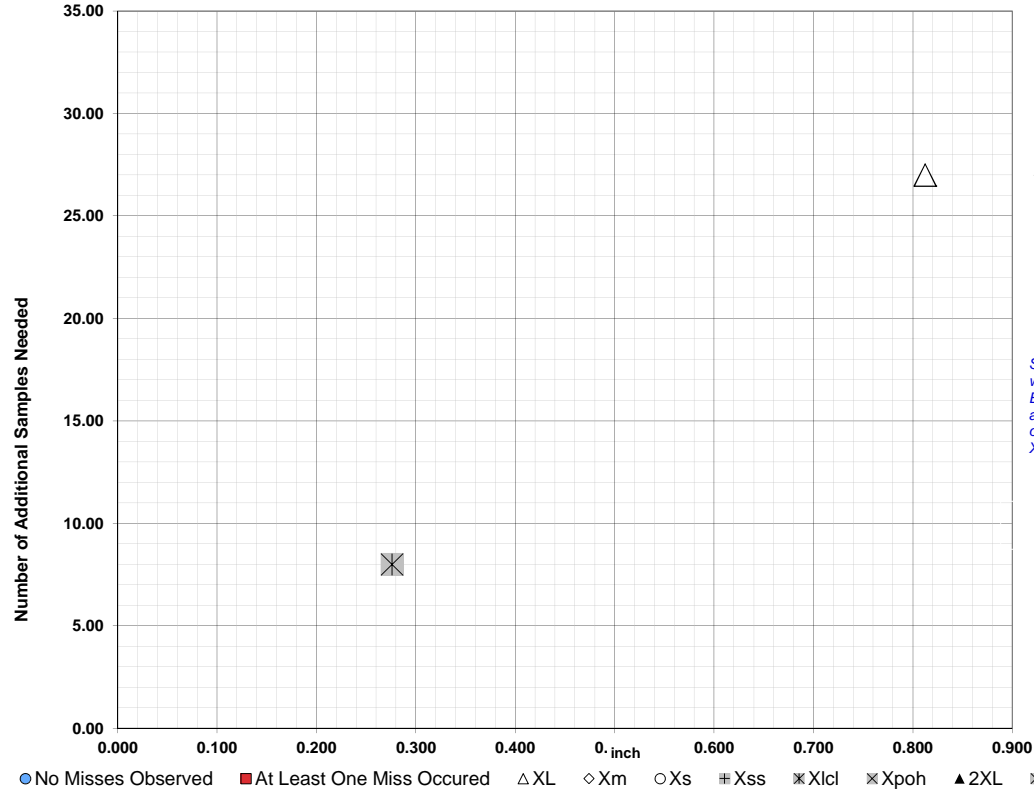


TABLE C

Class Length	Additional Samples
XL = 0.812	27
Xm =	
Xs =	
Xss =	
Xlcl = 0.276	8
Xpoh = 0.276	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

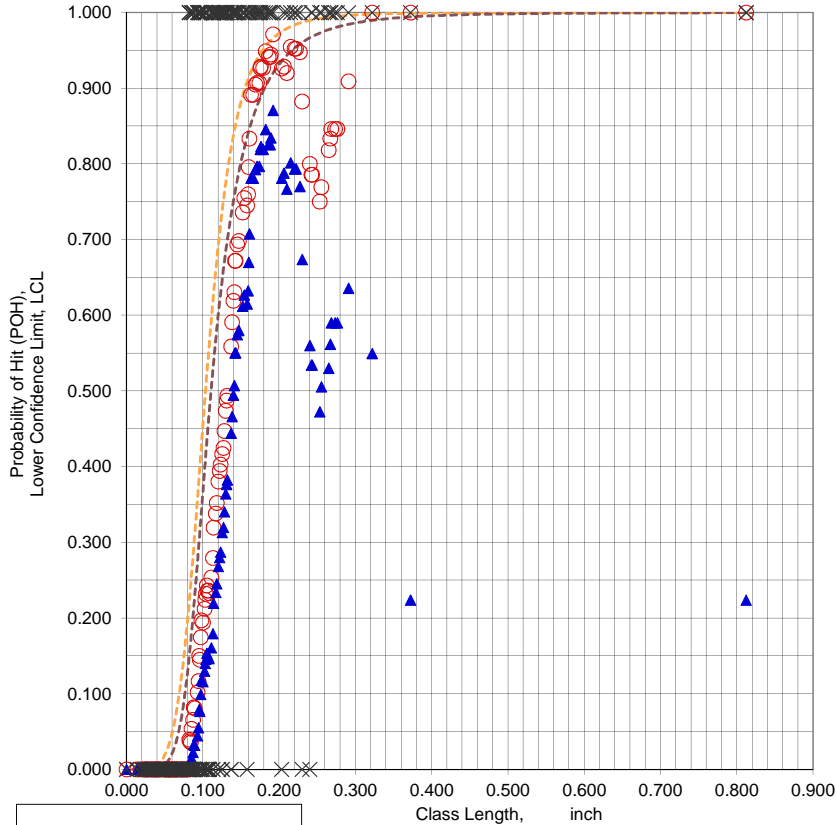
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **A6001GR.XLS**
 Data Set Name = **A6001GR(SITE CODE)**
 Date & Time = 6/4/15 6:09 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8707
 Classwidth @ Best LCL = 0.0540 inch
 Classlength @ Best LCL = 0.1920 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.2420 -0.001 inch 28 Samples
 NTIAC 90% POD = 0.914 @ 0.160 inch
 NTIAC 90/95 POD = 0.908 @ 0.185 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.812 inch
 Samples Needed @ XL = 27
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.322 inch
 Samples Needed @ Xpoh = 24
 New Largest Classlength , 2XL = 1.624 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = A6001GR.XLS
 Data Set Name = A6001GR(SITE CODE)

Directed DOE Options

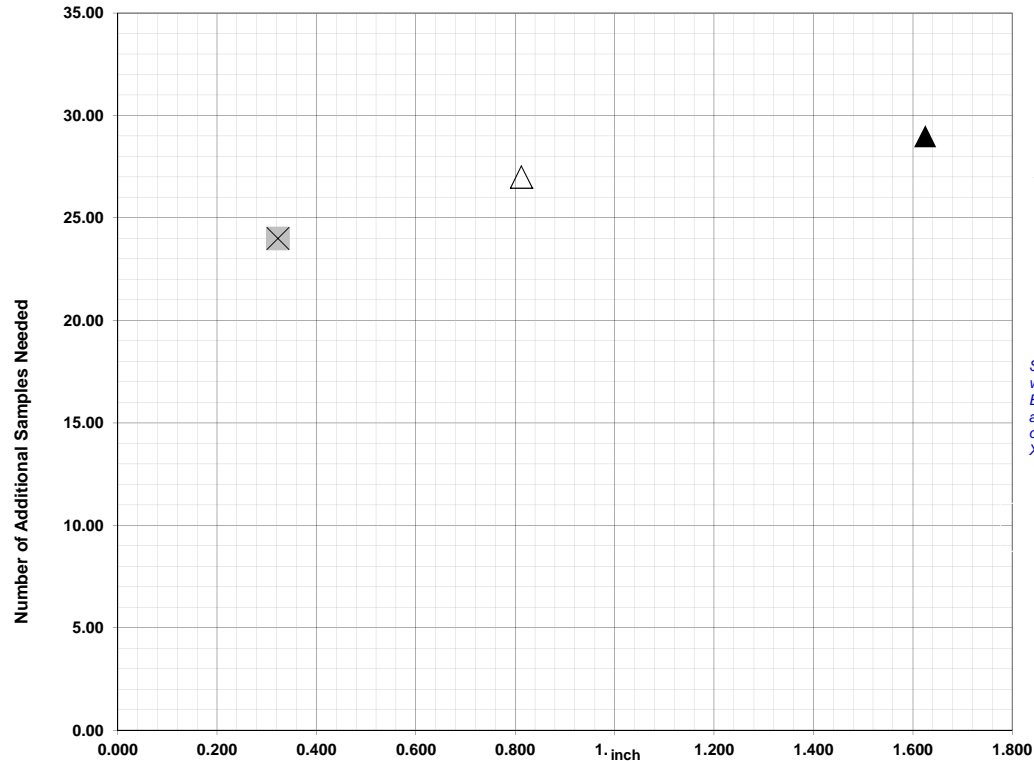


TABLE C

Class Length	Additional Samples
XL = 0.812	27
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 0.322	24
2XL = 1.624	29
**Alternate Xm =	
Xpodopt =	

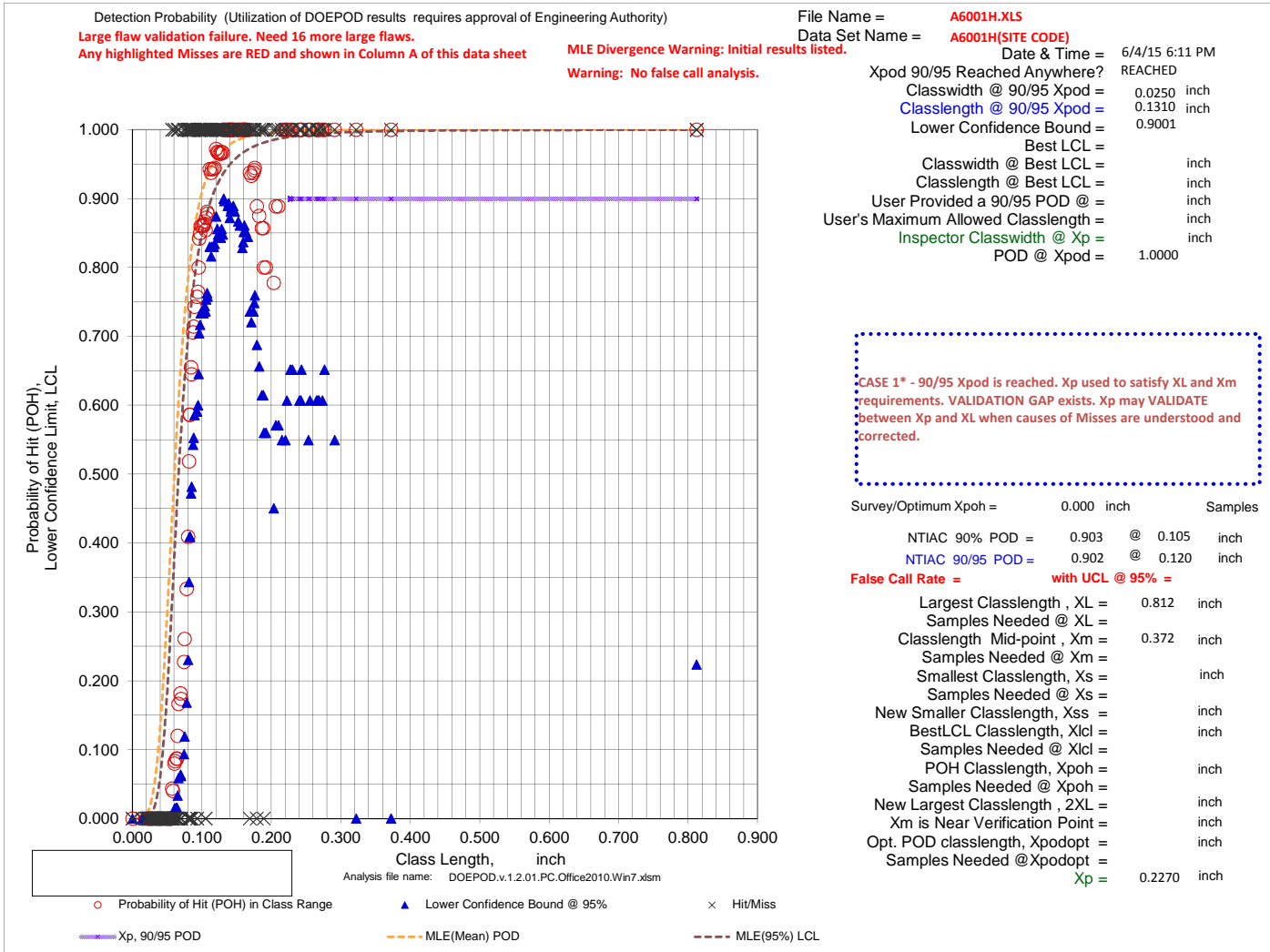
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ XLcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6001H.XLS
 Data Set Name = A6001H(SITE CODE)

Directed DOE Options

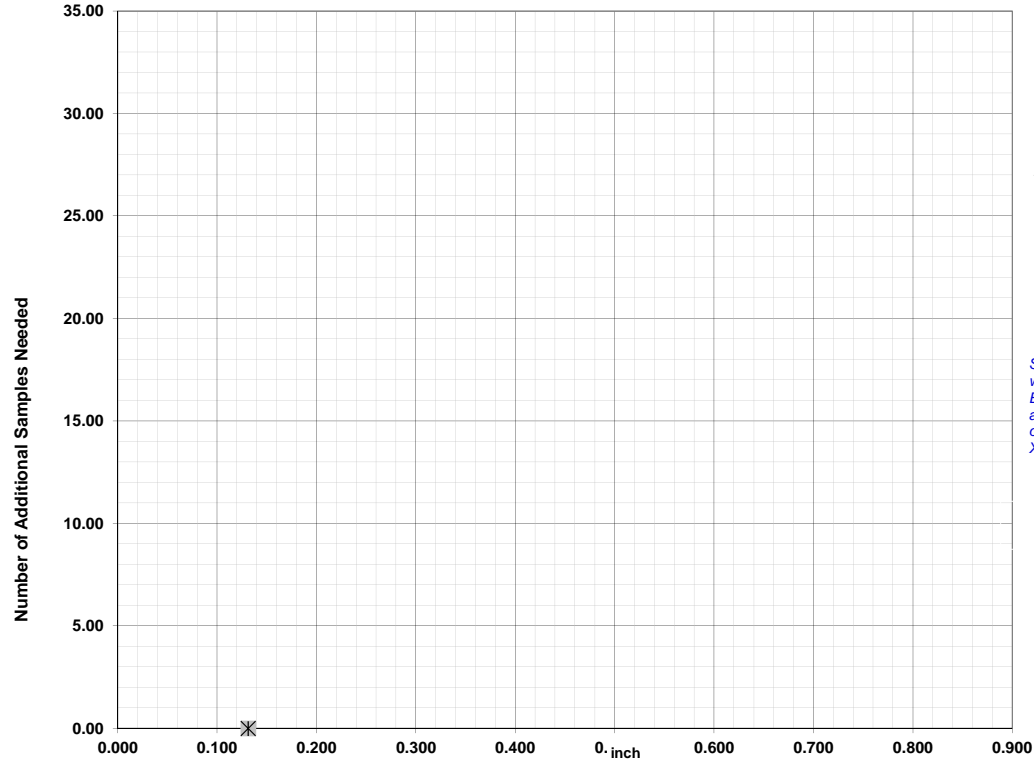


TABLE C

Class Length Additional Samples

XL = 0.812
 Xm = 0.372
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

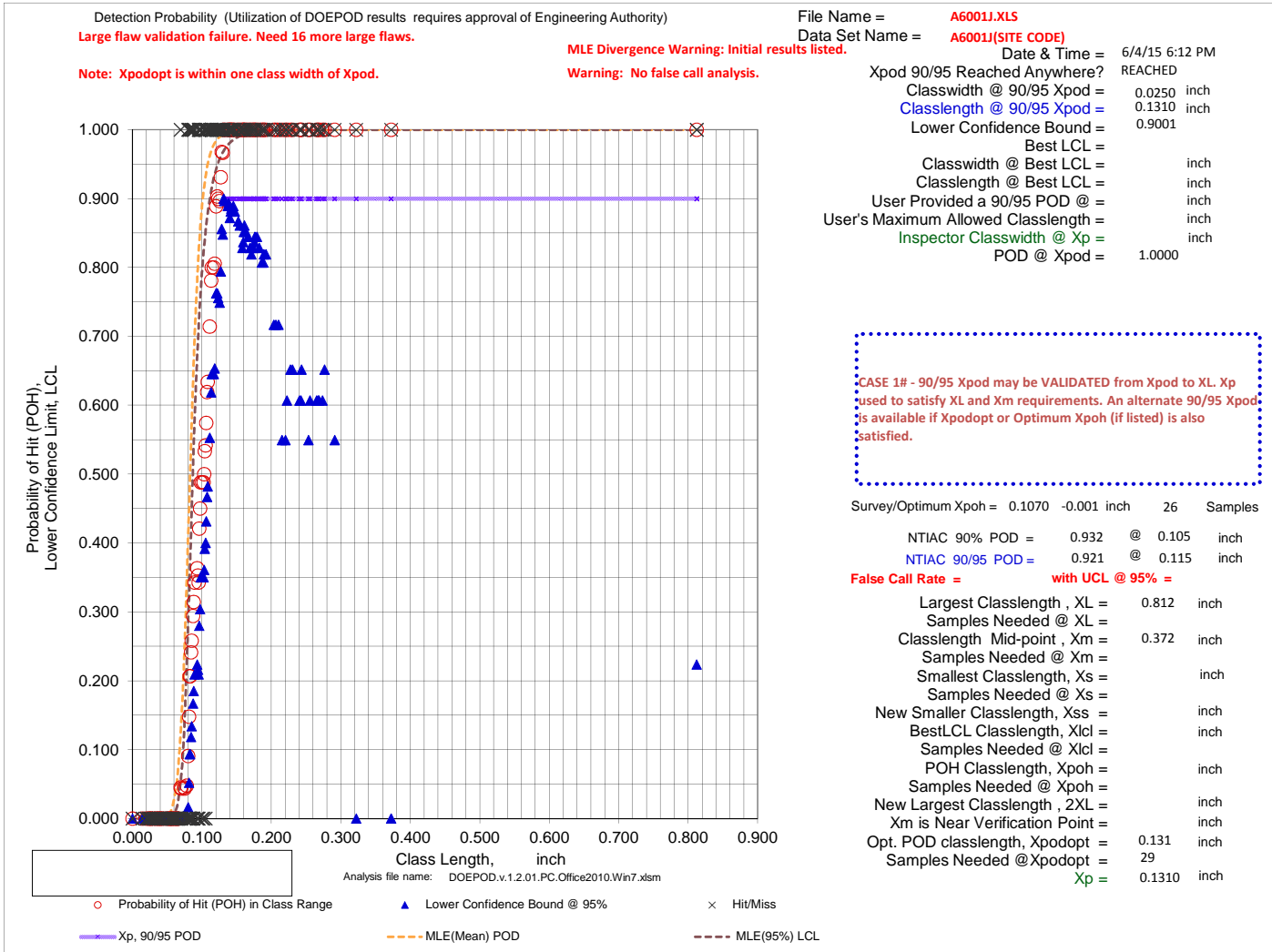
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6001J.XLS
 Data Set Name = A6001J(SITE CODE)

Directed DOE Options

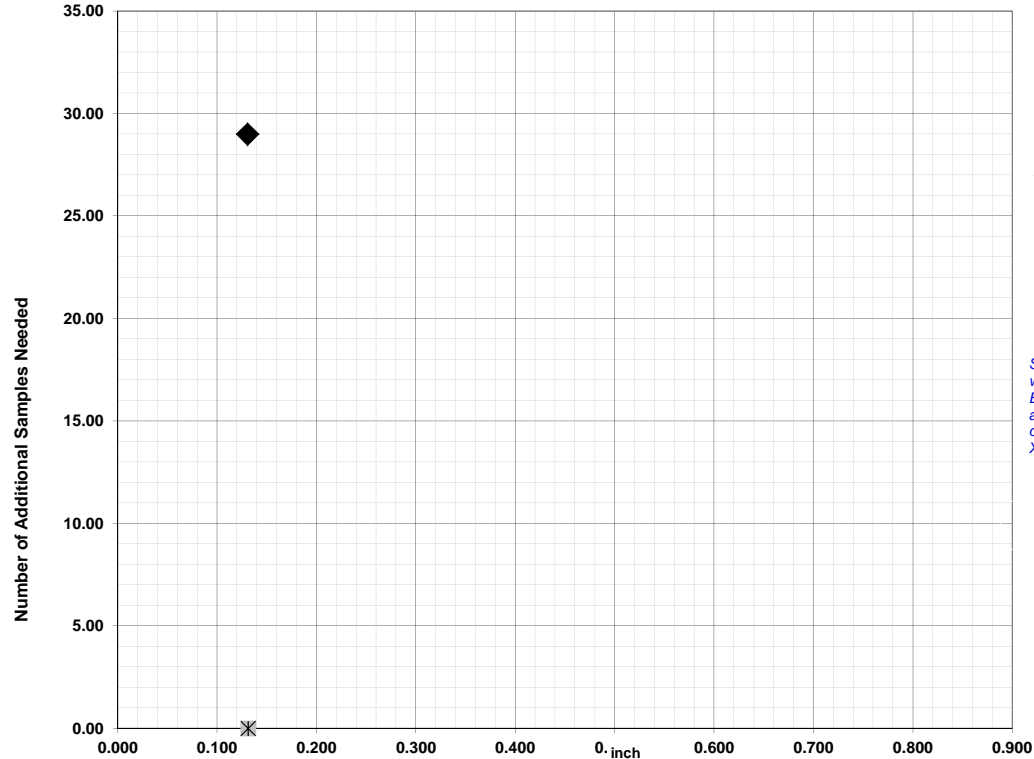


TABLE C

Class Length	Additional Samples
XL =	0.812
Xm =	0.372
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.131 29

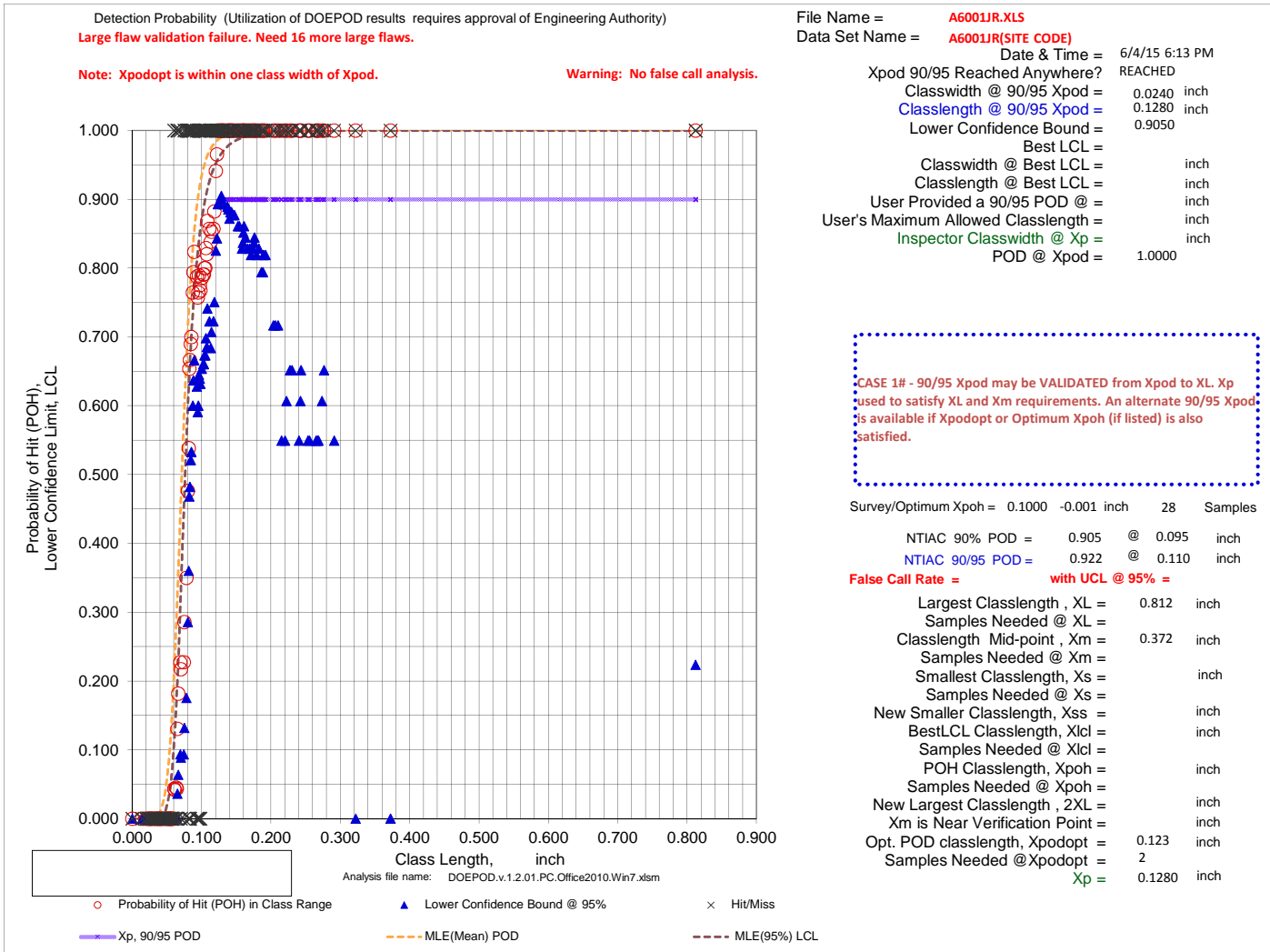
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6001JR.XLS
 Data Set Name = A6001JR(SITE CODE)

Directed DOE Options

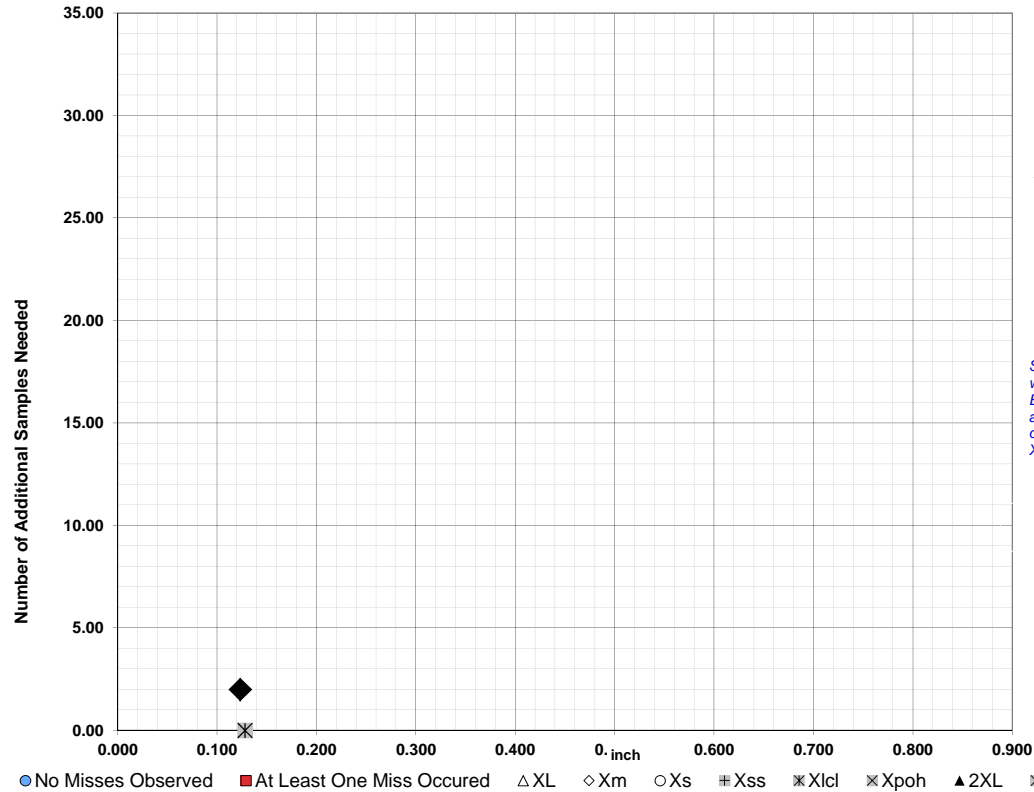


TABLE C

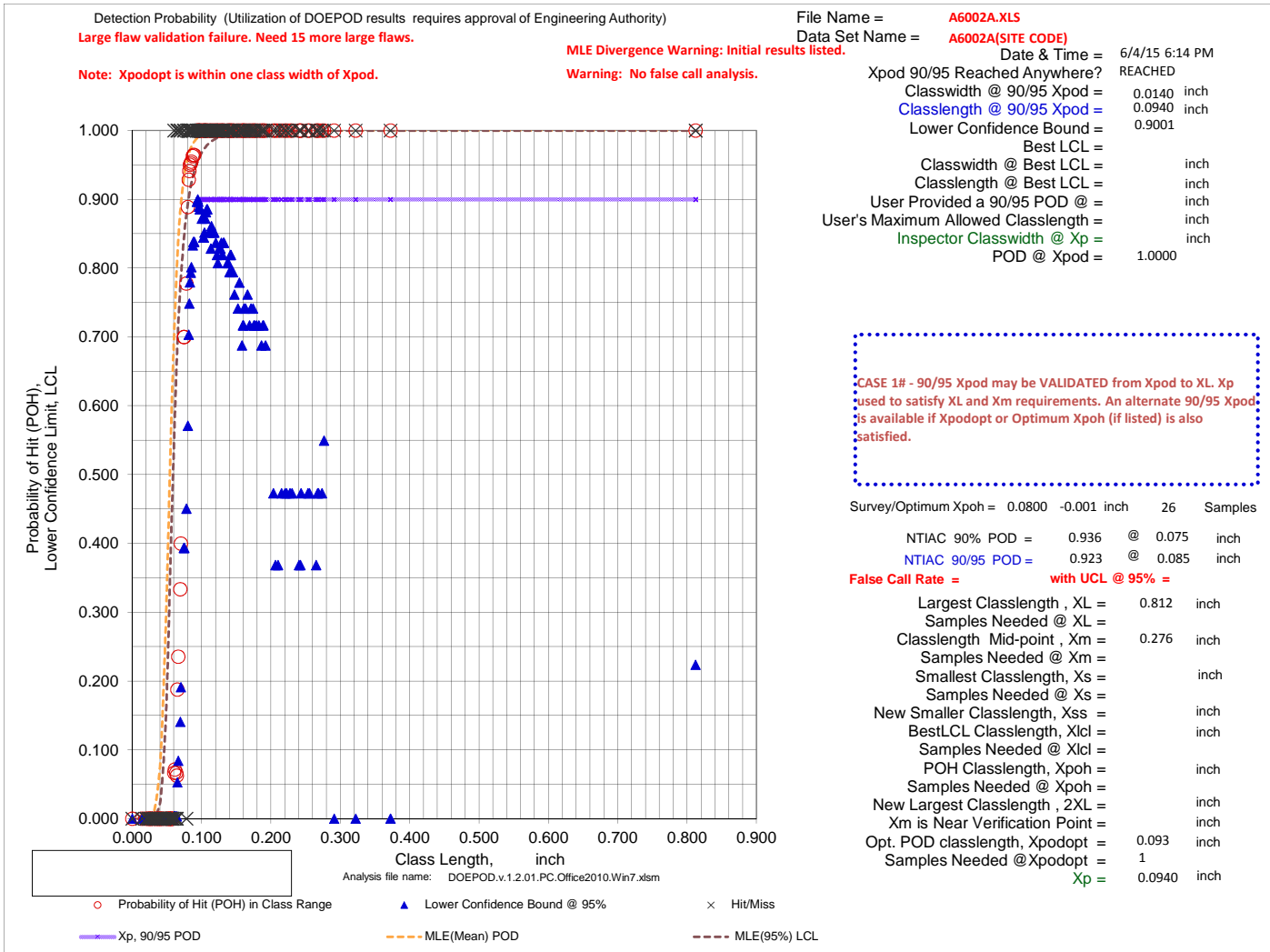
Class Length	Additional Samples
XL =	0.812
Xm =	0.372
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.123 2

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6002A.XLS
 Data Set Name = A6002A(SITE CODE)

Directed DOE Options

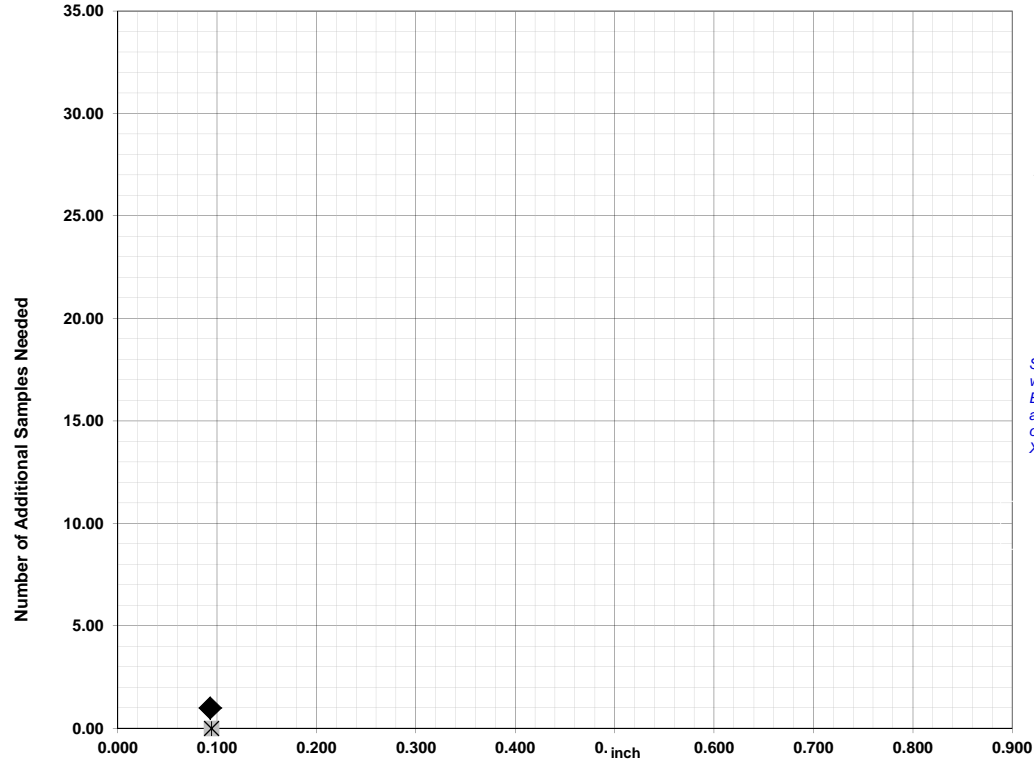


TABLE C

Class Length	Additional Samples
XL =	0.812
Xm =	0.276
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.093 1

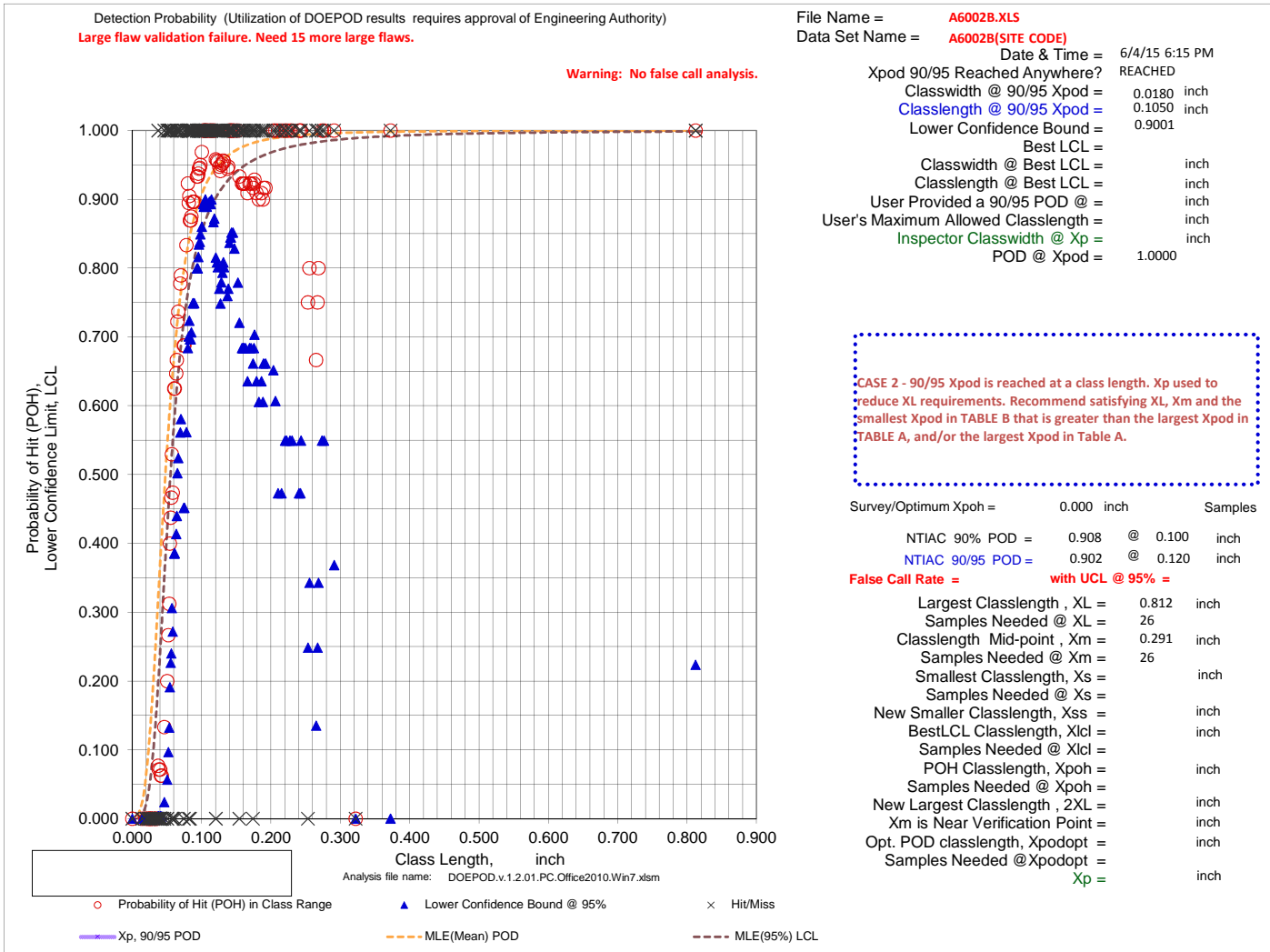
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6002B.XLS
 Data Set Name = A6002B(SITE CODE)

Directed DOE Options

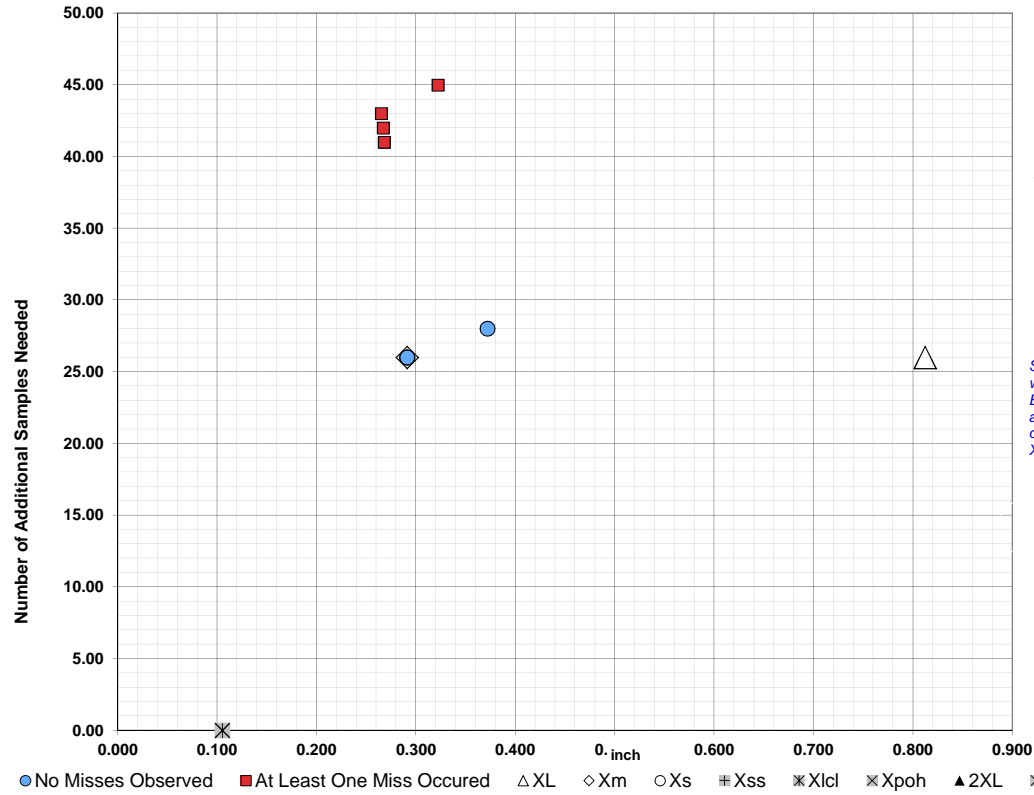


TABLE C

Class Length	Additional Samples
XL = 0.812	26
Xm = 0.291	26
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.3220	45	0.3720	28
0.2680	41	0.2910	26
0.2670	42	0.2910	26
0.2650	43	0.2910	26

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 15 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

MLE Divergence Warning: Initial results listed.

Warning: No false call analysis.

File Name = A6002C.XLS

Data Set Name = A6002C(SITE CODE)

Date & Time = 6/4/15 6:17 PM

Xpod 90/95 Reached Anywhere? REACHED

Classwidth @ 90/95 Xpod = 0.0180 inch

Classlength @ 90/95 Xpod = 0.1050 inch

Lower Confidence Bound = 0.9001

Best LCL =

Classwidth @ Best LCL = inch

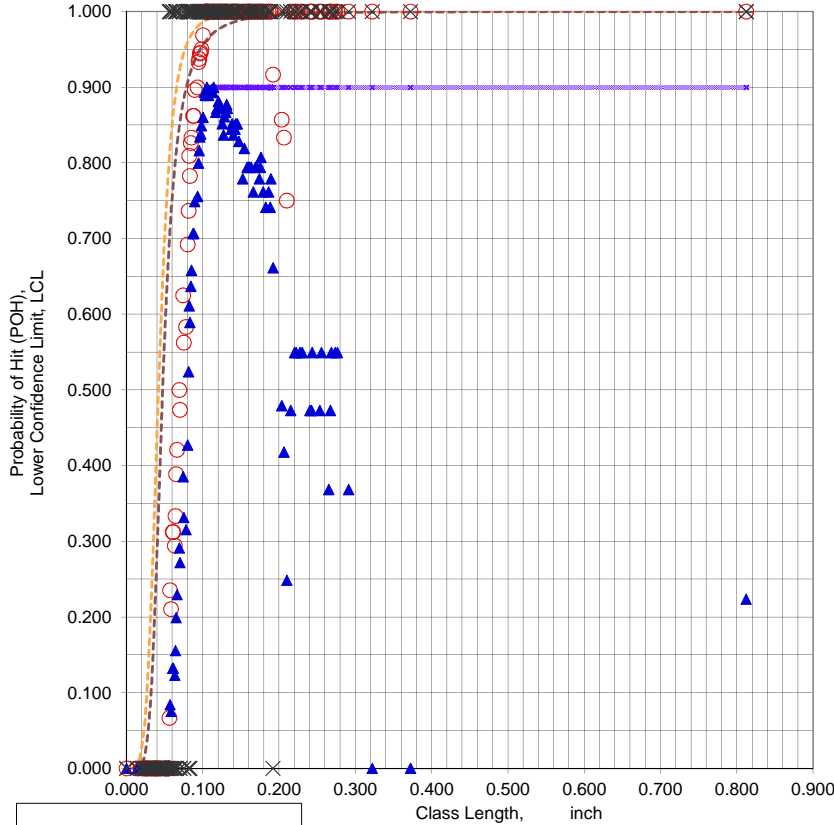
Classlength @ Best LCL = inch

User Provided a 90/95 POD @ = inch

User's Maximum Allowed Classlength = inch

Inspector Classwidth @ Xp = inch

POD @ Xpod = 1.0000



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples

NTIAC 90% POD = 0.926 @ 0.070 inch

NTIAC 90/95 POD = 0.907 @ 0.080 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.812 inch

Samples Needed @ XL =

Classlength Mid-point , Xm = 0.291 inch

Samples Needed @ Xm =

Smallest Classlength, Xs = inch

Samples Needed @ Xs =

New Smaller Classlength, Xss = inch

BestLCL Classlength, Xlcl = inch

Samples Needed @ Xlcl =

POH Classlength, Xpoh = inch

Samples Needed @ Xpoh =

New Largest Classlength , 2XL = inch

Xm is Near Verification Point = inch

Opt. POD classlength, Xpodopt = inch

Samples Needed @ Xpodopt =

Xp = 0.1050 inch

File Name = A6002C.XLS
 Data Set Name = A6002C(SITE CODE)

Directed DOE Options

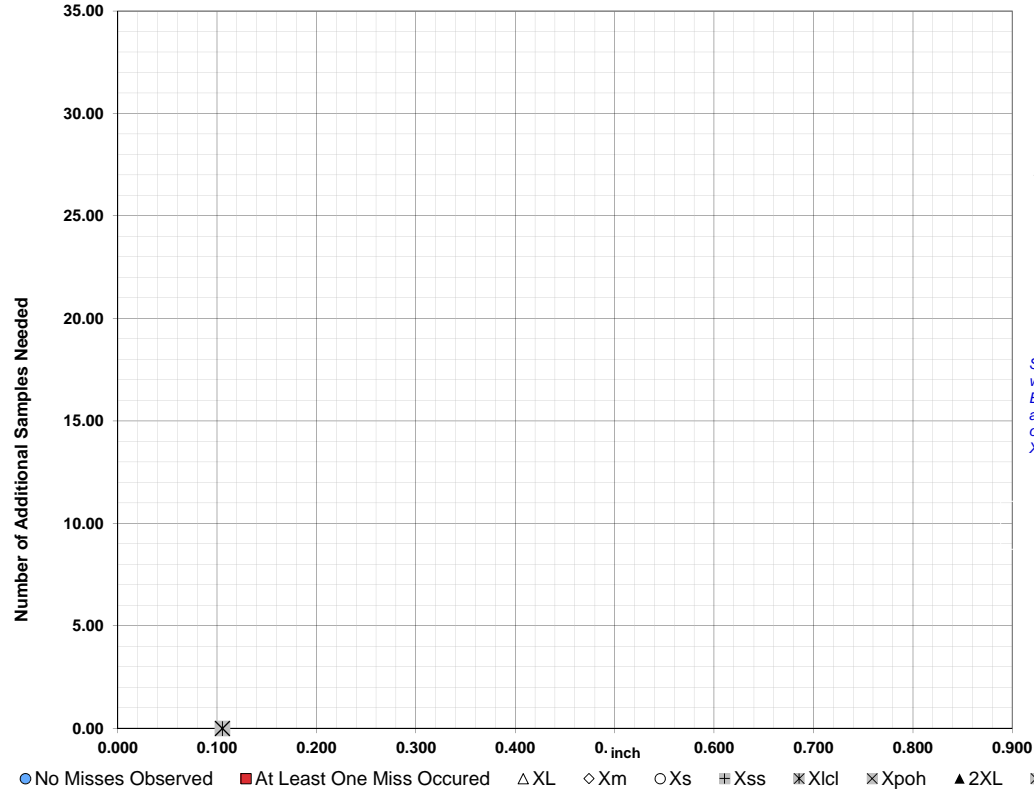


TABLE C

Class Length Additional Samples

XL = 0.812
 Xm = 0.291
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

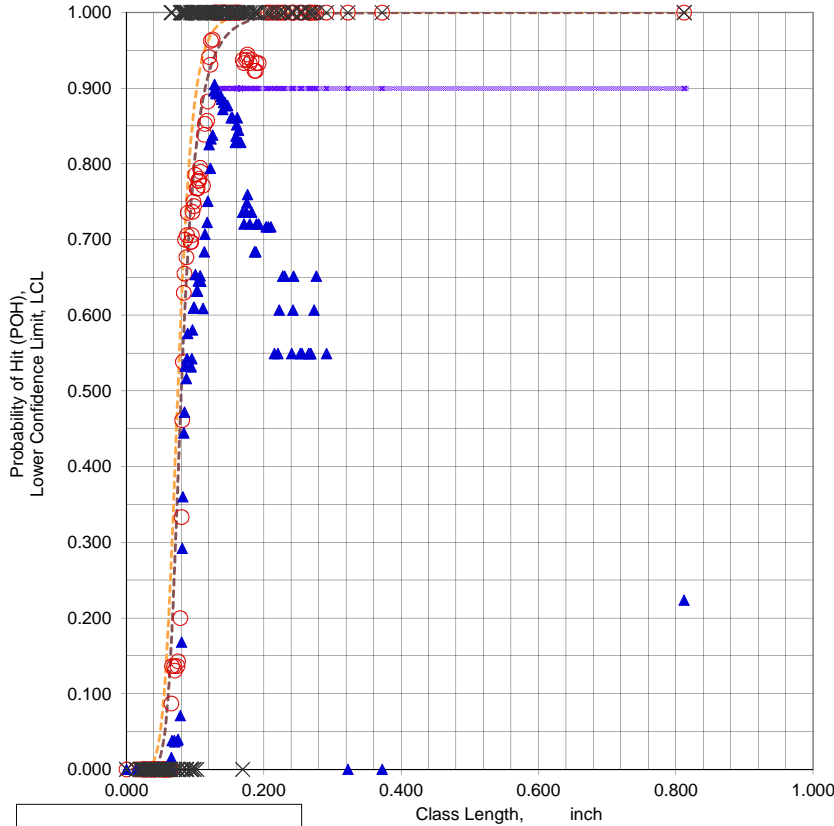
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 16 more large flaws.
Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE (Mean) POD
- - - MLE (95%) LCL

File Name = **A6002D.XLS**
 Data Set Name = **A6002D(SITE CODE)**
 Date & Time = 6/4/15 6:18 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0240 inch
 Classlength @ 90/95 Xpod = 0.1280 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.917 @ 0.105 inch
 NTIAC 90/95 POD = 0.902 @ 0.115 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.812 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.372 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.1280 inch

File Name = A6002D.XLS
 Data Set Name = A6002D(SITE CODE)

Directed DOE Options

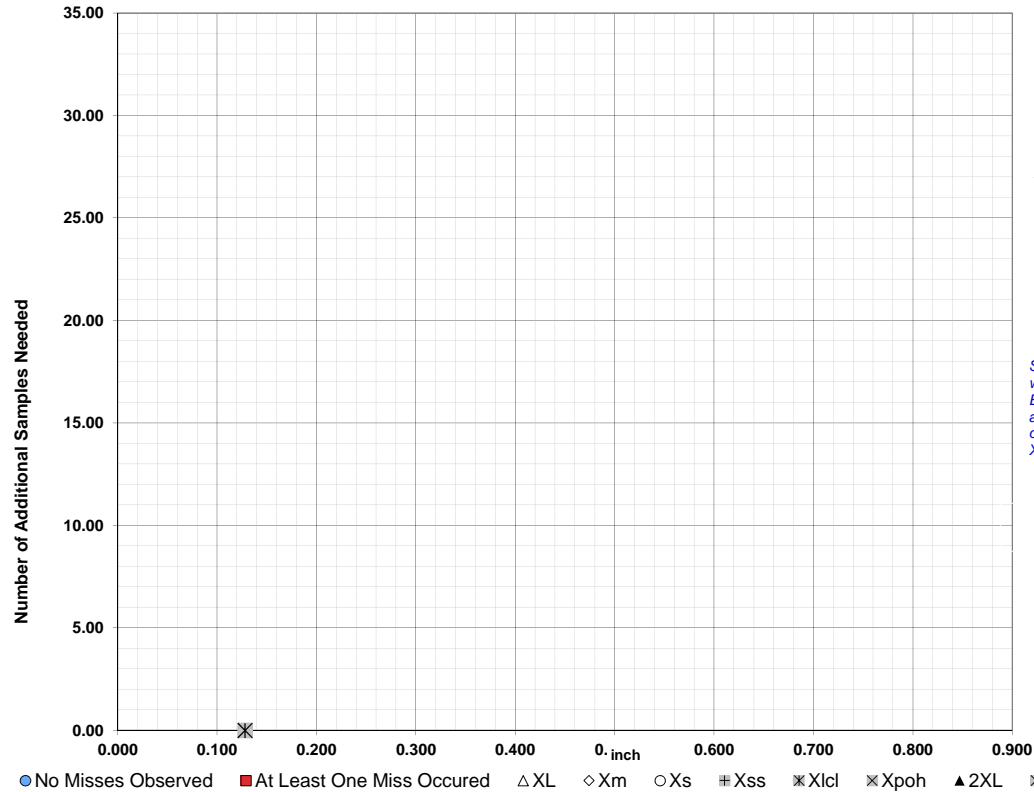


TABLE C

Class Length Additional Samples

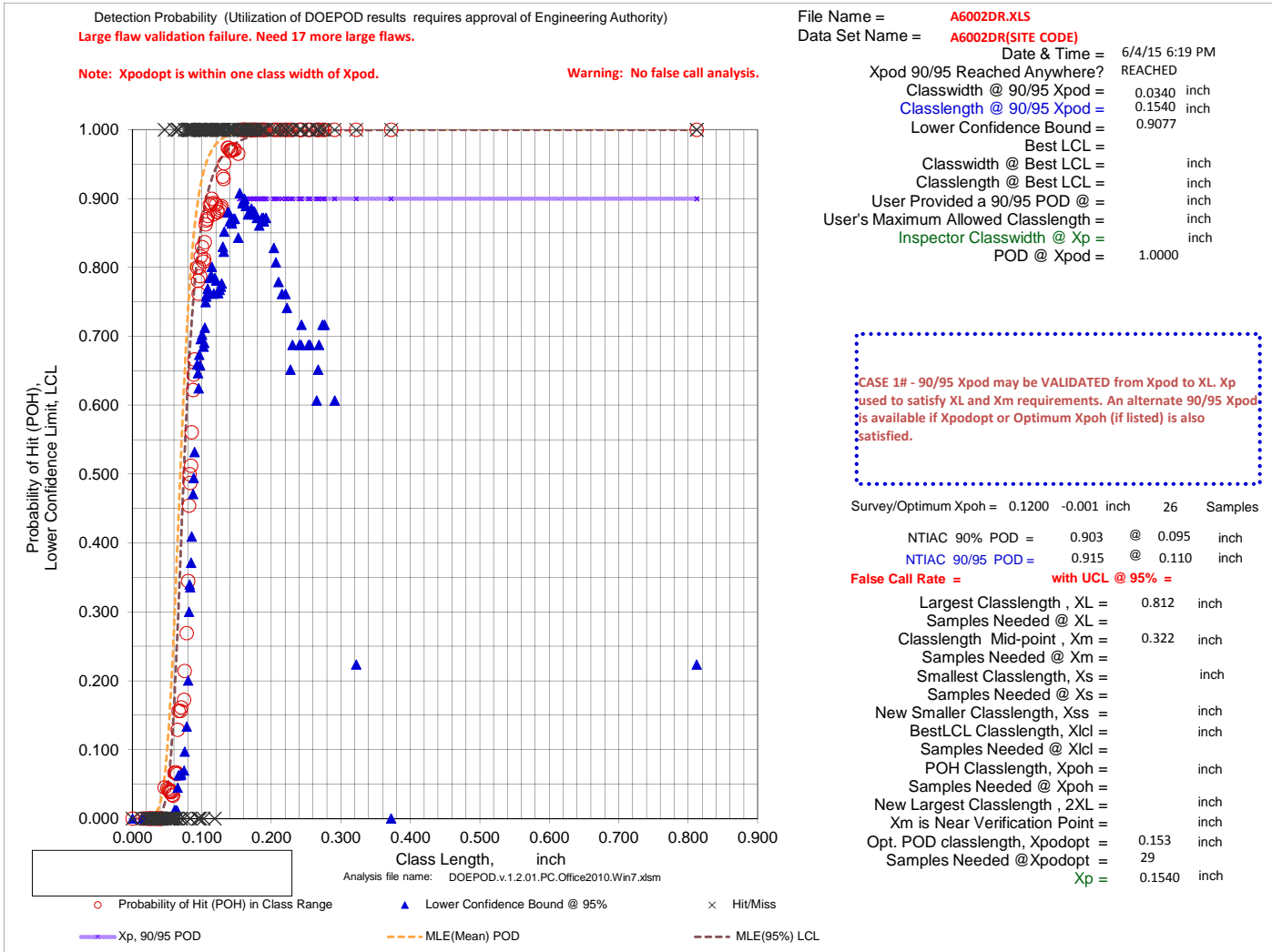
XL = 0.812
 Xm = 0.372
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6002DR.XLS
 Data Set Name = A6002DR(SITE CODE)

Directed DOE Options

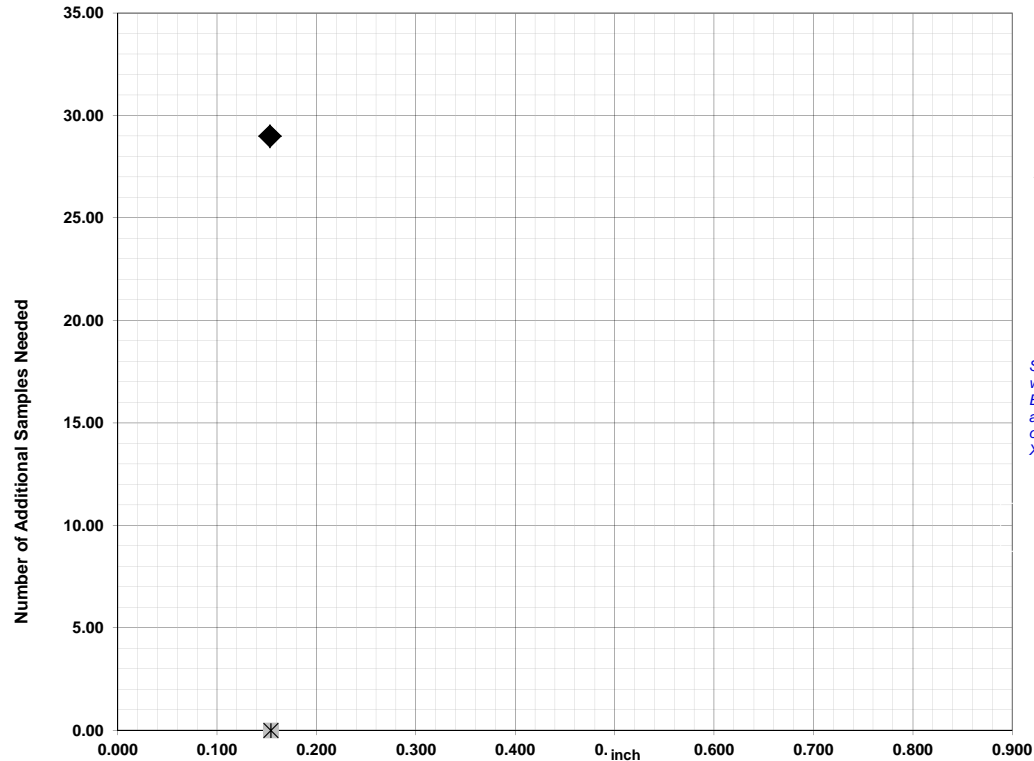


TABLE C

Class Length	Additional Samples
XL =	0.812
Xm =	0.322
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.153 29

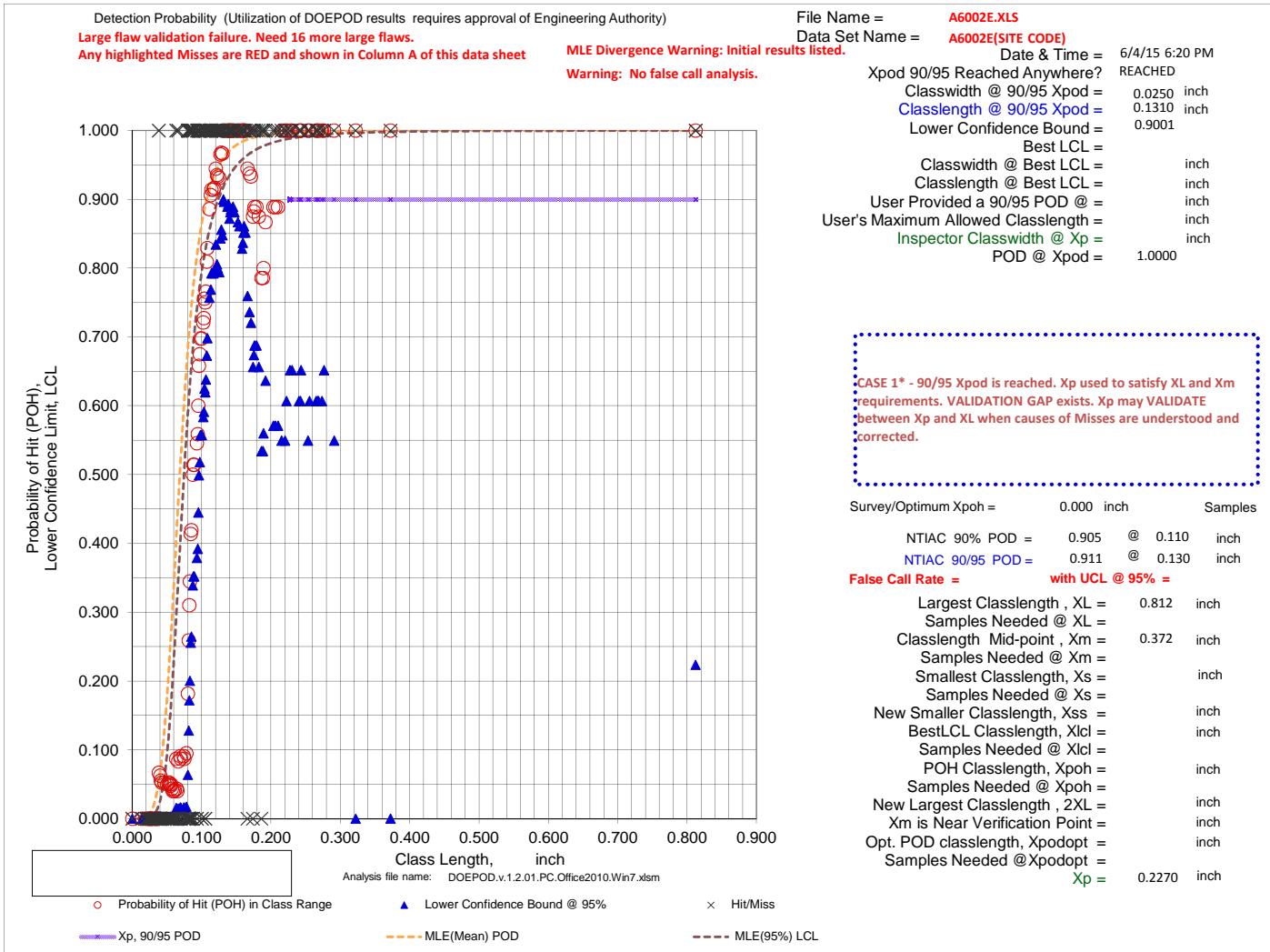
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6002E.XLS
 Data Set Name = A6002E(SITE CODE)

Directed DOE Options

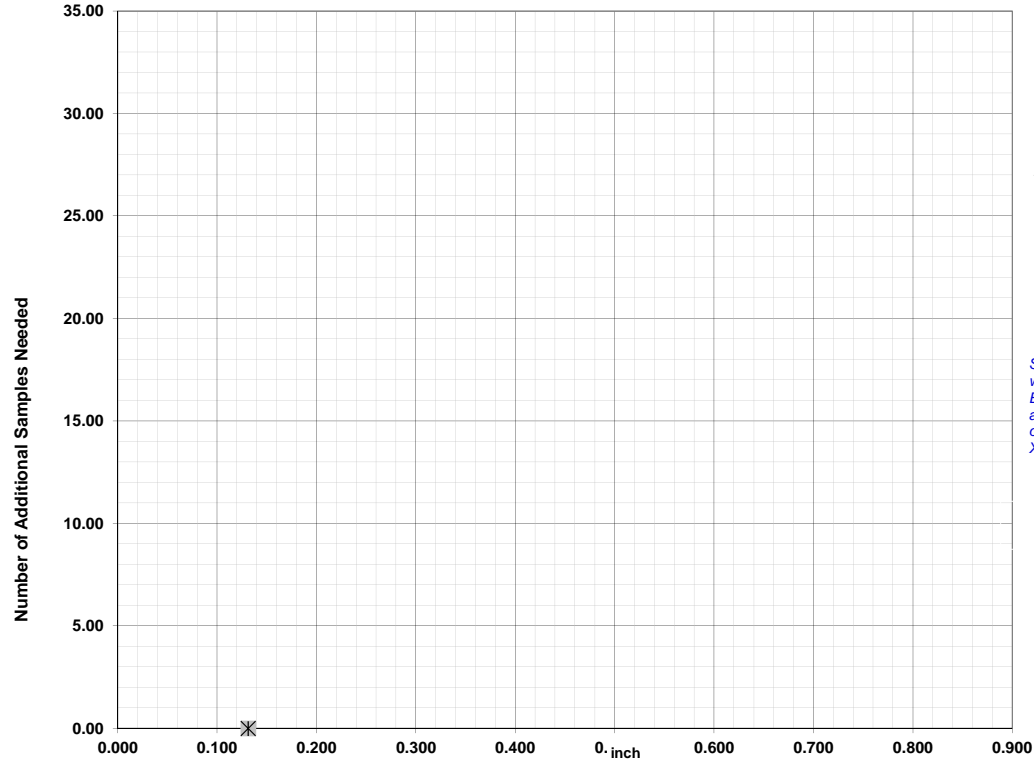


TABLE C

Class Length Additional Samples

XL = 0.812
 Xm = 0.372
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

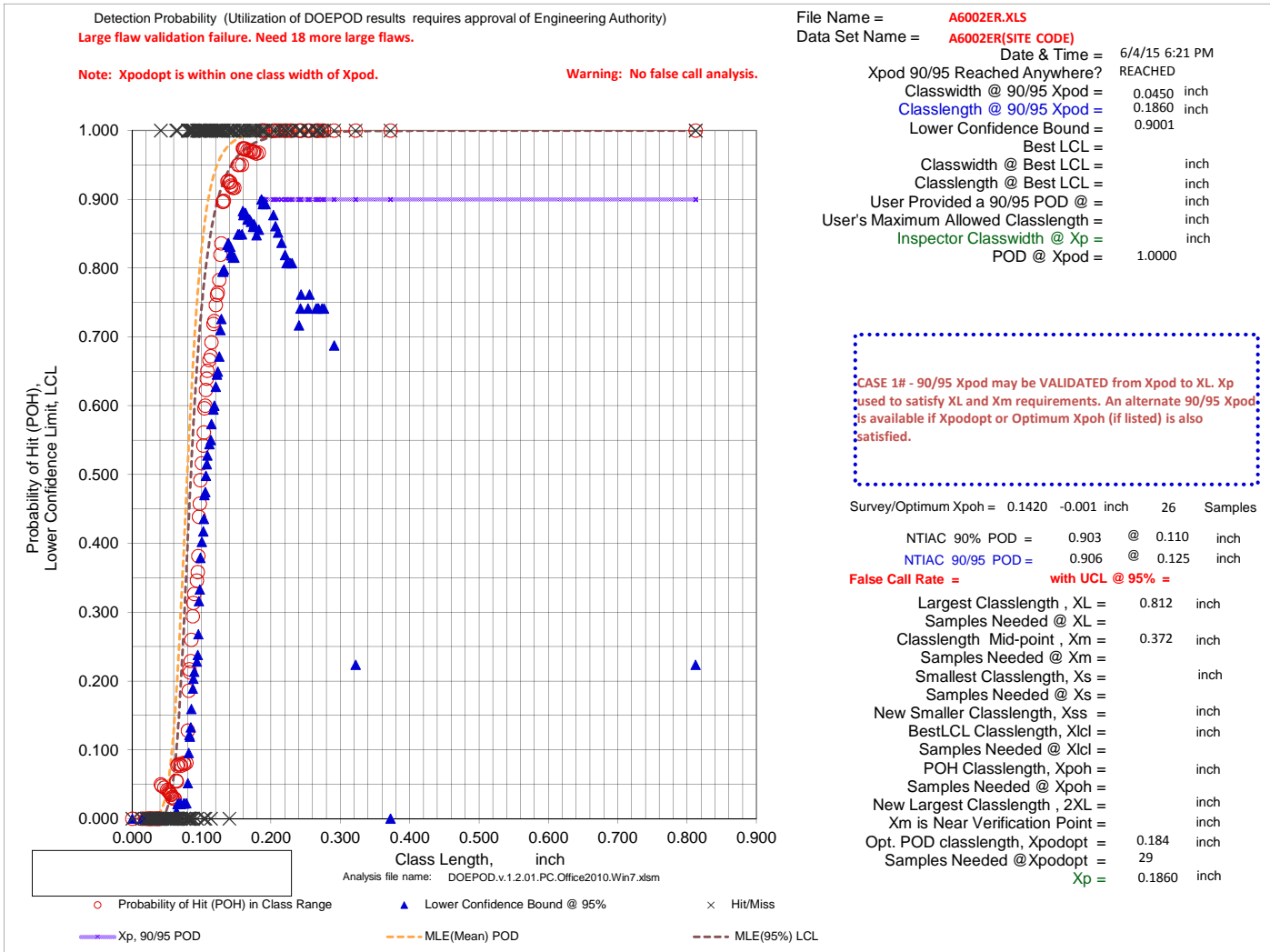
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6002ER.XLS
 Data Set Name = A6002ER(SITE CODE)

Directed DOE Options

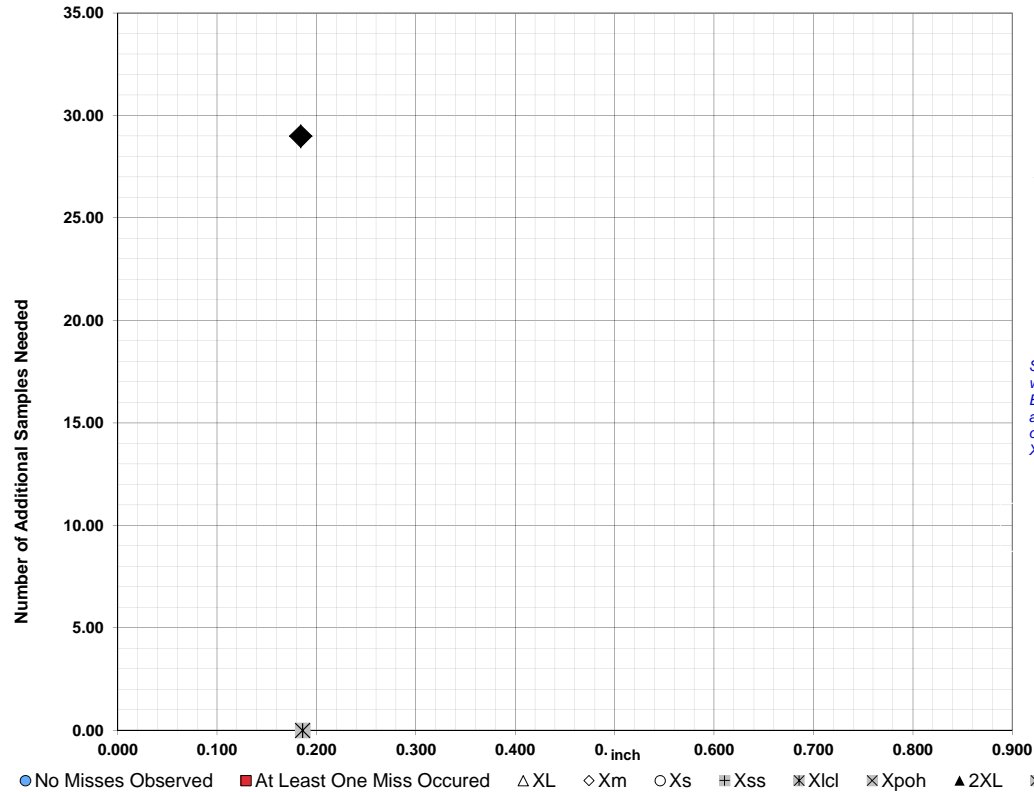


TABLE C

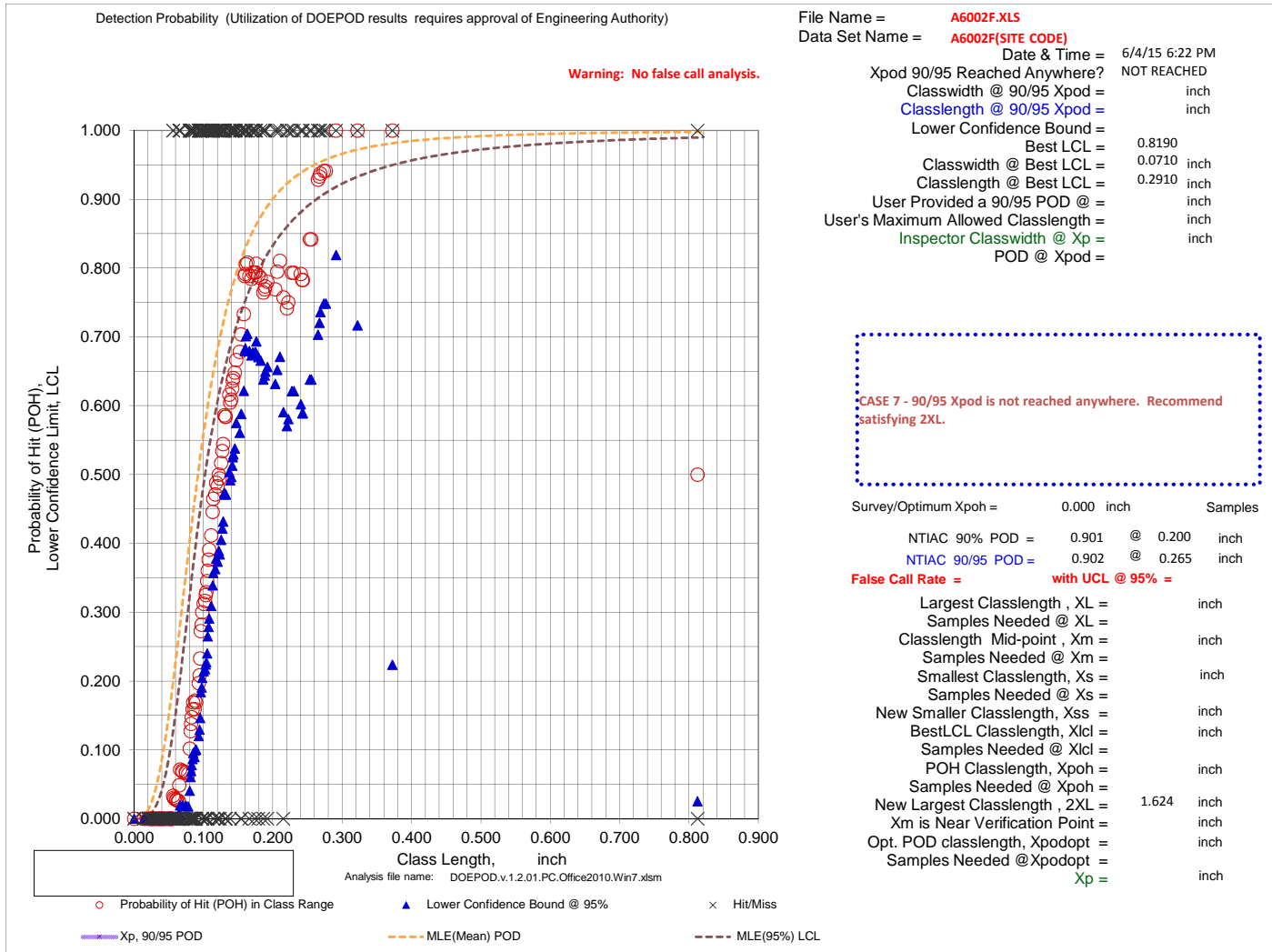
Class Length	Additional Samples
XL =	0.812
Xm =	0.372
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.184 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6002F.XLS
 Data Set Name = A6002F(SITE CODE)

Directed DOE Options

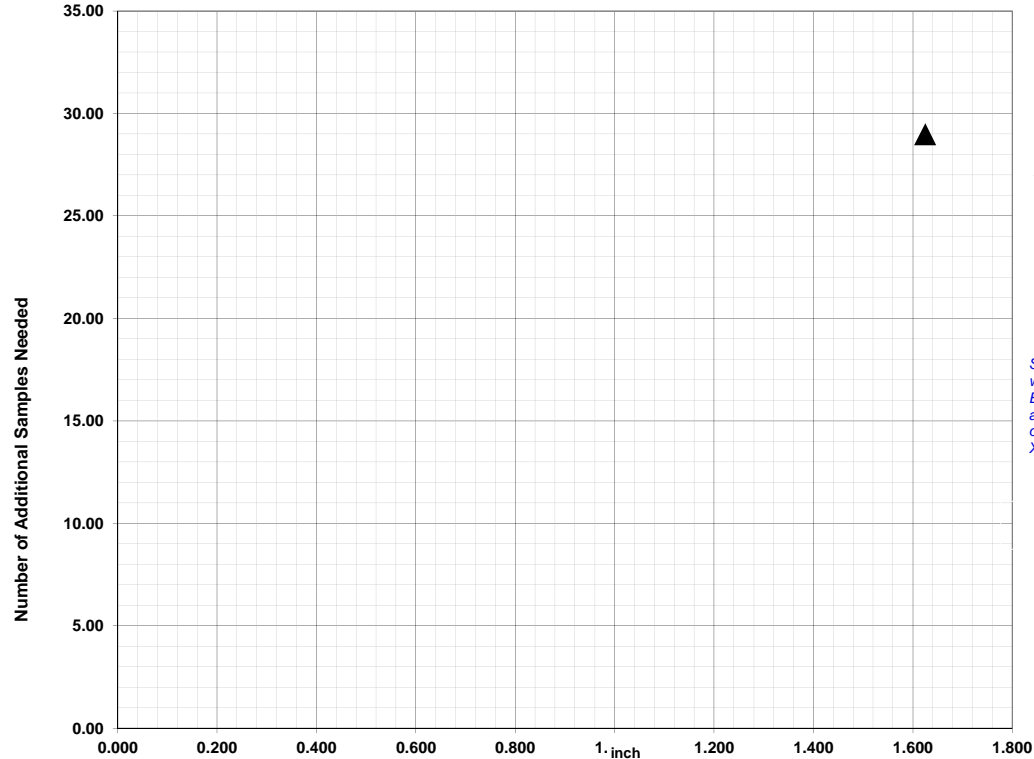


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 1.624	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 1.624 29
 **Alternate Xm =
 Xpodopt =

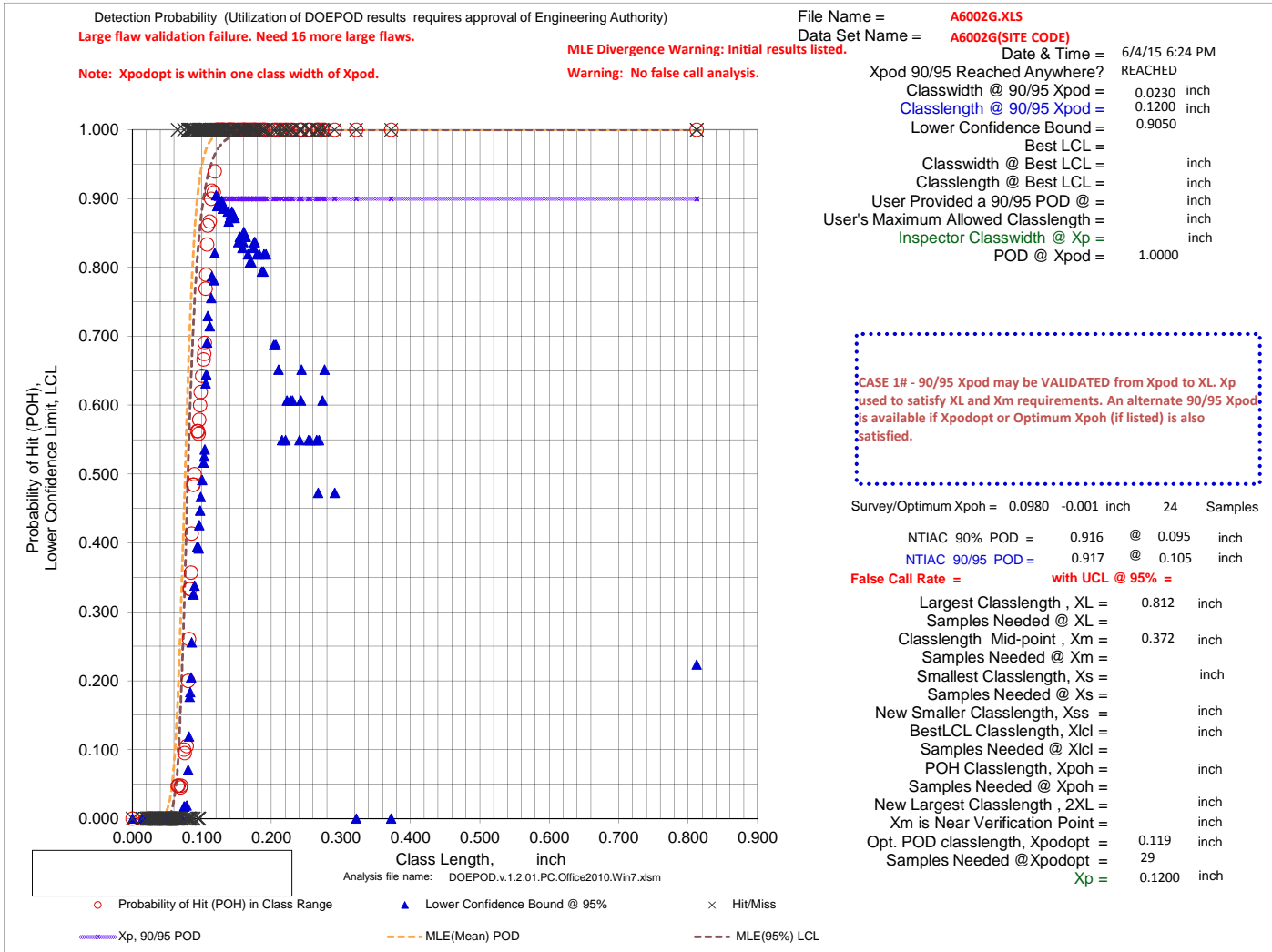
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6002G.XLS
 Data Set Name = A6002G(SITE CODE)

Directed DOE Options

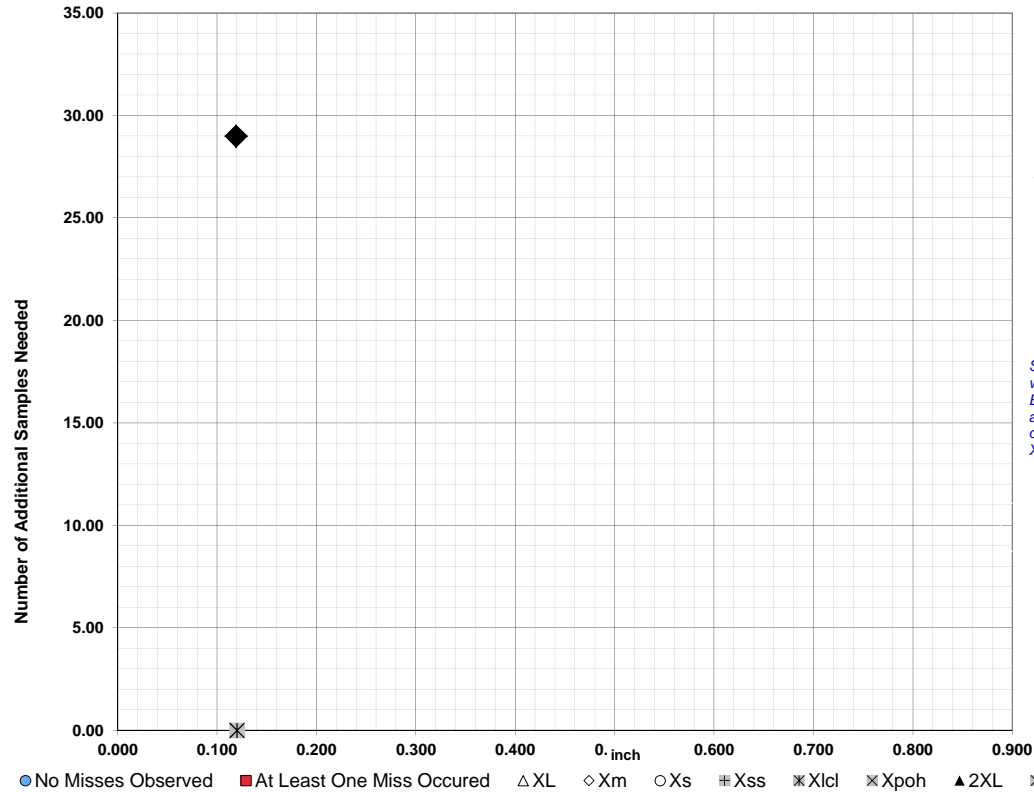


TABLE C

Class Length	Additional Samples
XL =	0.812
Xm =	0.372
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.119 29

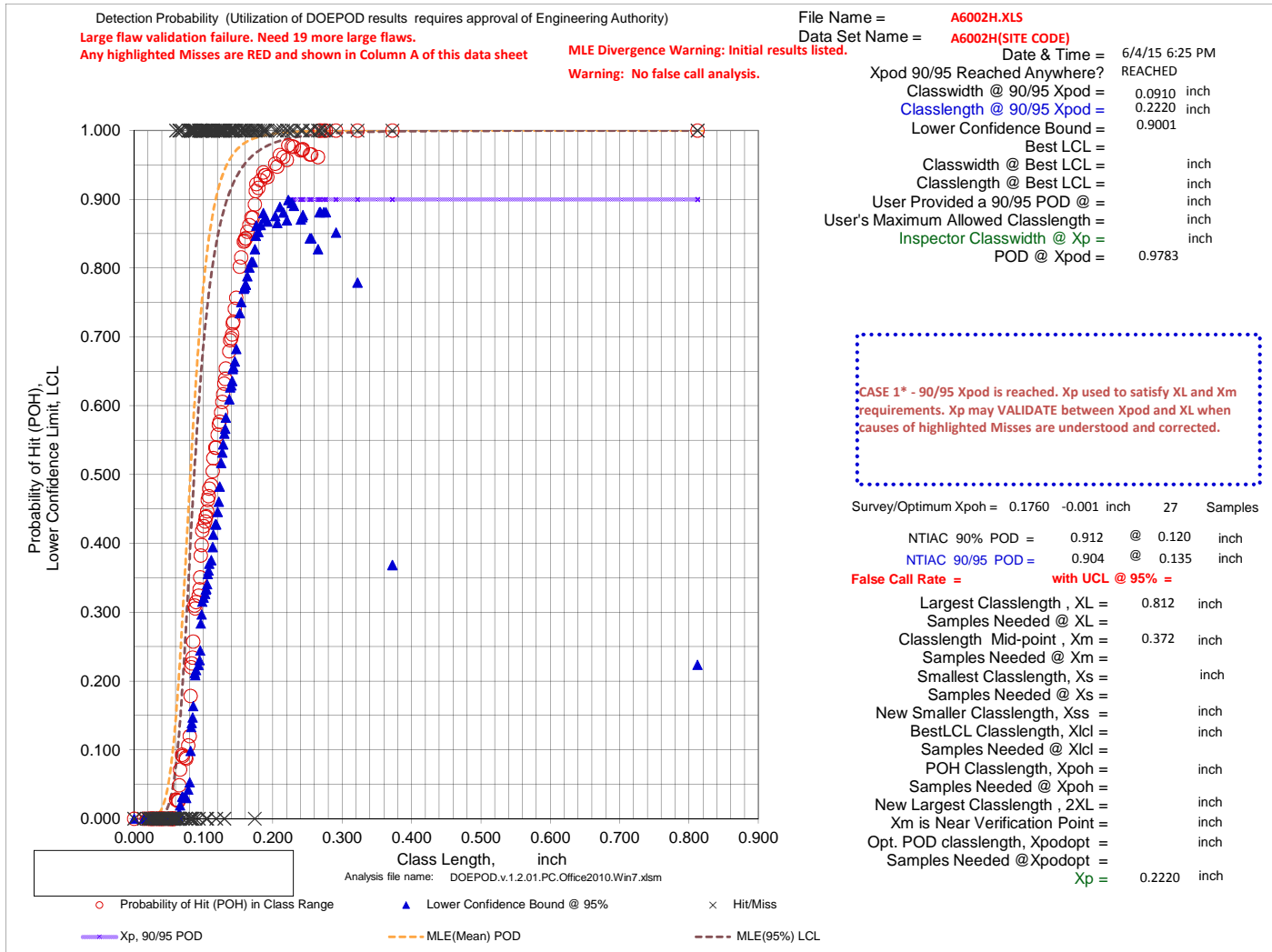
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6002H.XLS
 Data Set Name = A6002H(SITE CODE)

Directed DOE Options

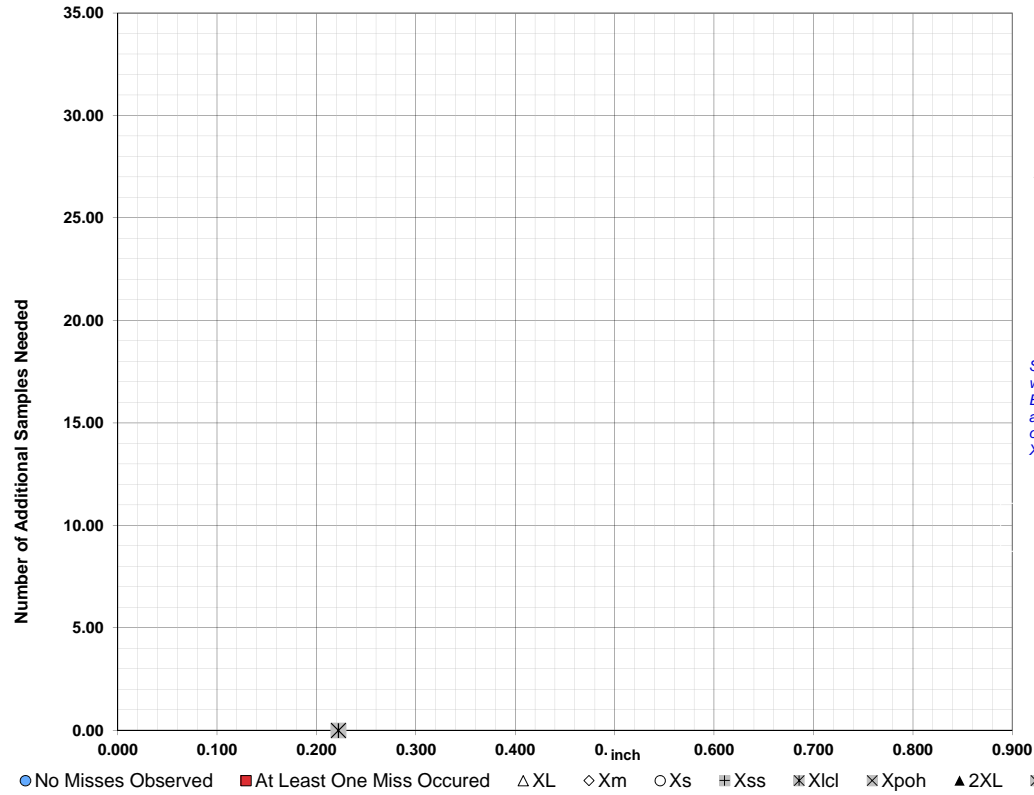


TABLE C

Class Length Additional Samples

XL = 0.812
 Xm = 0.372
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

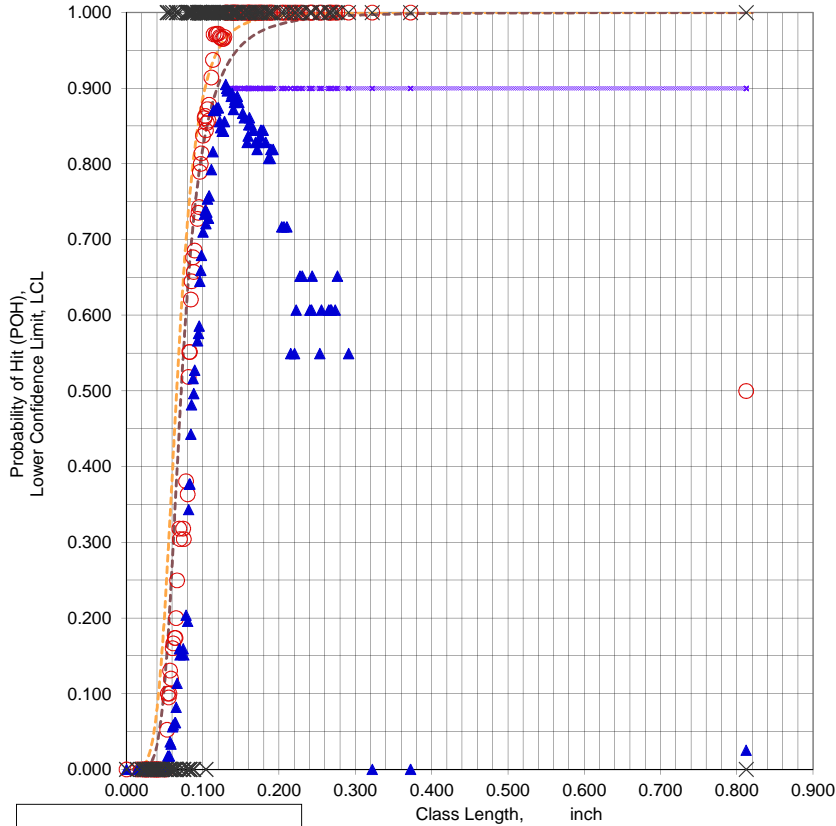
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 16 more large flaws.
Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **A6002HR.XLS**
 Data Set Name = **A6002HR(SITE CODE)**
 Date & Time = 6/4/15 6:27 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0250 inch
 Classlength @ 90/95 Xpod = 0.1300 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.909 @ 0.105 inch
 NTIAC 90/95 POD = 0.904 @ 0.120 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.812 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.372 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.1300 inch

File Name = A6002HR.XLS
 Data Set Name = A6002HR(SITE CODE)

Directed DOE Options

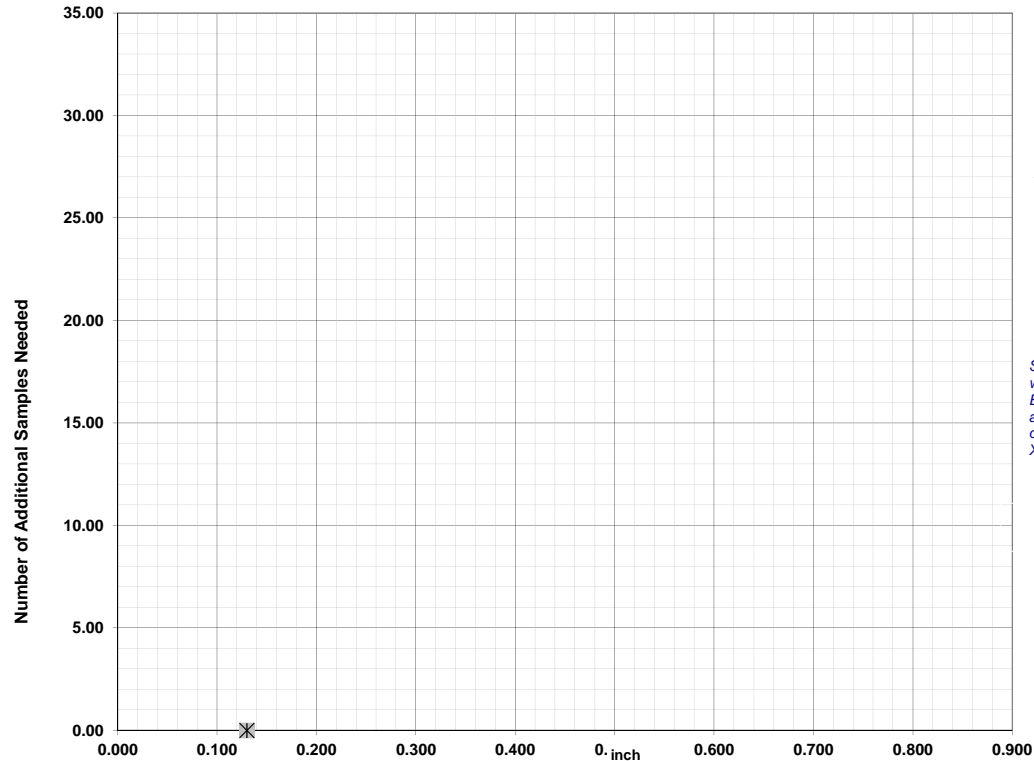


TABLE C

Class Length Additional Samples

XL = 0.812
 Xm = 0.372
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

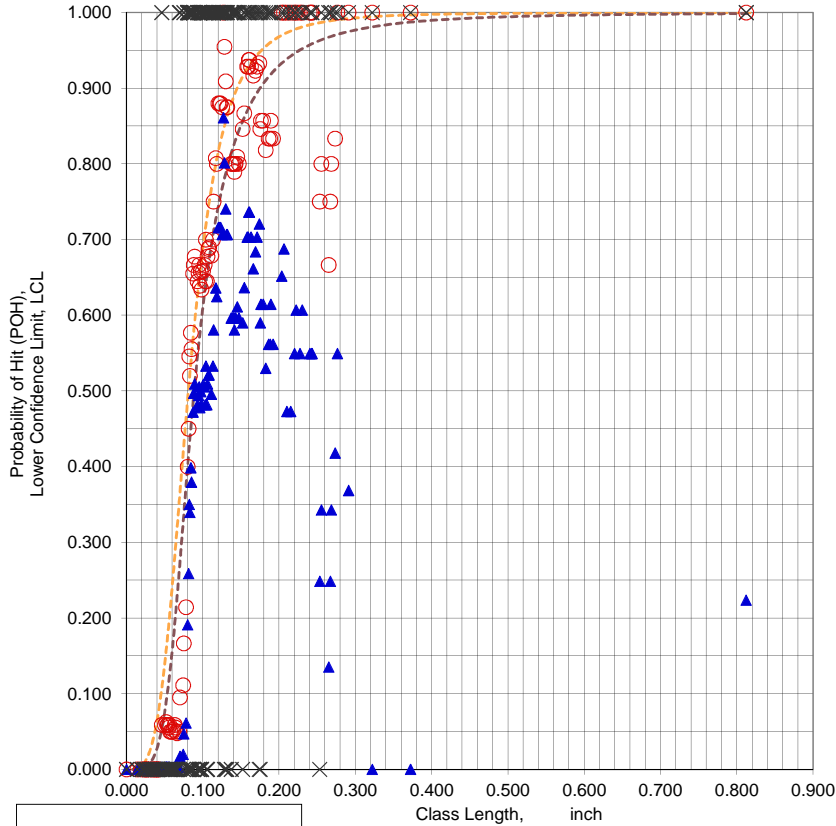
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **A6002J.XLS**
 Data Set Name = **A6002J(SITE CODE)**
 Date & Time = 6/4/15 6:28 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8609
 Classwidth @ Best LCL = 0.0200 inch
 Classlength @ Best LCL = 0.1270 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.2550 -0.001 inch 28 Samples

NTIAC 90% POD = 0.900 @ 0.145 inch
 NTIAC 90/95 POD = 0.900 @ 0.175 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.812 inch
 Samples Needed @ XL = 27
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.276 inch
 Samples Needed @ Xpoh = 24
 New Largest Classlength , 2XL = 1.624 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

File Name = A6002J.XLS
 Data Set Name = A6002J(SITE CODE)

Directed DOE Options

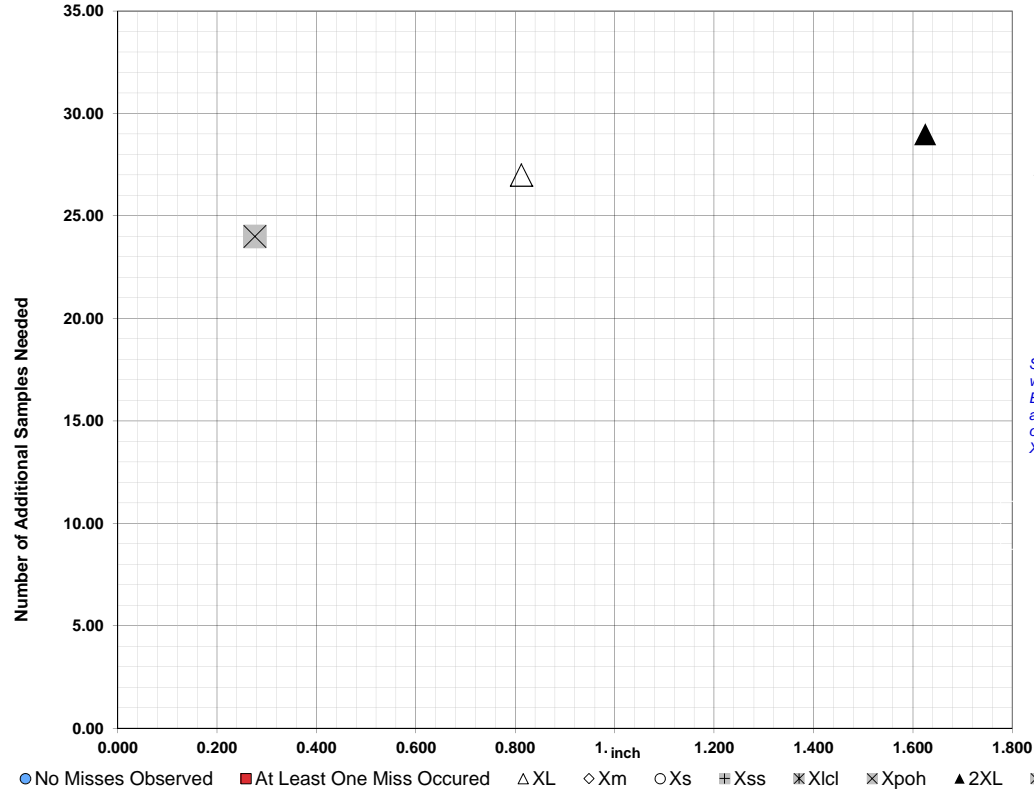


TABLE C

Class Length	Additional Samples
XL = 0.812	27
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 0.276	24
2XL = 1.624	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

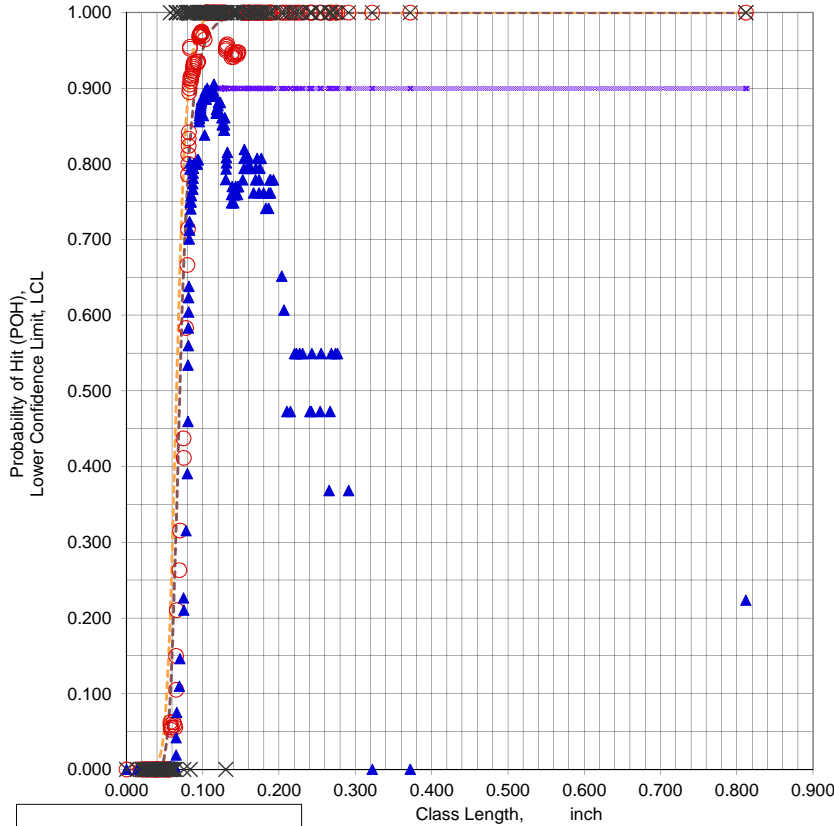
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ⊗ XLcl
 ⊗ Xpoh
 ▲ 2XL
 ⊗ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Need 15 more large flaws.
 Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



File Name = **A6003A.XLS**
 Data Set Name = **A6003A(SITE CODE)**
 Date & Time = 6/4/15 6:30 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0190 inch
 Classlength @ 90/95 Xpod = 0.1054 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.936 @ 0.085 inch
 NTIAC 90/95 POD = 0.930 @ 0.095 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.812 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.291 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.1054 inch

File Name = A6003A.XLS
 Data Set Name = A6003A(SITE CODE)

Directed DOE Options

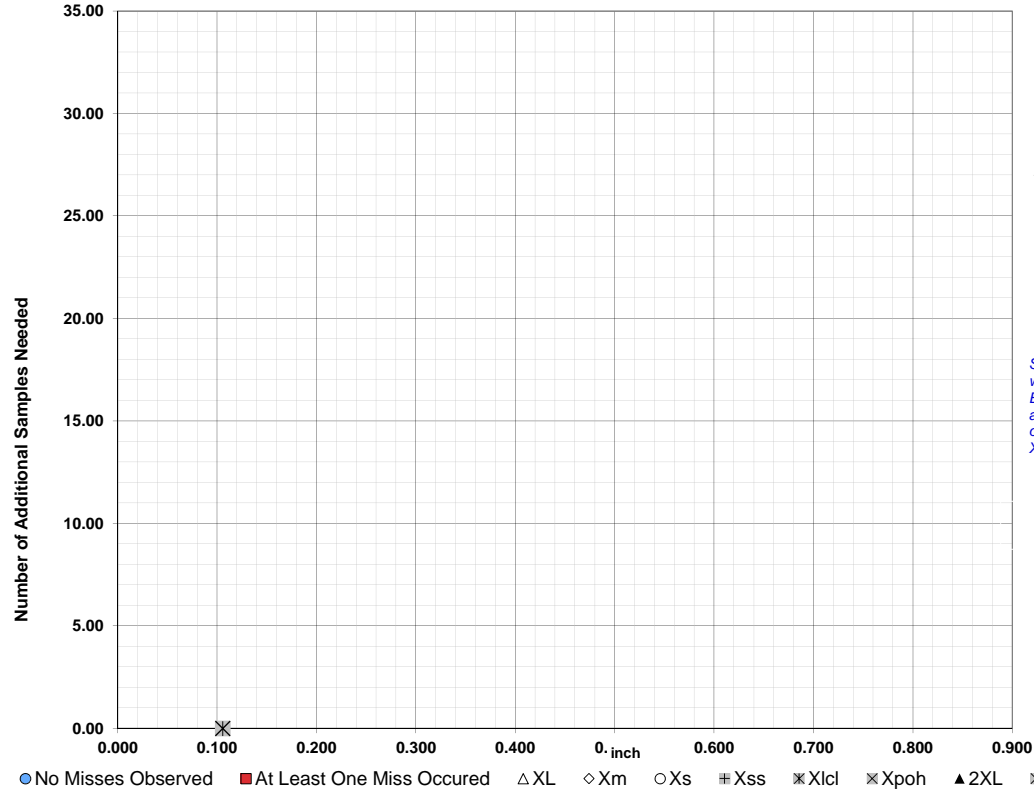


TABLE C

Class Length Additional Samples

XL = 0.812
 Xm = 0.291
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 16 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

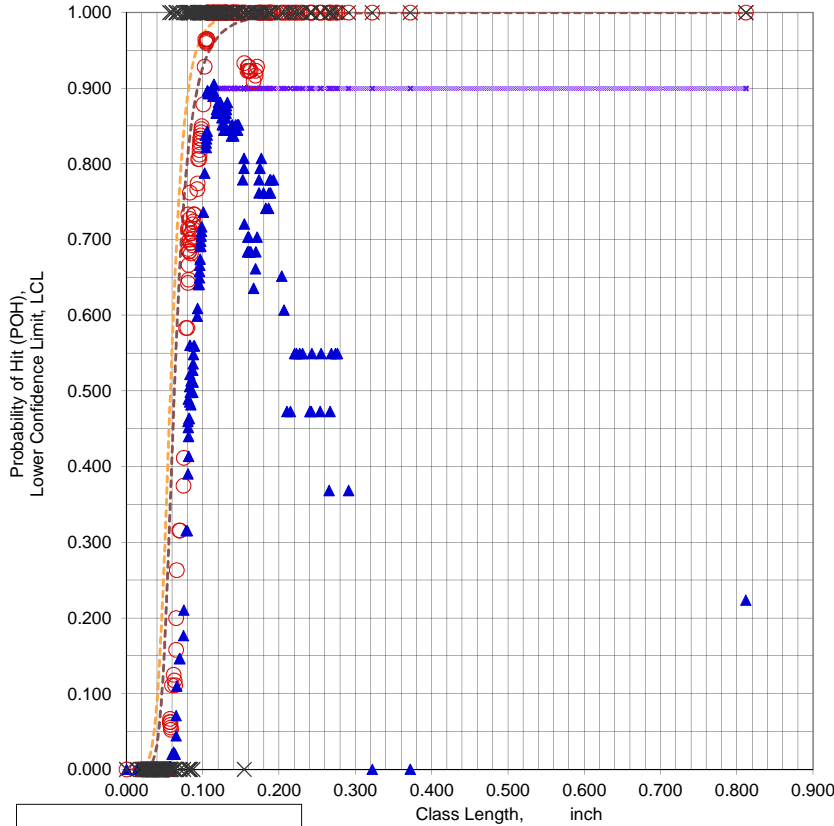
MLE Divergence Warning: Initial results listed.

Warning: No false call analysis.

File Name = A6003B.XLS

Data Set Name = A6003B(SITE CODE)

Date & Time = 6/4/15 6:31 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0190 inch
 Classlength @ 90/95 Xpod = 0.1141 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000



CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.923 @ 0.085 inch
 NTIAC 90/95 POD = 0.909 @ 0.095 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.812 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.291 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.1141 inch

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
 — Xp, 90/95 POD
 - - - MLE(Mean) POD
 - - - MLE(95%) LCL

File Name = A6003B.XLS
 Data Set Name = A6003B(SITE CODE)

Directed DOE Options

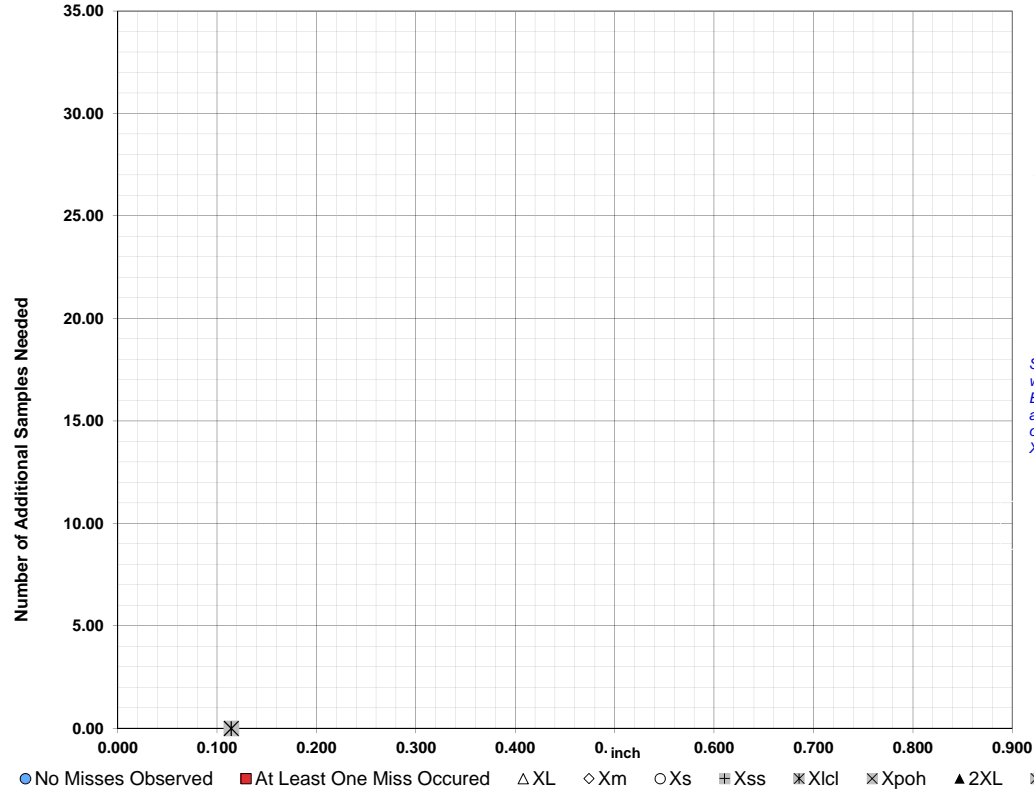


TABLE C

Class Length Additional Samples

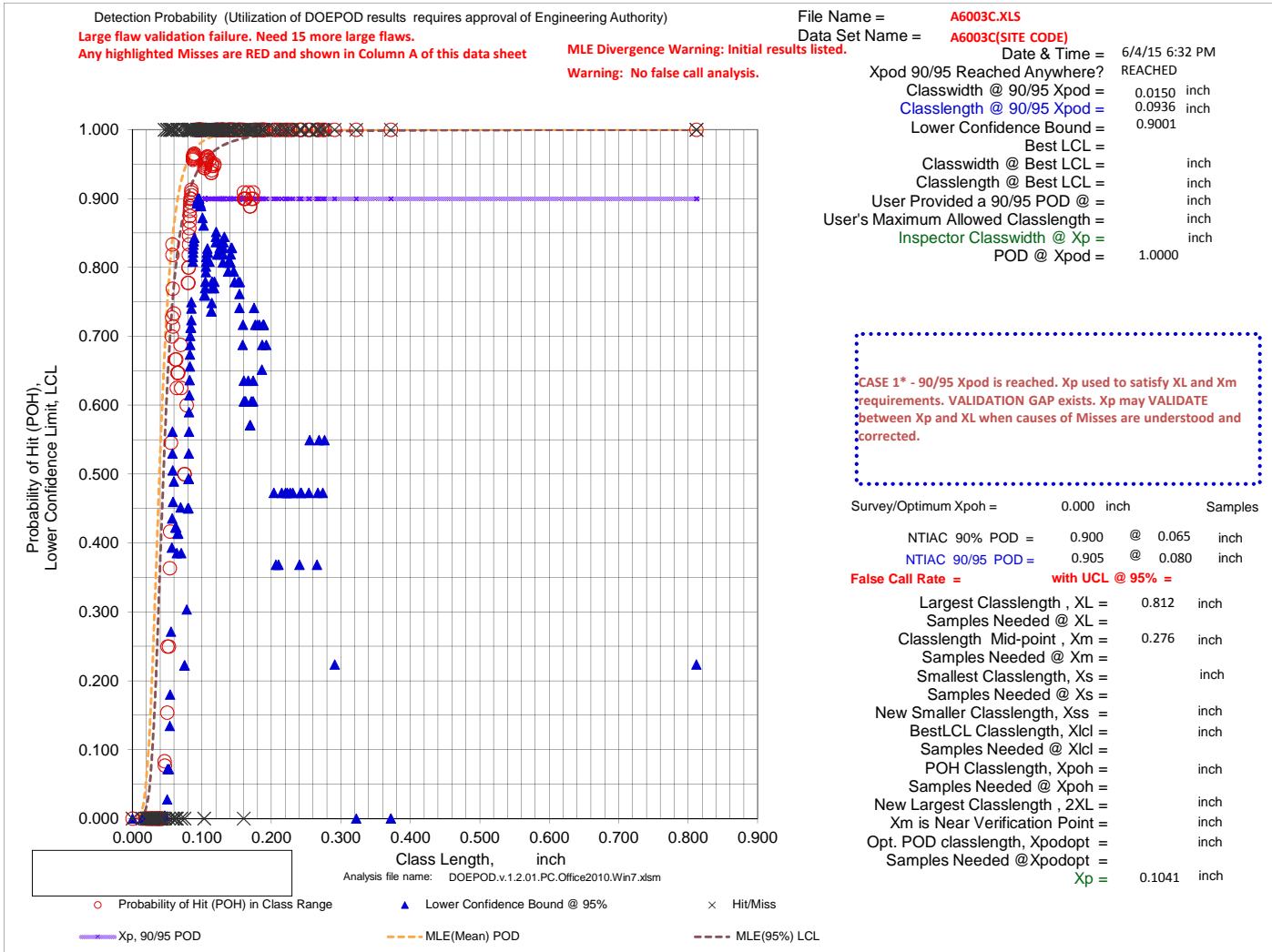
XL = 0.812
 Xm = 0.291
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6003C.XLS
 Data Set Name = A6003C(SITE CODE)

Directed DOE Options

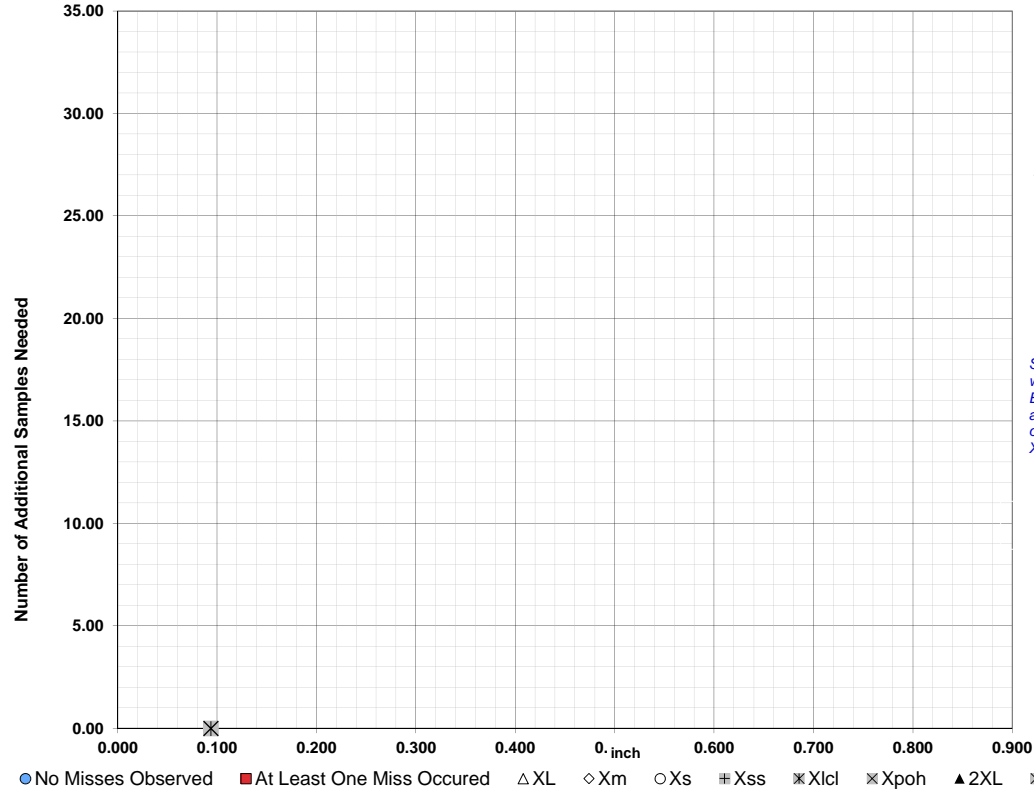


TABLE C

Class Length Additional Samples

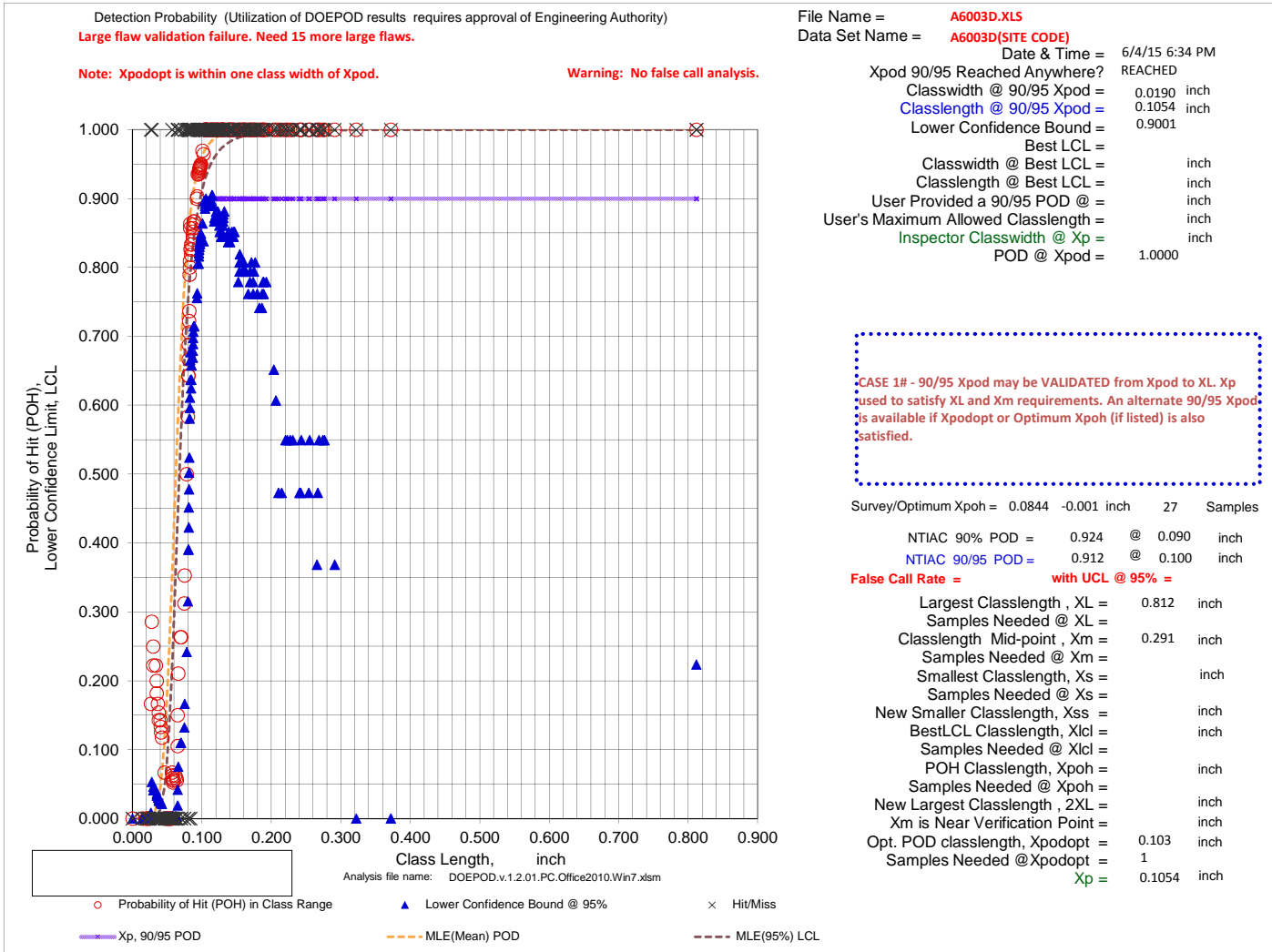
XL = 0.812
 Xm = 0.276
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6003D.XLS
 Data Set Name = A6003D(SITE CODE)

Directed DOE Options

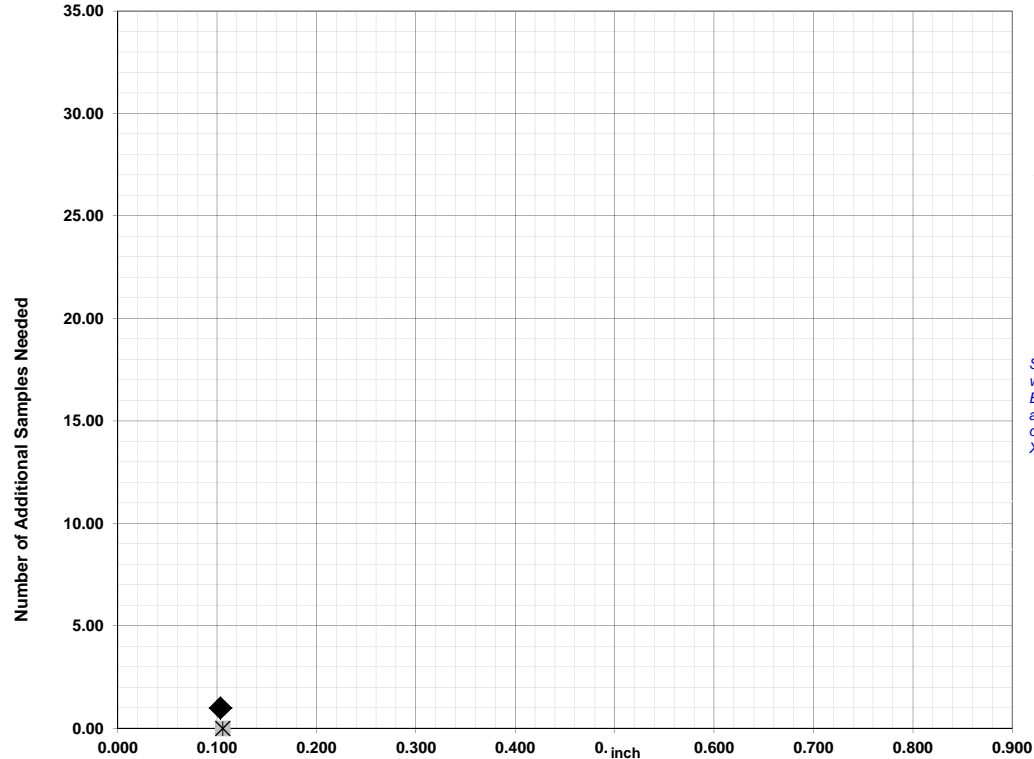


TABLE C

Class Length	Additional Samples
XL =	0.812
Xm =	0.291
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.103 1

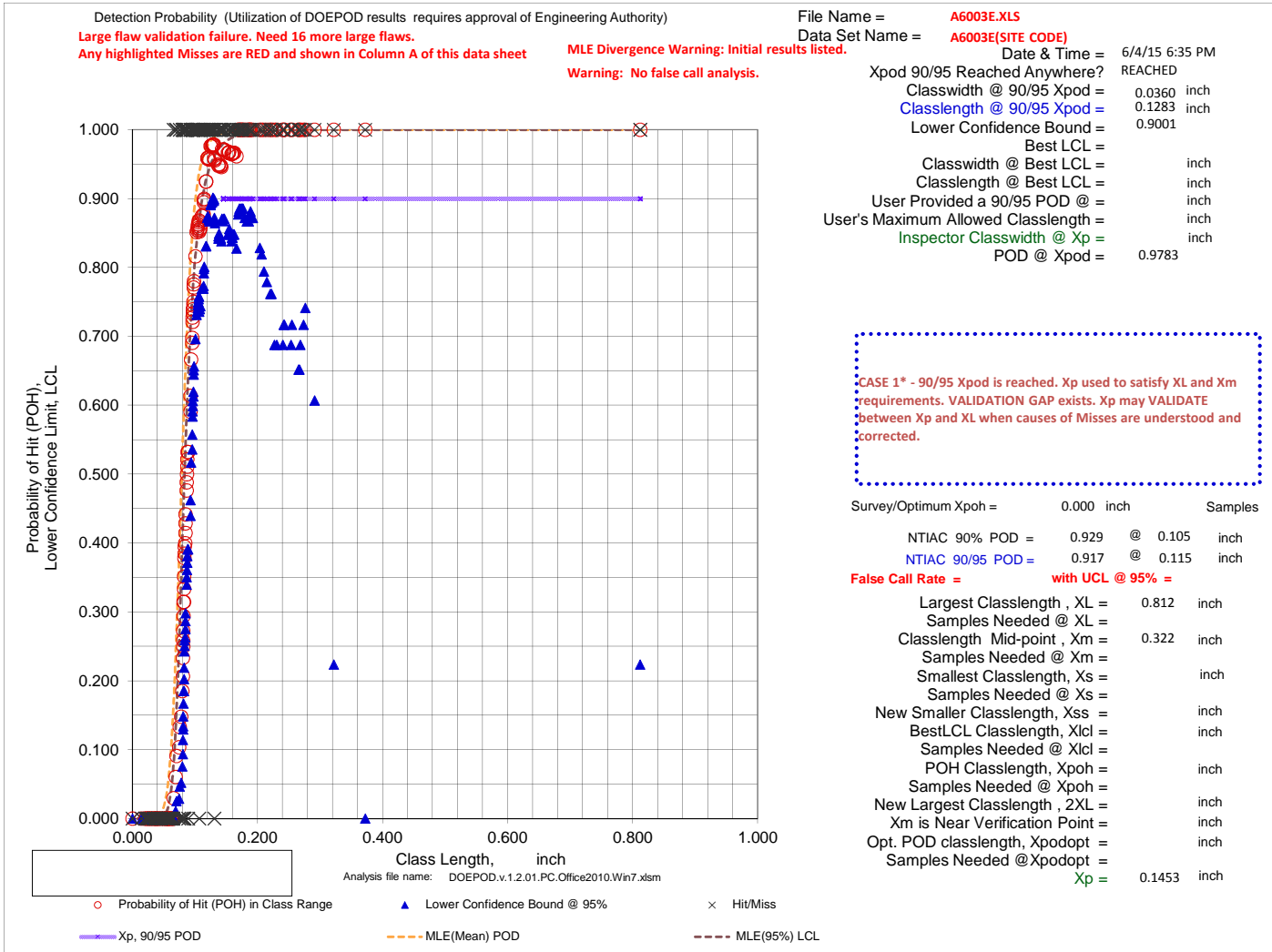
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6003E.XLS
 Data Set Name = A6003E(SITE CODE)

Directed DOE Options

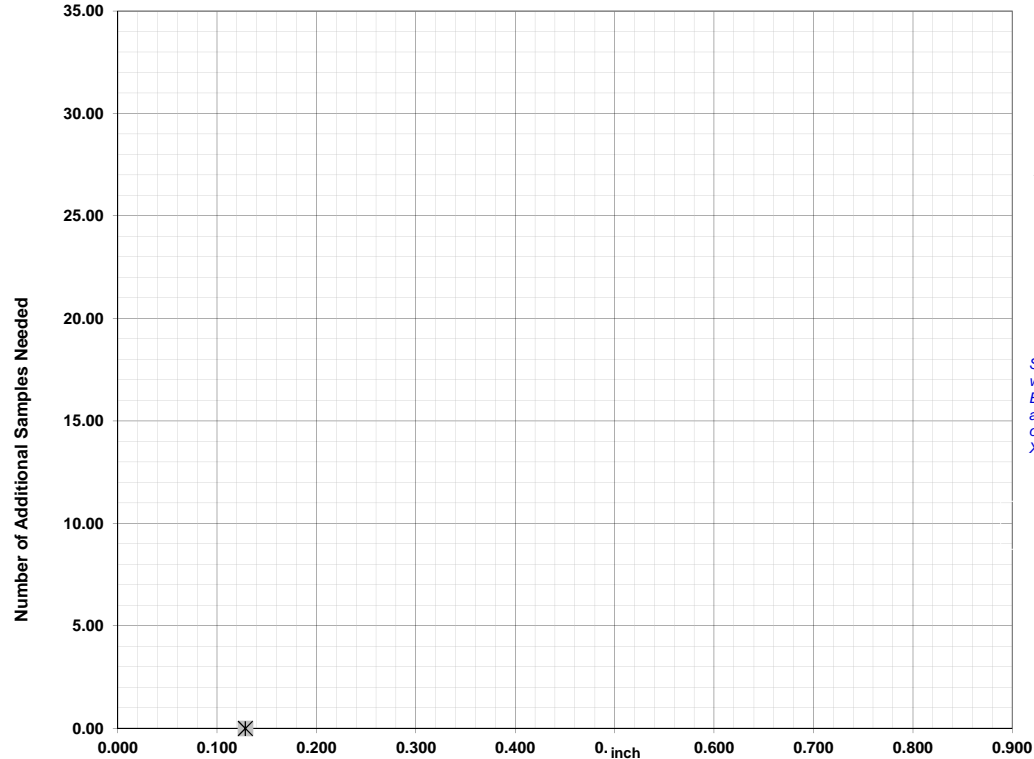


TABLE C

Class Length Additional Samples

XL = 0.812
 Xm = 0.322
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

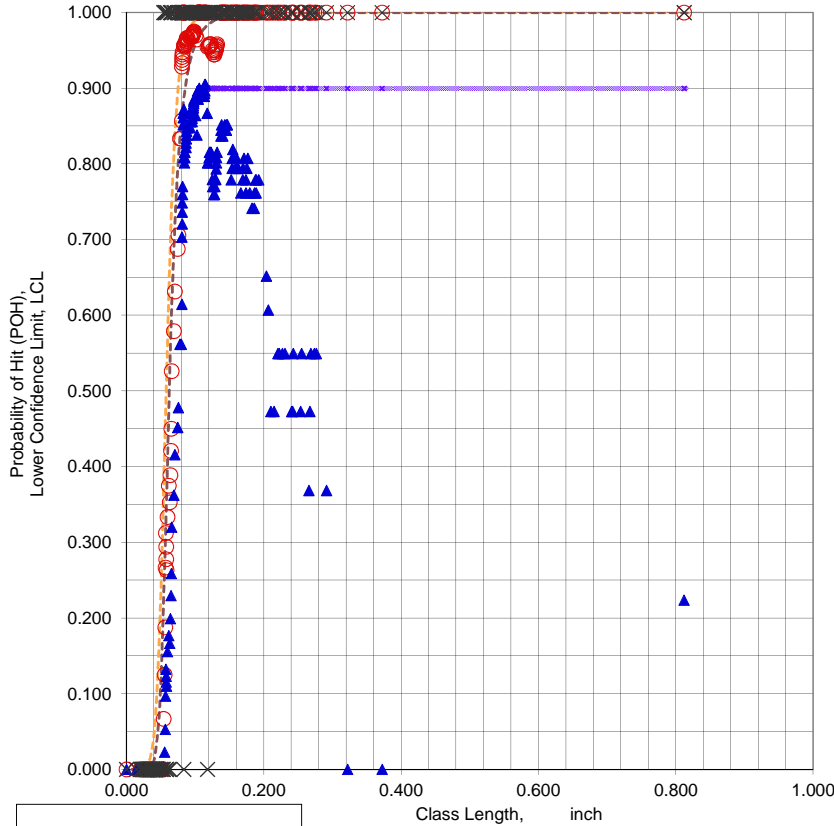
● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 15 more large flaws.
Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE (Mean) POD
- - - MLE (95%) LCL

File Name = **A6003F.XLS**
 Data Set Name = **A6003F(SITE CODE)**
 Date & Time = 6/4/15 6:37 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0190 inch
 Classlength @ 90/95 Xpod = 0.1054 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.938 @ 0.080 inch
 NTIAC 90/95 POD = 0.925 @ 0.090 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.812 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.291 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.1054 inch

File Name = A6003F.XLS
 Data Set Name = A6003F(SITE CODE)

Directed DOE Options

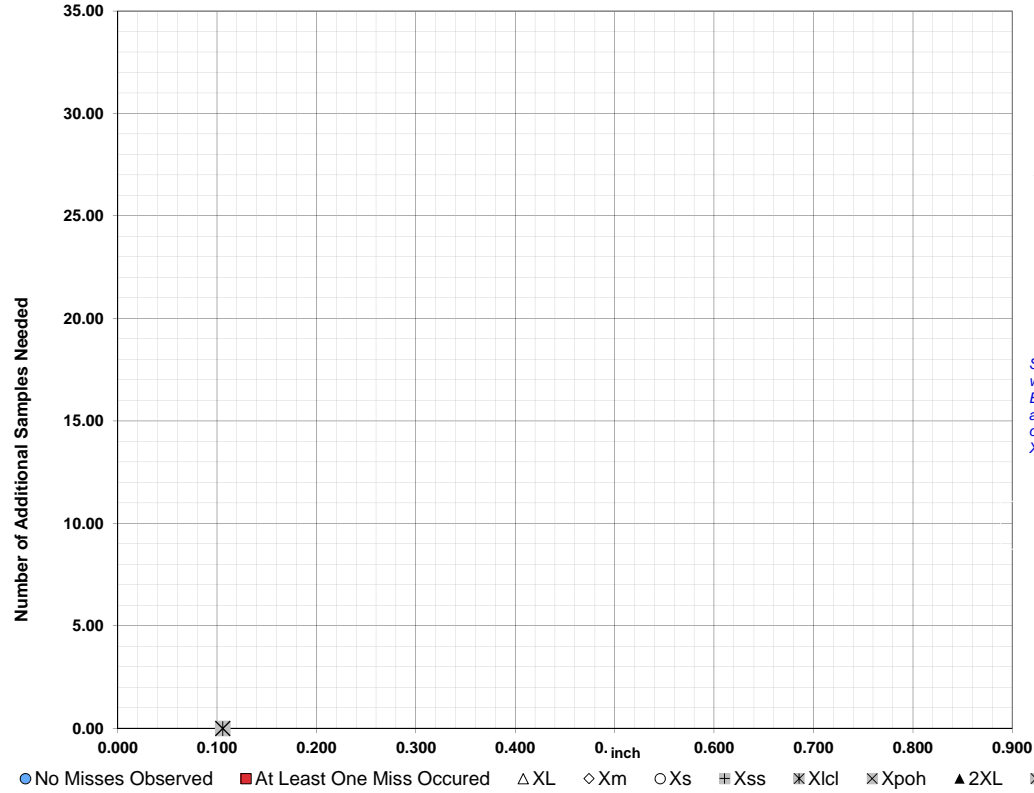


TABLE C

Class Length Additional Samples

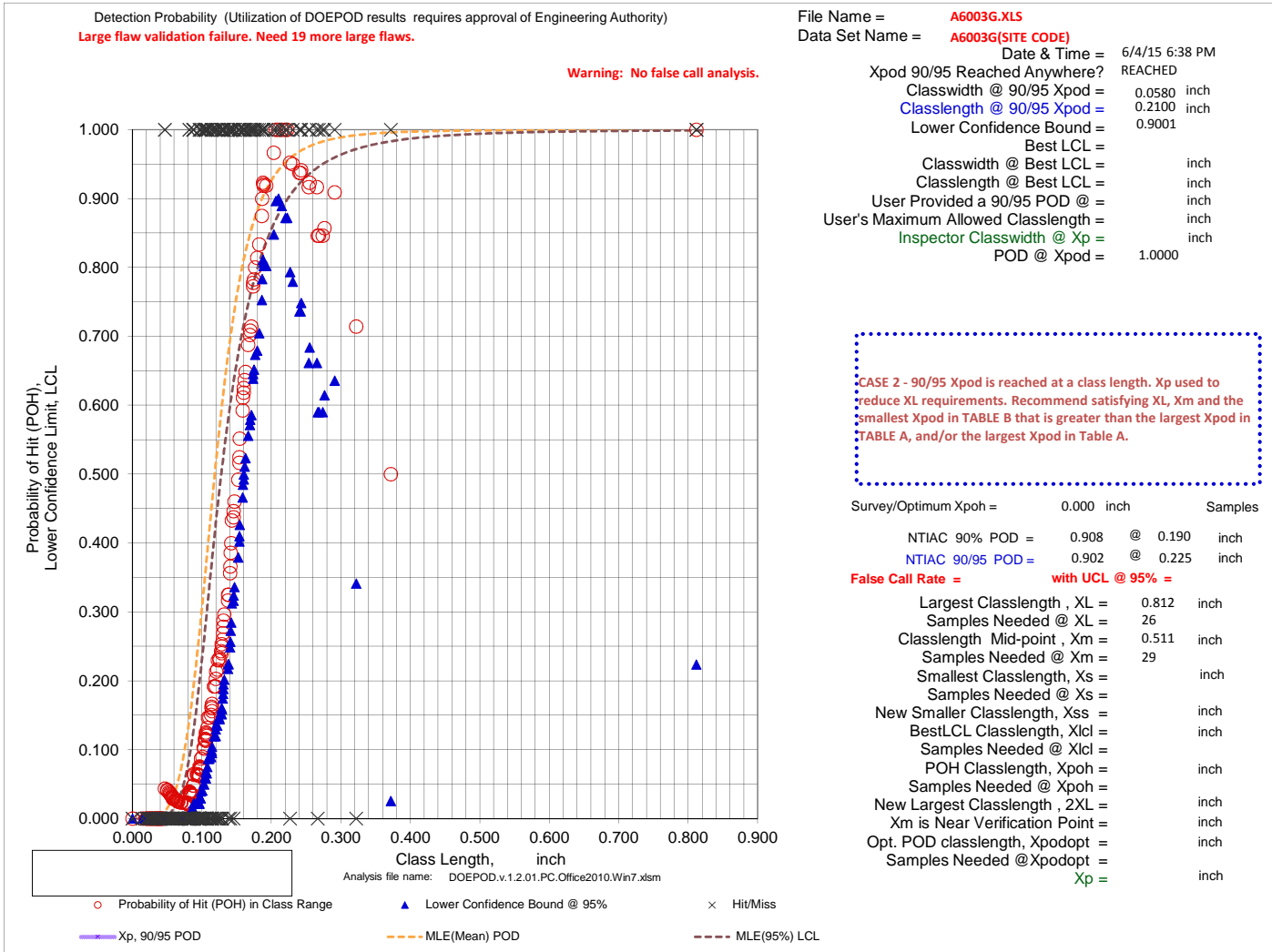
XL = 0.812
 Xm = 0.291
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6003G.XLS
 Data Set Name = A6003G(SITE CODE)

Directed DOE Options

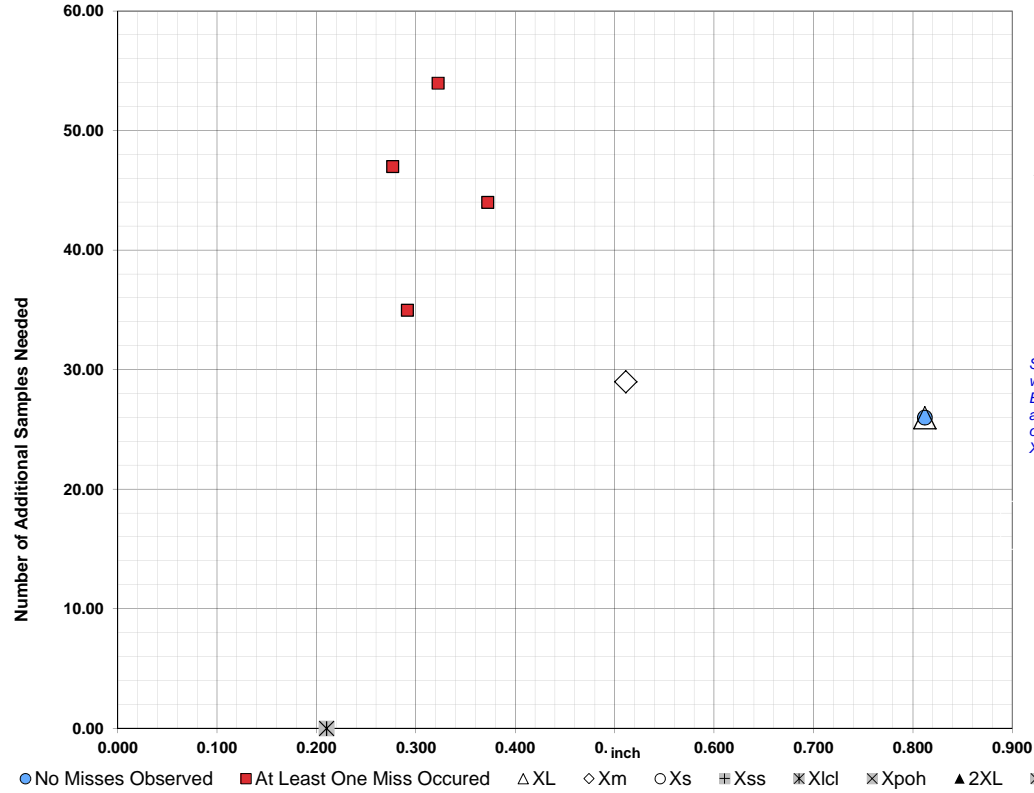


TABLE C

Class Length	Additional Samples
XL =	0.812 26
Xm =	0.511 29
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

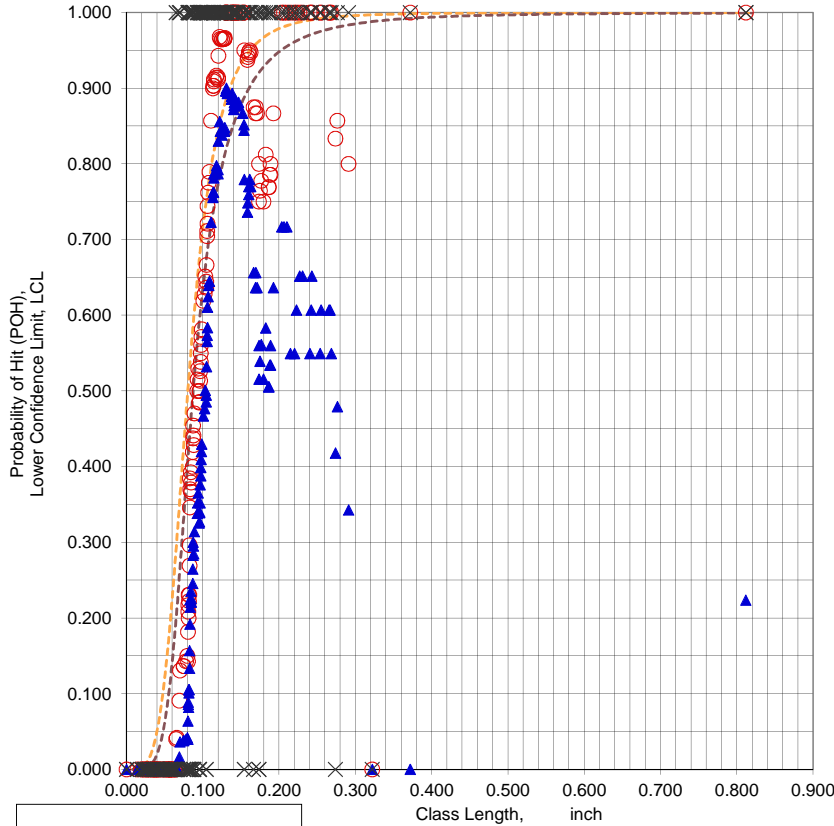
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.3719	44	0.8117	26
0.3219	54		
0.2910	35		
0.2762	47		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Need 16 more large flaws.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **A6003H.XLS**
 Data Set Name = **A6003H(SITE CODE)**
 Date & Time = 6/4/15 6:39 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0250 inch
 Classlength @ 90/95 Xpod = 0.1308 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Xp used to reduce XL requirements. Recommend satisfying XL, Xm and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in Table A.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.912 @ 0.140 inch
 NTIAC 90/95 POD = 0.908 @ 0.165 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.812 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = 0.372 inch
 Samples Needed @ Xm = 28
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A6003H.XLS
 Data Set Name = A6003H(SITE CODE)

Directed DOE Options

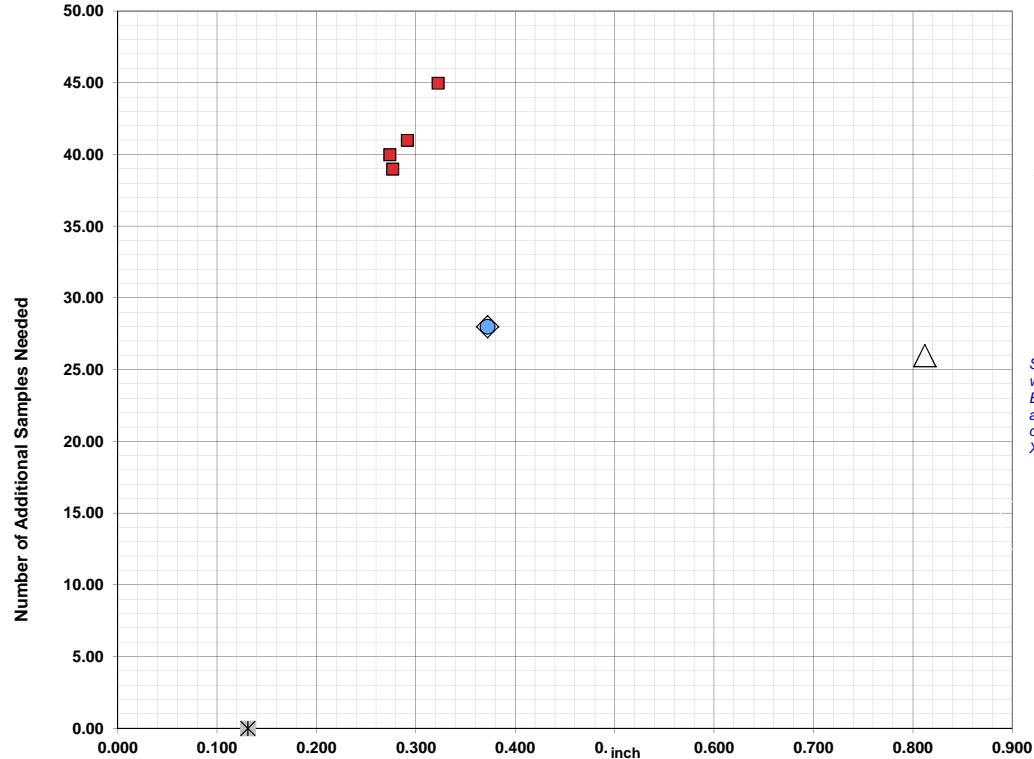


TABLE C

Class Length	Additional Samples
XL = 0.812	26
Xm = 0.372	28
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

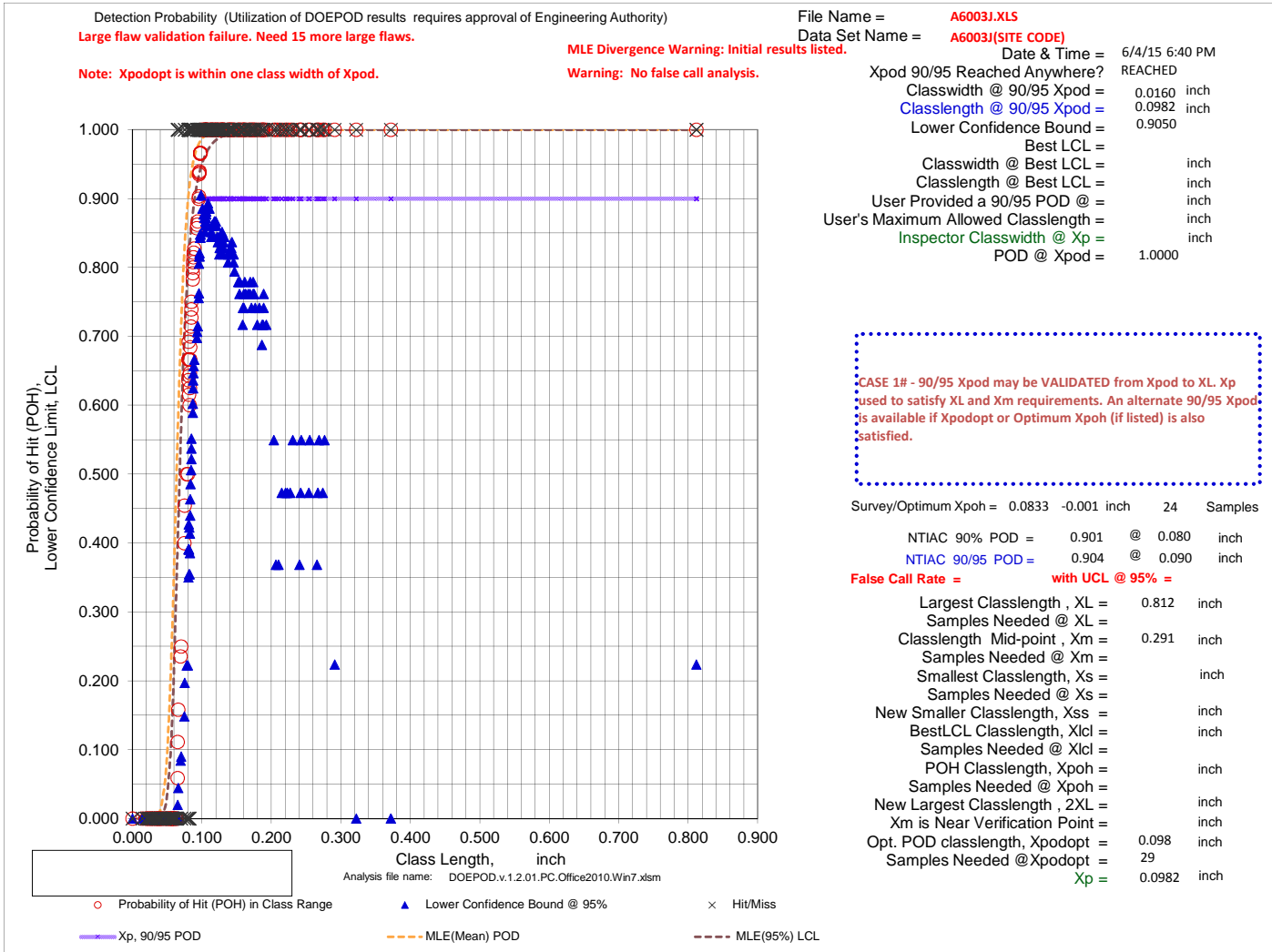
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.3219	45	0.3719	28
0.2910	41		
0.2762	39		
0.2735	40		

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◆ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6003J.XLS
 Data Set Name = A6003J(SITE CODE)

Directed DOE Options

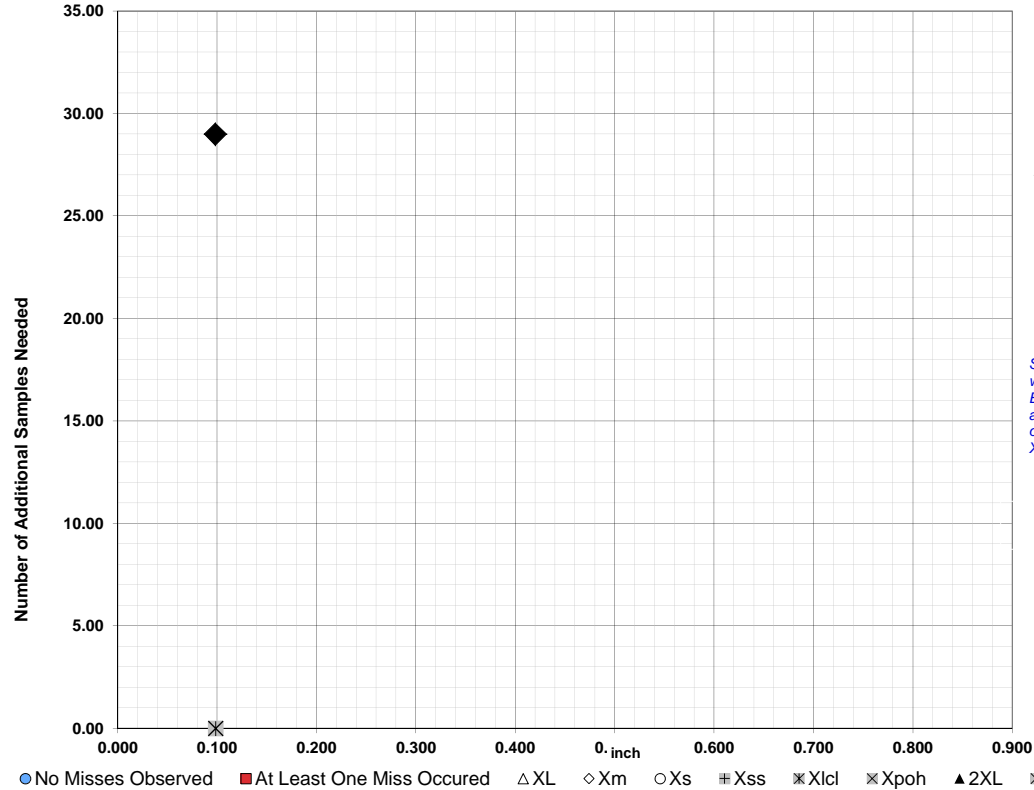


TABLE C

Class Length	Additional Samples
XL =	0.812
Xm =	0.291
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.098 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 15 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

MLE Divergence Warning: Initial results listed.

Warning: No false call analysis.

File Name = A6004A.XLS

Data Set Name = A6004A(SITE CODE)

Date & Time = 6/4/15 6:42 PM

Xpod 90/95 Reached Anywhere? REACHED

Classwidth @ 90/95 Xpod = 0.0140 inch

Classlength @ 90/95 Xpod = 0.0940 inch

Lower Confidence Bound = 0.9001

Best LCL =

Classwidth @ Best LCL = inch

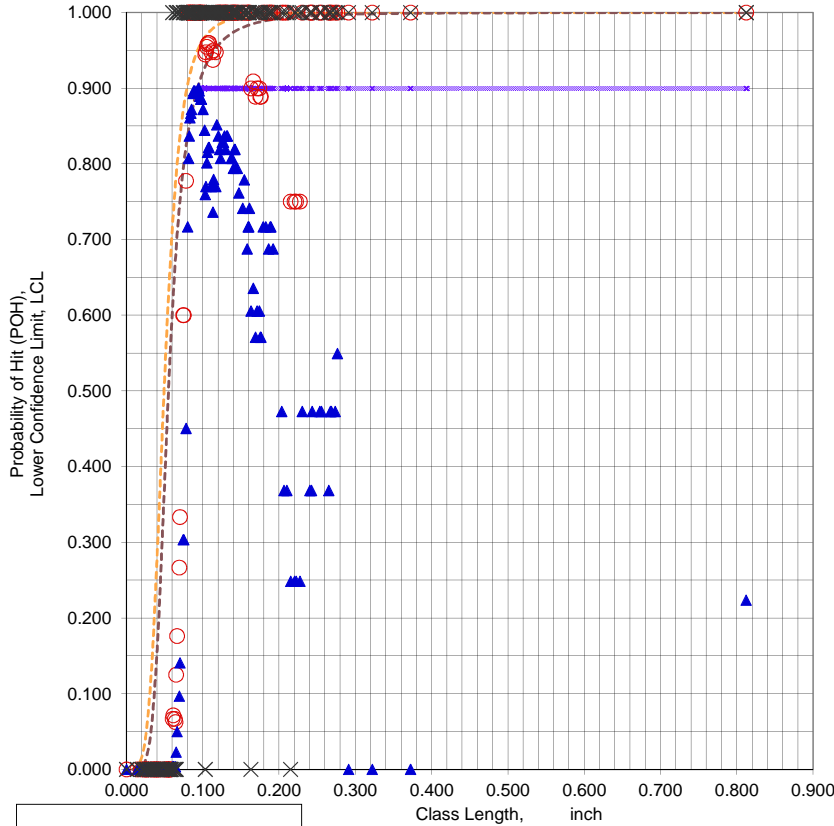
Classlength @ Best LCL = inch

User Provided a 90/95 POD @ = inch

User's Maximum Allowed Classlength = inch

Inspector Classwidth @ Xp = inch

POD @ Xpod = 1.0000



CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples

NTIAC 90% POD = 0.907 @ 0.080 inch

NTIAC 90/95 POD = 0.908 @ 0.095 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.812 inch

Samples Needed @ XL =

Classlength Mid-point , Xm = 0.276 inch

Samples Needed @ Xm =

Smallest Classlength, Xs = inch

Samples Needed @ Xs =

New Smaller Classlength, Xss = inch

BestLCL Classlength, Xlcl = inch

Samples Needed @ Xlcl =

POH Classlength, Xpoh = inch

Samples Needed @ Xpoh =

New Largest Classlength , 2XL = inch

Xm is Near Verification Point = inch

Opt. POD classlength, Xpodopt = inch

Samples Needed @ Xpodopt =

Xp = 0.0940 inch

File Name = A6004A.XLS
 Data Set Name = A6004A(SITE CODE)

Directed DOE Options

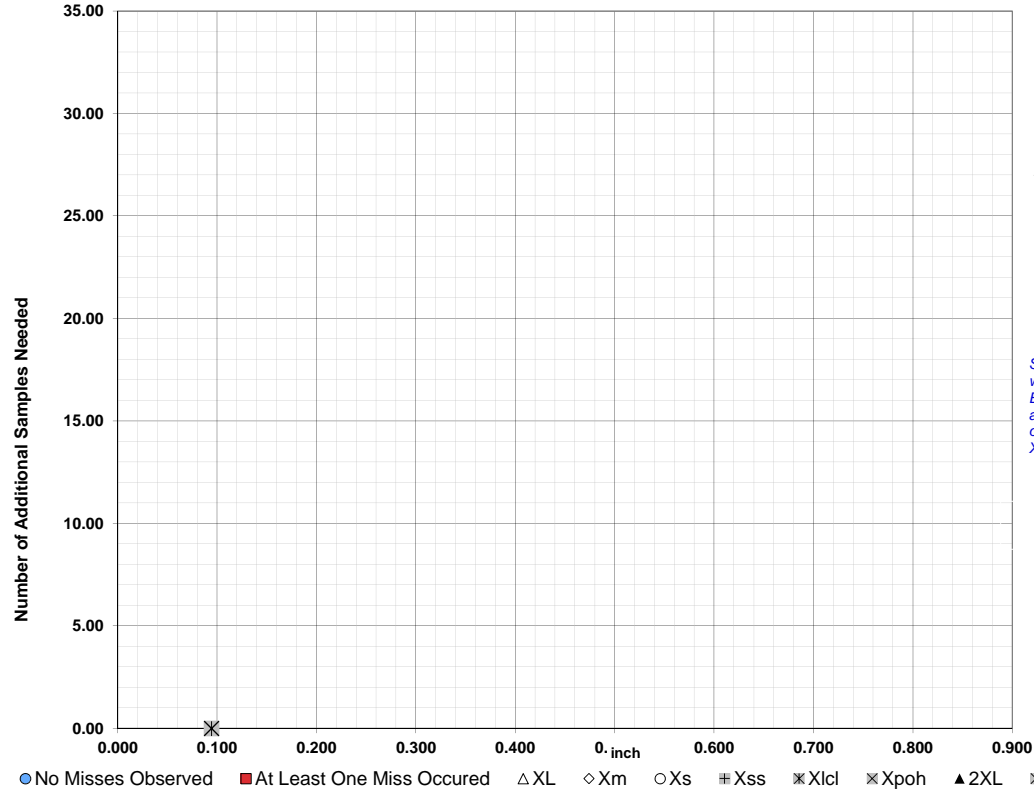


TABLE C

Class Length Additional Samples

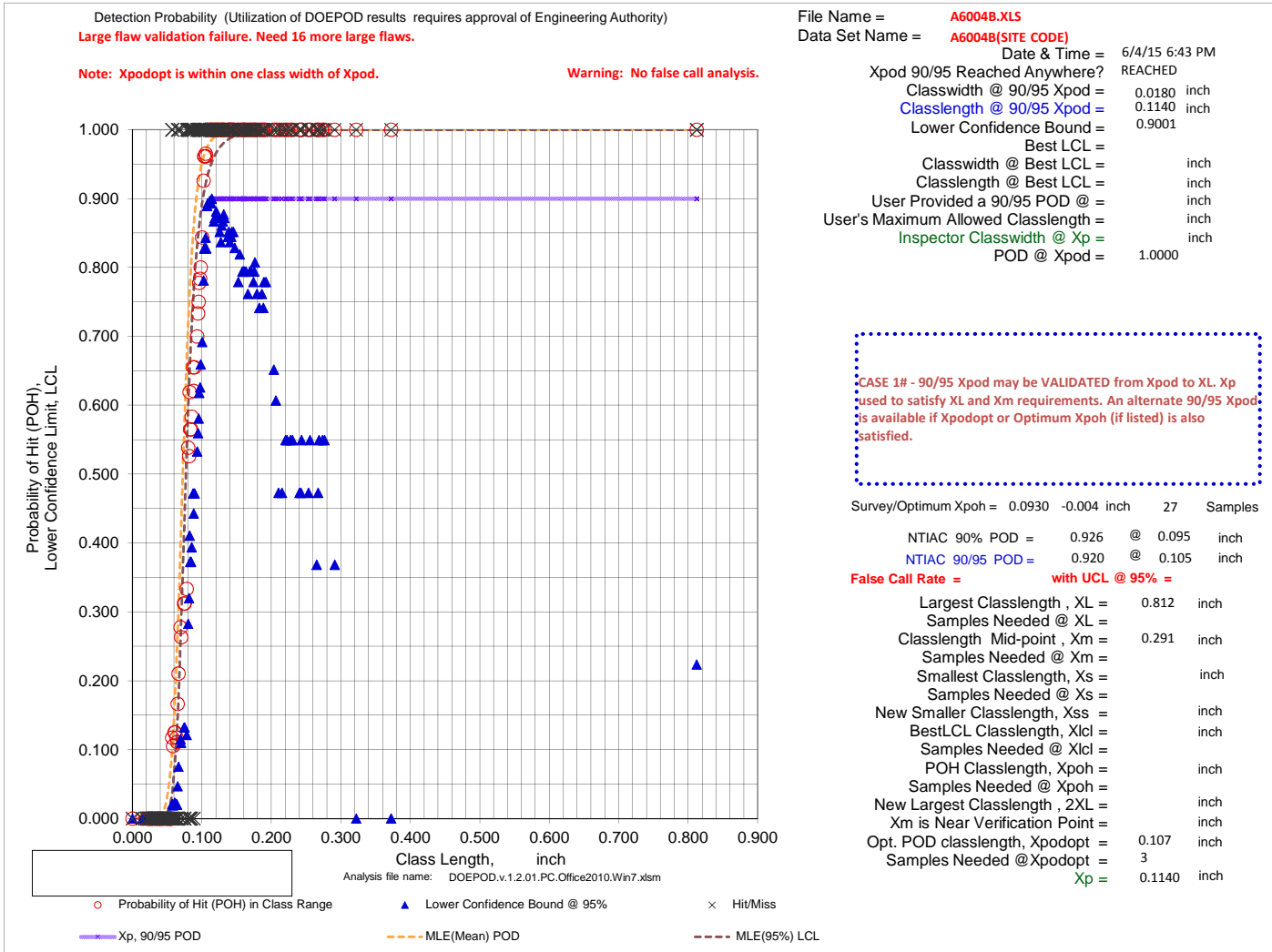
XL = 0.812
 Xm = 0.276
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6004B.XLS
 Data Set Name = A6004B(SITE CODE)

Directed DOE Options

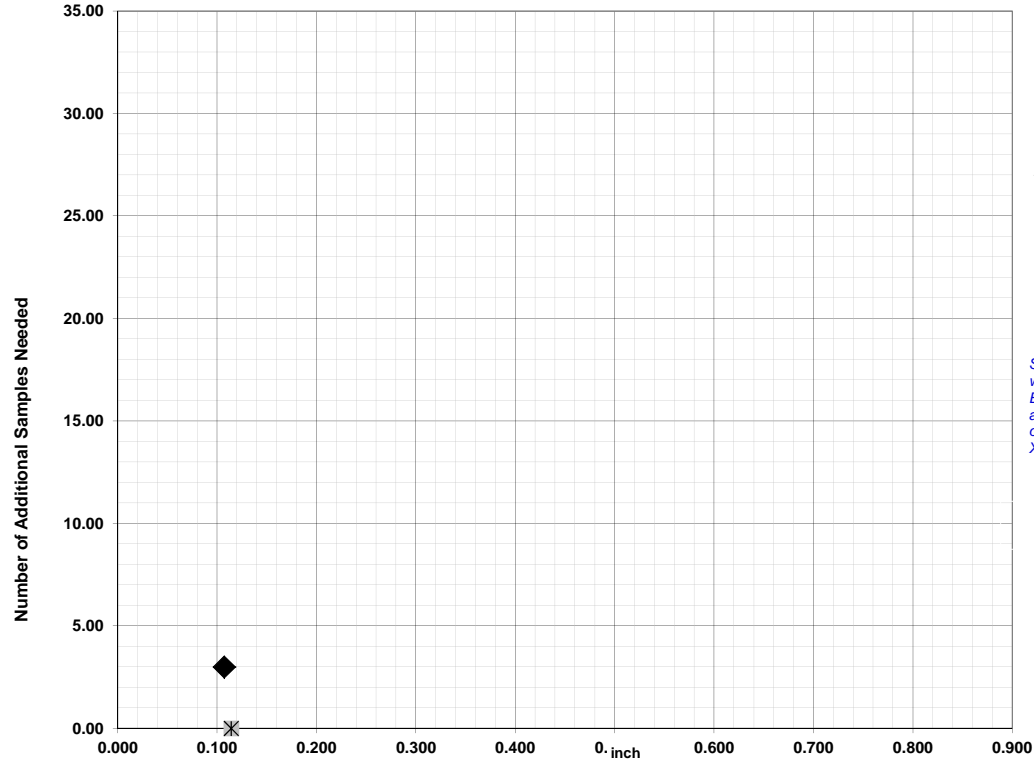


TABLE C

Class Length	Additional Samples
XL =	0.812
Xm =	0.291
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.107 3

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
--------------------	----------	--------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 15 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

MLE Divergence Warning: Initial results listed.

Warning: No false call analysis.

File Name =

A6004BR.XLS

Data Set Name =

A6004BR(SITE CODE)

Date & Time = 6/4/15 6:44 PM

Xpod 90/95 Reached Anywhere? REACHED

Classwidth @ 90/95 Xpod = 0.0180 inch

Classlength @ 90/95 Xpod = 0.1050 inch

Lower Confidence Bound = 0.9001

Best LCL =

Classwidth @ Best LCL = inch

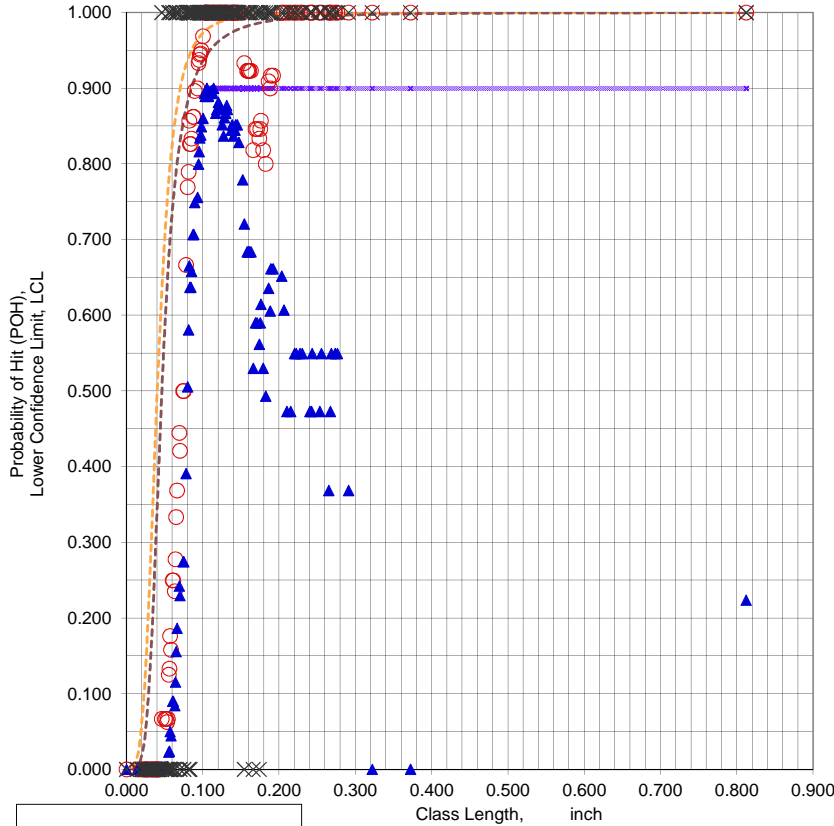
Classlength @ Best LCL = inch

User Provided a 90/95 POD @ = inch

User's Maximum Allowed Classlength = inch

Inspector Classwidth @ Xp = inch

POD @ Xpod = 1.0000



CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples

NTIAC 90% POD = 0.902 @ 0.070 inch

NTIAC 90/95 POD = 0.902 @ 0.085 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.812 inch

Samples Needed @ XL =

Classlength Mid-point , Xm = 0.291 inch

Samples Needed @ Xm =

Smallest Classlength, Xs = inch

Samples Needed @ Xs =

New Smaller Classlength, Xss = inch

BestLCL Classlength, Xlcl = inch

Samples Needed @ Xlcl =

POH Classlength, Xpoh = inch

Samples Needed @ Xpoh =

New Largest Classlength , 2XL = inch

Xm is Near Verification Point = inch

Opt. POD classlength, Xpodopt = inch

Samples Needed @ Xpodopt =

Xp = 0.1050 inch

○ Probability of Hit (POH) in Class Range

▲ Lower Confidence Bound @ 95%

× Hit/Miss

— Xp, 90/95 POD

- - - MLE (Mean) POD

- - - MLE (95%) LCL

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

File Name = A6004BR.XLS
 Data Set Name = A6004BR(SITE CODE)

Directed DOE Options

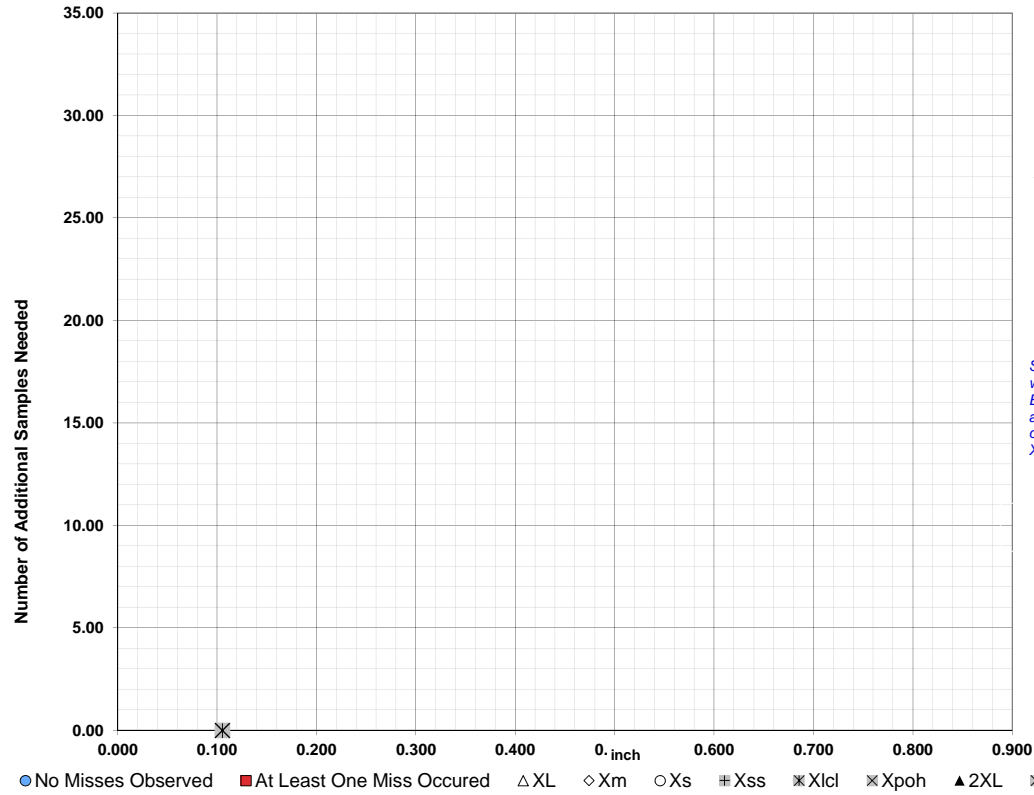


TABLE C

Class Length Additional Samples

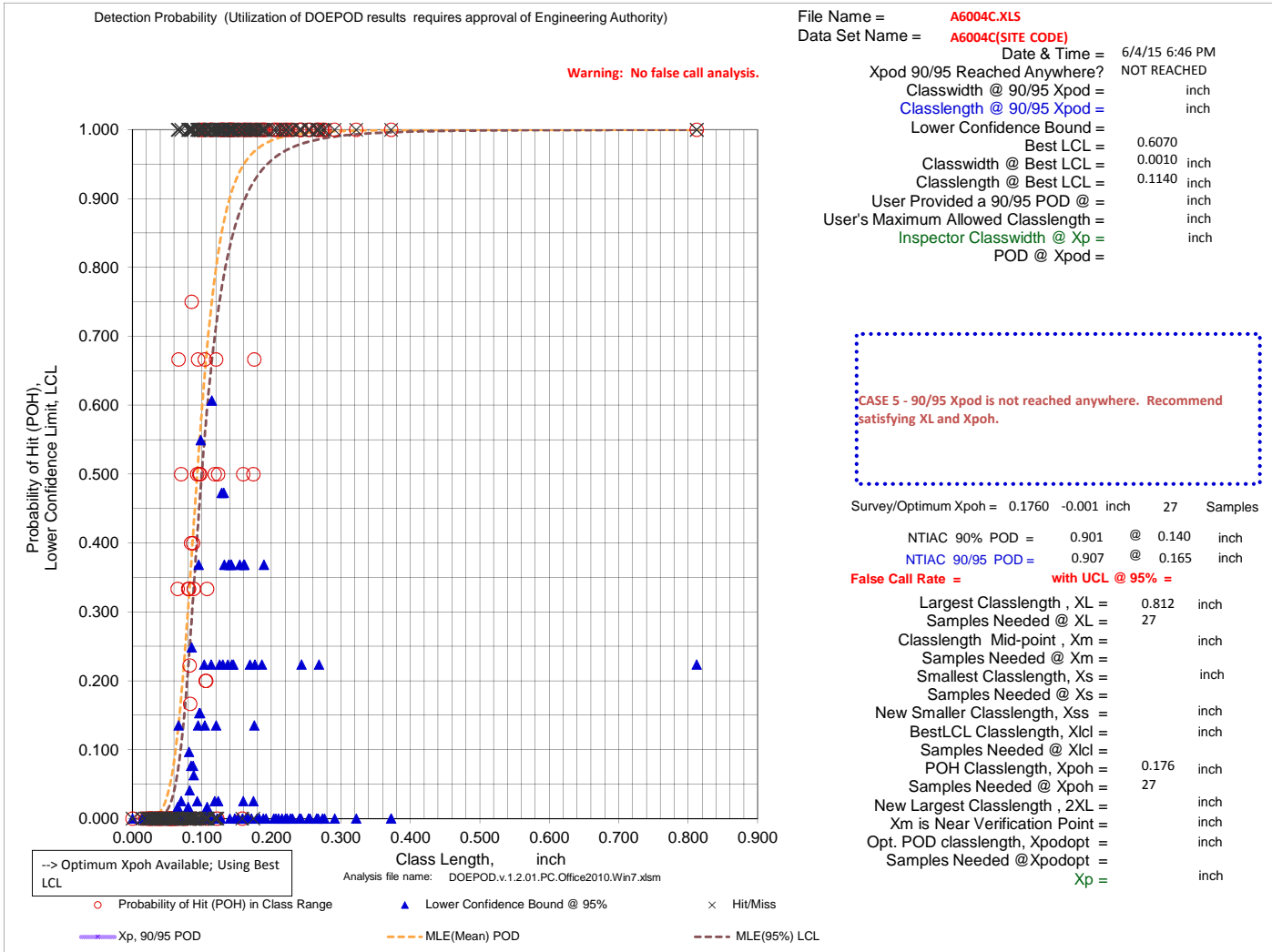
XL = 0.812
 Xm = 0.291
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6004C.XLS
 Data Set Name = A6004C(SITE CODE)

Directed DOE Options

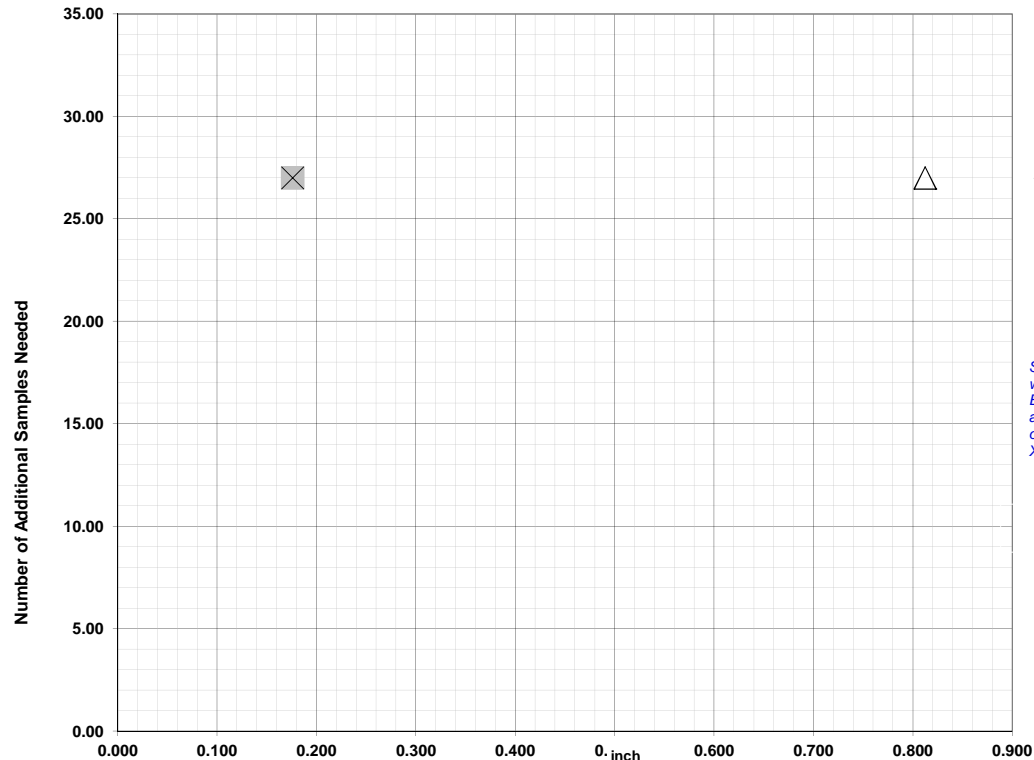


TABLE C

Class Length	Additional Samples
XL = 0.812	27
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.176	27
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs # Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

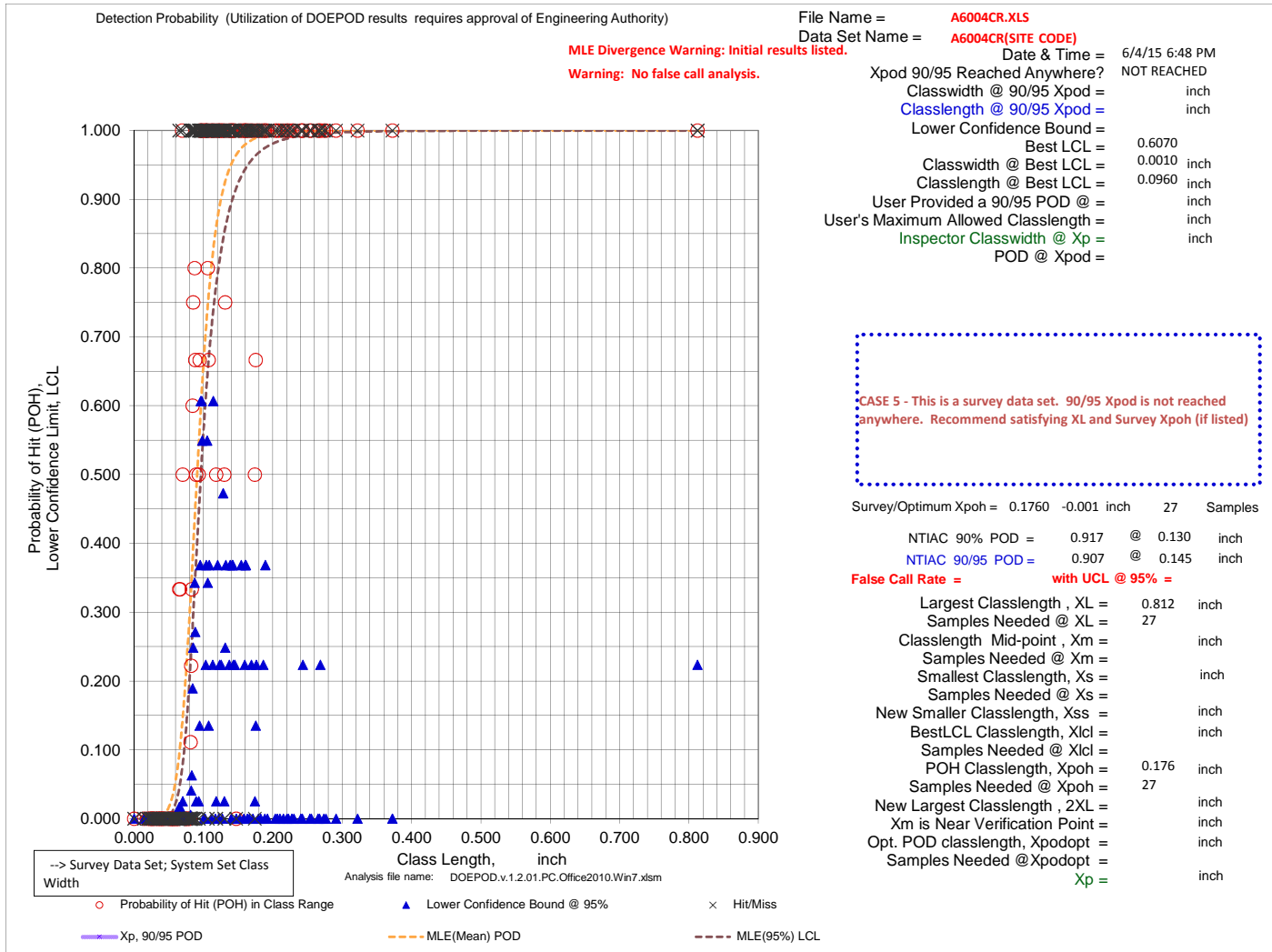
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6004CR.XLS
 Data Set Name = A6004CR(SITE CODE)

Directed DOE Options

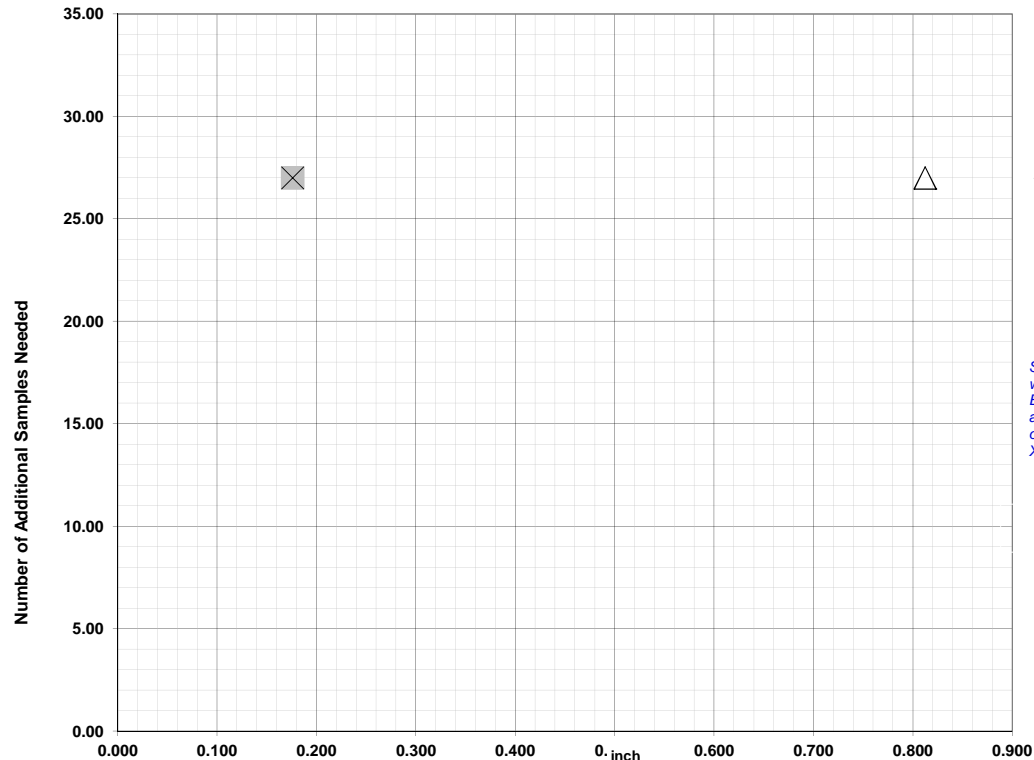


TABLE C

Class Length Additional Samples

XL = 0.812 27
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh = 0.176 27
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs # Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

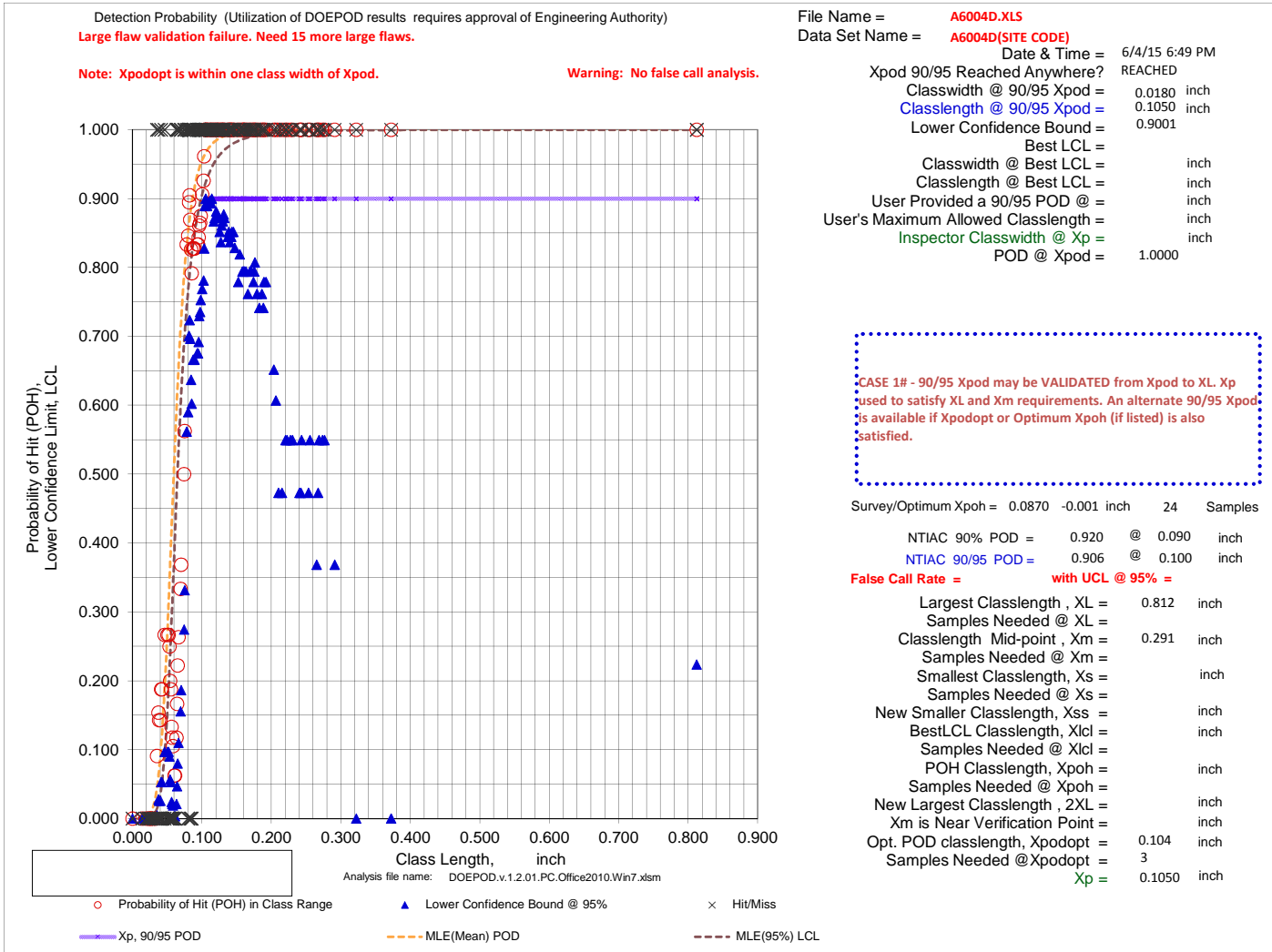
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6004D.XLS
 Data Set Name = A6004D(SITE CODE)

Directed DOE Options

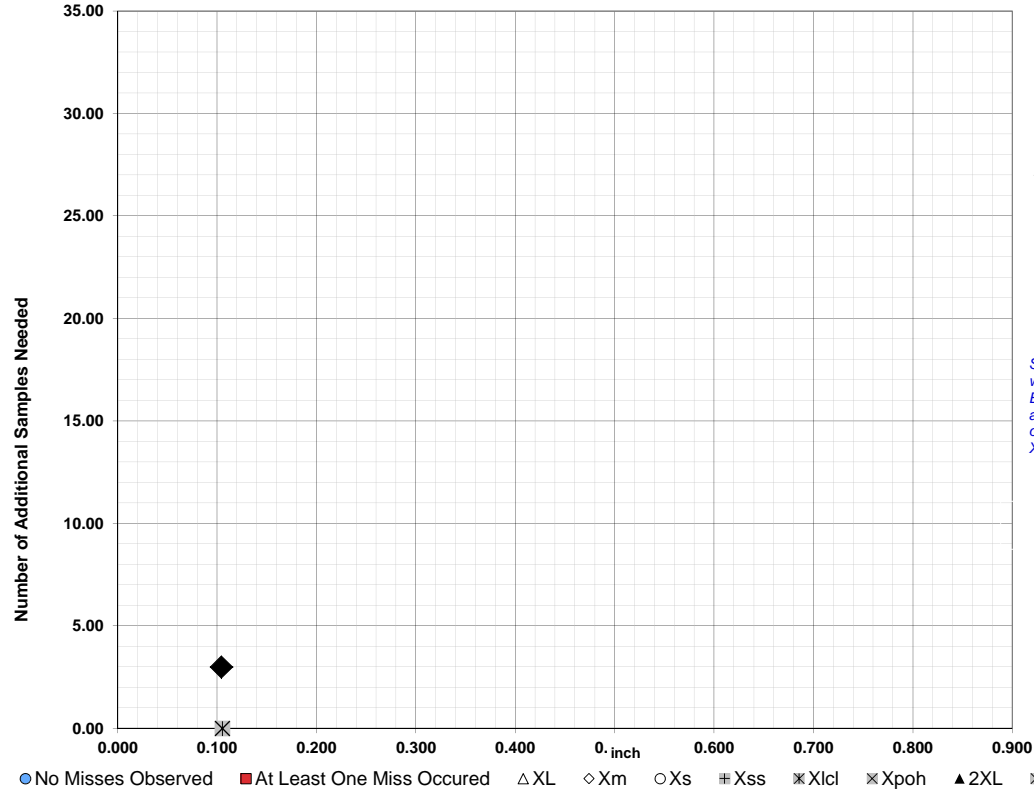


TABLE C

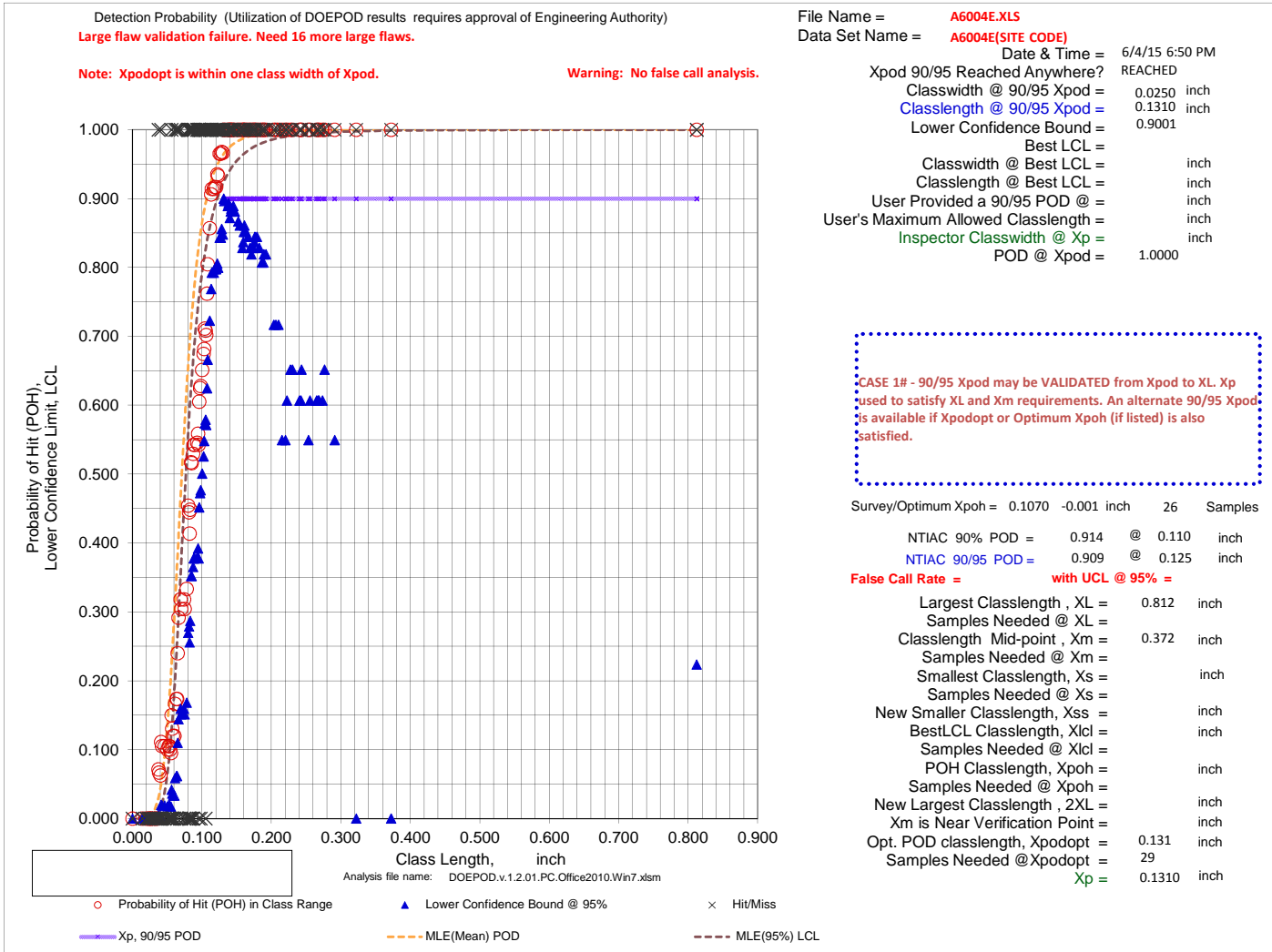
Class Length	Additional Samples
XL =	0.812
Xm =	0.291
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.104 3

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
--------------------	----------	--------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6004E.XLS
 Data Set Name = A6004E(SITE CODE)

Directed DOE Options

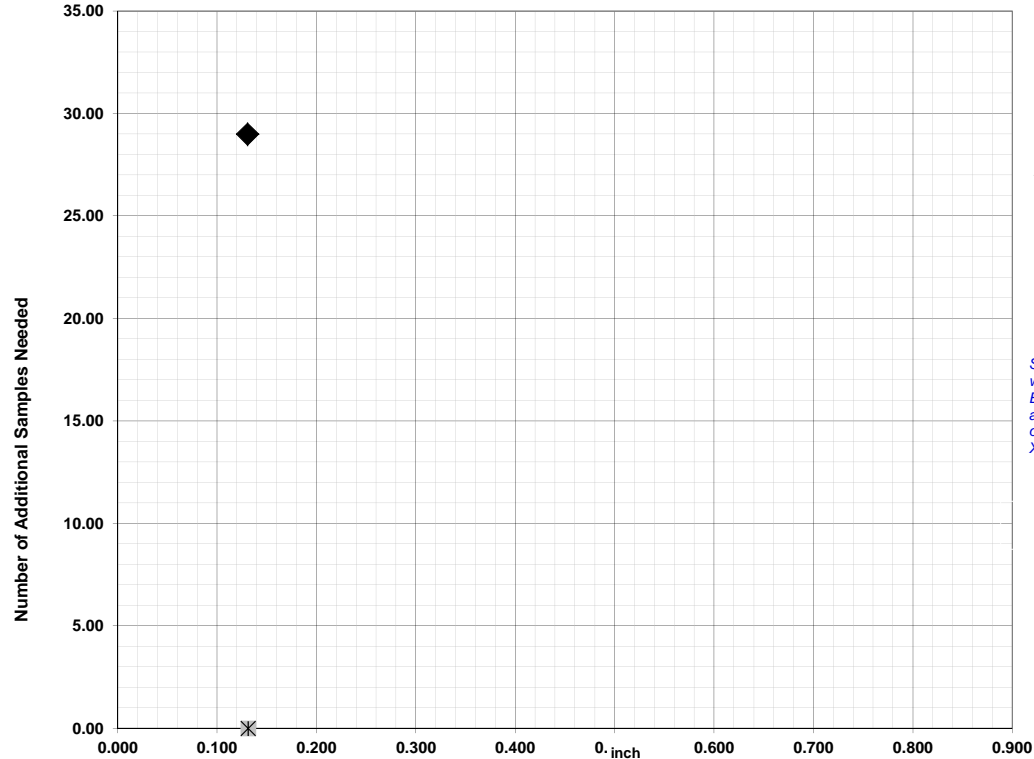


TABLE C

Class Length	Additional Samples
XL =	0.812
Xm =	0.372
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.131 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 15 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

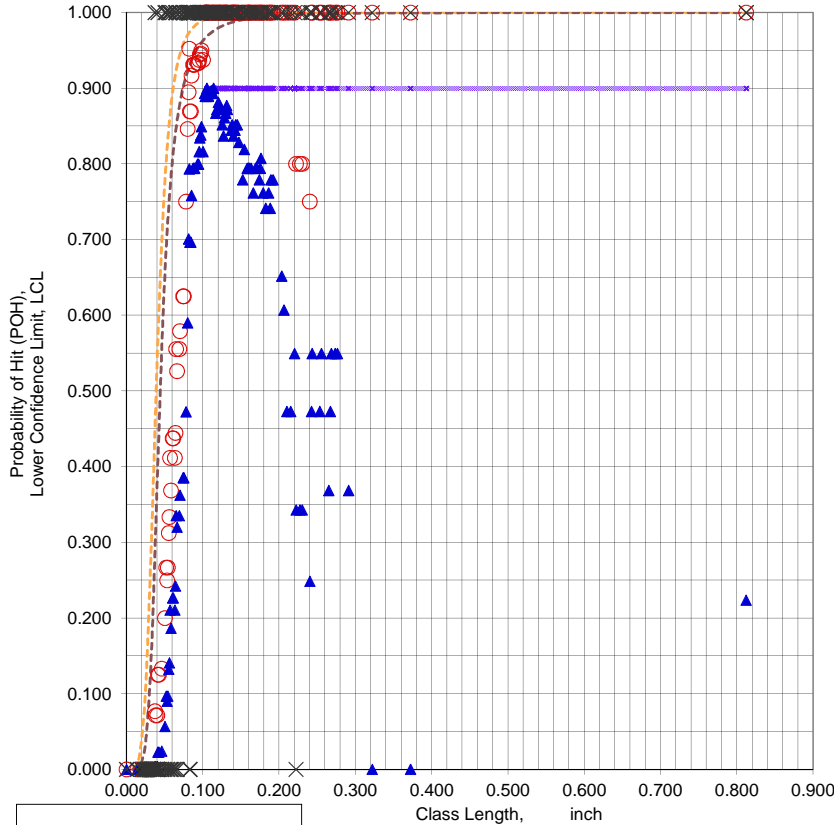
MLE Divergence Warning: Initial results listed.

Warning: No false call analysis.

File Name = A6004F.XLS

Data Set Name = A6004F(SITE CODE)

Date & Time = 6/4/15 6:52 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0180 inch
 Classlength @ 90/95 Xpod = 0.1050 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000



CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.926 @ 0.065 inch
 NTIAC 90/95 POD = 0.907 @ 0.075 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.812 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.291 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.1050 inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = A6004F.XLS
 Data Set Name = A6004F(SITE CODE)

Directed DOE Options

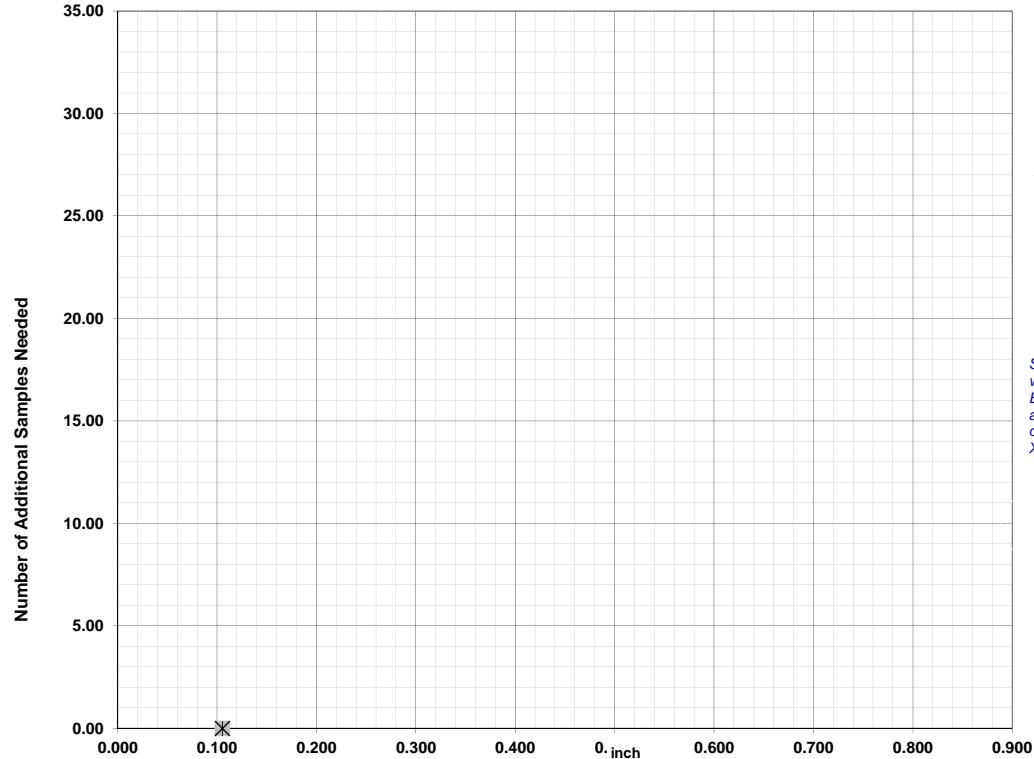


TABLE C

Class Length Additional Samples

XL = 0.812
 Xm = 0.291
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

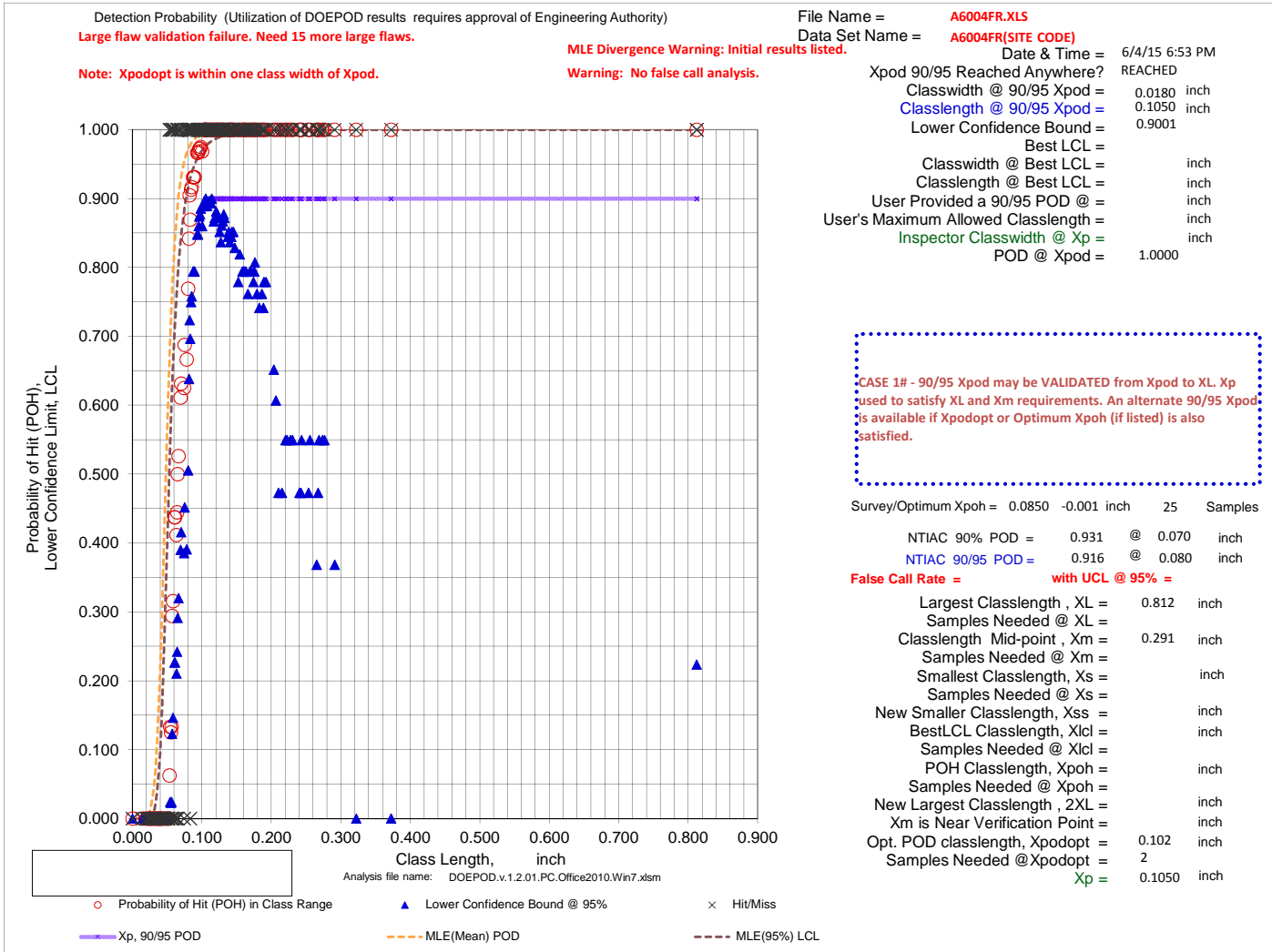
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6004FR.XLS
 Data Set Name = A6004FR(SITE CODE)

Directed DOE Options

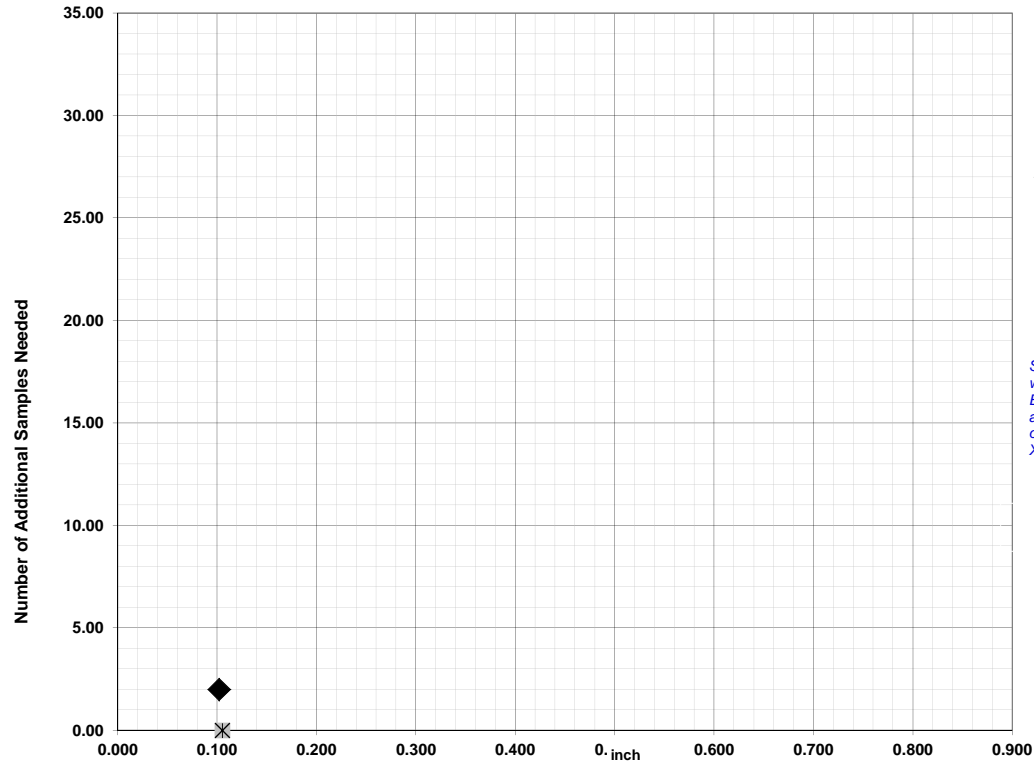


TABLE C

Class Length	Additional Samples
XL =	0.812
Xm =	0.291
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.102 2

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

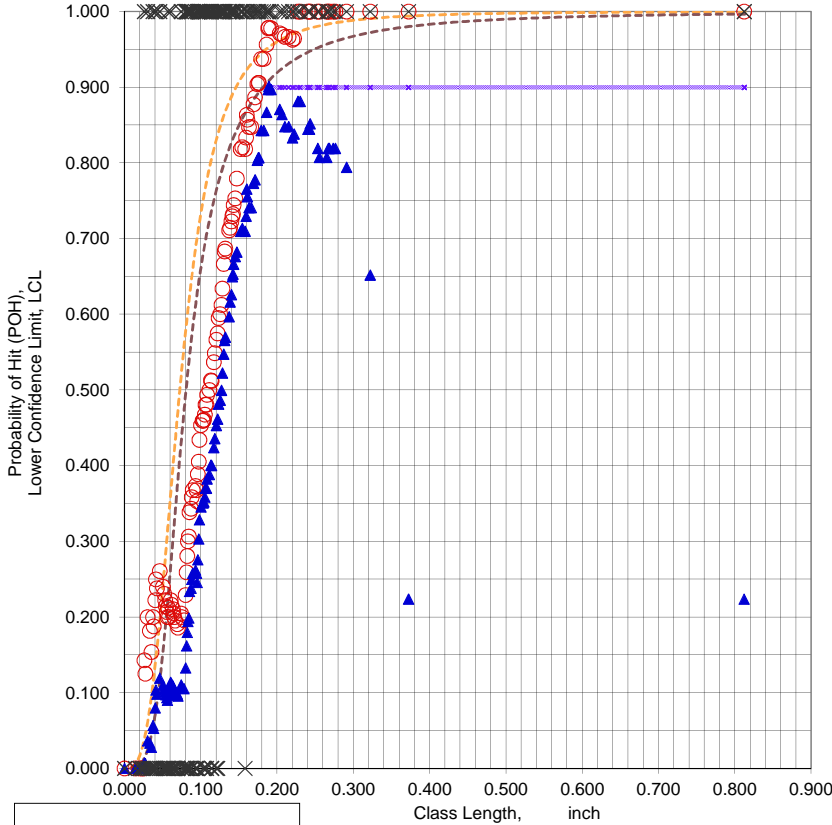
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 18 more large flaws.
Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.

File Name = **A6004G.XLS**
 Data Set Name = **A6004G(SITE CODE)**
 Date & Time = 6/4/15 6:54 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0640 inch
 Classlength @ 90/95 Xpod = 0.1890 inch
 Lower Confidence Bound = 0.9011
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 0.9787



CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.1600 -0.001 inch 26 Samples

NTIAC 90% POD = 0.907 @ 0.150 inch

NTIAC 90/95 POD = 0.904 @ 0.185 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.812 inch

Samples Needed @ XL =

Classlength Mid-point , Xm = 0.372 inch

Samples Needed @ Xm =

Smallest Classlength, Xs = inch

Samples Needed @ Xs =

New Smaller Classlength, Xss = inch

BestLCL Classlength, Xlcl = inch

Samples Needed @ Xlcl =

POH Classlength, Xpoh = inch

Samples Needed @ Xpoh =

New Largest Classlength , 2XL = inch

Xm is Near Verification Point = inch

Opt. POD classlength, Xpodopt = inch

Samples Needed @ Xpodopt =

Xp = 0.1890 inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

File Name = A6004G.XLS
 Data Set Name = A6004G(SITE CODE)

Directed DOE Options

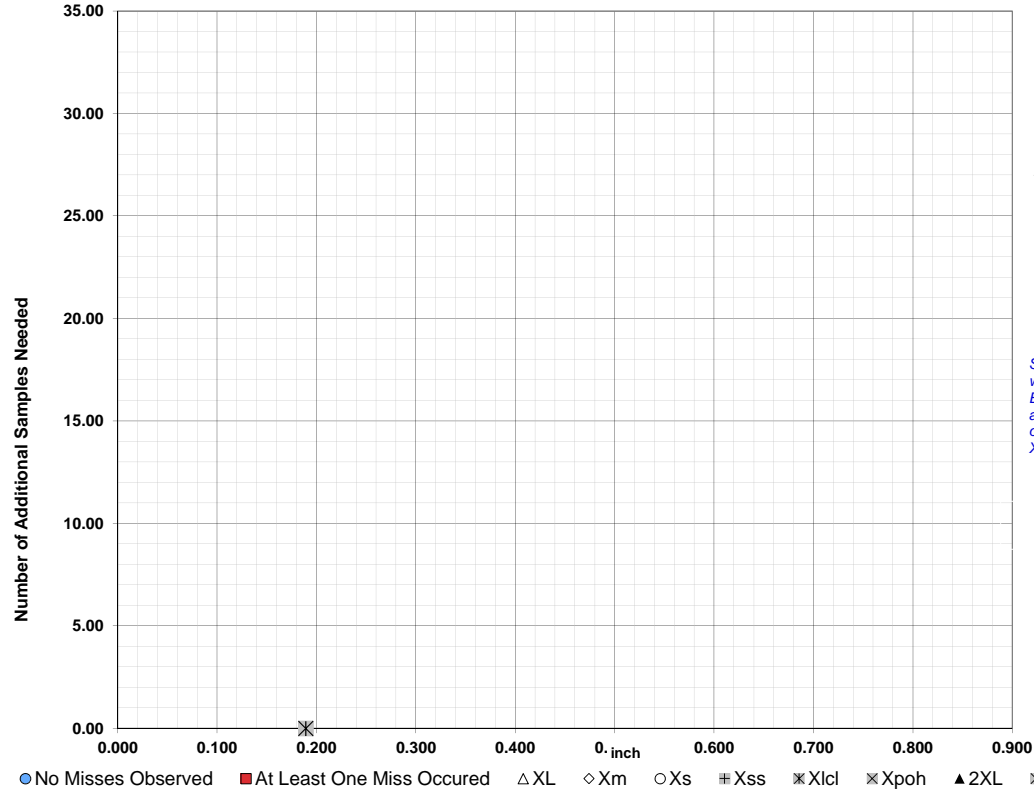


TABLE C

Class Length Additional Samples

XL = 0.812
 Xm = 0.372
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

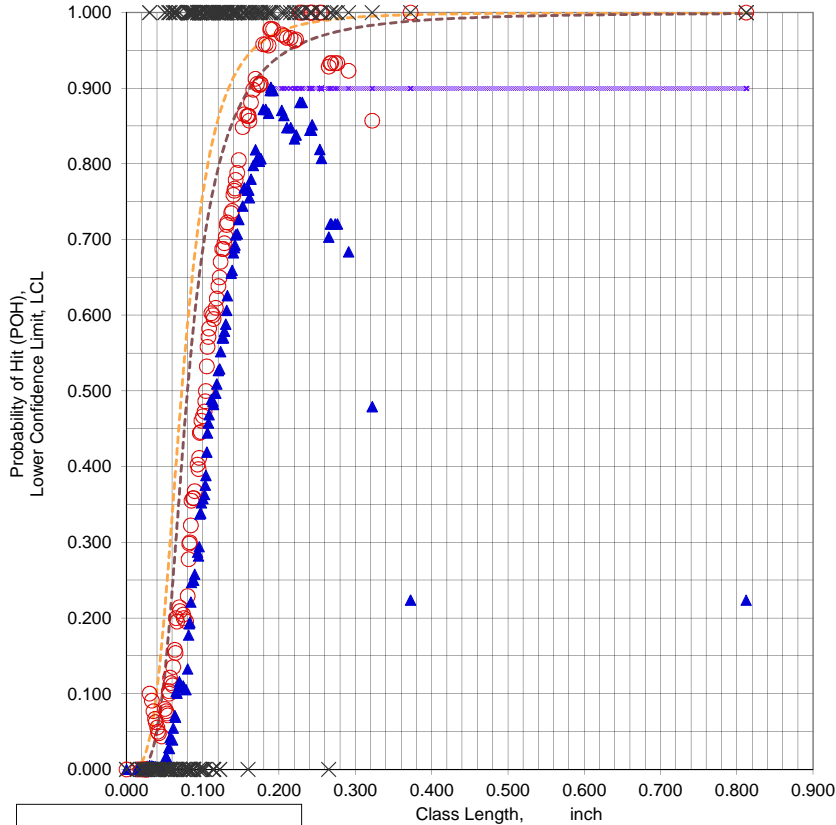
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 18 more large flaws.
Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



File Name = **A6004H.XLS**
 Data Set Name = **A6004H(SITE CODE)**
 Date & Time = 6/4/15 6:56 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0640 inch
 Classlength @ 90/95 Xpod = 0.1890 inch
 Lower Confidence Bound = 0.9011
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 0.9787

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.903 @ 0.135 inch
 NTIAC 90/95 POD = 0.905 @ 0.165 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.812 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.372 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.1890 inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = A6004H.XLS
 Data Set Name = A6004H(SITE CODE)

Directed DOE Options

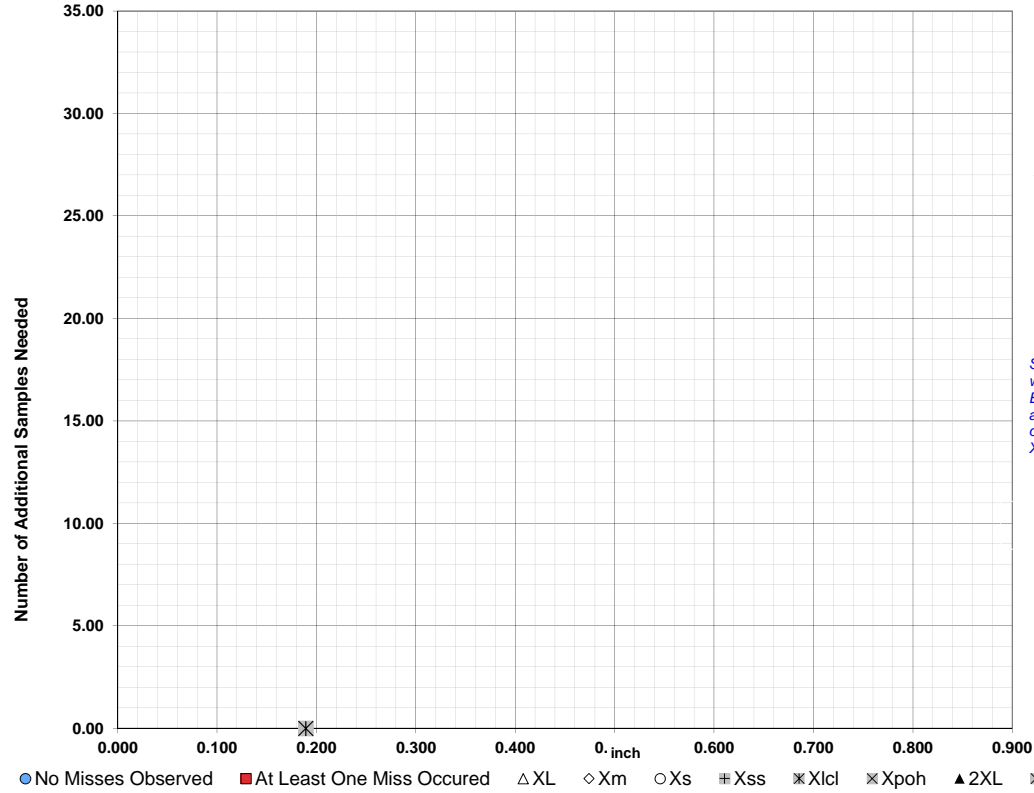


TABLE C

Class Length Additional Samples

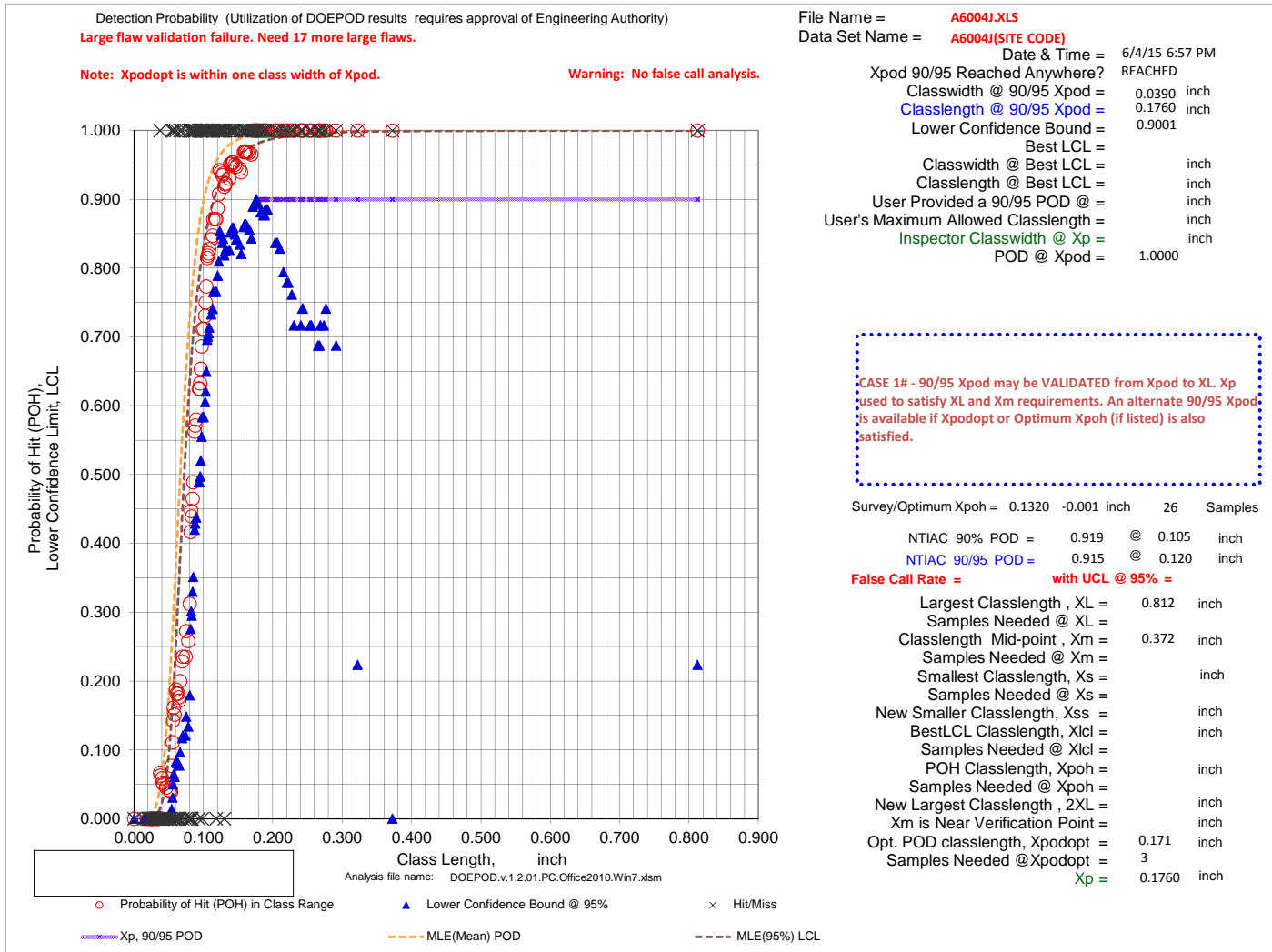
XL = 0.812
 Xm = 0.372
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A6004J.XLS
 Data Set Name = A6004J(SITE CODE)

Directed DOE Options

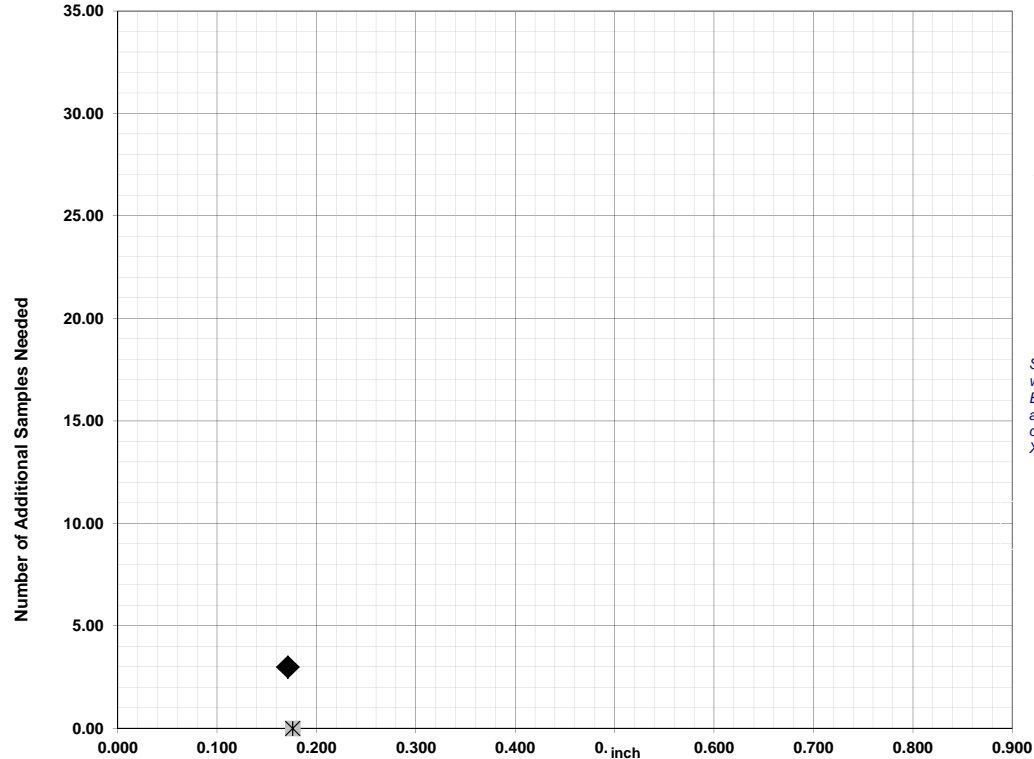


TABLE C

Class Length	Additional Samples
XL =	0.812
Xm =	0.372
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.171 3

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

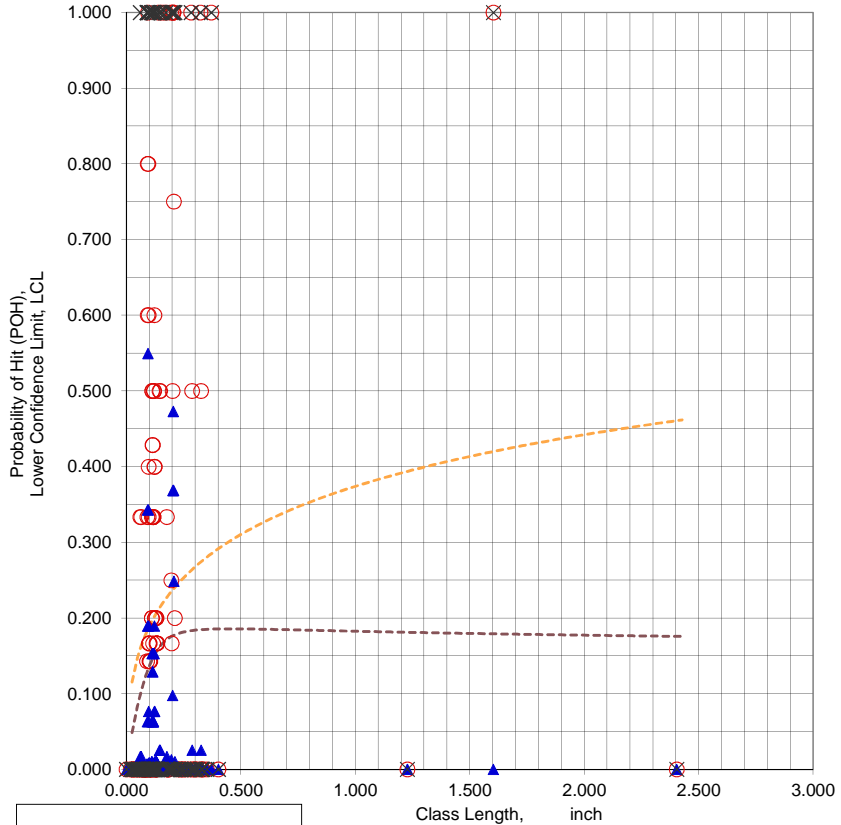
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = **A7001AL.XLS**
 Data Set Name = **A7001AL(CRK #)**
 Date & Time = 6/4/15 6:58 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.5493
 Classwidth @ Best LCL = 0.0040 inch
 Classlength @ Best LCL = 0.0933 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 4.806 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A7001AL.XLS
 Data Set Name = A7001AL(CRK #)

Directed DOE Options

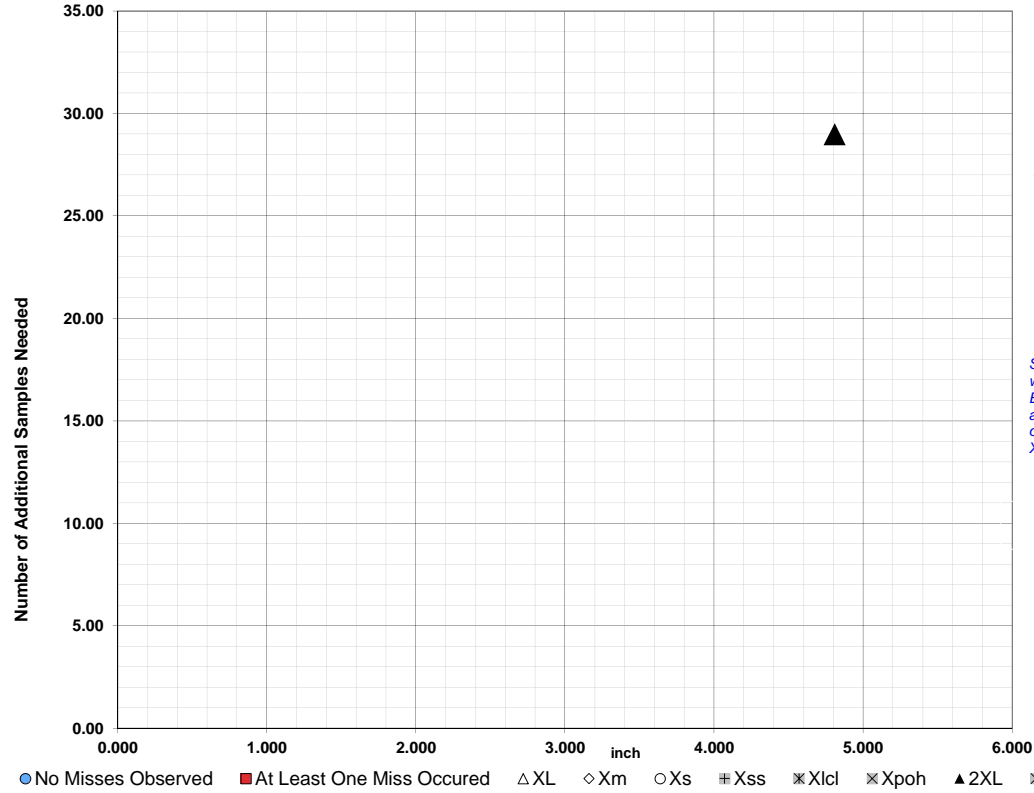


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 4.806 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

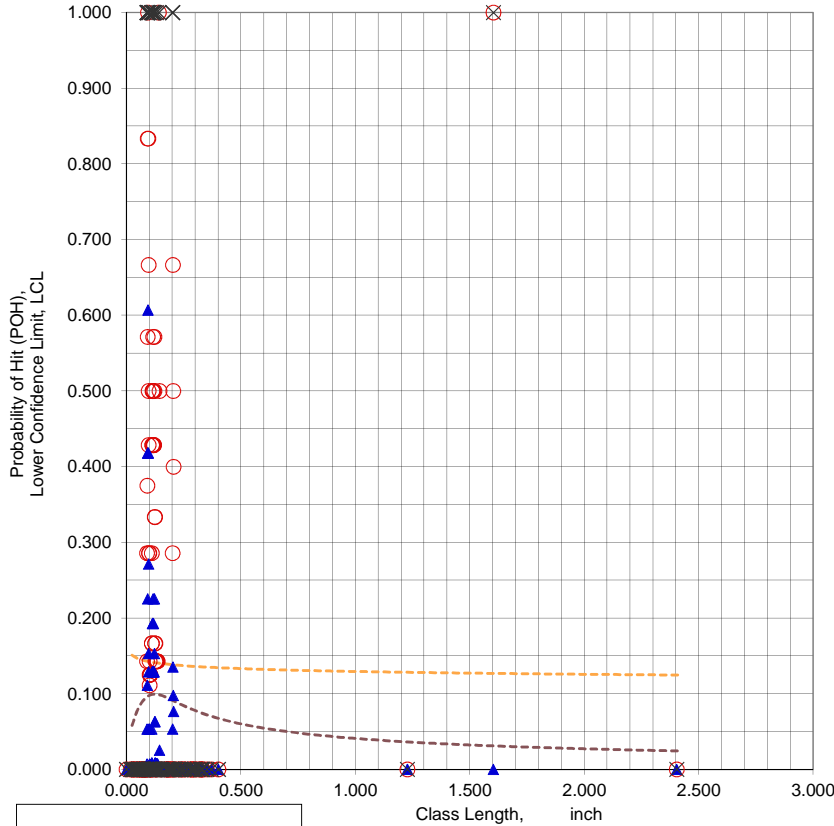
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **A7001BL.XLS**
 Data Set Name = **A7001BL(CRK #)**
 Date & Time = 6/4/15 7:00 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6070
 Classwidth @ Best LCL = 0.0050 inch
 Classlength @ Best LCL = 0.0933 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 4.806 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A7001BL.XLS
 Data Set Name = A7001BL(CRK #)

Directed DOE Options

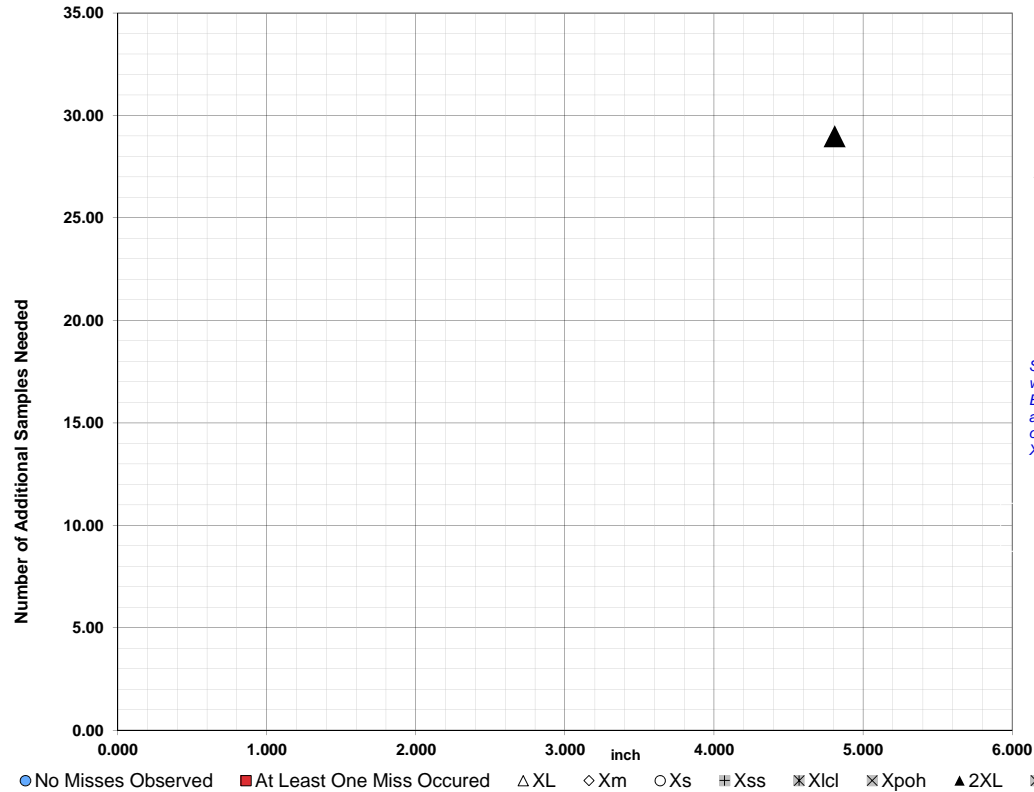


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 4.806 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

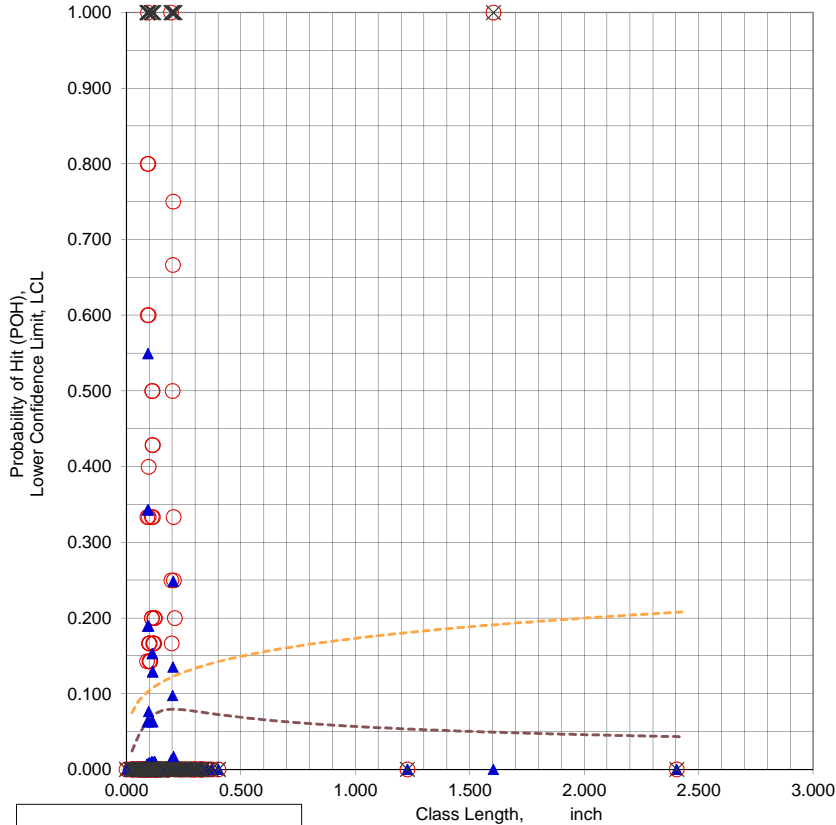
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **A7001CL.XLS**
 Data Set Name = **A7001CL(CRK #)**
 Date & Time = 6/4/15 7:03 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.5493
 Classwidth @ Best LCL = 0.0040 inch
 Classlength @ Best LCL = 0.0933 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 4.806 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A7001CL.XLS
 Data Set Name = A7001CL(CRK #)

Directed DOE Options

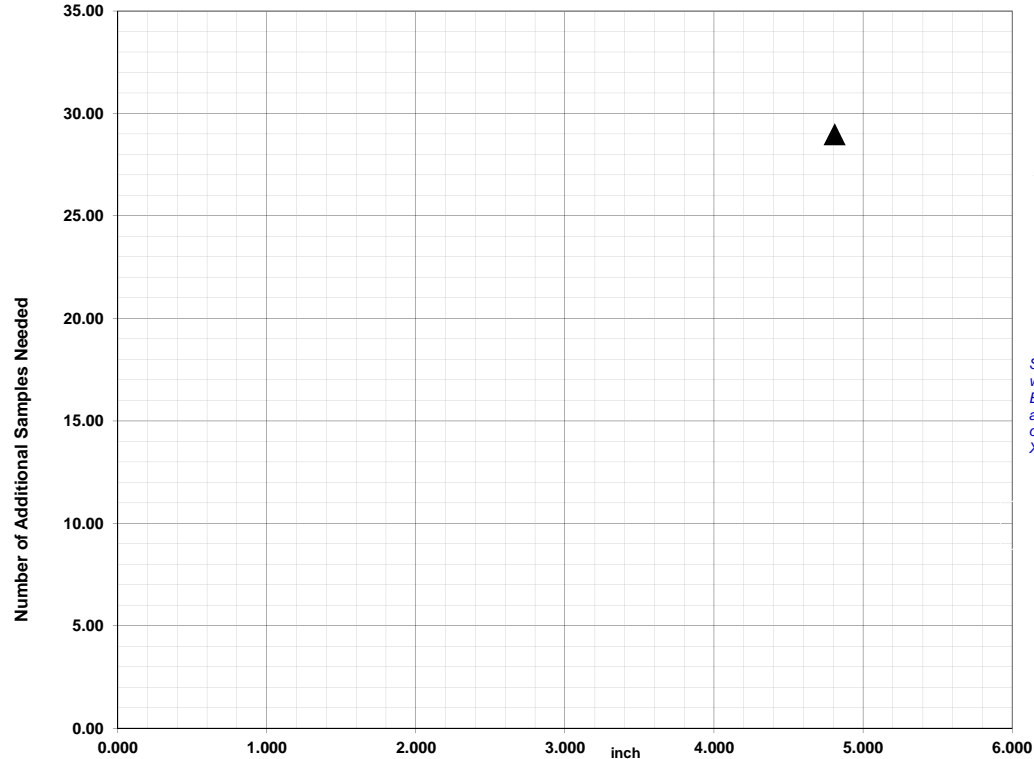


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 4.806 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

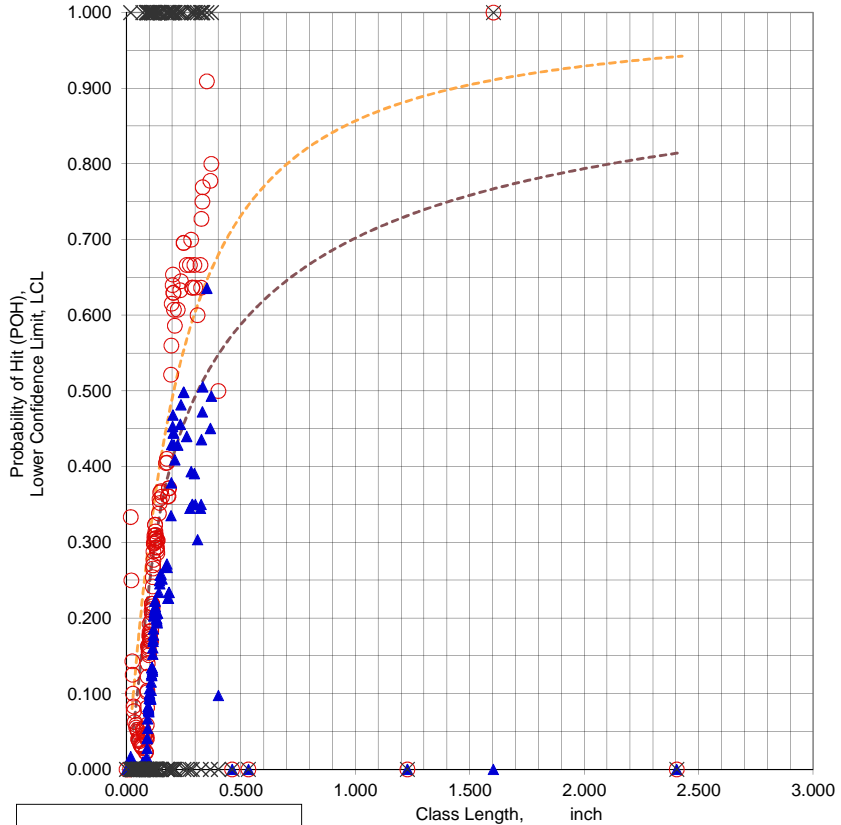
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **A7003AL.XLS**
 Data Set Name = **A7003AL(CRK #)**
 Date & Time = 6/4/15 7:05 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6356
 Classwidth @ Best LCL = 0.0630 inch
 Classlength @ Best LCL = 0.3500 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 4.806 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = A7003AL.XLS
 Data Set Name = A7003AL(CRK #)

Directed DOE Options

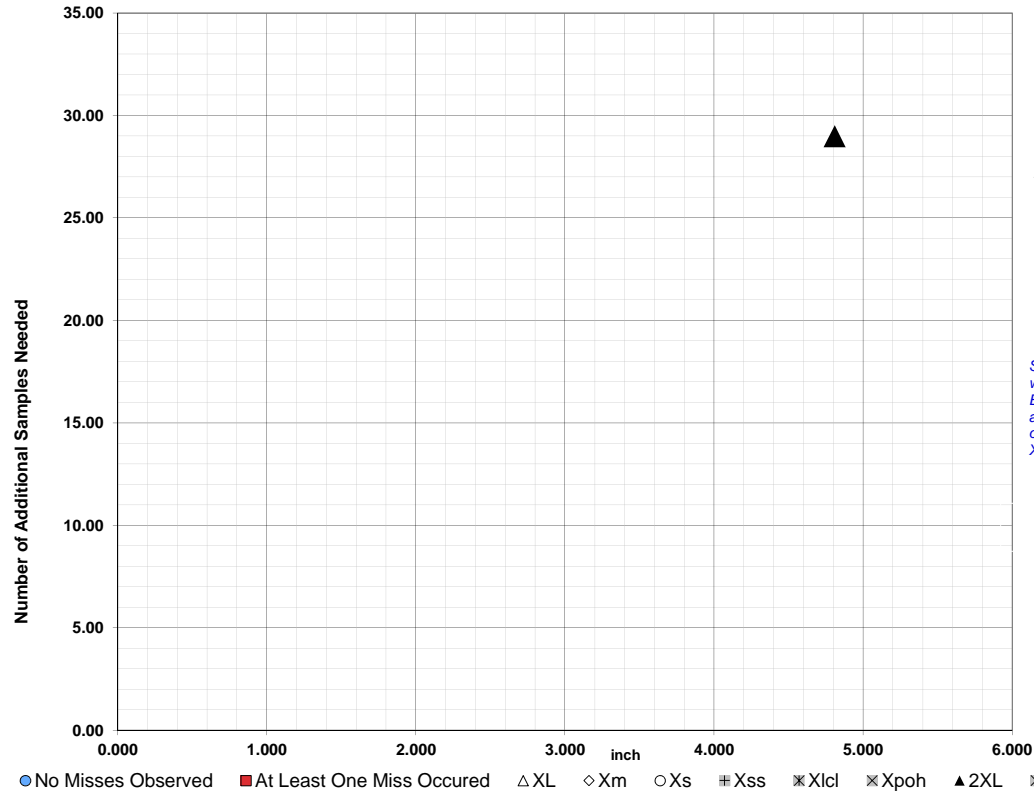


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 4.806 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

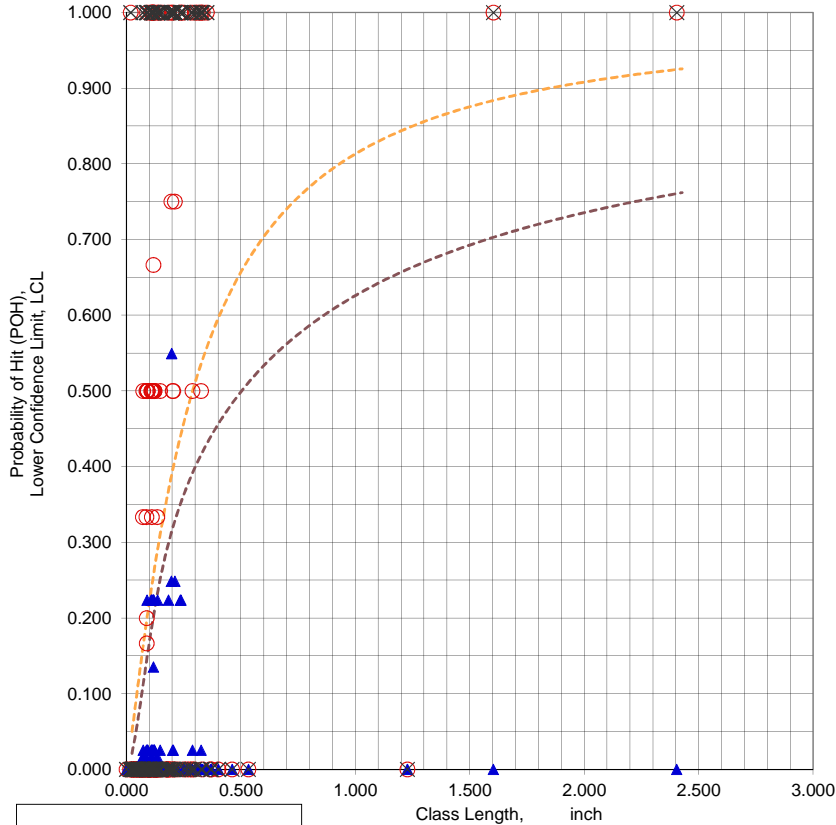
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **A7003BL.XLS**
 Data Set Name = **A7003BL(CRK #)**
 Date & Time = 6/4/15 7:07 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.5493
 Classwidth @ Best LCL = 0.0010 inch
 Classlength @ Best LCL = 0.1960 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 1.6030 -0.300 inch 28 Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 2.403 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 1.603 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 4.806 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A7003BL.XLS
 Data Set Name = A7003BL(CRK #)

Directed DOE Options

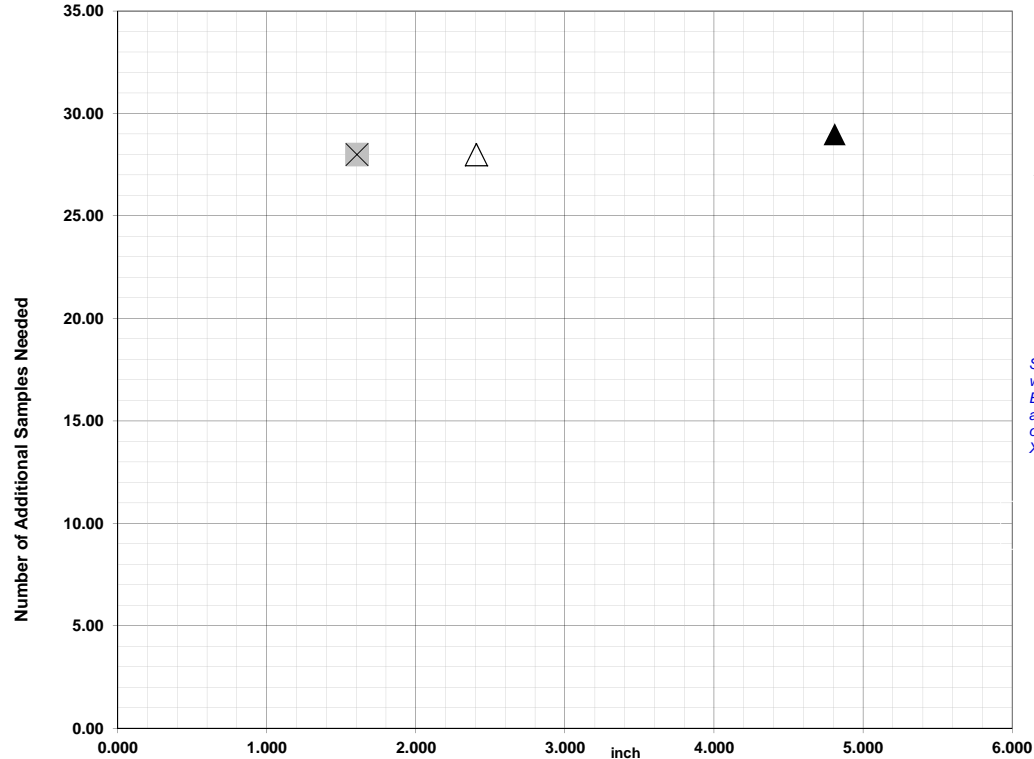


TABLE C

Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.603	28
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

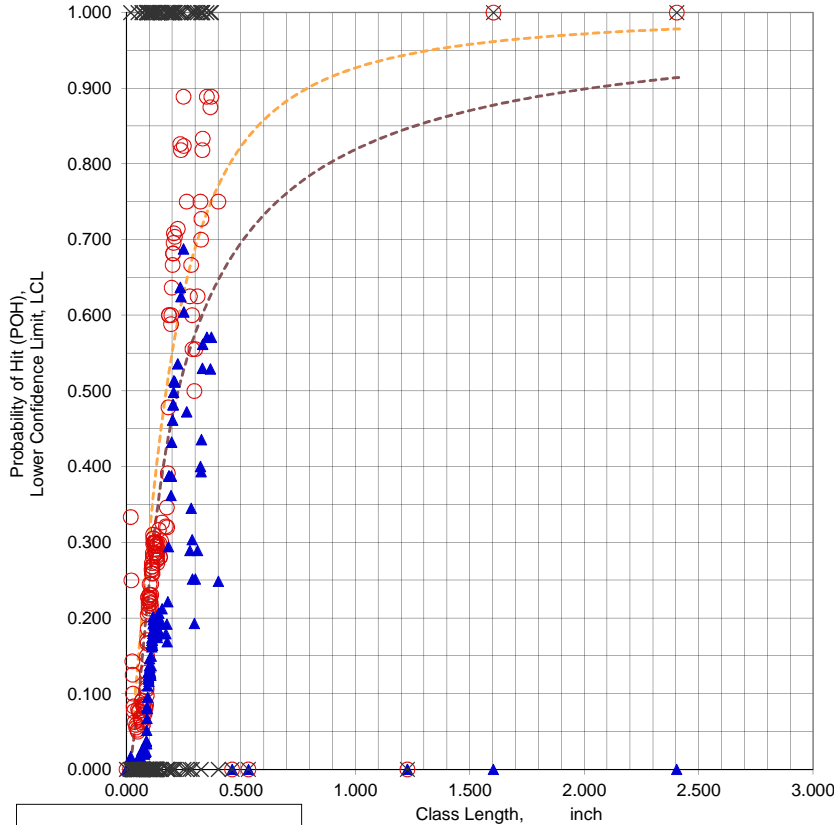
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **A7003CL.XLS**
 Data Set Name = **A7003CL(CRK #)**
 Date & Time = 6/4/15 7:09 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6878
 Classwidth @ Best LCL = 0.0520 inch
 Classlength @ Best LCL = 0.2480 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 1.6030 -0.300 inch 28 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 2.403 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 1.603 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 4.806 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A7003CL.XLS
 Data Set Name = A7003CL(CRK #)

Directed DOE Options

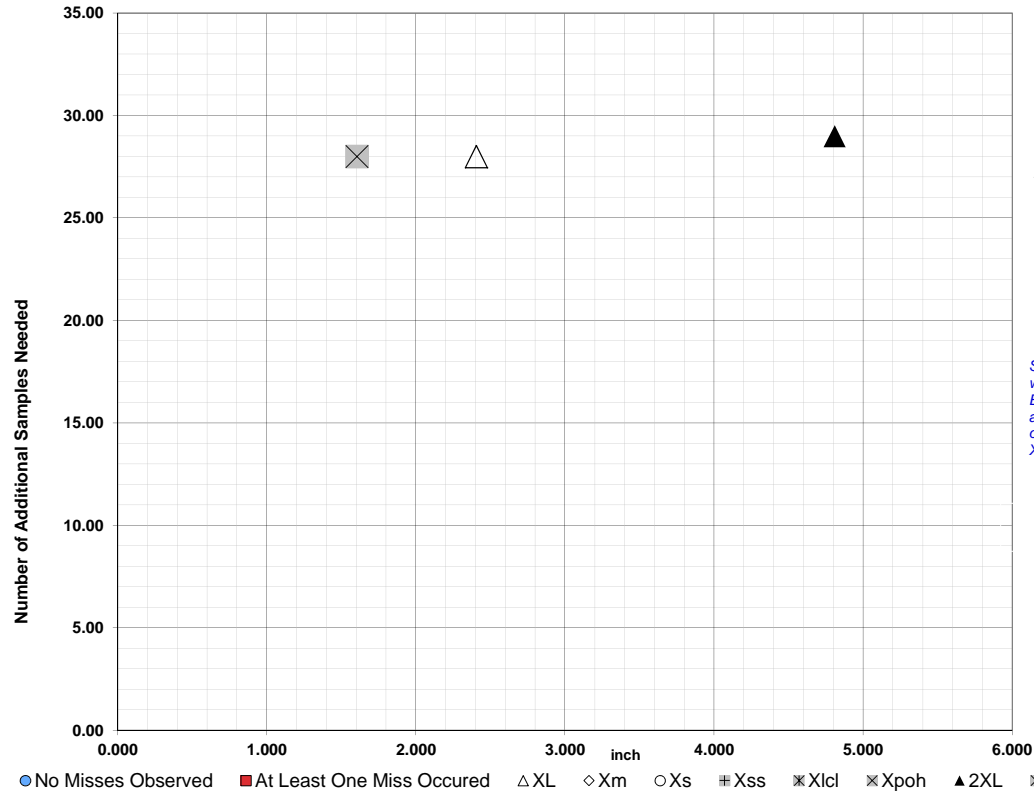


TABLE C

Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 1.603	28
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

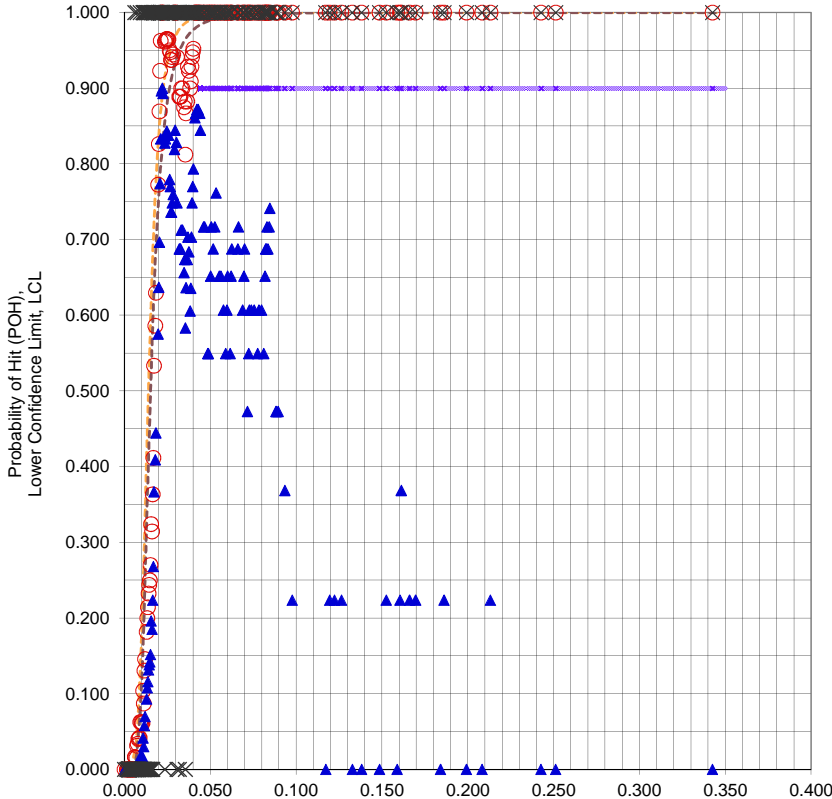
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 7 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **A8001L.XLS**
 Data Set Name = **A8001L(Eci-a-a)**
 Date & Time = 6/4/15 7:11 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0050 inch
 Classlength @ 90/95 Xpod = 0.0218 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.936 @ 0.025 inch
 NTIAC 90/95 POD = 0.937 @ 0.030 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.342 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.161 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.0440 inch

File Name = A8001L.XLS
 Data Set Name = A8001L(Eci-a-a)

Directed DOE Options

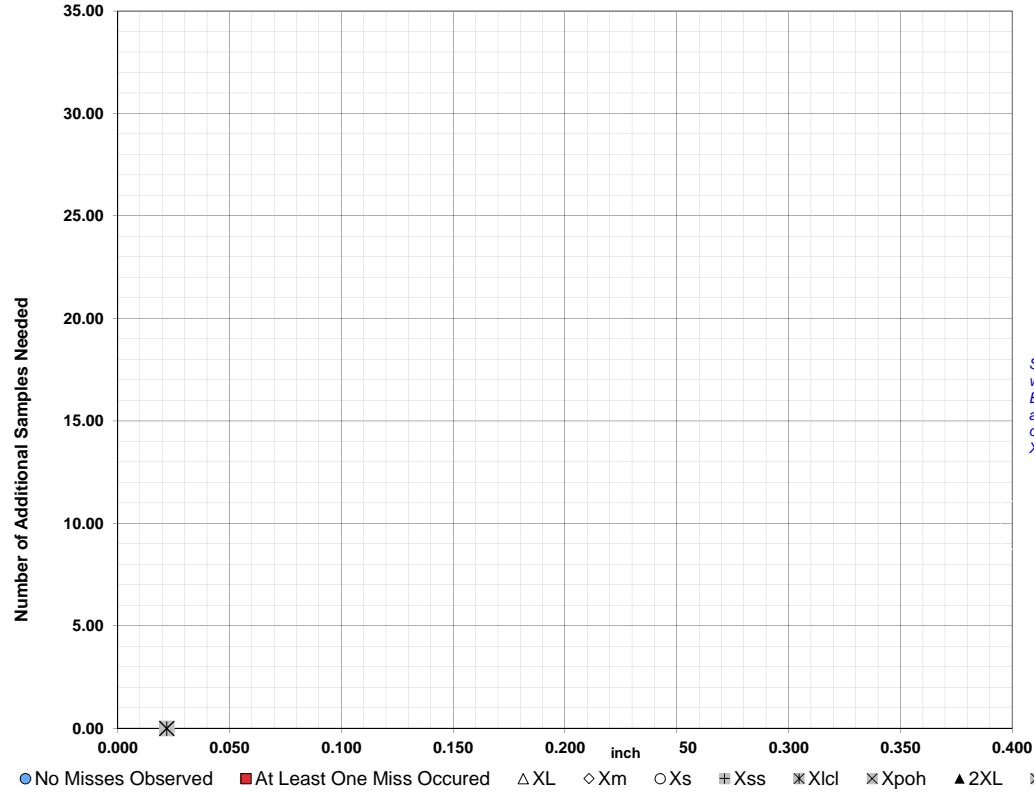


TABLE C

Class Length Additional Samples

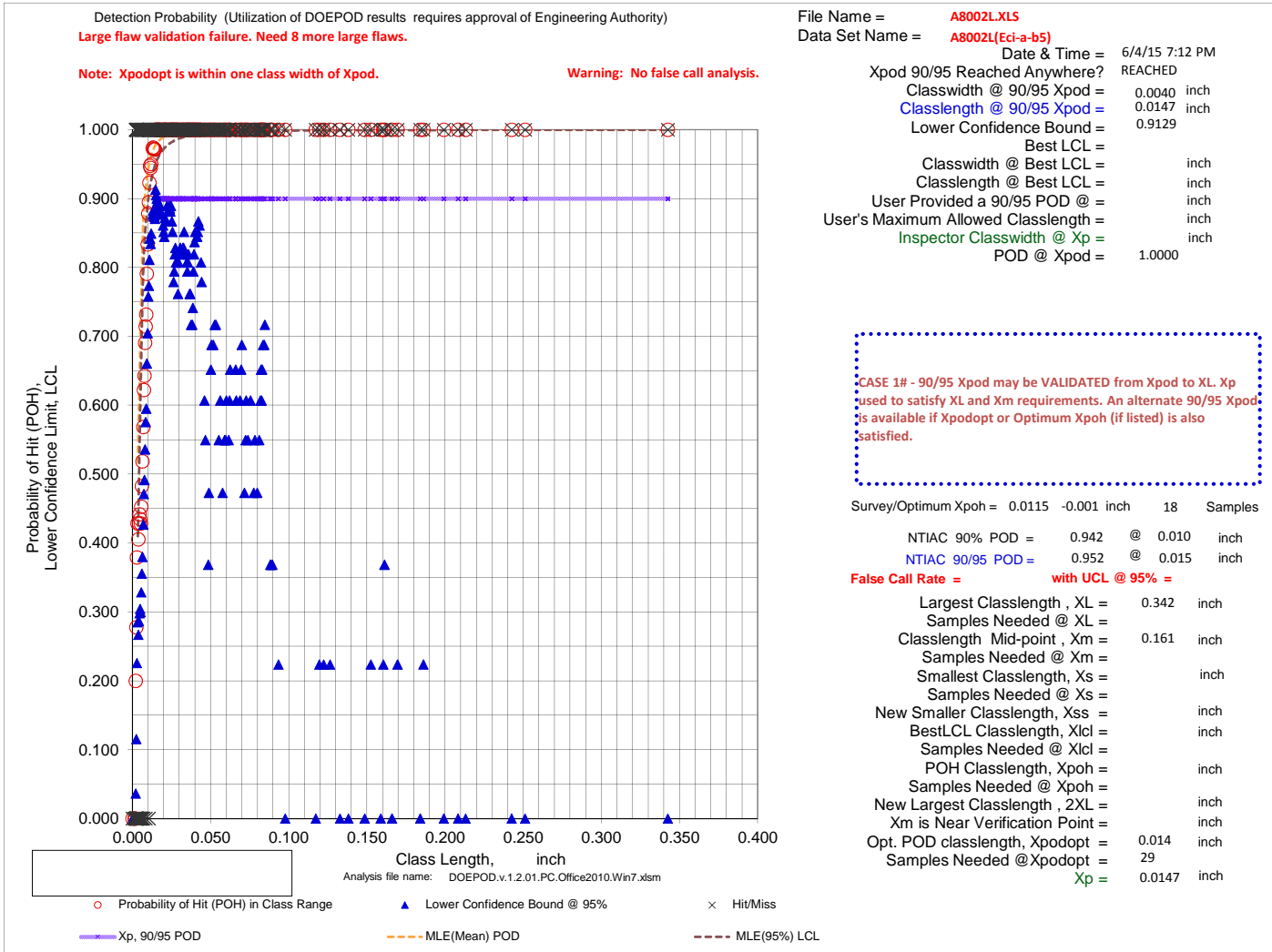
XL = 0.342
 Xm = 0.161
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A8002L.XLS
 Data Set Name = A8002L(Eci-a-b5)

Directed DOE Options

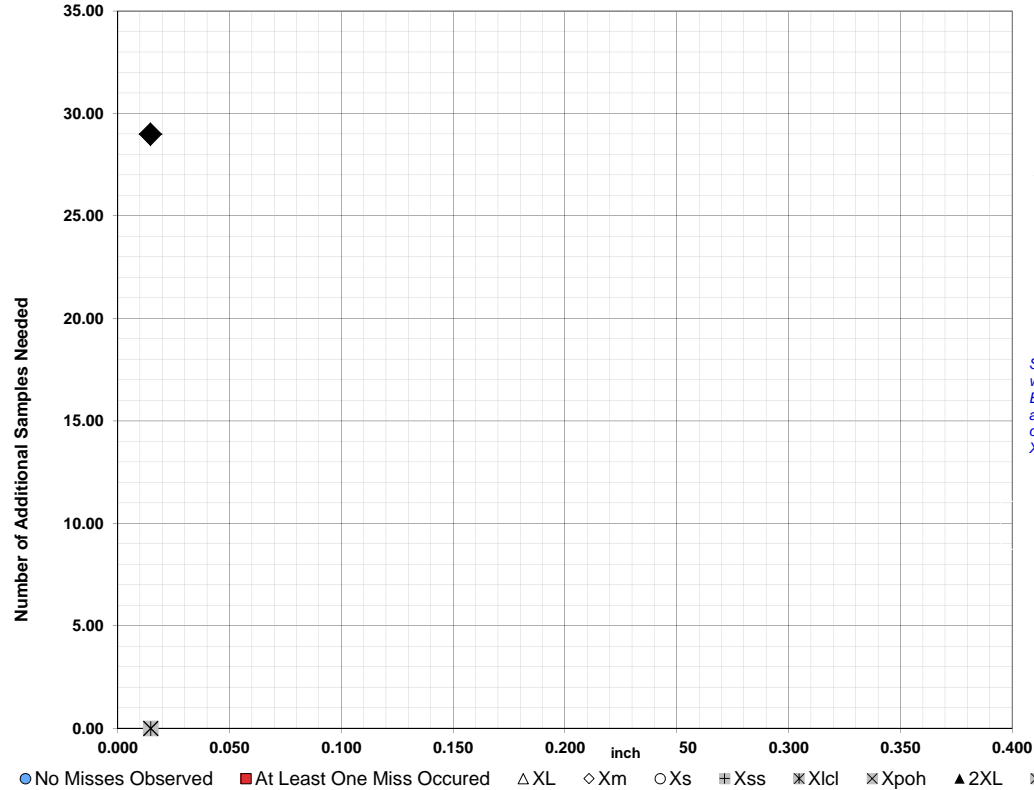


TABLE C

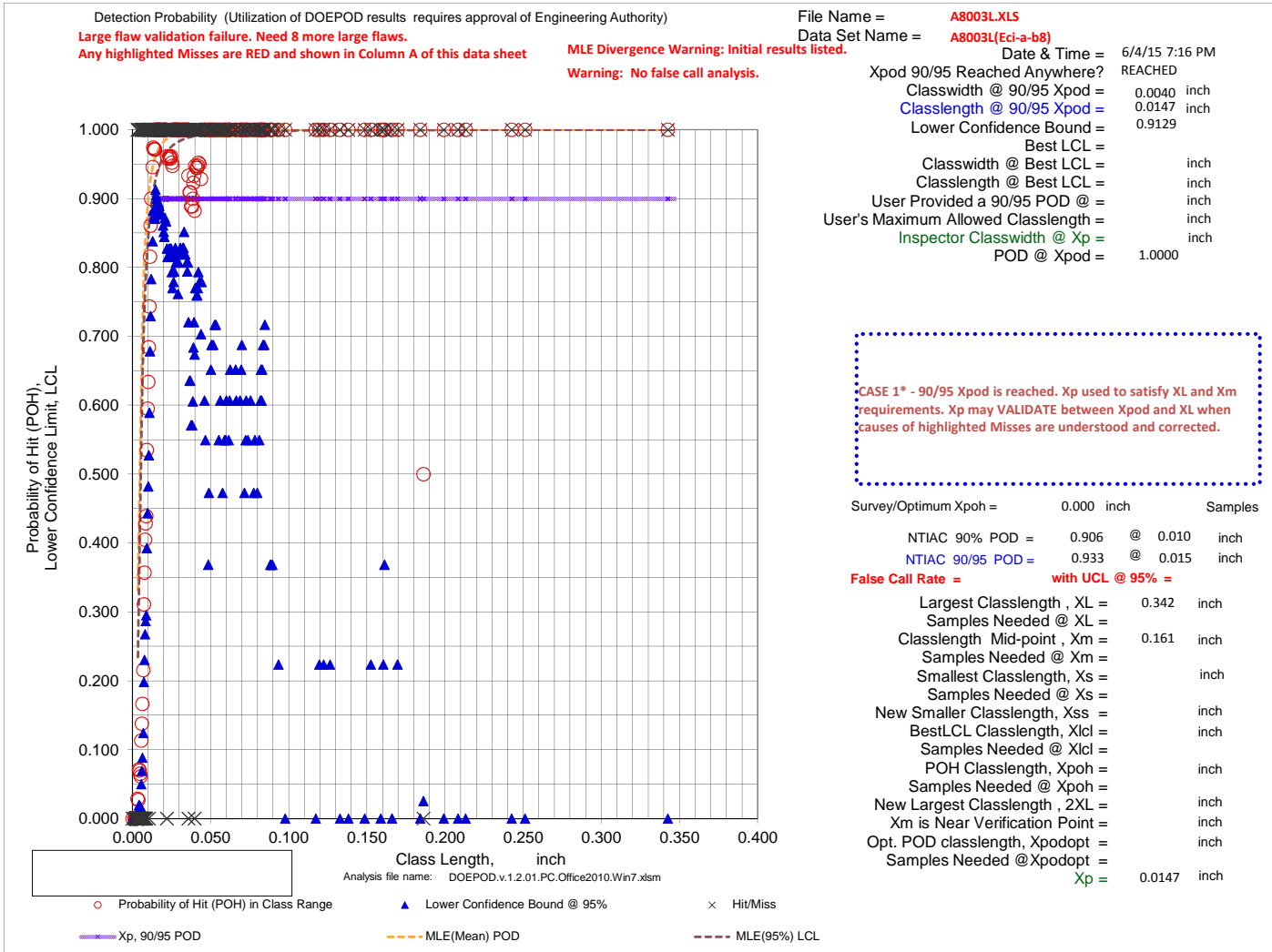
Class Length	Additional Samples
XL =	0.342
Xm =	0.161
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.014 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A8003L.XLS
 Data Set Name = A8003L(Eci-a-b8)

Directed DOE Options

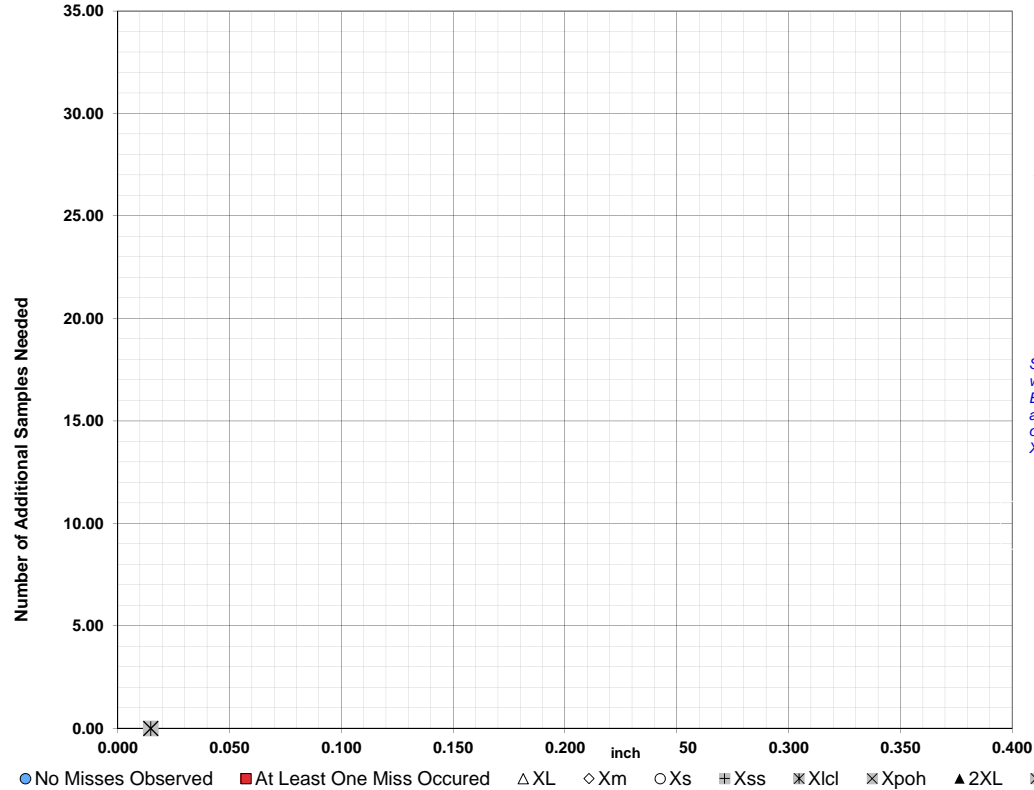


TABLE C

Class Length Additional Samples

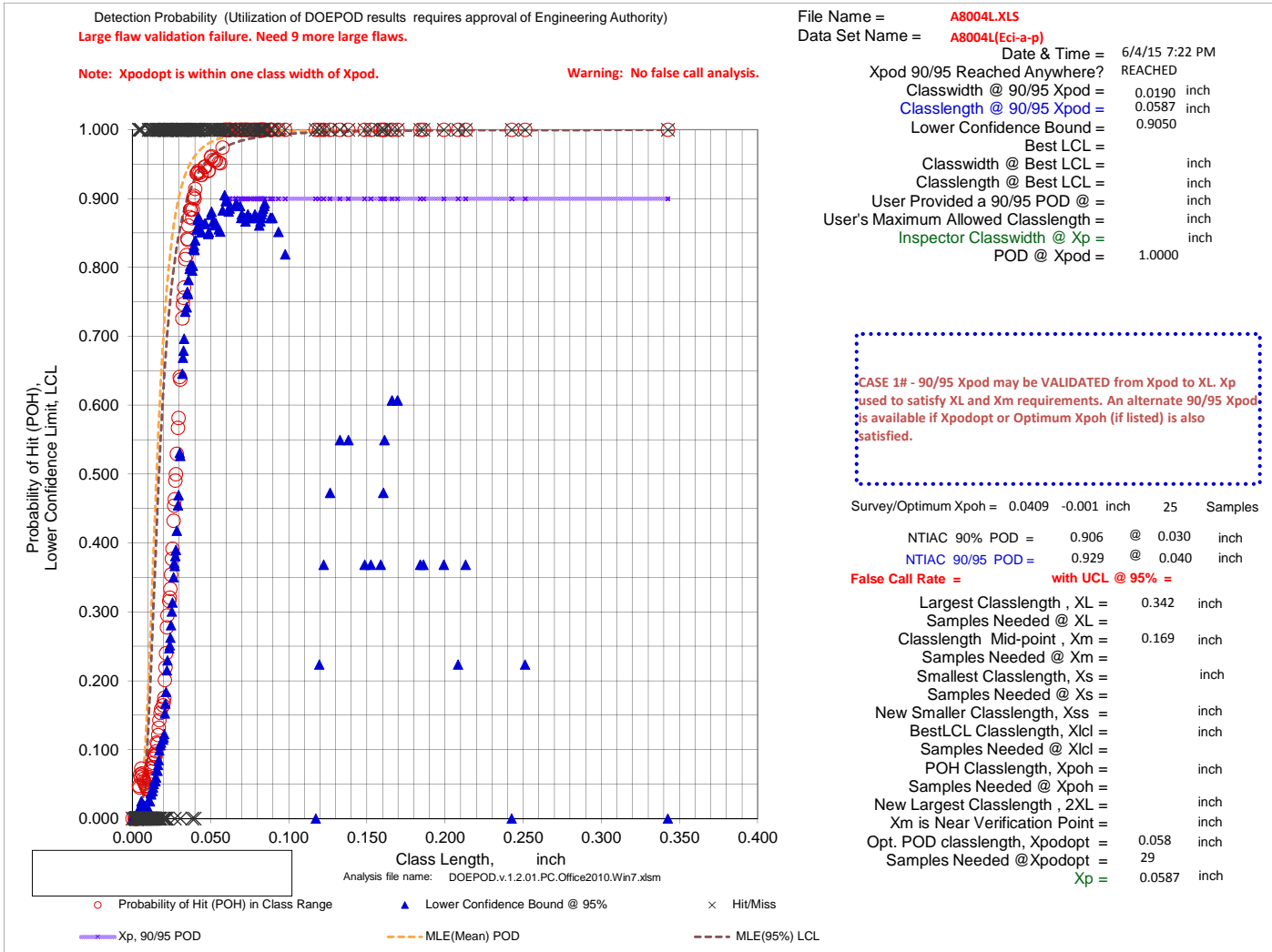
XL = 0.342
 Xm = 0.161
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A8004L.XLS
 Data Set Name = A8004L(Eci-a-p)

Directed DOE Options

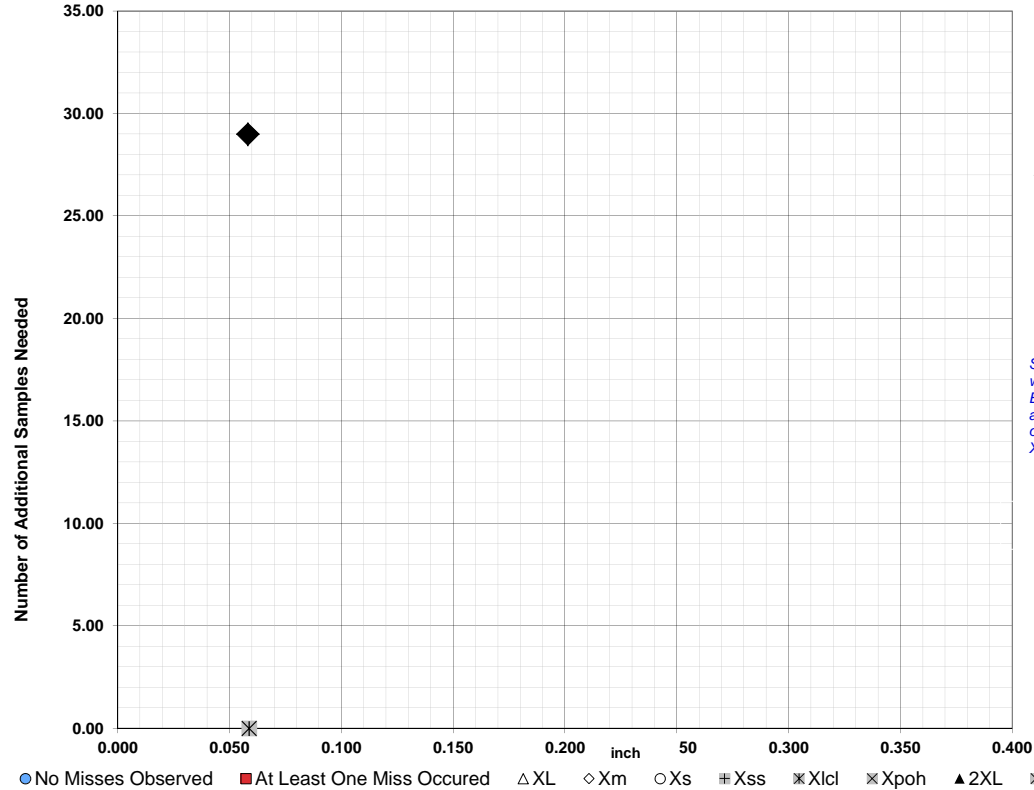


TABLE C

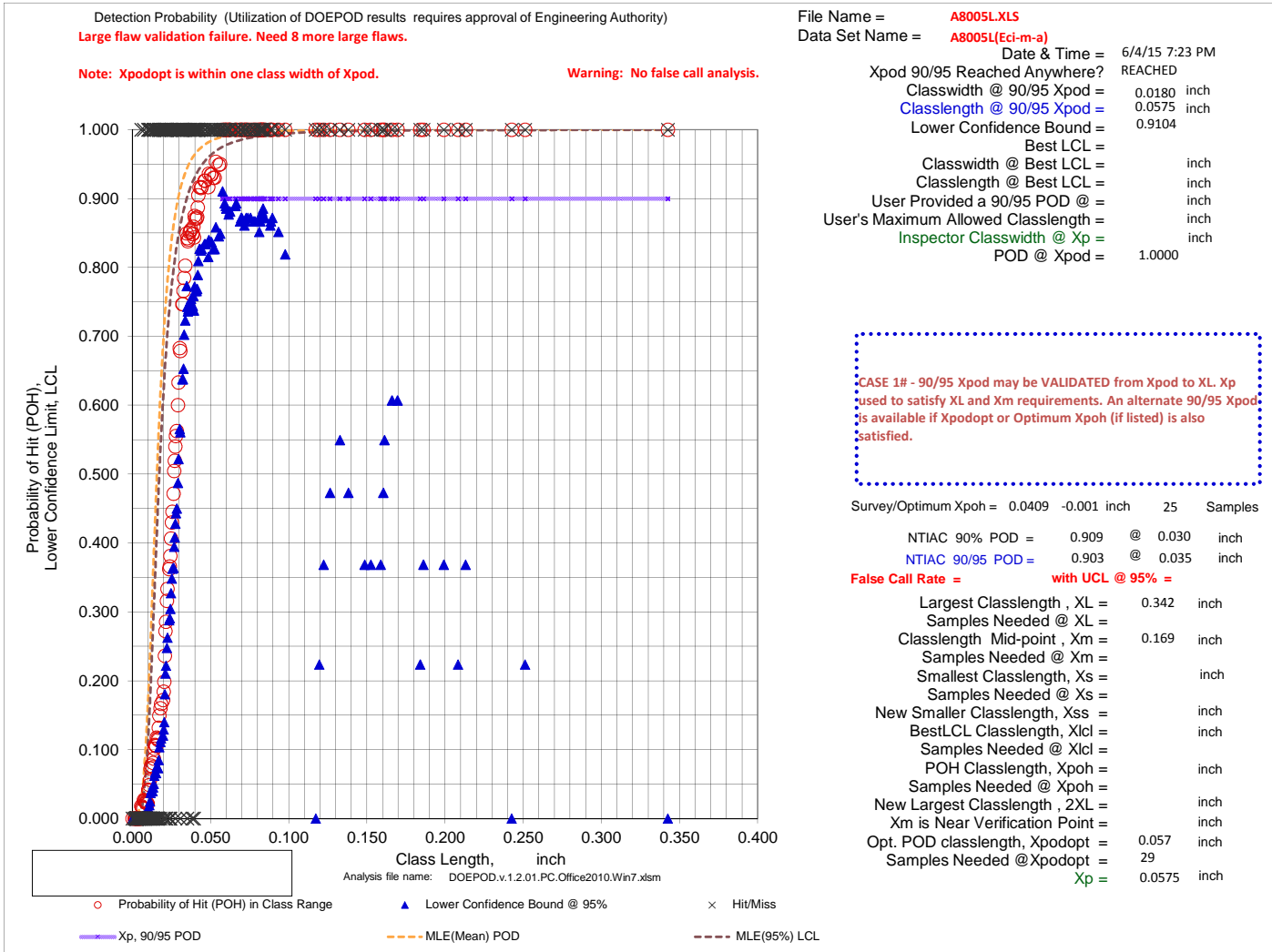
Class Length	Additional Samples
XL =	0.342
Xm =	0.169
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.058 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A8005L.XLS
 Data Set Name = A8005L(Eci-m-a)

Directed DOE Options

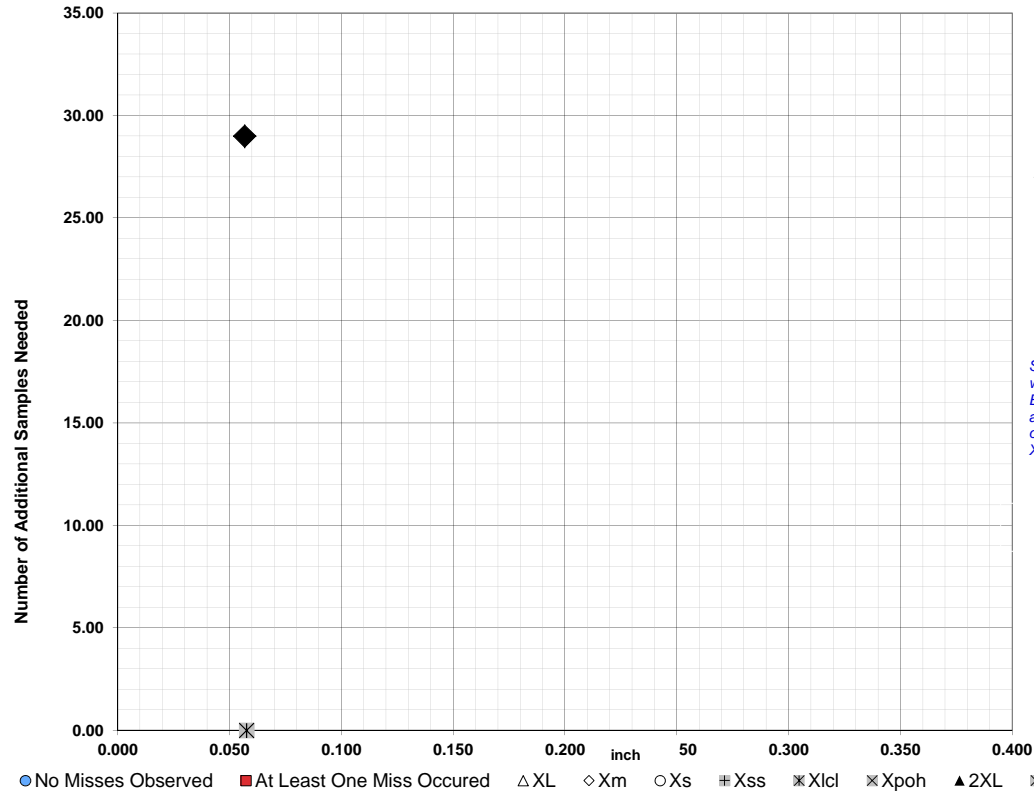


TABLE C

Class Length	Additional Samples
XL =	0.342
Xm =	0.169
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.057 29

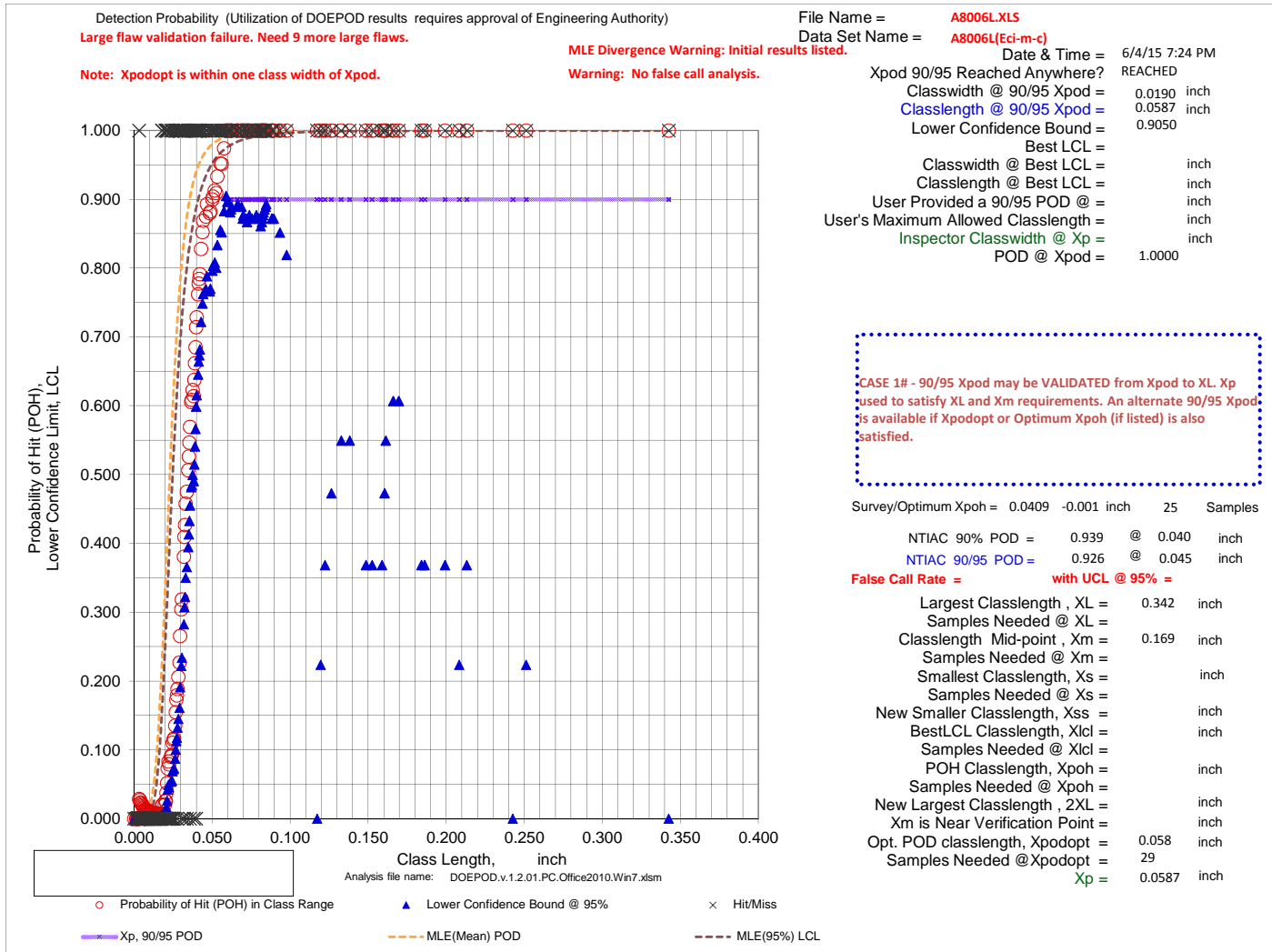
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = A8006L.XLS
 Data Set Name = A8006L(Eci-m-c)

Directed DOE Options

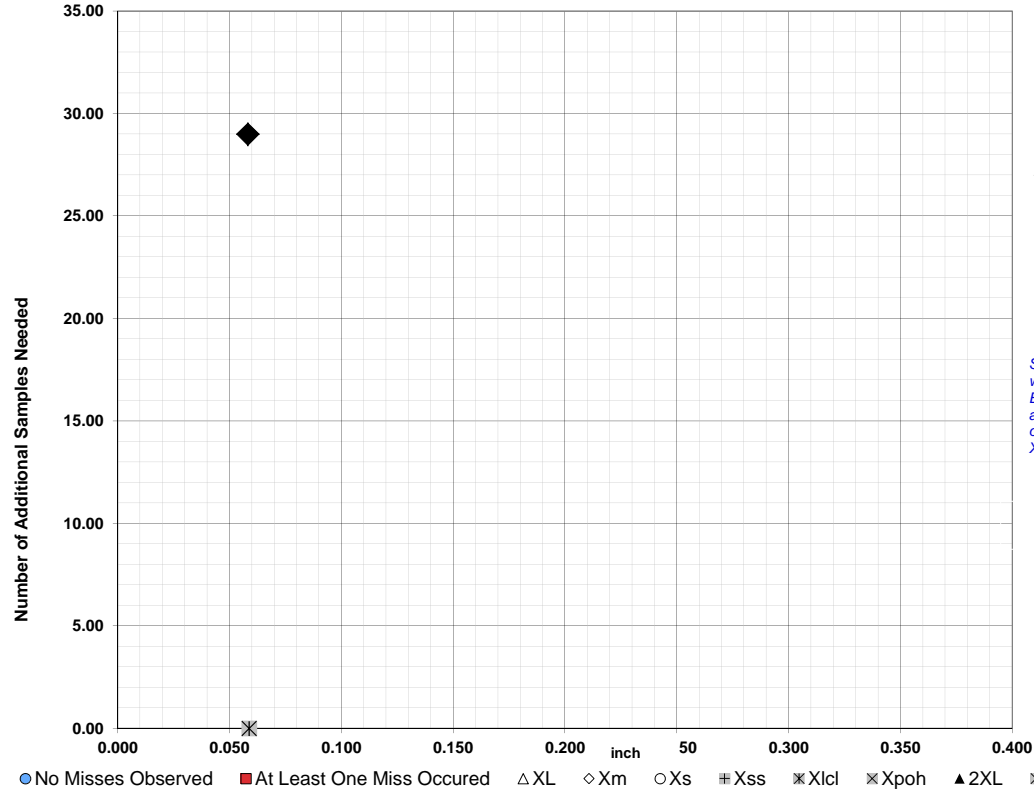


TABLE C

Class Length	Additional Samples
XL =	0.342
Xm =	0.169
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.058 29

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

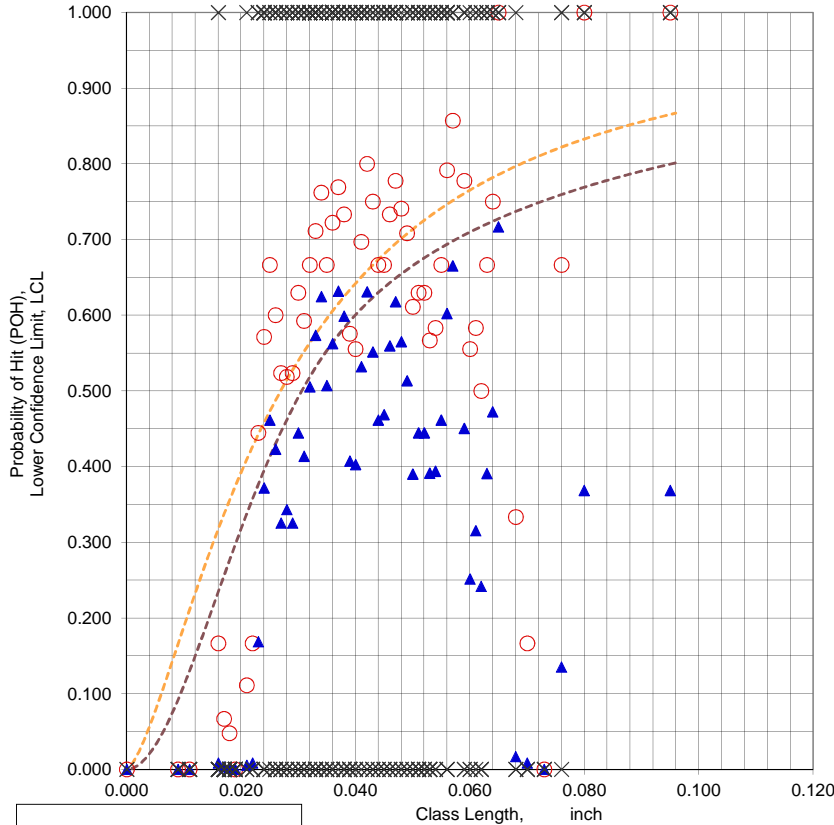
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = **A9001(3)D.xls**
 Data Set Name = **A9001(3)D(CK. NO.)**
 Date & Time = 6/4/15 7:26 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7169
 Classwidth @ Best LCL = 0.0020 inch
 Classlength @ Best LCL = 0.0650 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.0800 -0.003 inch 26 Samples
 NTIAC 90% POD = 0.901 @ 0.120 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.095 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.080 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 0.190 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A9001(3)D.xls
 Data Set Name = A9001(3)D(CK. NO.)

Directed DOE Options

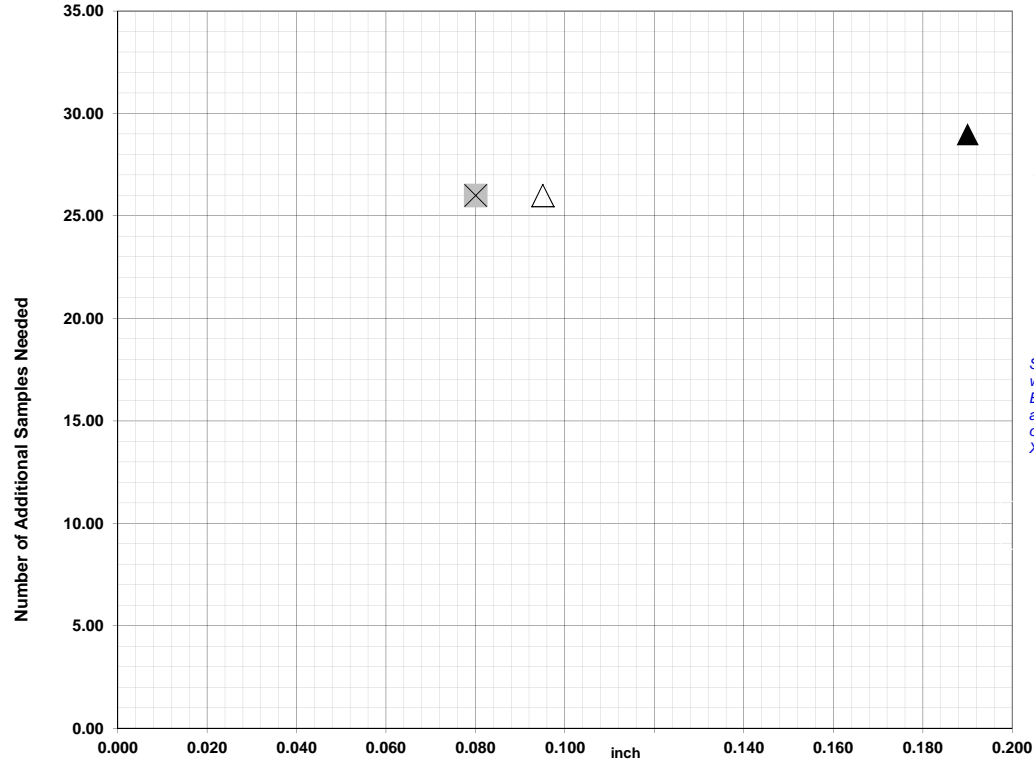


TABLE C

Class Length	Additional Samples
XL = 0.095	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.080	26
2XL = 0.190	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

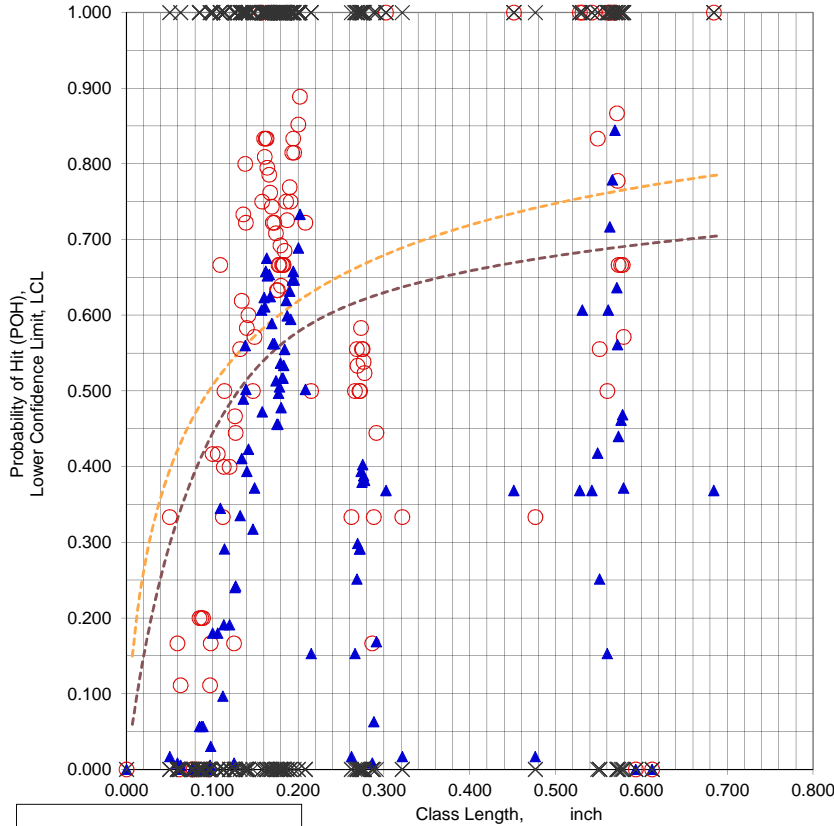
Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ⊗ Xlcl ⊗ Xpoh ▲ 2XL ⊗ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **A9001(3)L.xls**
 Data Set Name = **A9001(3)(CK. NO.)**
 Date & Time = 6/4/15 7:27 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8444
 Classwidth @ Best LCL = 0.0090 inch
 Classlength @ Best LCL = 0.5690 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.6840 -0.071 inch 26 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.684 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.684 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 1.368 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = A9001(3)L.xls
 Data Set Name = A9001(3)L(CK. NO.)

Directed DOE Options

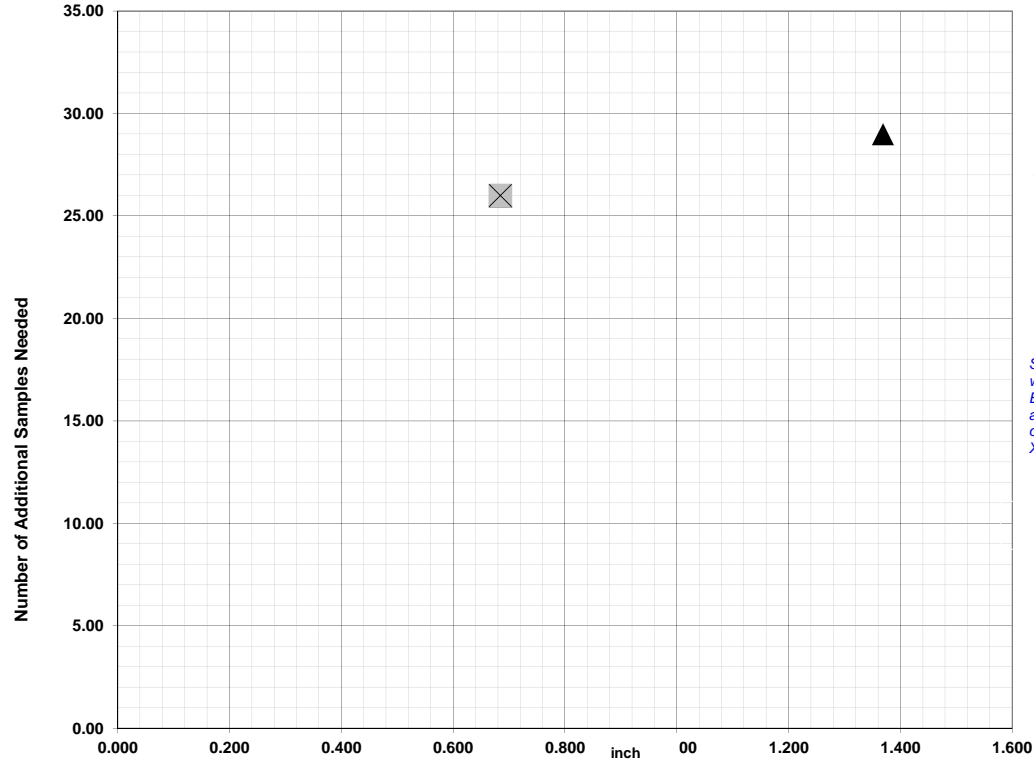


TABLE C

Class Length	Additional Samples
XL = 0.684	26
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 0.684	26
2XL = 1.368	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

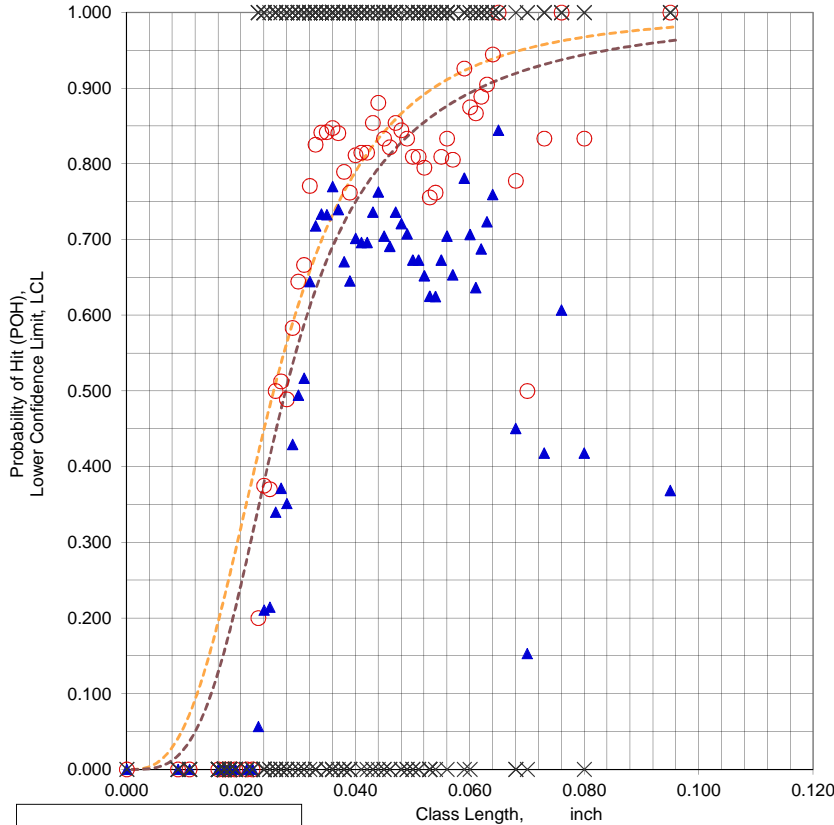
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ XLcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = A9002(3)D.xls
 Data Set Name = A9002(3)D(CK. NO.)
 Date & Time = 6/4/15 7:29 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8444
 Classwidth @ Best LCL = 0.0040 inch
 Classlength @ Best LCL = 0.0650 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.0950 -0.014 inch 26 Samples
 NTIAC 90% POD = 0.907 @ 0.055 inch
 NTIAC 90/95 POD = 0.911 @ 0.065 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.095 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.095 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 0.190 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A9002(3)D.xls
 Data Set Name = A9002(3)D(CK. NO.)

Directed DOE Options

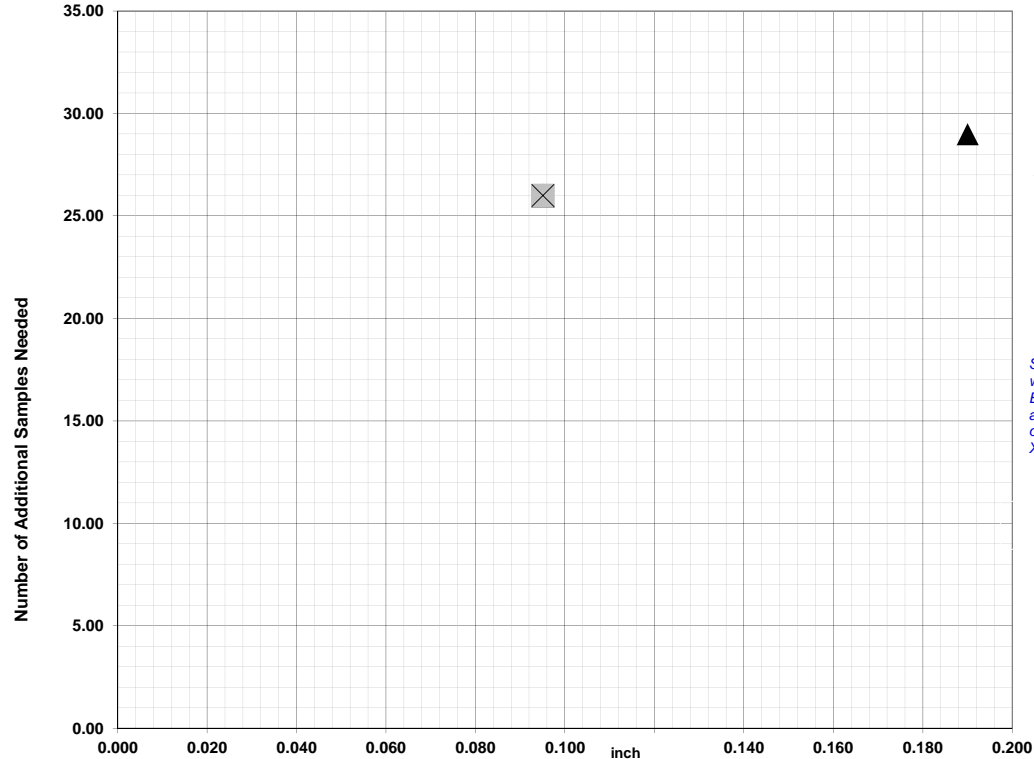


TABLE C

Class Length	Additional Samples
XL = 0.095	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.095	26
2XL = 0.190	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

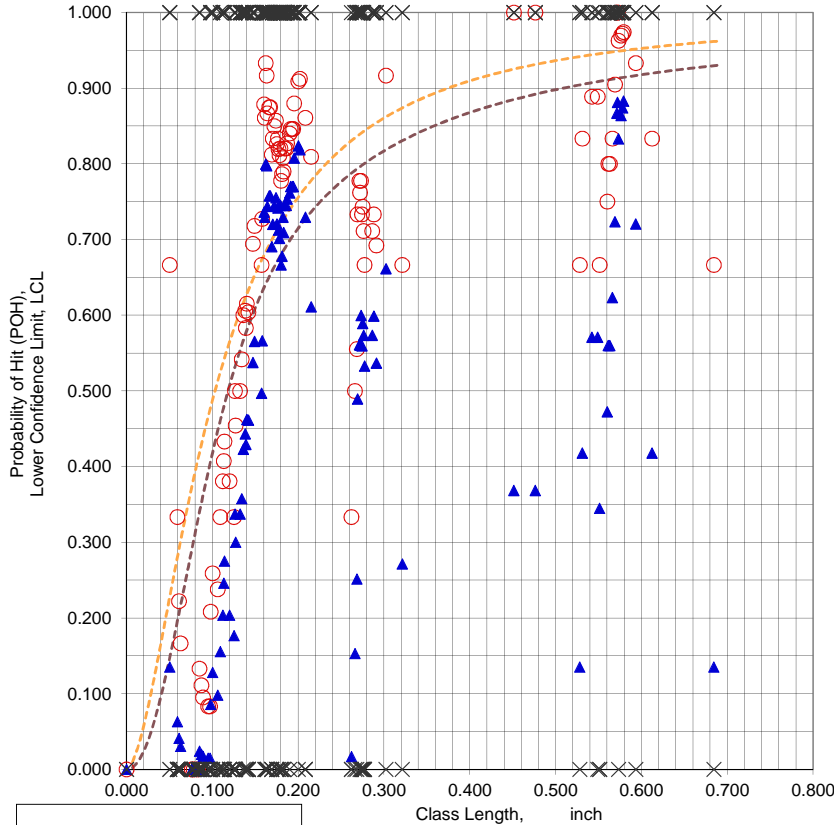
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = A9002(3)L.xls
 Data Set Name = A9002(3)L(CK. NO.)
 Date & Time = 6/4/15 7:31 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound = 0.8827
 Best LCL = 0.0190 inch
 Classwidth @ Best LCL = 0.5790 inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = inch

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.900 @ 0.375 inch
 NTIAC 90/95 POD = 0.900 @ 0.510 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 1.368 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A9002(3)L.xls
 Data Set Name = A9002(3)L(CK. NO.)

Directed DOE Options

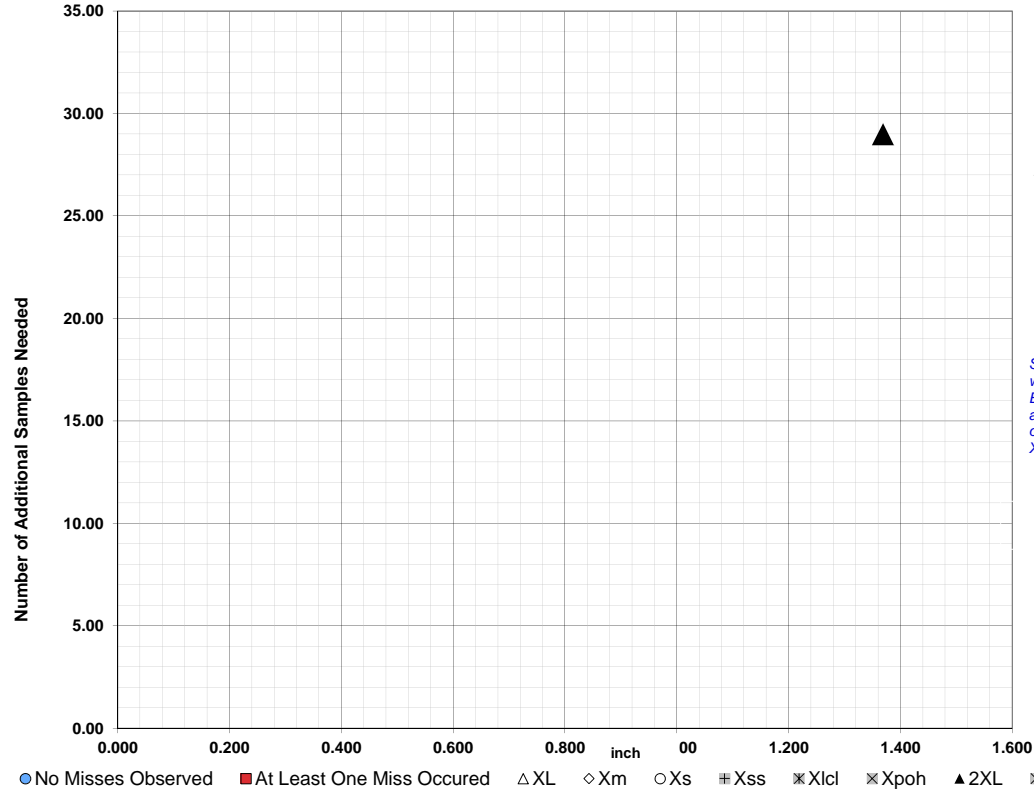


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 1.368	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 1.368 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

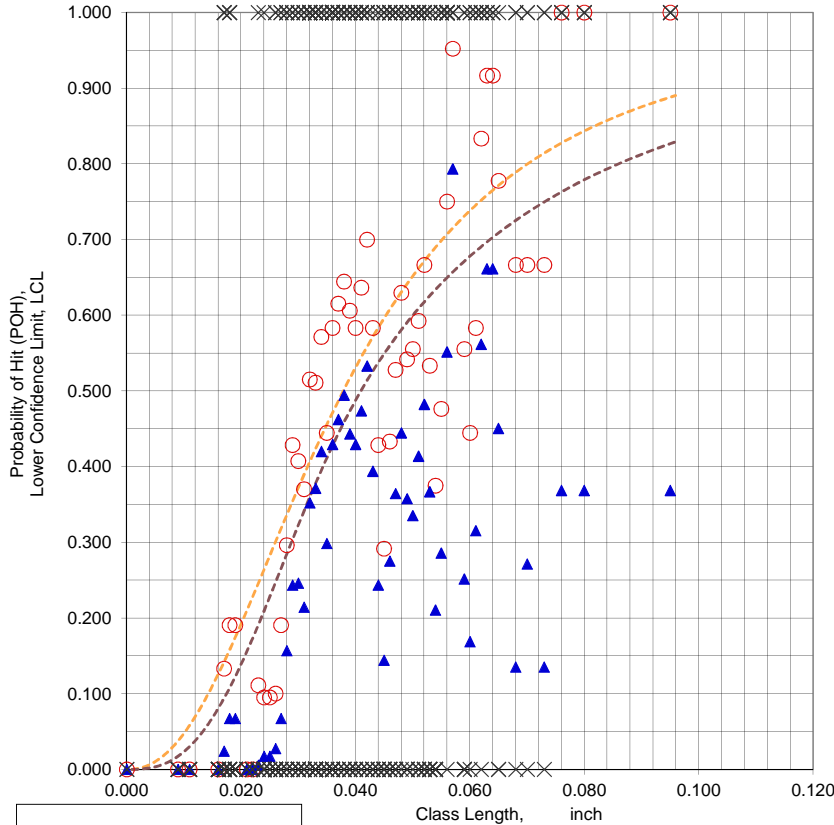
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **A9003(3)D.xls**
 Data Set Name = **A9003(3)D(Ck. No.)**
 Date & Time = 6/4/15 7:32 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7933
 Classwidth @ Best LCL = 0.0020 inch
 Classlength @ Best LCL = 0.0570 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.0760 -0.002 inch 26 Samples
 NTIAC 90% POD = 0.909 @ 0.105 inch
 NTIAC 90/95 POD = 0.904 @ 0.140 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.095 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.076 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 0.190 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A9003(3)D.xls
 Data Set Name = A9003(3)D(CK. No.)

Directed DOE Options

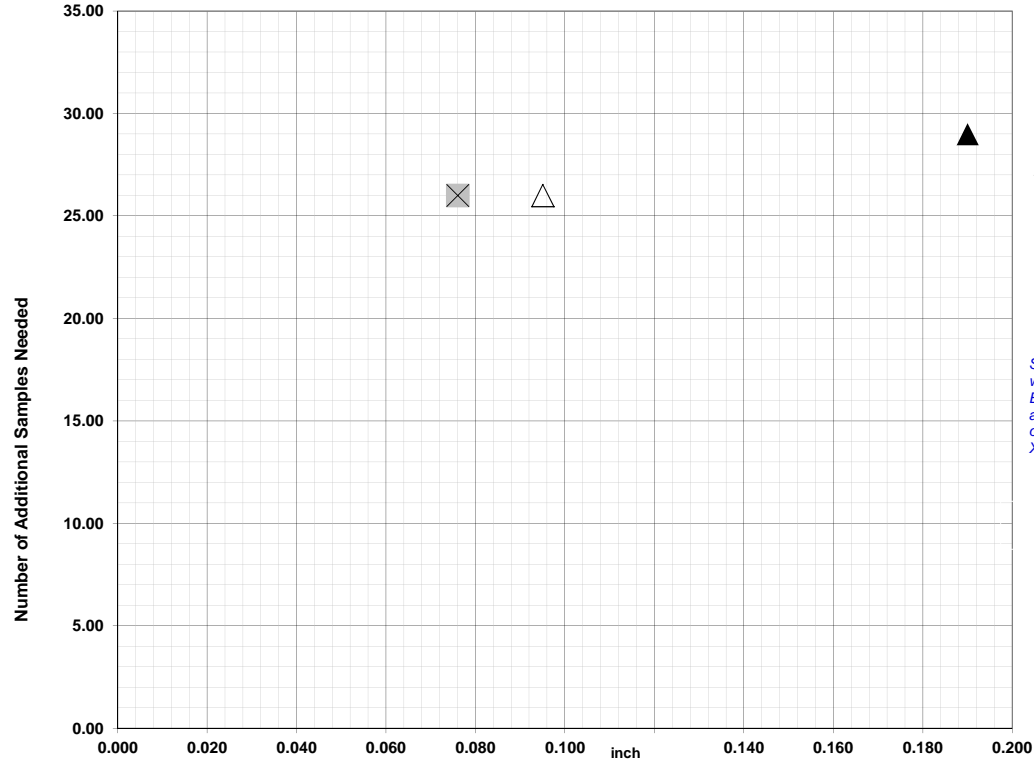


TABLE C

Class Length	Additional Samples
XL = 0.095	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.076	26
2XL = 0.190	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

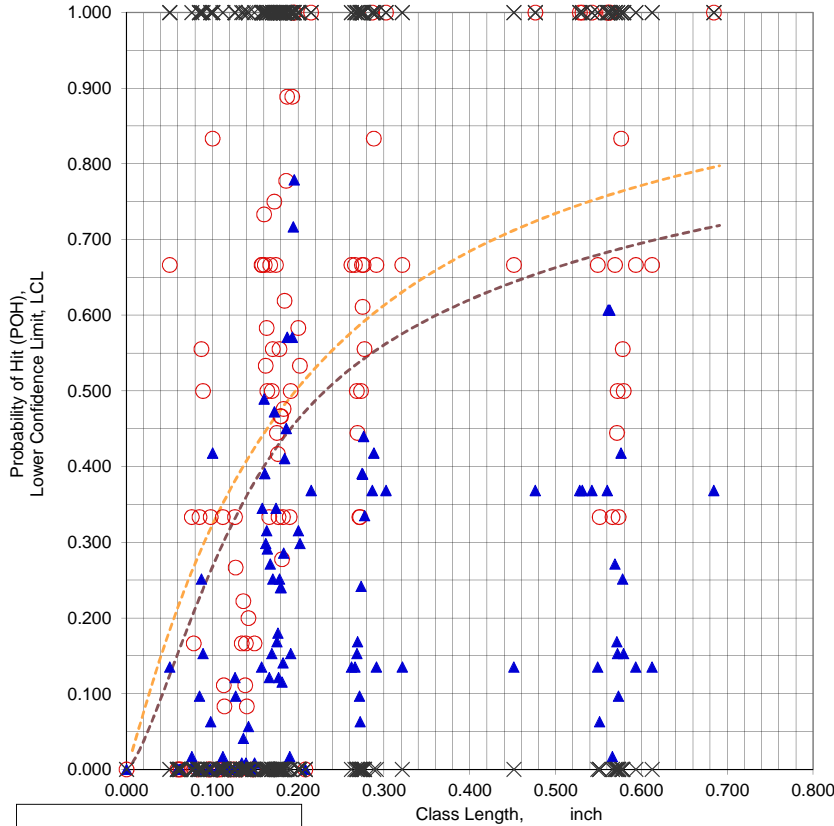
Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ⊗ Xlcl
 ⊗ Xpoh
 ▲ 2XL
 ⊗ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Probability of Hit (POH) in Class Range

Lower Confidence Bound @ 95%

Xp, 90/95 POD

Hit/Miss

MLE(Mean) POD

MLE(95%) LCL

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

File Name = A9003(3)L.xls
 Data Set Name = A9003(3)L(CK. No.)
 Date & Time = 6/4/15 7:34 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7791
 Classwidth @ Best LCL = 0.0020 inch
 Classlength @ Best LCL = 0.1950 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.6840 -0.071 inch 26 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.684 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.684 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 1.368 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = A9003(3)L.xls
 Data Set Name = A9003(3)L(CK. No.)

Directed DOE Options

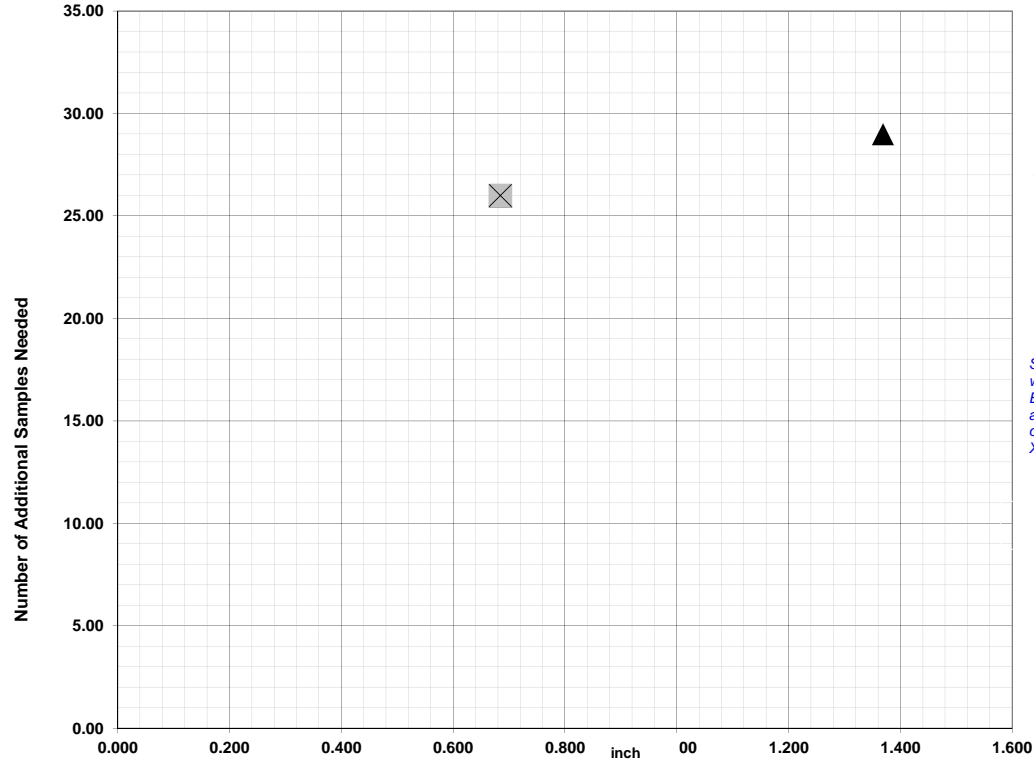


TABLE C

Class Length	Additional Samples
XL = 0.684	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.684	26
2XL = 1.368	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

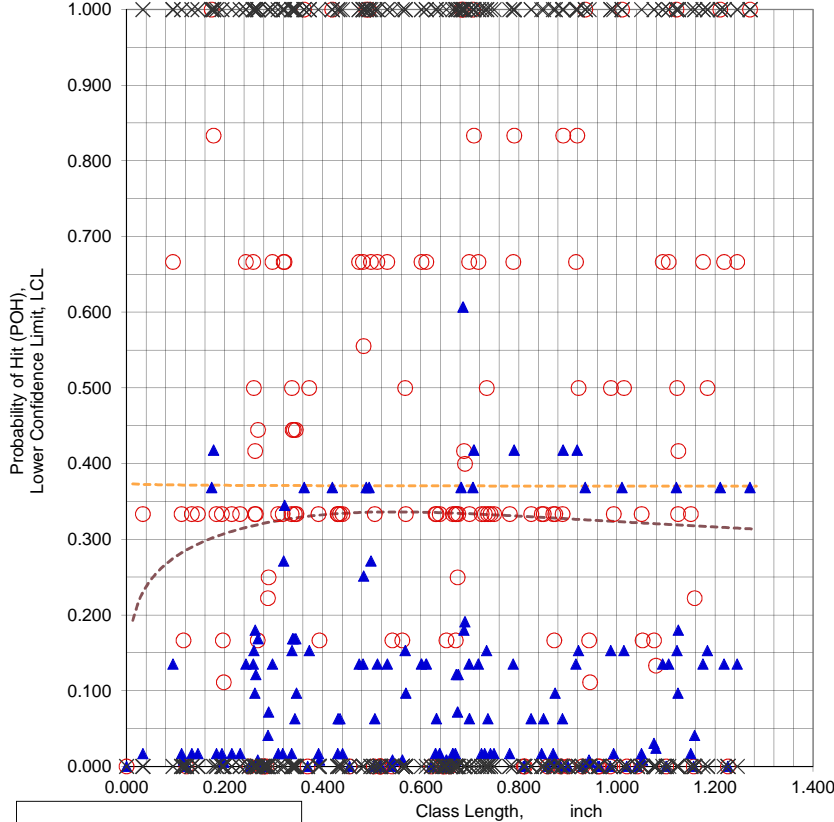
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = AA001(3)L.xls
 Data Set Name = AA001(3)L(CK. NO.)
 Date & Time = 6/4/15 7:35 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound = Best LCL = 0.6070
 Classwidth @ Best LCL = 0.0040 inch
 Classlength @ Best LCL = 0.6860 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 1.2710 -0.025 inch 26 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 1.271 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 1.271 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 2.542 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = AA001(3)L.xls
 Data Set Name = AA001(3)L(CK. NO.)

Directed DOE Options

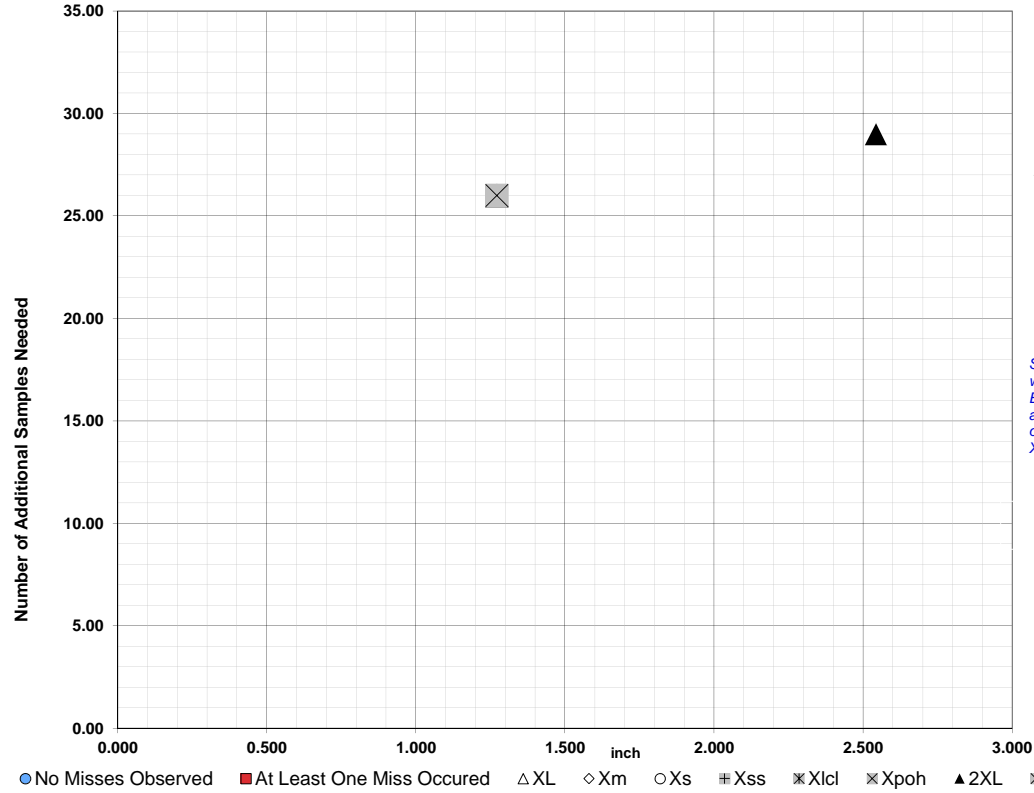


TABLE C

Class Length	Additional Samples
XL = 1.271	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.271	26
2XL = 2.542	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

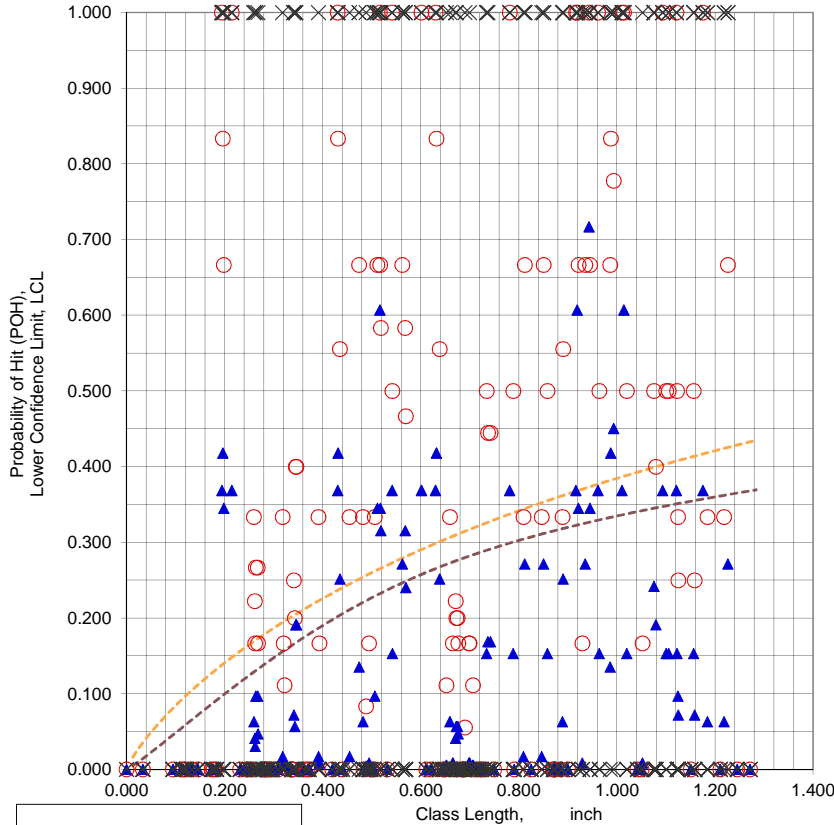
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = AA002(3)L.xls
 Data Set Name = AA002(3)L(CK. NO.)
 Date & Time = 6/4/15 7:37 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7169
 Classwidth @ Best LCL = 0.0080 inch
 Classlength @ Best LCL = 0.9430 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 2.542 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = AA002(3)L.xls
 Data Set Name = AA002(3)L(CK. NO.)

Directed DOE Options

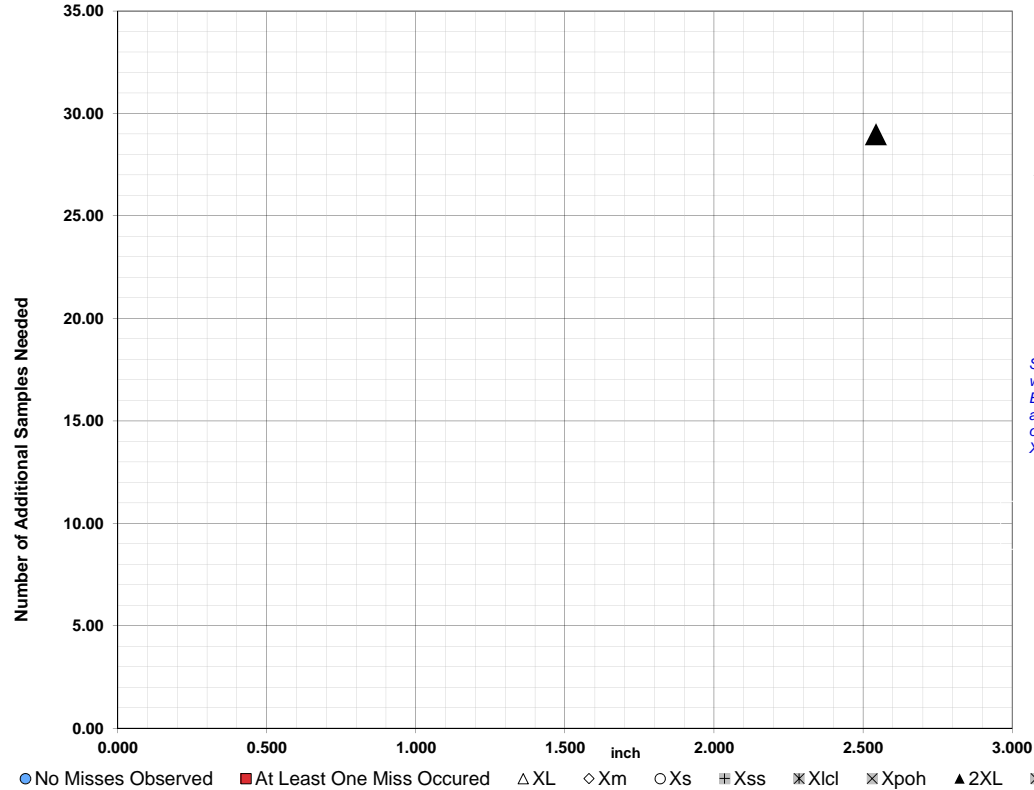


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 2.542	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 2.542 29
 **Alternate Xm =
 Xpodopt =

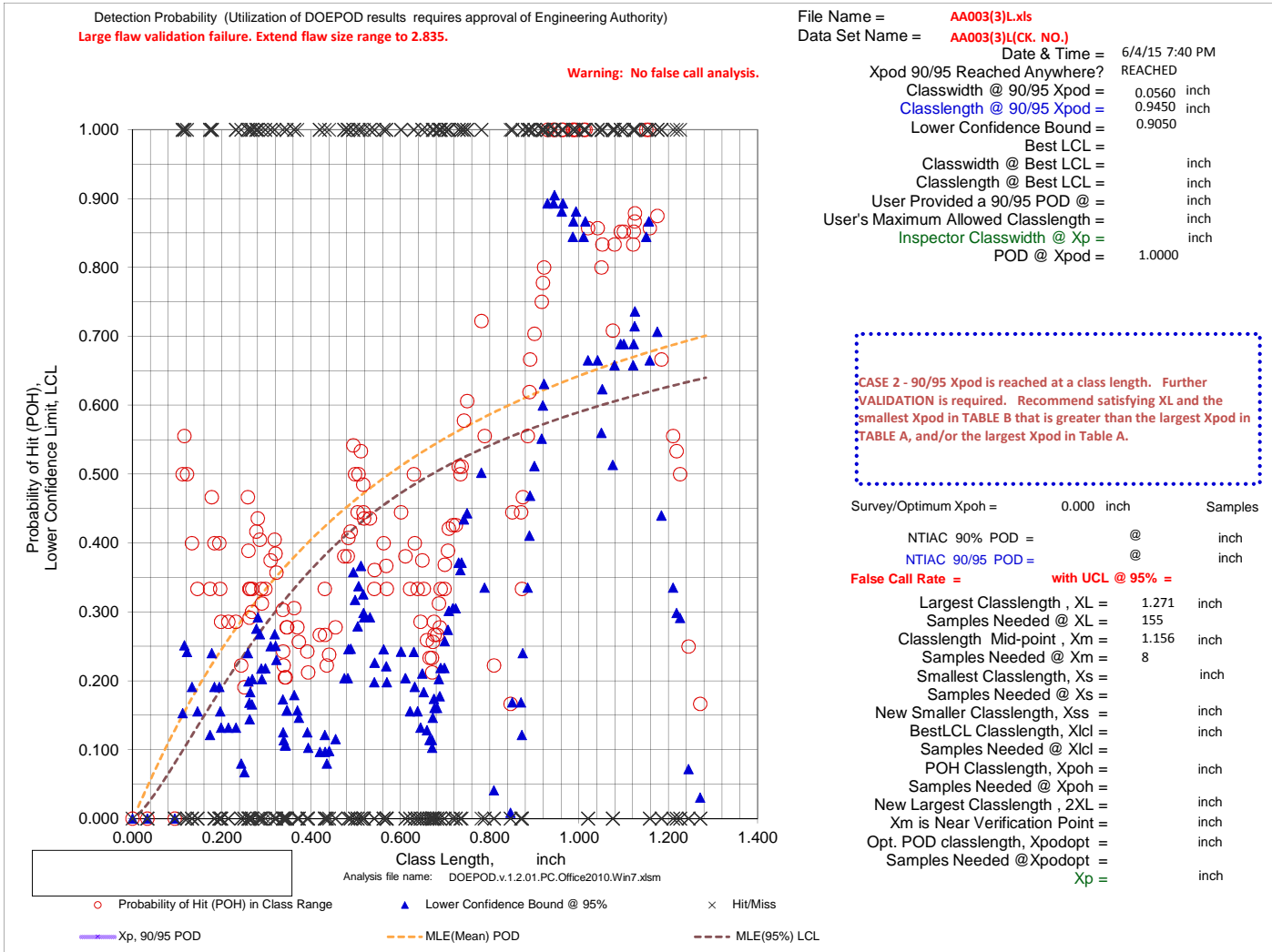
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = AA003(3)L.xls
 Data Set Name = AA003(3)L(CK. NO.)

Directed DOE Options

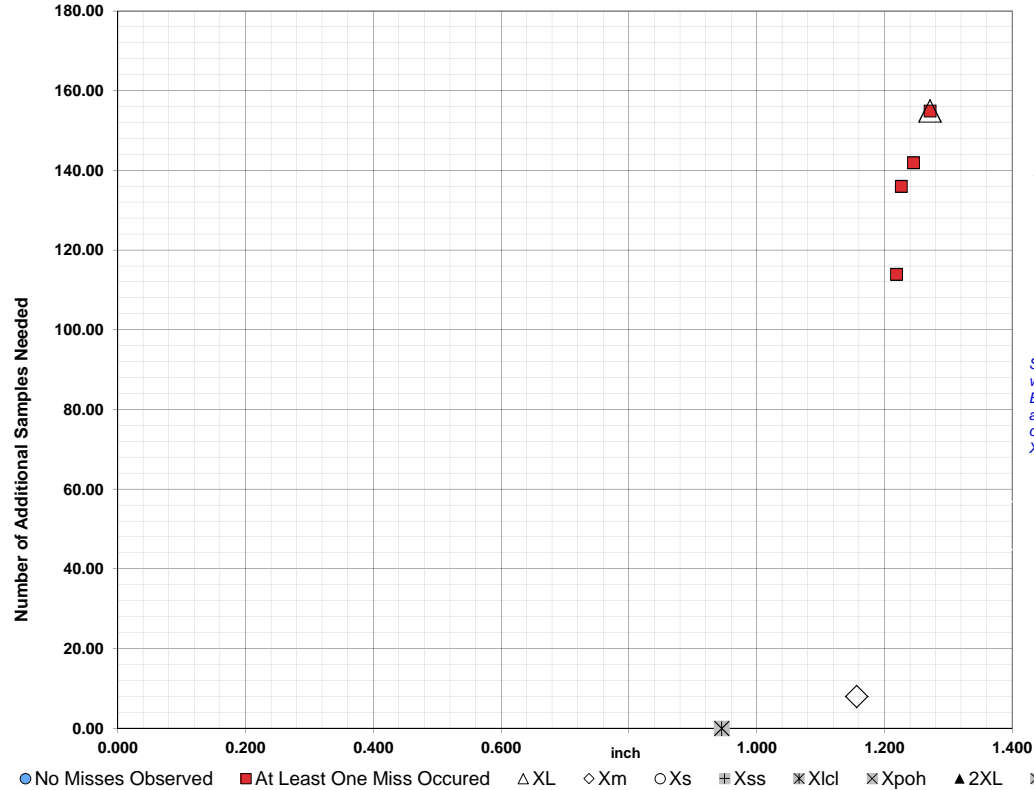


TABLE C

Class Length	Additional Samples
XL = 1.271	155
Xm = 1.156	8
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

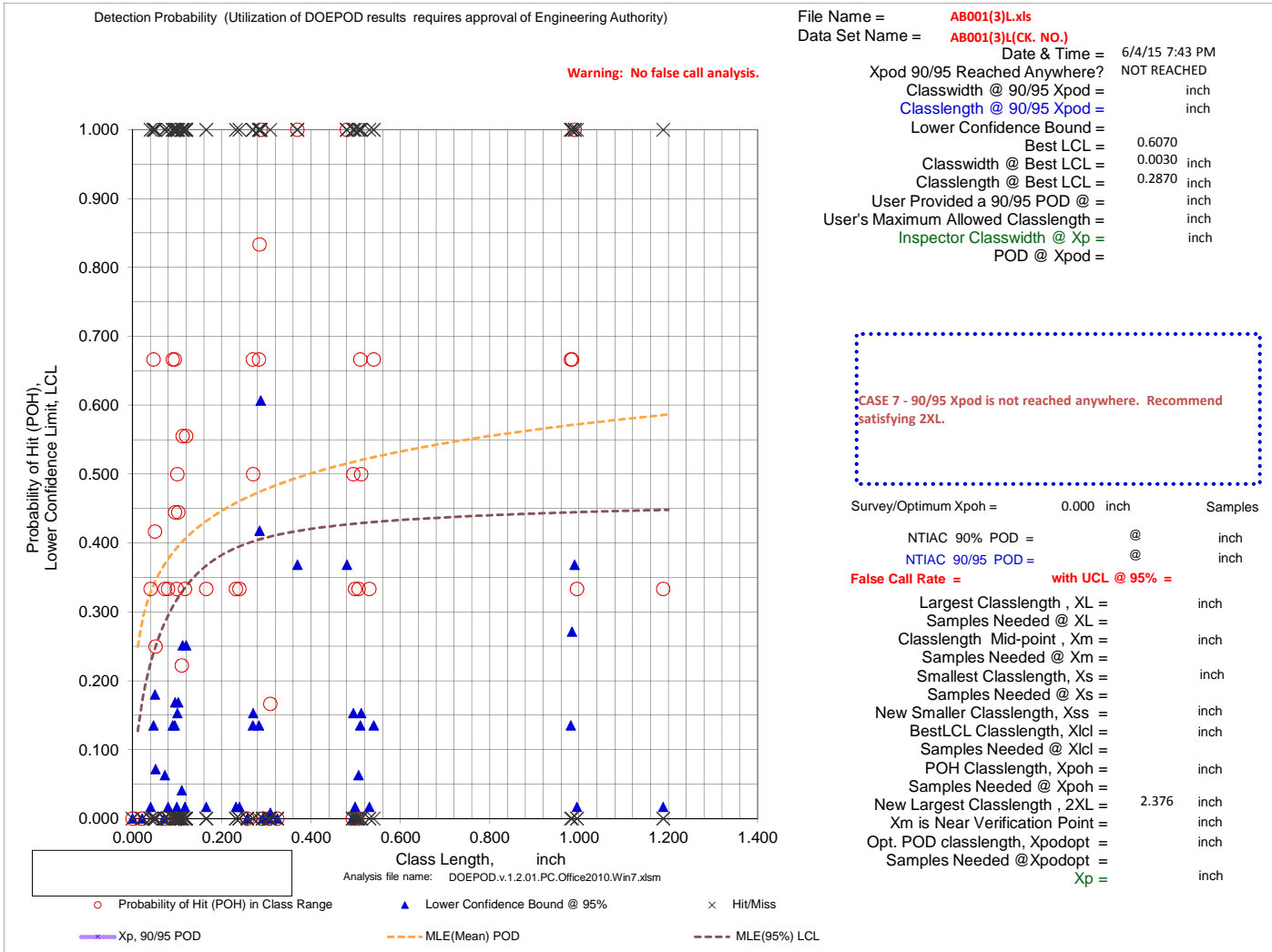
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
1.2710	155		
1.2450	142		
1.2260	136		
1.2180	114		

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = AB001(3)L.xls
 Data Set Name = AB001(3)L(CK. NO.)

Directed DOE Options



TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 2.376	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 2.376 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

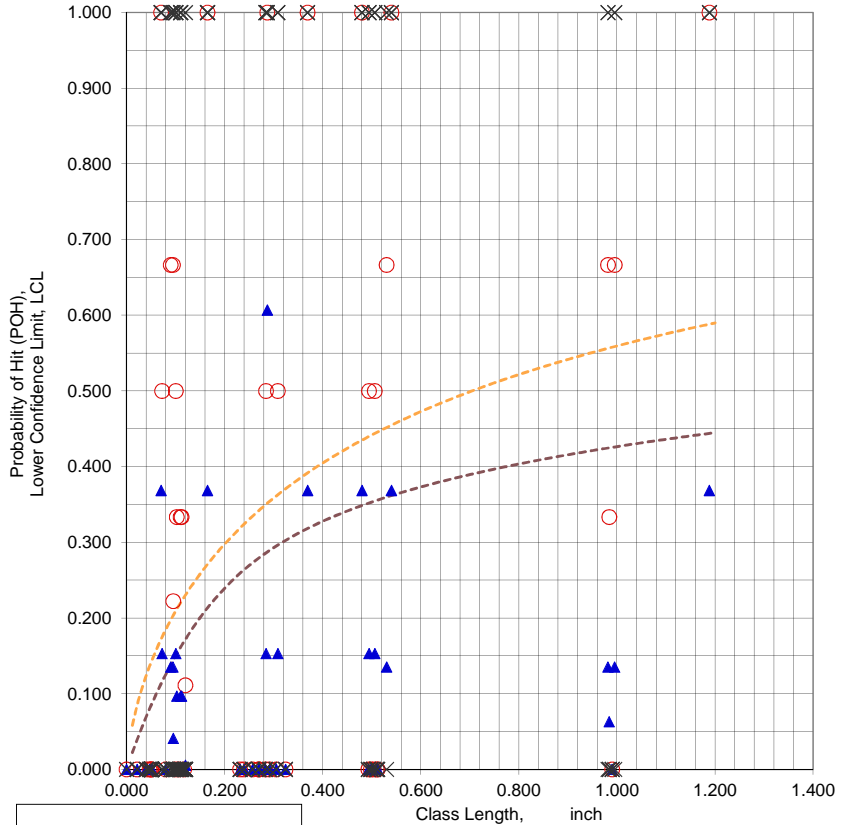
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = AB002(3)L.xls
 Data Set Name = AB002(3)L(CK. NO.)
 Date & Time = 6/4/15 7:44 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6070
 Classwidth @ Best LCL = 0.0030 inch
 Classlength @ Best LCL = 0.2870 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 1.1880 -0.100 inch 26 Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.188 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 1.188 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 2.376 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = AB002(3)L.xls
 Data Set Name = AB002(3)L(CK. NO.)

Directed DOE Options

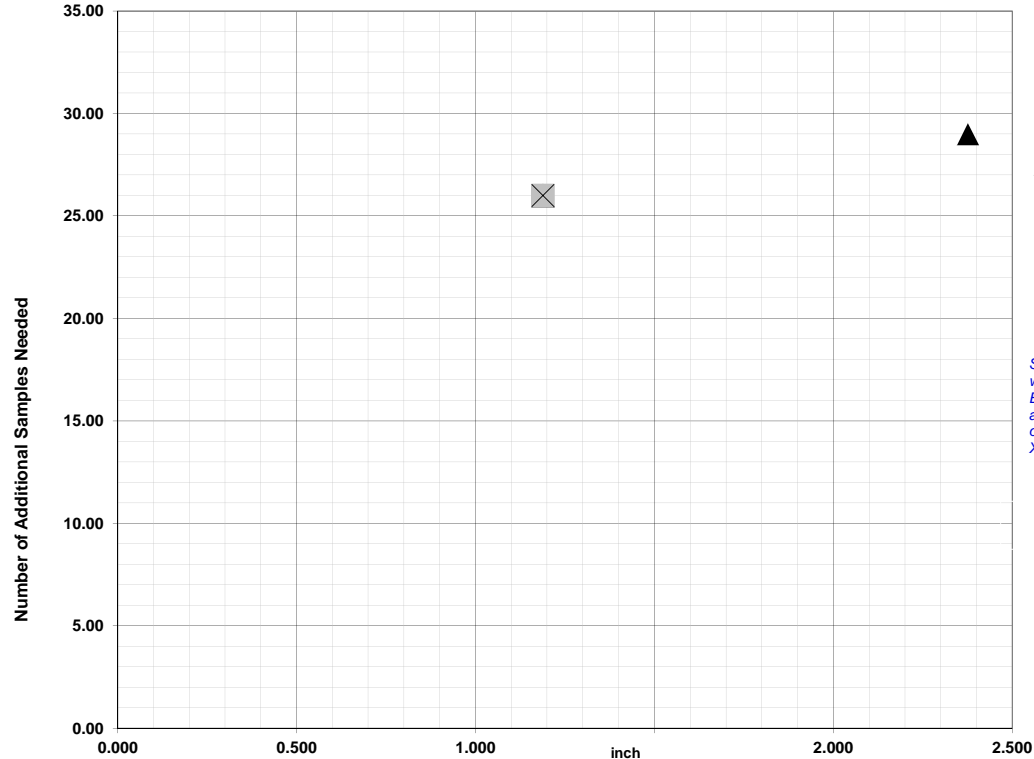


TABLE C

Class Length	Additional Samples	
XL =	1.188	26
Xm =		
Xs =		
Xss =		
Xlcl =		
Xpoh =	1.188	26
2XL =	2.376	29
**Alternate Xm =		
Xpodopt =		

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

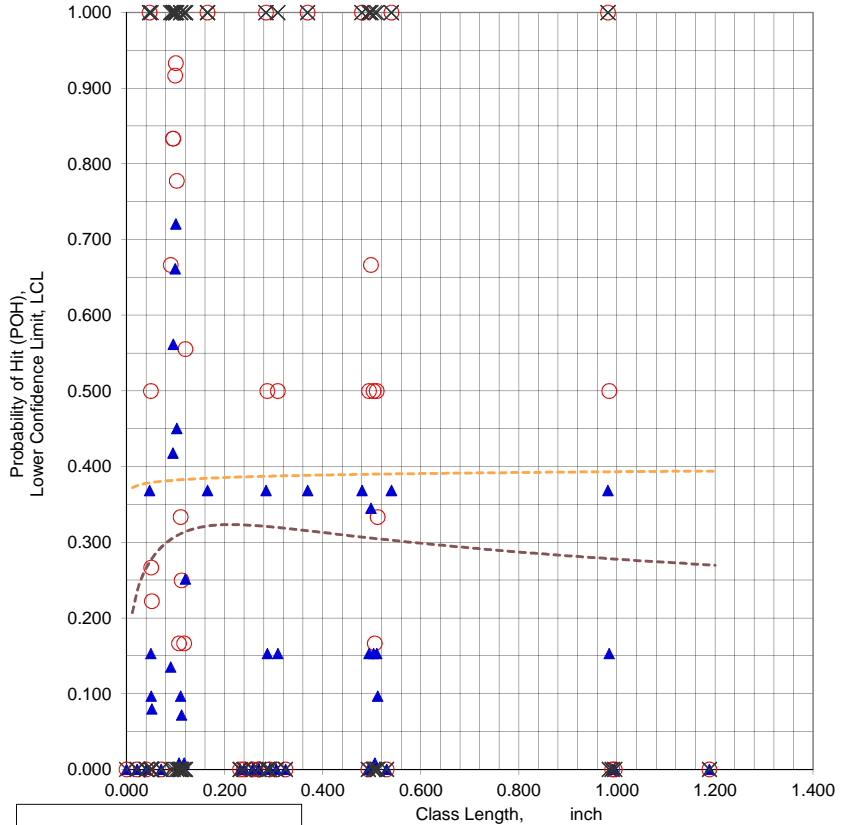
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = AB003(3)L.xls
 Data Set Name = AB003(3)L(CK. NO.)
 Date & Time = 6/4/15 7:46 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7206
 Classwidth @ Best LCL = 0.0060 inch
 Classlength @ Best LCL = 0.1000 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 2.376 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
 — Xp, 90/95 POD
 - - - MLE(Mean) POD
 - - - MLE(95%) LCL

File Name = AB003(3)L.xls
 Data Set Name = AB003(3)L(CK. NO.)

Directed DOE Options

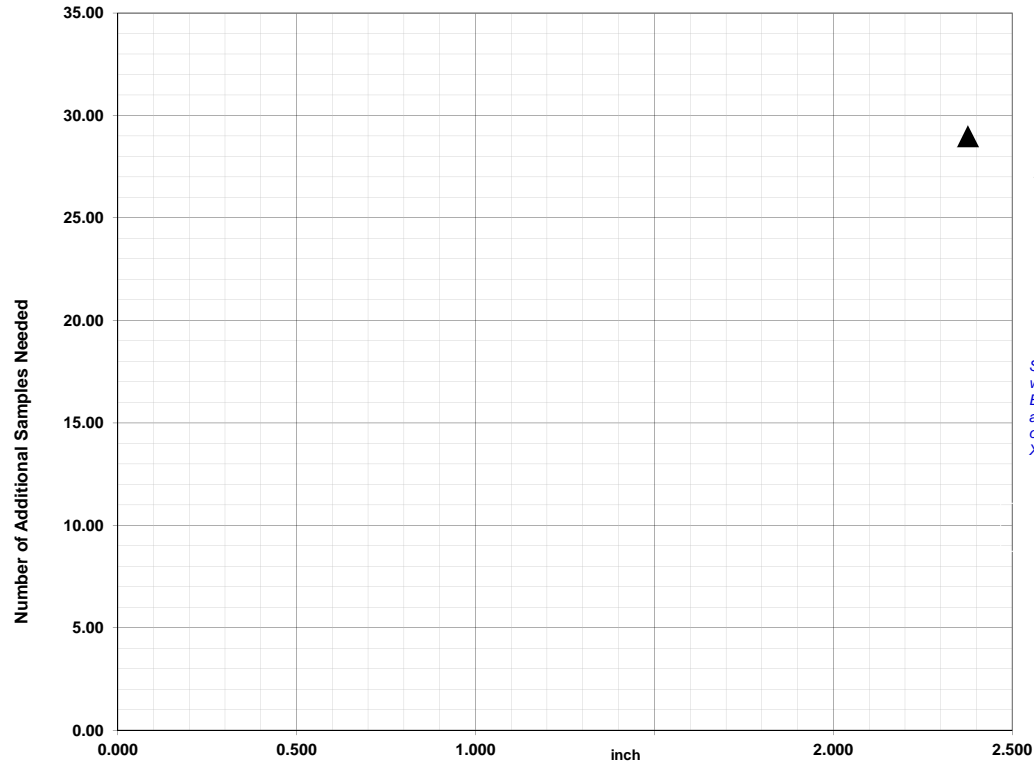


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 2.376	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 2.376 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

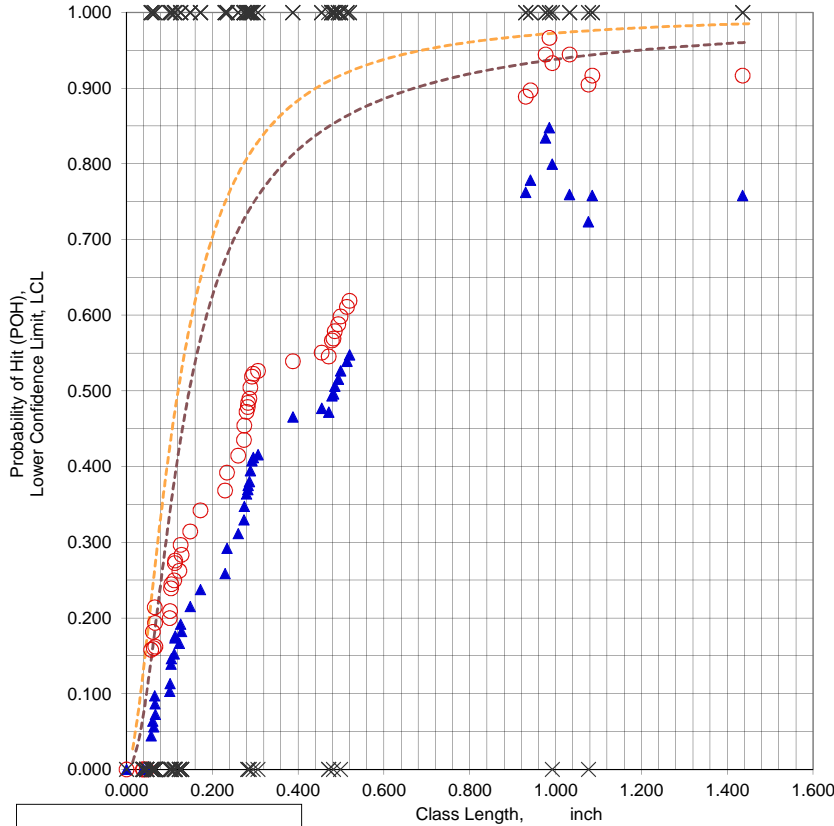
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = AC001(3)L.xls
 Data Set Name = AC001(3)L(CK. NO.)
 Date & Time = 6/4/15 7:48 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8477
 Classwidth @ Best LCL = 0.5000 inch
 Classlength @ Best LCL = 0.9850 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 1.0850 -0.008 inch 26 Samples

NTIAC 90% POD = 0.901 @ 0.445 inch
 NTIAC 90/95 POD = 0.900 @ 0.670 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 2.870 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
 — Xp, 90/95 POD
 - - - MLE(Mean) POD
 - - - MLE(95%) LCL

File Name = AC001(3)L.xls
 Data Set Name = AC001(3)L(CK. NO.)

Directed DOE Options

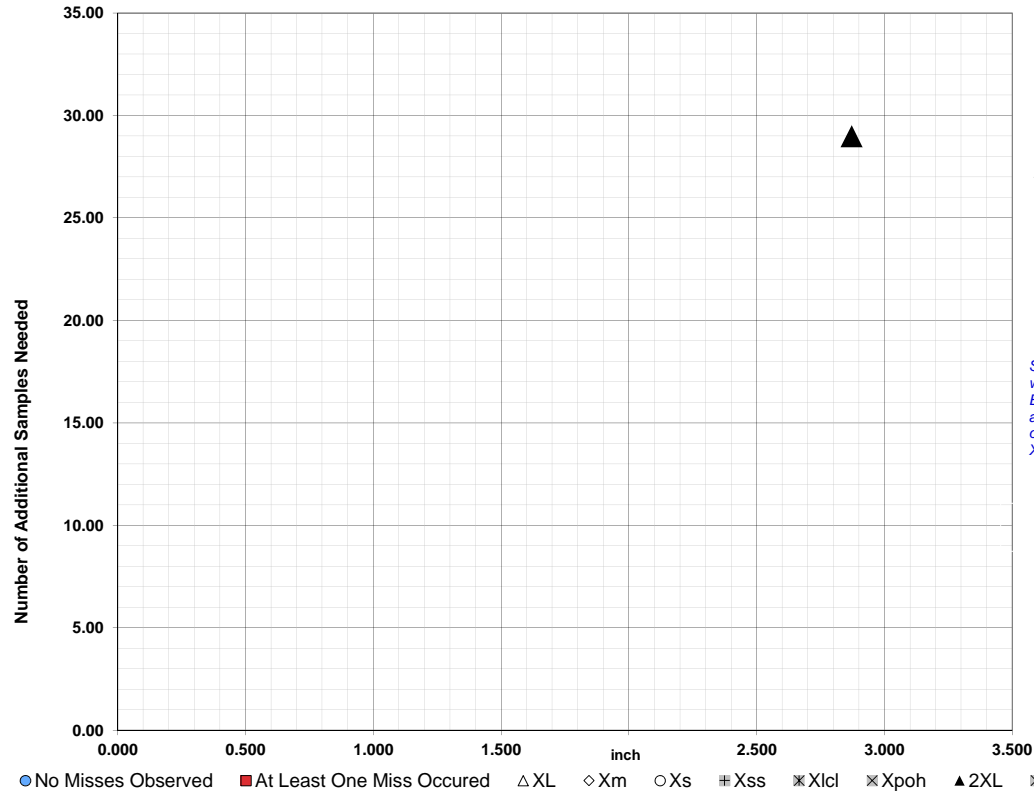


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 2.870	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 2.870 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

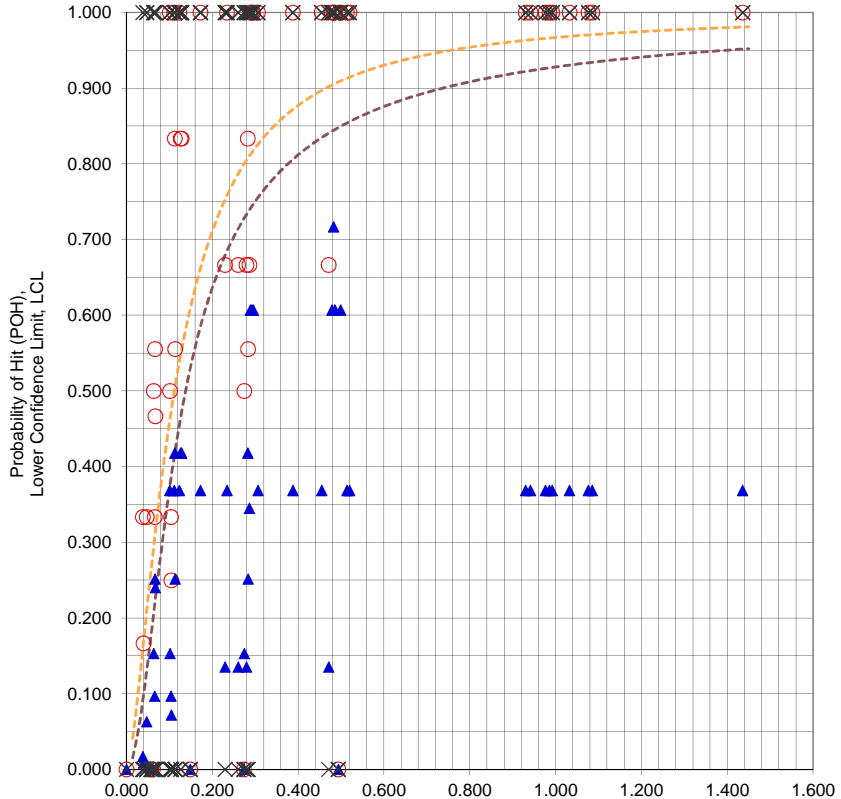
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



--> Optimum Xpoh Available; Using Best LCL

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = AC002(3)L.xls
 Data Set Name = AC002(3)L(CK. NO.)
 Date & Time = 6/4/15 7:49 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7169
 Classwidth @ Best LCL = 0.0040 inch
 Classlength @ Best LCL = 0.4820 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.4980 -0.004 inch 23 Samples
 NTIAC 90% POD = 0.900 @ 0.465 inch
 NTIAC 90/95 POD = 0.901 @ 0.740 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.435 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.498 inch
 Samples Needed @ Xpoh = 23
 New Largest Classlength , 2XL = 2.870 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = AC002(3)L.xls
 Data Set Name = AC002(3)L(CK. NO.)

Directed DOE Options

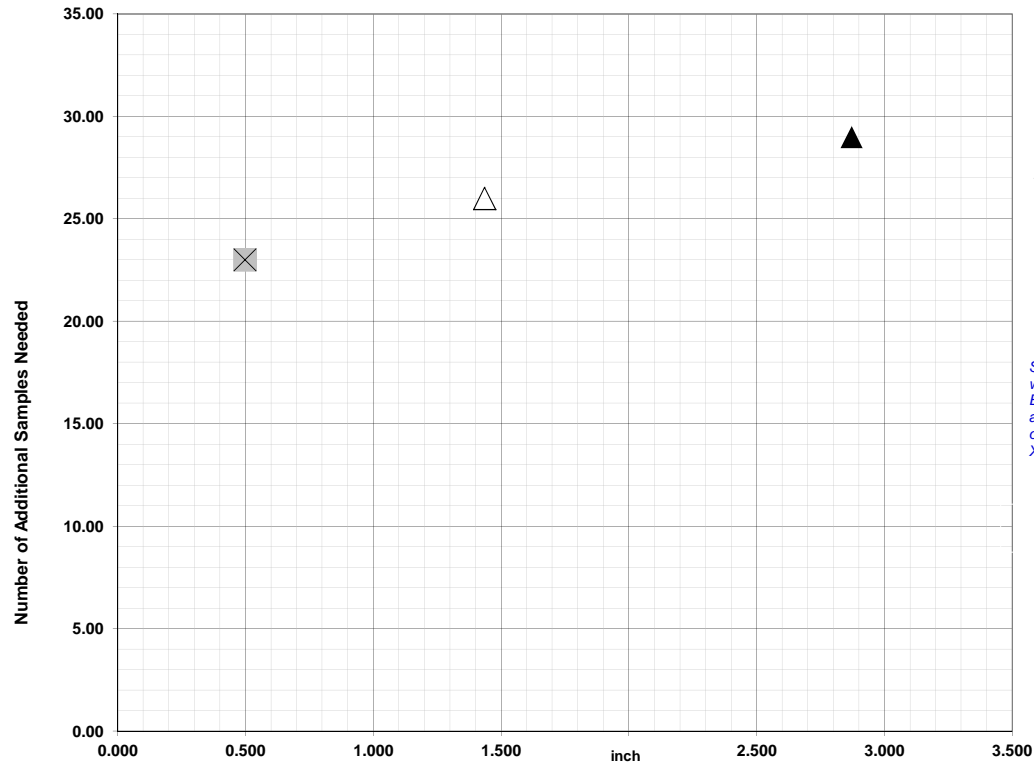


TABLE C

Class Length	Additional Samples
XL = 1.435	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.498	23
2XL = 2.870	29
**Alternate Xm =	
Xpodopt =	

**Alternate Xm =
 Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

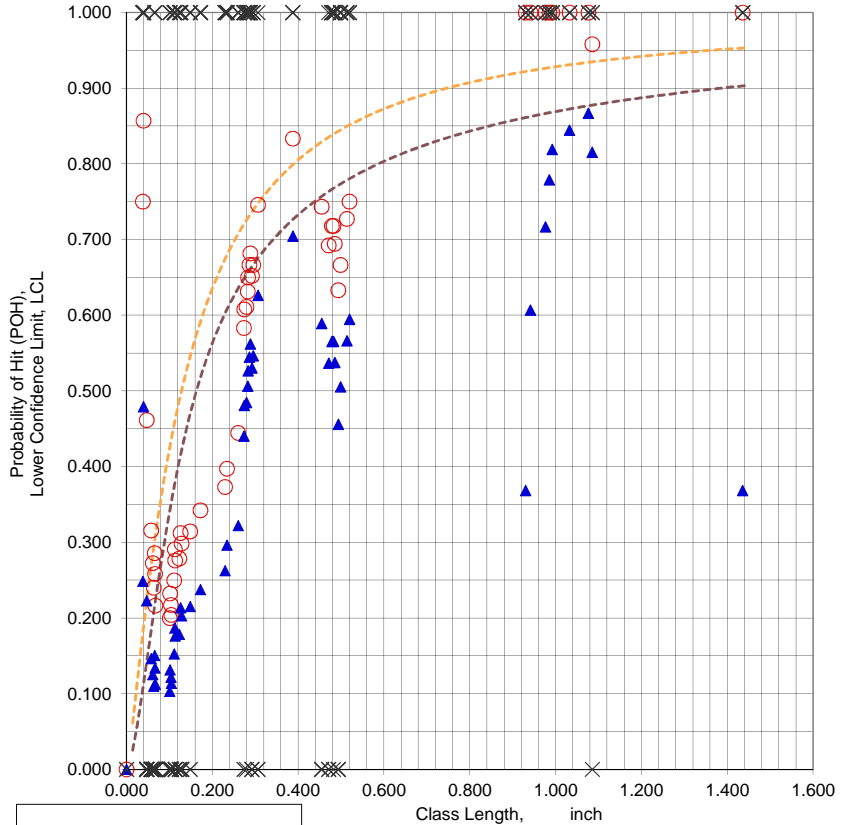
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 Δ XL
 \diamond Xm
 \circ Xs
 # Xss
 * Xlcl
 * Xpoh
 ▲ 2XL
 * Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = AC003(3)L.xls
 Data Set Name = AC003(3)L(CK. NO.)
 Date & Time = 6/4/15 7:50 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8666
 Classwidth @ Best LCL = 0.2000 inch
 Classlength @ Best LCL = 1.0760 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 1.4350 -0.300 inch 26 Samples

NTIAC 90% POD = 0.901 @ 0.750 inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.435 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = 1.435 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 2.870 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
 — Xp, 90/95 POD
 - - - MLE(Mean) POD
 - - - MLE(95%) LCL

File Name = AC003(3)L.xls
 Data Set Name = AC003(3)L(CK. NO.)

Directed DOE Options

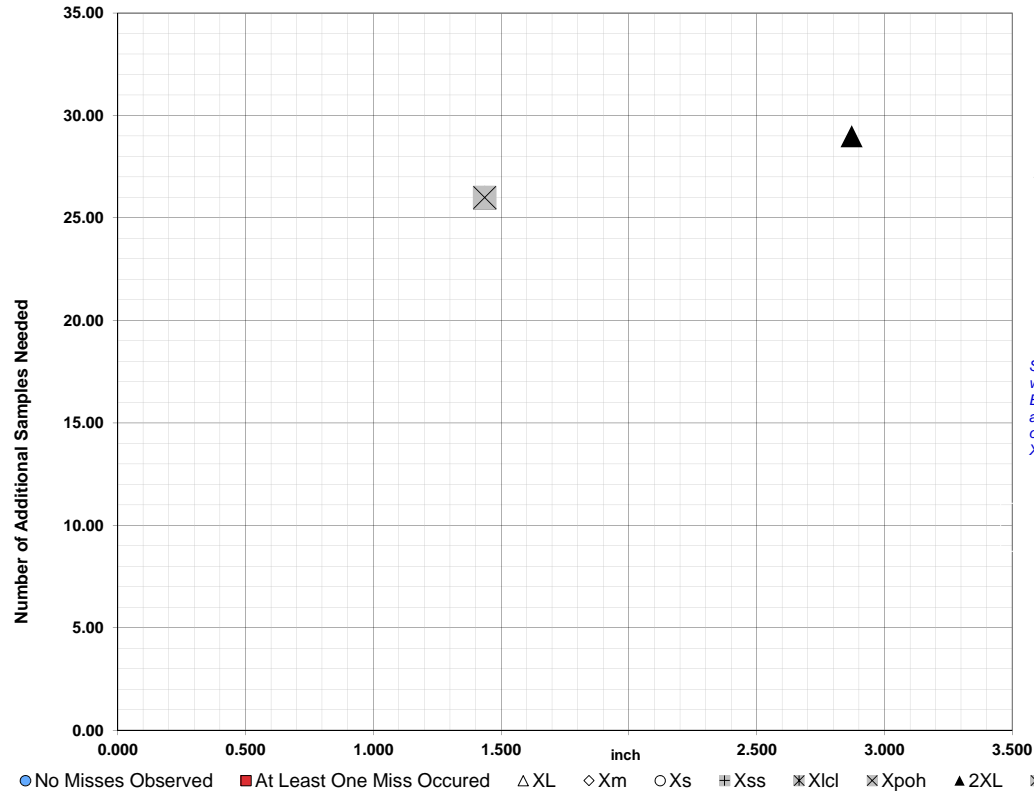


TABLE C

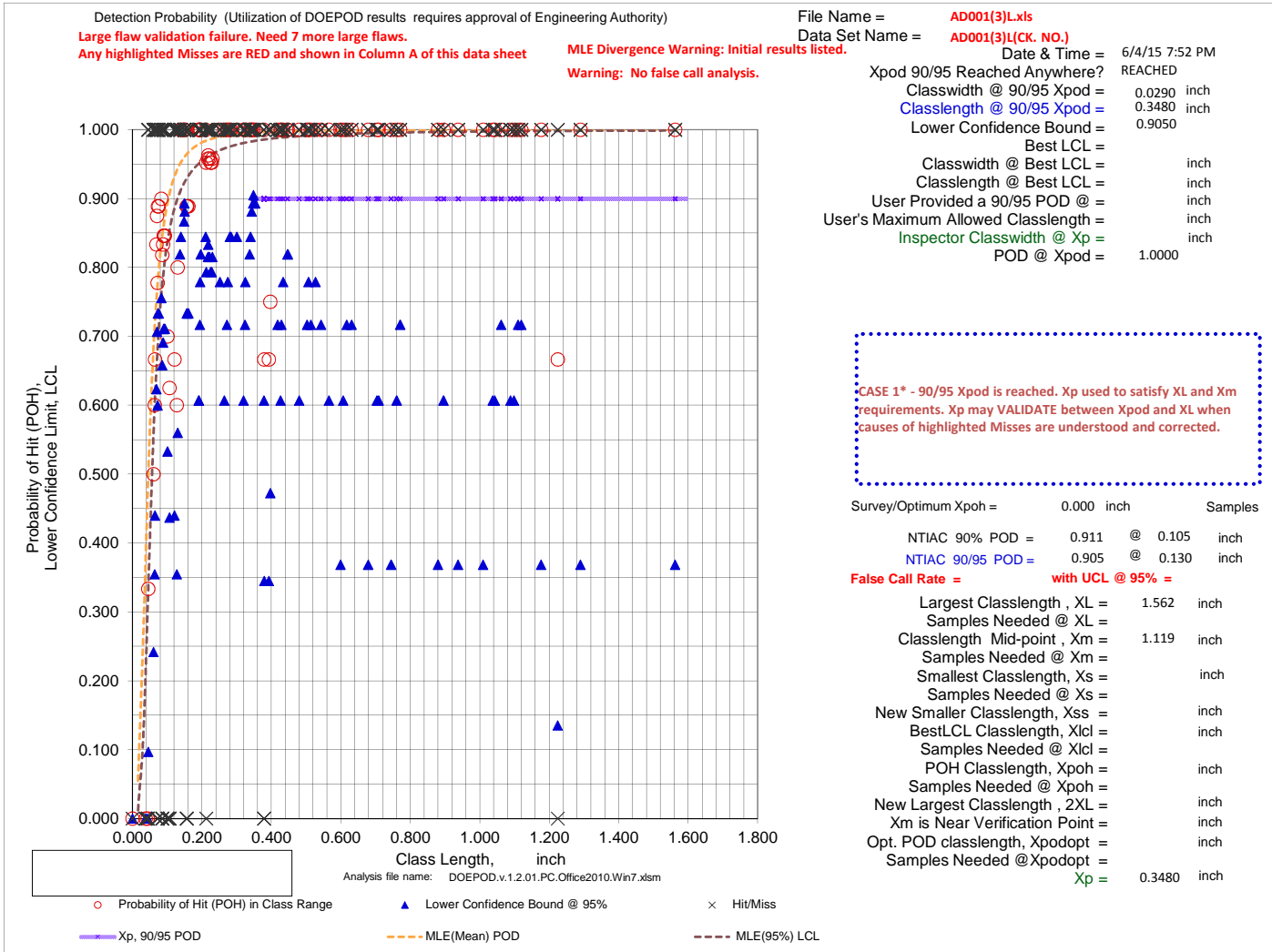
Class Length	Additional Samples
XL = 1.435	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.435	26
2XL = 2.870	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = AD001(3)L.xls
 Data Set Name = AD001(3)L(CK. NO.)

Directed DOE Options

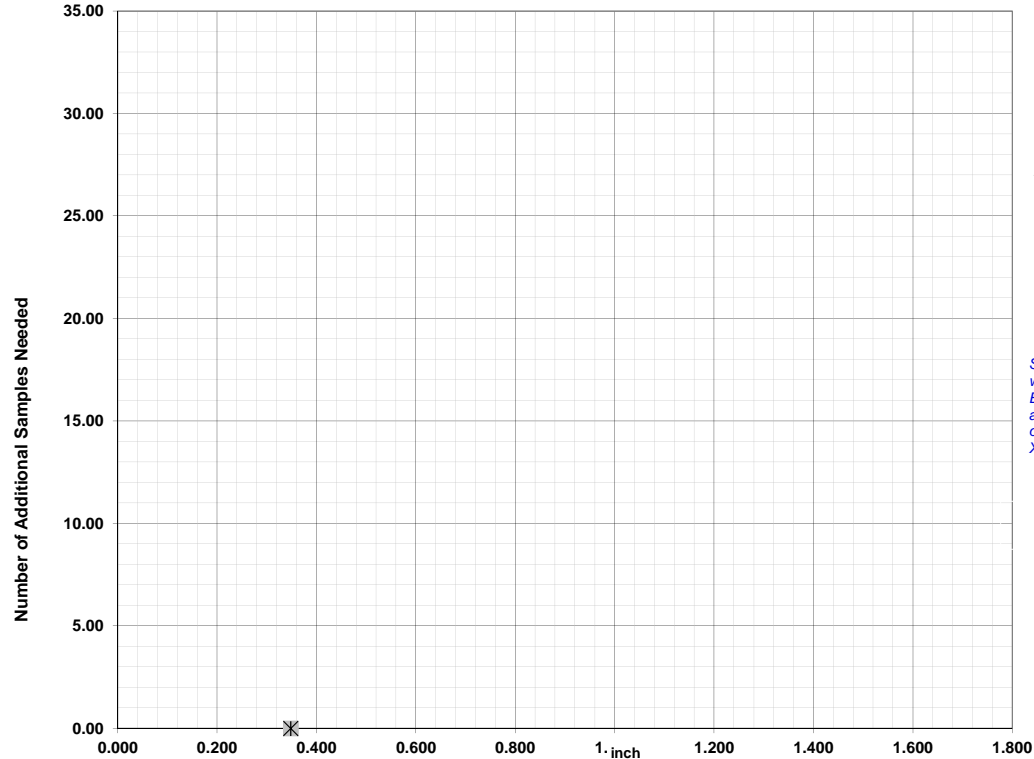


TABLE C

Class Length Additional Samples

XL = 1.562
 Xm = 1.119
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

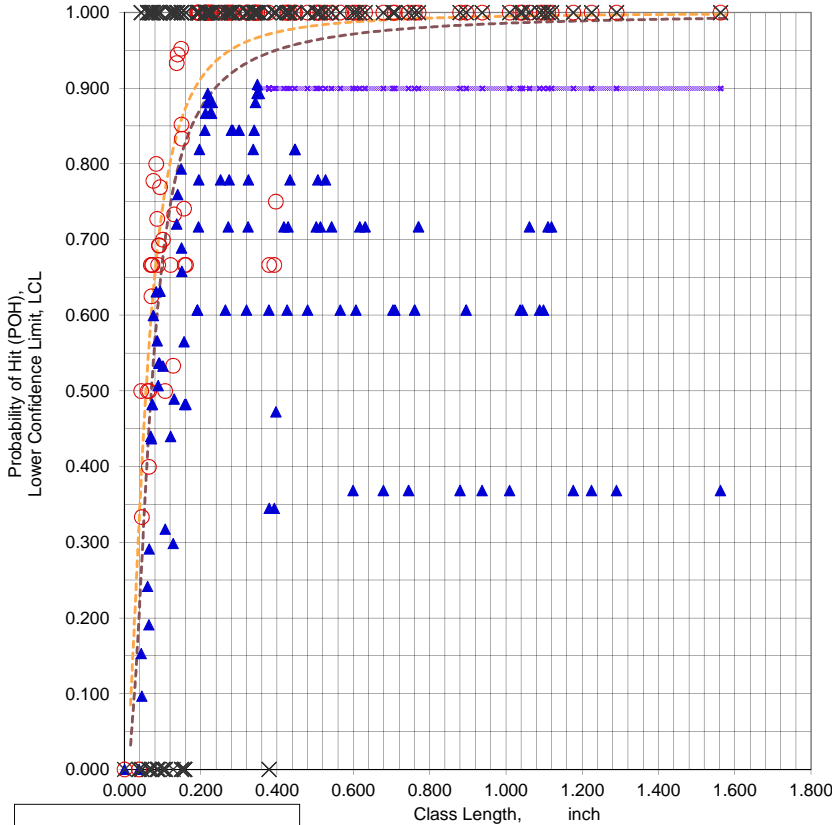
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 7 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



File Name = AD002(3)L.xls
 Data Set Name = AD002(3)L(CK. NO.)
 Date & Time = 6/4/15 7:58 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0290 inch
 Classlength @ 90/95 Xpod = 0.3480 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.901 @ 0.185 inch
 NTIAC 90/95 POD = 0.902 @ 0.240 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.562 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 1.119 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.3480 inch

File Name = AD002(3)L.xls
 Data Set Name = AD002(3)L(CK. NO.)

Directed DOE Options

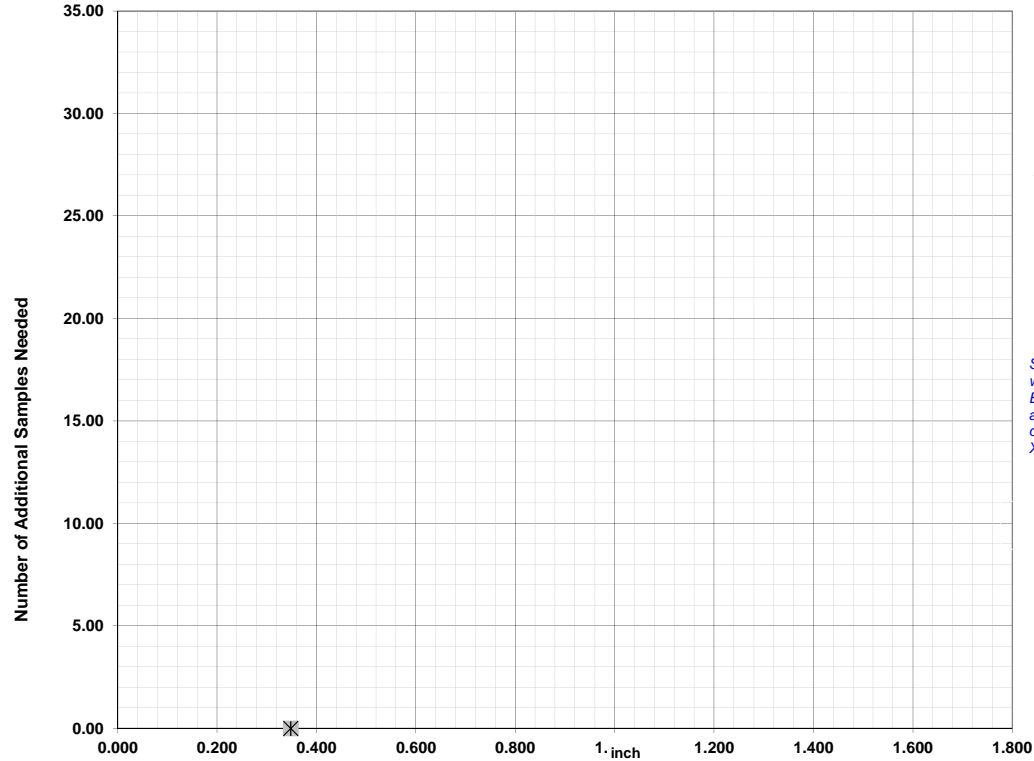


TABLE C

Class Length Additional Samples

XL = 1.562
 Xm = 1.119
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

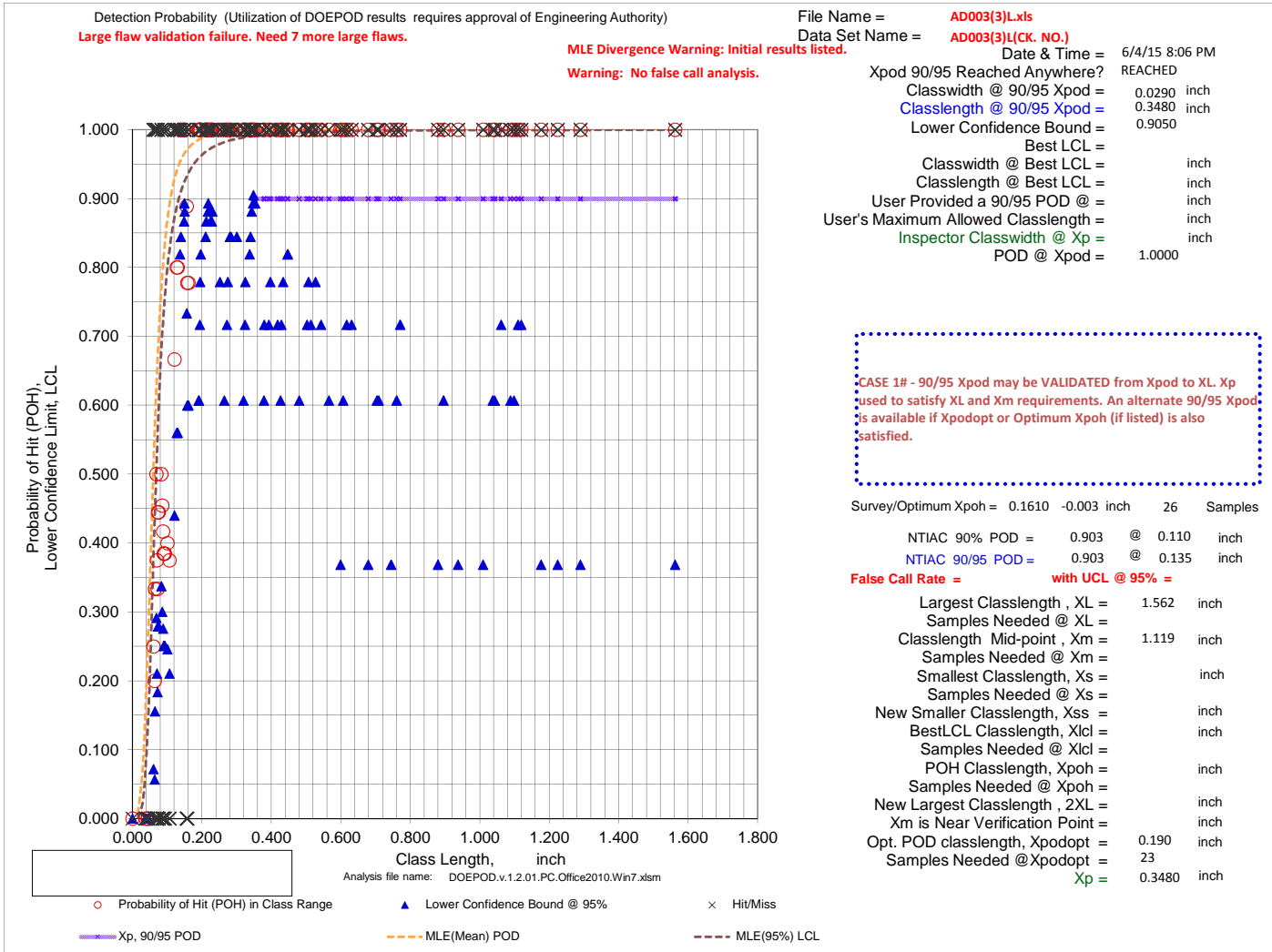
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = AD003(3)L.xls
 Data Set Name = AD003(3)L(CK. NO.)

Directed DOE Options

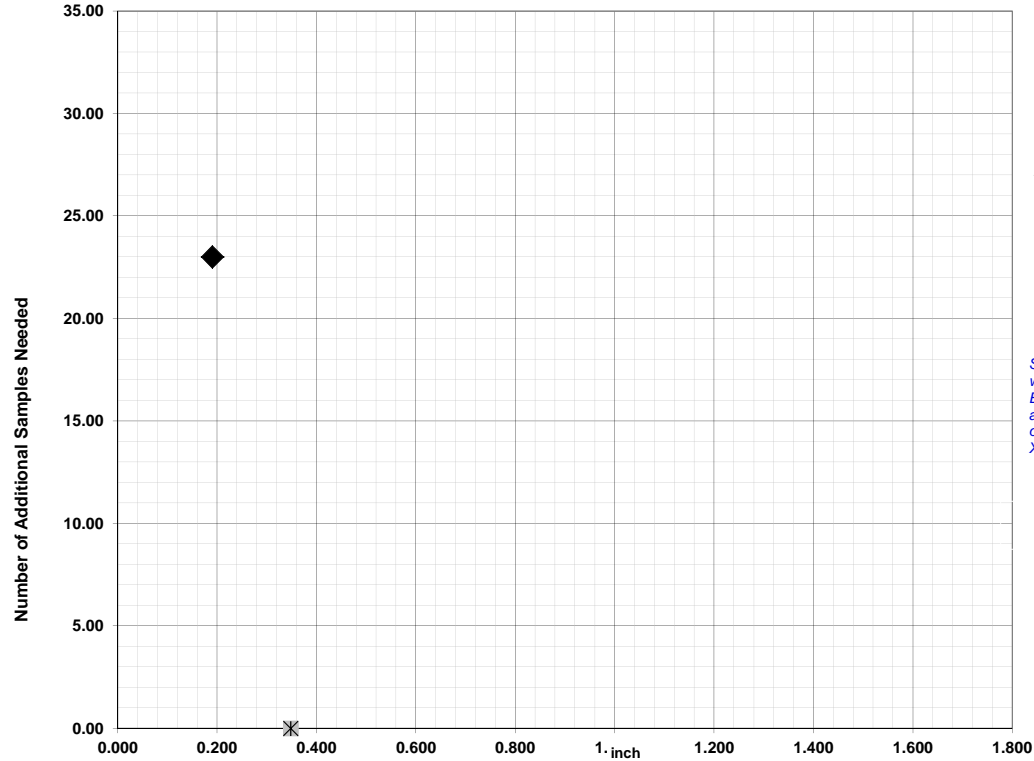


TABLE C

Class Length	Additional Samples
XL =	1.562
Xm =	1.119
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.190 23

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

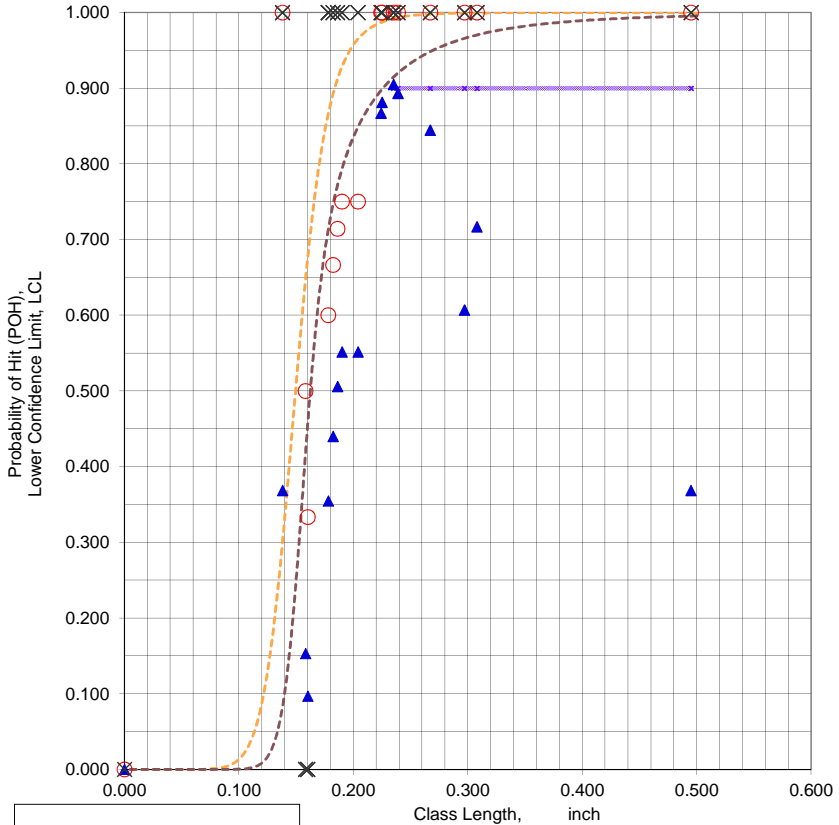
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 0.705.

Note: Xpodopt is within one class width of Xpod. **Warning: No false call analysis.**



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **AE001(3)L.xls**
 Data Set Name = **AE001(3)(CK. NO.)**
 Date & Time = 6/4/15 8:10 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0570 inch
 Classlength @ 90/95 Xpod = 0.2350 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1# - 90/95 Xpod may be VALIDATED from Xpod to XL. Xp used to satisfy XL and Xm requirements. An alternate 90/95 Xpod is available if Xpodopt or Optimum Xpoh (if listed) is also satisfied.

Survey/Optimum Xpoh = 0.1780 -0.017 inch 23 Samples
 NTIAC 90% POD = 0.907 @ 0.185 inch
 NTIAC 90/95 POD = 0.907 @ 0.230 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.495 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.308 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = 0.224 inch
 Samples Needed @ Xpodopt = 8
 Xp = 0.2350 inch

File Name = AE001(3)L.xls
 Data Set Name = AE001(3)L(CK. NO.)

Directed DOE Options

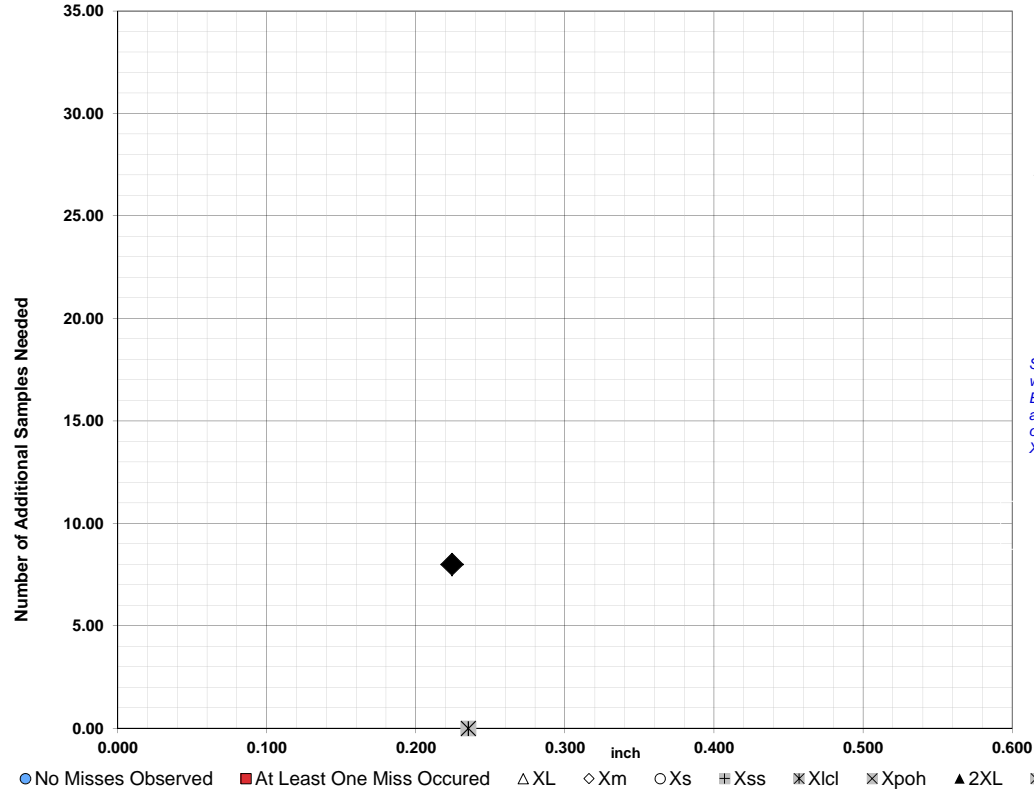


TABLE C

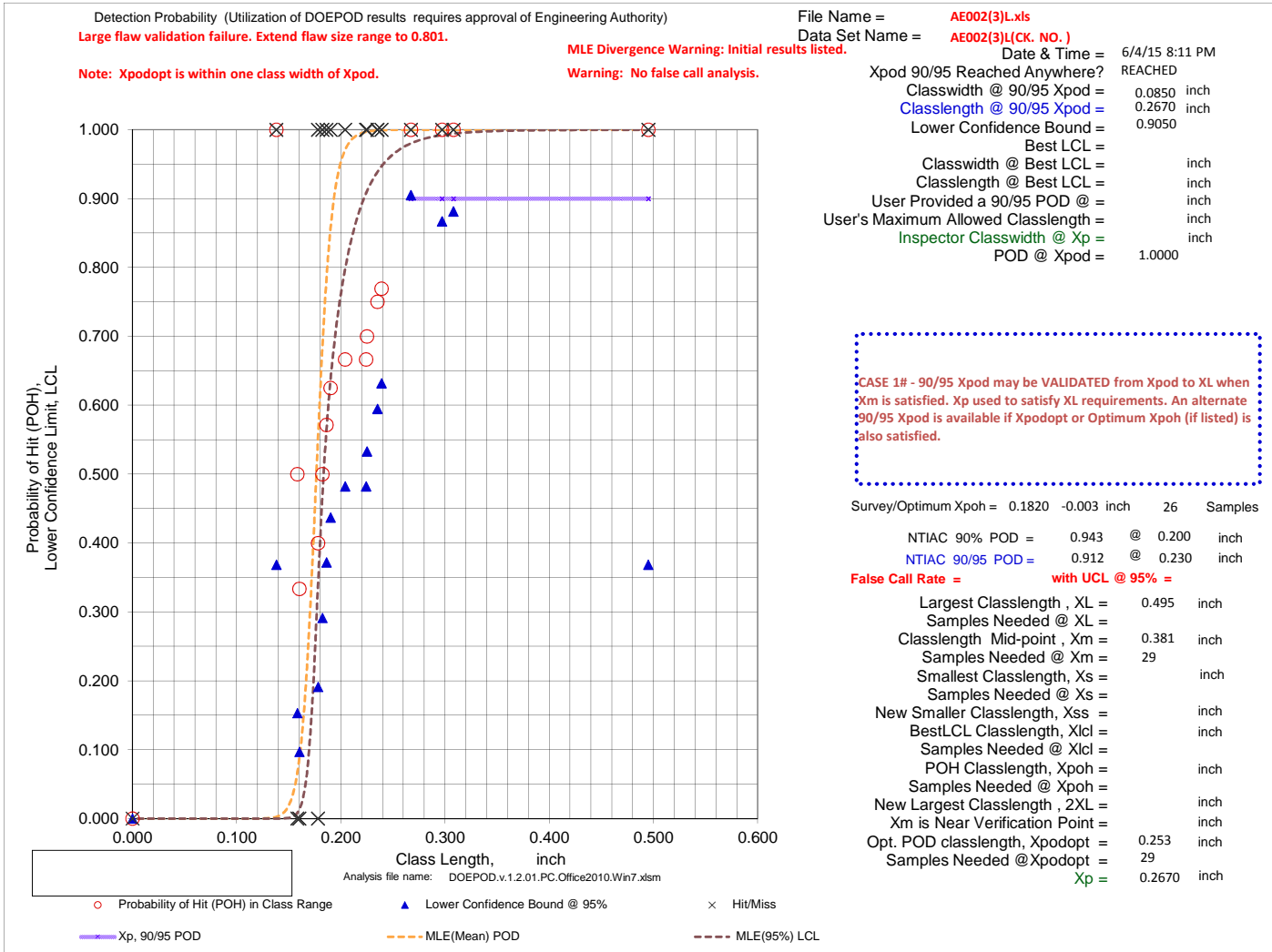
Class Length	Additional Samples
XL =	0.495
Xm =	0.308
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.224 8

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = AE002(3)L.xls
 Data Set Name = AE002(3)L(CK. NO.)

Directed DOE Options

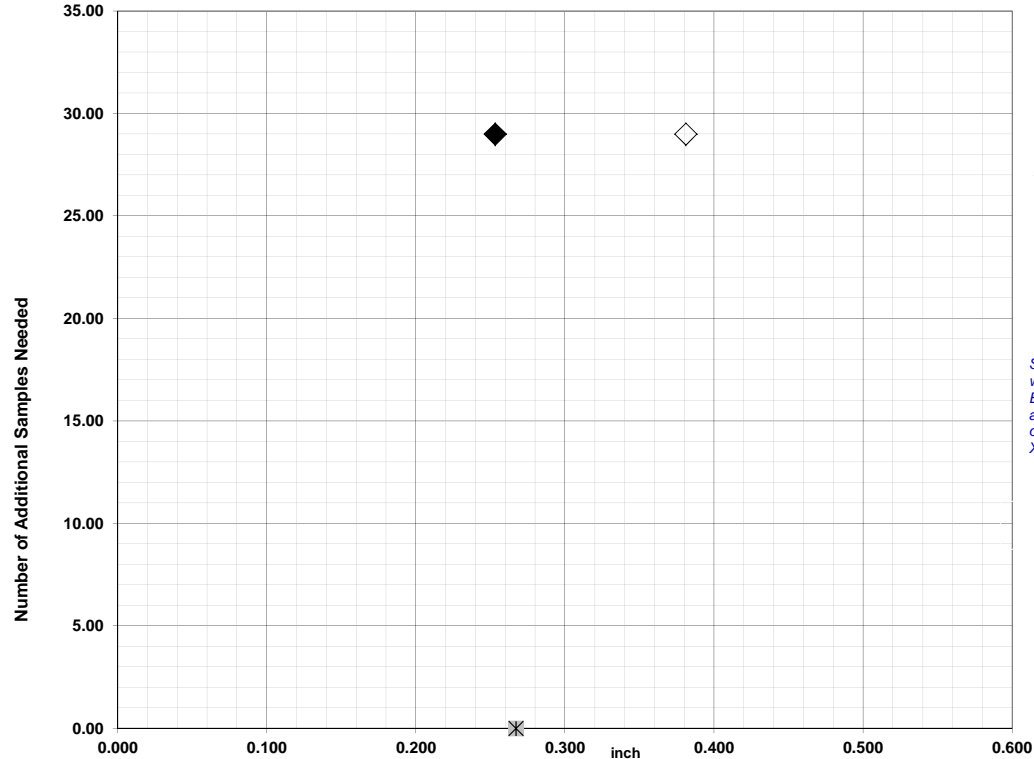


TABLE C

Class Length	Additional Samples
XL =	0.495
Xm =	0.381
Xs =	29
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.253
	29

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

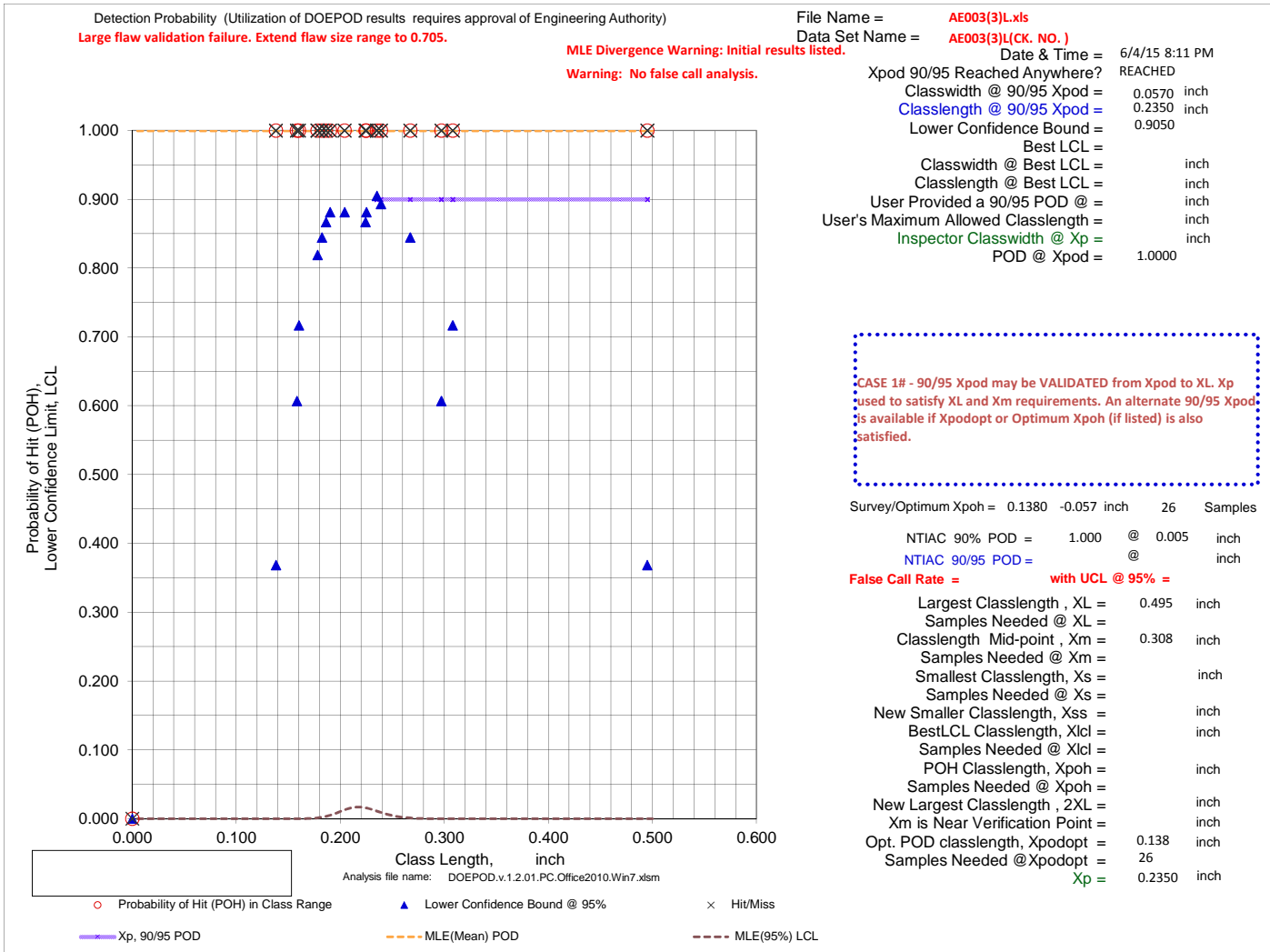
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = AE003(3)L.xls
 Data Set Name = AE003(3)L(CK. NO.)

Directed DOE Options

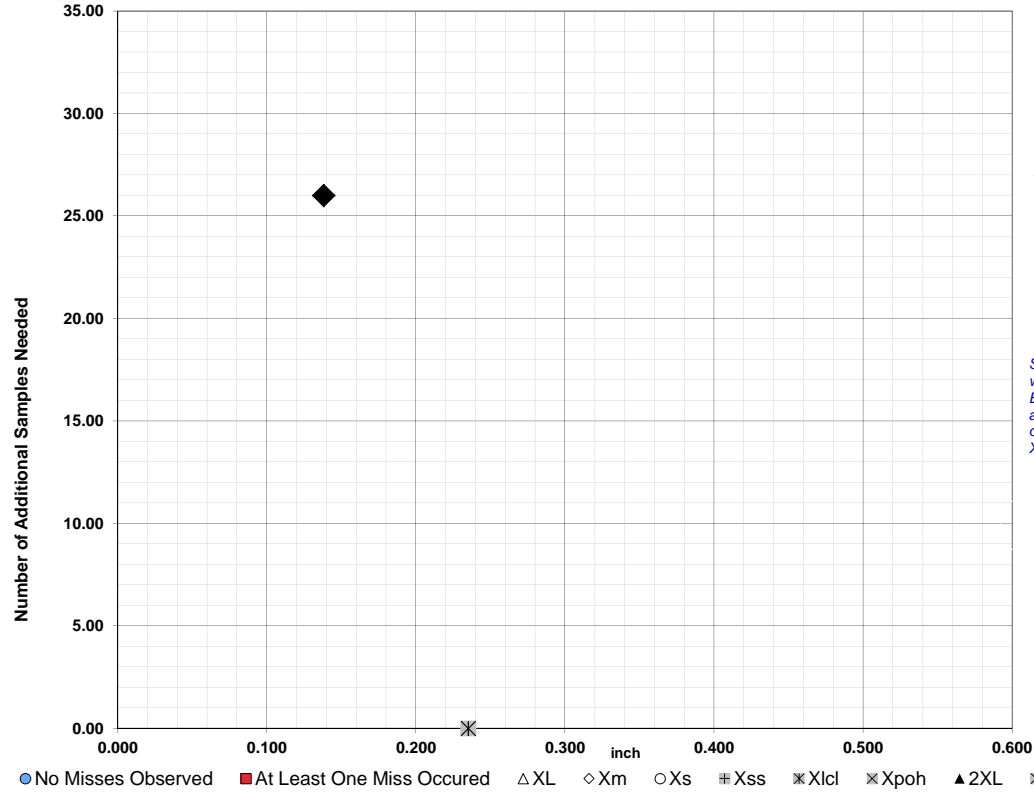


TABLE C

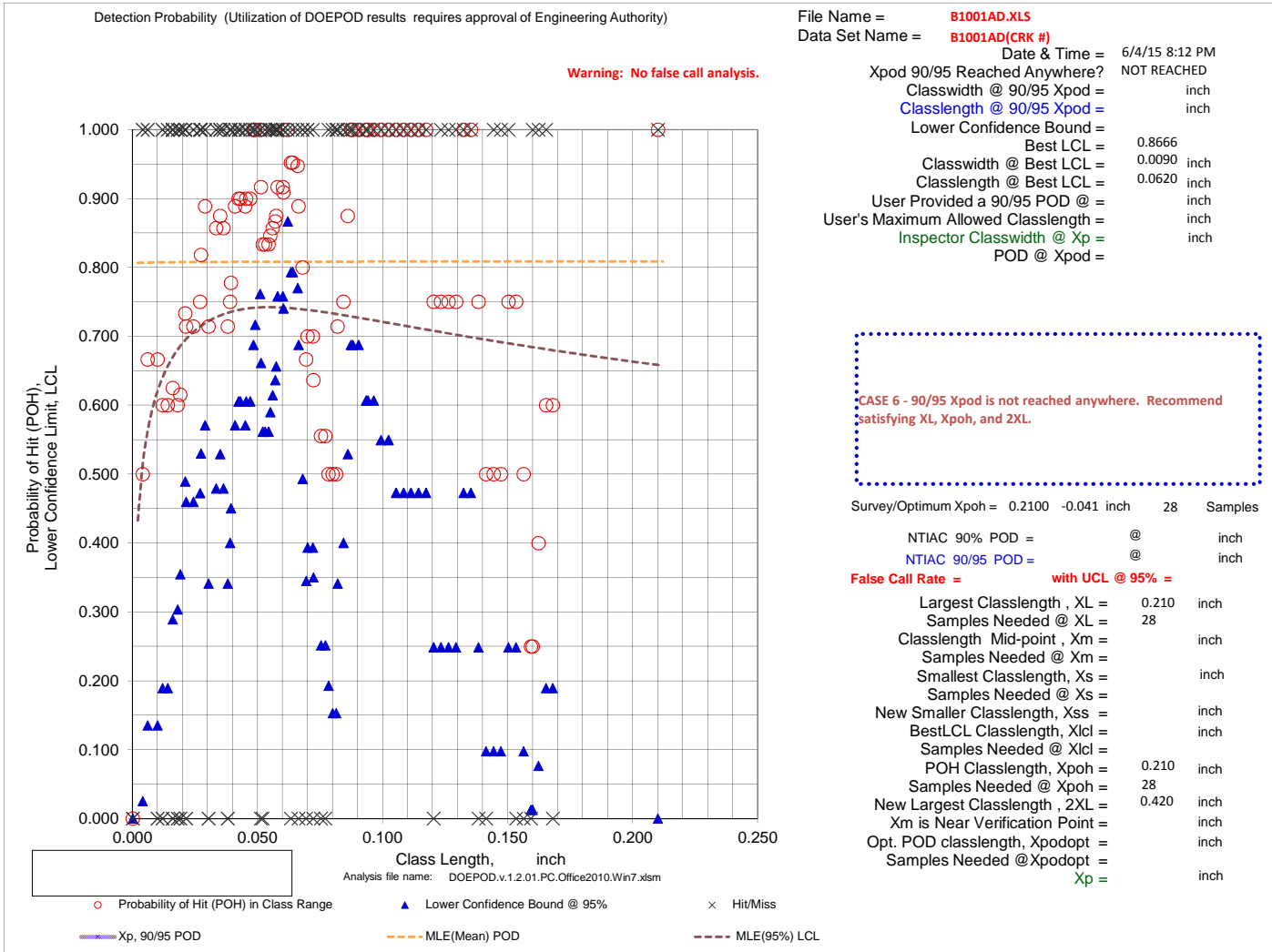
Class Length	Additional Samples
XL =	0.495
Xm =	0.308
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.138 26

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = B1001AD.XLS
 Data Set Name = B1001AD(CRK #)

Directed DOE Options

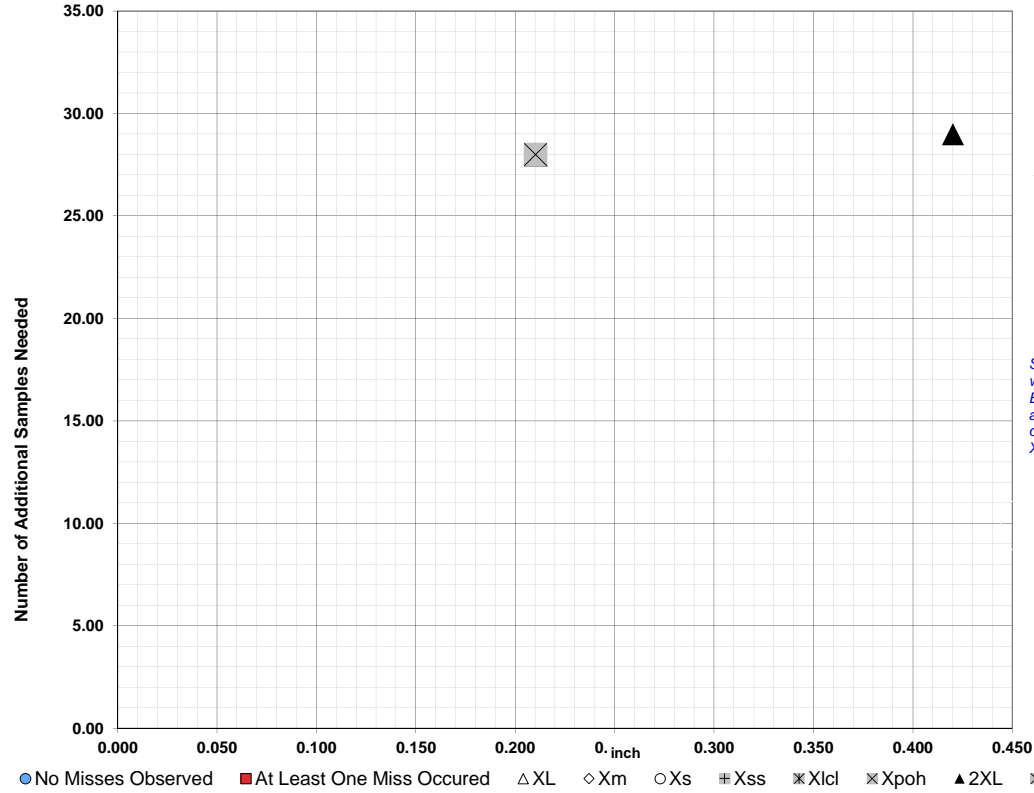


TABLE C

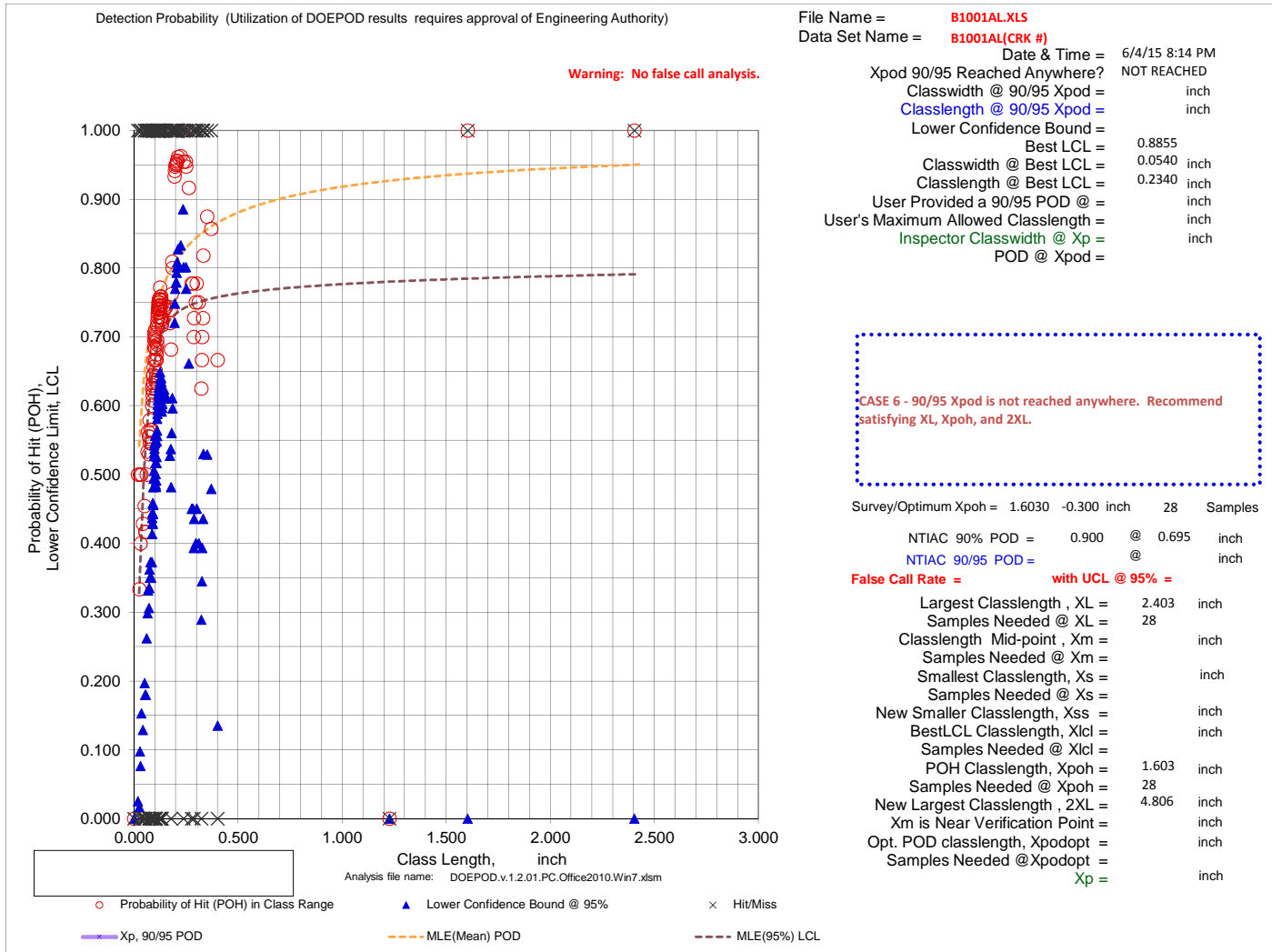
Class Length	Additional Samples
XL = 0.210	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.210	28
2XL = 0.420	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = B1001AL.XLS
 Data Set Name = B1001AL(CRK #)

Directed DOE Options

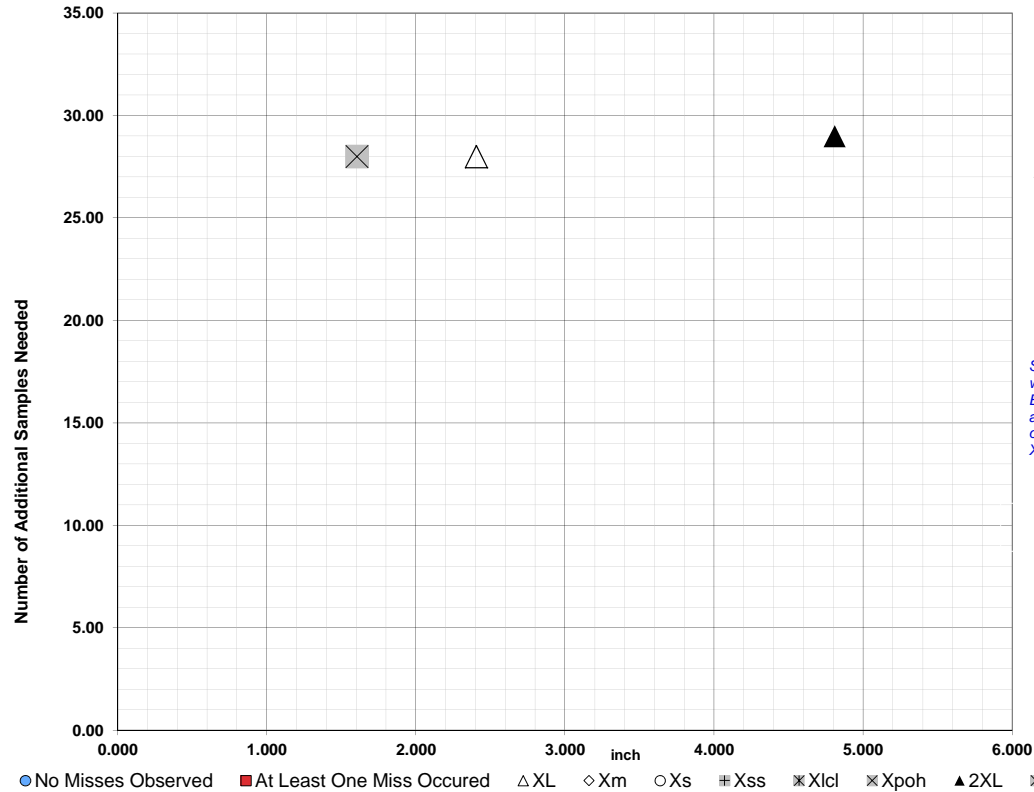


TABLE C

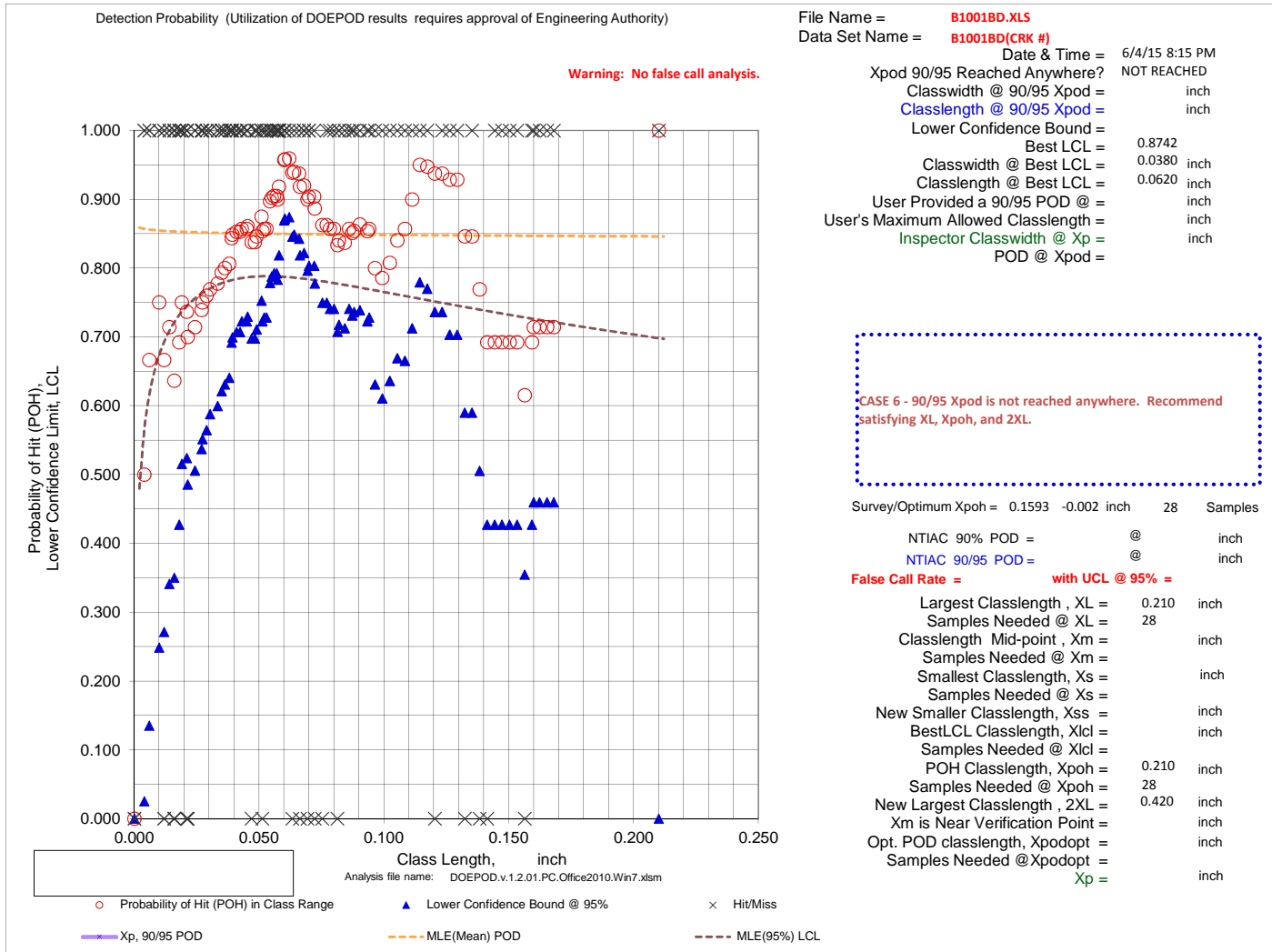
Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 1.603	28
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = B1001BD.XLS
 Data Set Name = B1001BD(CRK #)

Directed DOE Options

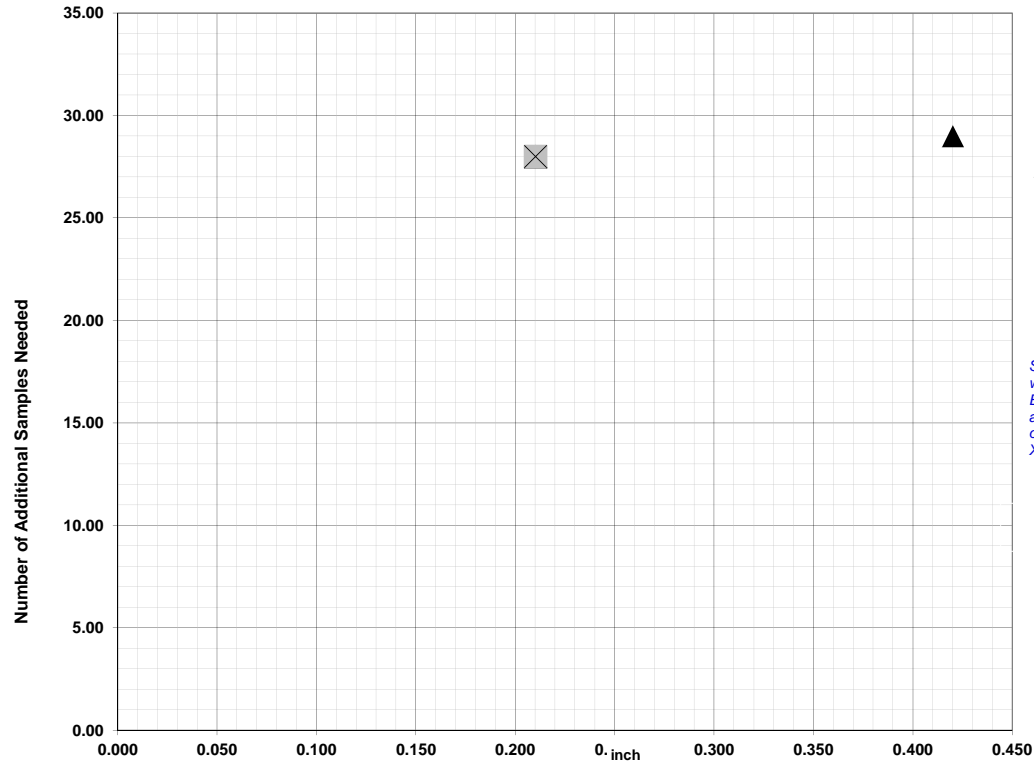


TABLE C

Class Length	Additional Samples
XL = 0.210	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.210	28
2XL = 0.420	29
**Alternate Xm =	
Xpodopt =	

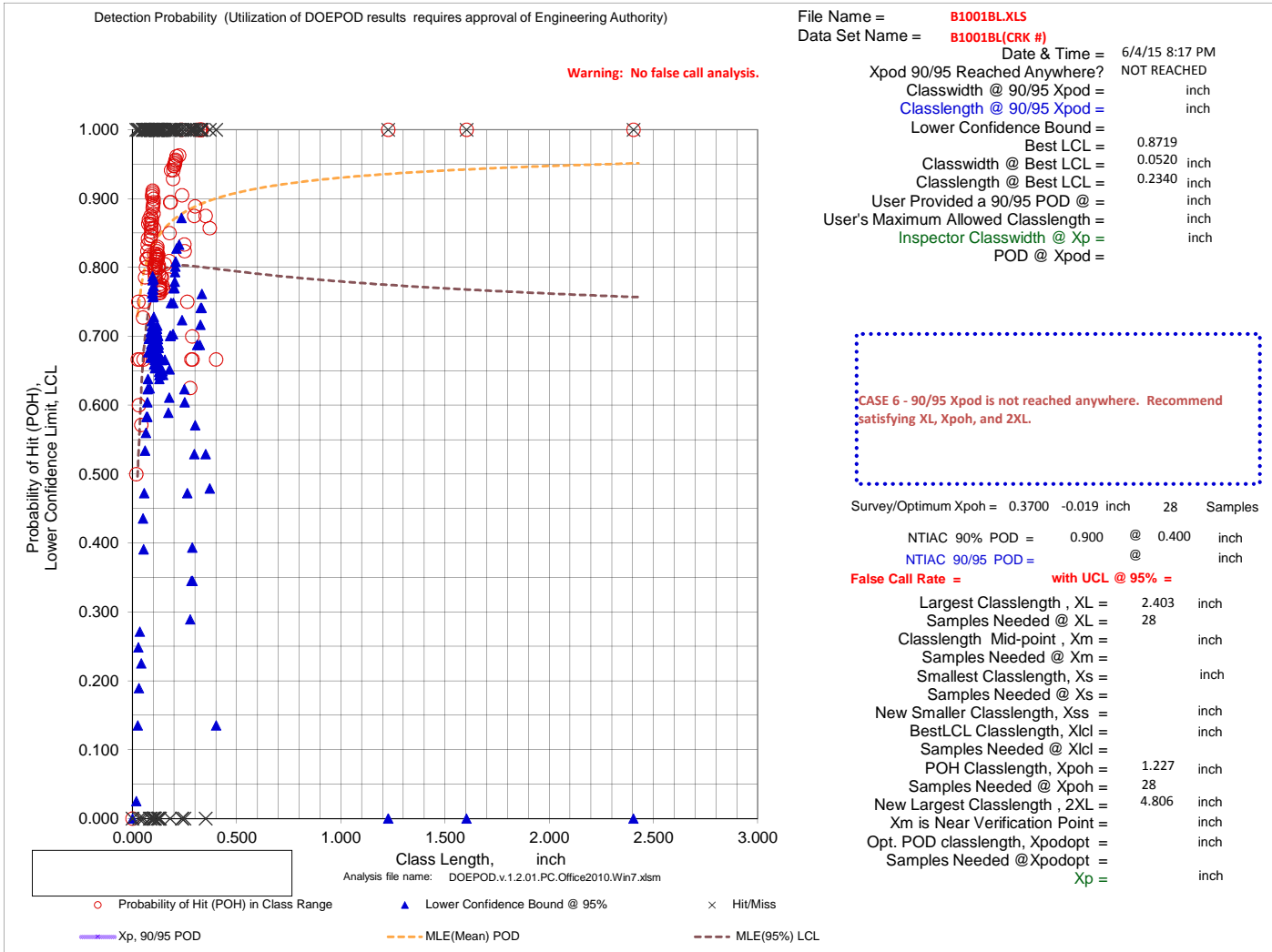
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = B1001BL.XLS
 Data Set Name = B1001BL(CRK #)

Directed DOE Options

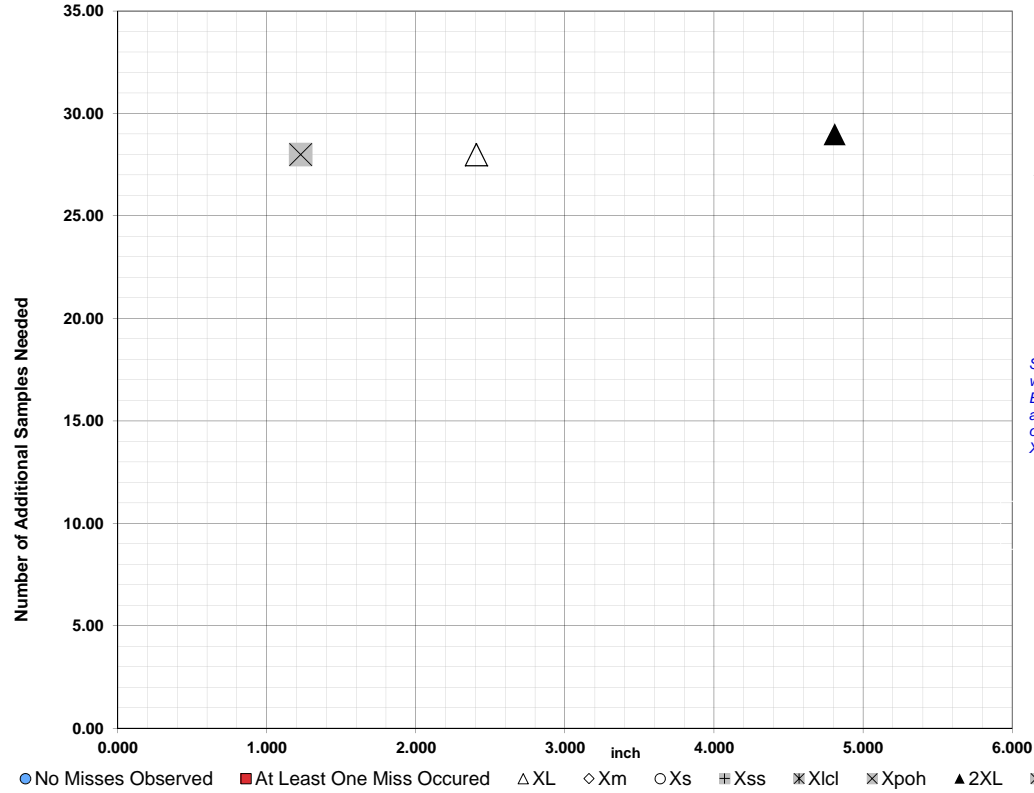


TABLE C

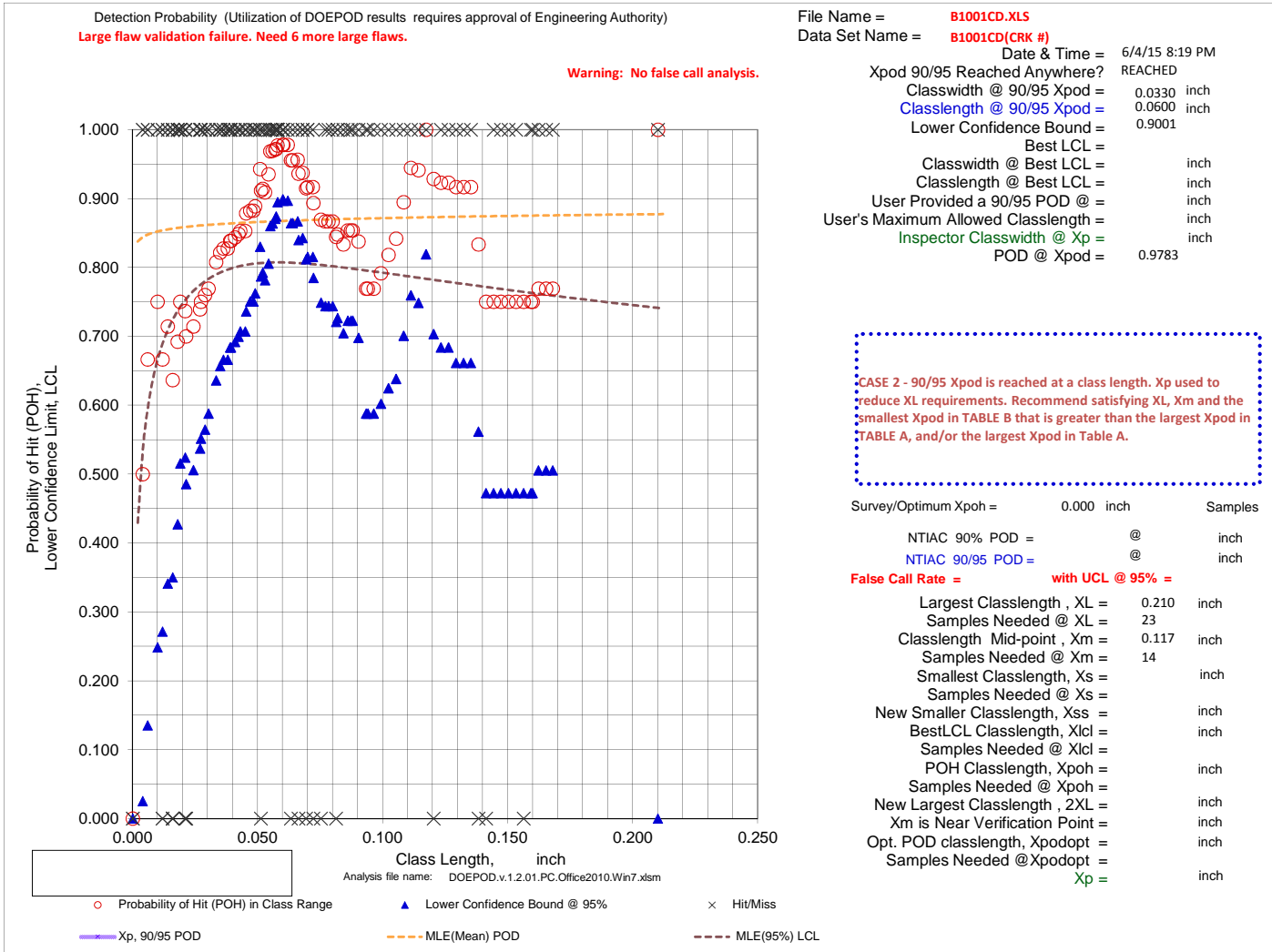
Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.227	28
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = B1001CD.XLS
 Data Set Name = B1001CD(CRK #)

Directed DOE Options

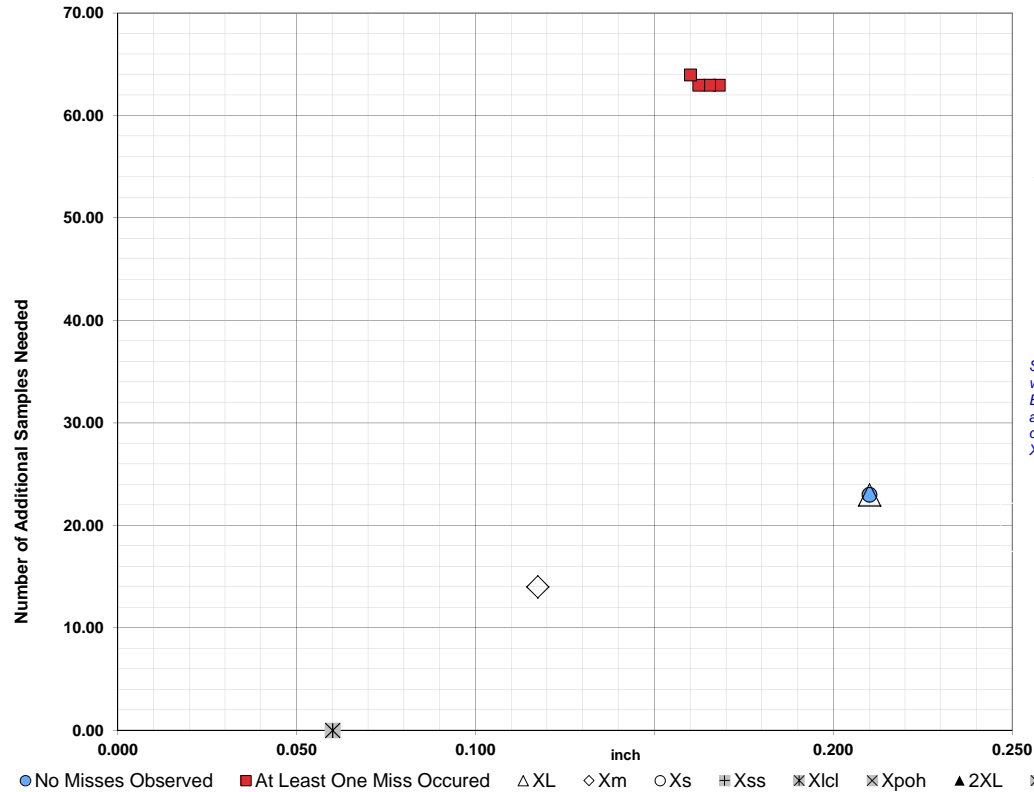


TABLE C

Class Length	Additional Samples
XL = 0.210	23
Xm = 0.117	14
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

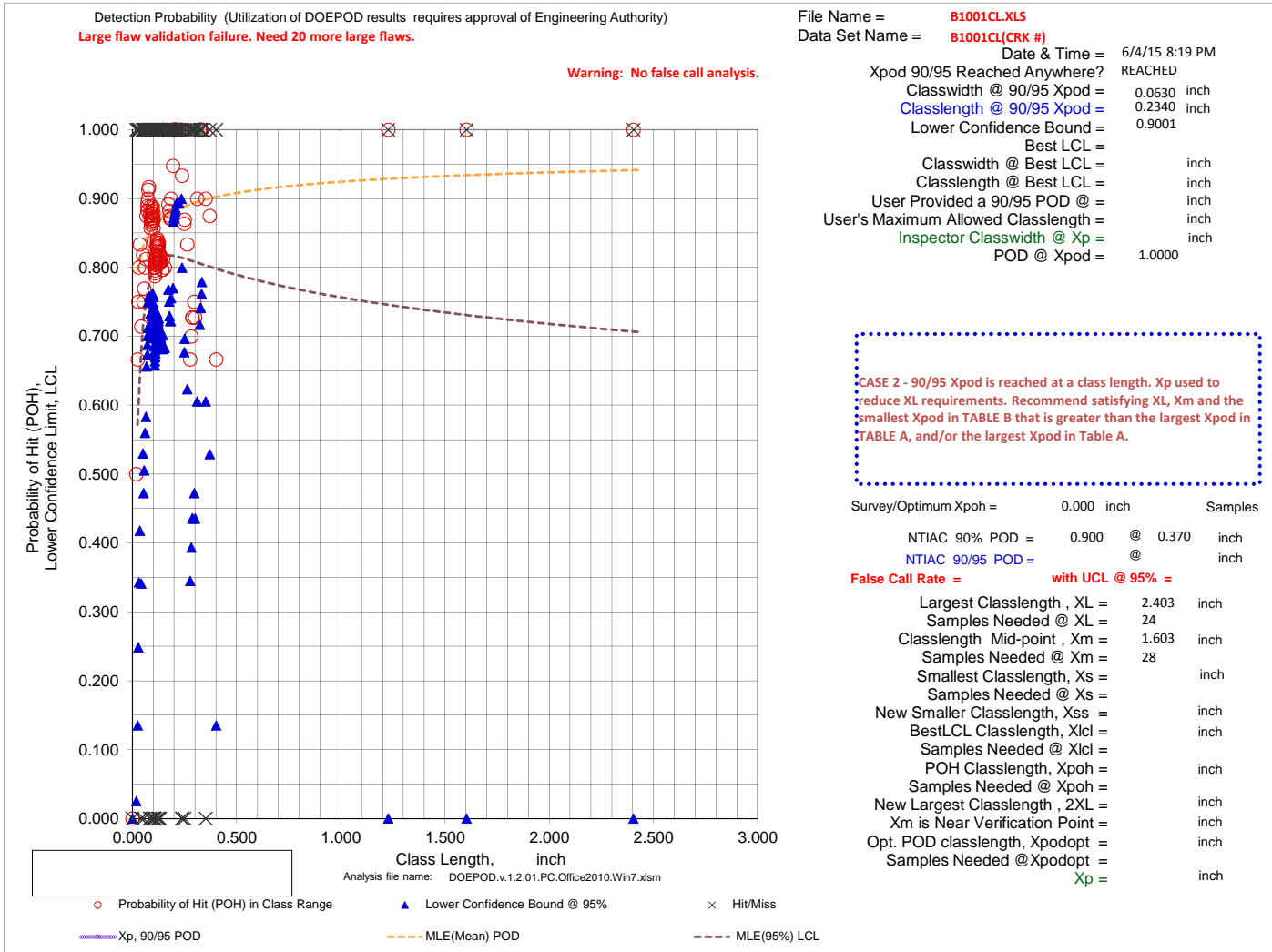
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.1680	63	0.2100	23
0.1653	63		
0.1623	63		
0.1600	64		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = B1001CL.XLS
 Data Set Name = B1001CL(CRK #)

Directed DOE Options

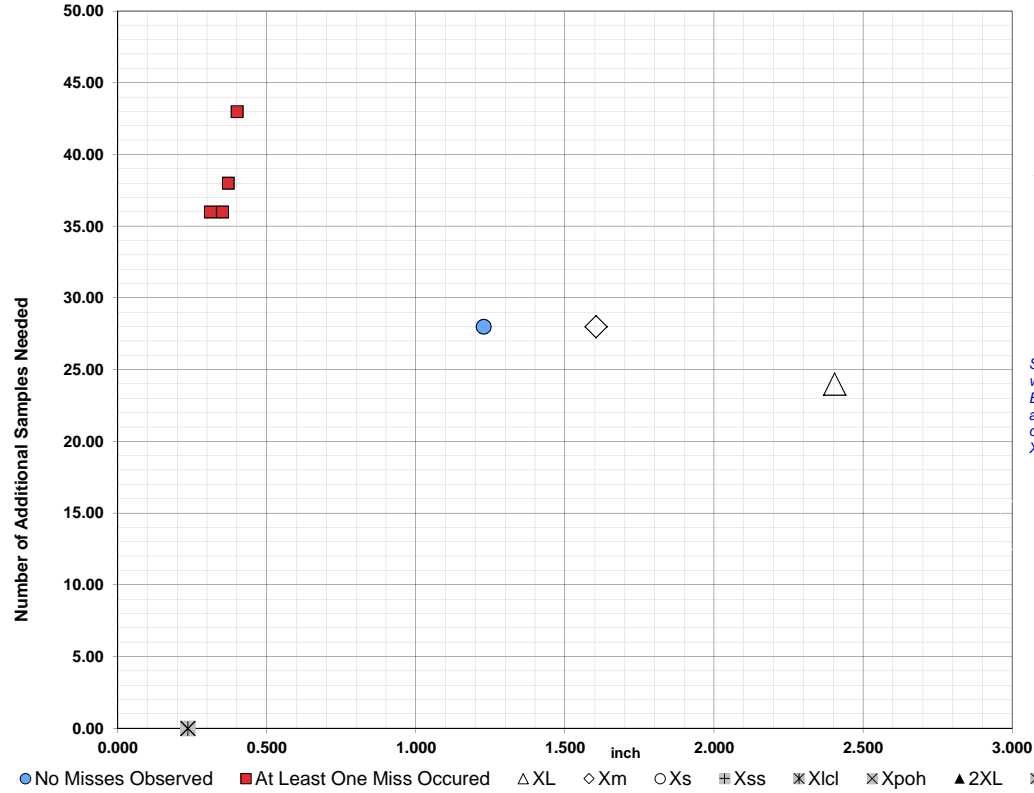


TABLE C

Class Length	Additional Samples
XL = 2.403	24
Xm = 1.603	28
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

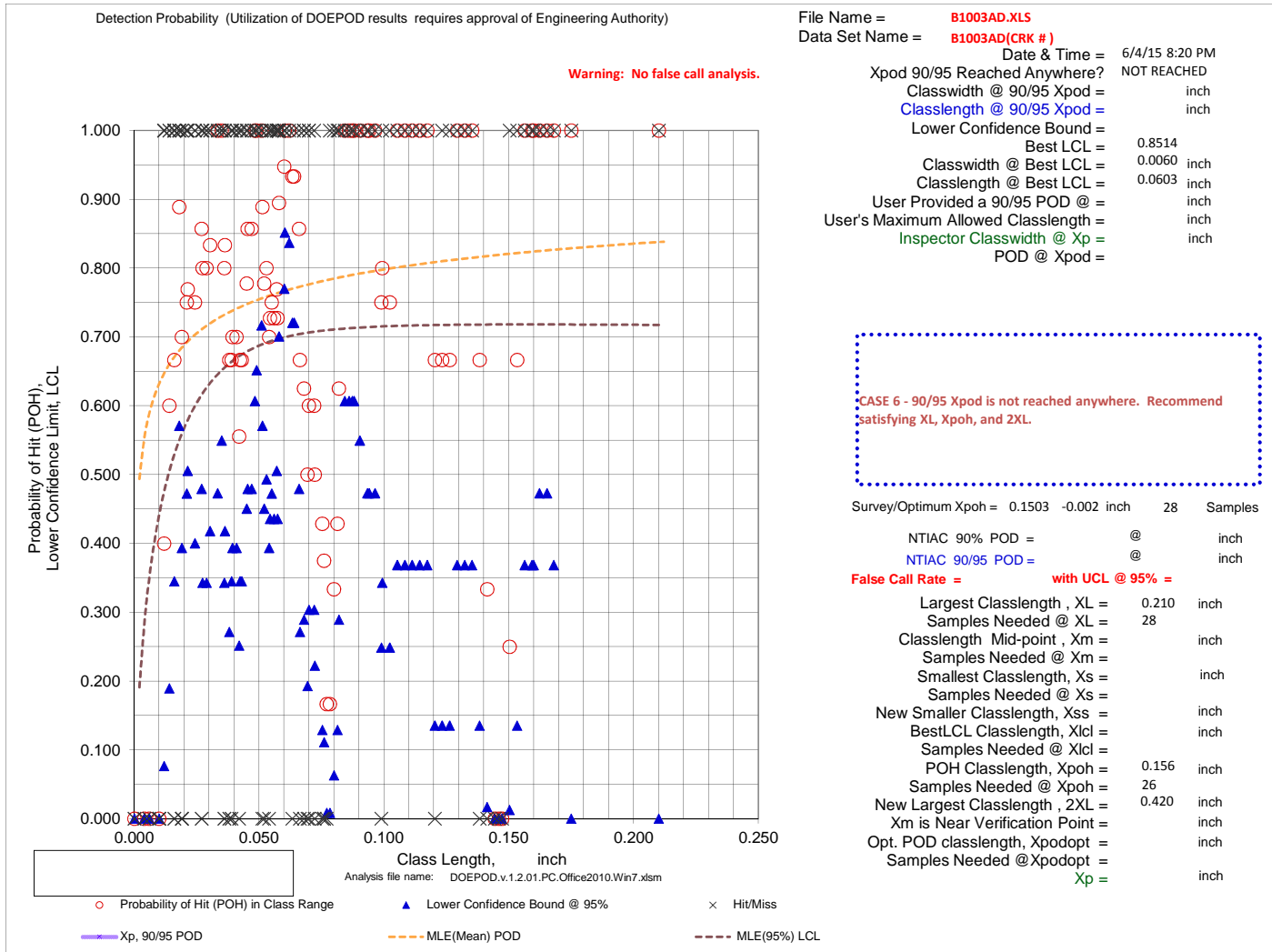
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.4000	43	1.2270	28
0.3700	38		
0.3500	36		
0.3090	36		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = B1003AD.XLS
 Data Set Name = B1003AD(CRK #)

Directed DOE Options

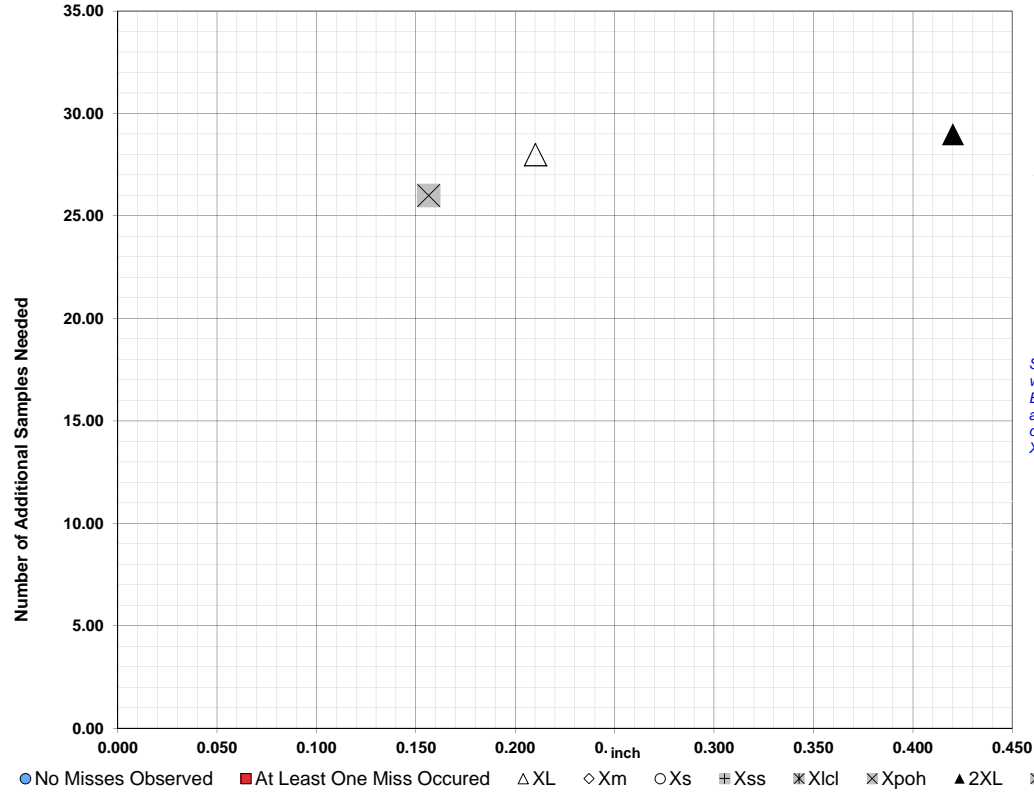


TABLE C

Class Length	Additional Samples
XL = 0.210	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.156	26
2XL = 0.420	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

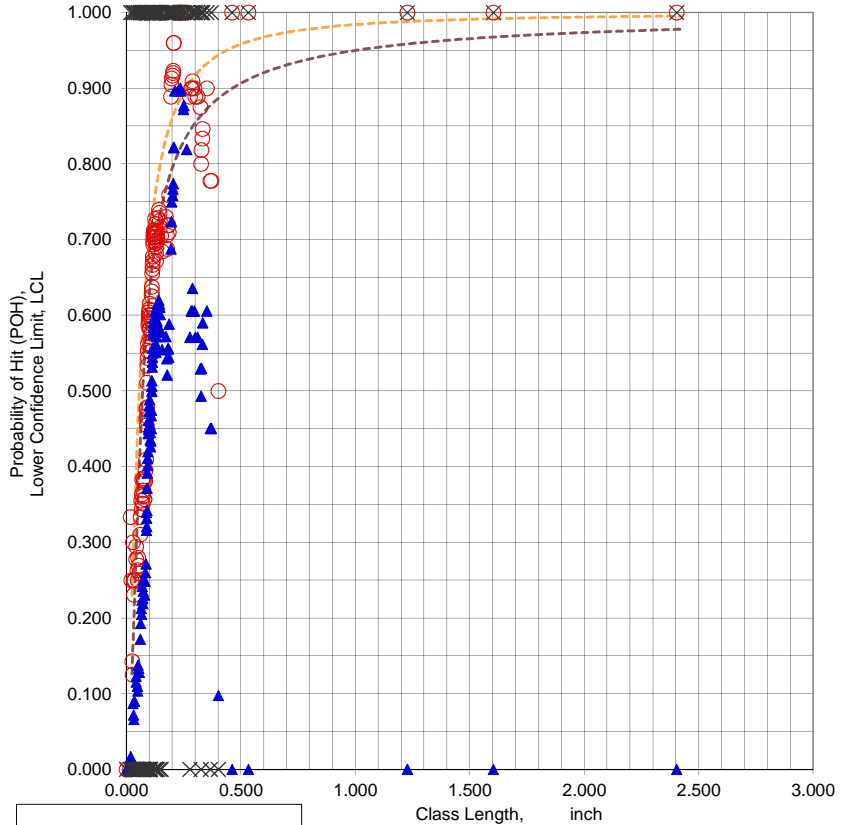
TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Need 19 more large flaws.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **B1003AL.XLS**
 Data Set Name = **B1003AL(CRK #)**
 Date & Time = 6/4/15 8:22 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0590 inch
 Classlength @ 90/95 Xpod = 0.2340 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Xp used to reduce XL requirements. Recommend satisfying XL, Xm and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in Table A.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.900 @ 0.260 inch
 NTIAC 90/95 POD = 0.900 @ 0.465 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 2.403 inch
 Samples Needed @ XL = 24
 Classlength Mid-point , Xm = 1.603 inch
 Samples Needed @ Xm = 28
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = B1003AL.XLS
 Data Set Name = B1003AL(CRK #)

Directed DOE Options

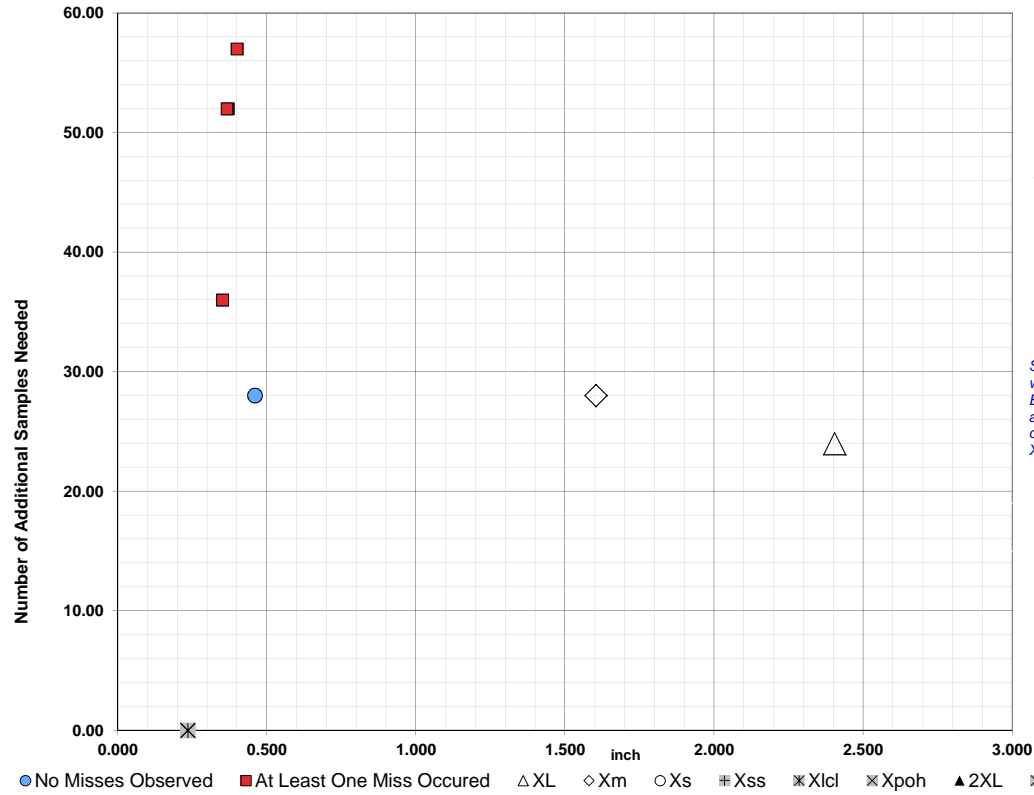


TABLE C

Class Length	Additional Samples
XL = 2.403	24
Xm = 1.603	28
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

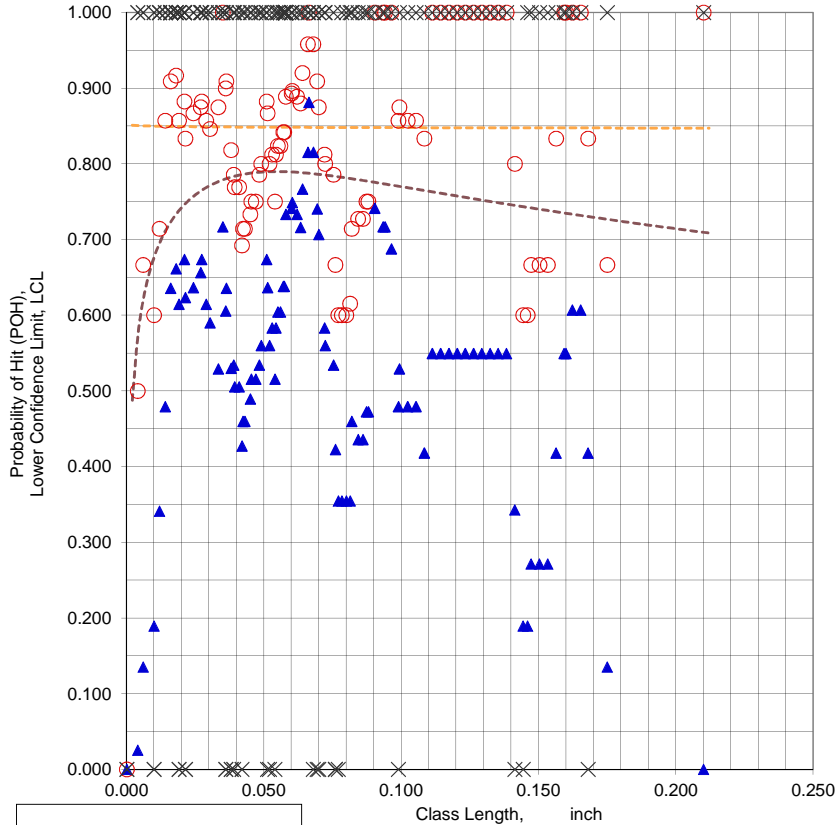
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.4000	57	0.4600	28
0.3700	52		
0.3650	52		
0.3500	36		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **B1003BD.XLS**
 Data Set Name = **B1003BD(CRK #)**
 Date & Time = 6/4/15 8:23 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8813
 Classwidth @ Best LCL = 0.0120 inch
 Classlength @ Best LCL = 0.0663 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.1750 -0.006 inch 28 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.210 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.210 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 0.420 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
 — Xp, 90/95 POD
 - - - MLE(Mean) POD
 - - - MLE(95%) LCL

File Name = B1003BD.XLS
 Data Set Name = B1003BD(CRK #)

Directed DOE Options

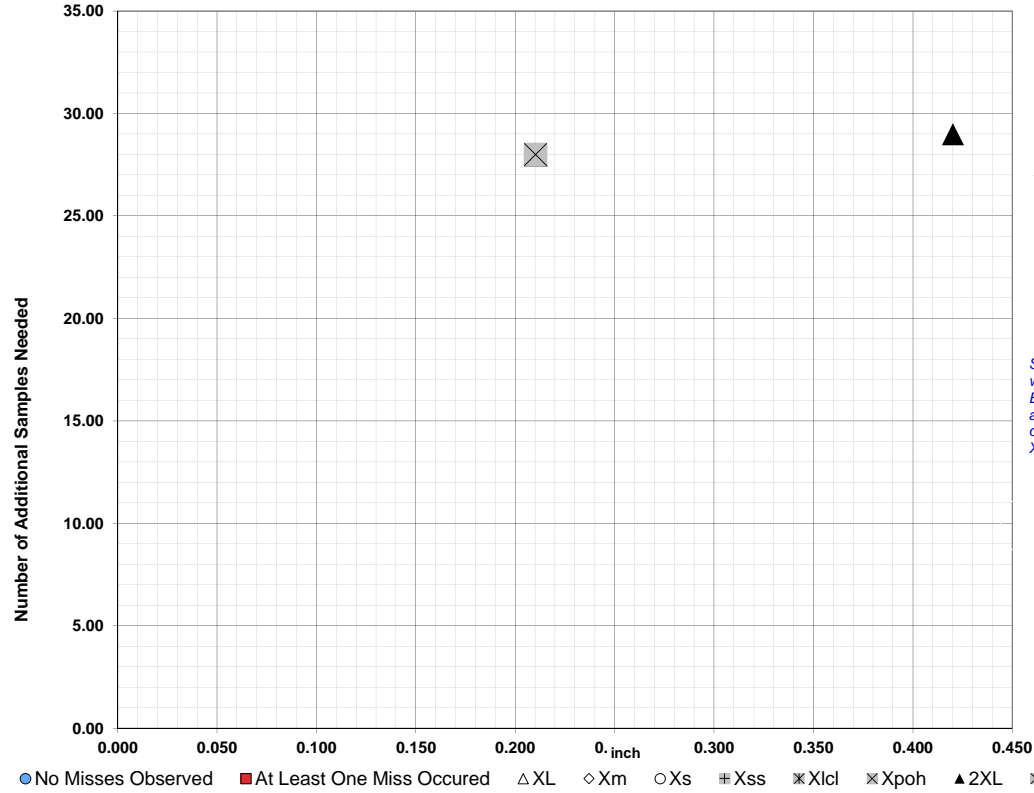


TABLE C

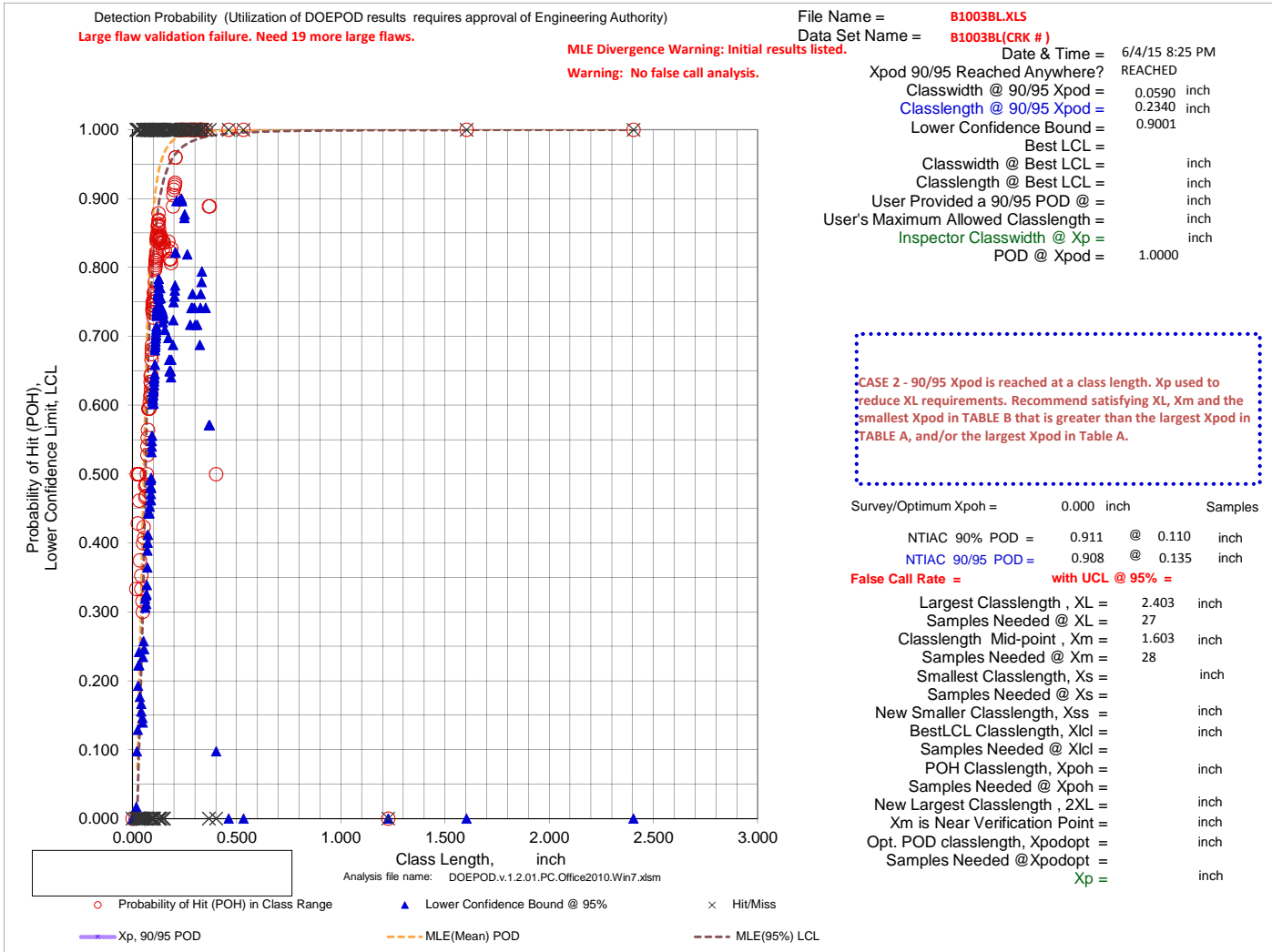
Class Length	Additional Samples
XL = 0.210	28
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 0.210	28
2XL = 0.420	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
--------------------	----------	--------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = B1003BL.XLS
 Data Set Name = B1003BL(CRK #)

Directed DOE Options

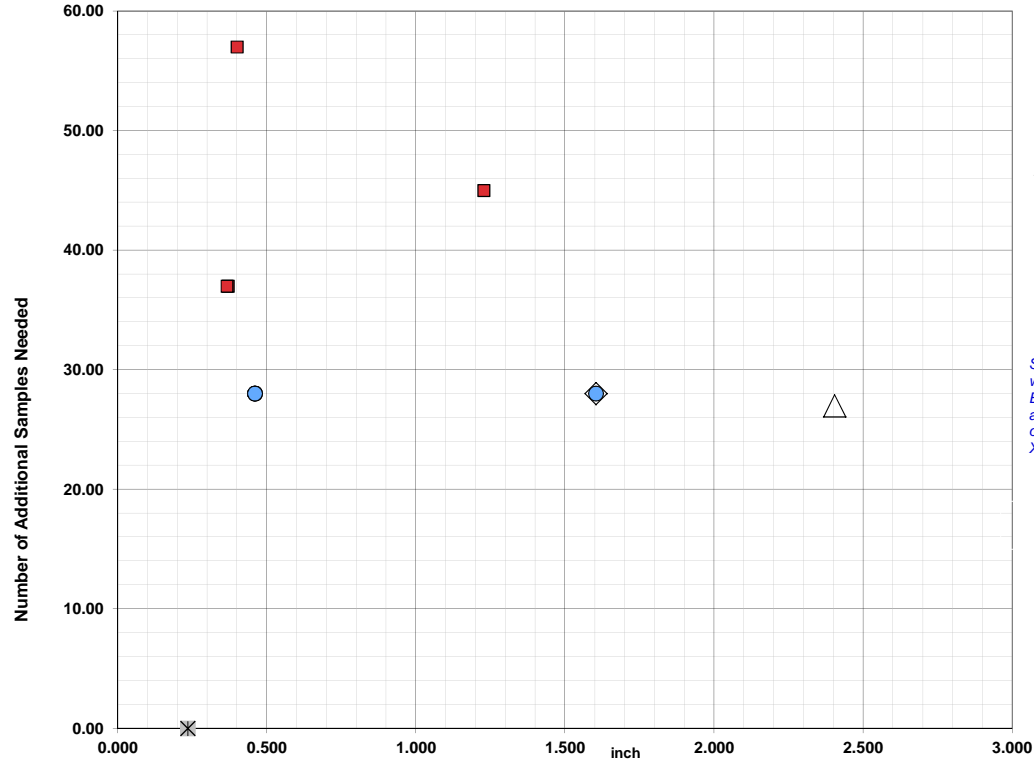


TABLE C

Class Length	Additional Samples
XL = 2.403	27
Xm = 1.603	28
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

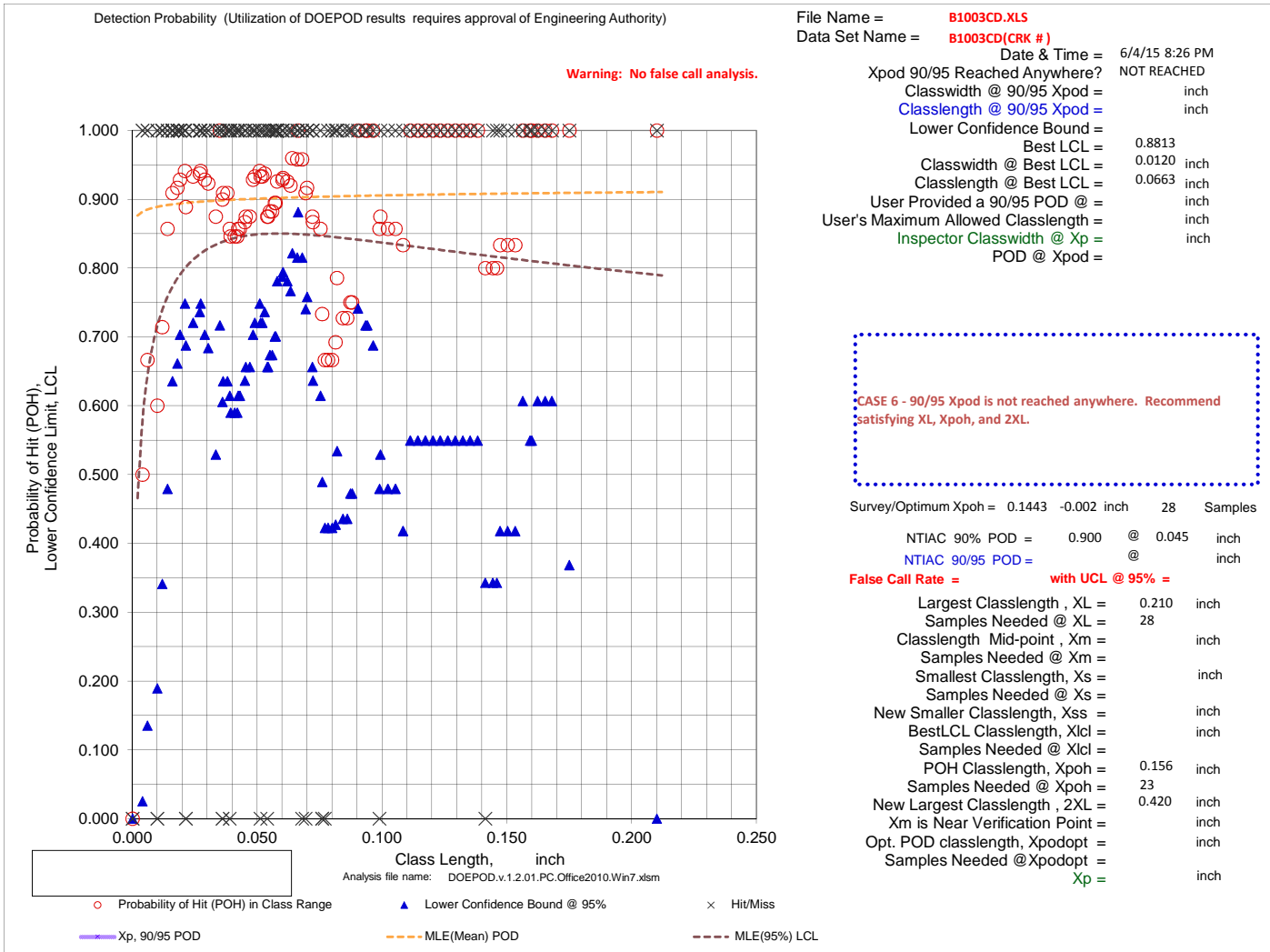
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
1.2270	45	1.6030	28
0.4000	57	0.4600	28
0.3700	37	0.4600	28
0.3650	37	0.4600	28

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs □ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = B1003CD.XLS
 Data Set Name = B1003CD(CRK #)

Directed DOE Options

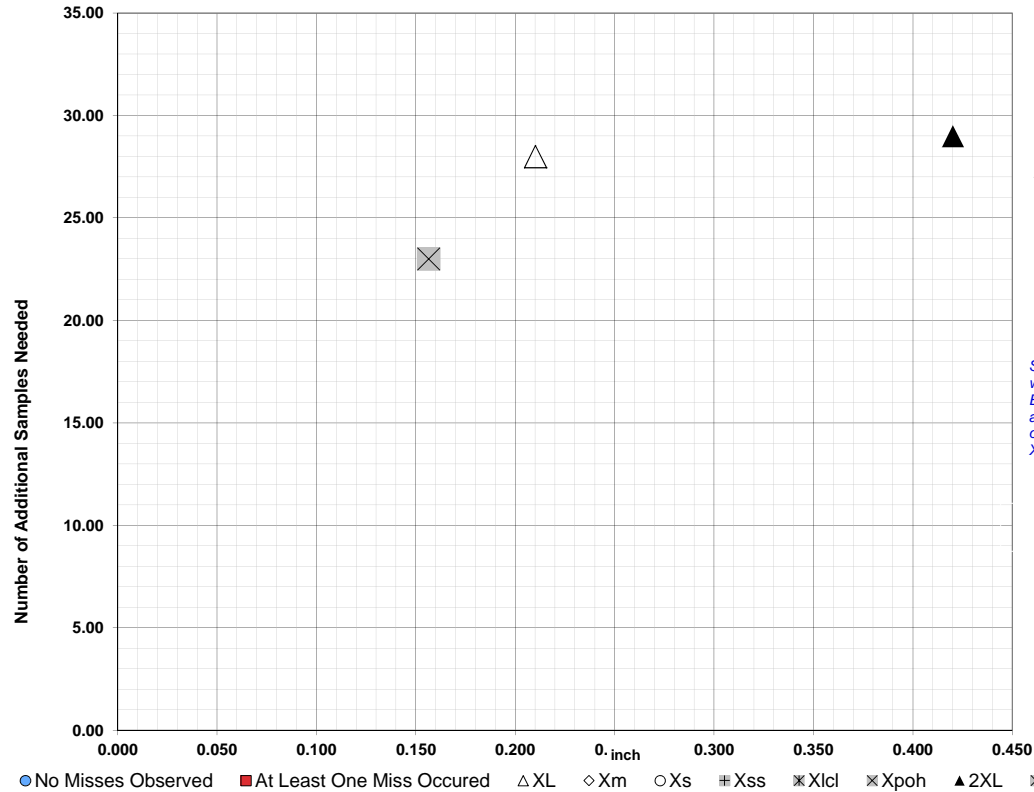


TABLE C

Class Length	Additional Samples
XL = 0.210	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.156	23
2XL = 0.420	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ⊗ Xlcl ⊗ Xpoh ▲ 2XL ⊗ Xpodopt ◆ Xpodopt

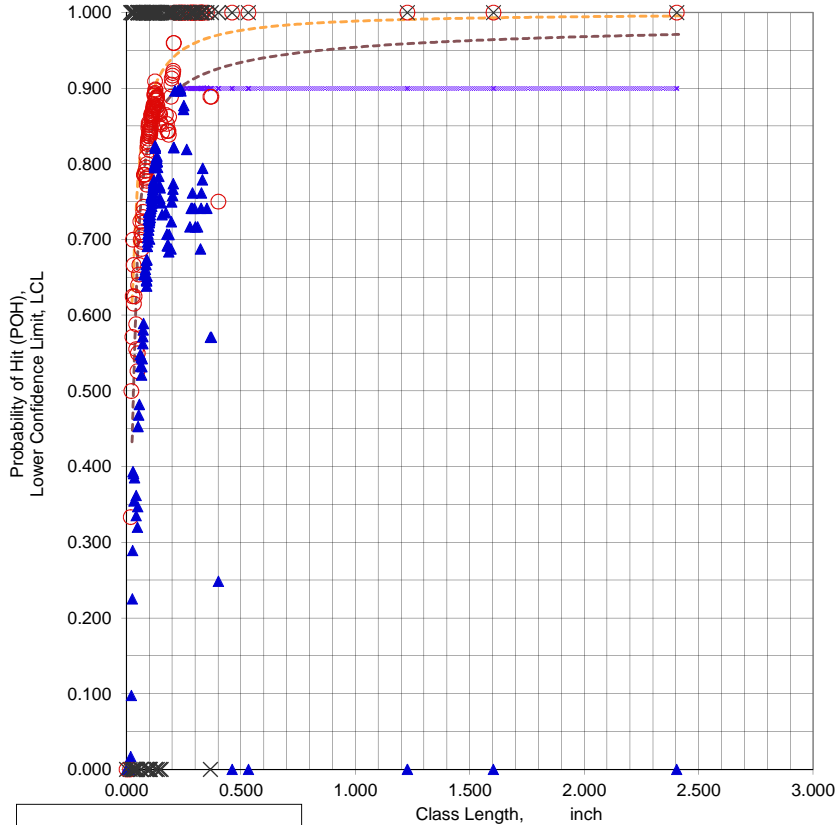
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 19 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **B1003CL.XLS**
 Data Set Name = **B1003CL(CRK #)**
 Date & Time = 6/4/15 8:27 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0590 inch
 Classlength @ 90/95 Xpod = 0.2340 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.900 @ 0.120 inch
 NTIAC 90/95 POD = 0.901 @ 0.235 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 2.403 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 1.603 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.2340 inch

File Name = B1003CL.XLS
 Data Set Name = B1003CL(CRK #)

Directed DOE Options

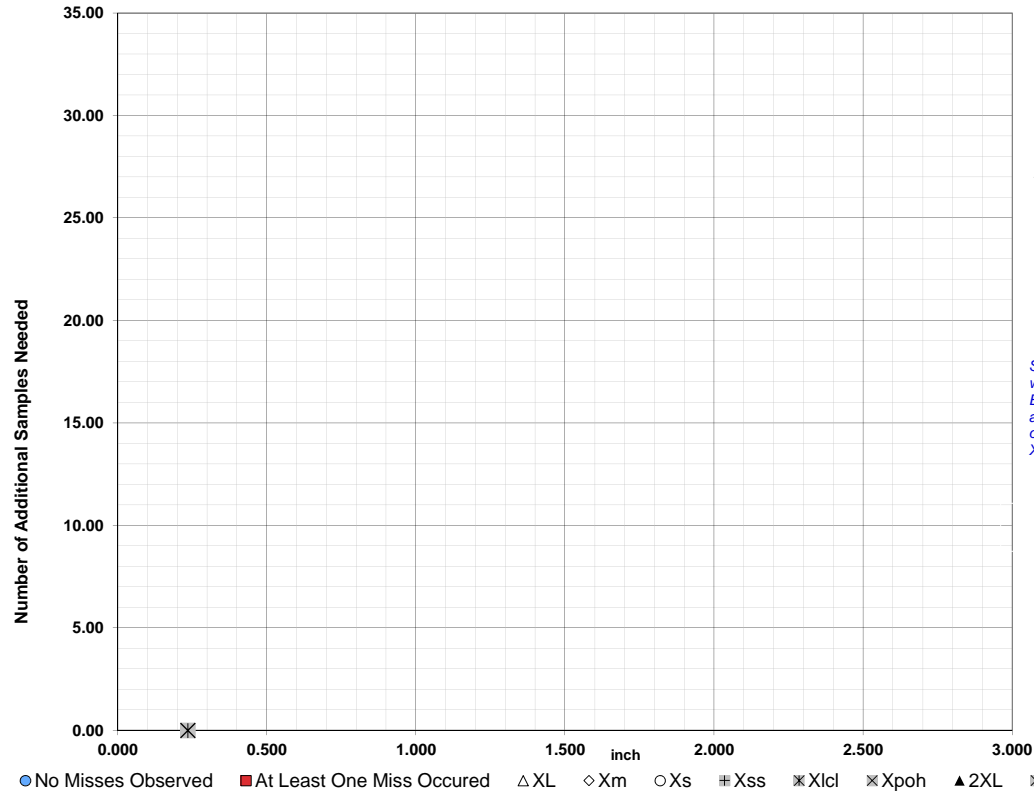


TABLE C

Class Length Additional Samples

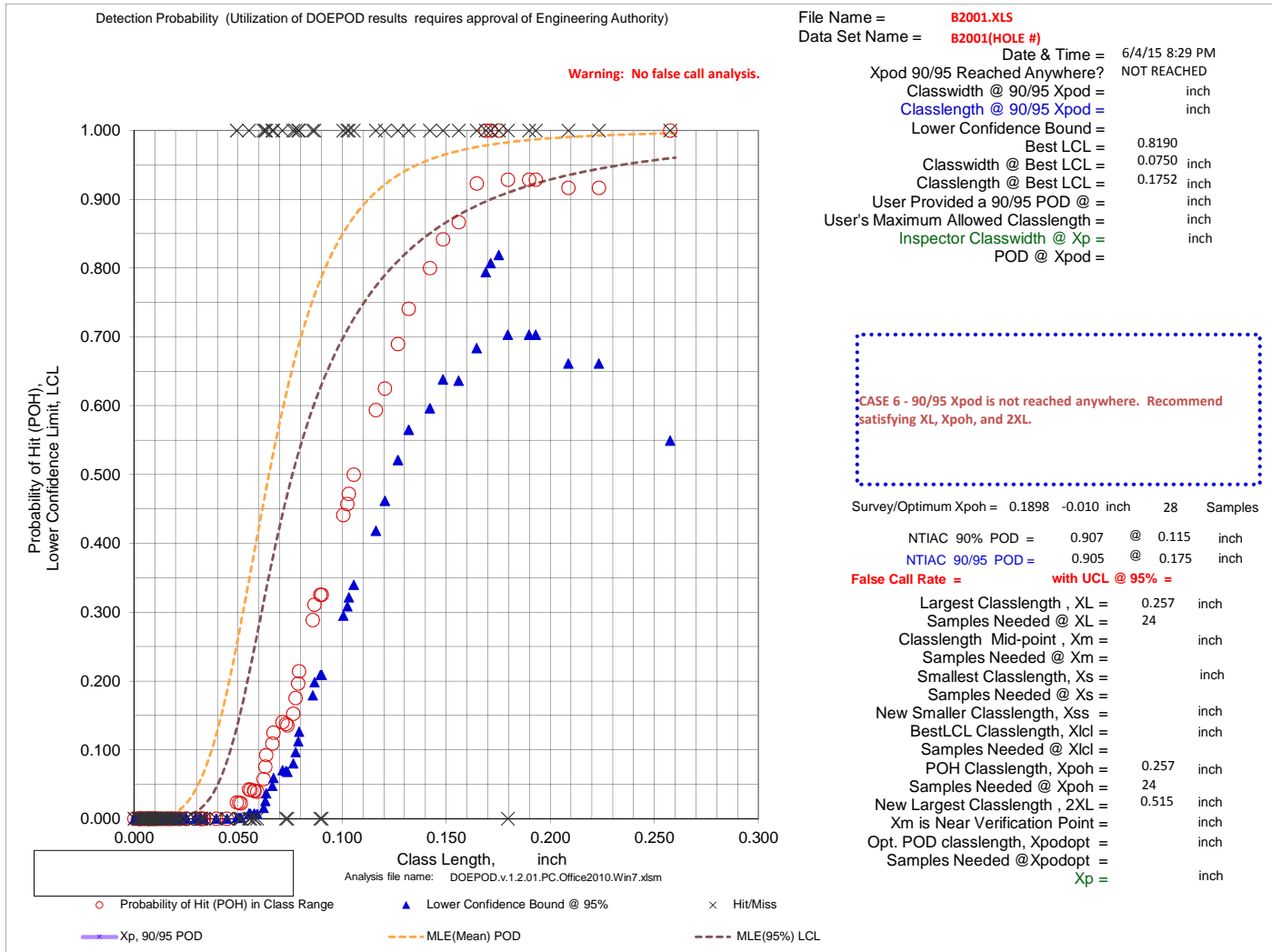
XL = 2.403
 Xm = 1.603
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = B2001.XLS
 Data Set Name = B2001(HOLE #)

Directed DOE Options

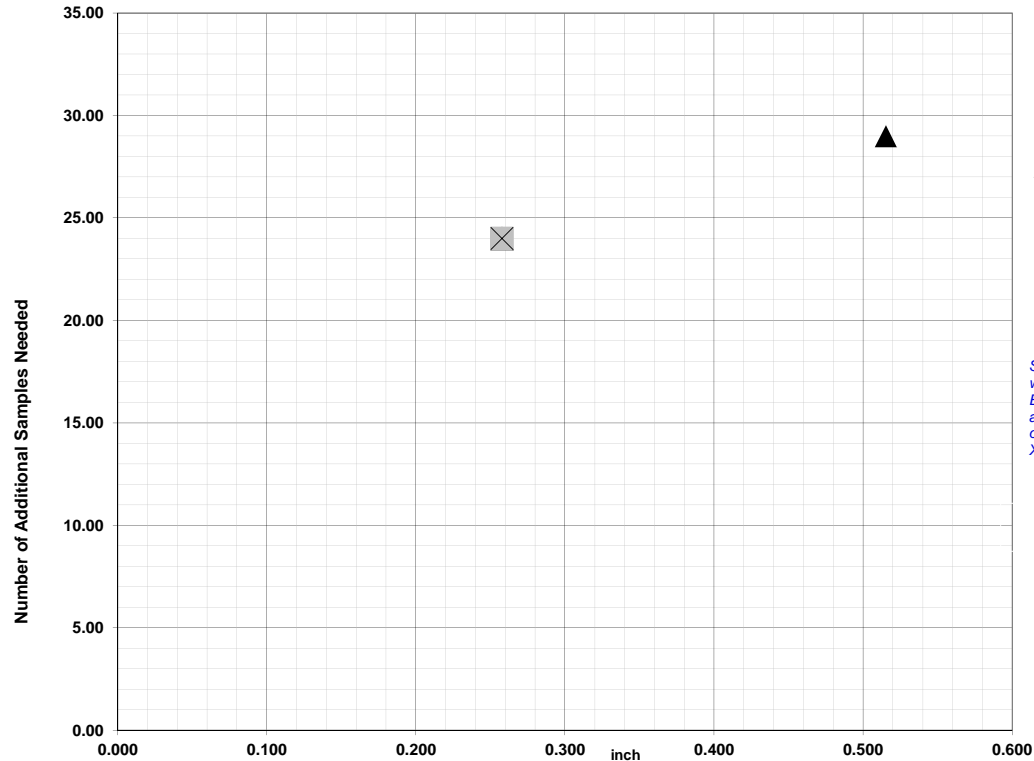


TABLE C

Class Length	Additional Samples
XL = 0.257	24
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.257	24
2XL = 0.515	29
**Alternate Xm =	
Xpodopt =	

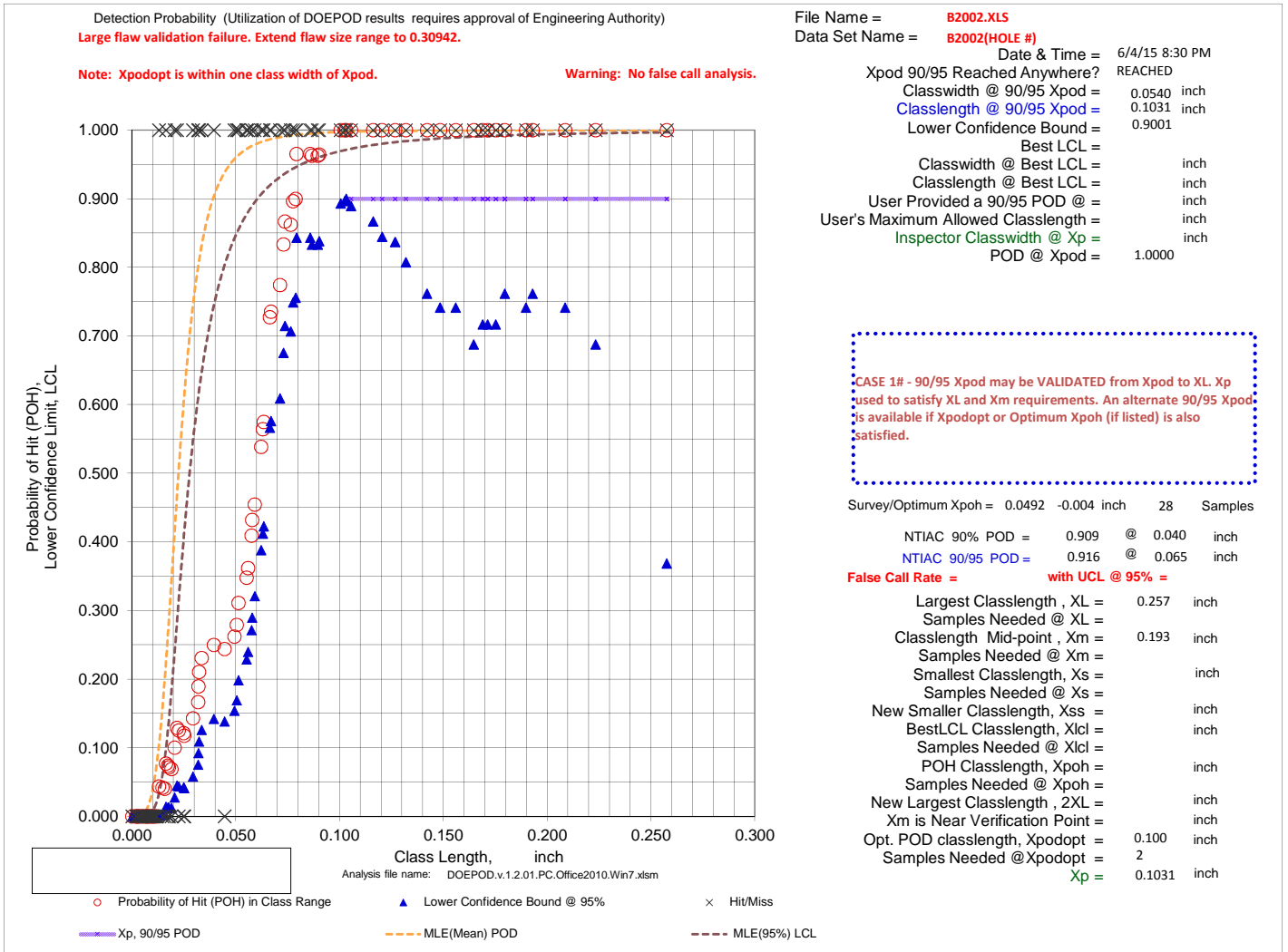
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = B2002.XLS
 Data Set Name = B2002(HOLE #)

Directed DOE Options

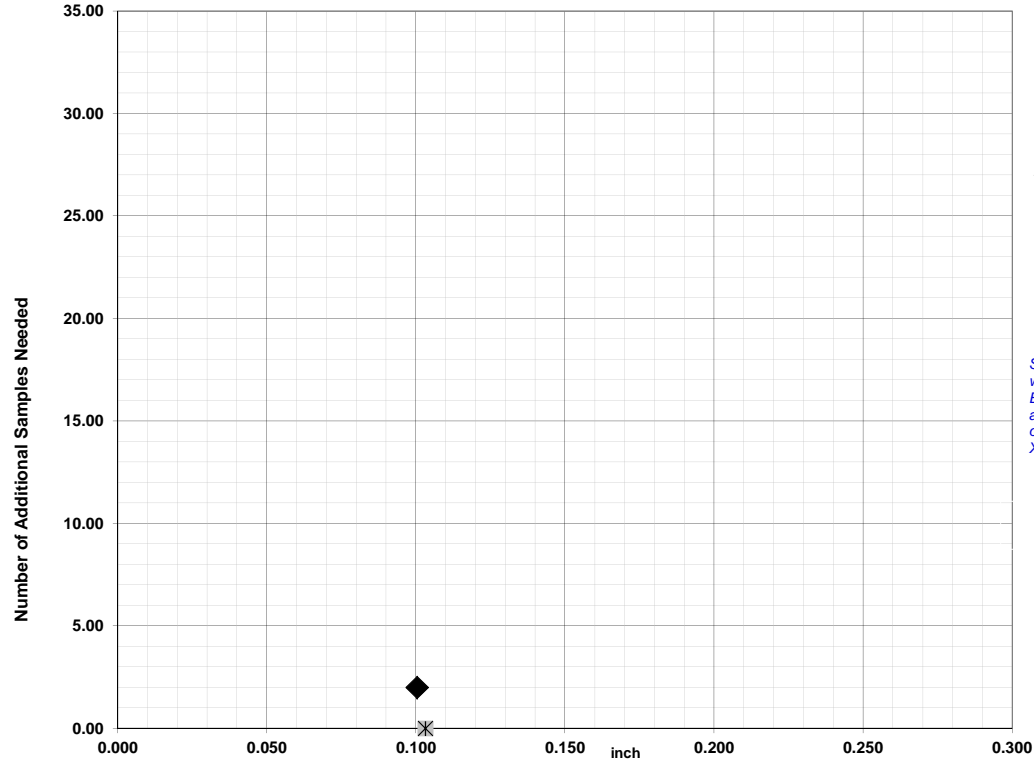


TABLE C

Class Length	Additional Samples
XL =	0.257
Xm =	0.193
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.100 2

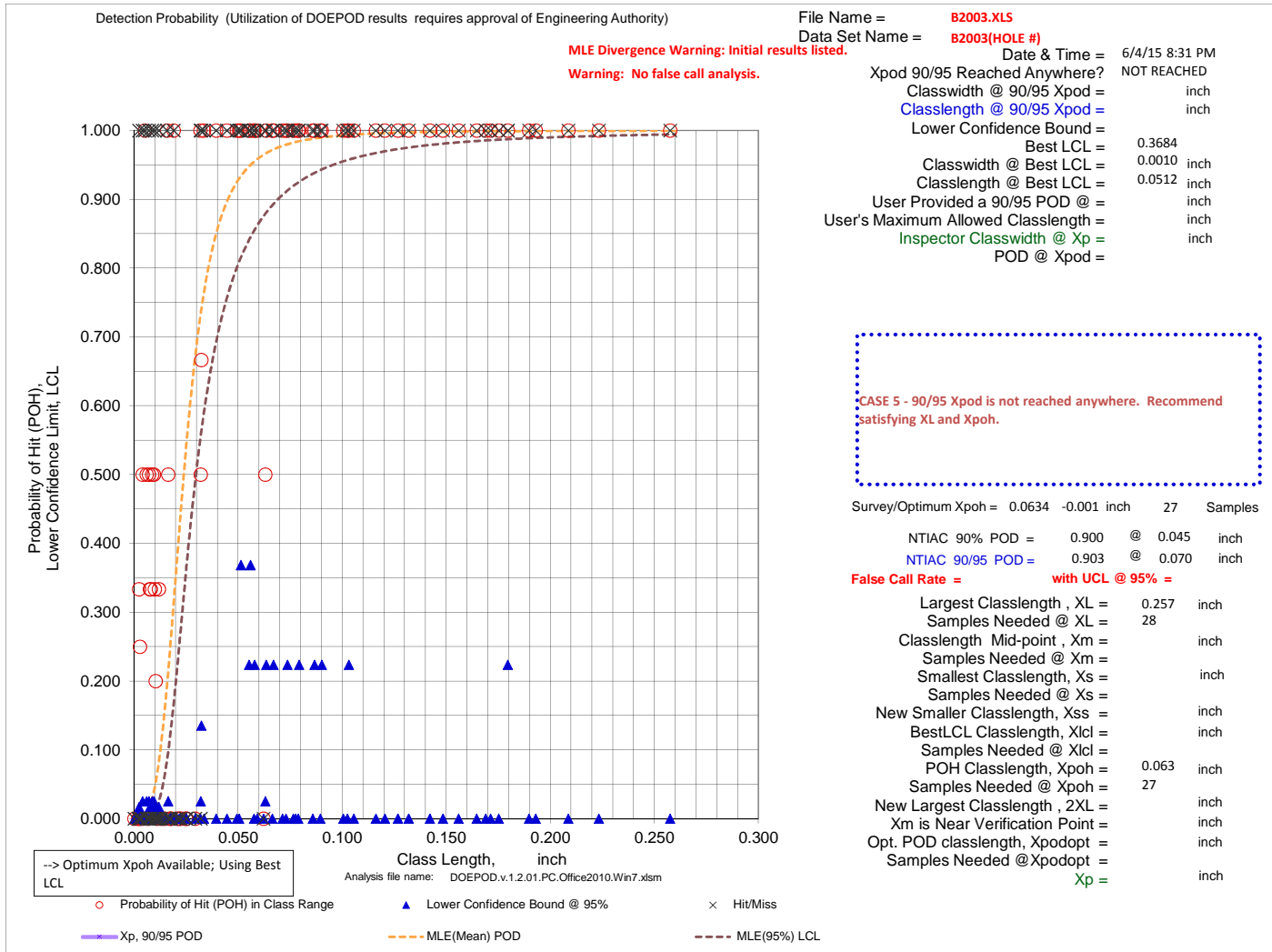
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
--------------------	----------	--------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = B2003.XLS
 Data Set Name = B2003(HOLE #)

Directed DOE Options

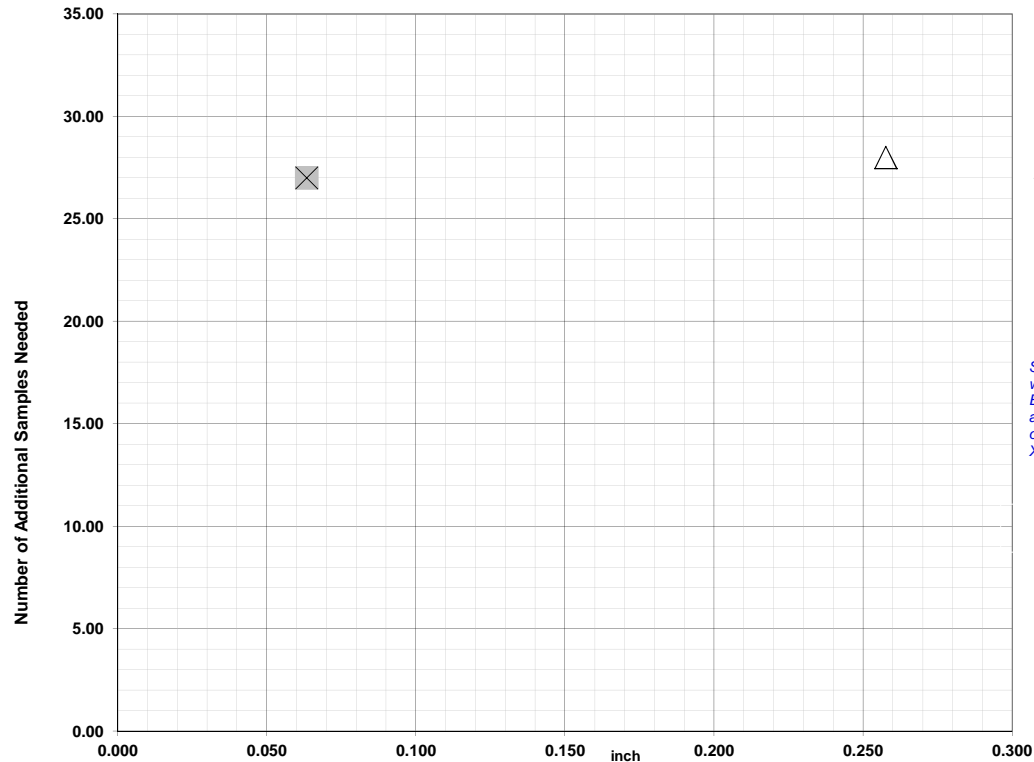


TABLE C

Class Length	Additional Samples
XL = 0.257	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.063	27
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 # Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

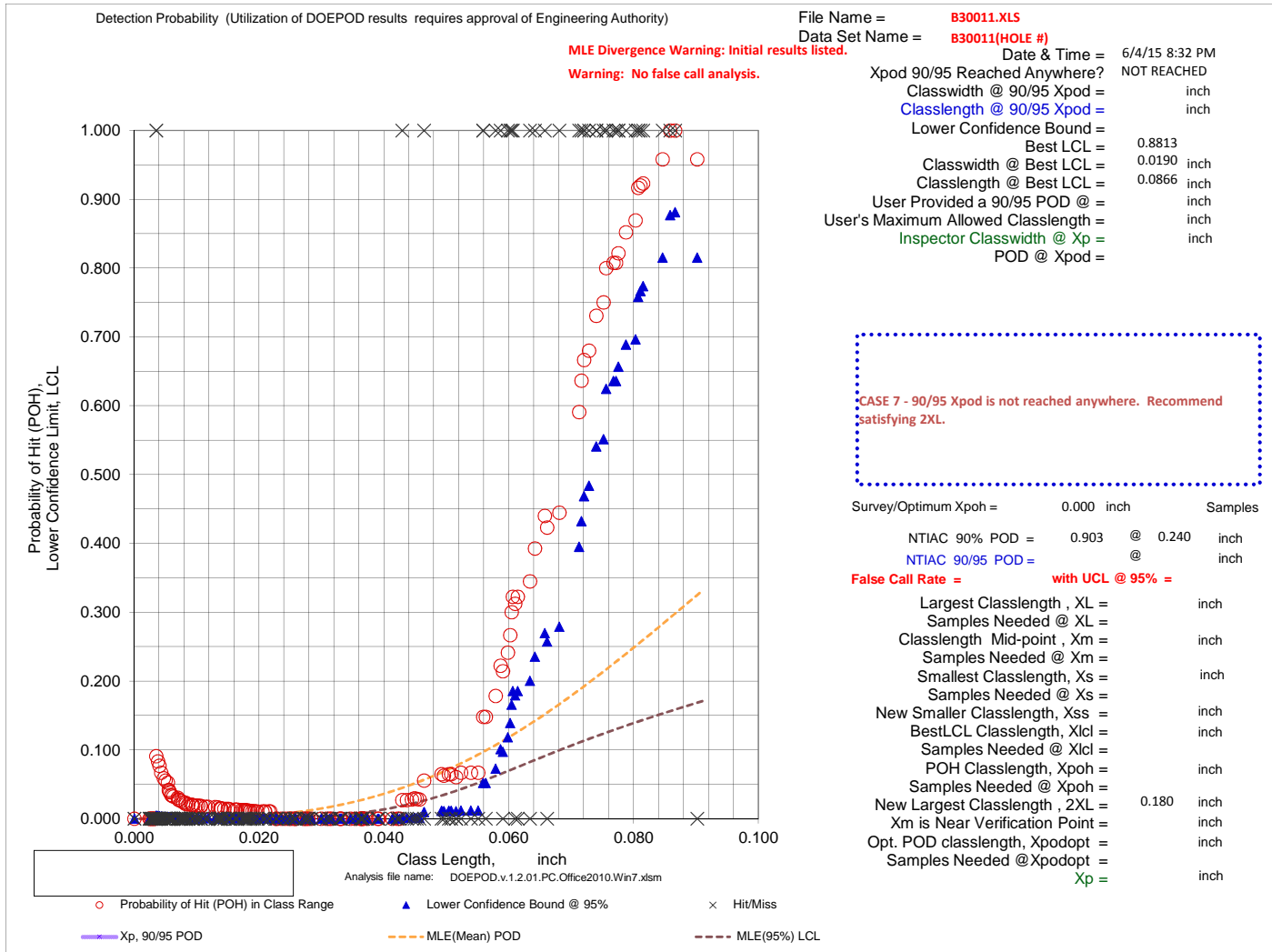
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = B30011.XLS
 Data Set Name = B30011(HOLE #)

Directed DOE Options

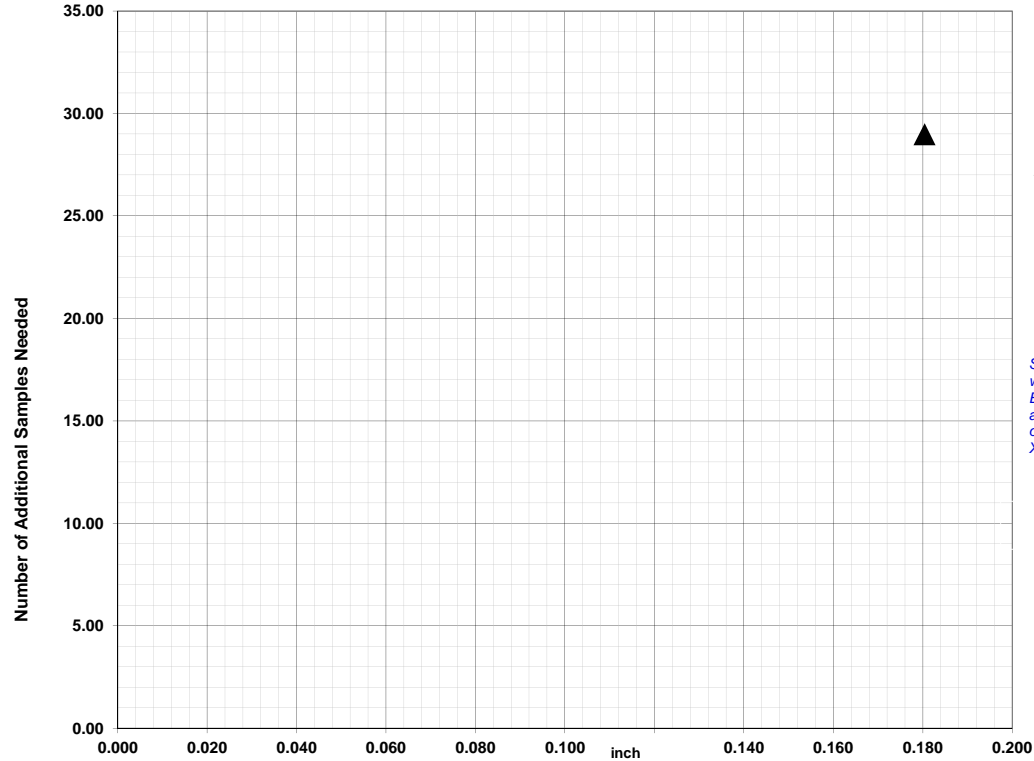


TABLE C

Class Length	Additional Samples
0.180	29

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.180 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

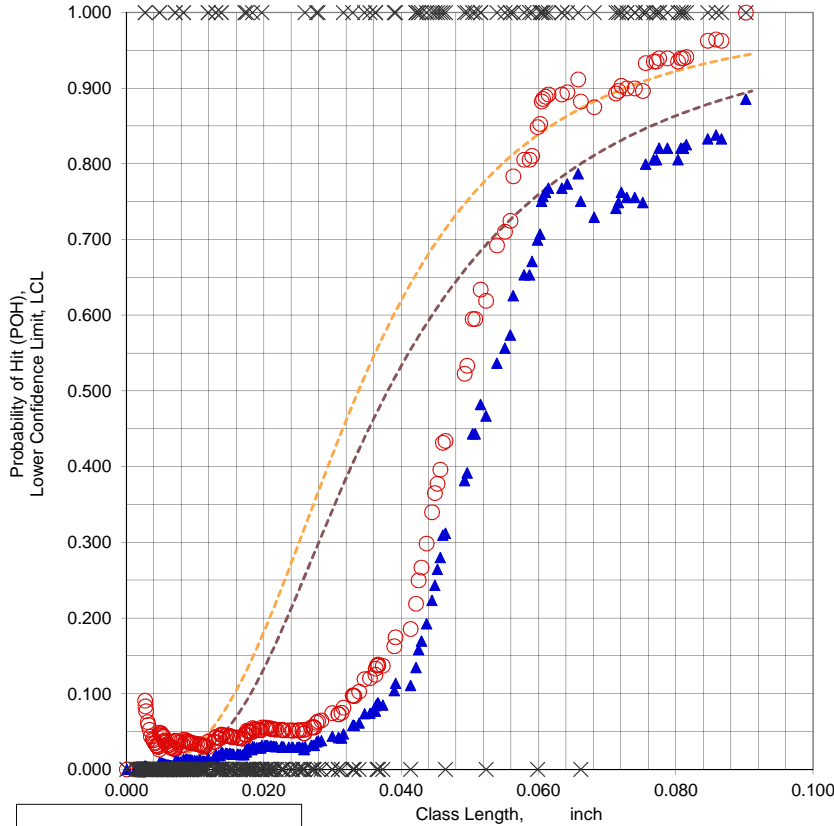
Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **B30012.XLS**
 Data Set Name = **B30012(HOLE #)**
 Date & Time = 6/4/15 8:34 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8855
 Classwidth @ Best LCL = 0.0230 inch
 Classlength @ Best LCL = 0.0902 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.0681 -0.001 inch 28 Samples

NTIAC 90% POD = 0.908 @ 0.075 inch
 NTIAC 90/95 POD = 0.905 @ 0.095 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.090 inch
 Samples Needed @ XL = 4
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.090 inch
 Samples Needed @ Xlcl = 4
 POH Classlength, Xpoh = 0.090 inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = 0.180 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = B30012.XLS
 Data Set Name = B30012(HOLE #)

Directed DOE Options

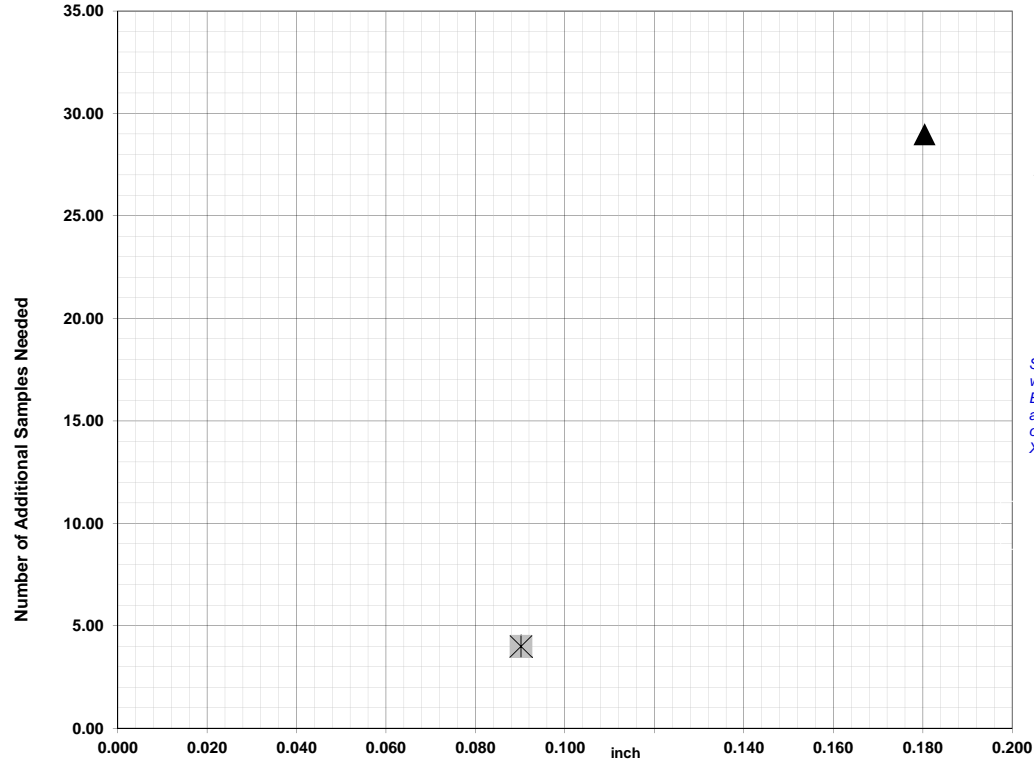


TABLE C

Class Length	Additional Samples
XL = 0.090	4
Xm =	
Xs =	
Xss =	
XLcl = 0.090	4
Xpoh = 0.090	
2XL = 0.180	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ XLcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

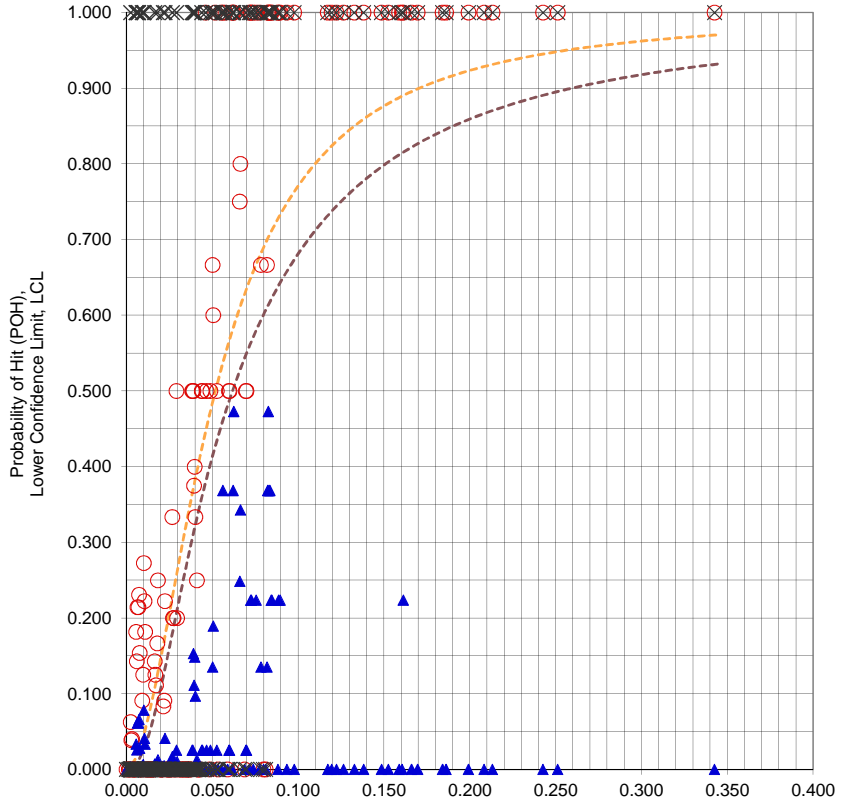
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **B4001L.XLS**
 Data Set Name = **B4001L(Mpi-d)**
 Date & Time = 6/4/15 8:36 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.4729
 Classwidth @ Best LCL = 0.0010 inch
 Classlength @ Best LCL = 0.0623 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 5 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and Xpoh.

Survey/Optimum Xpoh = 0.0821 -0.001 inch 26 Samples

NTIAC 90% POD = 0.904 @ 0.175 inch
 NTIAC 90/95 POD = 0.900 @ 0.260 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.342 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.082 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

--> Optimum Xpoh Available; Using Best LCL

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = B4001L.XLS
 Data Set Name = B4001L(Mpi-d)

Directed DOE Options

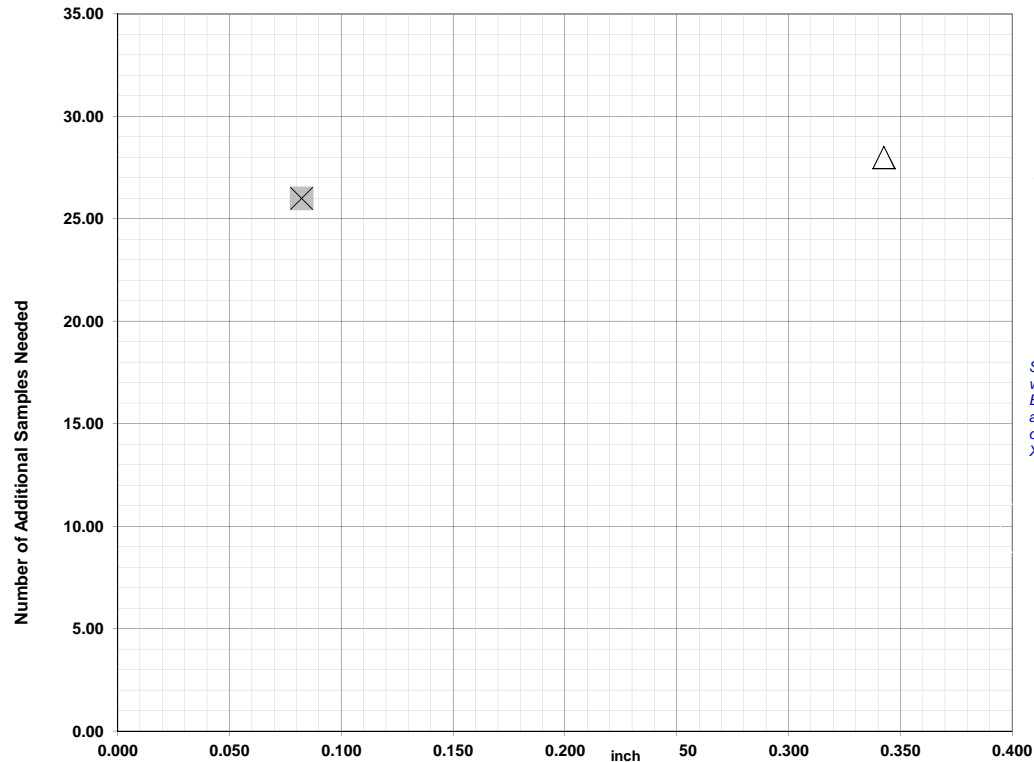


TABLE C

Class Length Additional Samples

XL = 0.342 28
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh = 0.082 26
 2XL =

**Alternate Xm =
 Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs # Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

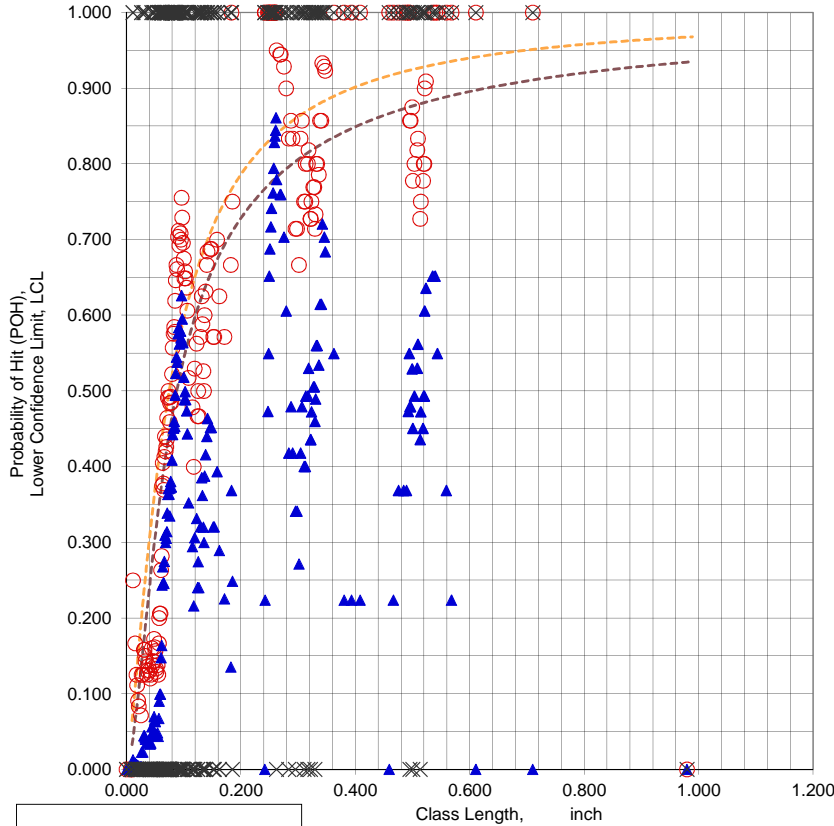
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = C1001AL.XLS
 Data Set Name = C1001AL(CRACK #)
 Date & Time = 6/4/15 8:38 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8609
 Classwidth @ Best LCL = 0.0200 inch
 Classlength @ Best LCL = 0.2610 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.900 @ 0.395 inch
 NTIAC 90/95 POD = 0.900 @ 0.630 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 1.958 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C1001AL.XLS
 Data Set Name = C1001AL(CRACK #)

Directed DOE Options

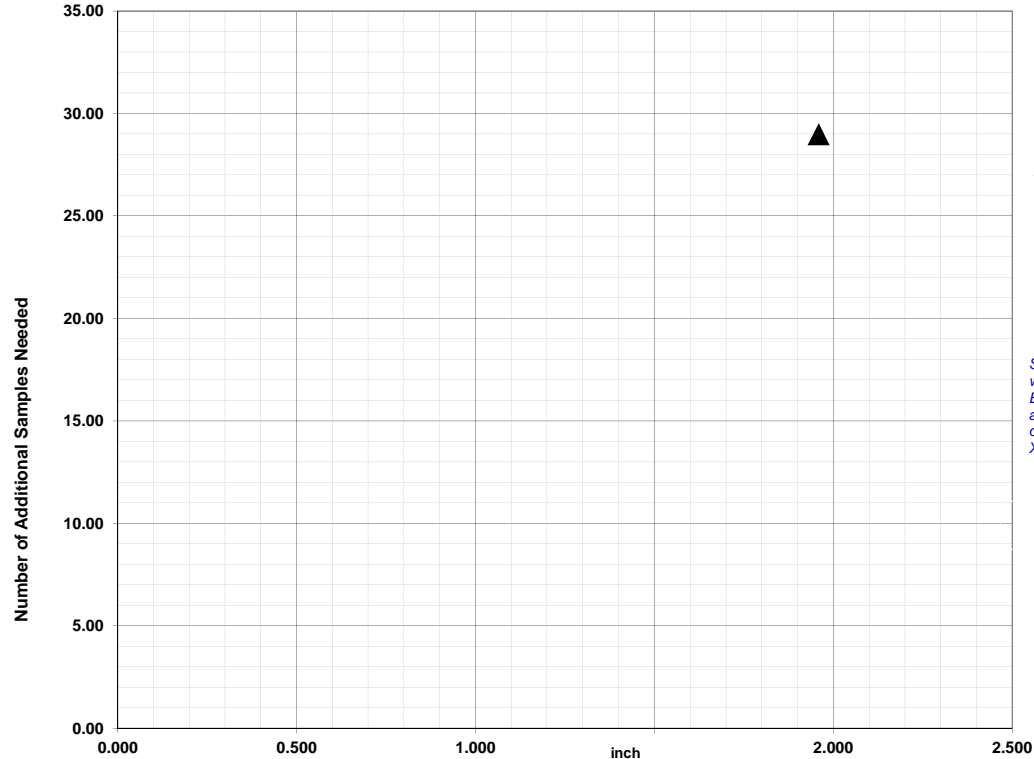


TABLE C

Class Length	Additional Samples
2XL = 1.958	29

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 1.958 29
 **Alternate Xm =
 Xpodopt =

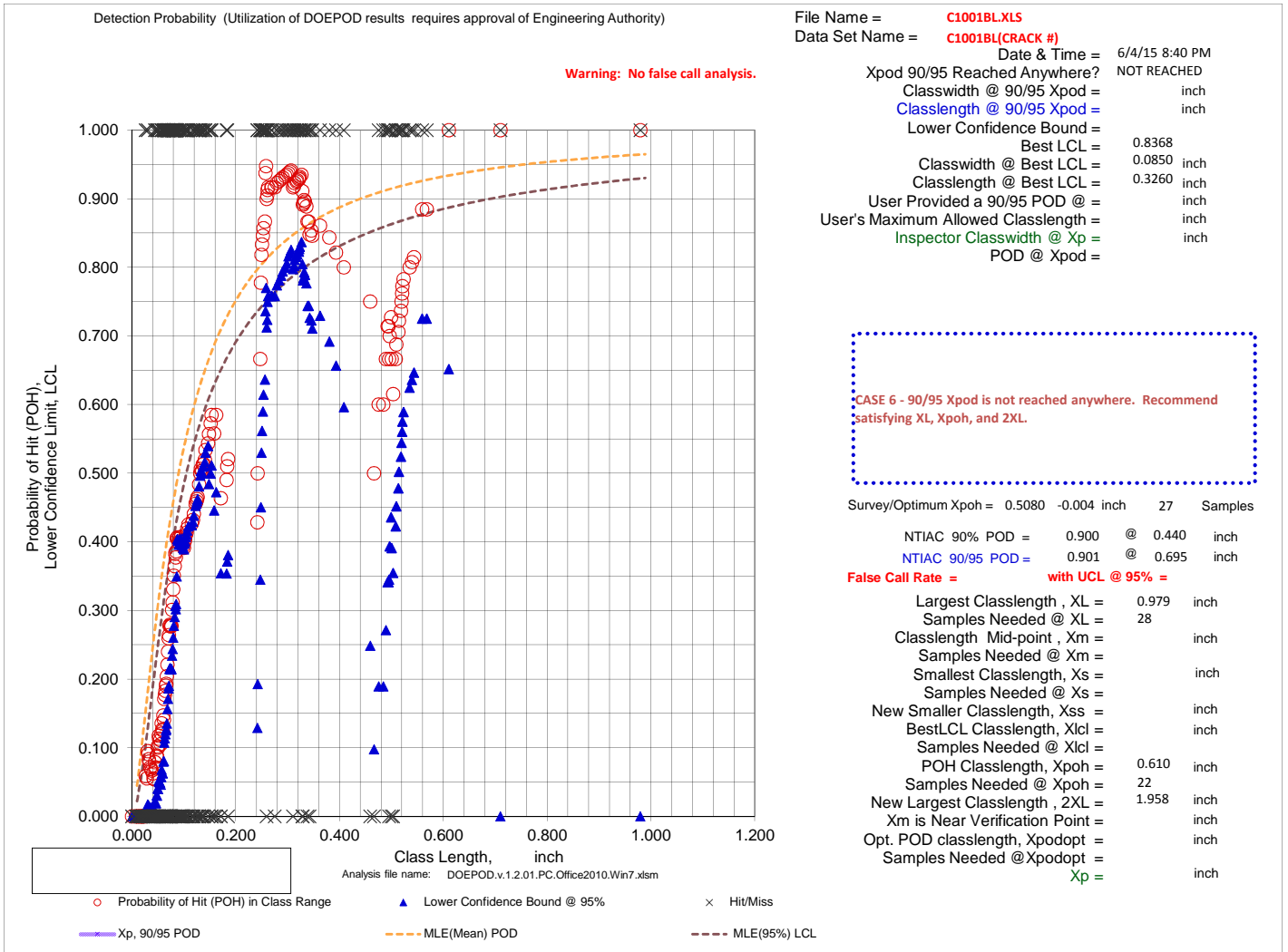
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C1001BL.XLS
 Data Set Name = C1001BL(CRACK #)

Directed DOE Options

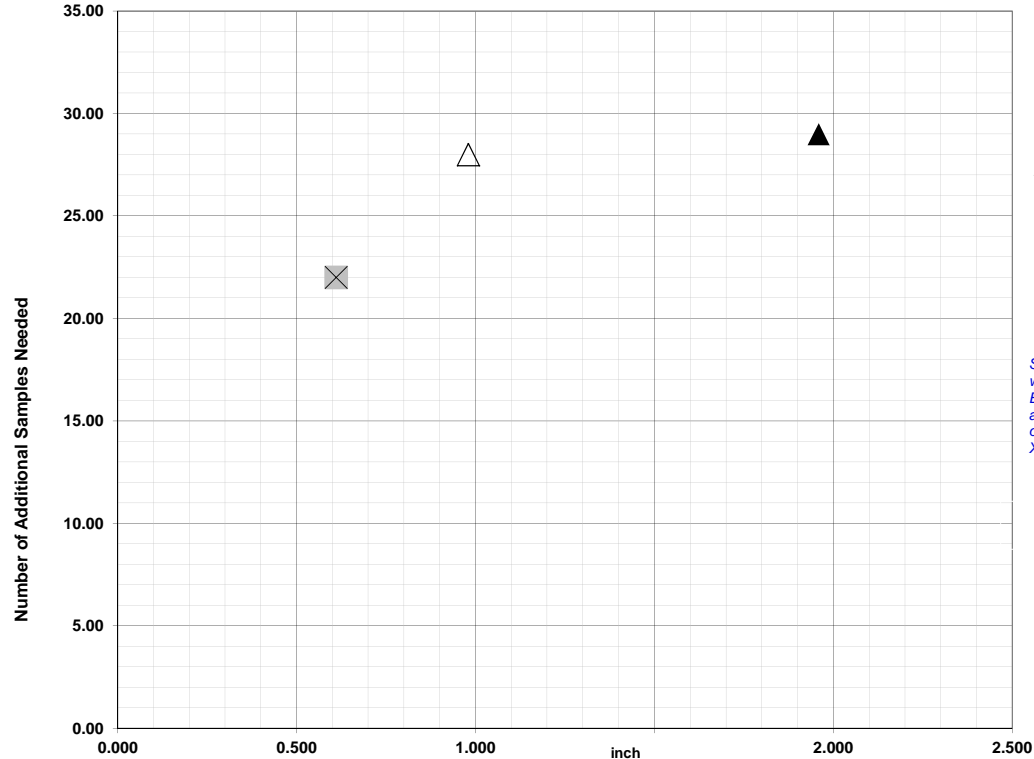


TABLE C

Class Length	Additional Samples
XL = 0.979	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.610	22
2XL = 1.958	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

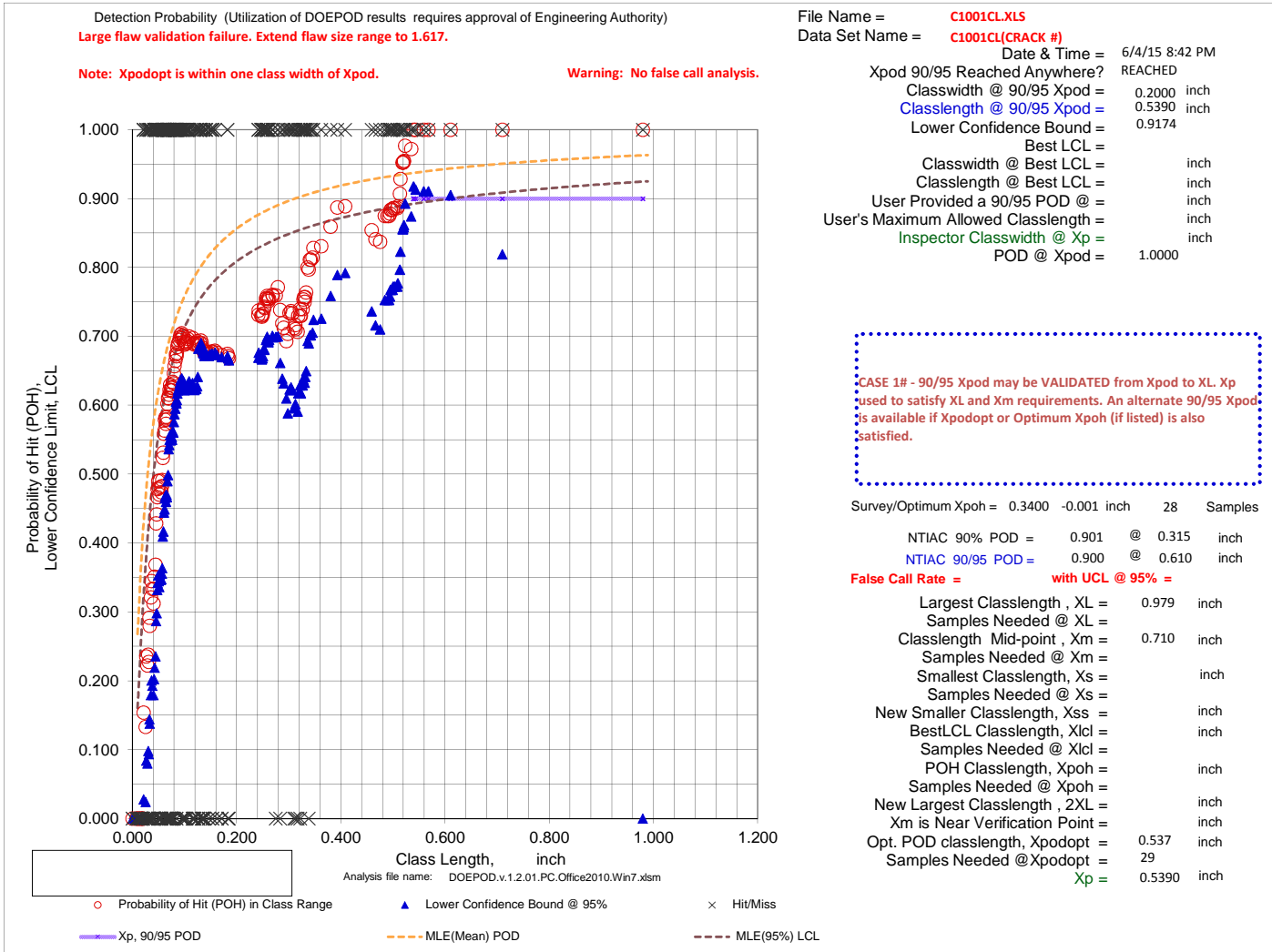
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C1001CL.XLS
 Data Set Name = C1001CL(CRACK #)

Directed DOE Options

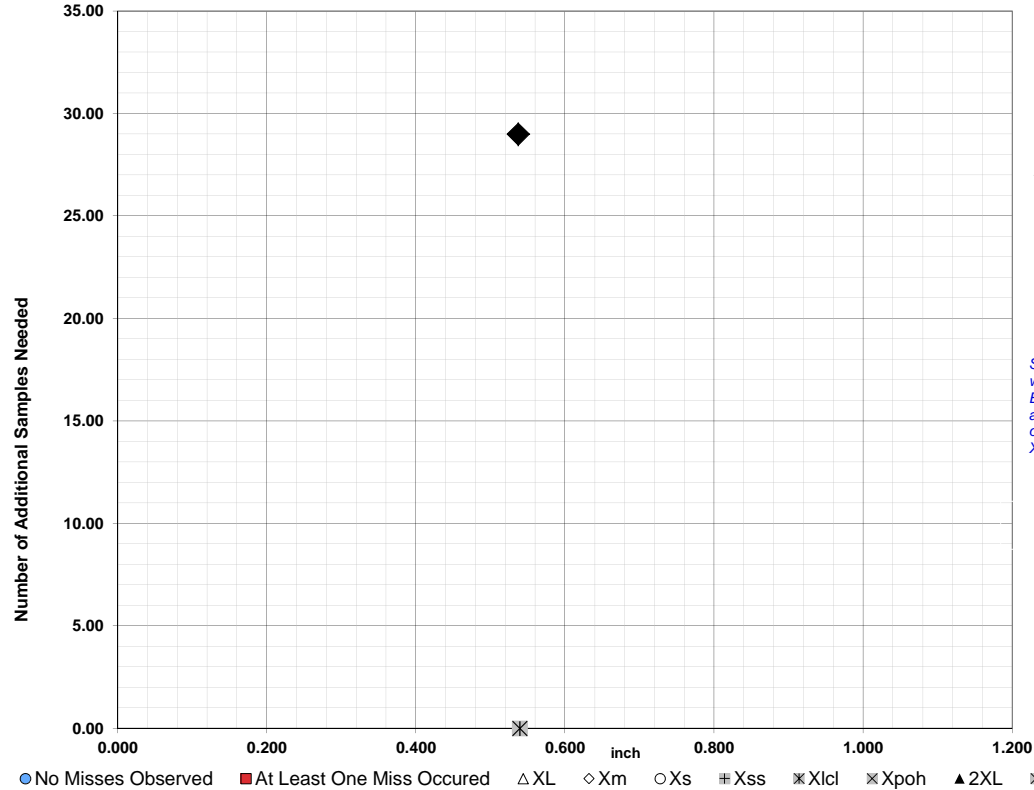


TABLE C

Class Length	Additional Samples
XL =	0.979
Xm =	0.710
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.537 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

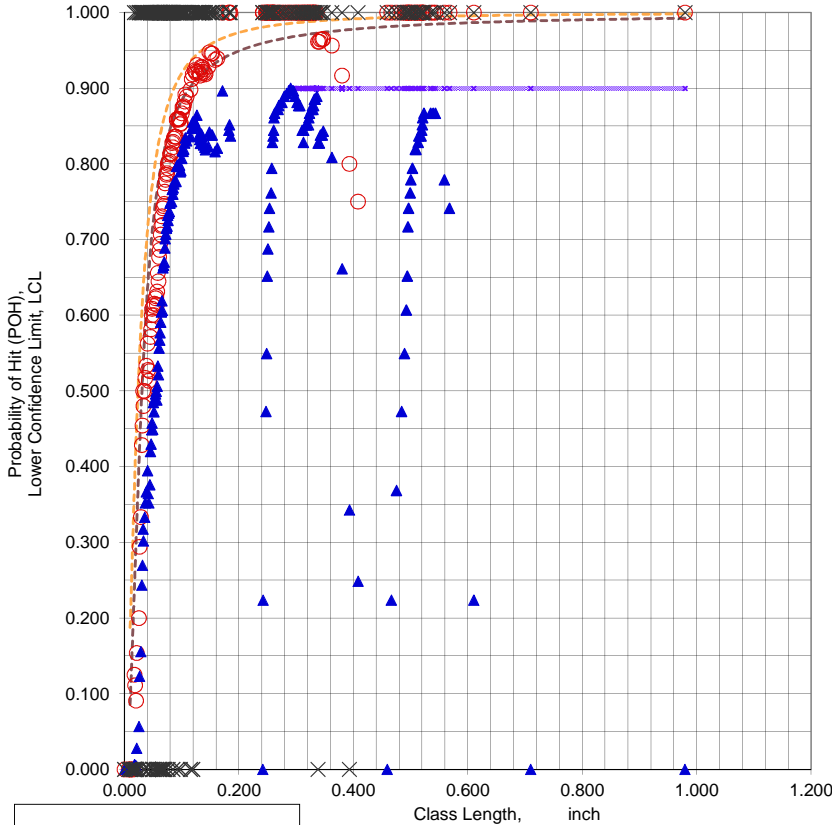
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 13 more large flaws.
Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = C1002AL.XLS
 Data Set Name = C1002AL(CRACK #)
 Date & Time = 6/4/15 8:45 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0490 inch
 Classlength @ 90/95 Xpod = 0.2900 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.906 @ 0.090 inch
 NTIAC 90/95 POD = 0.902 @ 0.115 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.979 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.543 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.2900 inch

File Name = C1002AL.XLS
 Data Set Name = C1002AL(CRACK #)

Directed DOE Options

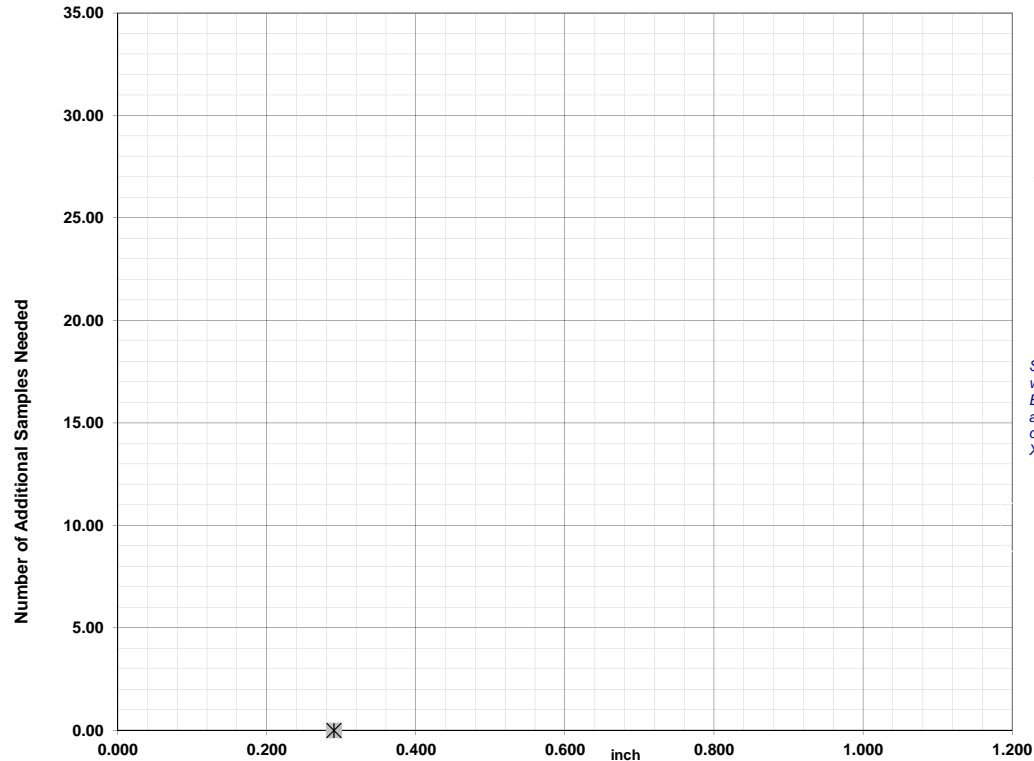


TABLE C

Class Length Additional Samples

XL = 0.979
 Xm = 0.543
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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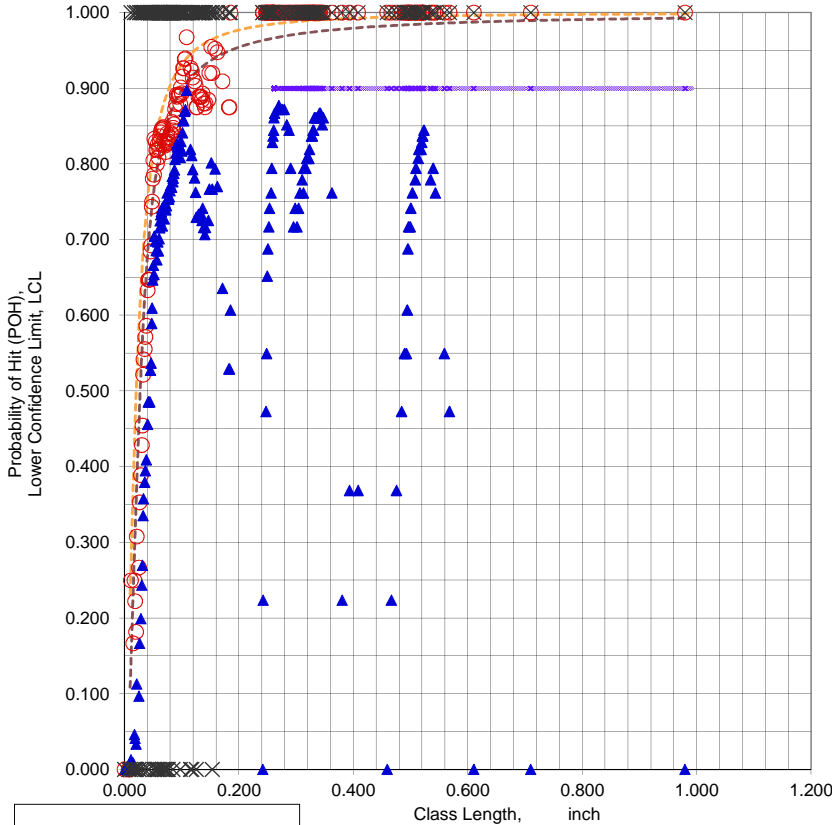
No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 10 more large flaws.
Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



File Name = C1002BL.XLS
 Data Set Name = C1002BL(CRACK #)
 Date & Time = 6/4/15 8:47 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0310 inch
 Classlength @ 90/95 Xpod = 0.1080 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 0.9672

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.904 @ 0.080 inch
 NTIAC 90/95 POD = 0.903 @ 0.105 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.979 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.342 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.2610 inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = C1002BL.XLS
 Data Set Name = C1002BL(CRACK #)

Directed DOE Options

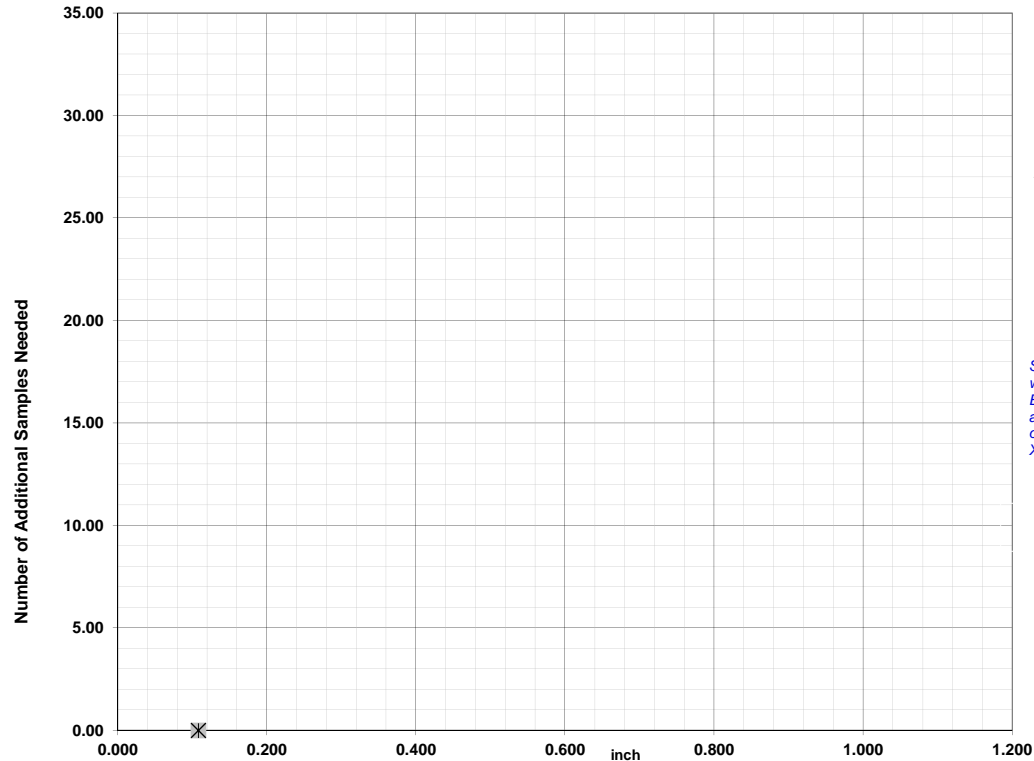


TABLE C

Class Length Additional Samples

XL = 0.979
 Xm = 0.342
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

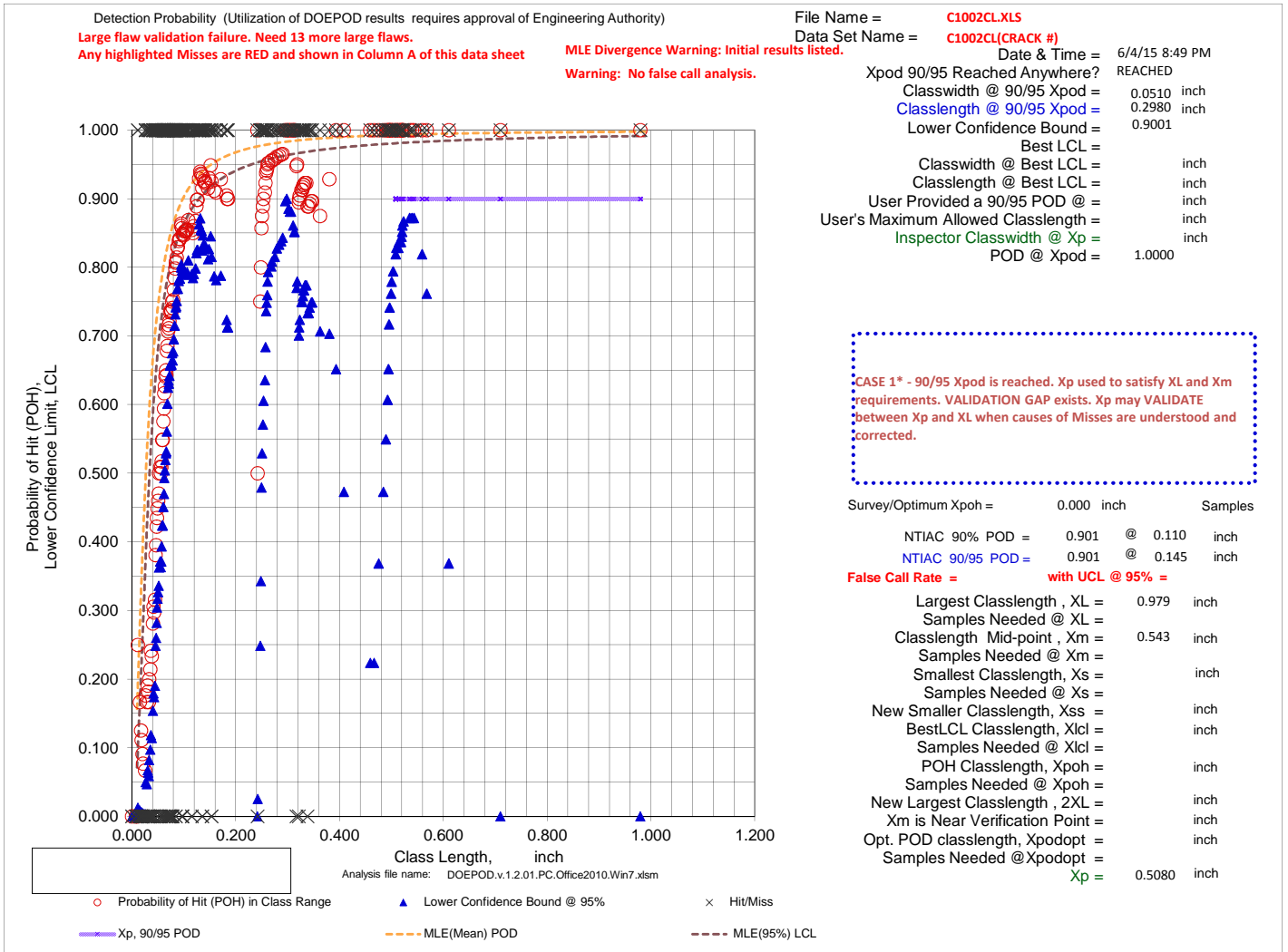
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C1002CL.XLS
 Data Set Name = C1002CL(CRACK #)

Directed DOE Options

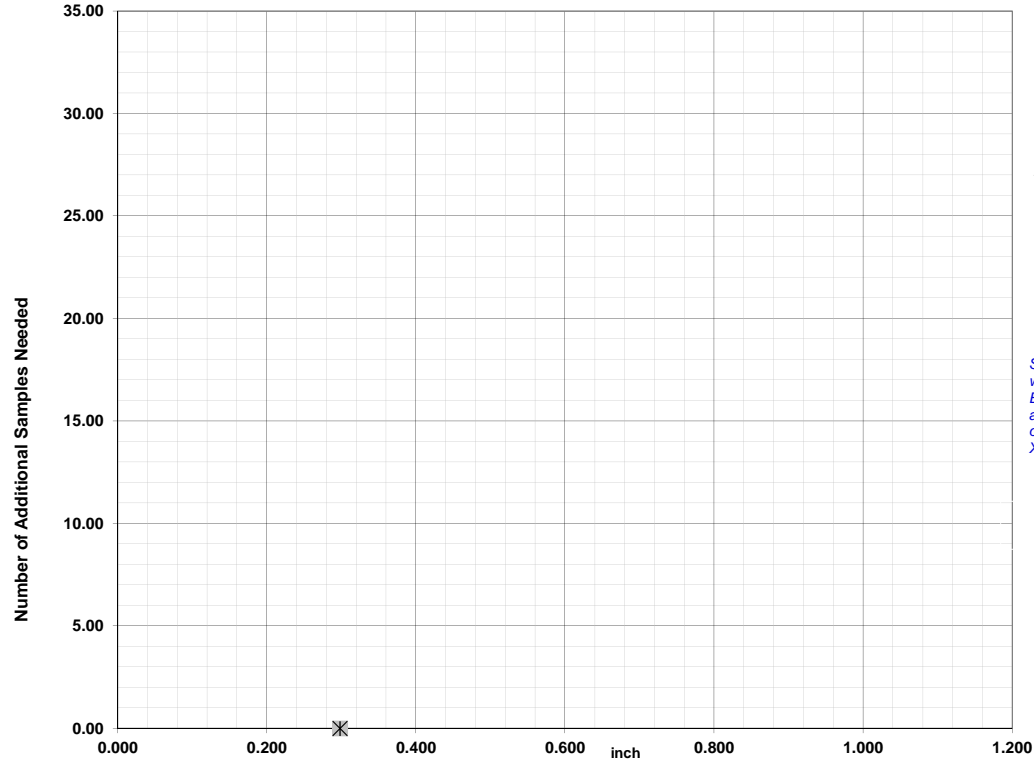


TABLE C

Class Length Additional Samples

XL = 0.979
 Xm = 0.543
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

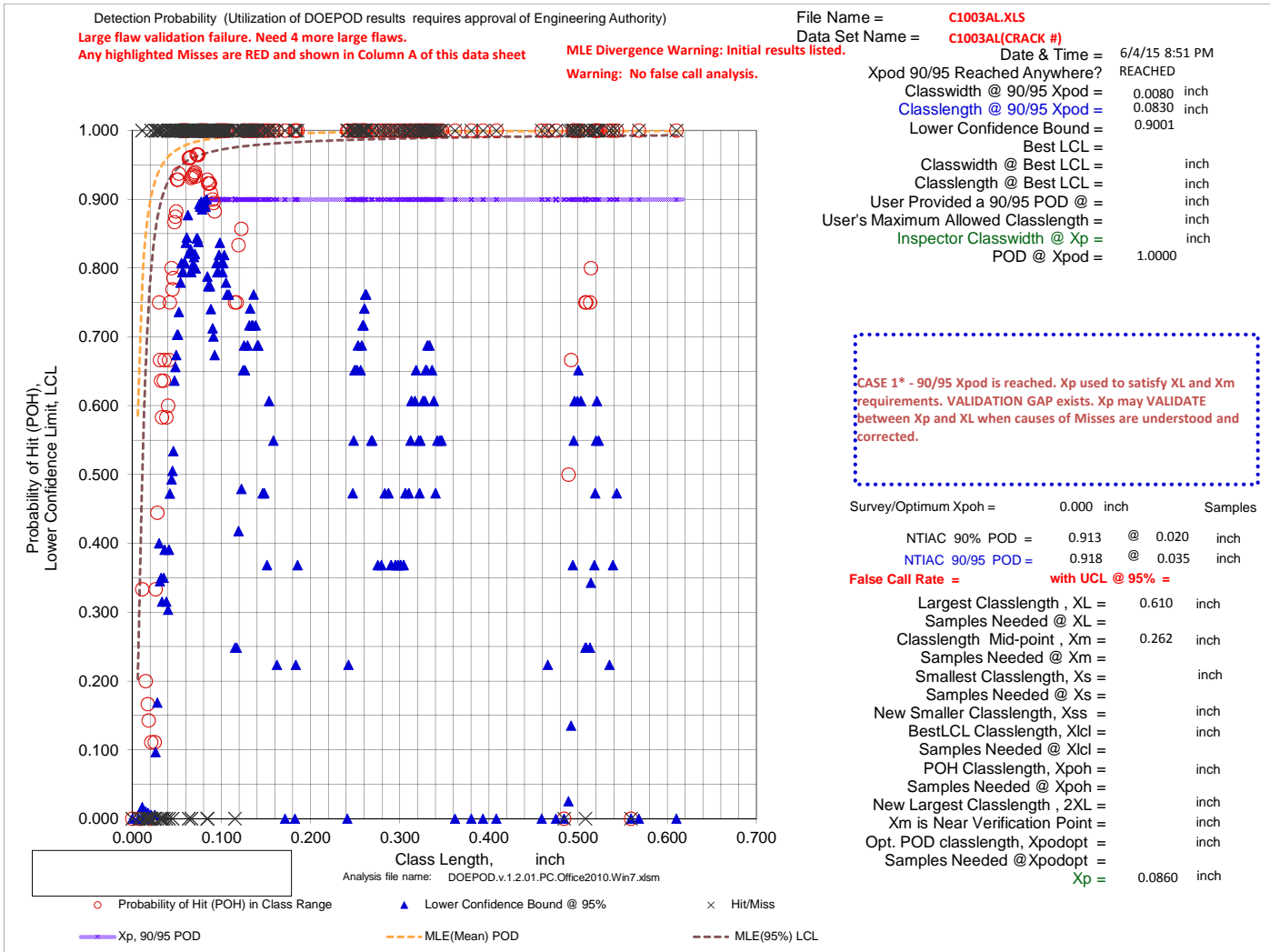
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C1003AL.XLS
 Data Set Name = C1003AL(CRACK #)

Directed DOE Options

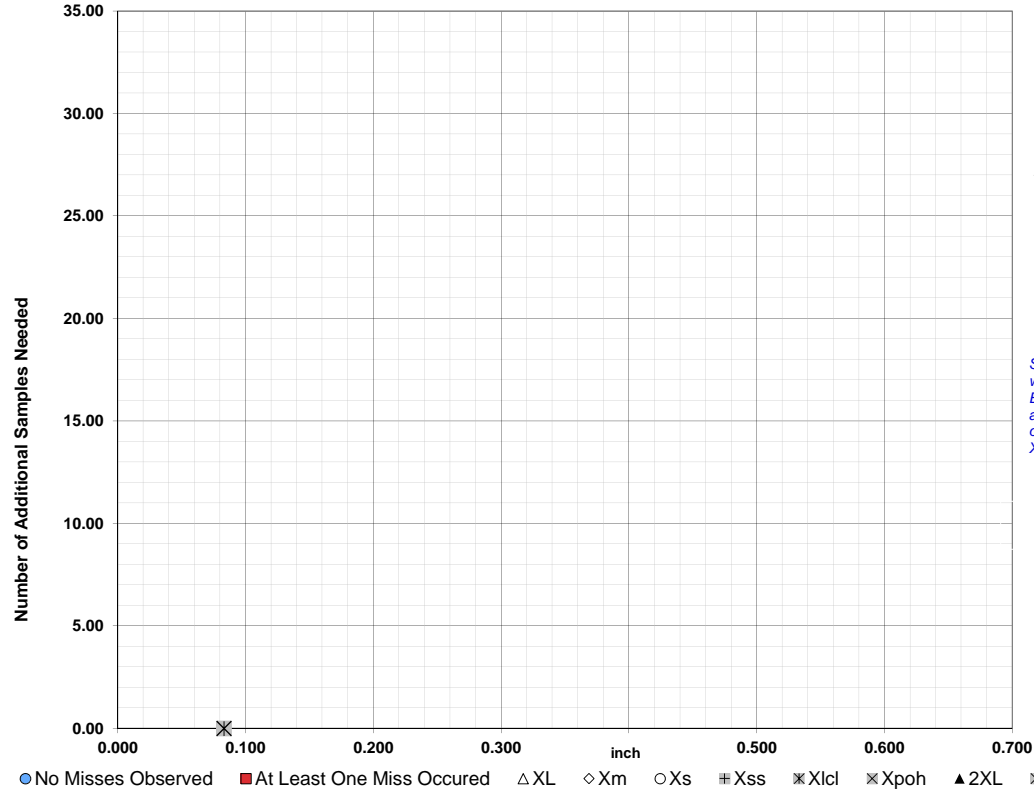


TABLE C

Class Length Additional Samples

XL = 0.610
 Xm = 0.262
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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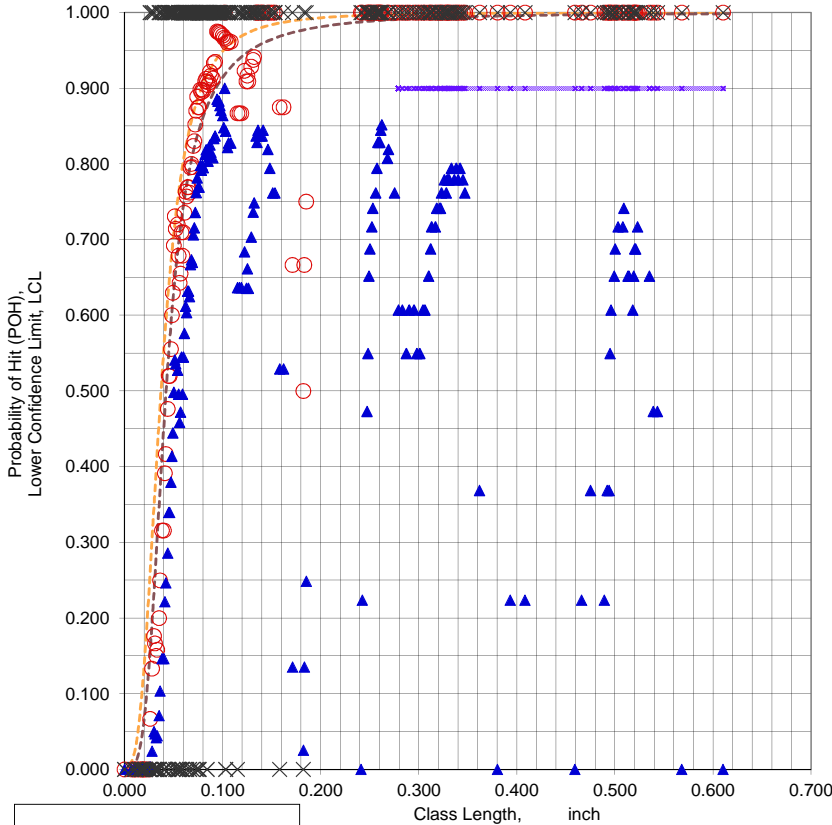
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 5 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



File Name = C1003BL.XLS
 Data Set Name = C1003BL(CRACK #)
 Date & Time = 6/4/15 8:56 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0170 inch
 Classlength @ 90/95 Xpod = 0.1020 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Xp used to satisfy XL requirements. Further VALIDATION is required. Recommend satisfying Xm and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in T

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.906 @ 0.080 inch
 NTIAC 90/95 POD = 0.904 @ 0.095 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.610 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.262 inch
 Samples Needed @ Xm = 10
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.2790 inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = C1003BL.XLS
 Data Set Name = C1003BL(CRACK #)

Directed DOE Options

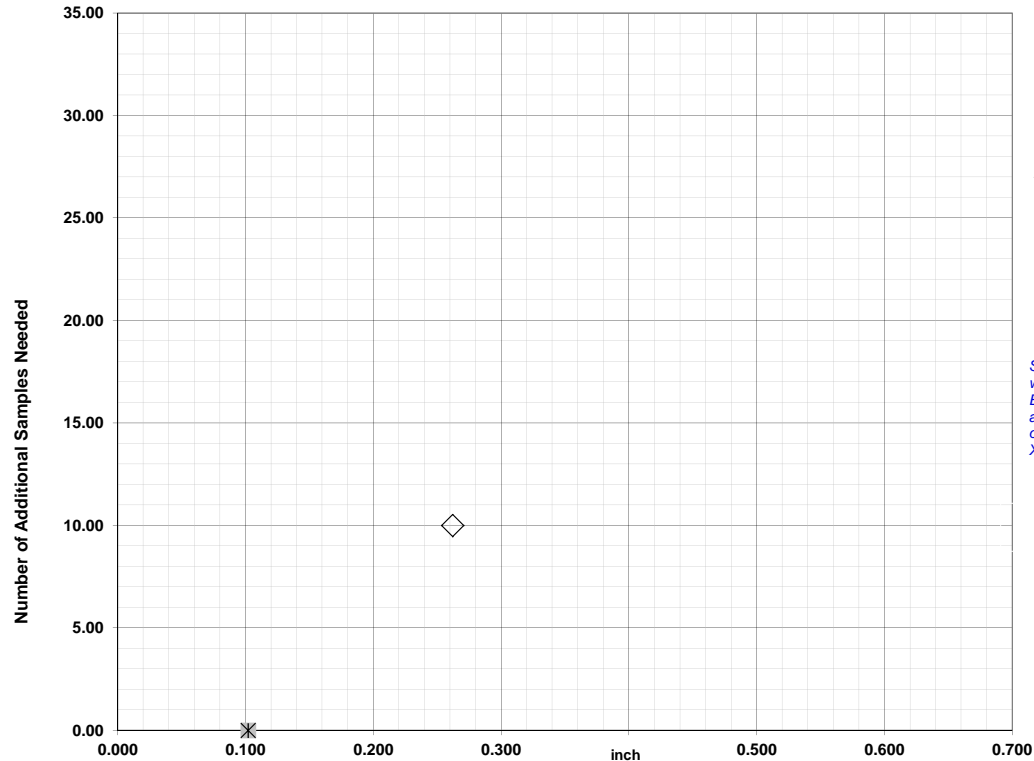


TABLE C

Class Length	Additional Samples
XL = 0.610	
Xm = 0.262	10
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

XL = 0.610
 Xm = 0.262 10
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

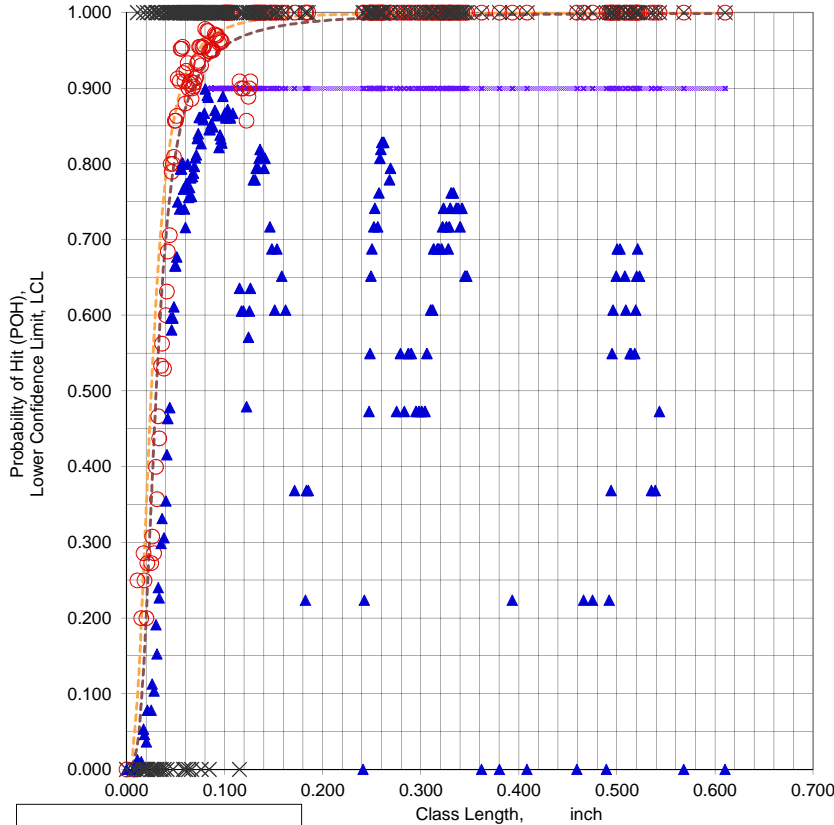
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 5 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = C1003CL.XLS
 Data Set Name = C1003CL(CRACK #)
 Date & Time = 6/4/15 8:57 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0130 inch
 Classlength @ 90/95 Xpod = 0.0800 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 0.9783

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.918 @ 0.060 inch
 NTIAC 90/95 POD = 0.908 @ 0.070 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.610 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.262 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.0860 inch

File Name = C1003CL.XLS
 Data Set Name = C1003CL(CRACK #)

Directed DOE Options

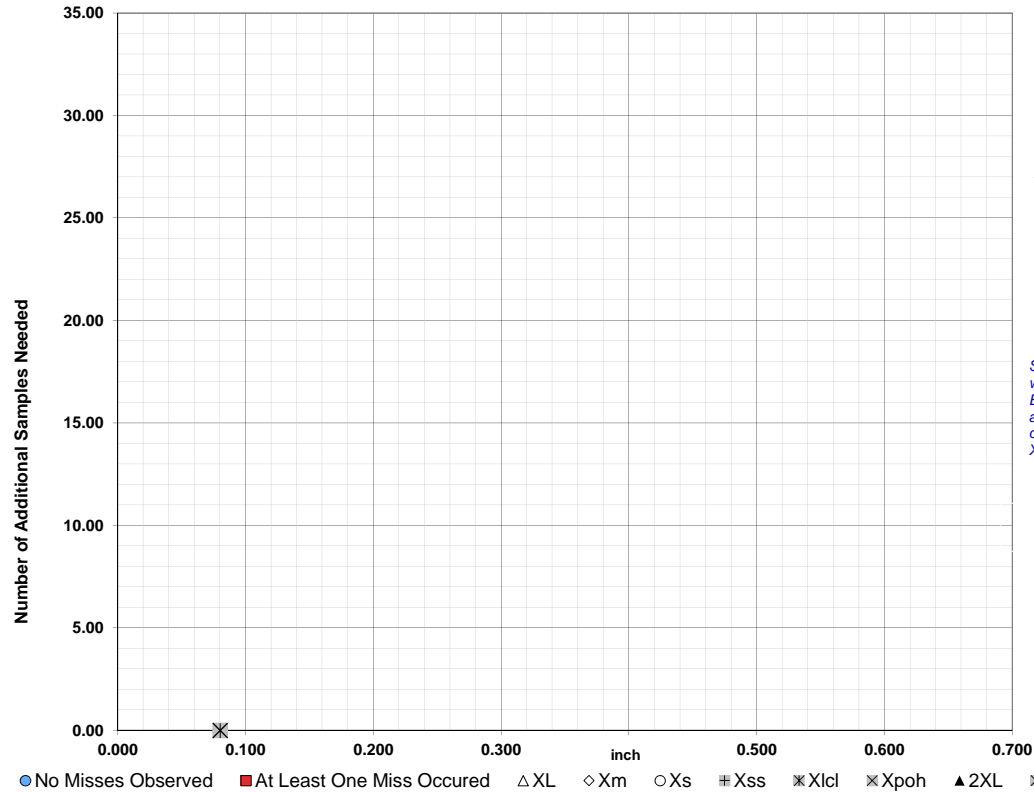


TABLE C

Class Length Additional Samples

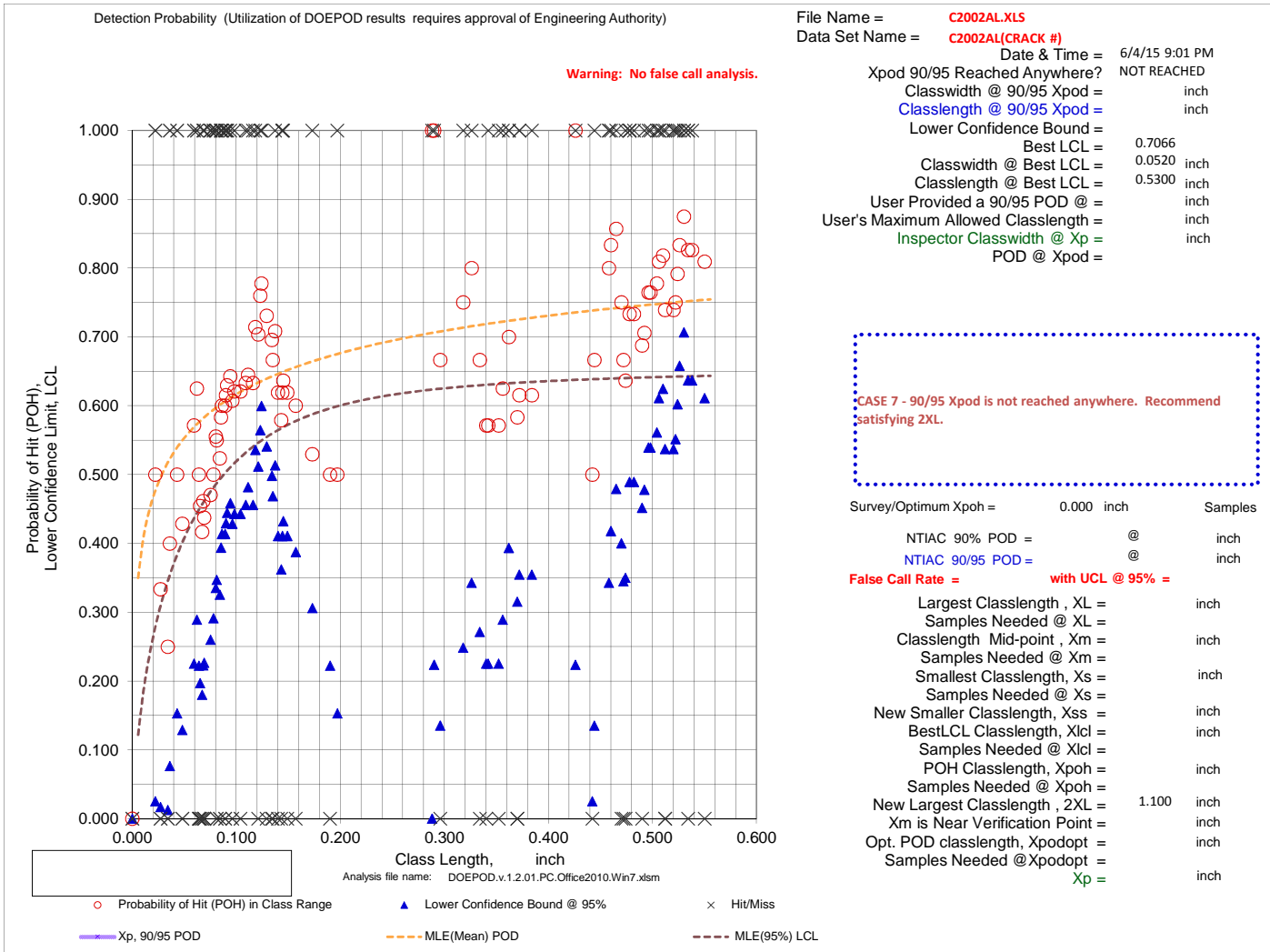
XL = 0.610
 Xm = 0.262
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C2002AL.XLS
 Data Set Name = C2002AL(CRACK #)

Directed DOE Options

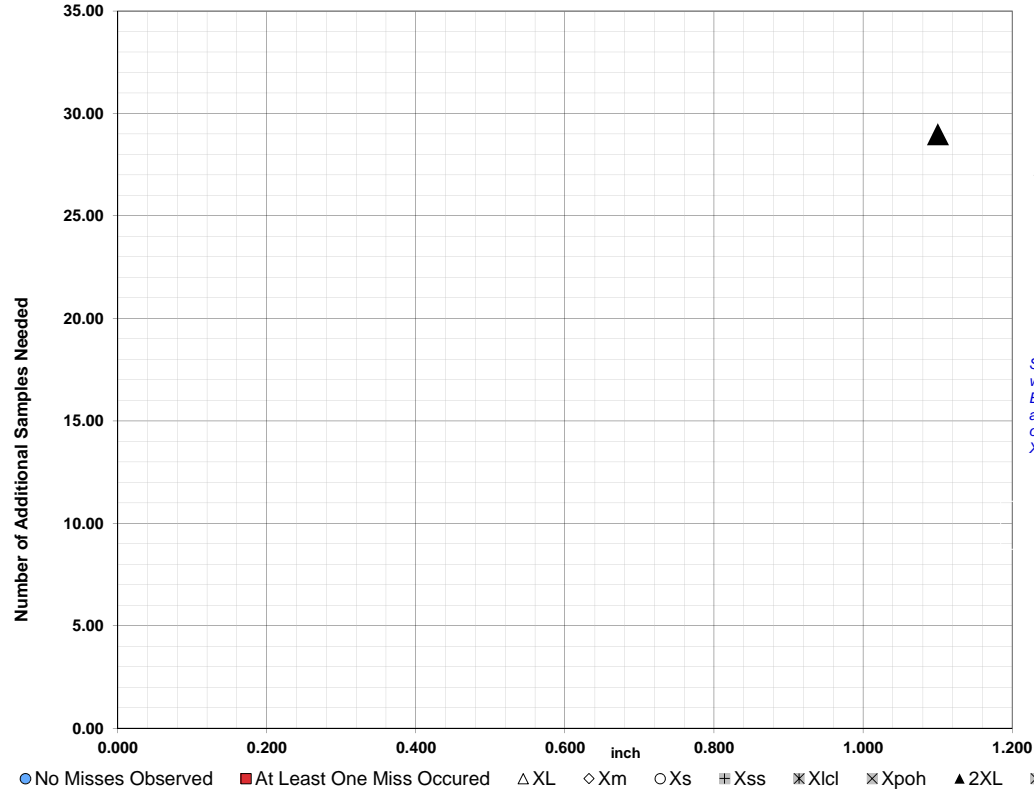


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 1.100	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 1.100 29
 **Alternate Xm =
 Xpodopt =

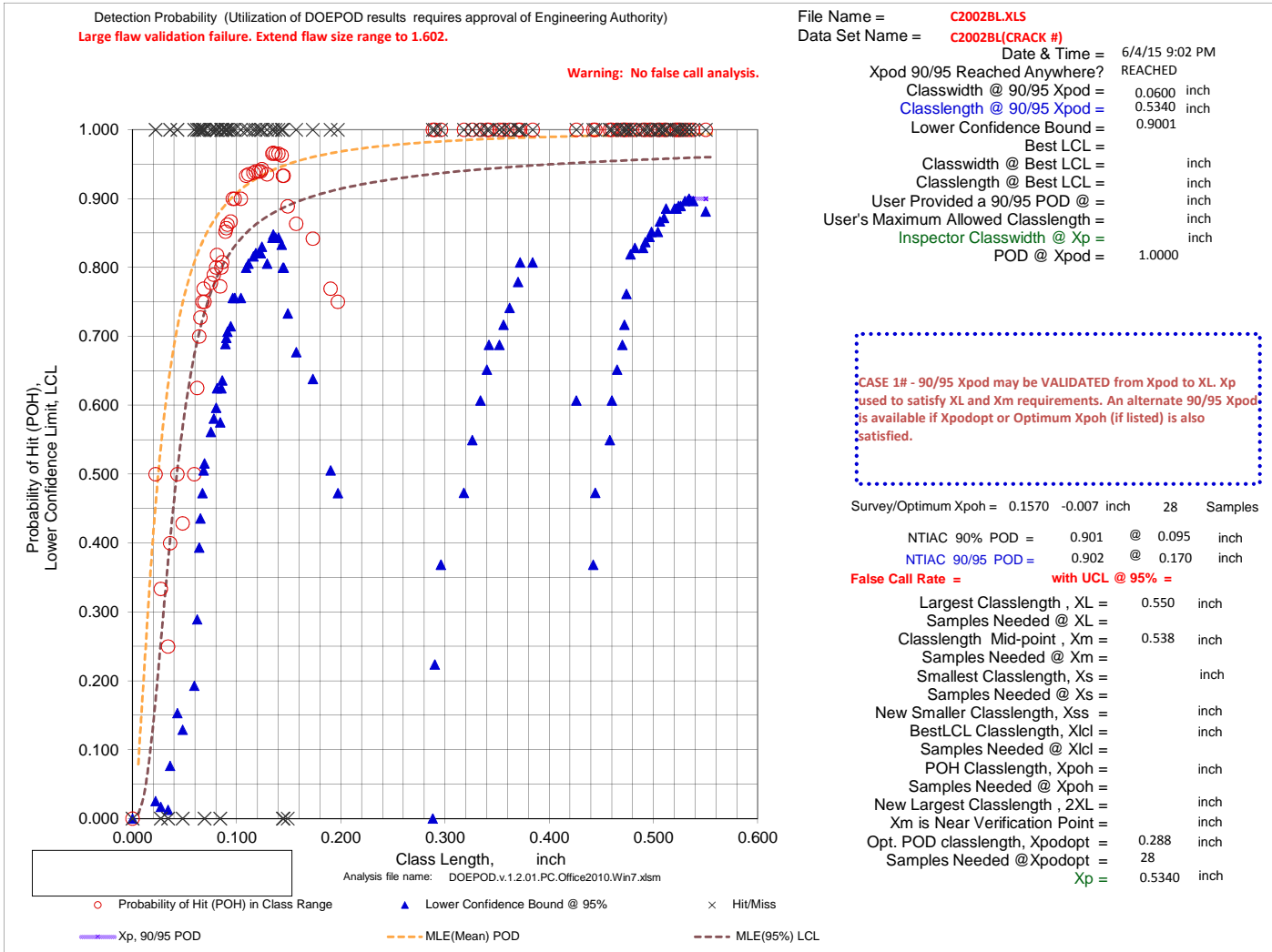
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C2002BL.XLS
 Data Set Name = C2002BL(CRACK #)

Directed DOE Options

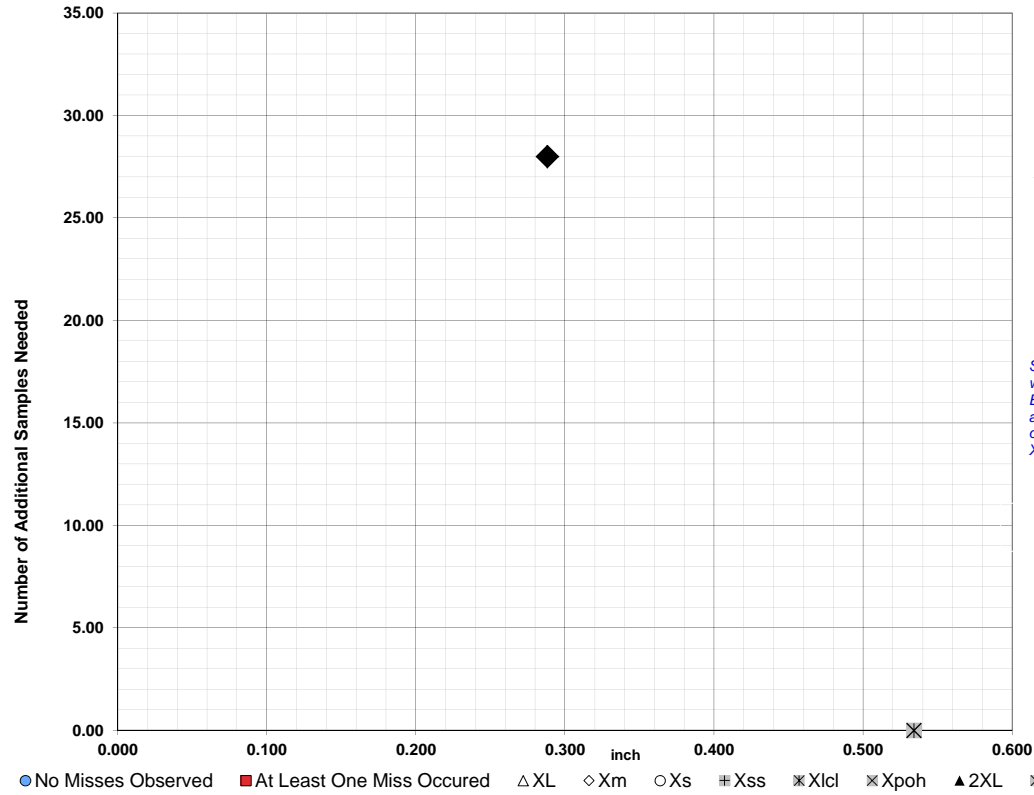


TABLE C

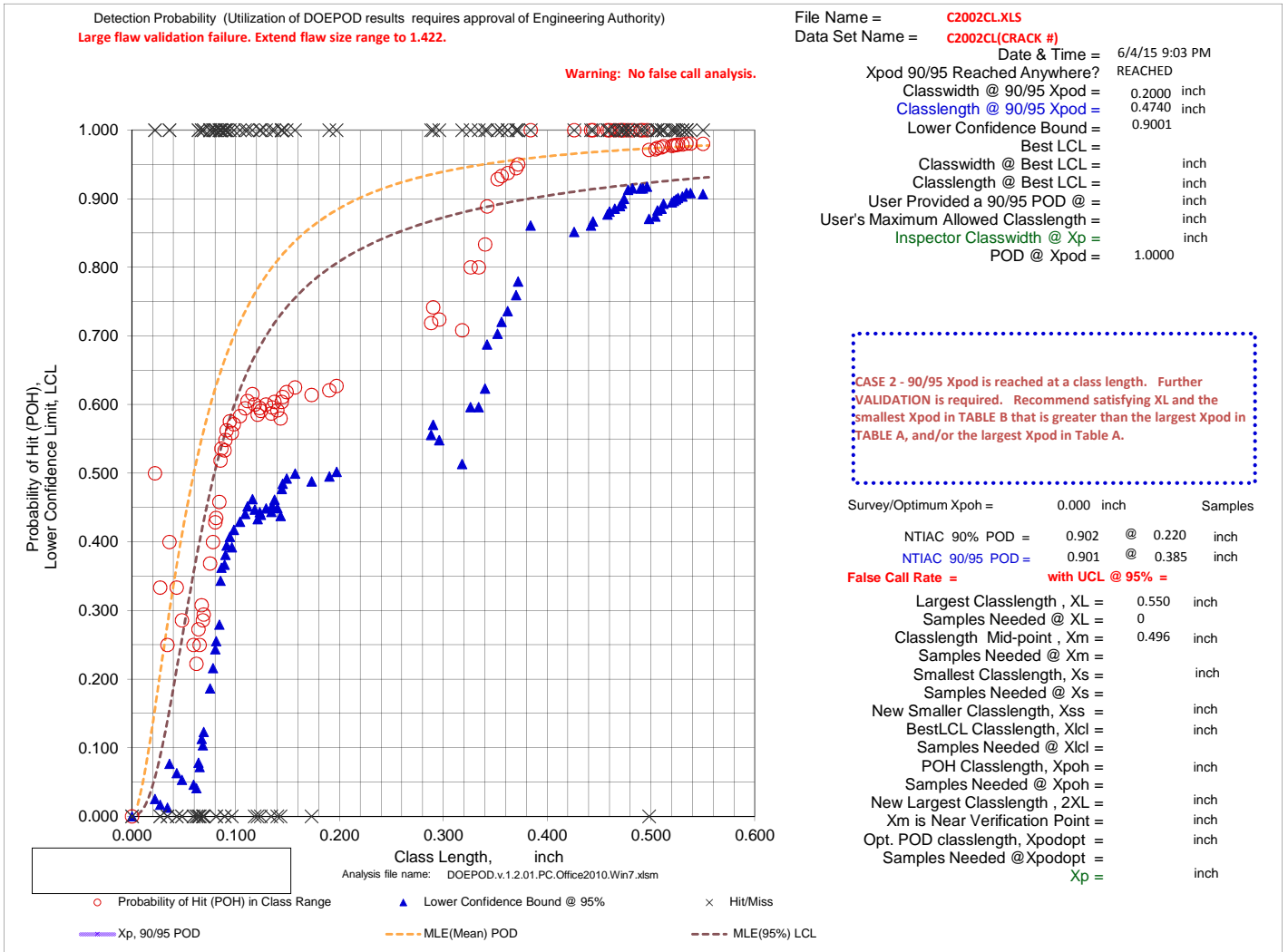
Class Length	Additional Samples
XL =	0.550
Xm =	0.538
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.288 28

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C2002CL.XLS
 Data Set Name = C2002CL(CRACK #)

Directed DOE Options

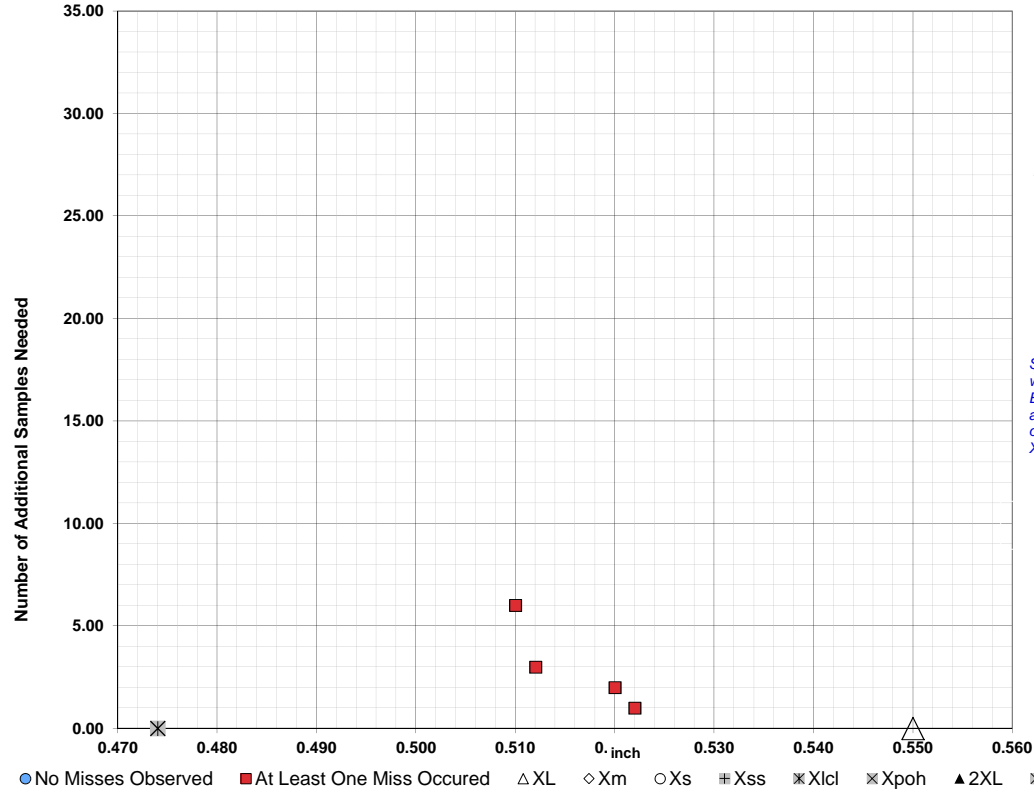


TABLE C

Class Length	Additional Samples
XL = 0.550	0
Xm = 0.496	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

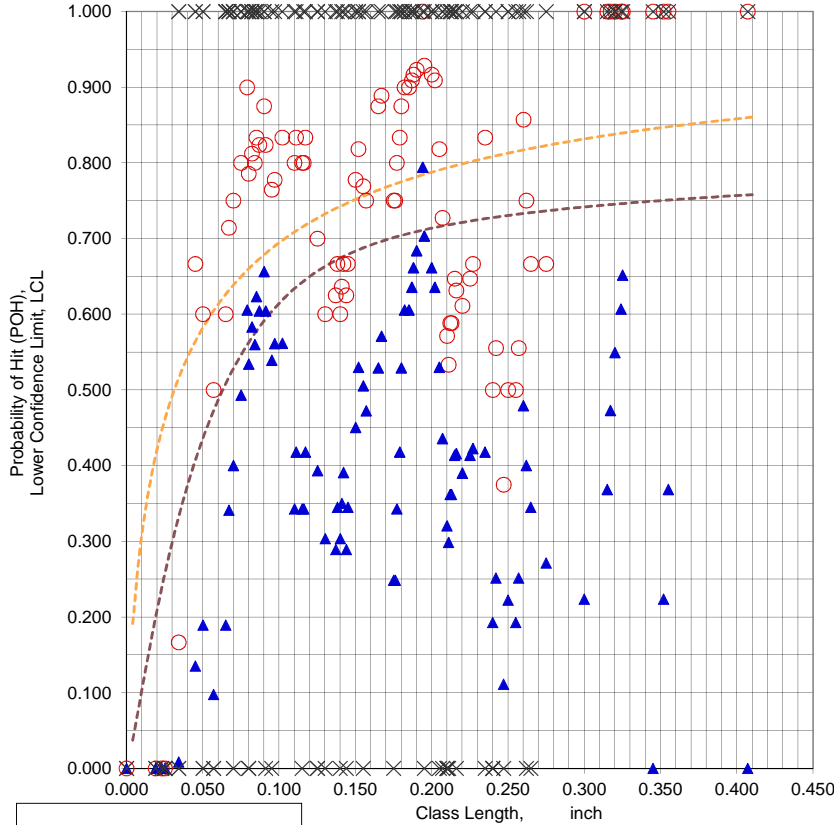
TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.5220	1		
0.5200	2		
0.5120	3		
0.5100	6		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss

— Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = C3001AL.XLS
 Data Set Name = C3001AL(CRK #)
 Date & Time = 6/4/15 9:04 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7942
 Classwidth @ Best LCL = 0.0180 inch
 Classlength @ Best LCL = 0.1940 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.2750 -0.009 inch 28 Samples

NTIAC 90% POD = 0.900 @ 0.705 inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.407 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.300 inch
 Samples Needed @ Xpoh = 27
 New Largest Classlength , 2XL = 0.814 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C3001AL.XLS
 Data Set Name = C3001AL(CRK #)

Directed DOE Options

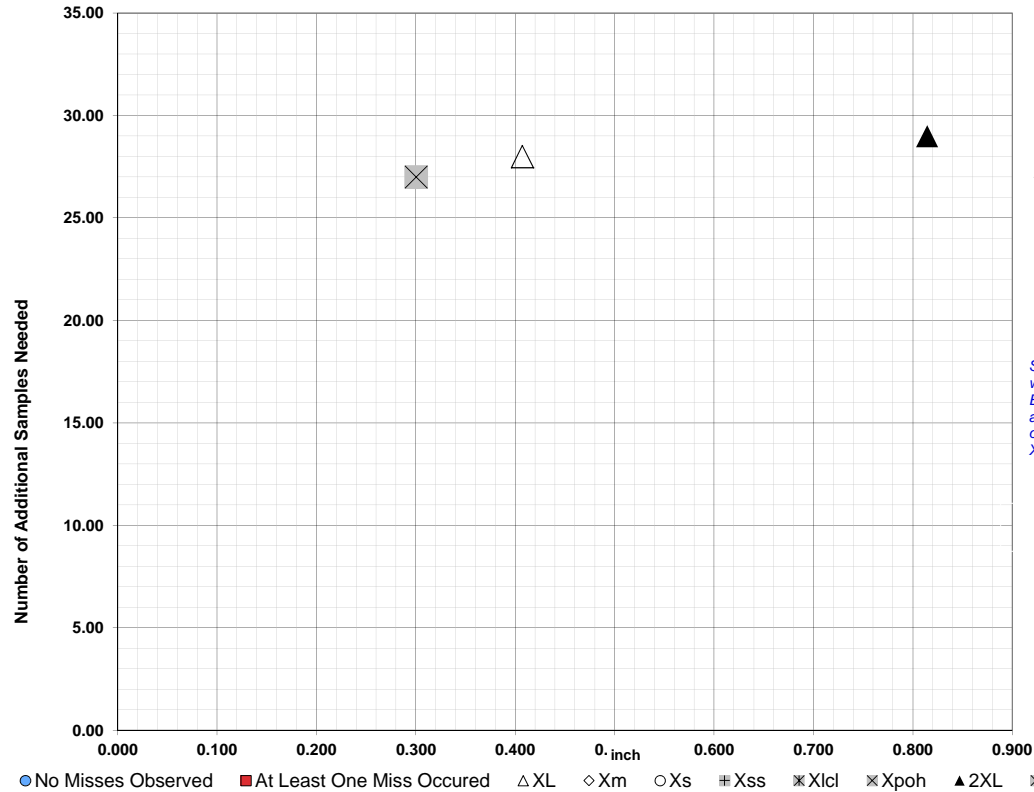


TABLE C

Class Length	Additional Samples
XL = 0.407	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.300	27
2XL = 0.814	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

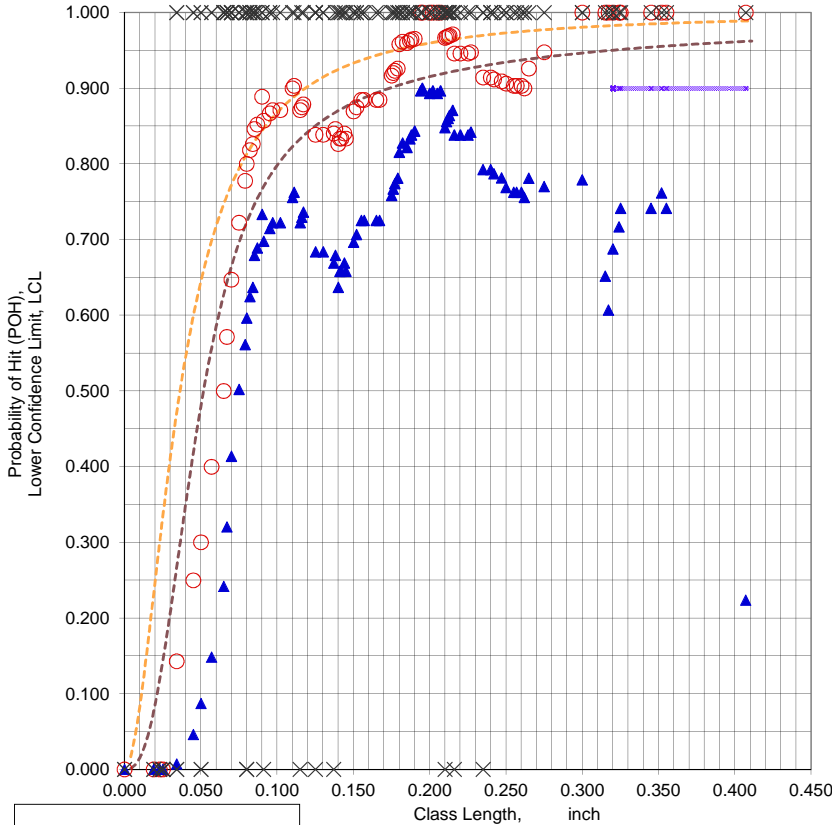
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Extend flaw size range to 0.585.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 ┆ Xp, 90/95 POD ┆ MLE(Mean) POD ┆ MLE(95%) LCL

File Name = C3001BL.XLS
 Data Set Name = C3001BL(CRK #)
 Date & Time = 6/4/15 9:06 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0540 inch
 Classlength @ 90/95 Xpod = 0.1950 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Xp used to satisfy XL requirements. Further VALIDATION is required. Recommend satisfying Xm and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in T

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.902 @ 0.120 inch
 NTIAC 90/95 POD = 0.901 @ 0.175 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.407 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.300 inch
 Samples Needed @ Xm = 17
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.3200 inch

File Name = C3001BL.XLS
 Data Set Name = C3001BL(CRK #)

Directed DOE Options

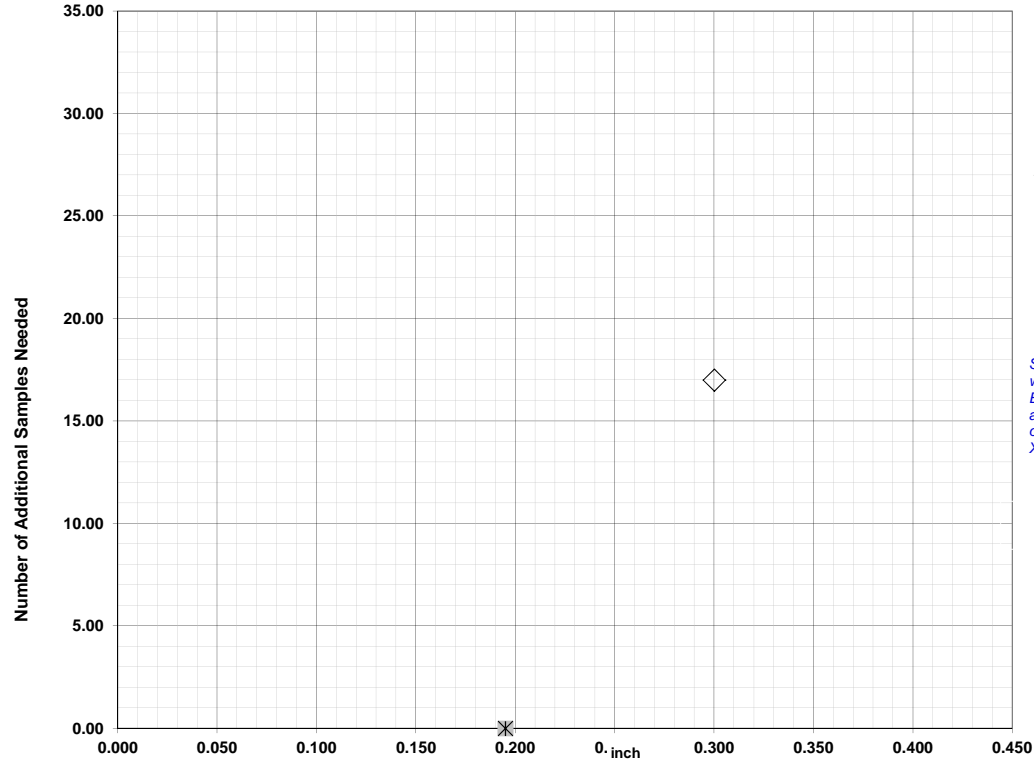


TABLE C

Class Length	Additional Samples
XL = 0.407	
Xm = 0.300	17
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

XL = 0.407
 Xm = 0.300 17
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

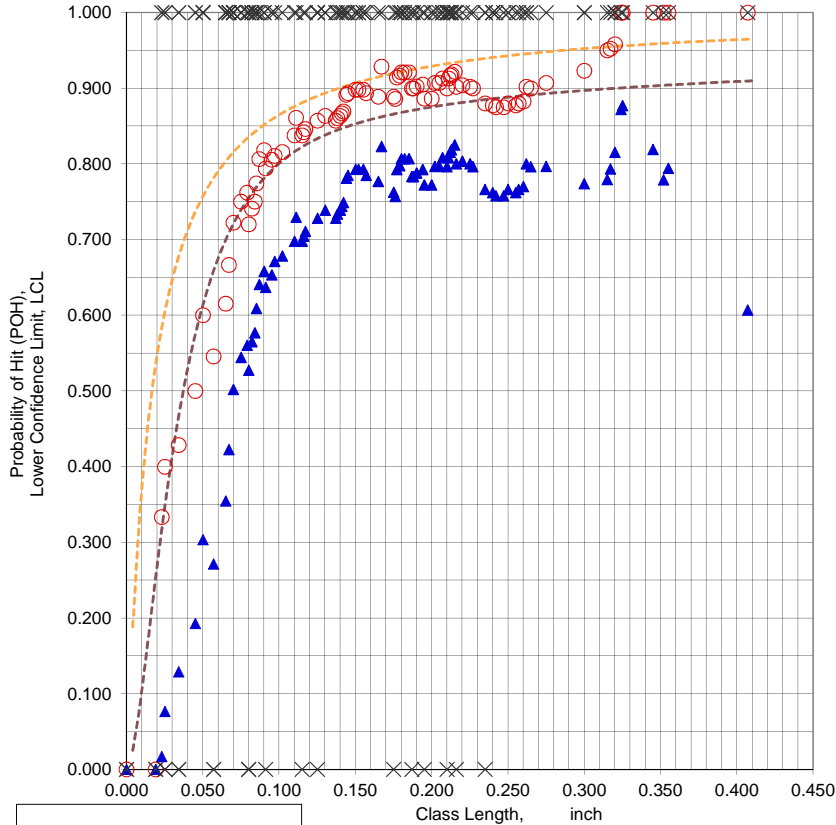
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = C3001CL.XLS
 Data Set Name = C3001CL(CRK #)
 Date & Time = 6/4/15 9:07 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8768
 Classwidth @ Best LCL = 0.0850 inch
 Classlength @ Best LCL = 0.3250 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.2400 -0.004 inch 26 Samples
 NTIAC 90% POD = 0.901 @ 0.140 inch
 NTIAC 90/95 POD = 0.901 @ 0.325 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.407 inch
 Samples Needed @ XL = 23
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.325 inch
 Samples Needed @ Xlcl = 6
 POH Classlength, Xpoh = 0.324 inch
 Samples Needed @ Xpoh = 7
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C3001CL.XLS
 Data Set Name = C3001CL(CRK #)

Directed DOE Options

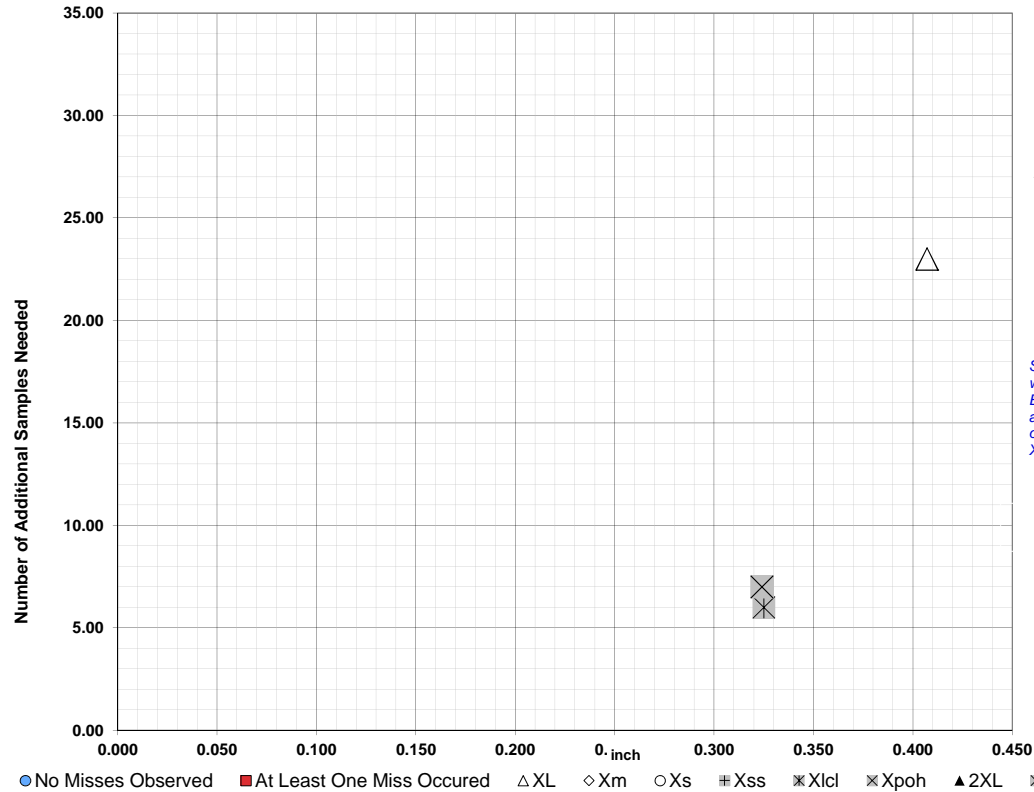


TABLE C

Class Length	Additional Samples
XL = 0.407	23
Xm =	
Xs =	
Xss =	
Xlcl = 0.325	6
Xpoh = 0.324	7
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

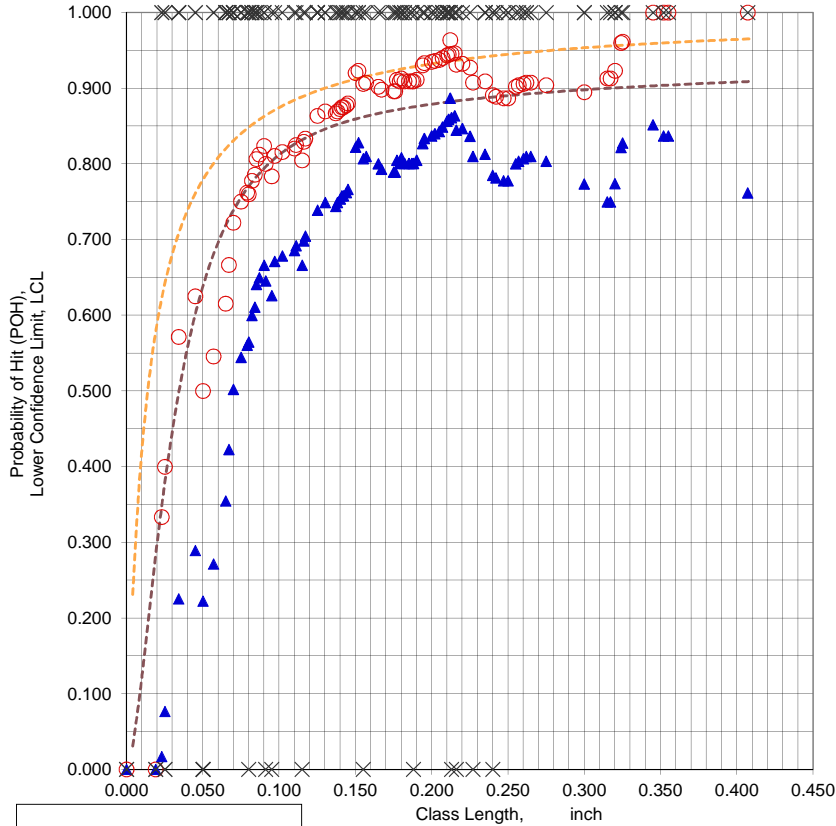
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = C3002AL.XLS
 Data Set Name = C3002AL(CRK #)
 Date & Time = 6/4/15 9:08 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8868
 Classwidth @ Best LCL = 0.0960 inch
 Classlength @ Best LCL = 0.2120 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.2420 -0.001 inch 28 Samples
 NTIAC 90% POD = 0.900 @ 0.130 inch
 NTIAC 90/95 POD = 0.900 @ 0.320 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.407 inch
 Samples Needed @ XL = 18
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.345 inch
 Samples Needed @ Xpoh = 10
 New Largest Classlength , 2XL = 0.814 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C3002AL.XLS
 Data Set Name = C3002AL(CRK #)

Directed DOE Options

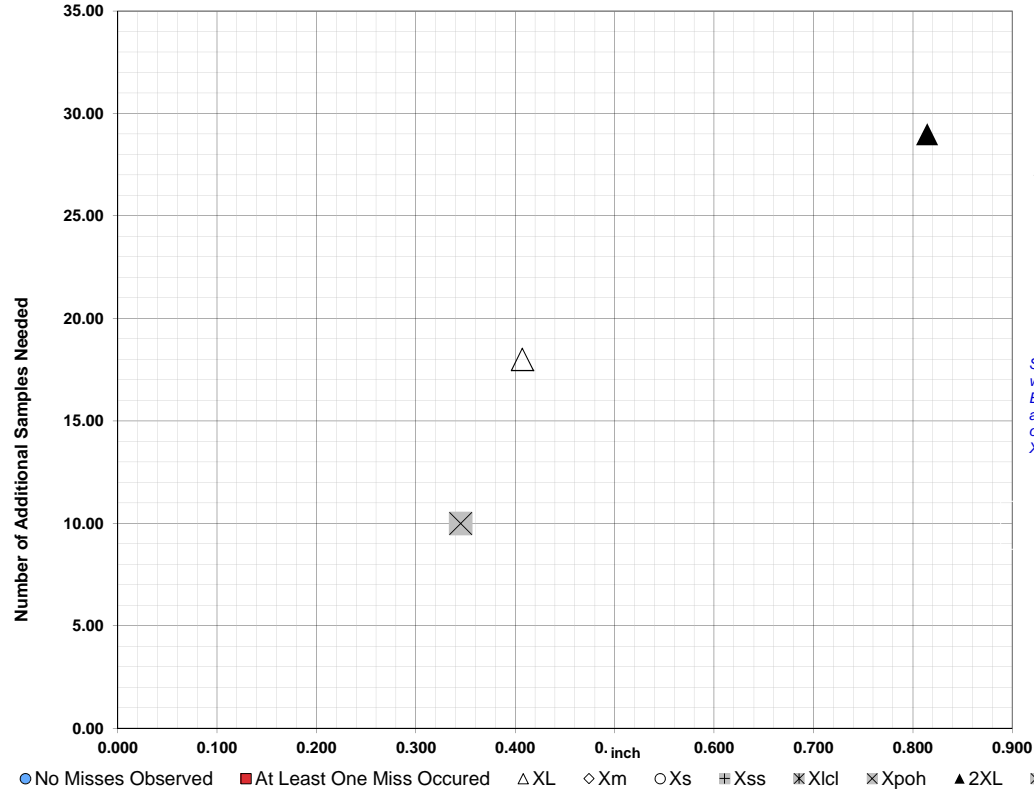


TABLE C

Class Length	Additional Samples
XL = 0.407	18
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.345	10
2XL = 0.814	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

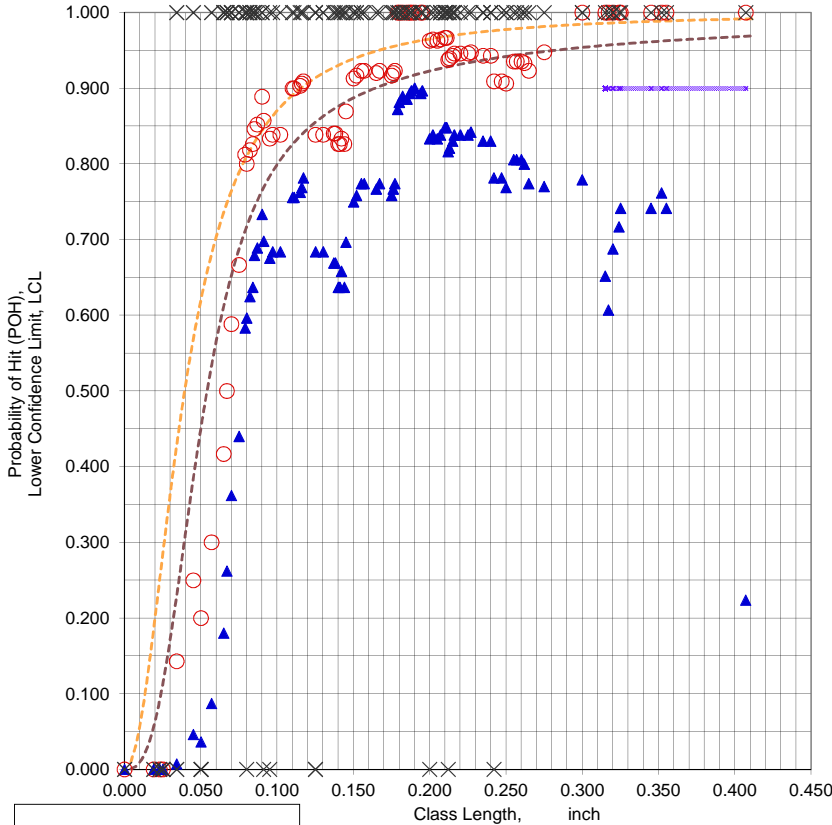
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 0.57.
 Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 ┆ Xp, 90/95 POD ┆ MLE(Mean) POD ┆ MLE(95%) LCL

File Name = **C3002BL.XLS**
 Data Set Name = **C3002BL(CRK #)**
 Date & Time = 6/4/15 9:10 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0530 inch
 Classlength @ 90/95 Xpod = 0.1900 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Xp used to satisfy XL requirements. Further VALIDATION is required. Recommend satisfying Xm and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in T

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.907 @ 0.120 inch
 NTIAC 90/95 POD = 0.901 @ 0.165 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.407 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.300 inch
 Samples Needed @ Xm = 17
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.3150 inch

File Name = C3002BL.XLS
 Data Set Name = C3002BL(CRK #)

Directed DOE Options

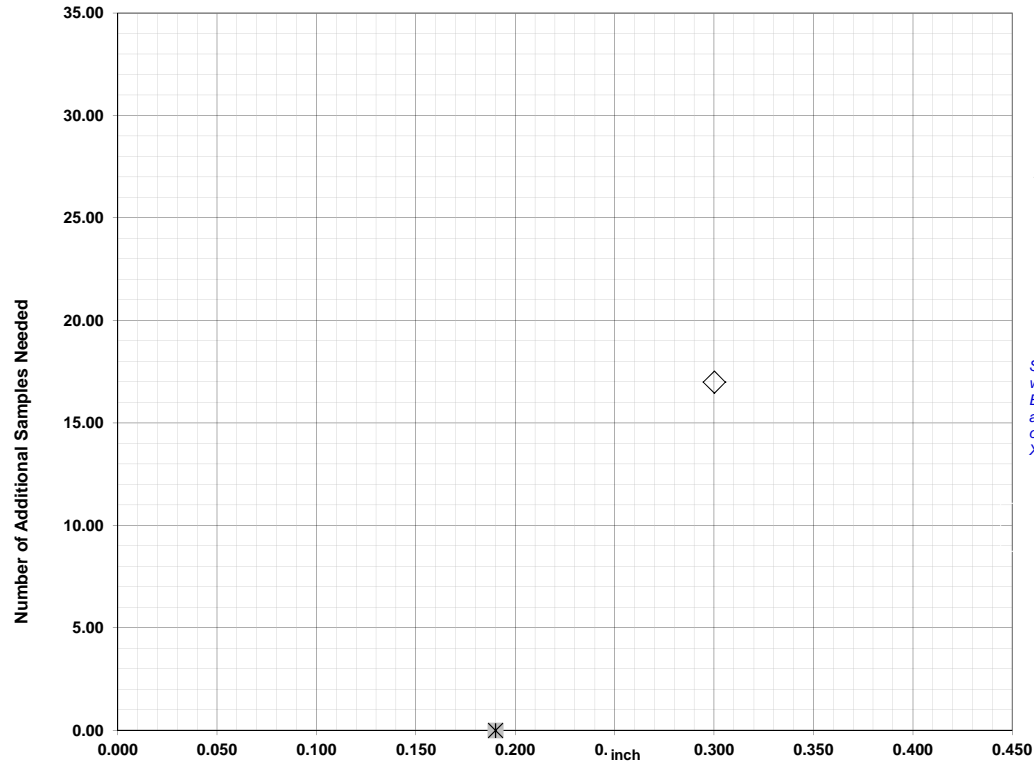


TABLE C

Class Length Additional Samples

XL = 0.407
 Xm = 0.300 17
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

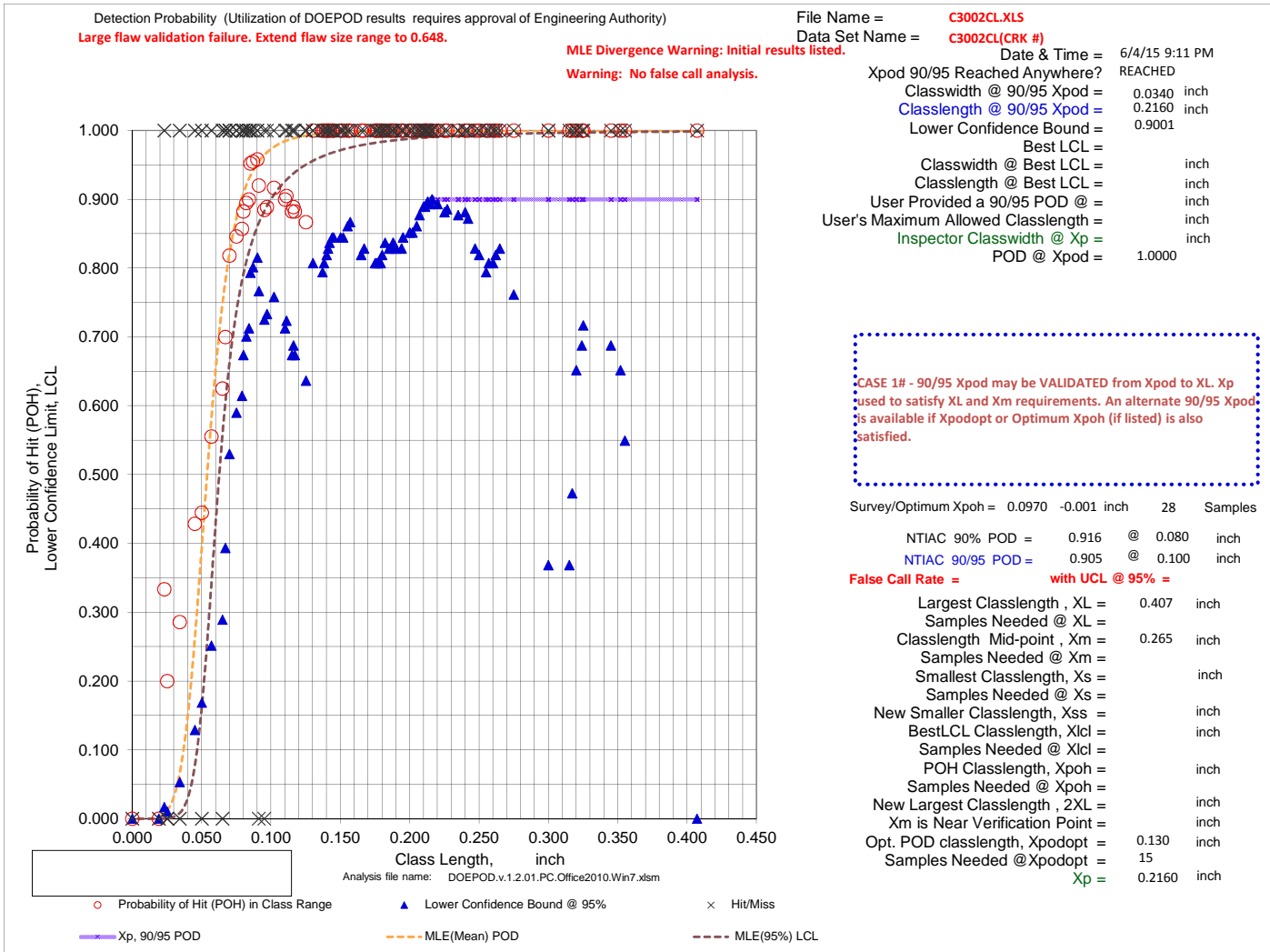
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C3002CL.XLS
 Data Set Name = C3002CL(CRK #)

Directed DOE Options

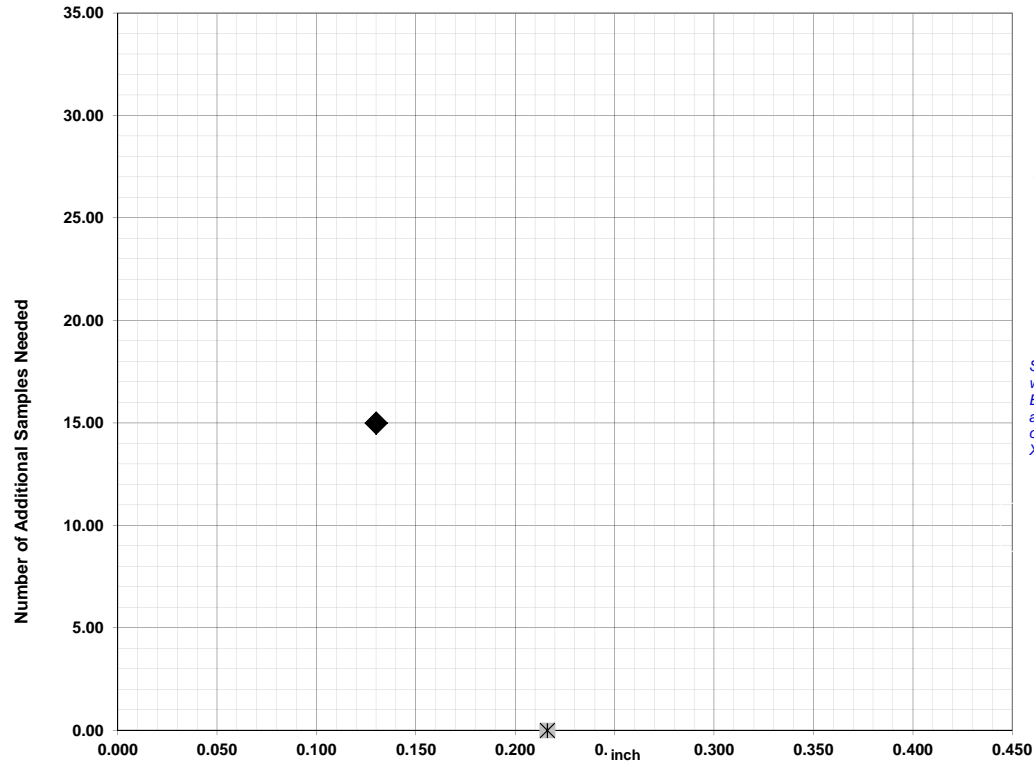


TABLE C

Class Length	Additional Samples
XL =	0.407
Xm =	0.265
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.130 15

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

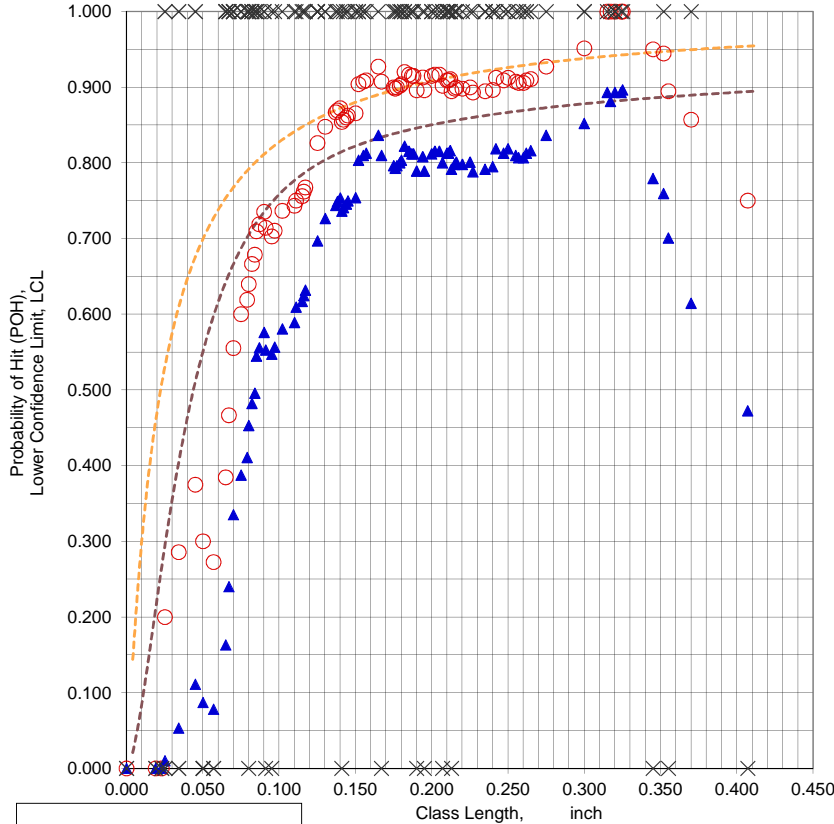
Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = C3003AL.XLS
 Data Set Name = C3003AL(CRK #)
 Date & Time = 6/4/15 9:12 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8965
 Classwidth @ Best LCL = 0.1000 inch
 Classlength @ Best LCL = 0.3250 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.901 @ 0.185 inch
 NTIAC 90/95 POD = 0.900 @ 0.465 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.814 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C3003AL.XLS
 Data Set Name = C3003AL(CRK #)

Directed DOE Options

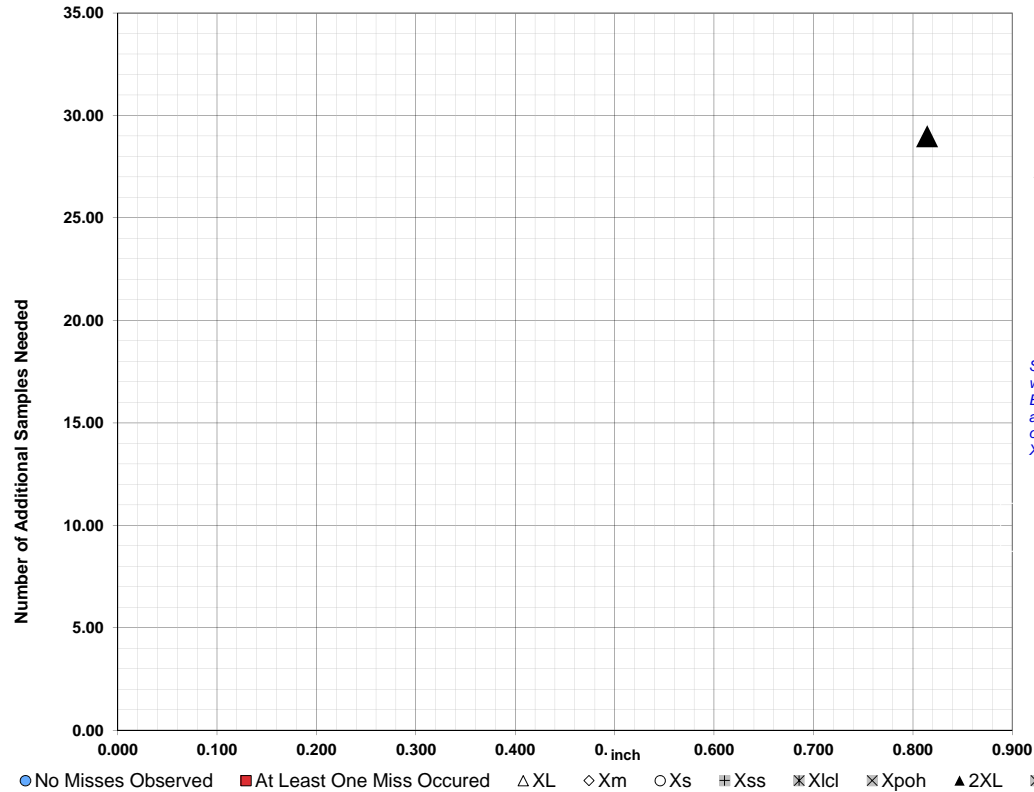


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.814	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.814 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

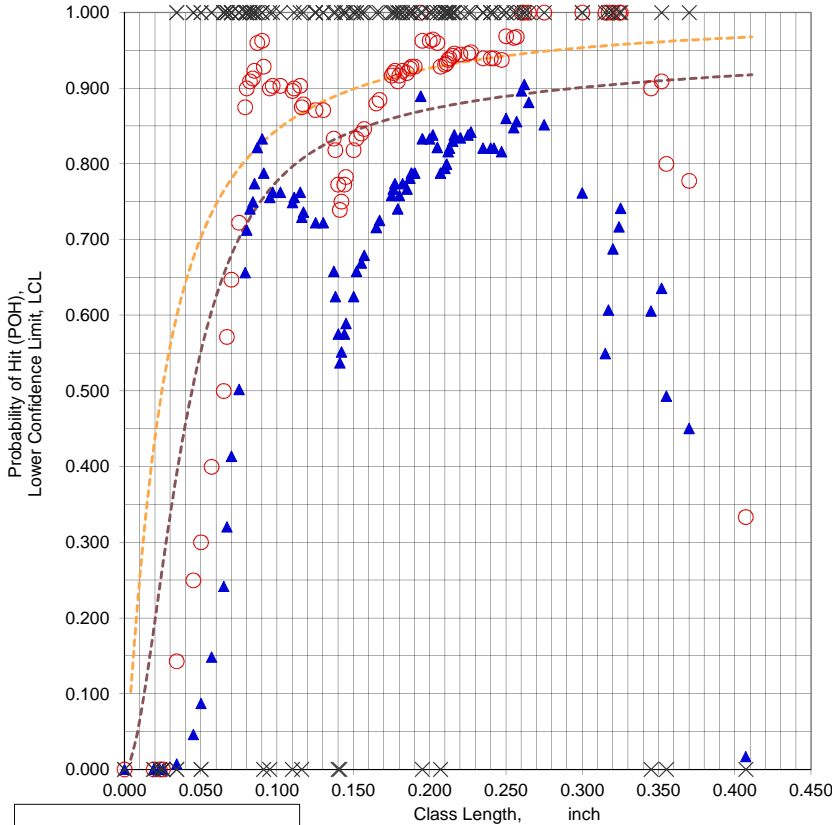
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 0.786.

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE (Mean) POD - - - MLE (95%) LCL

File Name = **C3003BL.XLS**
 Data Set Name = **C3003BL(CRK #)**
 Date & Time = 6/4/15 9:13 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0520 inch
 Classlength @ 90/95 Xpod = 0.2620 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Further VALIDATION is required. Recommend satisfying XL and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in Table A.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.903 @ 0.155 inch
 NTIAC 90/95 POD = 0.900 @ 0.295 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.407 inch
 Samples Needed @ XL = 58
 Classlength Mid-point , Xm = 0.300 inch
 Samples Needed @ Xm = 18
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C3003BL.XLS
 Data Set Name = C3003BL(CRK #)

Directed DOE Options

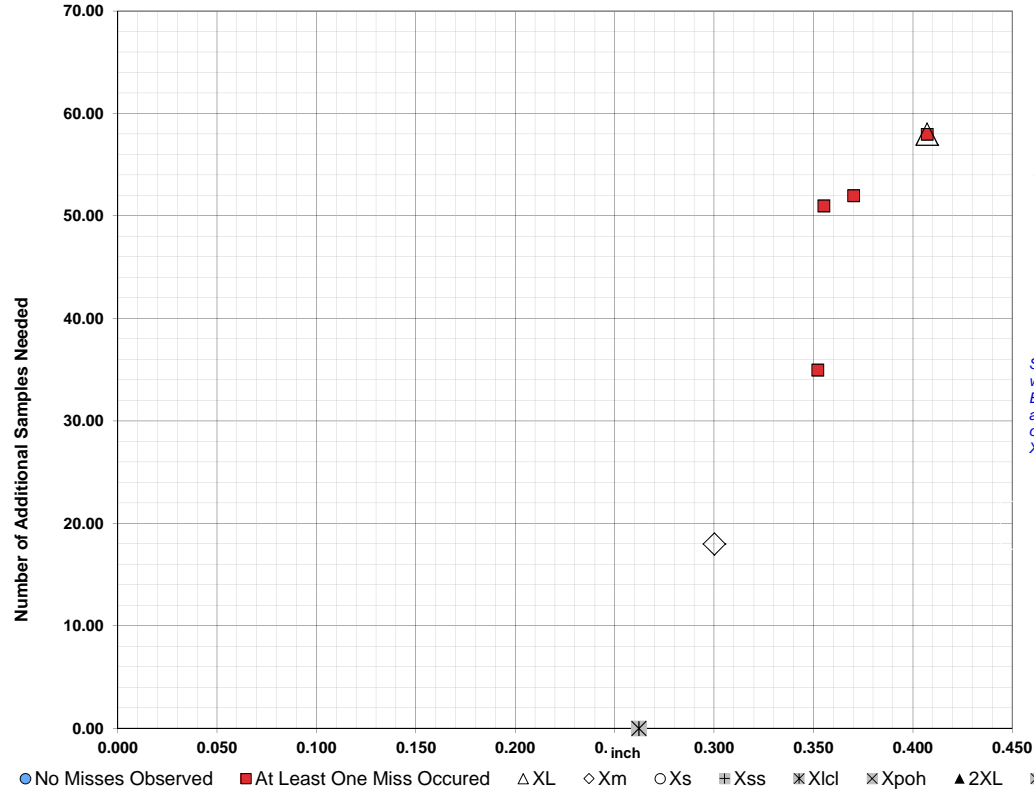


TABLE C

Class Length Additional Samples

XL = 0.407 58
 Xm = 0.300 18

Xs =

Xss =

Xlcl =

Xpoh =

2XL =

**Alternate Xm =

Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

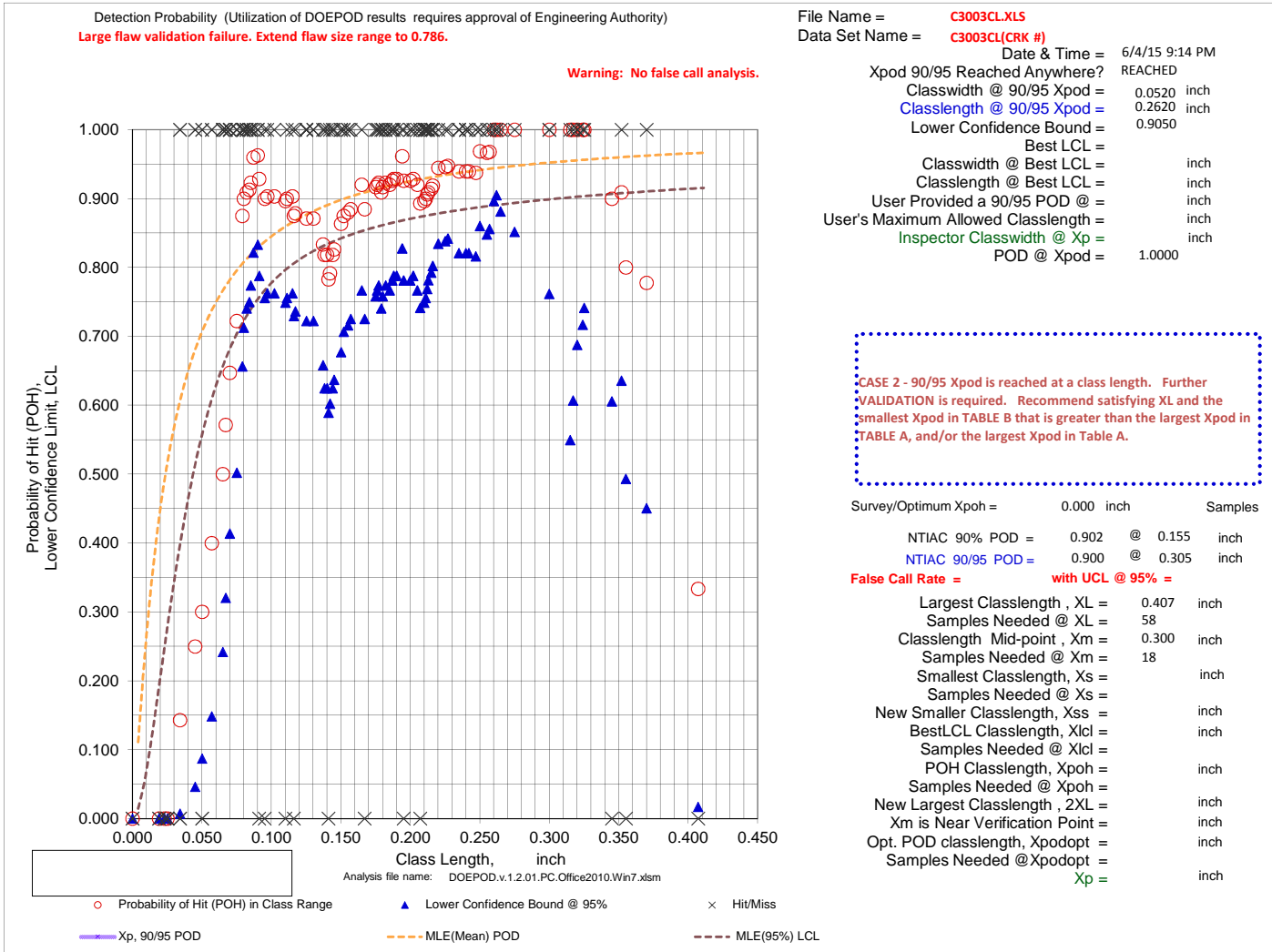
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.4070	58		
0.3700	52		
0.3550	51		
0.3520	35		

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs + Xss * Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C3003CL.XLS
 Data Set Name = C3003CL(CRK #)

Directed DOE Options

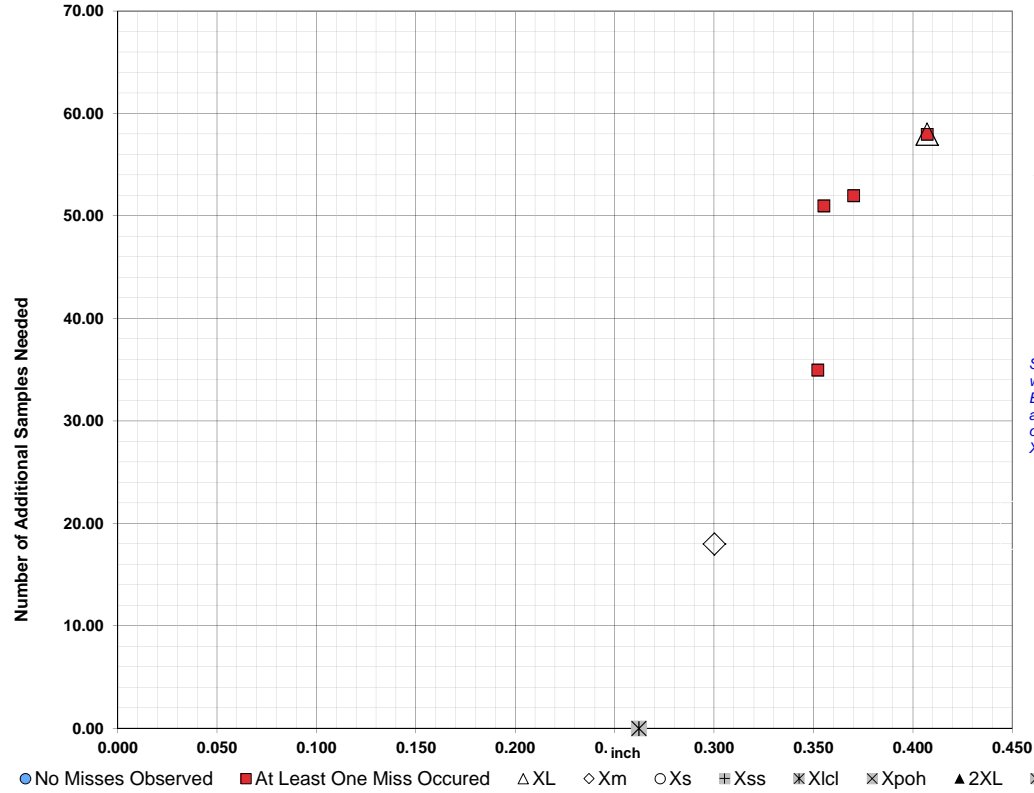


TABLE C

Class Length	Additional Samples
XL = 0.407	58
Xm = 0.300	18
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

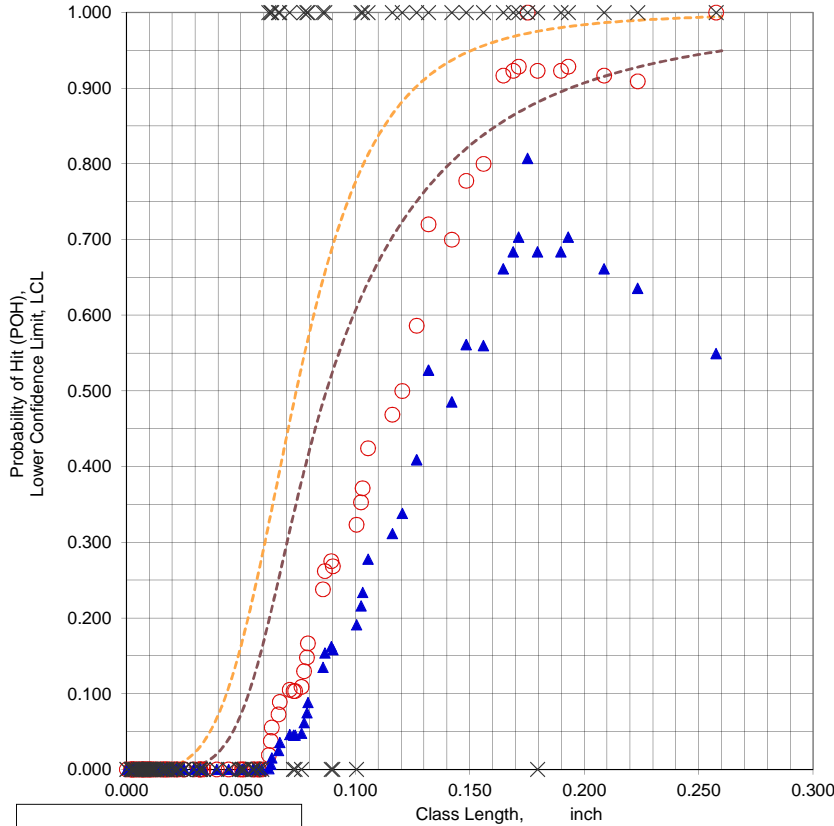
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.4070	58		
0.3700	52		
0.3550	51		
0.3520	35		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = C400011.XLS
 Data Set Name = C400011(hole no.)
 Date & Time = 6/4/15 9:15 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8074
 Classwidth @ Best LCL = 0.0730 inch
 Classlength @ Best LCL = 0.1752 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.1898 -0.010 inch 28 Samples
 NTIAC 90% POD = 0.912 @ 0.130 inch
 NTIAC 90/95 POD = 0.902 @ 0.195 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.257 inch
 Samples Needed @ XL = 24
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.257 inch
 Samples Needed @ Xpoh = 24
 New Largest Classlength , 2XL = 0.515 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C400011.XLS
 Data Set Name = C400011(hole no.)

Directed DOE Options

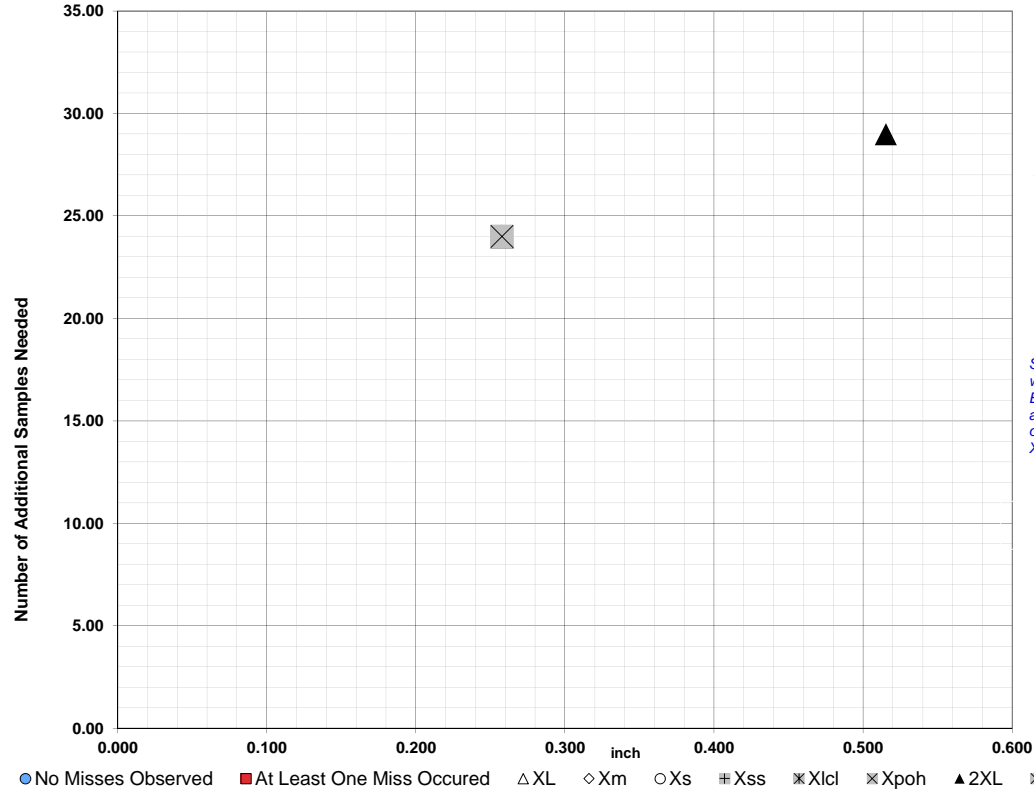


TABLE C

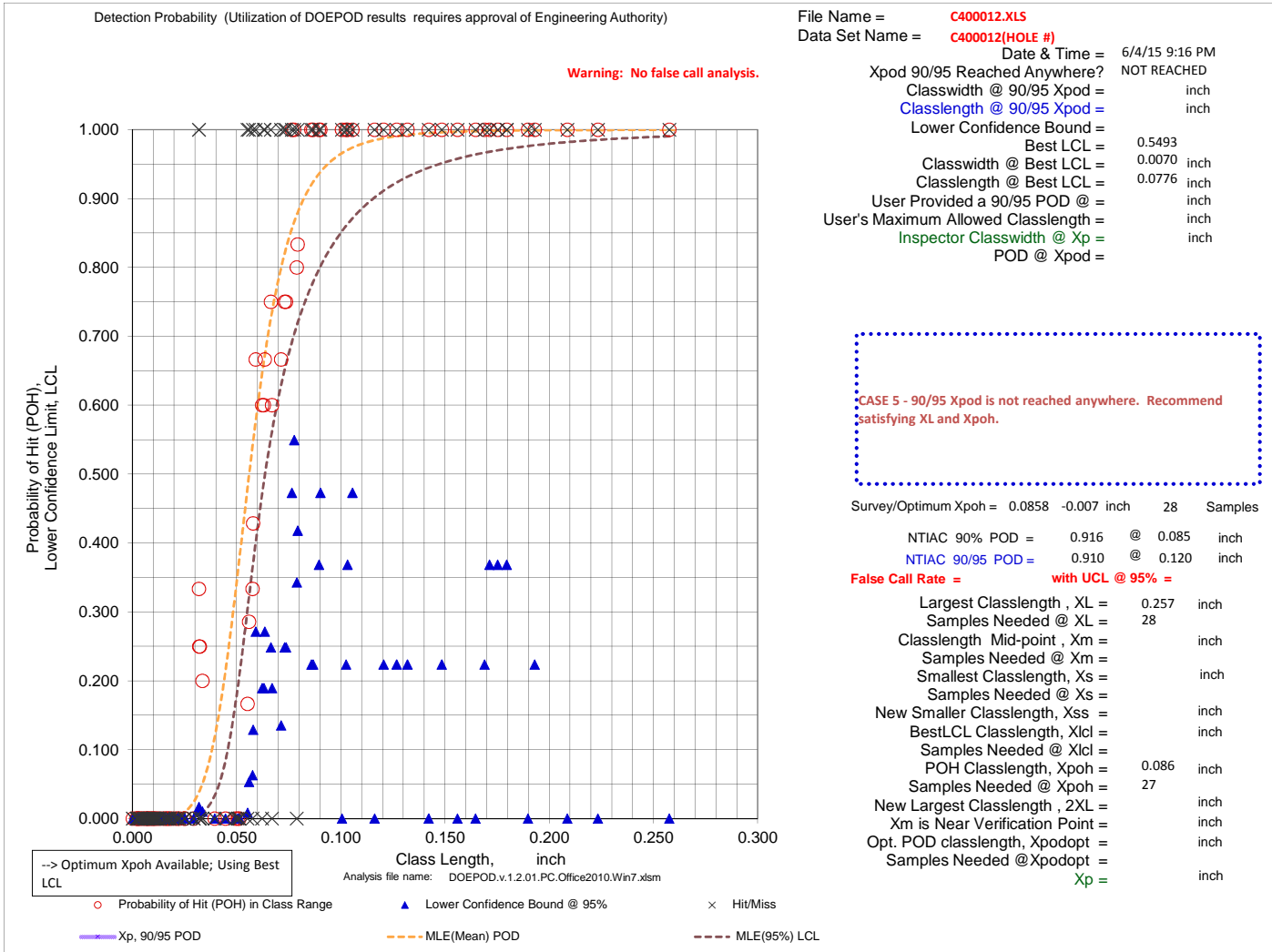
Class Length	Additional Samples
XL = 0.257	24
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.257	24
2XL = 0.515	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C400012.XLS
 Data Set Name = C400012(HOLE #)

Directed DOE Options

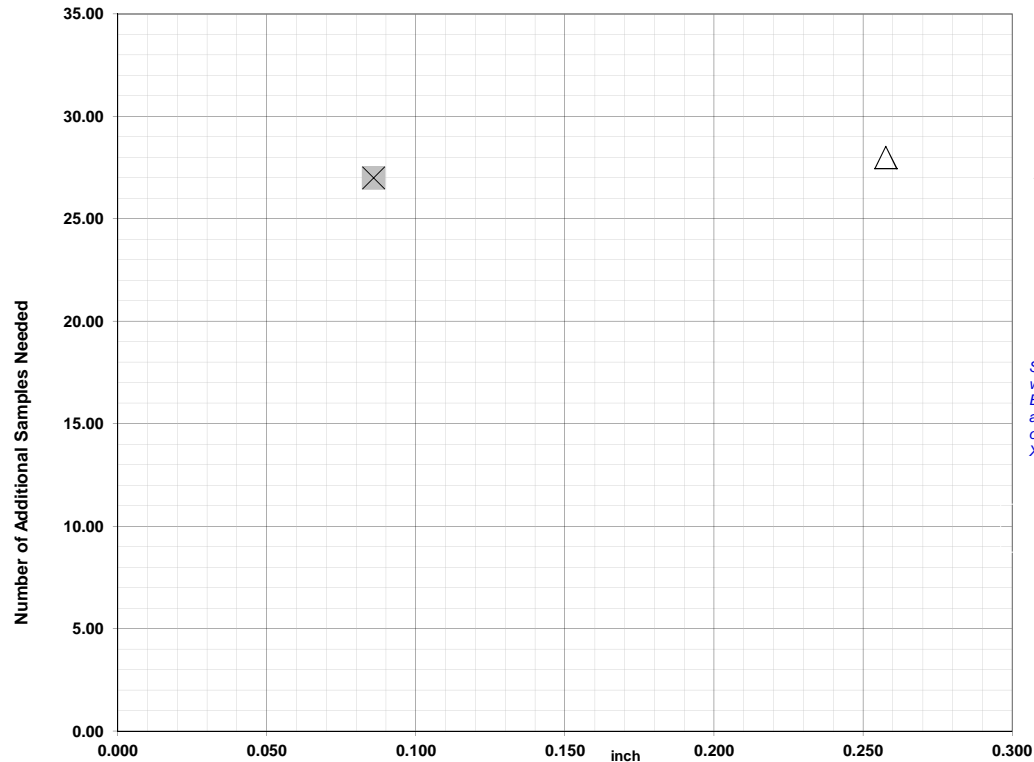


TABLE C

Class Length	Additional Samples
XL = 0.257	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.086	27
2XL =	
**Alternate Xm =	
Xpodopt =	

**Alternate Xm =
 Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs # Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

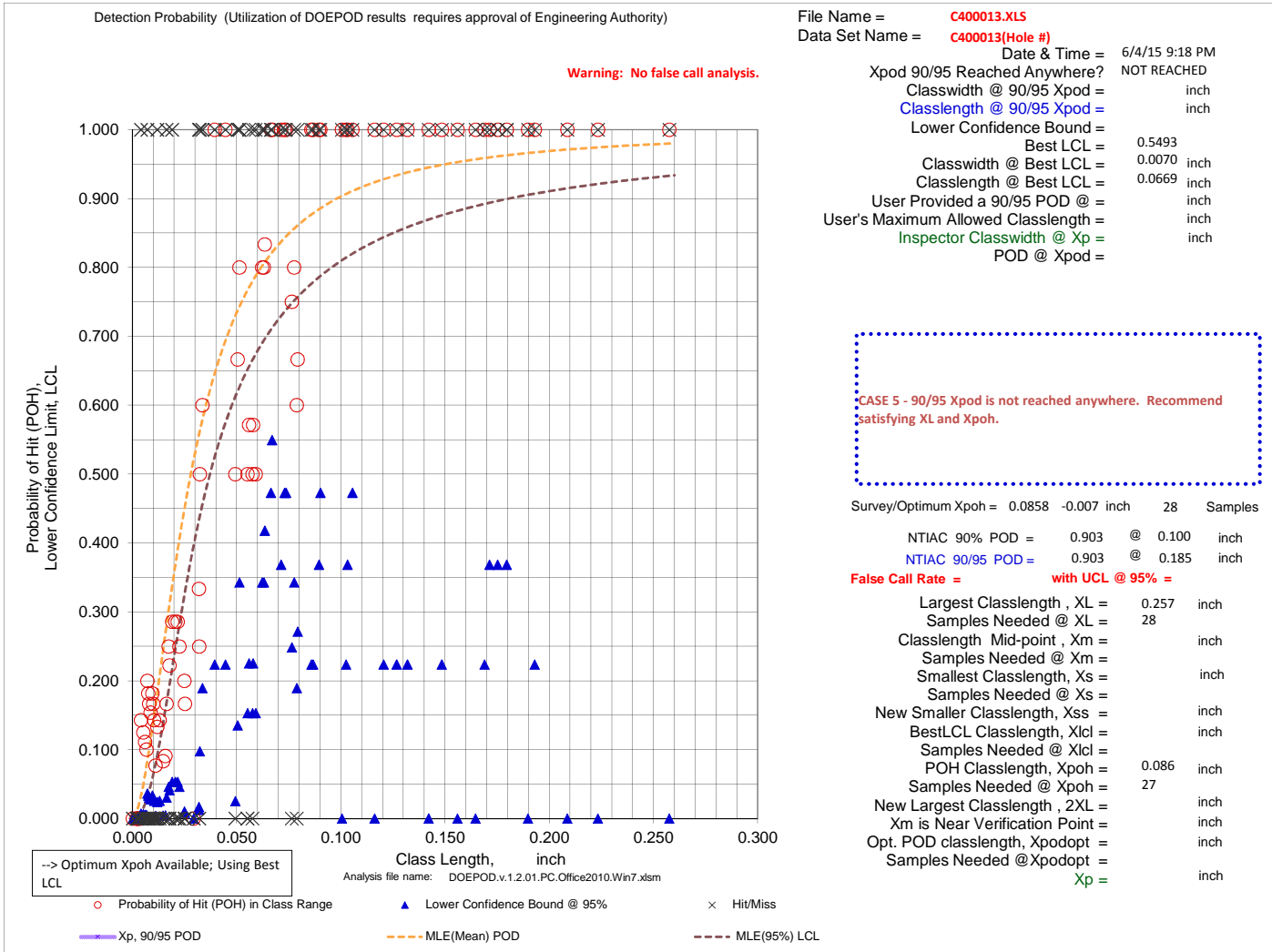
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C400013.XLS
 Data Set Name = C400013(Hole #)

Directed DOE Options

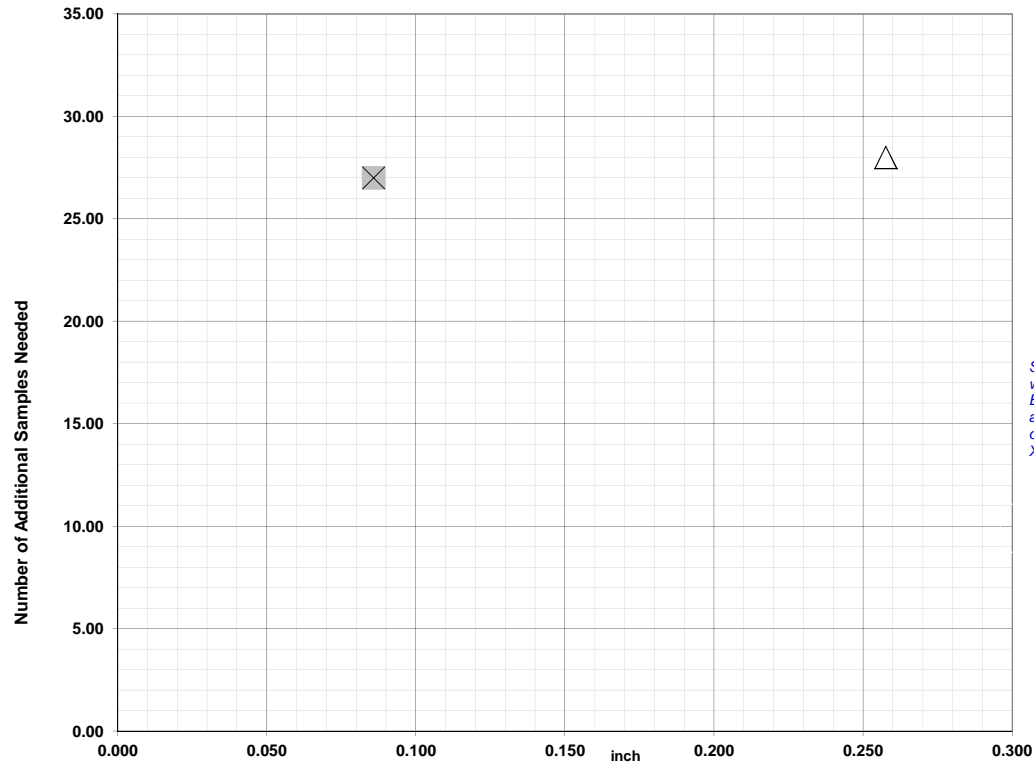


TABLE C

Class Length	Additional Samples
XL = 0.257	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.086	27
2XL =	
**Alternate Xm =	
Xpodopt =	

**Alternate Xm =
 Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs # Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

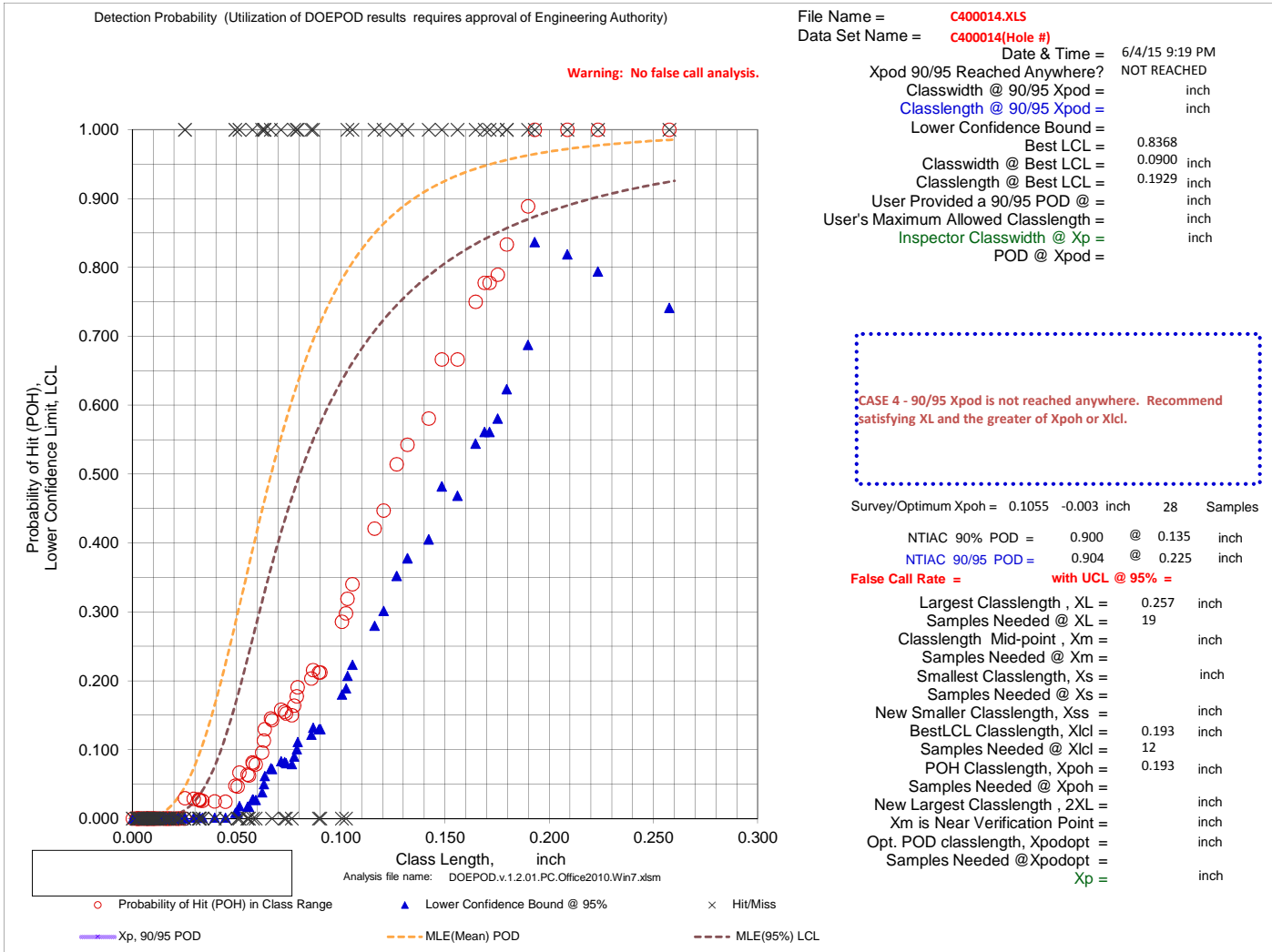
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C400014.XLS
 Data Set Name = C400014(Hole #)

Directed DOE Options

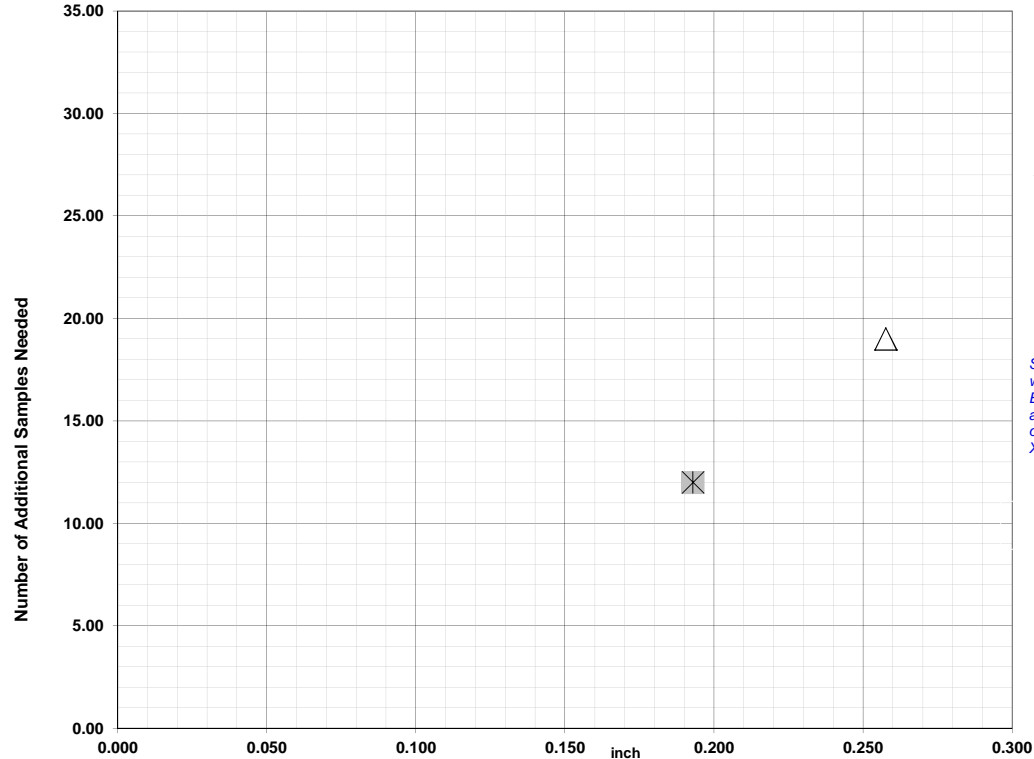


TABLE C

Class Length	Additional Samples
XL = 0.257	19
Xm =	
Xs =	
Xss =	
Xlcl = 0.193	12
Xpoh = 0.193	
2XL =	
**Alternate Xm =	
Xpodopt =	

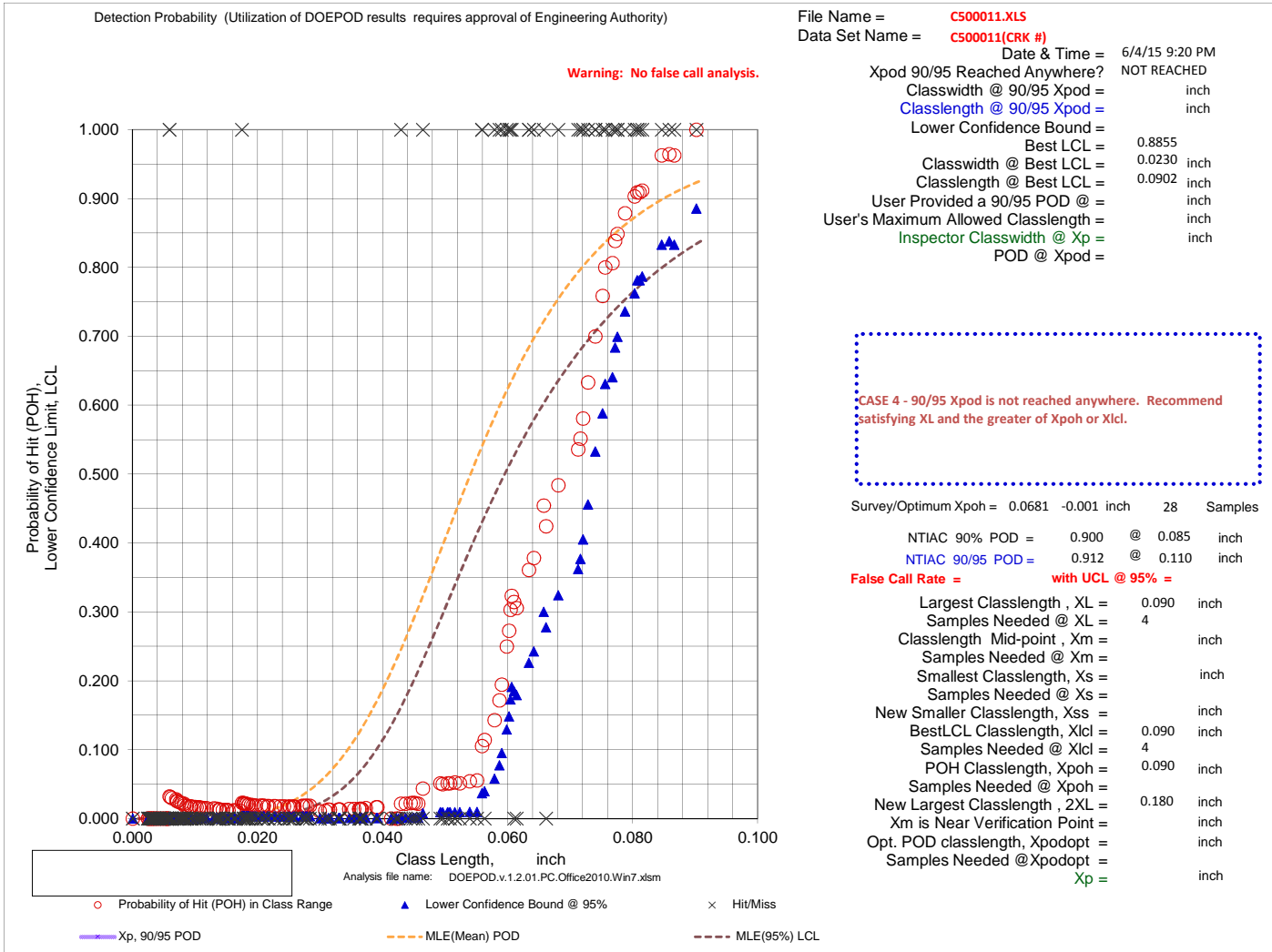
TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C500011.XLS
 Data Set Name = C500011(CRK #)

Directed DOE Options

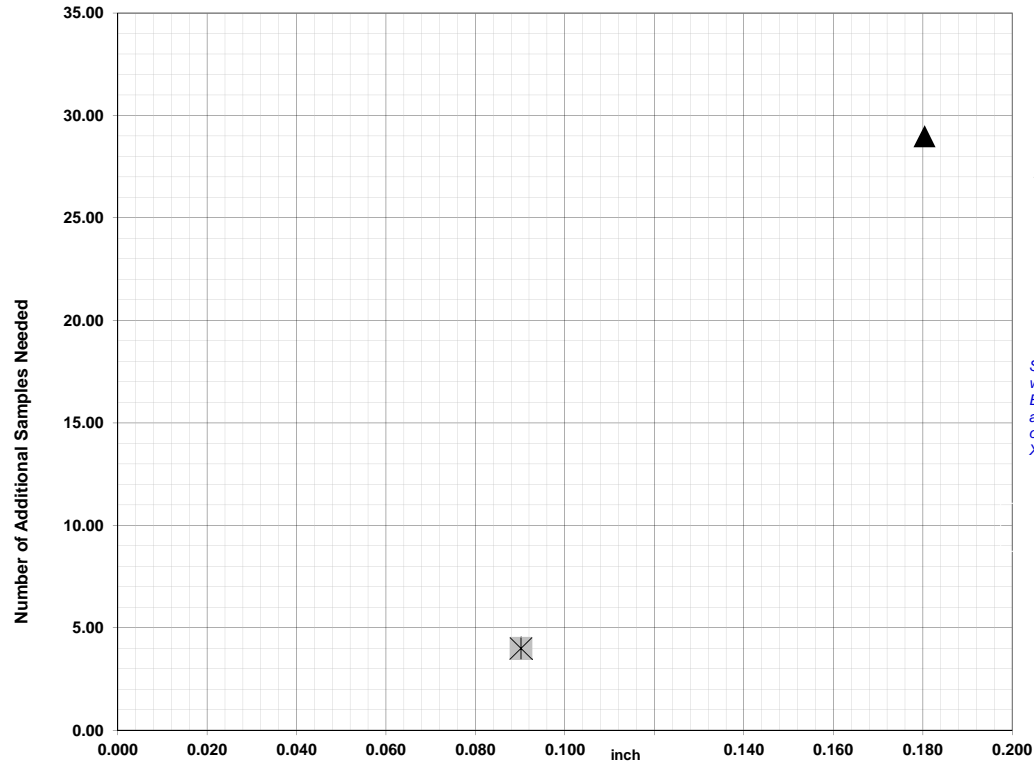


TABLE C

Class Length	Additional Samples
XL = 0.090	4
Xm =	
Xs =	
Xss =	
XLcl = 0.090	4
Xpoh = 0.090	
2XL = 0.180	29
**Alternate Xm =	
Xpodopt =	

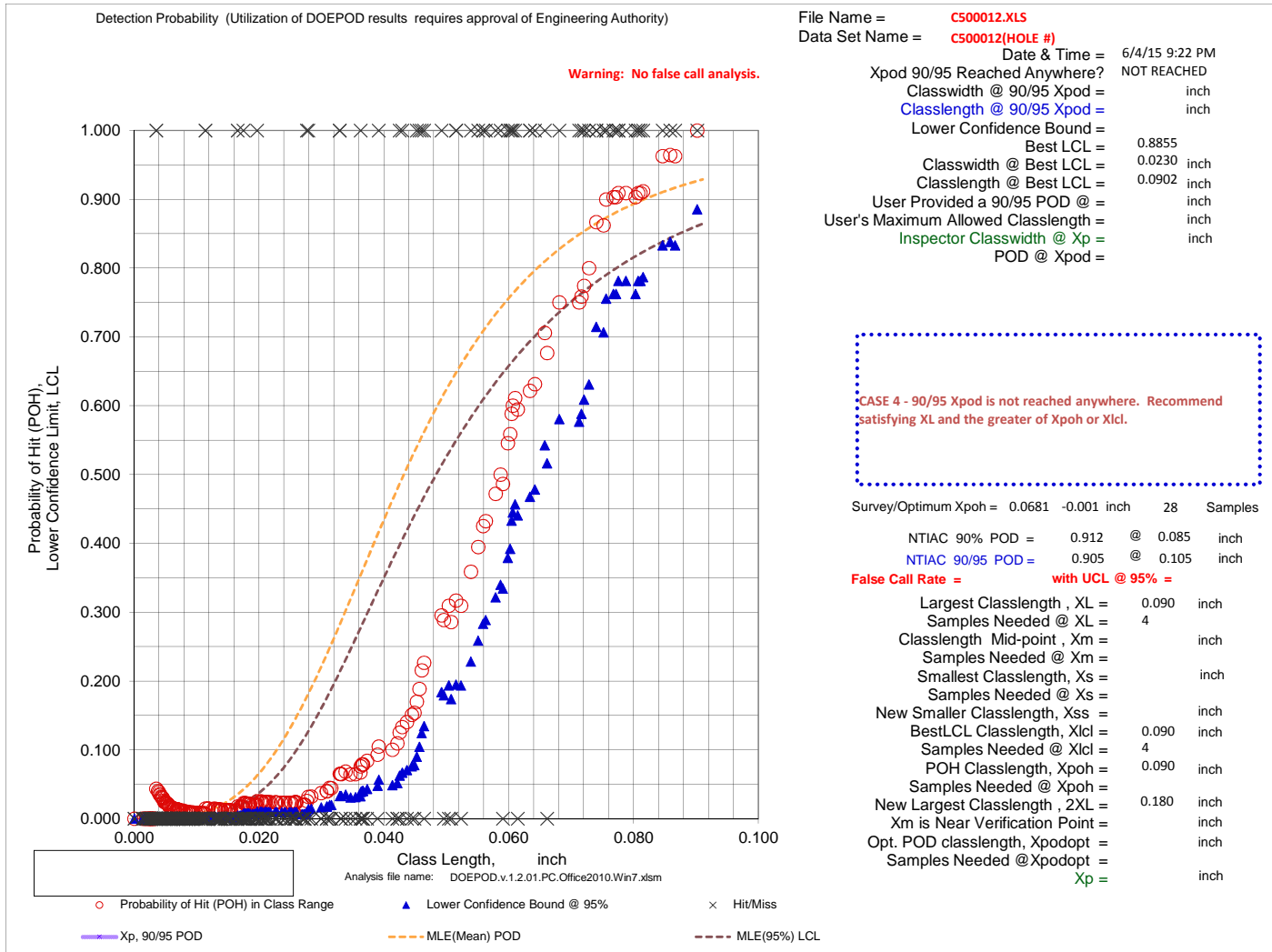
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ XLcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C500012.XLS
 Data Set Name = C500012(HOLE #)

Directed DOE Options

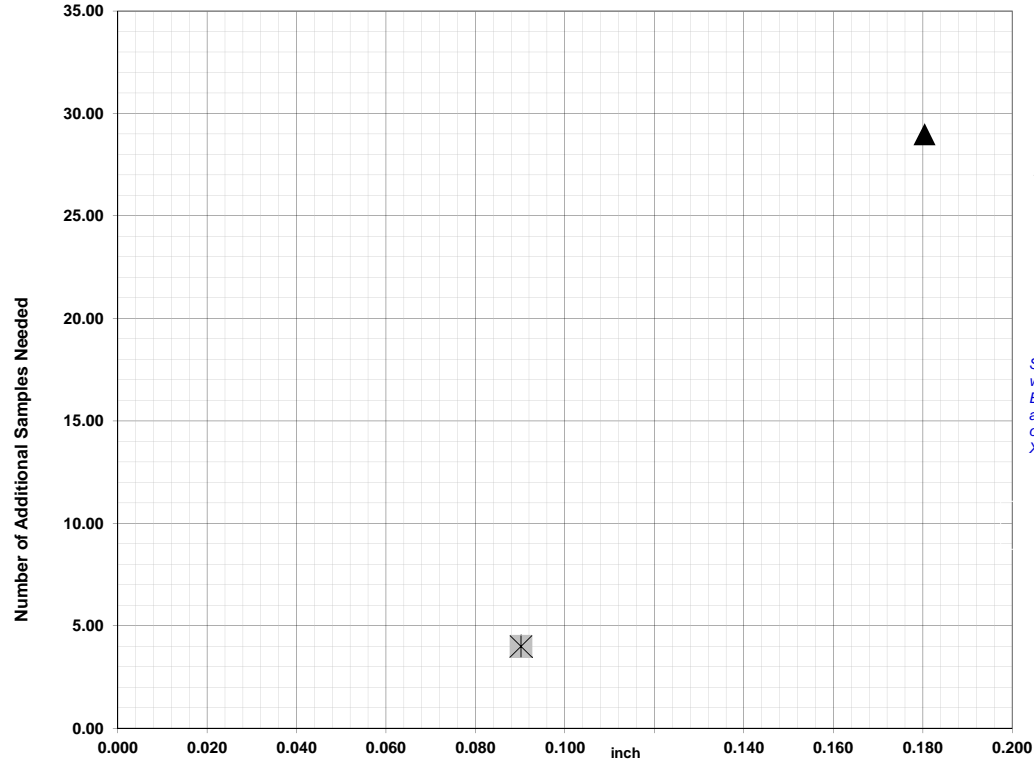


TABLE C

Class Length	Additional Samples
XL = 0.090	4
Xm =	
Xs =	
Xss =	
Xlcl = 0.090	4
Xpoh = 0.090	
2XL = 0.180	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

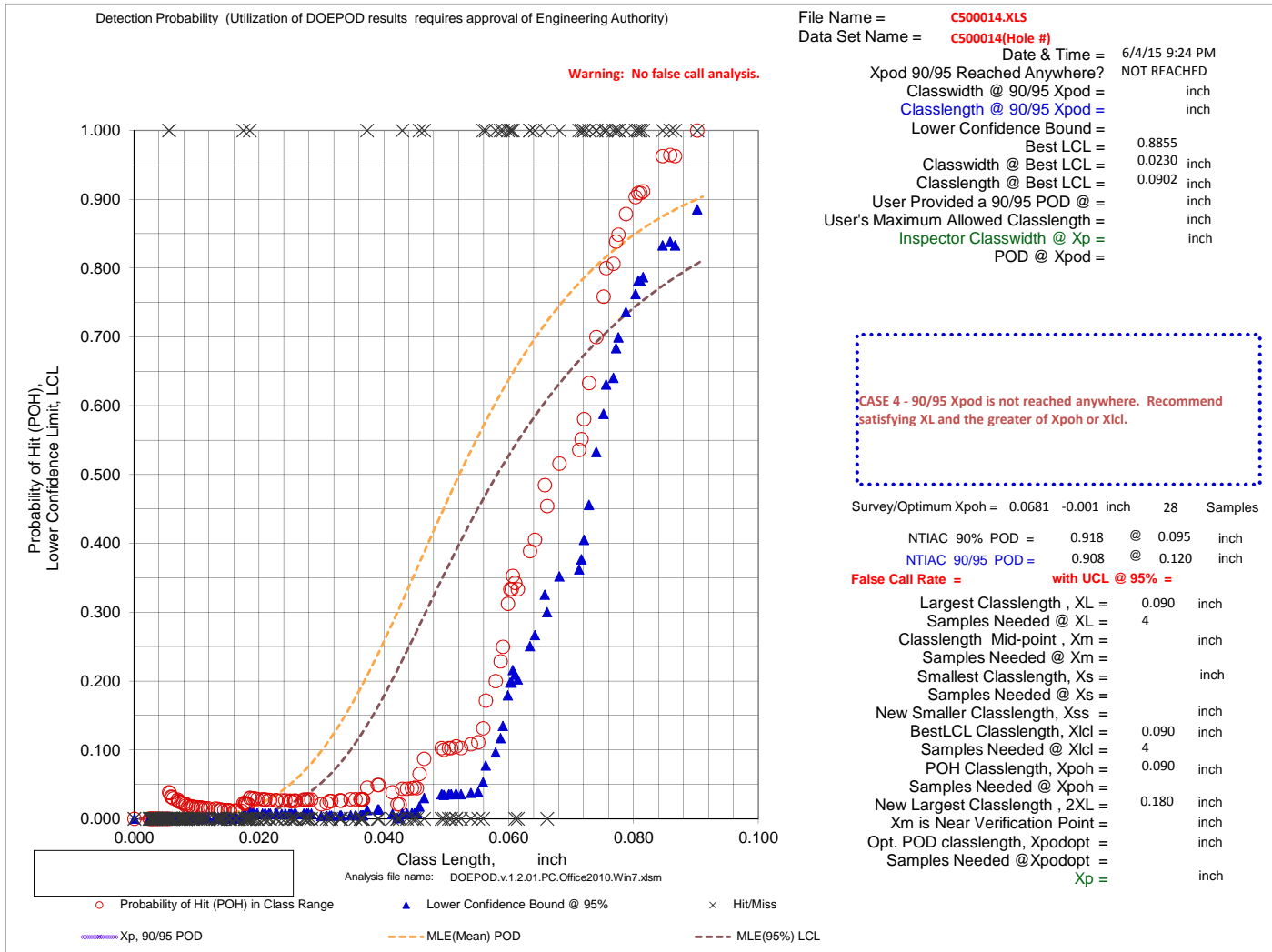
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C500014.XLS
 Data Set Name = C500014(Hole #)

Directed DOE Options

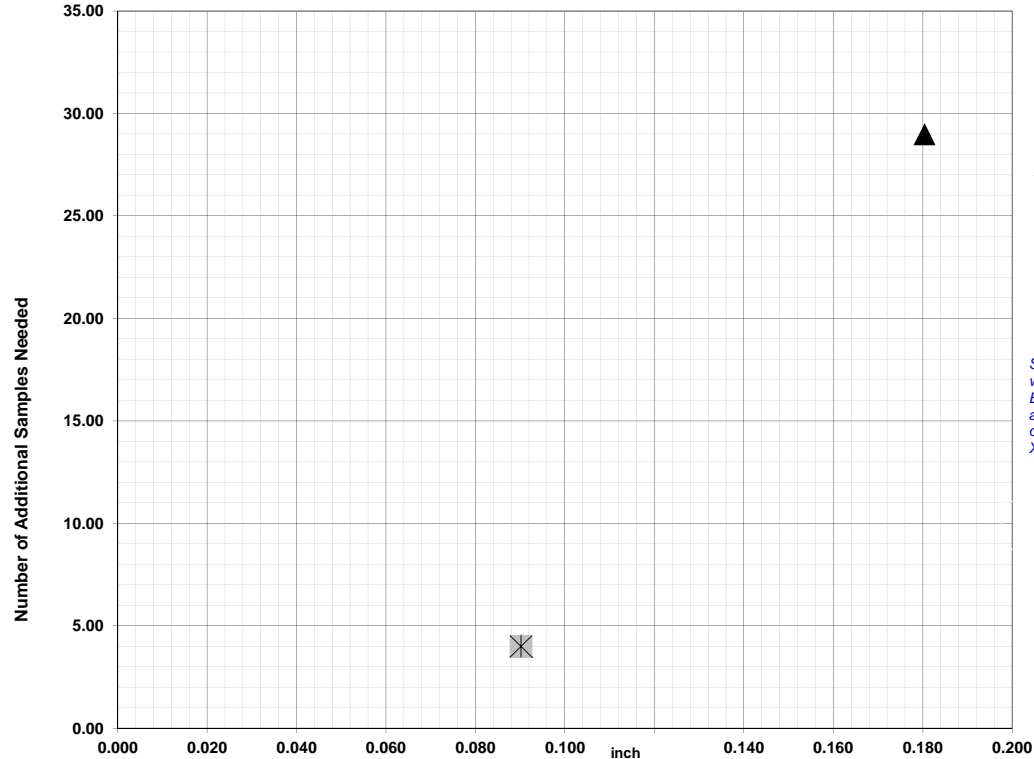


TABLE C

Class Length	Additional Samples
XL = 0.090	4
Xm =	
Xs =	
Xss =	
Xlcl = 0.090	4
Xpoh = 0.090	
2XL = 0.180	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

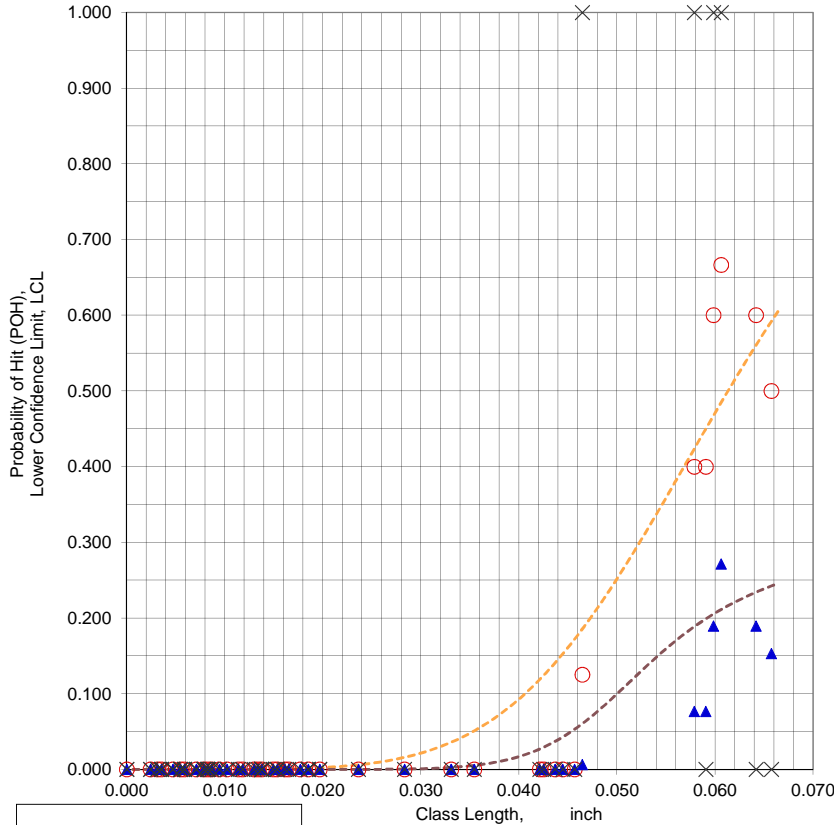
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = C500016.XLS
 Data Set Name = C500016(HOLE #)
 Date & Time = 6/4/15 9:26 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.2713
 Classwidth @ Best LCL = 0.0150 inch
 Classlength @ Best LCL = 0.0606 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.912 @ 0.095 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = 0.131 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C500016.XLS
 Data Set Name = C500016(HOLE #)

Directed DOE Options

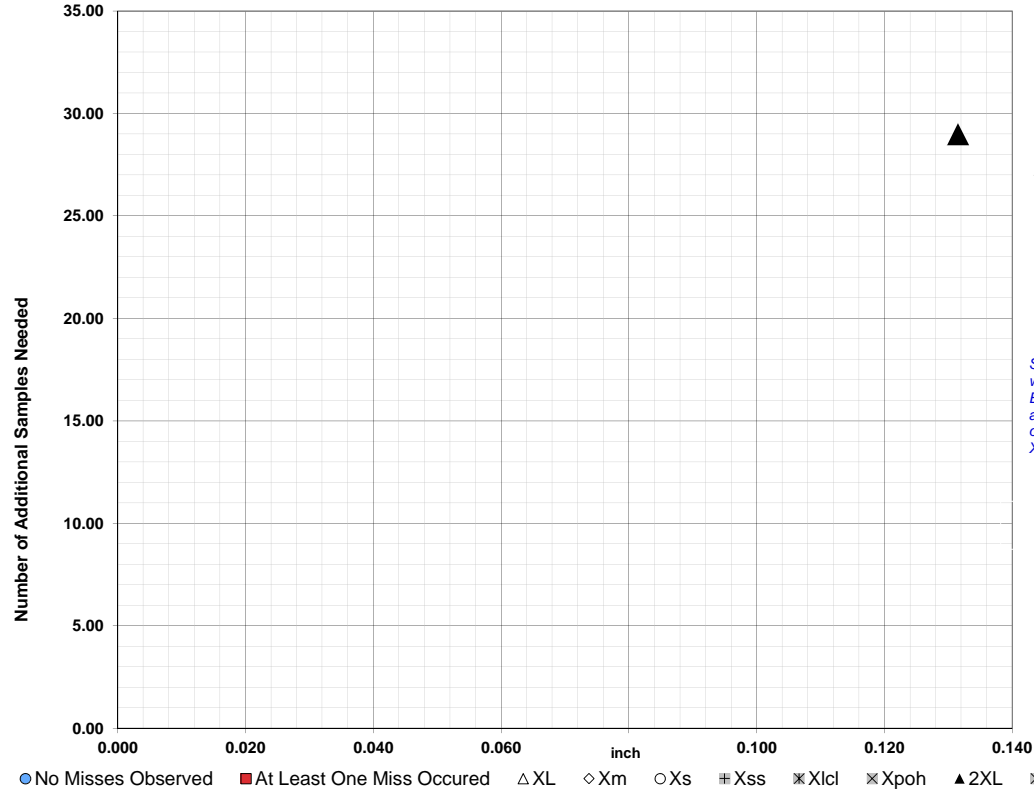


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.131	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.131 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

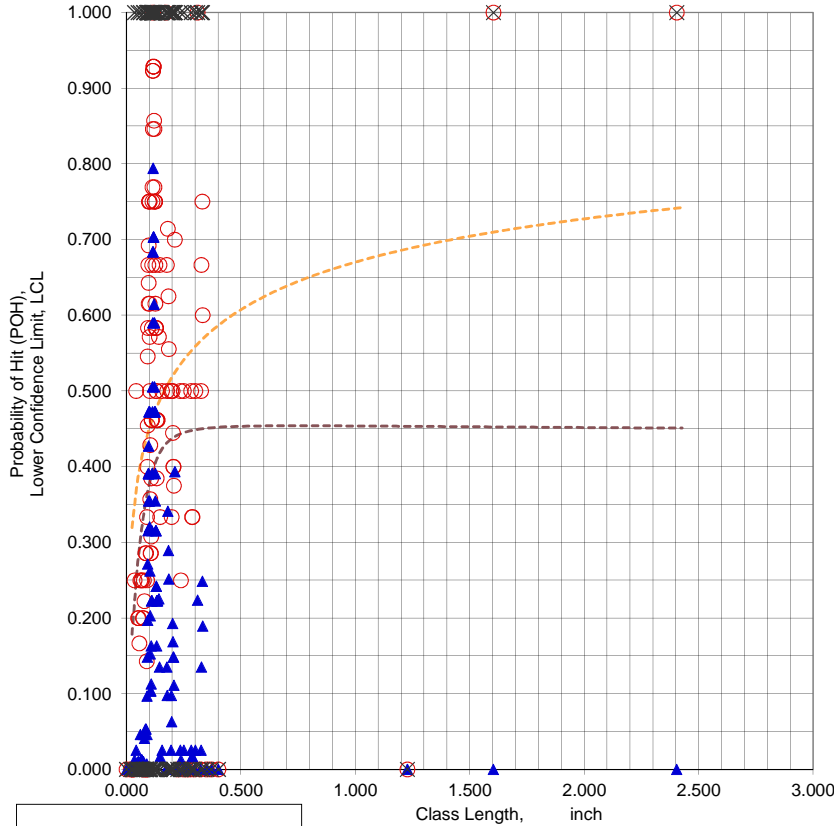
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE (Mean) POD
- MLE (95%) LCL

File Name = C6001AL.XLS
 Data Set Name = C6001AL(CRK #)
 Date & Time = 6/4/15 9:27 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7942
 Classwidth @ Best LCL = 0.0100 inch
 Classlength @ Best LCL = 0.1153 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 1.6030 -0.300 inch 28 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 2.403 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = 1.603 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 4.806 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = inch

File Name = C6001AL.XLS
 Data Set Name = C6001AL(CRK #)

Directed DOE Options

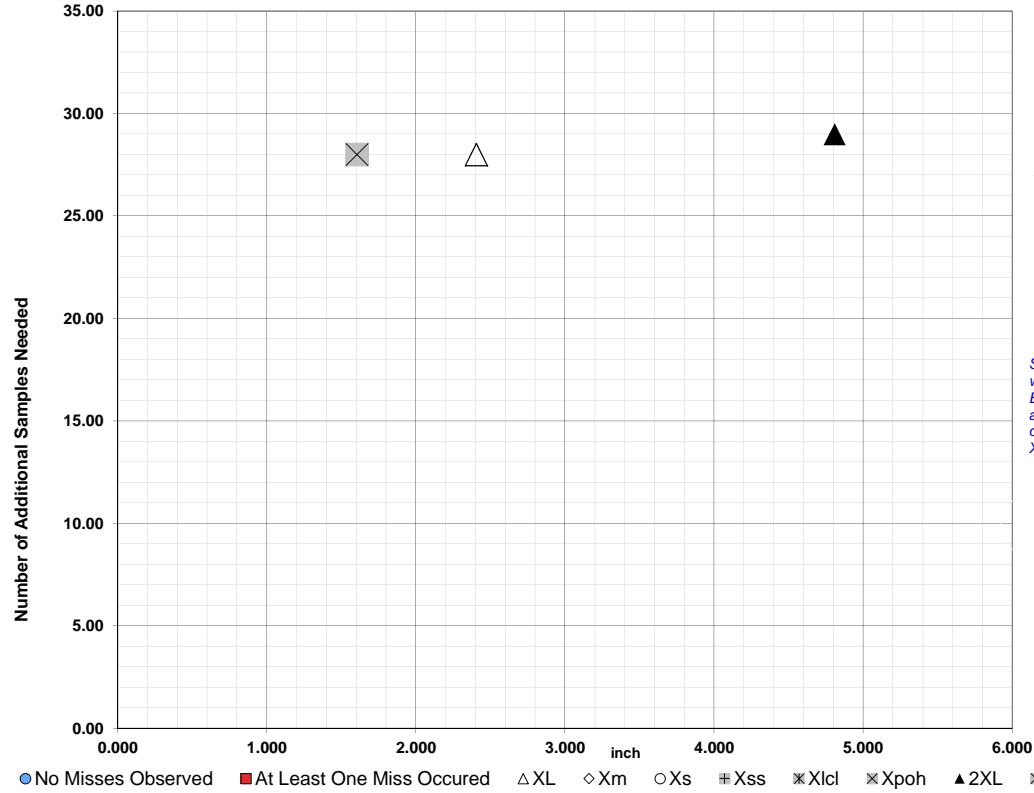


TABLE C

Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.603	28
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

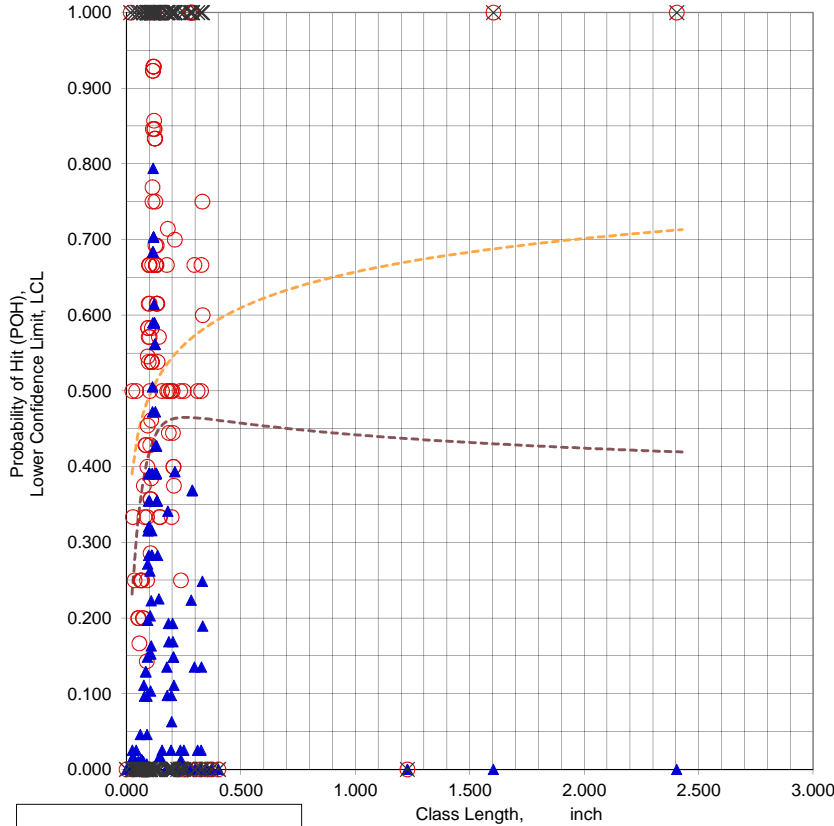
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = C6001BL.XLS
 Data Set Name = C6001BL(CRK #)
 Date & Time = 6/4/15 9:30 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7942
 Classwidth @ Best LCL = 0.0100 inch
 Classlength @ Best LCL = 0.1153 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 1.6030 -0.300 inch 28 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 2.403 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = 1.603 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 4.806 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C6001BL.XLS
 Data Set Name = C6001BL(CRK #)

Directed DOE Options

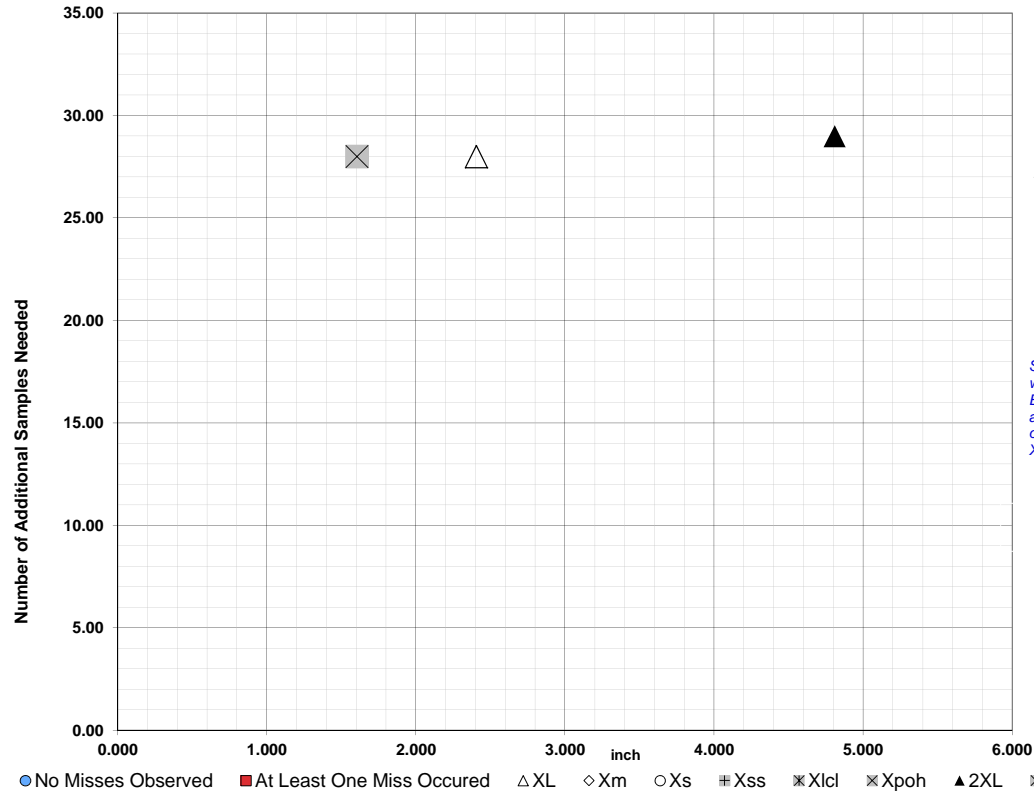


TABLE C

Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.603	28
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

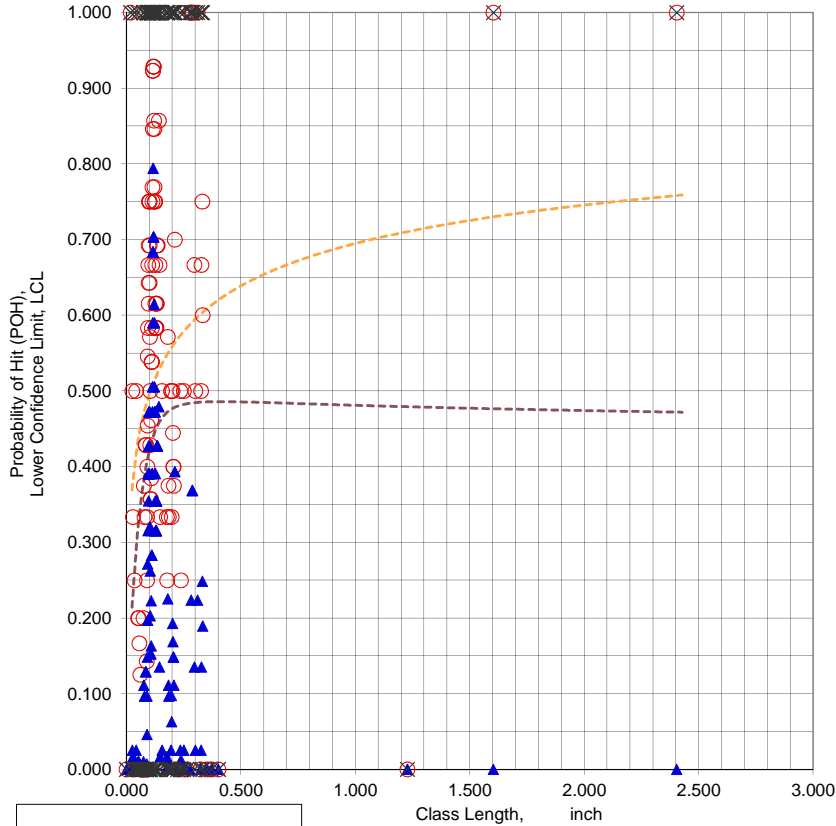
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = C6001CL.XLS
 Data Set Name = C6001CL(CRK #)
 Date & Time = 6/4/15 9:32 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7942
 Classwidth @ Best LCL = 0.0100 inch
 Classlength @ Best LCL = 0.1153 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 1.6030 -0.300 inch 28 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 2.403 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 1.603 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 4.806 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C6001CL.XLS
 Data Set Name = C6001CL(CRK #)

Directed DOE Options

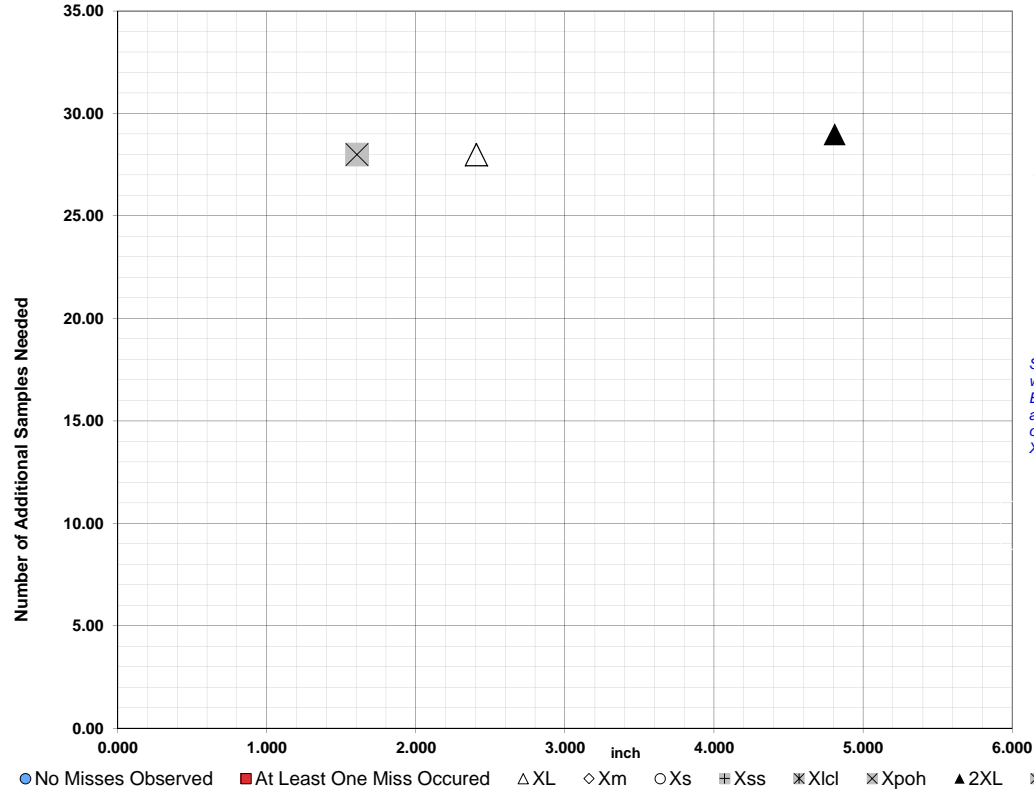


TABLE C

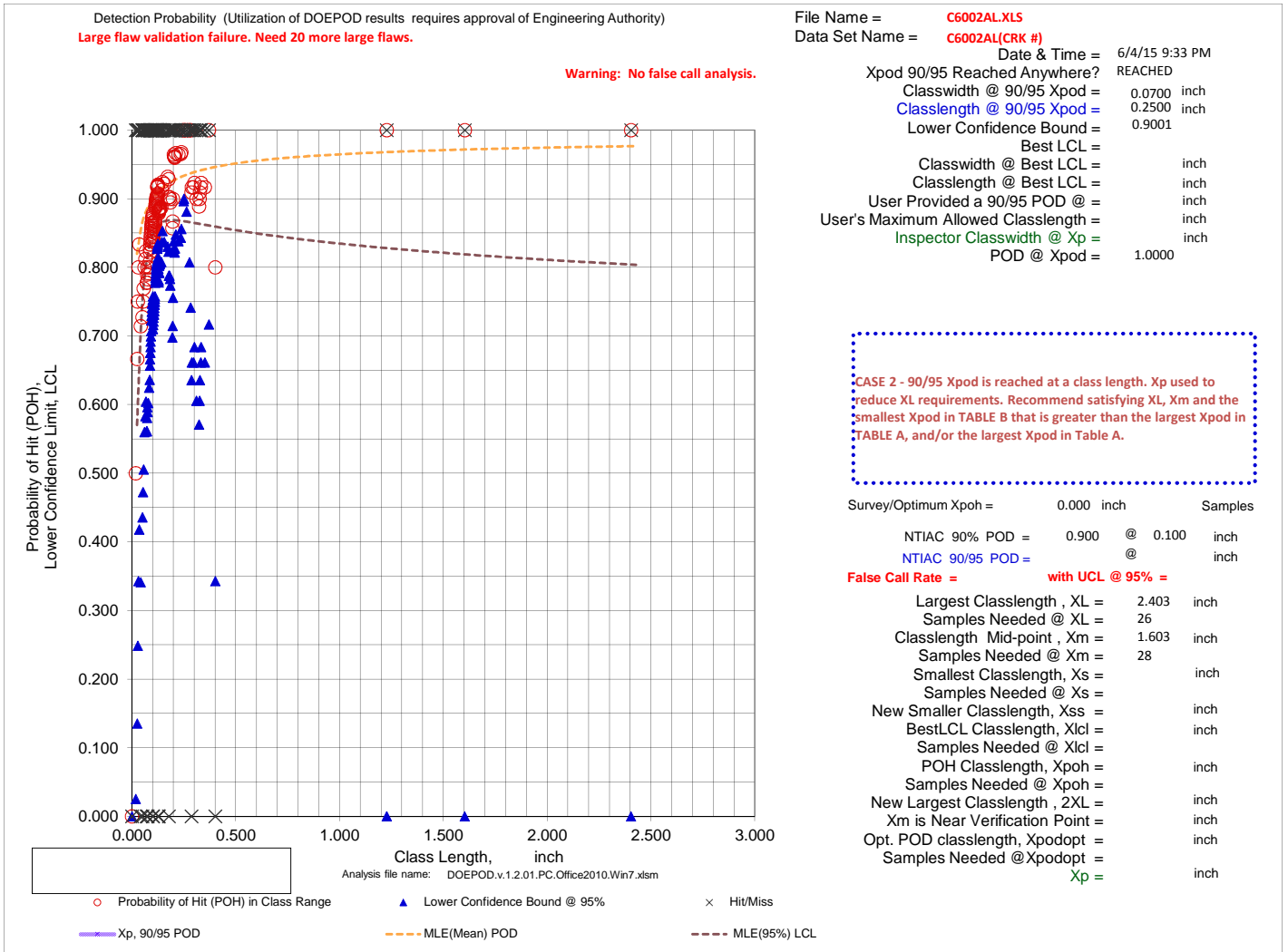
Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.603	28
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C6002AL.XLS
 Data Set Name = C6002AL(CRK #)

Directed DOE Options

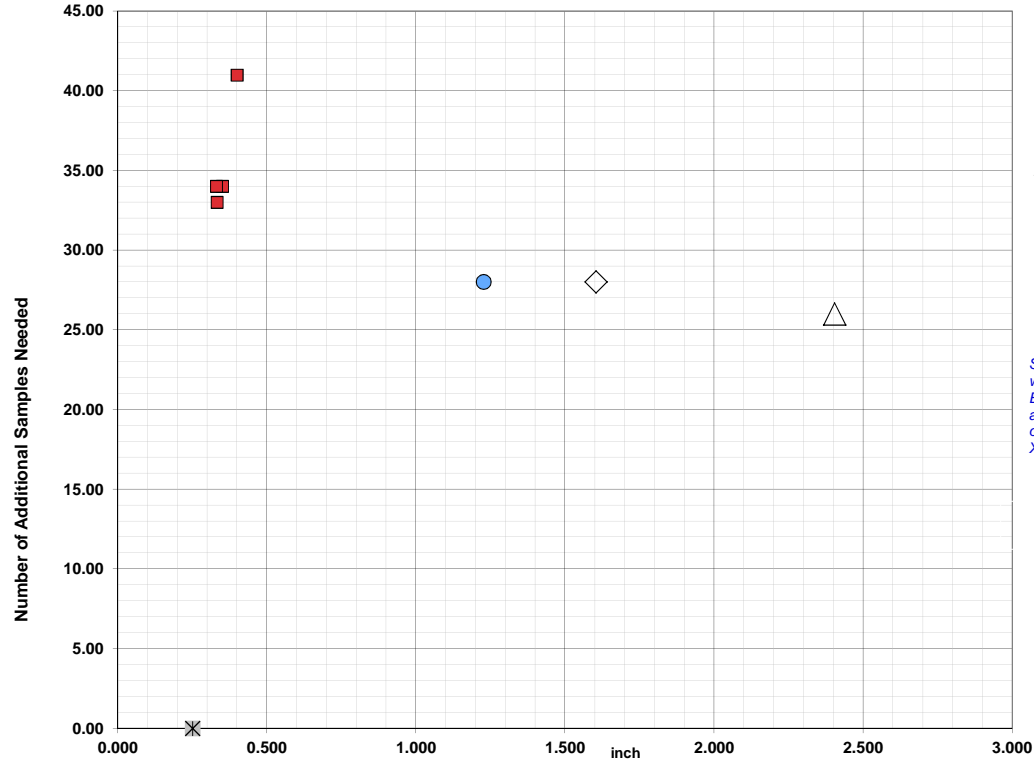


TABLE C

Class Length	Additional Samples
XL = 2.403	26
Xm = 1.603	28
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

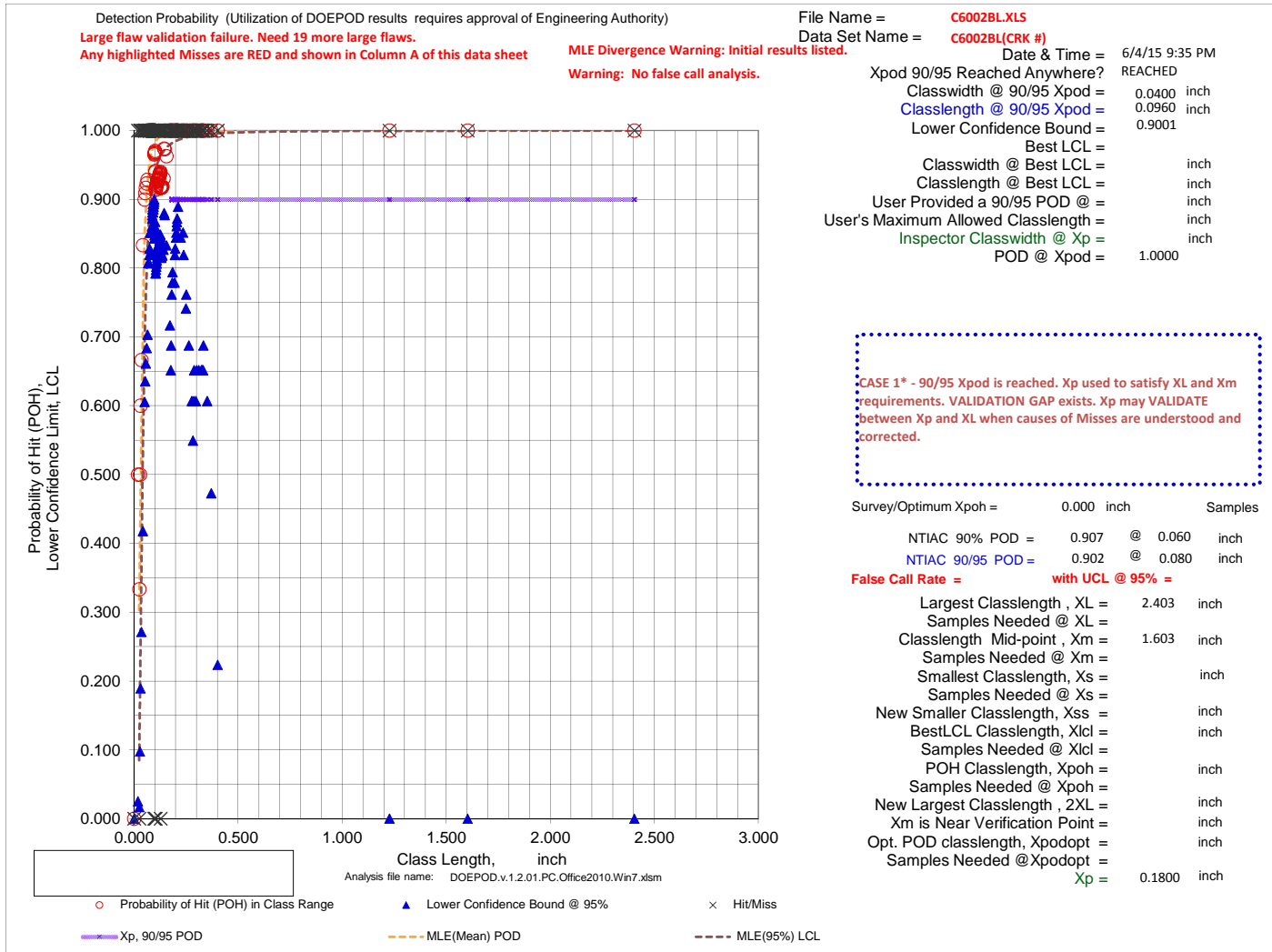
TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.4000	41	1.2270	28
0.3500	34		
0.3320	33		
0.3300	34		

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ✕ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C6002BL.XLS
 Data Set Name = C6002BL(CRK #)

Directed DOE Options

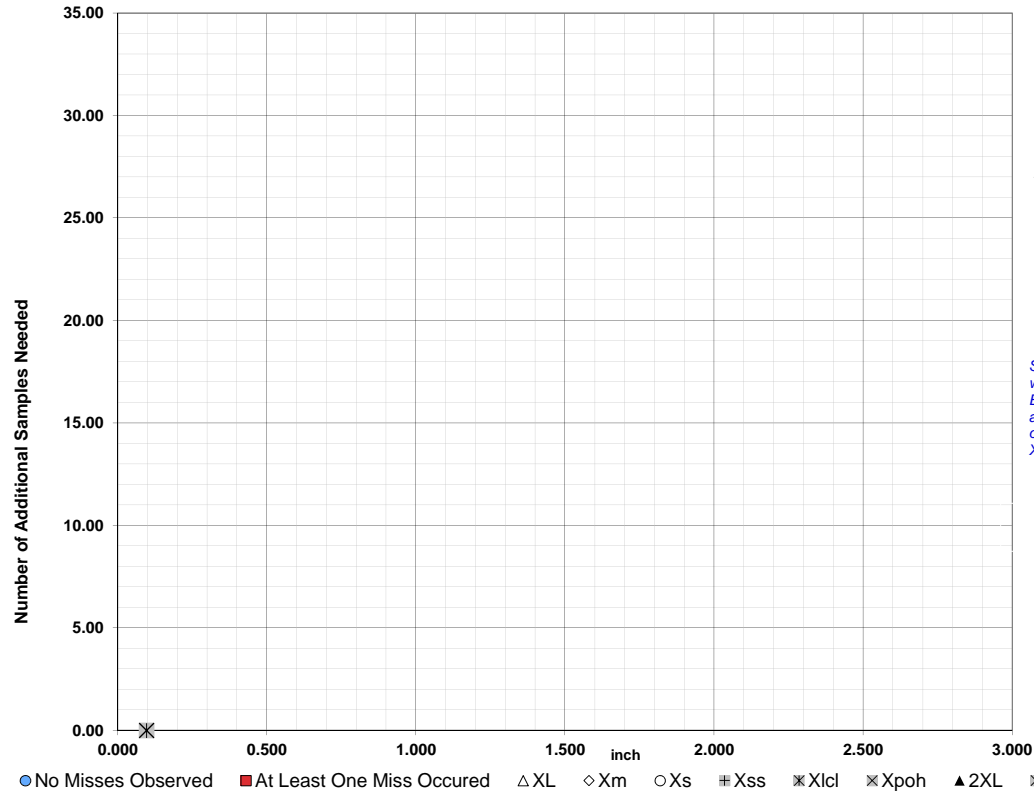


TABLE C

Class Length Additional Samples

XL = 2.403
 Xm = 1.603
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

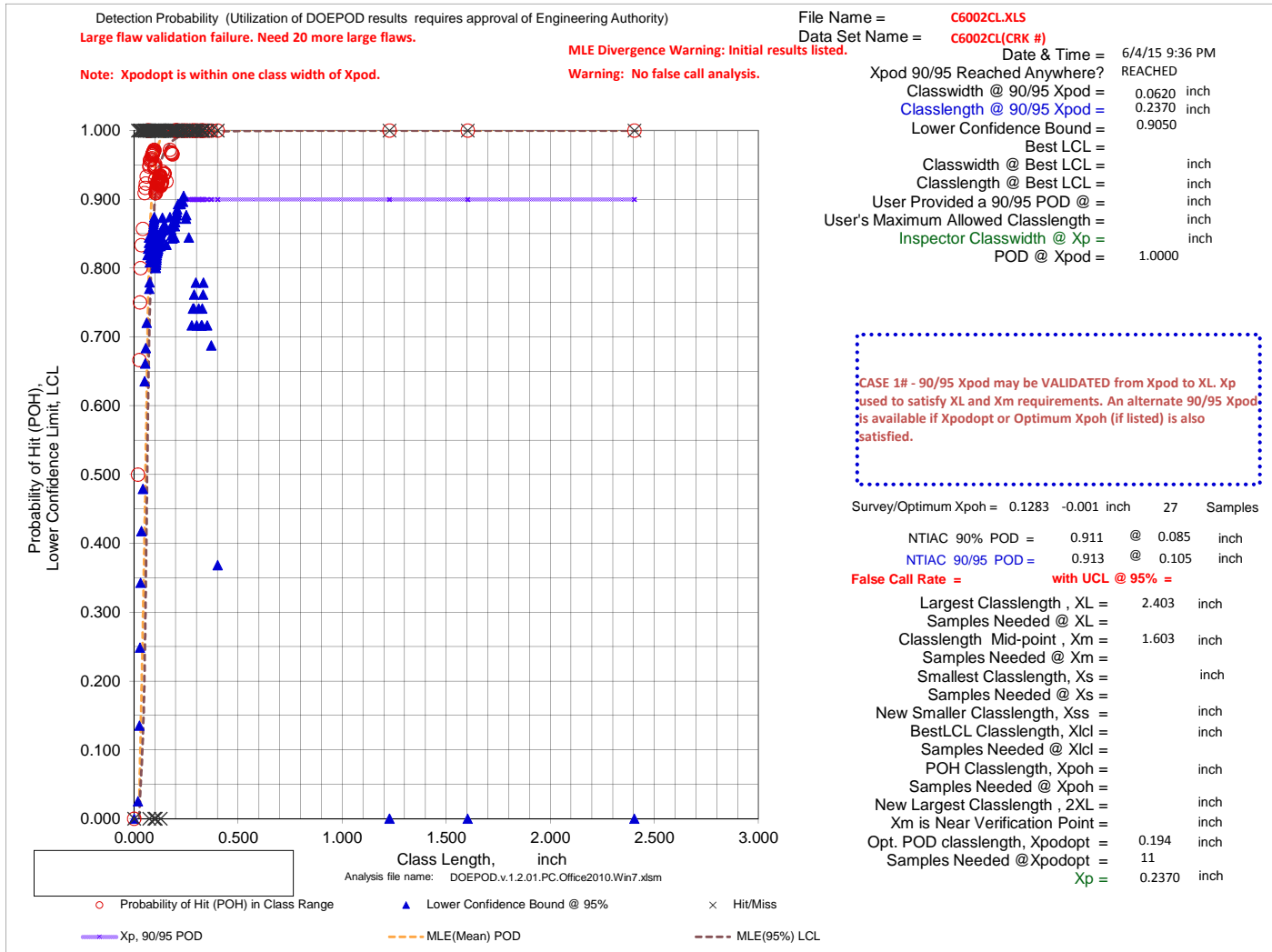
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C6002CL.XLS
 Data Set Name = C6002CL(CRK #)

Directed DOE Options

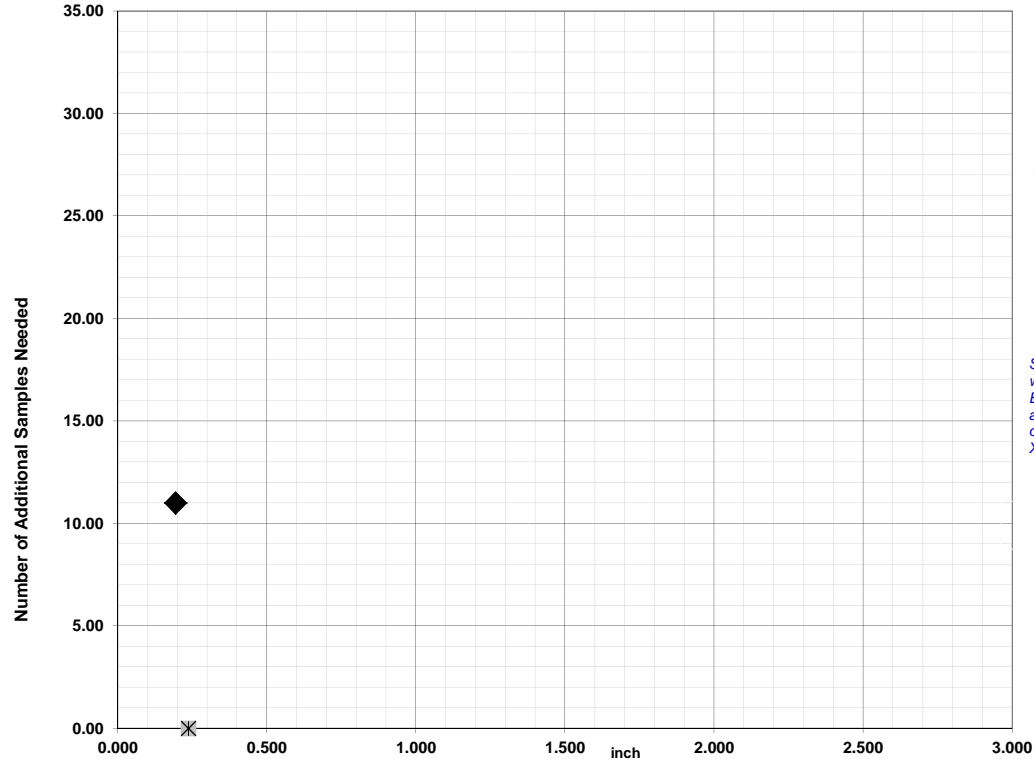


TABLE C

Class Length	Additional Samples
XL =	2.403
Xm =	1.603
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.194 11

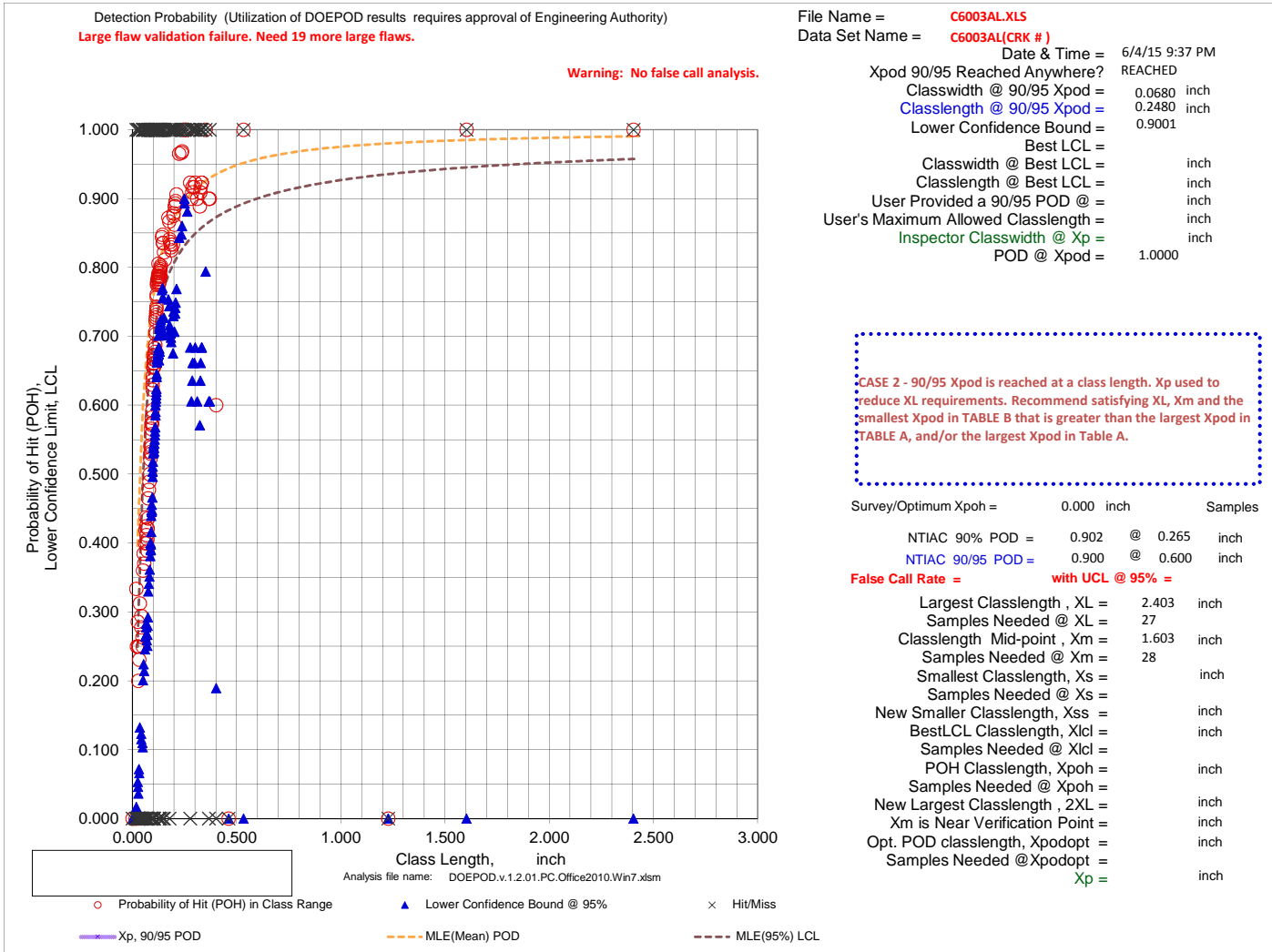
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C6003AL.XLS
 Data Set Name = C6003AL(CRK #)

Directed DOE Options

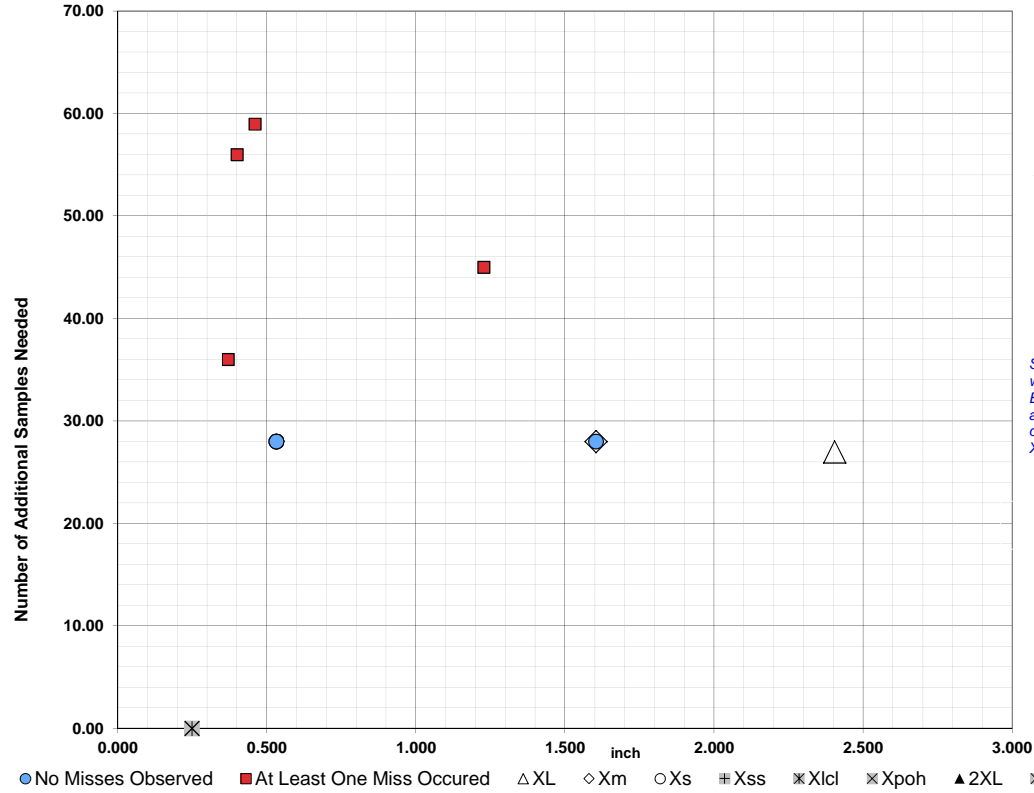


TABLE C

Class Length	Additional Samples
XL = 2.403	27
Xm = 1.603	28
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

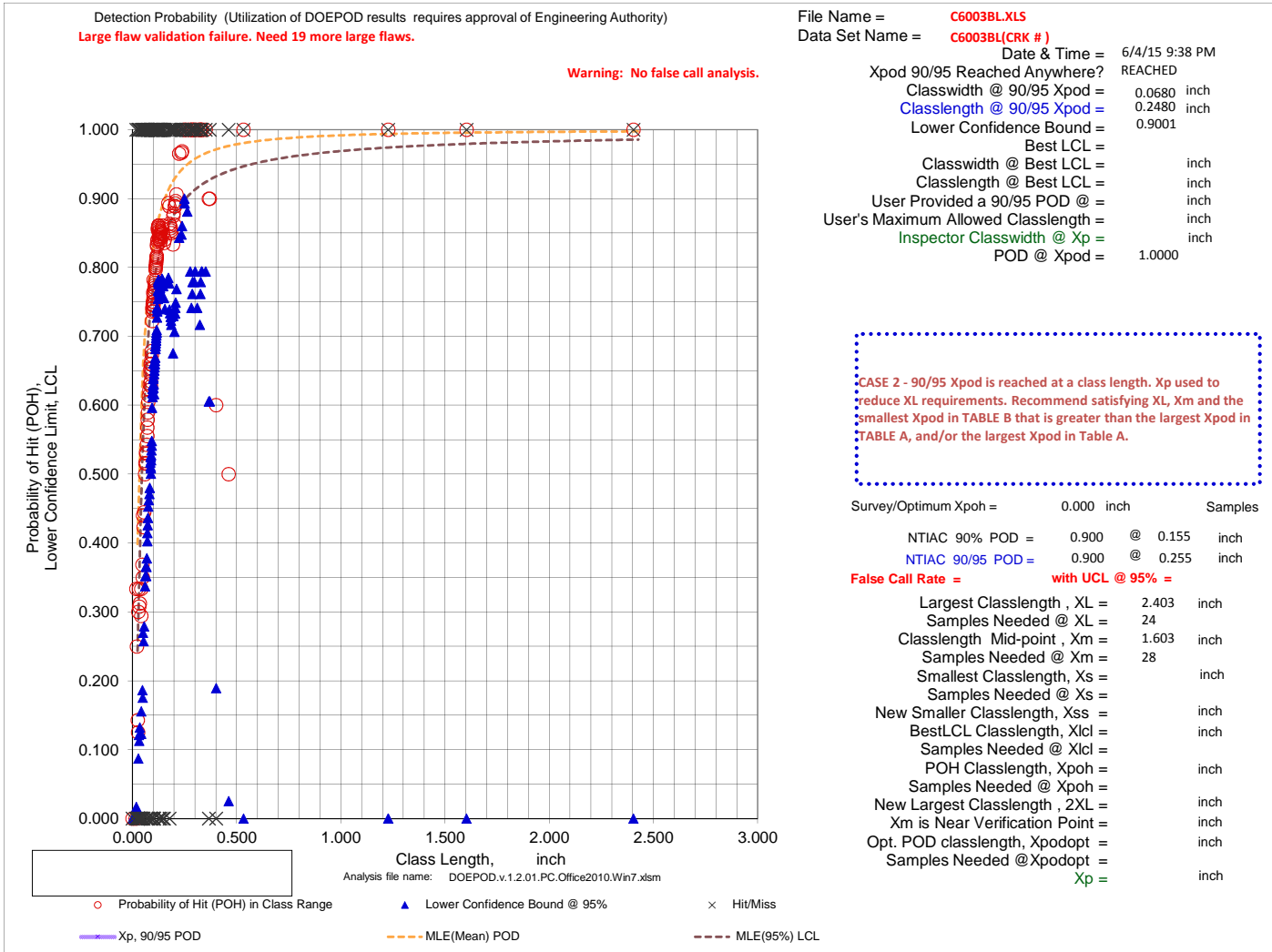
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
1.2270	45	1.6030	28
0.4600	59	0.5320	28
0.4000	56	0.5320	28
0.3700	36	0.5320	28

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C6003BL.XLS
 Data Set Name = C6003BL(CRK #)

Directed DOE Options

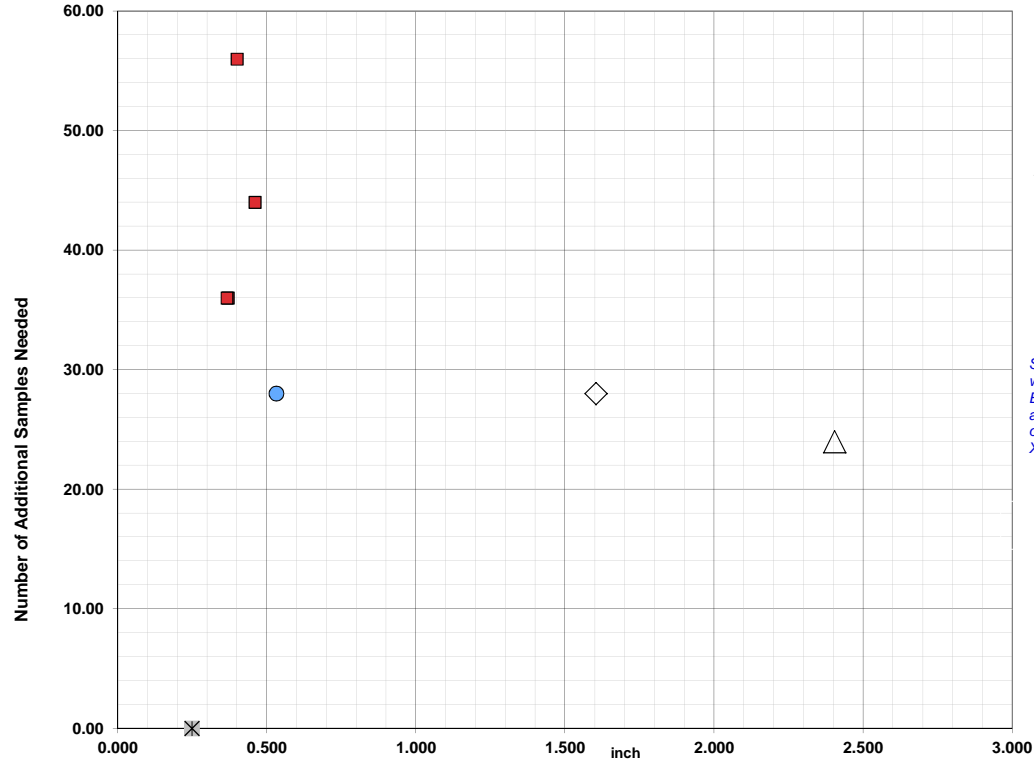


TABLE C

Class Length	Additional Samples
XL = 2.403	24
Xm = 1.603	28
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

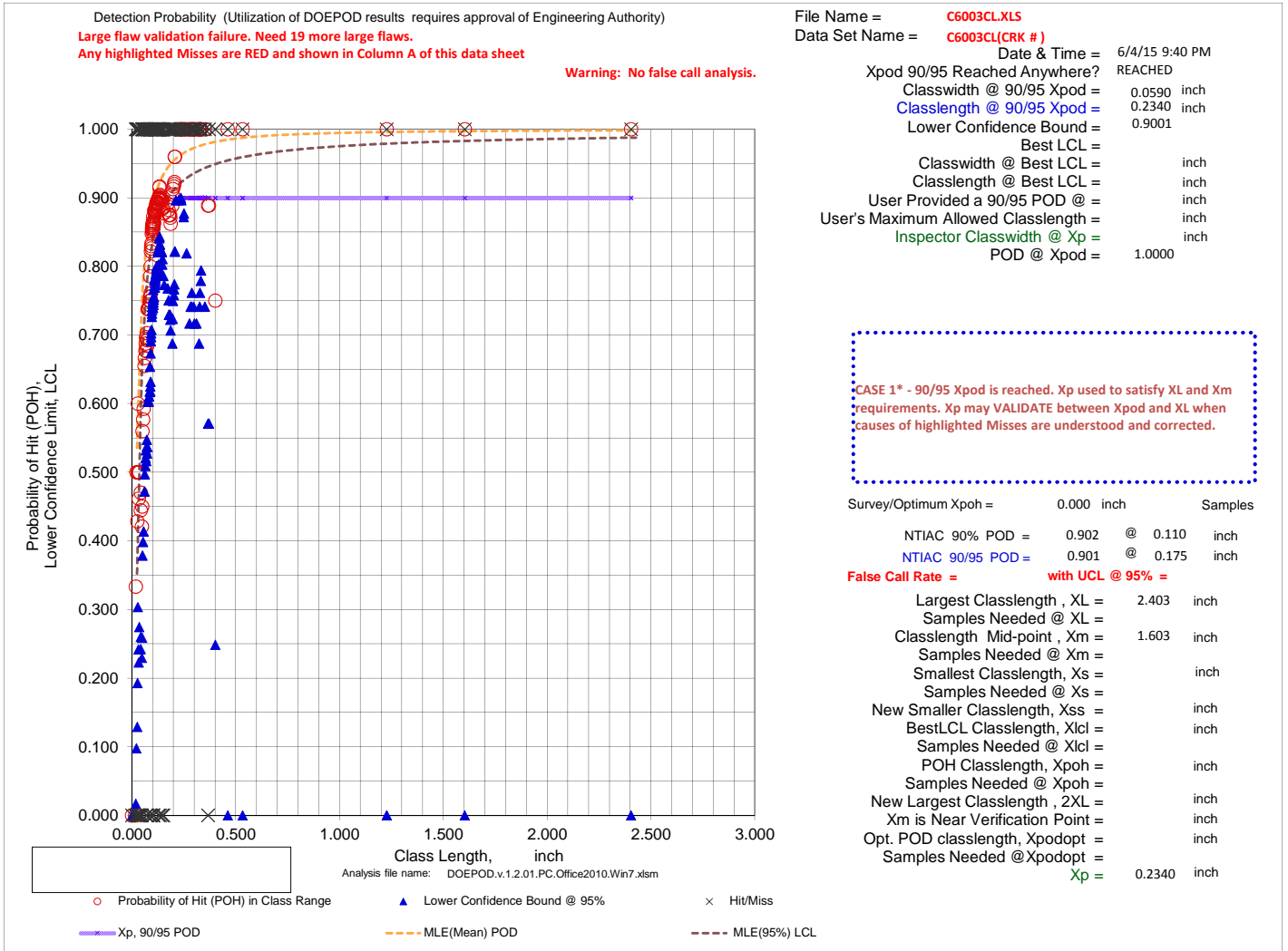
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.4600	44	0.5320	28
0.4000	56		
0.3700	36		
0.3650	36		

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ✕ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C6003CL.XLS
 Data Set Name = C6003CL(CRK #)

Directed DOE Options

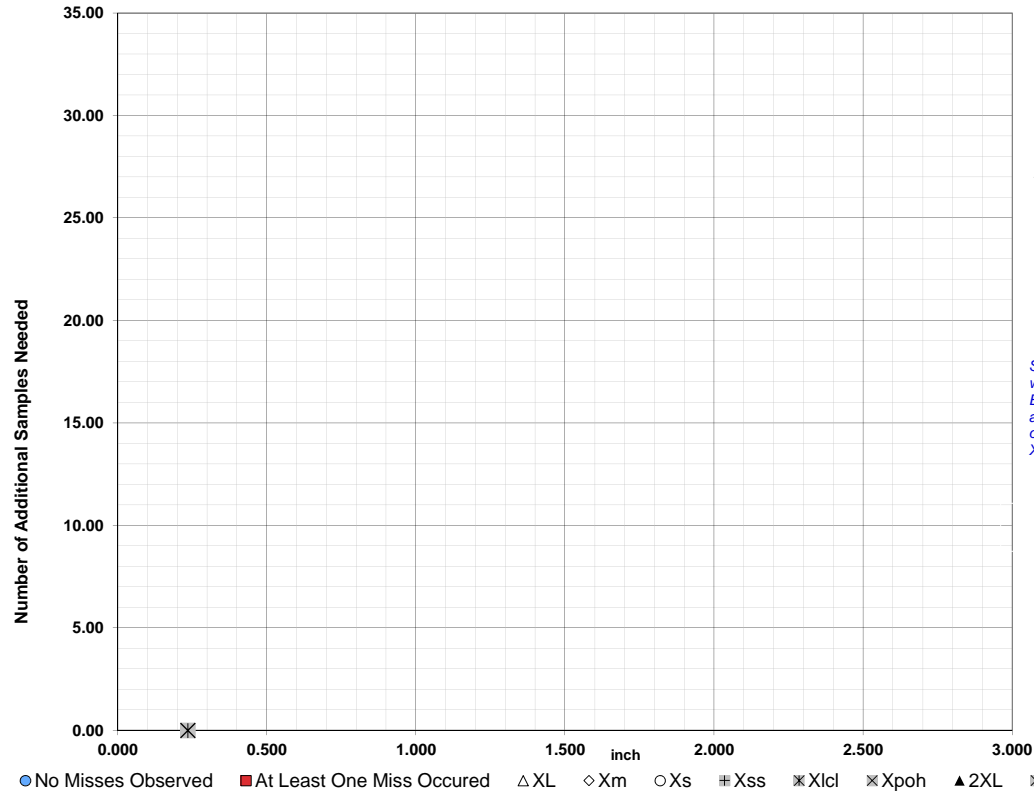


TABLE C

Class Length Additional Samples

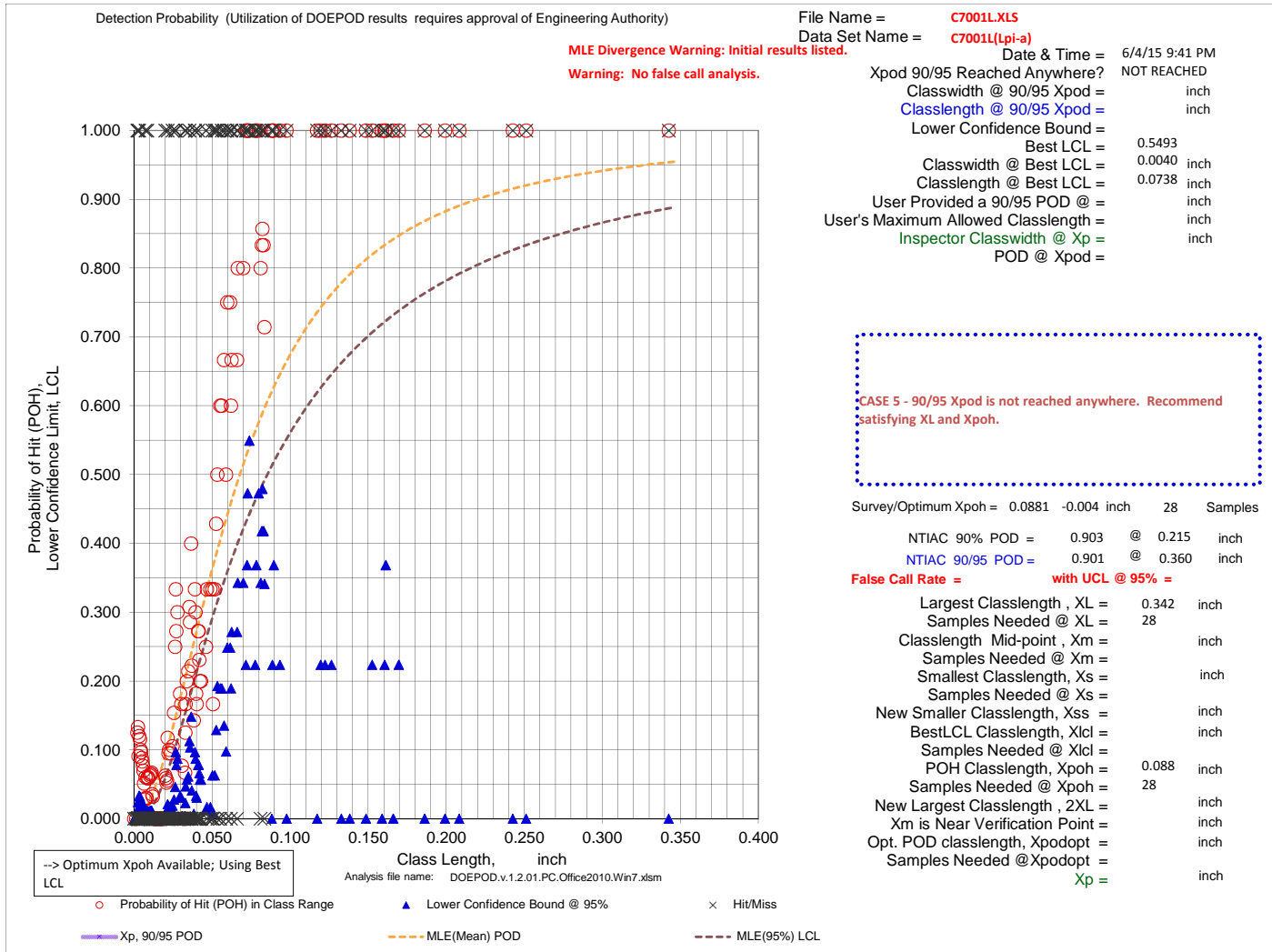
XL = 2.403
 Xm = 1.603
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C7001L.XLS
 Data Set Name = C7001L(Lpi-a)

Directed DOE Options

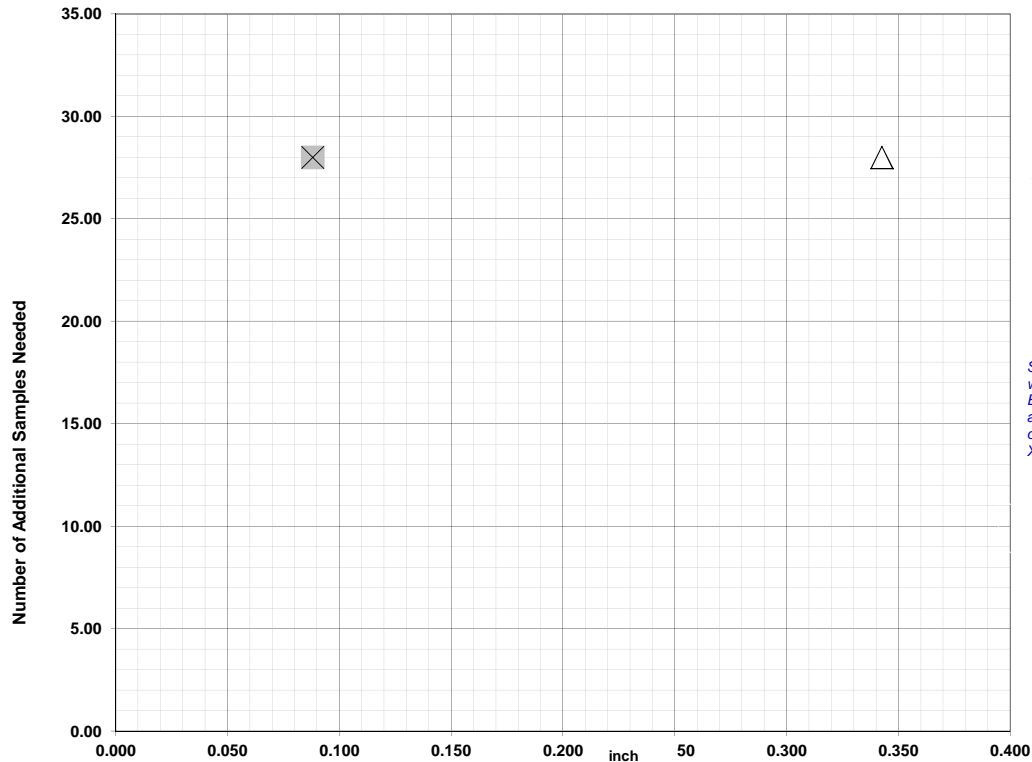


TABLE C

Class Length	Additional Samples
XL = 0.342	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.088	28
2XL =	
**Alternate Xm =	
Xpodopt =	

XL = 0.342 28
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh = 0.088 28
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 # Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

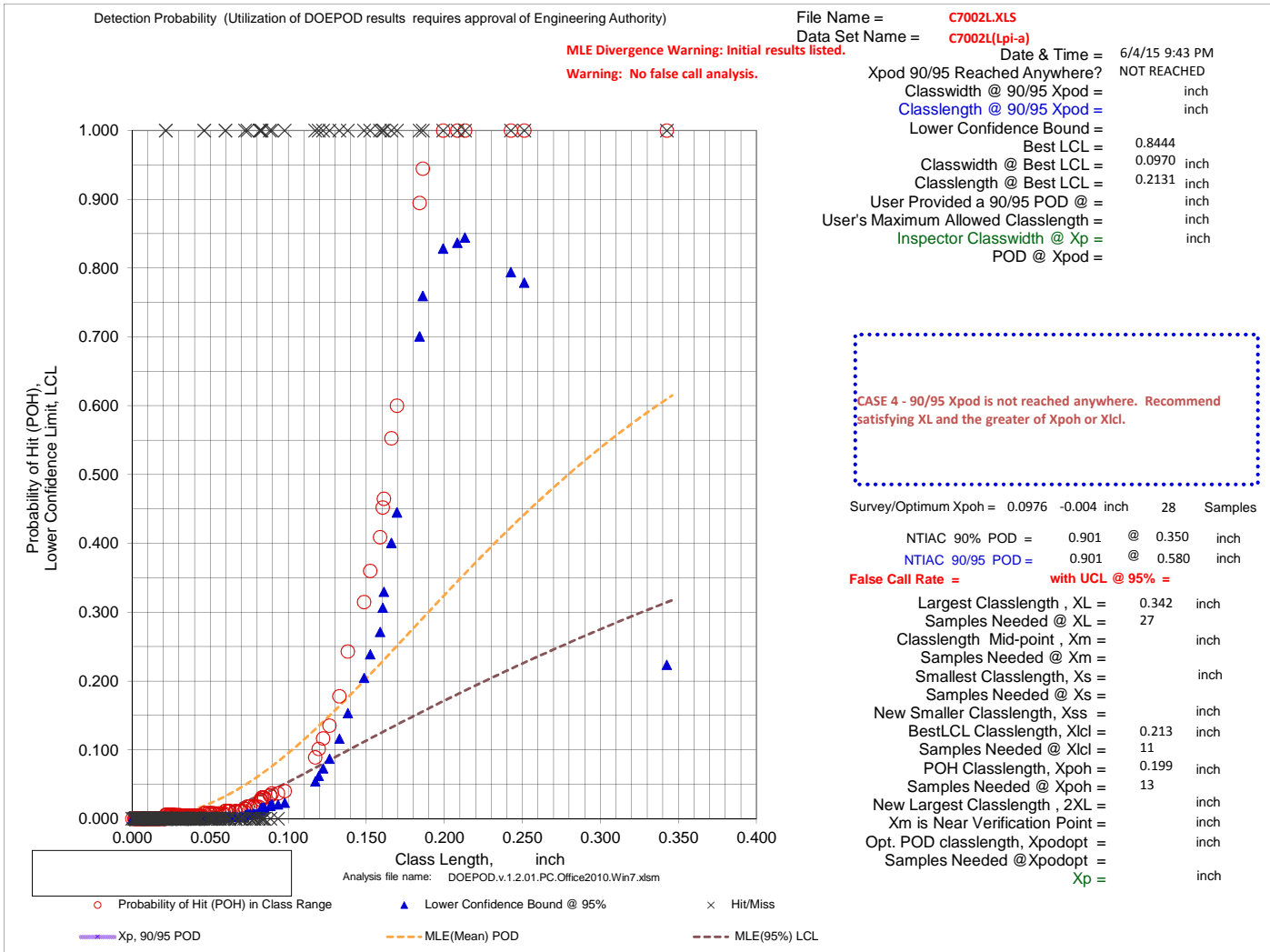
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C7002L.XLS
 Data Set Name = C7002L(Lpi-a)

Directed DOE Options

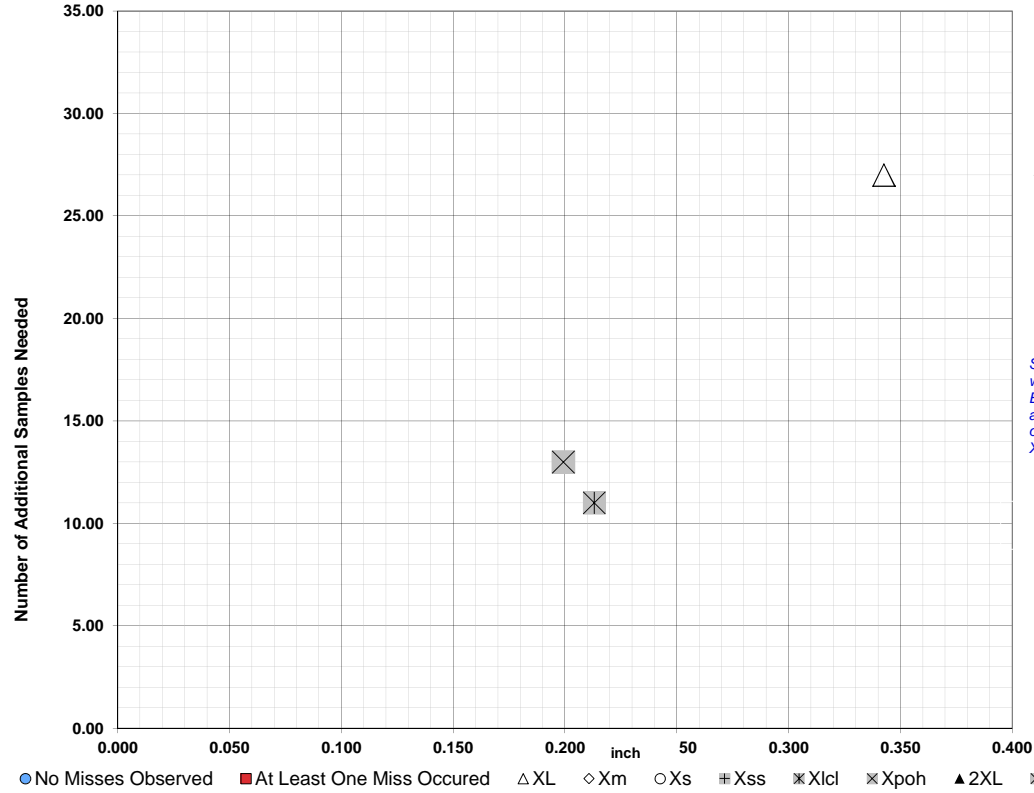


TABLE C

Class Length	Additional Samples
XL = 0.342	27
Xm =	
Xs =	
Xss =	
Xlcl = 0.213	11
Xpoh = 0.199	13
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

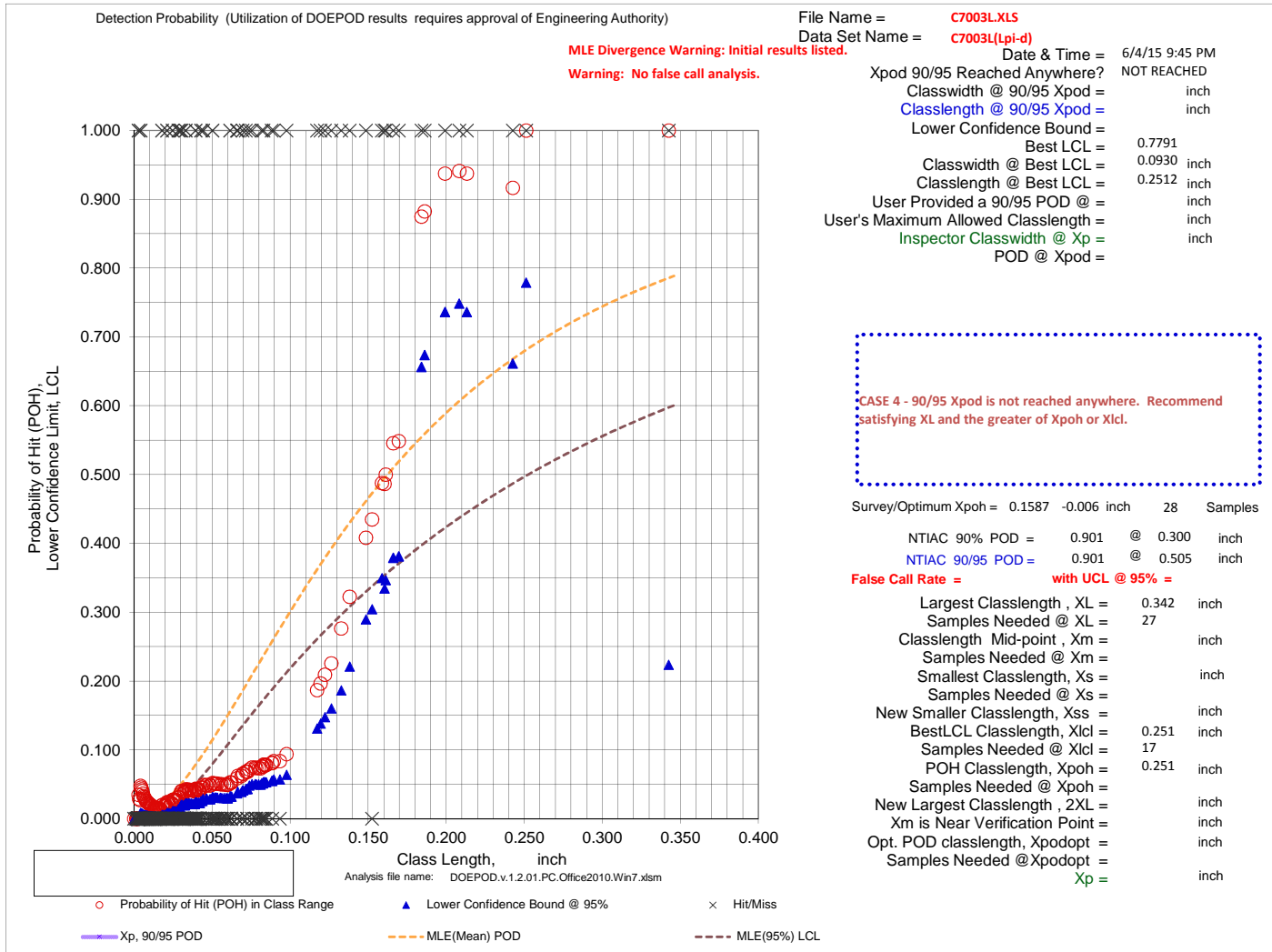
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C7003L.XLS
 Data Set Name = C7003L(Lpi-d)

Directed DOE Options

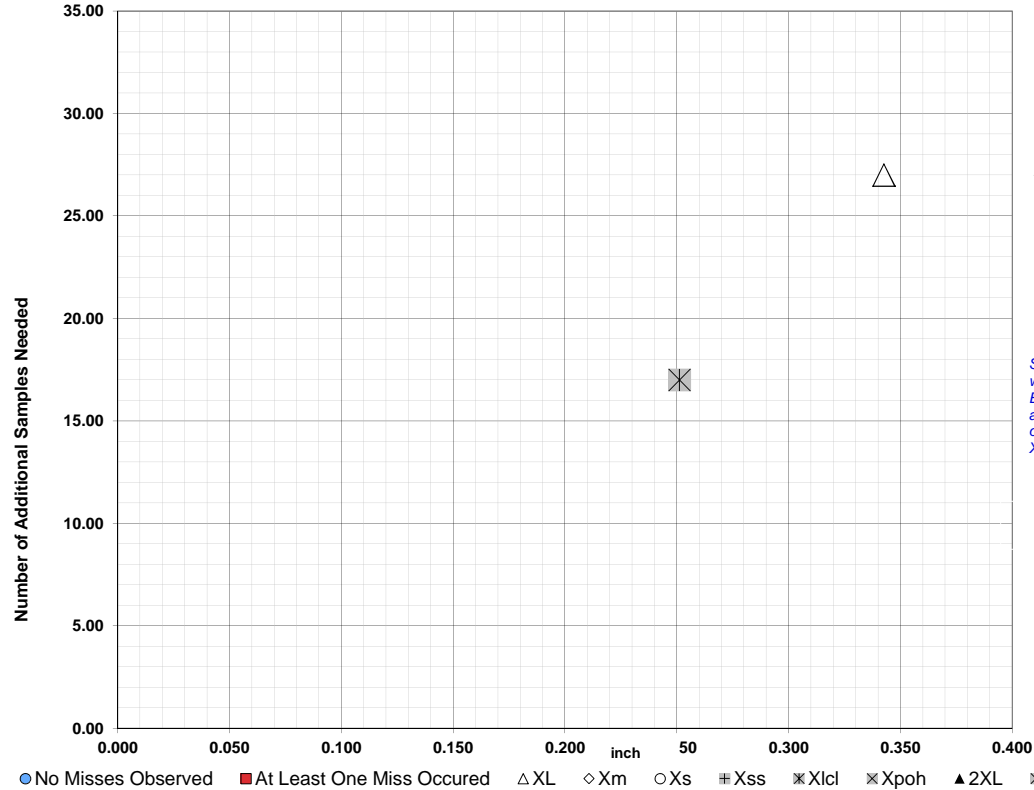


TABLE C

Class Length	Additional Samples
XL = 0.342	27
Xm =	
Xs =	
Xss =	
Xlcl = 0.251	17
Xpoh = 0.251	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

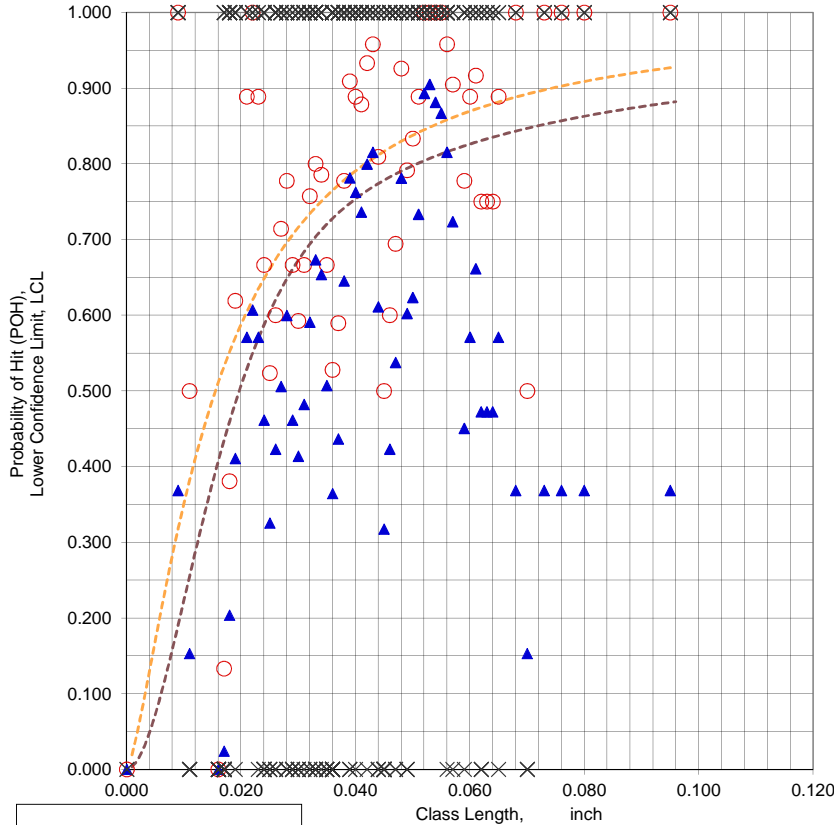
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 0.159.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **C8001(3)D.xls**
 Data Set Name = **C8001(3)D(CK. NO.)**
 Date & Time = 6/4/15 9:47 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0020 inch
 Classlength @ 90/95 Xpod = 0.0530 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Xp used to reduce XL requirements. Recommend satisfying XL, Xm and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in Table A.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.901 @ 0.075 inch
 NTIAC 90/95 POD = 0.902 @ 0.120 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.095 inch
 Samples Needed @ XL = 17
 Classlength Mid-point , Xm = 0.080 inch
 Samples Needed @ Xm = 26
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C8001(3)D.xls
 Data Set Name = C8001(3)D(CK. NO.)

Directed DOE Options

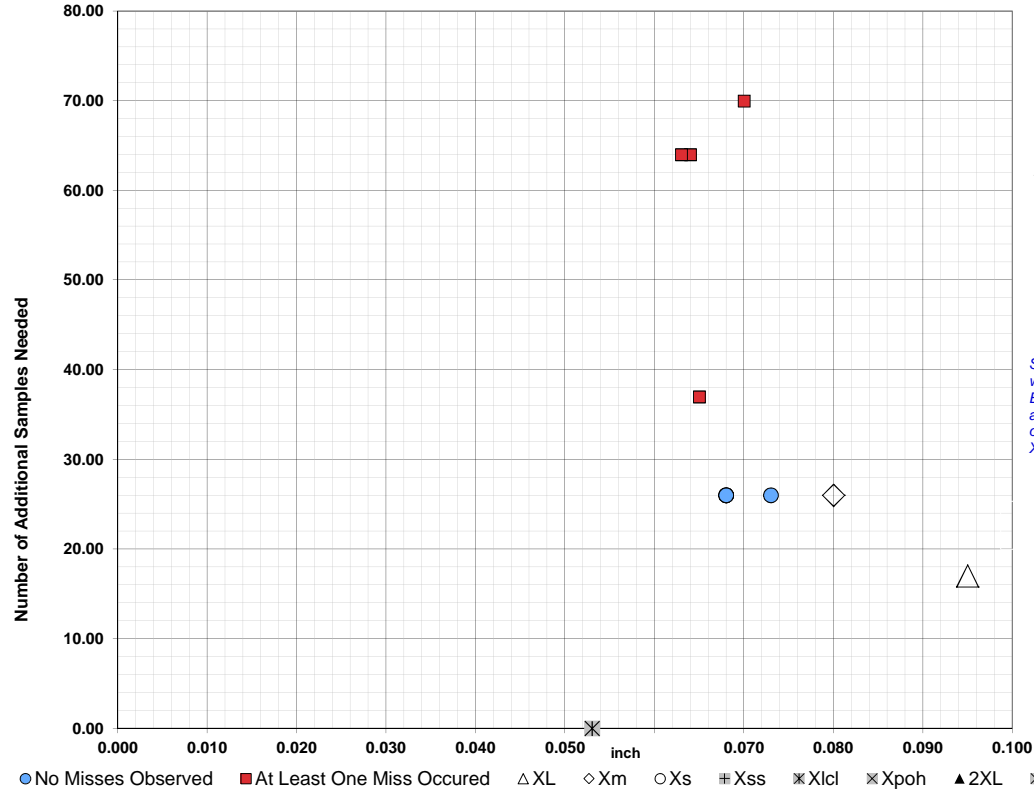


TABLE C

Class Length	Additional Samples
XL = 0.095	17
Xm = 0.080	26
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

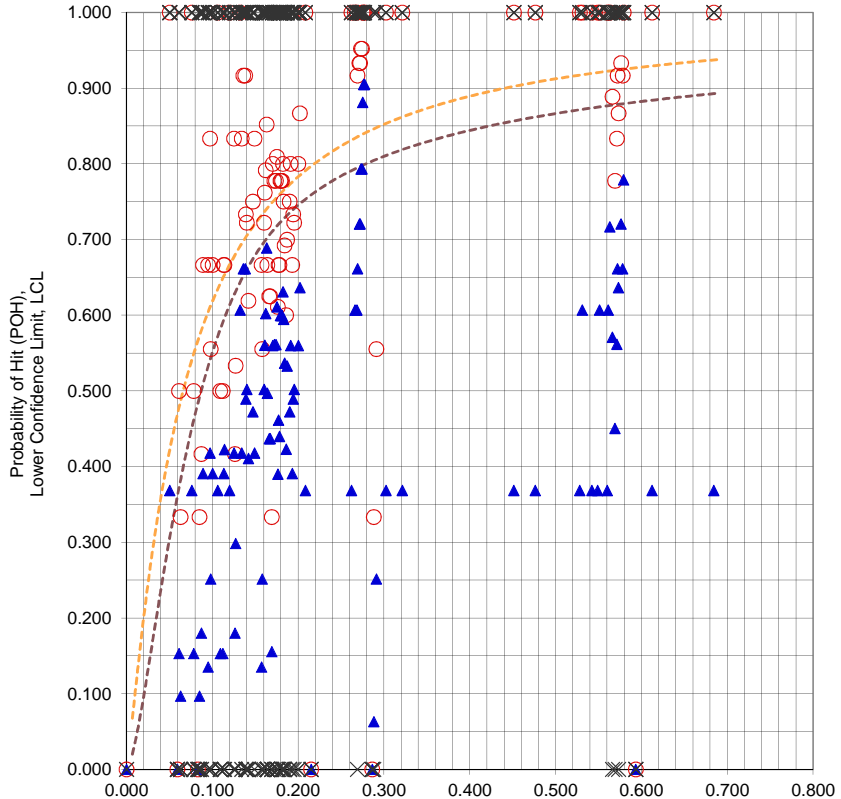
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.0700	70	0.0730	26
0.0650	37	0.0680	26
0.0640	64	0.0680	26
0.0630	64	0.0680	26

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 0.828.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **C8001(3)L.xls**
 Data Set Name = **C8001(3)(CK. NO.)**
 Date & Time = 6/4/15 9:49 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0050 inch
 Classlength @ 90/95 Xpod = 0.2760 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Xp used to reduce XL requirements. Recommend satisfying XL, Xm and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in Table A.

Survey/Optimum Xpoh = 0.000 inch Samples

NTIAC 90% POD = 0.901 @ 0.445 inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.684 inch
 Samples Needed @ XL = 23
 Classlength Mid-point , Xm = 0.579 inch
 Samples Needed @ Xm = 17
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C8001(3)L.xls
 Data Set Name = C8001(3)L(CK. NO.)

Directed DOE Options

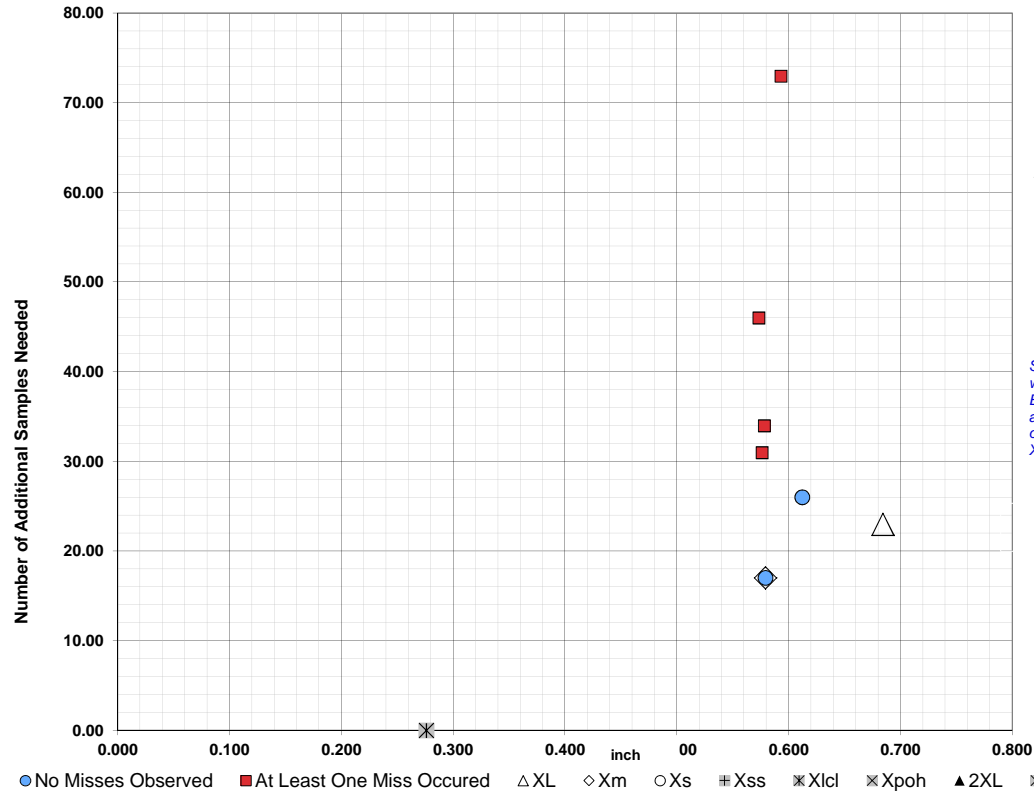


TABLE C

Class Length	Additional Samples
XL = 0.684	23
Xm = 0.579	17
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

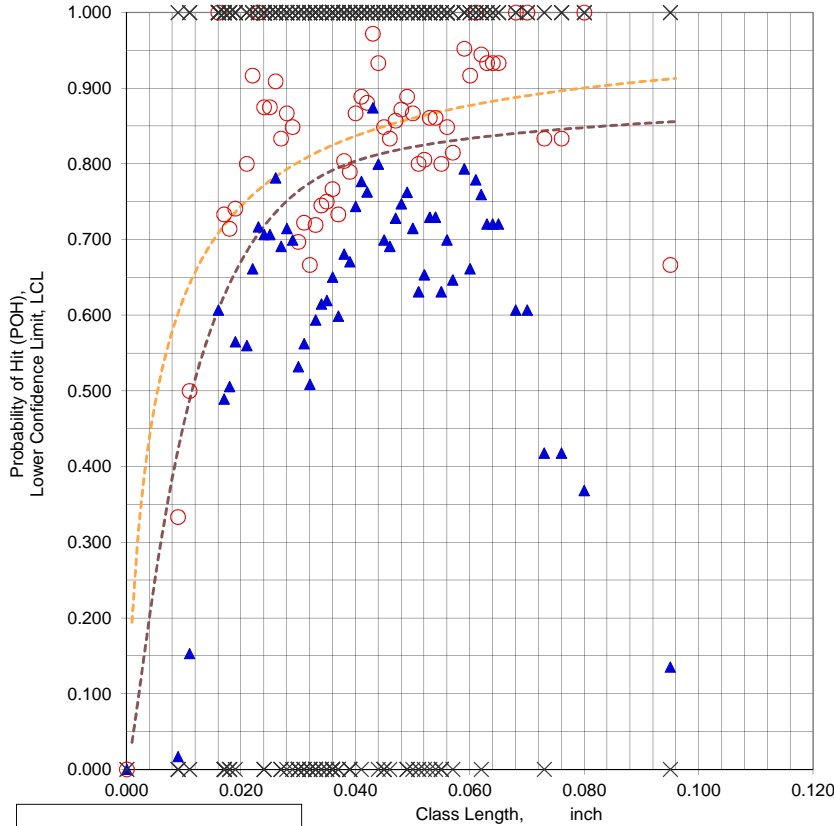
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.5930	73	0.6120	26
0.5780	34	0.5790	17
0.5760	31		
0.5730	46		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = C8002(3)D.xls
 Data Set Name = C8002(3)D(CK. NO.)
 Date & Time = 6/4/15 9:50 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8739
 Classwidth @ Best LCL = 0.0030 inch
 Classlength @ Best LCL = 0.0430 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.900 @ 0.080 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.190 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C8002(3)D.xls
 Data Set Name = C8002(3)D(CK. NO.)

Directed DOE Options

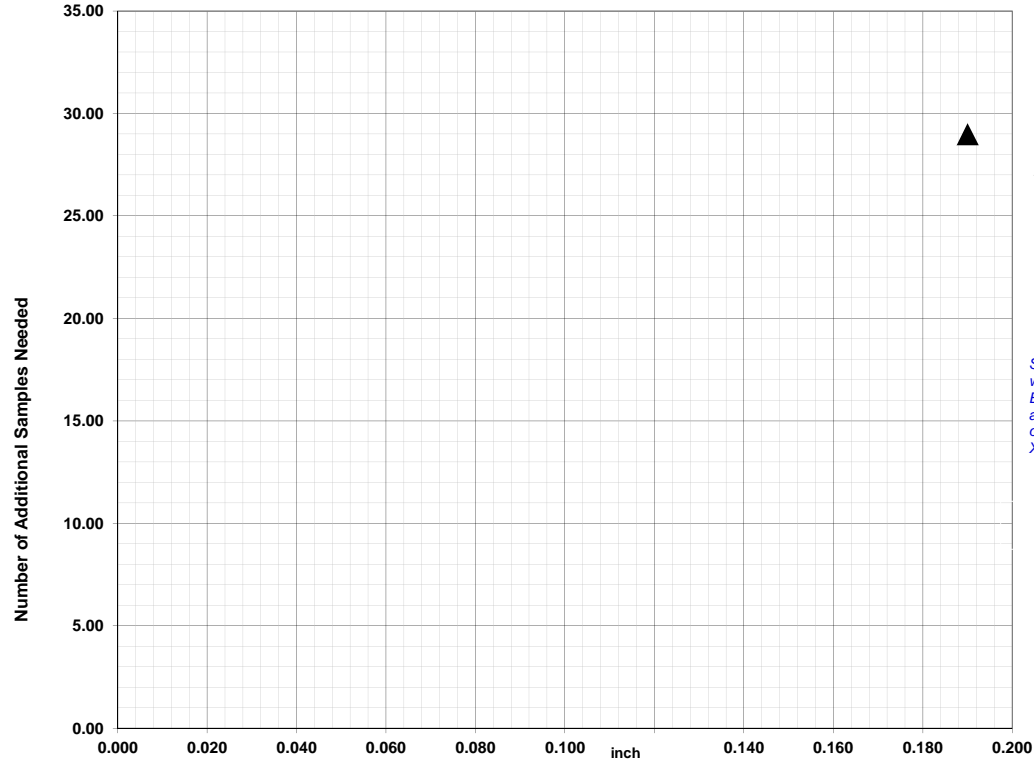


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.190	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.190 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

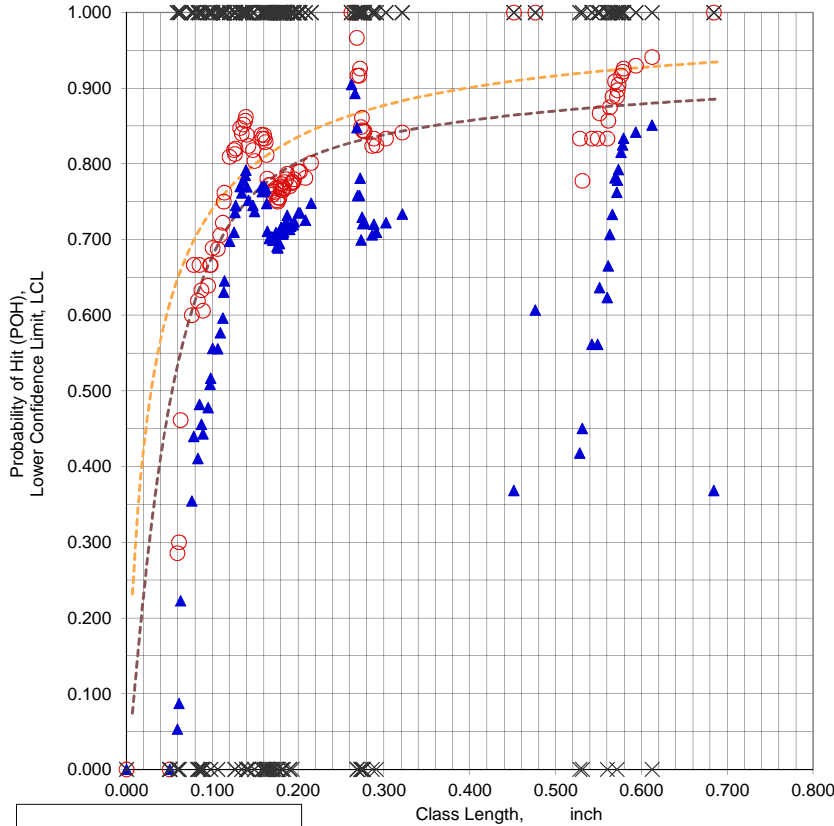
Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 0.786.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **C8002(3)L.xls**
 Data Set Name = **C8002(3)(CK. NO.)**
 Date & Time = 6/4/15 9:51 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0680 inch
 Classlength @ 90/95 Xpod = 0.2620 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Further VALIDATION is required. Recommend satisfying XL and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in Table A.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.900 @ 0.395 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.684 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = 0.476 inch
 Samples Needed @ Xm = 23
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C8002(3)L.xls
 Data Set Name = C8002(3)L(CK. NO.)

Directed DOE Options

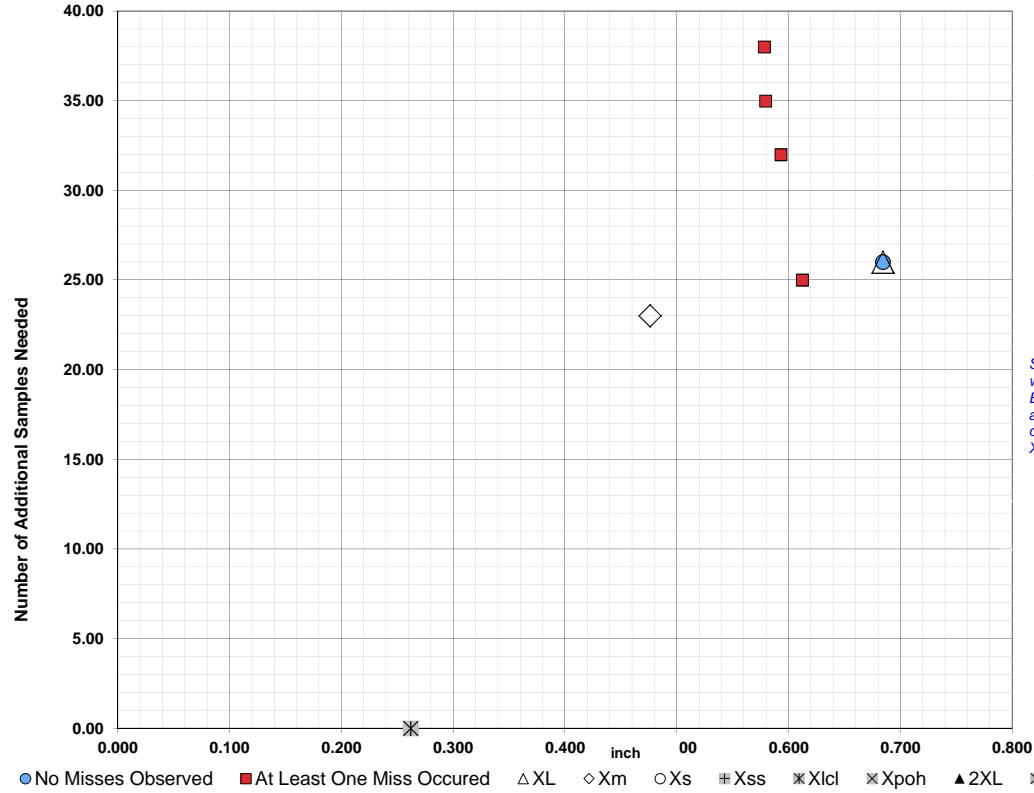


TABLE C

Class Length	Additional Samples
XL = 0.684	26
Xm = 0.476	23
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

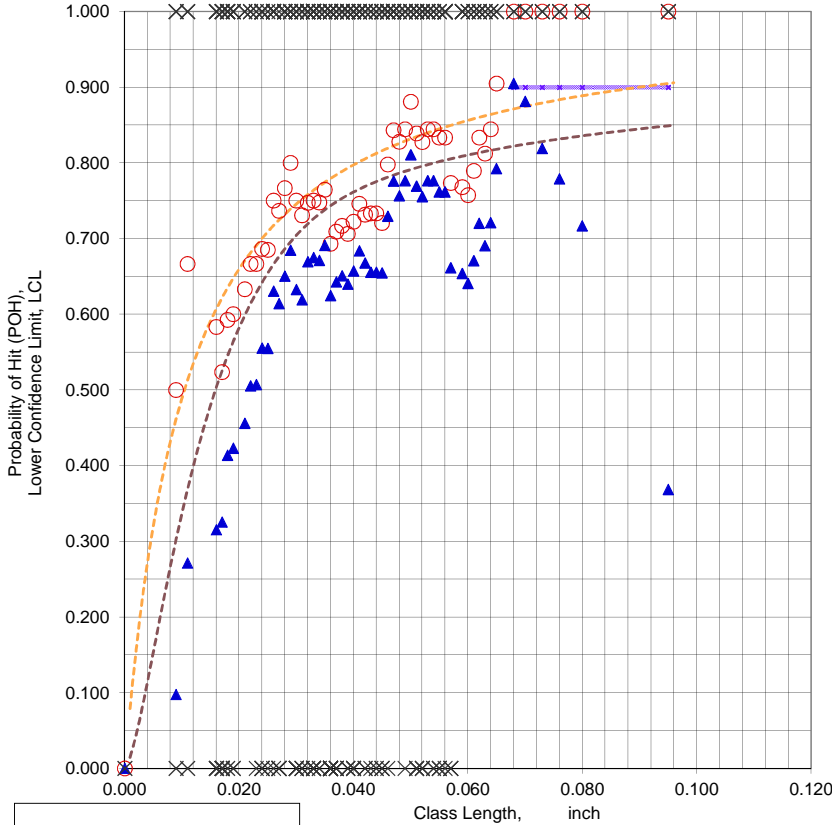
Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.6120	25	0.6840	26
0.5930	32		
0.5790	35		
0.5780	38		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 0.204.

Note: Xpodopt is within one class width of Xpod.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **C8003(3)D.xls**
 Data Set Name = **C8003(3)D(CK.NO.)**
 Date & Time = 6/4/15 9:53 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0090 inch
 Classlength @ 90/95 Xpod = 0.0680 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1# - 90/95 Xpod may be VALIDATED from Xpod to XL. Xp used to satisfy XL and Xm requirements. An alternate 90/95 Xpod is available if Xpodopt or Optimum Xpoh (if listed) is also satisfied.

Survey/Optimum Xpoh = 0.0590 -0.001 inch 23 Samples

NTIAC 90% POD = 0.900 @ 0.095 inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.095 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.076 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = 0.067 inch
 Samples Needed @ Xpodopt = 29
 Xp = 0.0680 inch

File Name = C8003(3)D.xls
 Data Set Name = C8003(3)D(CK.NO.)

Directed DOE Options

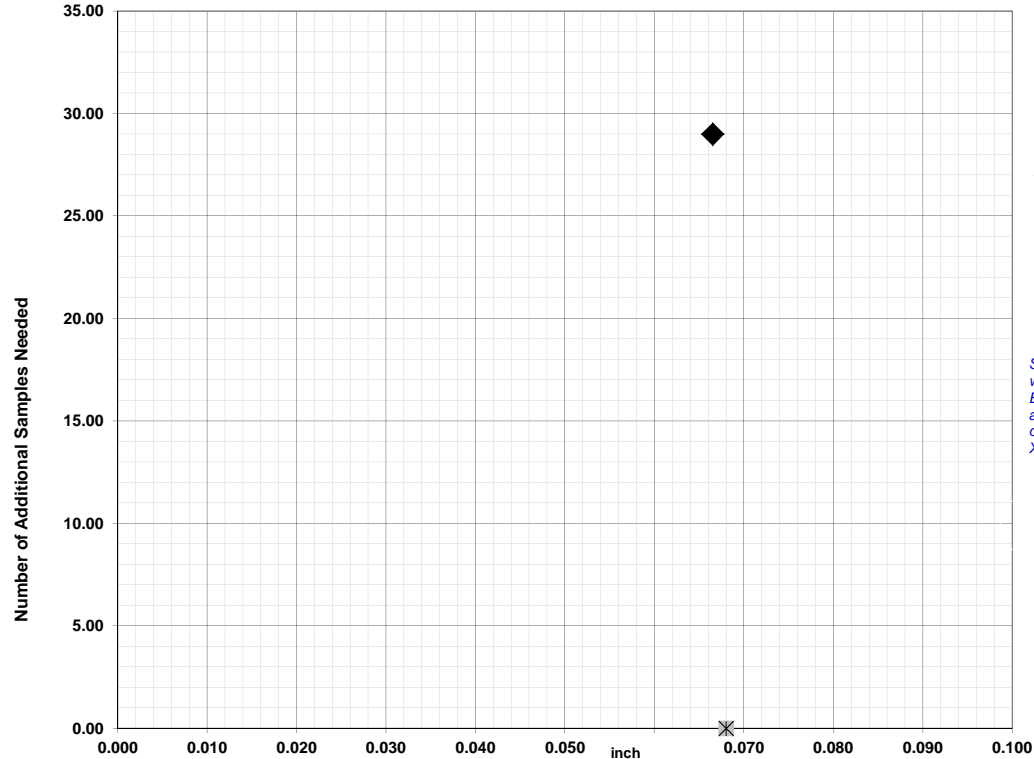


TABLE C

Class Length	Additional Samples
XL =	0.095
Xm =	0.076
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.067 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

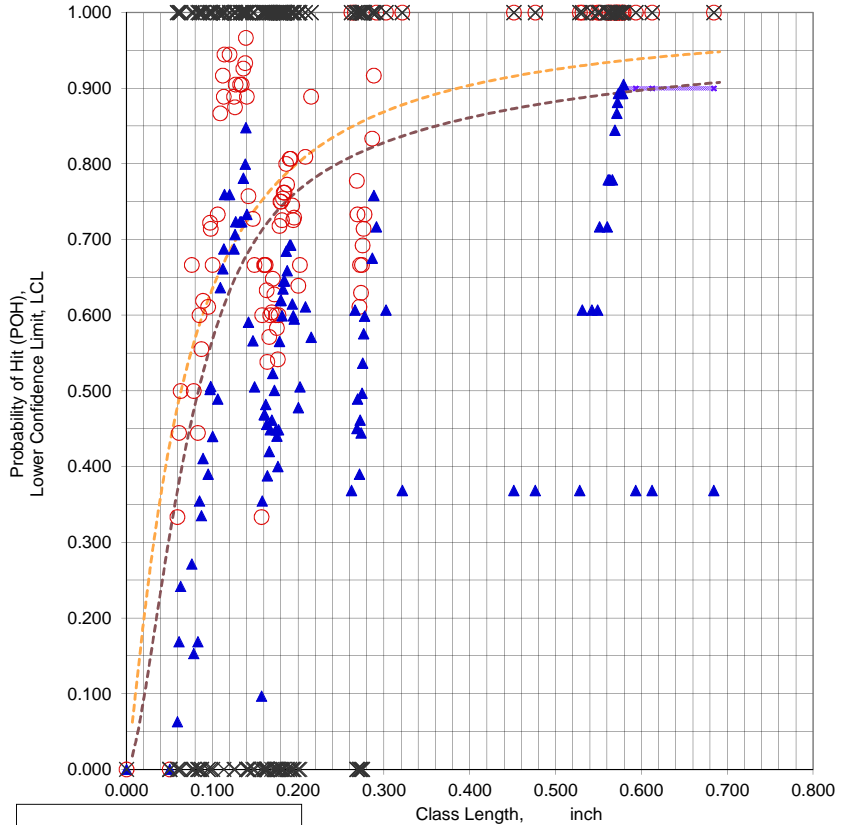
Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 1.737.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **C8003(3)L.xls**
 Data Set Name = **C8003(3)(CK.NO.)**
 Date & Time = 6/4/15 9:54 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0130 inch
 Classlength @ 90/95 Xpod = 0.5790 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1# - 90/95 Xpod may be VALIDATED from Xpod to XL. Xp used to satisfy XL and Xm requirements. An alternate 90/95 Xpod is available if Xpodopt or Optimum Xpoh (if listed) is also satisfied.

Survey/Optimum Xpoh = 0.2770 -0.001 inch 20 Samples

NTIAC 90% POD = 0.900 @ 0.405 inch
 NTIAC 90/95 POD = 0.901 @ 0.665 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.684 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.612 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = 0.291 inch
 Samples Needed @ Xpodopt = 20
 Xp = 0.5790 inch

File Name = C8003(3)L.xls
 Data Set Name = C8003(3)L(CK.NO.)

Directed DOE Options

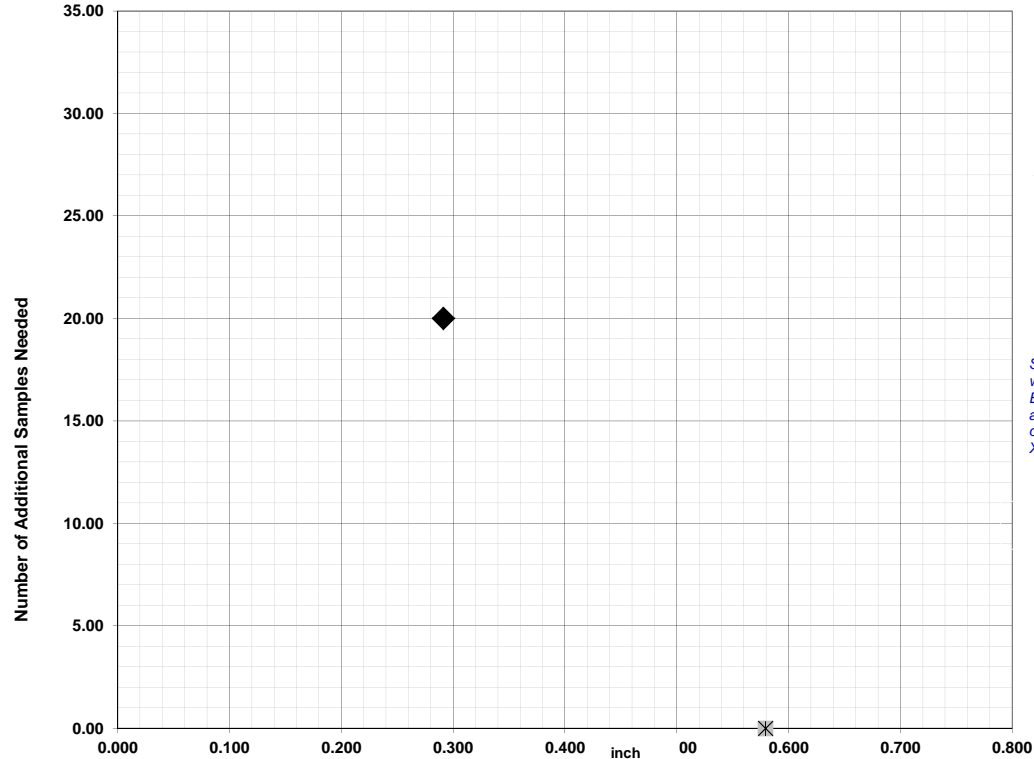


TABLE C

Class Length	Additional Samples
XL =	0.684
Xm =	0.612
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.291 20

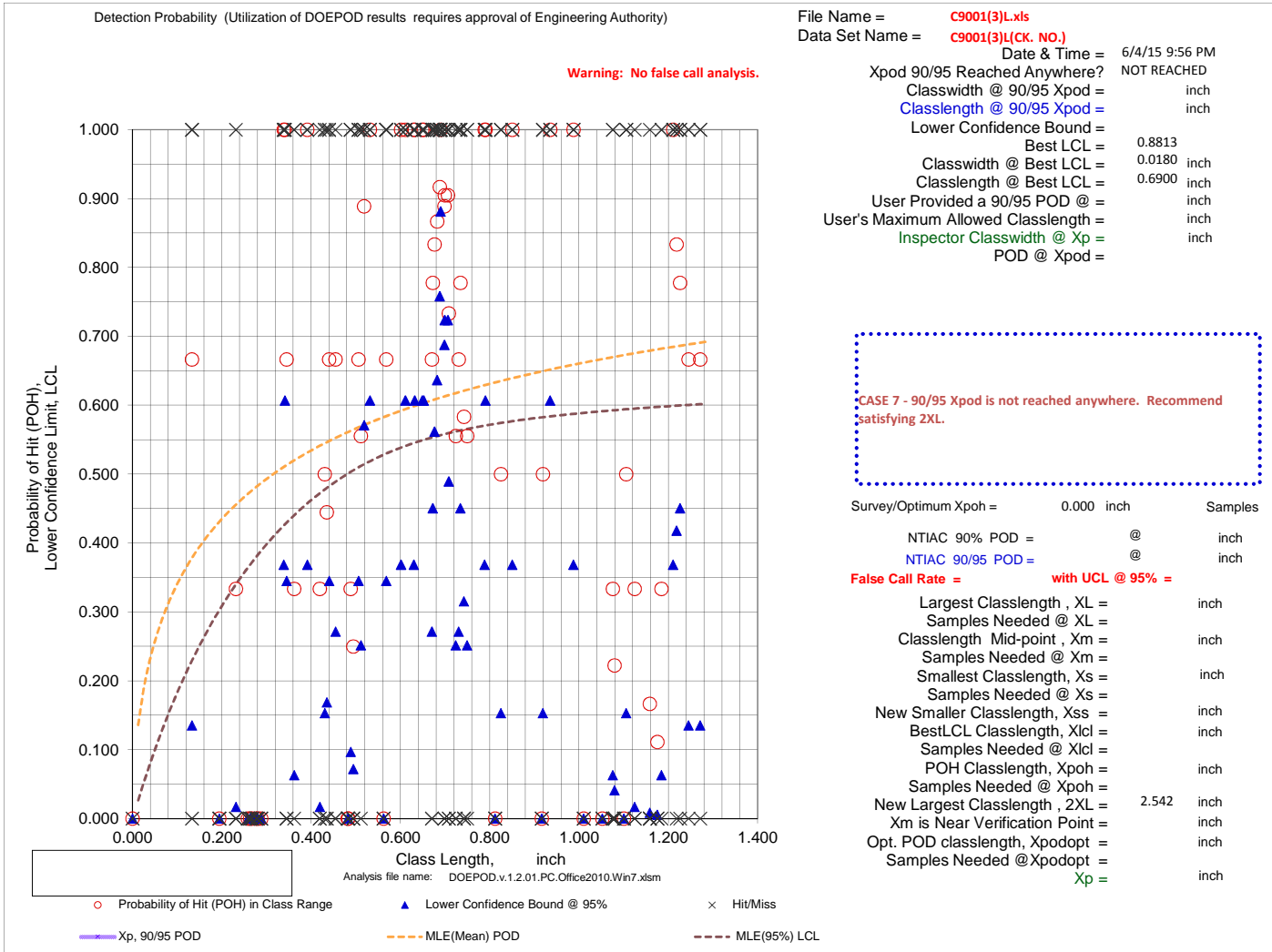
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = C9001(3)L.xls
 Data Set Name = C9001(3)L(CK. NO.)

Directed DOE Options

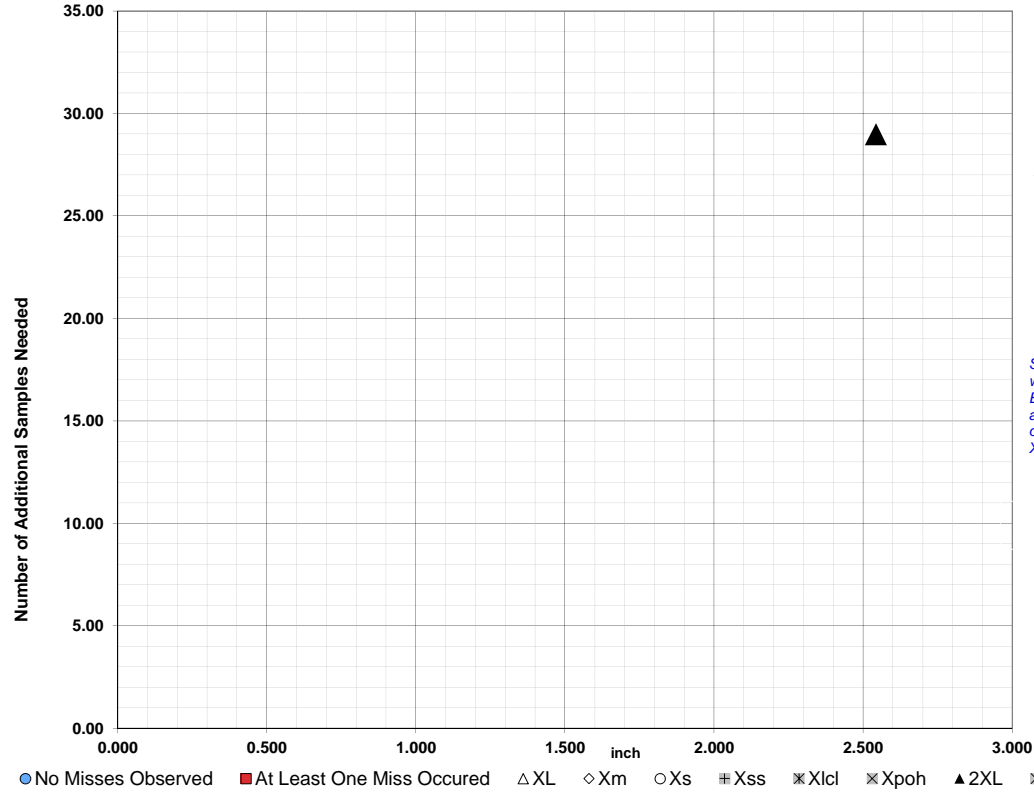


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 2.542	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 2.542 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

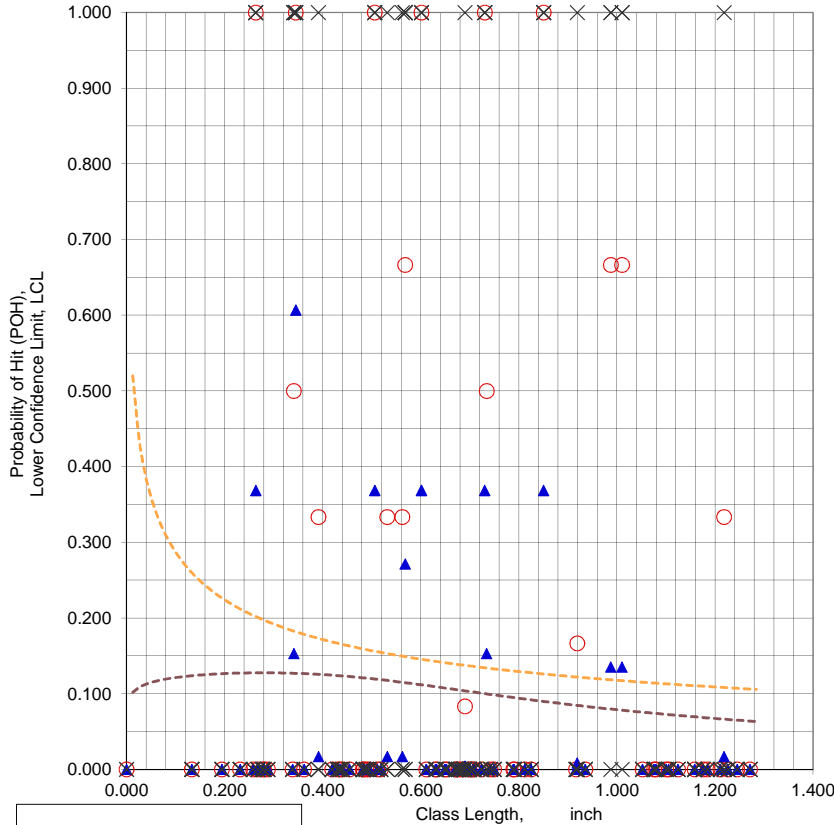
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = C9002(3)L.xls
 Data Set Name = C9002(3)(CK. NO.)
 Date & Time = 6/4/15 9:57 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6070
 Classwidth @ Best LCL = 0.0040 inch
 Classlength @ Best LCL = 0.3450 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 2.542 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C9002(3)L.xls
 Data Set Name = C9002(3)L(CK. NO.)

Directed DOE Options



TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 2.542	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 2.542 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

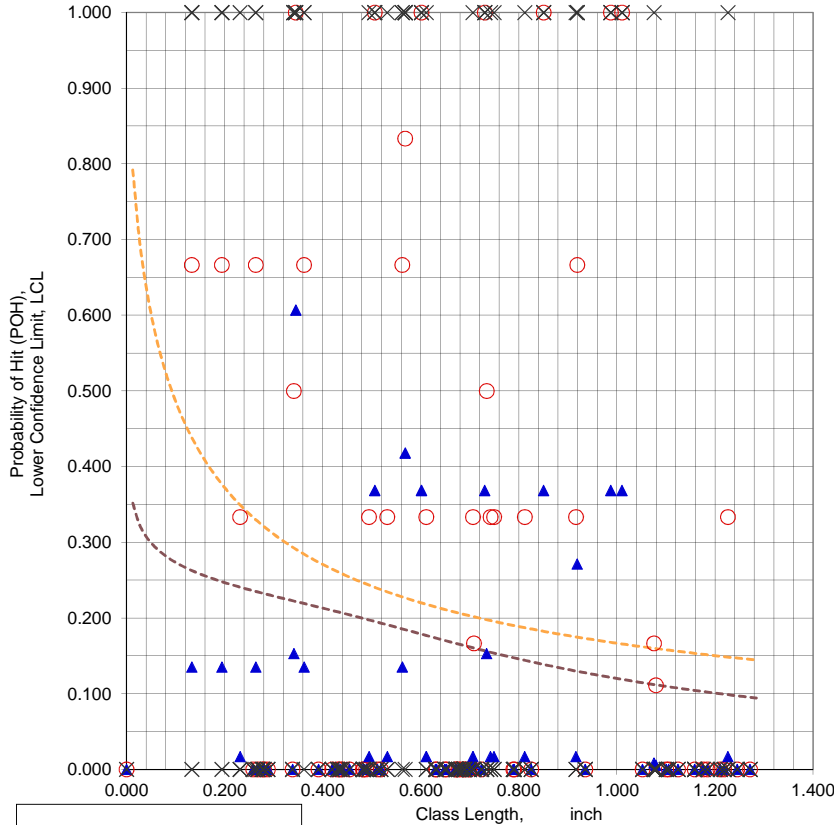
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = C9003(3)L.xls
 Data Set Name = C9003(3)(CK. NO.)
 Date & Time = 6/4/15 10:00 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6070
 Classwidth @ Best LCL = 0.0040 inch
 Classlength @ Best LCL = 0.3450 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 2.542 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = C9003(3)L.xls
 Data Set Name = C9003(3)L(CK. NO.)

Directed DOE Options



TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 2.542	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 2.542 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

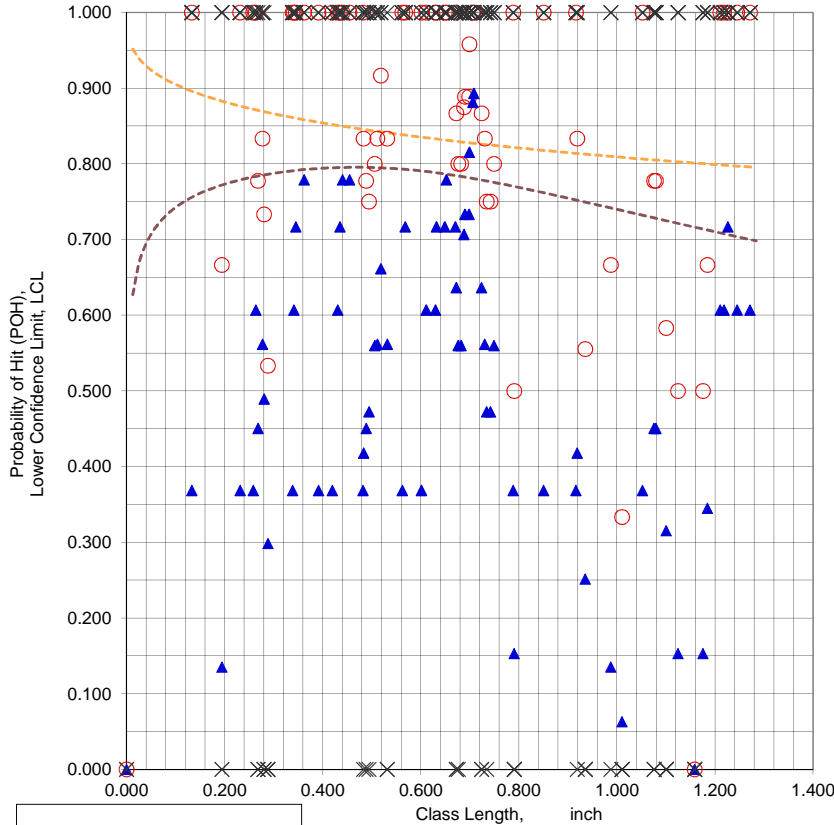
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = C9004(3)L.xls
 Data Set Name = C9004(3)L(NO.)
 Date & Time = 6/4/15 10:03 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8931
 Classwidth @ Best LCL = 0.0260 inch
 Classlength @ Best LCL = 0.7080 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 1.1750 -0.016 inch 26 Samples
 NTIAC 90% POD = 0.965 @ 0.005 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.271 inch
 Samples Needed @ XL = 23
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = 1.210 inch
 Samples Needed @ Xpoh = 23
 New Largest Classlength , 2XL = 2.542 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = C9004(3)L.xls
 Data Set Name = C9004(3)L(NO.)

Directed DOE Options

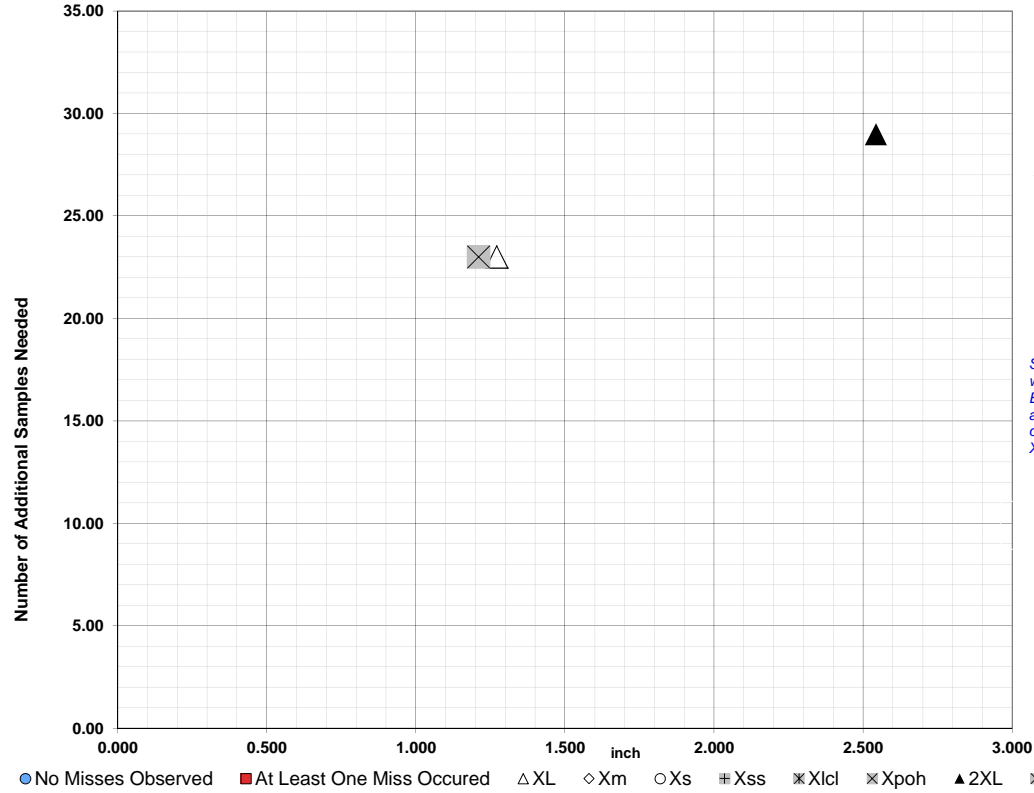


TABLE C

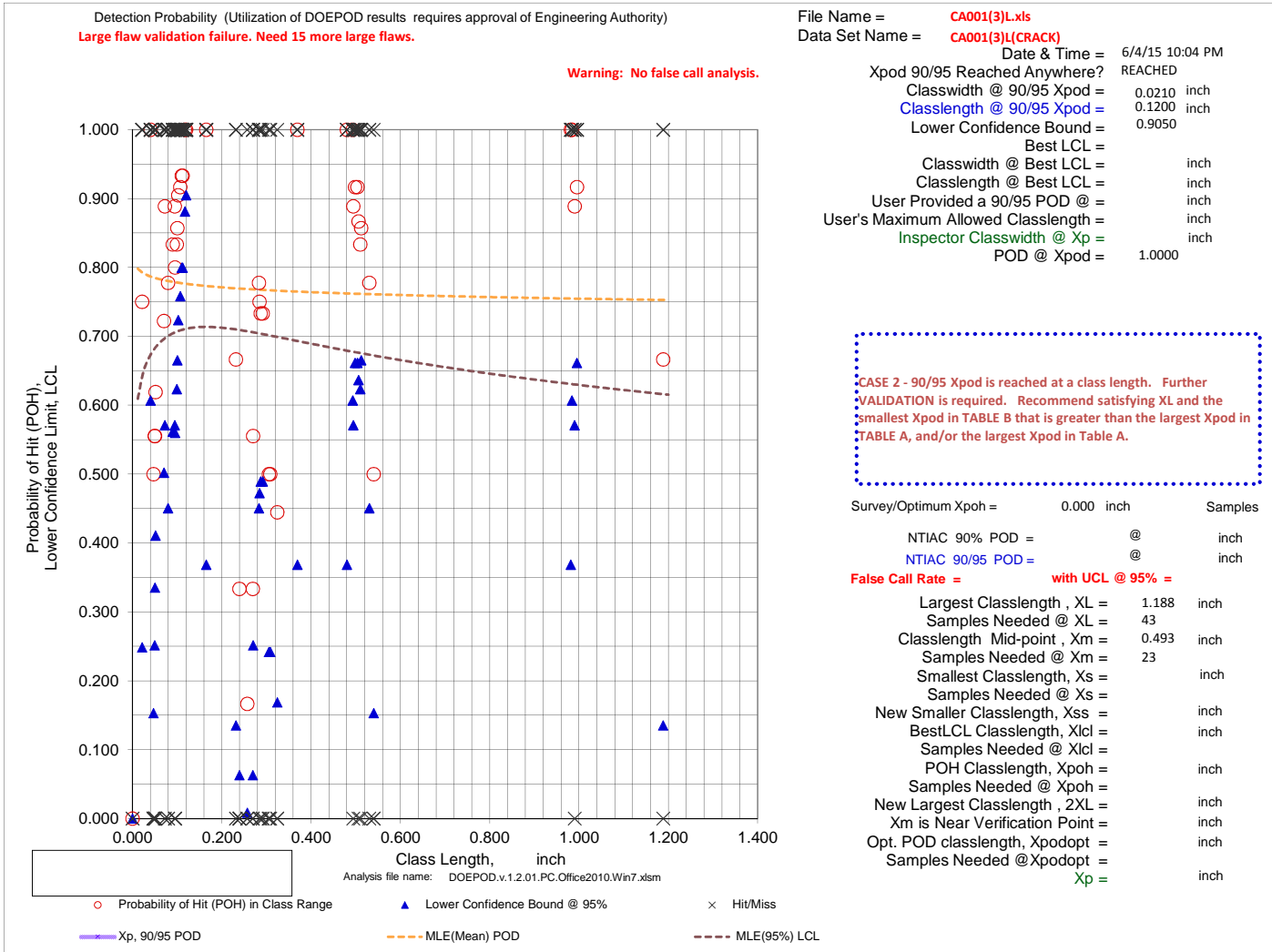
Class Length	Additional Samples
XL = 1.271	23
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.210	23
2XL = 2.542	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CA001(3)L.xls
 Data Set Name = CA001(3)L(CRACK)

Directed DOE Options

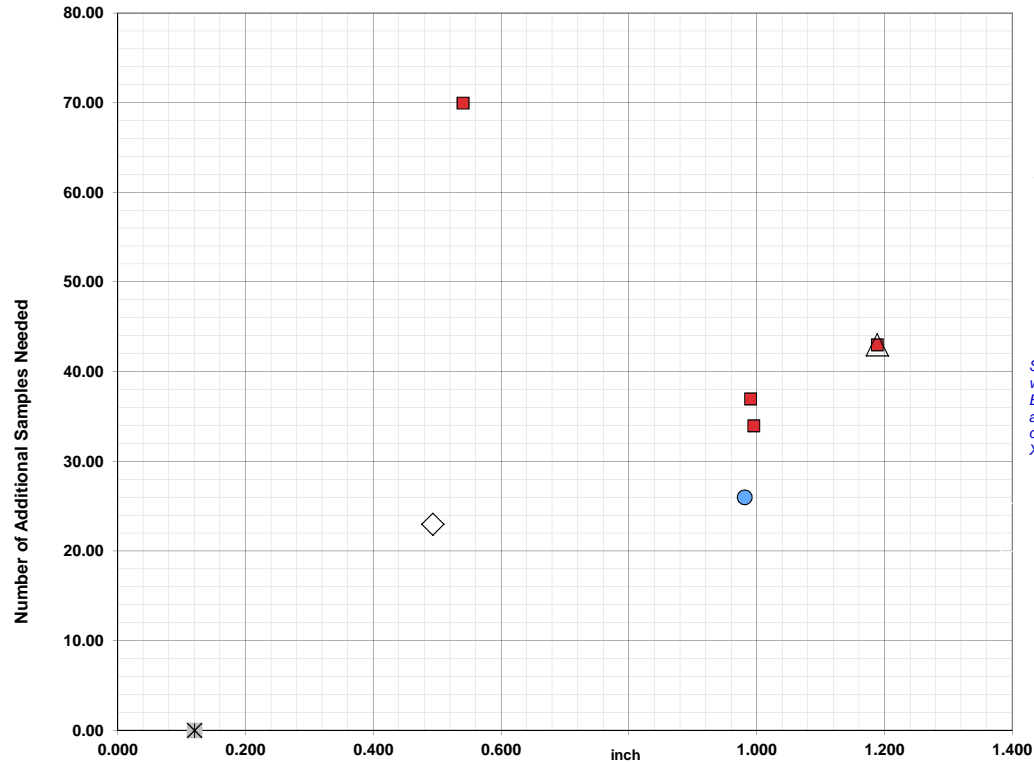


TABLE C

Class Length	Additional Samples
XL = 1.188	43
Xm = 0.493	23
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
1.1880	43		
0.9950	34		
0.9900	37		
0.5400	70	0.9810	26

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

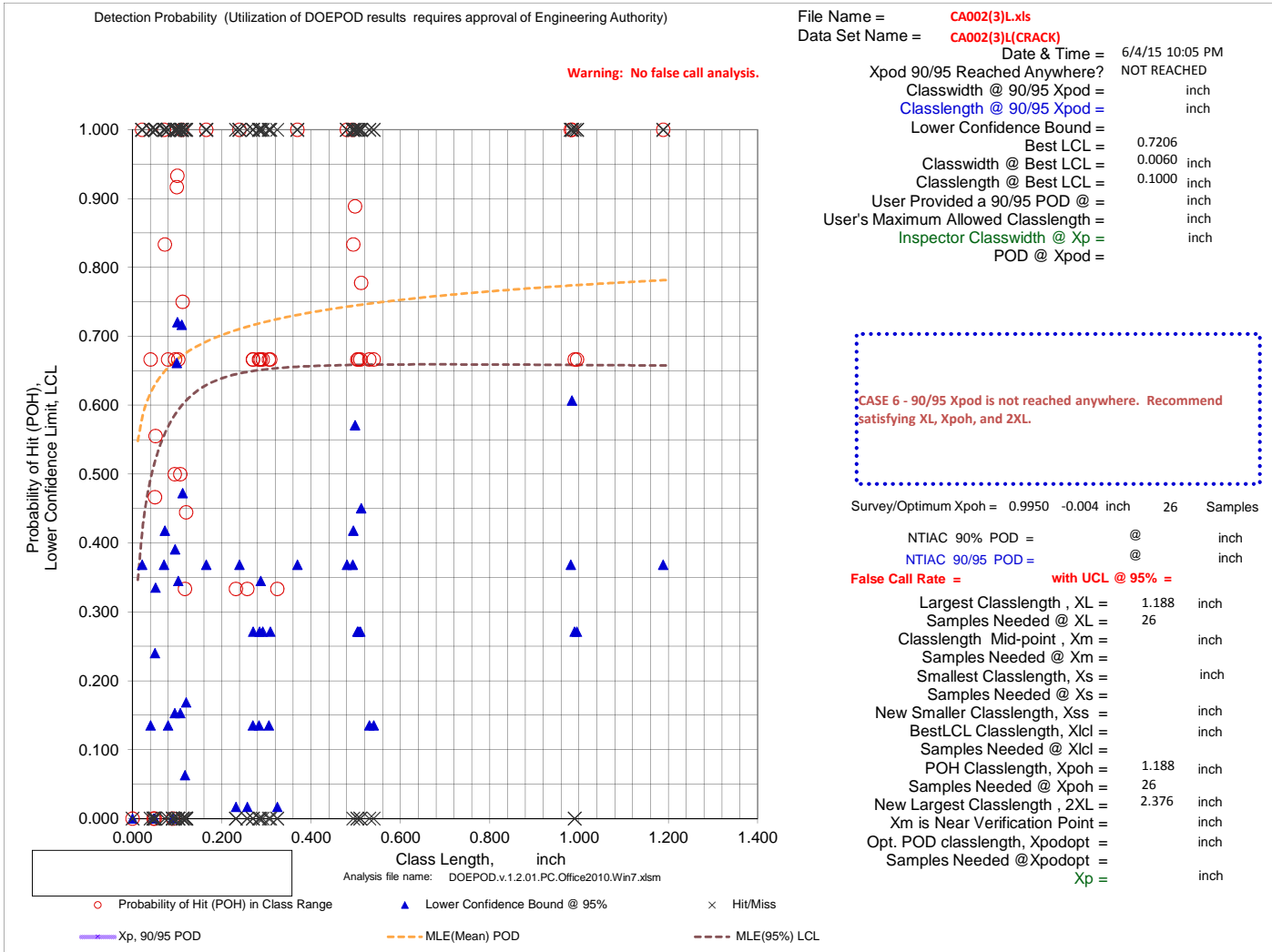
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CA002(3)L.xls
 Data Set Name = CA002(3)L(CRACK)

Directed DOE Options

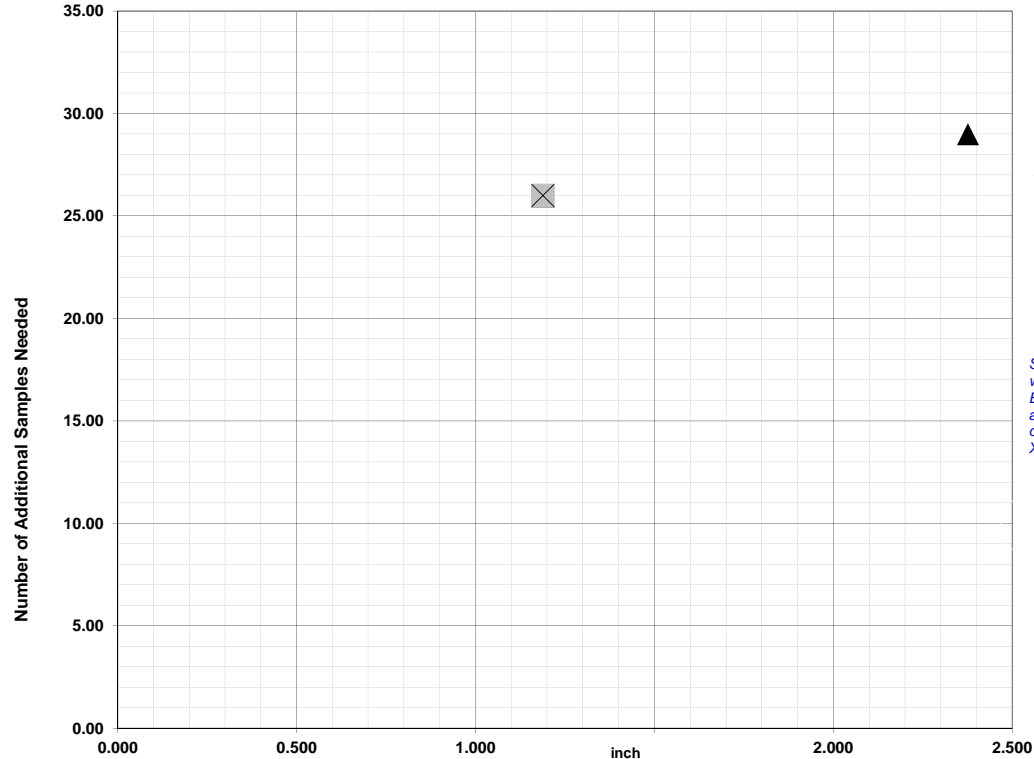


TABLE C

Class Length	Additional Samples	
XL =	1.188	26
Xm =		
Xs =		
Xss =		
Xlcl =		
Xpoh =	1.188	26
2XL =	2.376	29
**Alternate Xm =		
Xpodopt =		

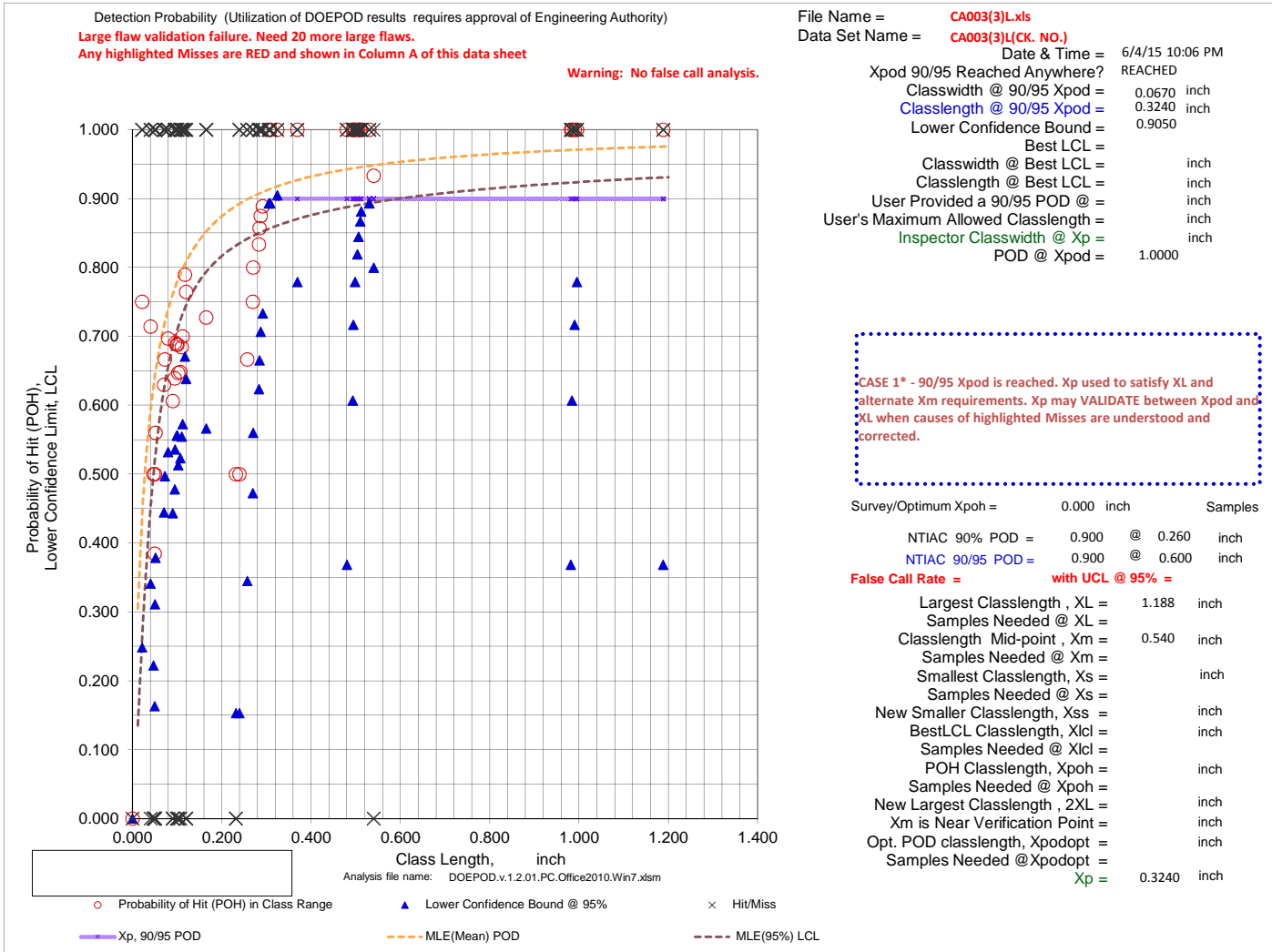
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CA003(3)L.xls
 Data Set Name = CA003(3)L(CK. NO.)

Directed DOE Options

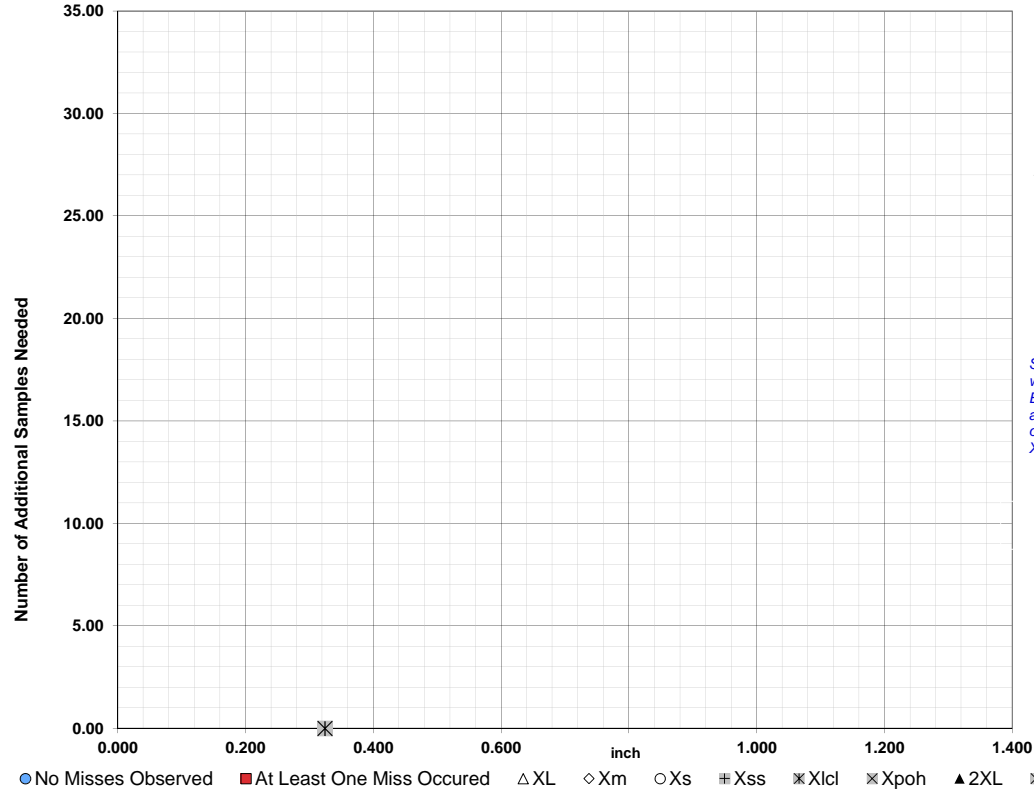


TABLE C

Class Length Additional Samples

XL = 1.188
 Xm = 0.540
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

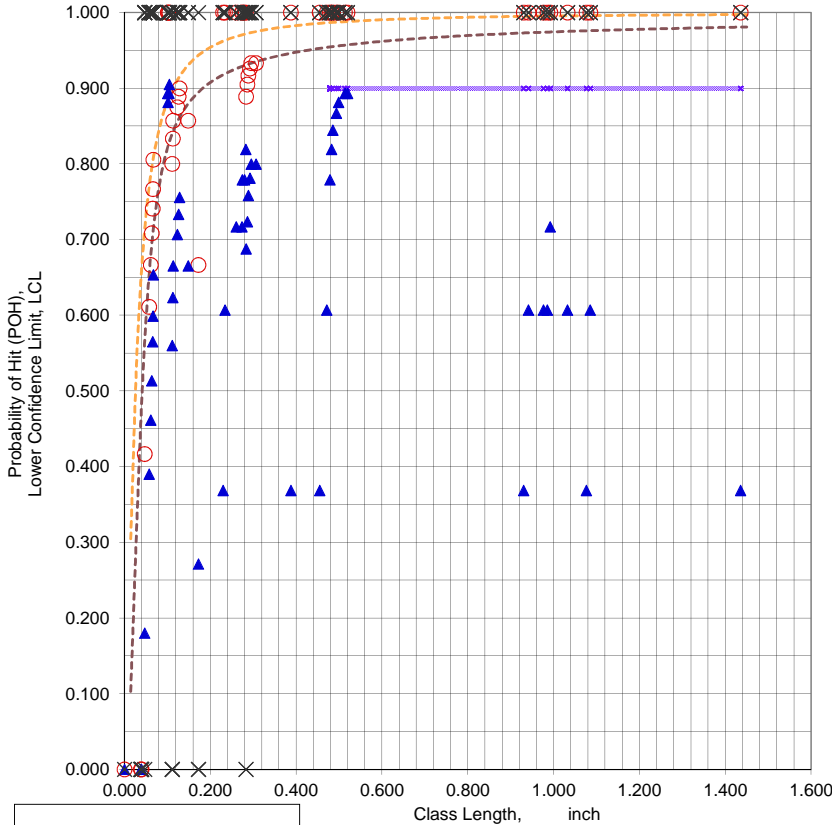
No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 14 more large flaws.
Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = CB001(3)L.xls
 Data Set Name = CB001(3)(CK. NO.)
 Date & Time = 6/4/15 10:07 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0430 inch
 Classlength @ 90/95 Xpod = 0.1040 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples

NTIAC 90% POD = 0.900 @ 0.055 inch
 NTIAC 90/95 POD = 0.905 @ 0.090 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 1.435 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.519 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.4780 inch

File Name = CB001(3)L.xls
 Data Set Name = CB001(3)L(CK. NO.)

Directed DOE Options

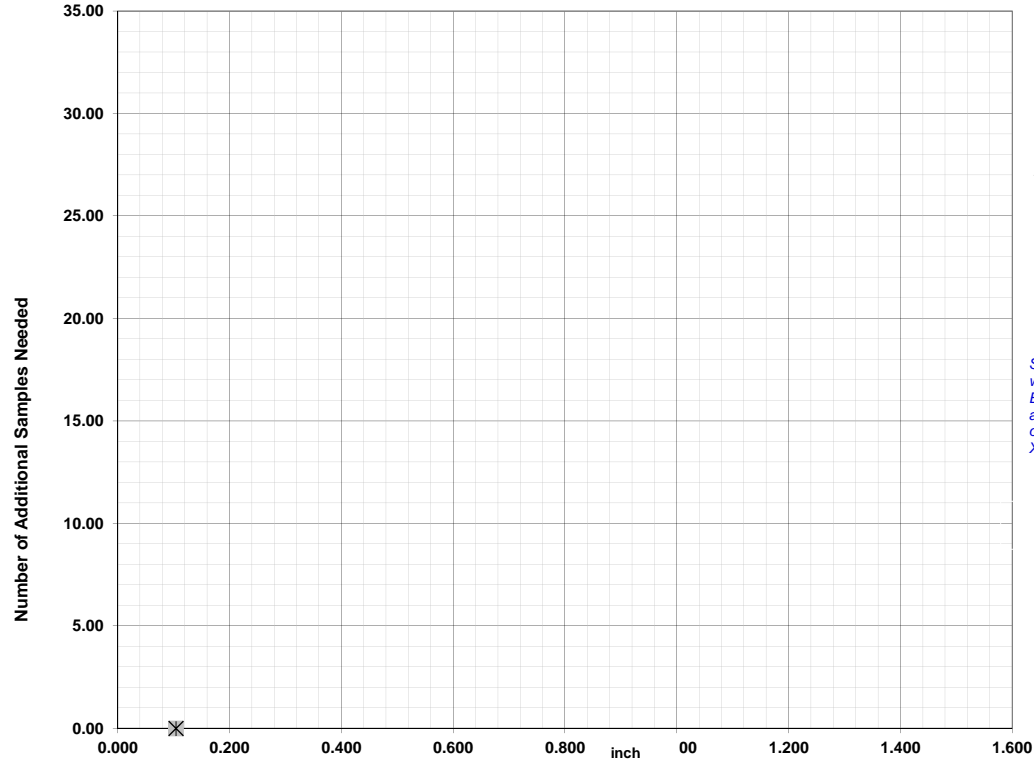


TABLE C

Class Length Additional Samples

XL = 1.435
 Xm = 0.519
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

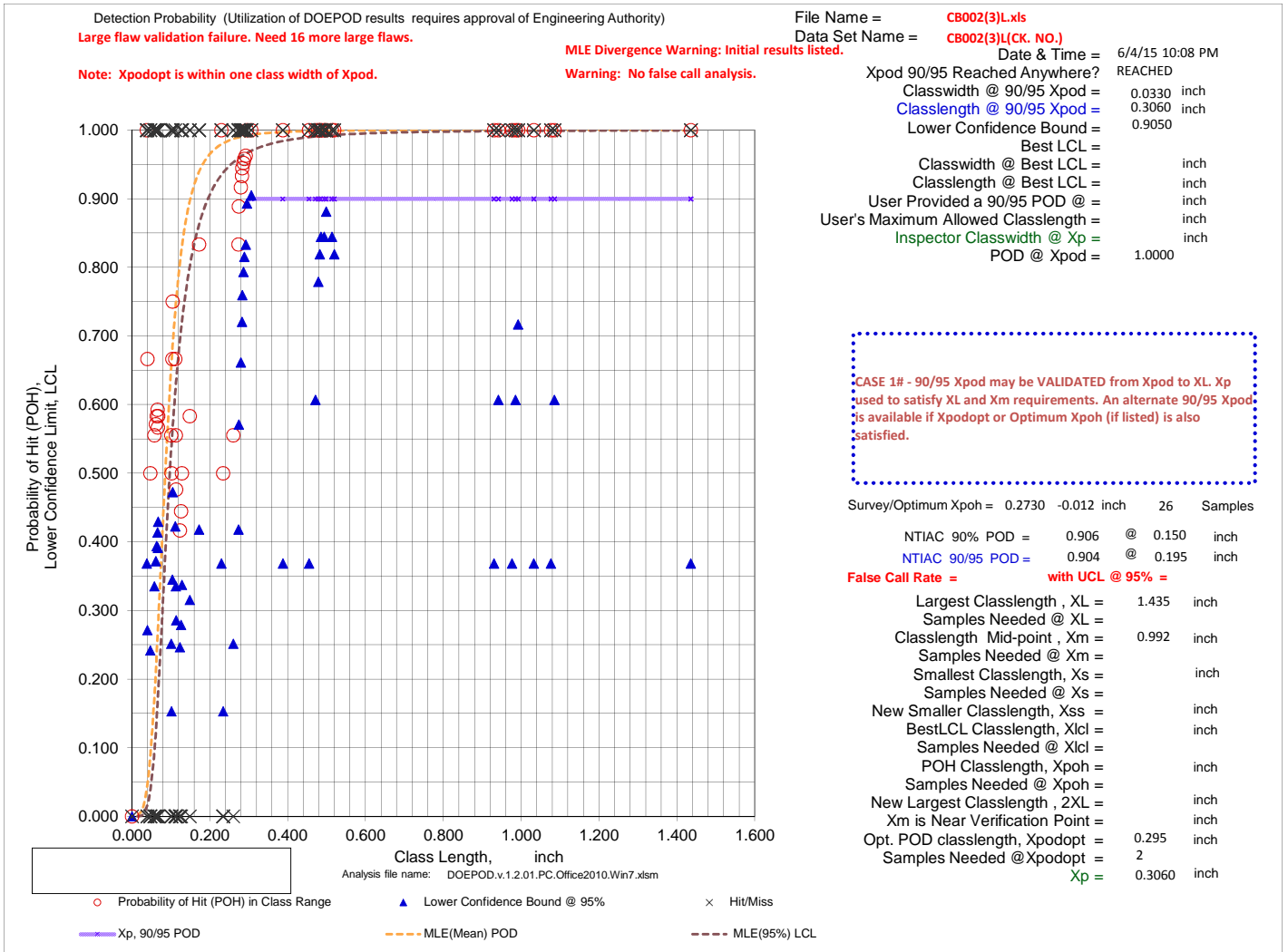
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CB002(3)L.xls
 Data Set Name = CB002(3)L(CK. NO.)

Directed DOE Options

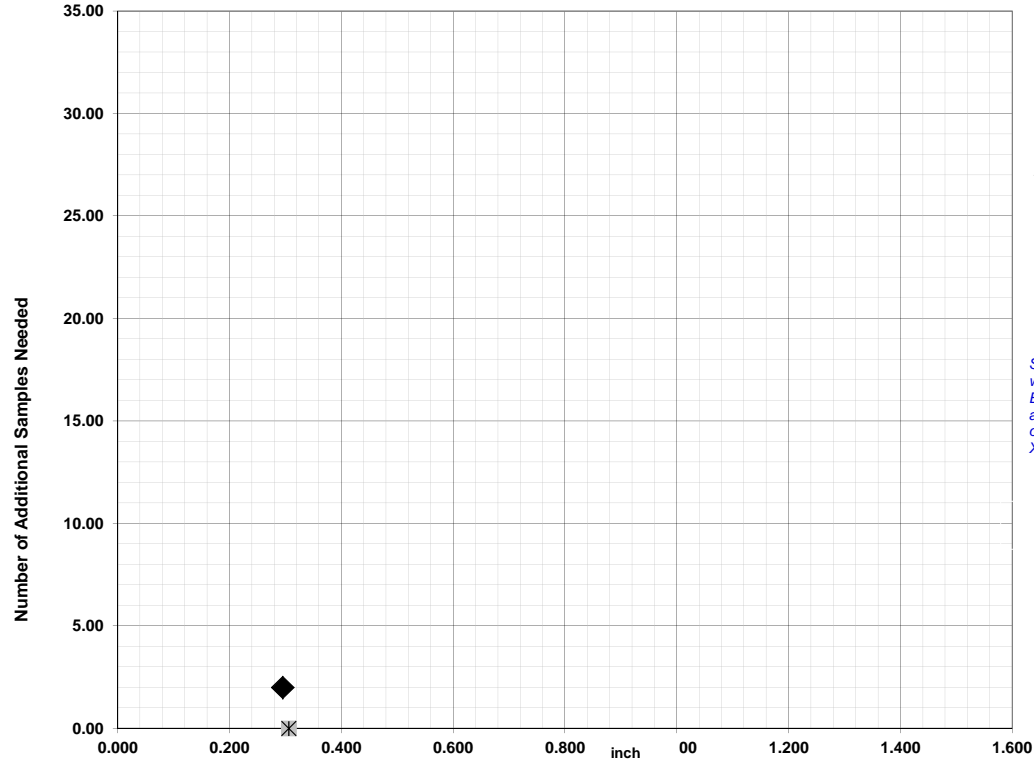


TABLE C

Class Length	Additional Samples
XL =	1.435
Xm =	0.992
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.295 2

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

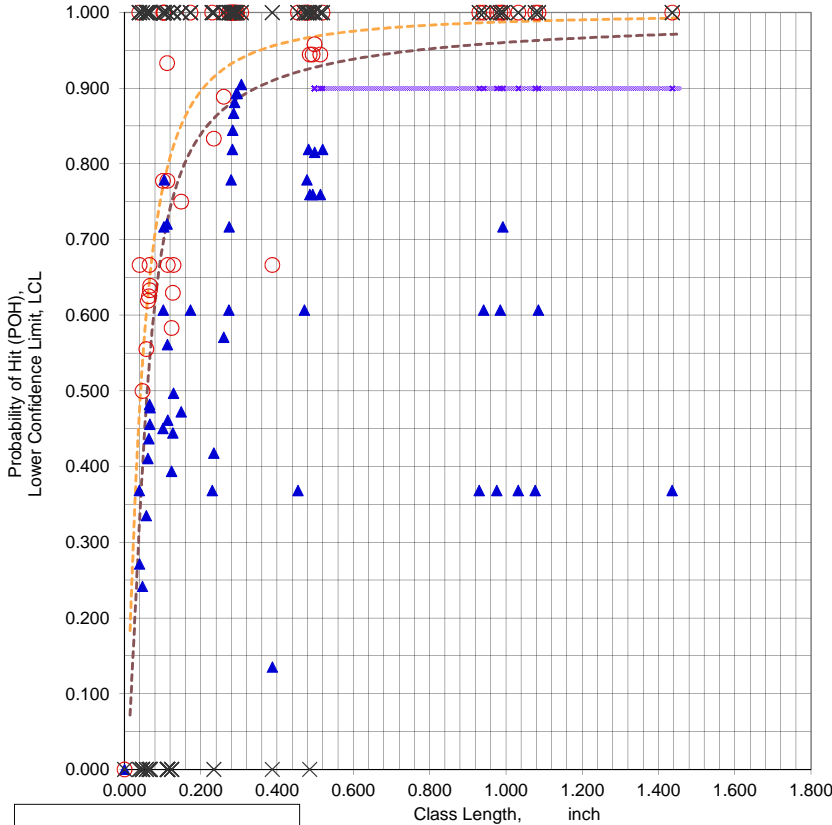
● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 16 more large flaws.
Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = CB003(3)L.xls
 Data Set Name = CB003(3)L(CK. NO.)
 Date & Time = 6/4/15 10:09 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0330 inch
 Classlength @ 90/95 Xpod = 0.3060 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.902 @ 0.210 inch
 NTIAC 90/95 POD = 0.900 @ 0.345 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.435 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.992 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.4980 inch

File Name = CB003(3)L.xls
 Data Set Name = CB003(3)L(CK. NO.)

Directed DOE Options

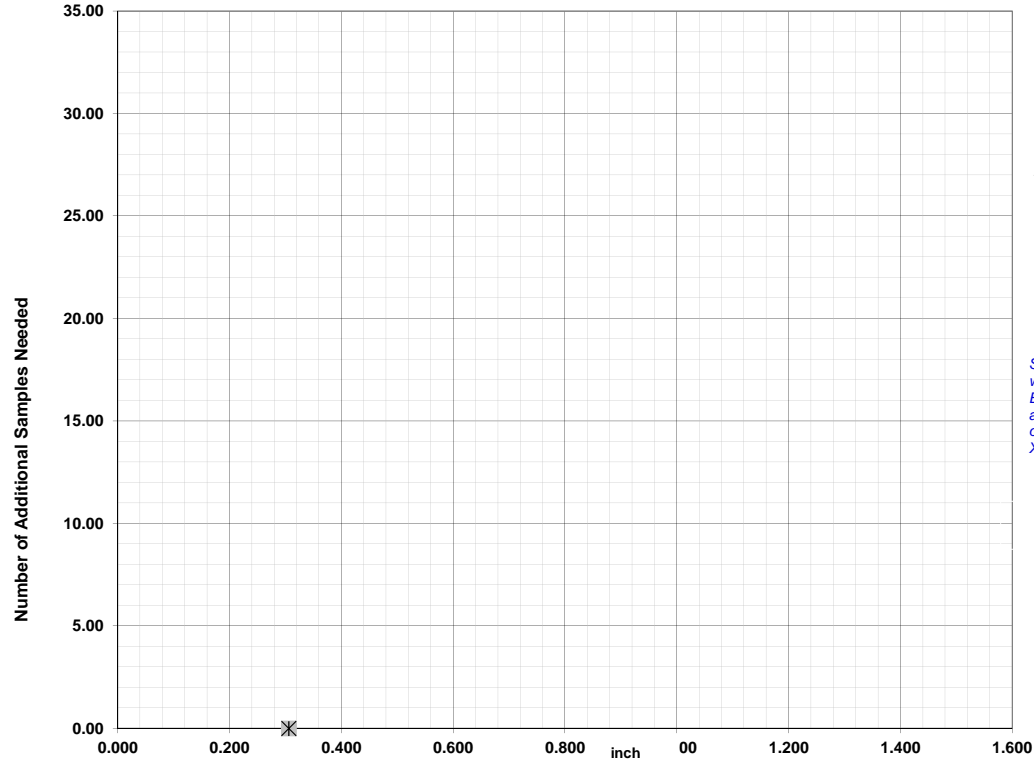


TABLE C

Class Length Additional Samples

XL = 1.435
 Xm = 0.992
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

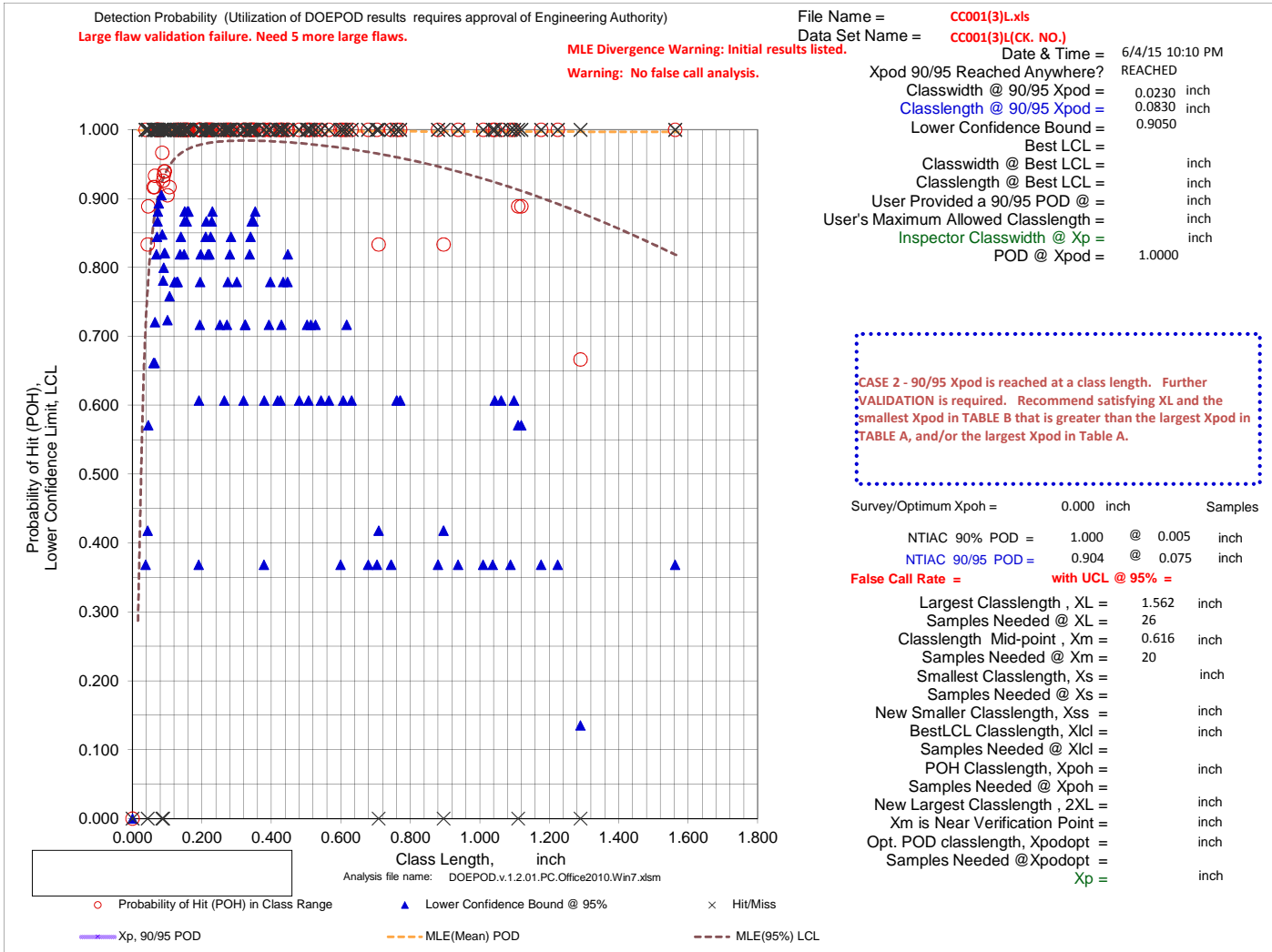
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CC001(3)L.xls
 Data Set Name = CC001(3)L(CK. NO.)

Directed DOE Options

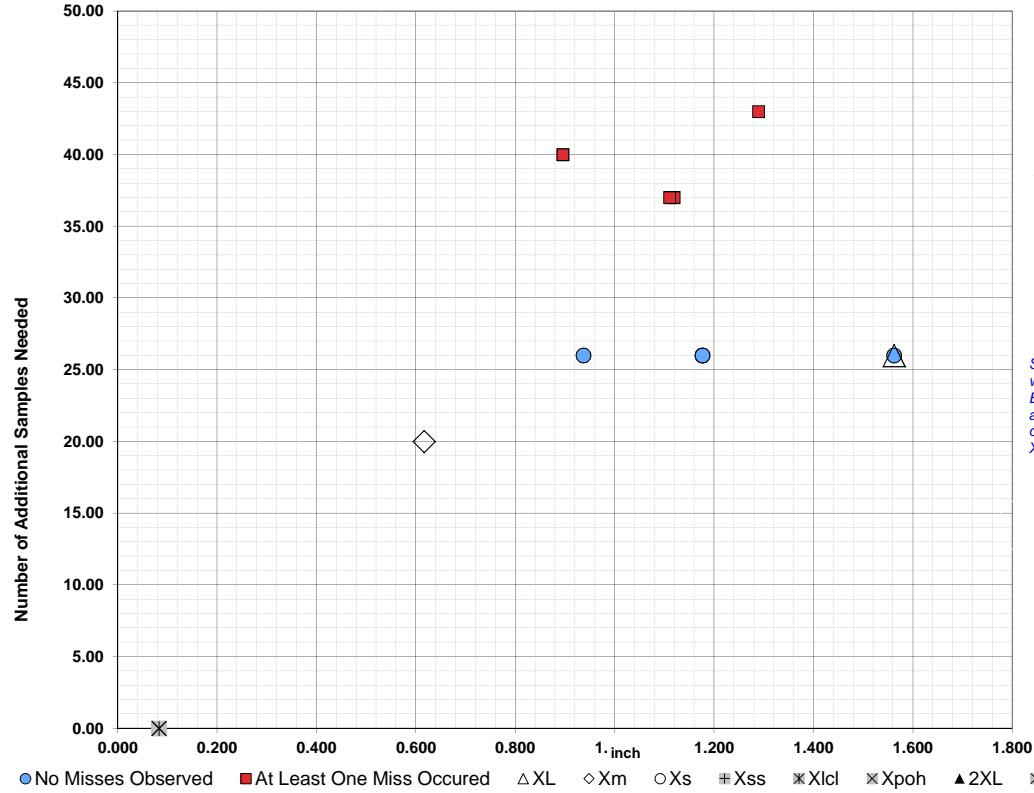


TABLE C

Class Length	Additional Samples
XL = 1.562	26
Xm = 0.616	20
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
1.2890	43	1.5620	26
1.1190	37	1.1760	26
1.1100	37	1.1760	26
0.8950	40	0.9370	26

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

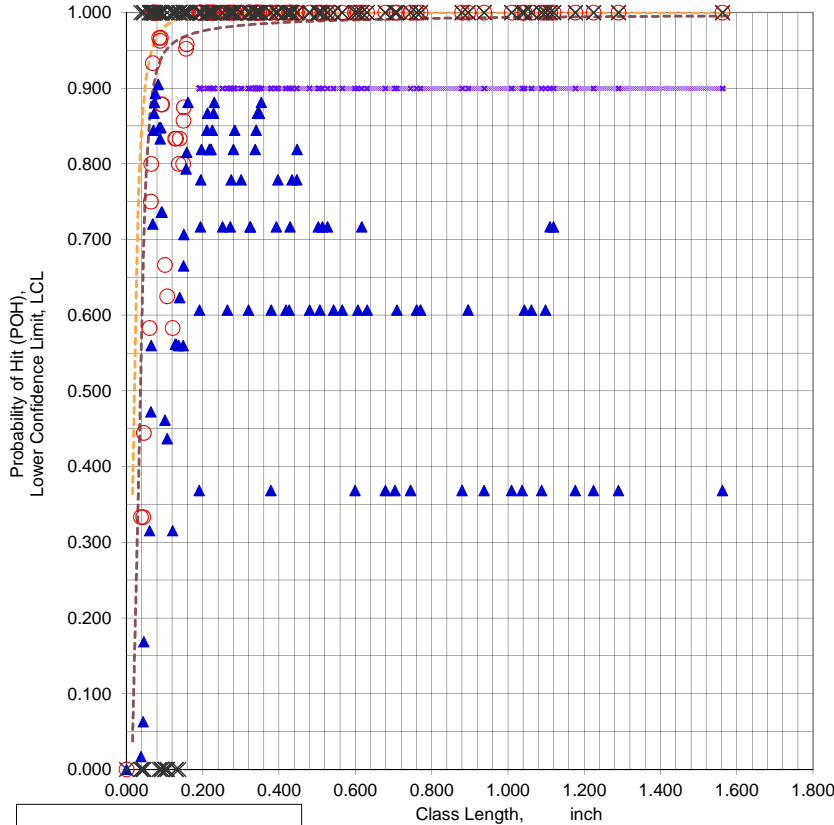
Large flaw validation failure. Need 5 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

MLE Divergence Warning: Initial results listed.

Warning: No false call analysis.

File Name = CC002(3)L.xls
 Data Set Name = CC002(3)(CK. NO.)
 Date & Time = 6/4/15 10:19 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0230 inch
 Classlength @ 90/95 Xpod = 0.0830 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000



CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.911 @ 0.050 inch
 NTIAC 90/95 POD = 0.903 @ 0.070 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.562 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 1.119 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.1910 inch

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = CC002(3)L.xls
 Data Set Name = CC002(3)L(CK. NO.)

Directed DOE Options

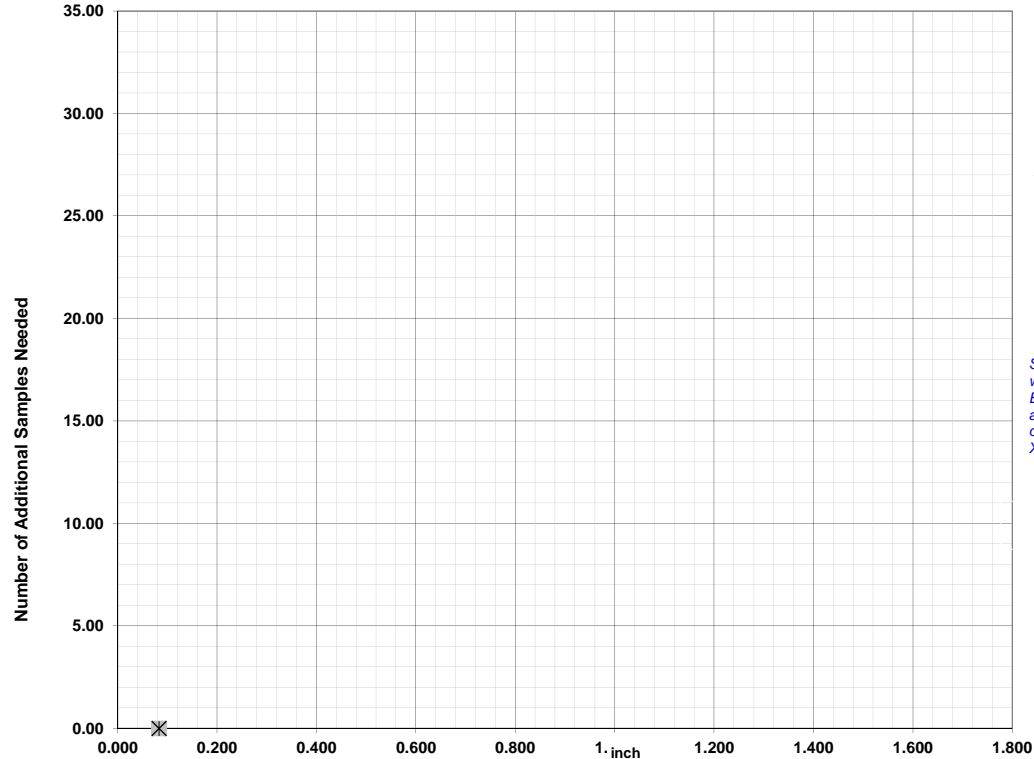


TABLE C

Class Length Additional Samples

XL = 1.562
 Xm = 1.119
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 5 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

MLE Divergence Warning: Initial results listed.

Warning: No false call analysis.

File Name = CC003(3)L.xls

Data Set Name = CC003(3)(CK. NO.)

Date & Time = 6/4/15 10:24 PM

Xpod 90/95 Reached Anywhere? REACHED

Classwidth @ 90/95 Xpod = 0.0230 inch

Classlength @ 90/95 Xpod = 0.0830 inch

Lower Confidence Bound = 0.9050

Best LCL =

Classwidth @ Best LCL = inch

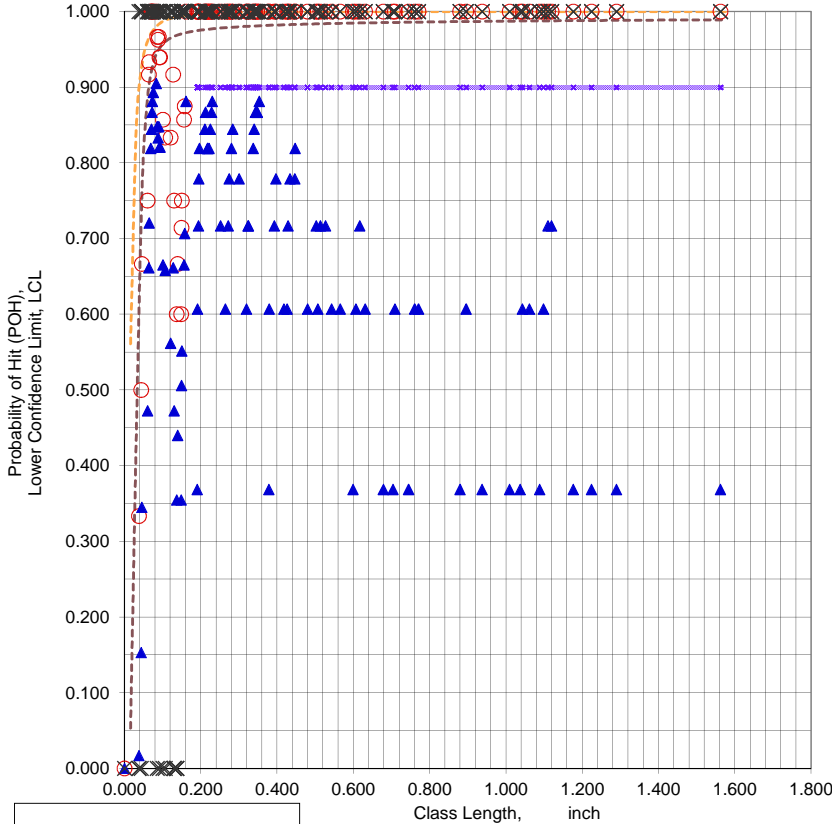
Classlength @ Best LCL = inch

User Provided a 90/95 POD @ = inch

User's Maximum Allowed Classlength = inch

Inspector Classwidth @ Xp = inch

POD @ Xpod = 1.0000



CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples

NTIAC 90% POD = 0.906 @ 0.040 inch

NTIAC 90/95 POD = 0.904 @ 0.065 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 1.562 inch

Samples Needed @ XL =

Classlength Mid-point , Xm = 1.119 inch

Samples Needed @ Xm =

Smallest Classlength, Xs = inch

Samples Needed @ Xs =

New Smaller Classlength, Xss = inch

BestLCL Classlength, Xlcl = inch

Samples Needed @ Xlcl =

POH Classlength, Xpoh = inch

Samples Needed @ Xpoh =

New Largest Classlength , 2XL = inch

Xm is Near Verification Point = inch

Opt. POD classlength, Xpodopt = inch

Samples Needed @ Xpodopt =

Xp = 0.1910 inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = CC003(3)L.xls
 Data Set Name = CC003(3)L(CK. NO.)

Directed DOE Options

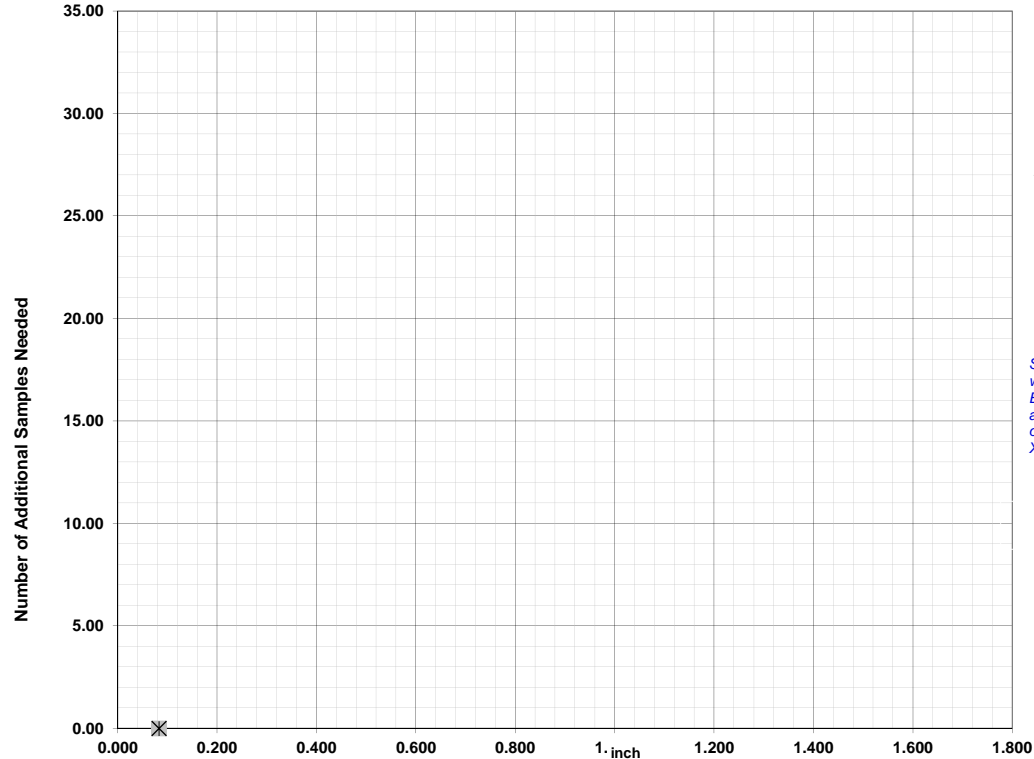


TABLE C

Class Length Additional Samples

XL = 1.562
 Xm = 1.119
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

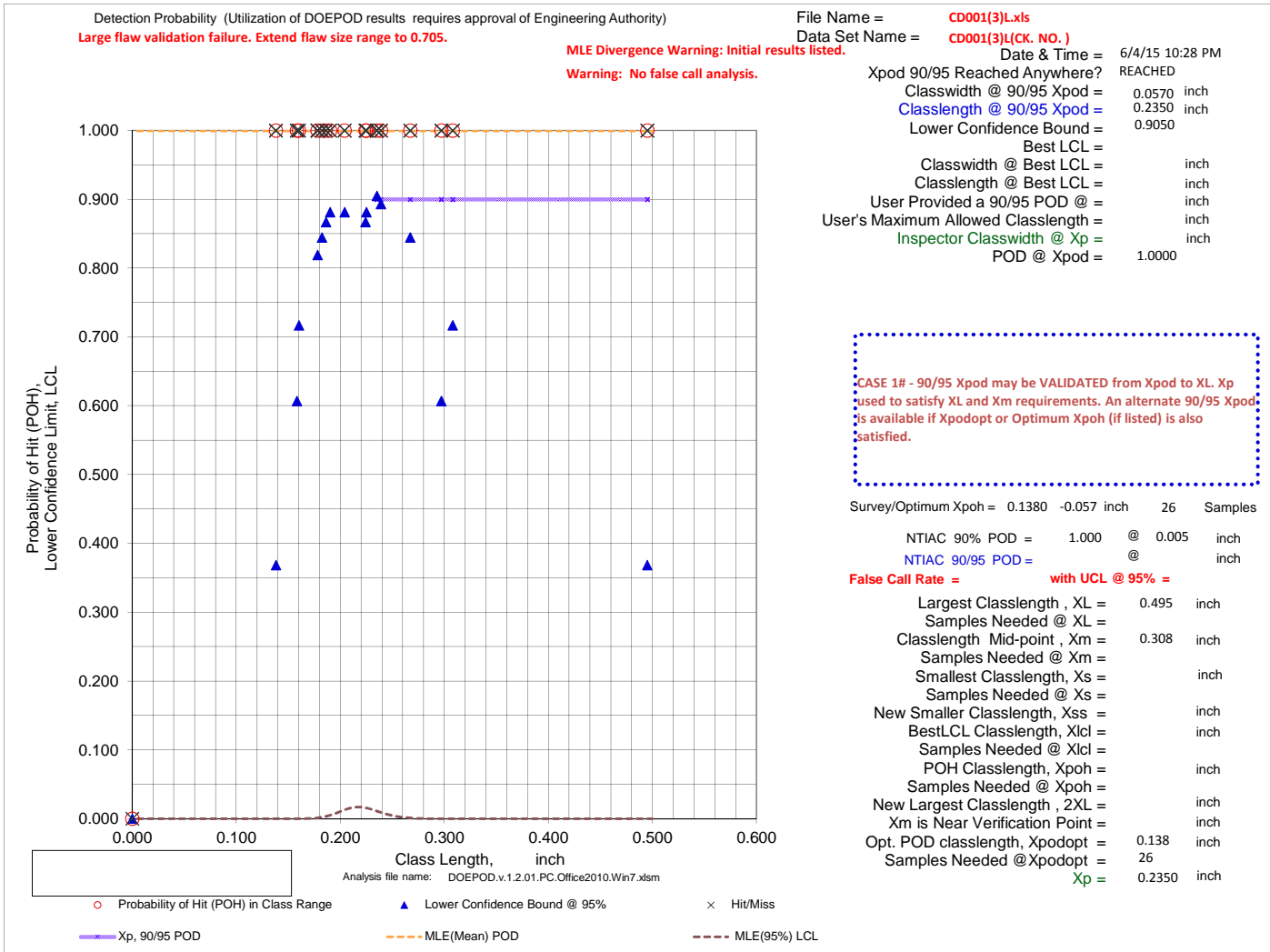
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CD001(3)L.xls
 Data Set Name = CD001(3)L(CK. NO.)

Directed DOE Options

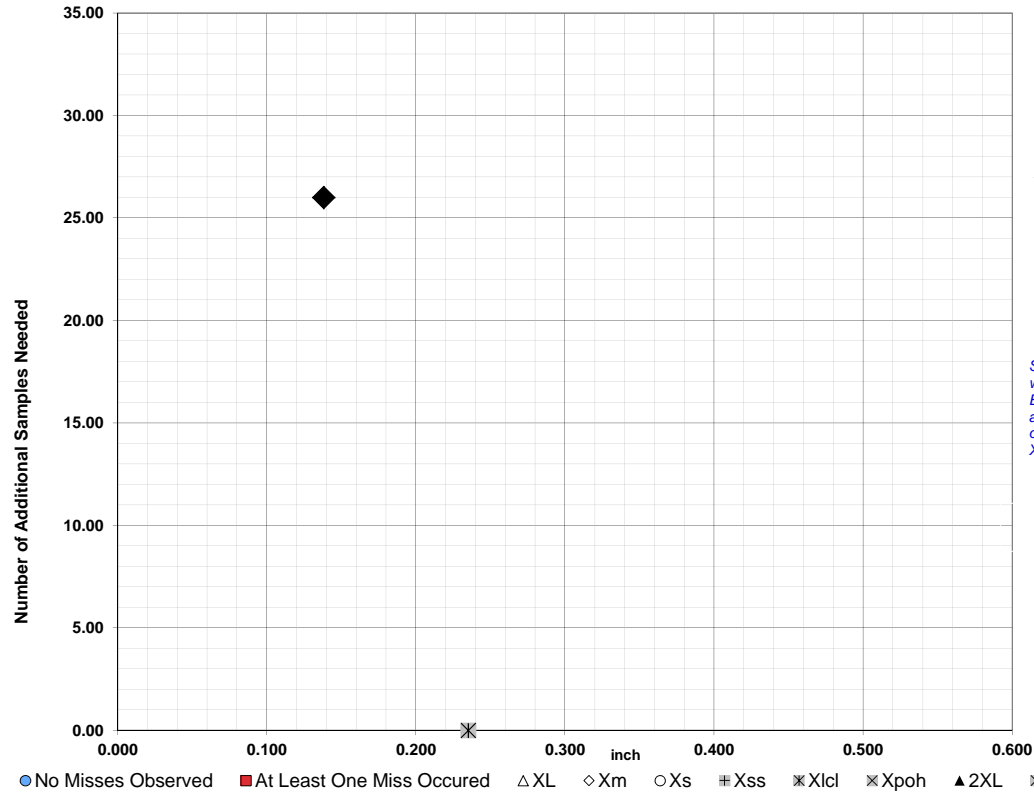


TABLE C

Class Length	Additional Samples
XL =	0.495
Xm =	0.308
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.138 26

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

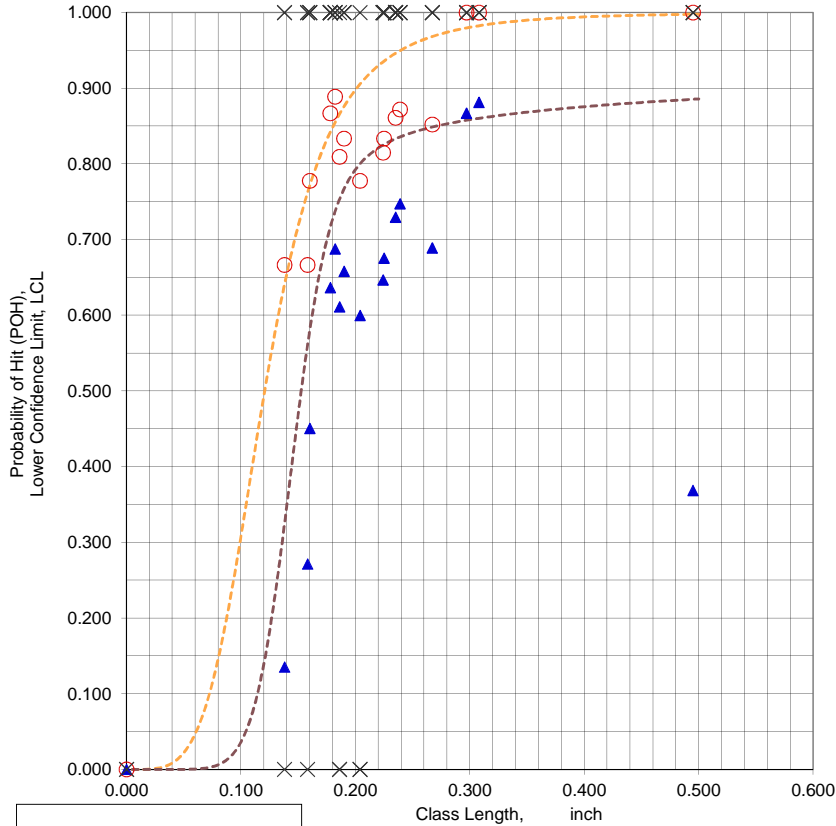
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **CD002(3)L.xls**
 Data Set Name = **CD002(3)L(CK. NO.)**
 Date & Time = 6/4/15 10:29 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8813
 Classwidth @ Best LCL = 0.0840 inch
 Classlength @ Best LCL = 0.3080 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.2240 -0.019 inch 26 Samples
 NTIAC 90% POD = 0.907 @ 0.205 inch
 NTIAC 90/95 POD = 0.900 @ 0.725 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.495 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.308 inch
 Samples Needed @ Xlcl = 5
 POH Classlength, Xpoh = 0.297 inch
 Samples Needed @ Xpoh = 8
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

File Name = CD002(3)L.xls
 Data Set Name = CD002(3)L(CK. NO.)

Directed DOE Options

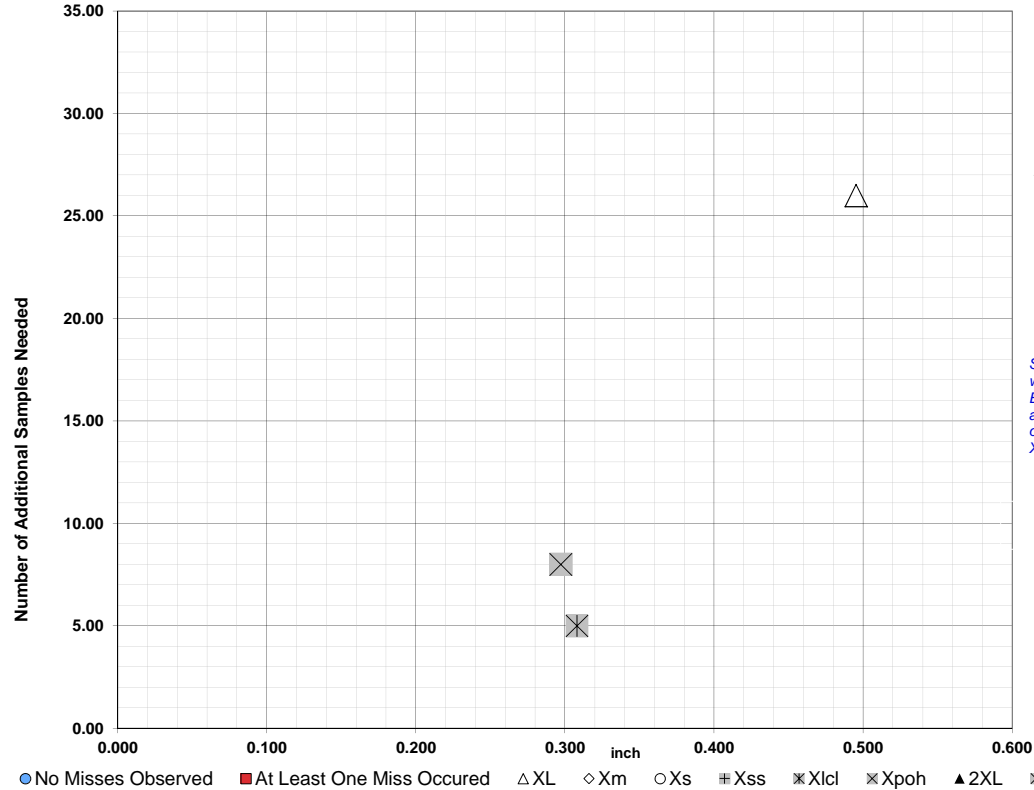


TABLE C

Class Length	Additional Samples
XL = 0.495	26
Xm =	
Xs =	
Xss =	
Xlcl = 0.308	5
Xpoh = 0.297	8
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

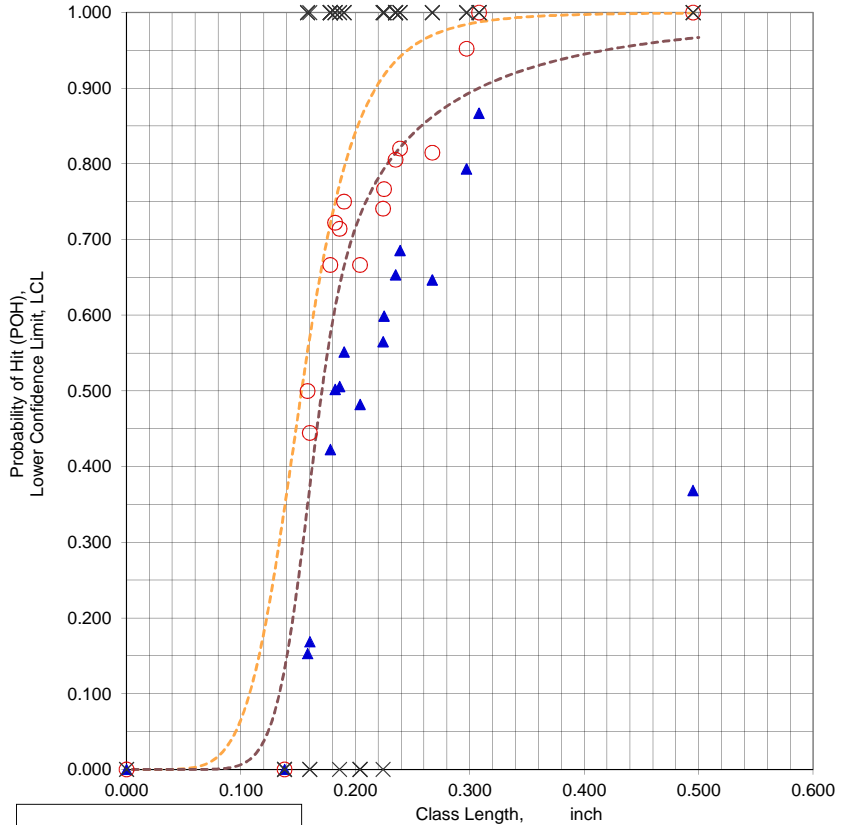
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **CD003(3)L.xls**
 Data Set Name = **CD003(3)L(CK. NO.)**
 Date & Time = 6/4/15 10:30 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8666
 Classwidth @ Best LCL = 0.0830 inch
 Classlength @ Best LCL = 0.3080 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.2350 -0.010 inch 23 Samples
 NTIAC 90% POD = 0.906 @ 0.220 inch
 NTIAC 90/95 POD = 0.902 @ 0.310 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.495 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.308 inch
 Samples Needed @ Xlcl = 8
 POH Classlength, Xpoh = 0.308 inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = CD003(3)L.xls
 Data Set Name = CD003(3)L(CK. NO.)

Directed DOE Options

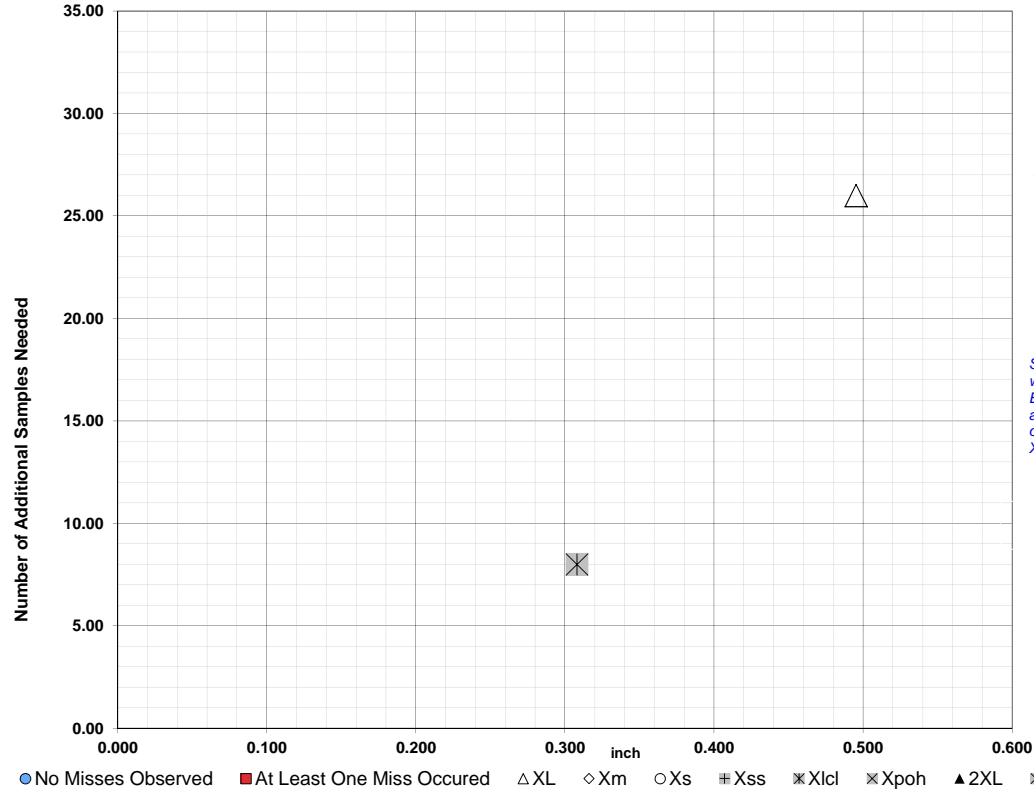


TABLE C

Class Length	Additional Samples
XL = 0.495	26
Xm =	
Xs =	
Xss =	
Xlcl = 0.308	8
Xpoh = 0.308	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

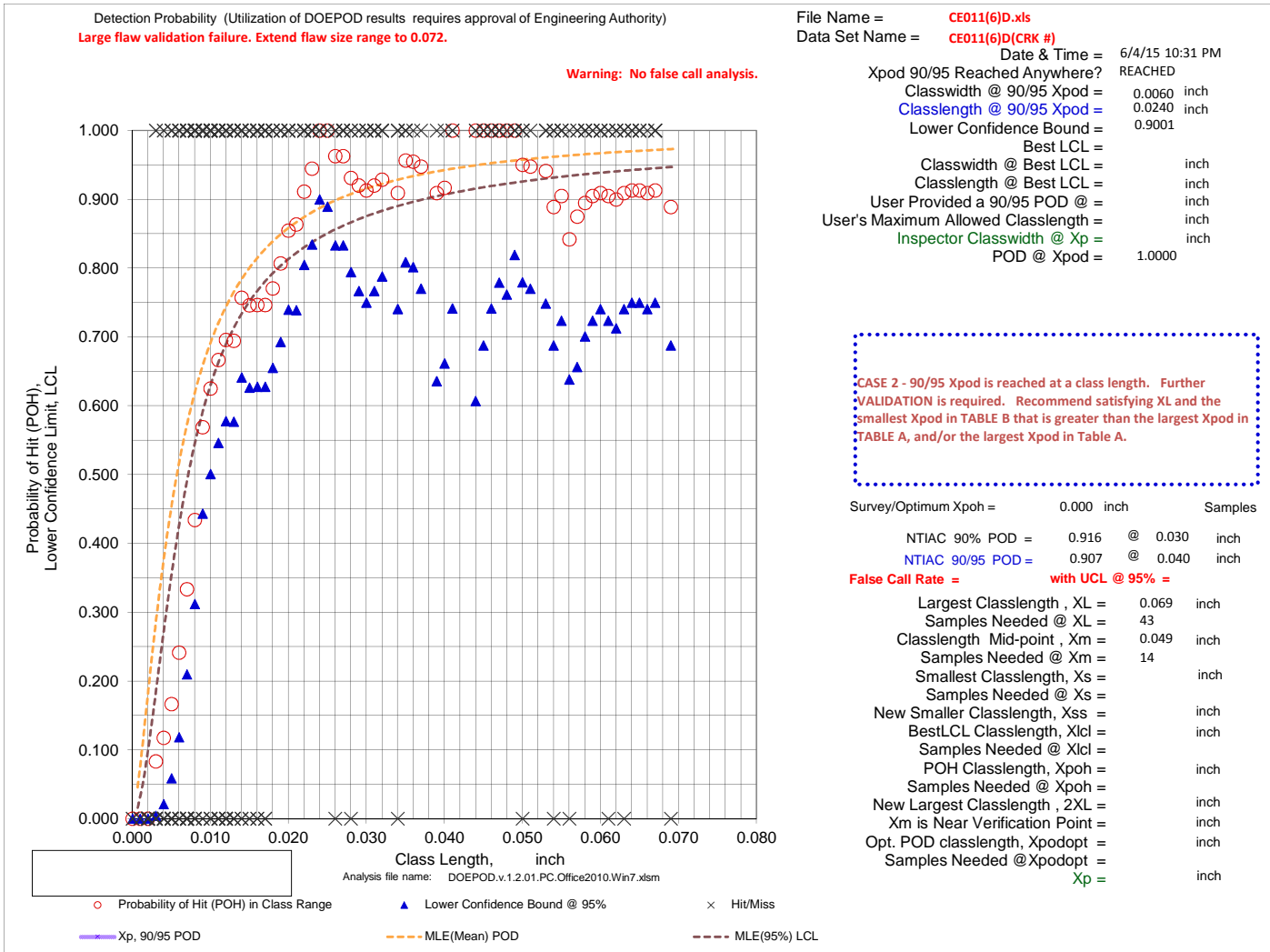
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CE011(6)D.xls
 Data Set Name = CE011(6)D(CRK #)

Directed DOE Options

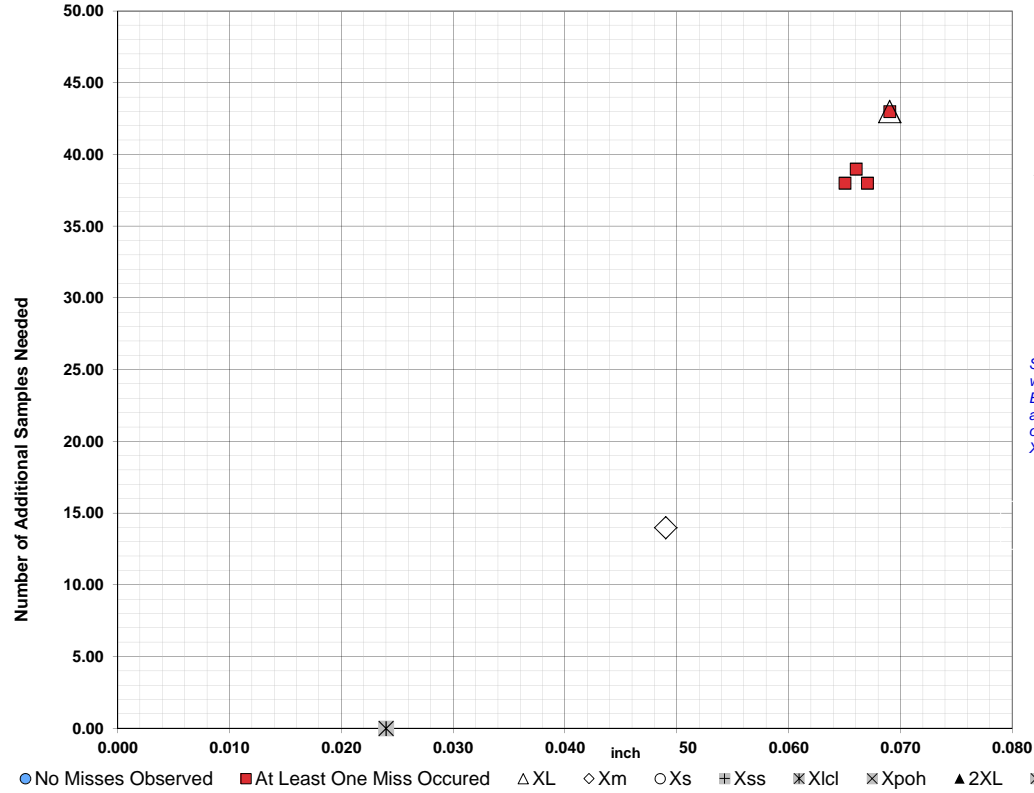


TABLE C

Class Length	Additional Samples
XL = 0.069	43
Xm = 0.049	14
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

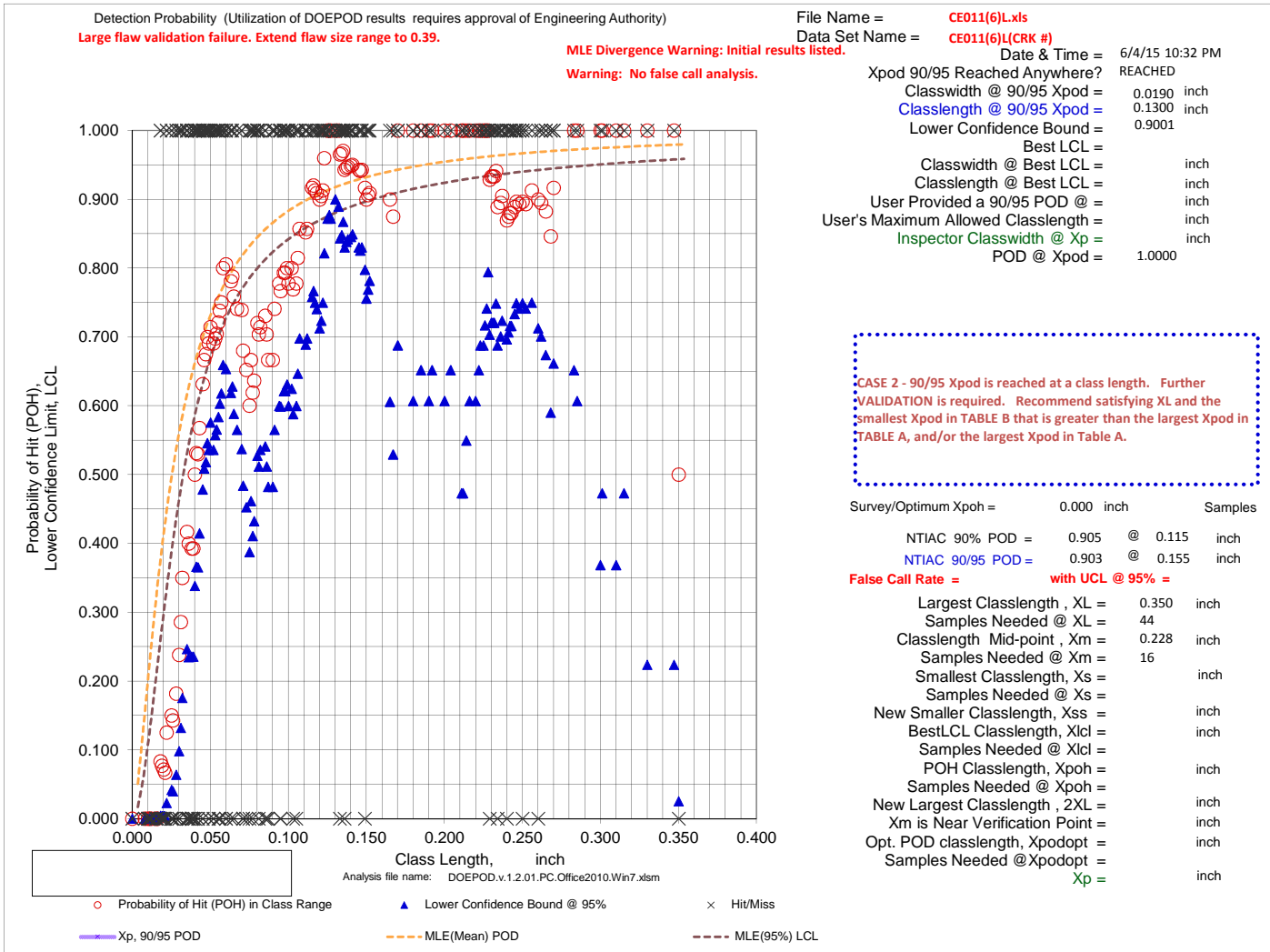
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.0690	43		
0.0670	38		
0.0660	39		
0.0650	38		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CE011(6)L.xls
 Data Set Name = CE011(6)L(CRK #)

Directed DOE Options

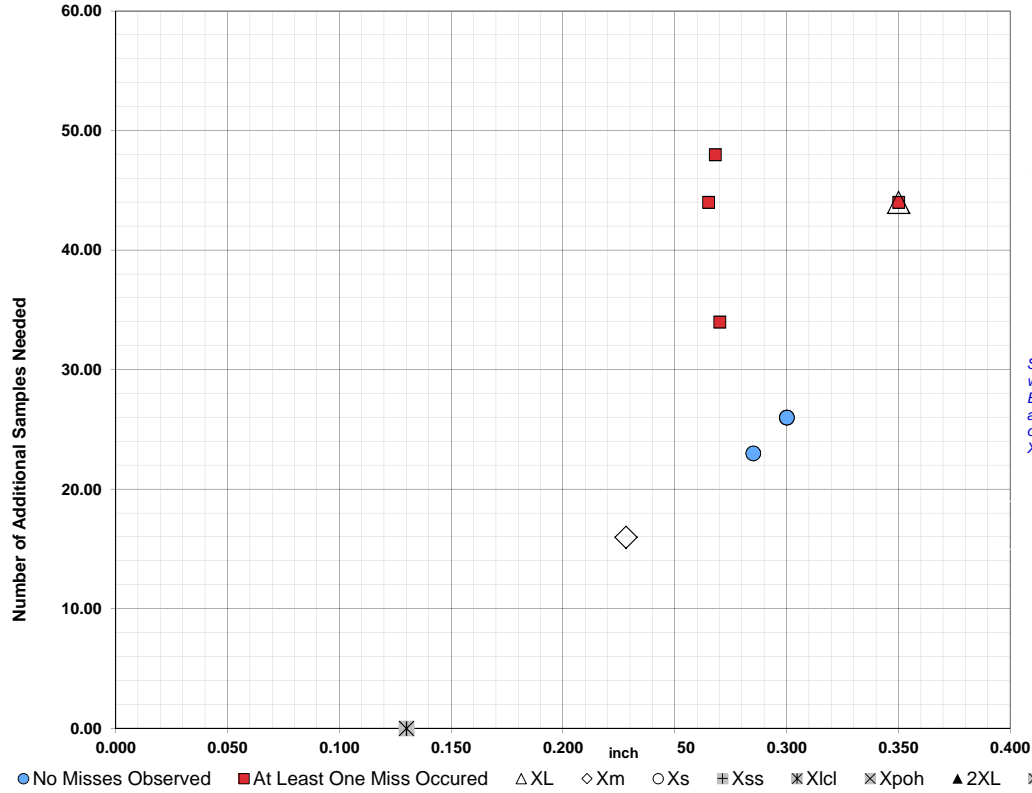


TABLE C

Class Length Additional Samples

XL =	0.350	44
Xm =	0.228	16
Xs =		
Xss =		
Xlcl =		
Xpoh =		
2XL =		
**Alternate Xm =		
Xpodopt =		

TABLE A*

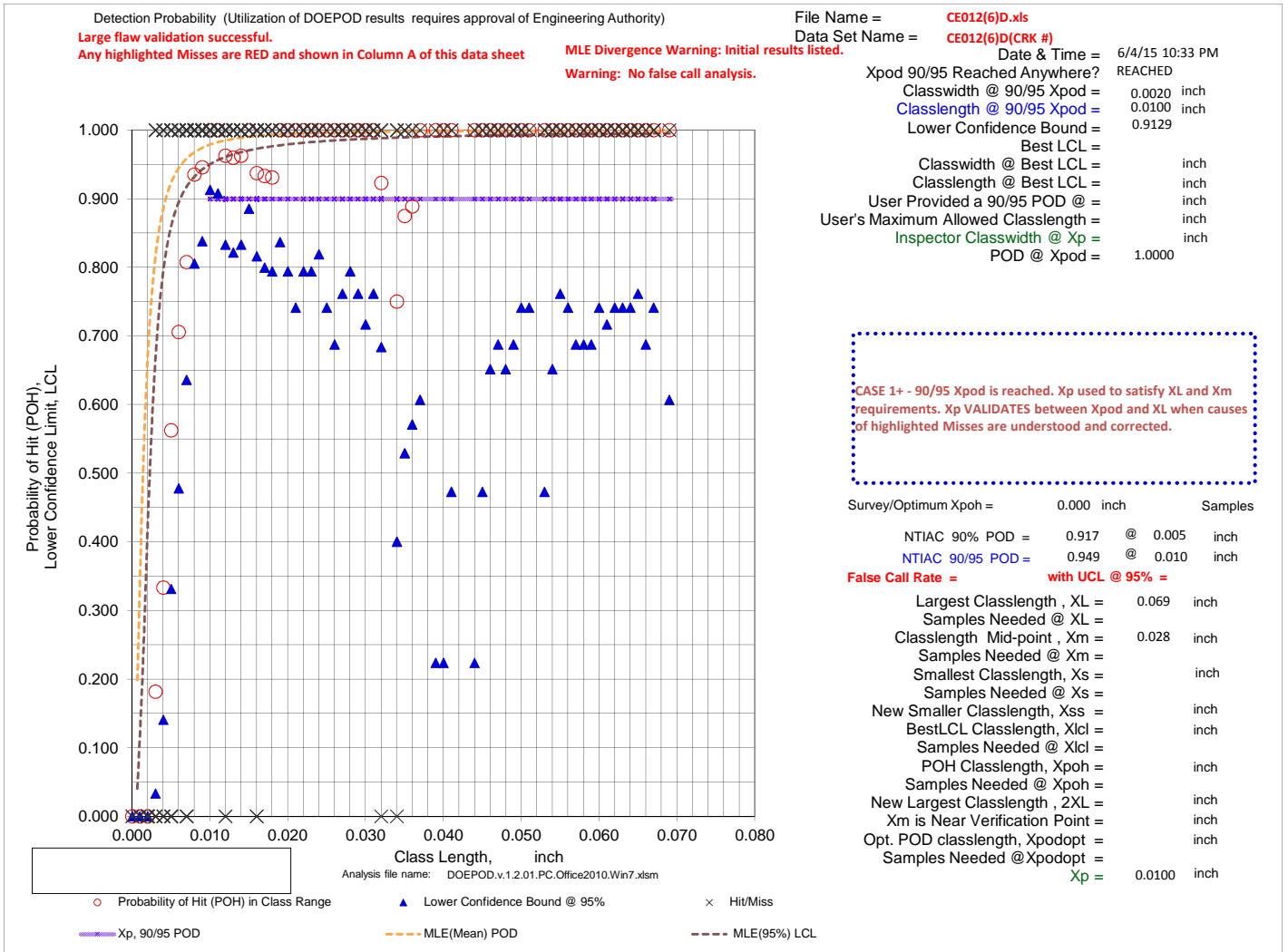
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.3500	44		
0.2700	34	0.3000	26
0.2680	48	0.3000	26
0.2650	44	0.2850	23

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CE012(6)D.xls
 Data Set Name = CE012(6)D(CRK #)

Directed DOE Options

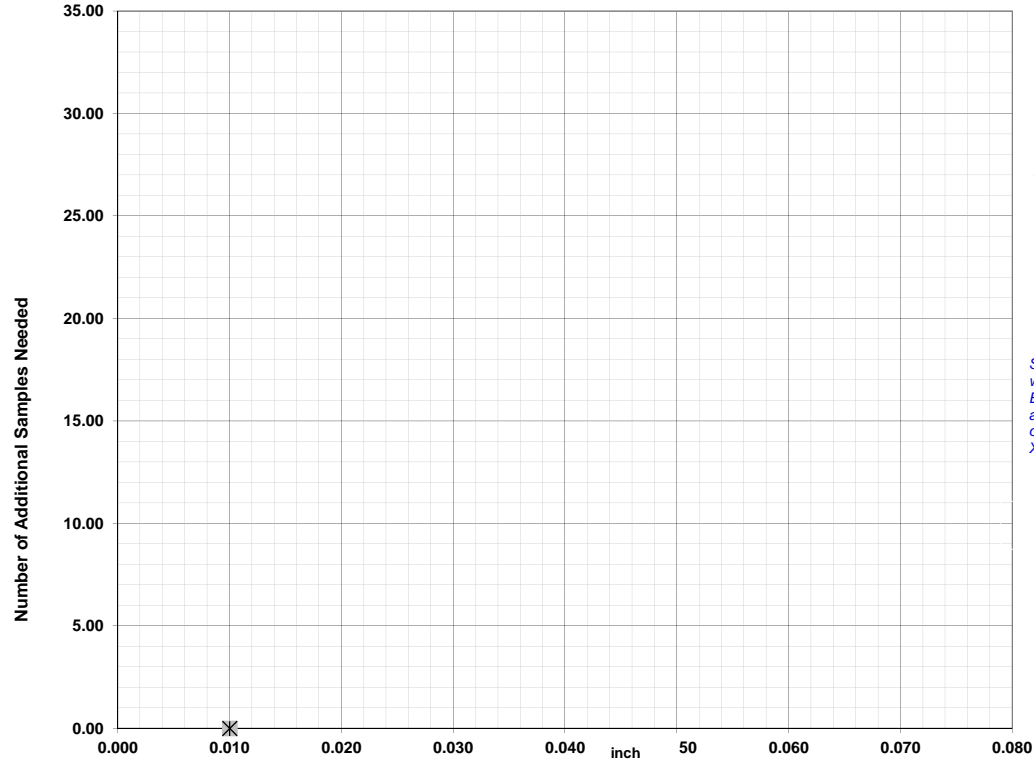


TABLE C

Class Length Additional Samples

XL = 0.069
 Xm = 0.028
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

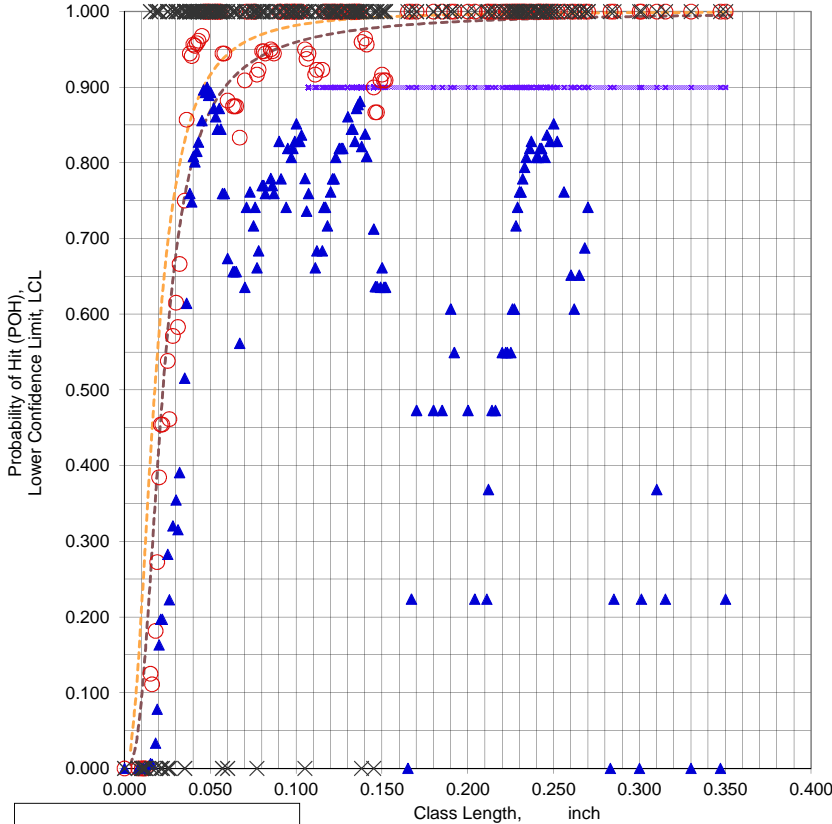
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 1 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE (Mean) POD - - - MLE (95%) LCL

File Name = **CE012(6)L.xls**
 Data Set Name = **CE012(6)L(CRK #)**
 Date & Time = 6/4/15 10:41 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0100 inch
 Classlength @ 90/95 Xpod = 0.0480 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.923 @ 0.030 inch
 NTIAC 90/95 POD = 0.915 @ 0.040 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.350 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.137 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.1070 inch

File Name = CE012(6)L.xls
 Data Set Name = CE012(6)L(CRK #)

Directed DOE Options

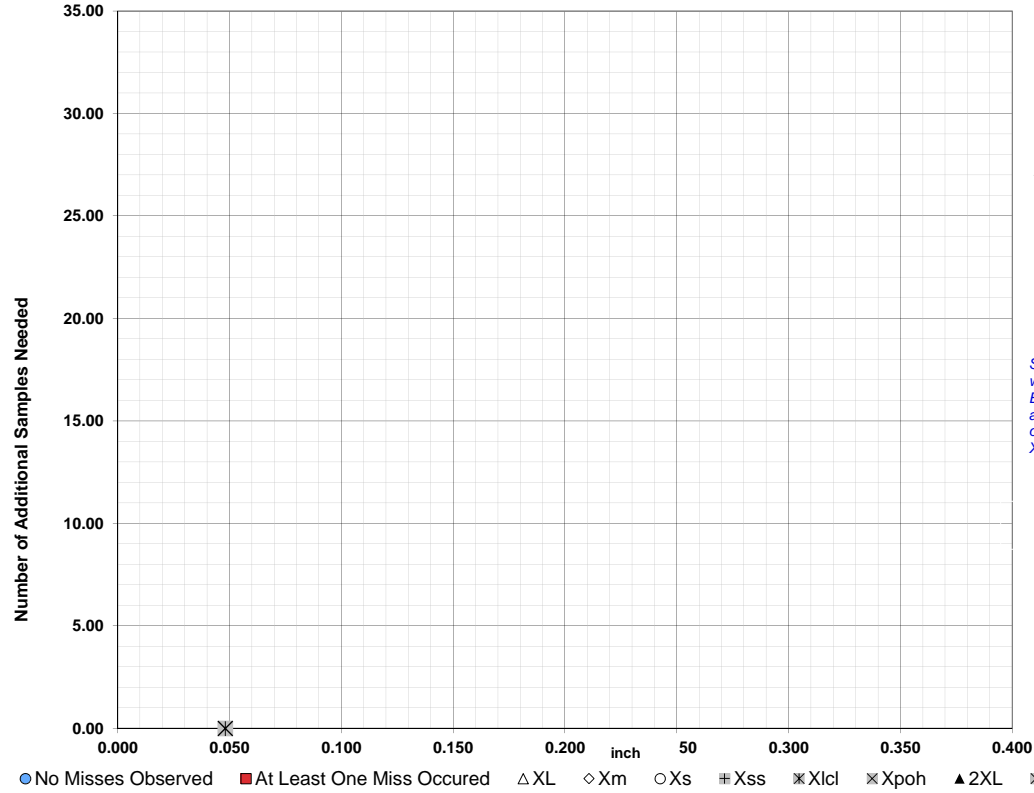


TABLE C

Class Length Additional Samples

XL = 0.350
 Xm = 0.137
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

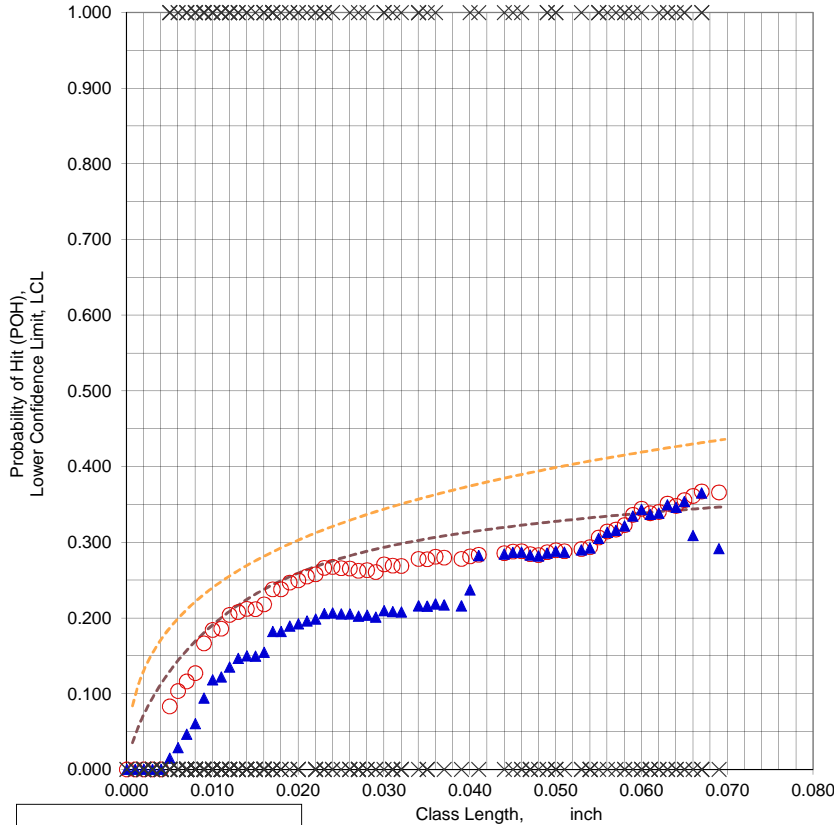
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **CE021(6)D.xls**
 Data Set Name = **CE021(6)D(CRK #)**
 Date & Time = 6/4/15 10:46 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.3653
 Classwidth @ Best LCL = 0.0510 inch
 Classlength @ Best LCL = 0.0670 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.138 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = CE021(6)D.xls
 Data Set Name = CE021(6)D(CRK #)

Directed DOE Options

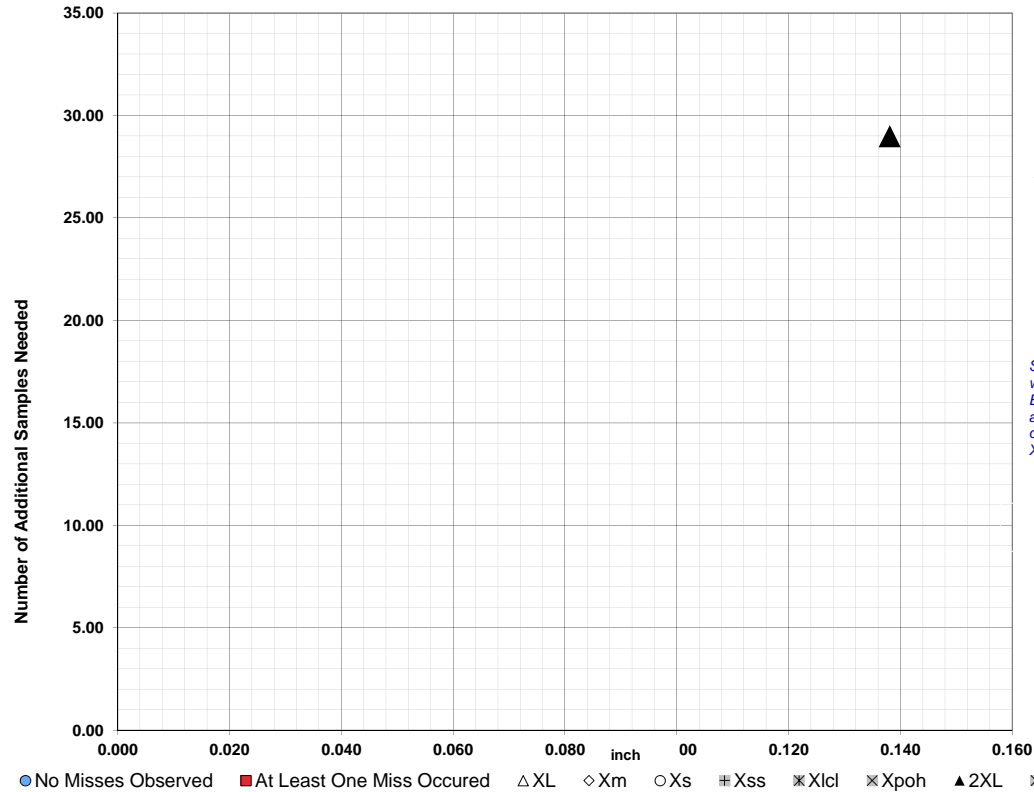


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.138	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.138 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

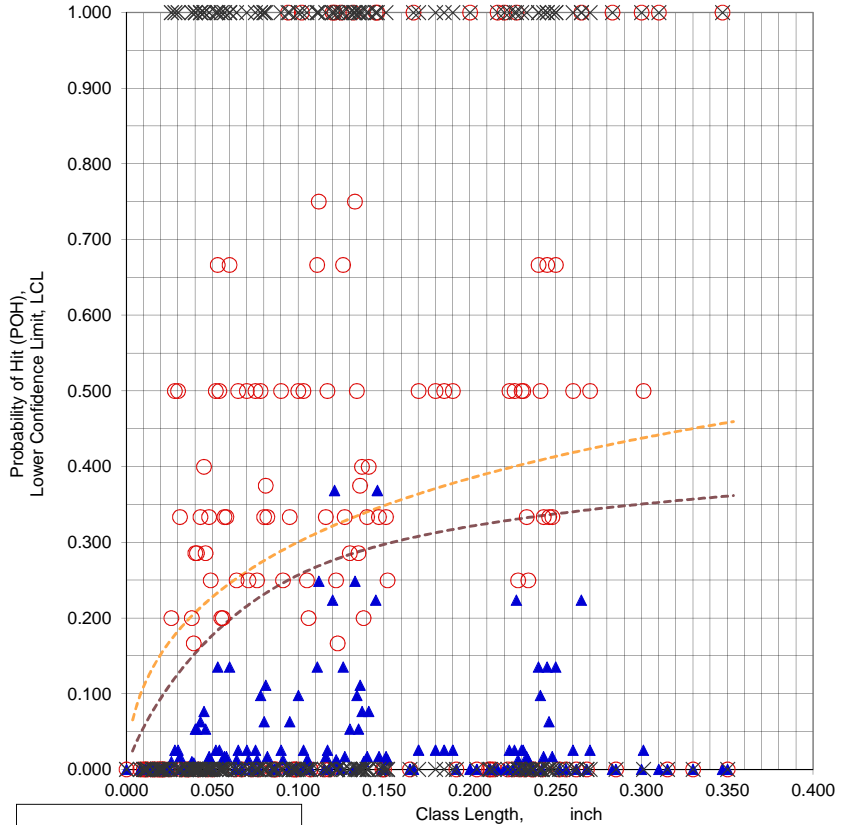
Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
— Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **CE021(6)L.xls**
 Data Set Name = **CE021(6)(CRK #)**
 Date & Time = 6/4/15 10:47 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.3684
 Classwidth @ Best LCL = 0.0010 inch
 Classlength @ Best LCL = 0.1210 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.700 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = CE021(6)L.xls
 Data Set Name = CE021(6)L(CRK #)

Directed DOE Options

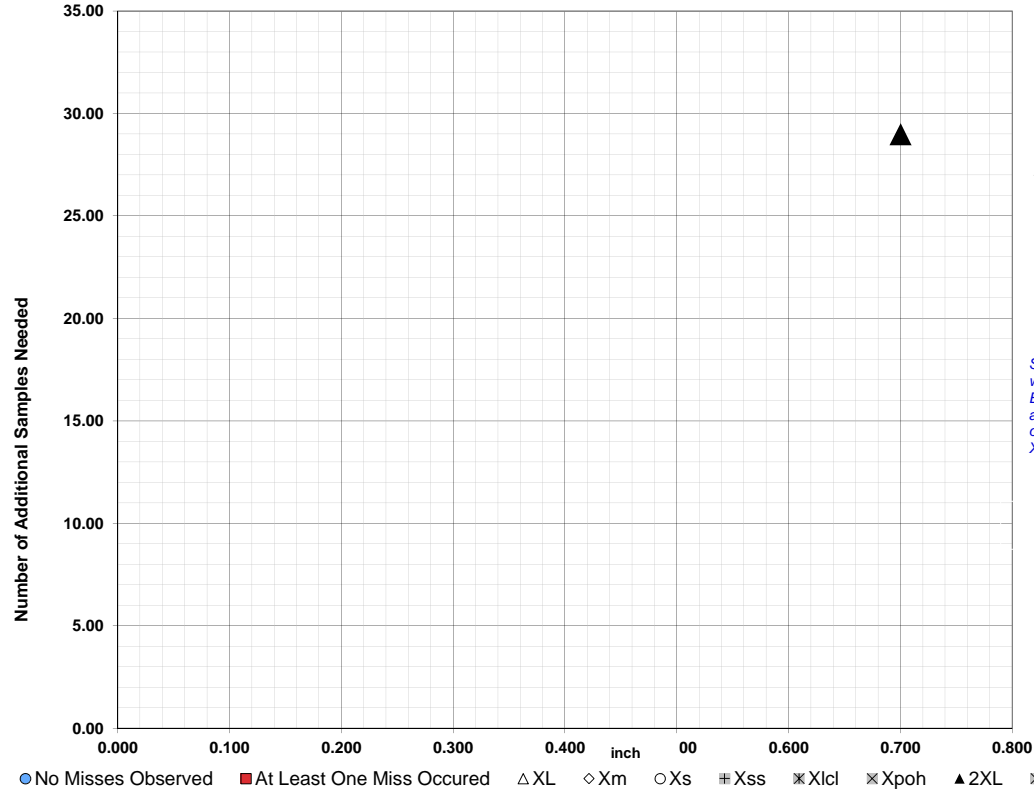


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.700	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.700 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

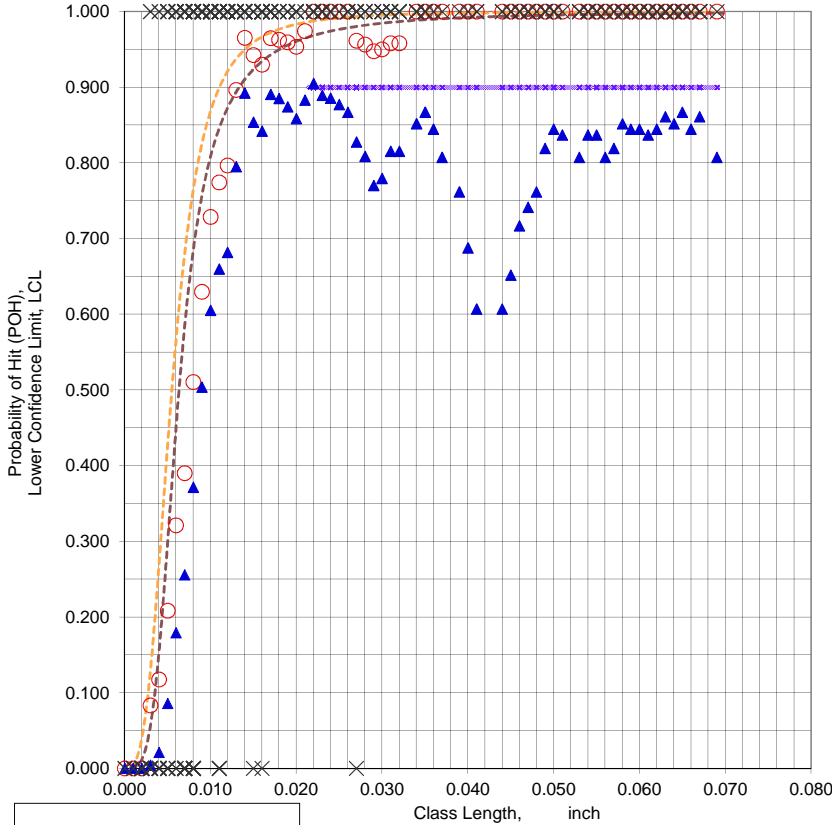
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 1 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



File Name = **CE022(6)D.xls**
 Data Set Name = **CE022(6)D(CRK #)**
 Date & Time = 6/4/15 10:48 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0050 inch
 Classlength @ 90/95 Xpod = 0.0220 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.959 @ 0.015 inch
 NTIAC 90/95 POD = 0.924 @ 0.015 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.069 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.035 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.0220 inch

File Name = CE022(6)D.xls
 Data Set Name = CE022(6)D(CRK #)

Directed DOE Options

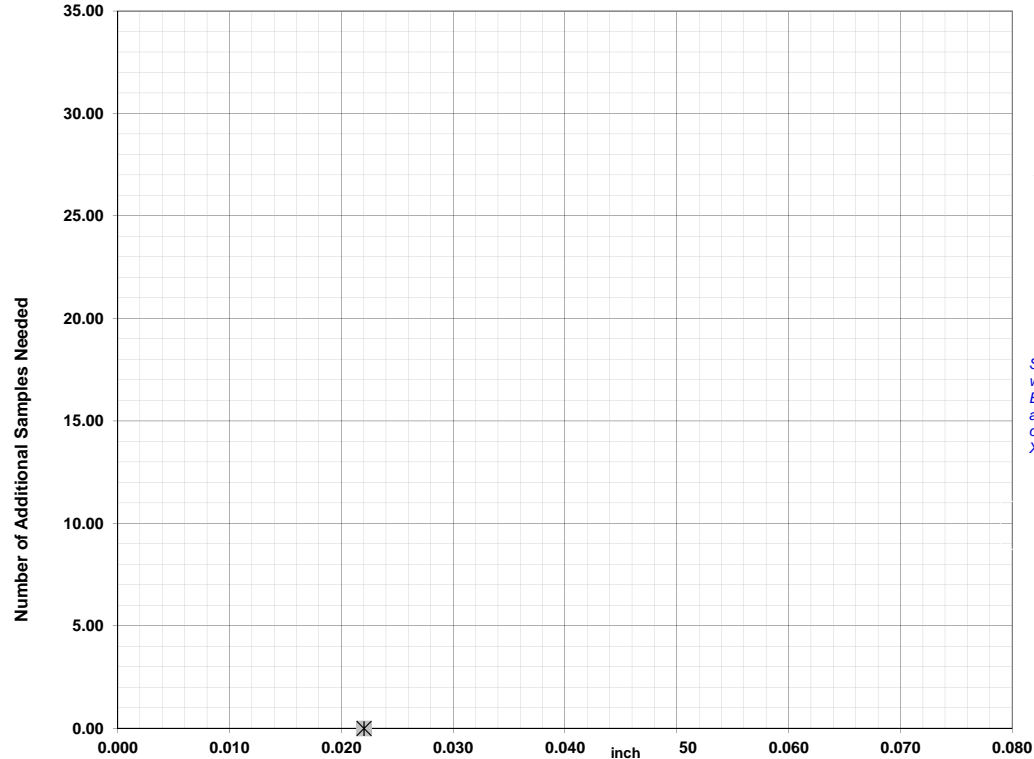


TABLE C

Class Length Additional Samples

XL = 0.069
 Xm = 0.035
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

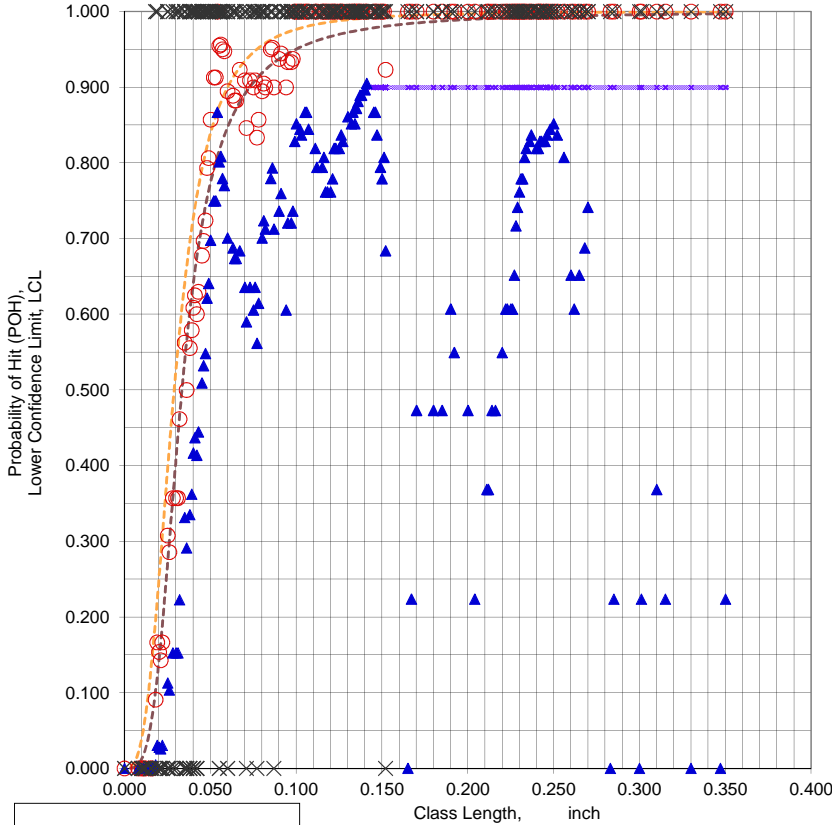
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Extend flaw size range to 0.423.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss

— Xp, 90/95 POD - - - MLE (Mean) POD - - - MLE (95%) LCL

File Name = CE022(6)L.xls
 Data Set Name = CE022(6)L(CRK #)
 Date & Time = 6/4/15 10:51 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0110 inch
 Classlength @ 90/95 Xpod = 0.1410 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples

NTIAC 90% POD = 0.920 @ 0.065 inch
 NTIAC 90/95 POD = 0.906 @ 0.075 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.350 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.250 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.1410 inch

File Name = CE022(6)L.xls
 Data Set Name = CE022(6)L(CRK #)

Directed DOE Options

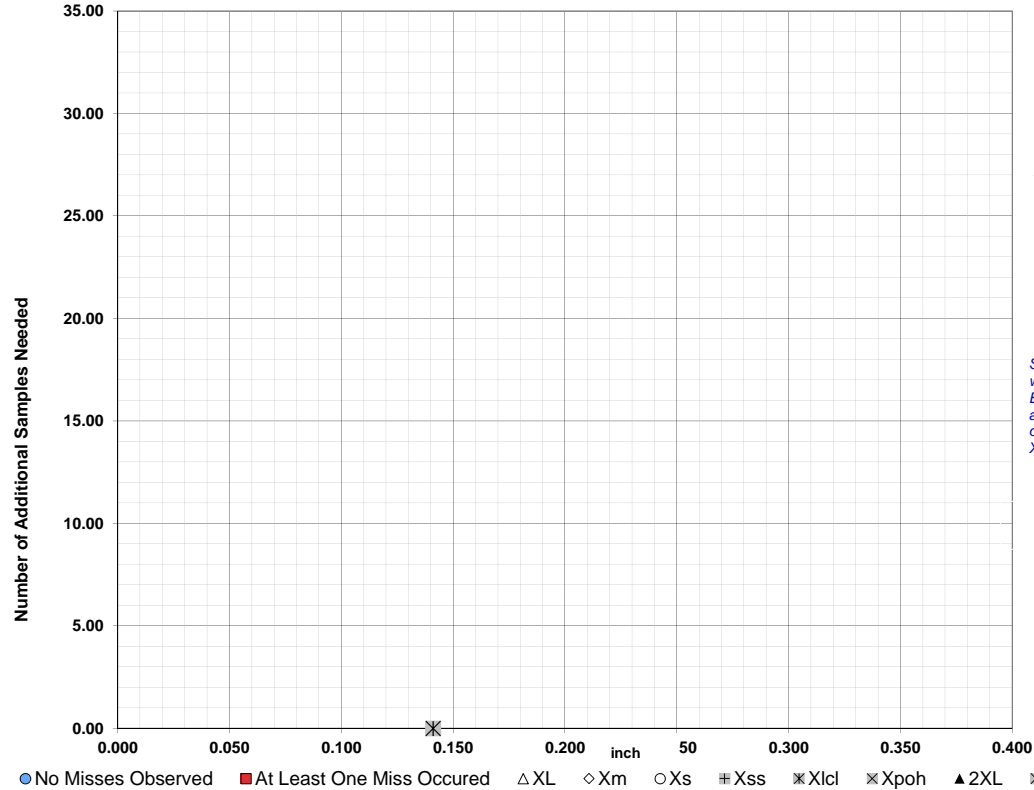


TABLE C

Class Length Additional Samples

XL = 0.350
 Xm = 0.250
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

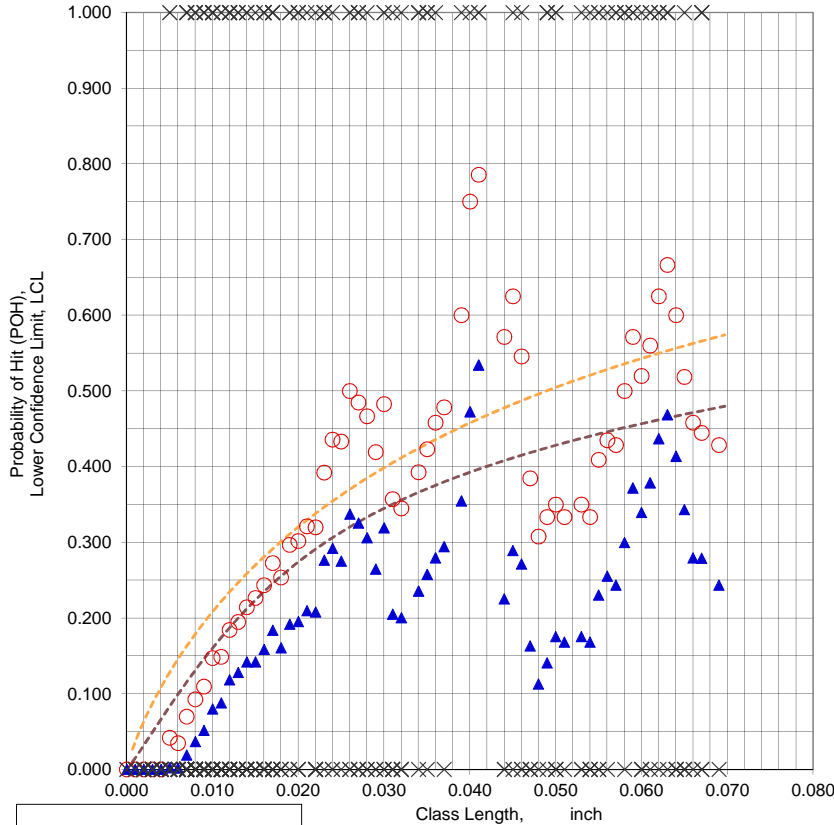
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = CE031(6)D.xls
 Data Set Name = CE031(6)D(CRK #)
 Date & Time = 6/4/15 10:55 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound = 0.5343
 Best LCL = 0.0070 inch
 Classwidth @ Best LCL = 0.0410 inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = inch

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.138 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = CE031(6)D.xls
 Data Set Name = CE031(6)D(CRK #)

Directed DOE Options



TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.138	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.138 29
 **Alternate Xm =
 Xpodopt =

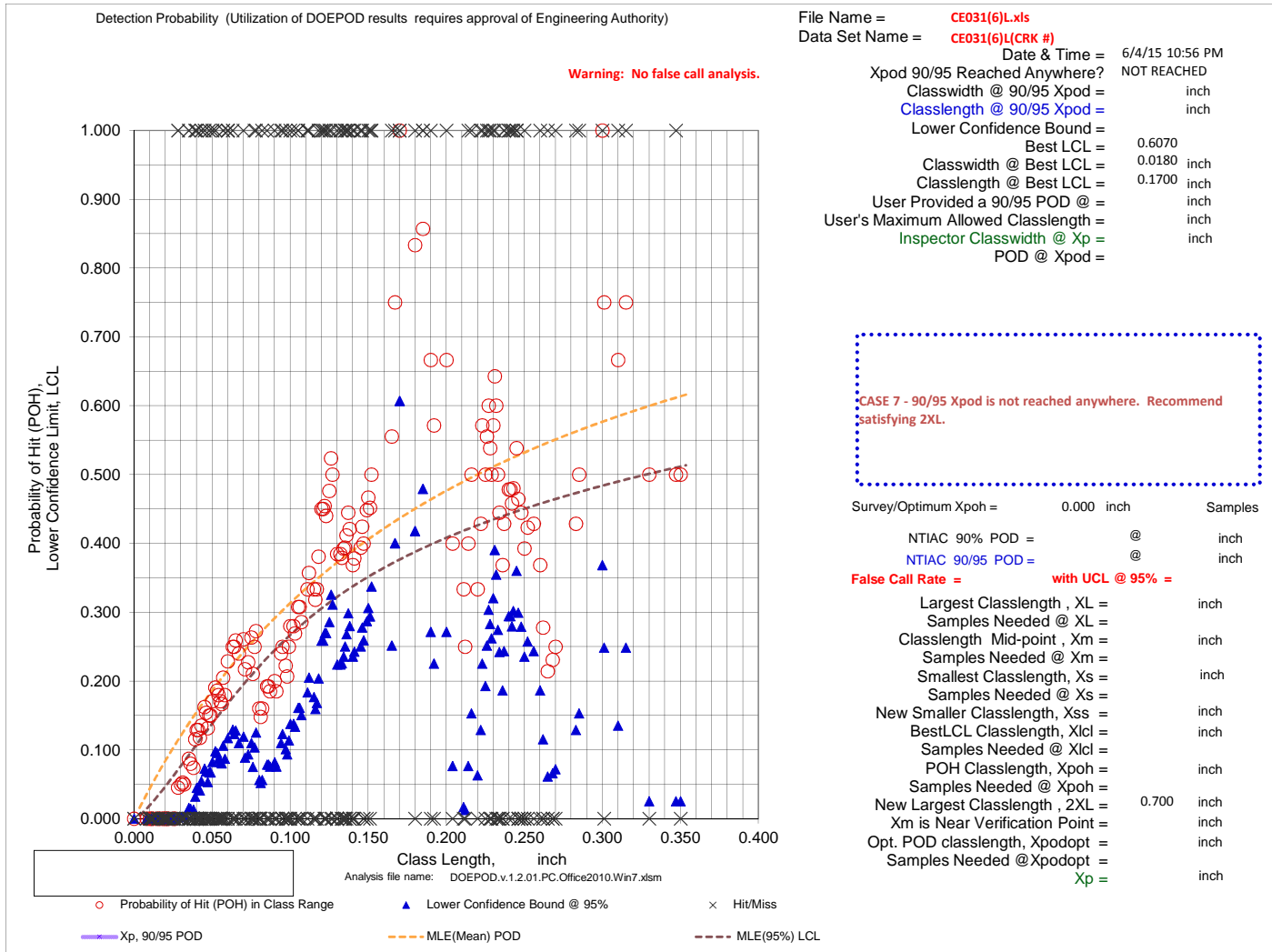
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CE031(6)L.xls
 Data Set Name = CE031(6)L(CRK #)

Directed DOE Options

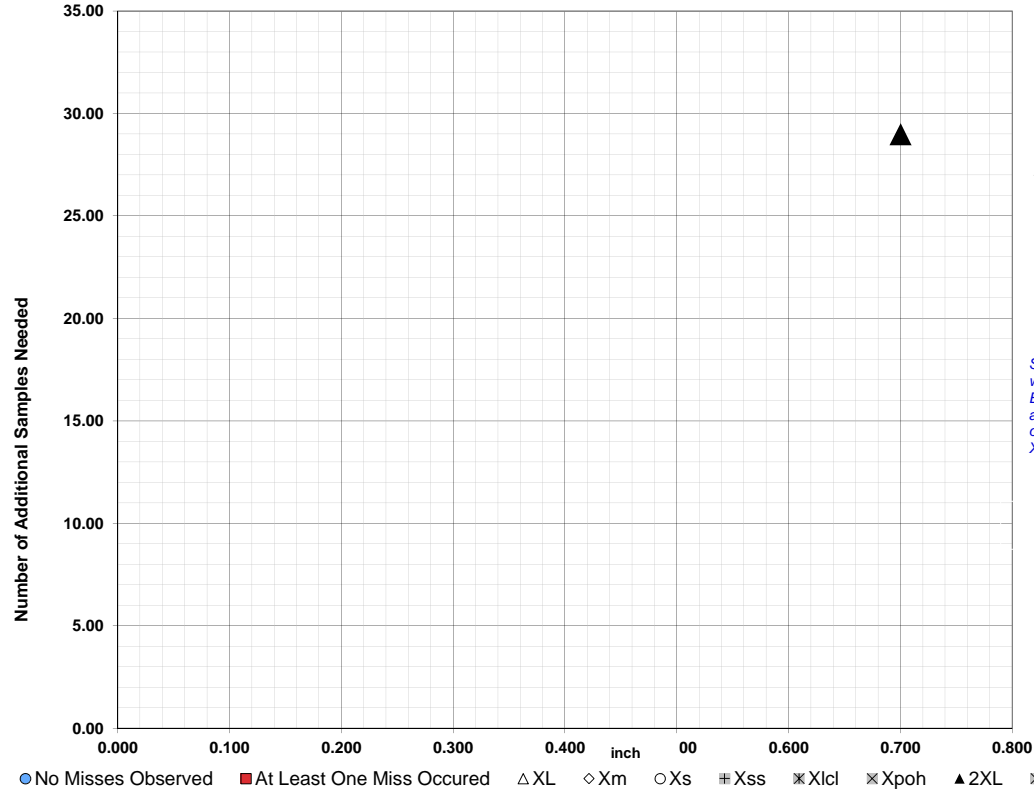


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.700	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.700 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

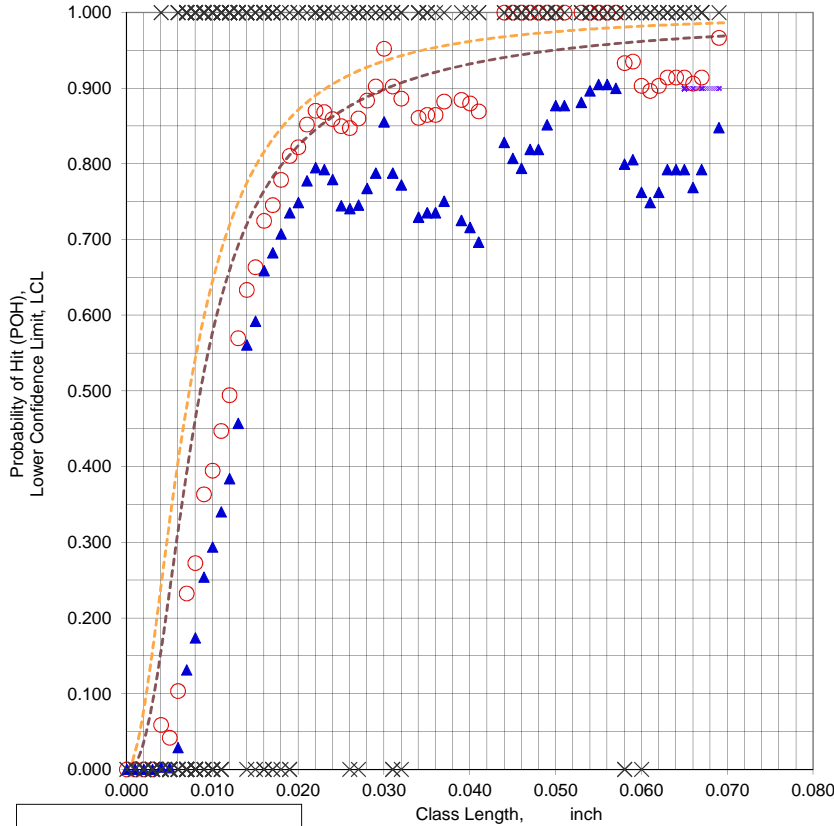
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 0.165.
 Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = **CE032(6)D.xls**
 Data Set Name = **CE032(6)D(CRK #)**
 Date & Time = 6/4/15 10:58 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0100 inch
 Classlength @ 90/95 Xpod = 0.0550 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Xp used to satisfy XL requirements. Further VALIDATION is required. Recommend satisfying Xm and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in T

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.912 @ 0.025 inch
 NTIAC 90/95 POD = 0.918 @ 0.035 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.069 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.062 inch
 Samples Needed @ Xm = 29
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.0650 inch

File Name = CE032(6)D.xls
 Data Set Name = CE032(6)D(CRK #)

Directed DOE Options

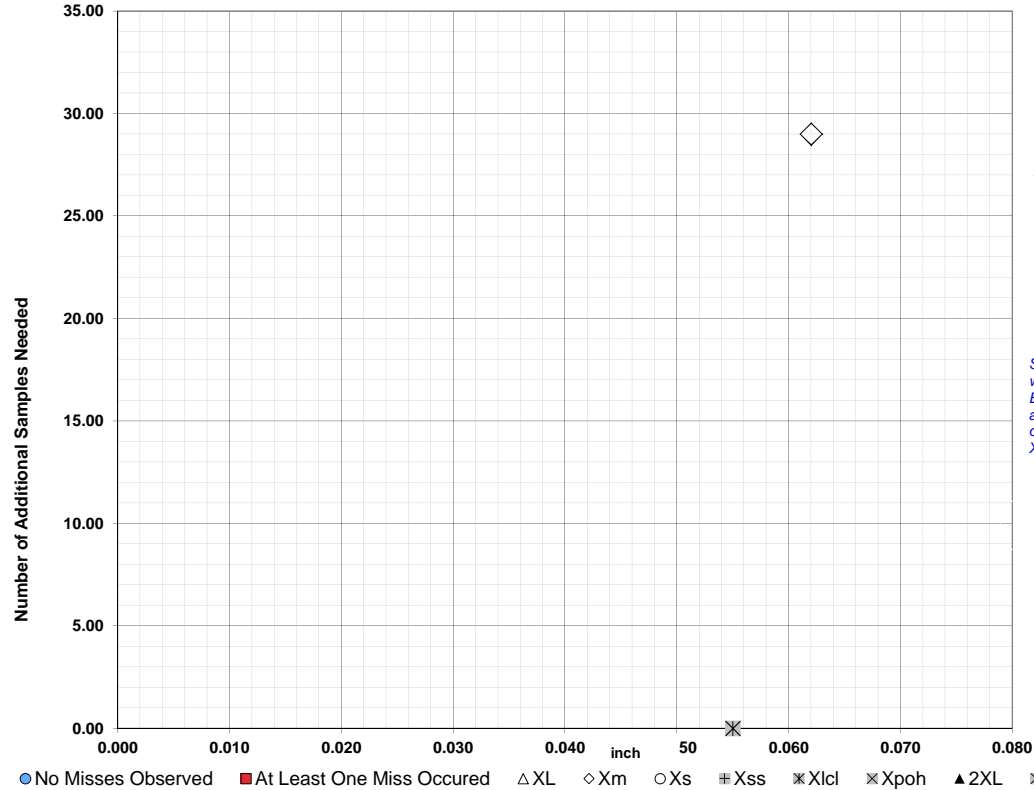


TABLE C

Class Length	Additional Samples
XL = 0.069	
Xm = 0.062	29
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

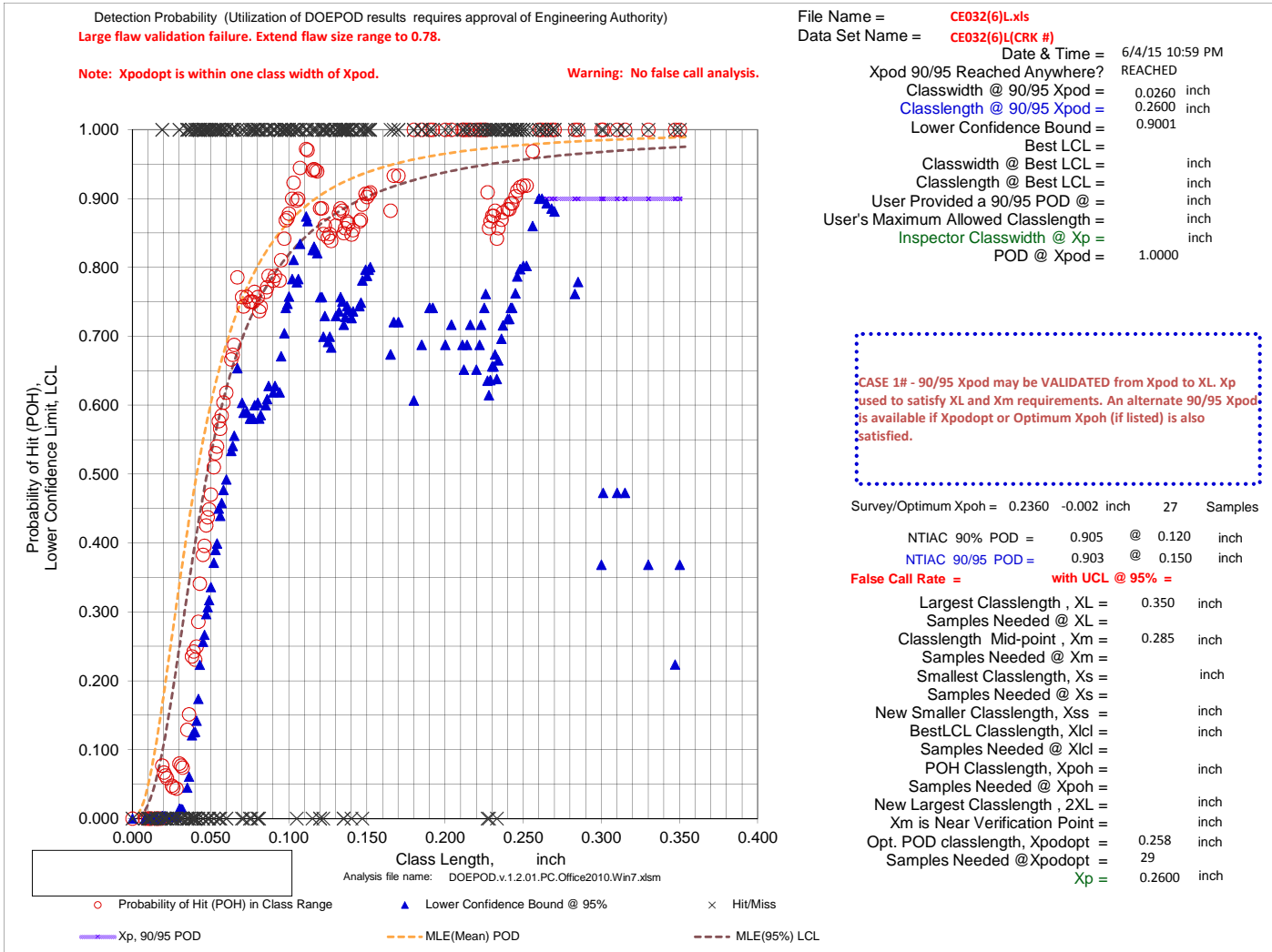
XL = 0.069
 Xm = 0.062 29
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CE032(6)L.xls
 Data Set Name = CE032(6)L(CRK #)

Directed DOE Options

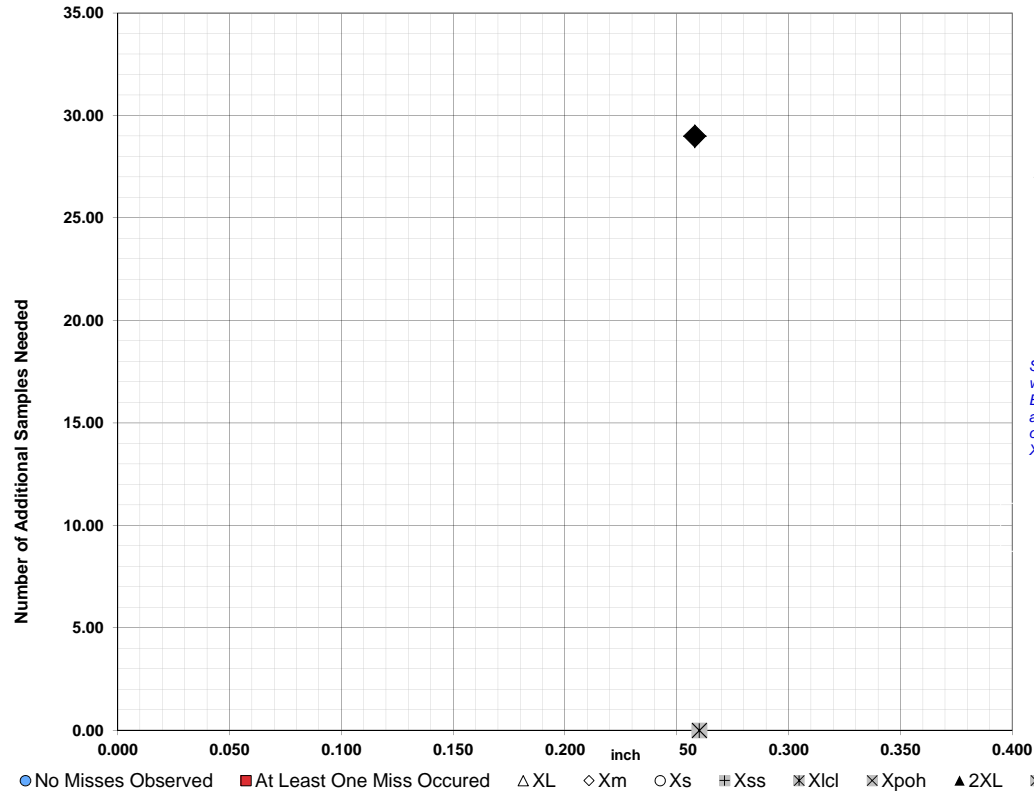


TABLE C

Class Length	Additional Samples
XL =	0.350
Xm =	0.285
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.258 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

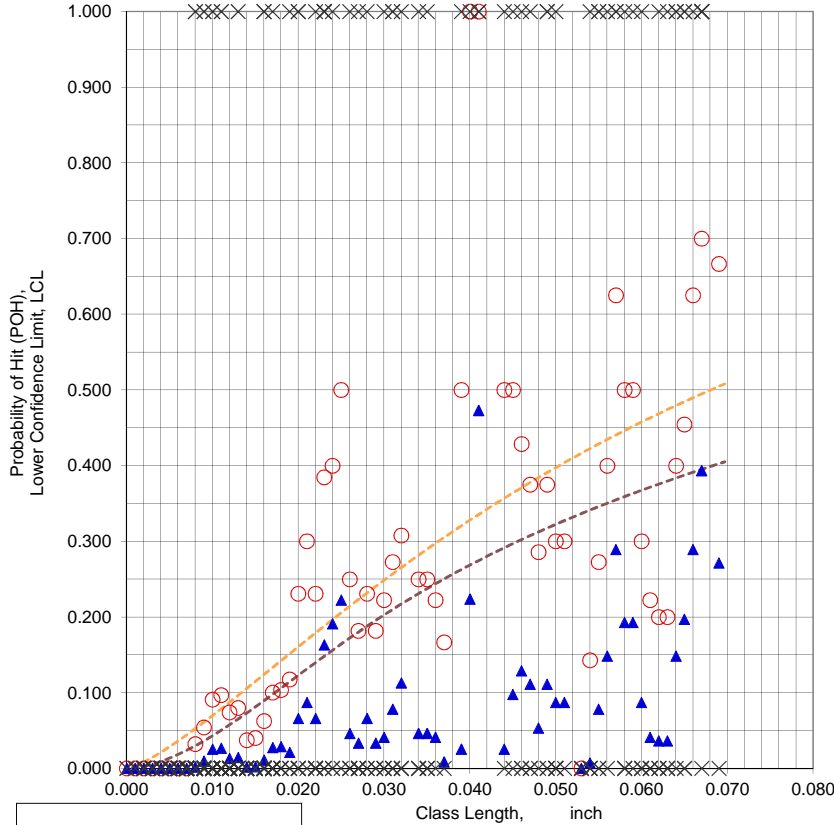
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = CE041(6)D.xls
 Data Set Name = CE041(6)D(CRK NO.)
 Date & Time = 6/4/15 11:00 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound = Best LCL = 0.4729
 Classwidth @ Best LCL = 0.0020 inch
 Classlength @ Best LCL = 0.0410 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.138 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
 — Xp, 90/95 POD
 - - - MLE(Mean) POD
 - - - MLE(95%) LCL

File Name = CE041(6)D.xls
 Data Set Name = CE041(6)D(CRK NO.)

Directed DOE Options



TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.138	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.138 29
 **Alternate Xm =
 Xpodopt =

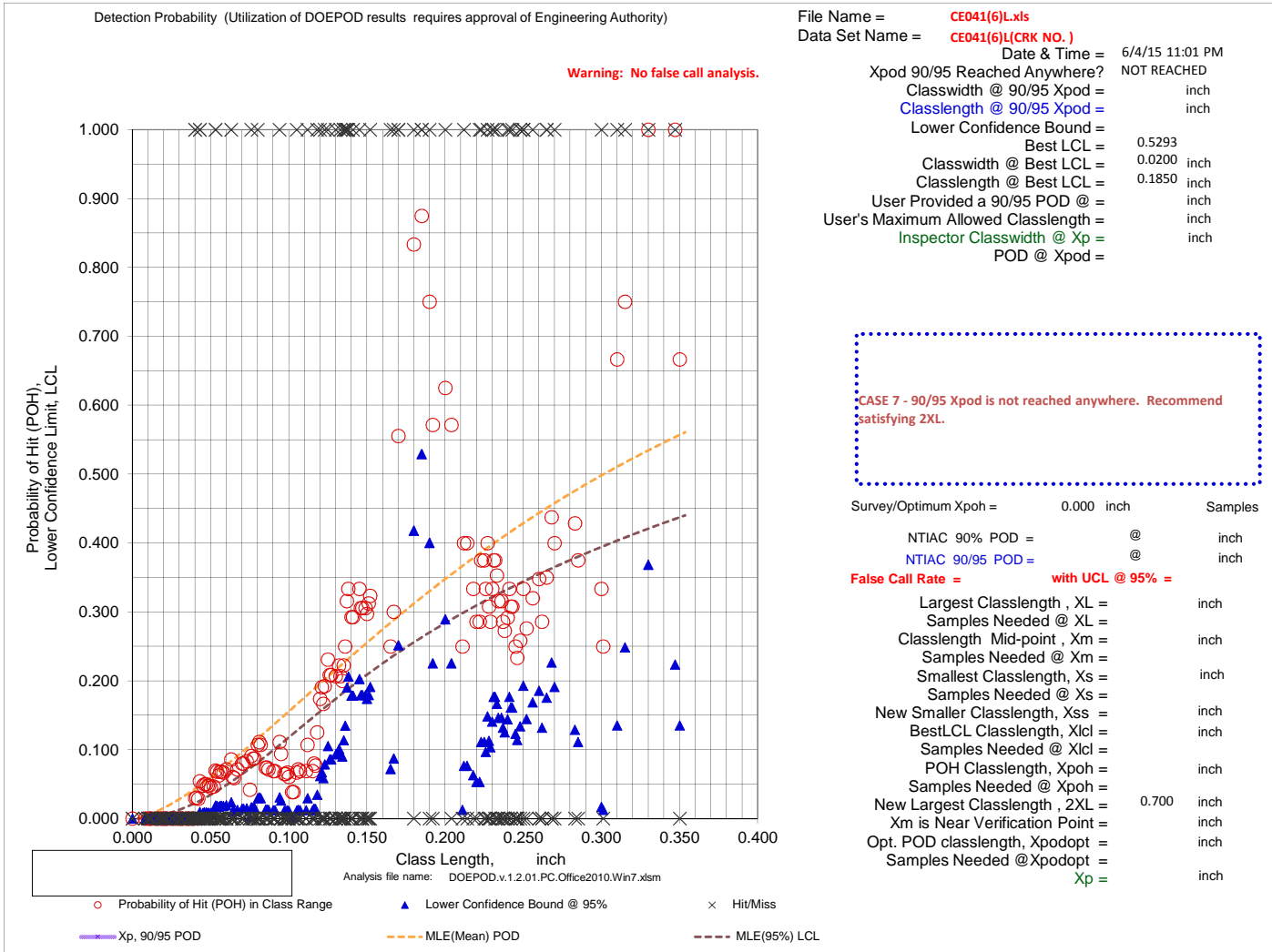
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CE041(6)L.xls
 Data Set Name = CE041(6)L(CRK NO.)

Directed DOE Options

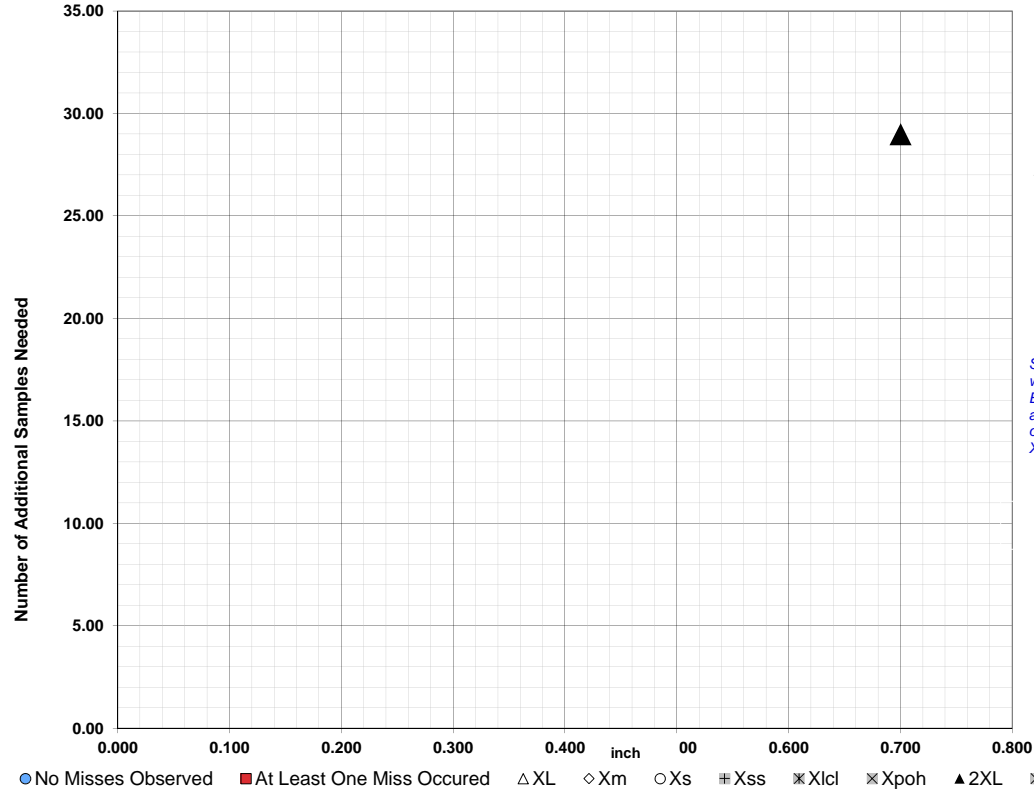


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.700	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.700 29
 **Alternate Xm =
 Xpodopt =

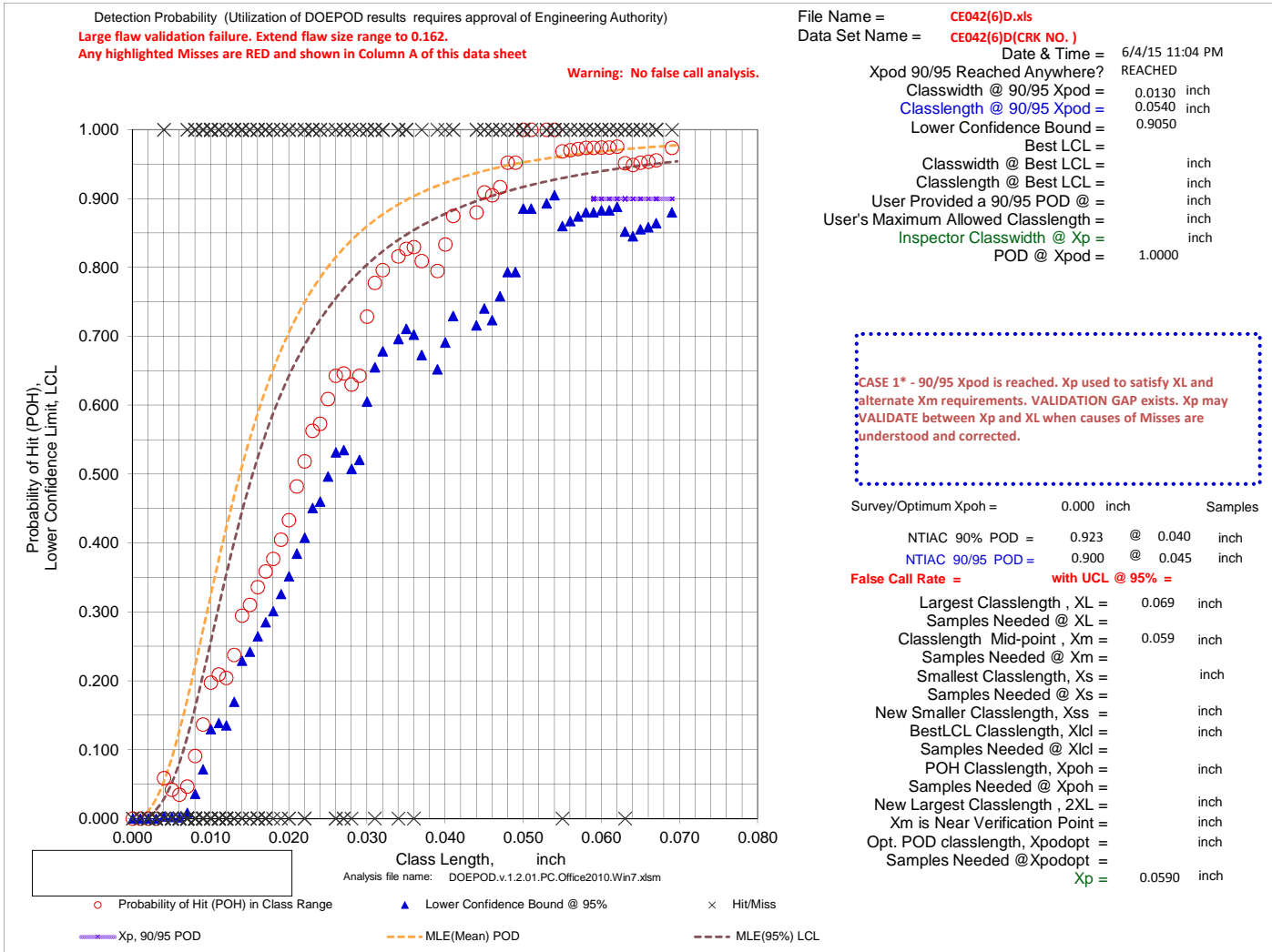
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CE042(6)D.xls
 Data Set Name = CE042(6)D(CRK NO.)

Directed DOE Options

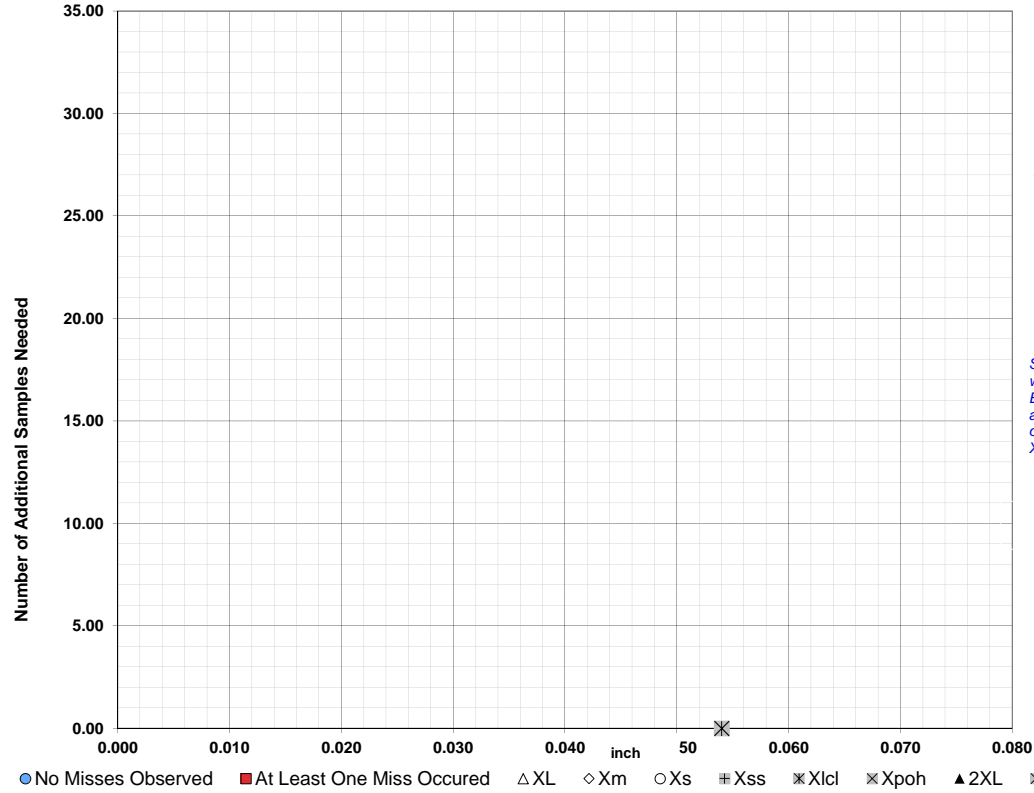


TABLE C

Class Length Additional Samples

XL = 0.069
 Xm = 0.059
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

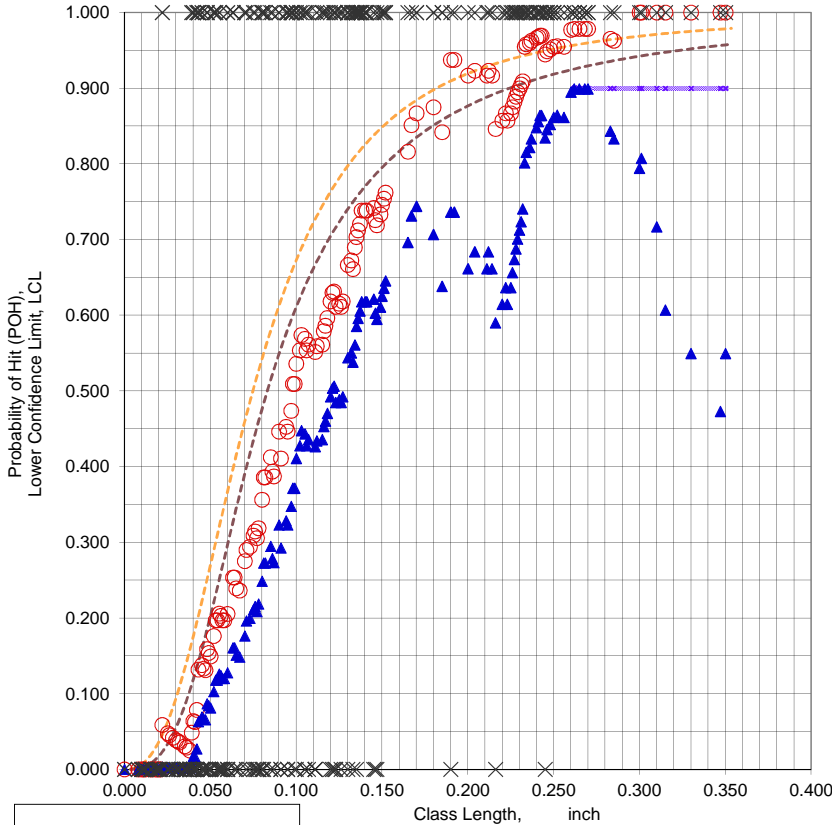
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Extend flaw size range to 0.786.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = CE042(6)L.xls
 Data Set Name = CE042(6)L(CRK NO.)
 Date & Time = 6/4/15 11:05 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0420 inch
 Classlength @ 90/95 Xpod = 0.2620 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 0.9783

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.2480 -0.002 inch 26 Samples
 NTIAC 90% POD = 0.904 @ 0.185 inch
 NTIAC 90/95 POD = 0.901 @ 0.225 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.350 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.301 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.2620 inch

File Name = CE042(6)L.xls
 Data Set Name = CE042(6)L(CRK NO.)

Directed DOE Options

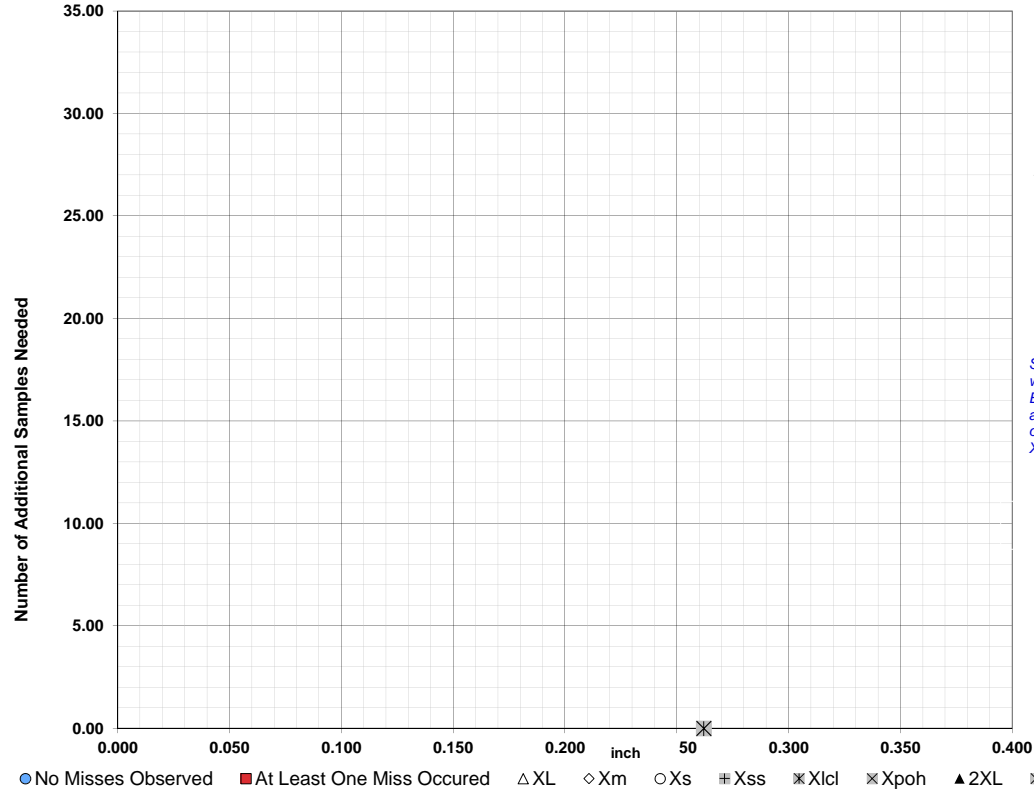


TABLE C

Class Length Additional Samples

XL = 0.350
 Xm = 0.301
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

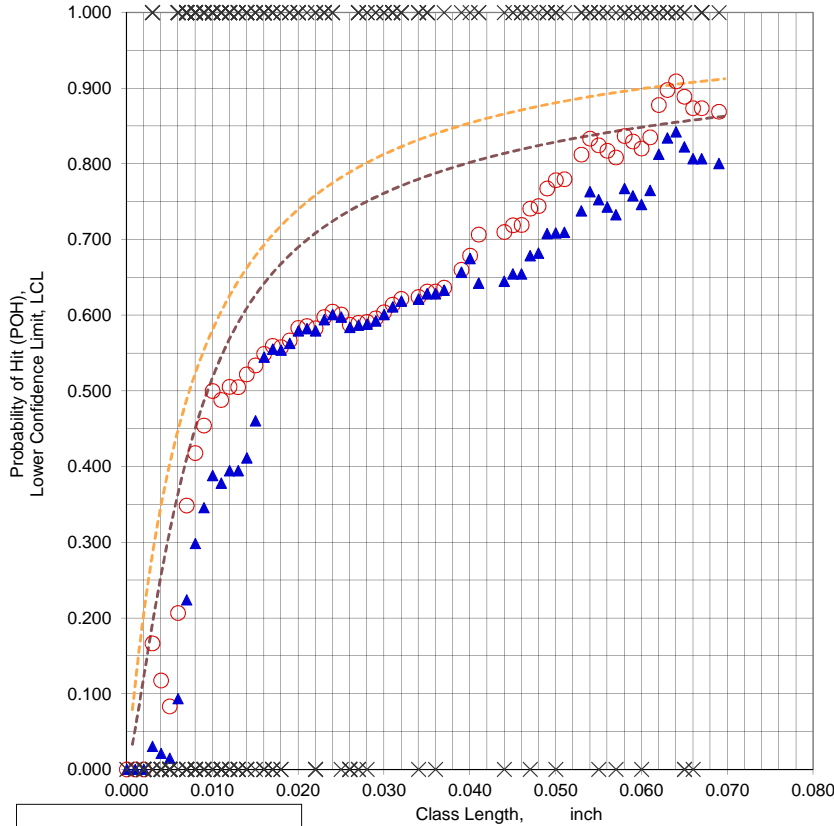
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Probability of Hit (POH), Lower Confidence Limit, LCL

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = CE051(6)D.xls
 Data Set Name = CE051(6)D(CRK NO.)
 Date & Time = 6/4/15 11:06 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8421
 Classwidth @ Best LCL = 0.0350 inch
 Classlength @ Best LCL = 0.0640 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.0690 -0.002 inch 28 Samples
 NTIAC 90% POD = 0.907 @ 0.065 inch
 NTIAC 90/95 POD = 0.903 @ 0.115 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.138 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = CE051(6)D.xls
 Data Set Name = CE051(6)D(CRK NO.)

Directed DOE Options



TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.138	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.138 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

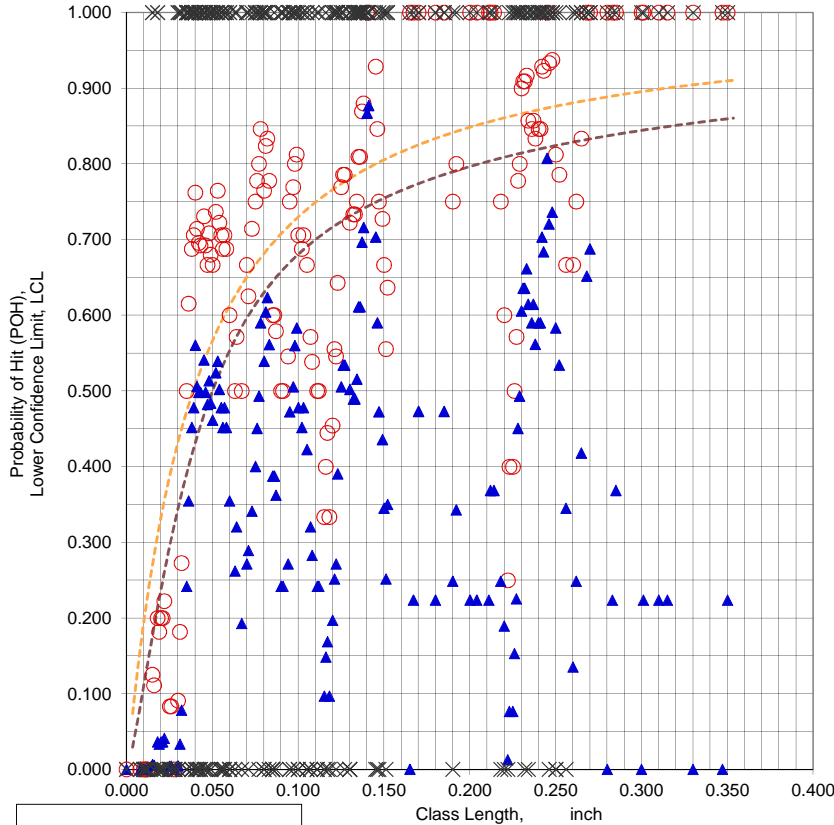
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = CE051(6)L.xls
 Data Set Name = CE051(6)(CRK NO.)
 Date & Time = 6/4/15 11:07 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound = 0.8768
 Best LCL = 0.0090 inch
 Classwidth @ Best LCL = 0.1410 inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = inch

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.2600 -0.003 inch 28 Samples
 NTIAC 90% POD = 0.900 @ 0.315 inch
 NTIAC 90/95 POD = 0.900 @ 0.575 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.350 inch
 Samples Needed @ XL = 27
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.268 inch
 Samples Needed @ Xpoh = 22
 New Largest Classlength , 2XL = 0.700 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
 — Xp, 90/95 POD
 - - - MLE (Mean) POD
 - - - MLE (95%) LCL

File Name = CE051(6)L.xls
 Data Set Name = CE051(6)L(CRK NO.)

Directed DOE Options

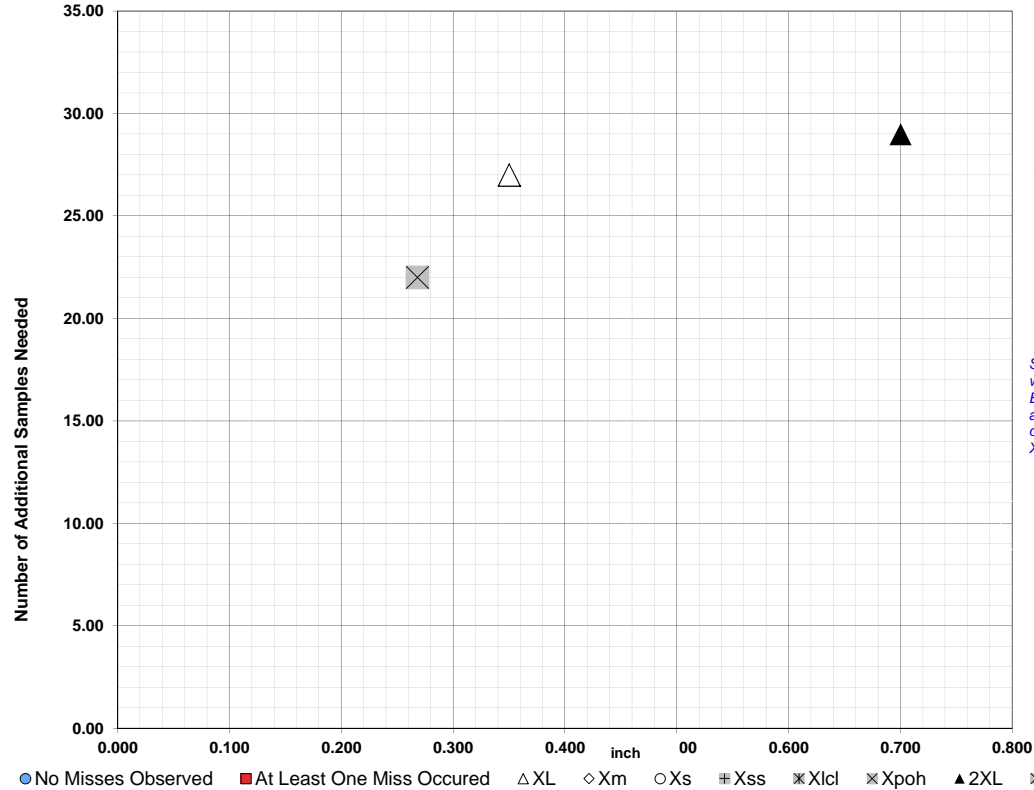


TABLE C

Class Length	Additional Samples
XL = 0.350	27
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.268	22
2XL = 0.700	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

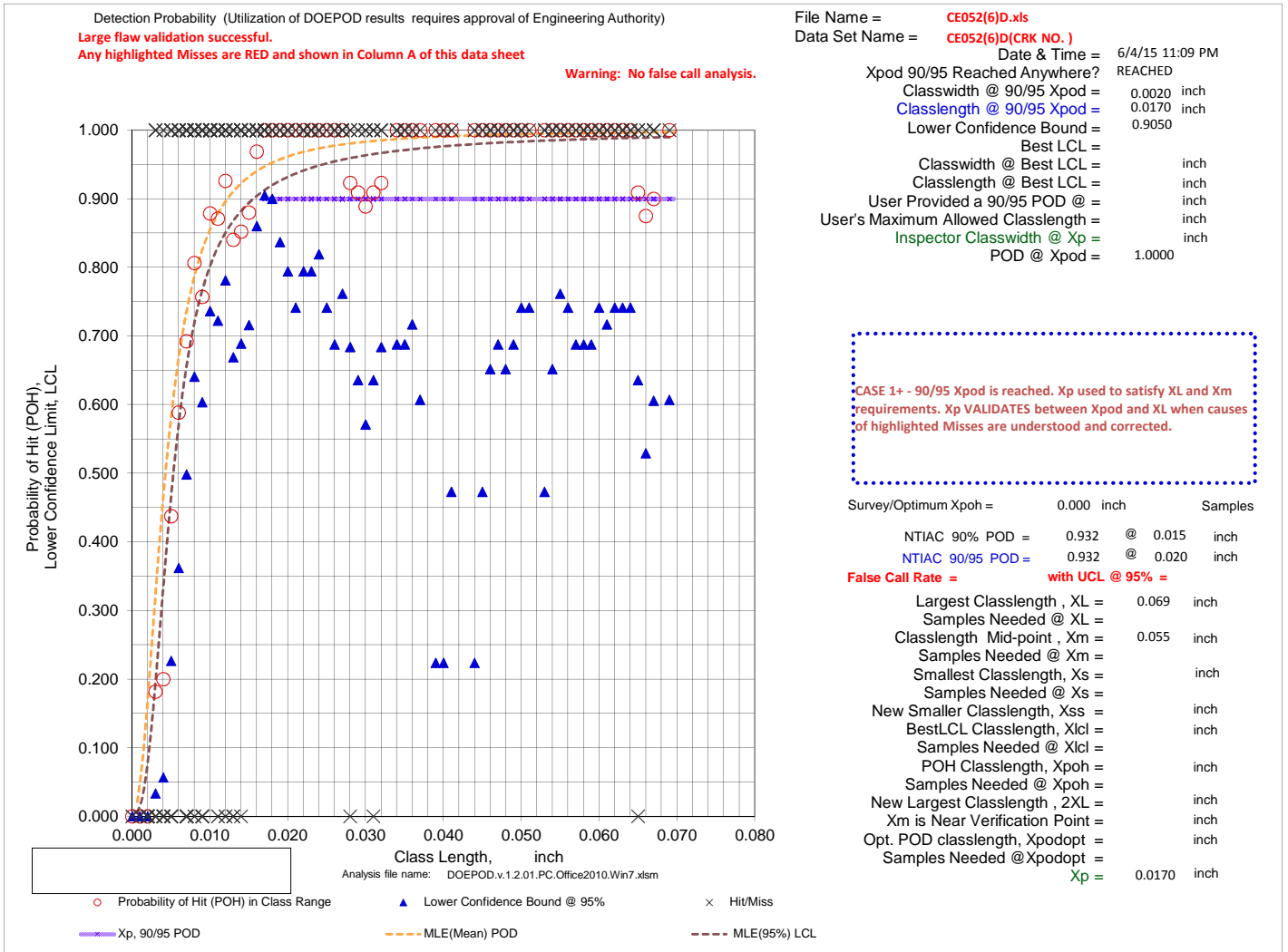
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CE052(6)D.xls
 Data Set Name = CE052(6)D(CRK NO.)

Directed DOE Options

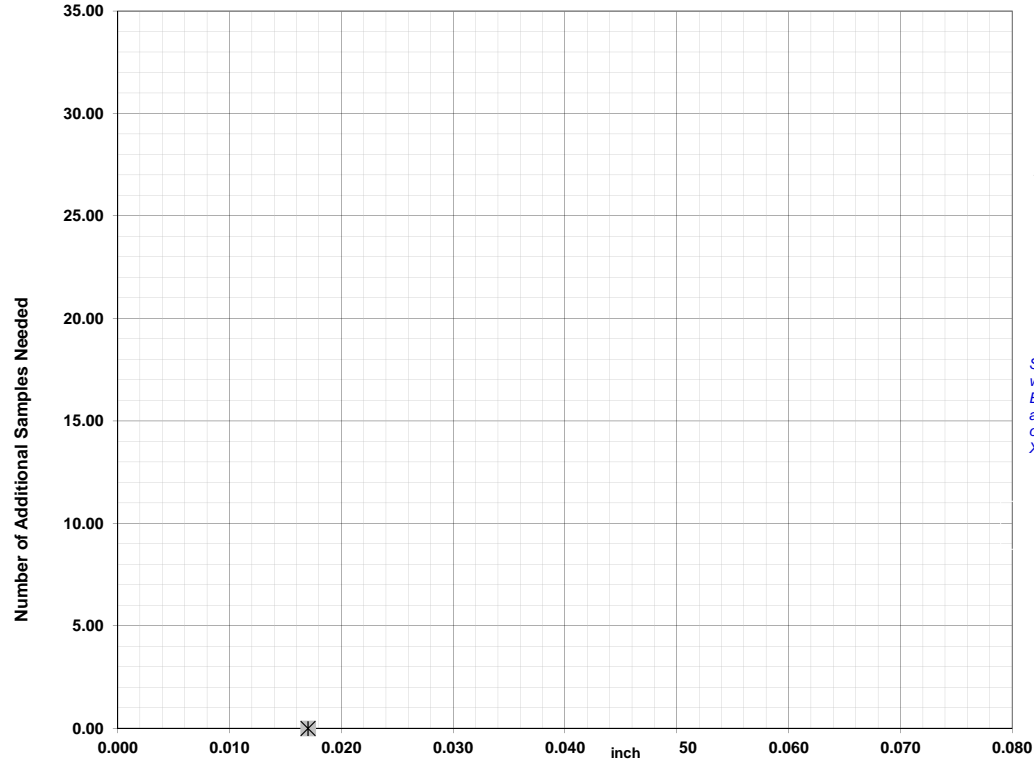


TABLE C

Class Length Additional Samples

XL = 0.069
 Xm = 0.055
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

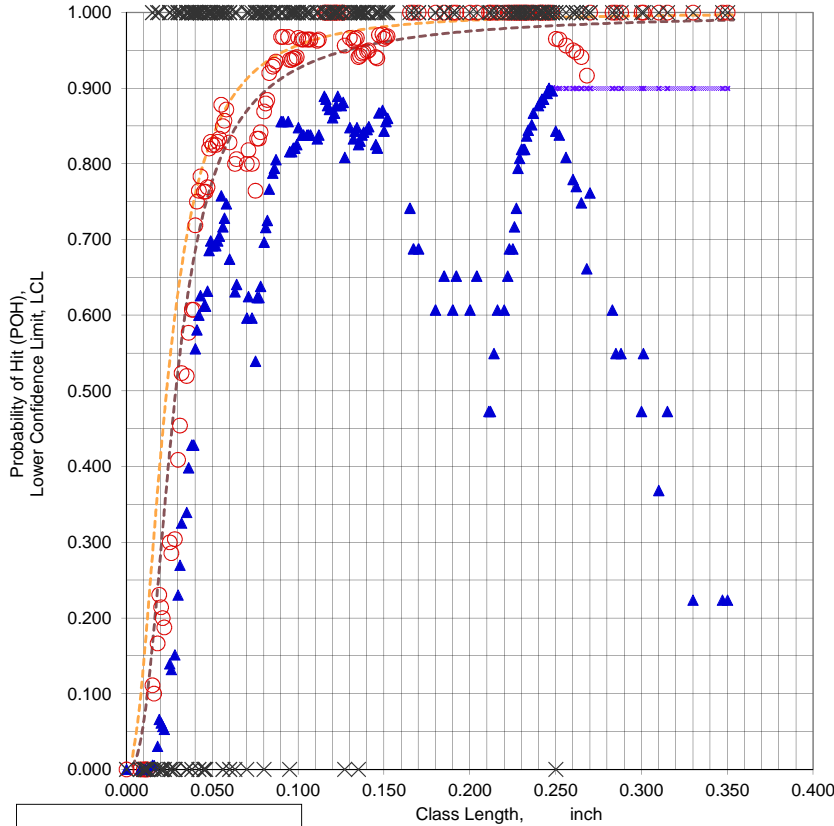
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Extend flaw size range to 0.738.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = CE052(6)L.xls
 Data Set Name = CE052(6)L(CRK NO.)
 Date & Time = 6/4/15 11:12 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0190 inch
 Classlength @ 90/95 Xpod = 0.2460 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.912 @ 0.070 inch
 NTIAC 90/95 POD = 0.905 @ 0.085 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.350 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.283 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.2460 inch

File Name = CE052(6)L.xls
 Data Set Name = CE052(6)L(CRK NO.)

Directed DOE Options

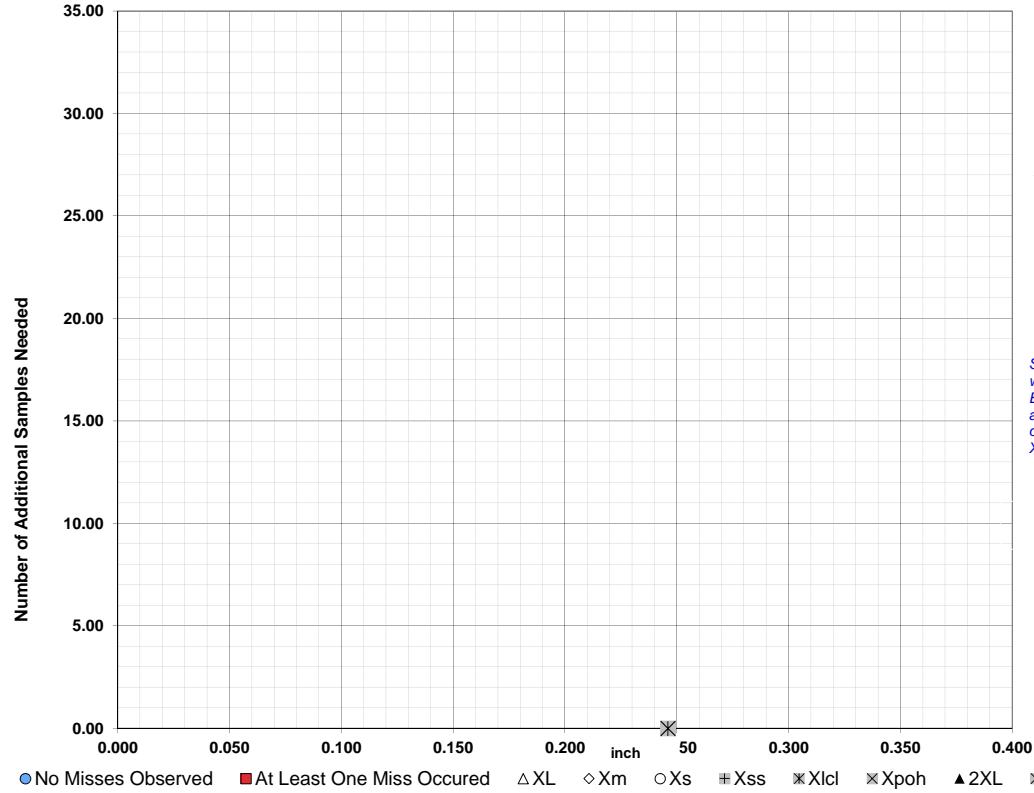


TABLE C

Class Length Additional Samples

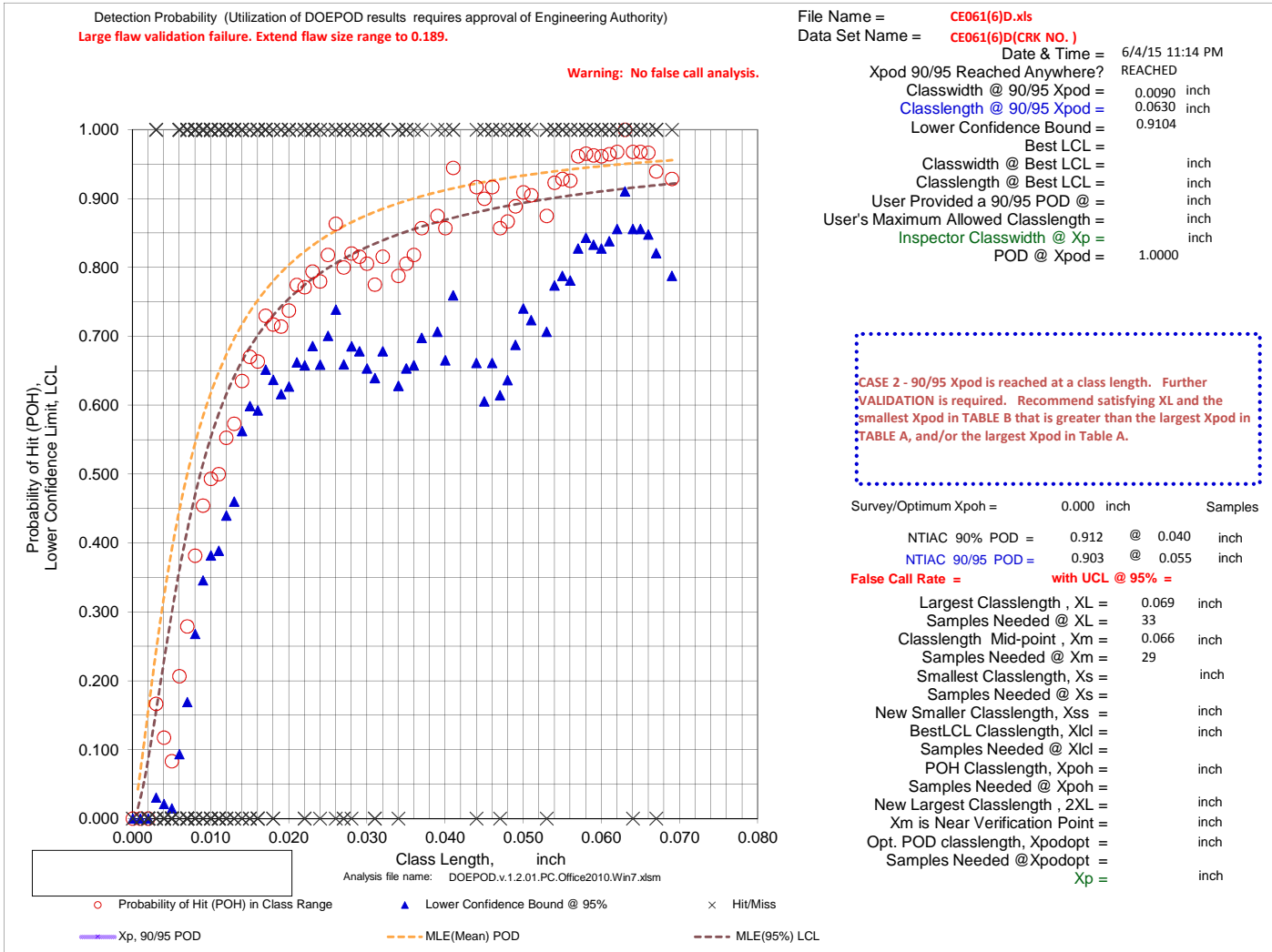
XL = 0.350
 Xm = 0.283
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CE061(6)D.xls
 Data Set Name = CE061(6)D(CRK NO.)

Directed DOE Options

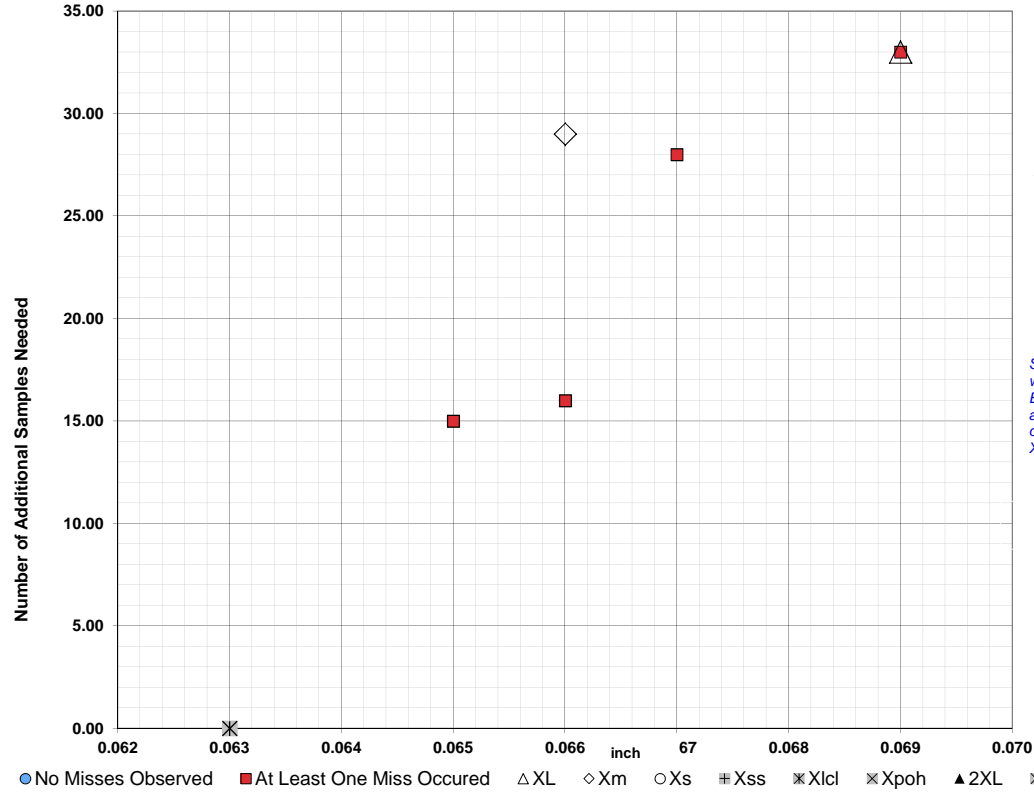


TABLE C

Class Length	Additional Samples
XL = 0.069	33
Xm = 0.066	29
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

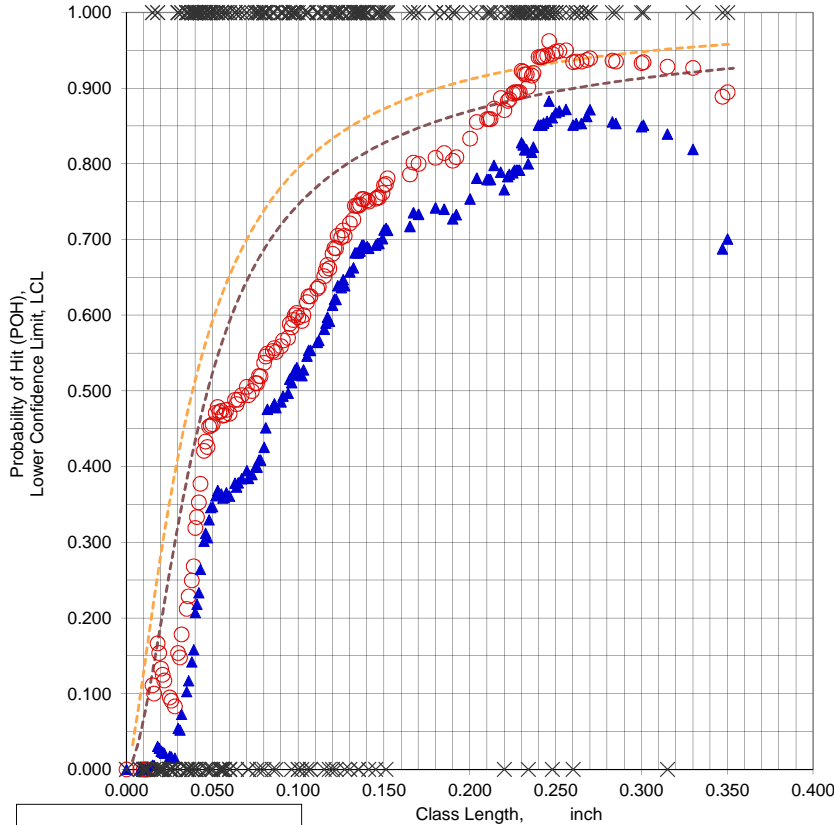
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.0690	33		
0.0670	28		
0.0660	16		
0.0650	15		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = CE061(6)L.xls
 Data Set Name = CE061(6)(CRK NO.)
 Date & Time = 6/4/15 11:15 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound = 0.8829
 Best LCL = 0.0940 inch
 Classwidth @ Best LCL = 0.2460 inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = inch

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.3300 -0.014 inch 28 Samples
 NTIAC 90% POD = 0.902 @ 0.185 inch
 NTIAC 90/95 POD = 0.902 @ 0.265 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.700 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = CE061(6)L.xls
 Data Set Name = CE061(6)L(CRK NO.)

Directed DOE Options

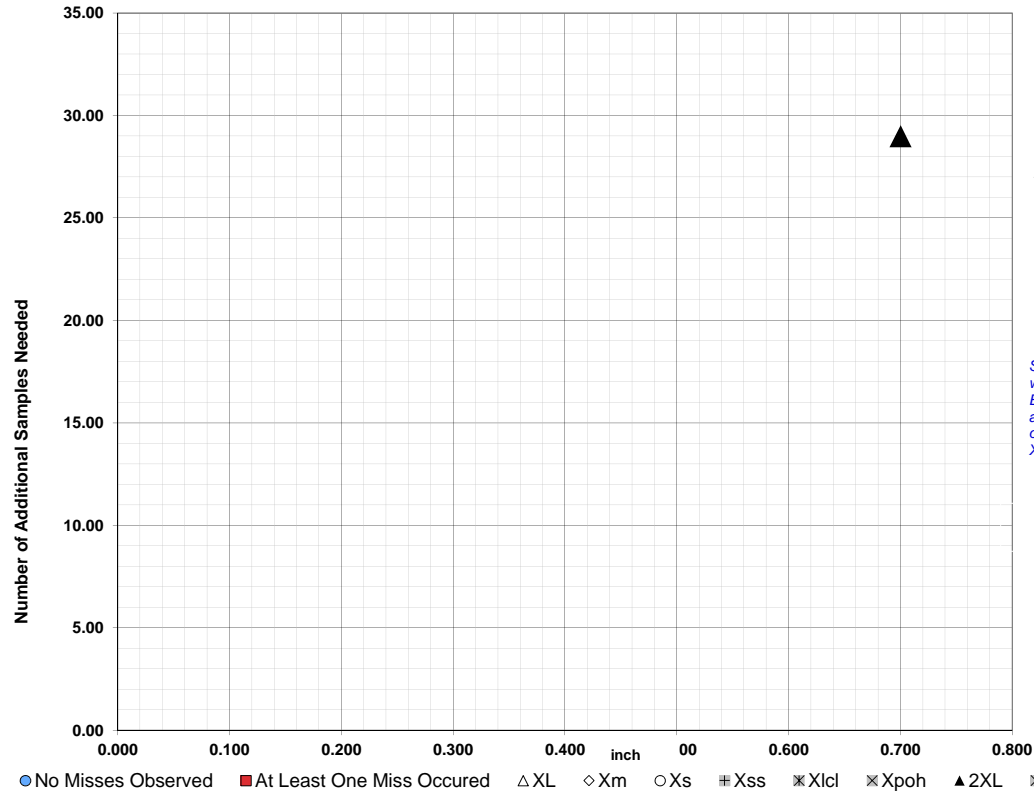


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.700	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.700 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

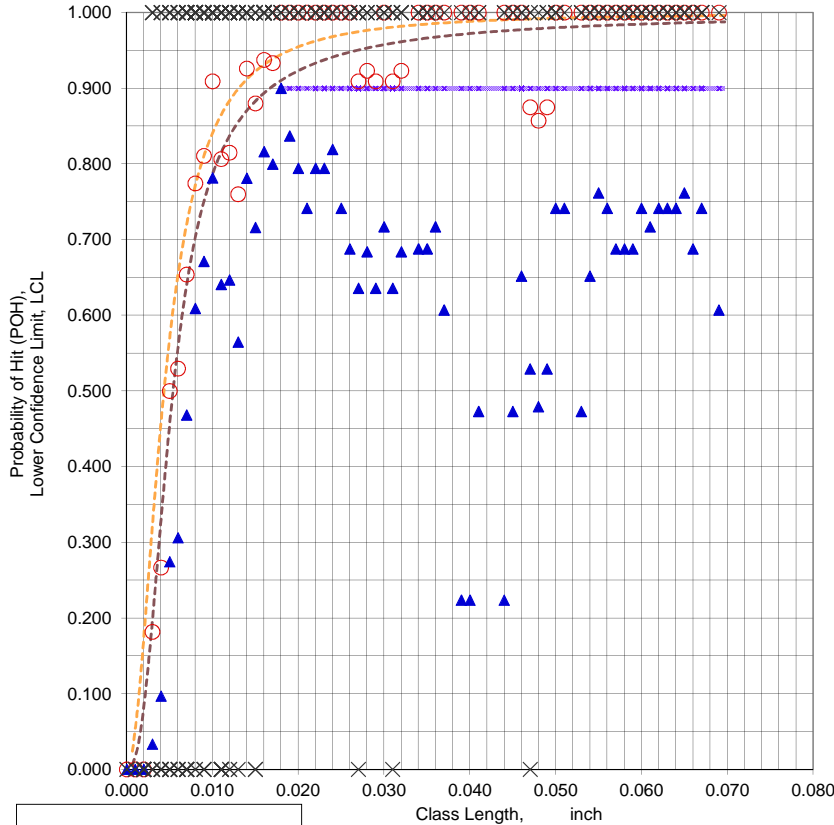
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 1 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



File Name = **CE062(6)D.xls**
 Data Set Name = **CE062(6)D(CRK NO.)**
 Date & Time = 6/4/15 11:17 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0020 inch
 Classlength @ 90/95 Xpod = 0.0180 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.922 @ 0.015 inch
 NTIAC 90/95 POD = 0.923 @ 0.020 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.069 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.055 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.0180 inch

File Name = CE062(6)D.xls
 Data Set Name = CE062(6)D(CRK NO.)

Directed DOE Options

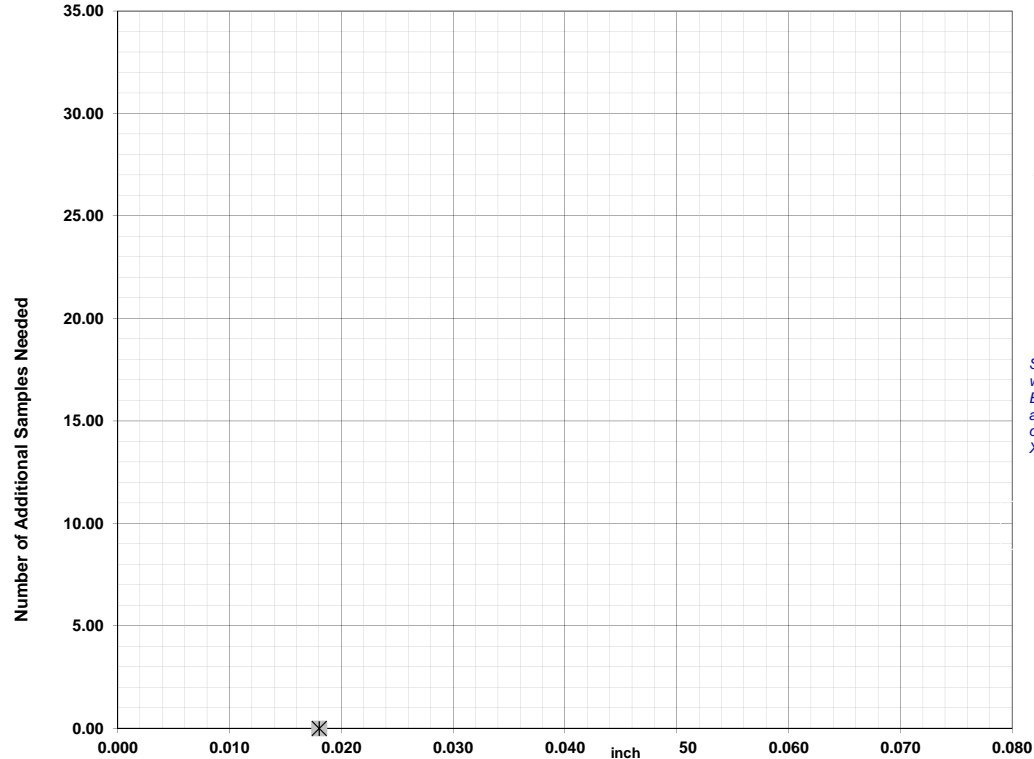


TABLE C

Class Length Additional Samples

XL = 0.069
 Xm = 0.055
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

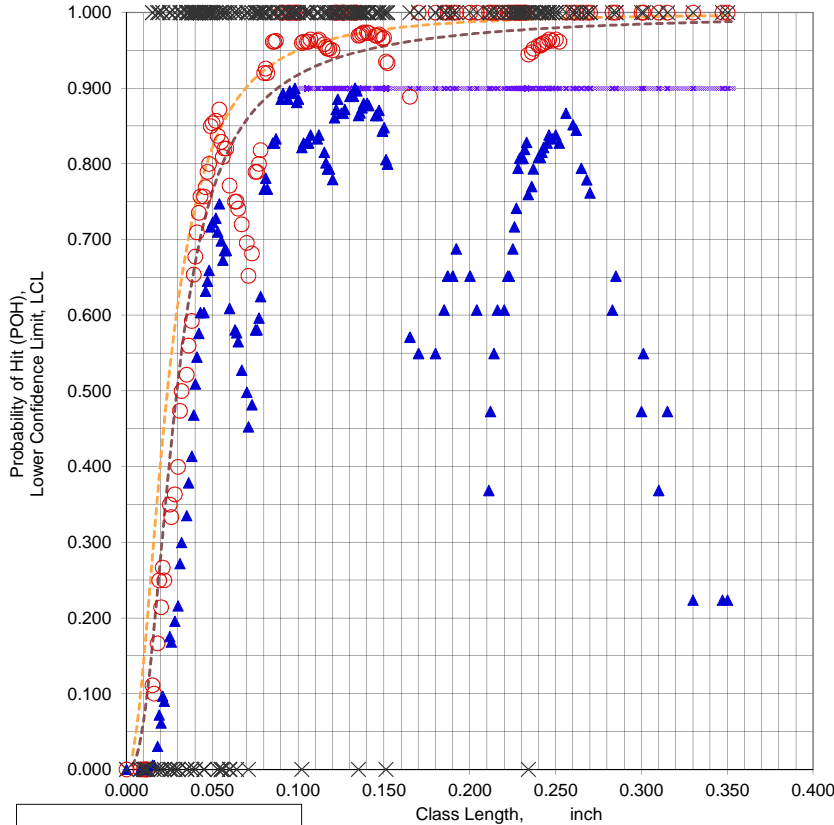
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 2 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE (Mean) POD
- - - MLE(95%) LCL

File Name = CE062(6)L.xls
 Data Set Name = CE062(6)L(CRK NO.)
 Date & Time = 6/4/15 11:20 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0180 inch
 Classlength @ 90/95 Xpod = 0.0980 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.902 @ 0.070 inch
 NTIAC 90/95 POD = 0.904 @ 0.090 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.350 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.256 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.1050 inch

File Name = CE062(6)L.xls
 Data Set Name = CE062(6)L(CRK NO.)

Directed DOE Options

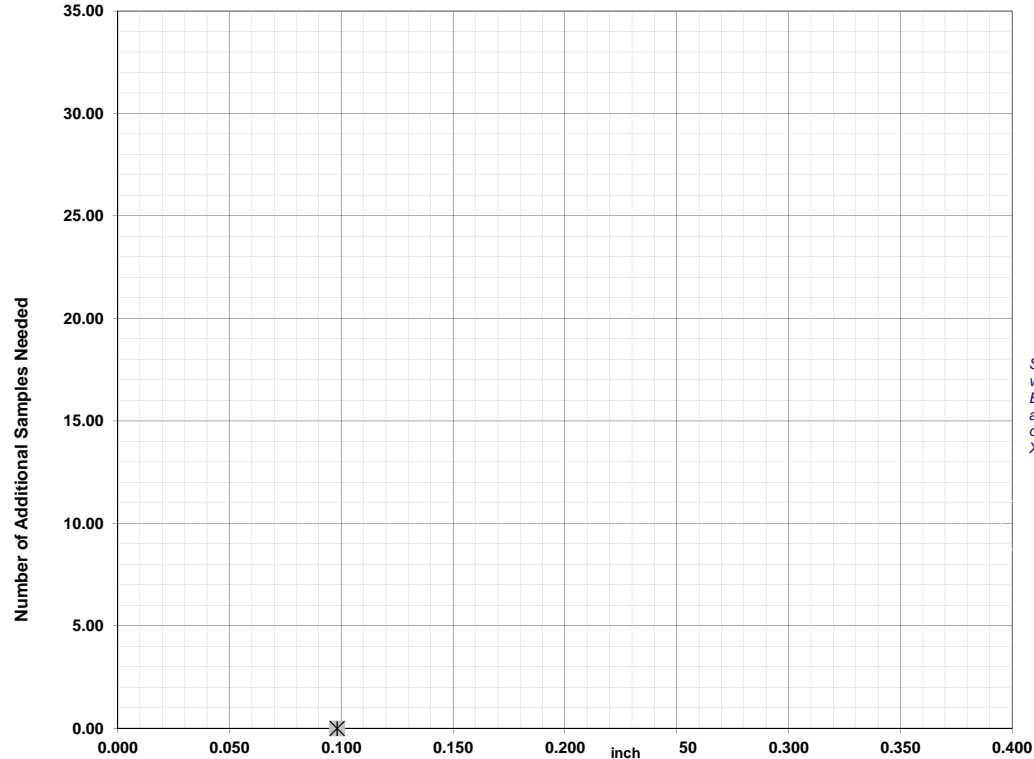


TABLE C

Class Length Additional Samples

XL = 0.350
 Xm = 0.256
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

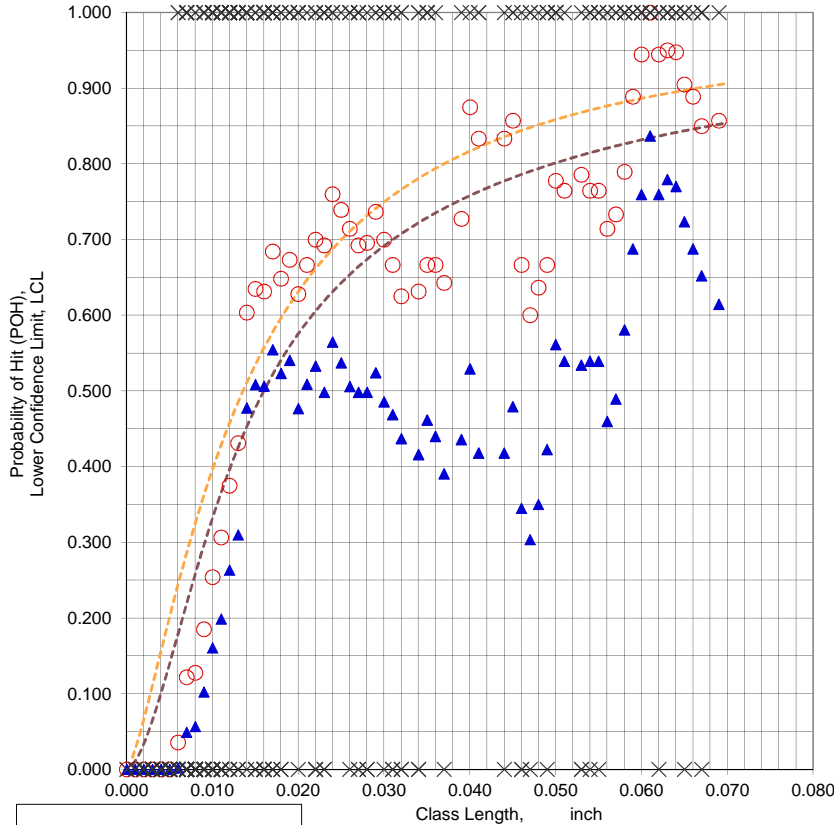
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Xp, 90/95 POD

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = CE071(6)D.xls
 Data Set Name = CE071(6)D(CRK NO.)
 Date & Time = 6/4/15 11:24 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound = 0.8368
 Best LCL = 0.0050 inch
 Classwidth @ Best LCL = 0.0610 inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = inch

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.0690 -0.001 inch 28 Samples
 NTIAC 90% POD = 0.906 @ 0.070 inch
 NTIAC 90/95 POD = 0.902 @ 0.105 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.138 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = CE071(6)D.xls
 Data Set Name = CE071(6)D(CRK NO.)

Directed DOE Options



TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.138	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.138 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

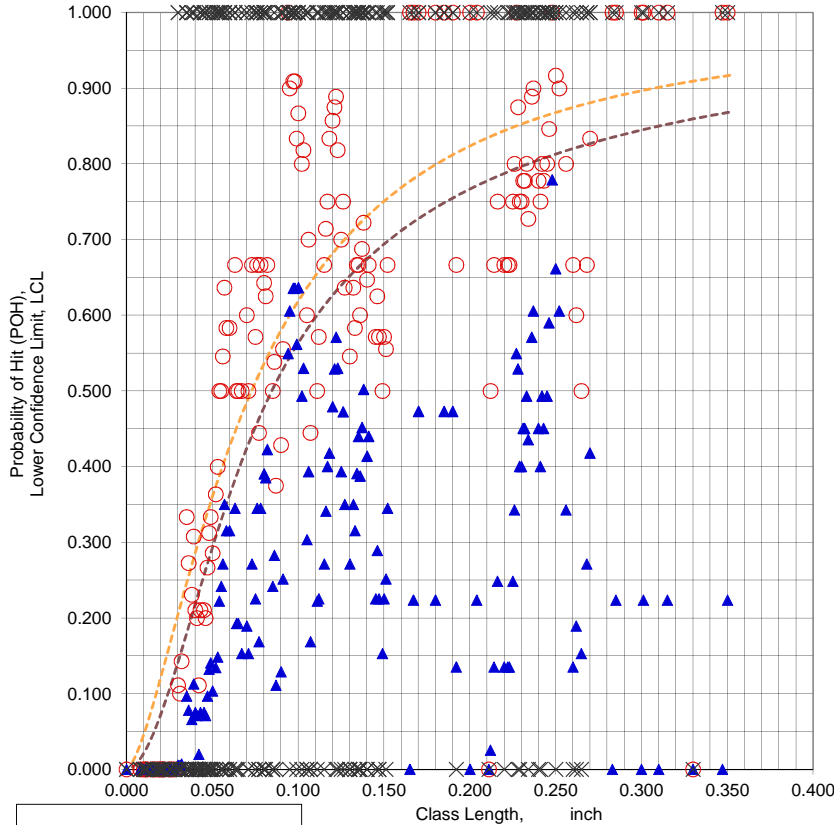
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **CE071(6)L.xls**
 Data Set Name = **CE071(6)I(CRK NO.)**
 Date & Time = 6/4/15 11:25 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7791
 Classwidth @ Best LCL = 0.0060 inch
 Classlength @ Best LCL = 0.2480 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.3470 -0.016 inch 28 Samples
 NTIAC 90% POD = 0.901 @ 0.310 inch
 NTIAC 90/95 POD = 0.900 @ 0.455 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.350 inch
 Samples Needed @ XL = 27
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.347 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 0.700 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = CE071(6)L.xls
 Data Set Name = CE071(6)L(CRK NO.)

Directed DOE Options

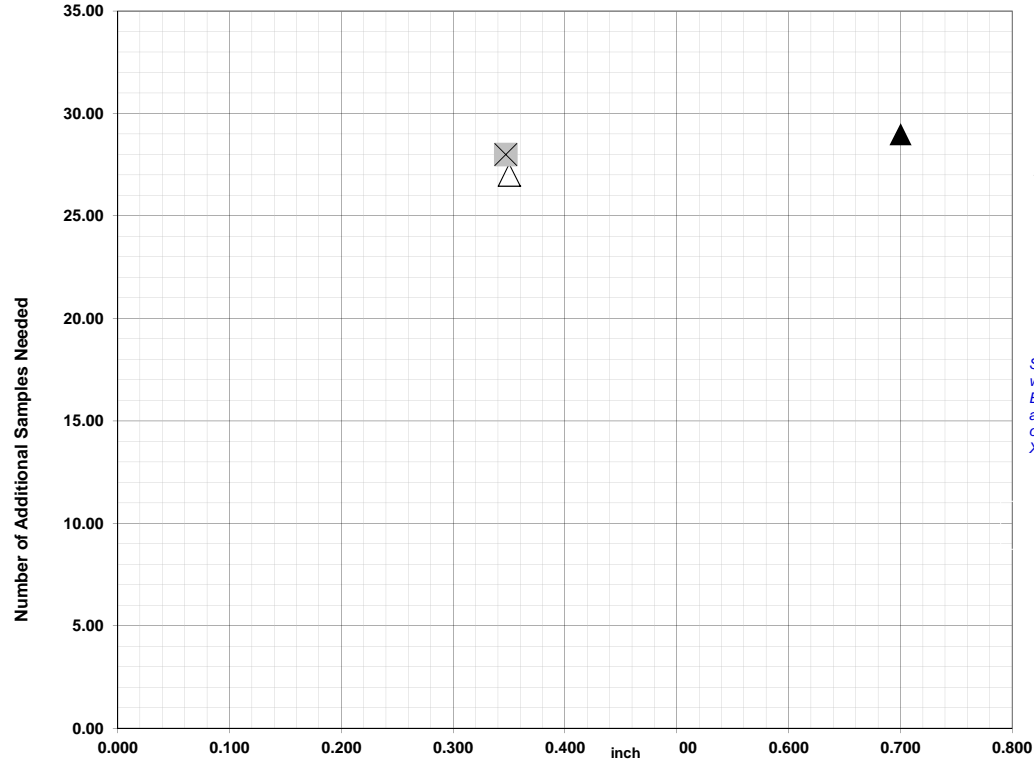


TABLE C

Class Length	Additional Samples
XL = 0.350	27
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.347	28
2XL = 0.700	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

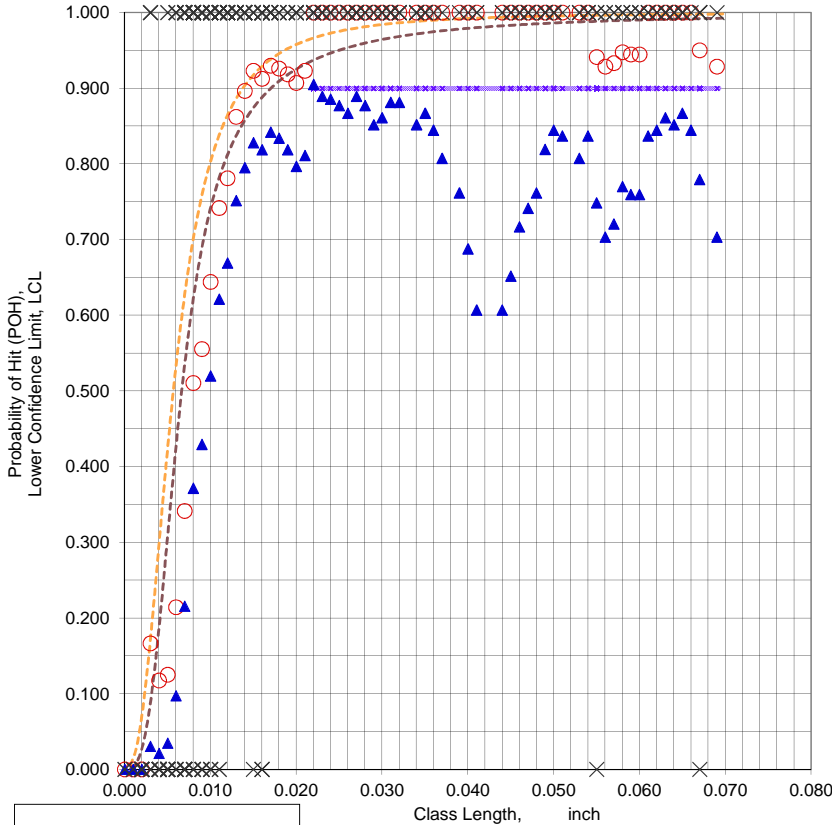
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 1 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss

— Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = CE072(6)D.xls
 Data Set Name = CE072(6)D(CRK NO.)
 Date & Time = 6/4/15 11:27 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0050 inch
 Classlength @ 90/95 Xpod = 0.0220 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples

NTIAC 90% POD = 0.917 @ 0.015 inch
 NTIAC 90/95 POD = 0.925 @ 0.020 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.069 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.035 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.0220 inch

File Name = CE072(6)D.xls
 Data Set Name = CE072(6)D(CRK NO.)

Directed DOE Options

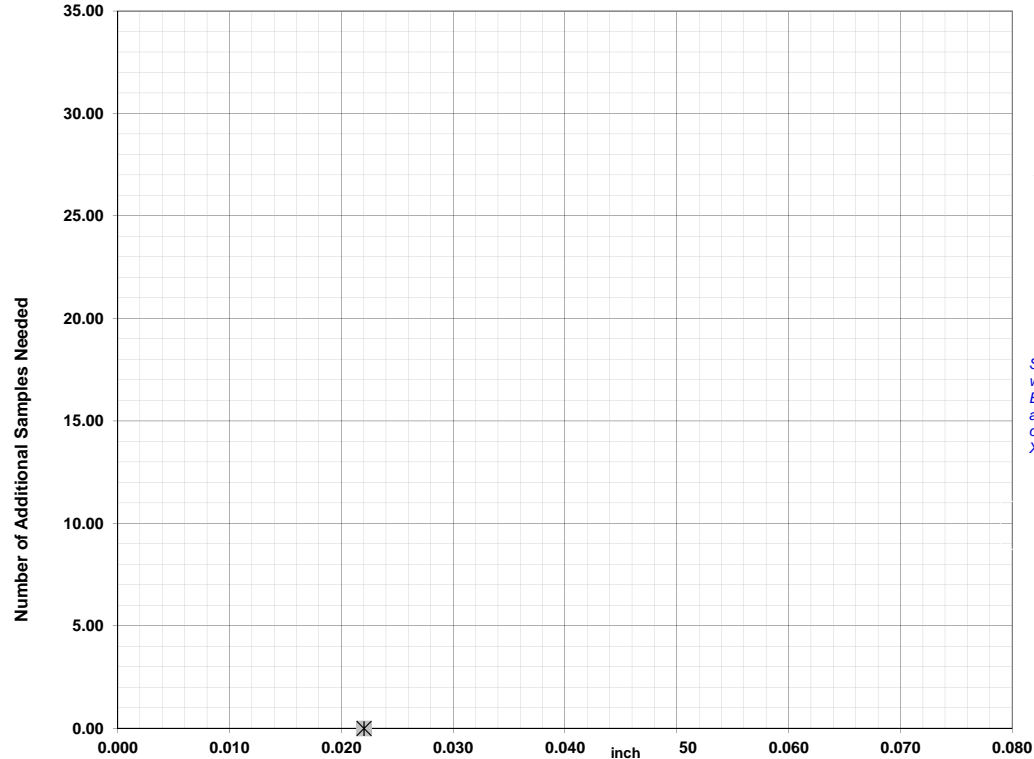


TABLE C

Class Length Additional Samples

XL = 0.069
 Xm = 0.035
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

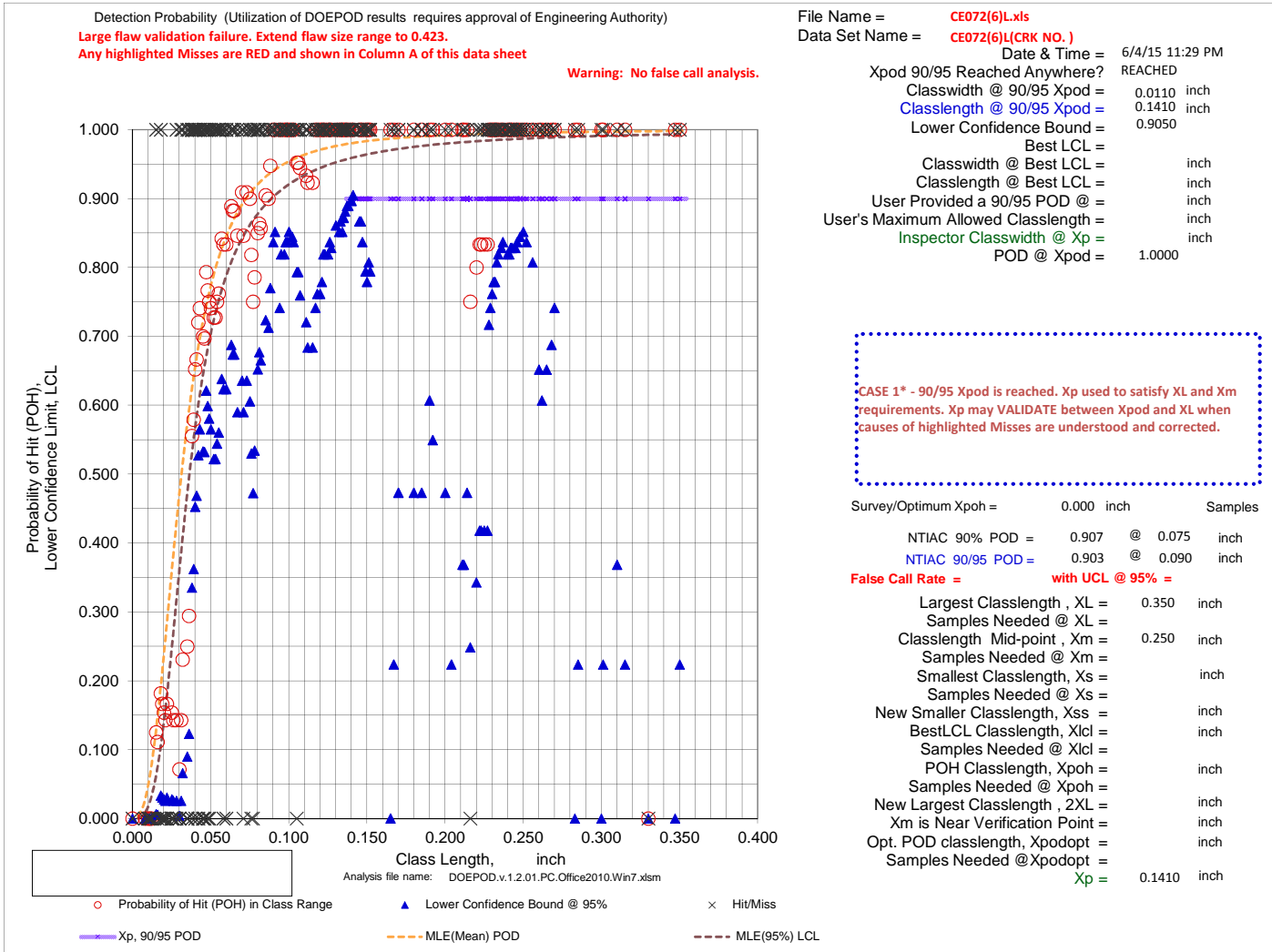
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = CE072(6)L.xls
 Data Set Name = CE072(6)L(CRK NO.)

Directed DOE Options

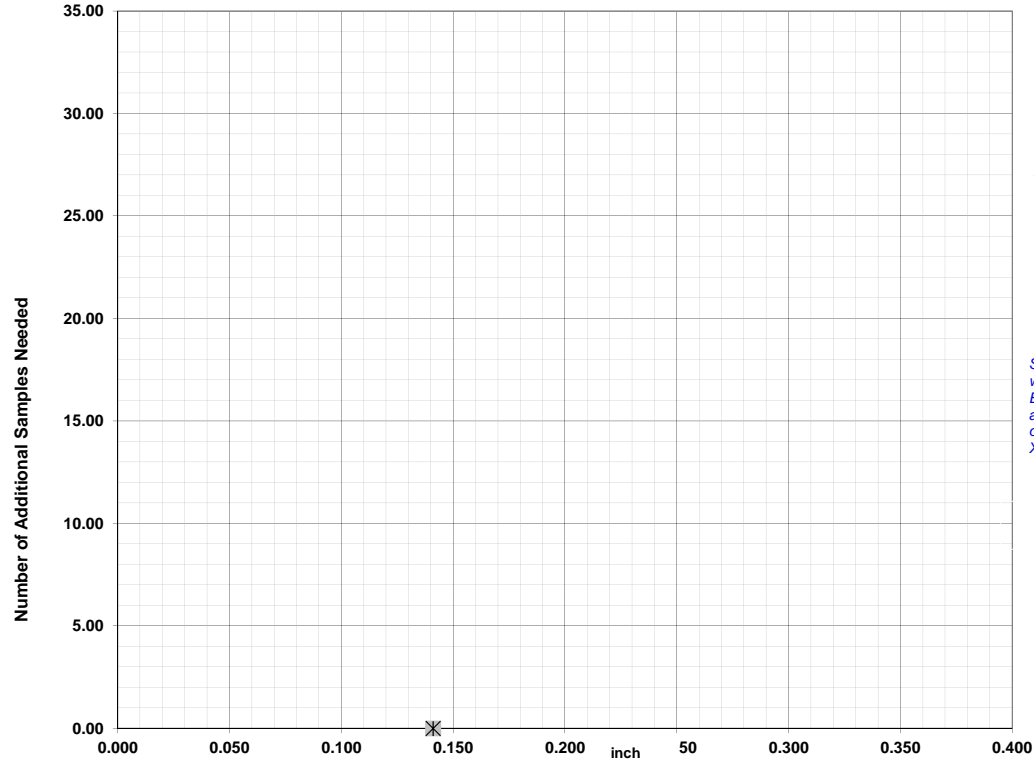


TABLE C

Class Length Additional Samples

XL = 0.350
 Xm = 0.250
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

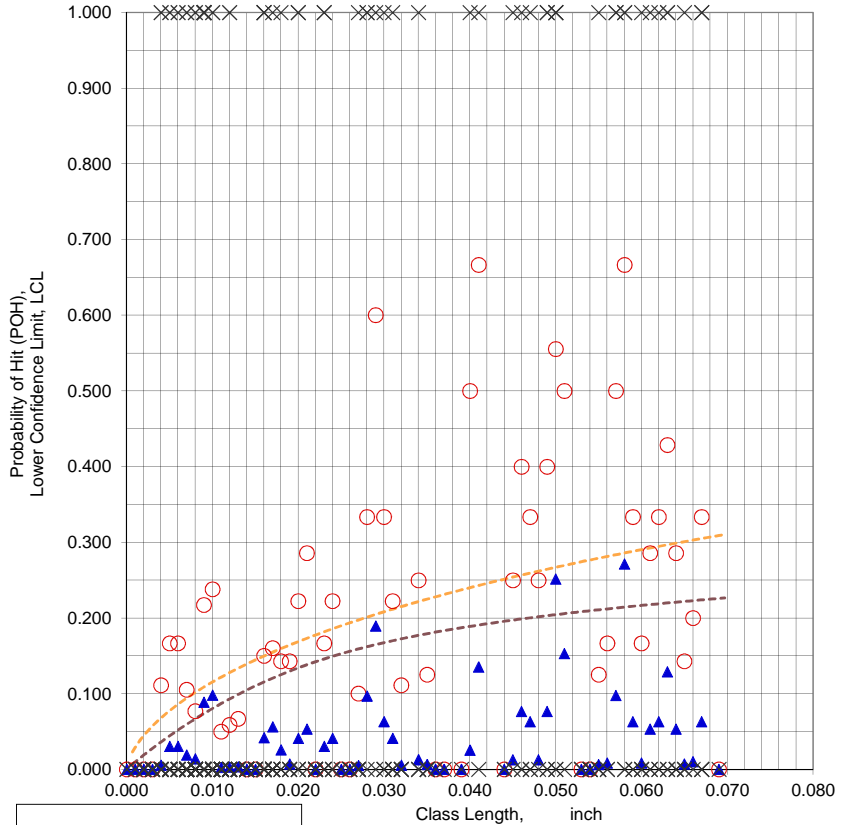
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = CE081(6)D.xls
 Data Set Name = CE081(6)D(CRK #)
 Date & Time = 6/4/15 11:32 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound = Best LCL = 0.2713
 Classwidth @ Best LCL = 0.0010 inch
 Classlength @ Best LCL = 0.0580 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.138 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = CE081(6)D.xls
 Data Set Name = CE081(6)D(CRK #)

Directed DOE Options



TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.138	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.138 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

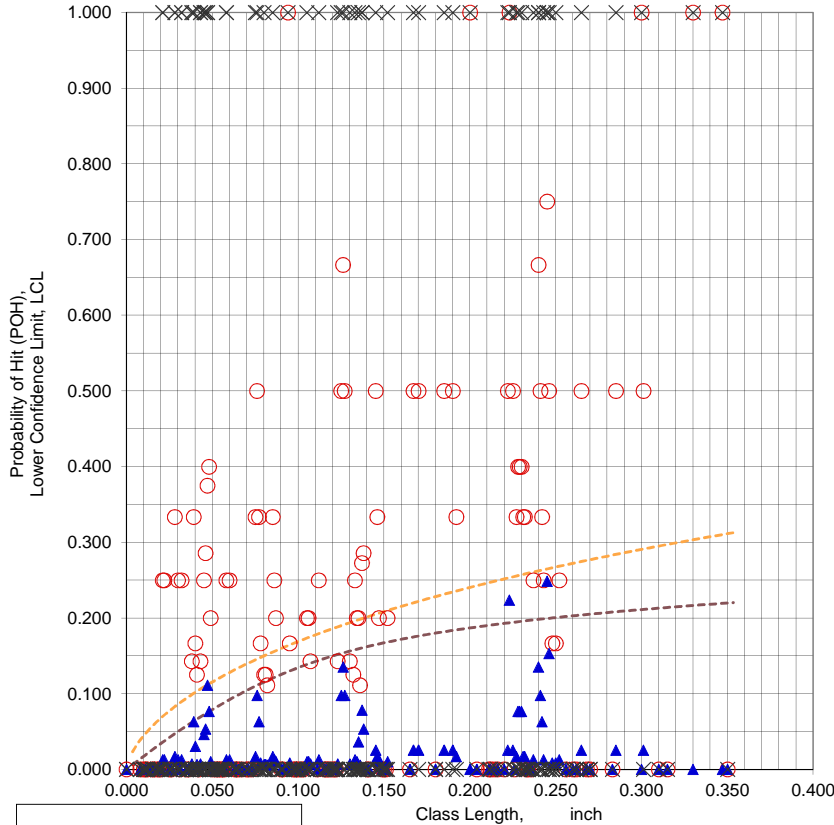
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = CE081(6)L.xls
 Data Set Name = CE081(6)(CRK #)
 Date & Time = 6/4/15 11:33 PM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.2486
 Classwidth @ Best LCL = 0.0020 inch
 Classlength @ Best LCL = 0.2450 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.700 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = CE081(6)L.xls
 Data Set Name = CE081(6)L(CRK #)

Directed DOE Options

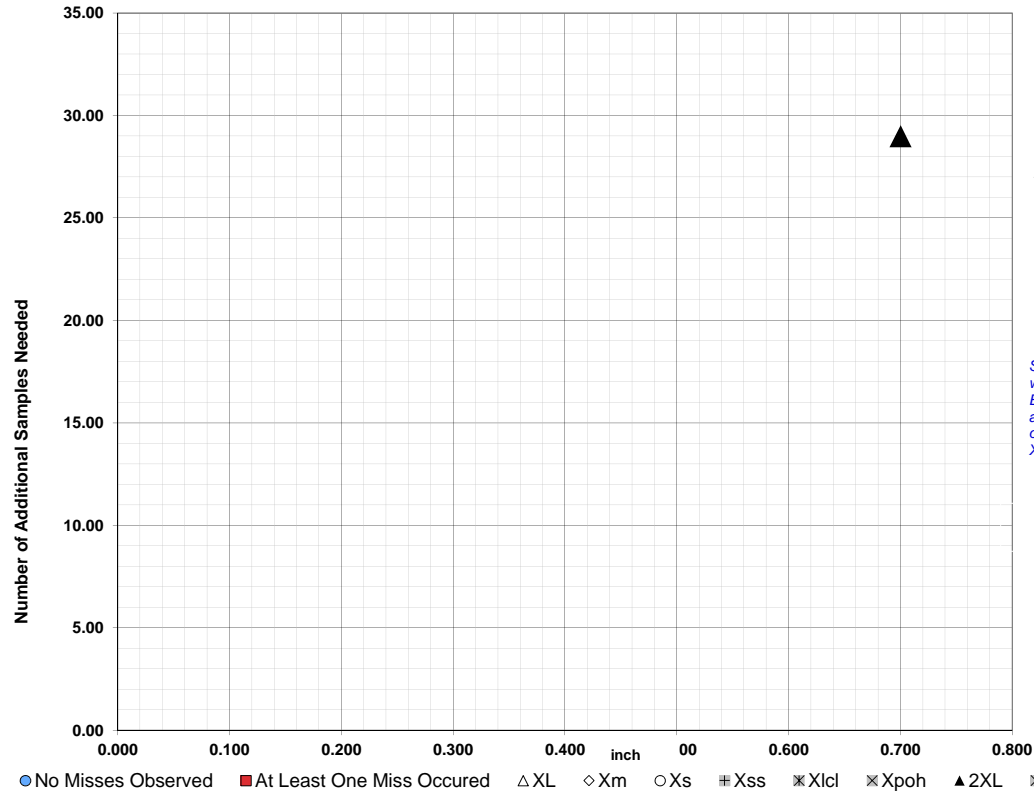


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.700	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.700 29
 **Alternate Xm =
 Xpodopt =

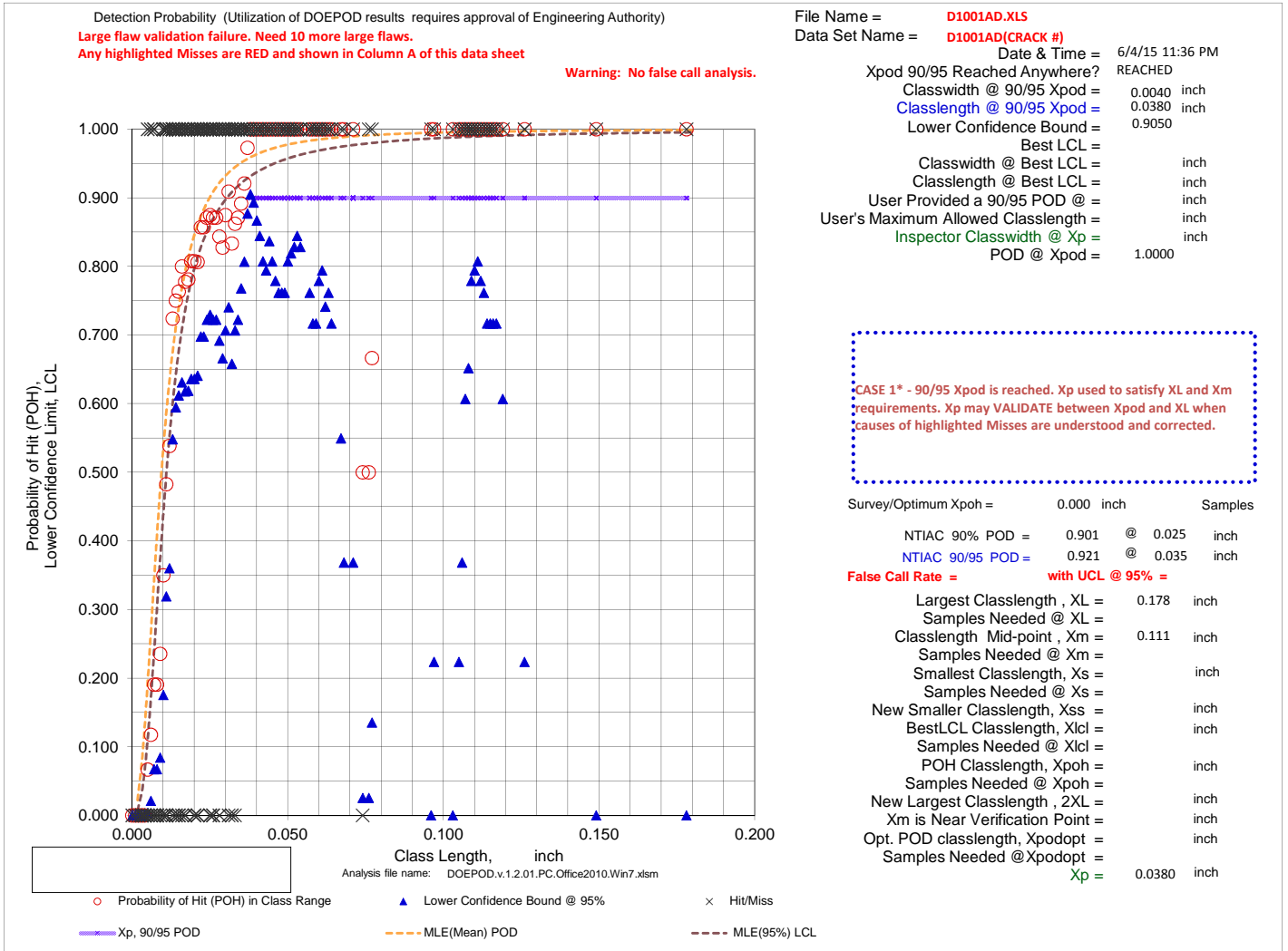
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D1001AD.XLS
 Data Set Name = D1001AD(CRACK #)

Directed DOE Options

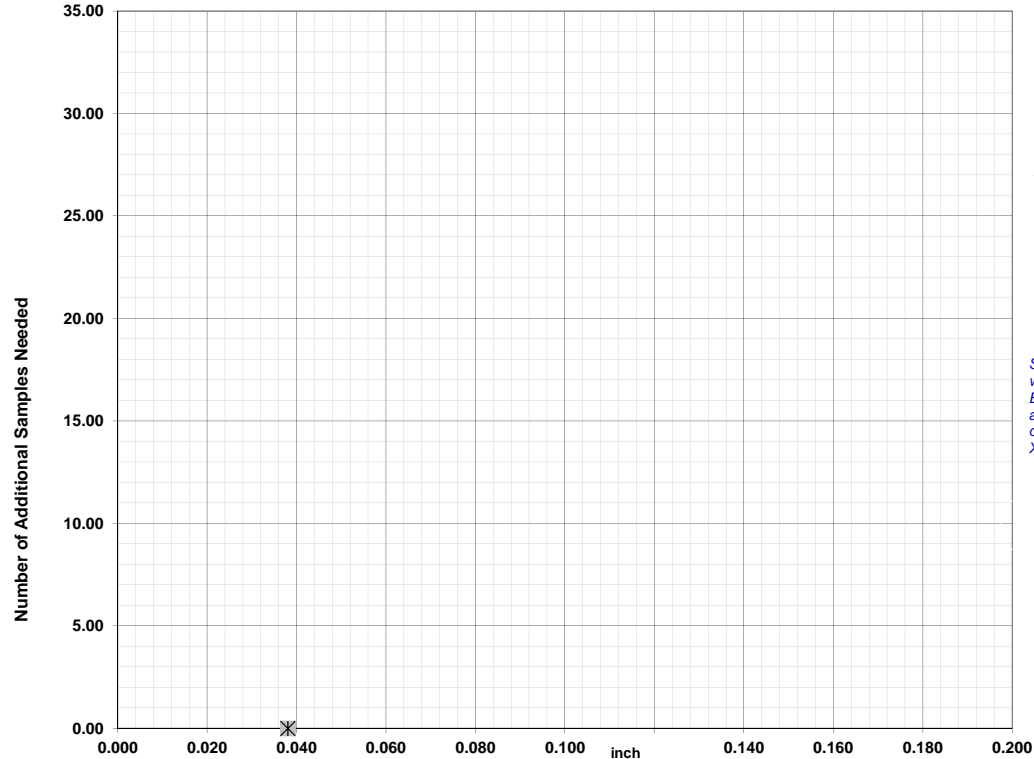


TABLE C

Class Length Additional Samples

XL = 0.178
 Xm = 0.111
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

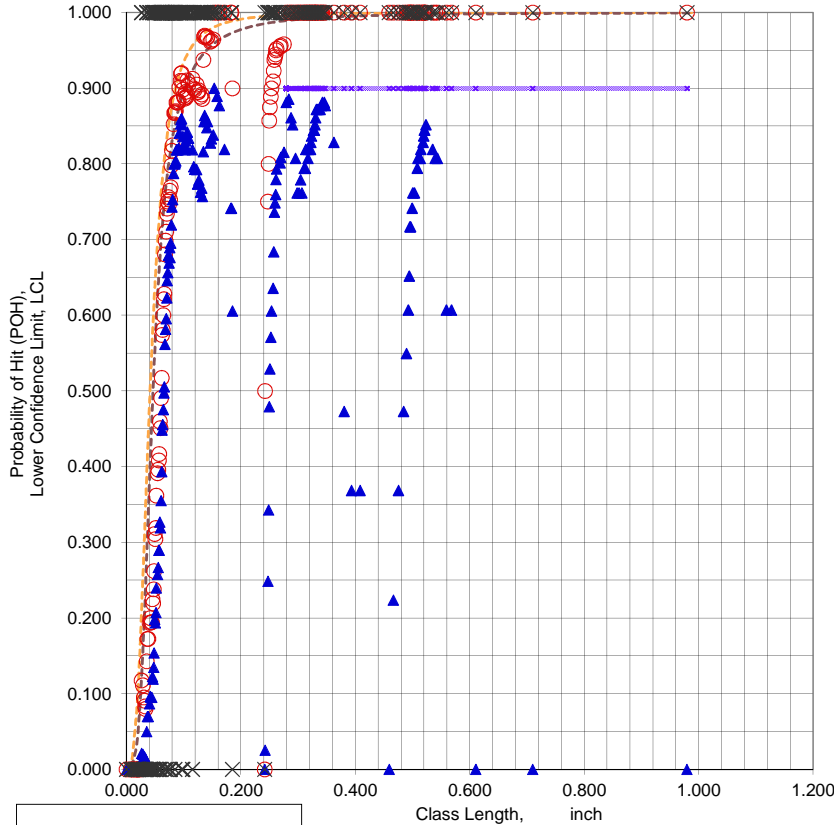
● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 10 more large flaws.
Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE (Mean) POD
- - - MLE (95%) LCL

File Name = **D1001AL.XLS**
 Data Set Name = **D1001AL(CRACK #)**
 Date & Time = 6/4/15 11:38 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0360 inch
 Classlength @ 90/95 Xpod = 0.1530 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.913 @ 0.090 inch
 NTIAC 90/95 POD = 0.907 @ 0.105 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.979 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.523 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.2790 inch

File Name = D1001AL.XLS
 Data Set Name = D1001AL(CRACK #)

Directed DOE Options



TABLE C

Class Length Additional Samples

XL = 0.979
 Xm = 0.523
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

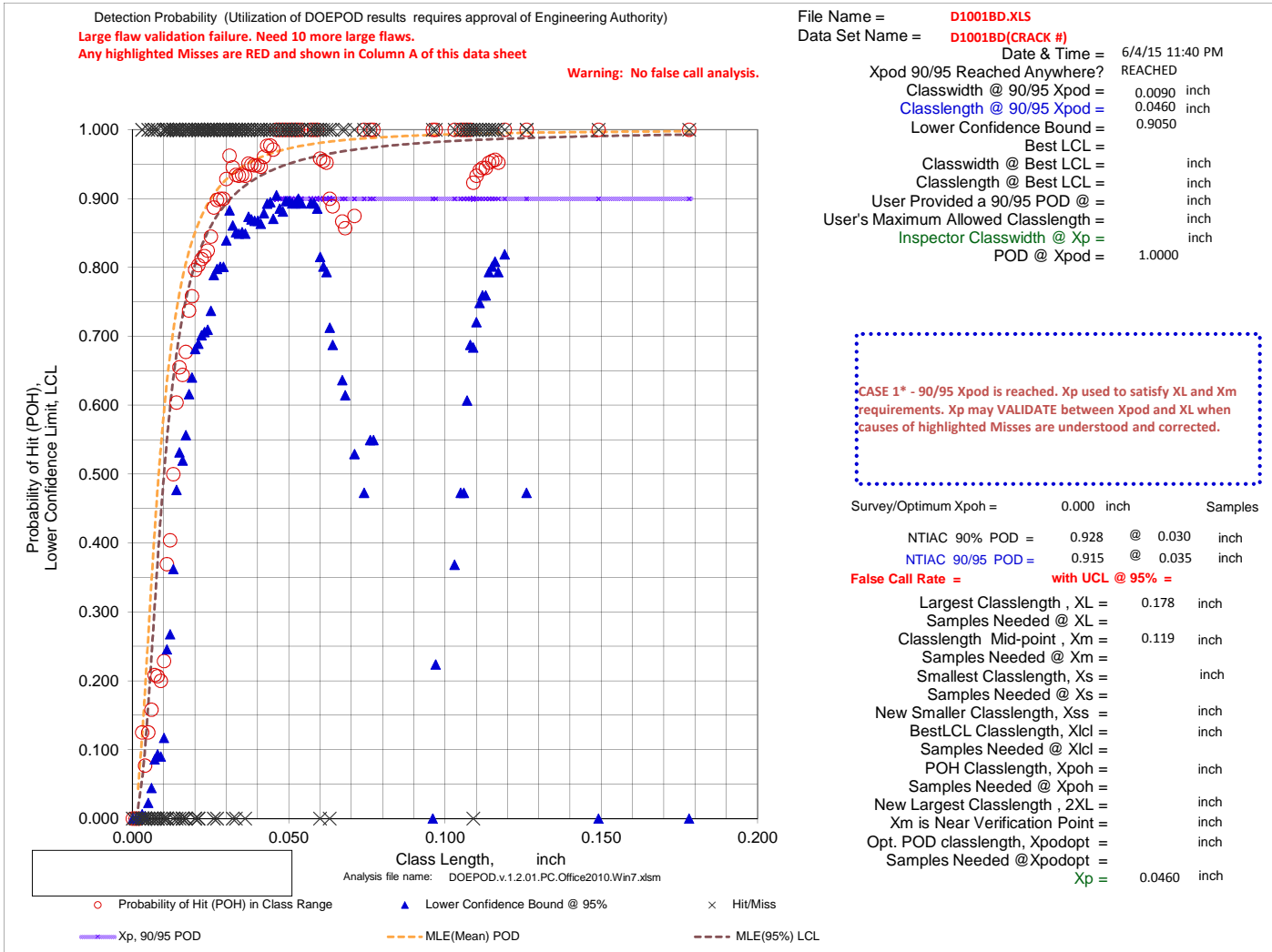
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D10018D.XLS
 Data Set Name = D10018D(CRACK #)

Directed DOE Options

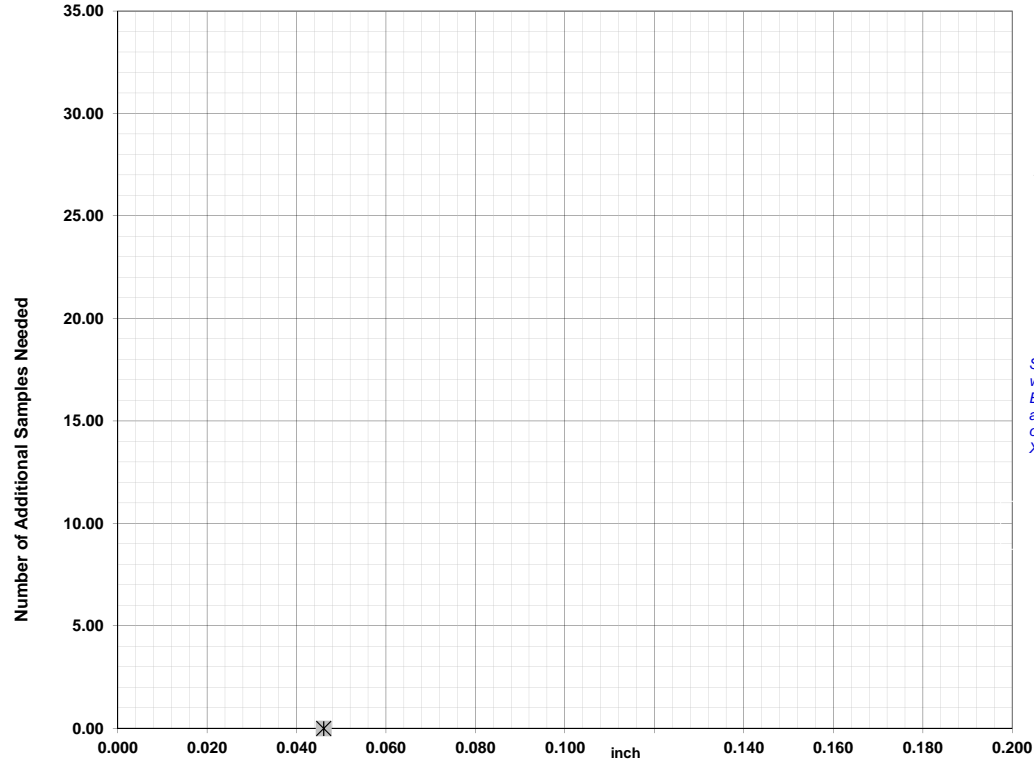


TABLE C

Class Length Additional Samples

XL = 0.178
 Xm = 0.119
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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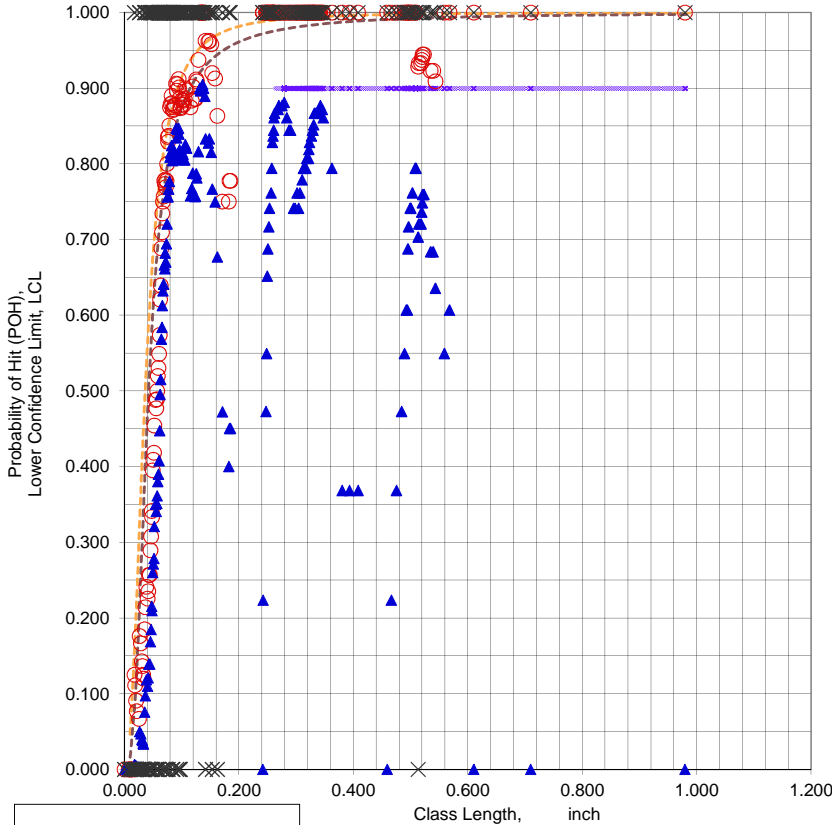
No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 10 more large flaws.
Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **D1001BL.XLS**
 Data Set Name = **D1001BL(CRACK #)**
 Date & Time = 6/4/15 11:42 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0330 inch
 Classlength @ 90/95 Xpod = 0.1310 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.905 @ 0.095 inch
 NTIAC 90/95 POD = 0.901 @ 0.115 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.979 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.345 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.2790 inch

File Name = D1001BL.XLS
 Data Set Name = D1001BL(CRACK #)

Directed DOE Options



TABLE C

Class Length Additional Samples

XL = 0.979
 Xm = 0.345
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

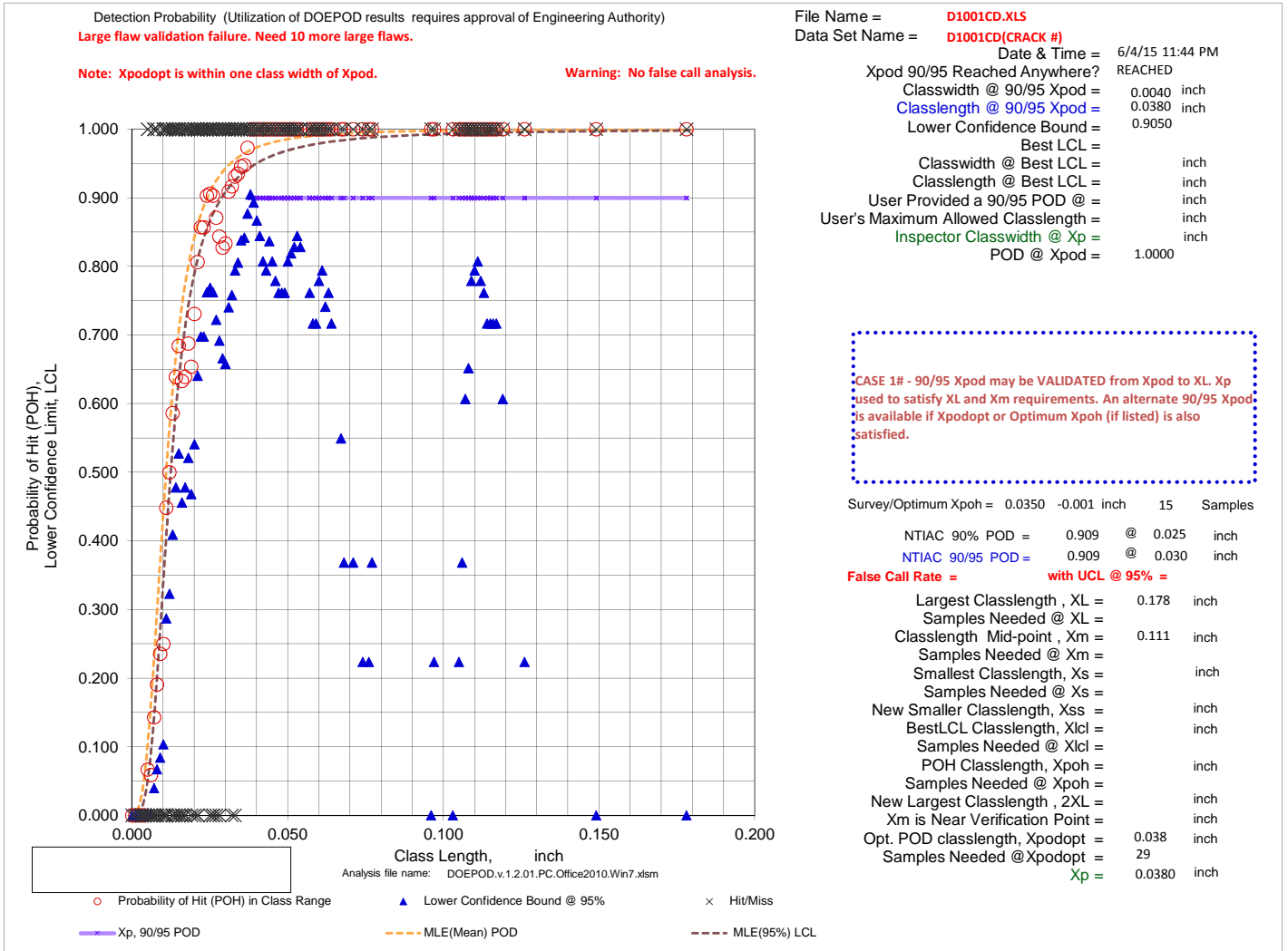
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D1001CD.XLS
 Data Set Name = D1001CD(CRACK #)

Directed DOE Options

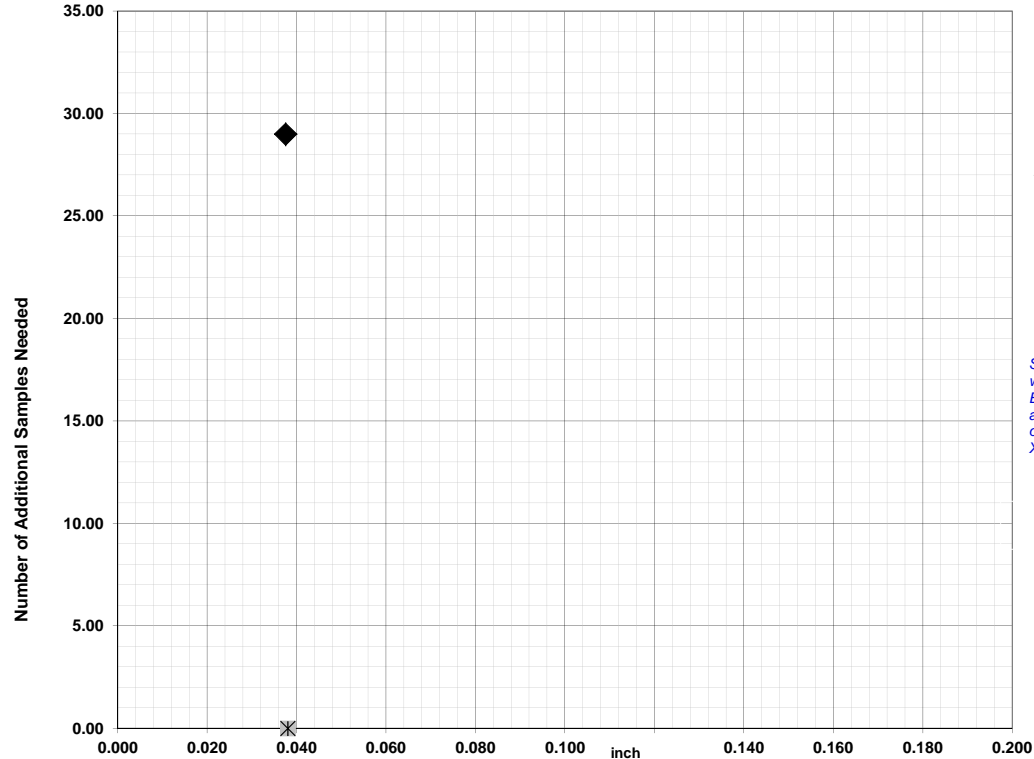


TABLE C

Class Length	Additional Samples
XL =	0.178
Xm =	0.111
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.038 29

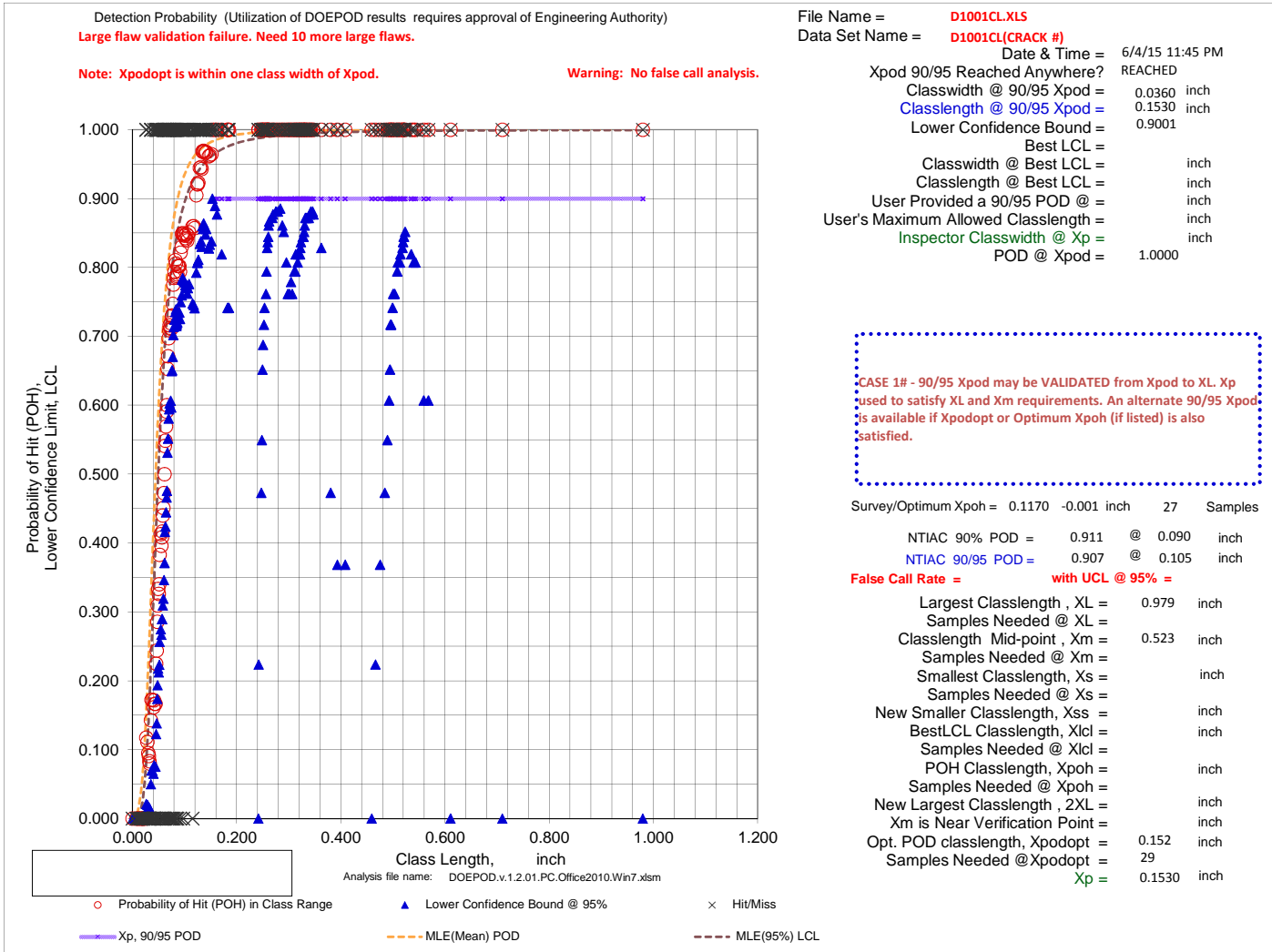
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D1001CL.XLS
 Data Set Name = D1001CL(CRACK #)

Directed DOE Options

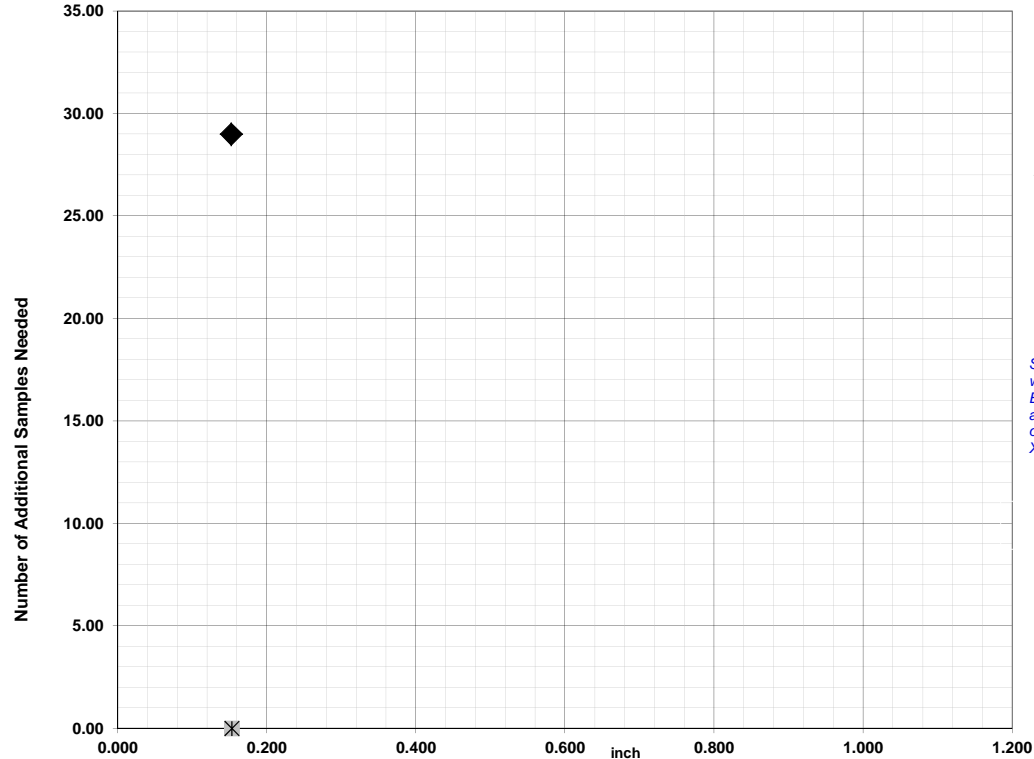


TABLE C

Class Length	Additional Samples
XL =	0.979
Xm =	0.523
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.152 29

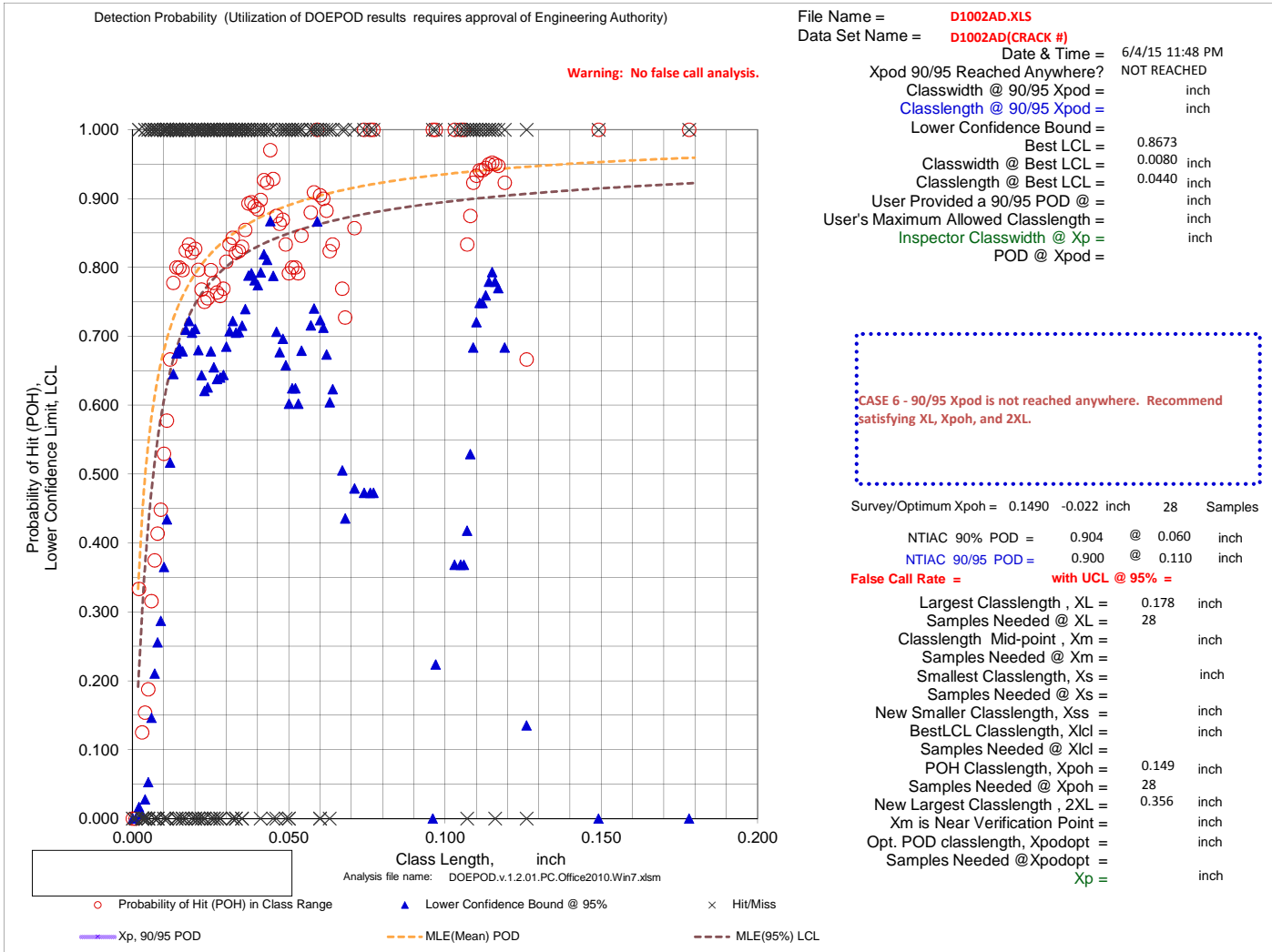
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D1002AD.XLS
 Data Set Name = D1002AD(CRACK #)

Directed DOE Options

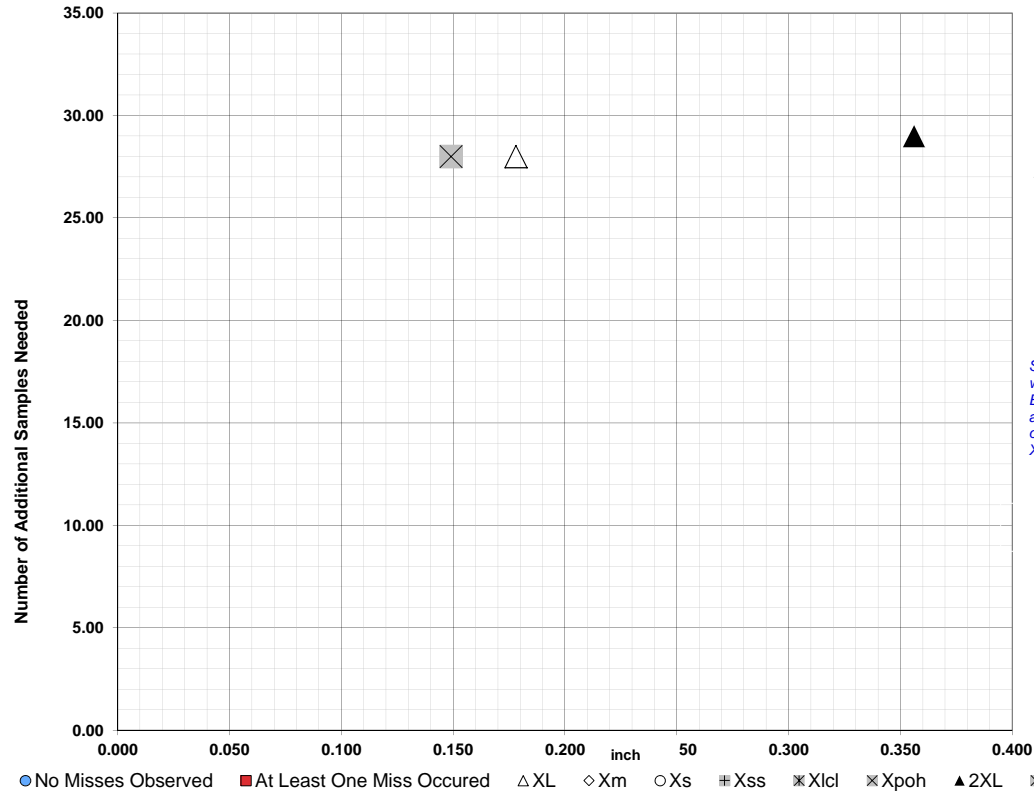


TABLE C

Class Length	Additional Samples
XL = 0.178	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.149	28
2XL = 0.356	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

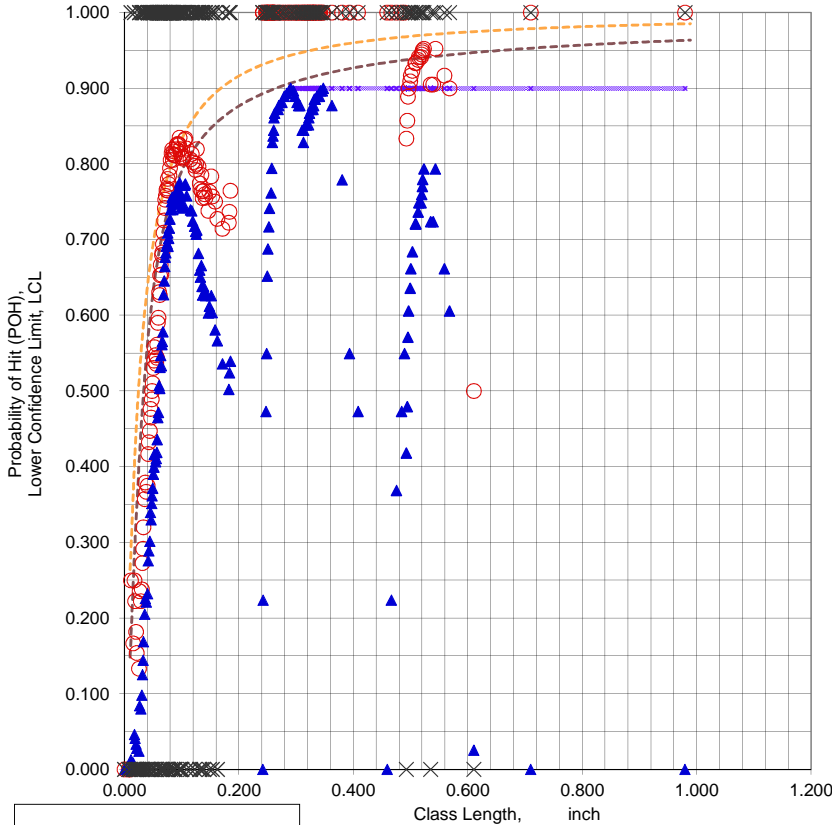
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 13 more large flaws.
Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



File Name = **D1002AL.XLS**
 Data Set Name = **D1002AL(CRACK #)**
 Date & Time = 6/4/15 11:49 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0490 inch
 Classlength @ 90/95 Xpod = 0.2900 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.901 @ 0.170 inch
 NTIAC 90/95 POD = 0.900 @ 0.265 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.979 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.489 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.2900 inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE (Mean) POD - - - MLE (95%) LCL

File Name = D1002AL.XLS
 Data Set Name = D1002AL(CRACK #)

Directed DOE Options

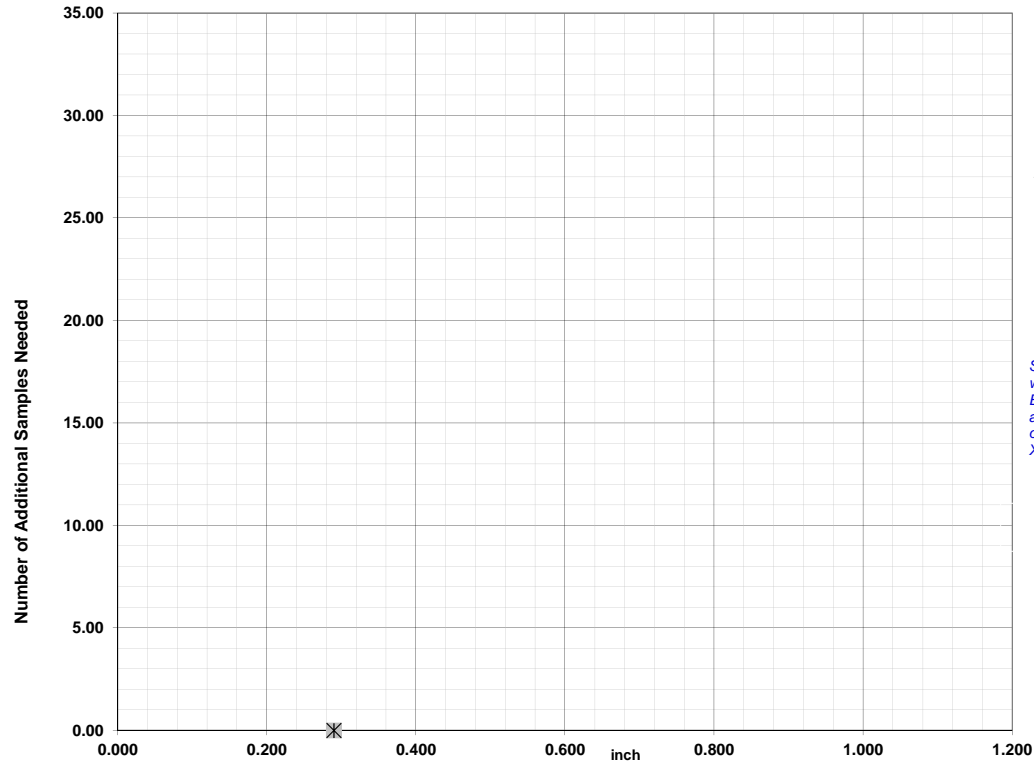


TABLE C

Class Length Additional Samples

XL = 0.979
 Xm = 0.489
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

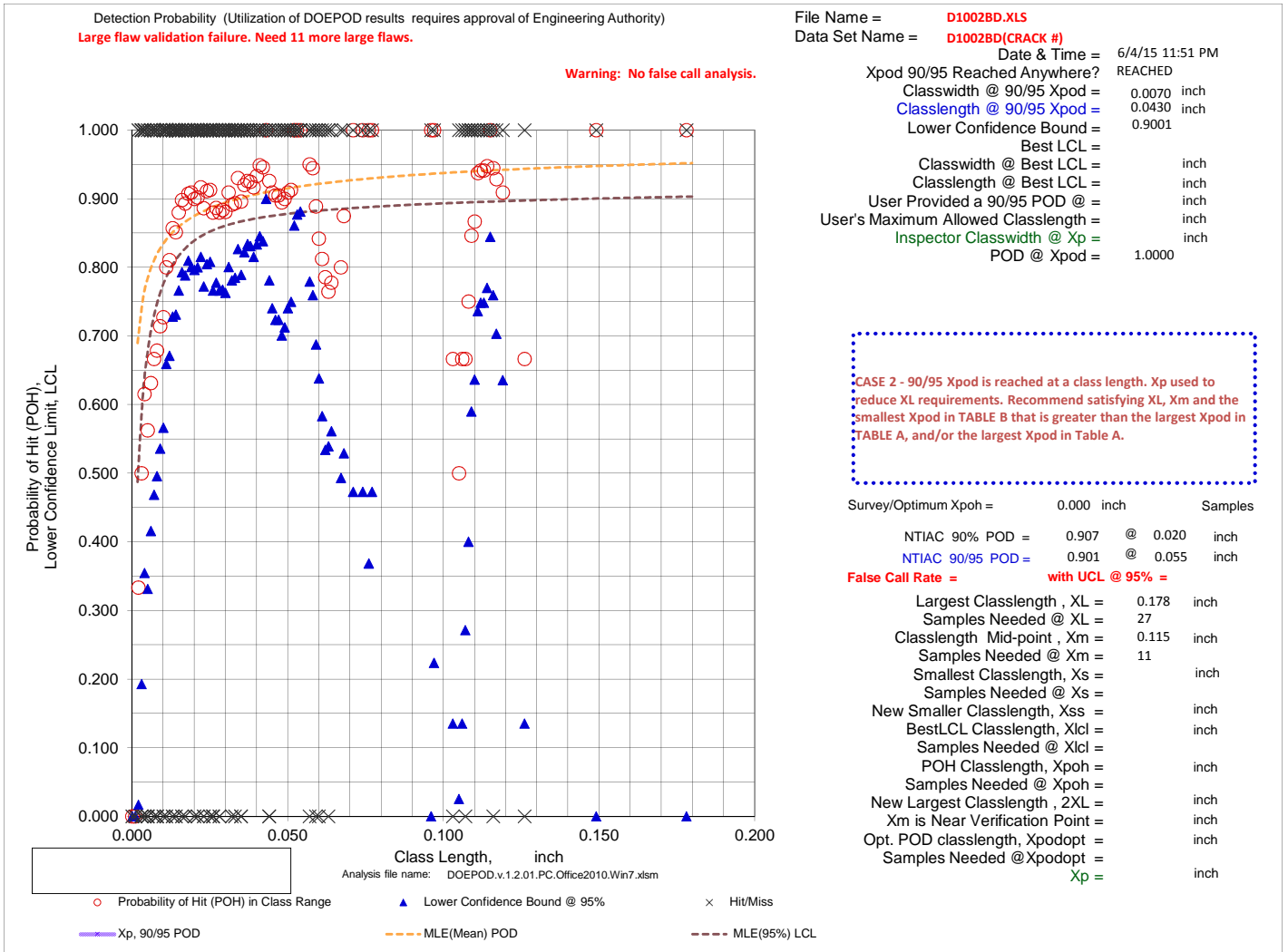
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D1002BD.XLS
 Data Set Name = D1002BD(CRACK #)

Directed DOE Options

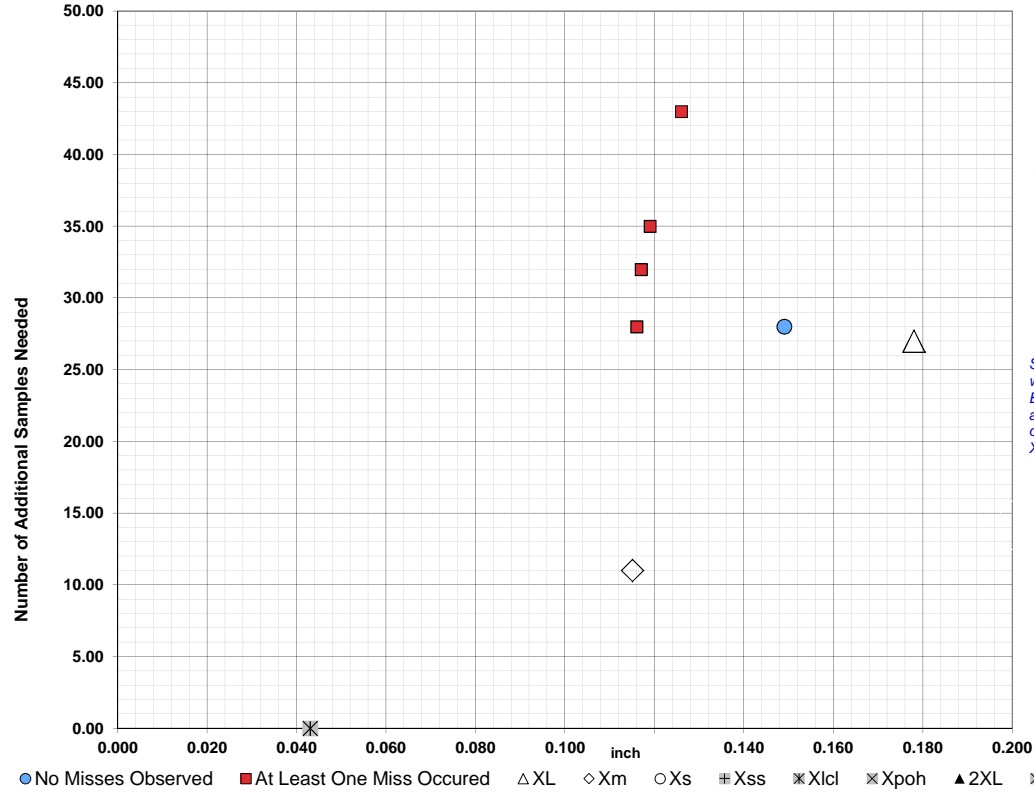


TABLE C

Class Length	Additional Samples
XL = 0.178	27
Xm = 0.115	11
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

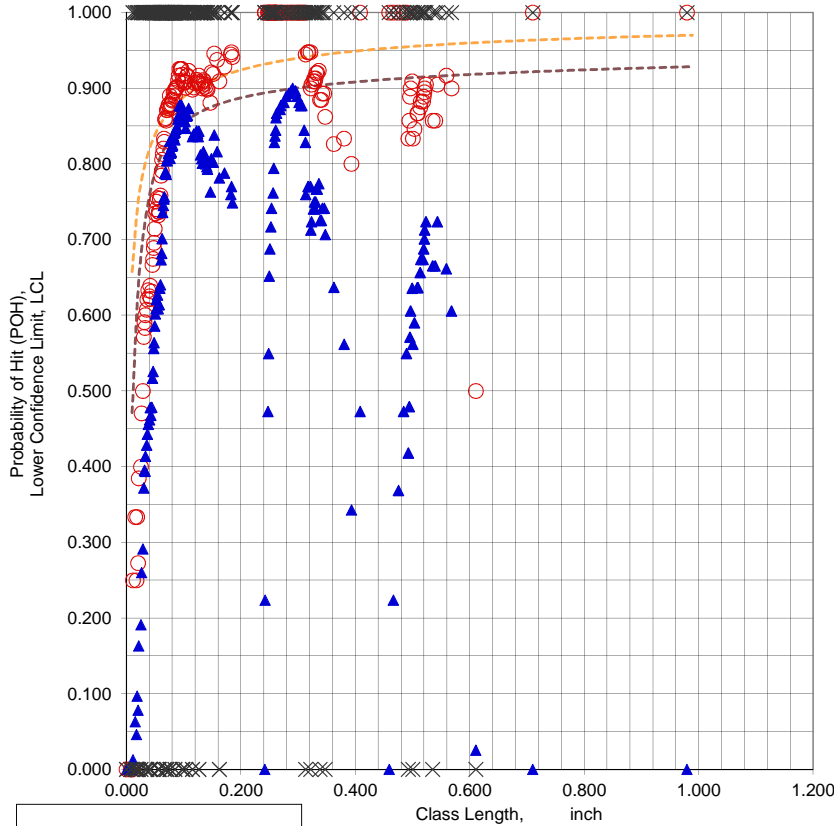
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.1260	43	0.1490	28
0.1190	35		
0.1170	32		
0.1160	28		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Need 13 more large flaws.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **D1002BL.XLS**
 Data Set Name = **D1002BL(CRACK #)**
 Date & Time = 6/4/15 11:52 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0490 inch
 Classlength @ 90/95 Xpod = 0.2900 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Xp used to reduce XL requirements. Recommend satisfying XL, Xm and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in Table A.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.901 @ 0.125 inch
 NTIAC 90/95 POD = 0.900 @ 0.295 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.979 inch
 Samples Needed @ XL = 27
 Classlength Mid-point , Xm = 0.489 inch
 Samples Needed @ Xm = 24
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = D1002BL.XLS
 Data Set Name = D1002BL(CRACK #)

Directed DOE Options

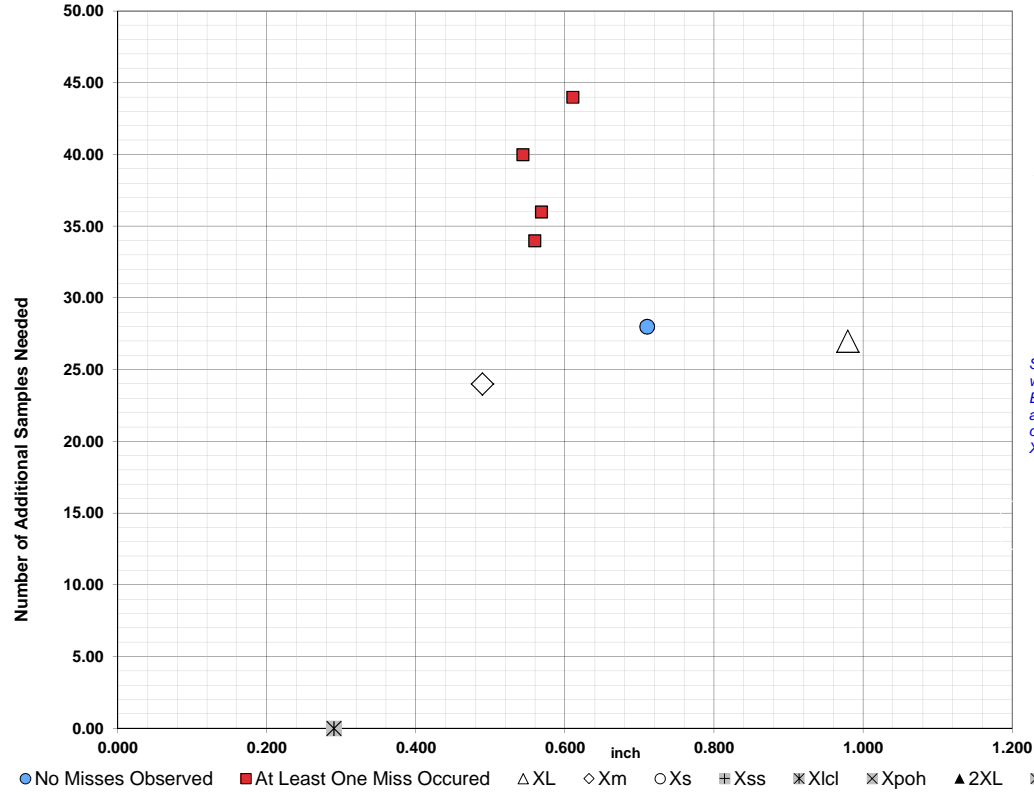


TABLE C

Class Length	Additional Samples
XL =	0.979 27
Xm =	0.489 24
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

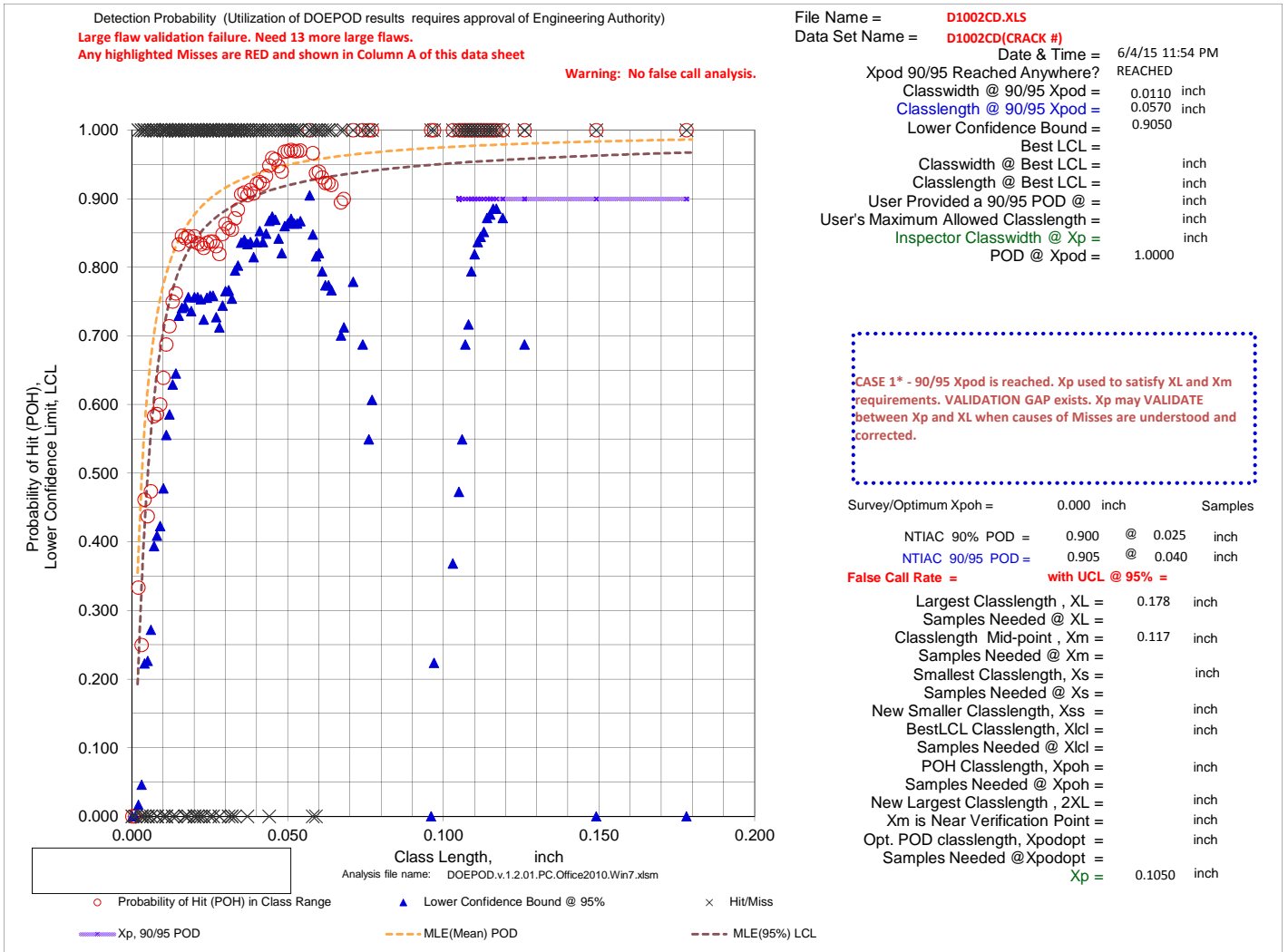
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.6100	44	0.7100	28
0.5680	36		
0.5590	34		
0.5430	40		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D1002CD.XLS
 Data Set Name = D1002CD(CRACK #)

Directed DOE Options

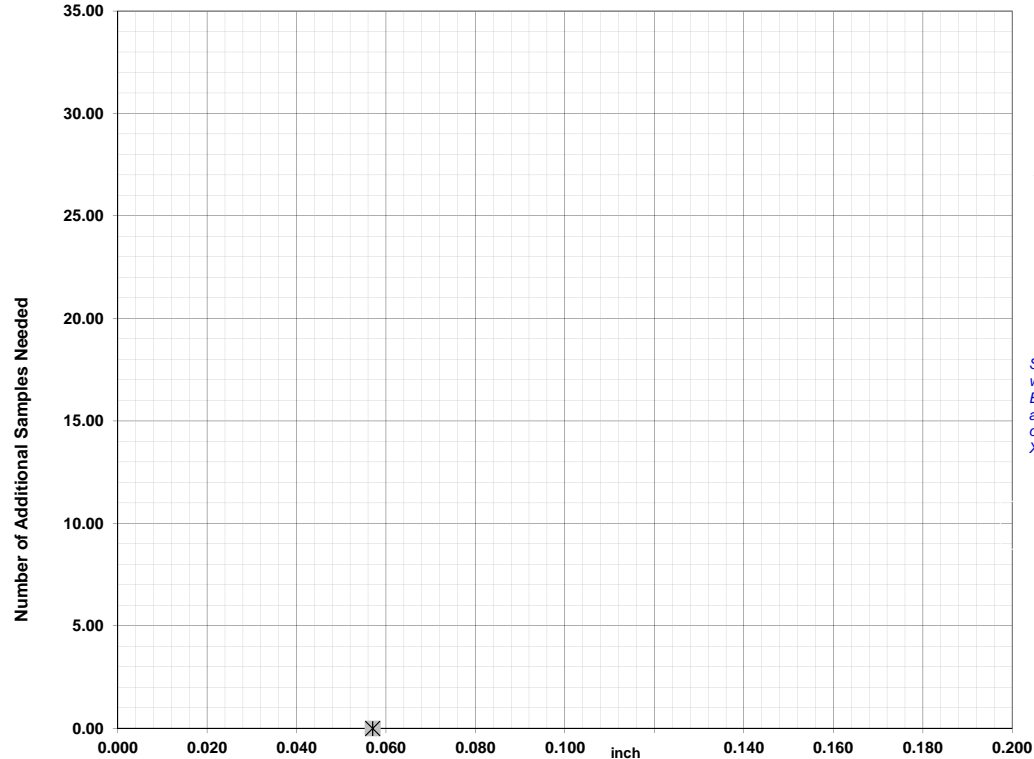


TABLE C

Class Length Additional Samples

XL = 0.178
 Xm = 0.117
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

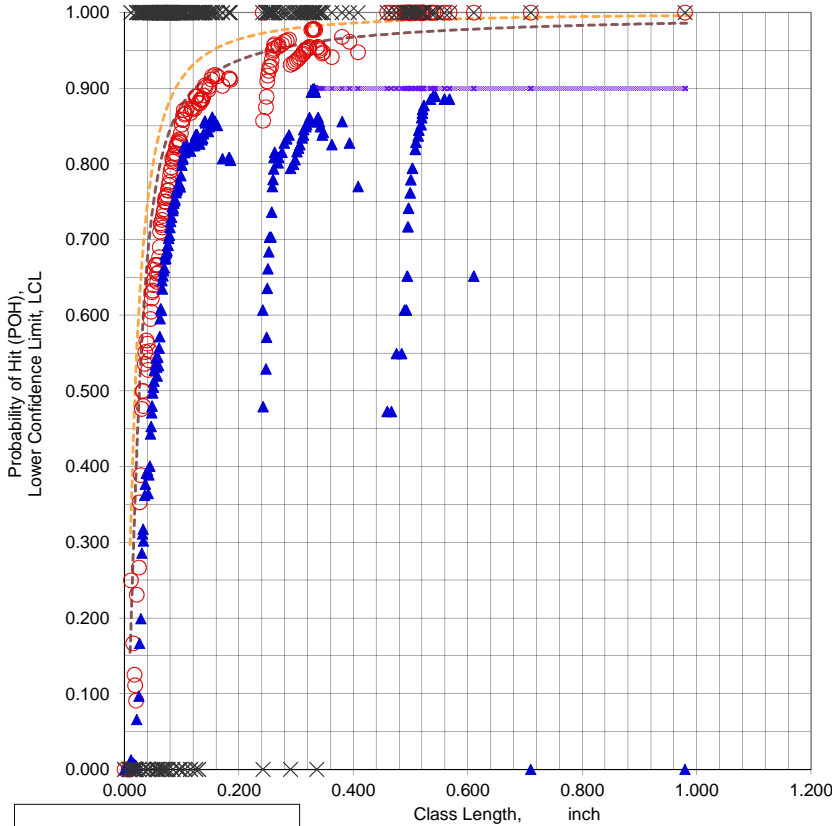
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Extend flaw size range to 0.987.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



File Name = **D1002CL.XLS**
 Data Set Name = **D1002CL(CRACK #)**
 Date & Time = 6/4/15 11:55 PM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0820 inch
 Classlength @ 90/95 Xpod = 0.3290 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 0.9783

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.901 @ 0.090 inch
 NTIAC 90/95 POD = 0.902 @ 0.125 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.979 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.543 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.3290 inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = D1002CL.XLS
 Data Set Name = D1002CL(CRACK #)

Directed DOE Options

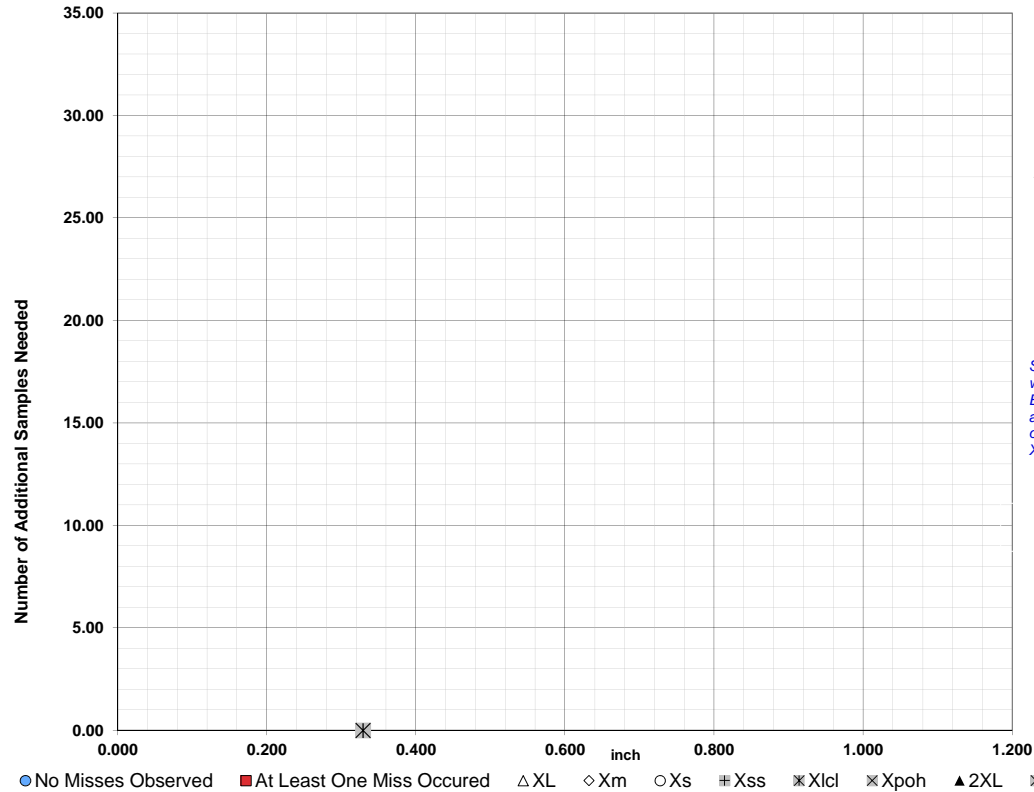


TABLE C

Class Length Additional Samples

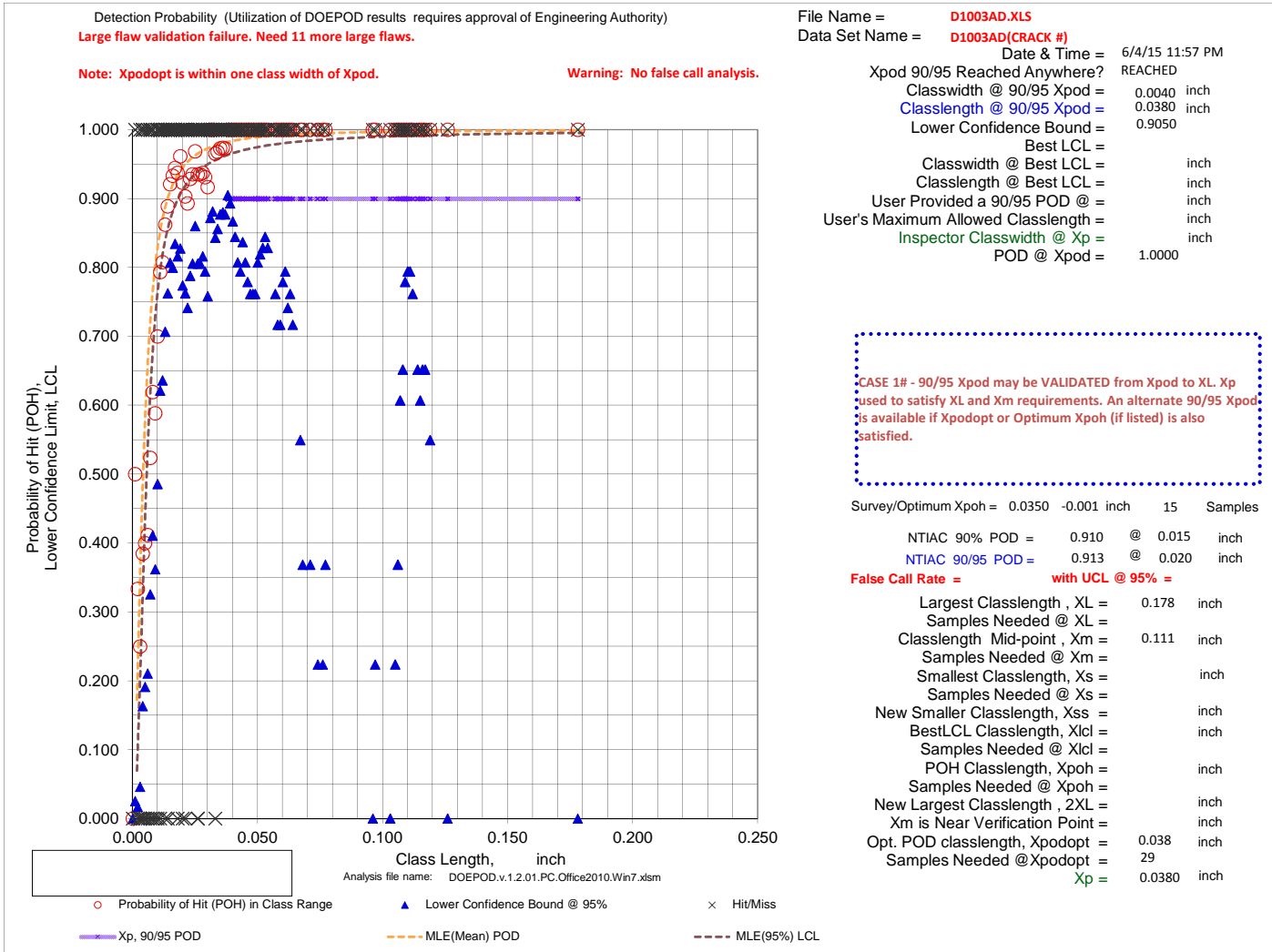
XL = 0.979
 Xm = 0.543
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D1003AD.XLS
 Data Set Name = D1003AD(CRACK #)

Directed DOE Options

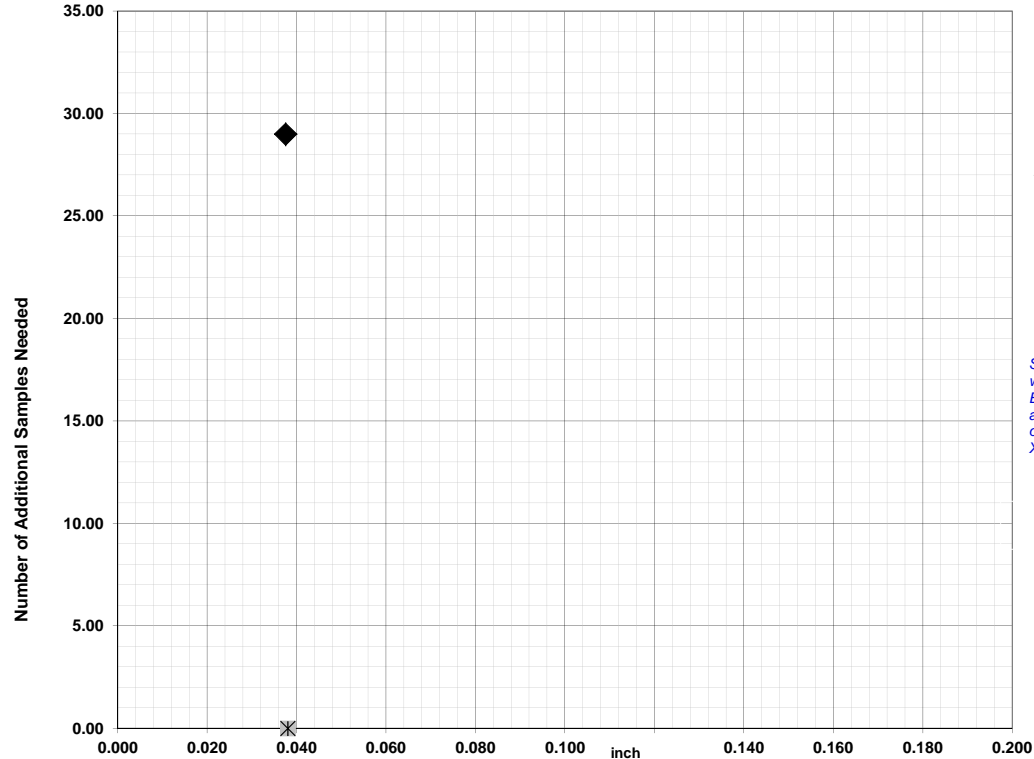


TABLE C

Class Length	Additional Samples
XL =	0.178
Xm =	0.111
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.038 29

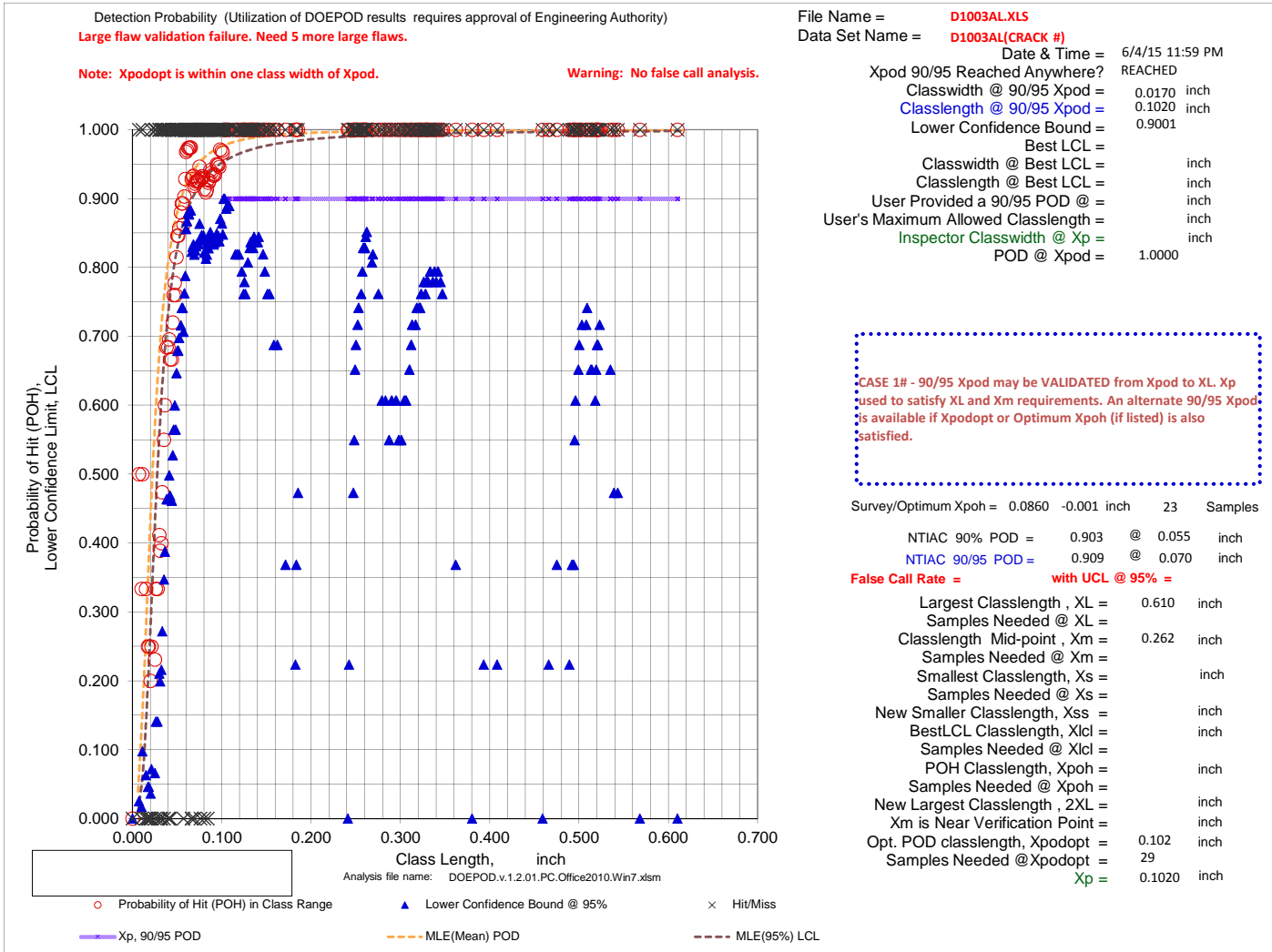
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D1003AL.XLS
 Data Set Name = D1003AL(CRACK #)

Directed DOE Options

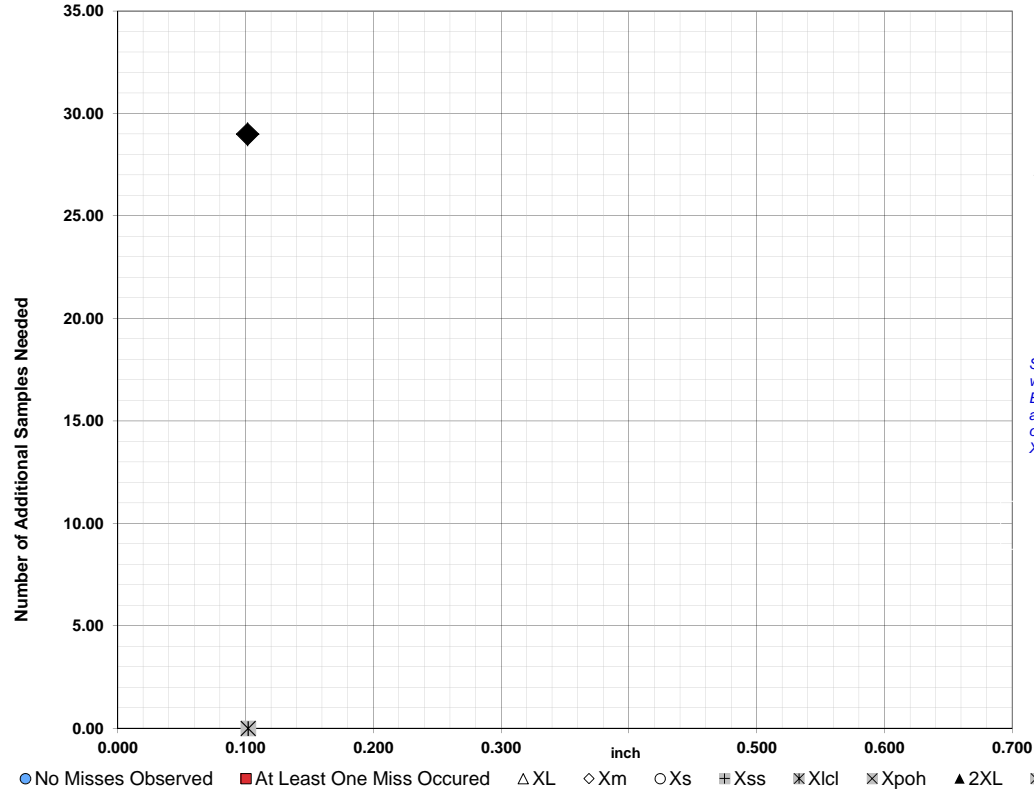


TABLE C

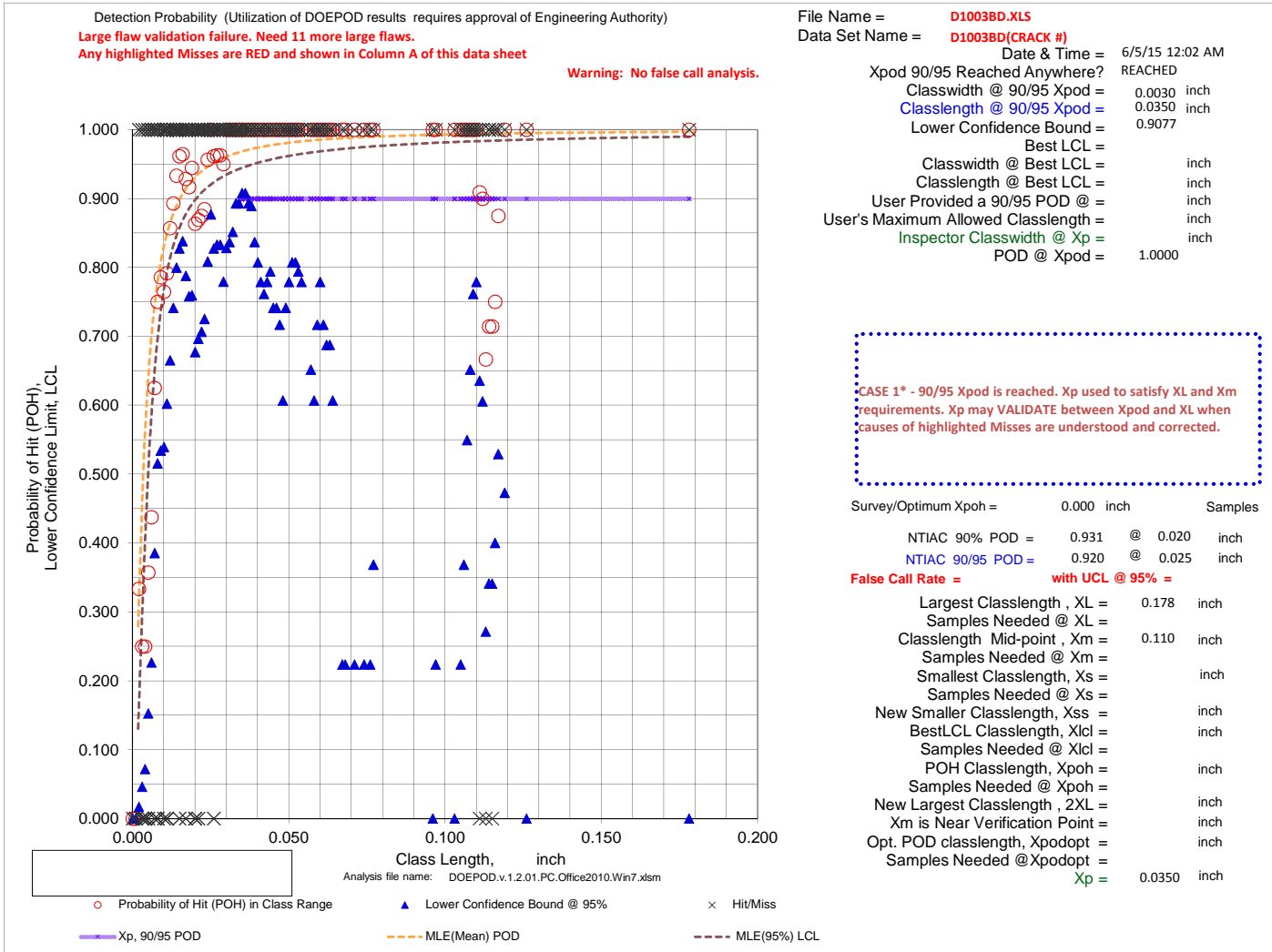
Class Length	Additional Samples
XL =	0.610
Xm =	0.262
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.102 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D1003BD.XLS
 Data Set Name = D1003BD(CRACK #)

Directed DOE Options



TABLE C

Class Length Additional Samples

XL = 0.178
 Xm = 0.110
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

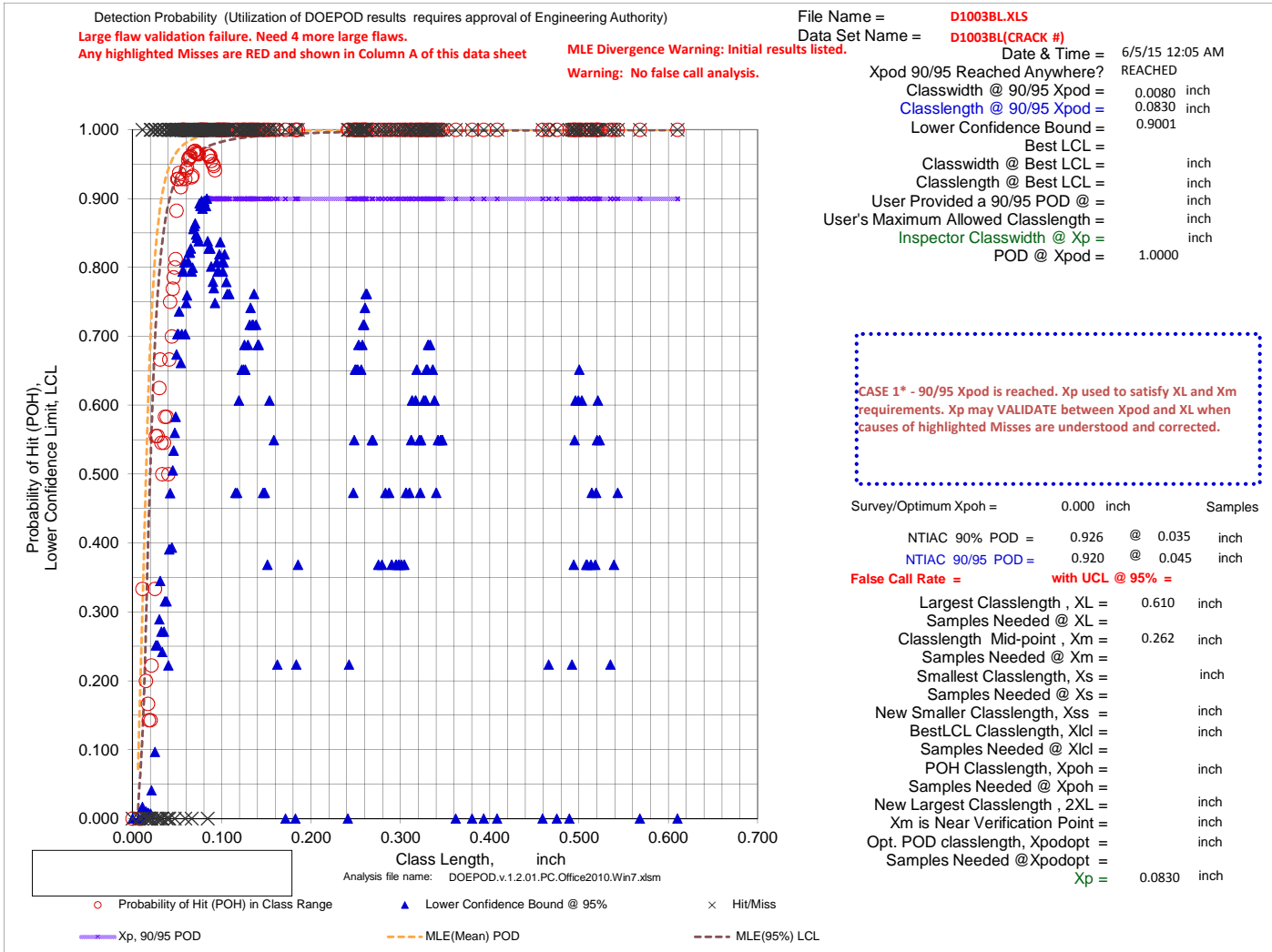
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D1003BL.XLS
 Data Set Name = D1003BL(CRACK #)

Directed DOE Options

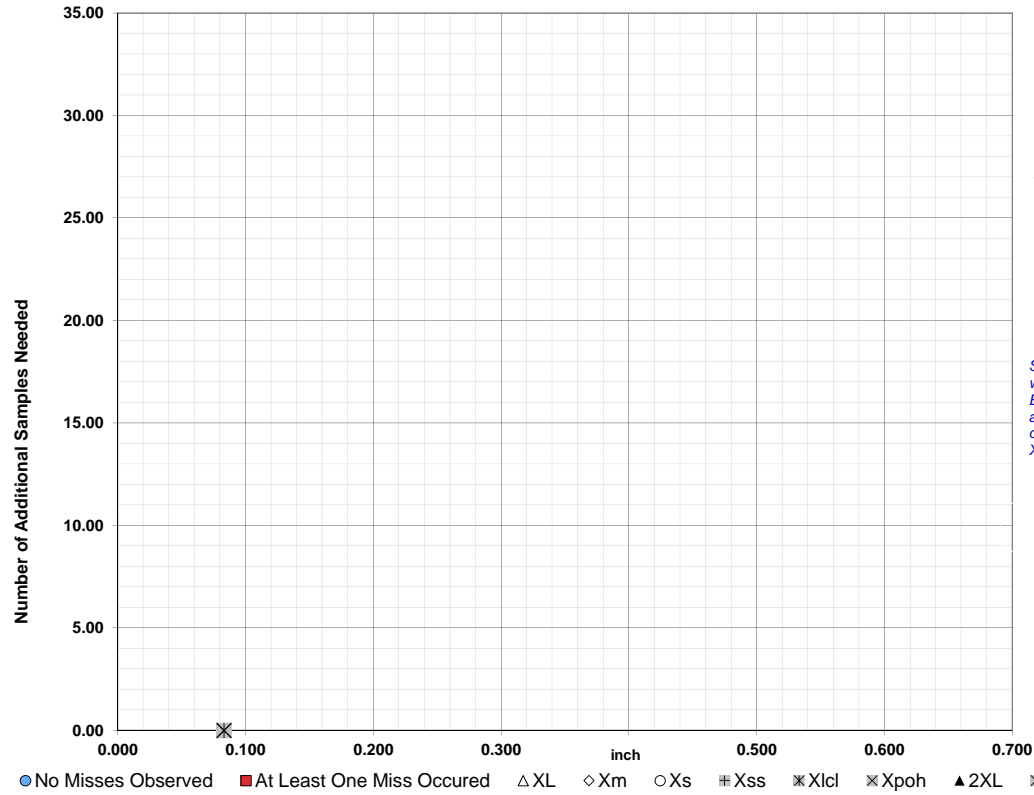


TABLE C

Class Length Additional Samples

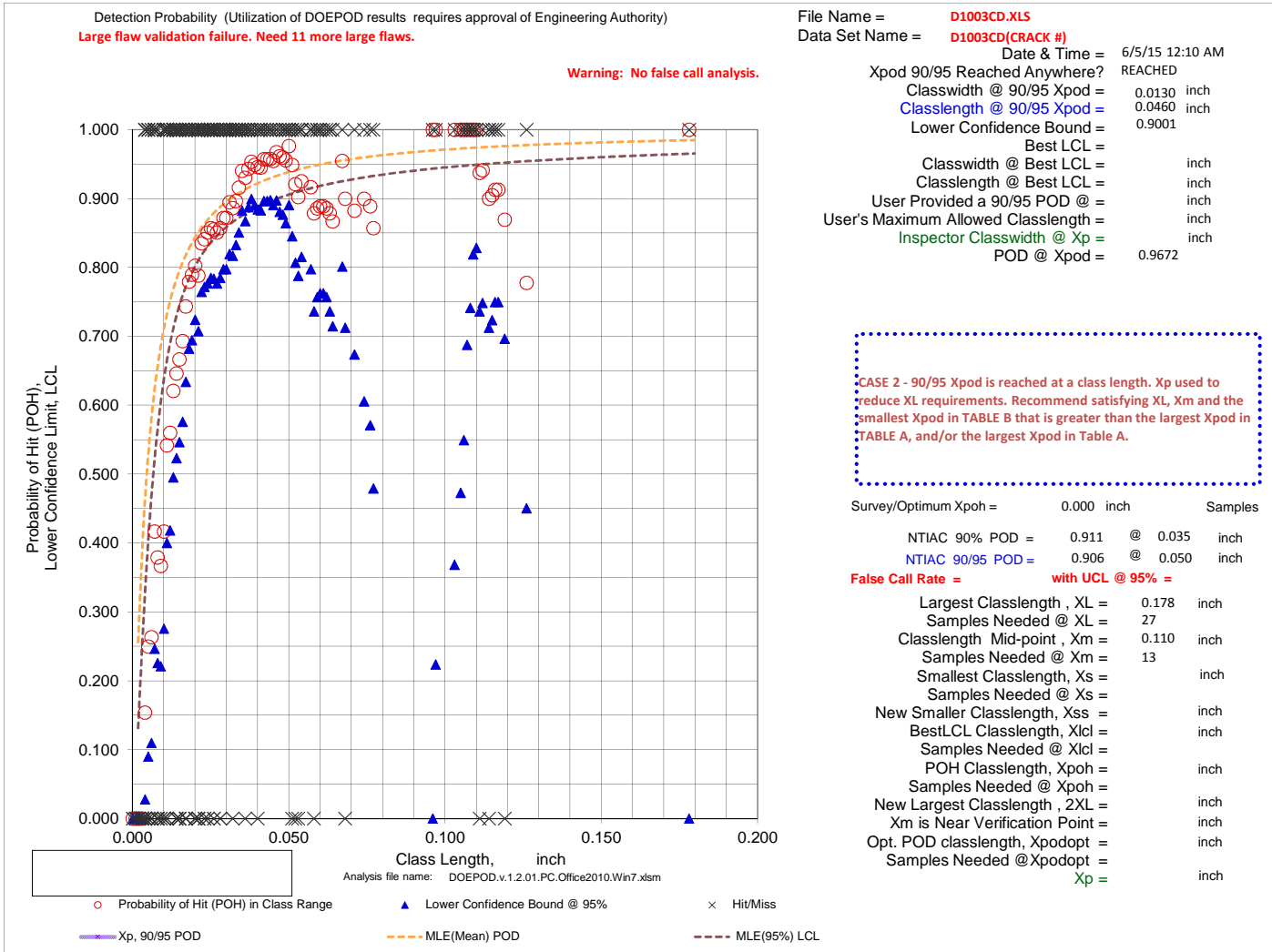
XL = 0.610
 Xm = 0.262
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D1003CD.XLS
 Data Set Name = D1003CD(CRACK #)

Directed DOE Options

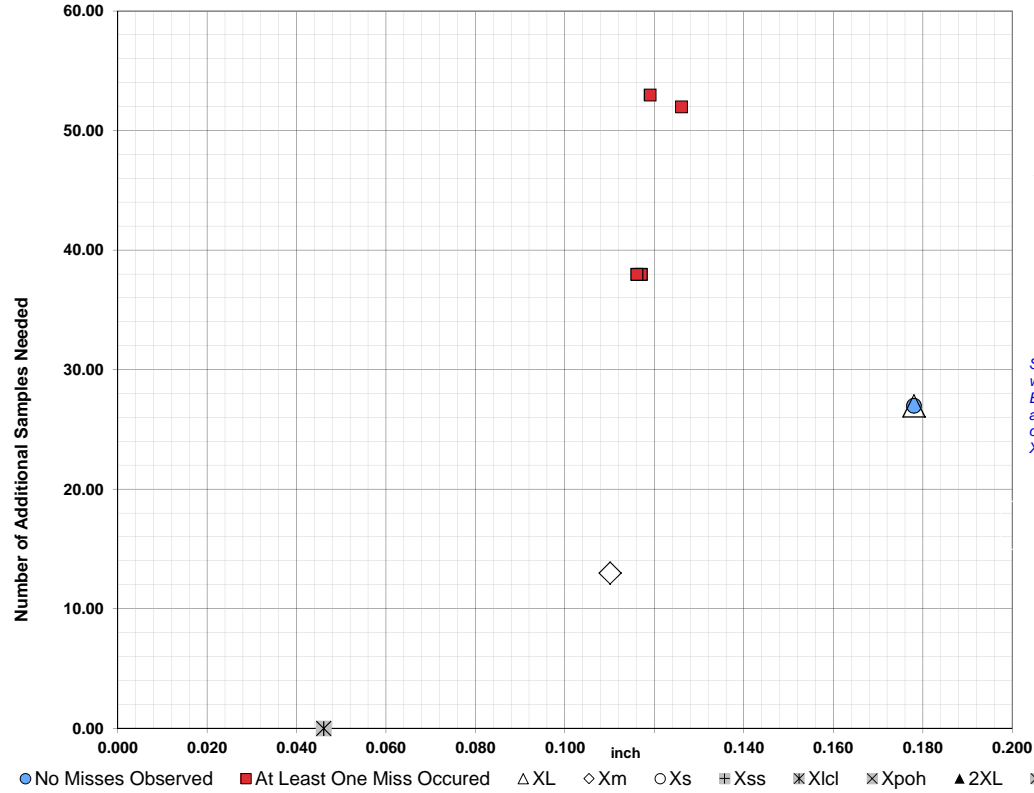


TABLE C

Class Length	Additional Samples
XL = 0.178	27
Xm = 0.110	13
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

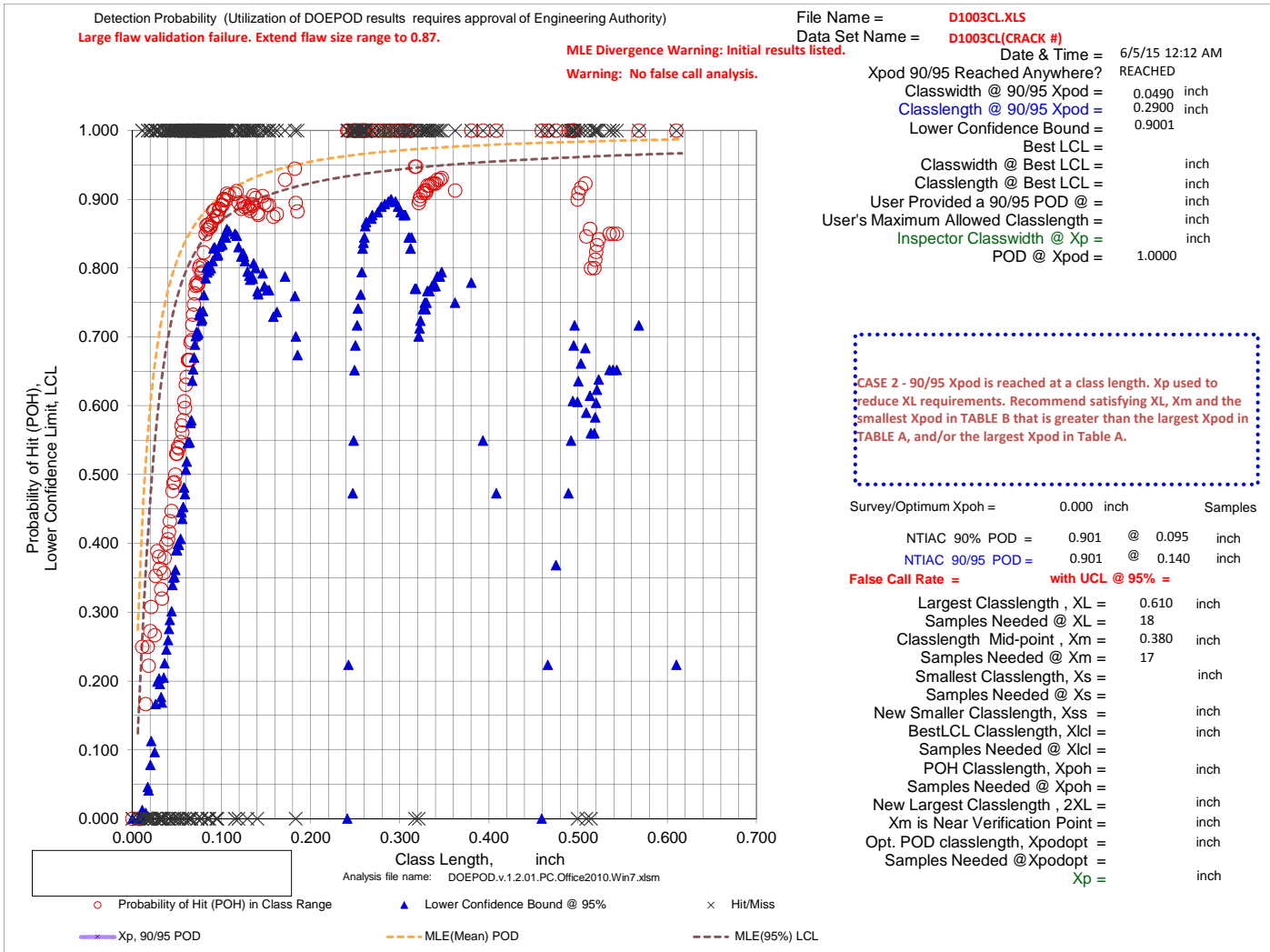
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.1260	52	0.1780	27
0.1190	53		
0.1170	38		
0.1160	38		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D1003CL.XLS
 Data Set Name = D1003CL(CRACK #)

Directed DOE Options

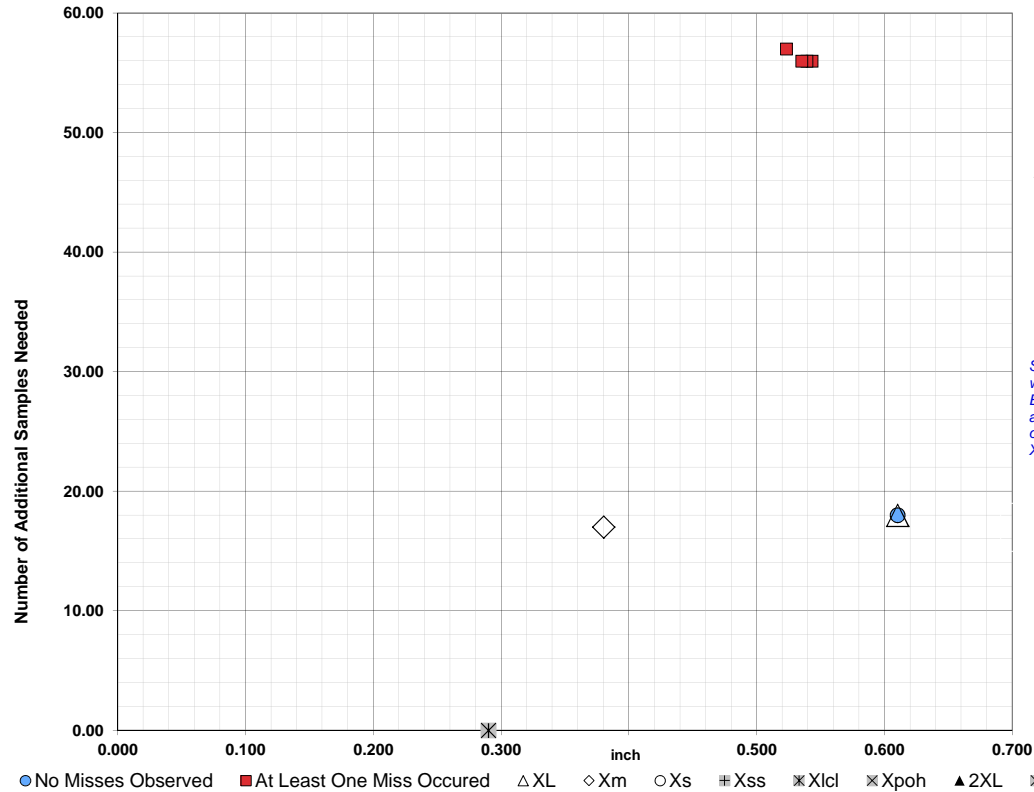


TABLE C

Class Length Additional Samples

XL = 0.610 18
 Xm = 0.380 17

Xs =

Xss =

Xlcl =

Xpoh =

2XL =

**Alternate Xm =

Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.5430	56	0.6100	18
0.5390	56		
0.5350	56		
0.5230	57		

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

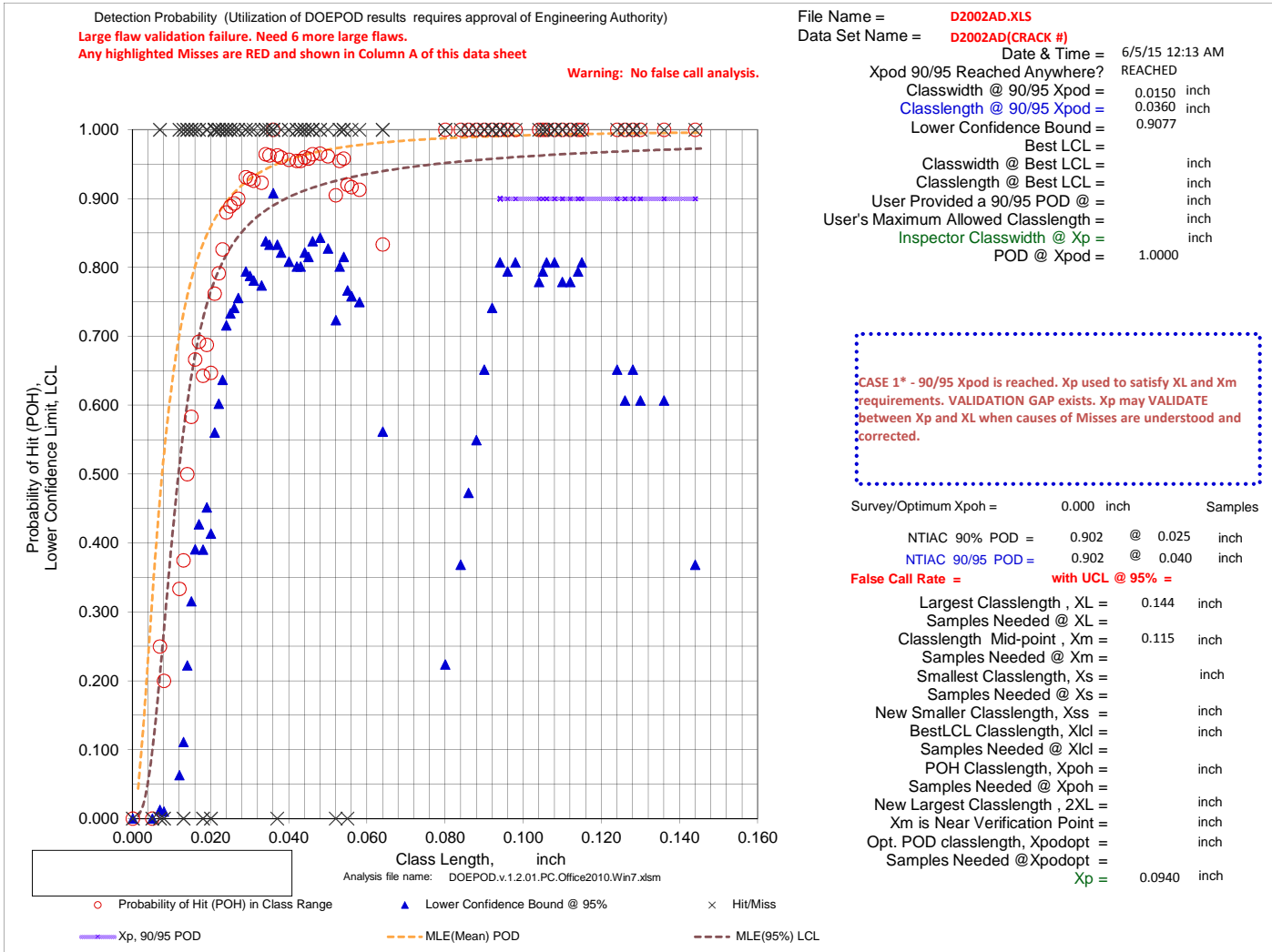
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D2002AD.XLS
 Data Set Name = D2002AD(CRACK #)

Directed DOE Options

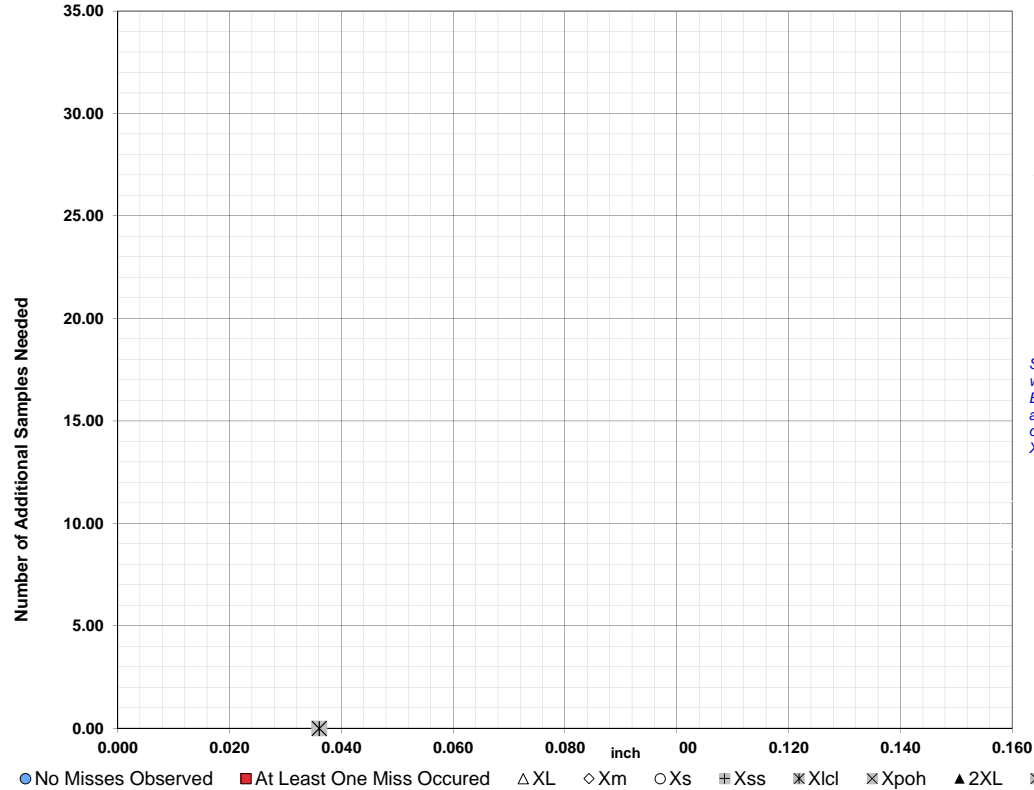


TABLE C

Class Length Additional Samples

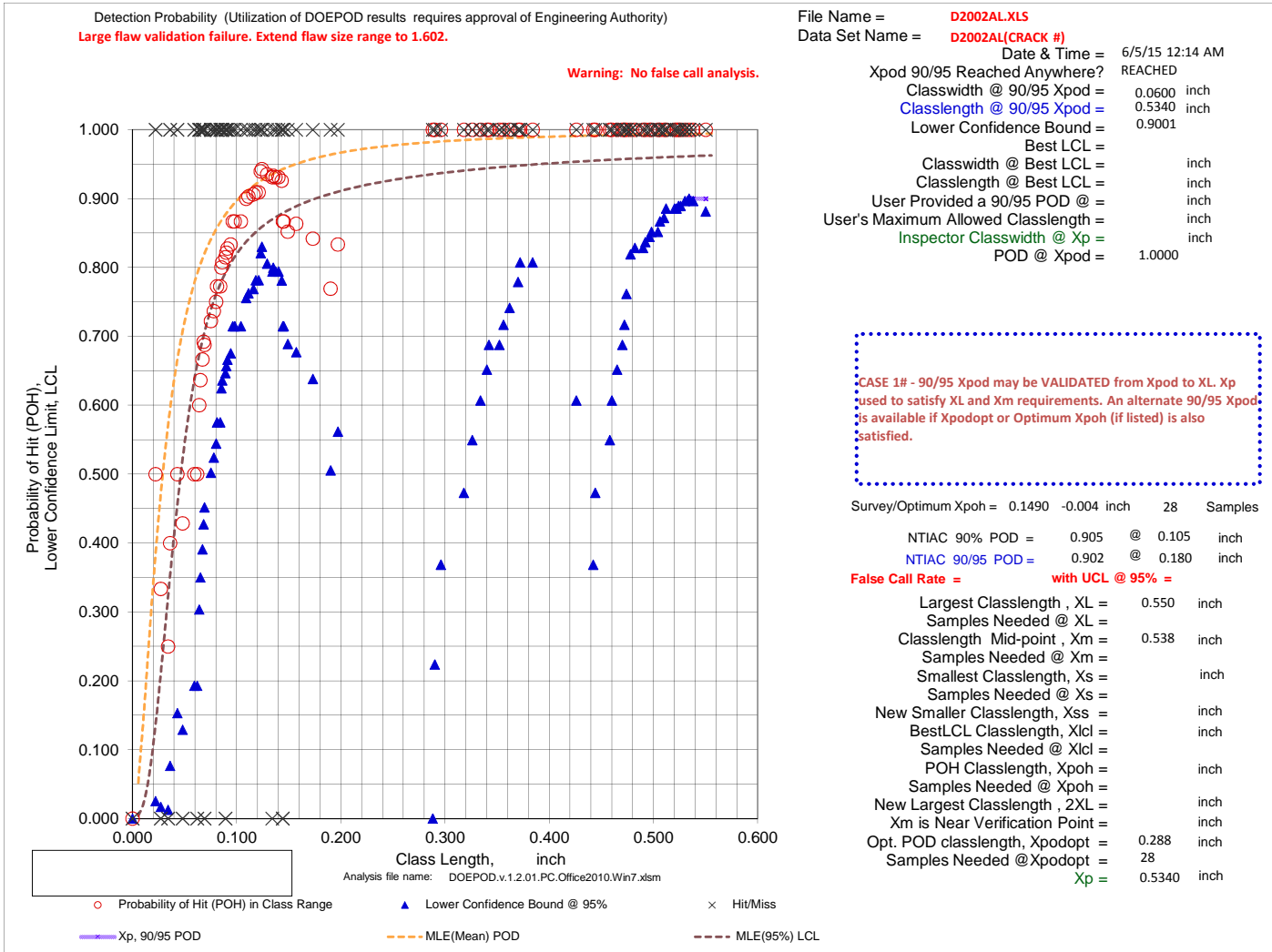
XL = 0.144
 Xm = 0.115
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D2002AL.XLS
 Data Set Name = D2002AL(CRACK #)

Directed DOE Options

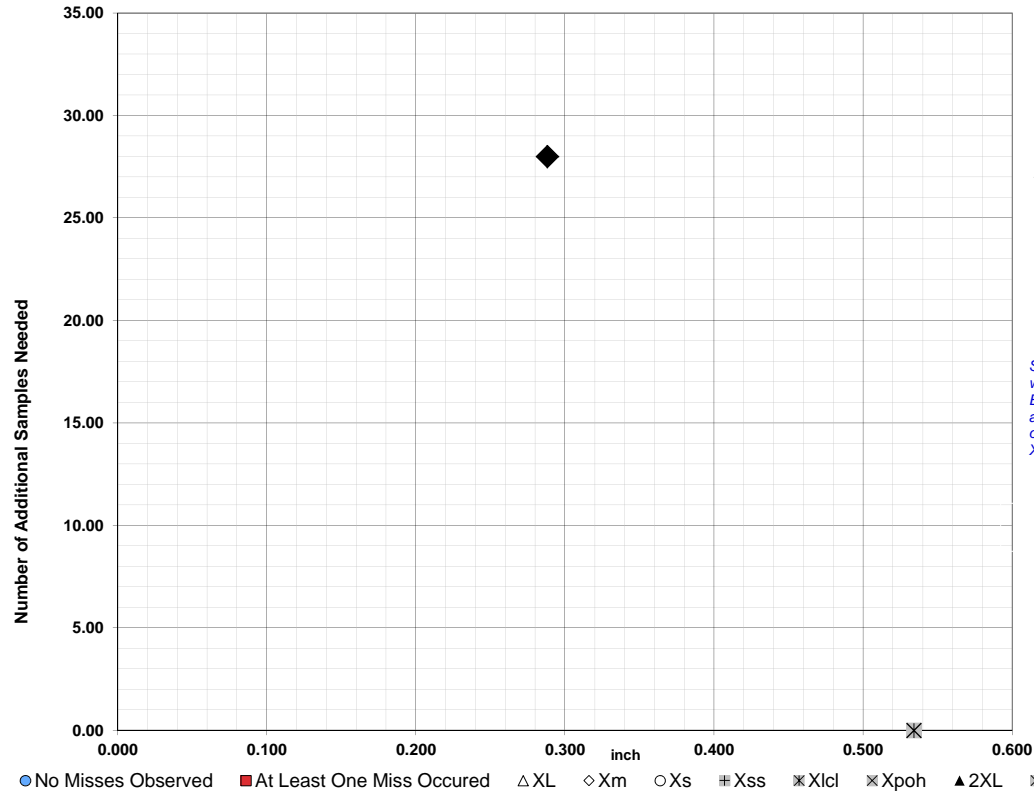


TABLE C

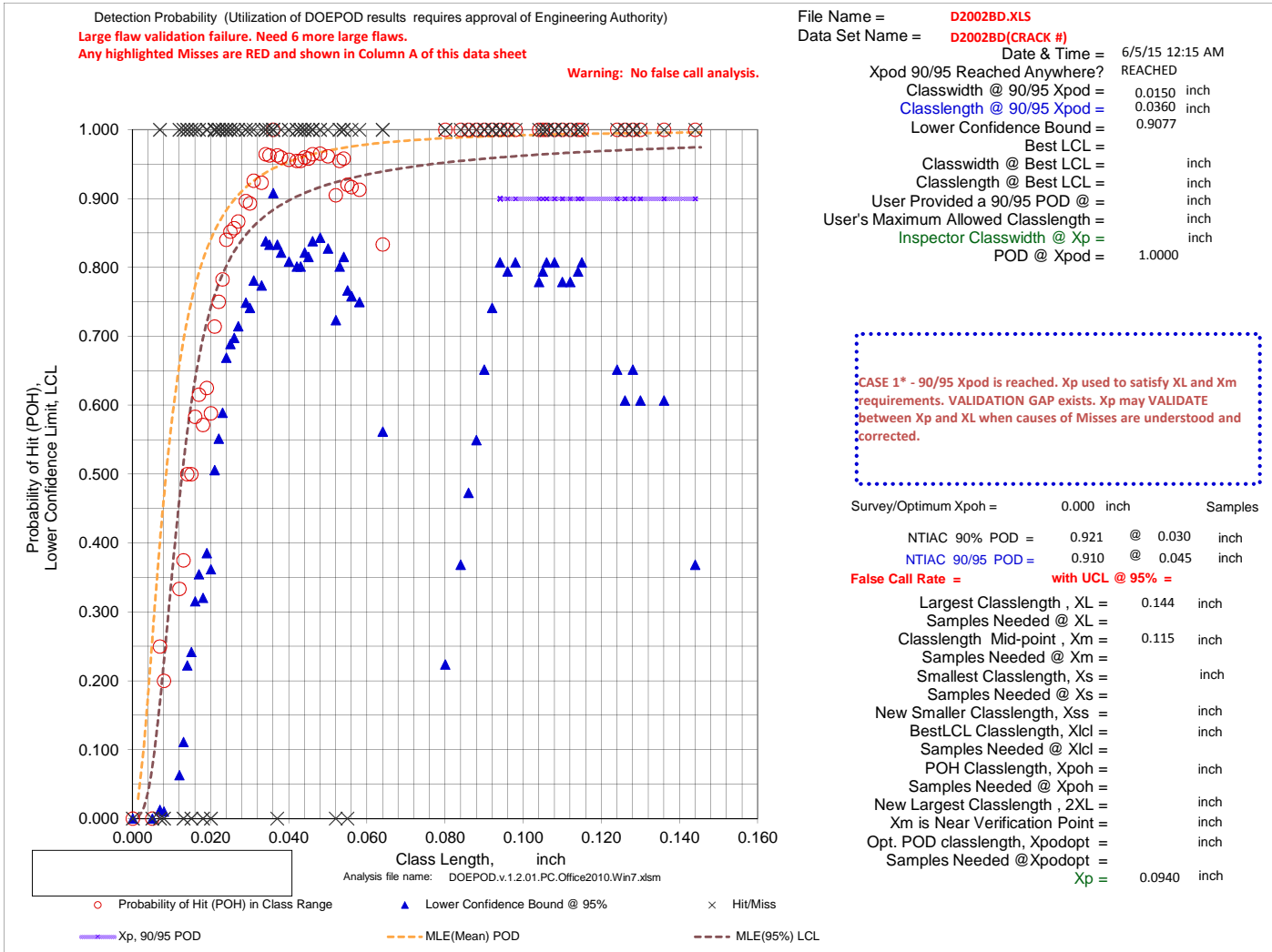
Class Length	Additional Samples
XL =	0.550
Xm =	0.538
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.288 28

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D2002BD.XLS
 Data Set Name = D2002BD(CRACK #)

Directed DOE Options

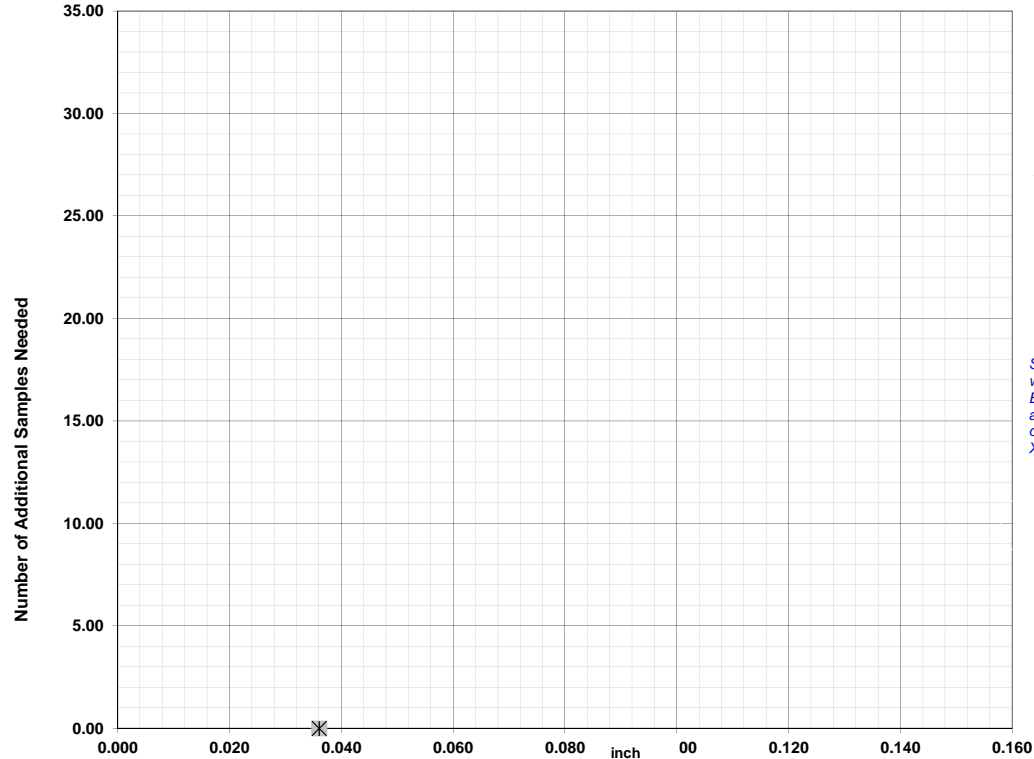


TABLE C

Class Length Additional Samples

XL = 0.144
 Xm = 0.115
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

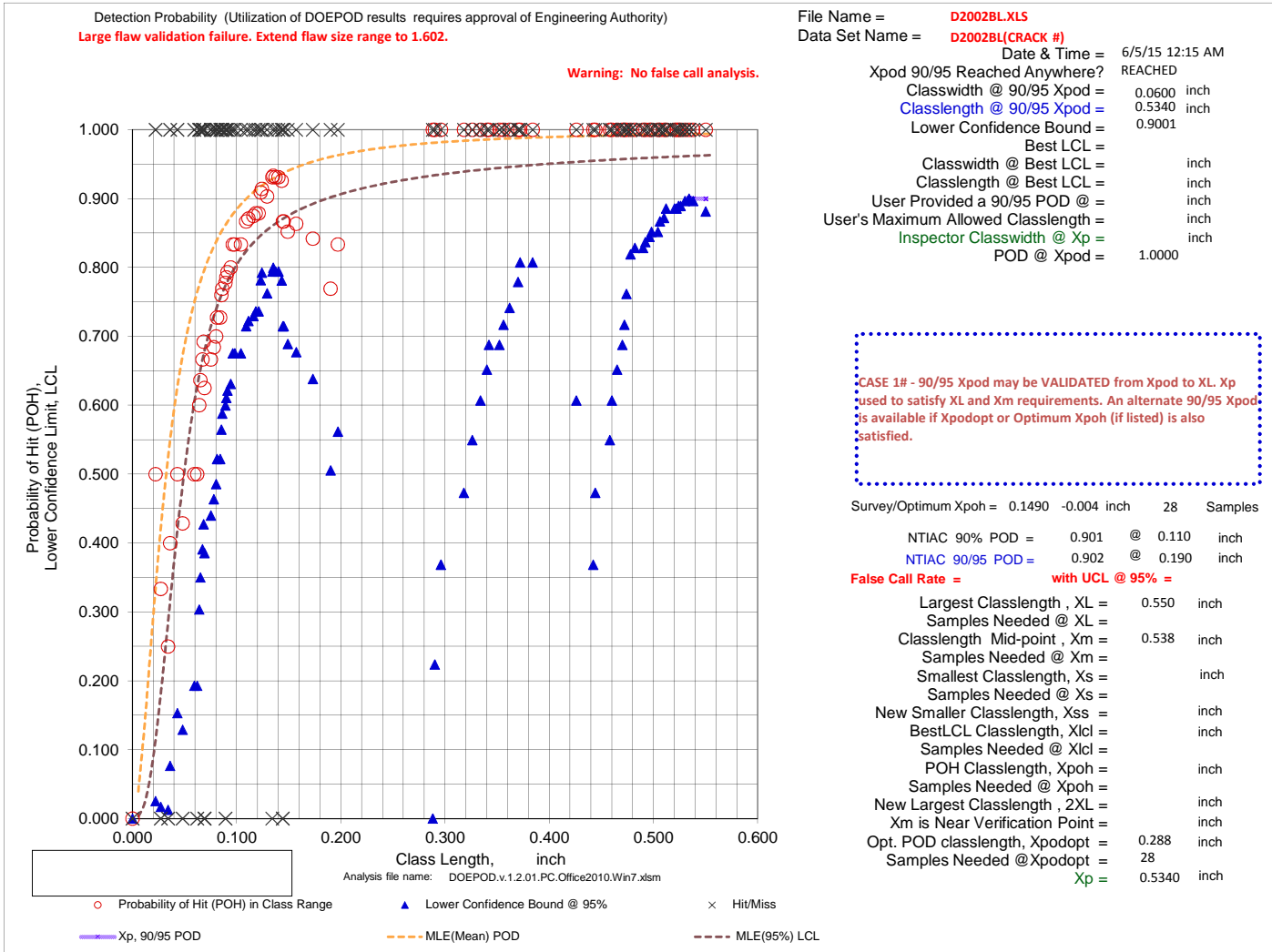
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D2002BL.XLS
 Data Set Name = D2002BL(CRACK #)

Directed DOE Options

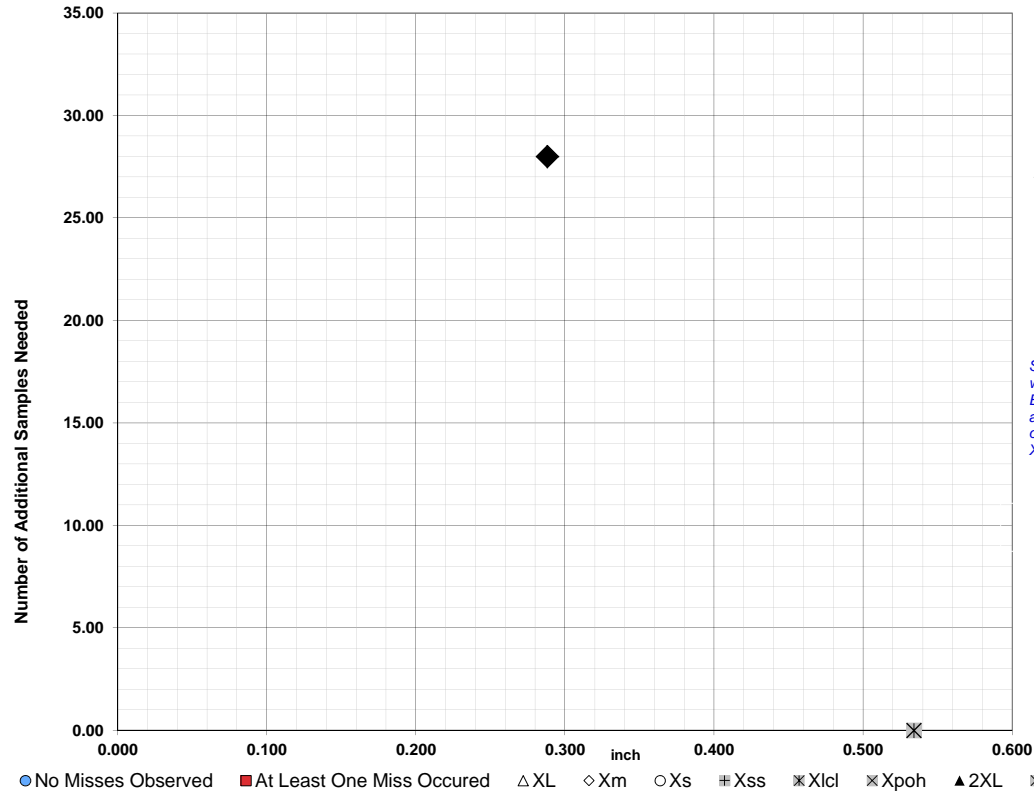


TABLE C

Class Length	Additional Samples
XL =	0.550
Xm =	0.538
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.288 28

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

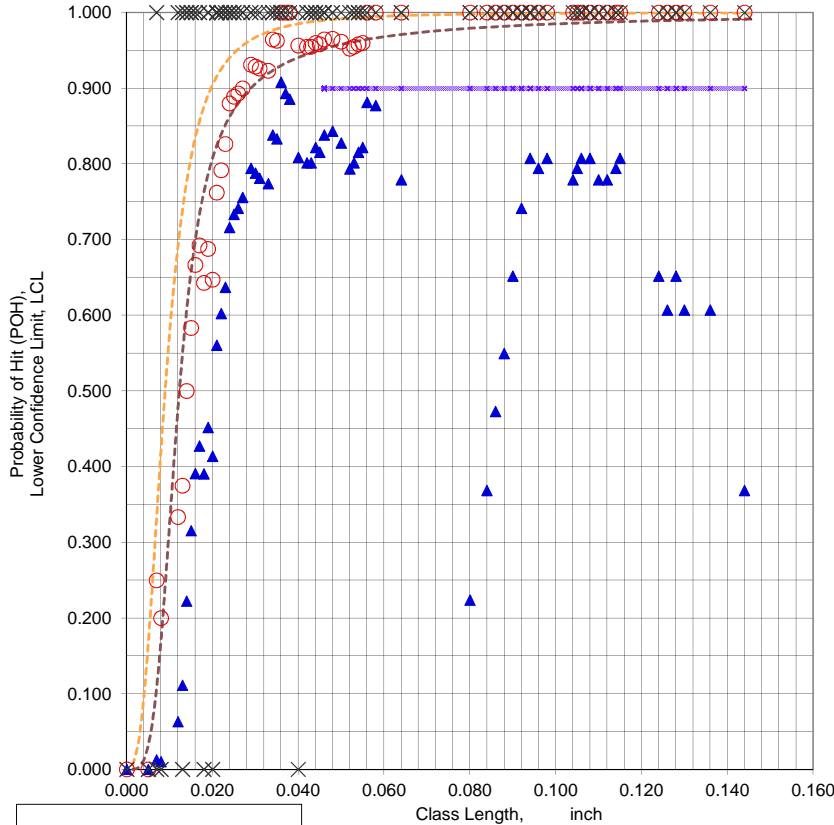
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 6 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **D2002CD.XLS**
 Data Set Name = **D2002CD(CRACK #)**
 Date & Time = 6/5/15 12:16 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0150 inch
 Classlength @ 90/95 Xpod = 0.0360 inch
 Lower Confidence Bound = 0.9077
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.904 @ 0.020 inch
 NTIAC 90/95 POD = 0.906 @ 0.030 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.144 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.115 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.0460 inch

File Name = D2002CD.XLS
 Data Set Name = D2002CD(CRACK #)

Directed DOE Options

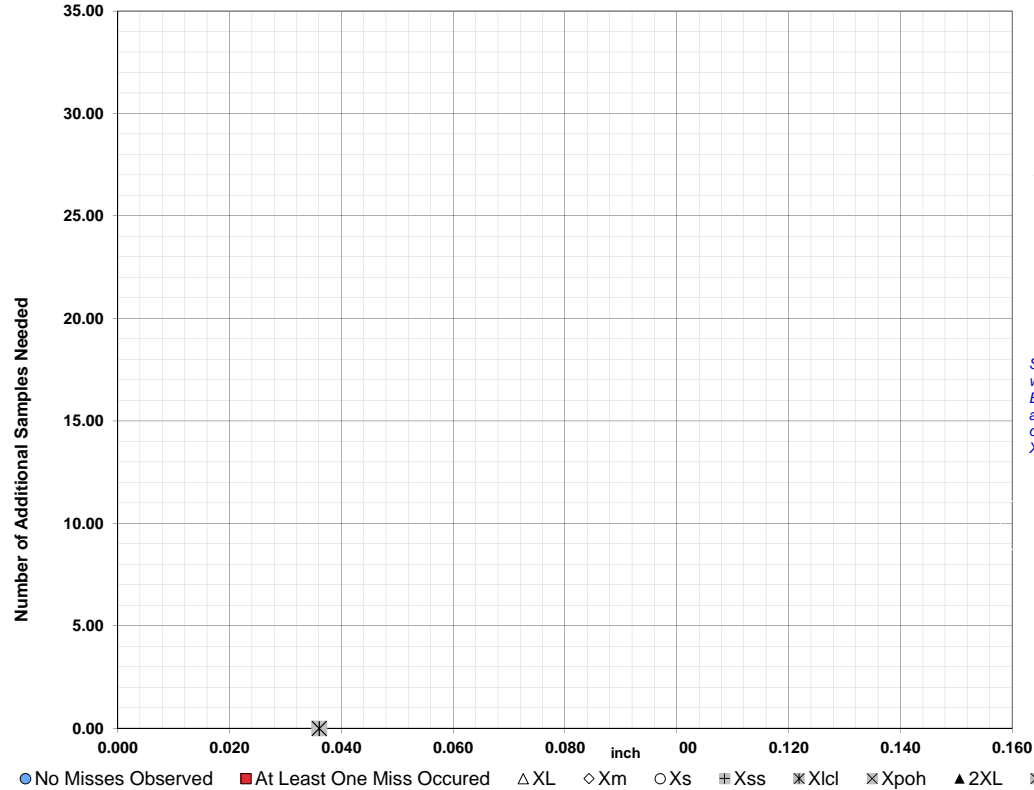


TABLE C

Class Length Additional Samples

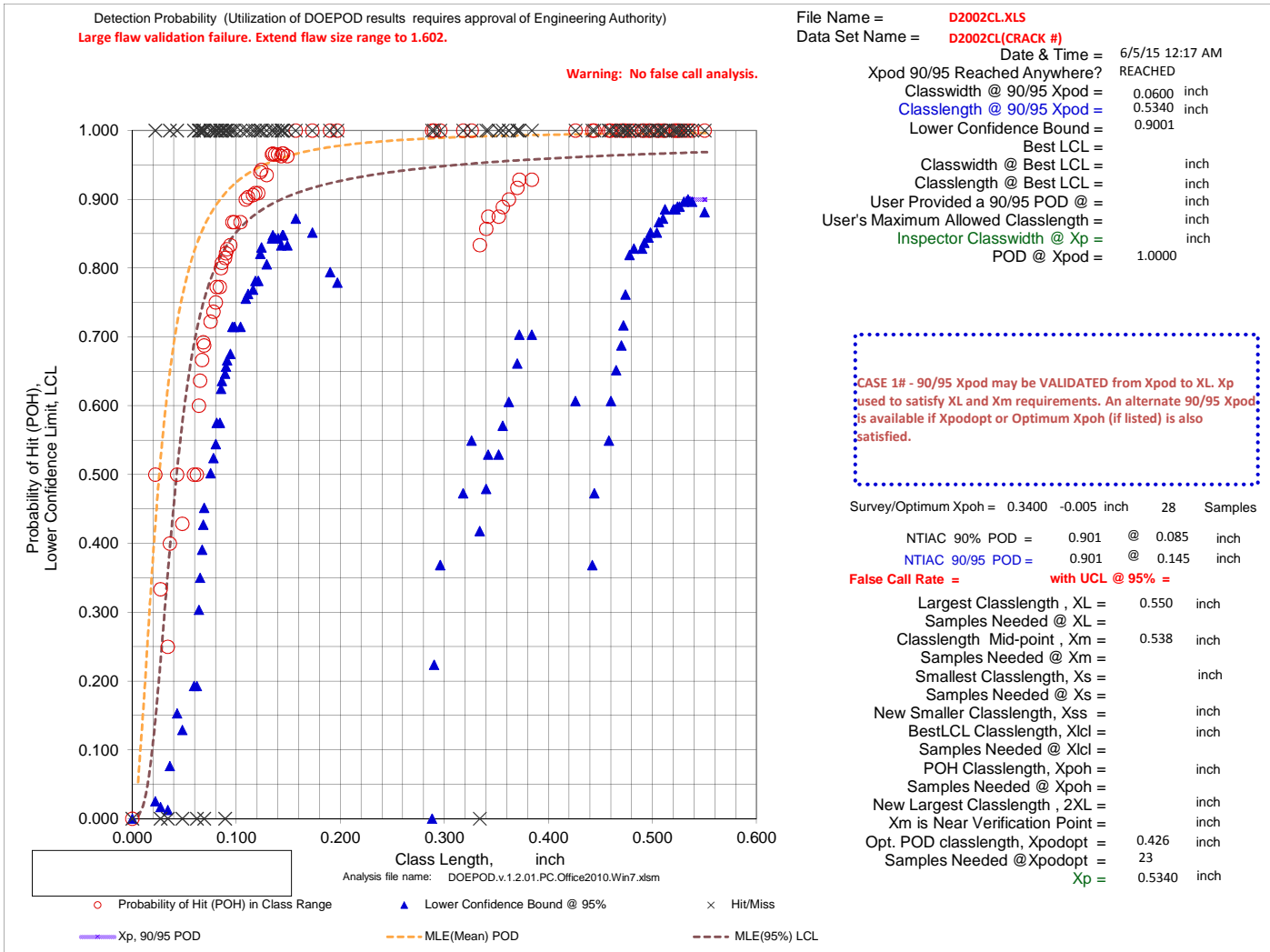
XL = 0.144
 Xm = 0.115
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D2002CL.XLS
 Data Set Name = D2002CL(CRACK #)

Directed DOE Options

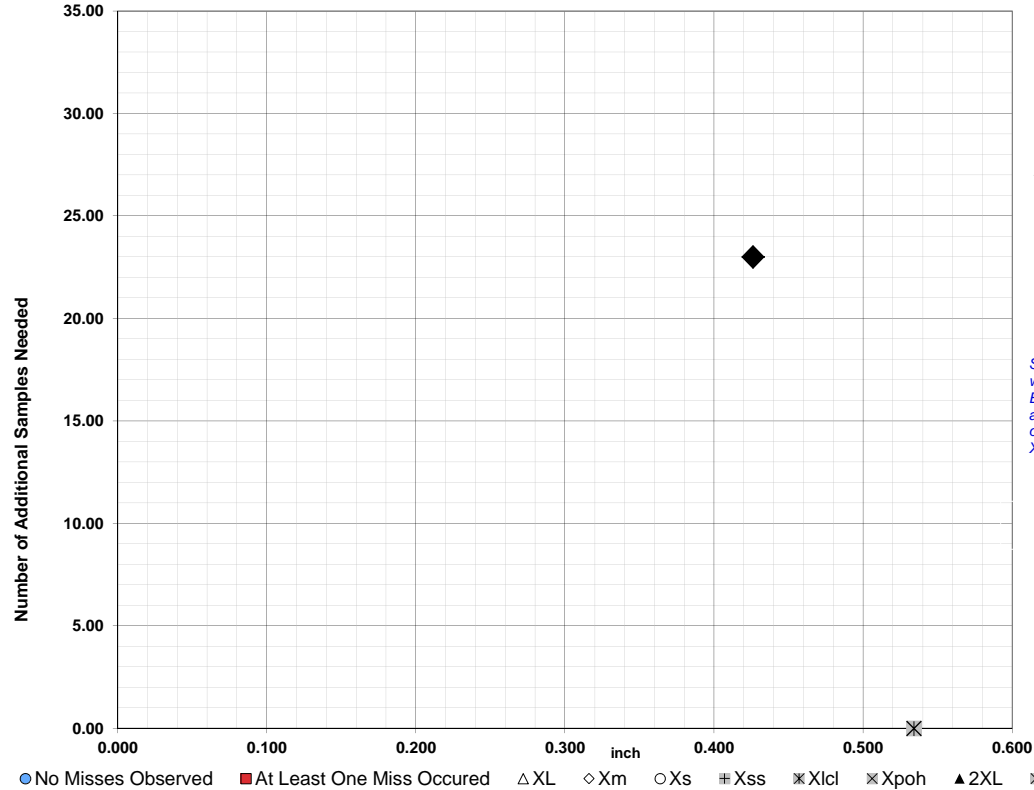


TABLE C

Class Length	Additional Samples
XL =	0.550
Xm =	0.538
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.426 23

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

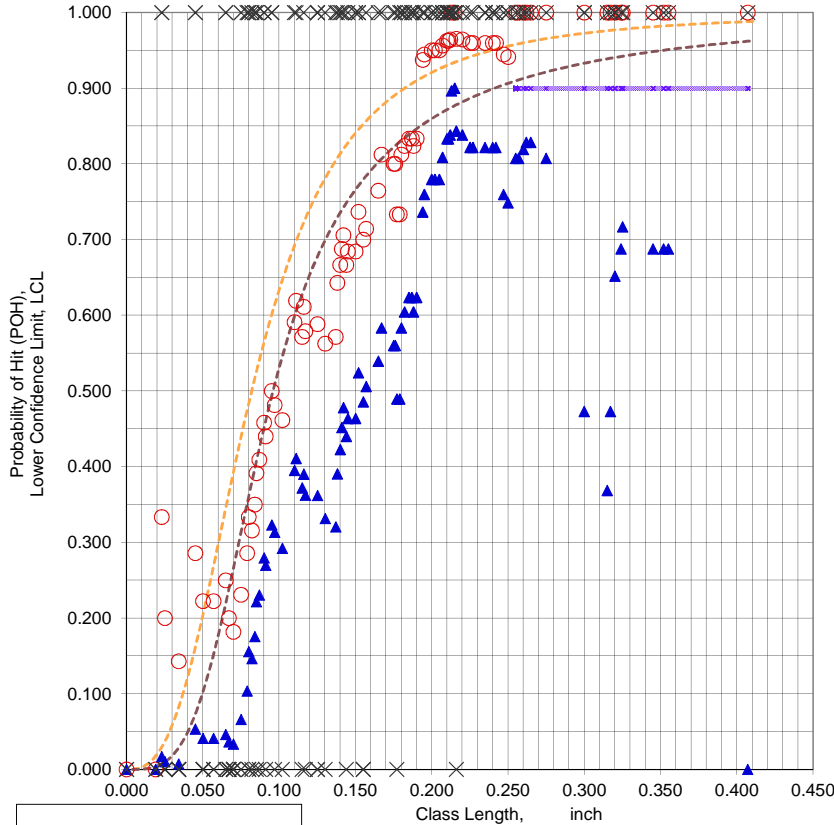
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Extend flaw size range to 0.645.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **D3001AL.XLS**
 Data Set Name = **D3001AL(CRK #)**
 Date & Time = 6/5/15 12:18 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0350 inch
 Classlength @ 90/95 Xpod = 0.2150 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.904 @ 0.185 inch
 NTIAC 90/95 POD = 0.903 @ 0.245 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.407 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.265 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.2550 inch

File Name = D3001AL.XLS
 Data Set Name = D3001AL(CRK #)

Directed DOE Options

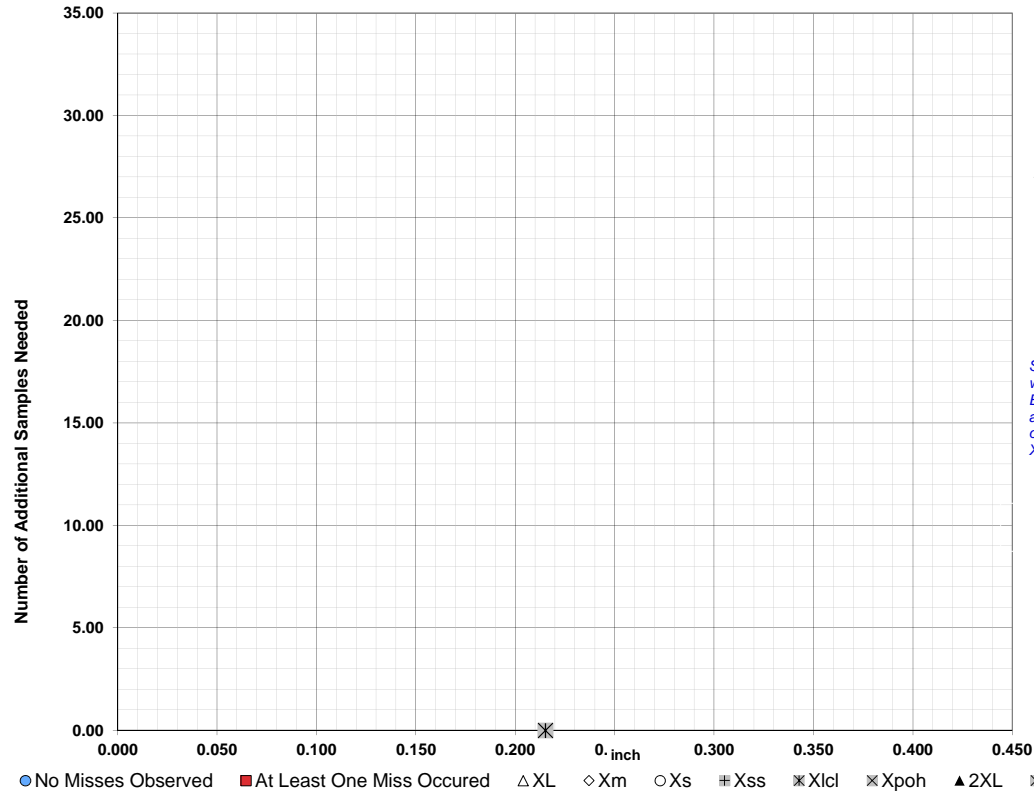


TABLE C

Class Length Additional Samples

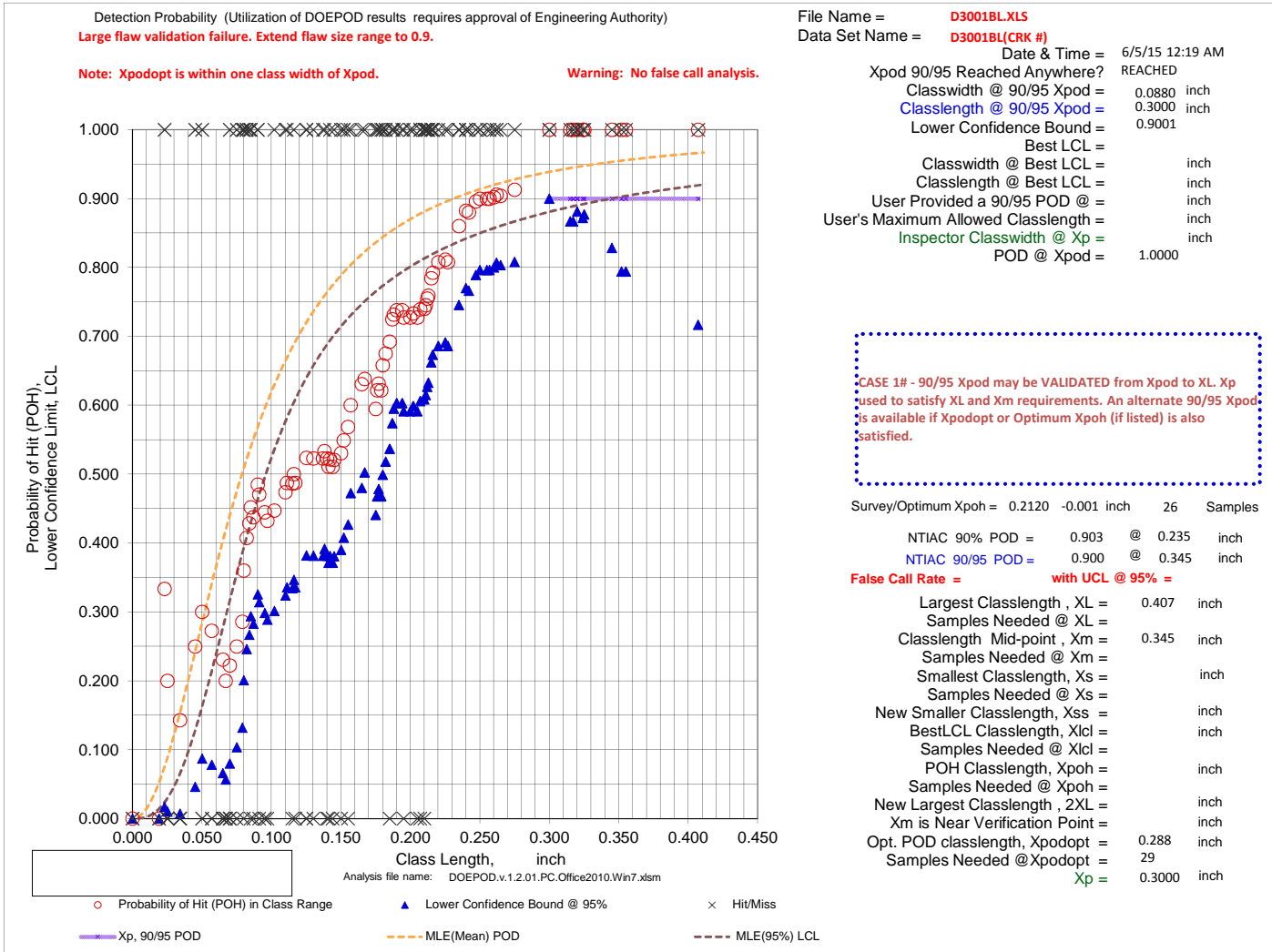
XL = 0.407
 Xm = 0.265
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D3001BL.XLS
 Data Set Name = D3001BL(CRK #)

Directed DOE Options

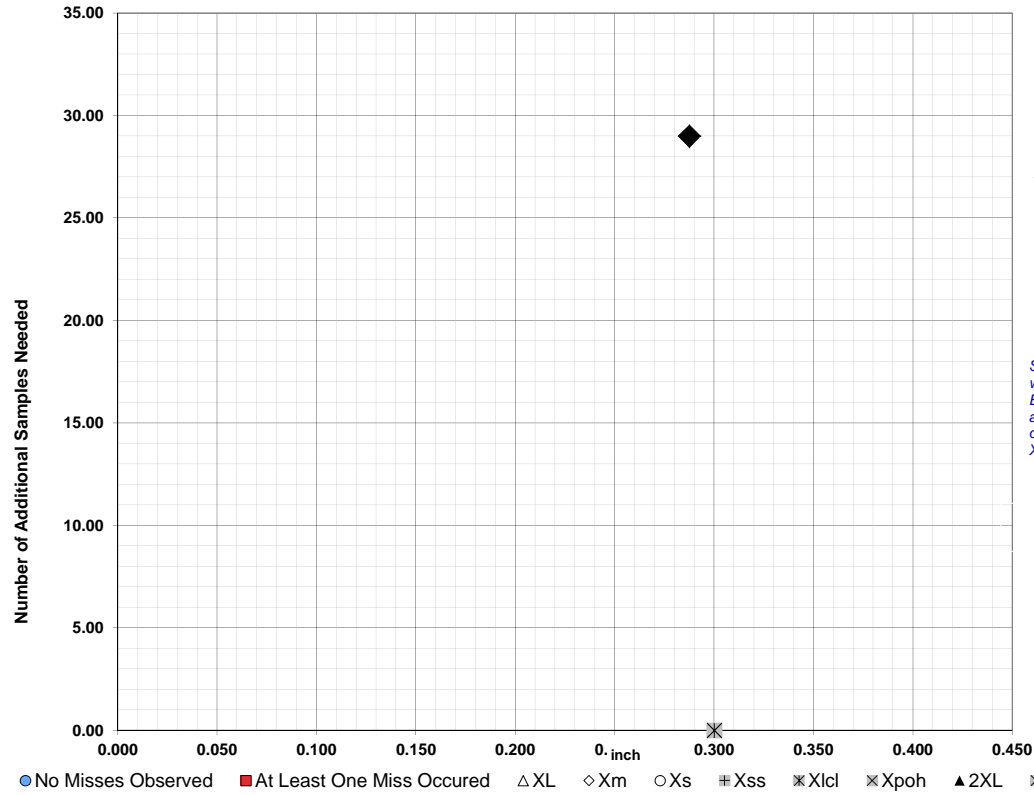


TABLE C

Class Length	Additional Samples
XL =	0.407
Xm =	0.345
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.288 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

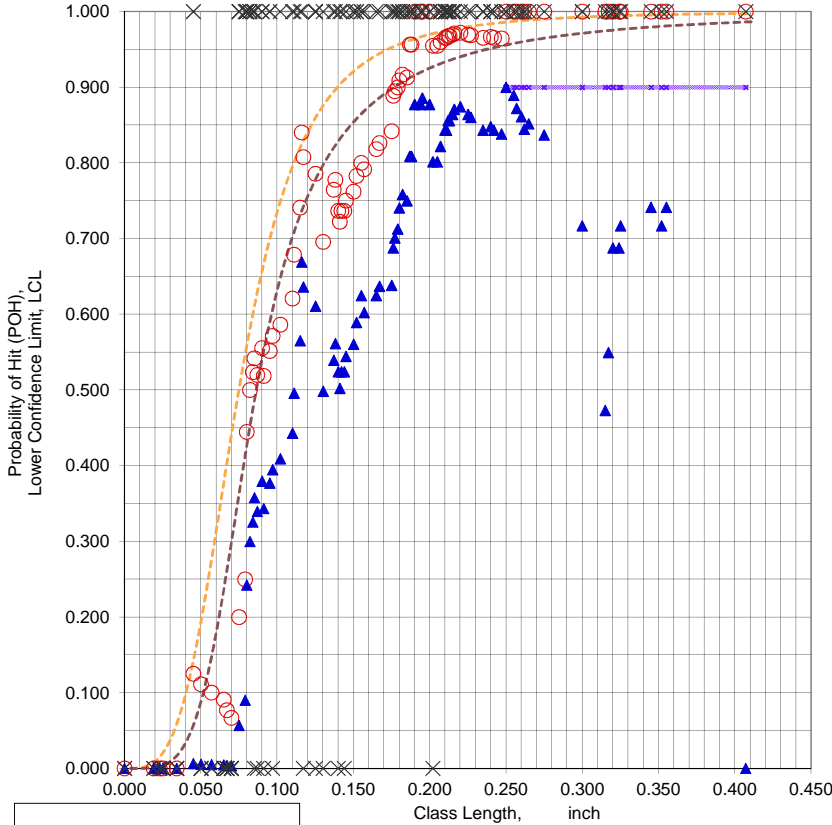
Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 0.75.

Note: Xpodopt is within one class width of Xpod.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **D3001CL.XLS**
 Data Set Name = **D3001CL(CRK #)**
 Date & Time = 6/5/15 12:20 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0450 inch
 Classlength @ 90/95 Xpod = 0.2500 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1# - 90/95 Xpod may be VALIDATED from Xpod to XL. Xp used to satisfy XL and Xm requirements. An alternate 90/95 Xpod is available if Xpodopt or Optimum Xpoh (if listed) is also satisfied.

Survey/Optimum Xpoh = 0.2050 -0.002 inch 28 Samples

NTIAC 90% POD = 0.901 @ 0.140 inch
 NTIAC 90/95 POD = 0.904 @ 0.180 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.407 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.355 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = 0.249 inch
 Samples Needed @ Xpodopt = 29
 Xp = 0.2500 inch

File Name = D3001CL.XLS
 Data Set Name = D3001CL(CRK #)

Directed DOE Options

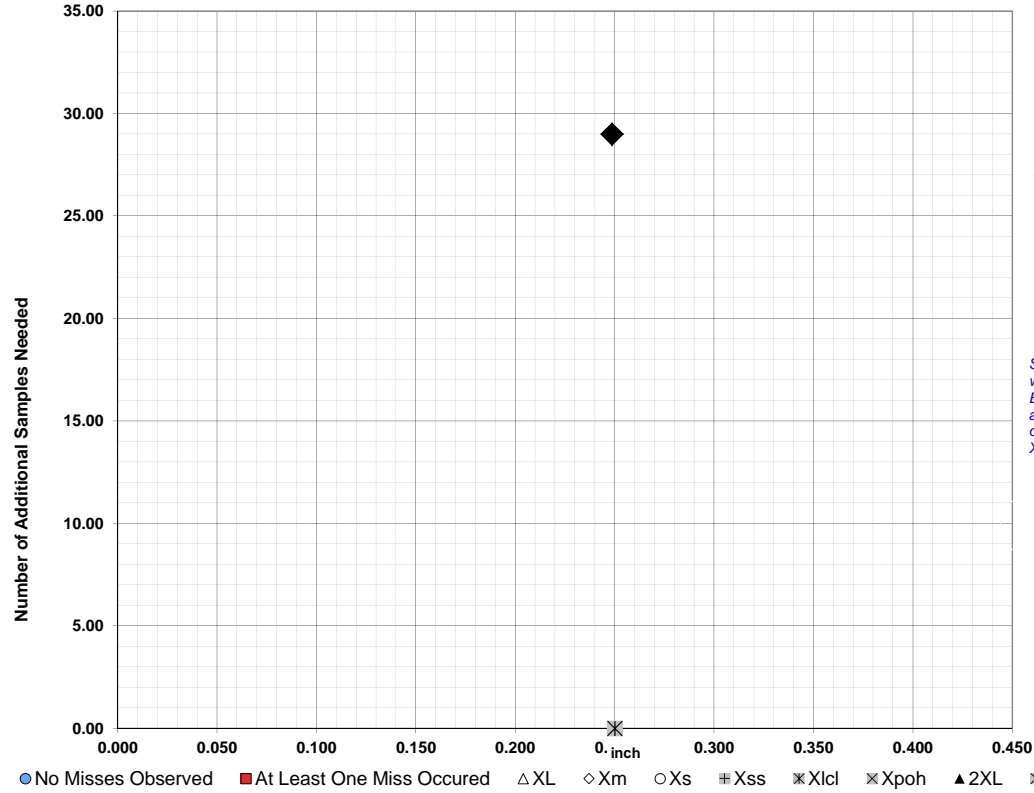


TABLE C

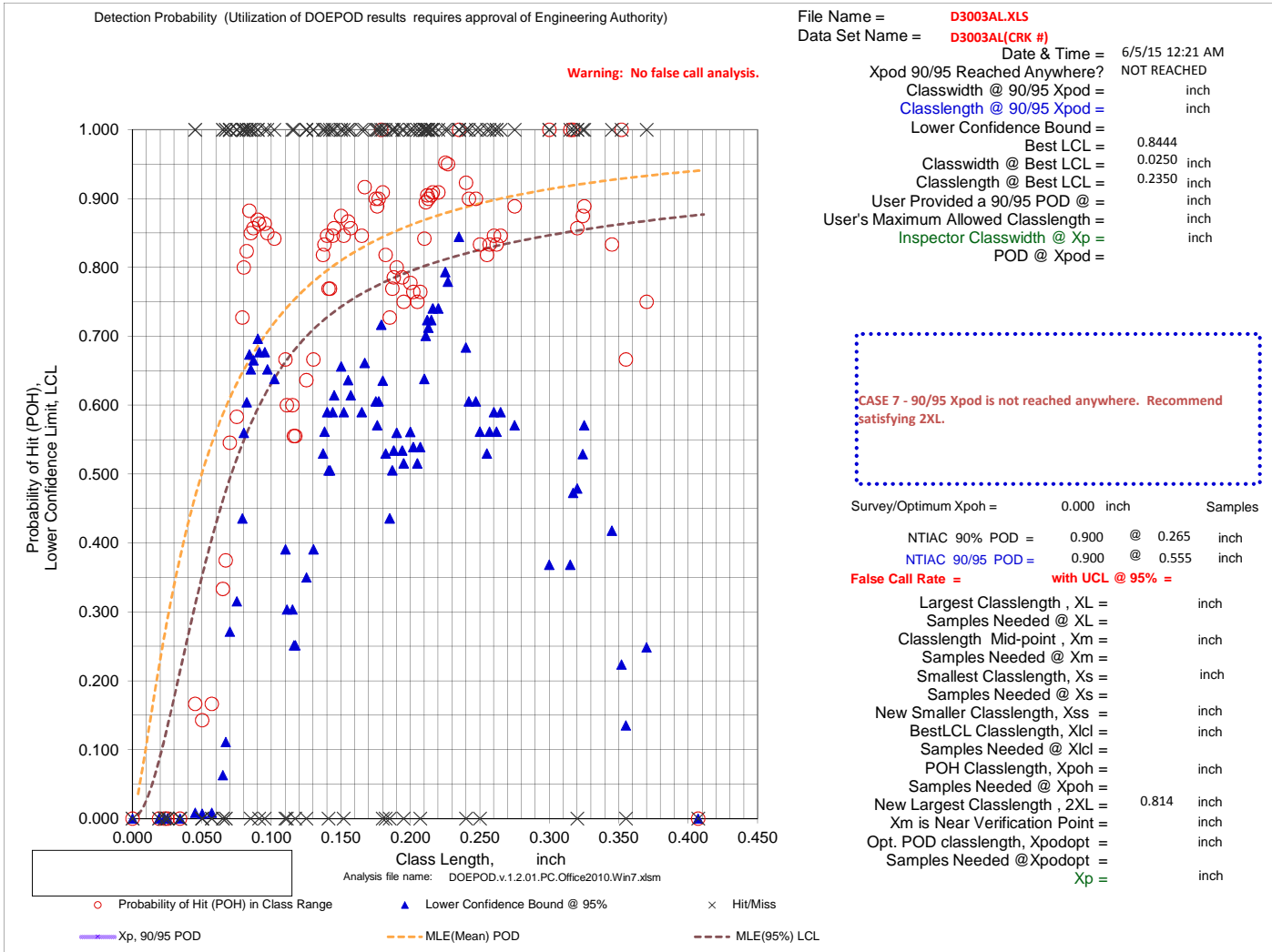
Class Length	Additional Samples
XL =	0.407
Xm =	0.355
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.249 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D3003AL.XLS
 Data Set Name = D3003AL(CRK #)

Directed DOE Options

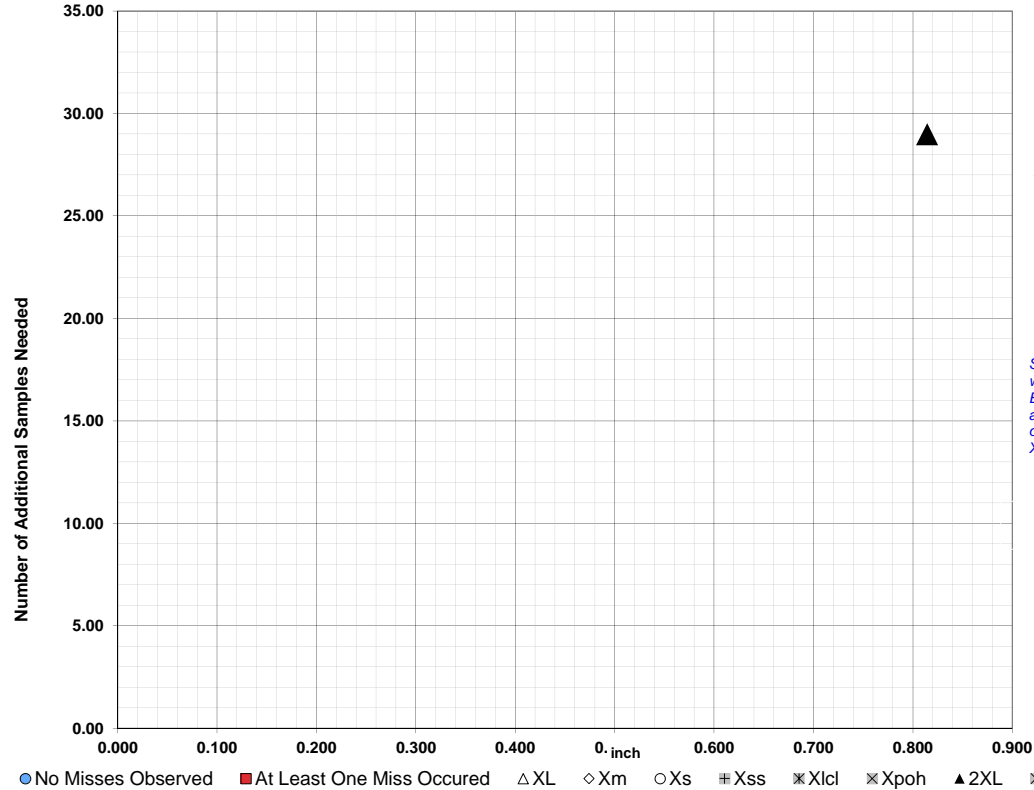


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.814	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.814 29
 **Alternate Xm =
 Xpodopt =

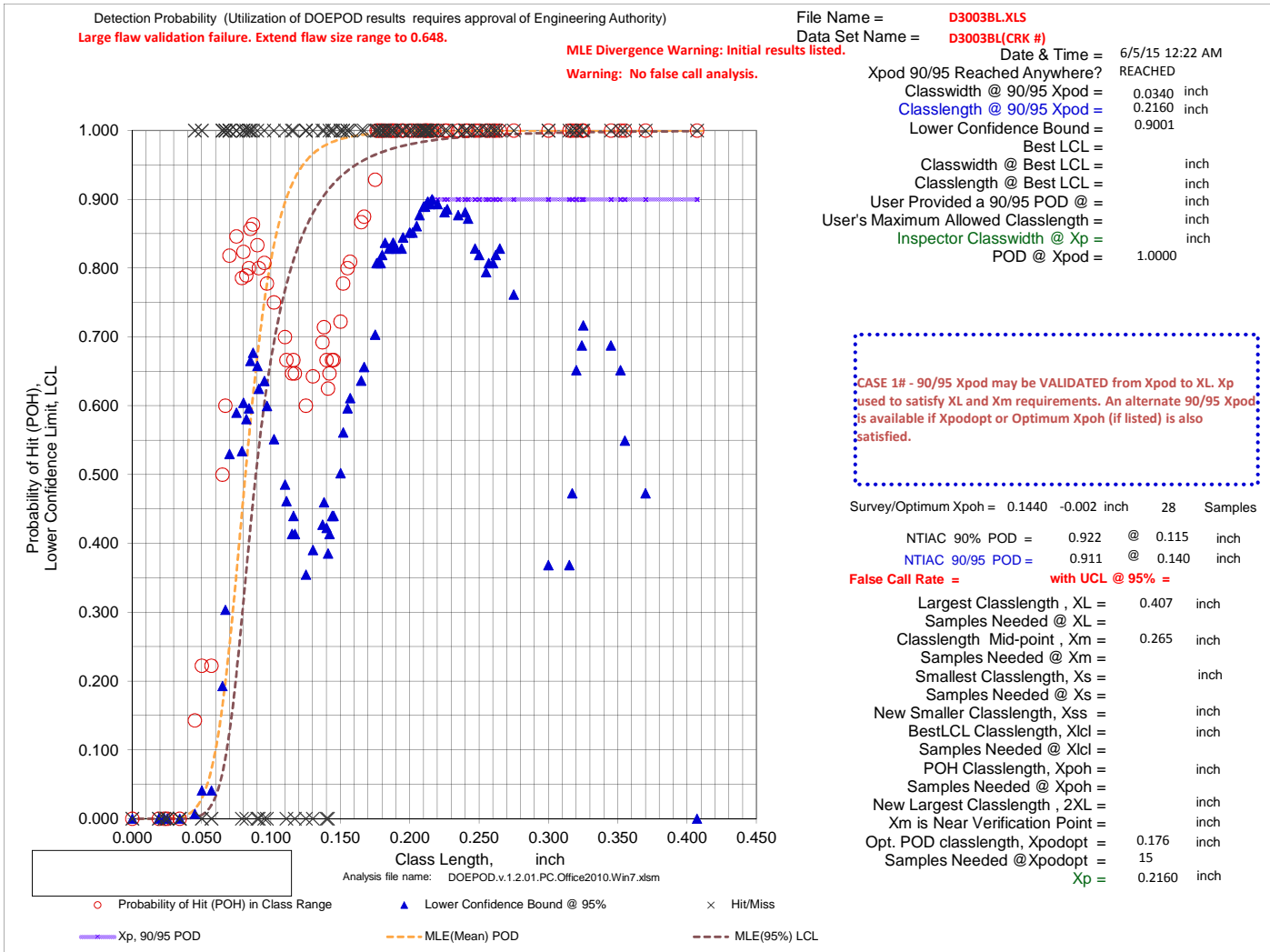
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D3003BL.XLS
 Data Set Name = D3003BL(CRK #)

Directed DOE Options

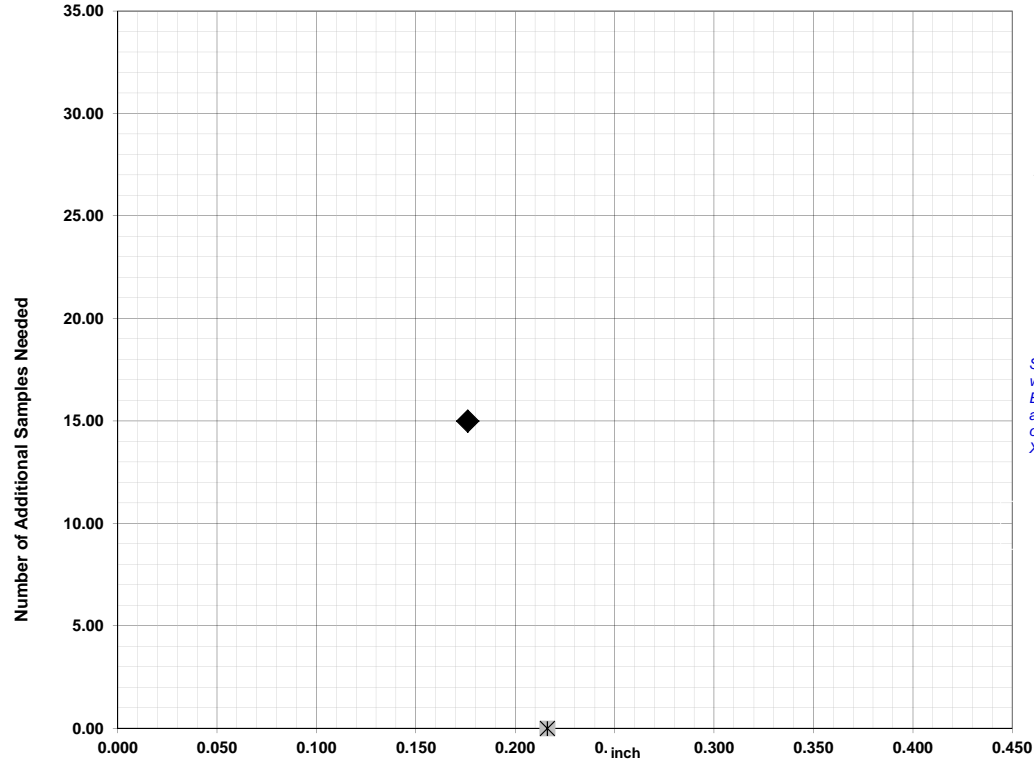


TABLE C

Class Length	Additional Samples
XL =	0.407
Xm =	0.265
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.176 15

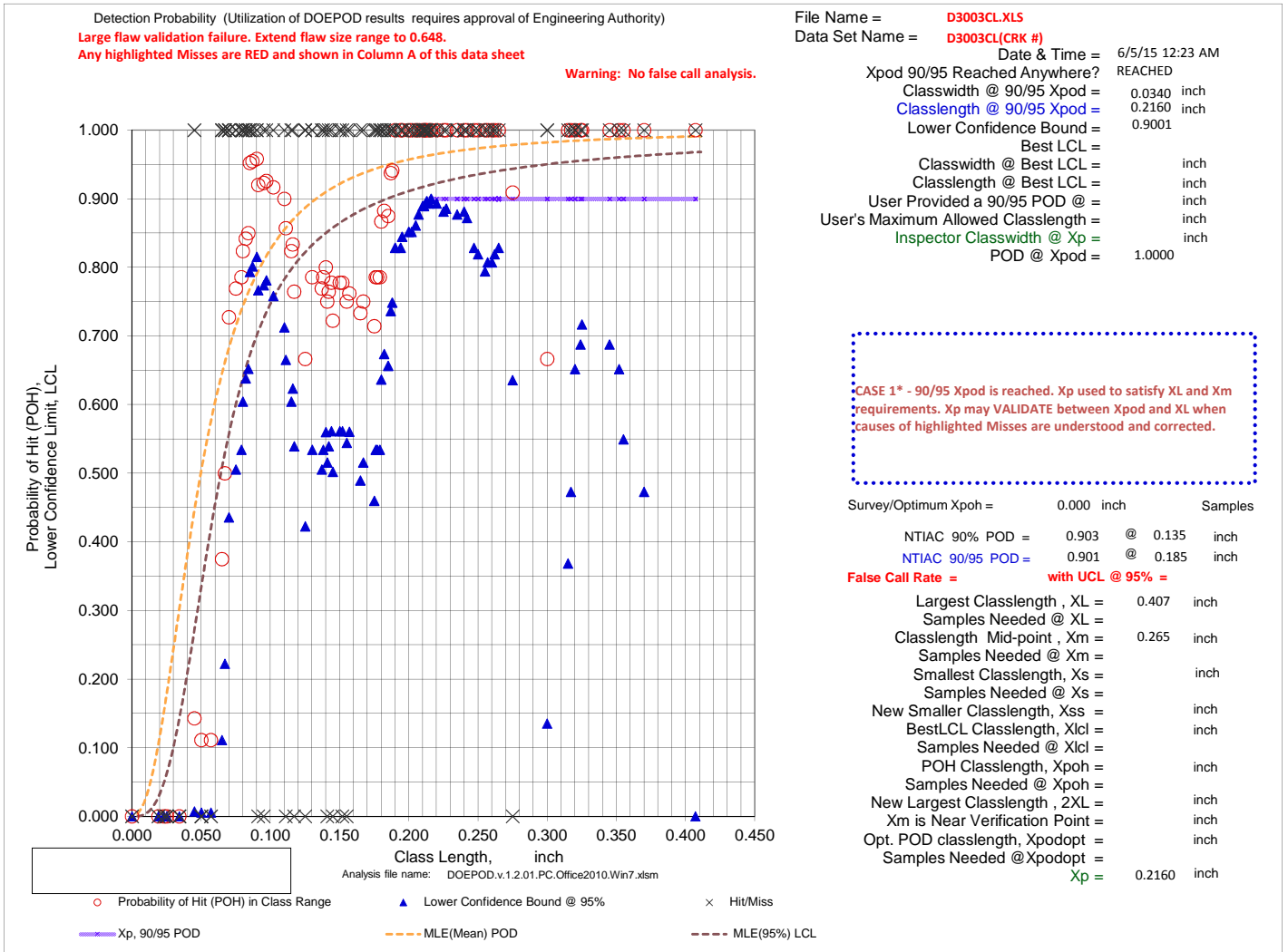
TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D3003CL.XLS
 Data Set Name = D3003CL(CRK #)

Directed DOE Options

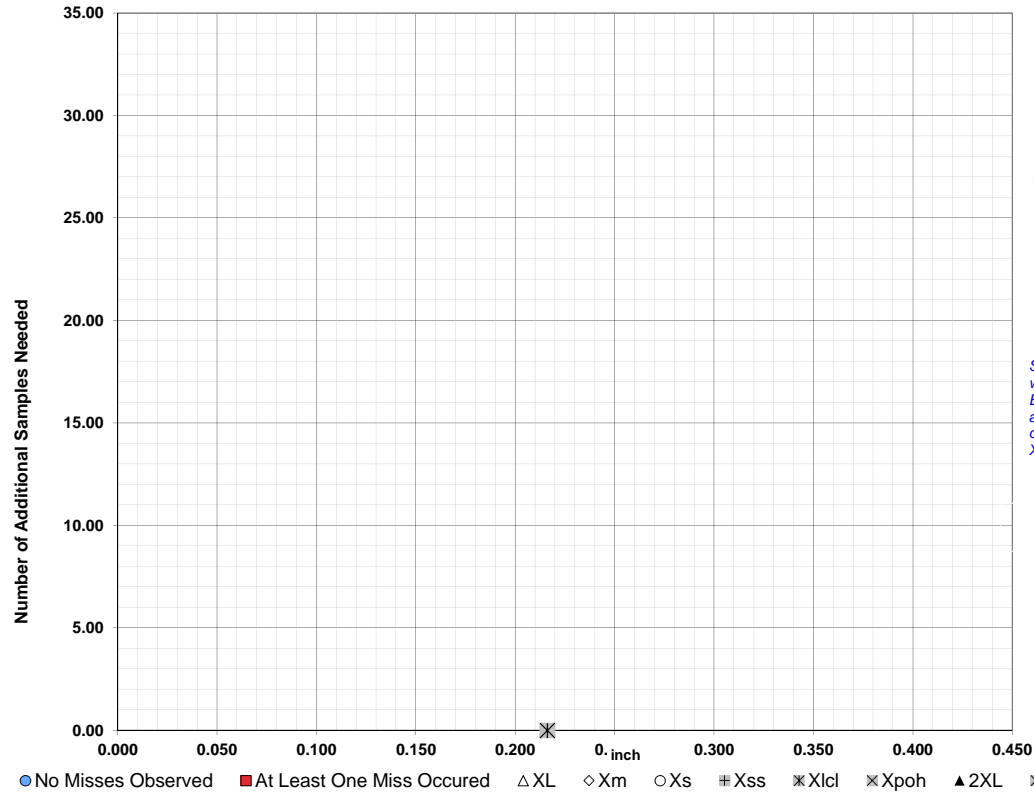


TABLE C

Class Length Additional Samples

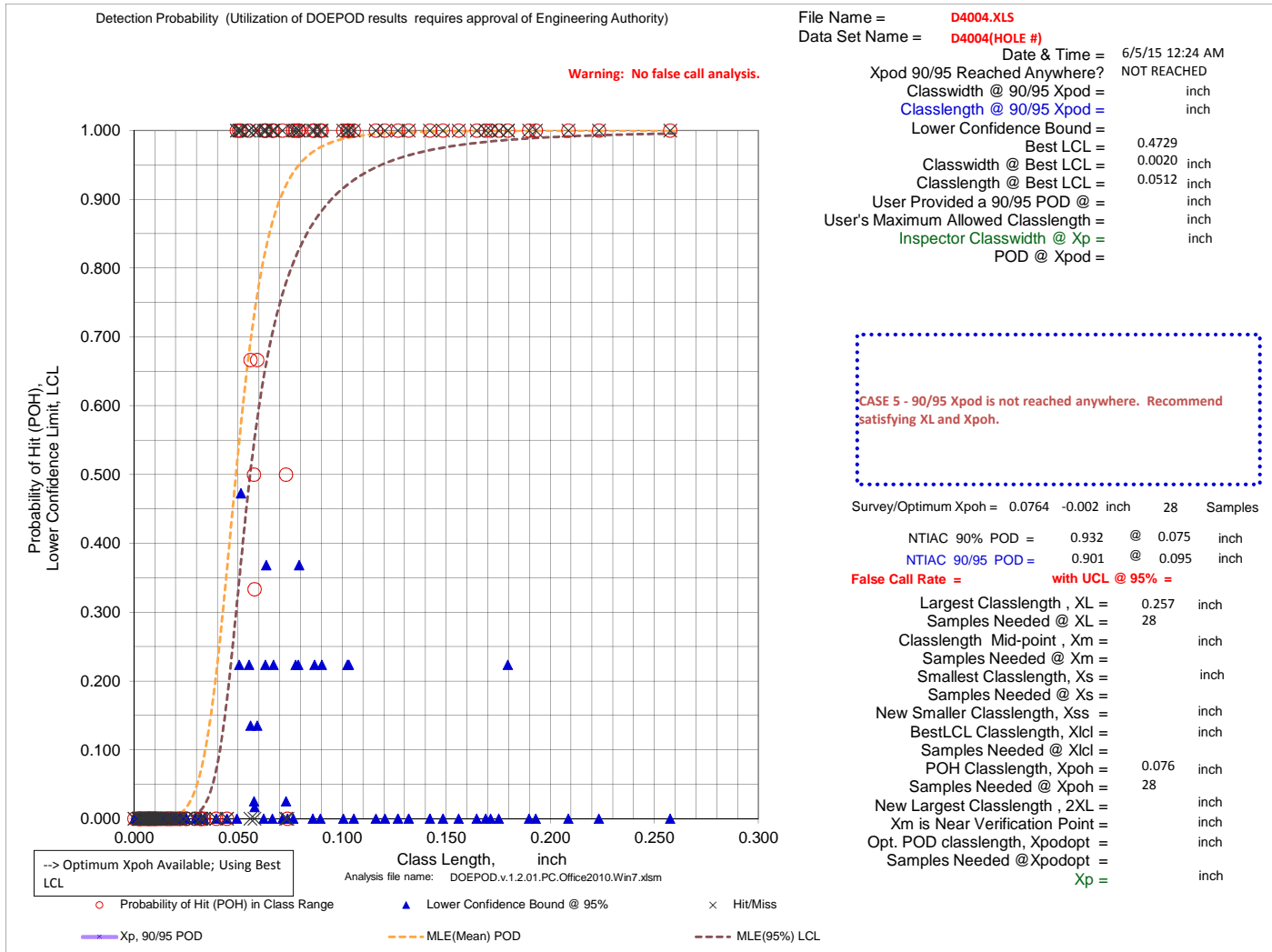
XL = 0.407
 Xm = 0.265
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D4004.XLS
 Data Set Name = D4004(HOLE #)

Directed DOE Options

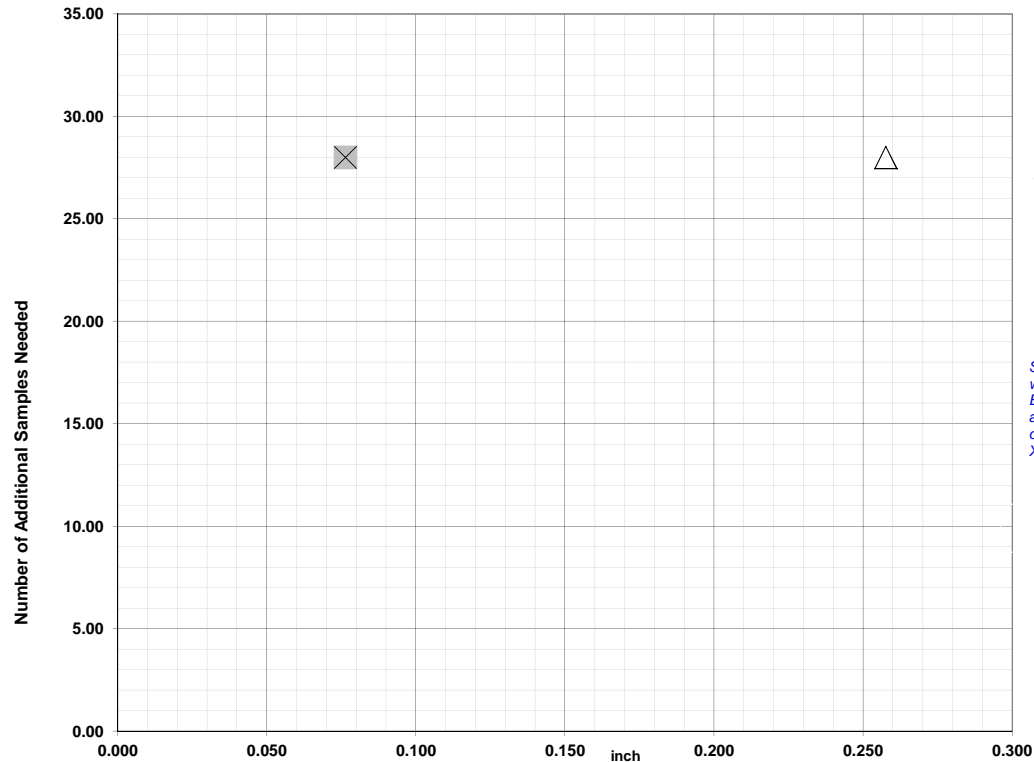


TABLE C

Class Length	Additional Samples
XL = 0.257	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.076	28
2XL =	
**Alternate Xm =	
Xpodopt =	

**Alternate Xm =
 Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs # Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

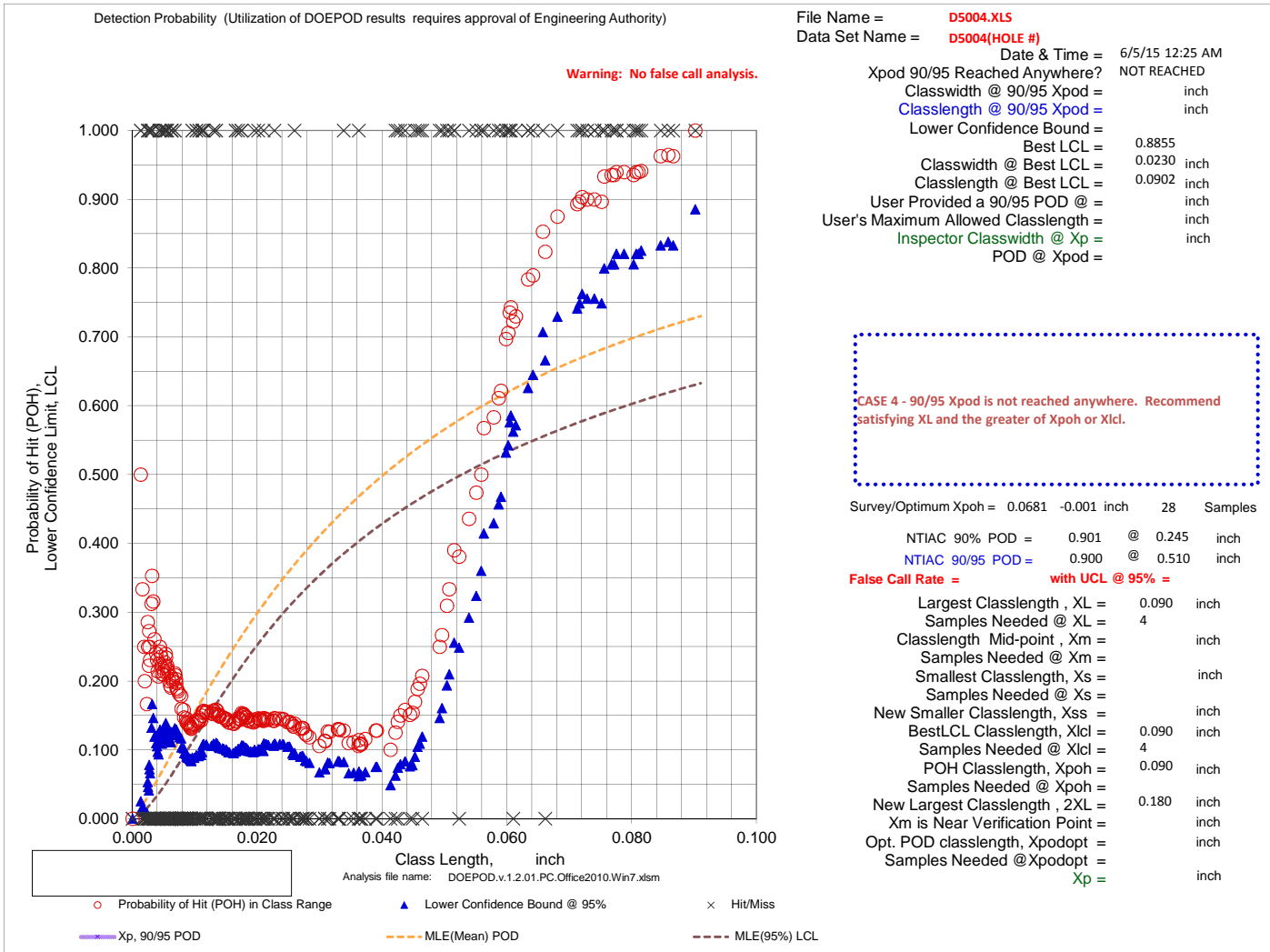
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D5004.XLS
 Data Set Name = D5004(HOLE #)

Directed DOE Options

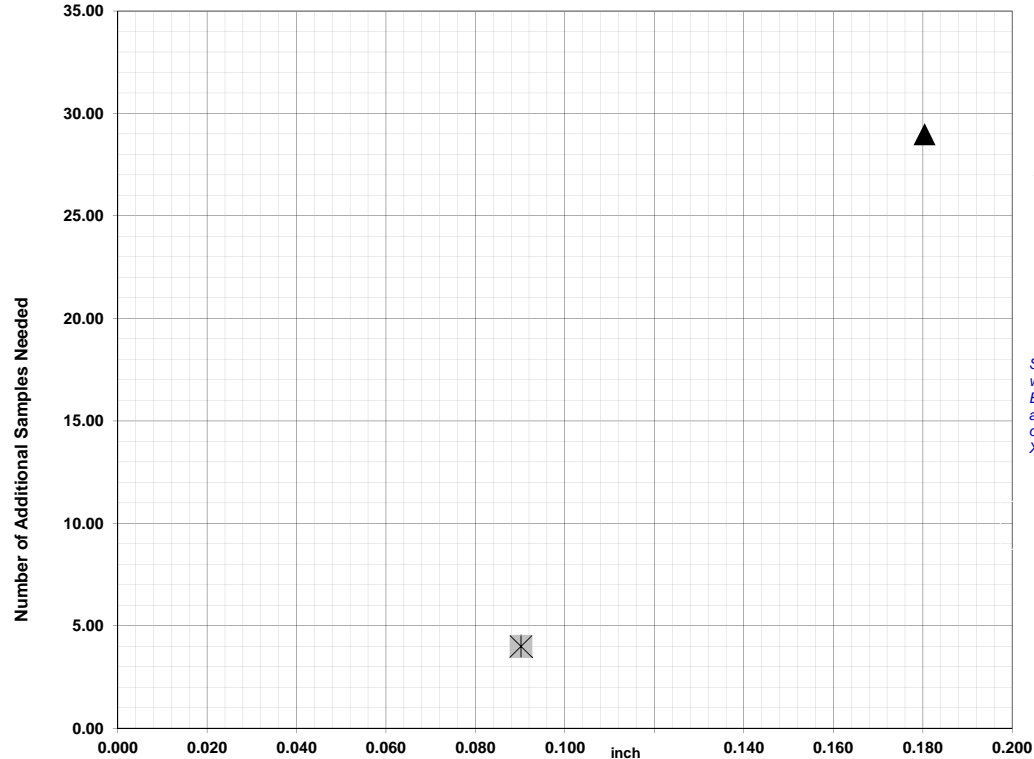


TABLE C

Class Length	Additional Samples
XL = 0.090	4
Xm =	
Xs =	
Xss =	
Xlcl = 0.090	4
Xpoh = 0.090	
2XL = 0.180	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

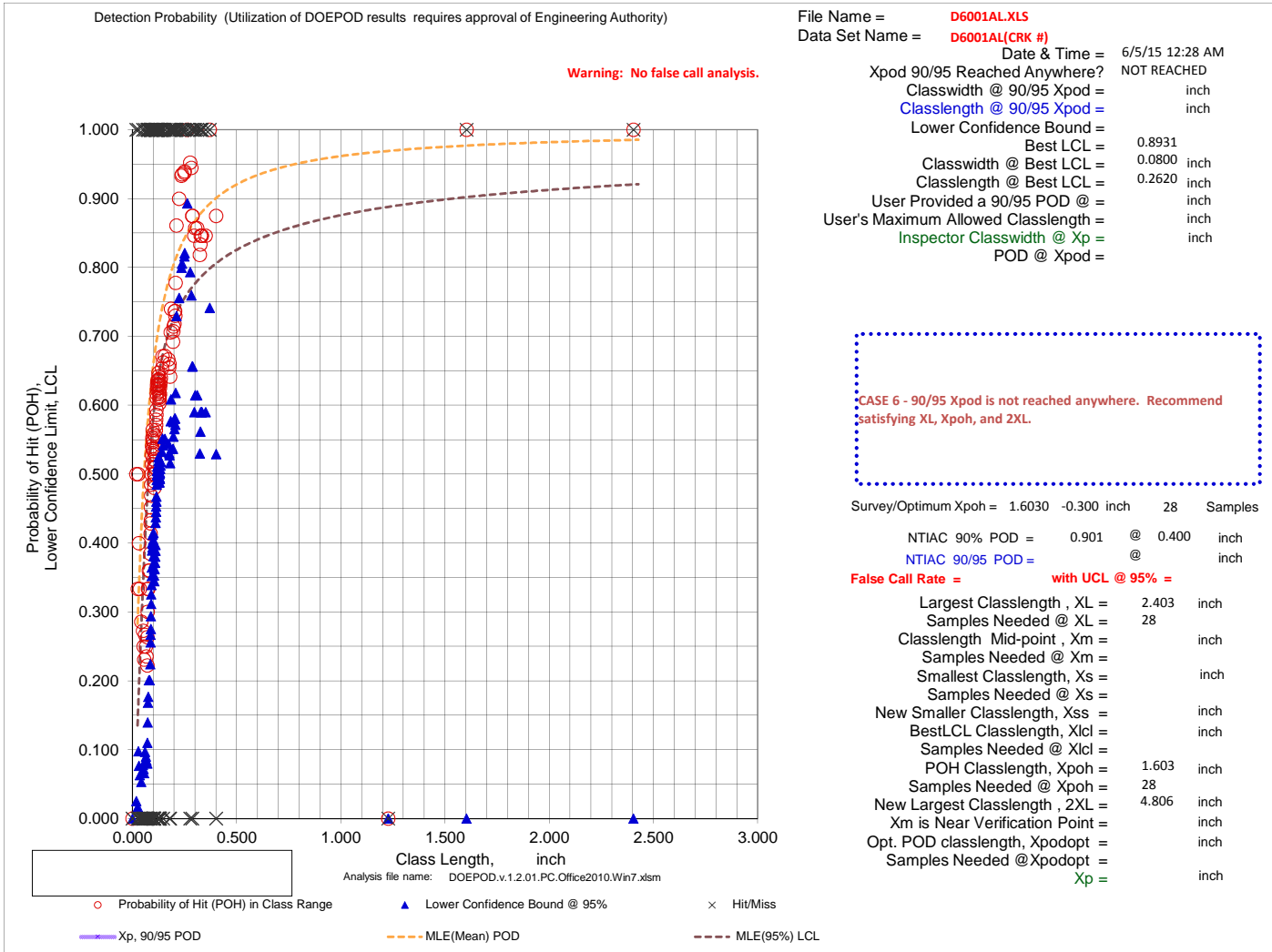
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D6001AL.XLS
 Data Set Name = D6001AL(CRK #)

Directed DOE Options

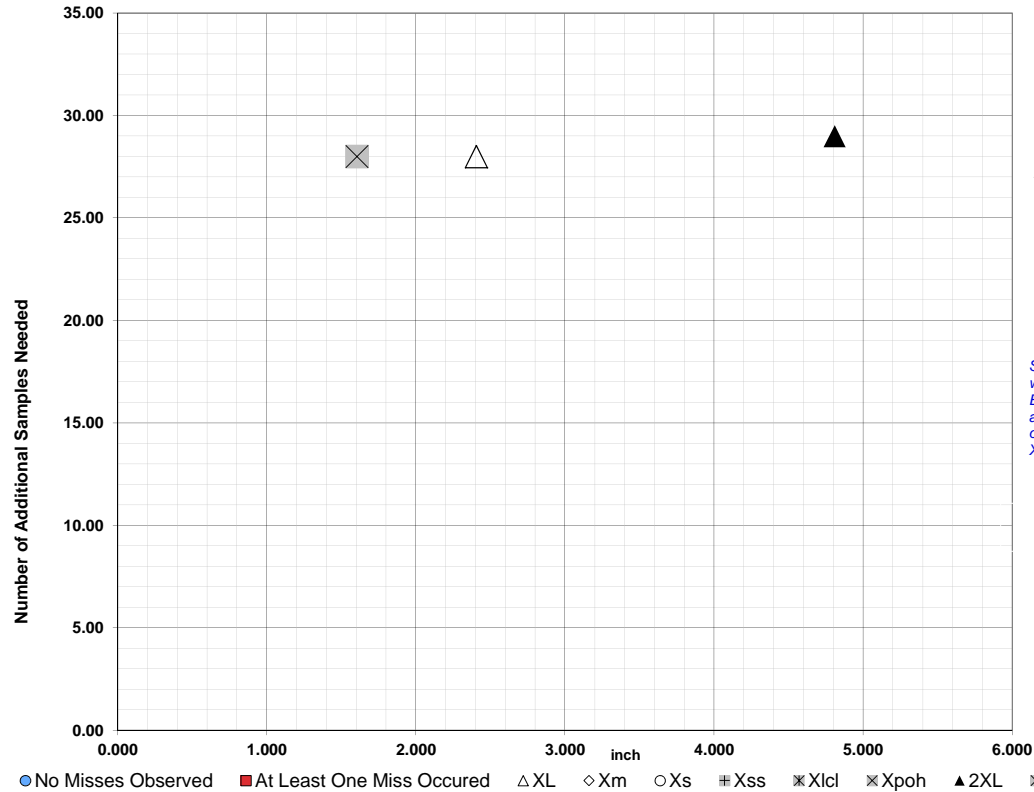


TABLE C

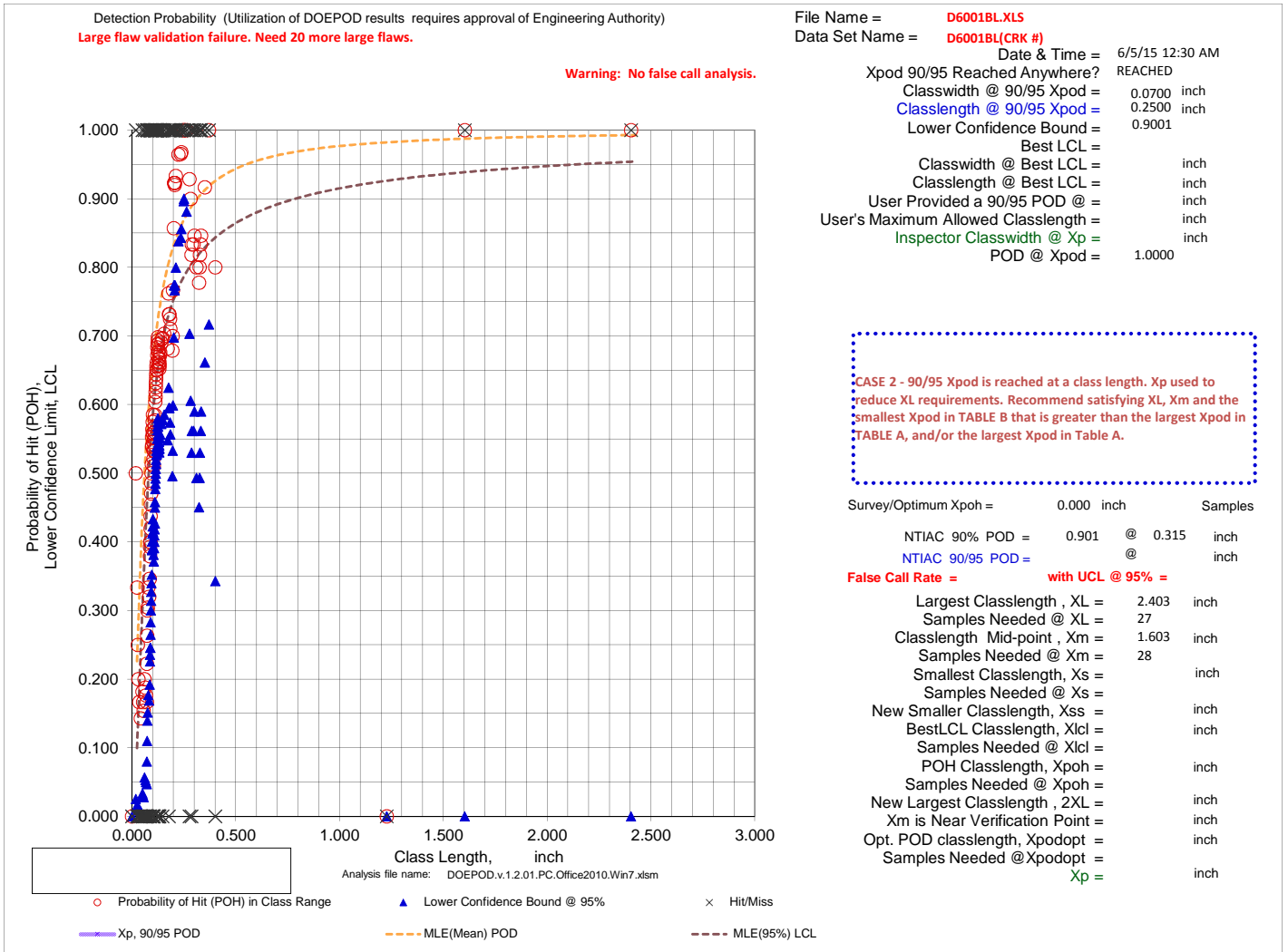
Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 1.603	28
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D6001BL.XLS
 Data Set Name = D6001BL(CRK #)

Directed DOE Options

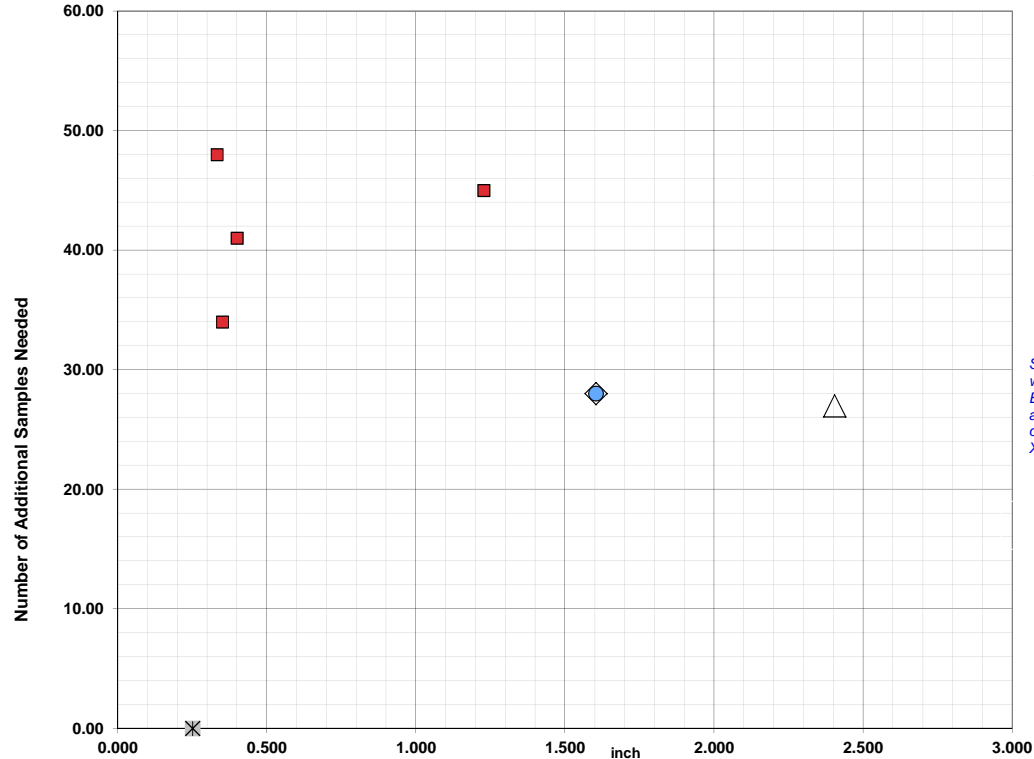


TABLE C

Class Length	Additional Samples
XL = 2.403	27
Xm = 1.603	28
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

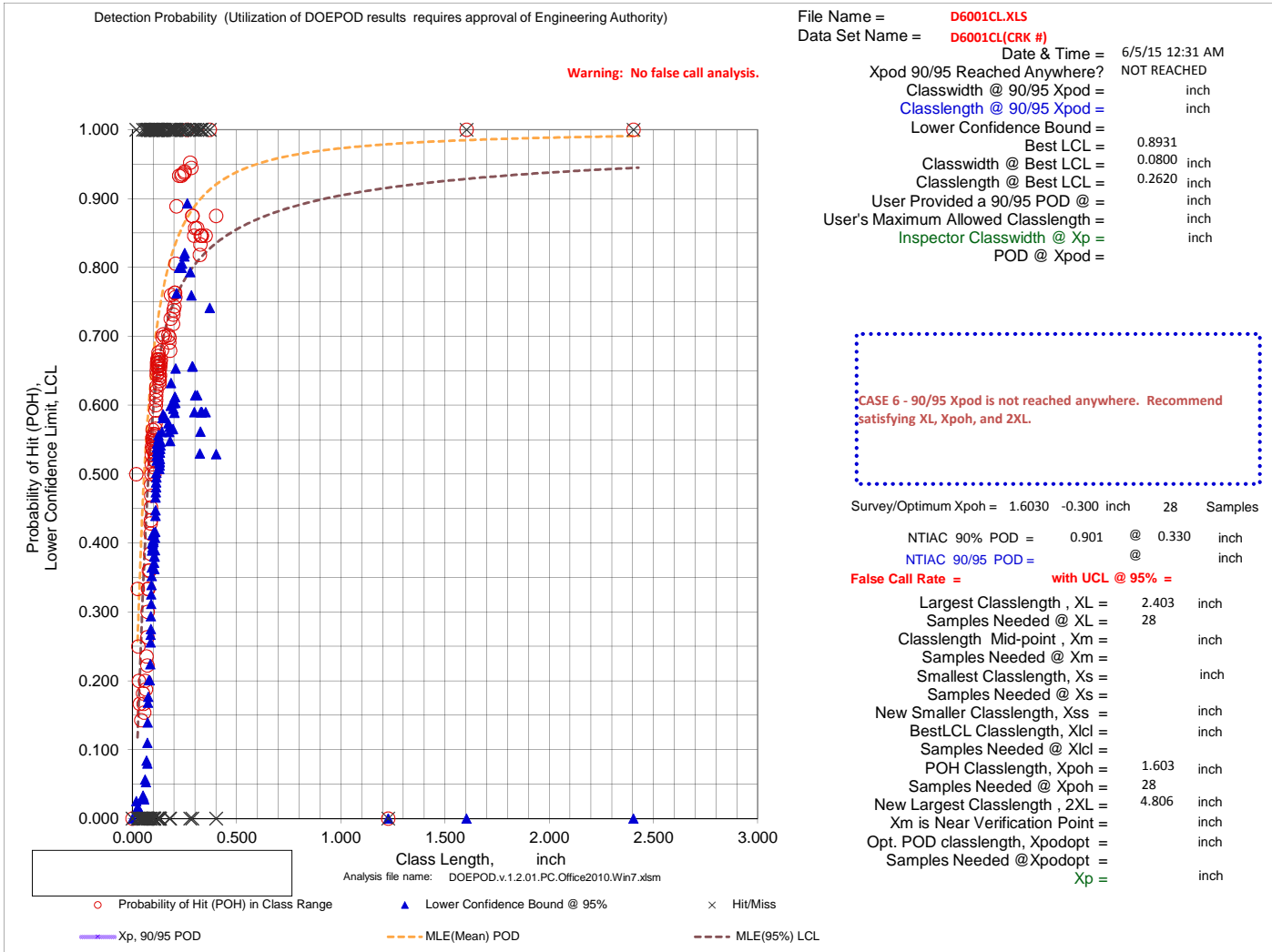
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
1.2270	45	1.6030	28
0.4000	41		
0.3500	34		
0.3320	48		

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D6001CL.XLS
 Data Set Name = D6001CL(CRK #)

Directed DOE Options

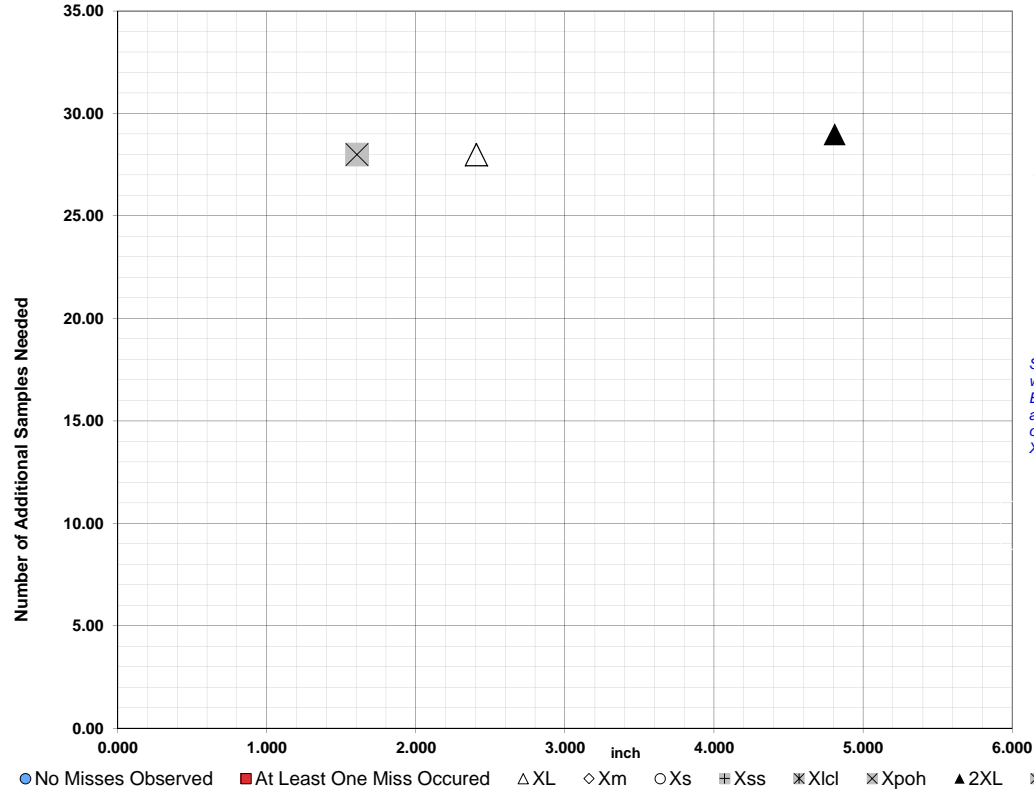


TABLE C

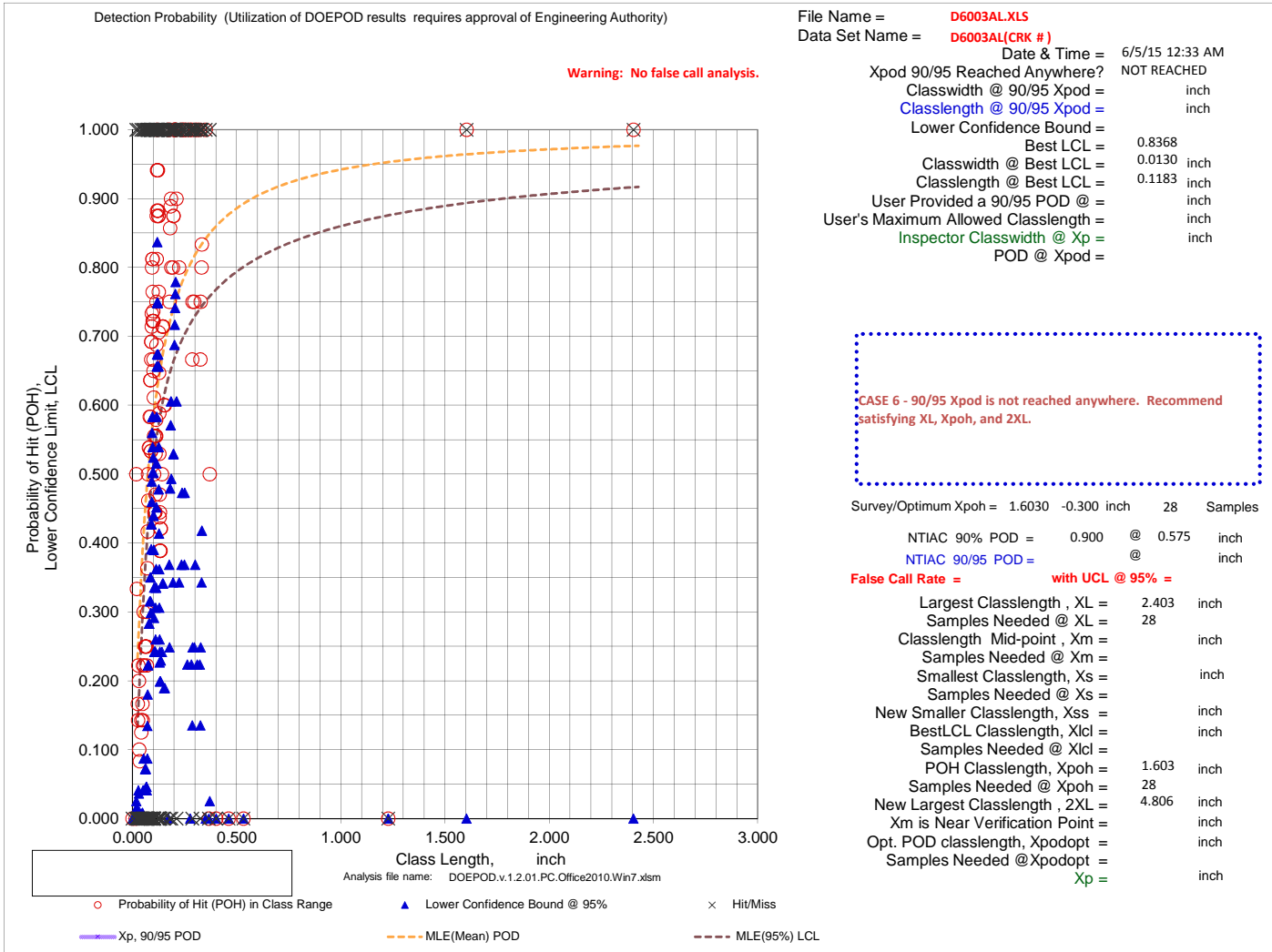
Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 1.603	28
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D6003AL.XLS
 Data Set Name = D6003AL(CRK #)

Directed DOE Options

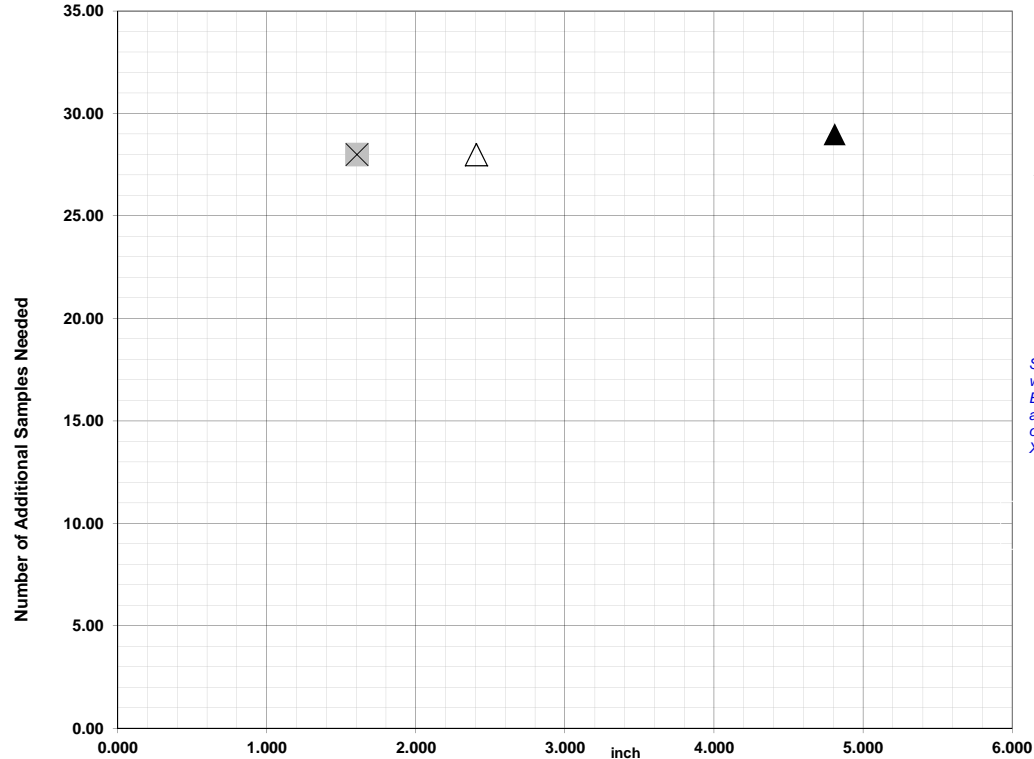


TABLE C

Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 1.603	28
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

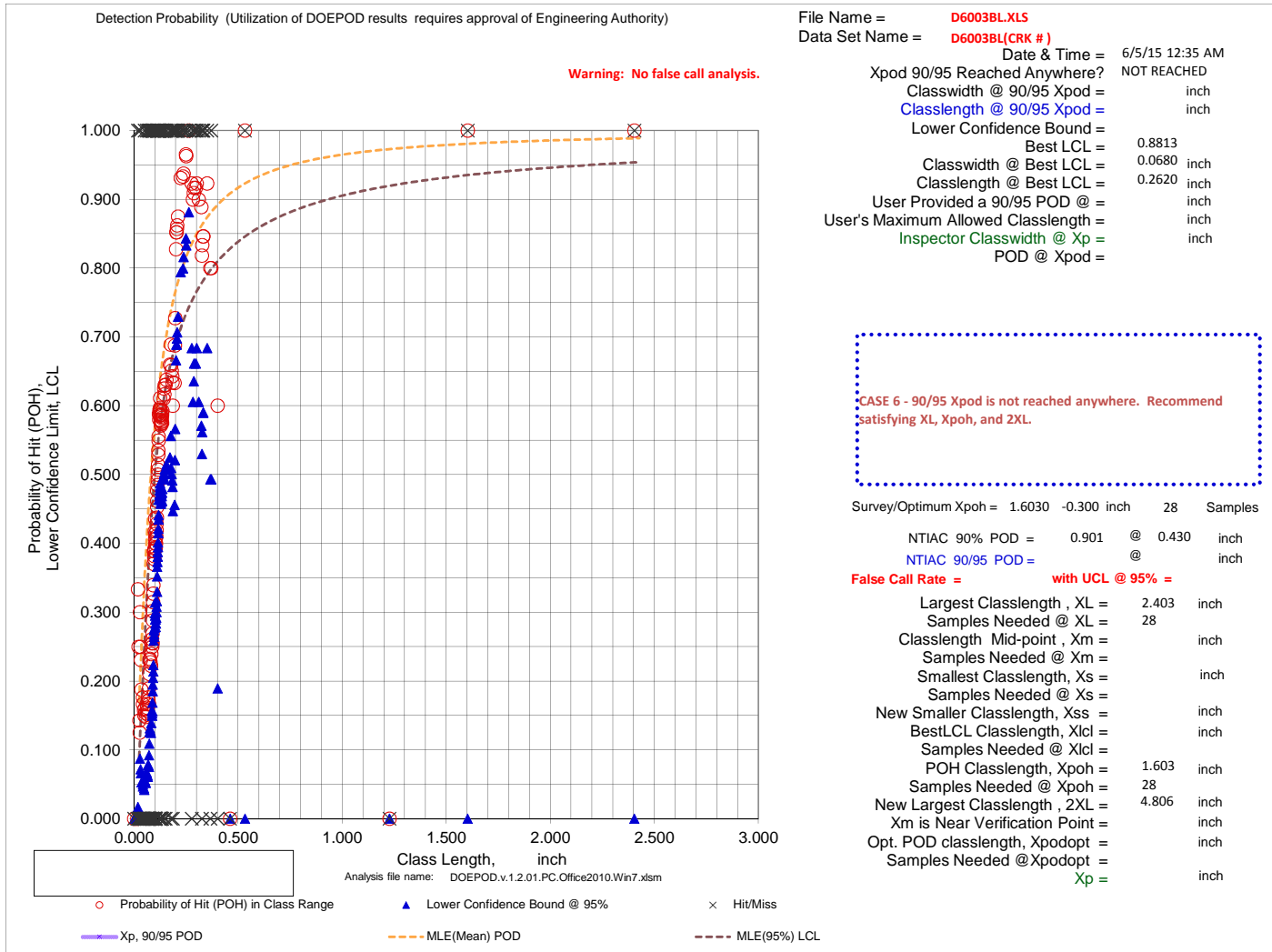
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ XLcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D6003BL.XLS
 Data Set Name = D6003BL(CRK #)

Directed DOE Options

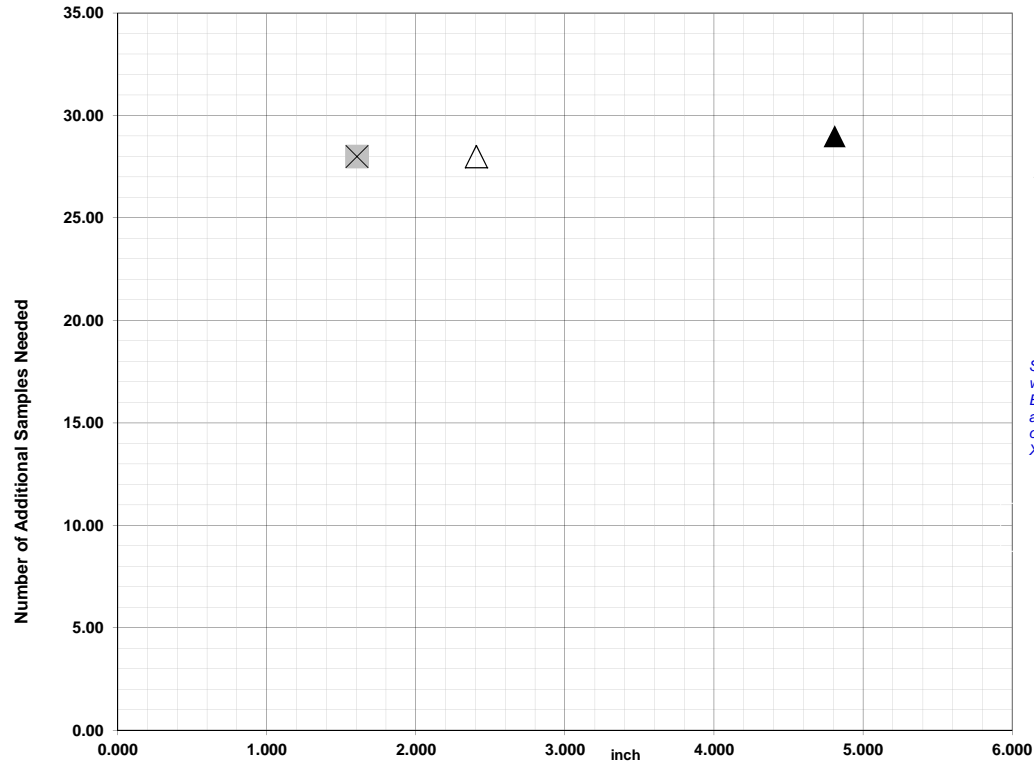


TABLE C

Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.603	28
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

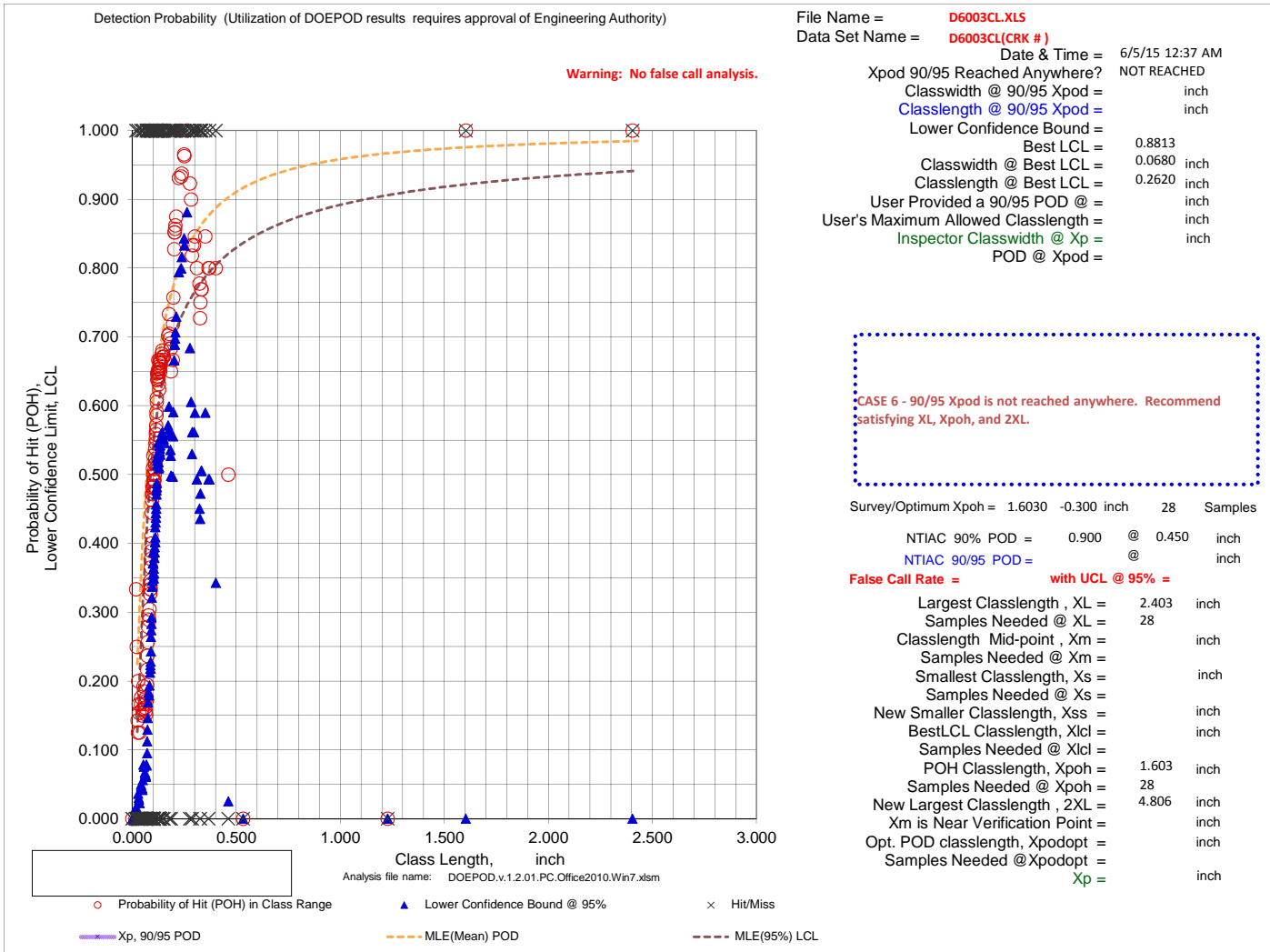
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D6003CL.XLS
 Data Set Name = D6003CL(CRK #)

Directed DOE Options

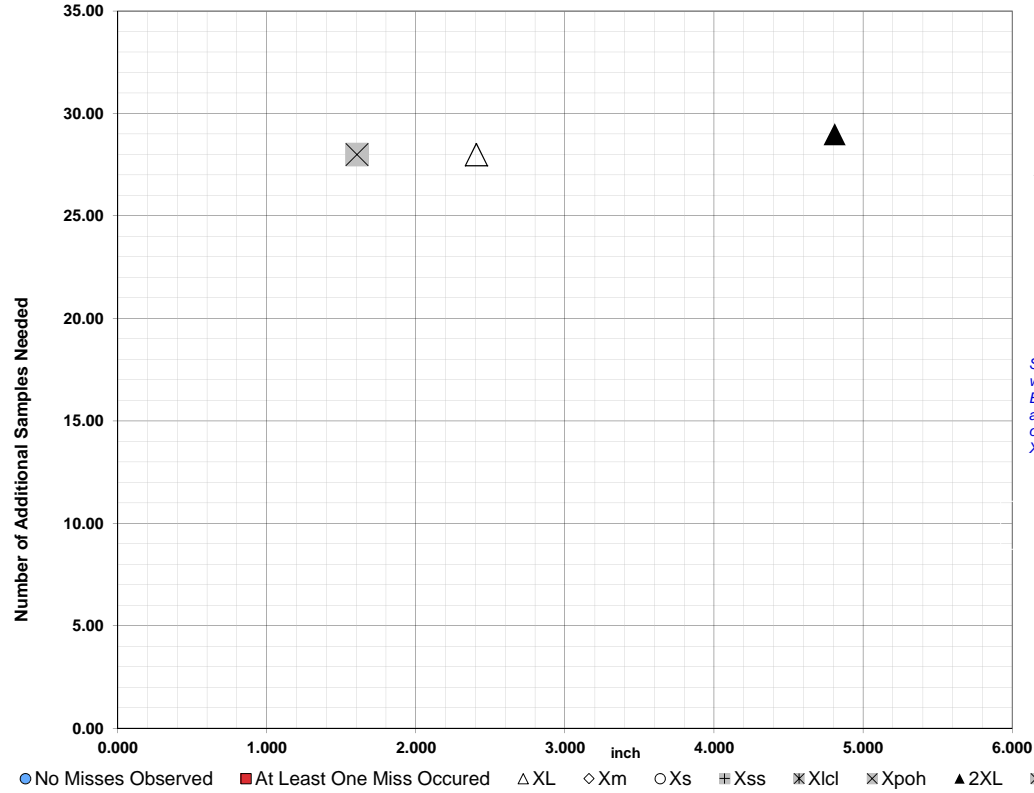


TABLE C

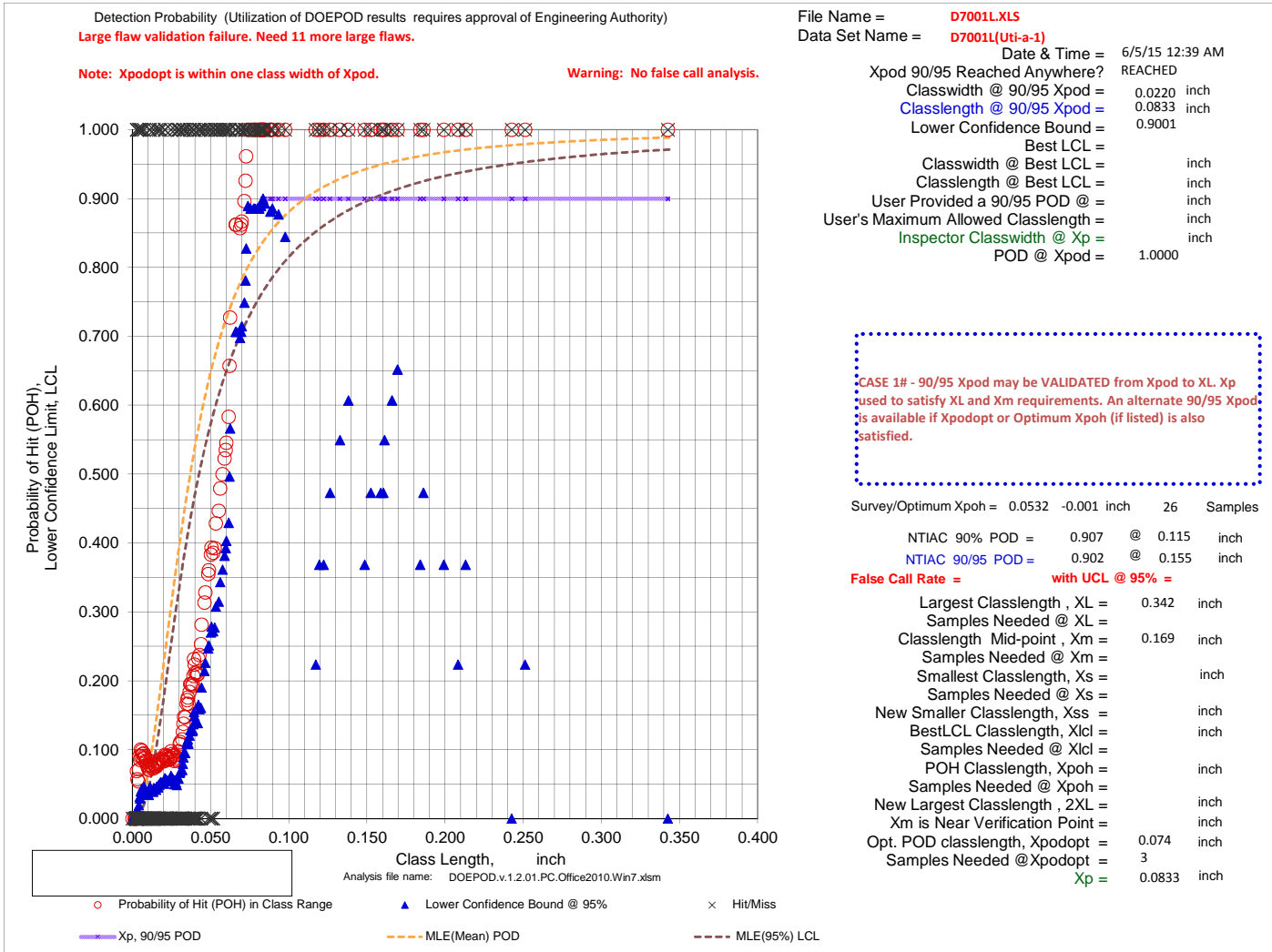
Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.603	28
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D7001L.XLS
 Data Set Name = D7001L(Uti-a-1)

Directed DOE Options

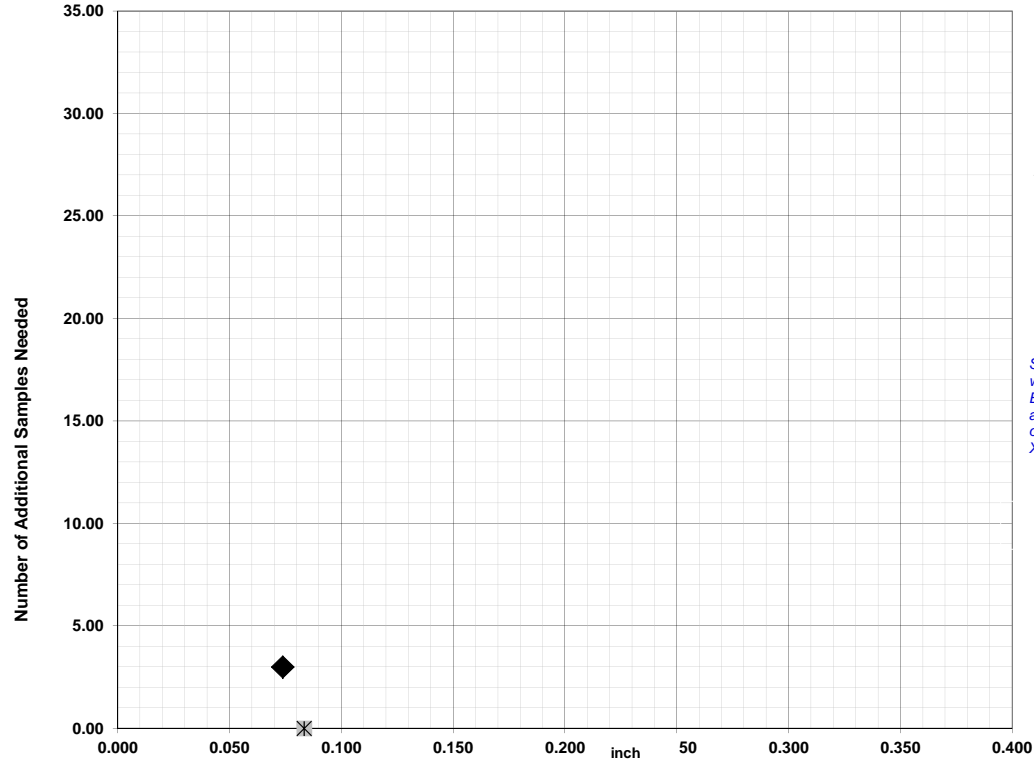


TABLE C

Class Length	Additional Samples
XL =	0.342
Xm =	0.169
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.074 3

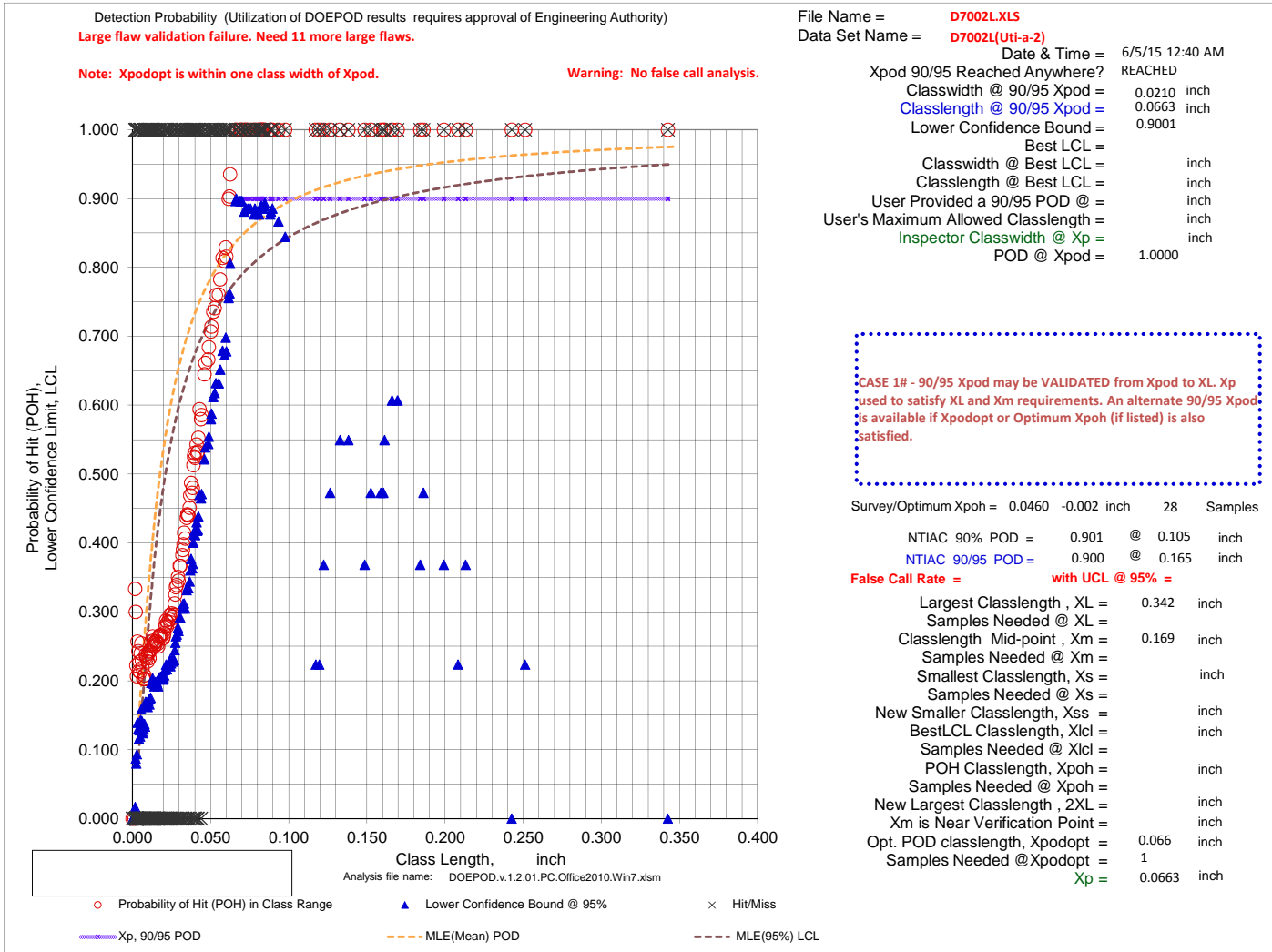
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D7002L.XLS
 Data Set Name = D7002L(Uti-a-2)

Directed DOE Options

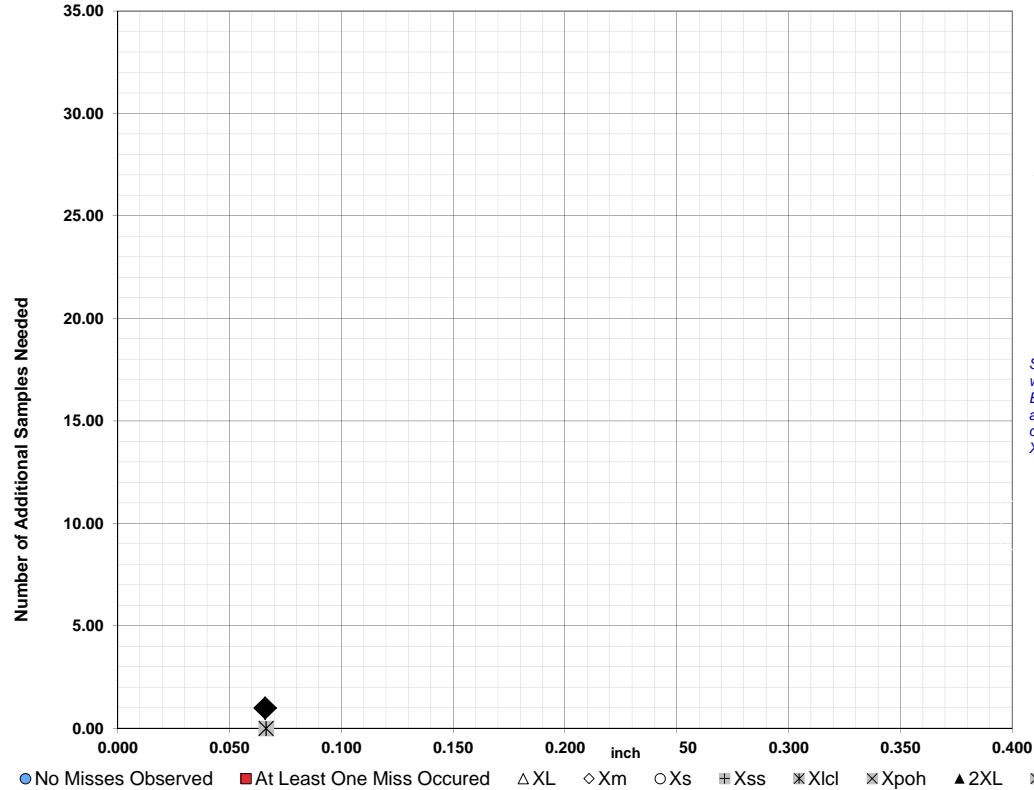


TABLE C

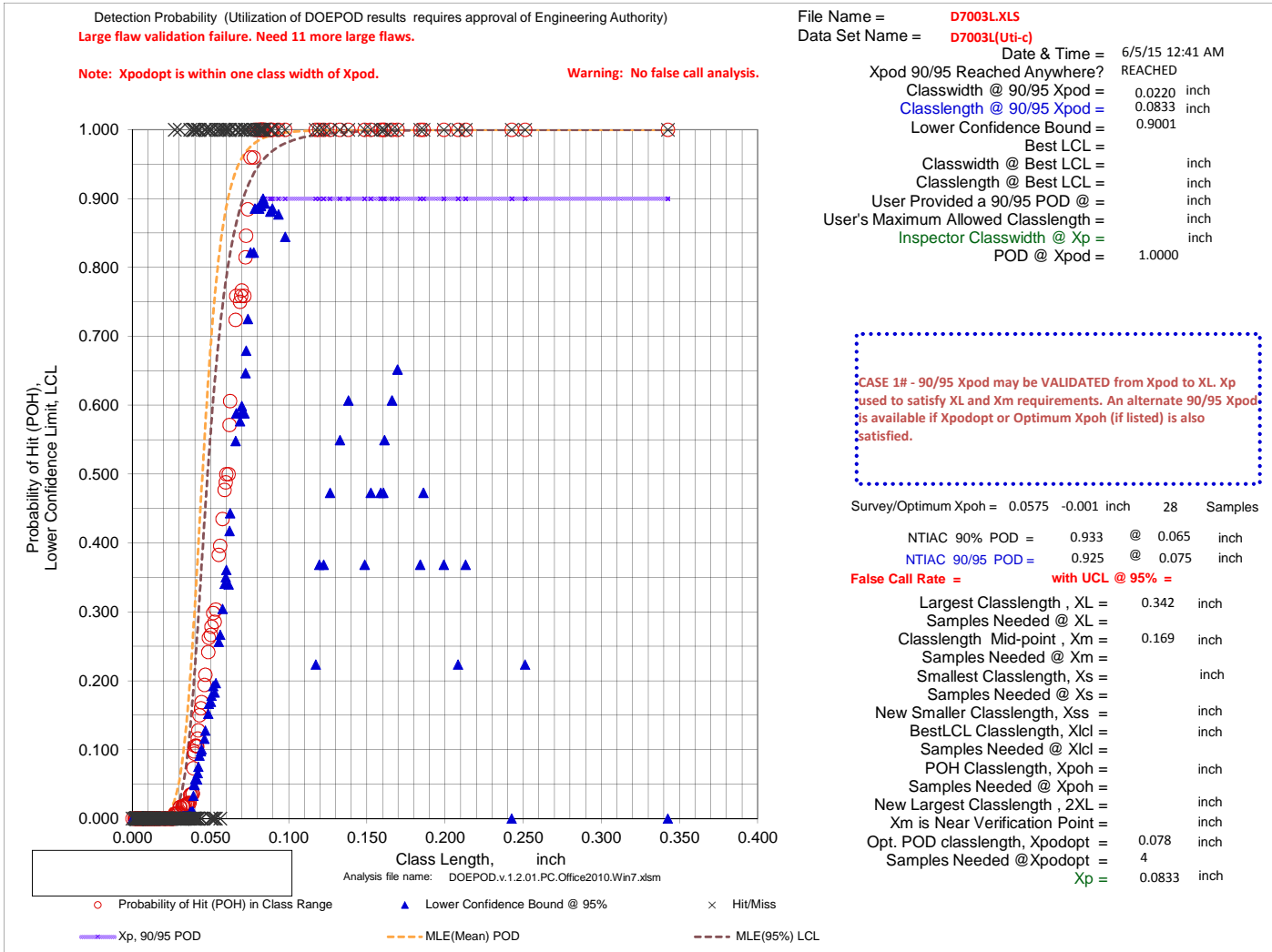
Class Length	Additional Samples
XL =	0.342
Xm =	0.169
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.066 1

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D7003L.XLS
 Data Set Name = D7003L(Uti-c)

Directed DOE Options

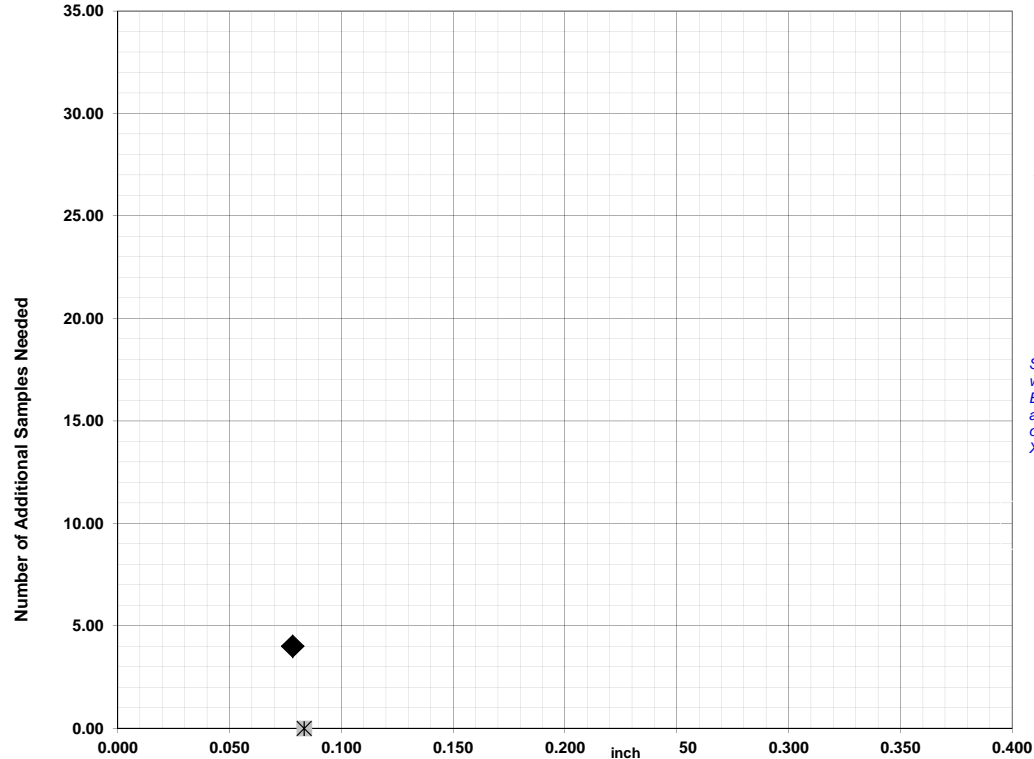


TABLE C

Class Length	Additional Samples
XL =	0.342
Xm =	0.169
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.078 4

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

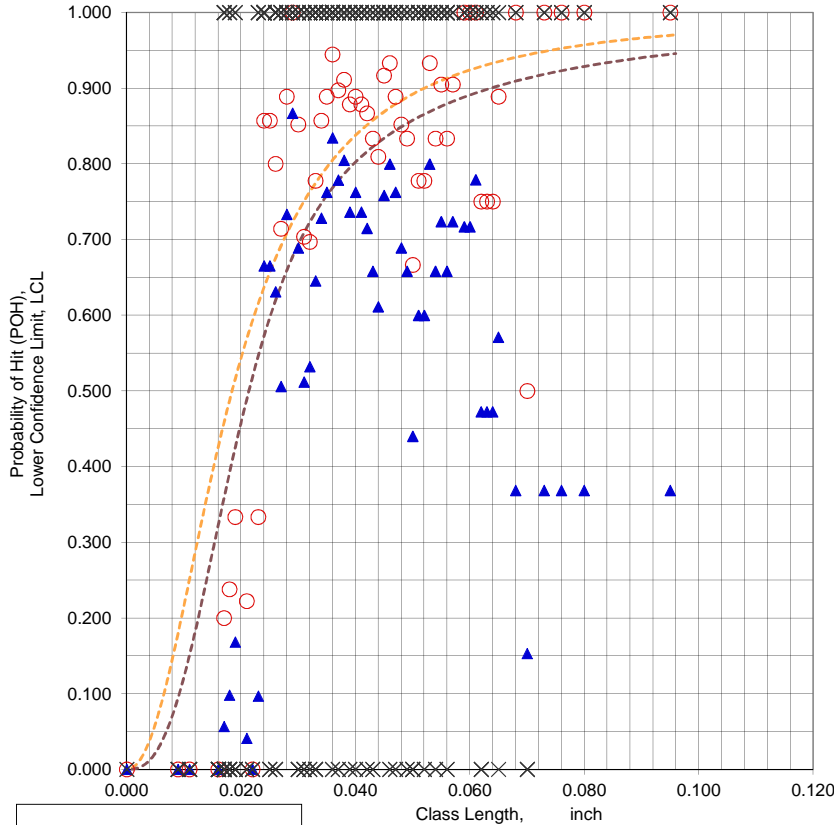
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **D8001(3)D.xls**
 Data Set Name = **D8001(3)D(CK. NO)**
 Date & Time = 6/5/15 12:42 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8666
 Classwidth @ Best LCL = 0.0020 inch
 Classlength @ Best LCL = 0.0290 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.0730 -0.002 inch 26 Samples
 NTIAC 90% POD = 0.910 @ 0.055 inch
 NTIAC 90/95 POD = 0.903 @ 0.065 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.095 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.073 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 0.190 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = D8001(3)D.xls
 Data Set Name = D8001(3)D(CK. NO)

Directed DOE Options

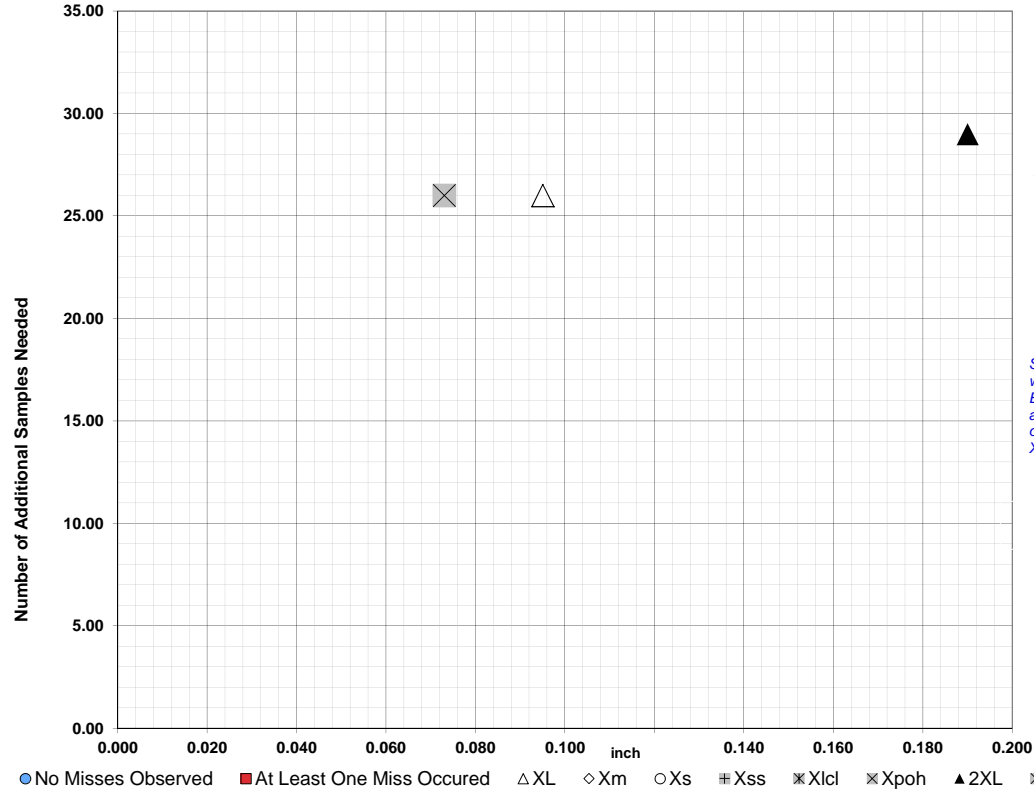


TABLE C

Class Length	Additional Samples
XL = 0.095	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.073	26
2XL = 0.190	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

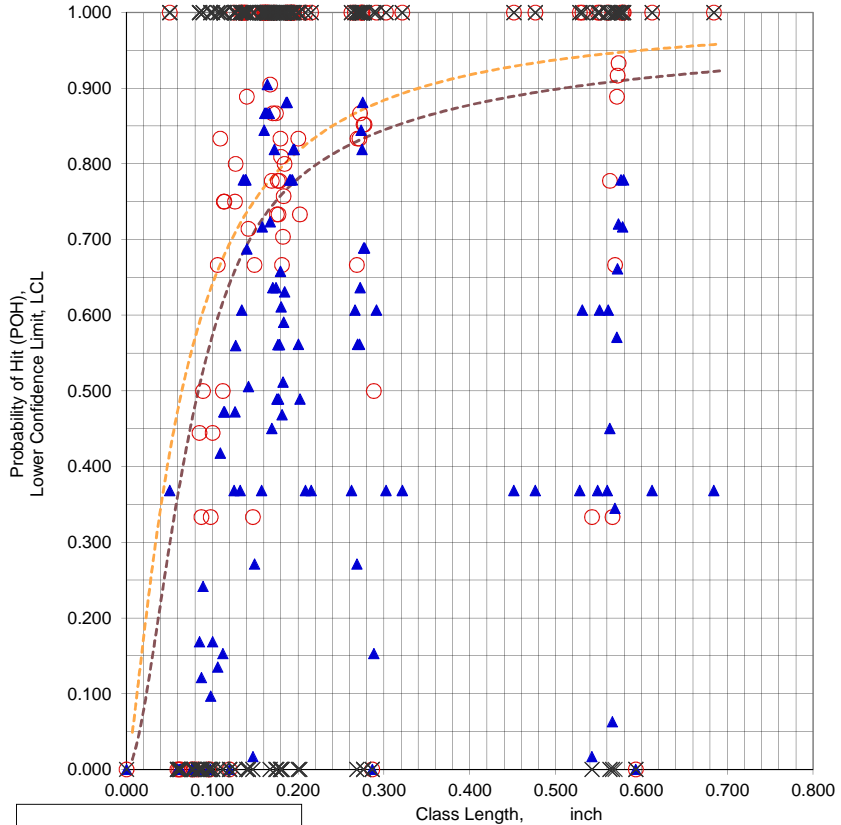
Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ⊗ Xlcl
 ⊗ Xpoh
 ▲ 2XL
 ⊗ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Need 11 more large flaws.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **D8001(3)L.xls**
 Data Set Name = **D8001(3)L(CK. NO)**
 Date & Time = 6/5/15 12:44 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0040 inch
 Classlength @ 90/95 Xpod = 0.1640 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Xp used to reduce XL requirements. Recommend satisfying XL, Xm and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in Table A.

Survey/Optimum Xpoh = 0.000 inch Samples

NTIAC 90% POD = 0.900 @ 0.340 inch
 NTIAC 90/95 POD = 0.900 @ 0.510 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.684 inch
 Samples Needed @ XL = 23
 Classlength Mid-point , Xm = 0.551 inch
 Samples Needed @ Xm = 23
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = D8001(3)L.xls
 Data Set Name = D8001(3)L(CK. NO)

Directed DOE Options

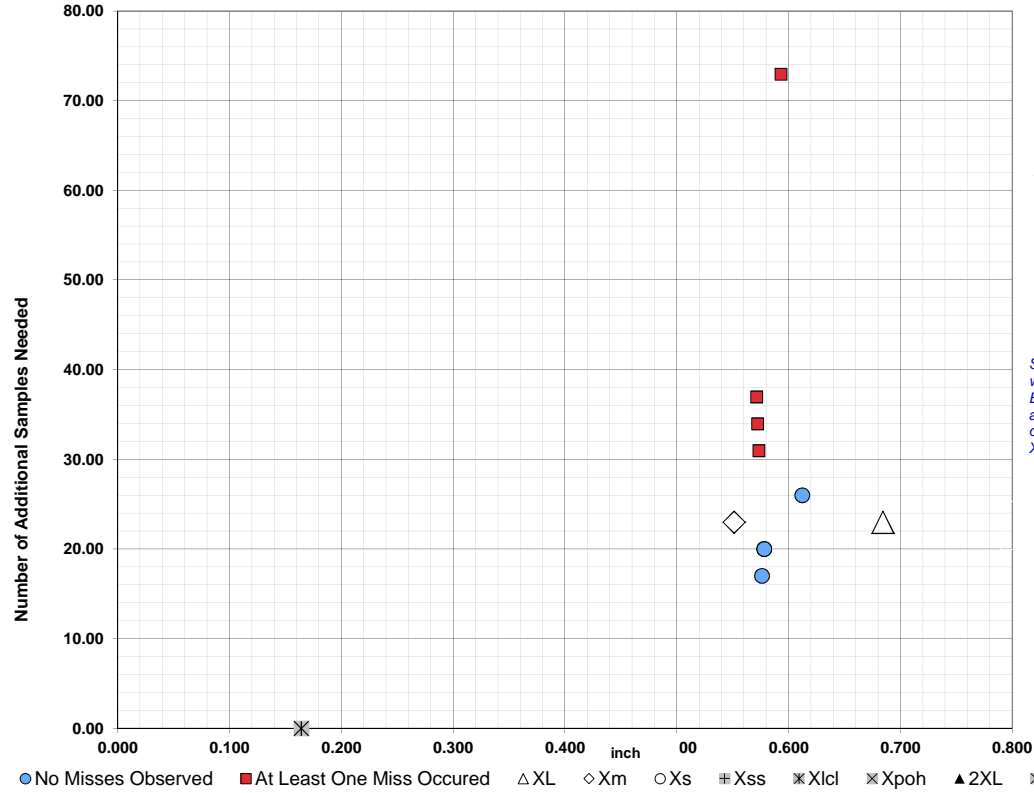


TABLE C

Class Length	Additional Samples
XL =	0.684 23
Xm =	0.551 23
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

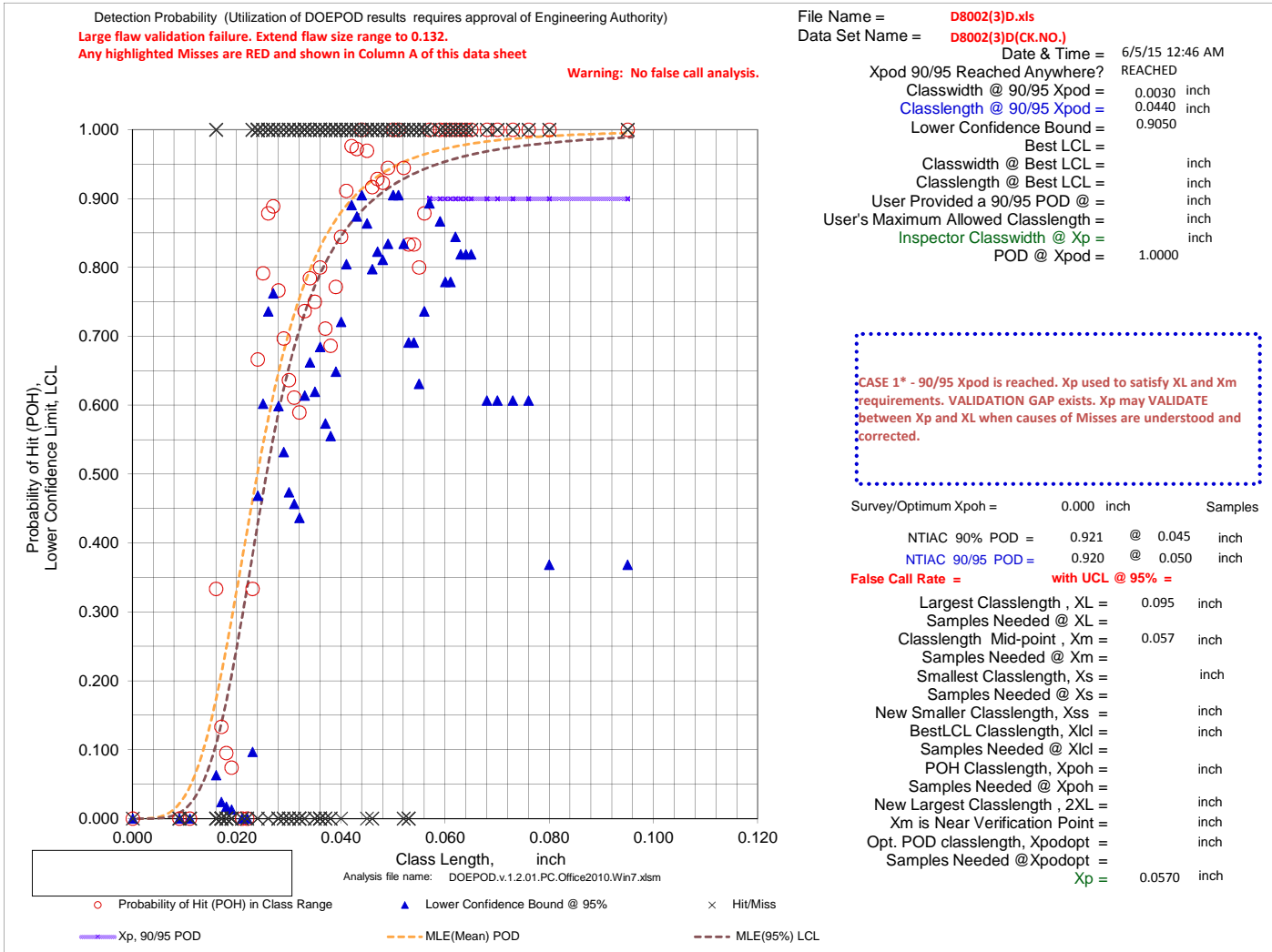
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.5930	73	0.6120	26
0.5730	31	0.5780	20
0.5720	34	0.5780	20
0.5710	37	0.5760	17

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D8002(3)D.xls
 Data Set Name = D8002(3)D(CK.NO.)

Directed DOE Options

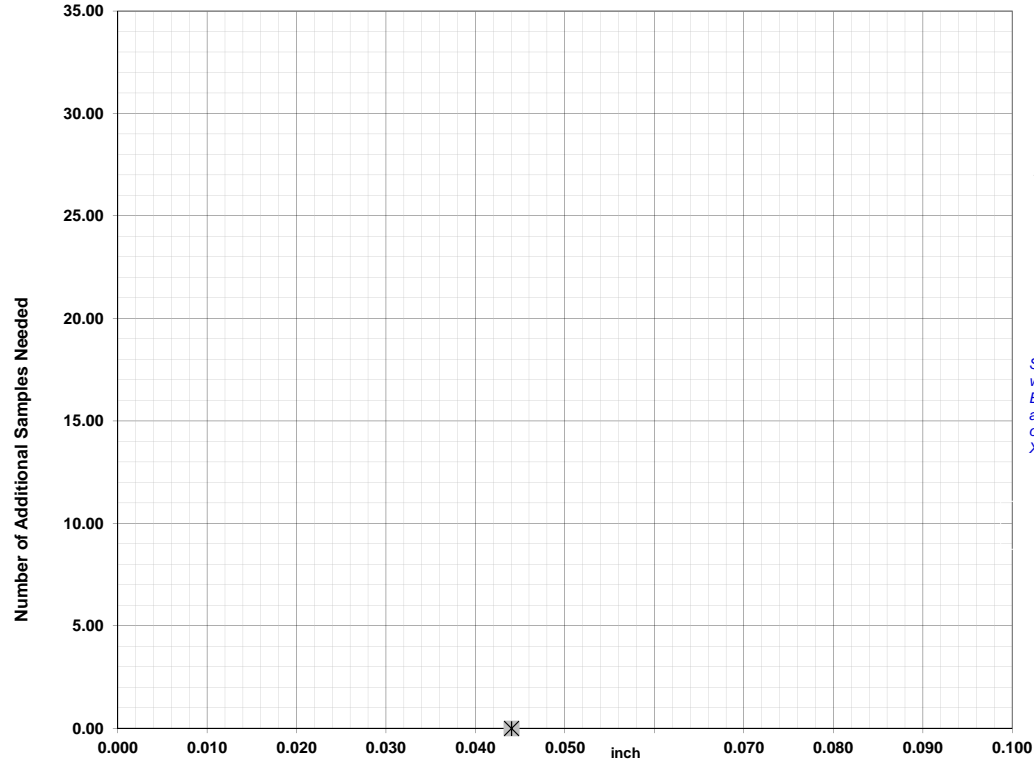


TABLE C

Class Length	Additional Samples
XL =	0.095
Xm =	0.057
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

XL = 0.095
 Xm = 0.057
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

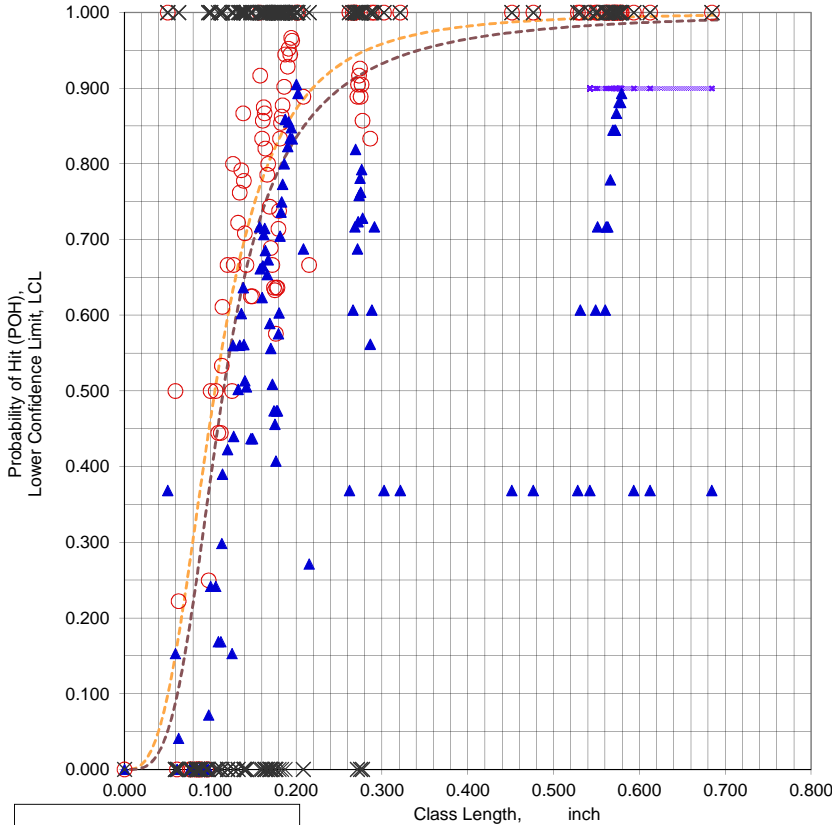
No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 12 more large flaws.
Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **D8002(3)L.xls**
 Data Set Name = **D8002(3)L(CK.NO.)**
 Date & Time = 6/5/15 12:48 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0100 inch
 Classlength @ 90/95 Xpod = 0.2000 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.901 @ 0.220 inch
 NTIAC 90/95 POD = 0.903 @ 0.255 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.684 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.563 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.5420 inch

File Name = D8002(3)L.xls
 Data Set Name = D8002(3)L(CK.NO.)

Directed DOE Options

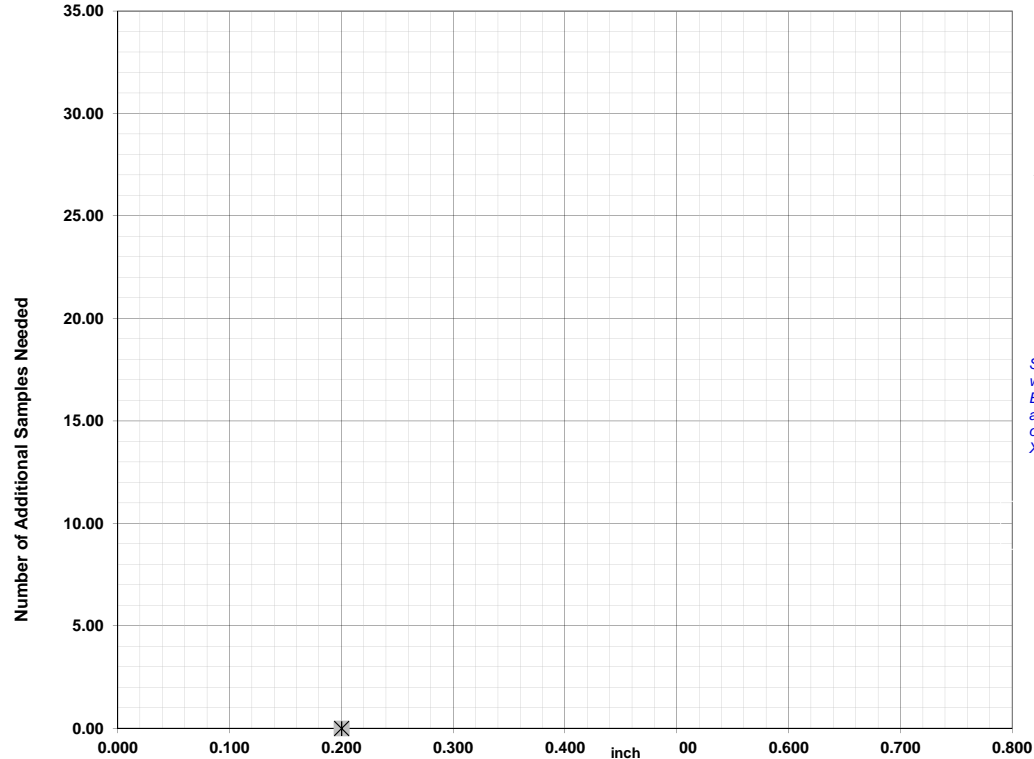


TABLE C

Class Length Additional Samples

XL = 0.684
 Xm = 0.563
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

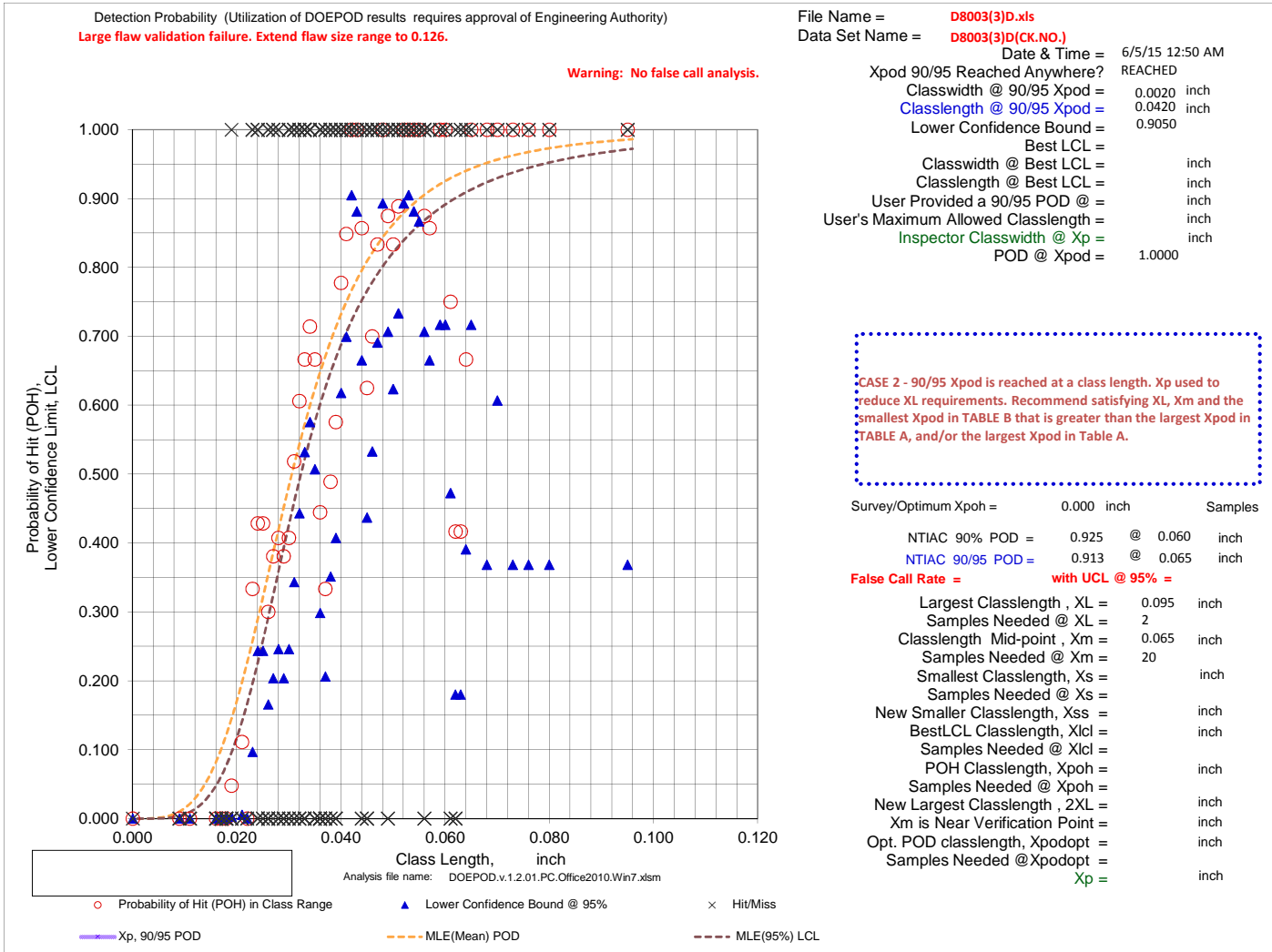
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D8003(3)D.xls
 Data Set Name = D8003(3)D(CK.NO.)

Directed DOE Options

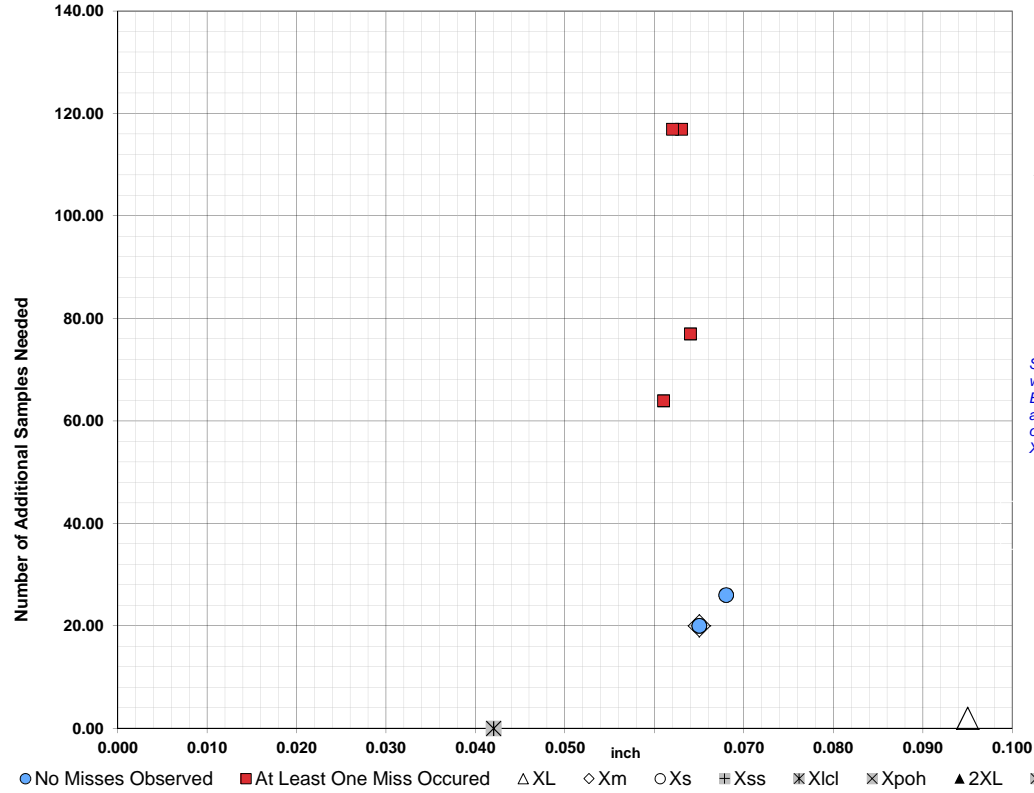


TABLE C

Class Length Additional Samples

XL = 0.095 2
 Xm = 0.065 20
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*

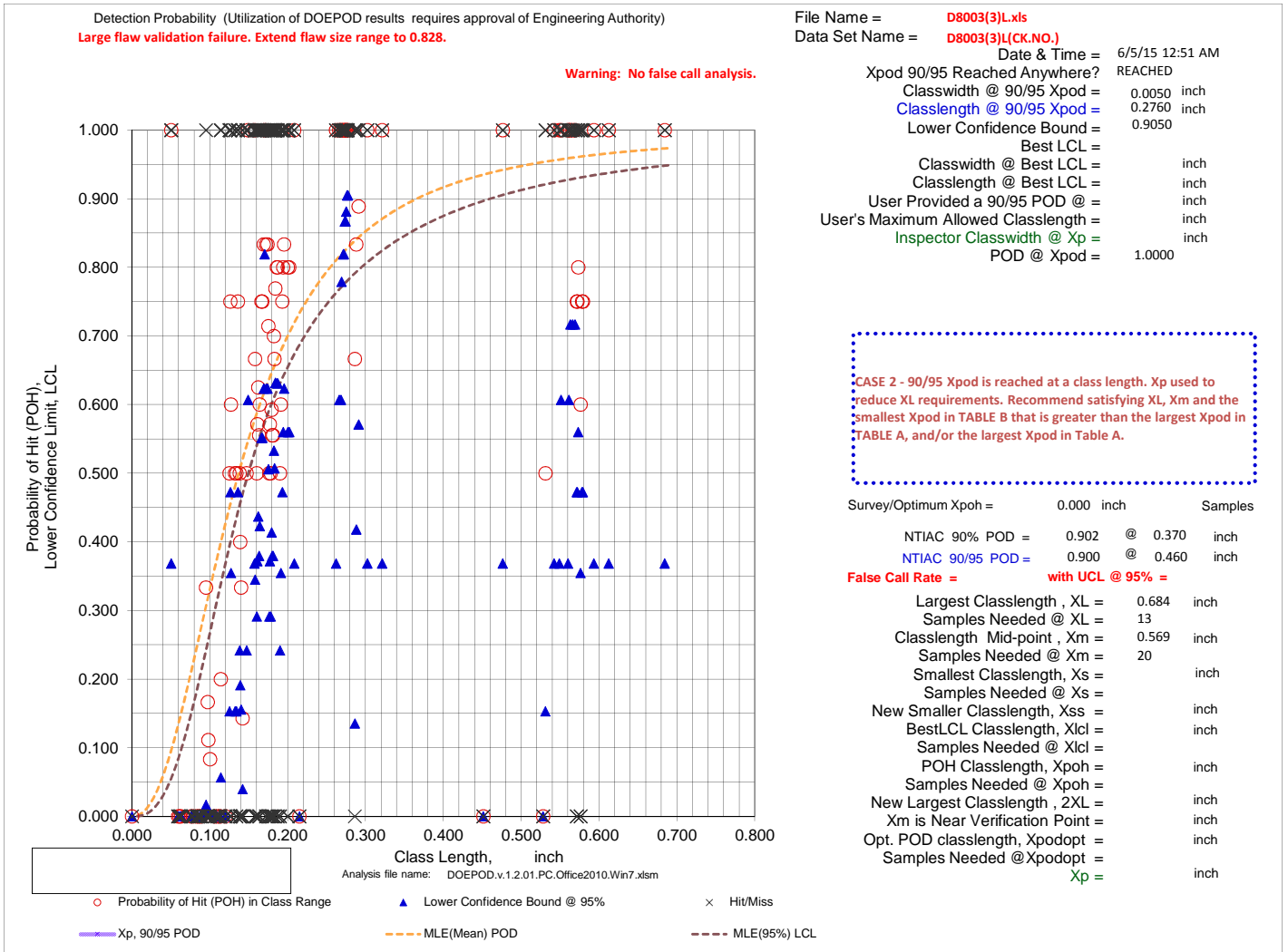
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.0640	77	0.0680	26
0.0630	117	0.0650	20
0.0620	117	0.0650	20
0.0610	64		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D8003(3)L.xls
 Data Set Name = D8003(3)L(CK.NO.)

Directed DOE Options

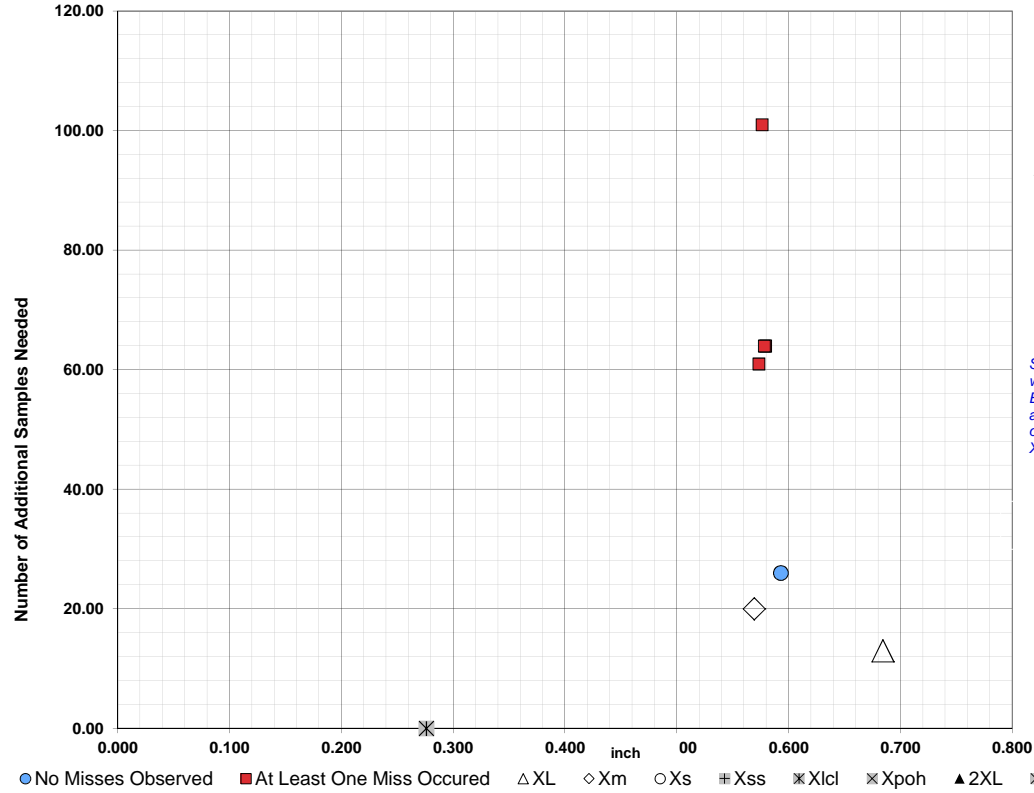


TABLE C

Class Length	Additional Samples
XL =	0.684 13
Xm =	0.569 20
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

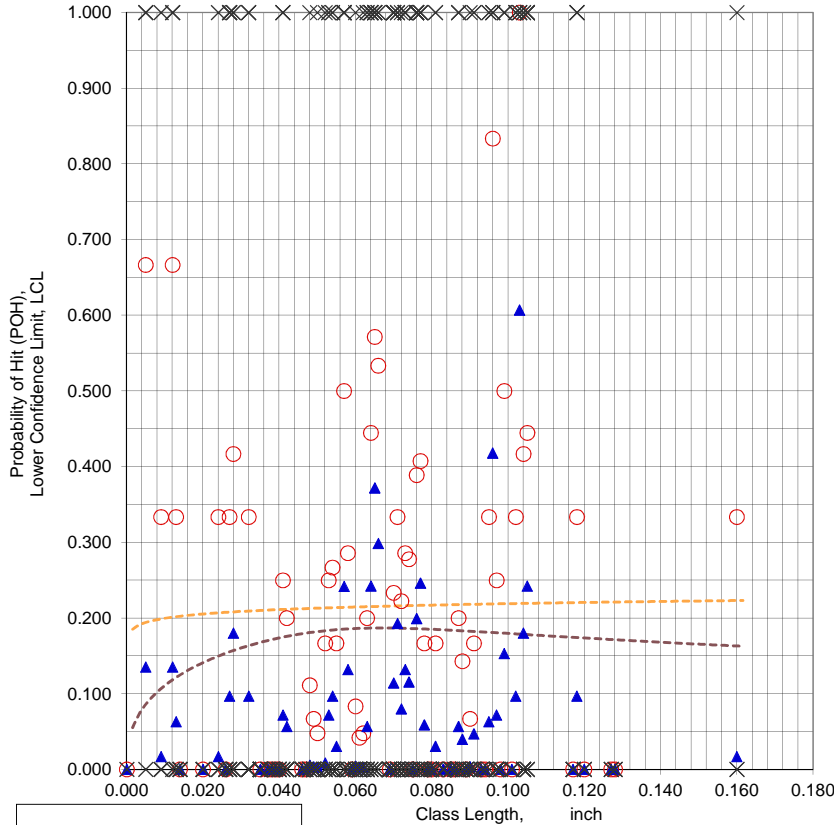
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.5790	64	0.5930	26
0.5780	64		
0.5760	101		
0.5730	61		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **D9001(3)D.xls**
 Data Set Name = **D9001(3)D(CK. NO.)**
 Date & Time = 6/5/15 12:52 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6070
 Classwidth @ Best LCL = 0.0010 inch
 Classlength @ Best LCL = 0.1030 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.320 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = D9001(3)D.xls
 Data Set Name = D9001(3)D(CK. NO.)

Directed DOE Options

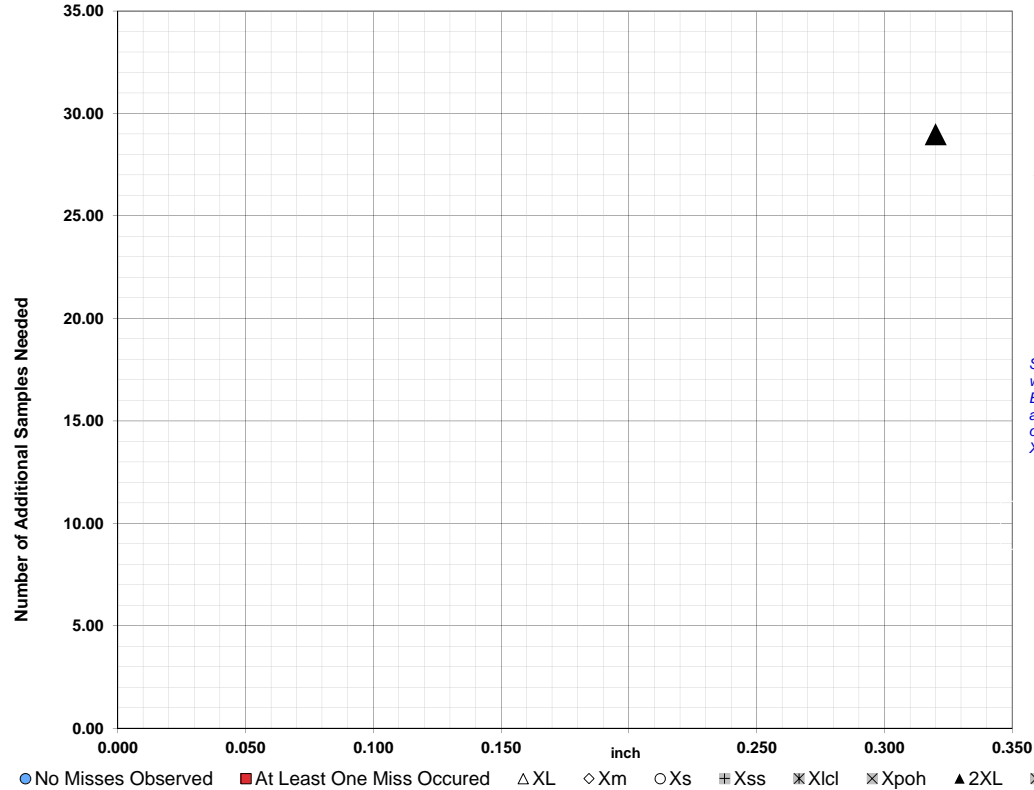


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.320	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.320 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

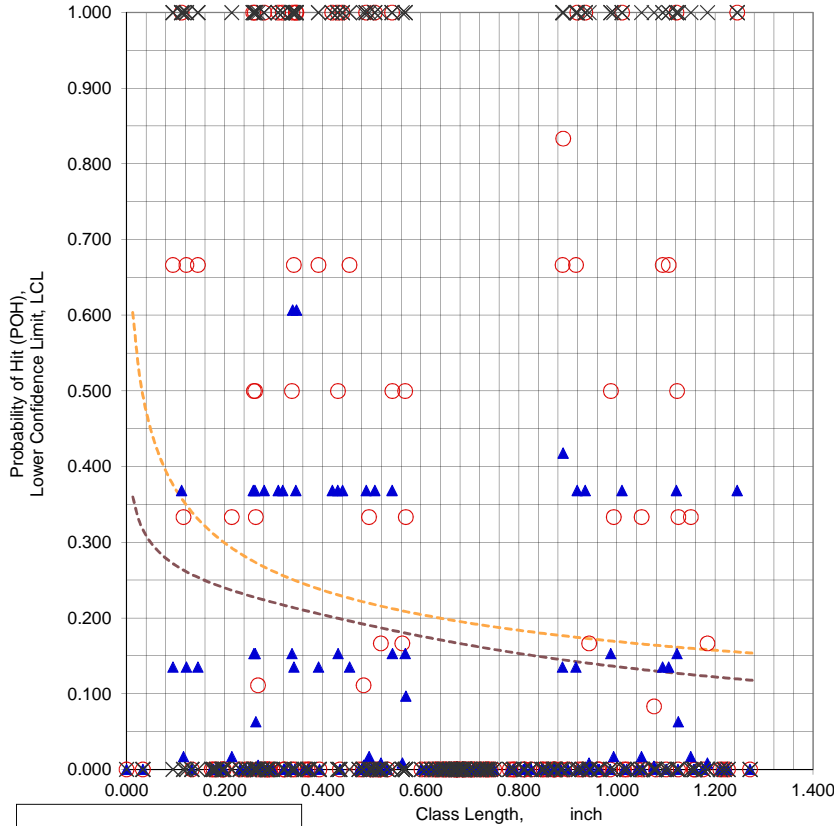
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **D9001(3)L.xls**
 Data Set Name = **D9001(3)(CK. NO.)**
 Date & Time = 6/5/15 12:54 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6070
 Classwidth @ Best LCL = 0.0010 inch
 Classlength @ Best LCL = 0.3380 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 2.542 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = D9001(3)L.xls
 Data Set Name = D9001(3)L(CK. NO.)

Directed DOE Options



TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 2.542	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 2.542 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

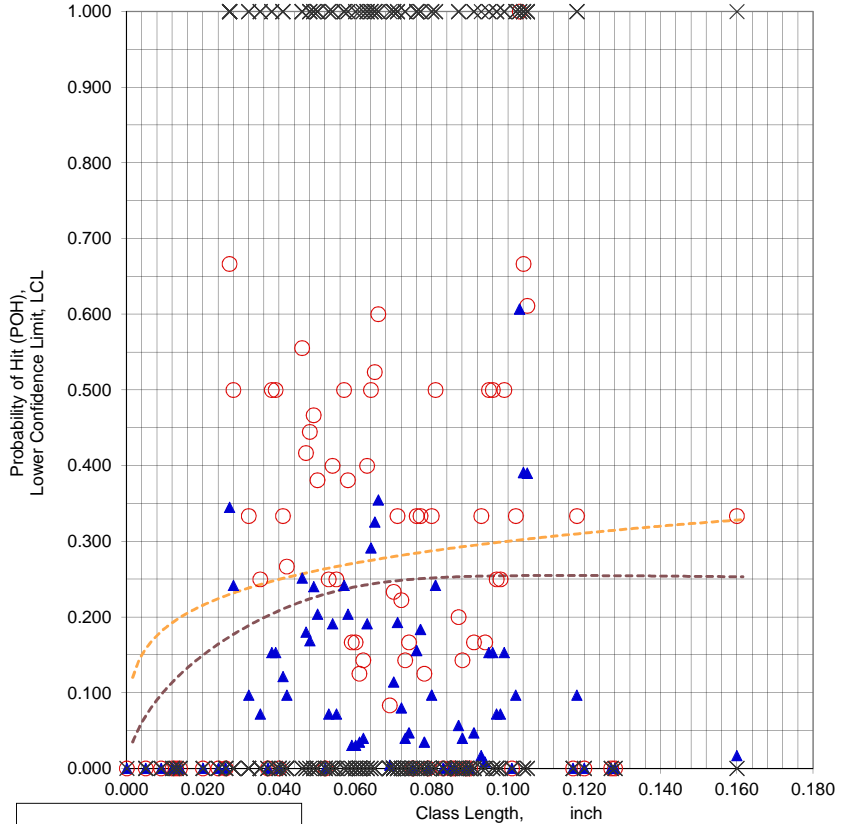
● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.

File Name = **D9002(3)D.xls**
 Data Set Name = **D9002(3)D(CK.NO.)**
 Date & Time = 6/5/15 12:57 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6070
 Classwidth @ Best LCL = 0.0010 inch
 Classlength @ Best LCL = 0.1030 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =



CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.320 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD — MLE(Mean) POD - - - MLE(95%) LCL

File Name = D9002(3)D.xls
 Data Set Name = D9002(3)D(CK.NO.)

Directed DOE Options

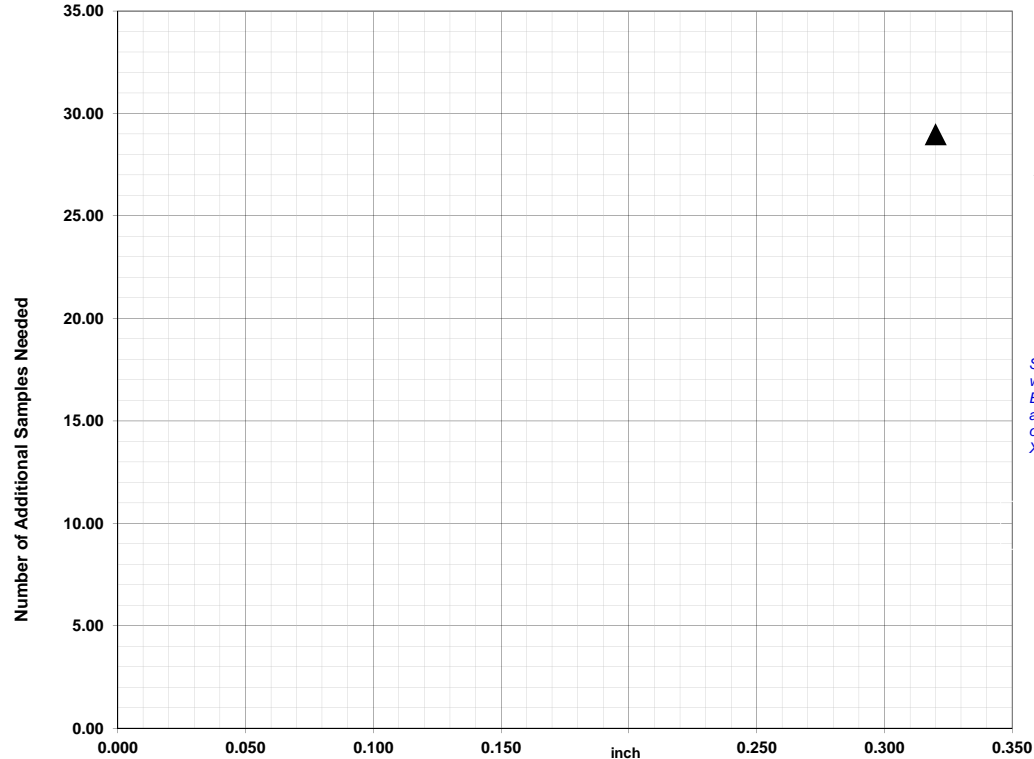


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.320	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.320 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

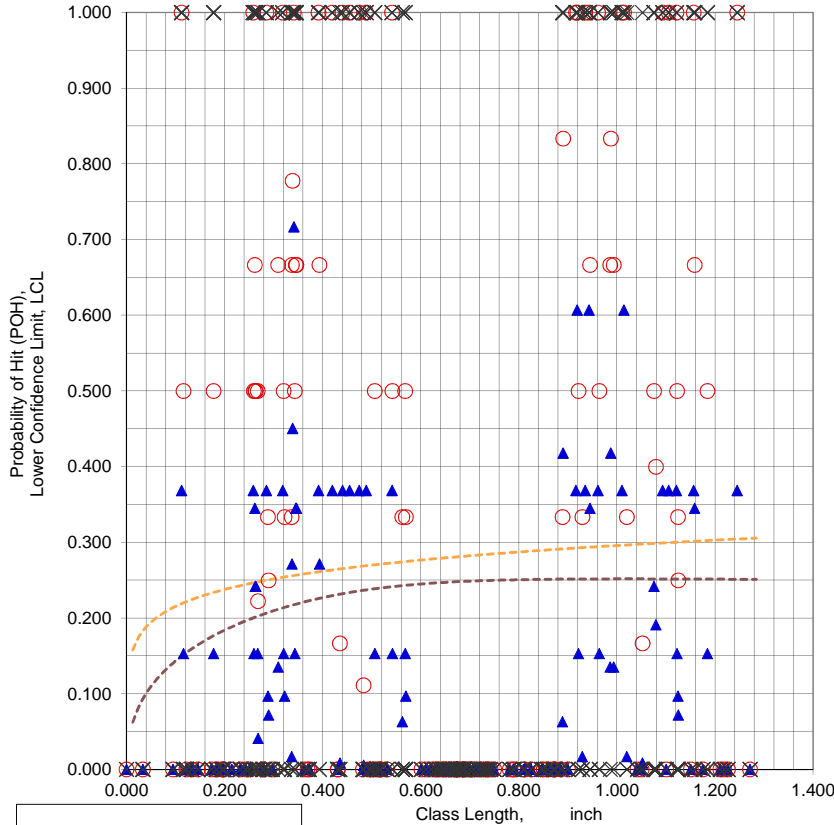
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **D9002(3)L.xls**
 Data Set Name = **D9002(3)L(CK.NO.)**
 Date & Time = 6/5/15 12:59 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7169
 Classwidth @ Best LCL = 0.0040 inch
 Classlength @ Best LCL = 0.3410 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.900 @ 0.005 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 2.542 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = D9002(3)L.xls
 Data Set Name = D9002(3)L(CK.NO.)

Directed DOE Options

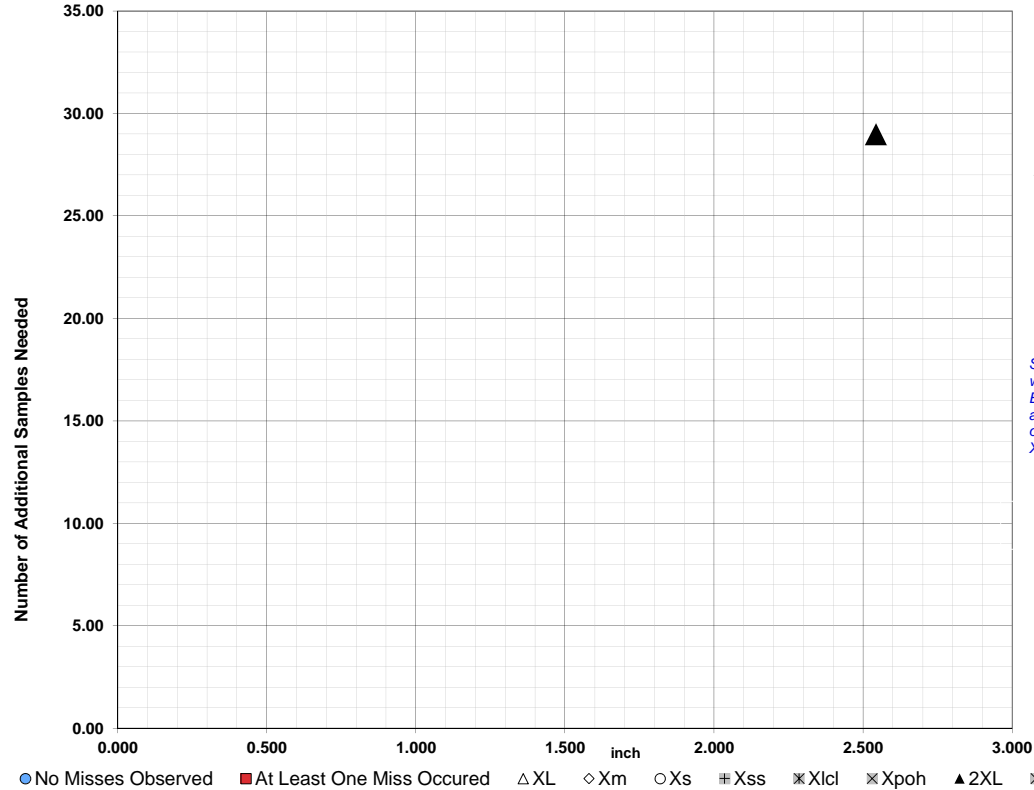


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 2.542	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 2.542 29
 **Alternate Xm =
 Xpodopt =

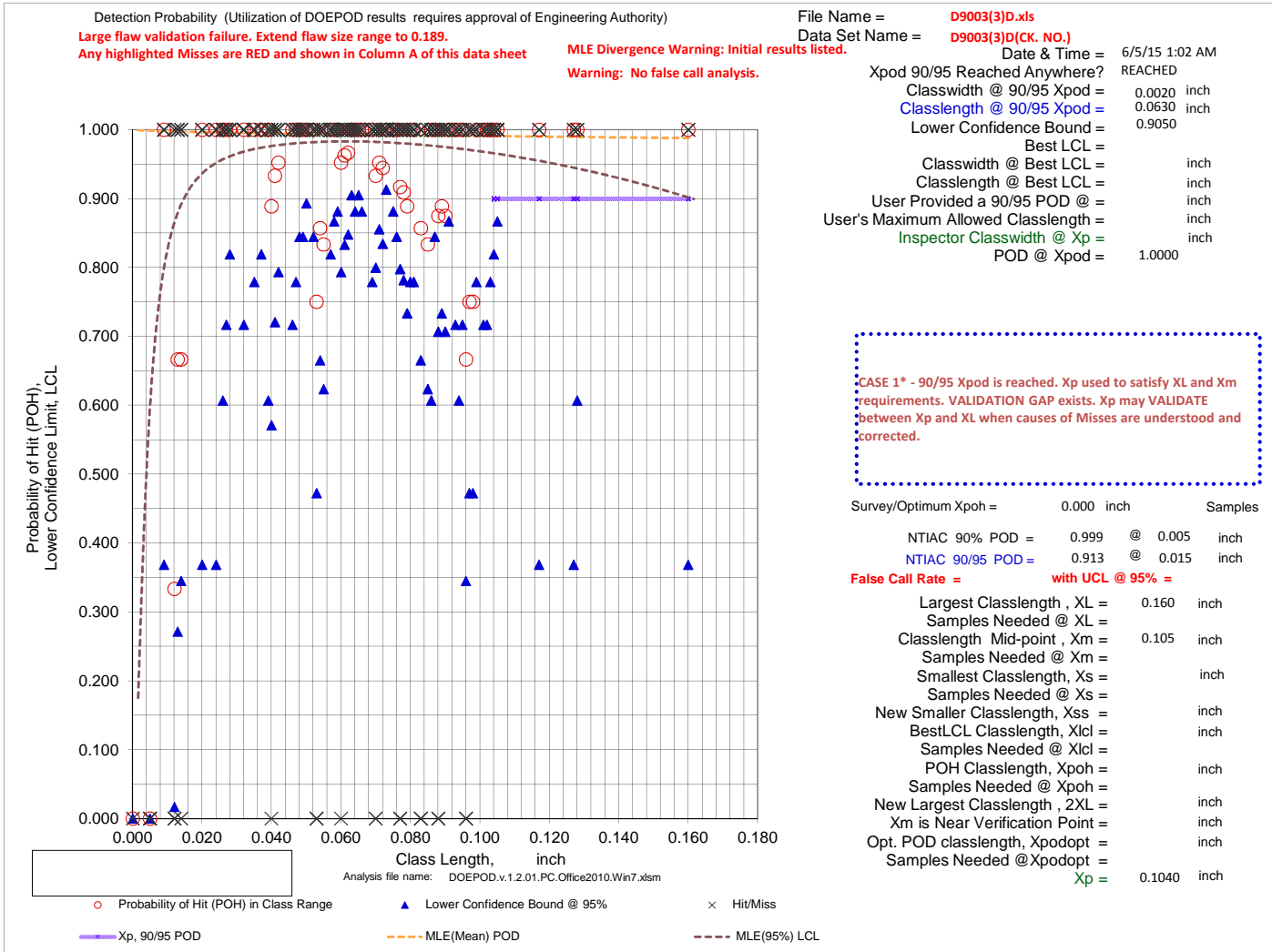
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D9003(3)D.xls
 Data Set Name = D9003(3)D(CK. NO.)

Directed DOE Options

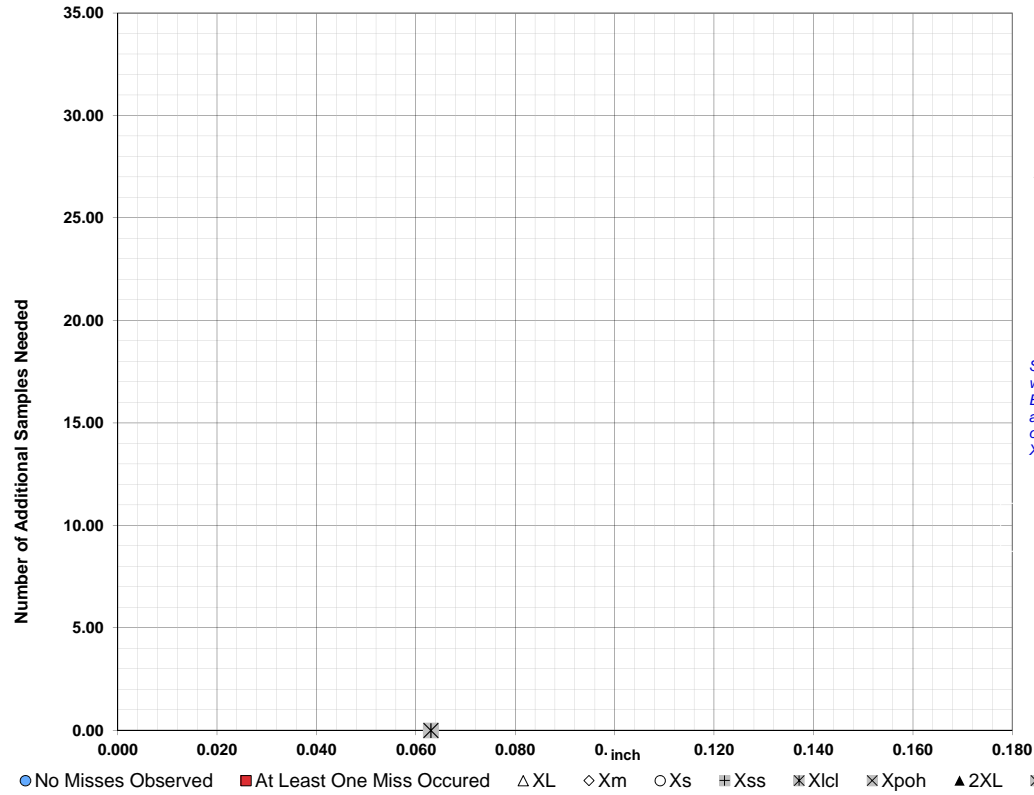


TABLE C

Class Length	Additional Samples
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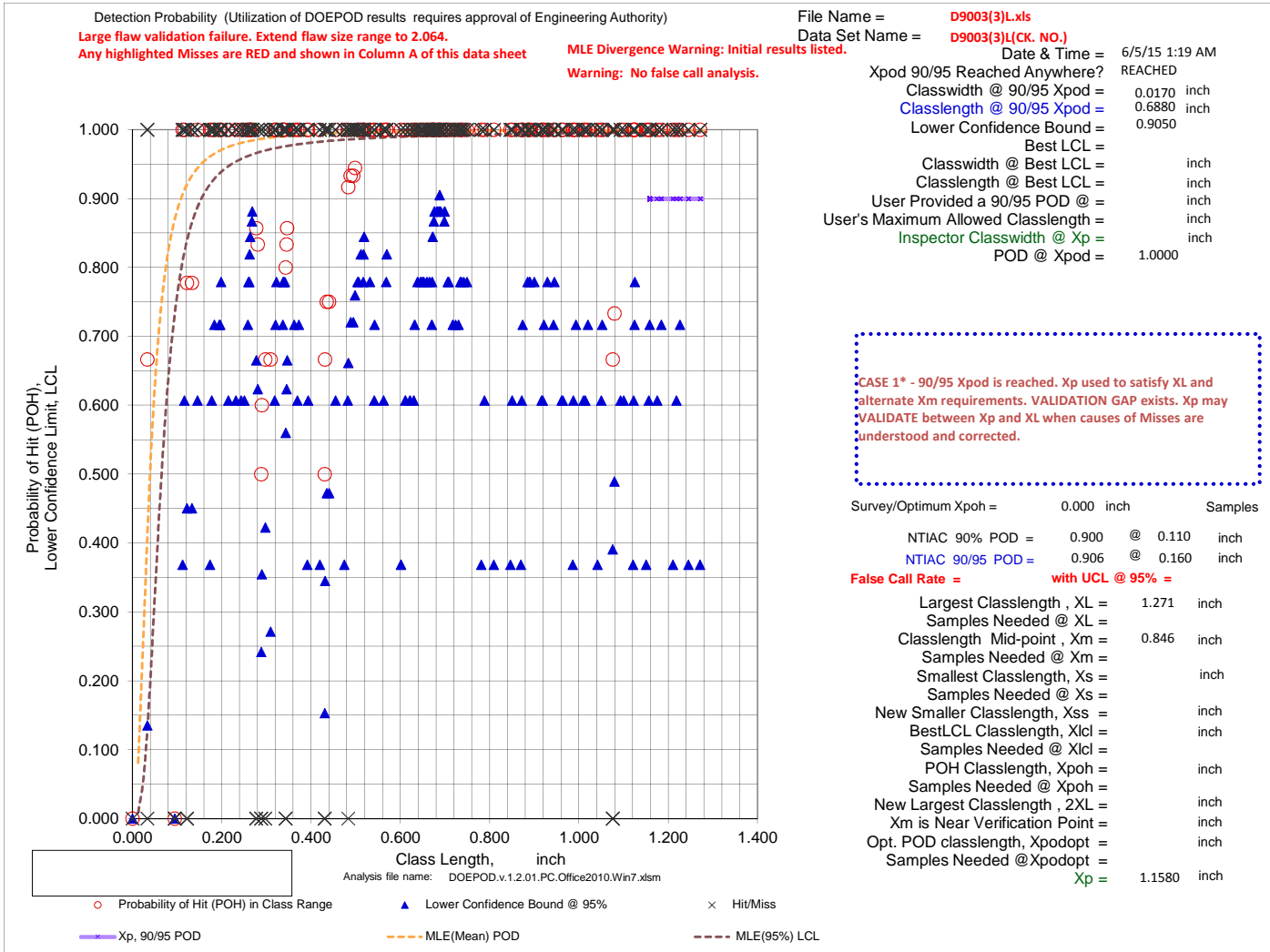
XL =	0.160
Xm =	0.105
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D9003(3)L.xls
 Data Set Name = D9003(3)L(CK. NO.)

Directed DOE Options

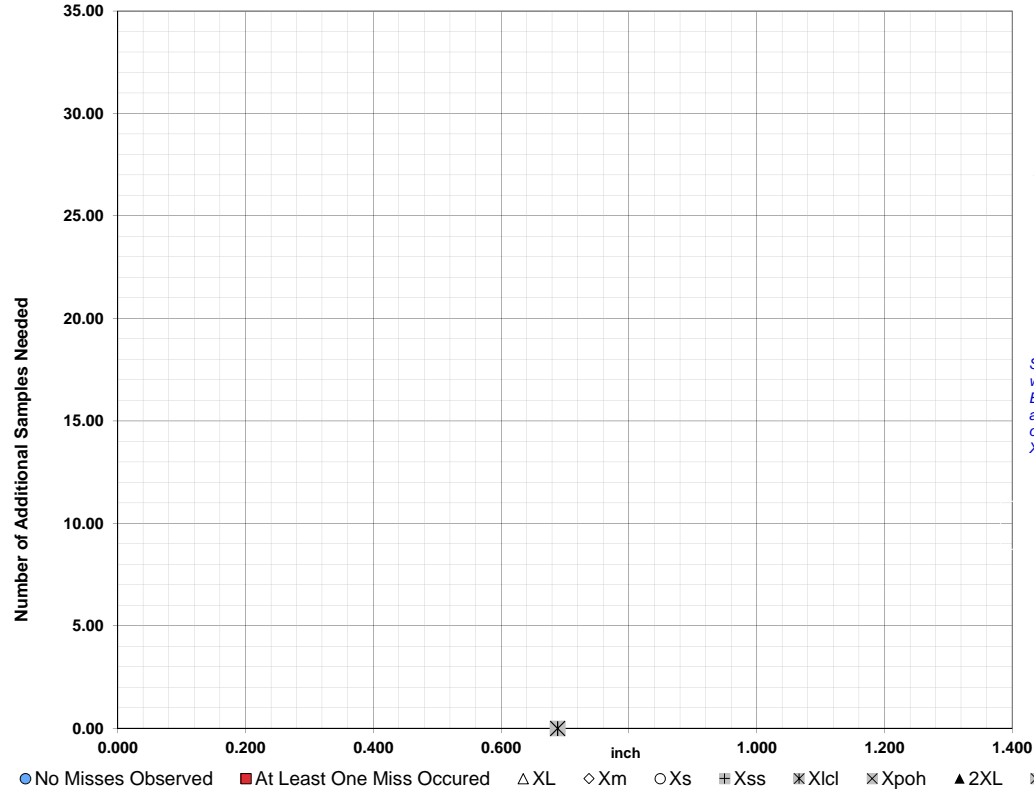


TABLE C

Class Length Additional Samples

XL = 1.271
 Xm = 0.846
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

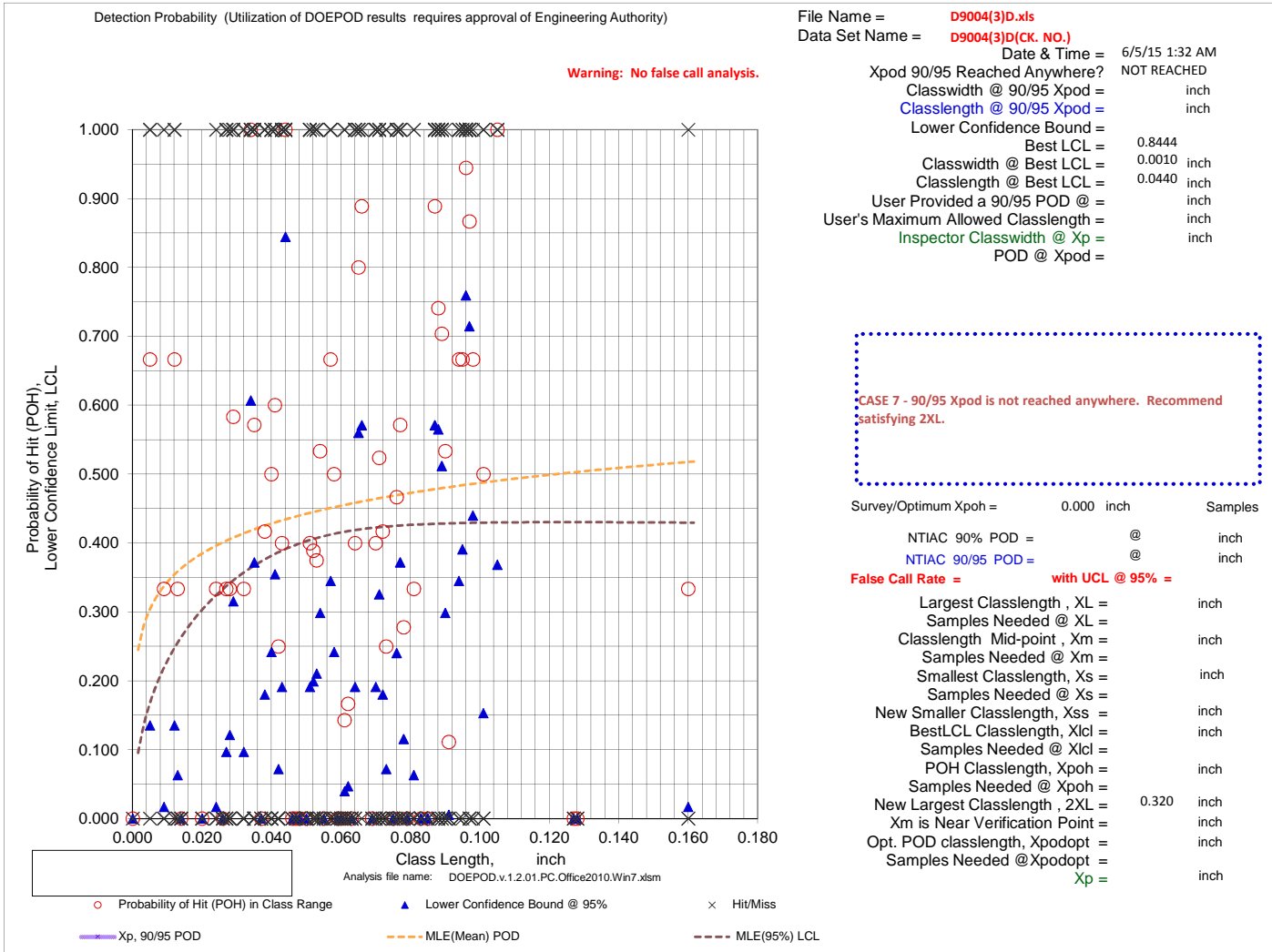
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D9004(3)D.xls
 Data Set Name = D9004(3)D(CK. NO.)

Directed DOE Options

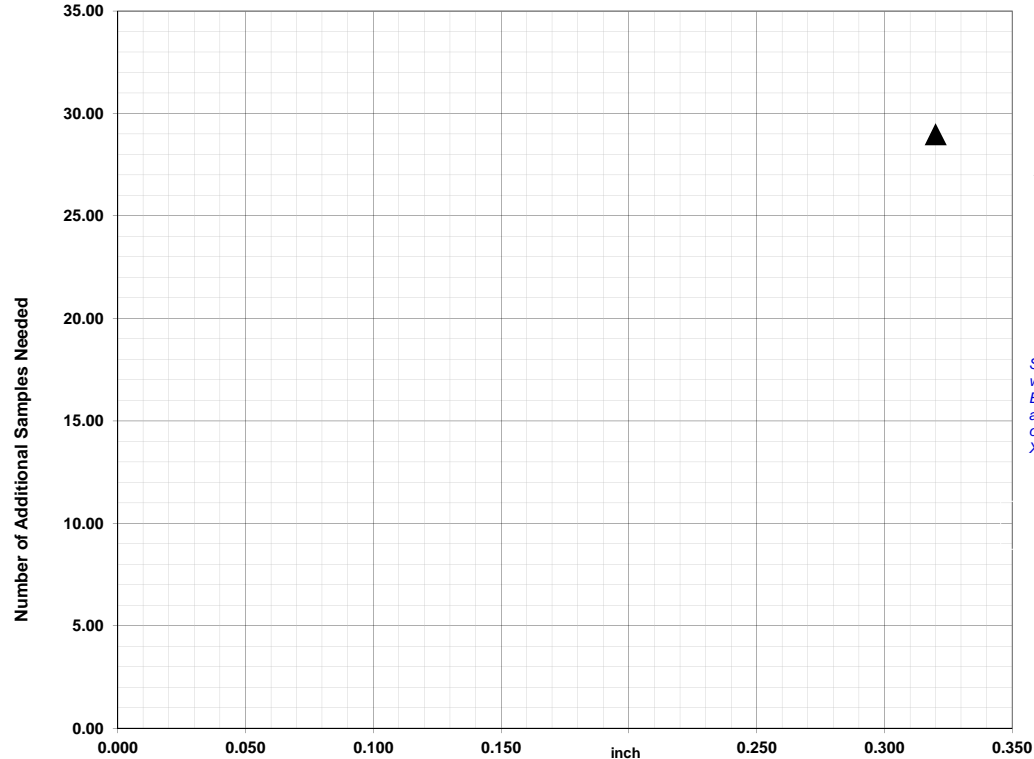


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.320	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.320 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

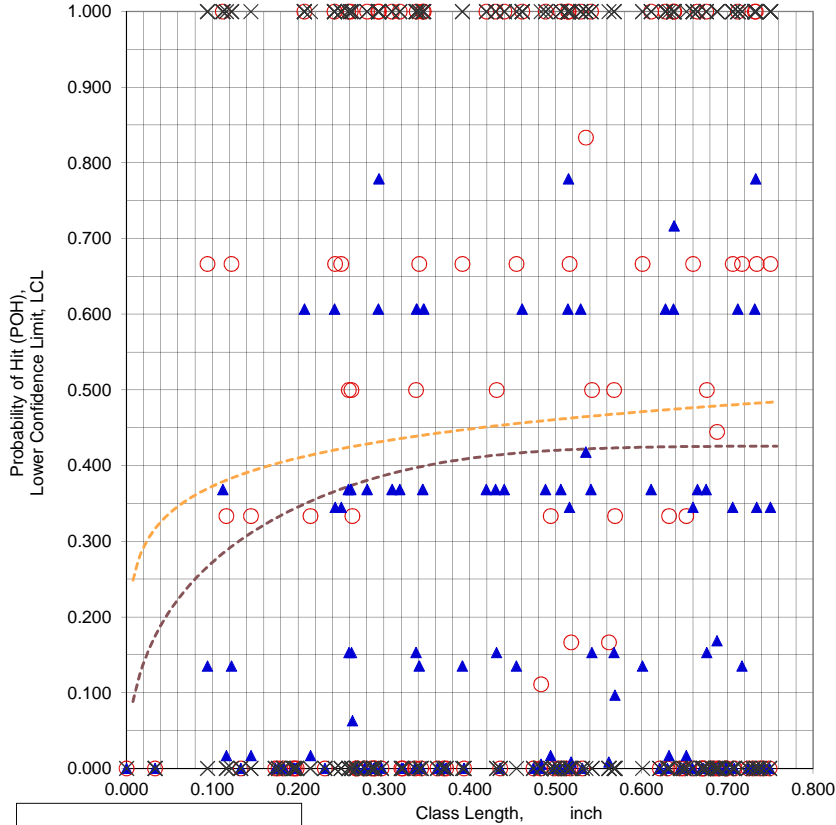
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
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Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



o Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 x Hit/Miss
— Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **D9004(3)L.xls**
 Data Set Name = **D9004(3)L(CK. NO.)**
 Date & Time = 6/5/15 1:33 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7791
 Classwidth @ Best LCL = 0.0010 inch
 Classlength @ Best LCL = 0.2940 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 1.500 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = D9004(3)L.xls
 Data Set Name = D9004(3)L(CK. NO.)

Directed DOE Options

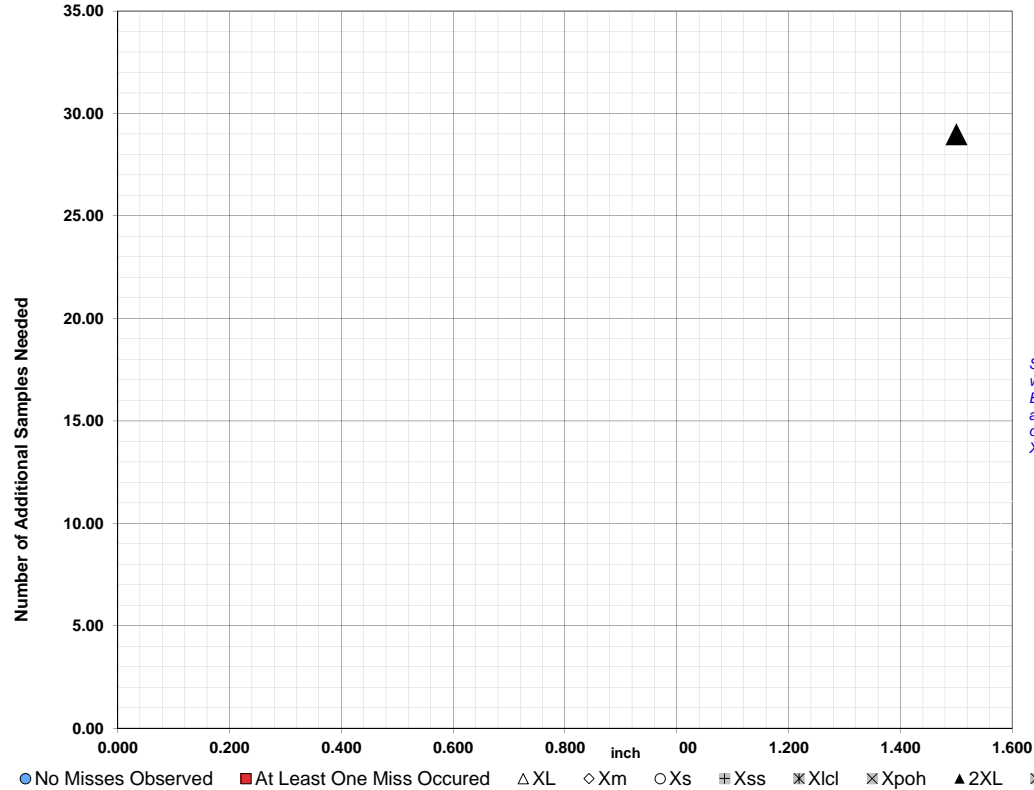


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 1.500	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 1.500 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

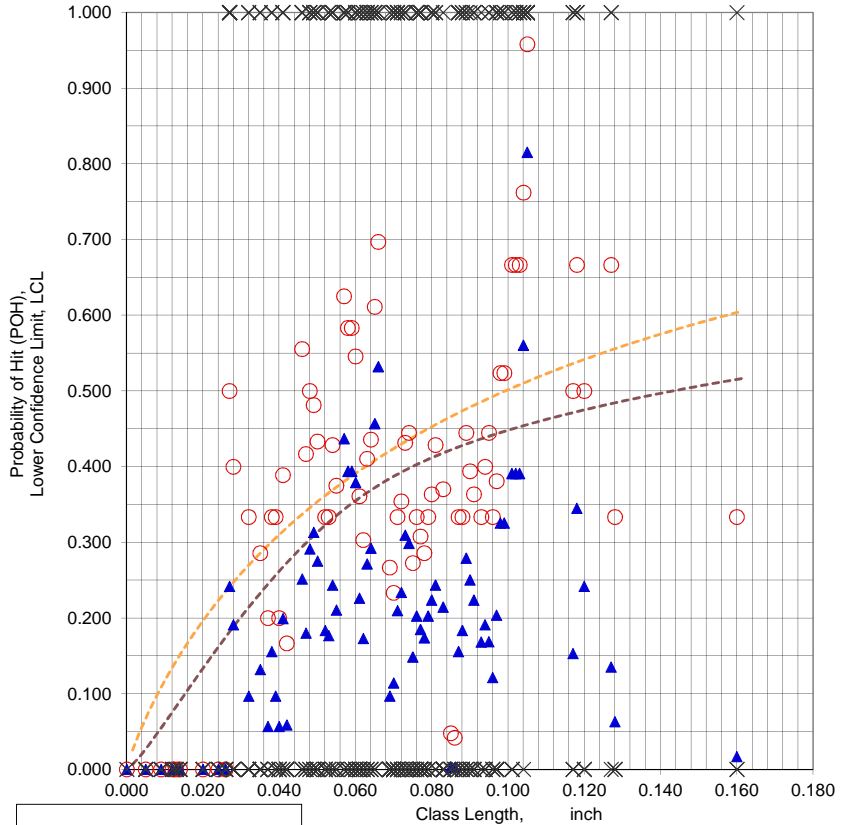
Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = D9005(3)D.xls
 Data Set Name = D9005(3)D(CK. NO.)
 Date & Time = 6/5/15 1:36 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound = 0.8153
 Best LCL = 0.0030 inch
 Classwidth @ Best LCL = 0.1050 inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = inch

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.320 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = D9005(3)D.xls
 Data Set Name = D9005(3)D(CK. NO.)

Directed DOE Options

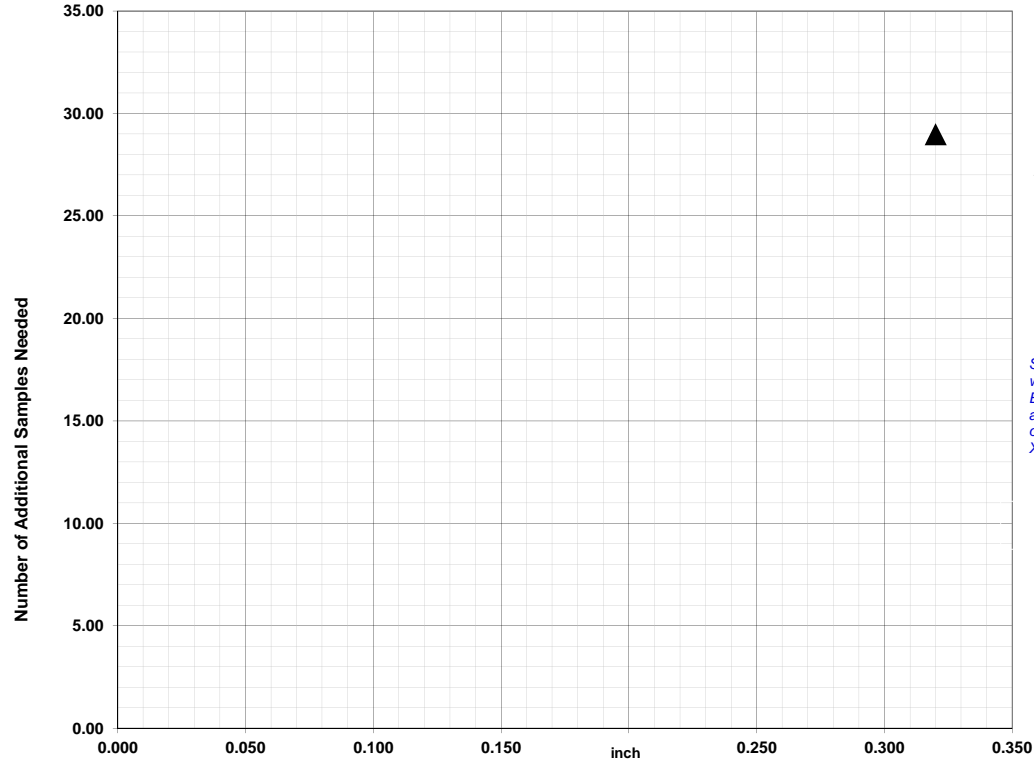


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.320	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.320 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

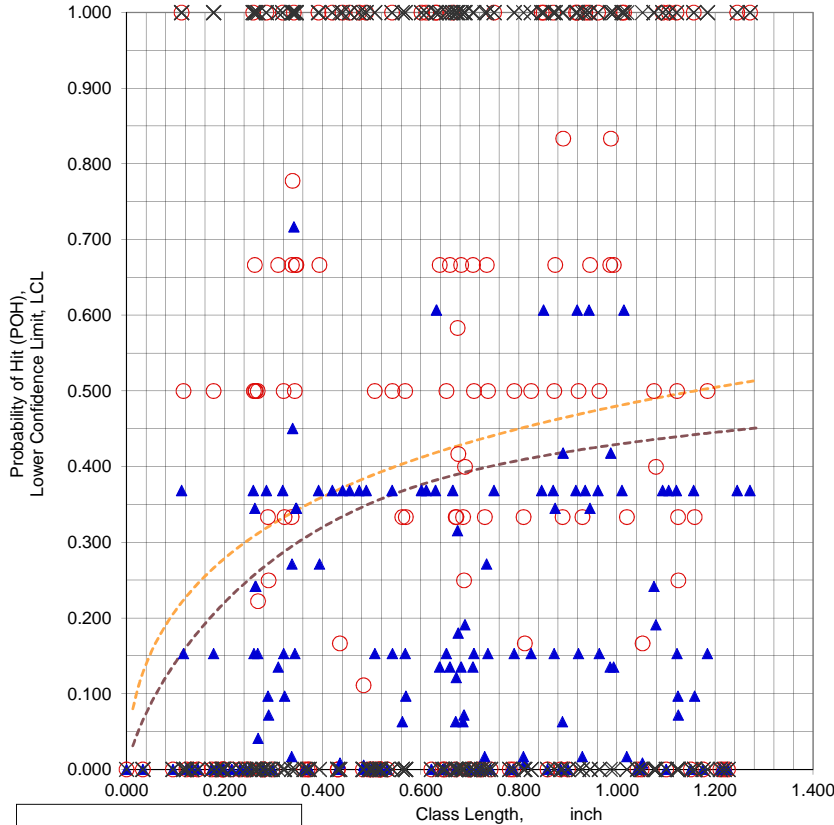
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
— Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **D9005(3)L.xls**
 Data Set Name = **D9005(3)L(CK. NO.)**
 Date & Time = 6/5/15 1:38 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7169
 Classwidth @ Best LCL = 0.0040 inch
 Classlength @ Best LCL = 0.3410 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 1.2450 -0.018 inch 26 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 1.271 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 1.245 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 2.542 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = D9005(3)L.xls
 Data Set Name = D9005(3)L(CK. NO.)

Directed DOE Options

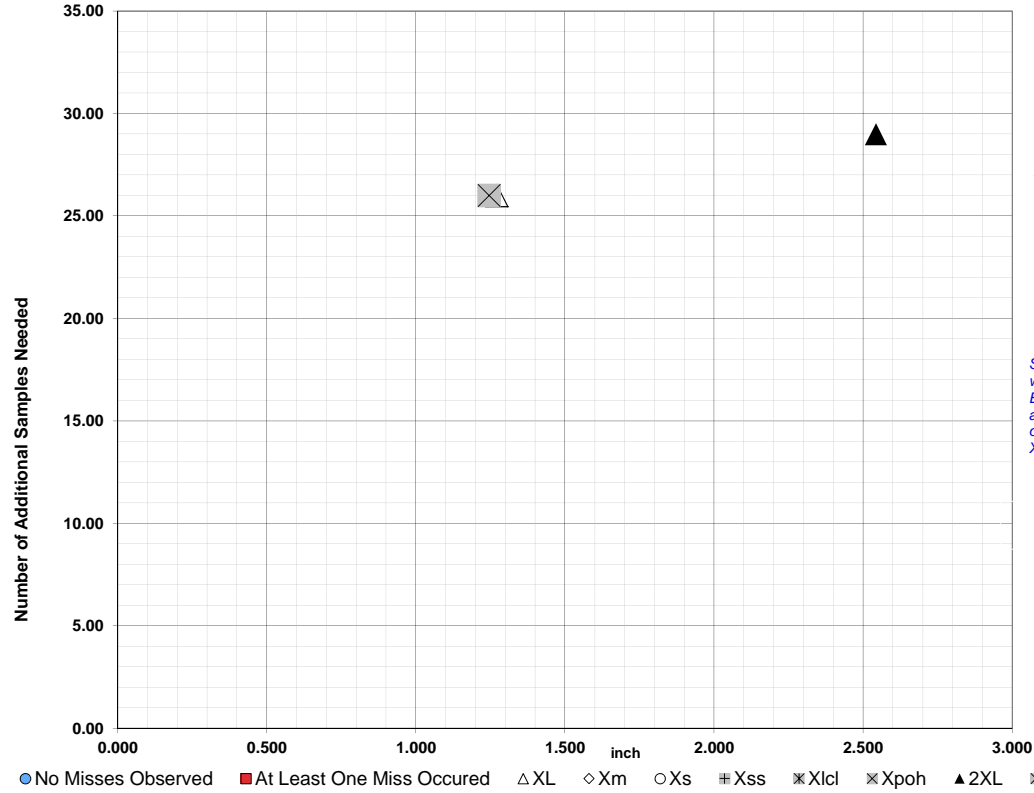


TABLE C

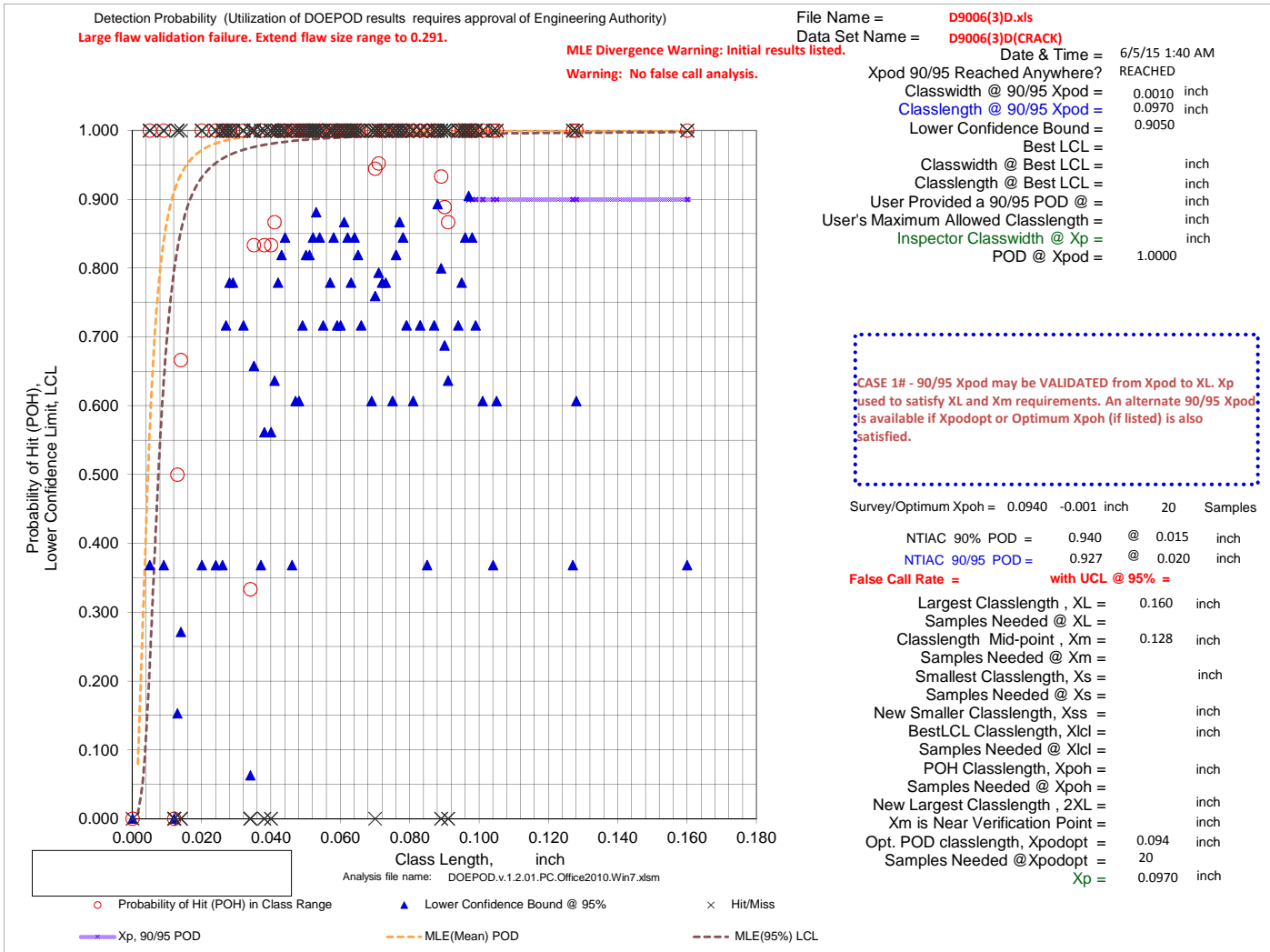
Class Length	Additional Samples
XL = 1.271	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.245	26
2XL = 2.542	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D9006(3)D.xls
 Data Set Name = D9006(3)D(CRACK)

Directed DOE Options

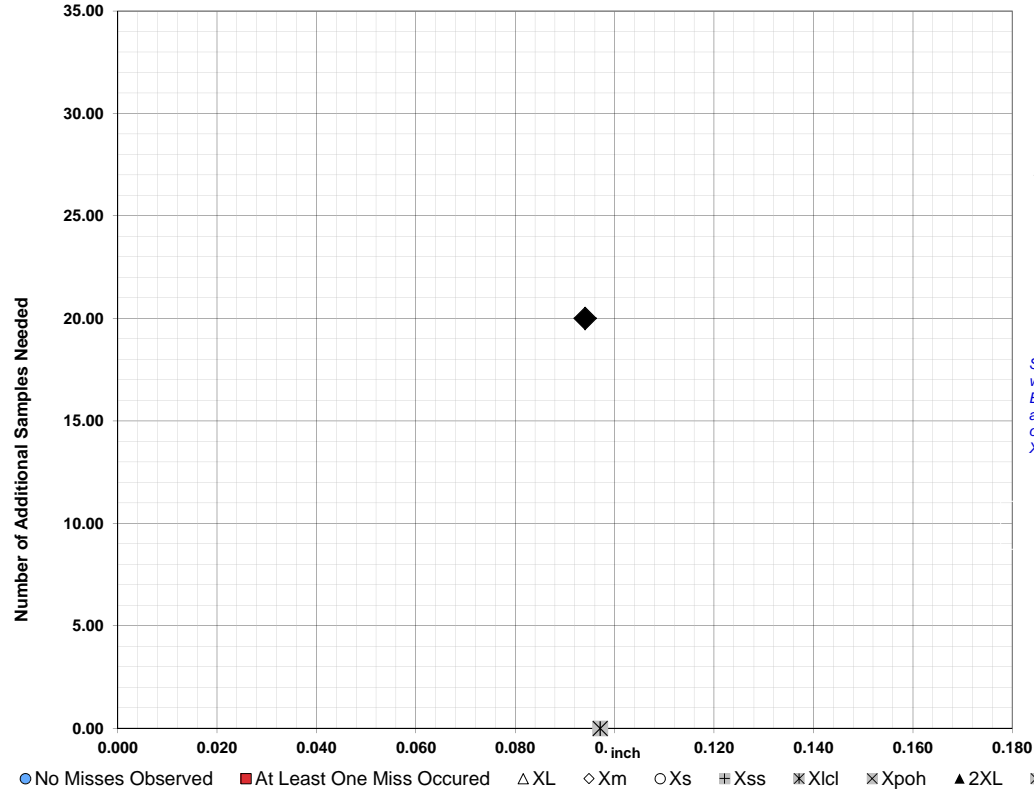


TABLE C

Class Length	Additional Samples
XL =	0.160
Xm =	0.128
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.094 20

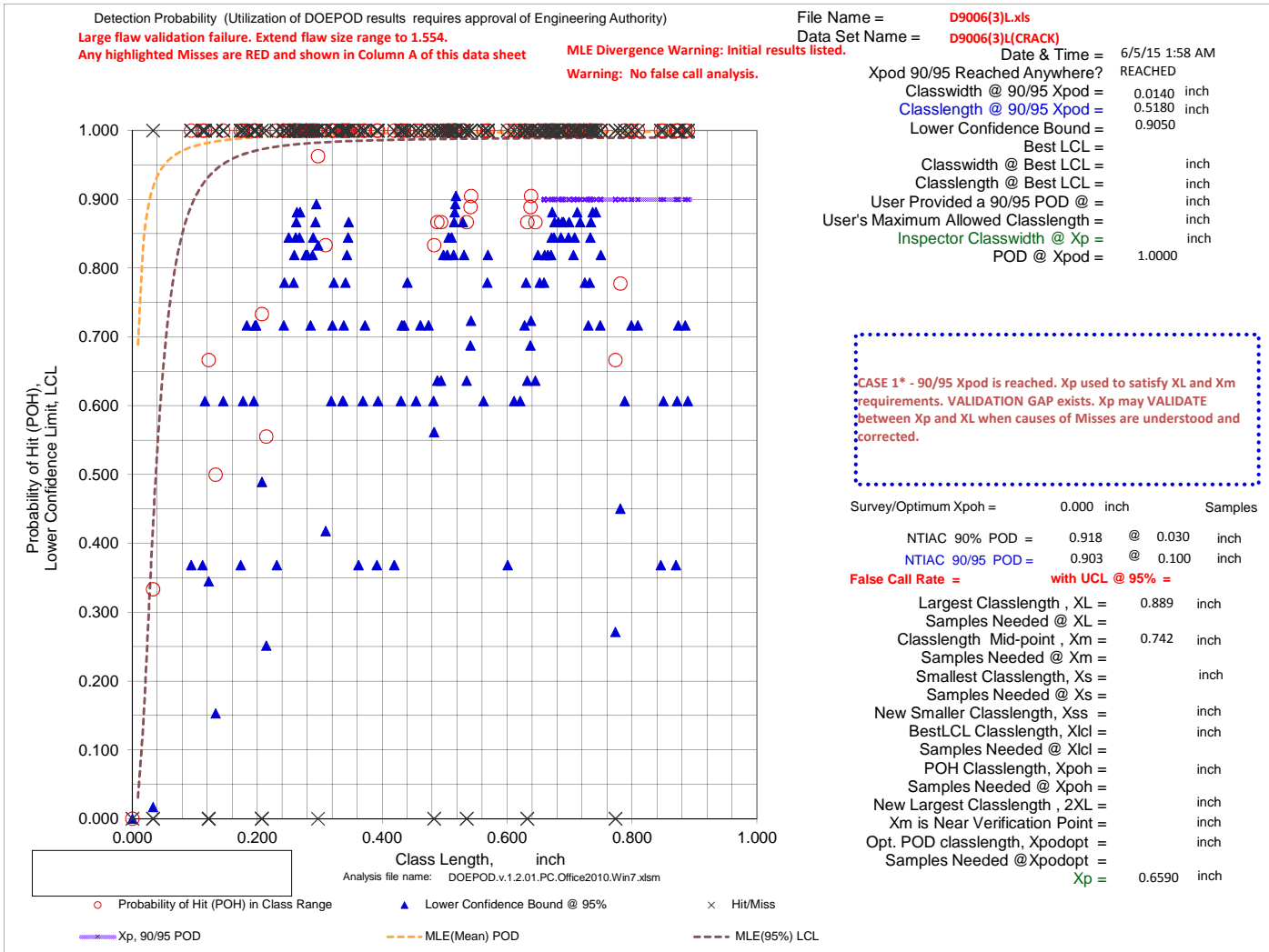
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = D9006(3)L.xls
 Data Set Name = D9006(3)L(CRACK)

Directed DOE Options

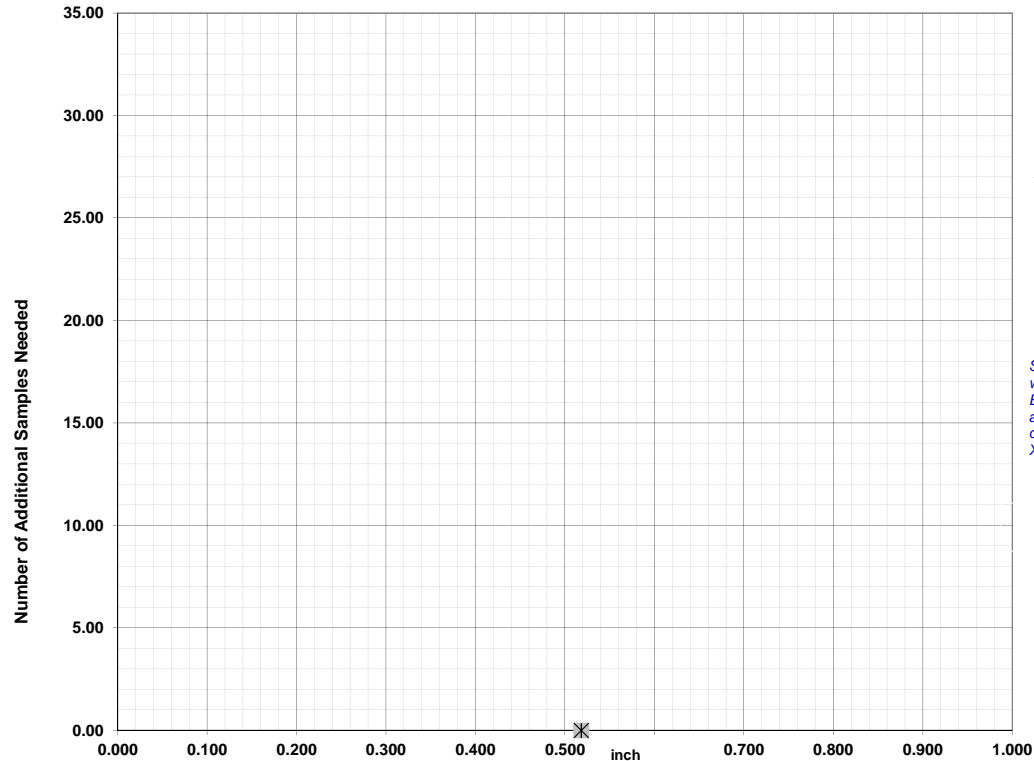


TABLE C

Class Length Additional Samples

XL = 0.889
 Xm = 0.742
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

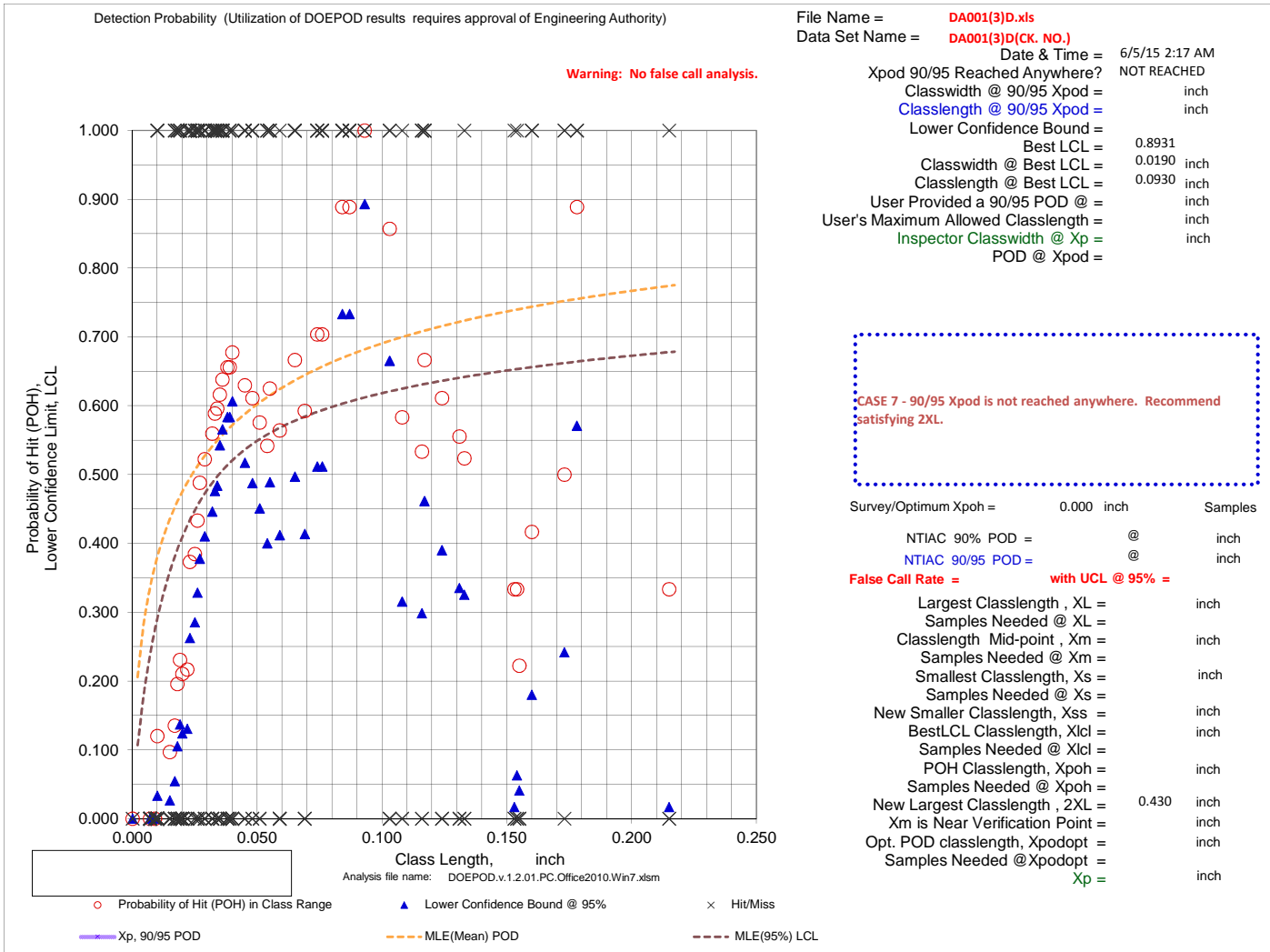
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = DA001(3)D.xls
 Data Set Name = DA001(3)D(CK. NO.)

Directed DOE Options

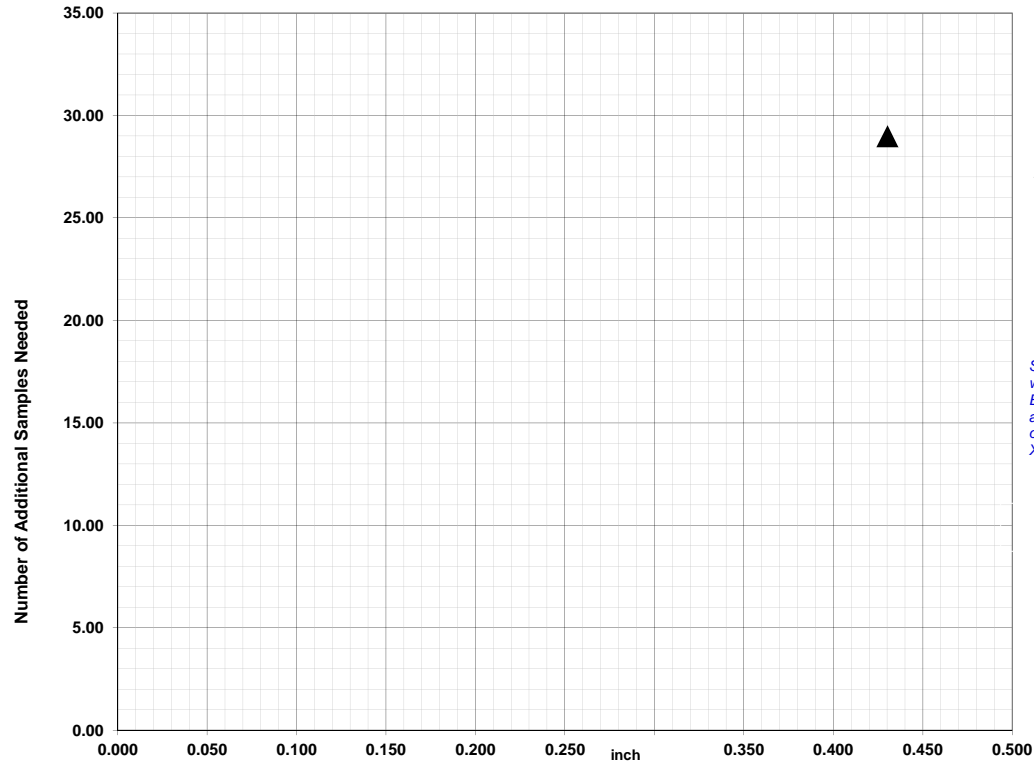


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.430	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.430 29
 **Alternate Xm =
 Xpodopt =

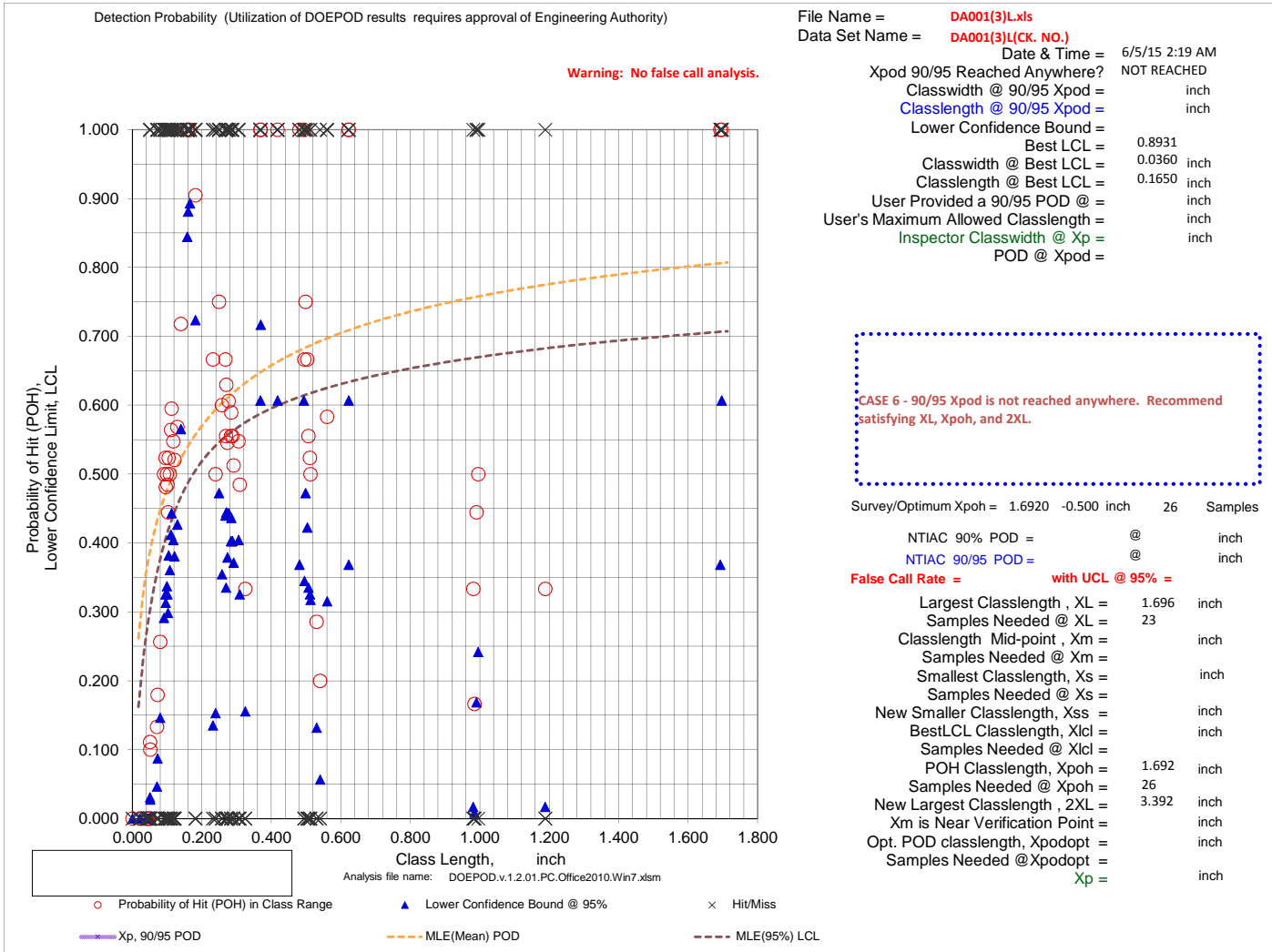
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ⊗ Xlcl
 ⊗ Xpoh
 ▲ 2XL
 ⊗ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = DA001(3)L.xls
 Data Set Name = DA001(3)L(CK. NO.)

Directed DOE Options

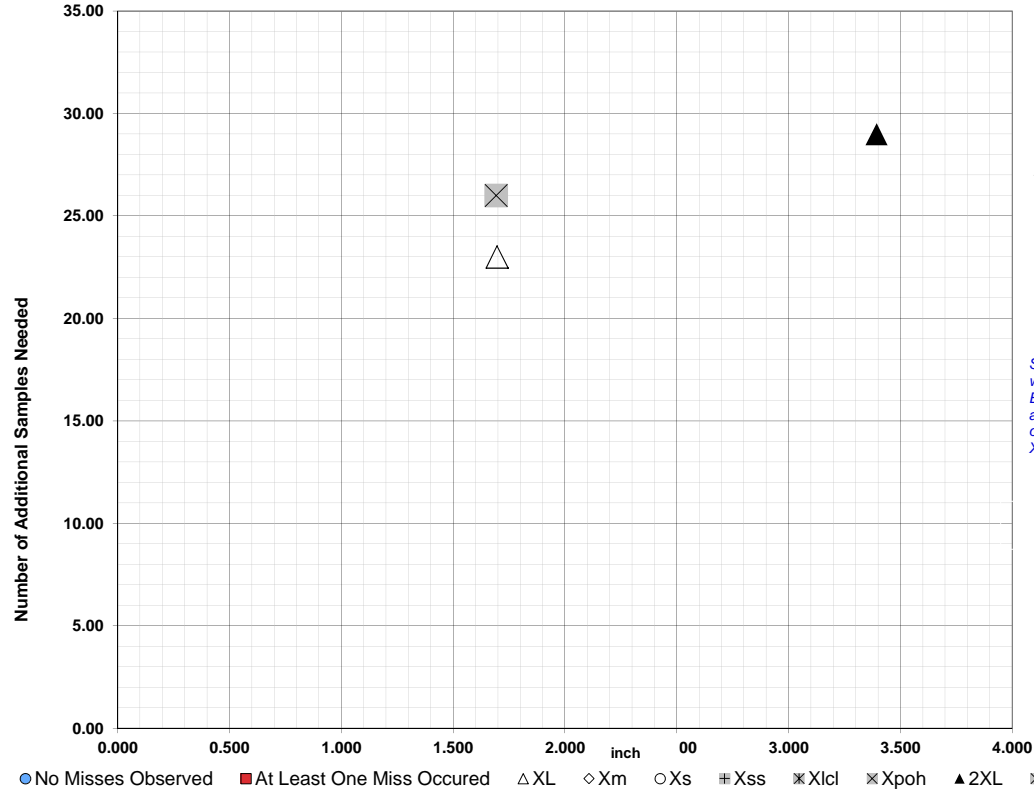


TABLE C

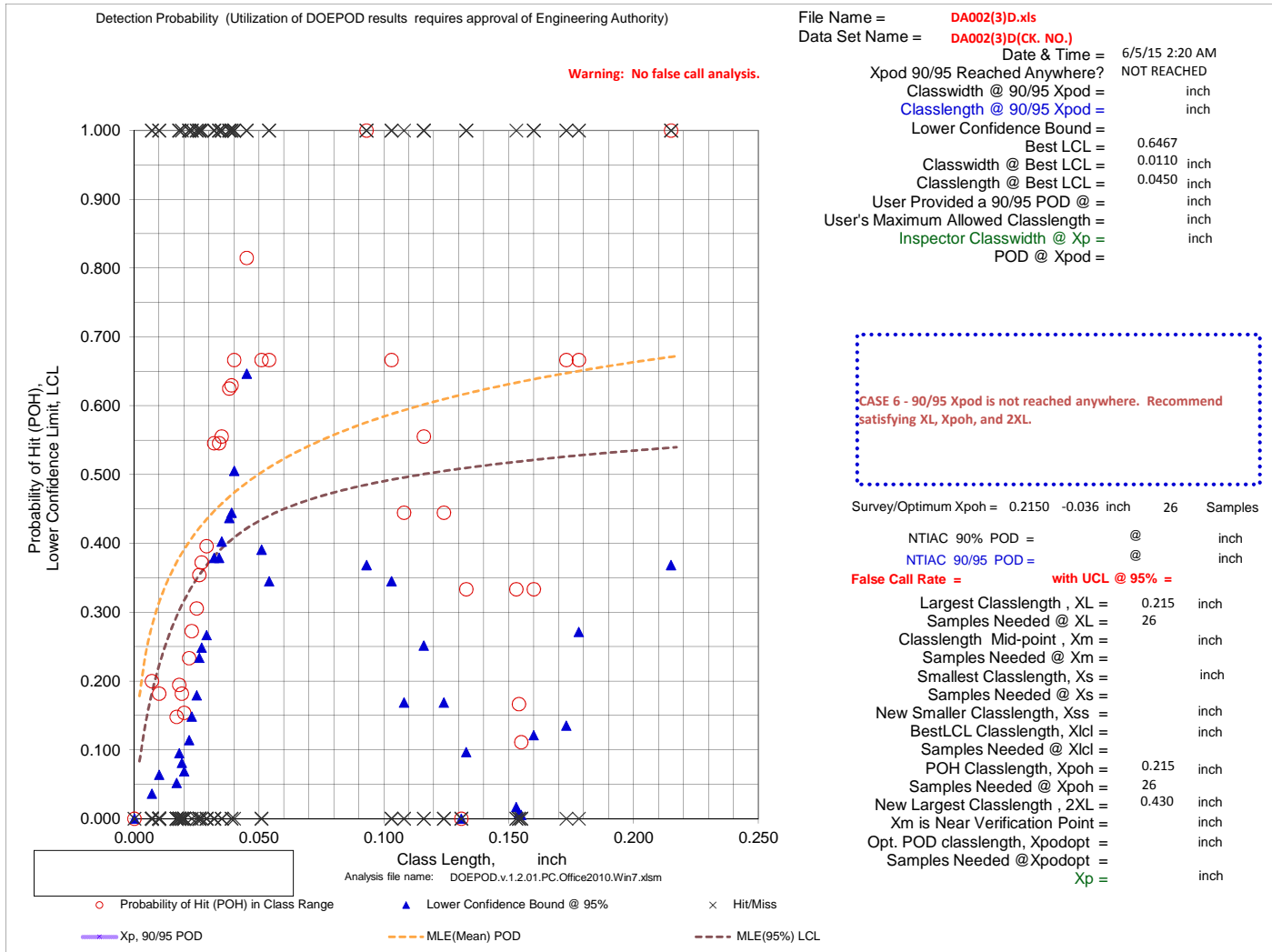
Class Length	Additional Samples
XL =	1.696 23
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	1.692 26
2XL =	3.392 29
**Alternate Xm =	
Xpodopt =	

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = DA002(3)D.xls
 Data Set Name = DA002(3)D(CK. NO.)

Directed DOE Options

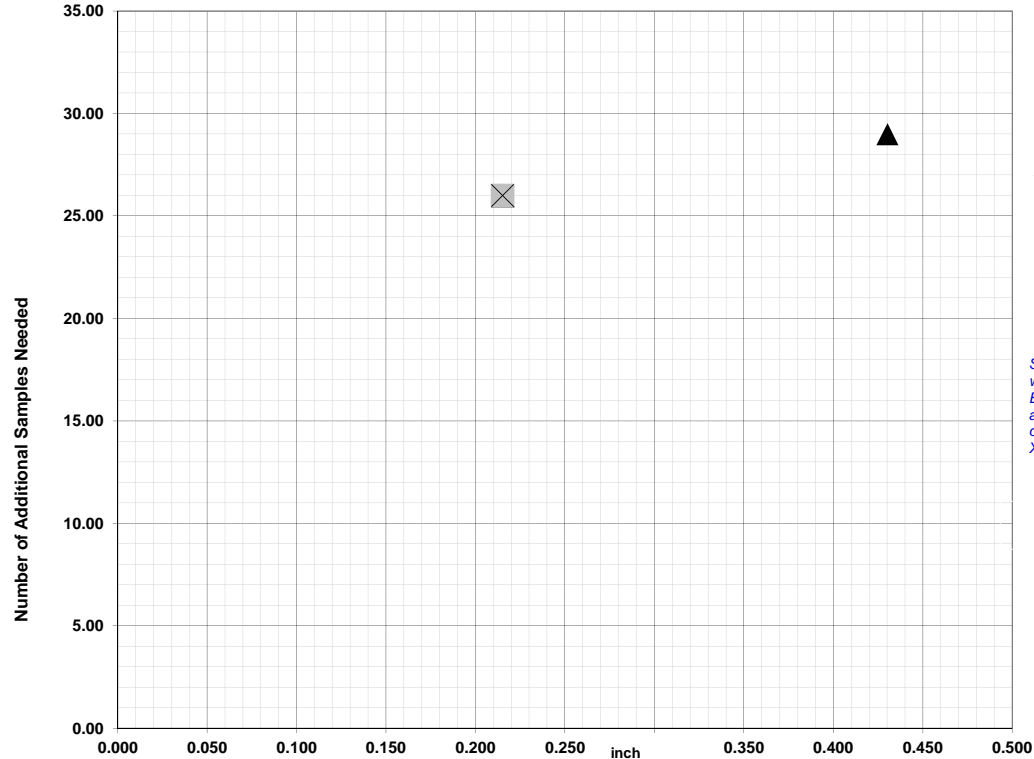


TABLE C

Class Length	Additional Samples
XL = 0.215	26
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 0.215	26
2XL = 0.430	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

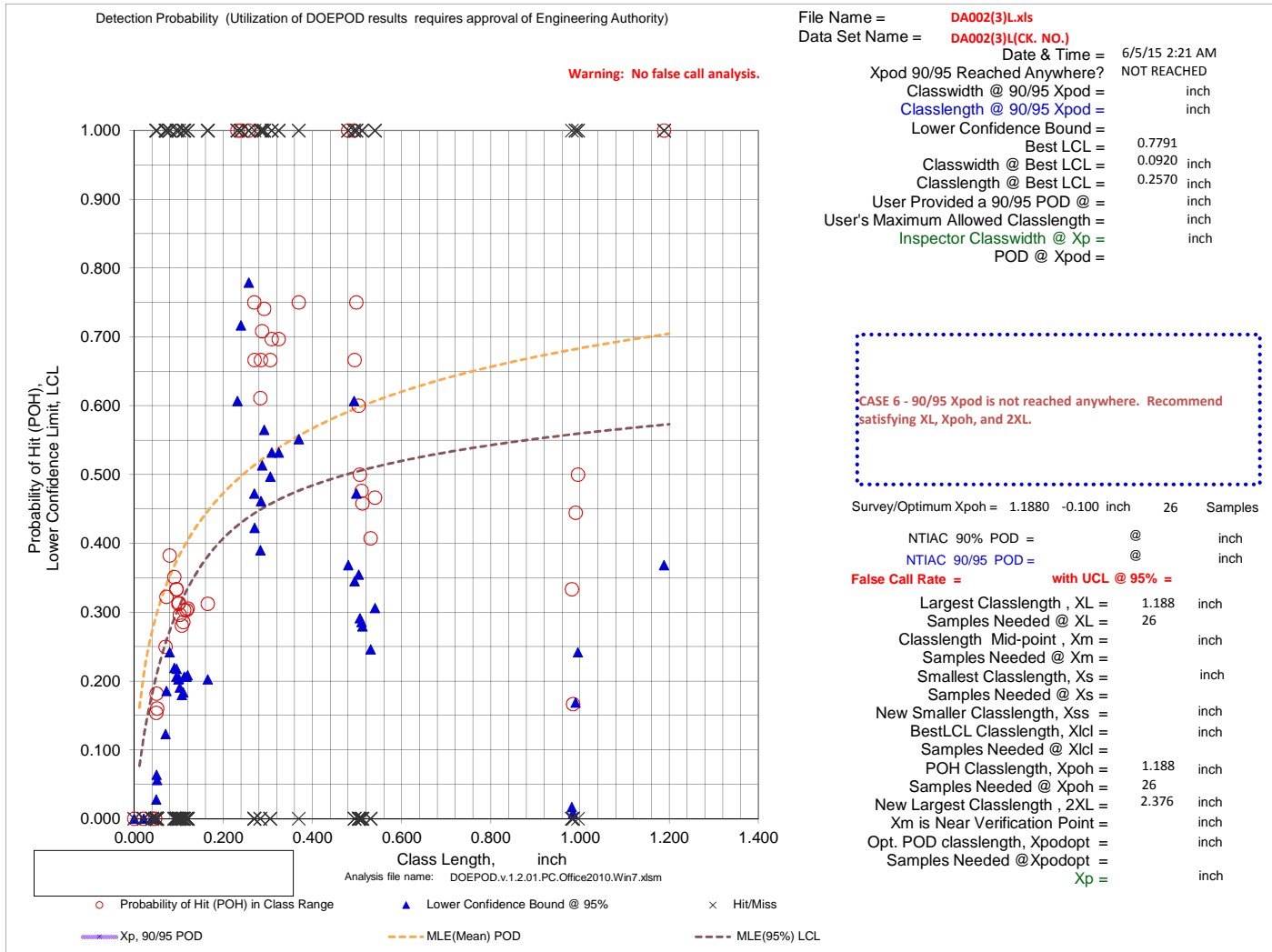
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ XLcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = DA002(3)L.xls
 Data Set Name = DA002(3)L(CK. NO.)

Directed DOE Options

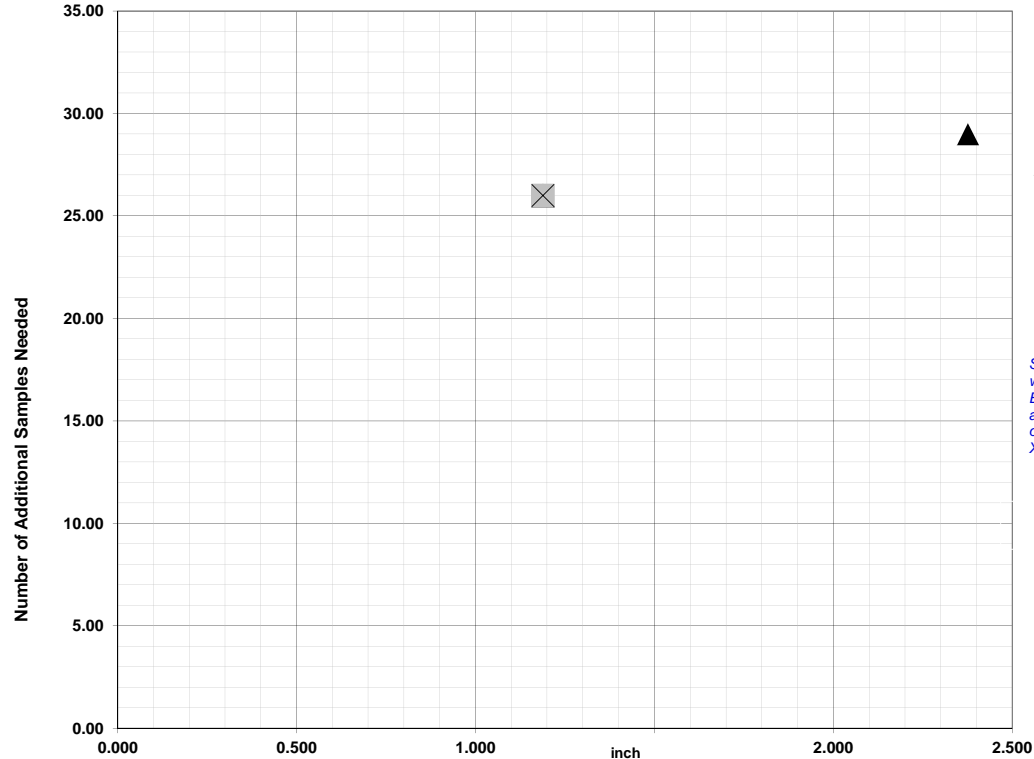


TABLE C

Class Length	Additional Samples
XL = 1.188	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.188	26
2XL = 2.376	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

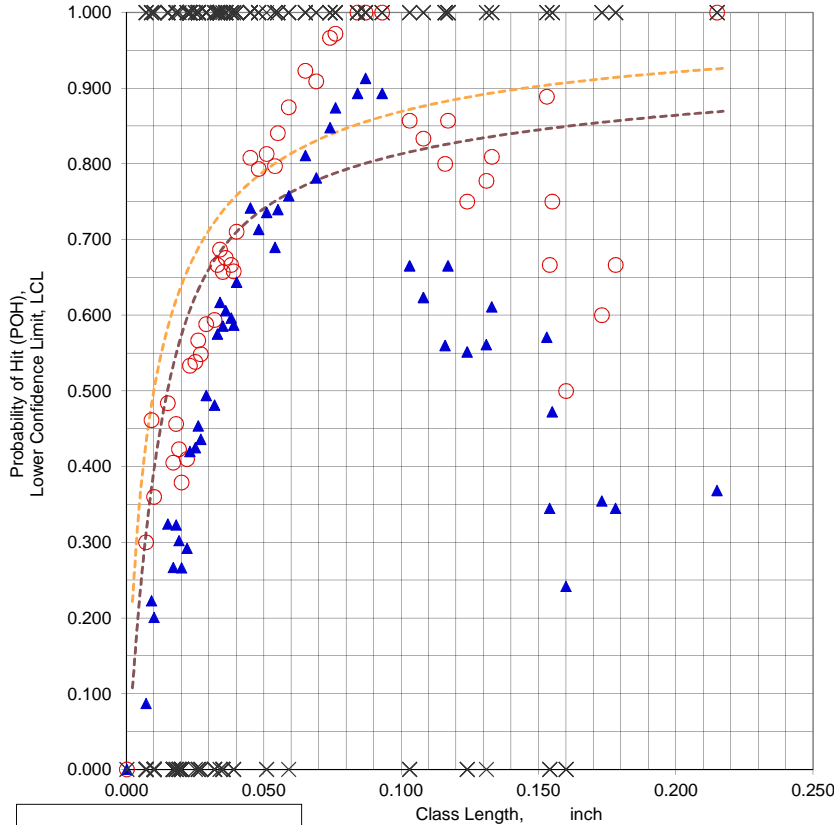
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 0.261.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **DA003(3)D.xls**
 Data Set Name = **DA003(3)D(CK. NO.)**
 Date & Time = 6/5/15 2:23 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0220 inch
 Classlength @ 90/95 Xpod = 0.0870 inch
 Lower Confidence Bound = 0.9129
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Xp used to reduce XL requirements. Recommend satisfying XL, Xm and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in Table A.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.900 @ 0.145 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.215 inch
 Samples Needed @ XL = 20
 Classlength Mid-point , Xm = 0.151 inch
 Samples Needed @ Xm = 29
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = DA003(3)D.xls
 Data Set Name = DA003(3)D(CK. NO.)

Directed DOE Options

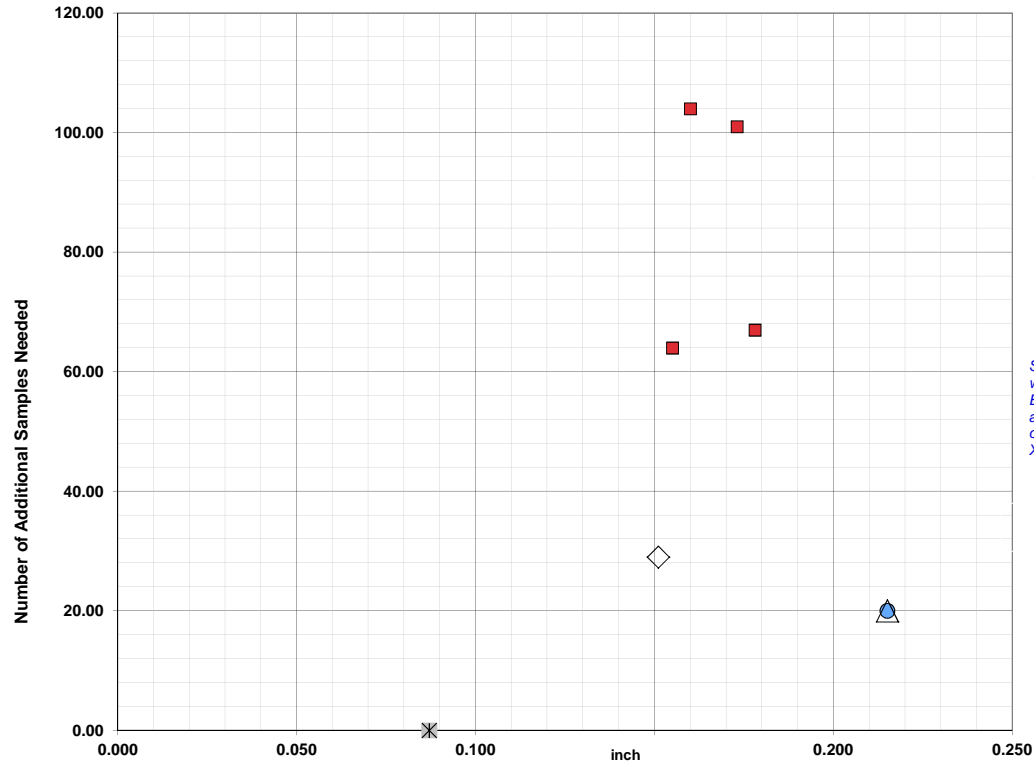


TABLE C

Class Length Additional Samples

XL = 0.215 20
 Xm = 0.151 29

Xs =

Xss =

Xlcl =

Xpoh =

2XL =

**Alternate Xm =

Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.1780	67	0.2150	20
0.1730	101		
0.1600	104		
0.1550	64		

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ✕ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

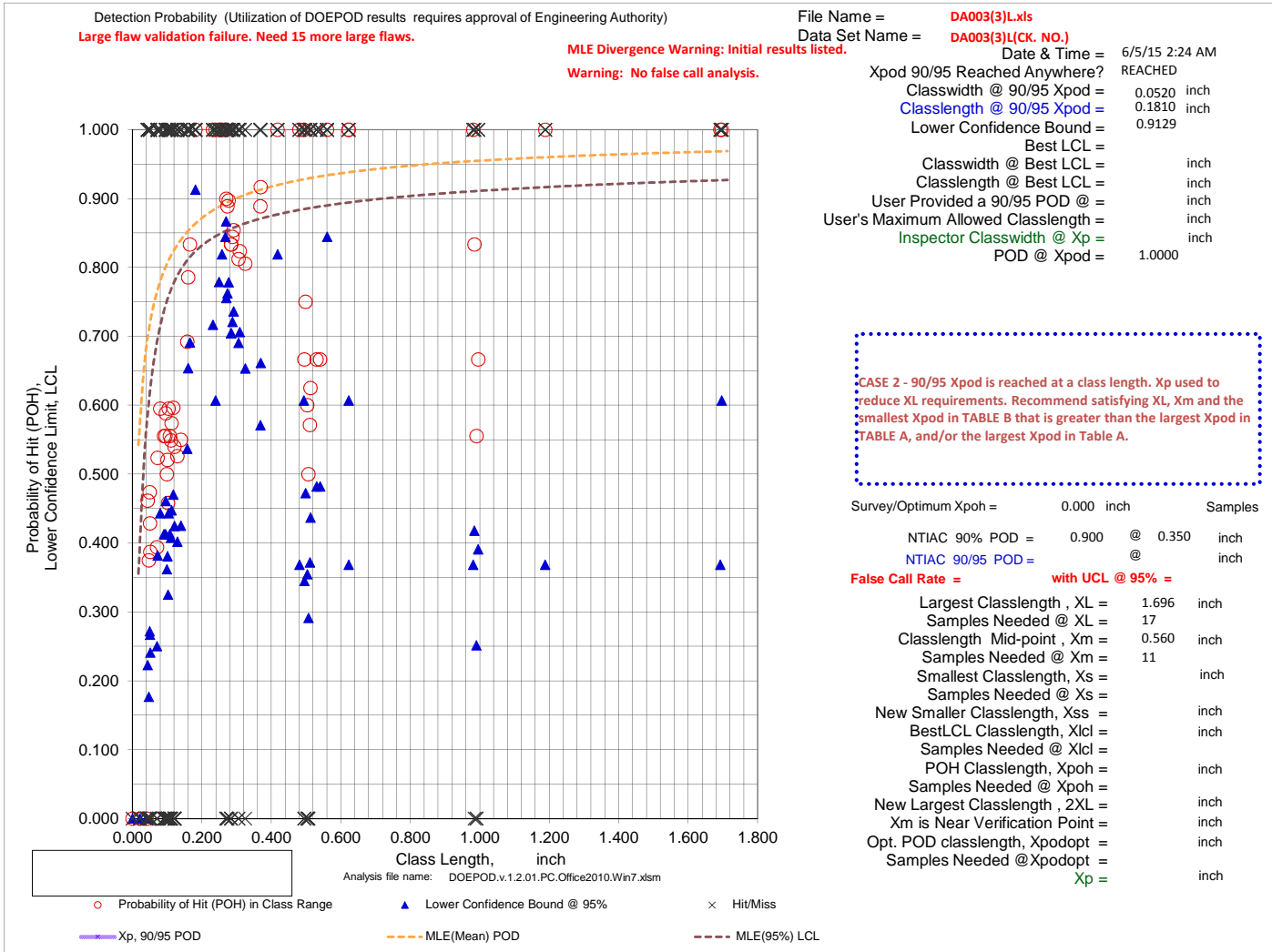
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = DA003(3)L.xls
 Data Set Name = DA003(3)L(CK. NO.)

Directed DOE Options

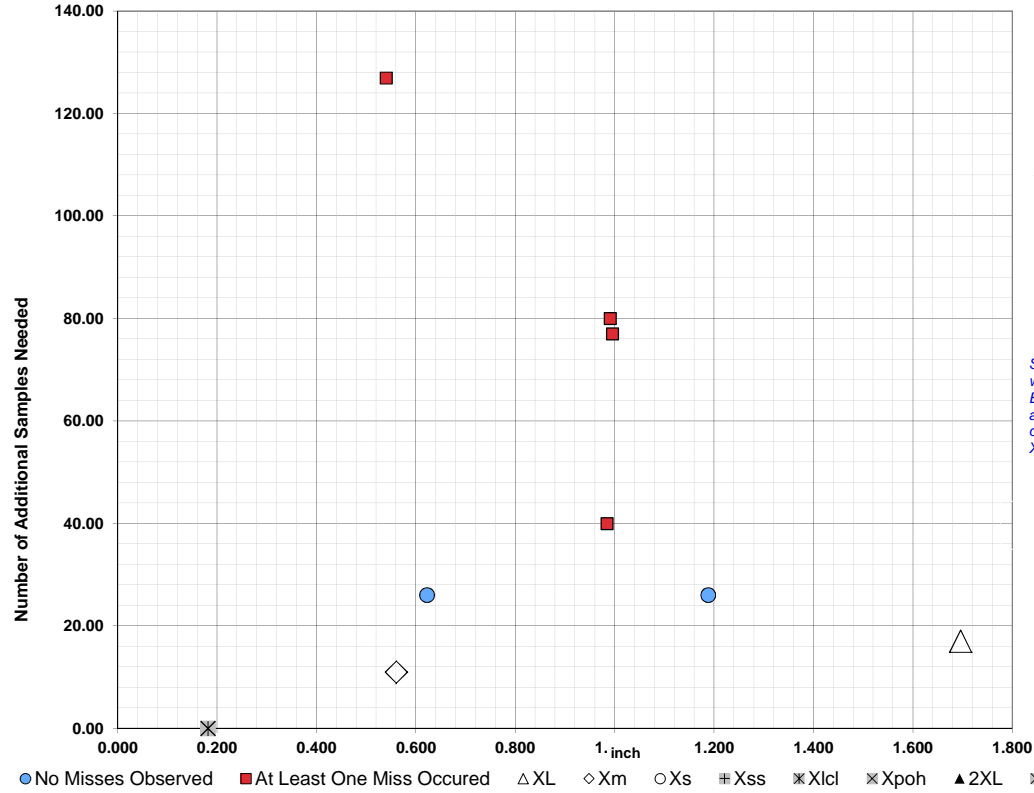


TABLE C

Class Length	Additional Samples
XL = 1.696	17
Xm = 0.560	11
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

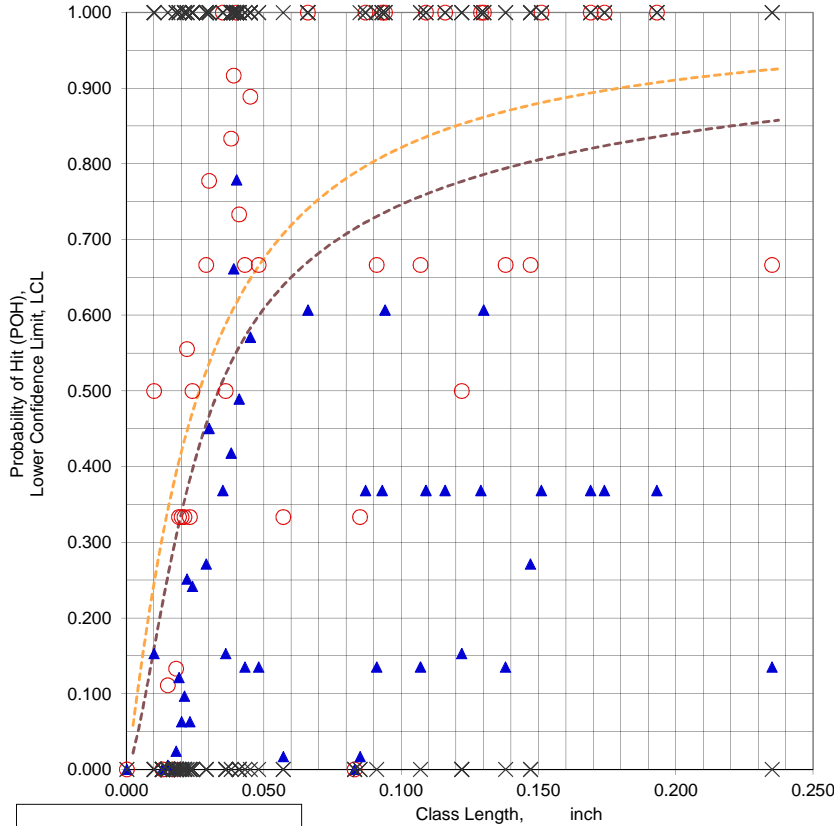
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.9950	77	1.1880	26
0.9900	80	0.6220	26
0.9840	40		
0.5400	127		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = DB001(3)D.xls
 Data Set Name = DB001(3)D(ck. NO.)
 Date & Time = 6/5/15 2:25 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7791
 Classwidth @ Best LCL = 0.0010 inch
 Classlength @ Best LCL = 0.0400 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.901 @ 0.180 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.470 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = DB001(3)D.xls
 Data Set Name = DB001(3)D(CK. NO.)

Directed DOE Options

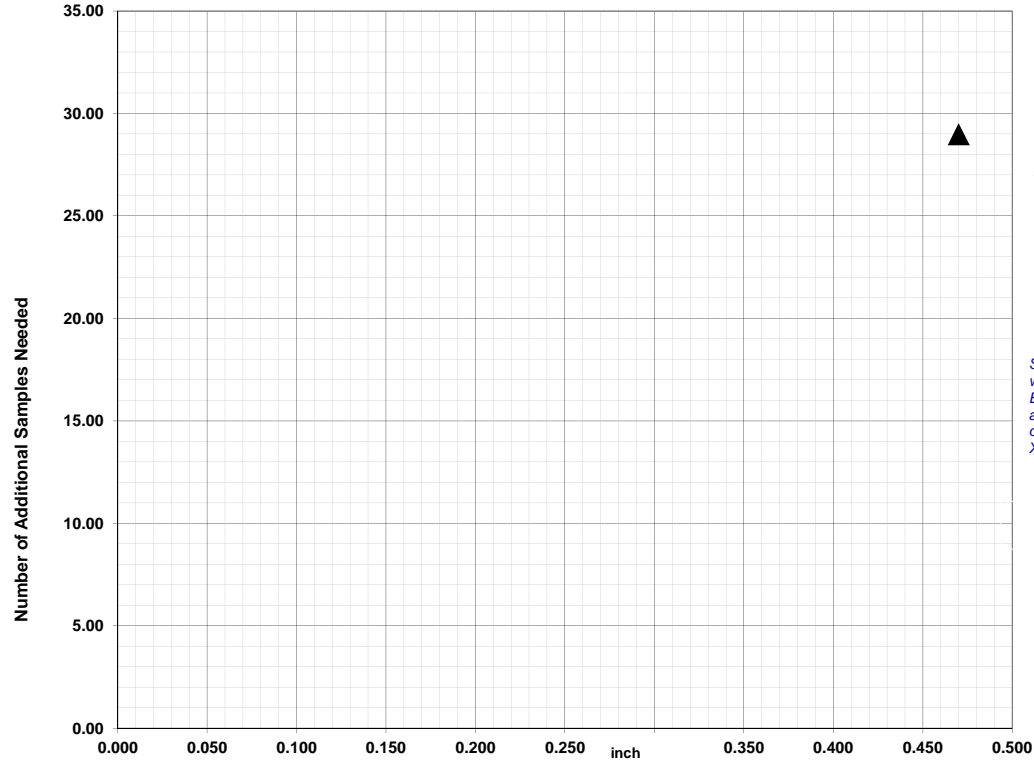


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.470	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.470 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

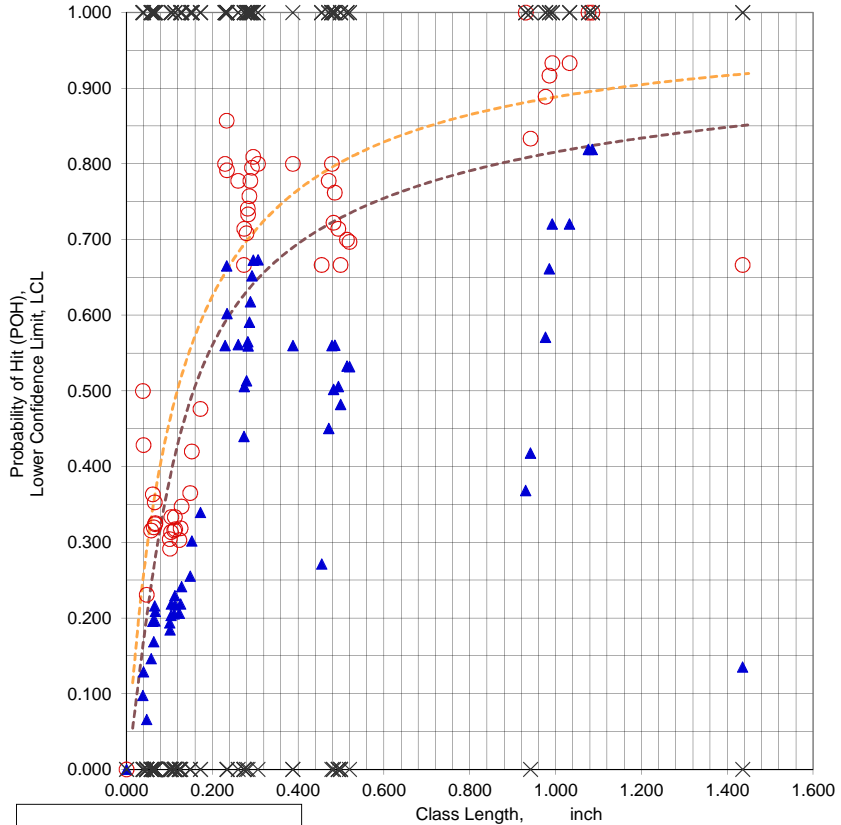
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = DB001(3)L.xls
 Data Set Name = DB001(3)L(CK. NO.)
 Date & Time = 6/5/15 2:27 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8190
 Classwidth @ Best LCL = 0.1000 inch
 Classlength @ Best LCL = 1.0760 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 2.870 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = DB001(3)L.xls
 Data Set Name = DB001(3)L(CK. NO.)

Directed DOE Options

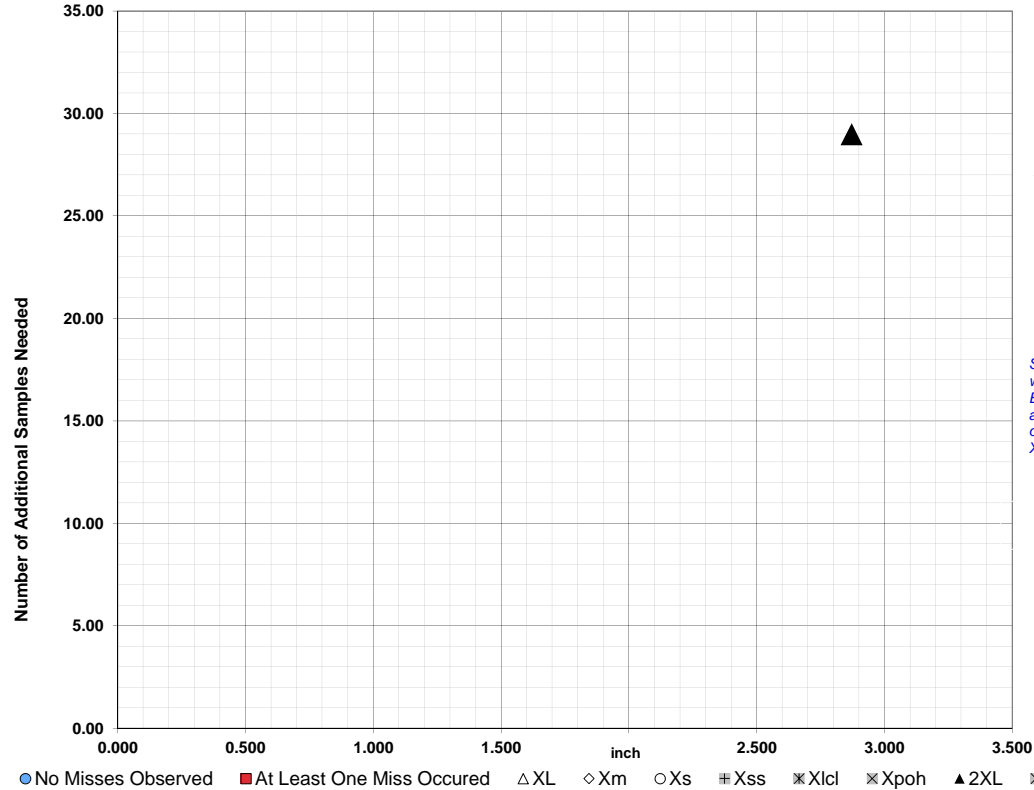


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 2.870	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 2.870 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

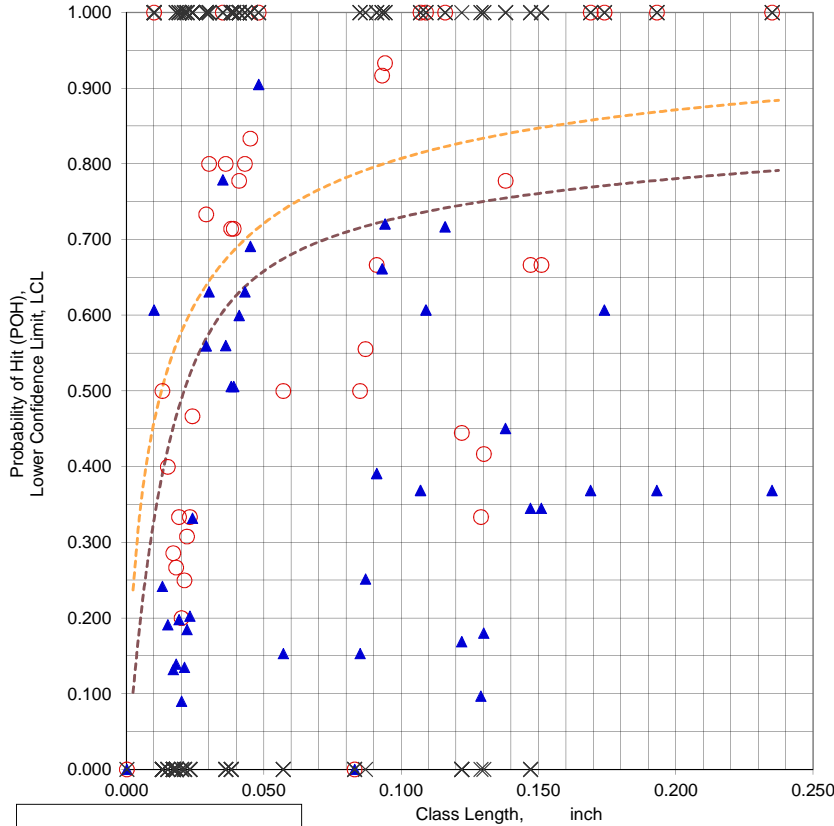
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Need 11 more large flaws.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **DB002(3)D.xls**
 Data Set Name = **DB002(3)D(CK. NO.)**
 Date & Time = 6/5/15 2:28 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0090 inch
 Classlength @ 90/95 Xpod = 0.0480 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Xp used to reduce XL requirements. Recommend satisfying XL, Xm and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in Table A.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.235 inch
 Samples Needed @ XL = 14
 Classlength Mid-point , Xm = 0.116 inch
 Samples Needed @ Xm = 20
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = DB002(3)D.xls
 Data Set Name = DB002(3)D(CK. NO.)

Directed DOE Options

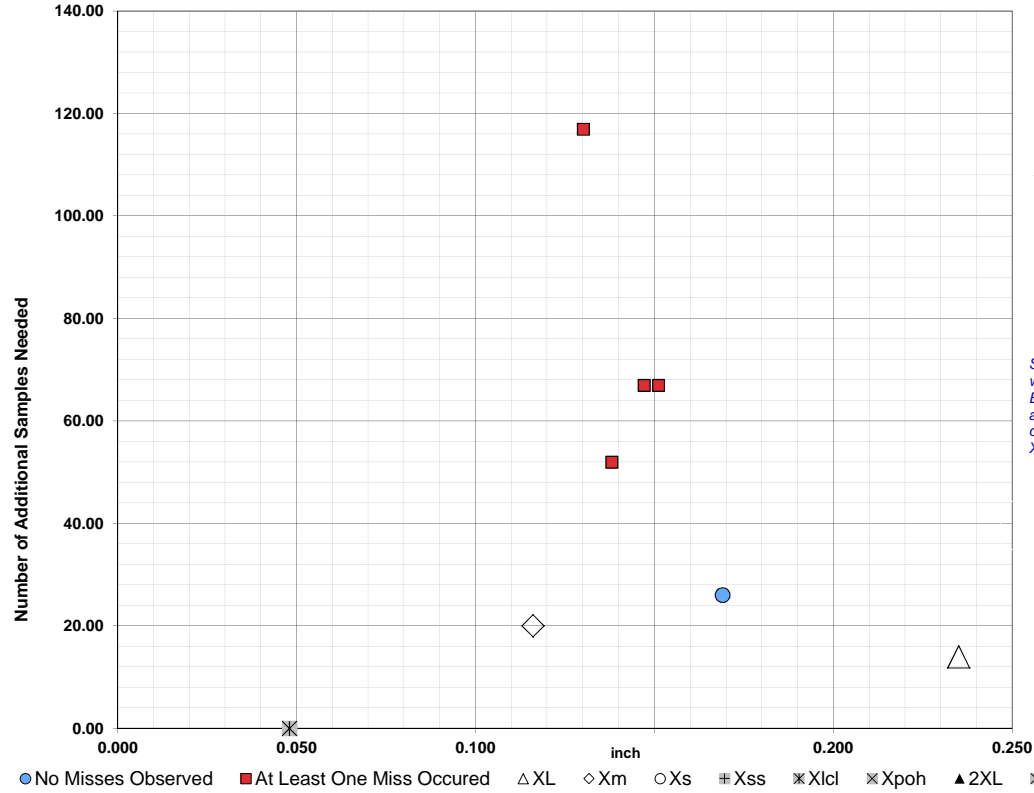


TABLE C

Class Length	Additional Samples
XL =	0.235 14
Xm =	0.116 20
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

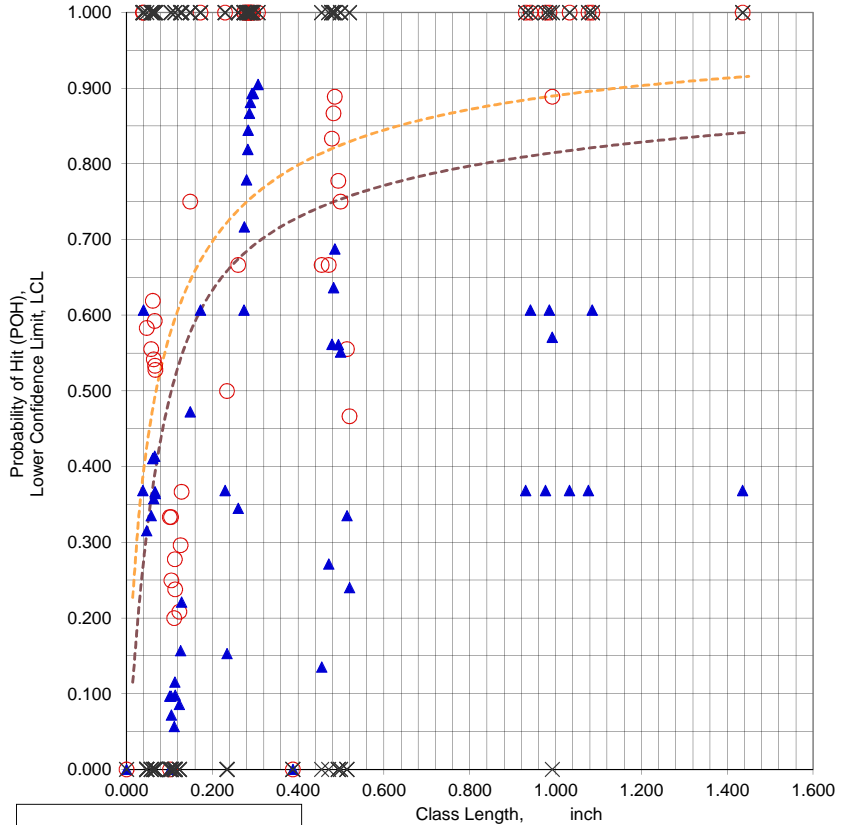
TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.1510	67	0.1690	26
0.1470	67		
0.1380	52		
0.1300	117		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Need 16 more large flaws.

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **DB002(3)L.xls**
 Data Set Name = **DB002(3)L(CK. NO.)**
 Date & Time = 6/5/15 2:29 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0330 inch
 Classlength @ 90/95 Xpod = 0.3060 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Xp used to reduce XL requirements. Recommend satisfying XL, Xm and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in Table A.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.435 inch
 Samples Needed @ XL = 17
 Classlength Mid-point , Xm = 1.085 inch
 Samples Needed @ Xm = 23
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = DB002(3)L.xls
 Data Set Name = DB002(3)L(CK. NO.)

Directed DOE Options

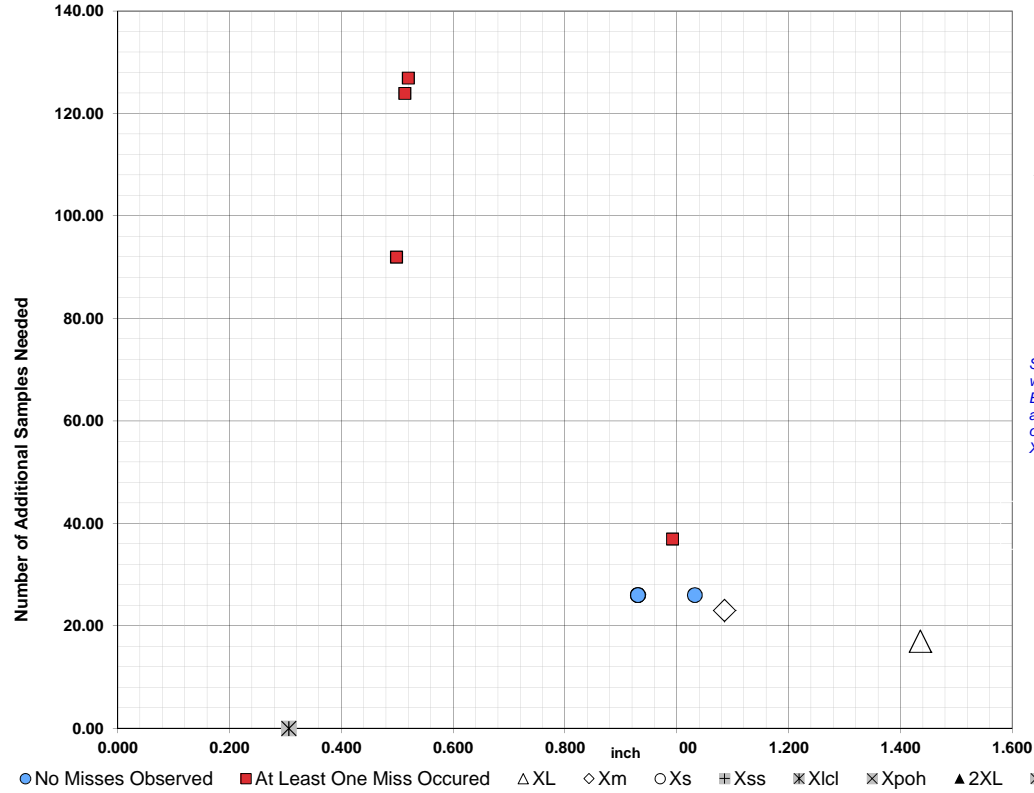


TABLE C

Class Length Additional Samples

XL = 1.435 17
 Xm = 1.085 23
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

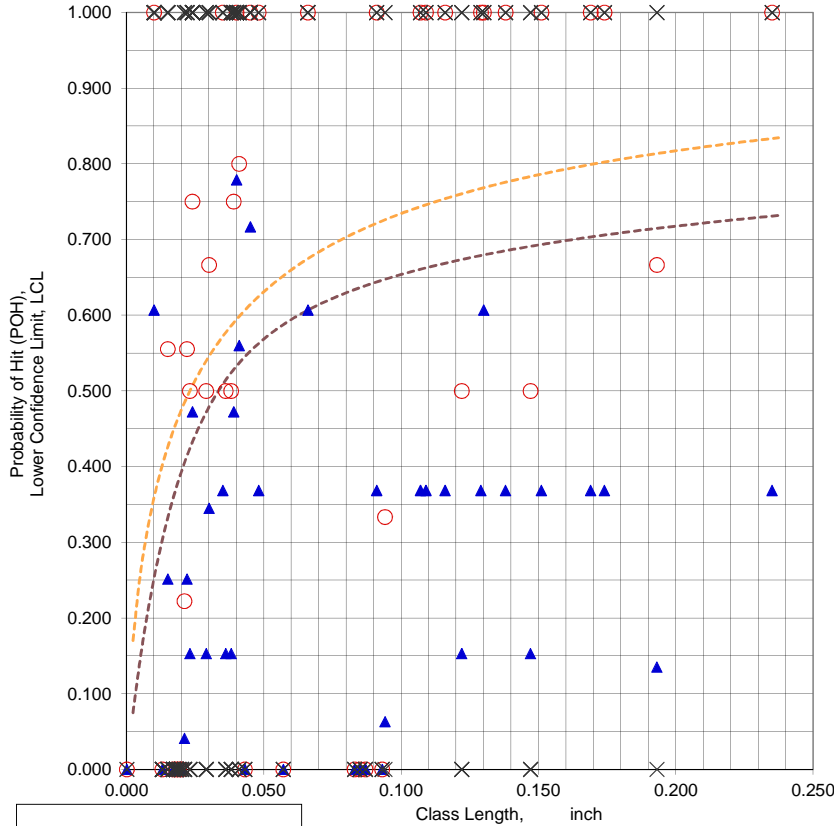
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.9920	37	1.0320	26
0.5190	127	0.9300	26
0.5130	124	0.9300	26
0.4980	92	0.9300	26

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = DB003(3)D.xls
 Data Set Name = DB003(3)D(CK. NO.)
 Date & Time = 6/5/15 2:30 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7791
 Classwidth @ Best LCL = 0.0010 inch
 Classlength @ Best LCL = 0.0400 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.2350 -0.041 inch 26 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.235 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.235 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 0.470 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = DB003(3)D.xls
 Data Set Name = DB003(3)D(CK. NO.)

Directed DOE Options

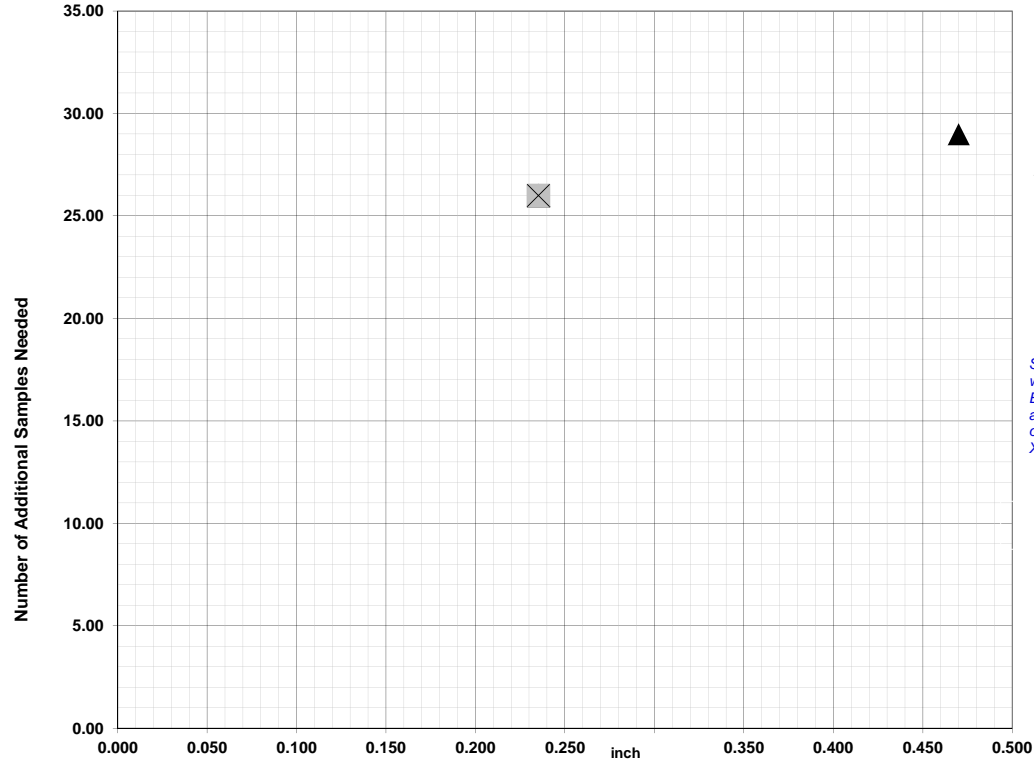


TABLE C

Class Length	Additional Samples
XL = 0.235	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.235	26
2XL = 0.470	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

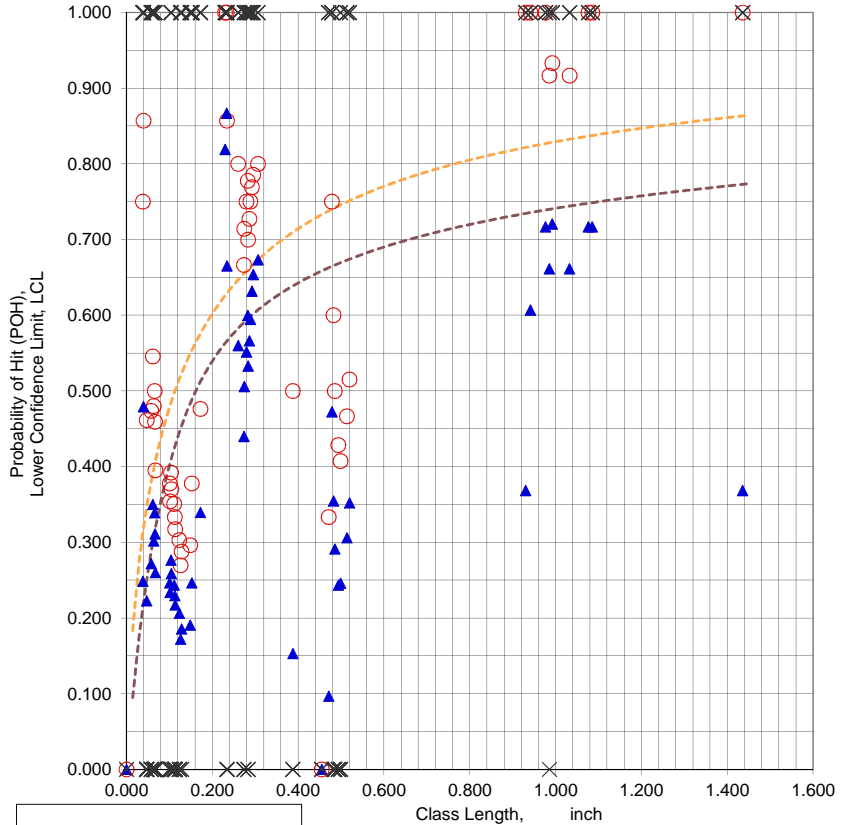
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ⊗ Xlcl
 ⊗ Xpoh
 ▲ 2XL
 ⊗ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Probability of Hit (POH), Lower Confidence Limit, LCL

Class Length, inch

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = DB003(3)L.xls
 Data Set Name = DB003(3)L(CK. NO.)
 Date & Time = 6/5/15 2:31 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8666
 Classwidth @ Best LCL = 0.0850 inch
 Classlength @ Best LCL = 0.2330 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.9920 -0.006 inch 26 Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.435 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 1.076 inch
 Samples Needed @ Xpoh = 20
 New Largest Classlength , 2XL = 2.870 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = DB003(3)L.xls
 Data Set Name = DB003(3)L(CK. NO.)

Directed DOE Options

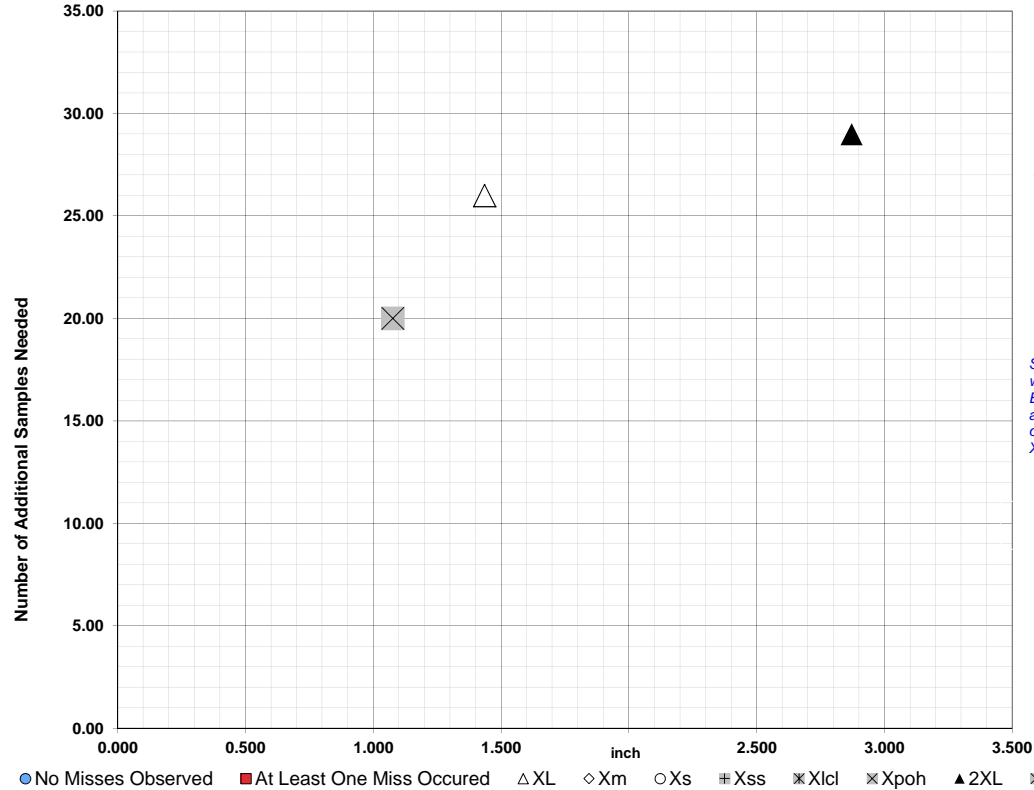


TABLE C

Class Length	Additional Samples
XL = 1.435	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.076	20
2XL = 2.870	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

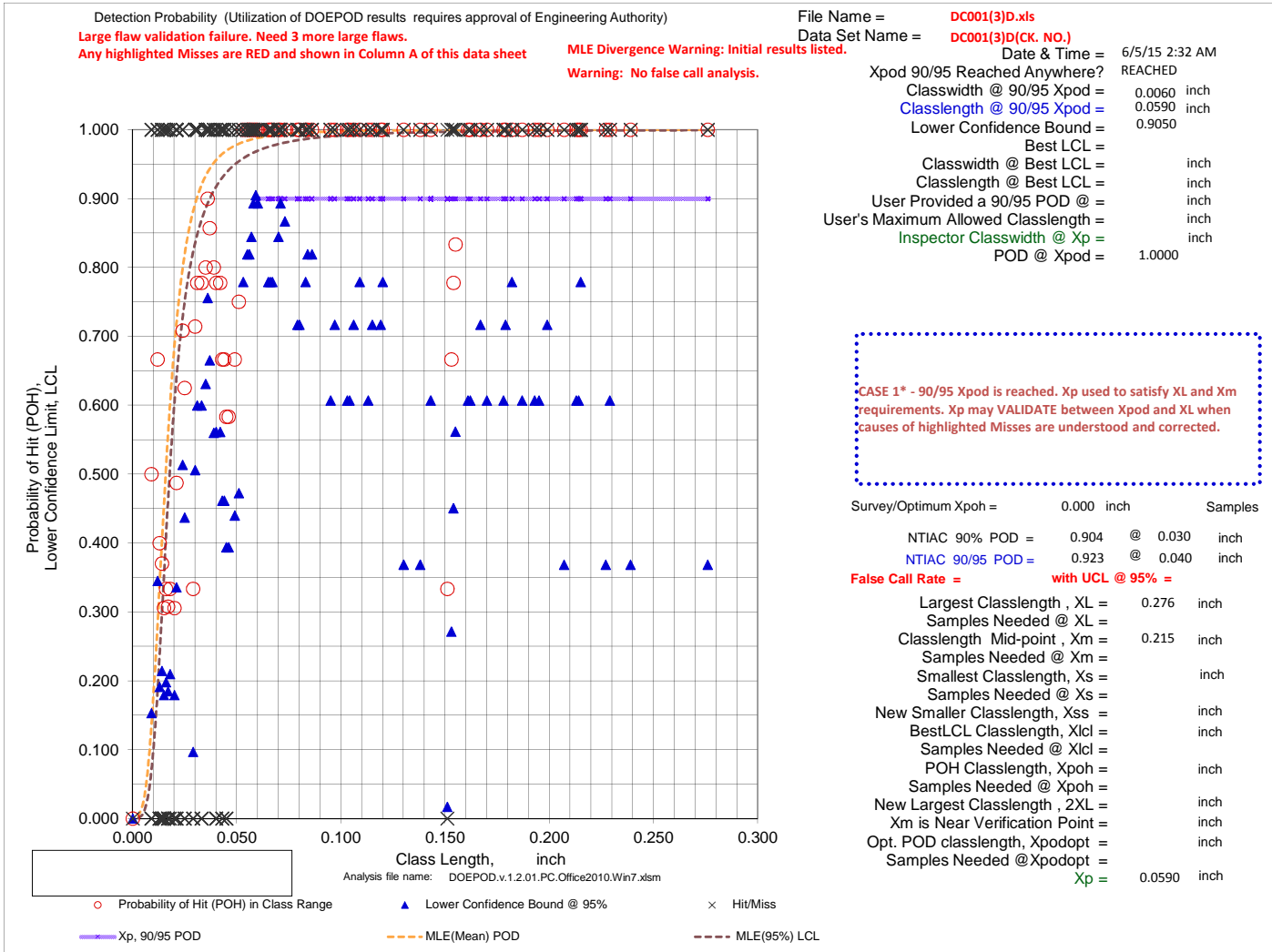
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = DC001(3)D.xls
 Data Set Name = DC001(3)D(CK. NO.)

Directed DOE Options

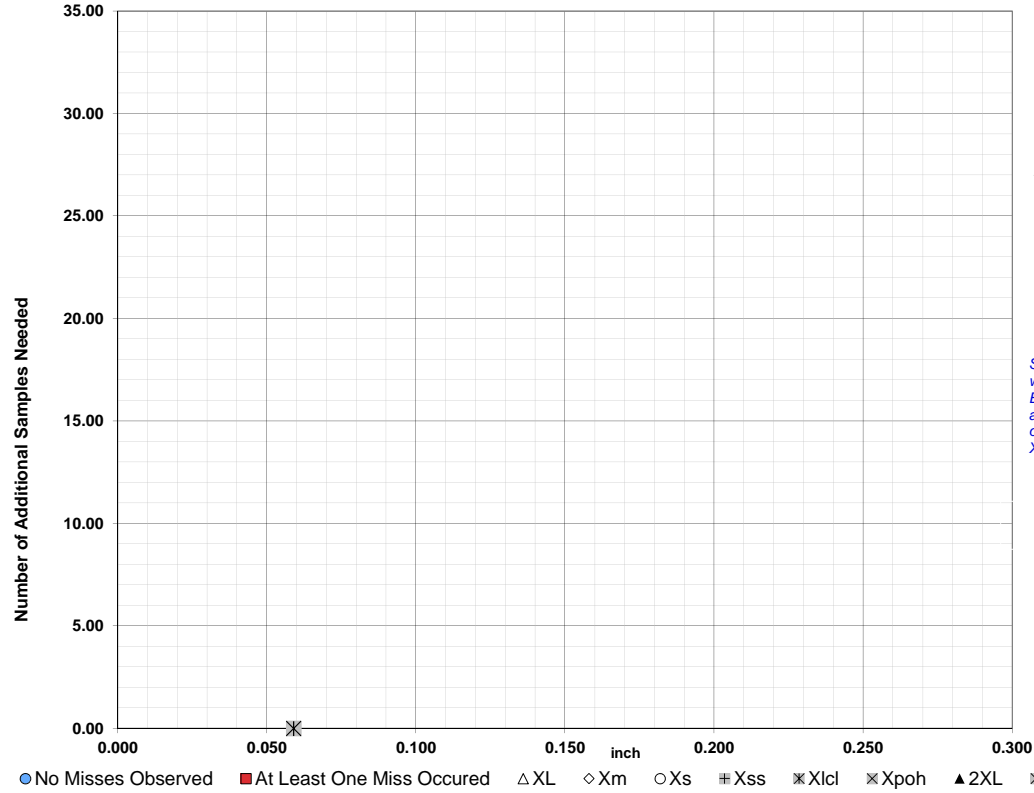


TABLE C

Class Length Additional Samples

XL = 0.276
 Xm = 0.215
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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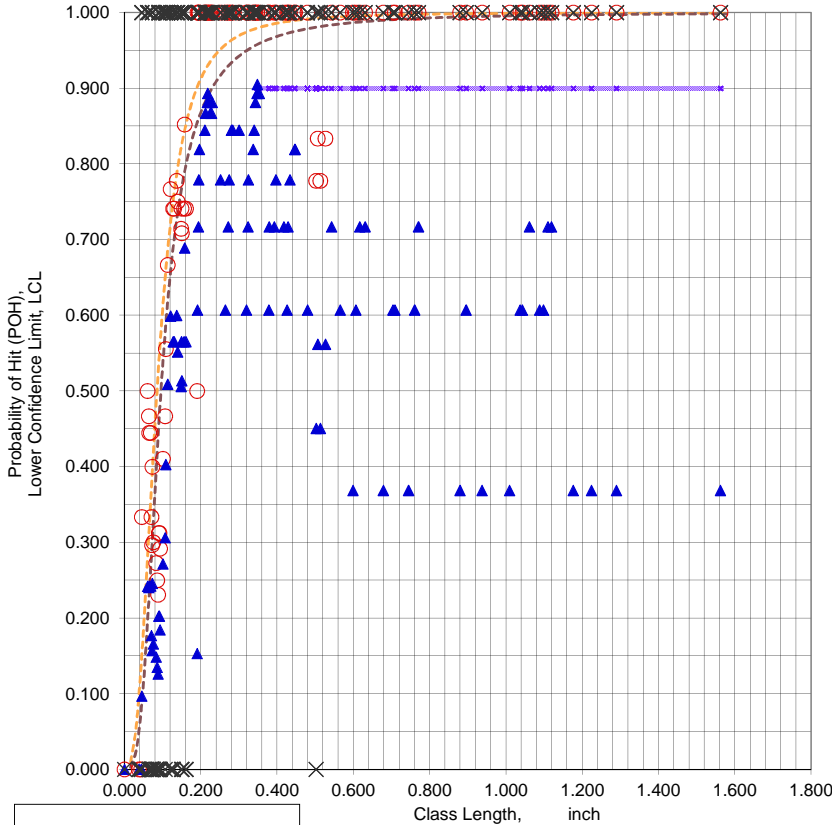
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 7 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



File Name = DC001(3)L.xls
 Data Set Name = DC001(3)(CK. NO.)
 Date & Time = 6/5/15 2:37 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0290 inch
 Classlength @ 90/95 Xpod = 0.3480 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.904 @ 0.180 inch
 NTIAC 90/95 POD = 0.900 @ 0.215 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.562 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 1.119 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.3480 inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = DC001(3)L.xls
 Data Set Name = DC001(3)L(CK. NO.)

Directed DOE Options

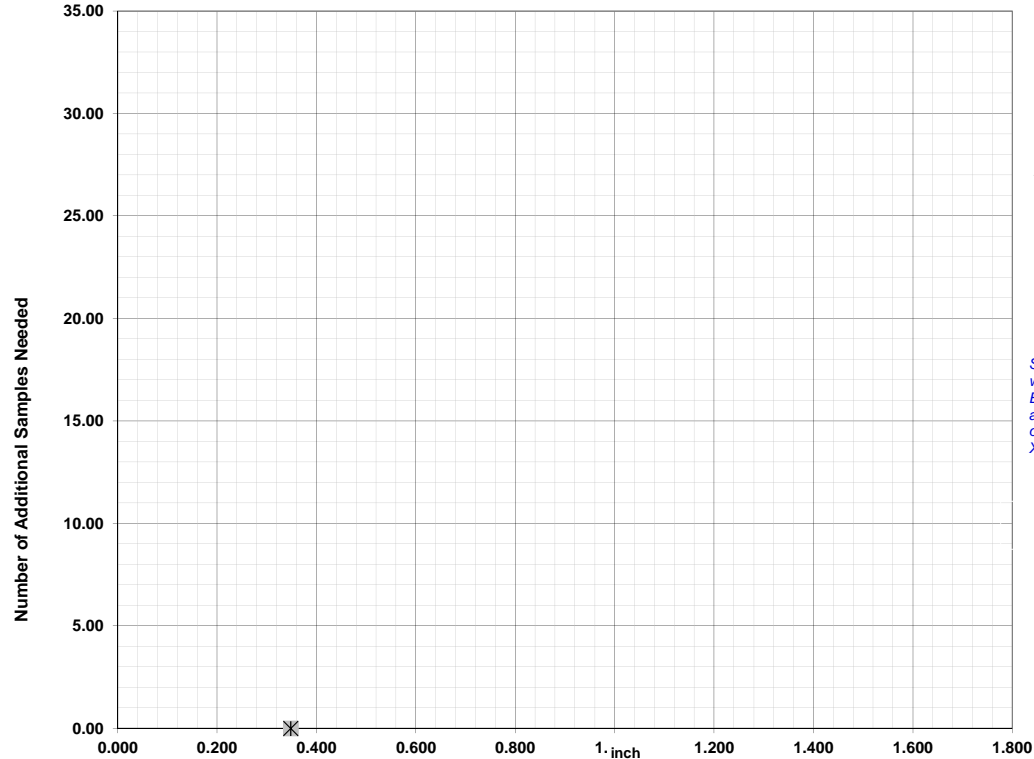


TABLE C

Class Length Additional Samples

XL = 1.562
 Xm = 1.119
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

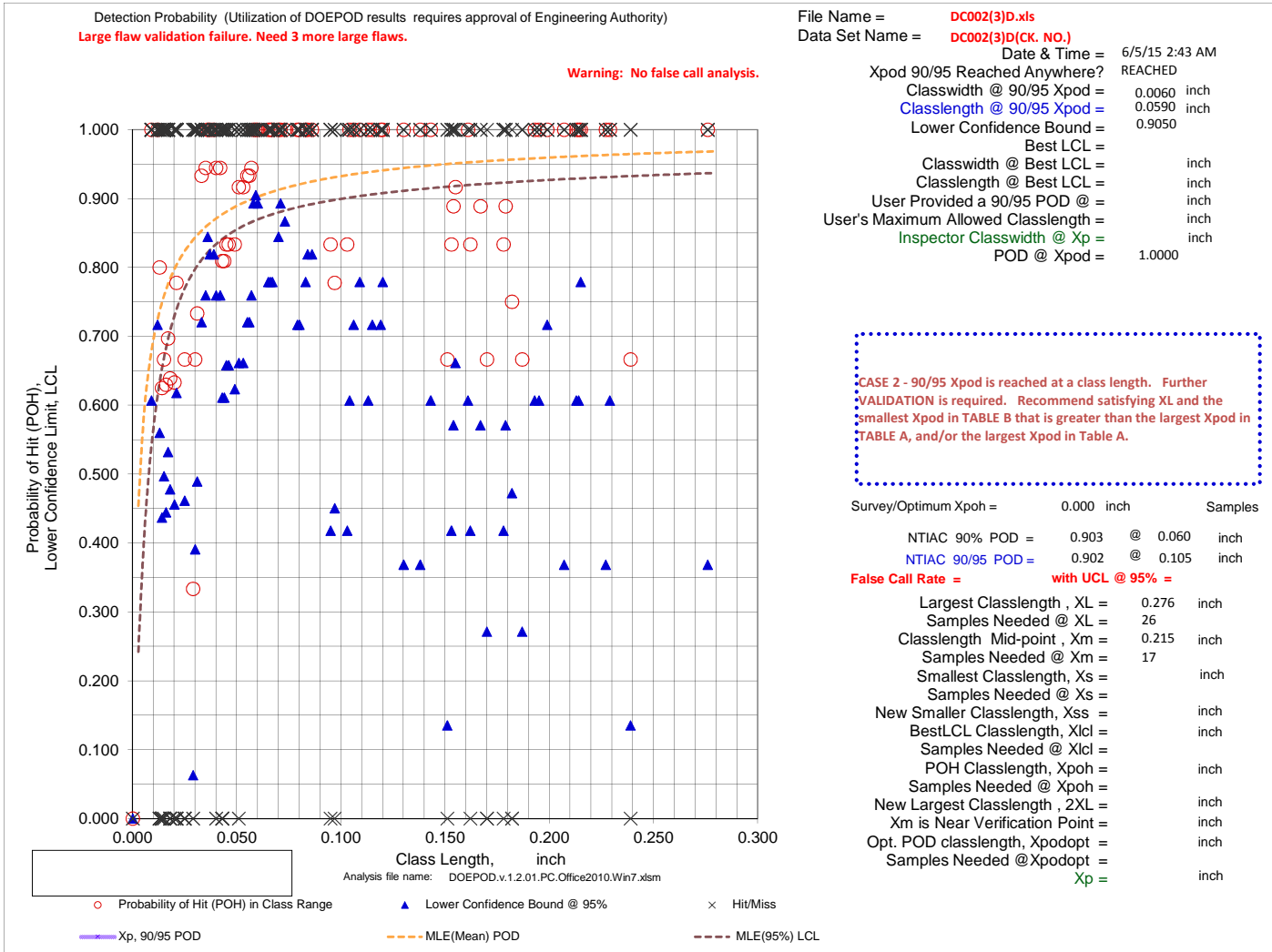
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = DC002(3)D.xls
 Data Set Name = DC002(3)D(CK. NO.)

Directed DOE Options

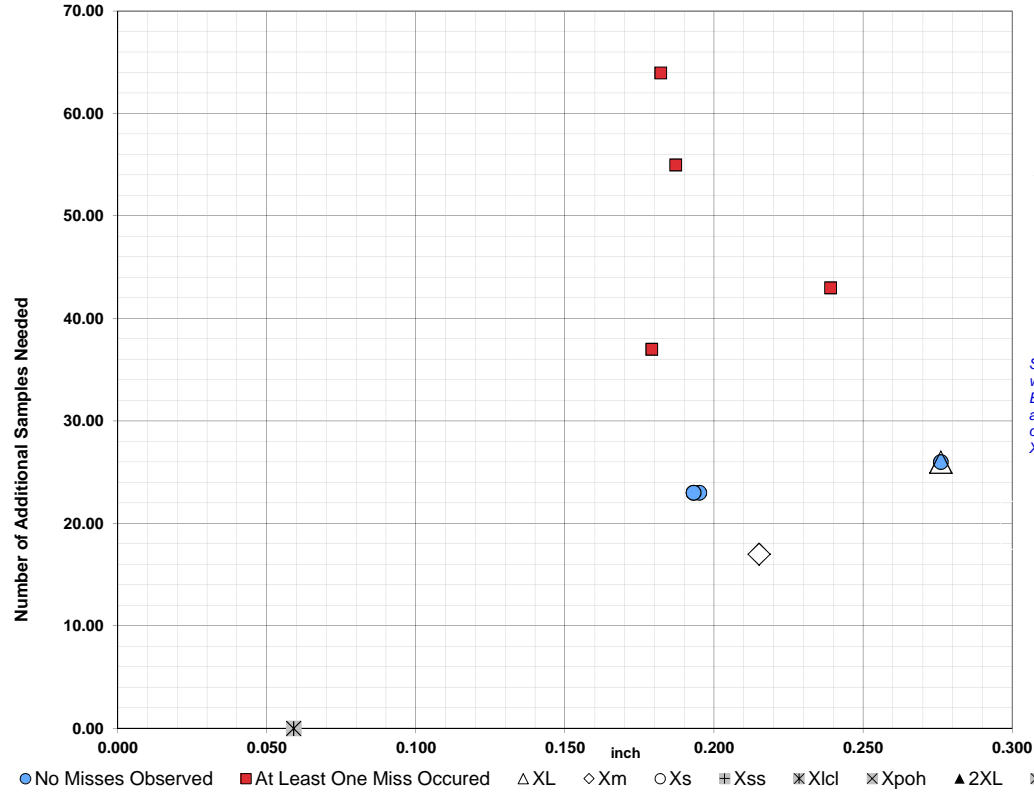


TABLE C

Class Length	Additional Samples
XL = 0.276	26
Xm = 0.215	17
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.2390	43	0.2760	26
0.1870	55	0.1950	23
0.1820	64	0.1930	23
0.1790	37	0.1930	23

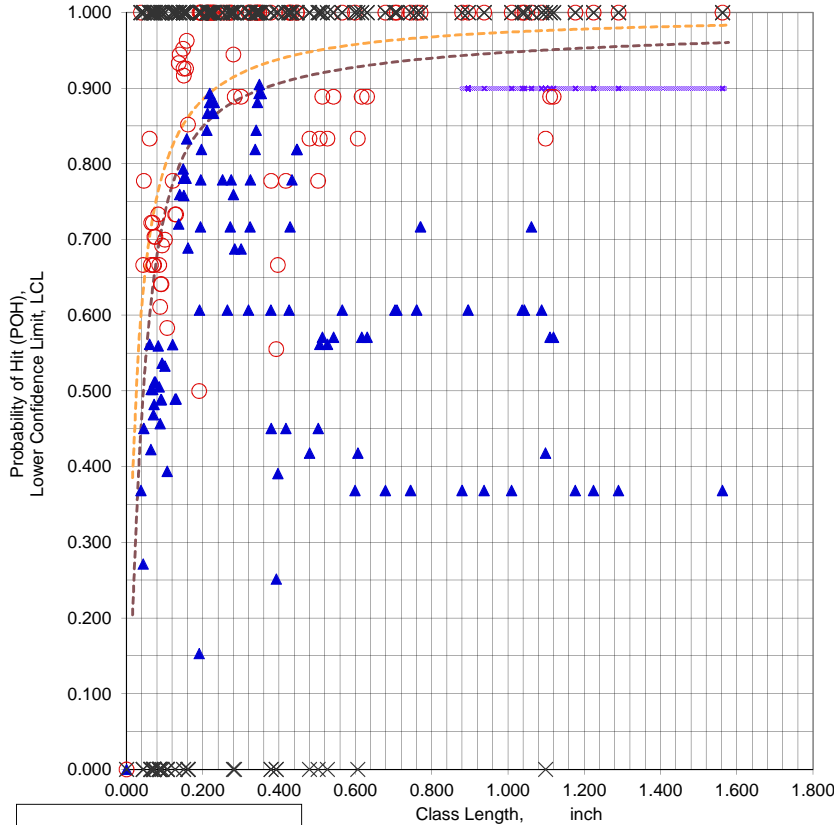
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 7 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = DC002(3)L.xls
 Data Set Name = DC002(3)L(KK. NO.)
 Date & Time = 6/5/15 2:47 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0290 inch
 Classlength @ 90/95 Xpod = 0.3480 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.900 @ 0.235 inch
 NTIAC 90/95 POD = 0.900 @ 0.360 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.562 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 1.061 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.8950 inch

File Name = DC002(3)L.xls
 Data Set Name = DC002(3)L(CK. NO.)

Directed DOE Options

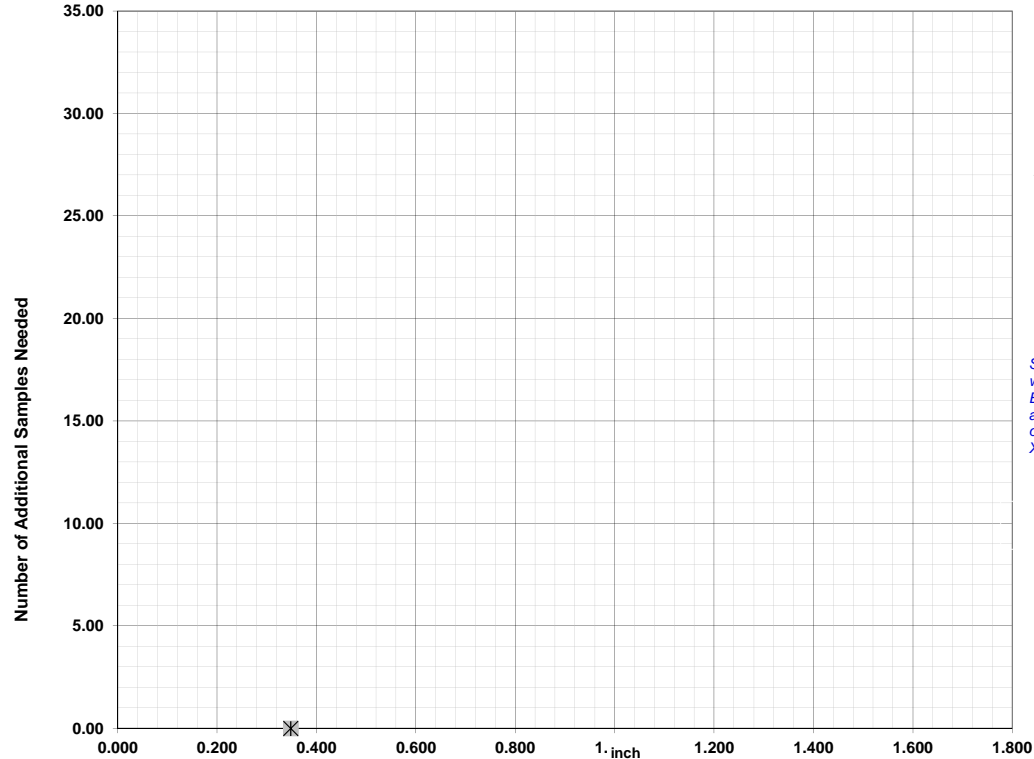


TABLE C

Class Length Additional Samples

XL = 1.562
 Xm = 1.061
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

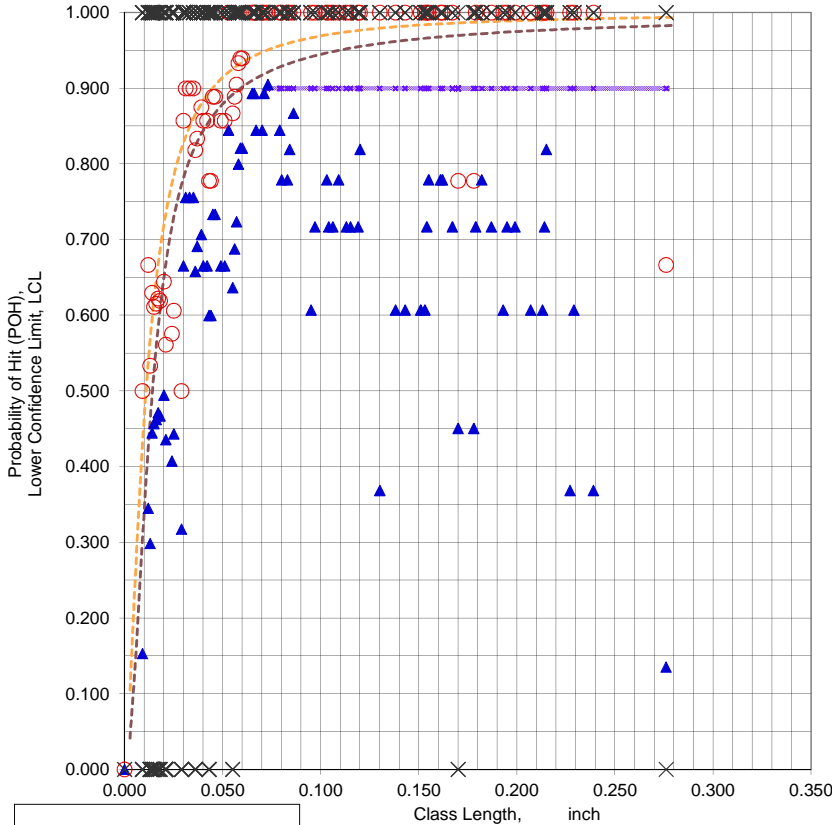
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 5 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = DC003(3)D.xls
 Data Set Name = DC003(3)D(CK. NO.)
 Date & Time = 6/5/15 2:50 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0080 inch
 Classlength @ 90/95 Xpod = 0.0730 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.901 @ 0.045 inch
 NTIAC 90/95 POD = 0.902 @ 0.060 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.276 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.215 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.0730 inch

File Name = DC003(3)D.xls
 Data Set Name = DC003(3)D(CK. NO.)

Directed DOE Options

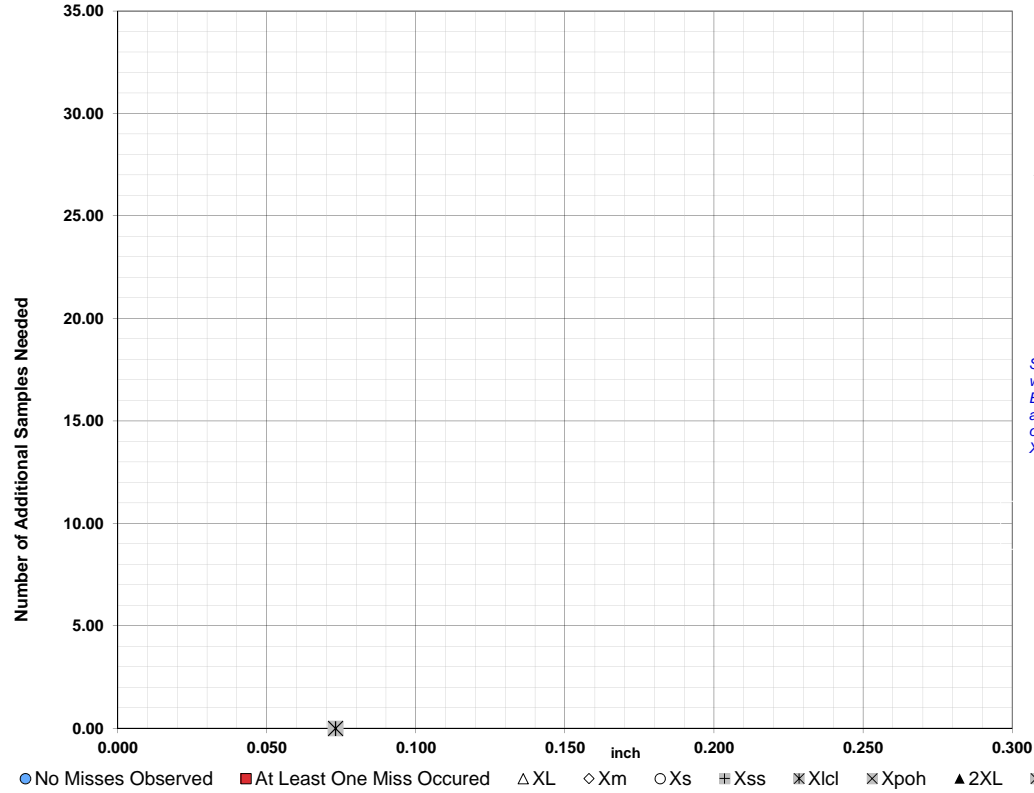


TABLE C

Class Length	Additional Samples
XL =	0.276
Xm =	0.215
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

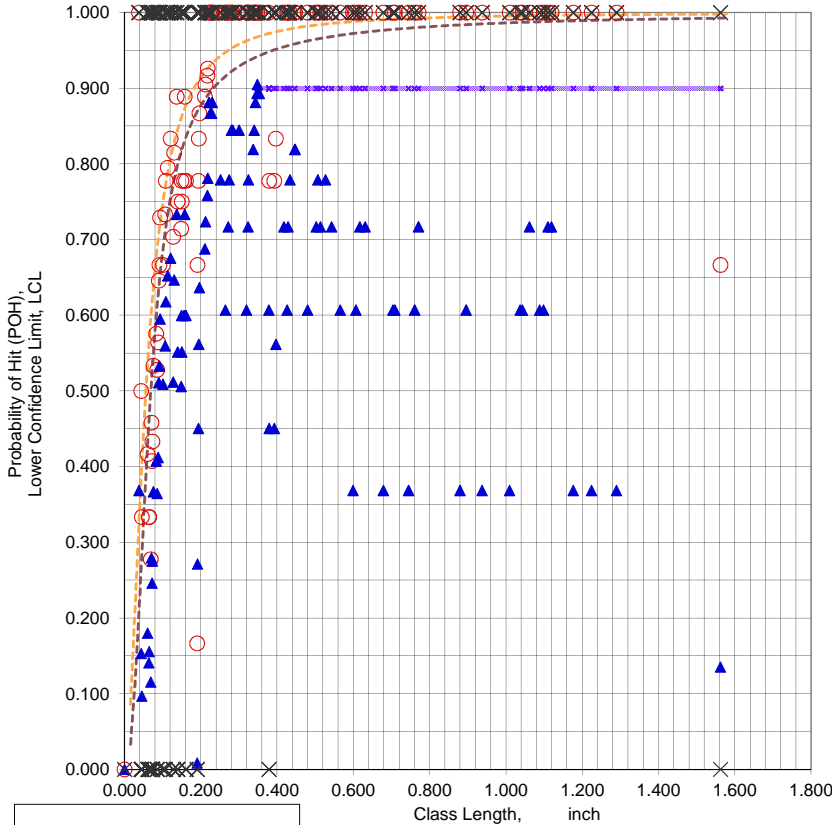
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 7 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



File Name = DC003(3)L.xls
 Data Set Name = DC003(3)L(CK. NO.)
 Date & Time = 6/5/15 2:54 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0290 inch
 Classlength @ 90/95 Xpod = 0.3480 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.903 @ 0.185 inch
 NTIAC 90/95 POD = 0.901 @ 0.235 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.562 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 1.119 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.3480 inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = DC003(3)L.xls
 Data Set Name = DC003(3)L(CK. NO.)

Directed DOE Options

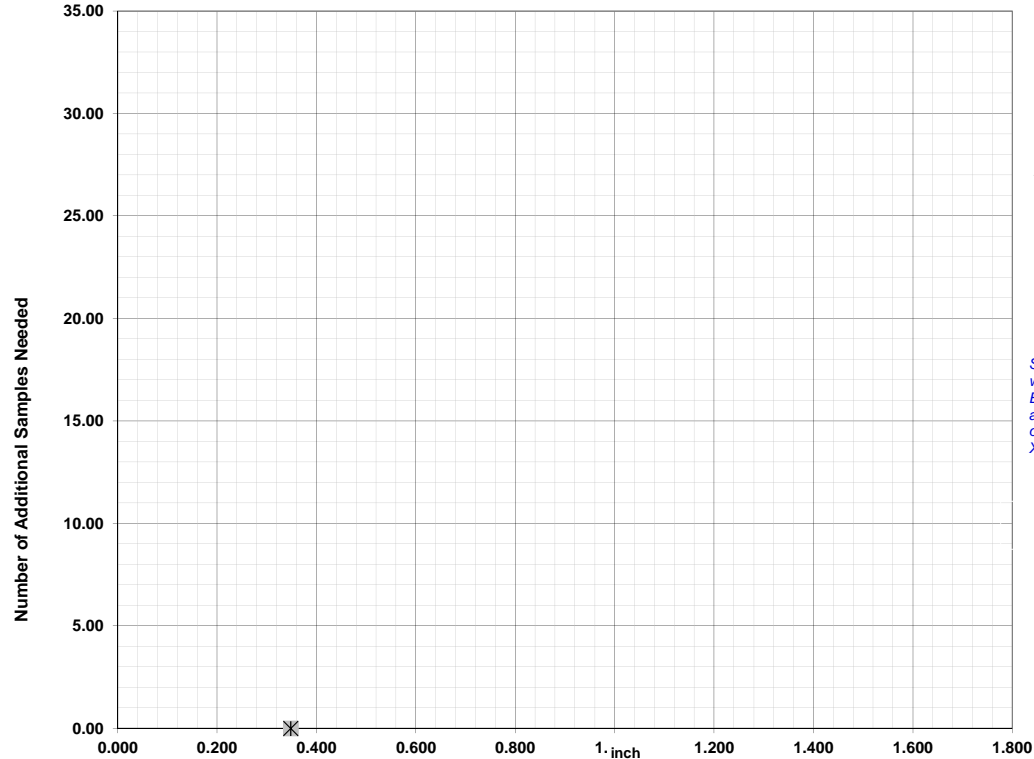


TABLE C

Class Length Additional Samples

XL = 1.562
 Xm = 1.119
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

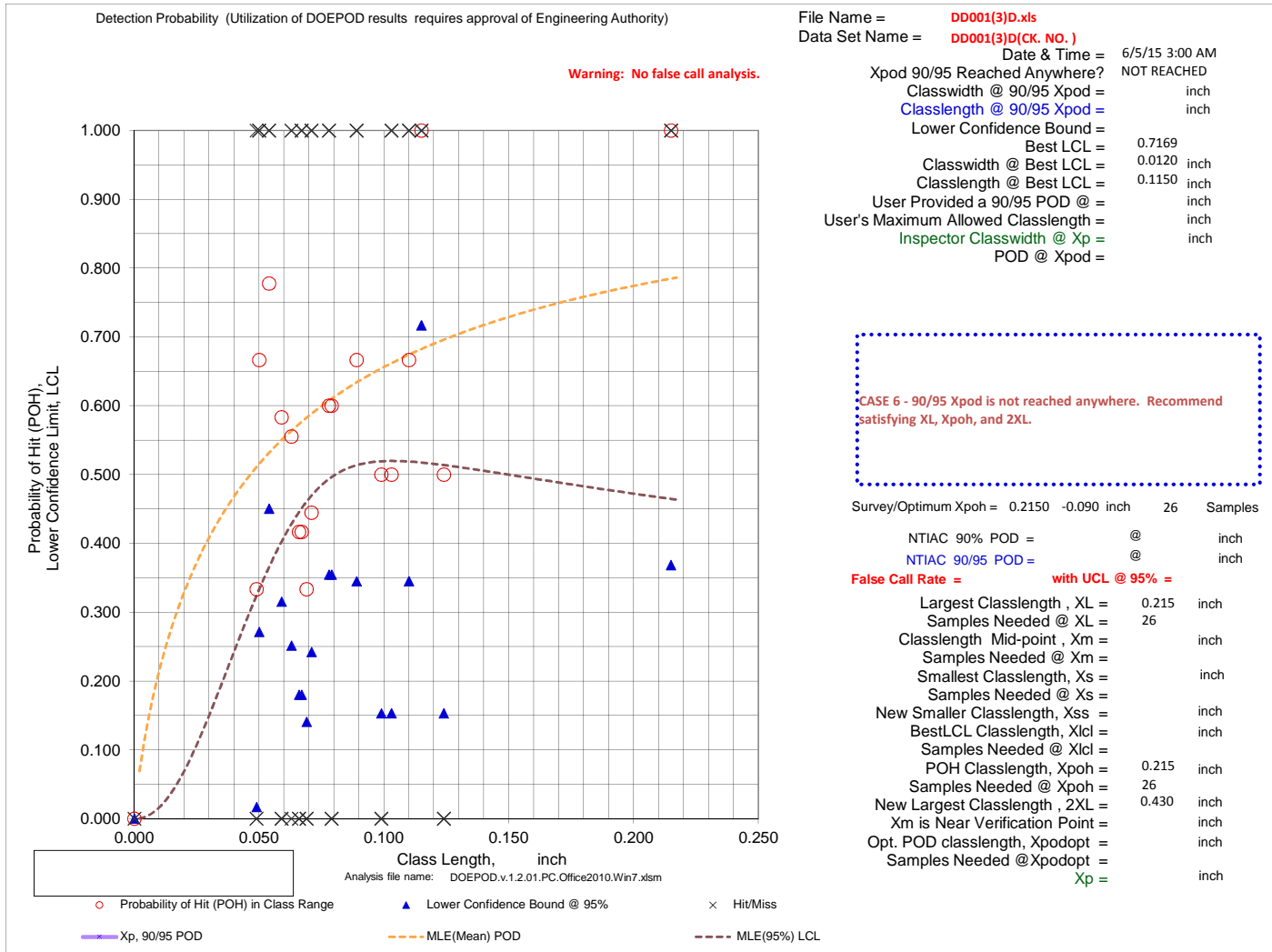
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = DD001(3)D.xls
 Data Set Name = DD001(3)D(CK. NO.)

Directed DOE Options

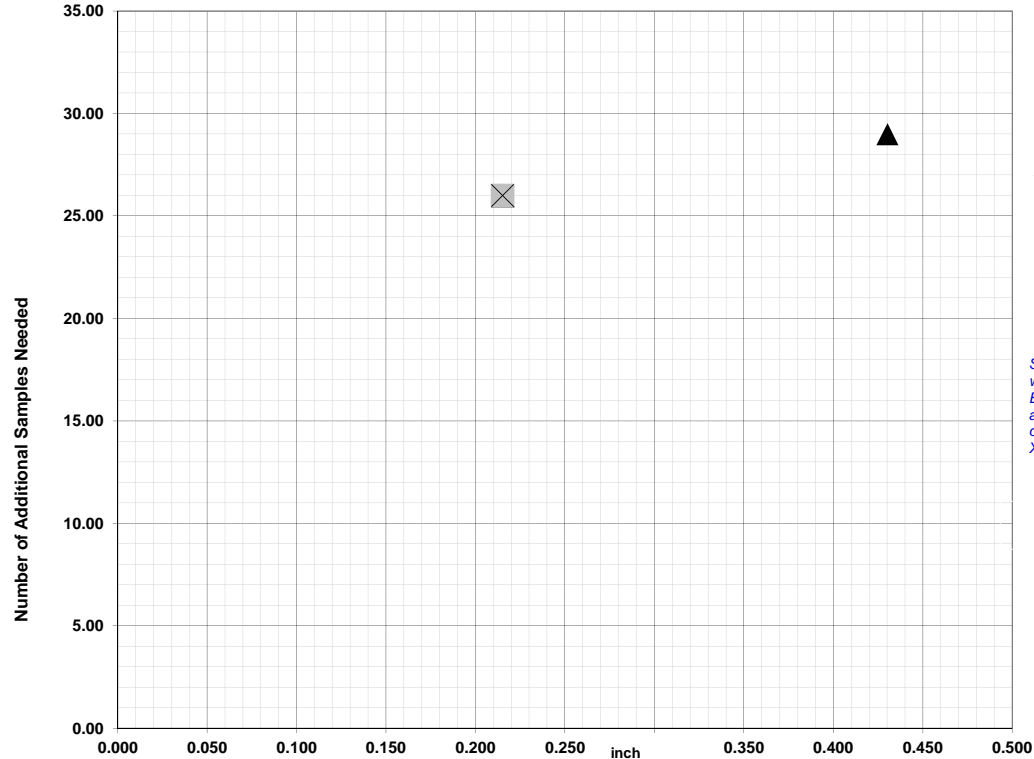


TABLE C

Class Length	Additional Samples
XL = 0.215	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.215	26
2XL = 0.430	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

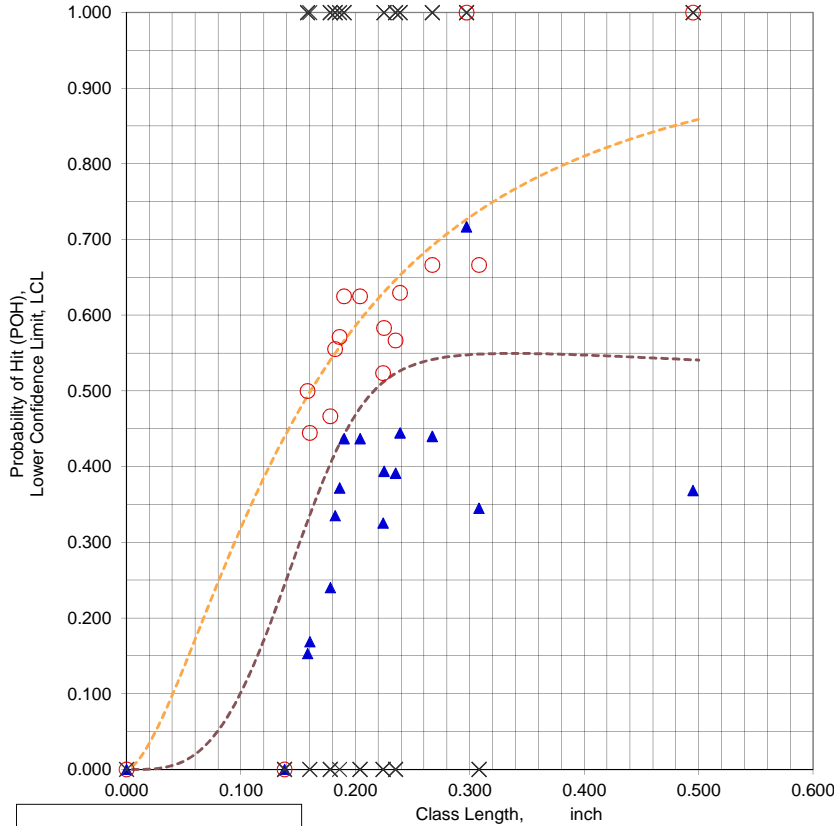
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
 — Xp, 90/95 POD
 - - - MLE(Mean) POD
 - - - MLE(95%) LCL

File Name = DD001(3)L.xls
 Data Set Name = DD001(3)L(CK. NO.)
 Date & Time = 6/5/15 3:01 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7169
 Classwidth @ Best LCL = 0.0580 inch
 Classlength @ Best LCL = 0.2970 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.4950 -0.100 inch 26 Samples

NTIAC 90% POD = 0.900 @ 0.640 inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.495 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.495 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 0.990 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = DD001(3)L.xls
 Data Set Name = DD001(3)L(CK. NO.)

Directed DOE Options

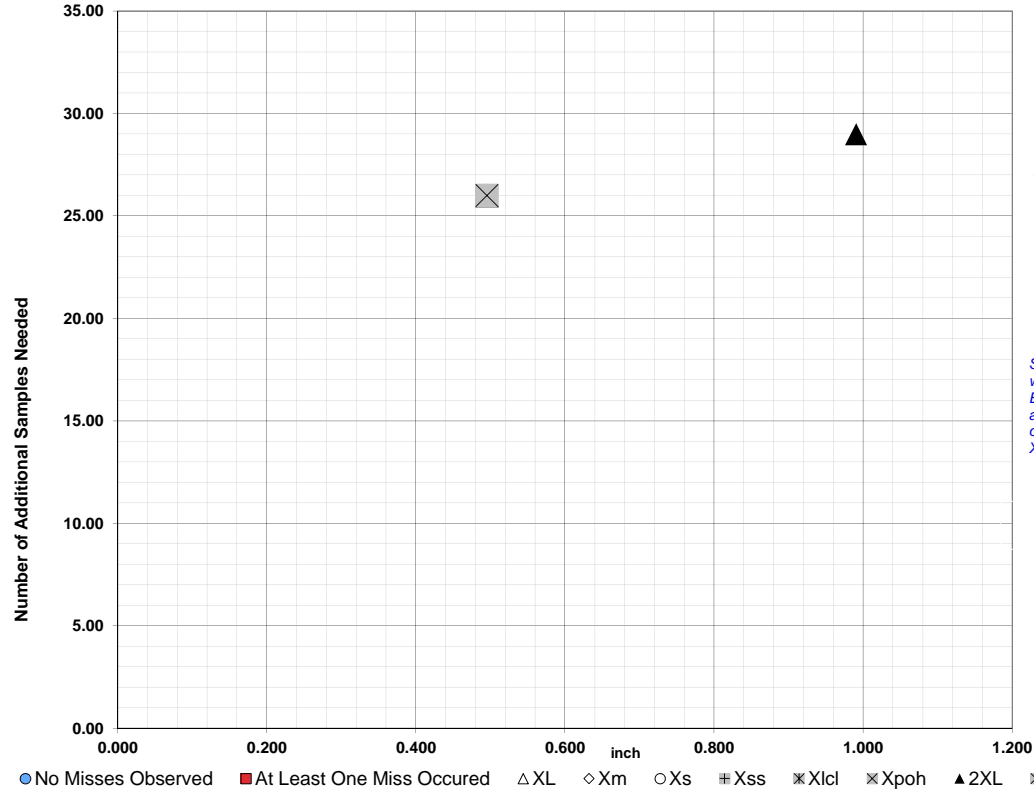


TABLE C

Class Length	Additional Samples
XL =	0.495 26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	0.495 26
2XL =	0.990 29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

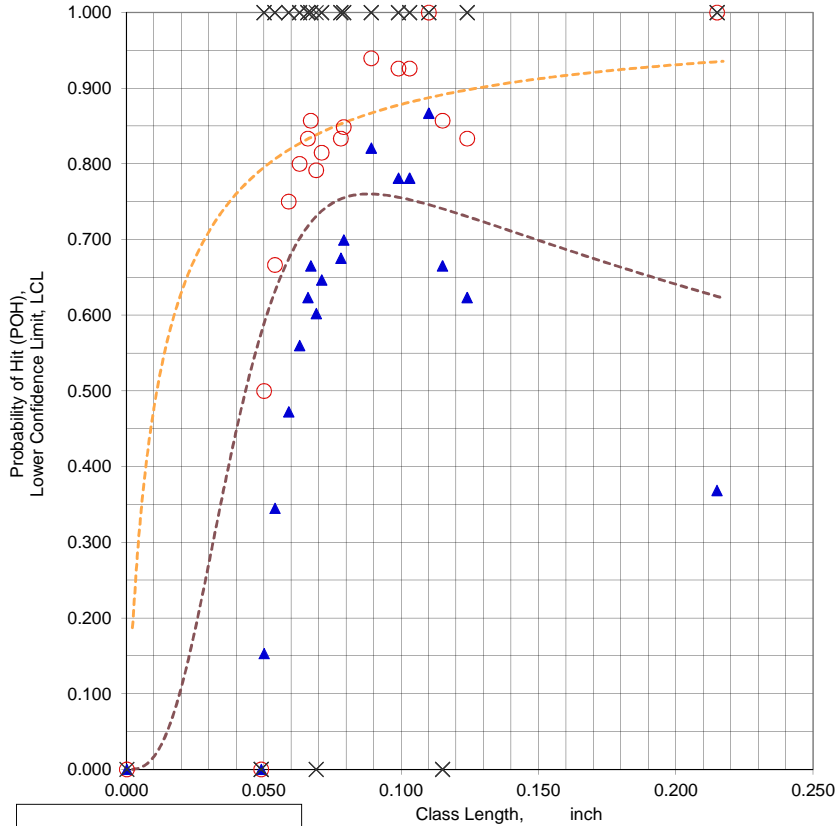
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = DD002(3)D.xls
 Data Set Name = DD002(3)D(CK. NO.)
 Date & Time = 6/5/15 3:02 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8666
 Classwidth @ Best LCL = 0.0390 inch
 Classlength @ Best LCL = 0.1100 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.1240 -0.008 inch 26 Samples
 NTIAC 90% POD = 0.902 @ 0.130 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.215 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = 0.215 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 0.430 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = DD002(3)D.xls
 Data Set Name = DD002(3)D(CK. NO.)

Directed DOE Options

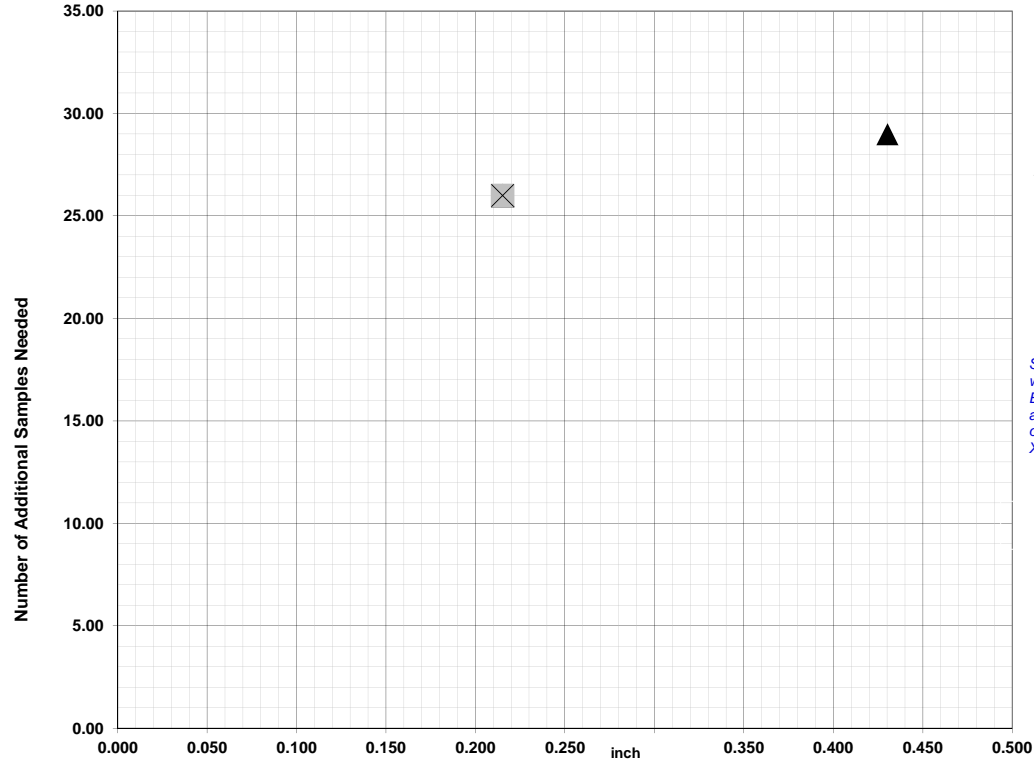


TABLE C

Class Length	Additional Samples
XL = 0.215	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.215	26
2XL = 0.430	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

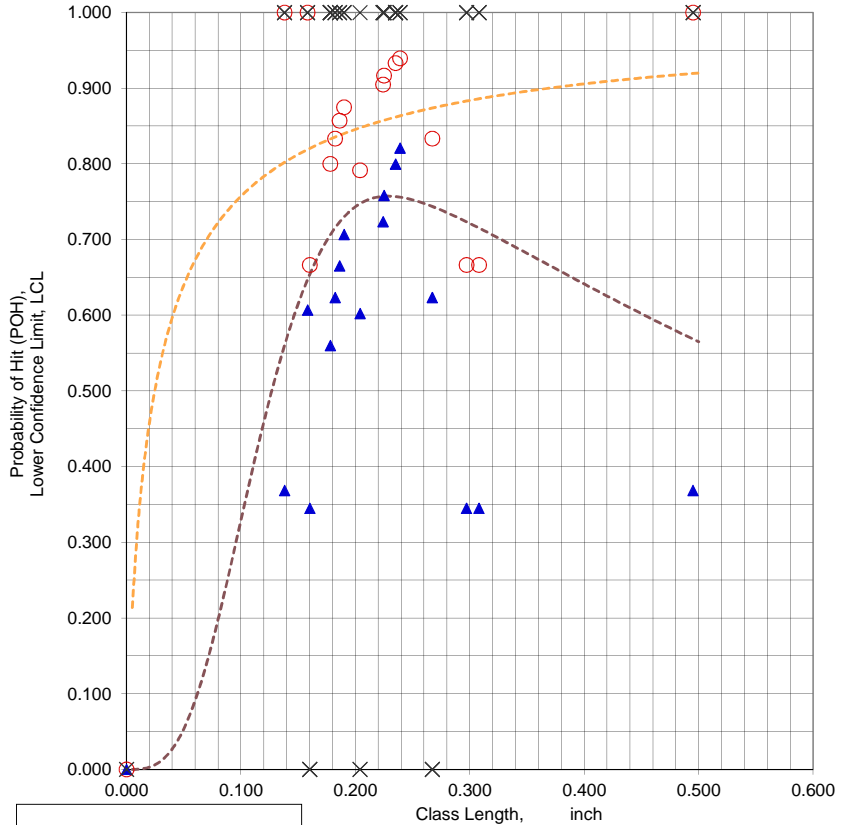
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ⊗ Xlcl
 ⊗ Xpoh
 ▲ 2XL
 ⊗ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = DD002(3)L.xls
 Data Set Name = DD002(3)L(CK. NO.)
 Date & Time = 6/5/15 3:03 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8209
 Classwidth @ Best LCL = 0.0610 inch
 Classlength @ Best LCL = 0.2390 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.2970 -0.029 inch 26 Samples
 NTIAC 90% POD = 0.900 @ 0.370 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.495 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.495 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 0.990 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = DD002(3)L.xls
 Data Set Name = DD002(3)L(CK. NO.)

Directed DOE Options

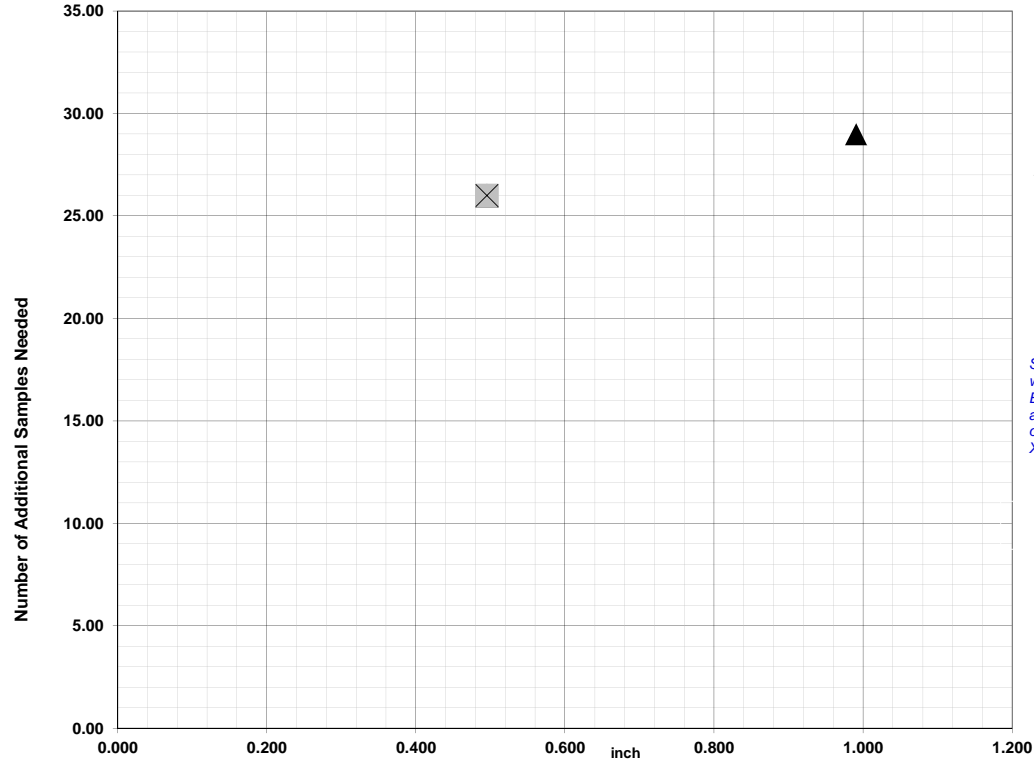


TABLE C

Class Length	Additional Samples
XL = 0.495	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.495	26
2XL = 0.990	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

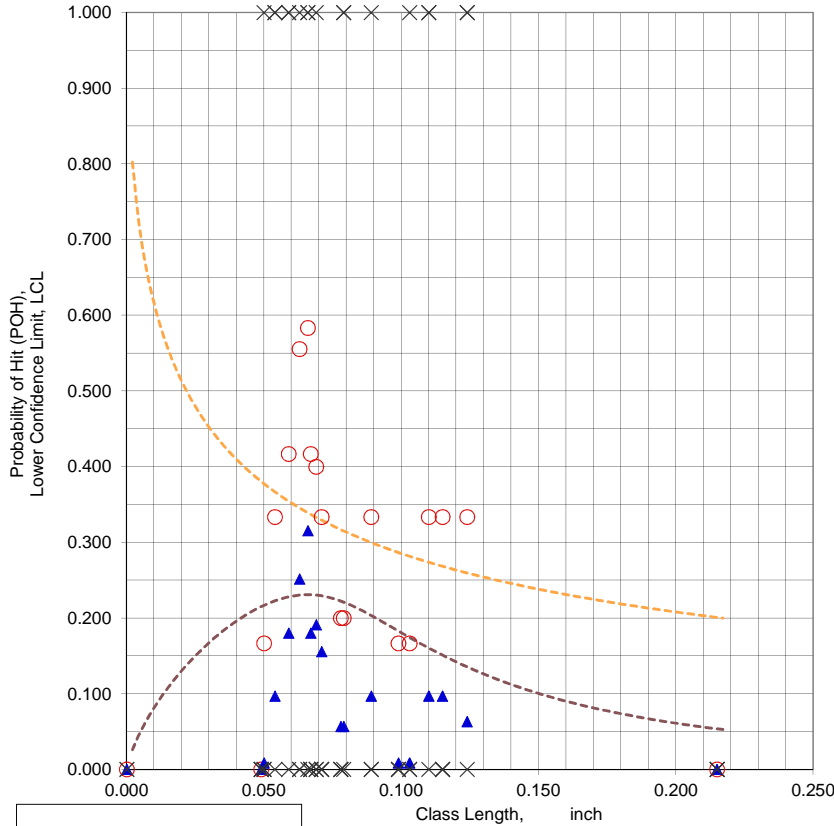
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = DD003(3)D.xls
 Data Set Name = DD003(3)D(CK. NO.)
 Date & Time = 6/5/15 3:04 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.3152
 Classwidth @ Best LCL = 0.0120 inch
 Classlength @ Best LCL = 0.0660 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.430 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = DD003(3)D.xls
 Data Set Name = DD003(3)D(CK. NO.)

Directed DOE Options

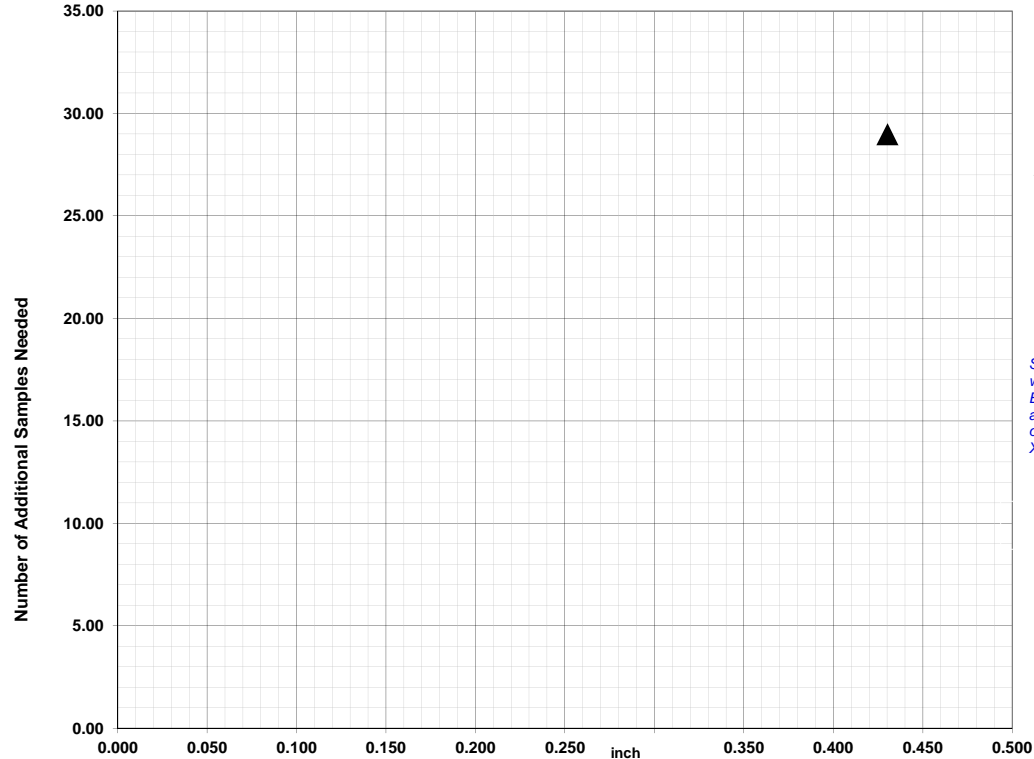


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.430	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.430 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

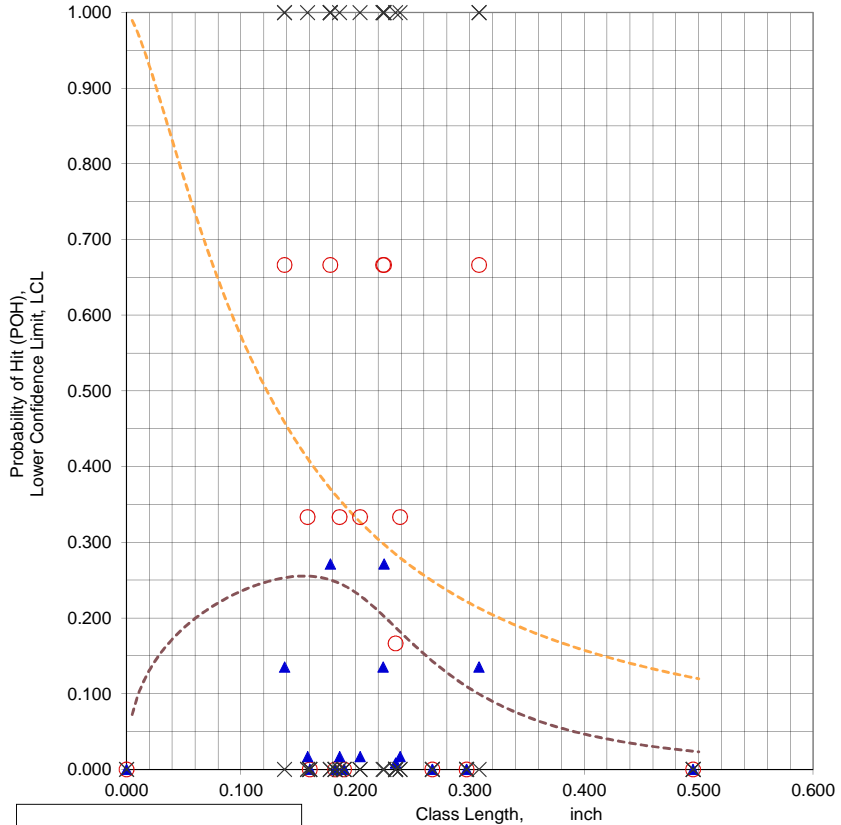
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = DD003(3)L.xls
 Data Set Name = DD003(3)L(CK. NO.)
 Date & Time = 6/5/15 3:05 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.2713
 Classwidth @ Best LCL = 0.0010 inch
 Classlength @ Best LCL = 0.1780 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.989 @ 0.005 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.990 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = DD003(3)L.xls
 Data Set Name = DD003(3)L(CK. NO.)

Directed DOE Options

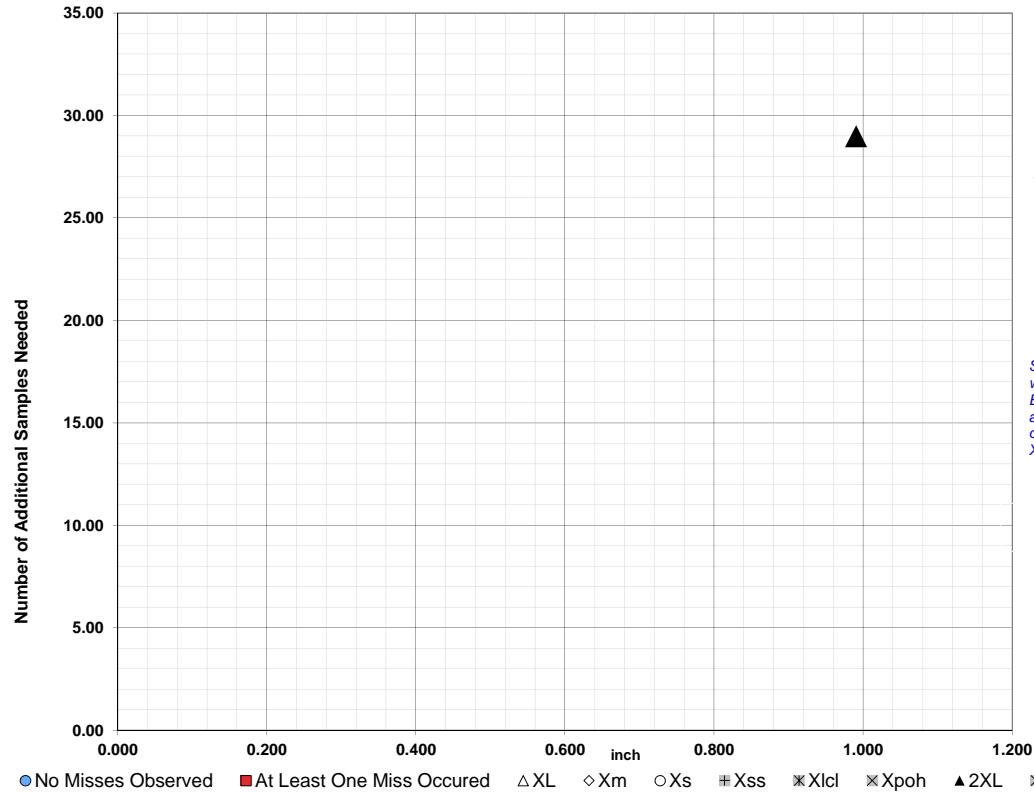


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.990	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.990 29
 **Alternate Xm =
 Xpodopt =

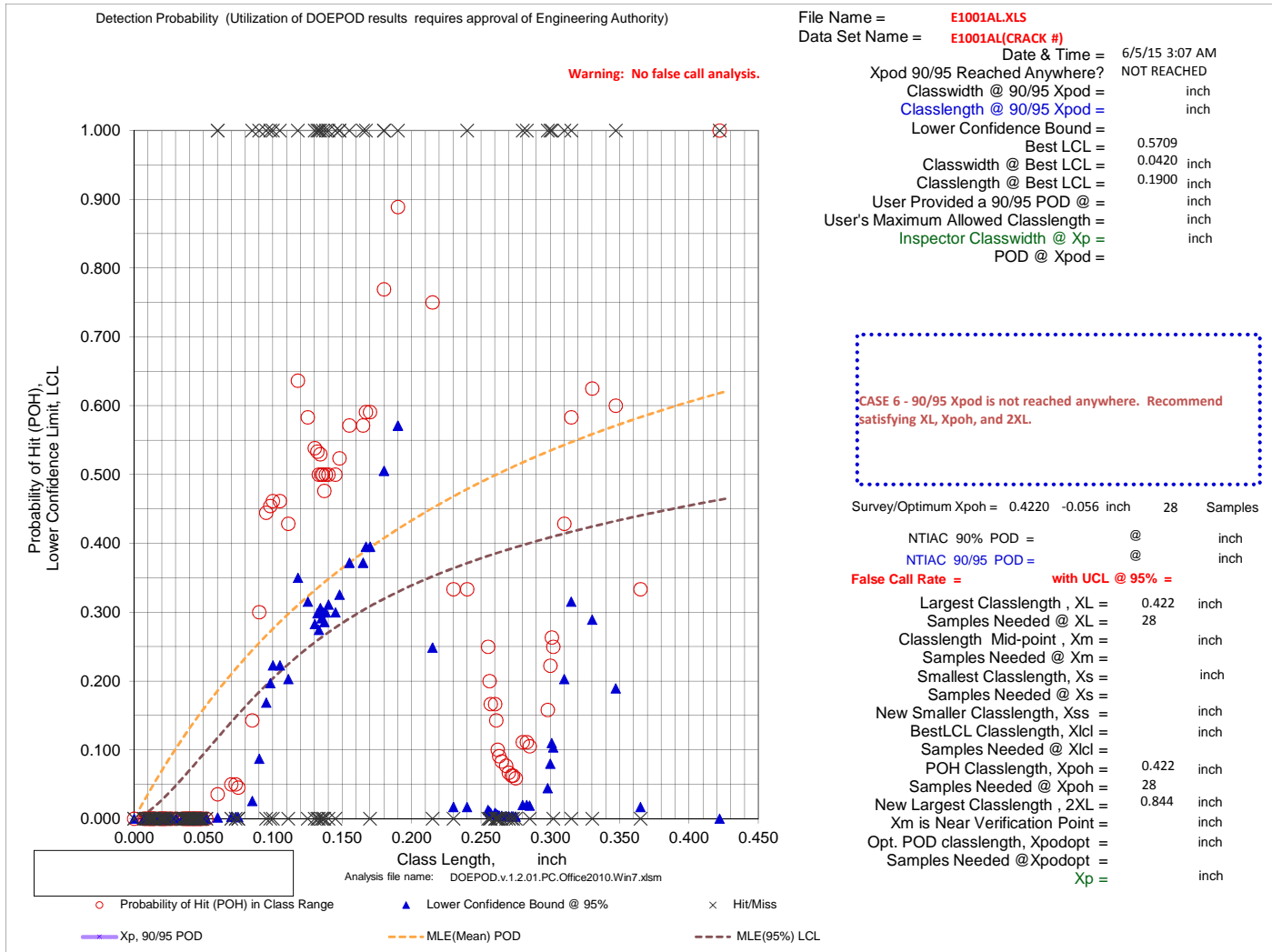
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = E1001AL.XLS
 Data Set Name = E1001AL(CRACK #)

Directed DOE Options

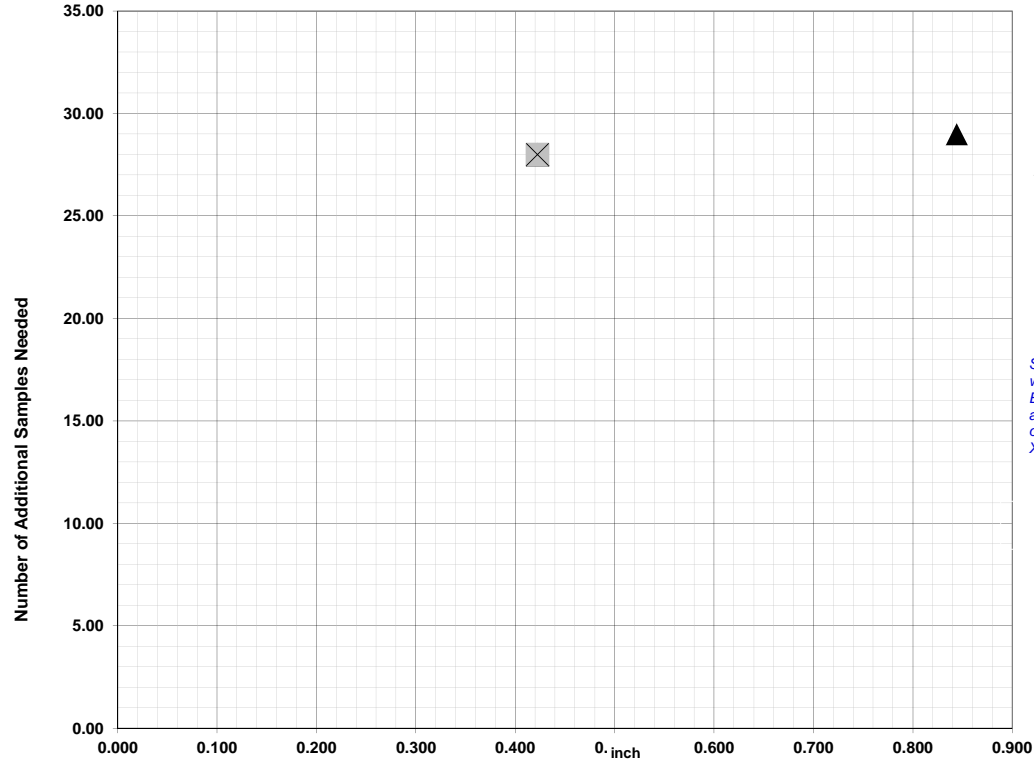


TABLE C

Class Length	Additional Samples
XL = 0.422	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.422	28
2XL = 0.844	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

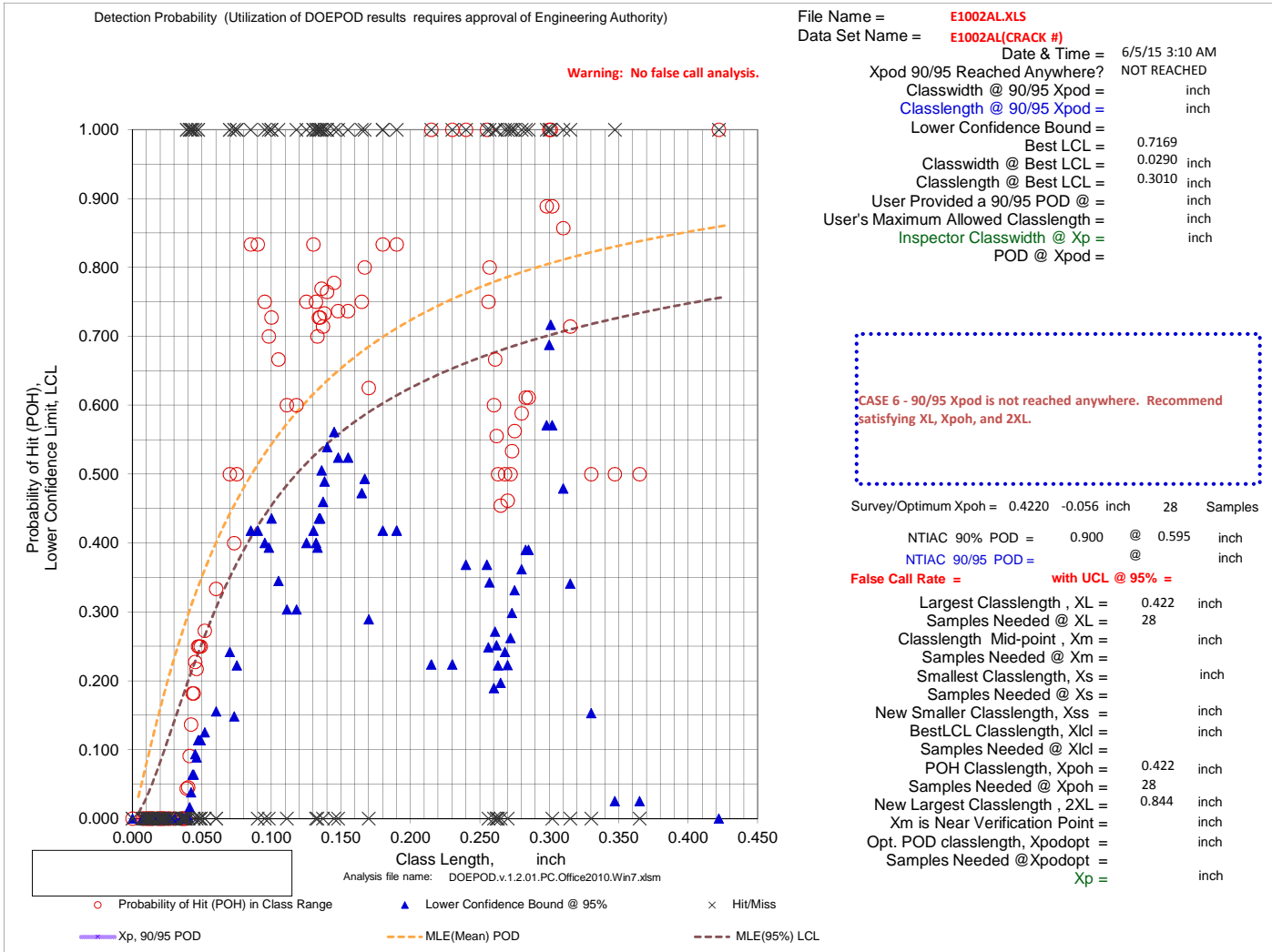
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = E1002AL.XLS
 Data Set Name = E1002AL(CRACK #)

Directed DOE Options

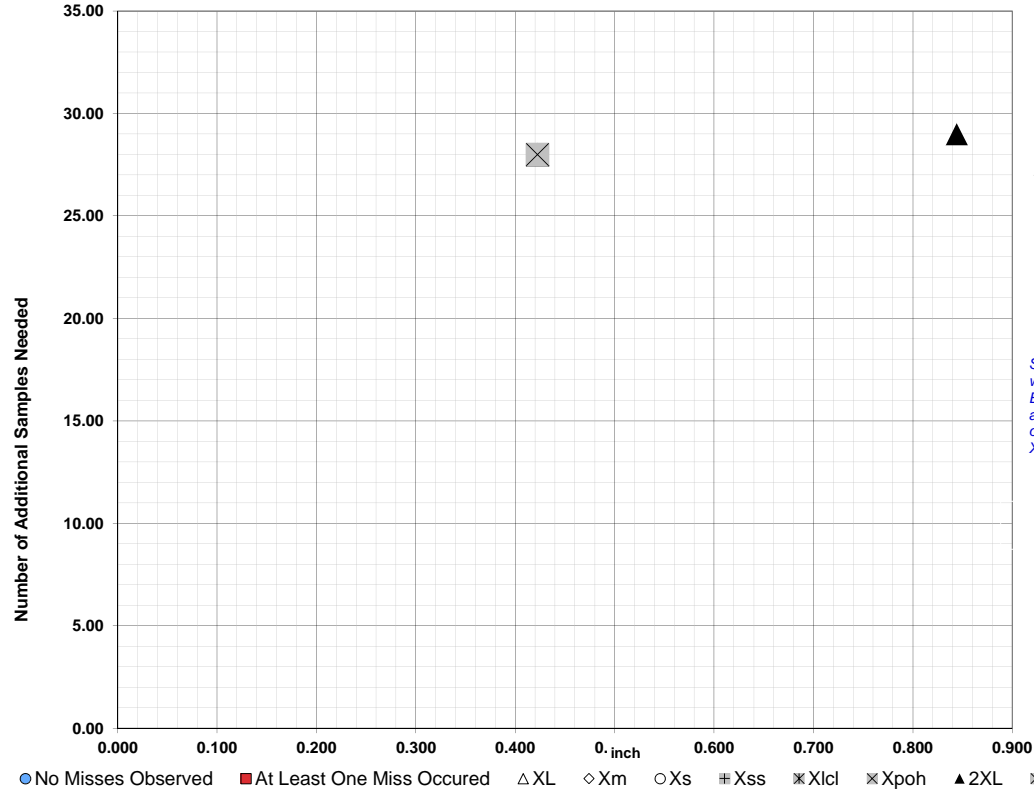


TABLE C

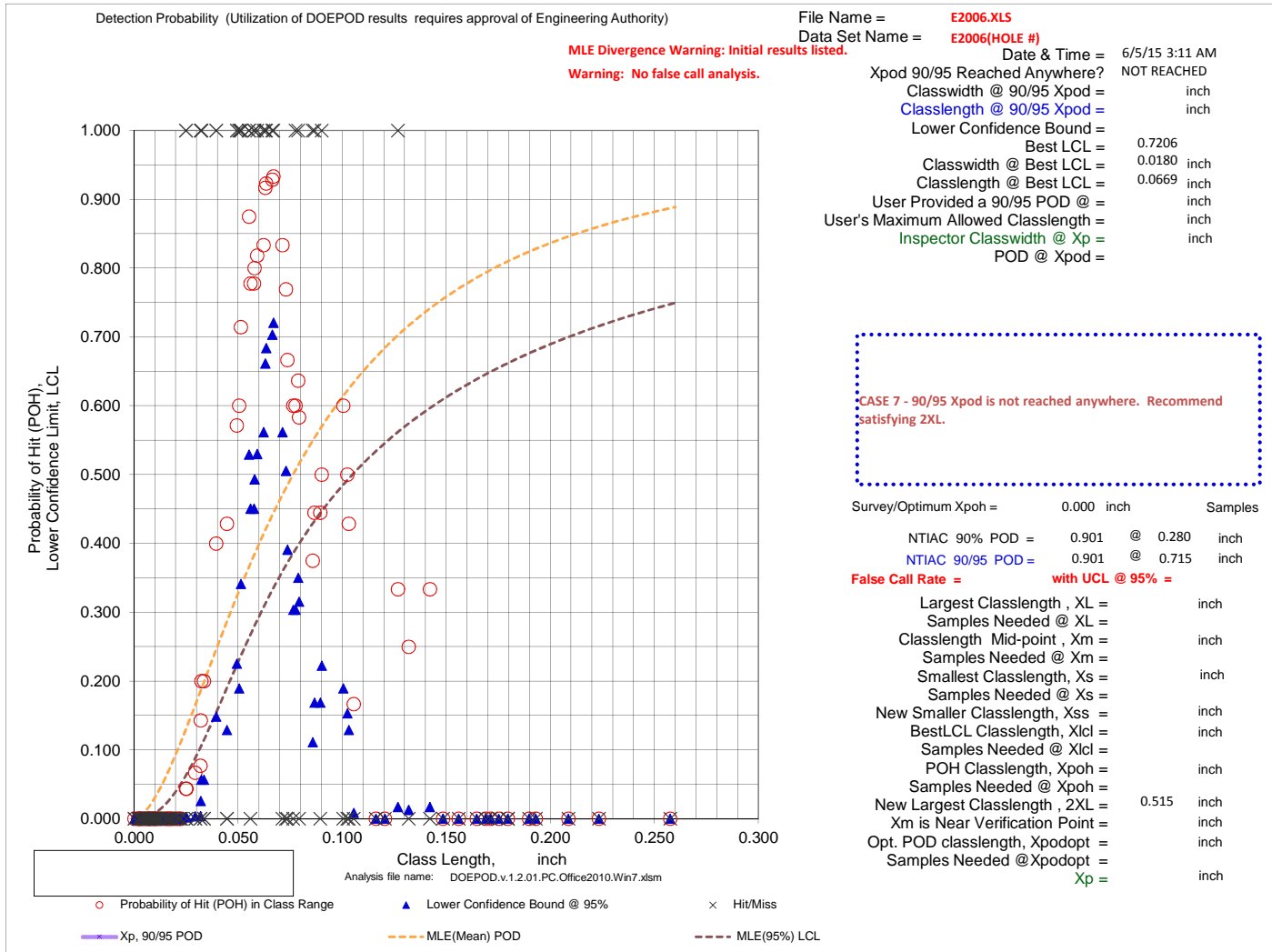
Class Length	Additional Samples
XL = 0.422	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.422	28
2XL = 0.844	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = E2006.XLS
 Data Set Name = E2006(HOLE #)

Directed DOE Options

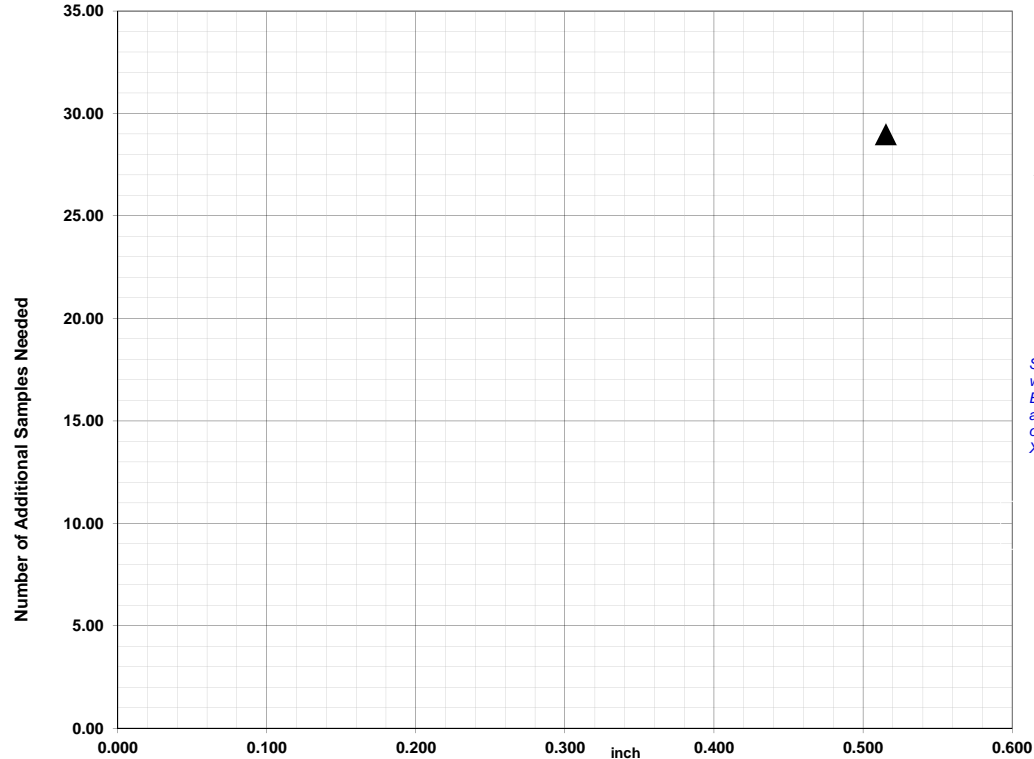


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.515	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.515 29
 **Alternate Xm =
 Xpodopt =

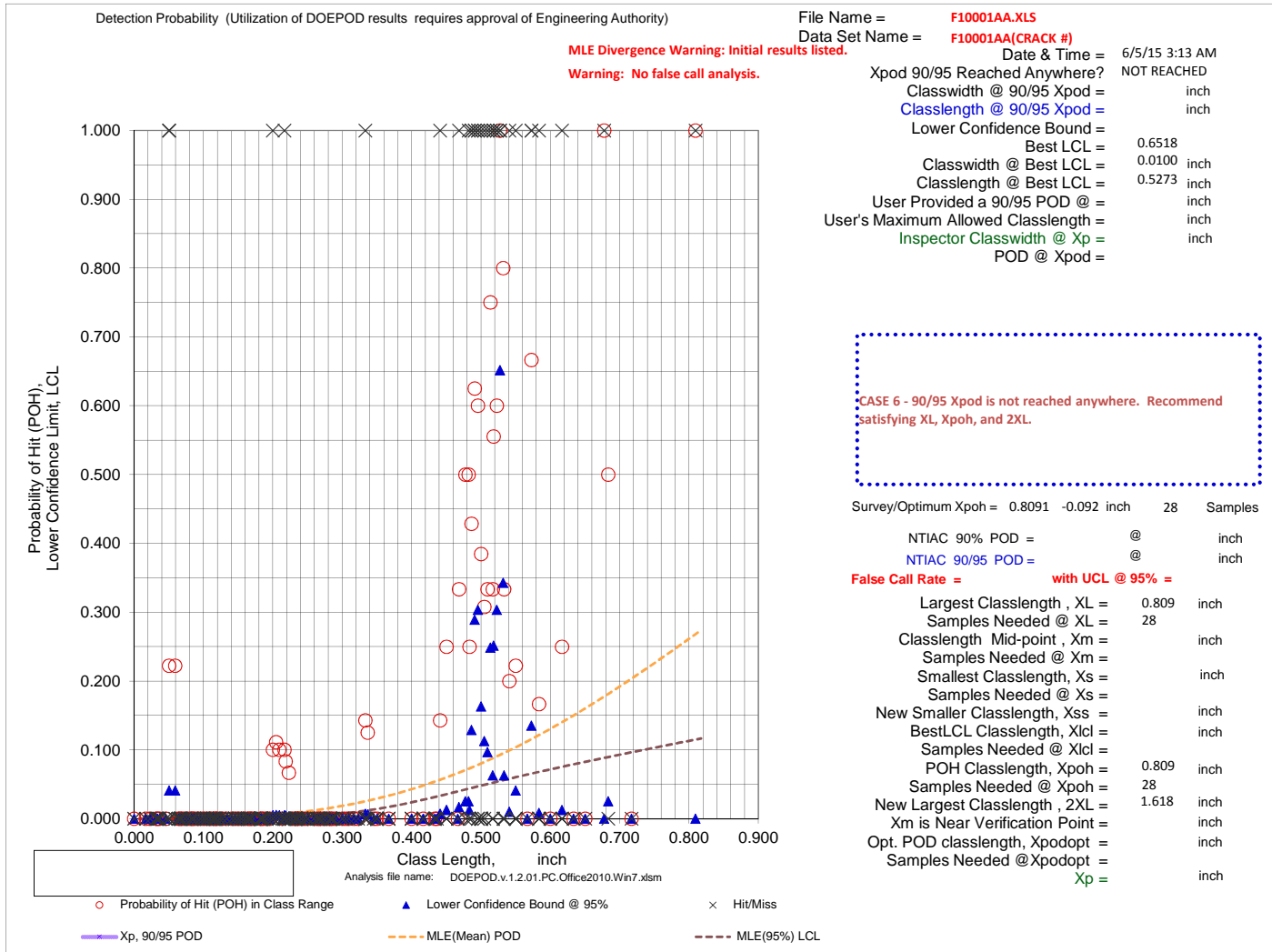
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F10001AA.XLS
 Data Set Name = F10001AA(CRACK #)

Directed DOE Options

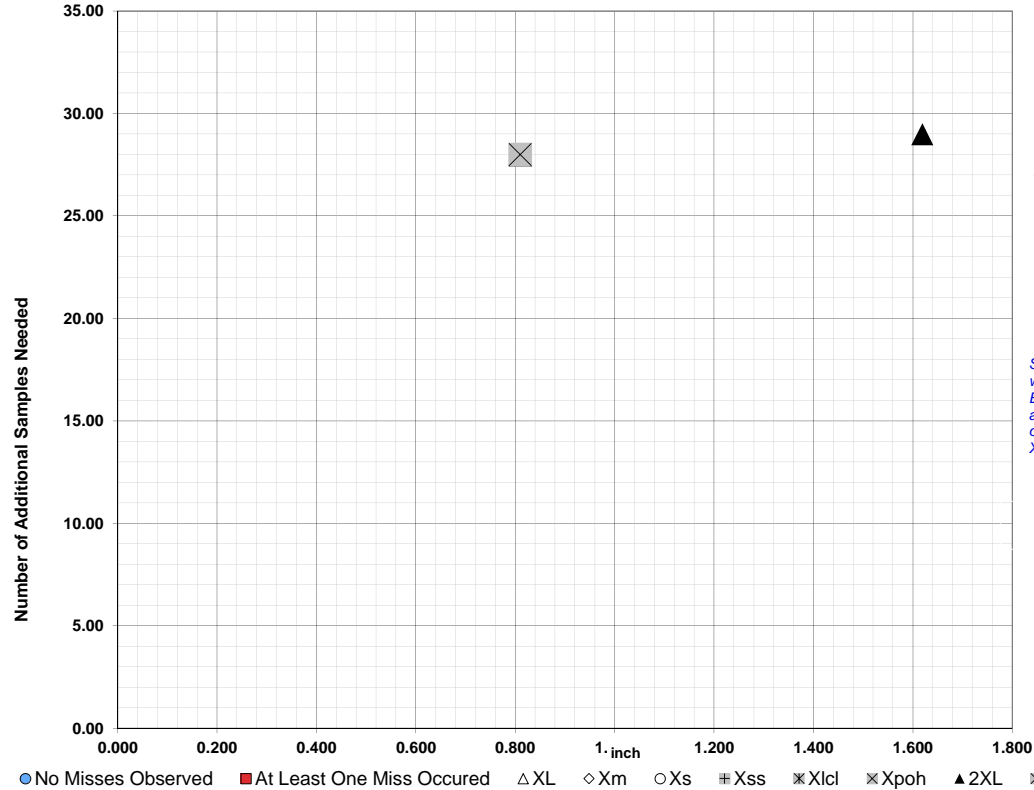


TABLE C

Class Length	Additional Samples
XL = 0.809	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.809	28
2XL = 1.618	29
**Alternate Xm =	
Xpodopt =	

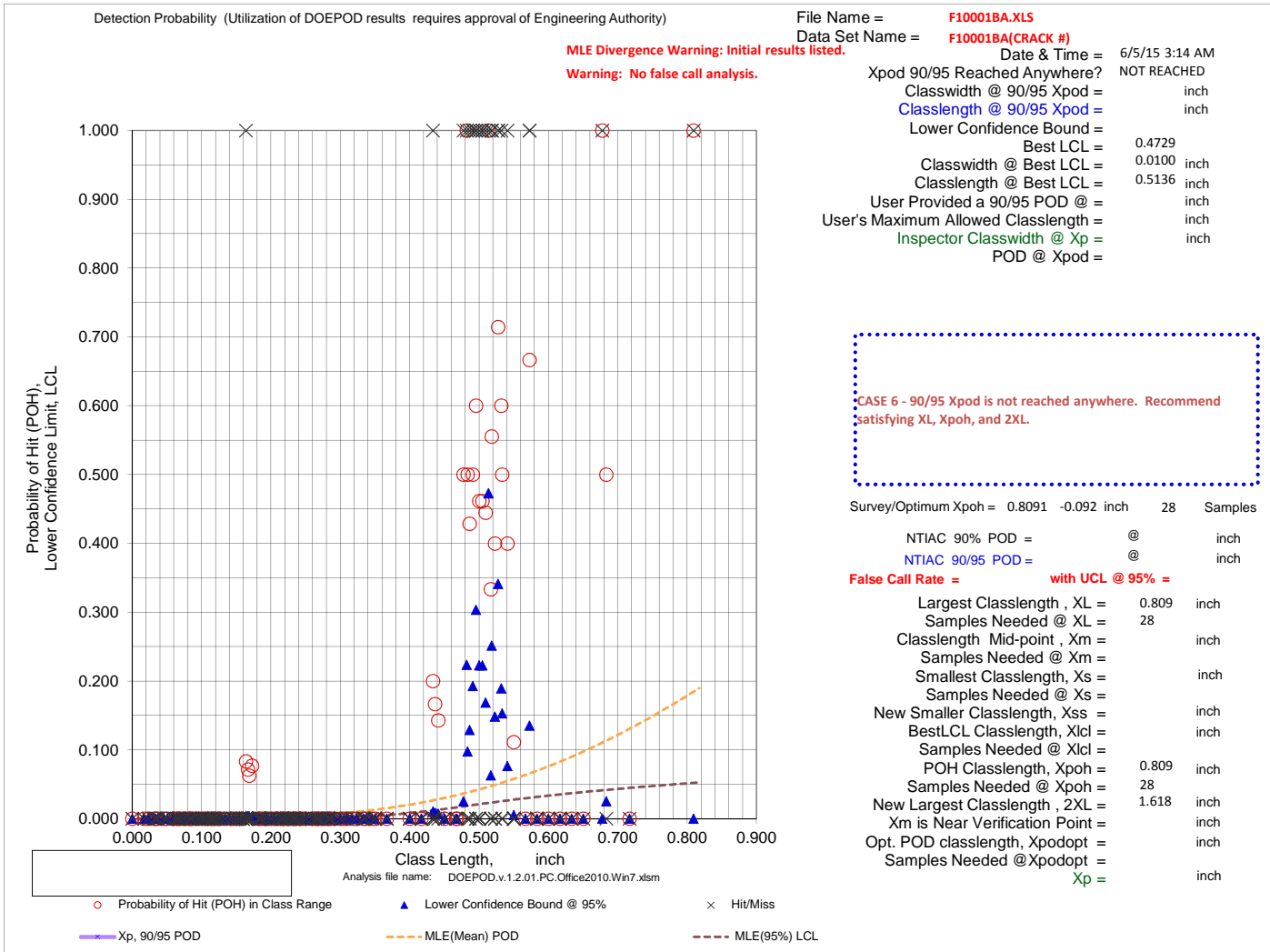
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F10001BA.XLS
 Data Set Name = F10001BA(CRACK #)

Directed DOE Options

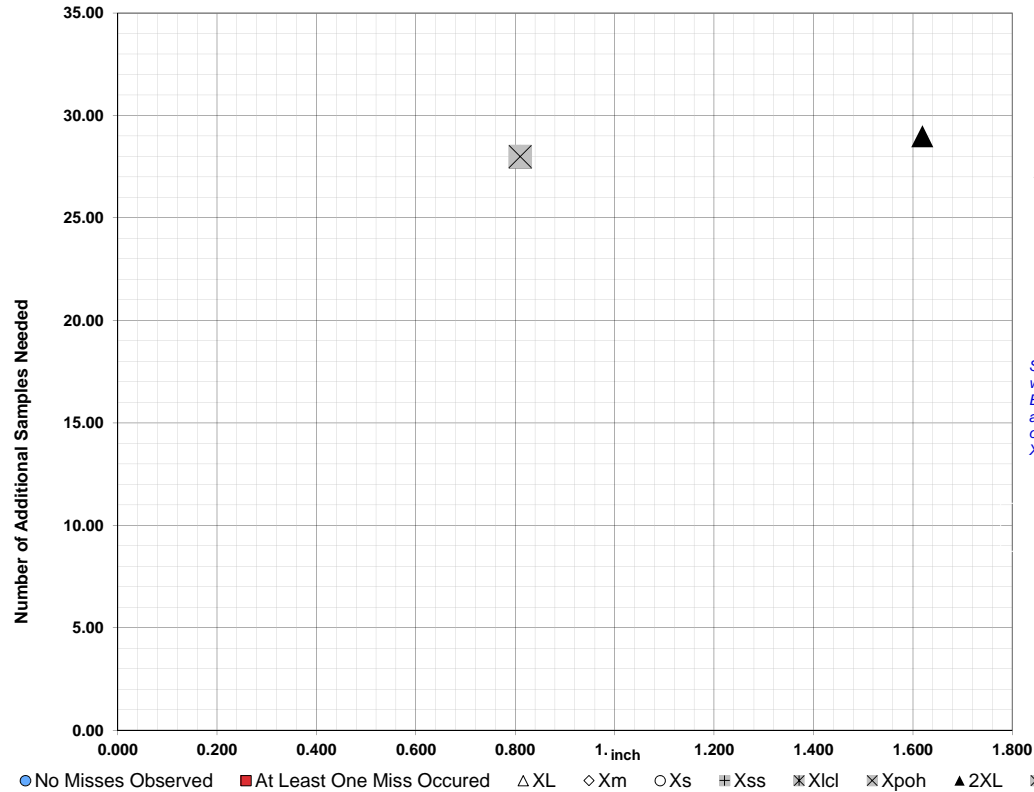


TABLE C

Class Length	Additional Samples
XL = 0.809	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.809	28
2XL = 1.618	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

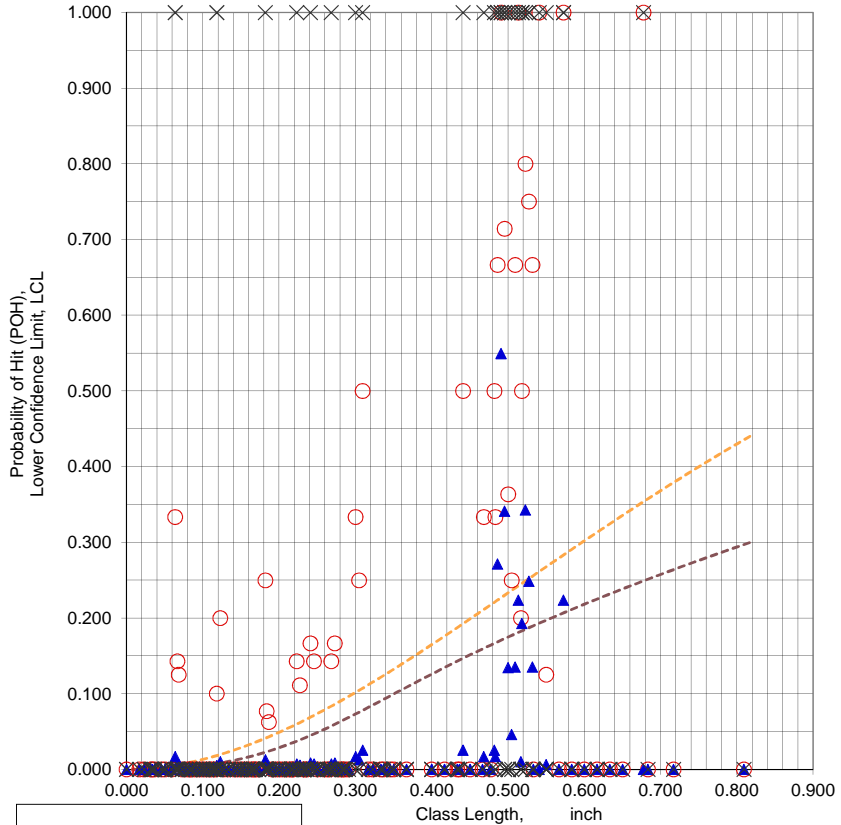
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **F10001CA.XLS**
 Data Set Name = **F10001CA(CRACK #)**
 Date & Time = 6/5/15 3:16 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound = Best LCL = 0.5493
 Classwidth @ Best LCL = 0.0050 inch
 Classlength @ Best LCL = 0.4909 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 1.618 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD — MLE(Mean) POD - - - MLE(95%) LCL

File Name = F10001CA.XLS
 Data Set Name = F10001CA(CRACK #)

Directed DOE Options

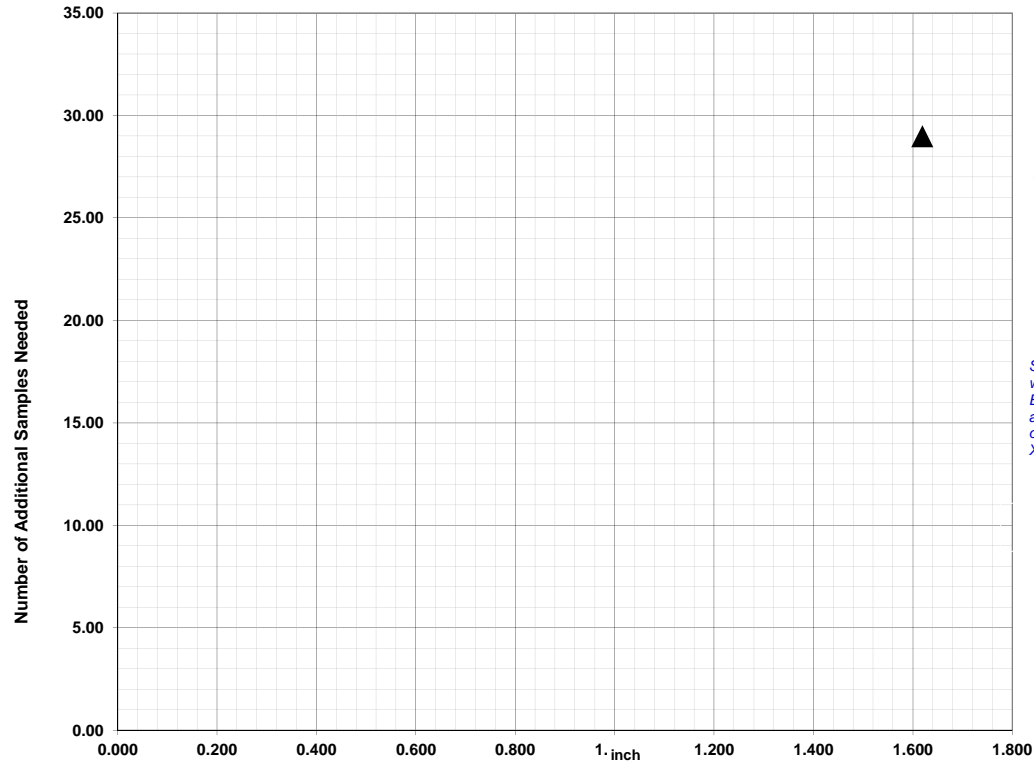


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 1.618	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 1.618 29
 **Alternate Xm =
 Xpodopt =

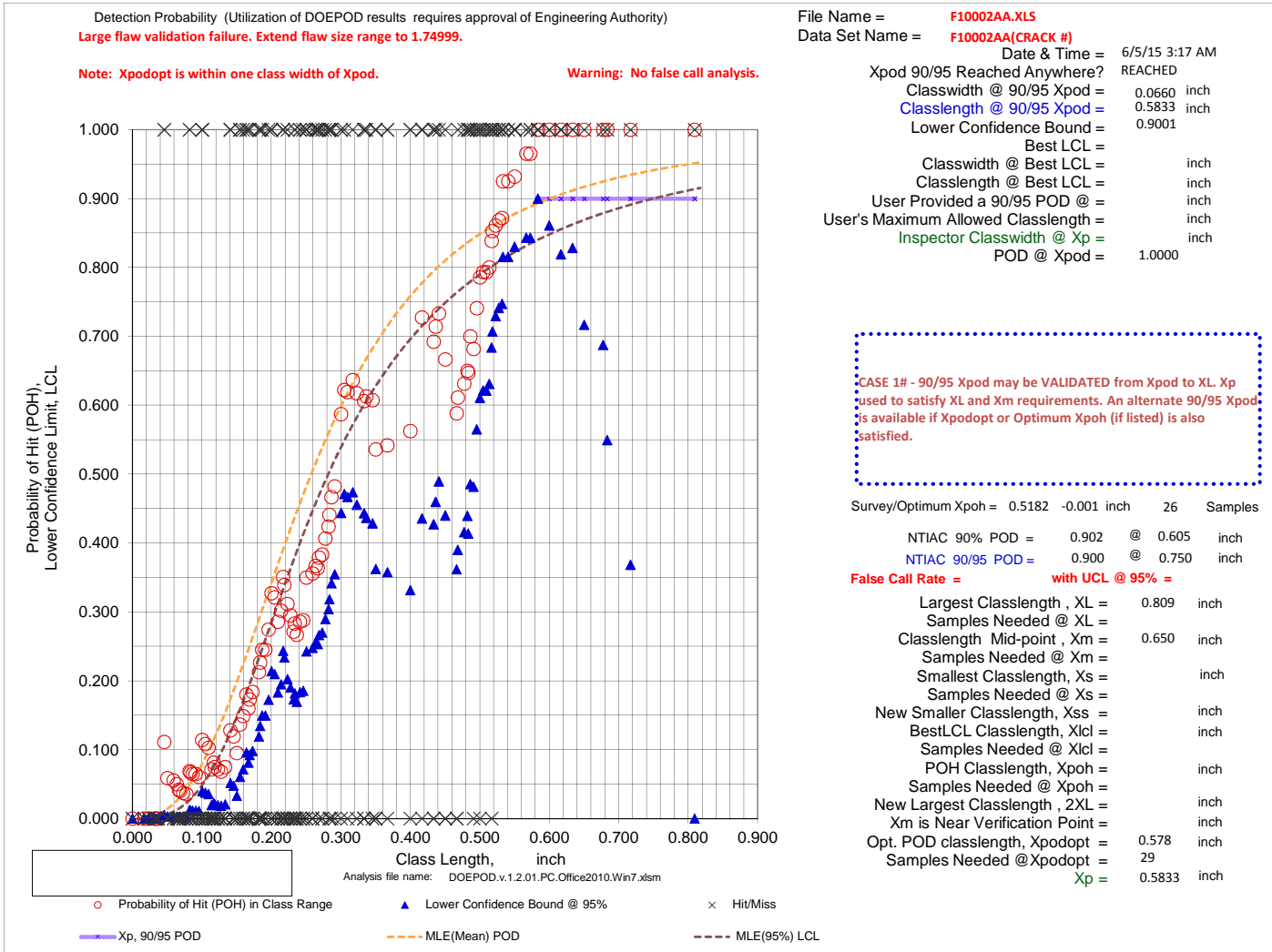
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F10002AA.XLS
 Data Set Name = F10002AA(CRACK #)

Directed DOE Options

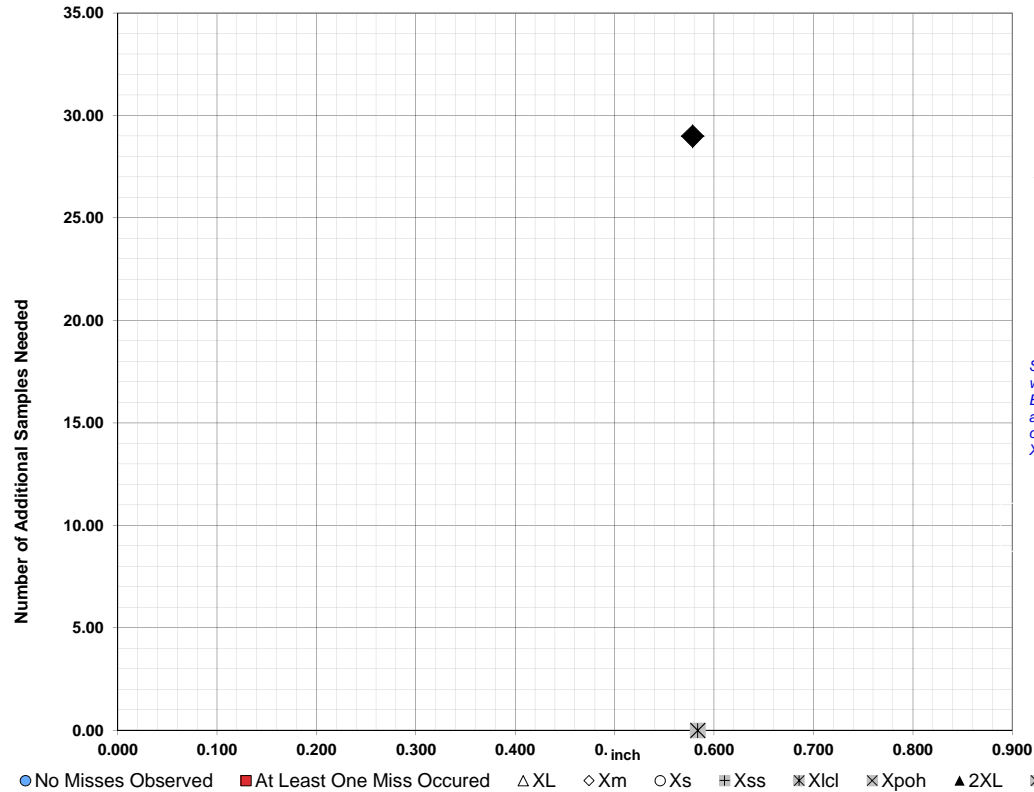


TABLE C

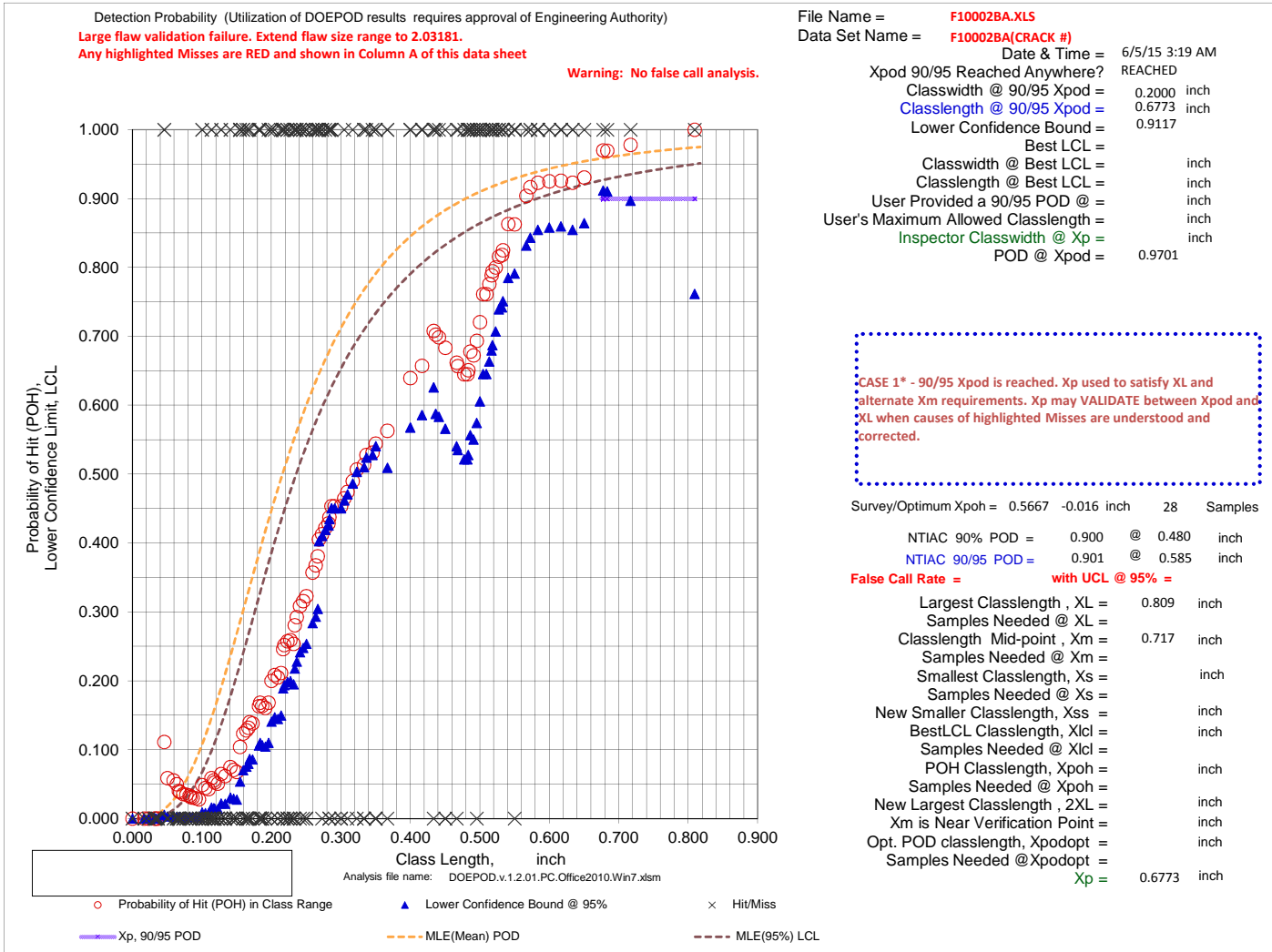
Class Length	Additional Samples
XL =	0.809
Xm =	0.650
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.578 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F10002BA.XLS
 Data Set Name = F10002BA(CRACK #)

Directed DOE Options

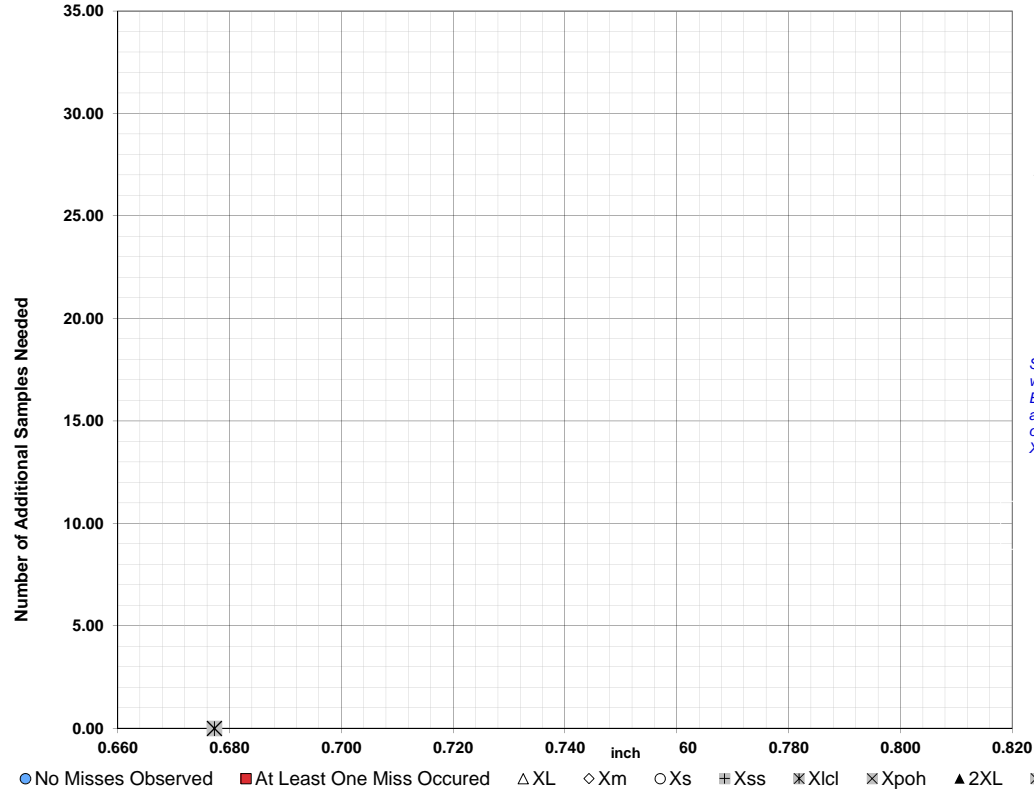


TABLE C

Class Length Additional Samples

XL = 0.809
 Xm = 0.717
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

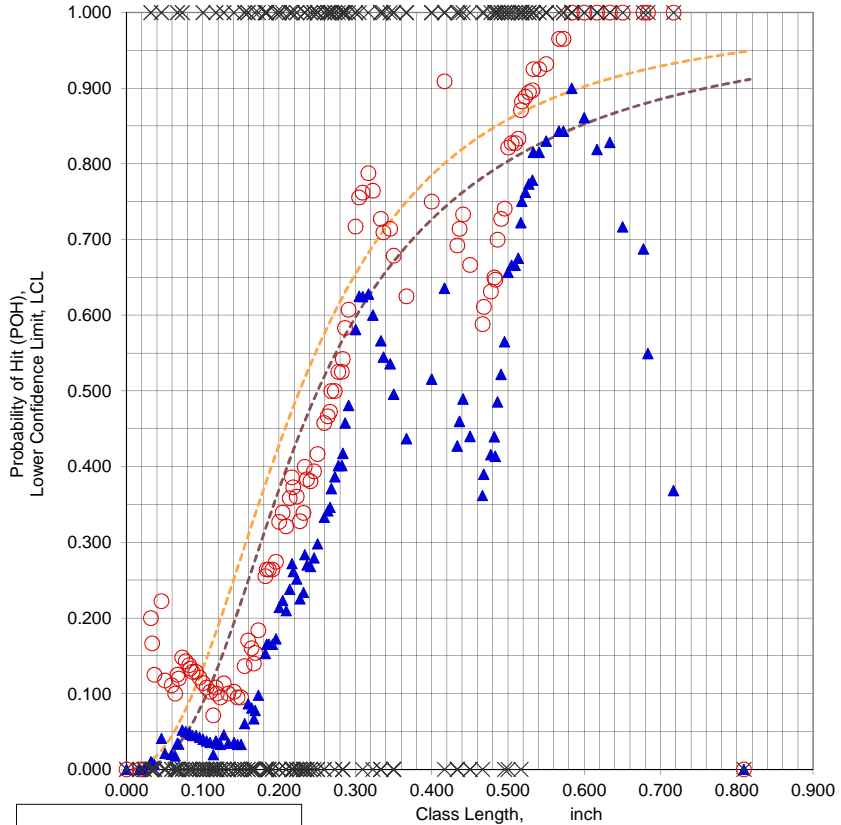
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 1.74999.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 ┆ Xp, 90/95 POD ┆ MLE(Mean) POD ┆ MLE(95%) LCL

File Name = **F10002CA.XLS**
 Data Set Name = **F10002CA(CRACK #)**
 Date & Time = 6/5/15 3:21 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0660 inch
 Classlength @ 90/95 Xpod = 0.5833 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Further VALIDATION is required. Recommend satisfying XL and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in Table A.

Survey/Optimum Xpoh = 0.000 inch Samples

NTIAC 90% POD = 0.901 @ 0.595 inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.809 inch
 Samples Needed @ XL = 45
 Classlength Mid-point , Xm = 0.650 inch
 Samples Needed @ Xm = 20
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F10002CA.XLS
 Data Set Name = F10002CA(CRACK #)

Directed DOE Options

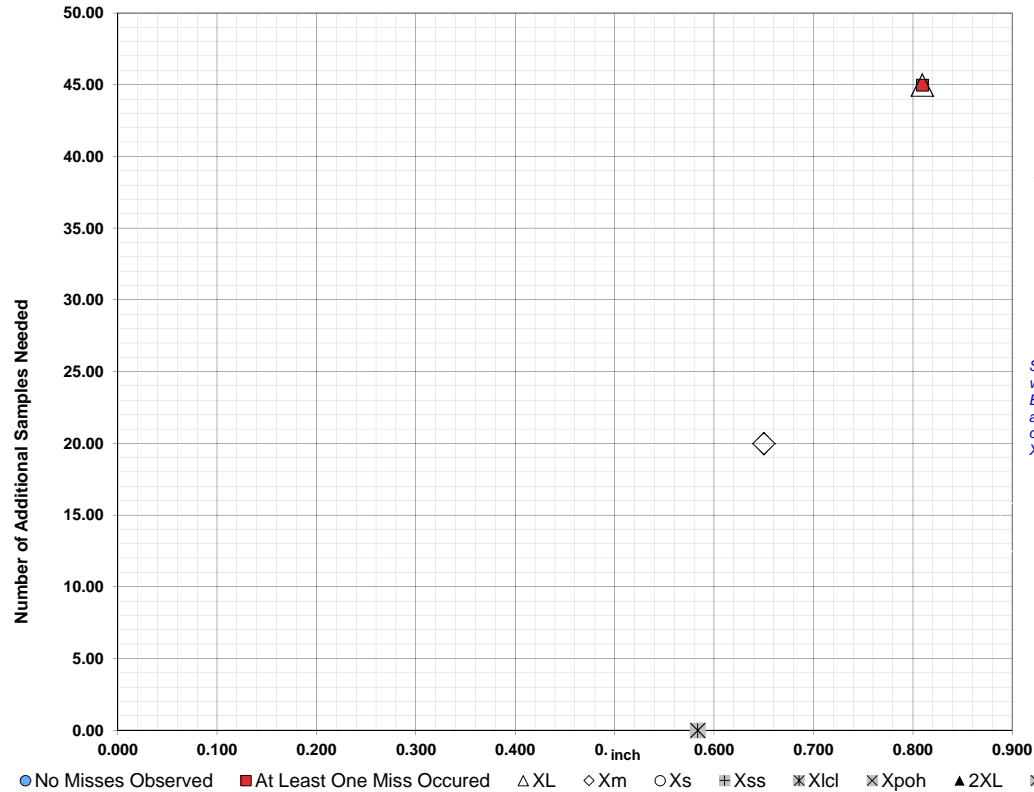


TABLE C

Class Length Additional Samples

XL = 0.809 45
 Xm = 0.650 20
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

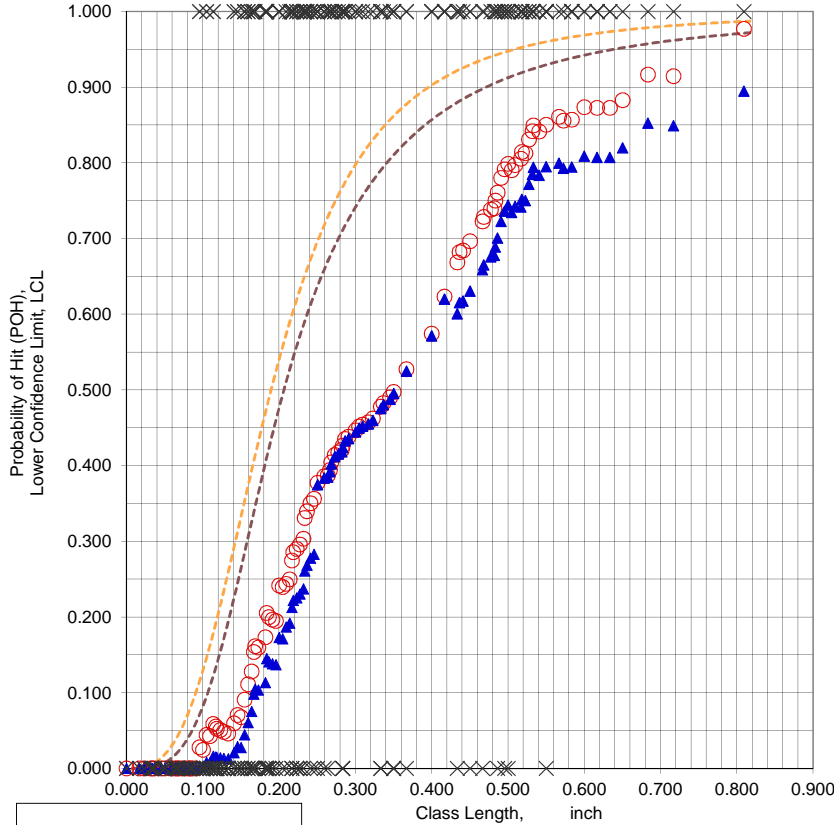
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
0.8091	45		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = F10003AA.XLS
 Data Set Name = F10003AA(CRACK #)
 Date & Time = 6/5/15 3:23 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8949
 Classwidth @ Best LCL = 0.3000 inch
 Classlength @ Best LCL = 0.8091 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.5667 -0.016 inch 28 Samples

NTIAC 90% POD = 0.903 @ 0.400 inch
 NTIAC 90/95 POD = 0.902 @ 0.475 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 1.618 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F10003AA.XLS
 Data Set Name = F10003AA(CRACK #)

Directed DOE Options

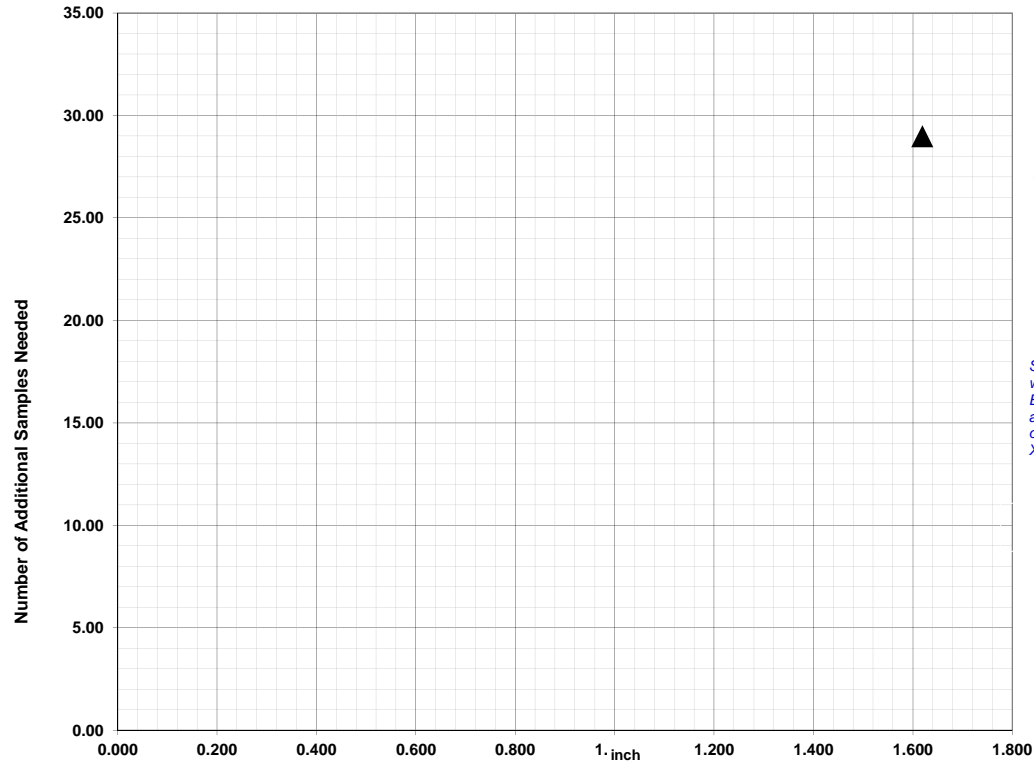


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 1.618	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 1.618 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

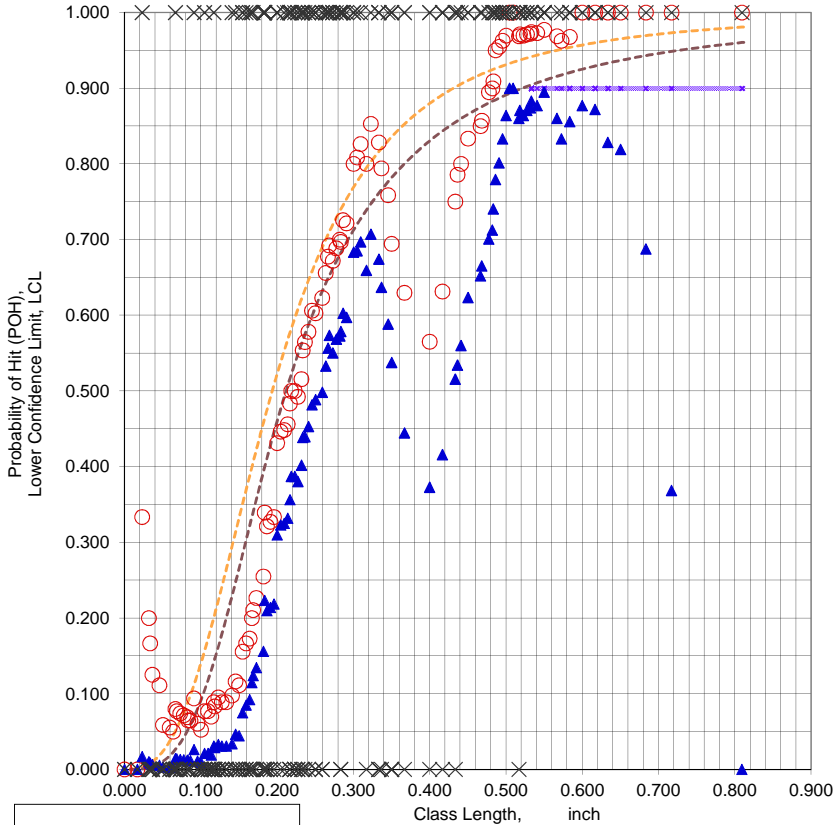
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Extend flaw size range to 1.51362.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **F10003BA.XLS**
 Data Set Name = **F10003BA(CRACK #)**
 Date & Time = 6/5/15 3:25 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0690 inch
 Classlength @ 90/95 Xpod = 0.5045 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.902 @ 0.435 inch
 NTIAC 90/95 POD = 0.901 @ 0.525 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.809 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.600 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.5333 inch

File Name = F10003BA.XLS
 Data Set Name = F10003BA(CRACK #)

Directed DOE Options

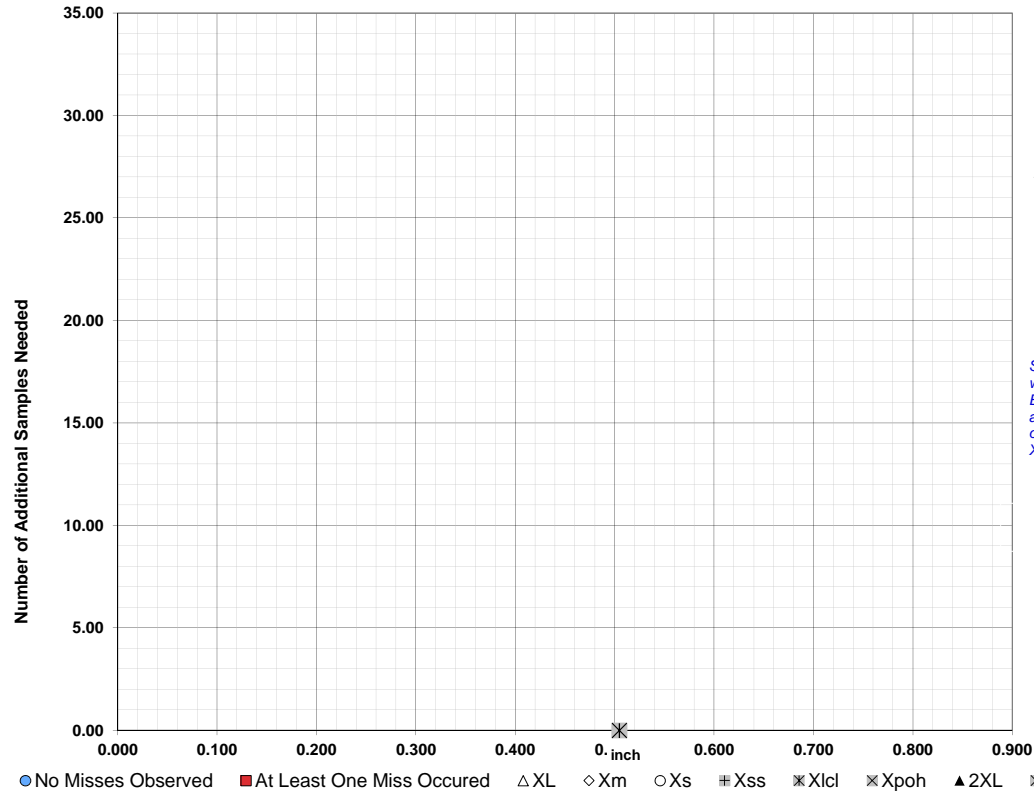


TABLE C

Class Length Additional Samples

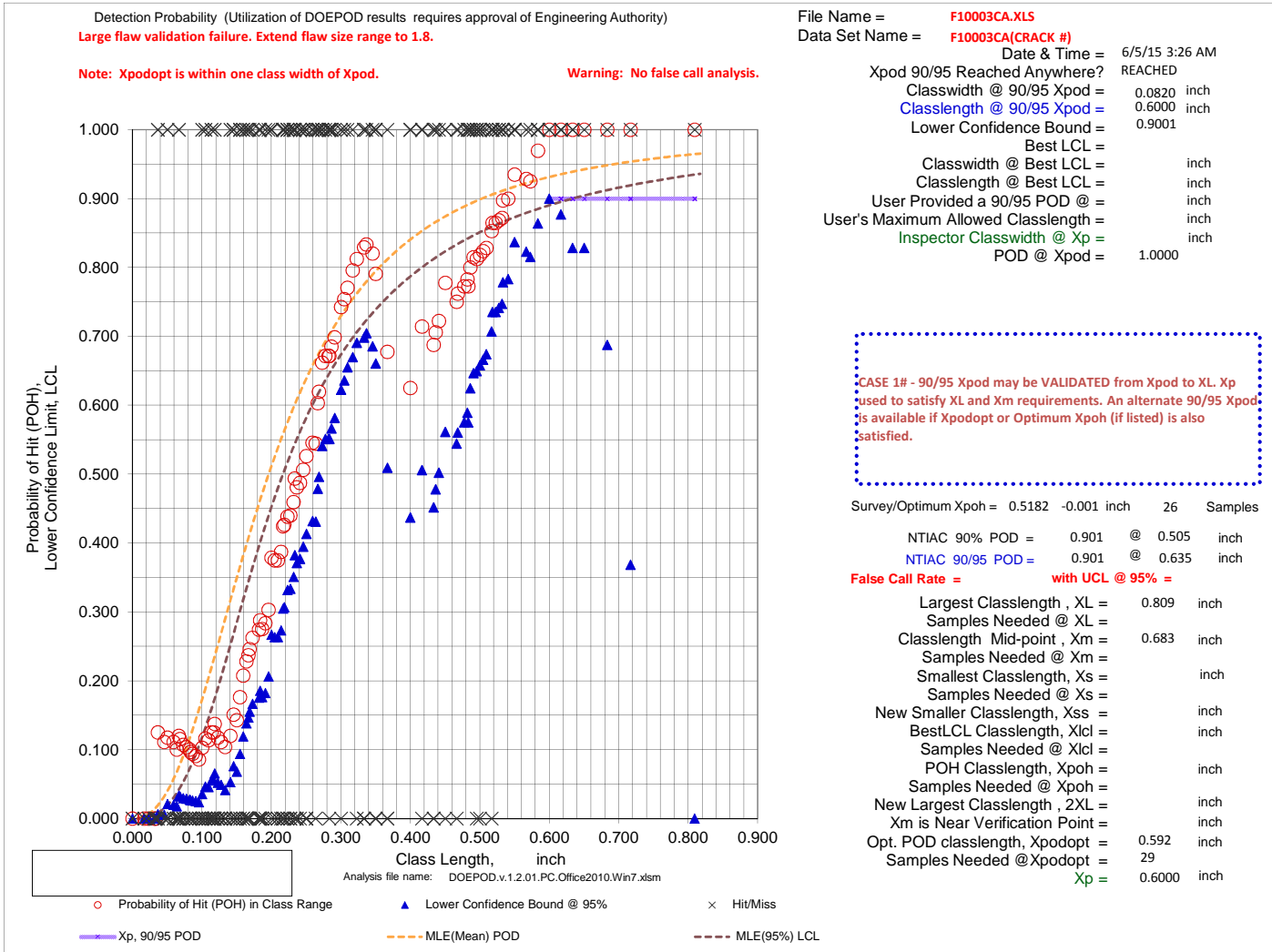
XL = 0.809
 Xm = 0.600
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F10003CA.XLS
 Data Set Name = F10003CA(CRACK #)

Directed DOE Options

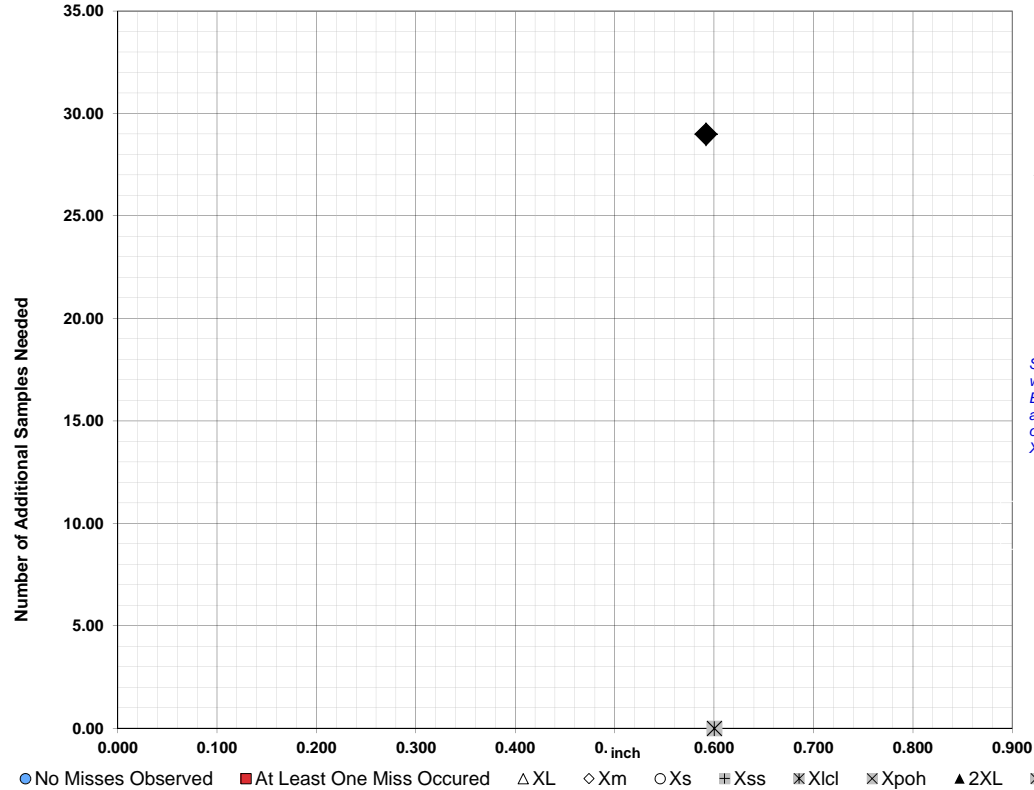


TABLE C

Class Length	Additional Samples
XL =	0.809
Xm =	0.683
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.592 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

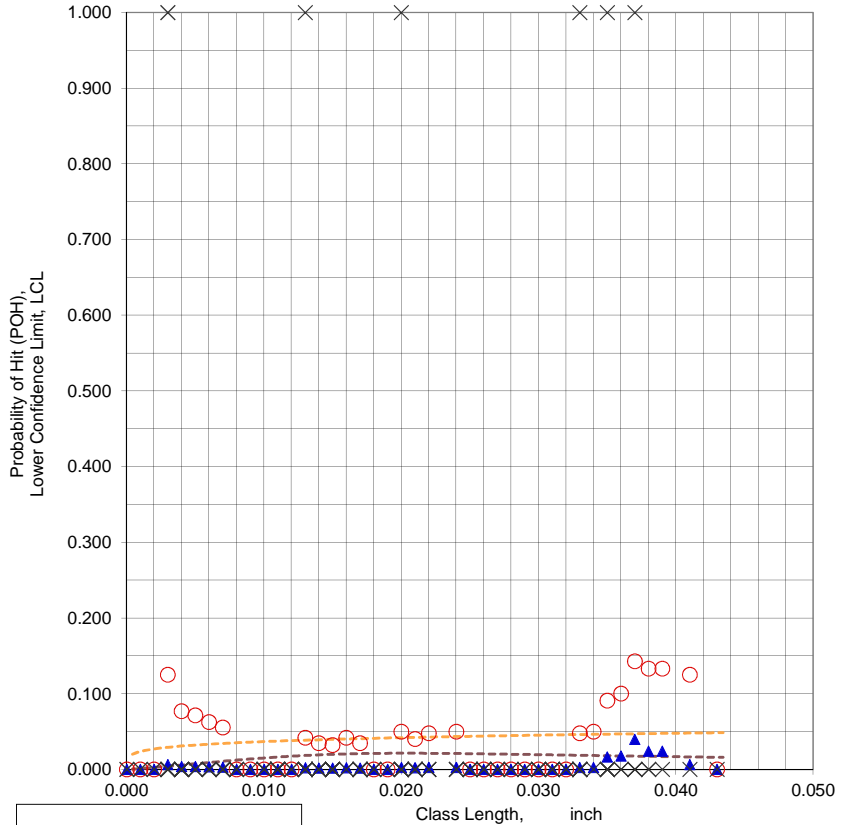
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **F10601AD.XLS**
 Data Set Name = **F10601AD(CRACK #)**
 Date & Time = 6/5/15 3:28 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.0398
 Classwidth @ Best LCL = 0.0040 inch
 Classlength @ Best LCL = 0.0370 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.909 @ 0.128 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.086 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = F10601AD.XLS
 Data Set Name = F10601AD(CRACK #)

Directed DOE Options

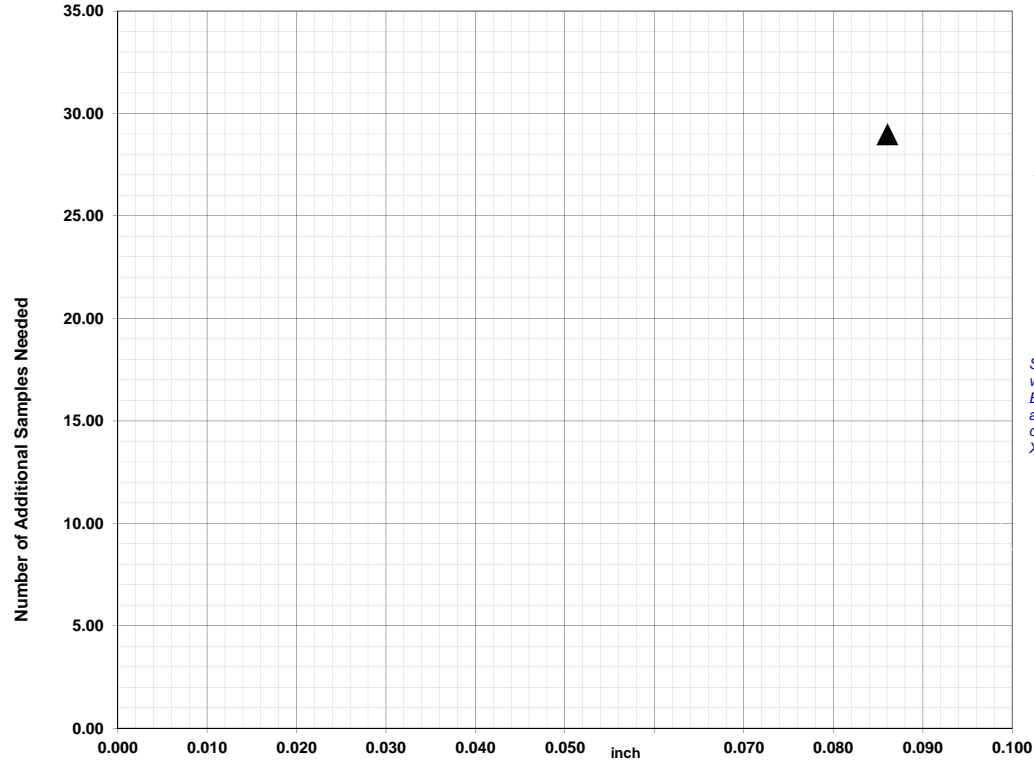


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.086	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.086 29
 **Alternate Xm =
 Xpodopt =

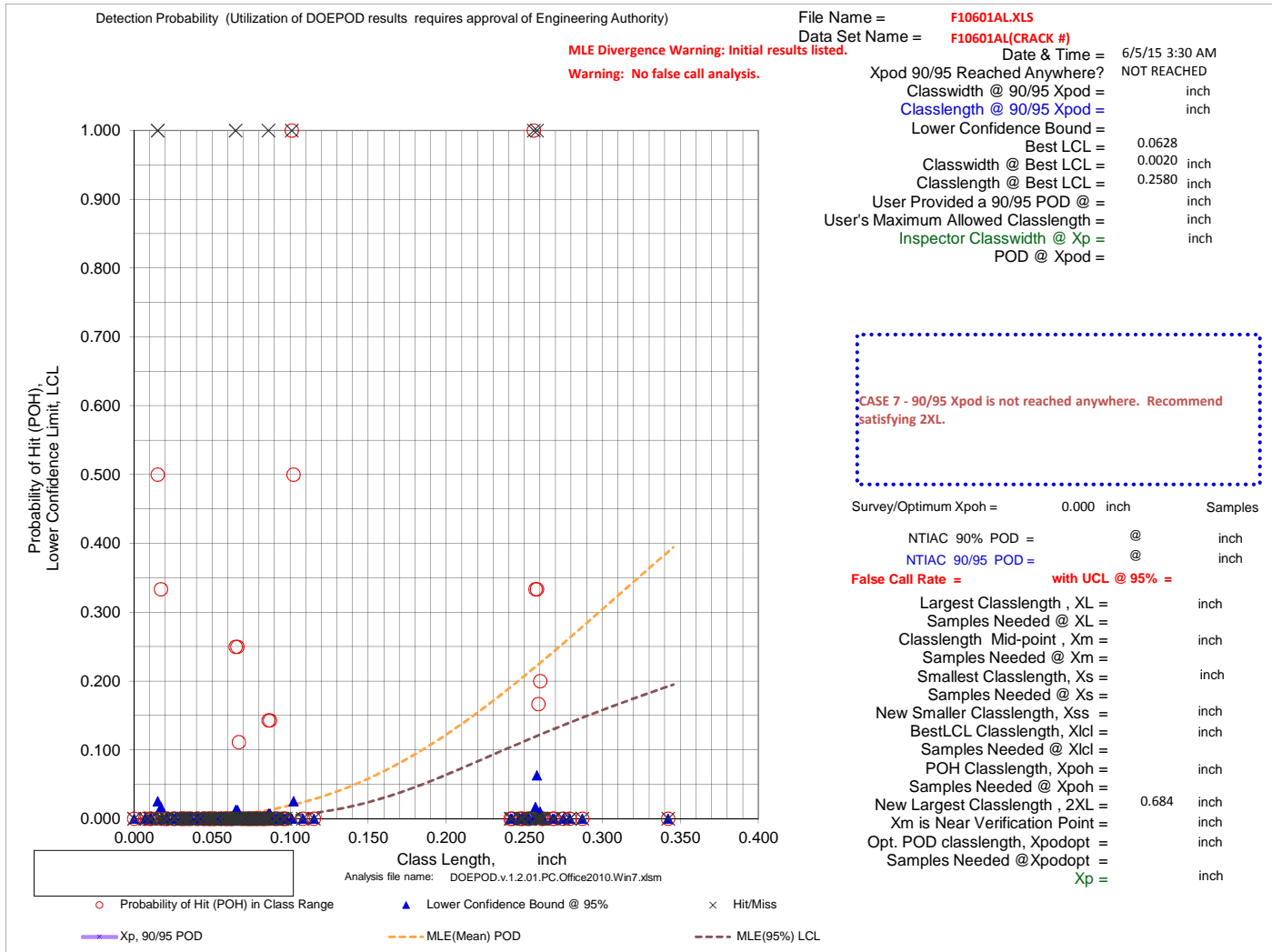
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F10601AL.XLS
 Data Set Name = F10601AL(CRACK #)

Directed DOE Options

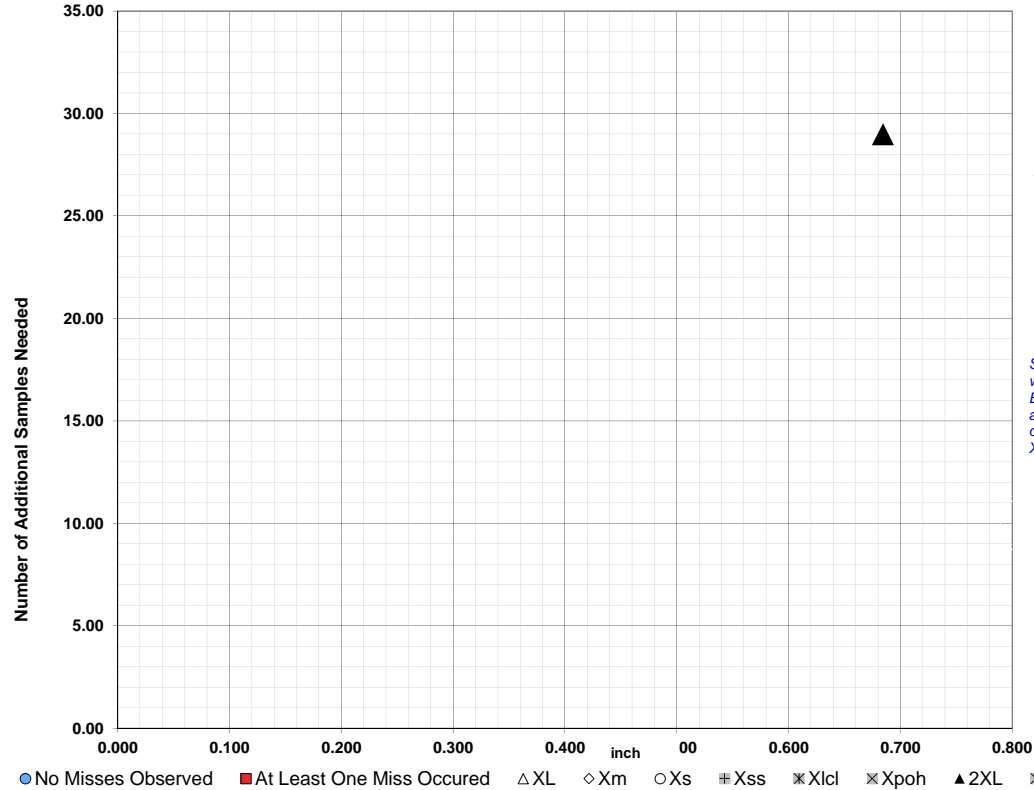


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.684	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.684 29
 **Alternate Xm =
 Xpodopt =

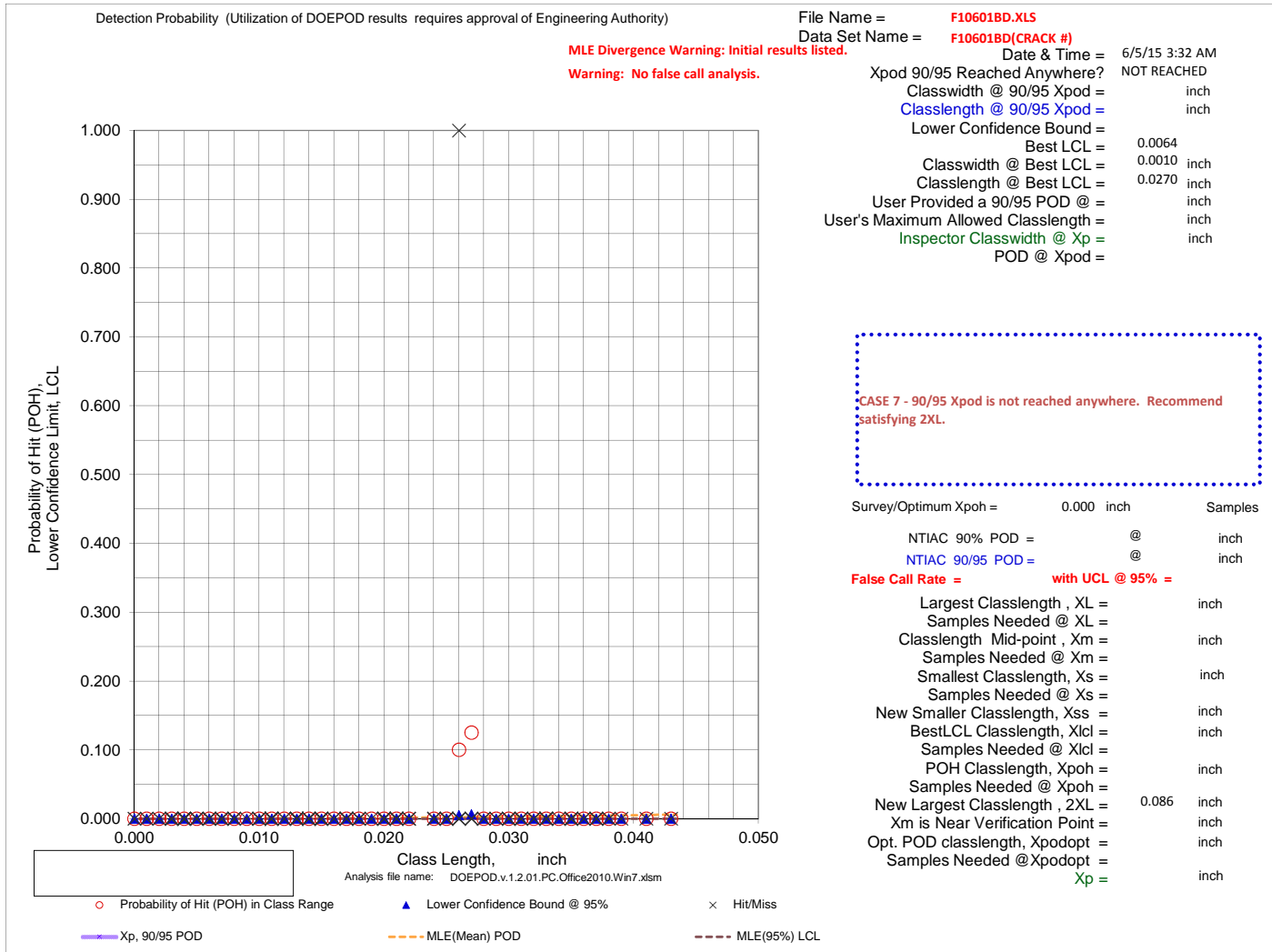
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F10601BD.XLS
 Data Set Name = F10601BD(CRACK #)

Directed DOE Options

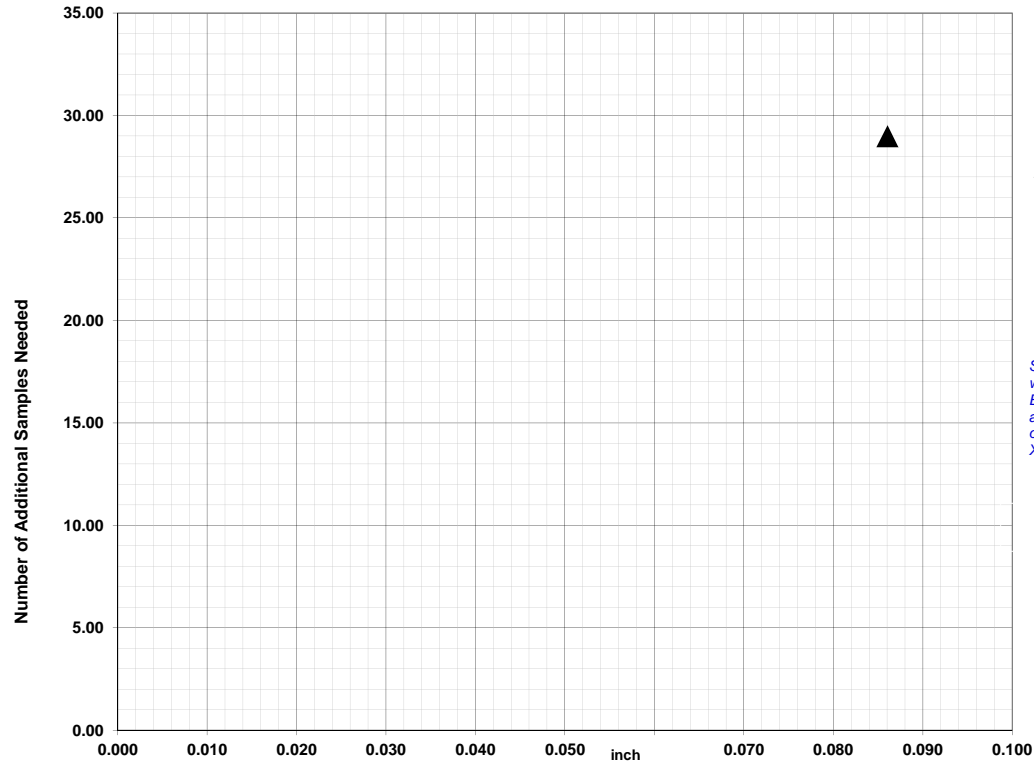


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.086	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.086 29
 **Alternate Xm =
 Xpodopt =

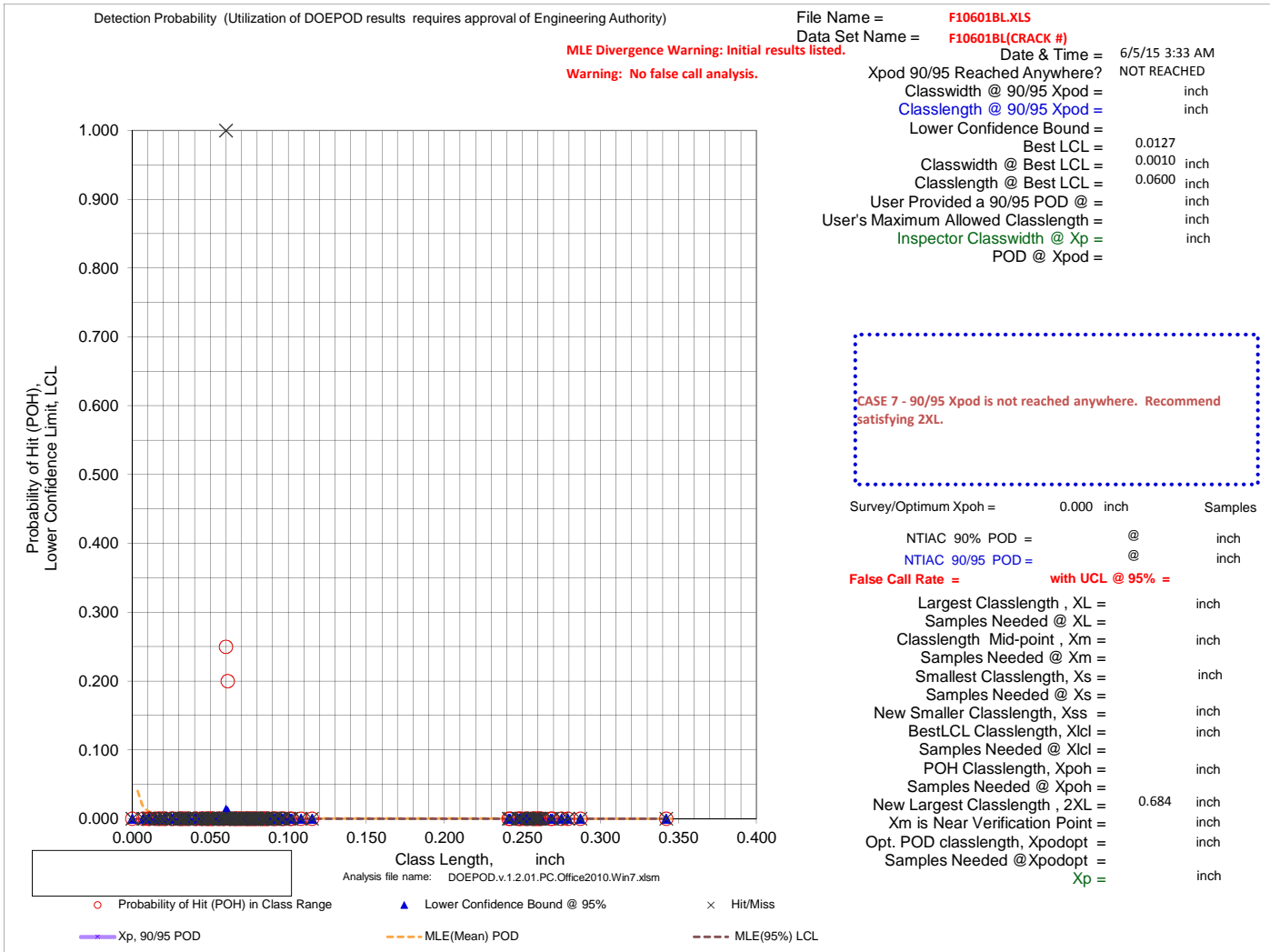
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F10601BL.XLS
 Data Set Name = F10601BL(CRACK #)

Directed DOE Options

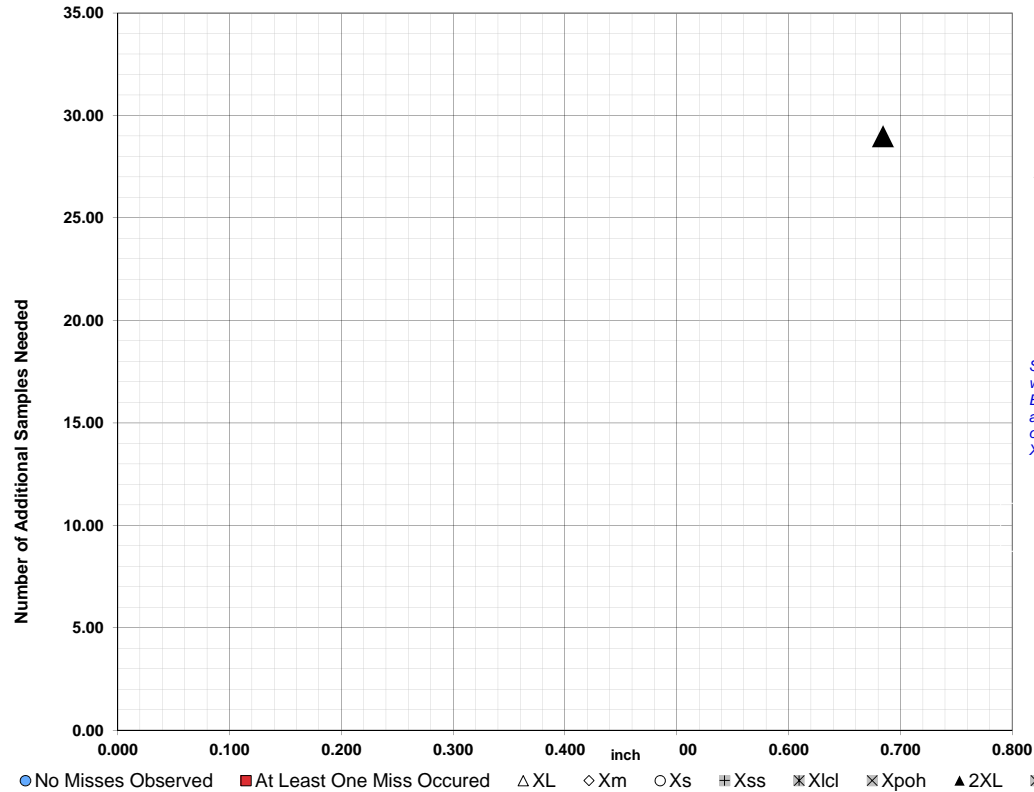


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.684	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.684 29
 **Alternate Xm =
 Xpodopt =

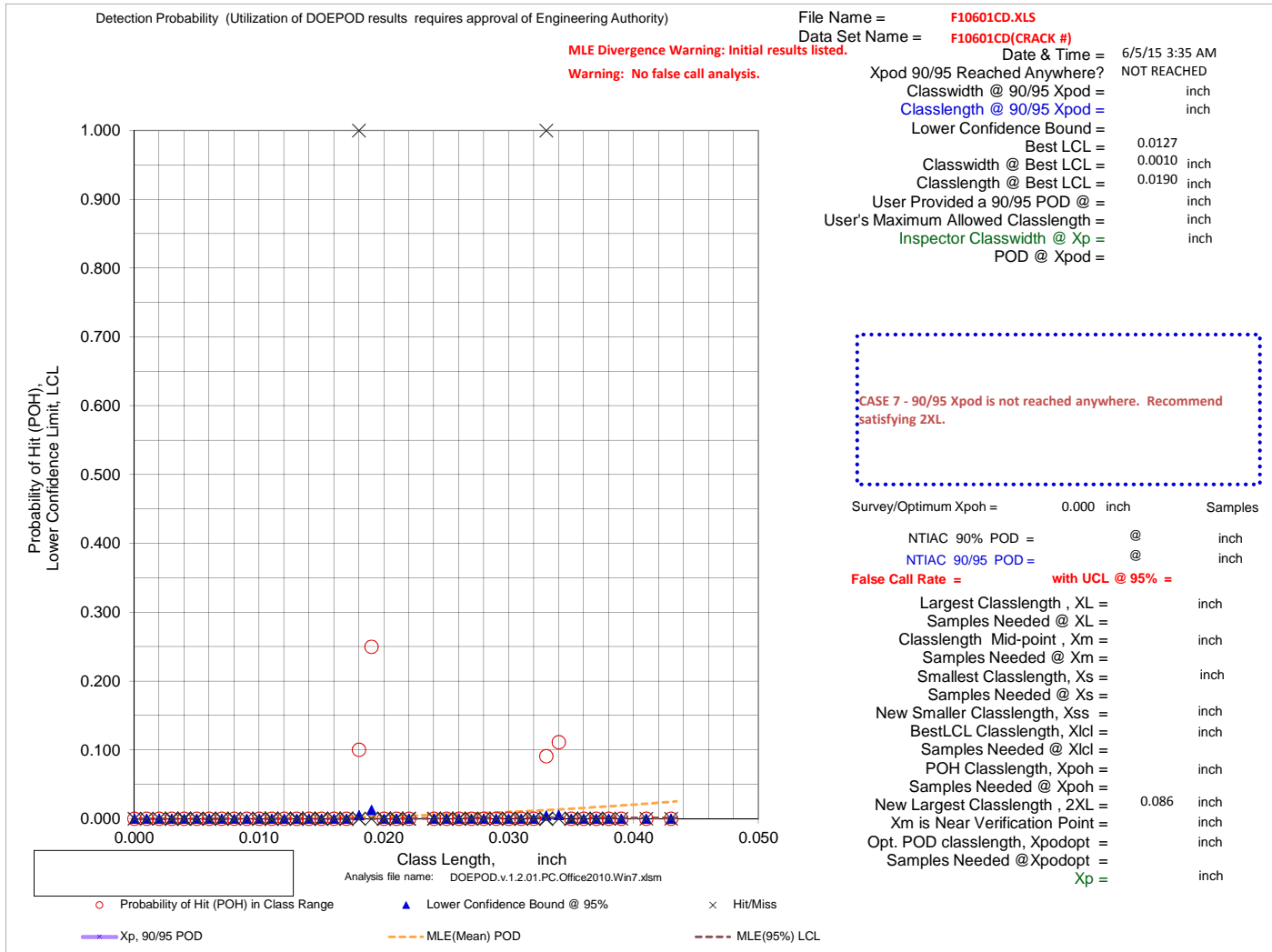
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F10601CD.XLS
 Data Set Name = F10601CD(CRACK #)

Directed DOE Options

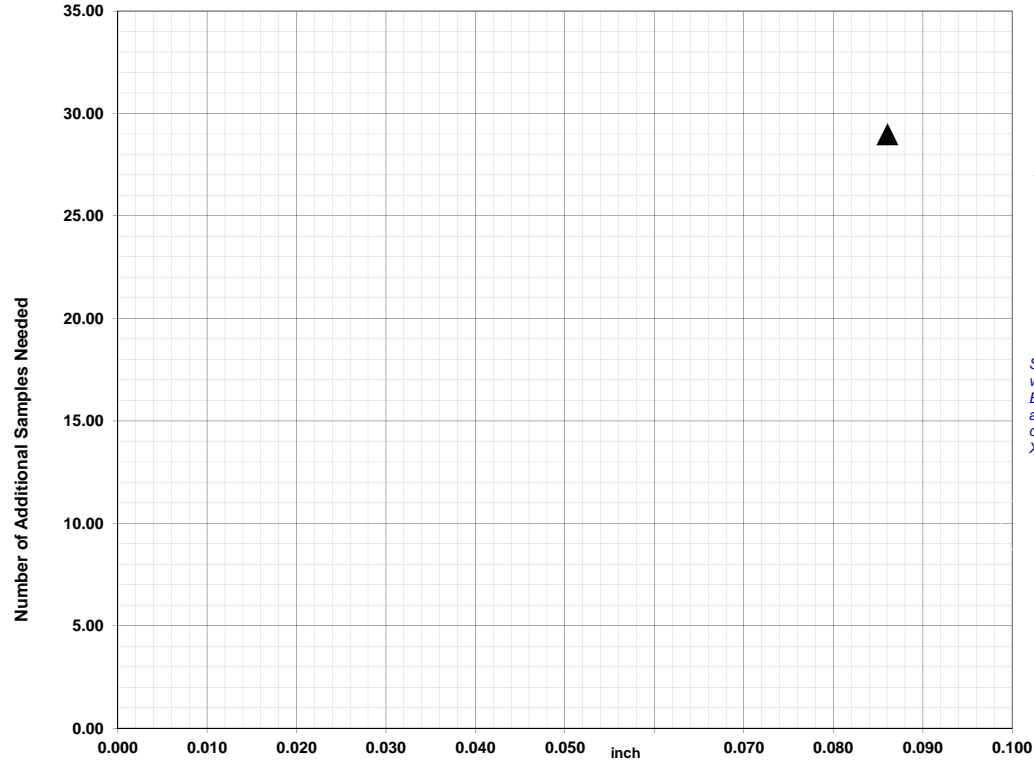


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.086	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.086 29
 **Alternate Xm =
 Xpodopt =

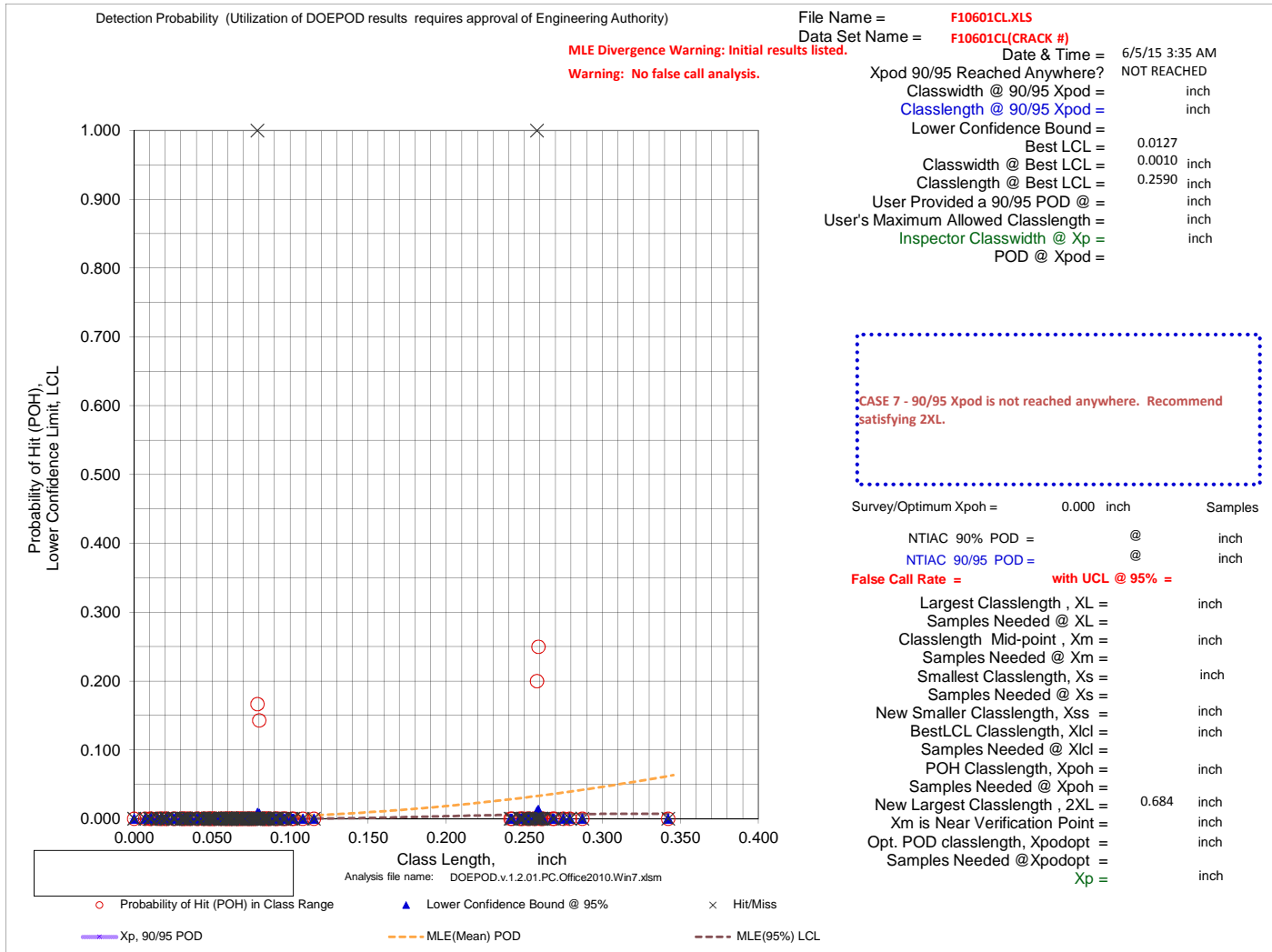
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F10601CL.XLS
 Data Set Name = F10601CL(CRACK #)

Directed DOE Options

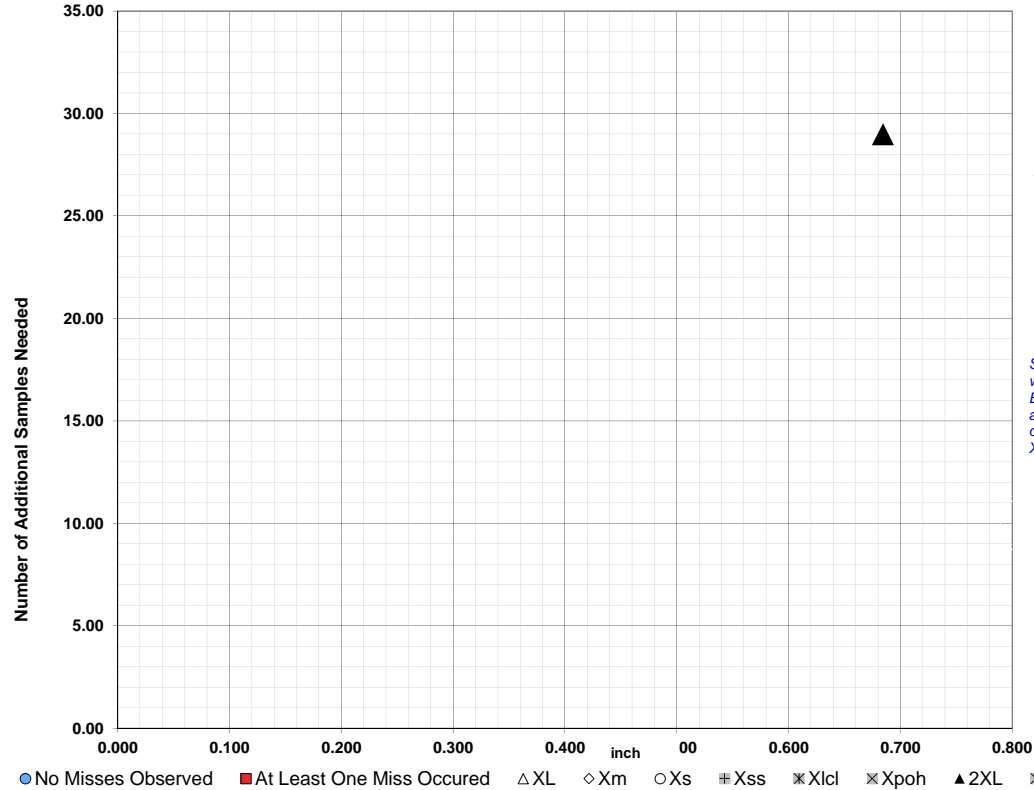


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.684	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.684 29
 **Alternate Xm =
 Xpodopt =

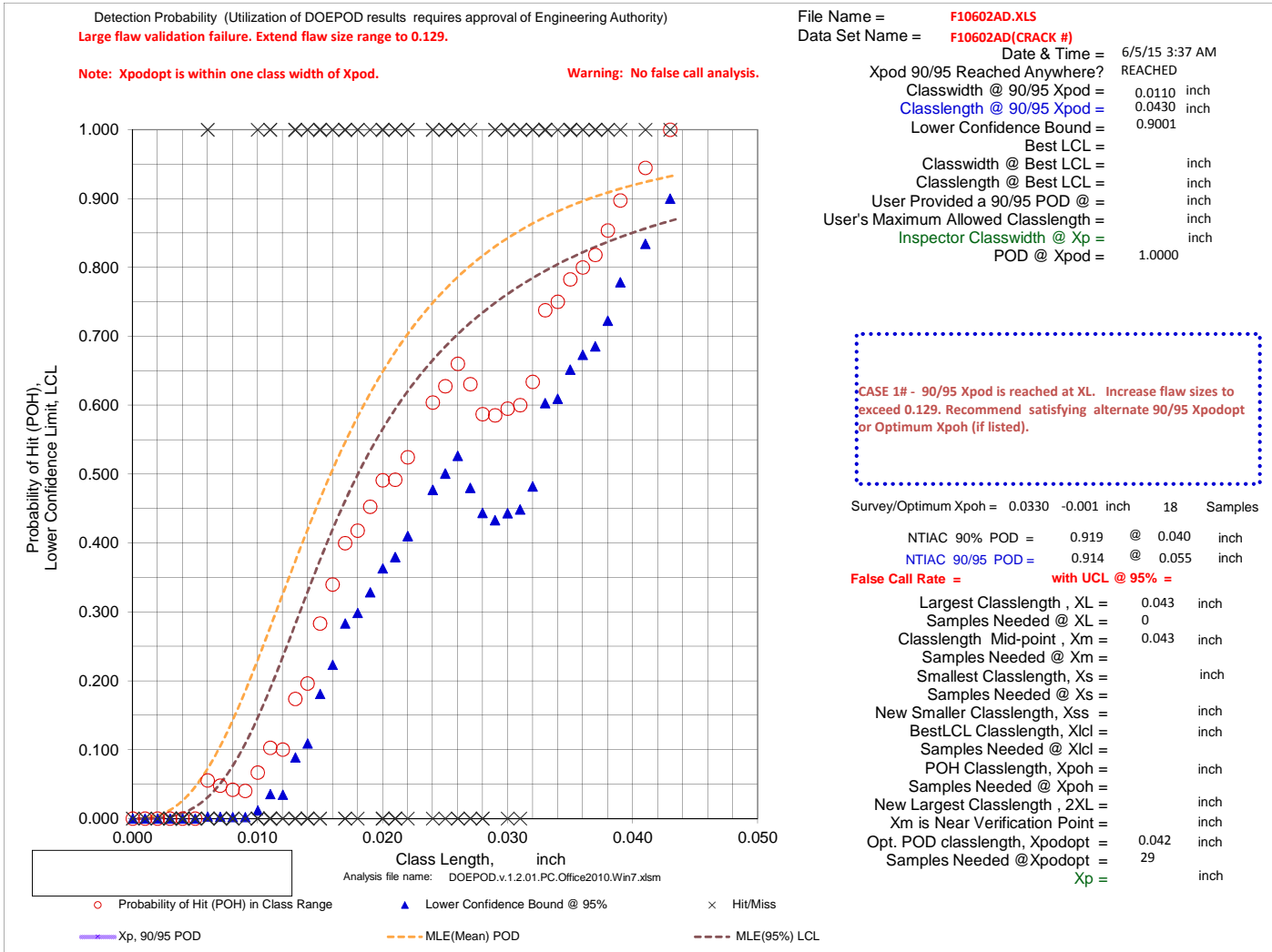
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F10602AD.XLS
 Data Set Name = F10602AD(CRACK #)

Directed DOE Options

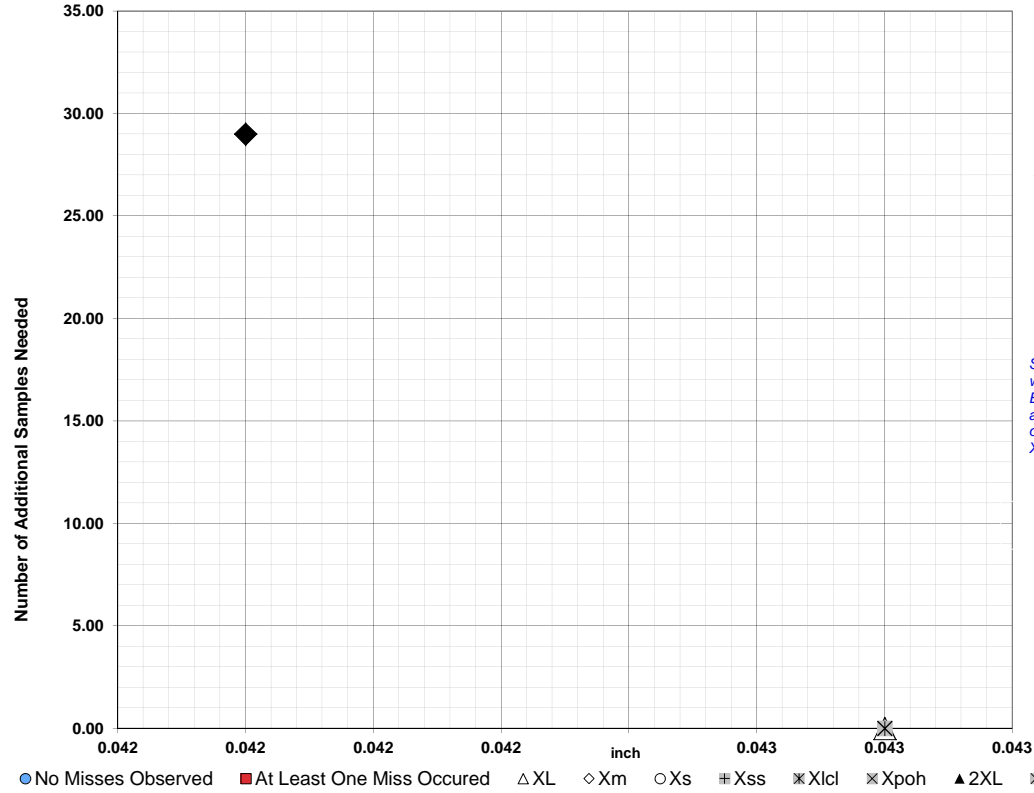


TABLE C

Class Length	Additional Samples
XL = 0.043	0
Xm = 0.043	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt = 0.042	29

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

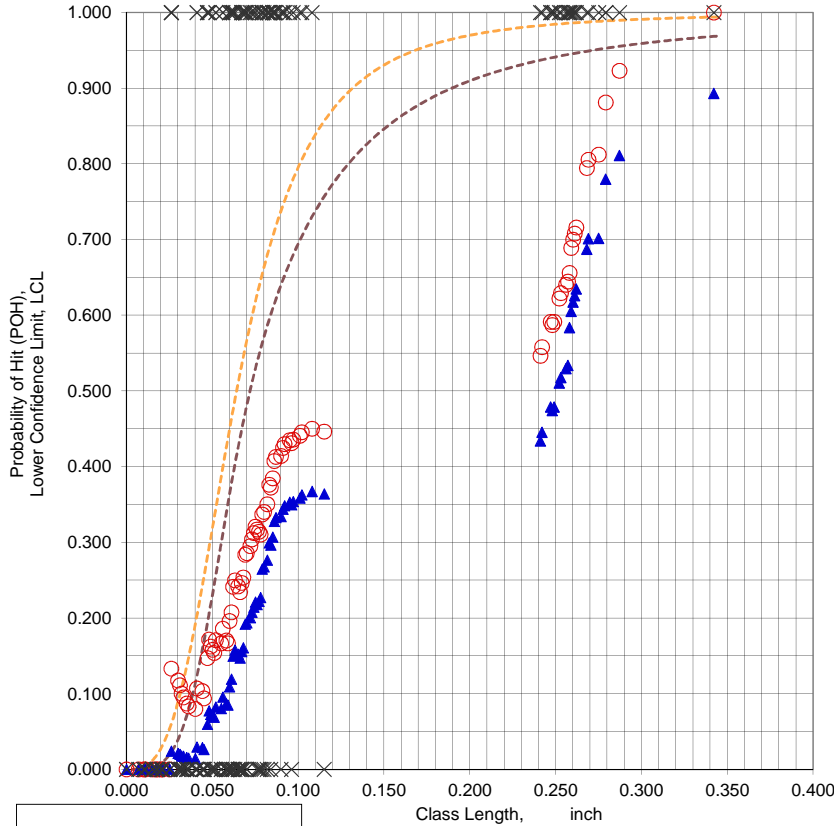
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = F10602AL.XLS
 Data Set Name = F10602AL(CRACK #)
 Date & Time = 6/5/15 3:37 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8931
 Classwidth @ Best LCL = 0.2000 inch
 Classlength @ Best LCL = 0.3420 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.2410 -0.100 inch 28 Samples

NTIAC 90% POD = 0.907 @ 0.135 inch
 NTIAC 90/95 POD = 0.901 @ 0.190 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.342 inch
 Samples Needed @ XL = 2
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.342 inch
 Samples Needed @ Xlcl = 2
 POH Classlength, Xpoh = 0.342 inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.684 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = F10602AL.XLS
 Data Set Name = F10602AL(CRACK #)

Directed DOE Options

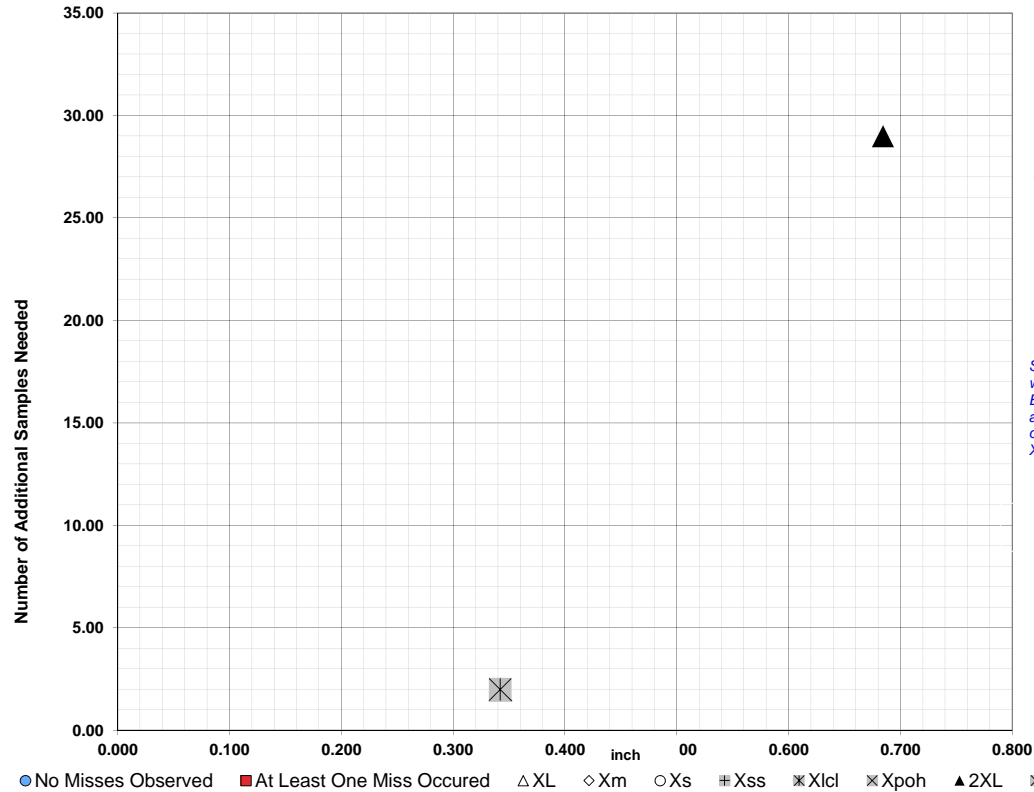


TABLE C

Class Length	Additional Samples
XL = 0.342	2
Xm =	
Xs =	
Xss =	
XLcl = 0.342	2
Xpoh = 0.342	
2XL = 0.684	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

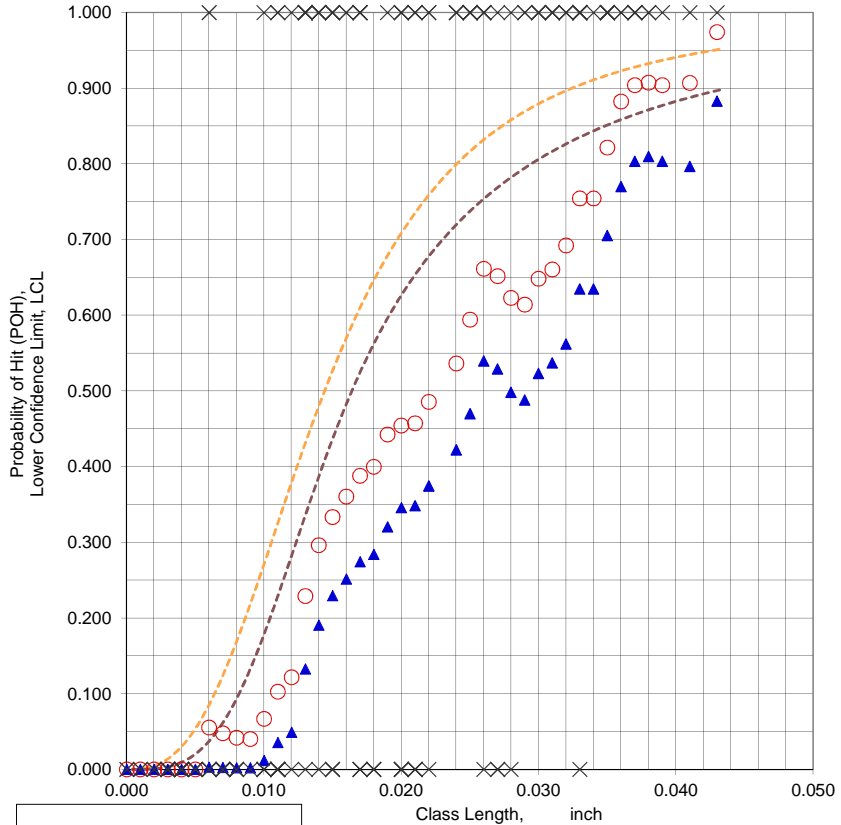
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = F10602BD.XLS
 Data Set Name = F10602BD(CRACK #)
 Date & Time = 6/5/15 3:38 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound = 0.8827
 Best LCL = 0.0140 inch
 Classwidth @ Best LCL = 0.0430 inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = inch

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.0350 -0.001 inch 22 Samples
 NTIAC 90% POD = 0.917 @ 0.035 inch
 NTIAC 90/95 POD = 0.905 @ 0.045 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.086 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
 — Xp, 90/95 POD
 - - - MLE(Mean) POD
 - - - MLE(95%) LCL

File Name = F10602BD.XLS
 Data Set Name = F10602BD(CRACK #)

Directed DOE Options

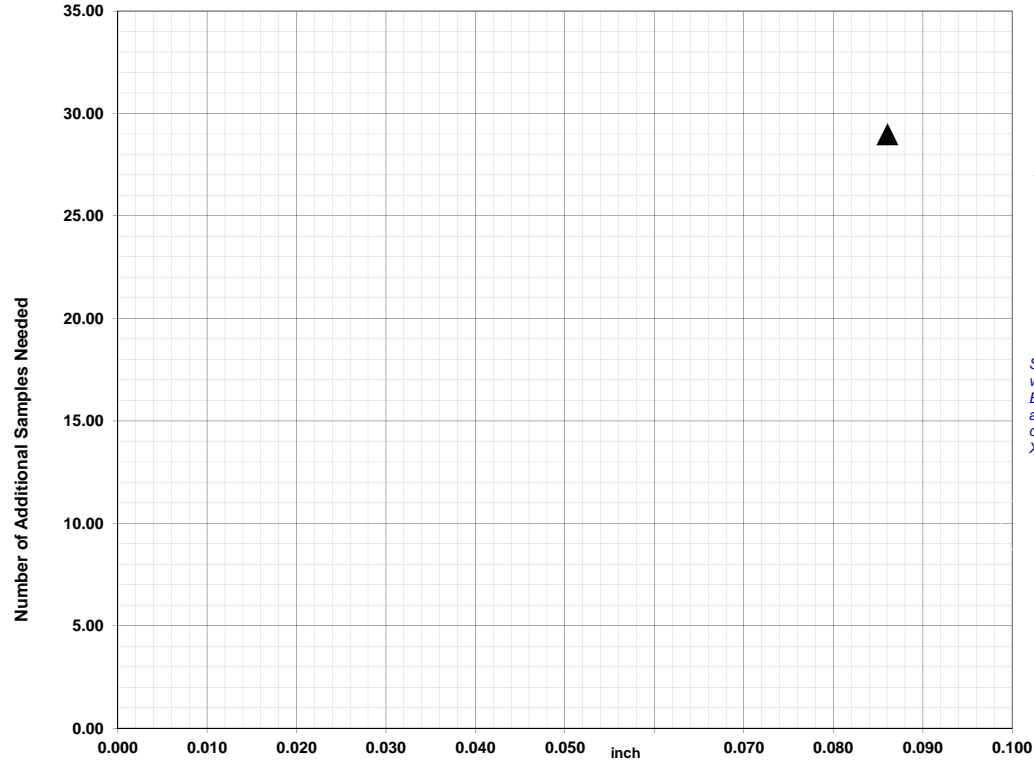


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.086	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.086 29
 **Alternate Xm =
 Xpodopt =

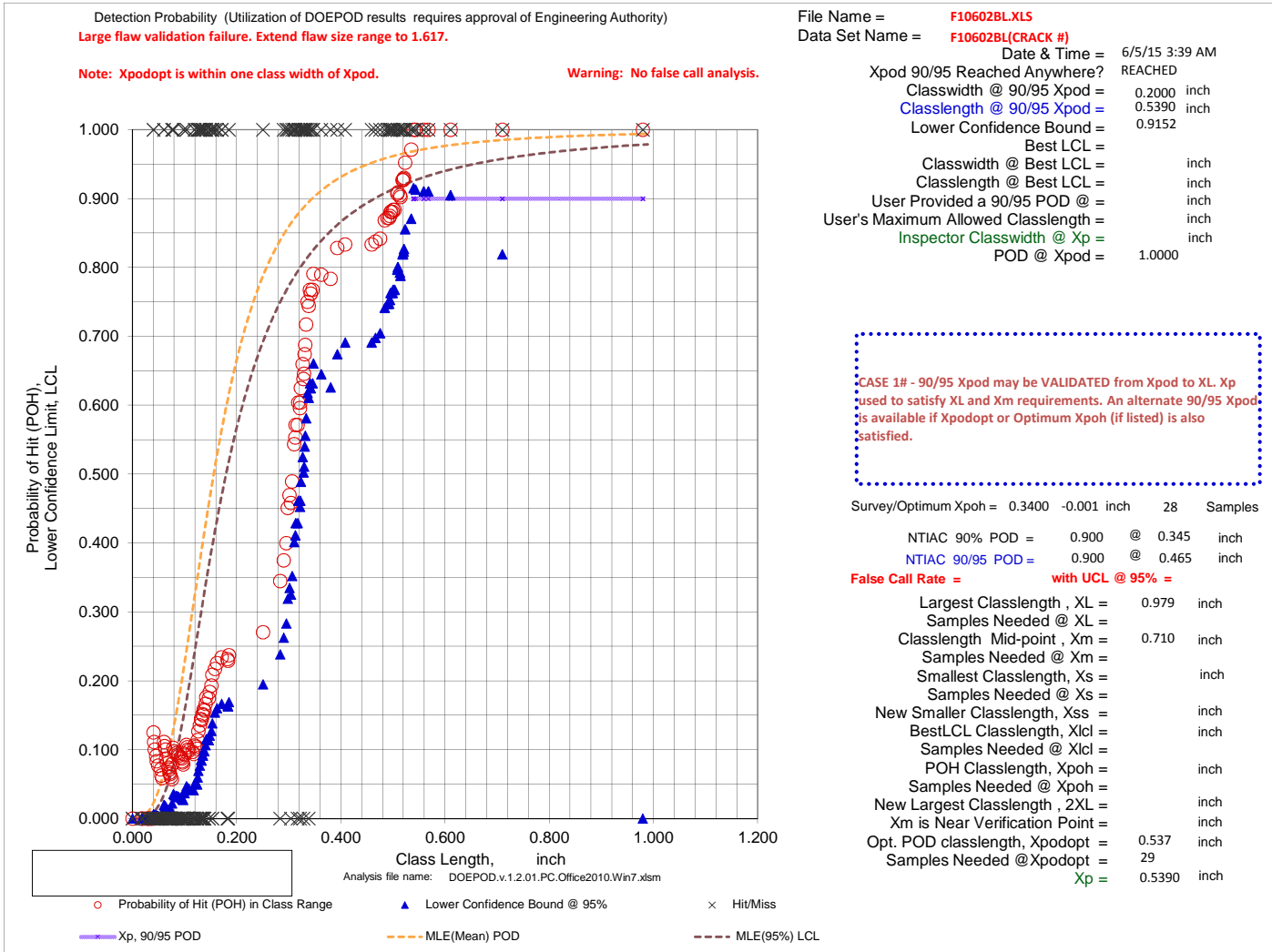
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F10602BL.XLS
 Data Set Name = F10602BL(CRACK #)

Directed DOE Options

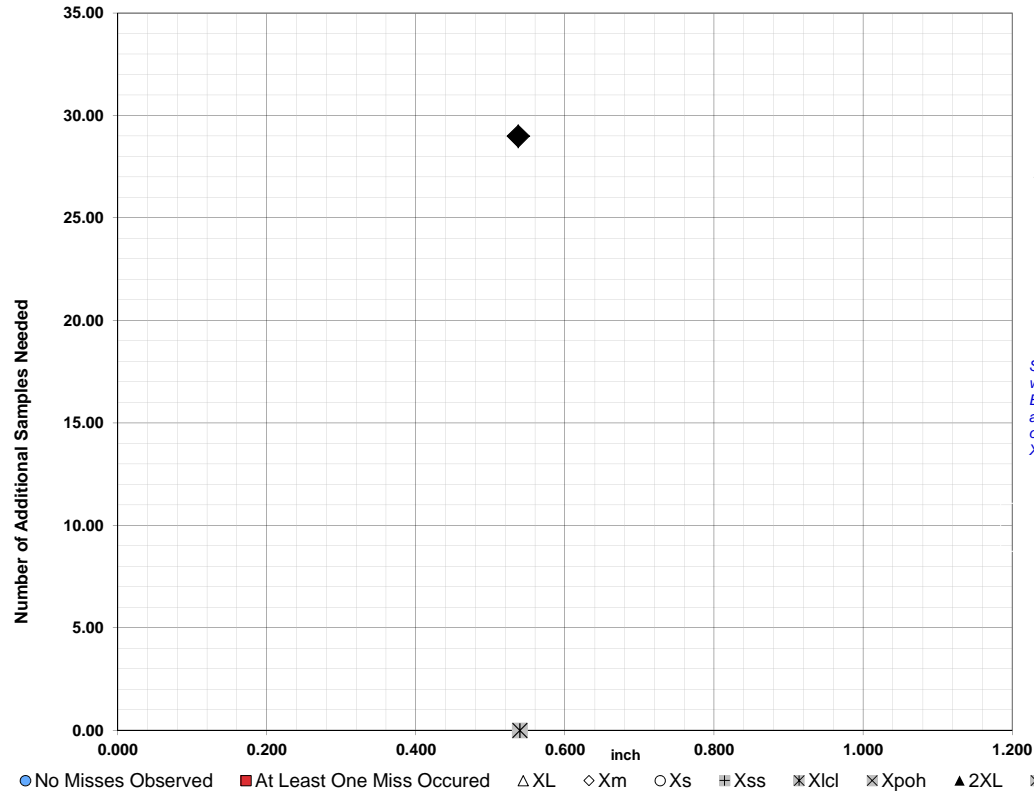


TABLE C

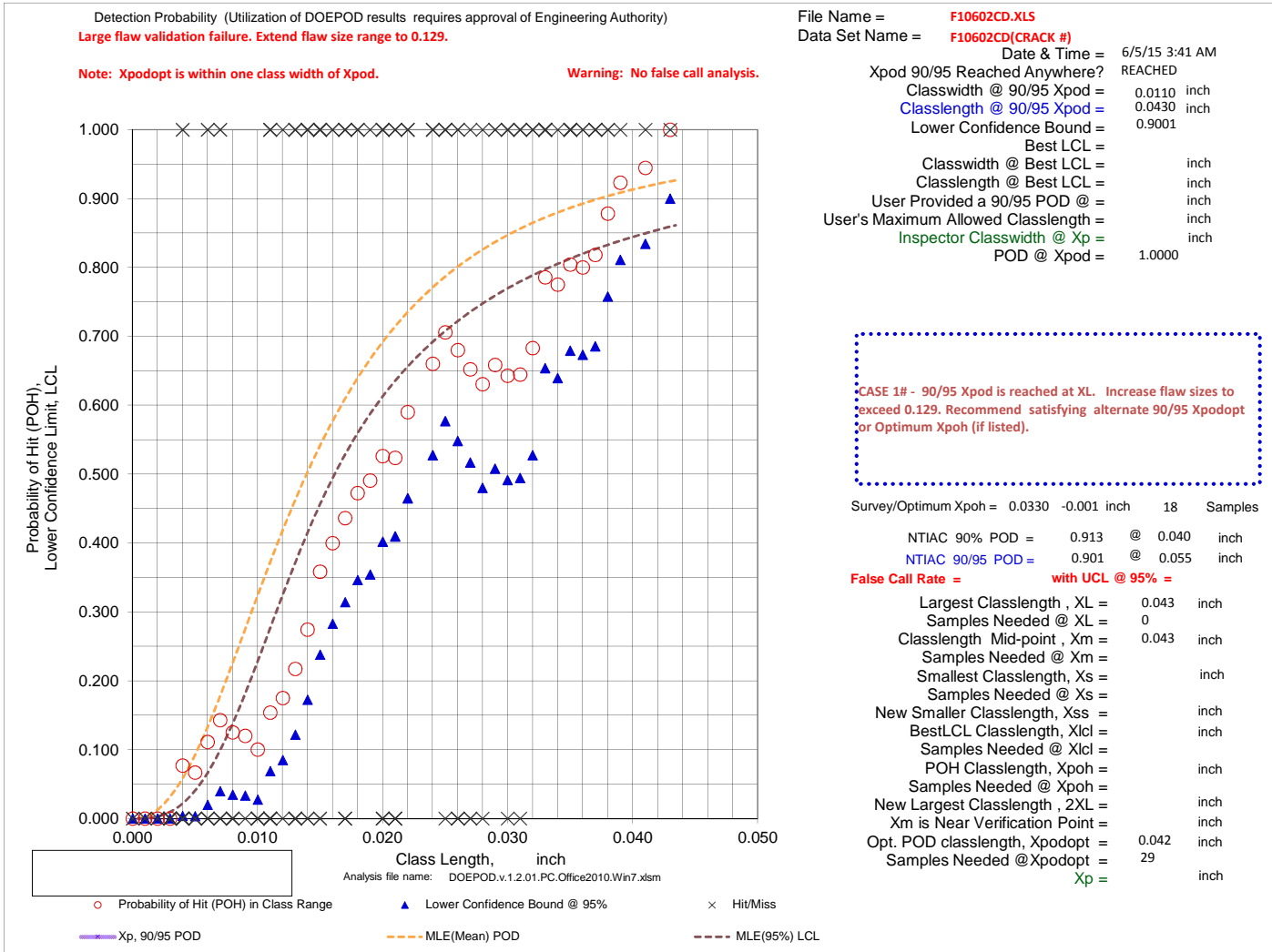
Class Length	Additional Samples
XL =	0.979
Xm =	0.710
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.537 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F10602CD.XLS
 Data Set Name = F10602CD(CRACK #)

Directed DOE Options

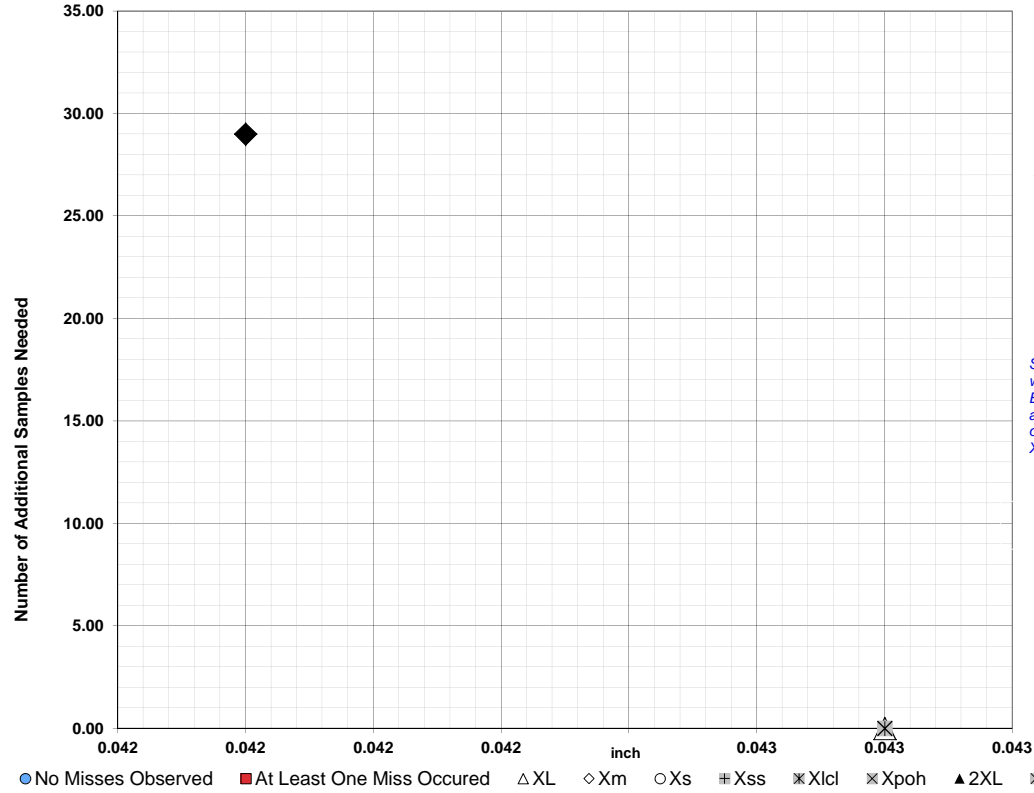


TABLE C

Class Length	Additional Samples
XL = 0.043	0
Xm = 0.043	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt = 0.042	29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

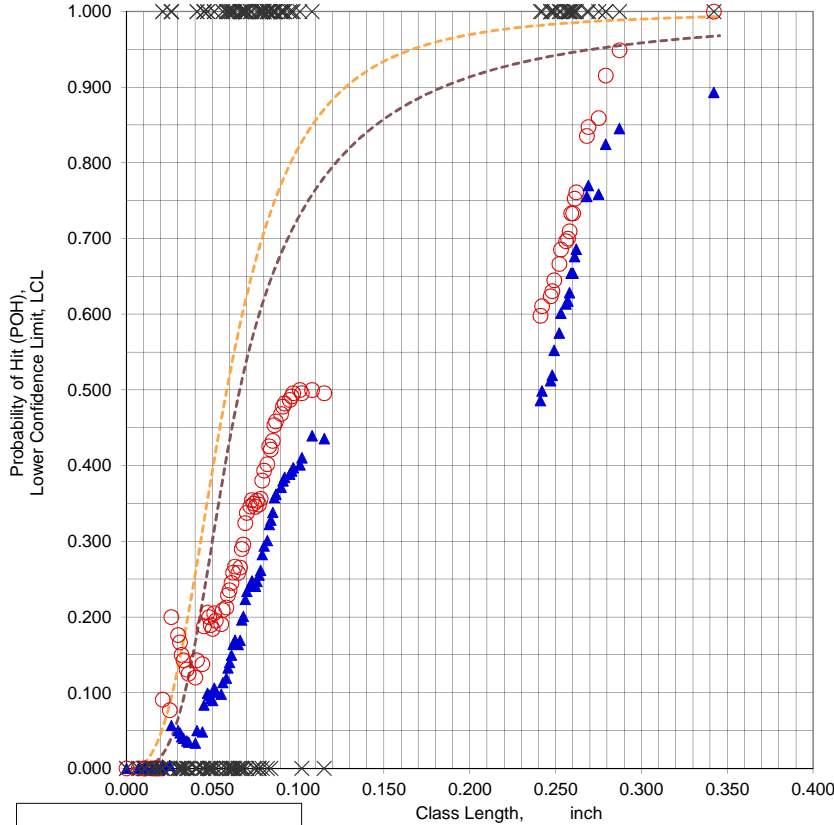
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = F10602CL.XLS
 Data Set Name = F10602CL(CRACK #)
 Date & Time = 6/5/15 3:41 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8931
 Classwidth @ Best LCL = 0.2000 inch
 Classlength @ Best LCL = 0.3420 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.2410 -0.100 inch 28 Samples

NTIAC 90% POD = 0.905 @ 0.130 inch
 NTIAC 90/95 POD = 0.901 @ 0.185 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.342 inch
 Samples Needed @ XL = 2
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.342 inch
 Samples Needed @ Xlcl = 2
 POH Classlength, Xpoh = 0.342 inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.684 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
 — Xp, 90/95 POD
 - - - MLE(Mean) POD
 - - - MLE(95%) LCL

File Name = F10602CL.XLS
 Data Set Name = F10602CL(CRACK #)

Directed DOE Options

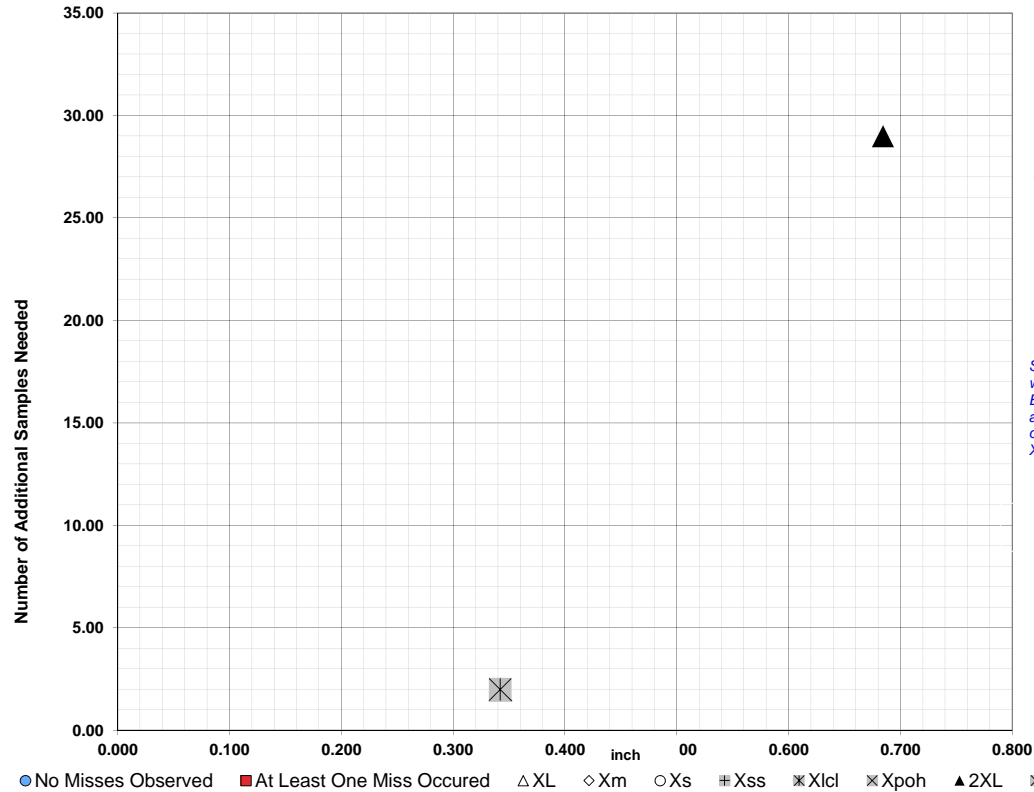


TABLE C

Class Length	Additional Samples
XL = 0.342	2
Xm =	
Xs =	
Xss =	
Xlcl = 0.342	2
Xpoh = 0.342	
2XL = 0.684	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

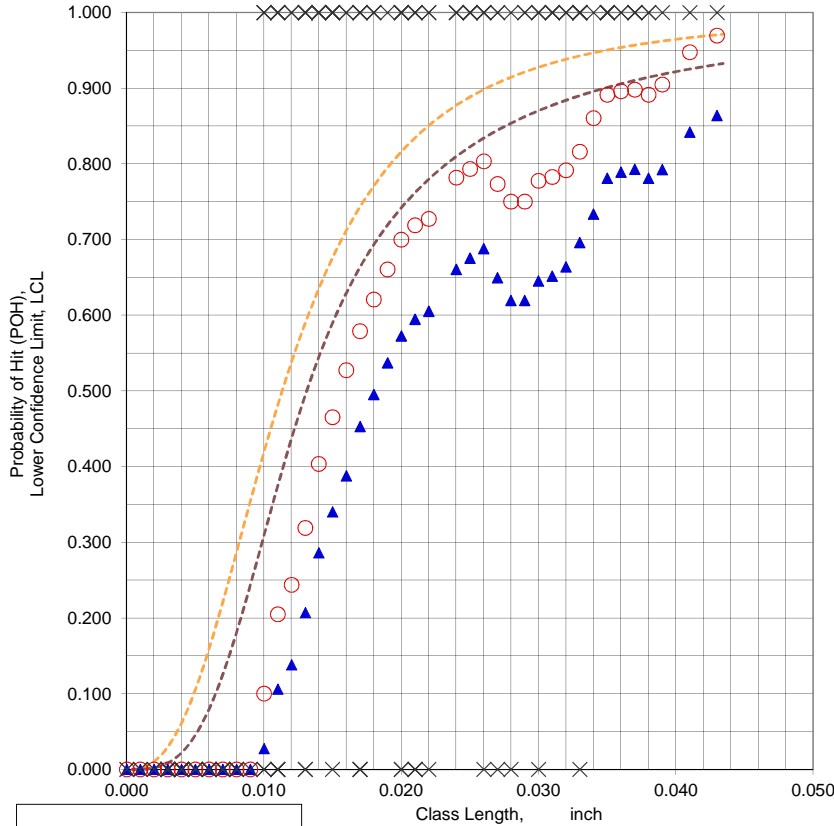
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = F10603AD.XLS
 Data Set Name = F10603AD(CRACK #)
 Date & Time = 6/5/15 3:43 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound = 0.8637
 Best LCL = 0.0120 inch
 Classwidth @ Best LCL = 0.0430 inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = inch

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.0350 -0.001 inch 22 Samples
 NTIAC 90% POD = 0.928 @ 0.030 inch
 NTIAC 90/95 POD = 0.901 @ 0.035 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.086 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F10603AD.XLS
 Data Set Name = F10603AD(CRACK #)

Directed DOE Options

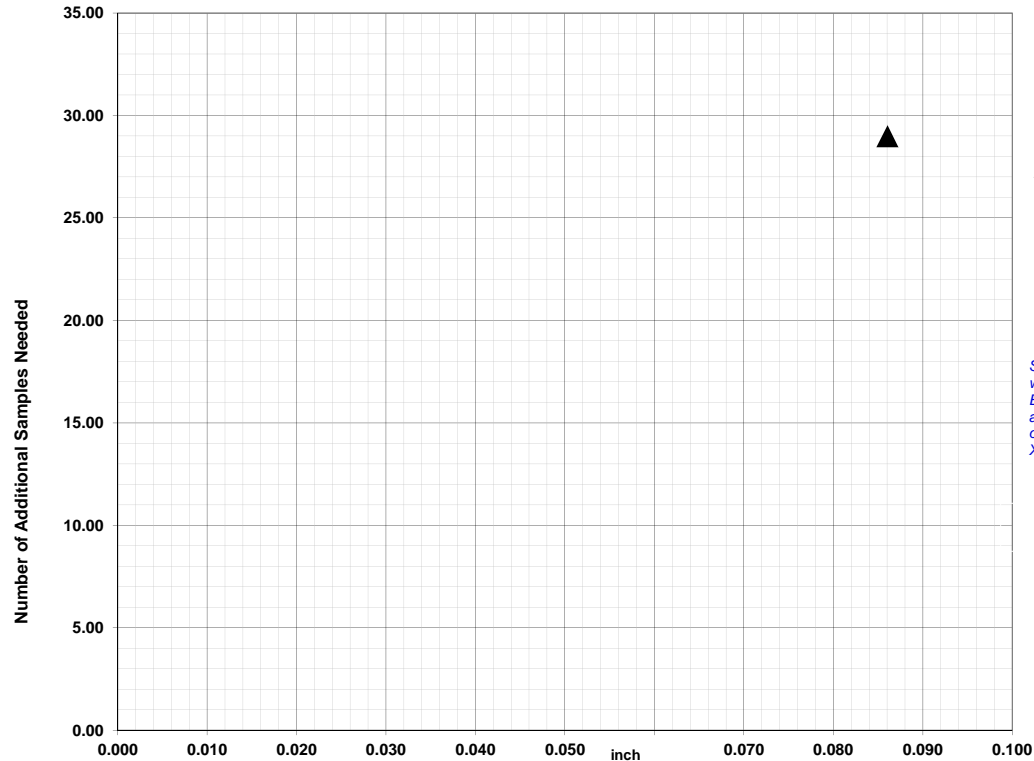


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.086	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.086 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

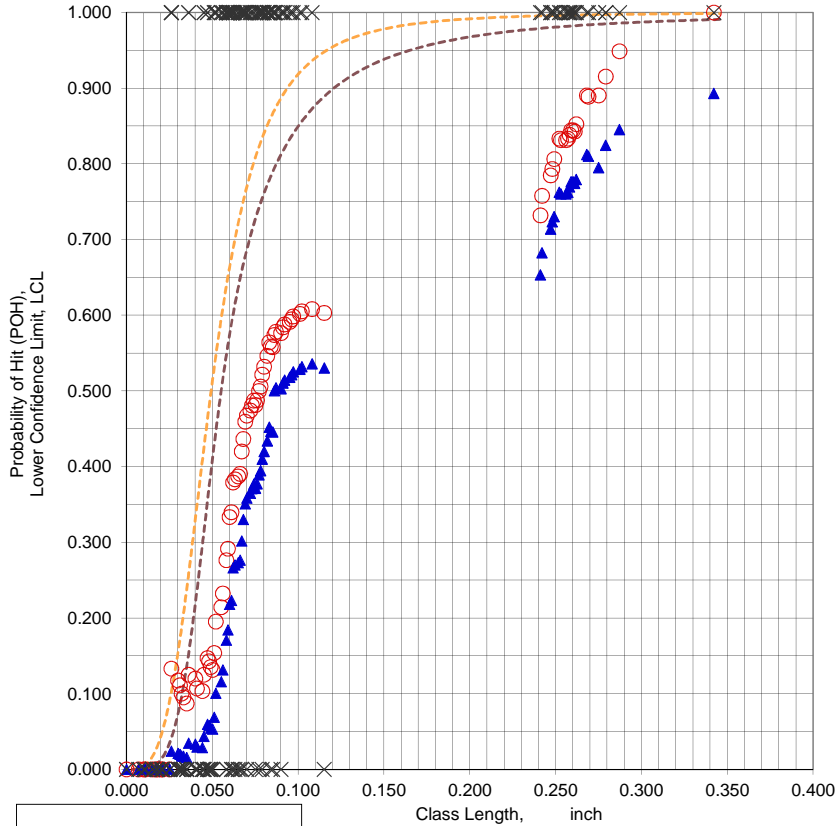
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **F10603AL.XLS**
 Data Set Name = **F10603AL(CRACK #)**
 Date & Time = 6/5/15 3:43 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8931
 Classwidth @ Best LCL = 0.2000 inch
 Classlength @ Best LCL = 0.3420 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.2410 -0.100 inch 28 Samples

NTIAC 90% POD = 0.904 @ 0.095 inch
 NTIAC 90/95 POD = 0.907 @ 0.125 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.342 inch
 Samples Needed @ XL = 2
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.342 inch
 Samples Needed @ Xlcl = 2
 POH Classlength, Xpoh = 0.342 inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = 0.684 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = F10603AL.XLS
 Data Set Name = F10603AL(CRACK #)

Directed DOE Options

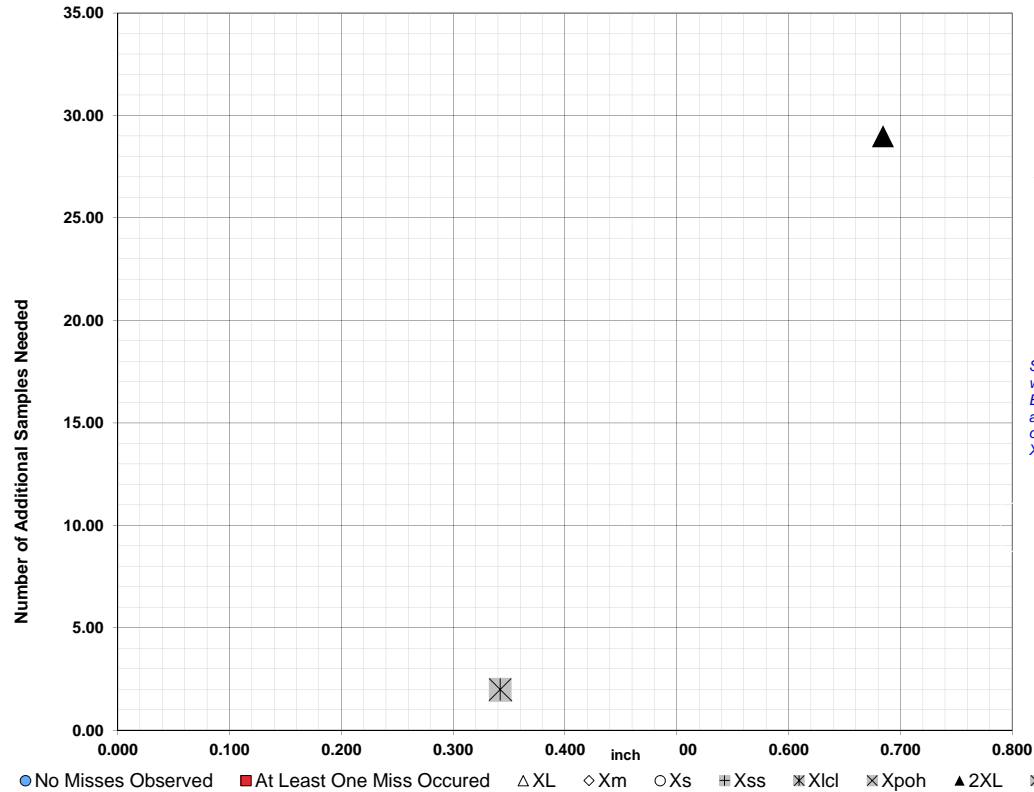


TABLE C

Class Length	Additional Samples
XL = 0.342	2
Xm =	
Xs =	
Xss =	
Xlcl = 0.342	2
Xpoh = 0.342	
2XL = 0.684	29
**Alternate Xm =	
Xpodopt =	

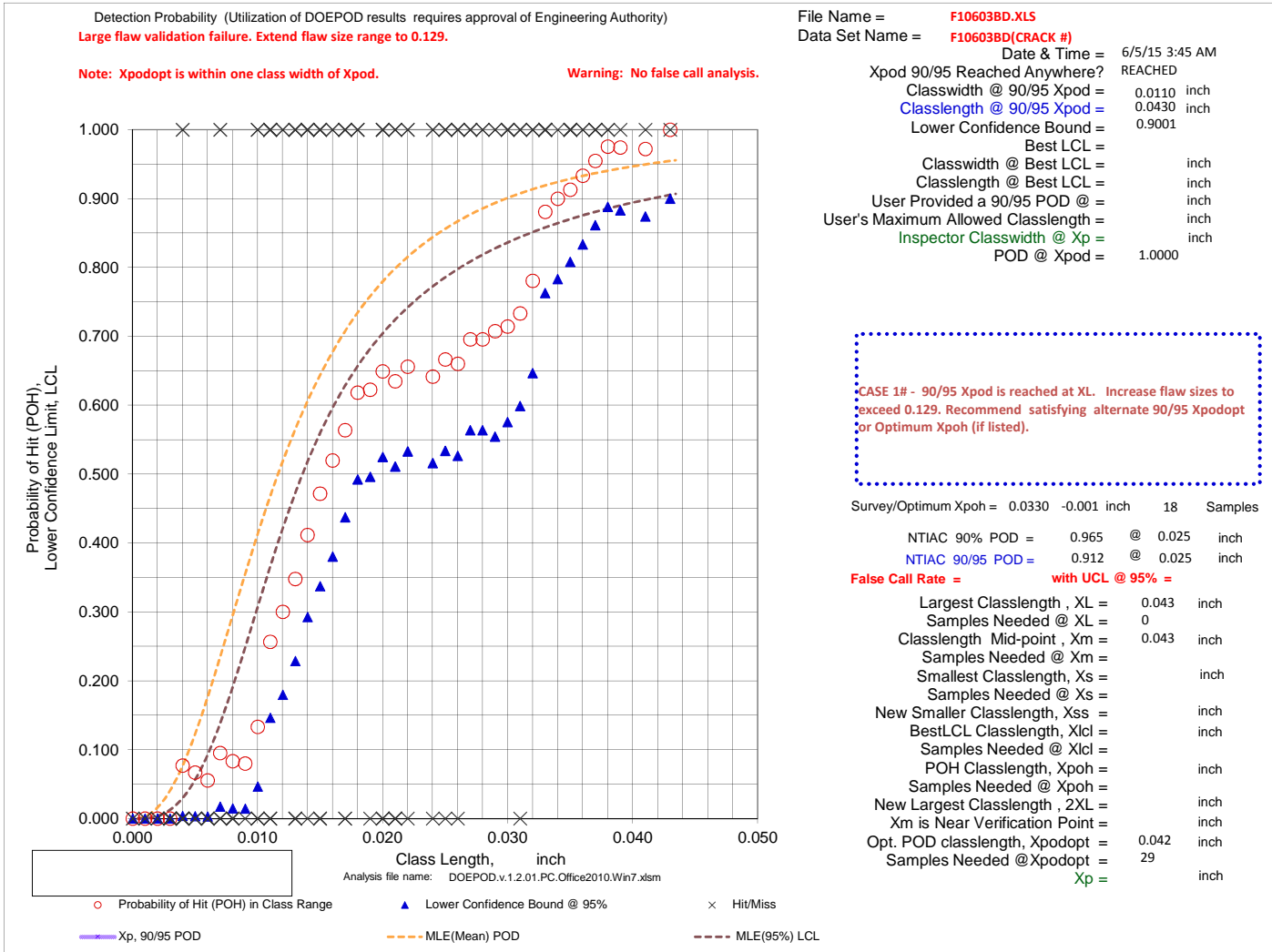
**Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F10603BD.XLS
 Data Set Name = F10603BD(CRACK #)

Directed DOE Options

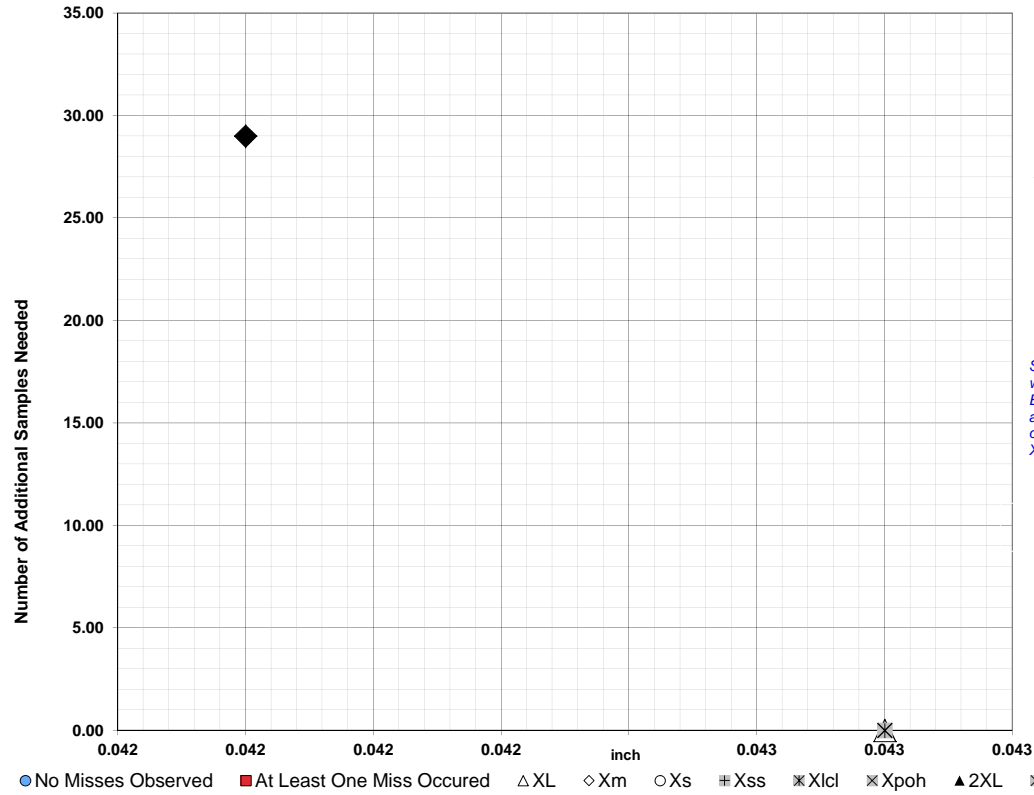


TABLE C

Class Length	Additional Samples
XL = 0.043	0
Xm = 0.043	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt = 0.042	29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

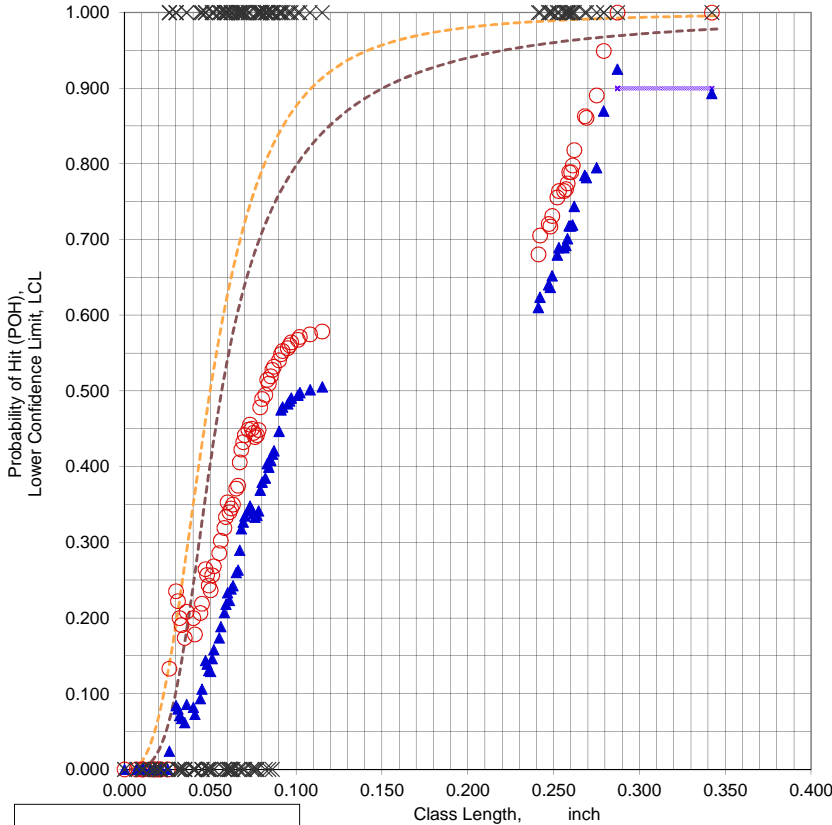
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 0.861.

Note: No Midpoint evaluation; Xpod near XL. Meet 2XL to extend VALIDATION Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **F10603BL.XLS**
 Data Set Name = **F10603BL(CRACK #)**
 Date & Time = 6/5/15 3:45 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.2000 inch
 Classlength @ 90/95 Xpod = 0.2870 inch
 Lower Confidence Bound = 0.9253
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1# - 90/95 Xpod may be VALIDATED from Xpod to XL. Xp used to satisfy XL requirements. An alternate 90/95 Xpod is available if Xpodopt or Optimum Xpoh (if listed) is also satisfied.

Survey/Optimum Xpoh = 0.0900 -0.003 inch 27 Samples
 NTIAC 90% POD = 0.903 @ 0.110 inch
 NTIAC 90/95 POD = 0.905 @ 0.155 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.342 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.315 inch
 Samples Needed @ Xm = 0
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = 0.684 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = 0.283 inch
 Samples Needed @ Xpodopt = 29
 Xp = 0.2870 inch

File Name = F10603BL.XLS
 Data Set Name = F10603BL(CRACK #)

Directed DOE Options

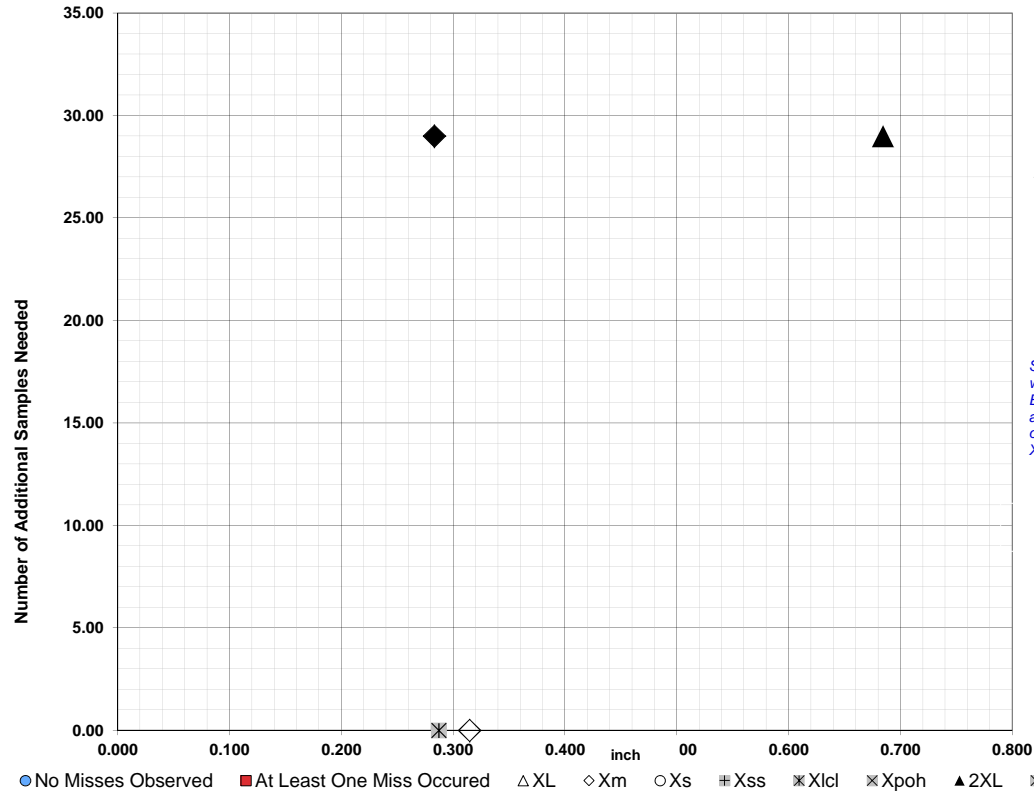


TABLE C

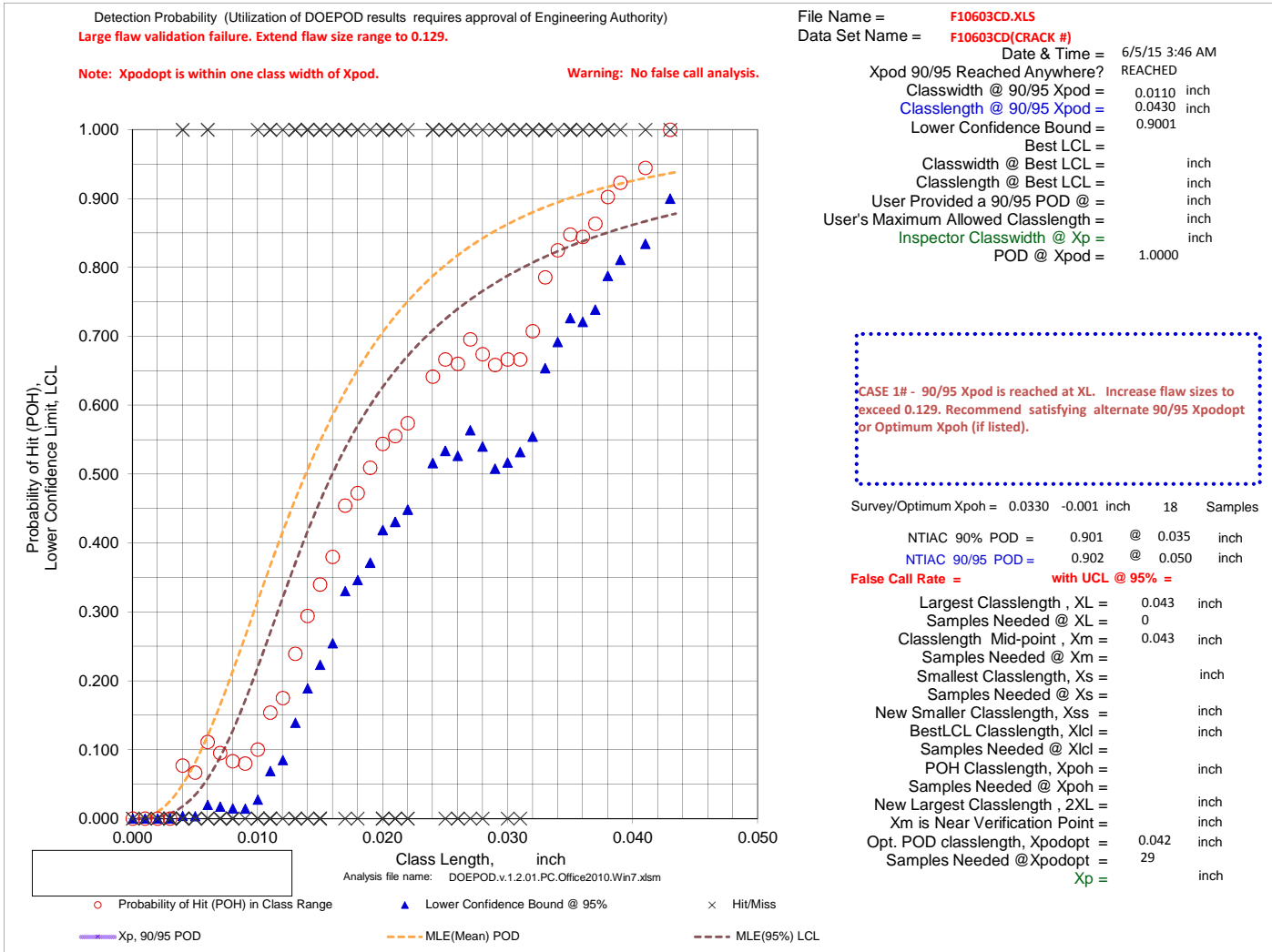
Class Length	Additional Samples
XL =	0.342
Xm =	0.315
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	0.684
**Alternate Xm =	
Xpodopt =	0.283

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F10603CD.XLS
 Data Set Name = F10603CD(CRACK #)

Directed DOE Options

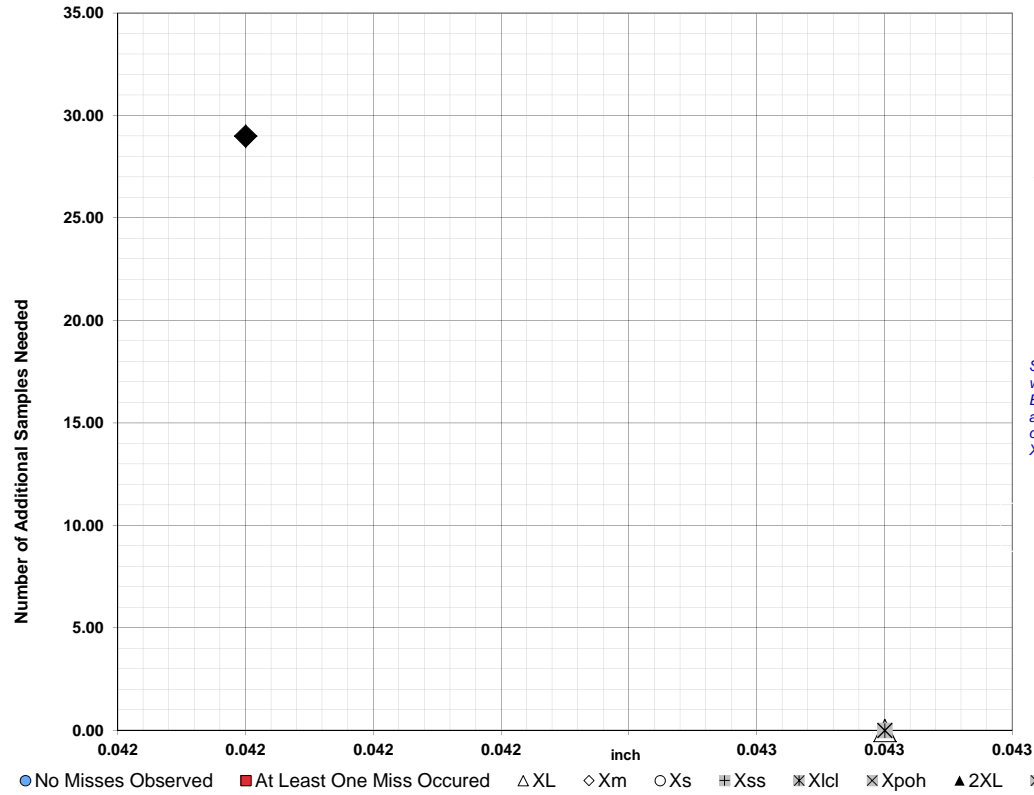


TABLE C

Class Length	Additional Samples
XL = 0.043	0
Xm = 0.043	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt = 0.042	29

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

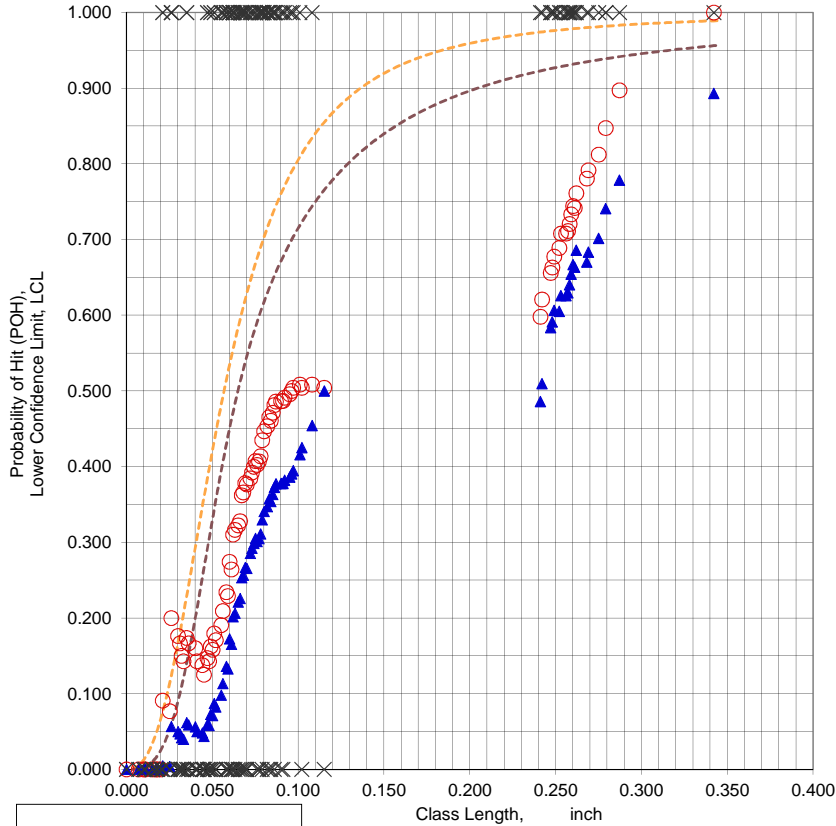
TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = F10603CL.XLS
 Data Set Name = F10603(CLACK #)
 Date & Time = 6/5/15 3:47 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8931
 Classwidth @ Best LCL = 0.2000 inch
 Classlength @ Best LCL = 0.3420 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.2410 -0.100 inch 28 Samples

NTIAC 90% POD = 0.906 @ 0.140 inch
 NTIAC 90/95 POD = 0.901 @ 0.205 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.342 inch
 Samples Needed @ XL = 2
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.342 inch
 Samples Needed @ Xlcl = 2
 POH Classlength, Xpoh = 0.342 inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.684 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = F10603CL.XLS
 Data Set Name = F10603CL(CRACK #)

Directed DOE Options

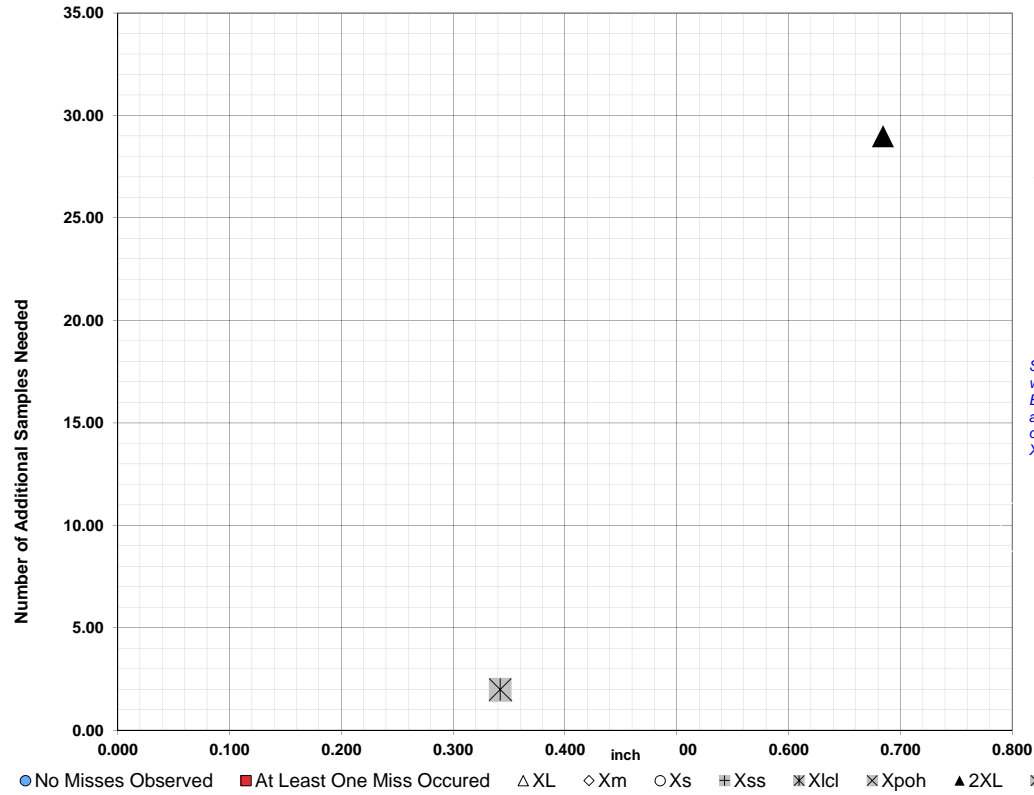


TABLE C

Class Length	Additional Samples
XL = 0.342	2
Xm =	
Xs =	
Xss =	
Xlcl = 0.342	2
Xpoh = 0.342	
2XL = 0.684	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

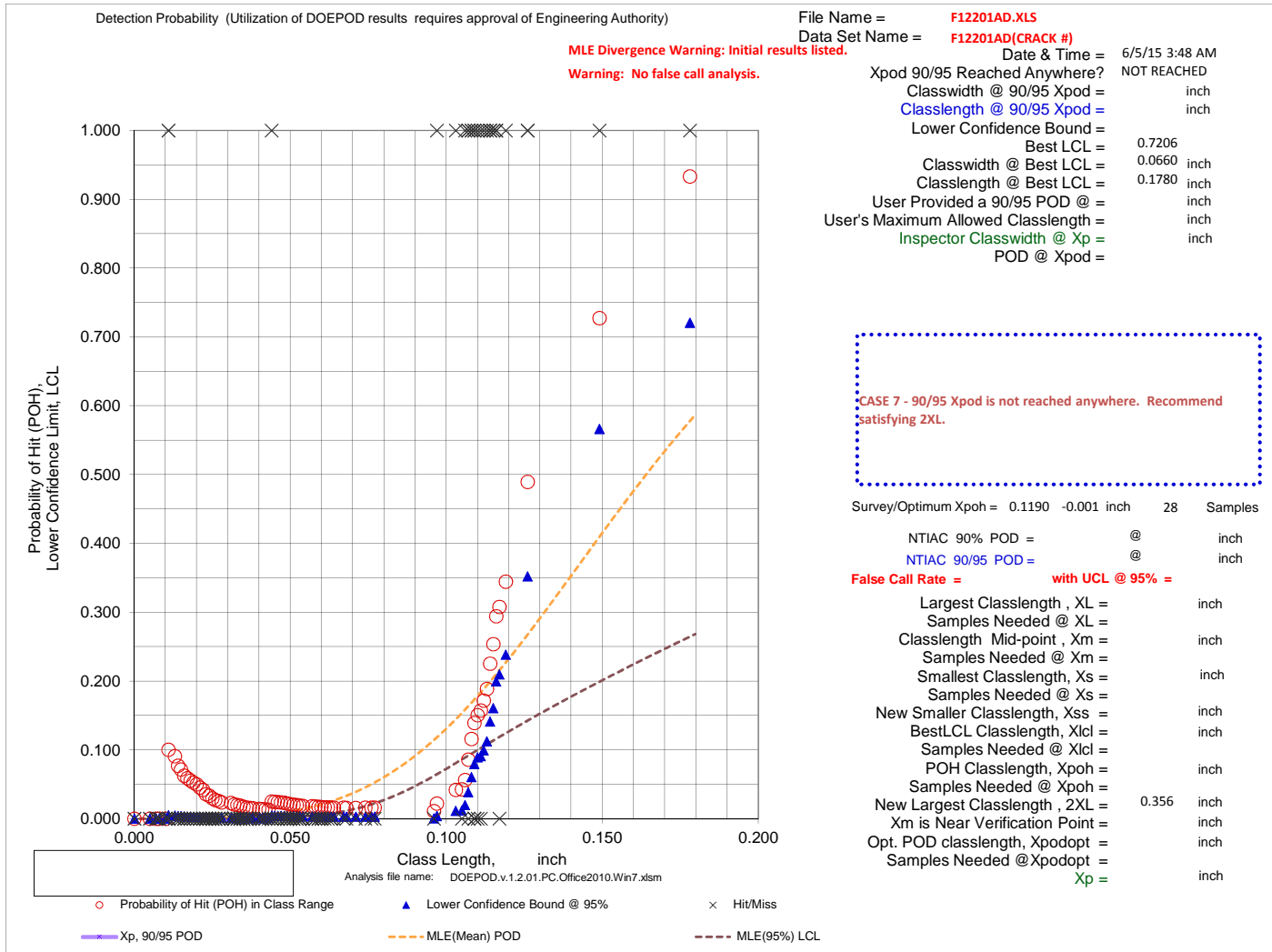
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F12201AD.XLS
 Data Set Name = F12201AD(CRACK #)

Directed DOE Options

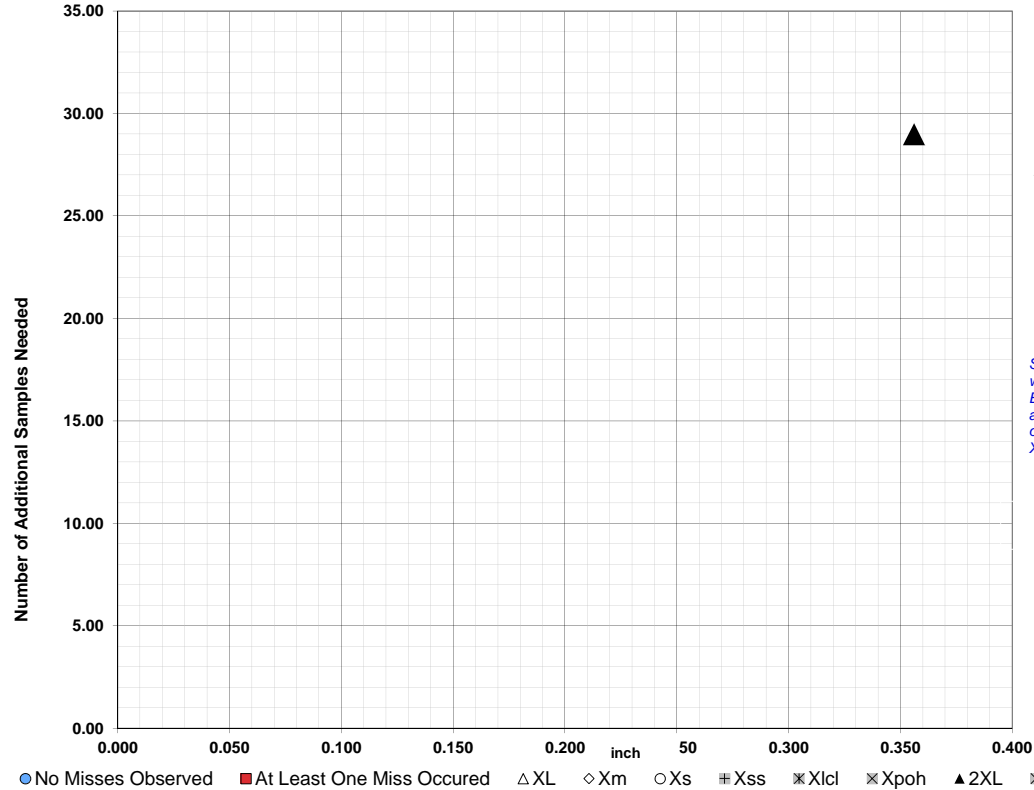


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.356	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.356 29
 **Alternate Xm =
 Xpodopt =

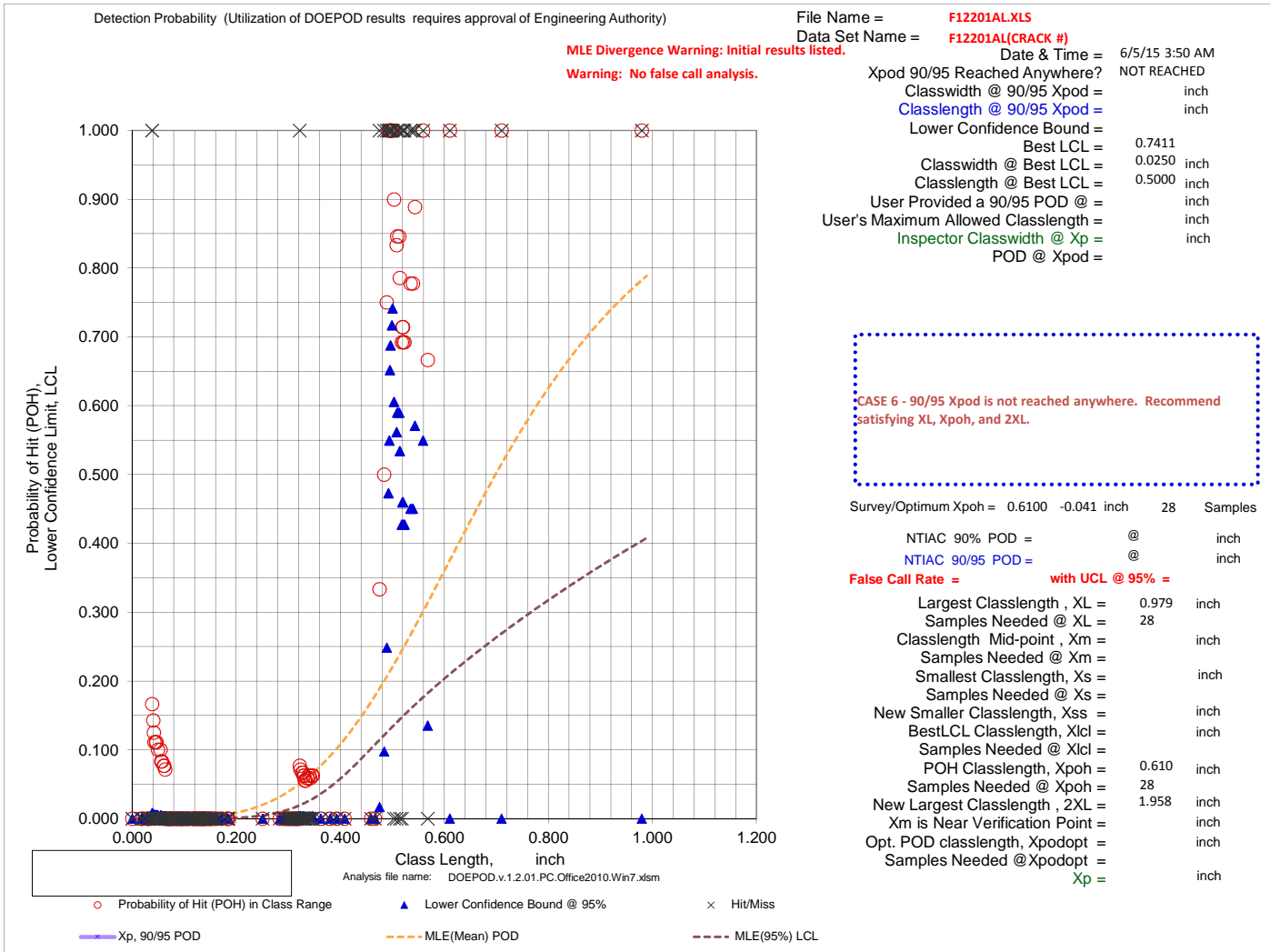
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F12201AL.XLS
 Data Set Name = F12201AL(CRACK #)

Directed DOE Options

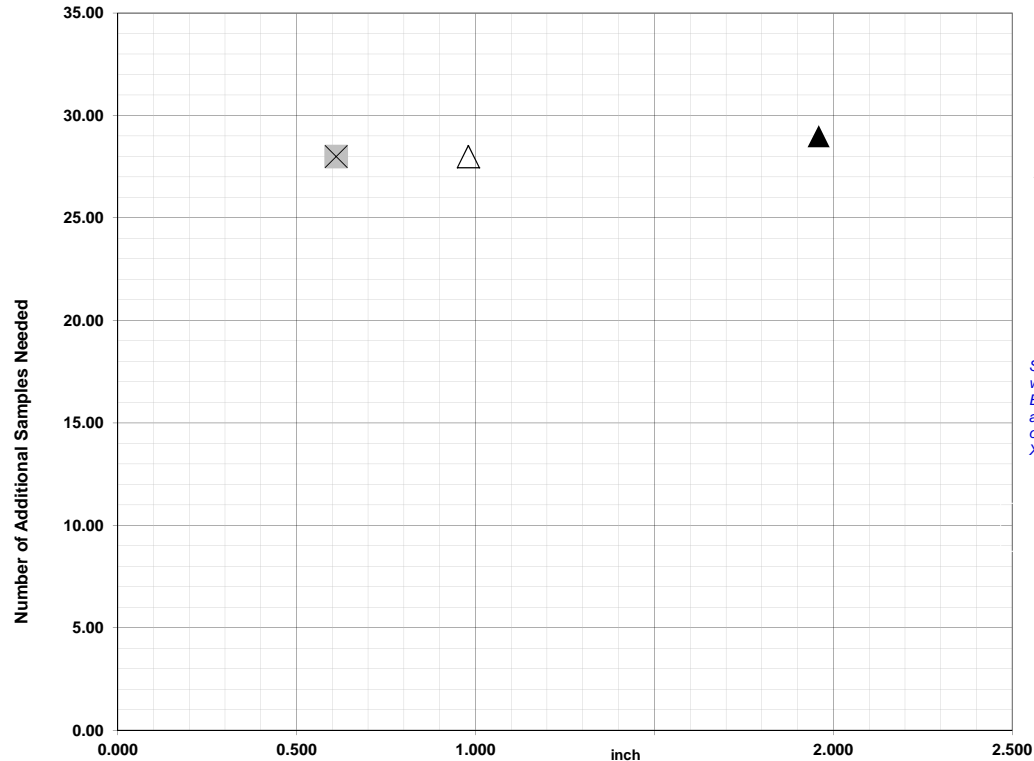


TABLE C

Class Length	Additional Samples
XL = 0.979	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.610	28
2XL = 1.958	29
**Alternate Xm =	
Xpodopt =	

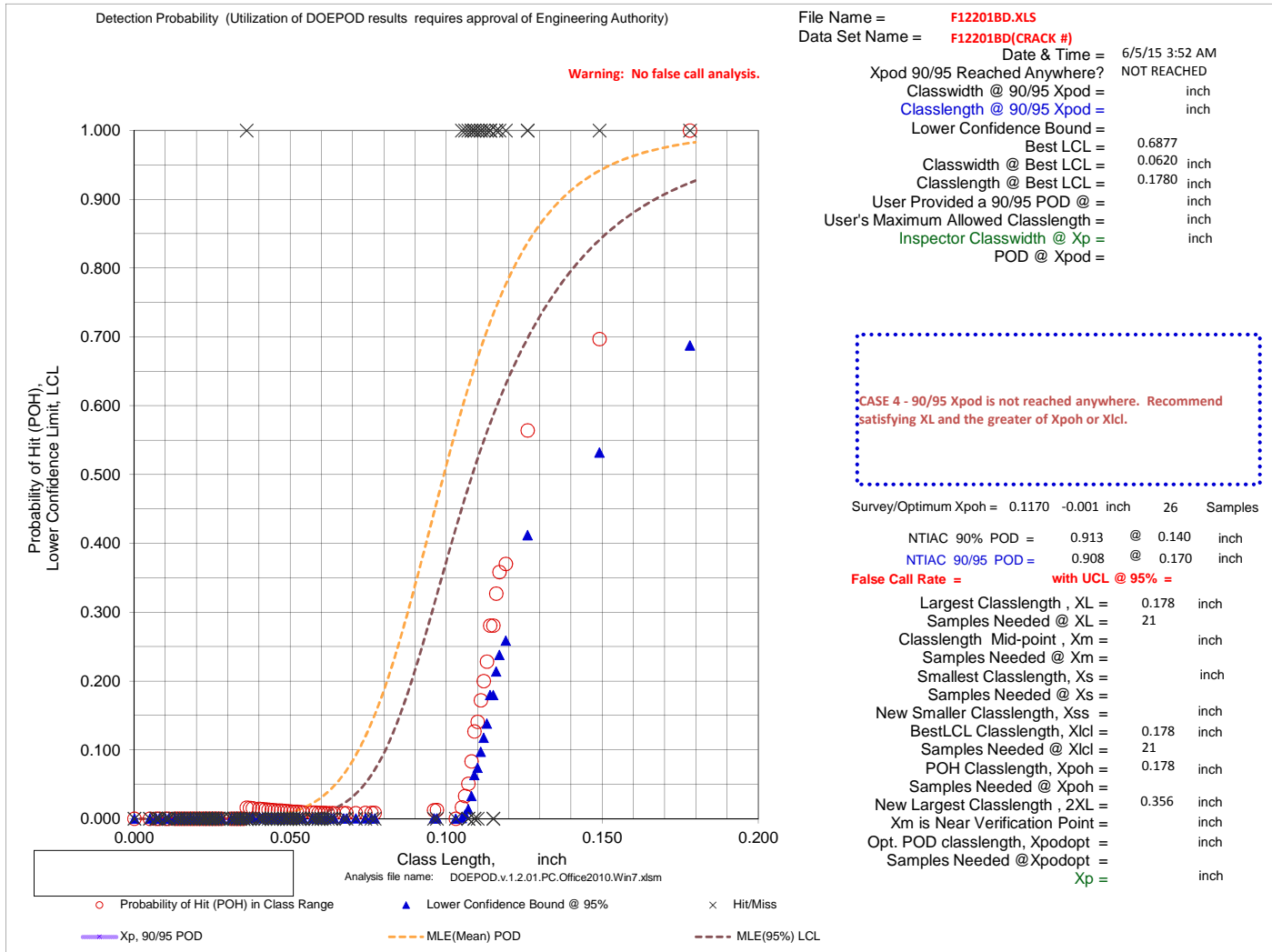
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F12201BD.XLS
 Data Set Name = F12201BD(CRACK #)

Directed DOE Options

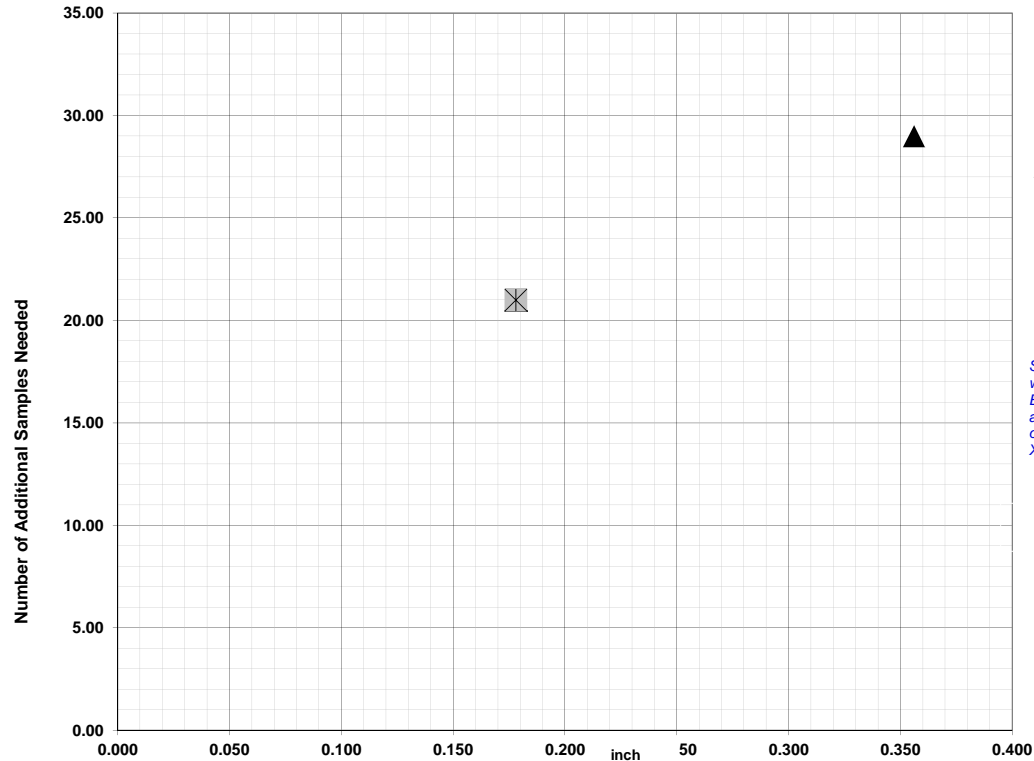


TABLE C

Class Length	Additional Samples
XL = 0.178	21
Xm =	
Xs =	
Xss =	
Xlcl = 0.178	21
Xpoh = 0.178	
2XL = 0.356	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

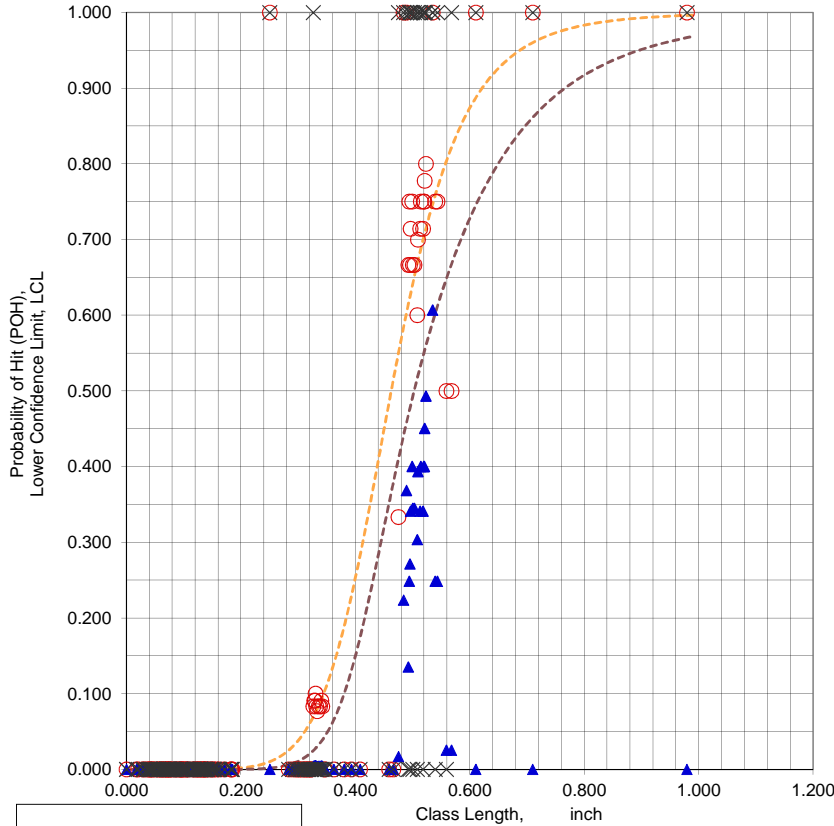
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **F12201BL.XLS**
 Data Set Name = **F12201BL(CRACK #)**
 Date & Time = 6/5/15 3:53 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6070
 Classwidth @ Best LCL = 0.0160 inch
 Classlength @ Best LCL = 0.5350 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.5680 -0.008 inch 28 Samples

NTIAC 90% POD = 0.904 @ 0.625 inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.979 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.610 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 1.958 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = F12201BL.XLS
 Data Set Name = F12201BL(CRACK #)

Directed DOE Options

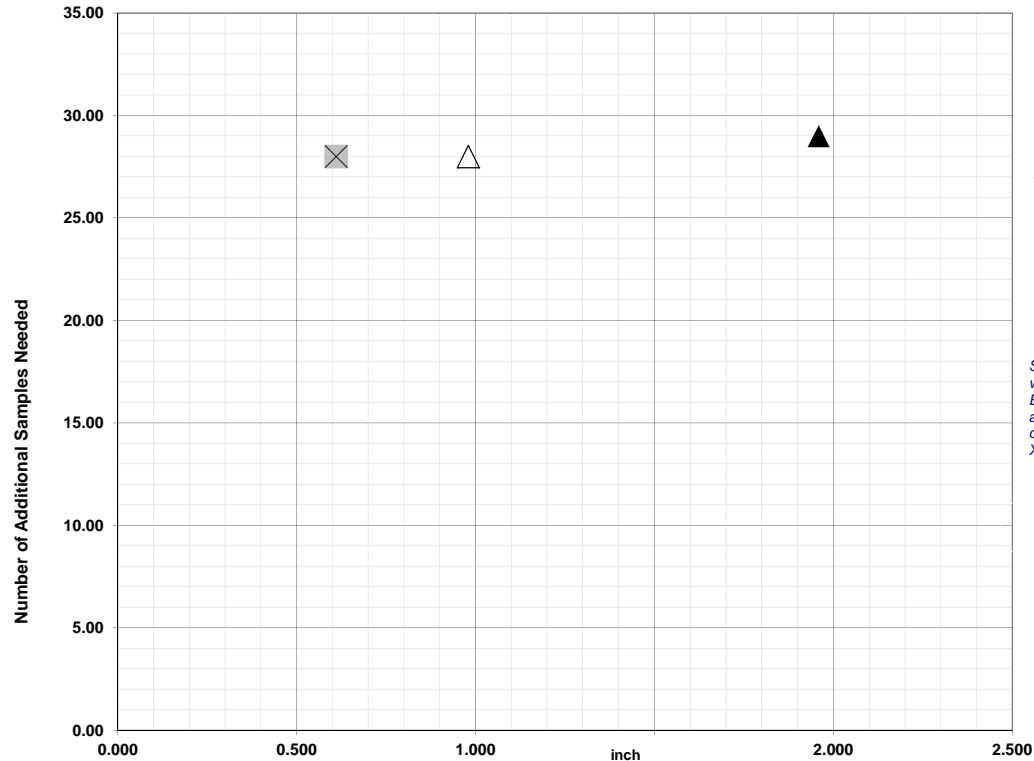


TABLE C

Class Length	Additional Samples
XL = 0.979	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.610	28
2XL = 1.958	29
**Alternate Xm =	
Xpodopt =	

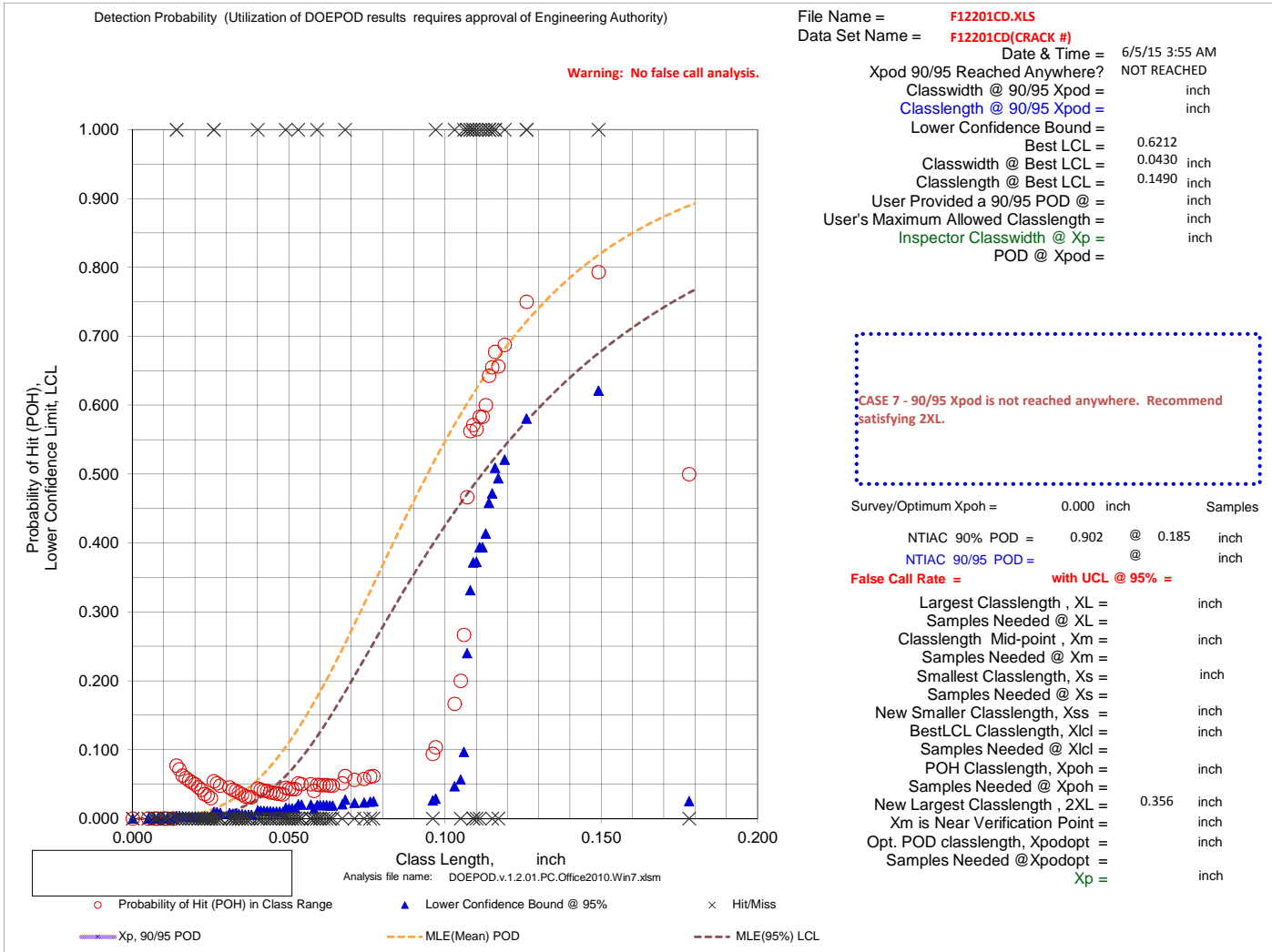
TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F12201CD.XLS
 Data Set Name = F12201CD(CRACK #)

Directed DOE Options

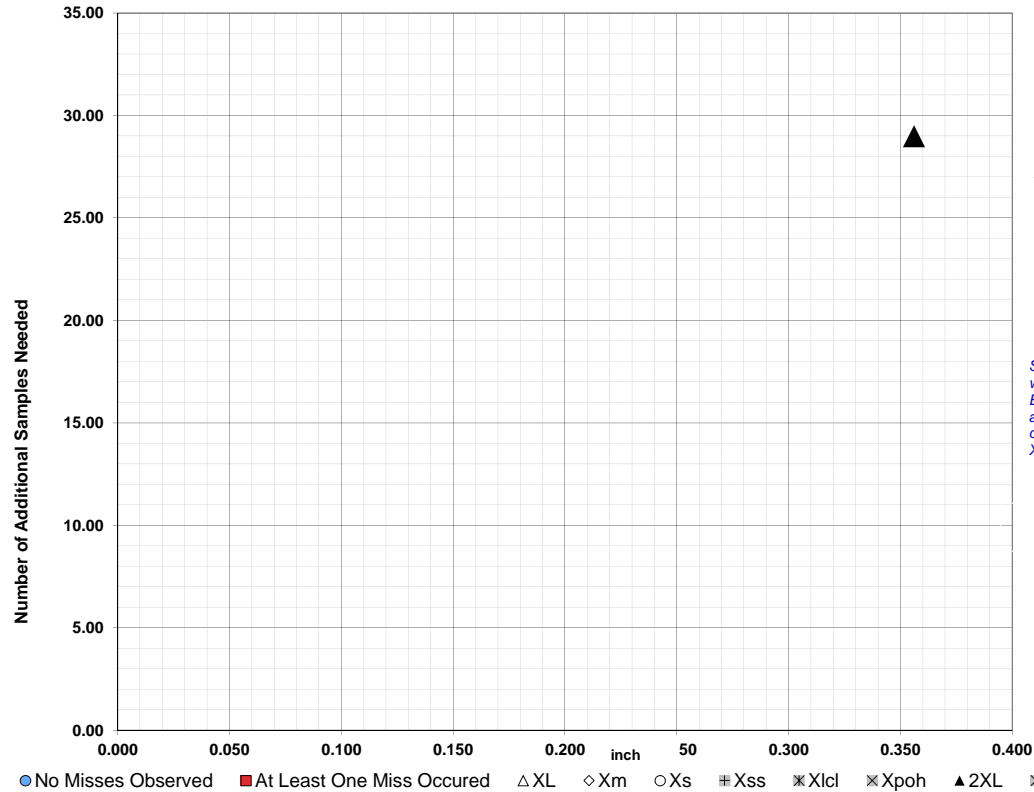


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.356	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.356 29
 **Alternate Xm =
 Xpodopt =

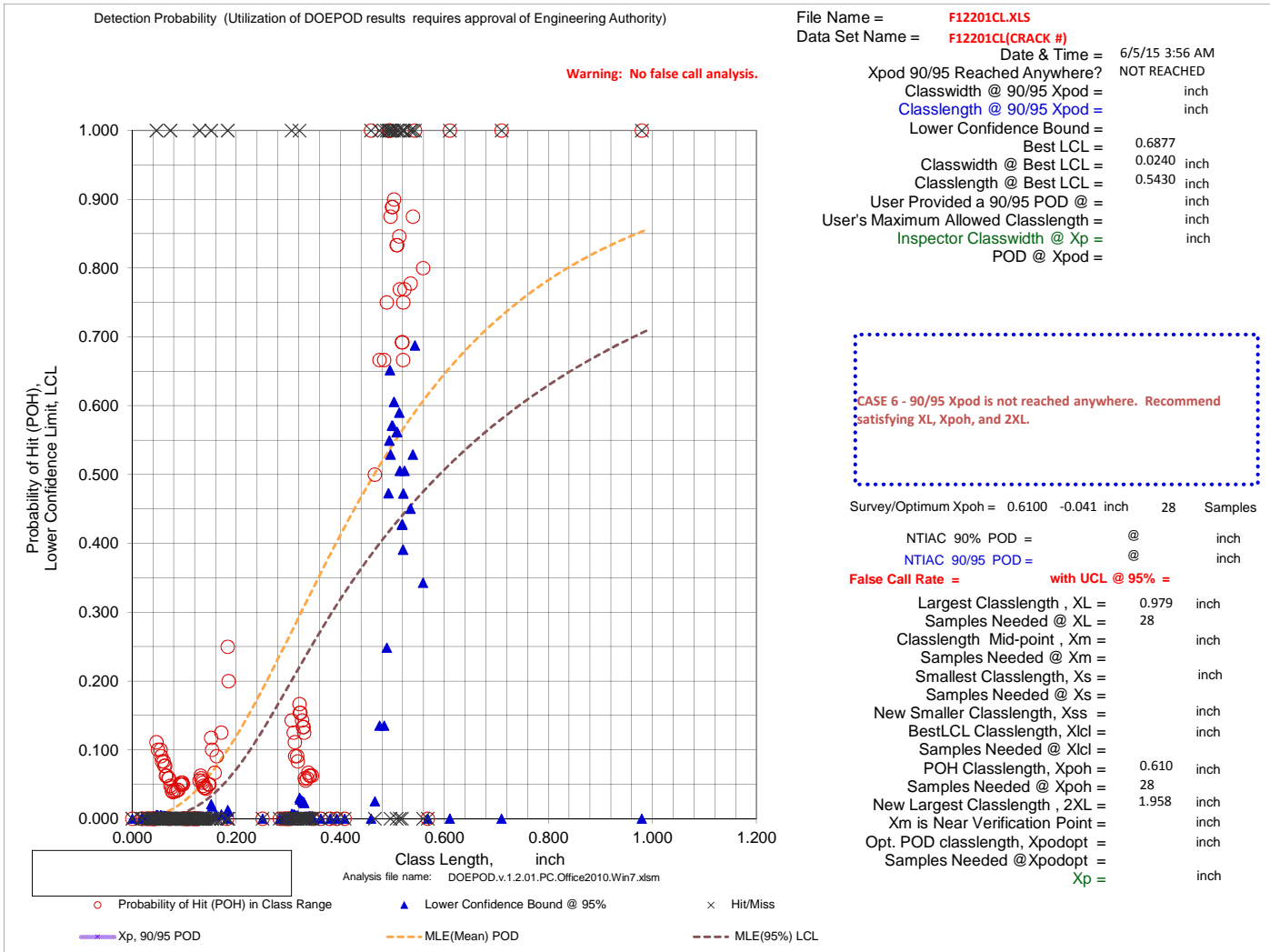
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F12201CL.XLS
 Data Set Name = F12201CL(CRACK #)

Directed DOE Options

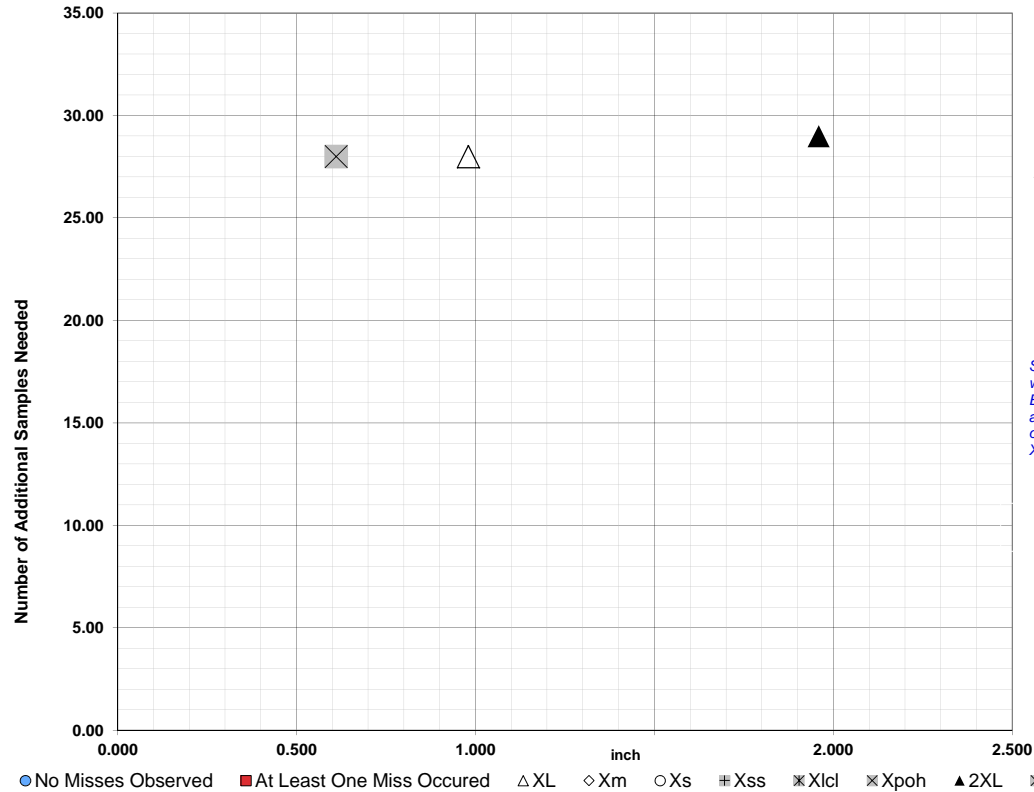


TABLE C

Class Length	Additional Samples
XL = 0.979	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.610	28
2XL = 1.958	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

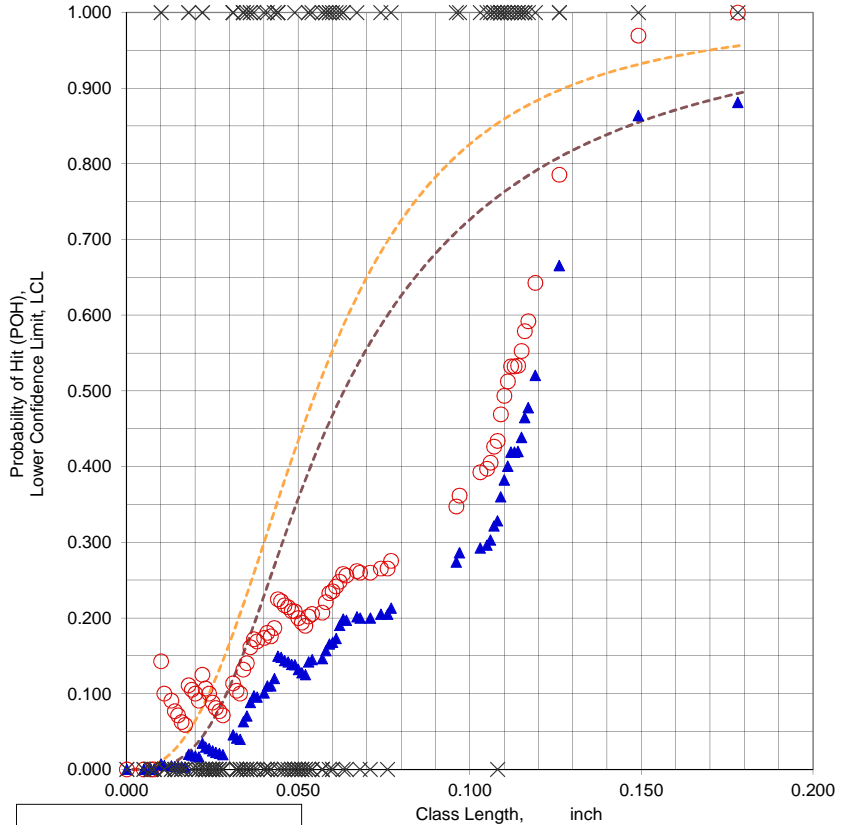
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = **F12202AD.XLS**
 Data Set Name = **F12202AD(CRACK #)**
 Date & Time = 6/5/15 3:58 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8813
 Classwidth @ Best LCL = 0.0690 inch
 Classlength @ Best LCL = 0.1780 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.1100 -0.001 inch 22 Samples
 NTIAC 90% POD = 0.905 @ 0.130 inch
 NTIAC 90/95 POD = 0.900 @ 0.185 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.178 inch
 Samples Needed @ XL = 5
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.178 inch
 Samples Needed @ Xlcl = 5
 POH Classlength, Xpoh = 0.178 inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.356 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F12202AD.XLS
 Data Set Name = F12202AD(CRACK #)

Directed DOE Options

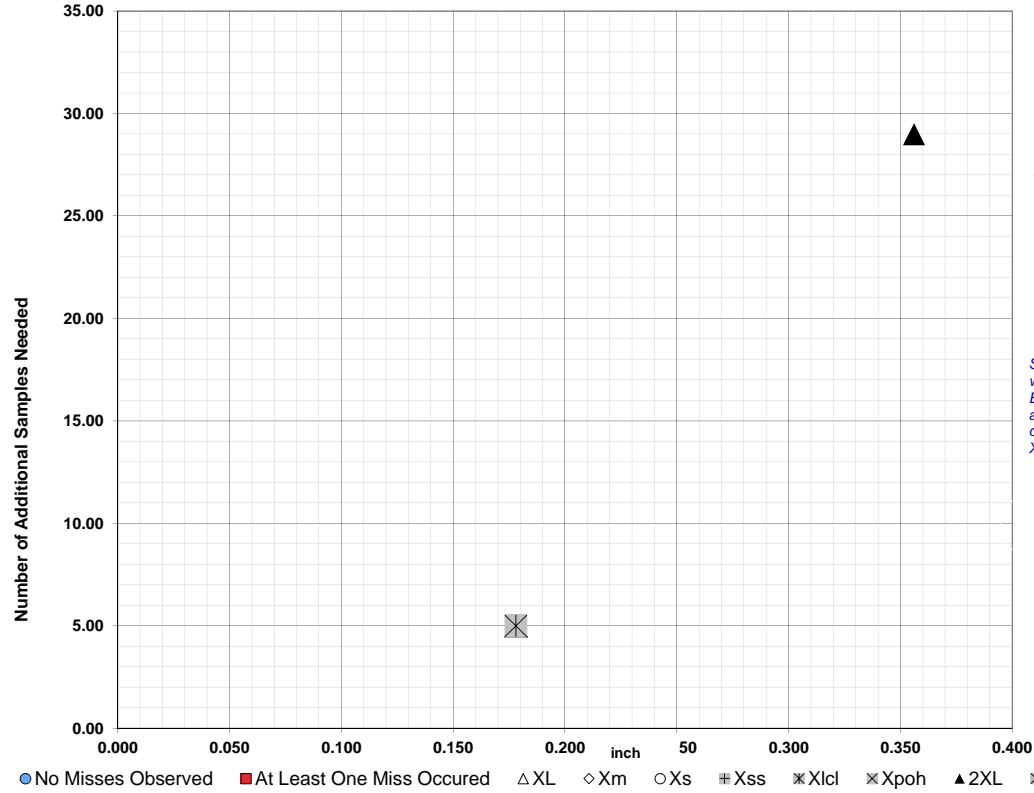


TABLE C

Class Length	Additional Samples
XL = 0.178	5
Xm =	
Xs =	
Xss =	
XLcl = 0.178	5
Xpoh = 0.178	
2XL = 0.356	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

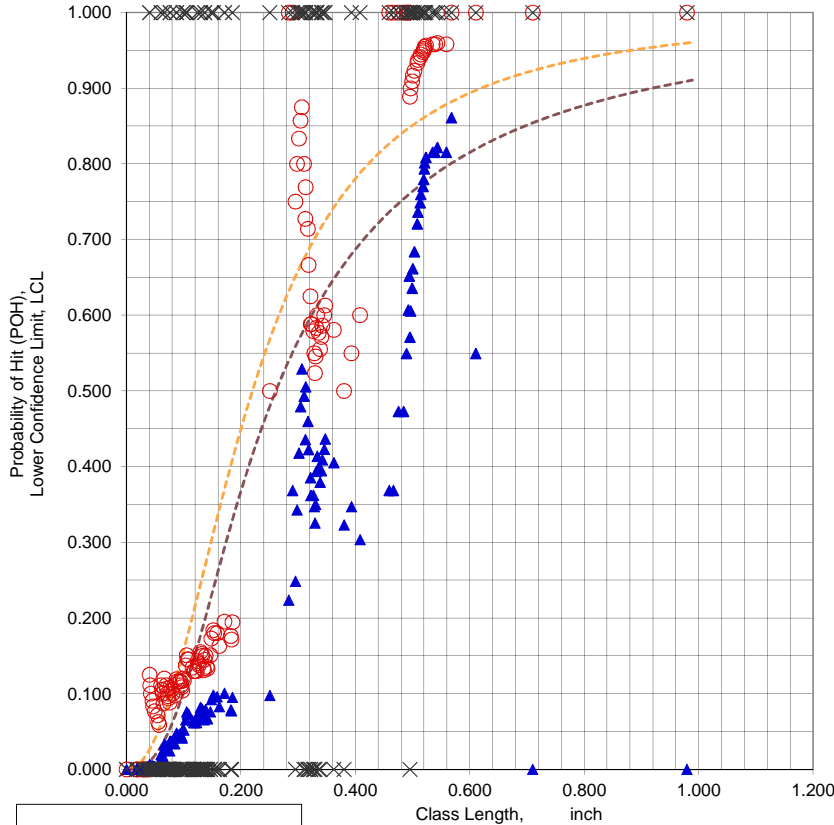
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = F12202AL.XLS
 Data Set Name = F12202AL(CRACK #)
 Date & Time = 6/5/15 3:59 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8609
 Classwidth @ Best LCL = 0.0720 inch
 Classlength @ Best LCL = 0.5680 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.4990 -0.003 inch 28 Samples
 NTIAC 90% POD = 0.900 @ 0.620 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.979 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.568 inch
 Samples Needed @ Xlcl = 9
 POH Classlength, Xpoh = 0.568 inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F12202AL.XLS
 Data Set Name = F12202AL(CRACK #)

Directed DOE Options

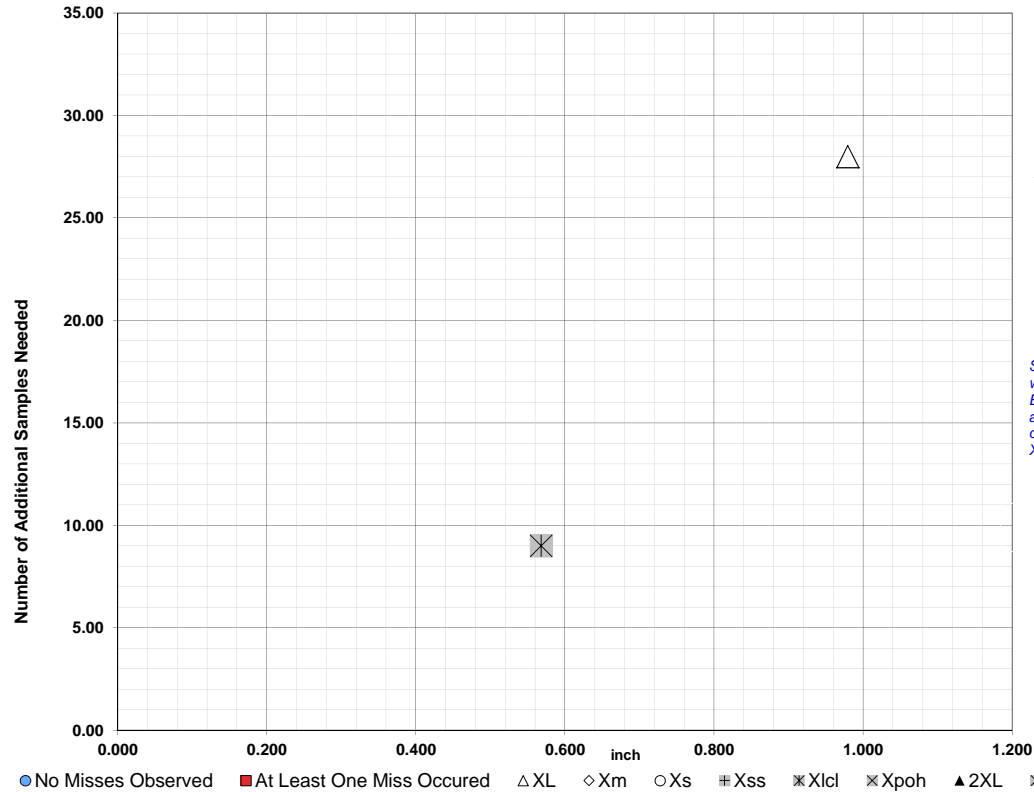


TABLE C

Class Length	Additional Samples
XL = 0.979	28
Xm =	
Xs =	
Xss =	
Xlcl = 0.568	9
Xpoh = 0.568	
2XL =	
**Alternate Xm =	
Xpodopt =	

XL = 0.979 28
 Xm =
 Xs =
 Xss =
 Xlcl = 0.568 9
 Xpoh = 0.568
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*

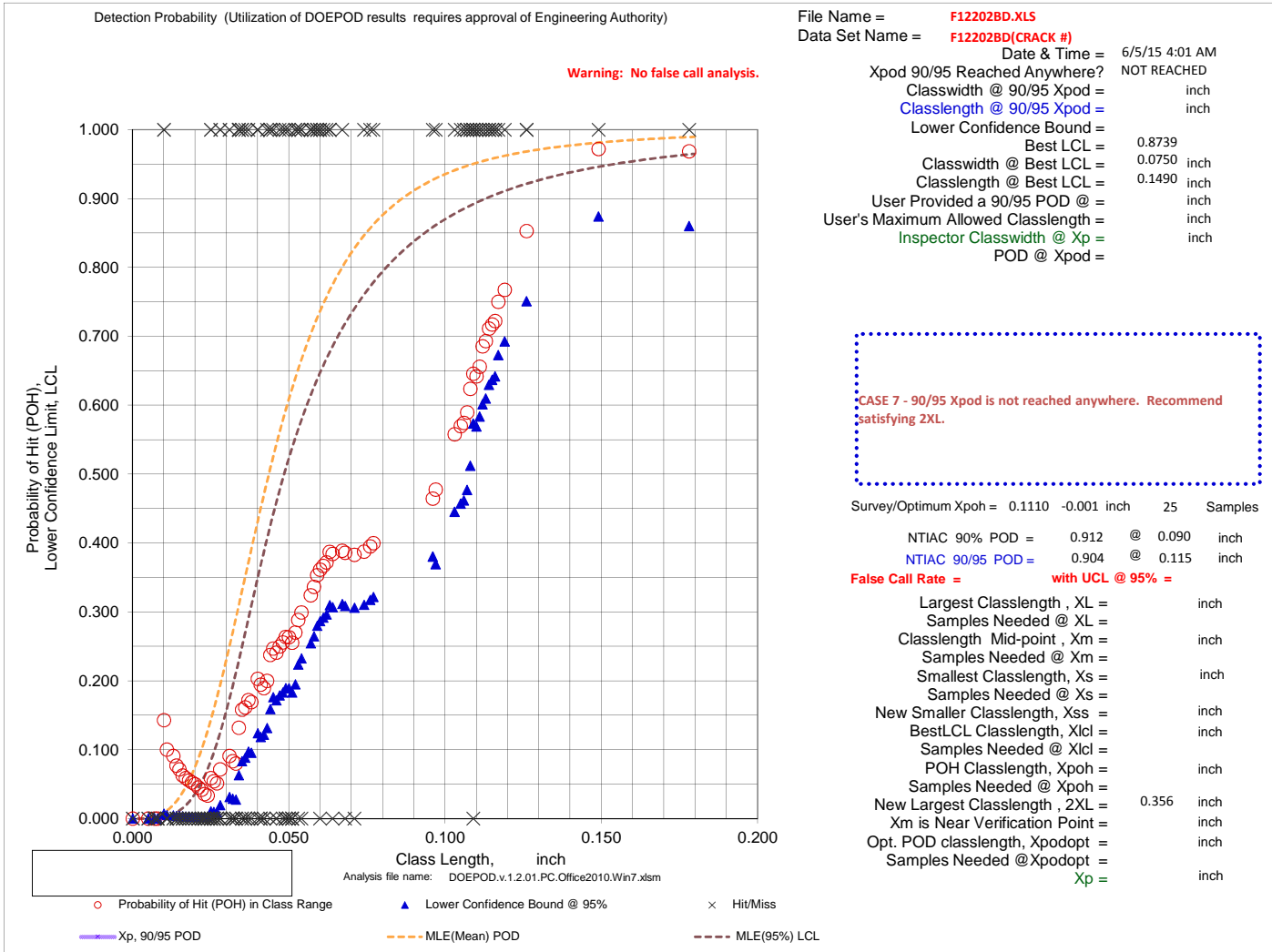
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F12202BD.XLS
 Data Set Name = F12202BD(CRACK #)

Directed DOE Options

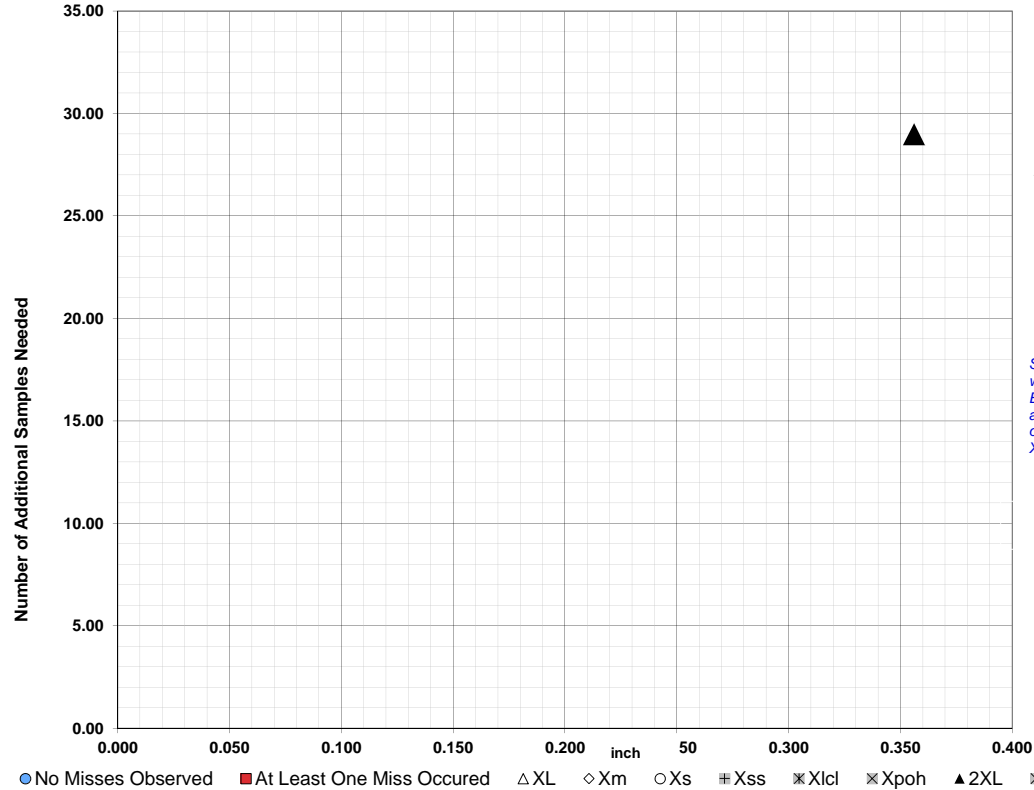


TABLE C

Class Length Additional Samples

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.356 29
 **Alternate Xm =
 Xpodopt =

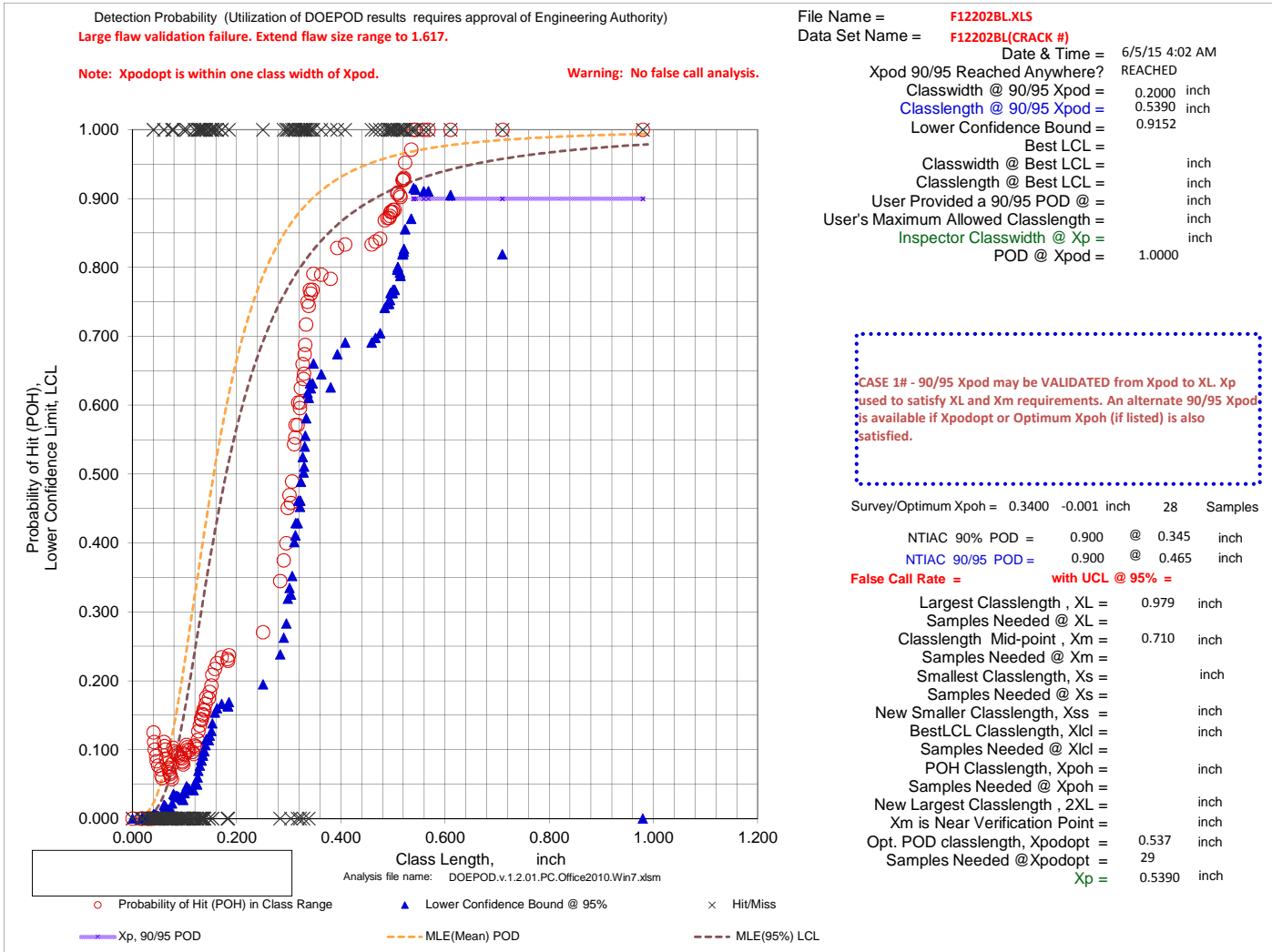
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F12202BL.XLS
 Data Set Name = F12202BL(CRACK #)

Directed DOE Options

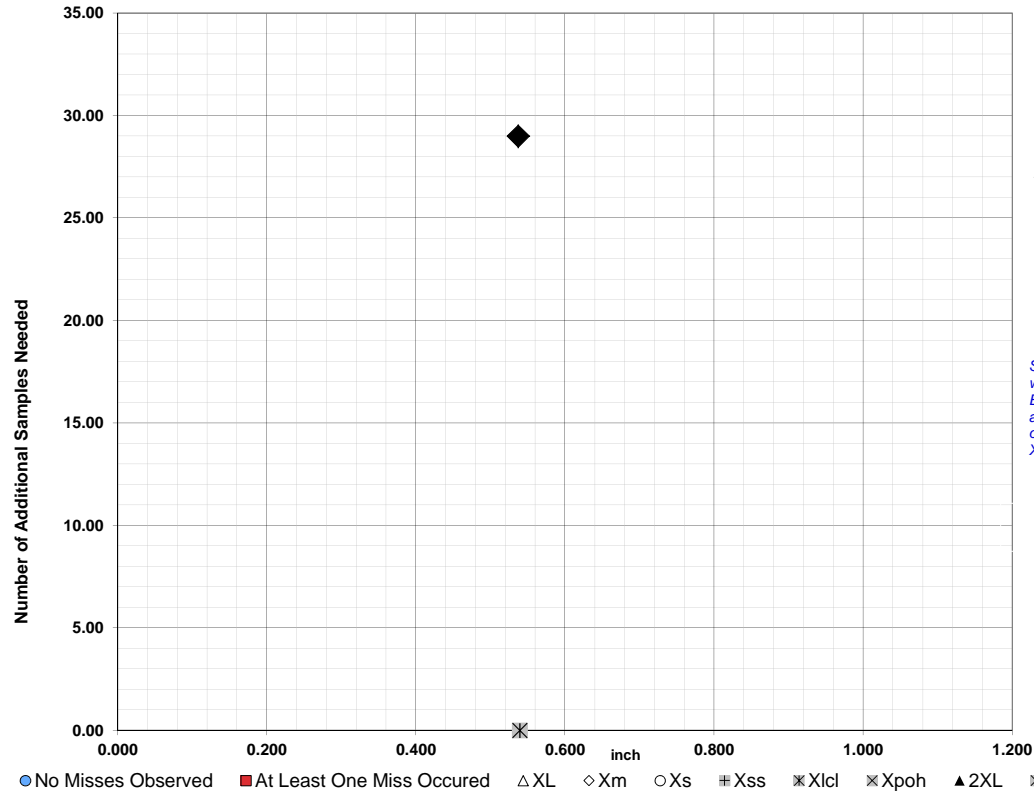


TABLE C

Class Length	Additional Samples
XL =	0.979
Xm =	0.710
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.537 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

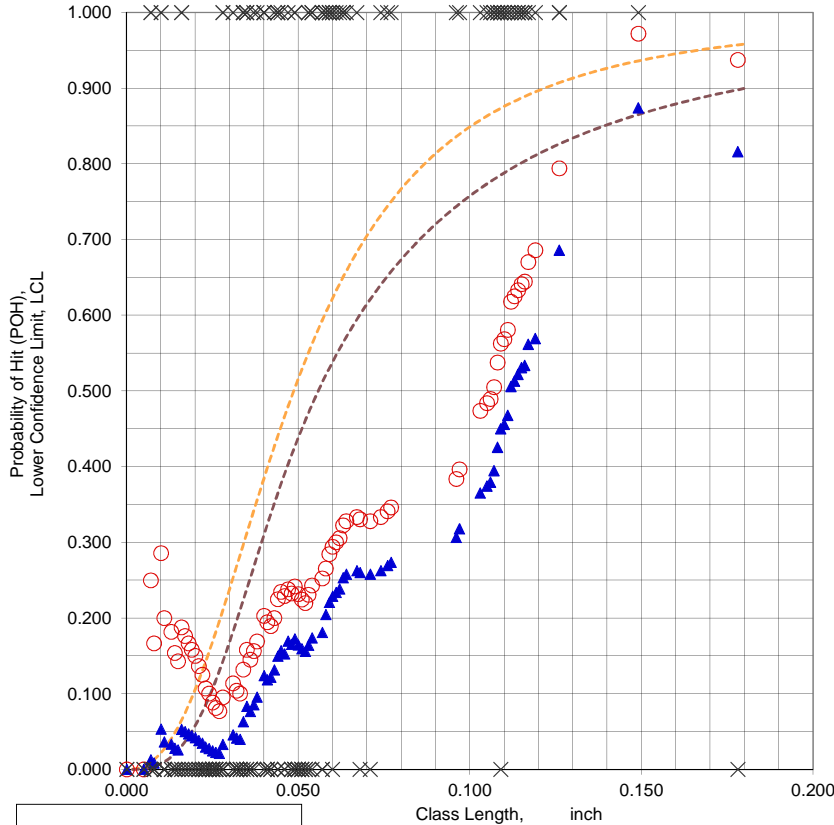
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **F12202CD.XLS**
 Data Set Name = **F12202CD(CRACK #)**
 Date & Time = 6/5/15 4:04 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8739
 Classwidth @ Best LCL = 0.0750 inch
 Classlength @ Best LCL = 0.1490 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.906 @ 0.125 inch
 NTIAC 90/95 POD = 0.904 @ 0.185 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.356 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F12202CD.XLS
 Data Set Name = F12202CD(CRACK #)

Directed DOE Options

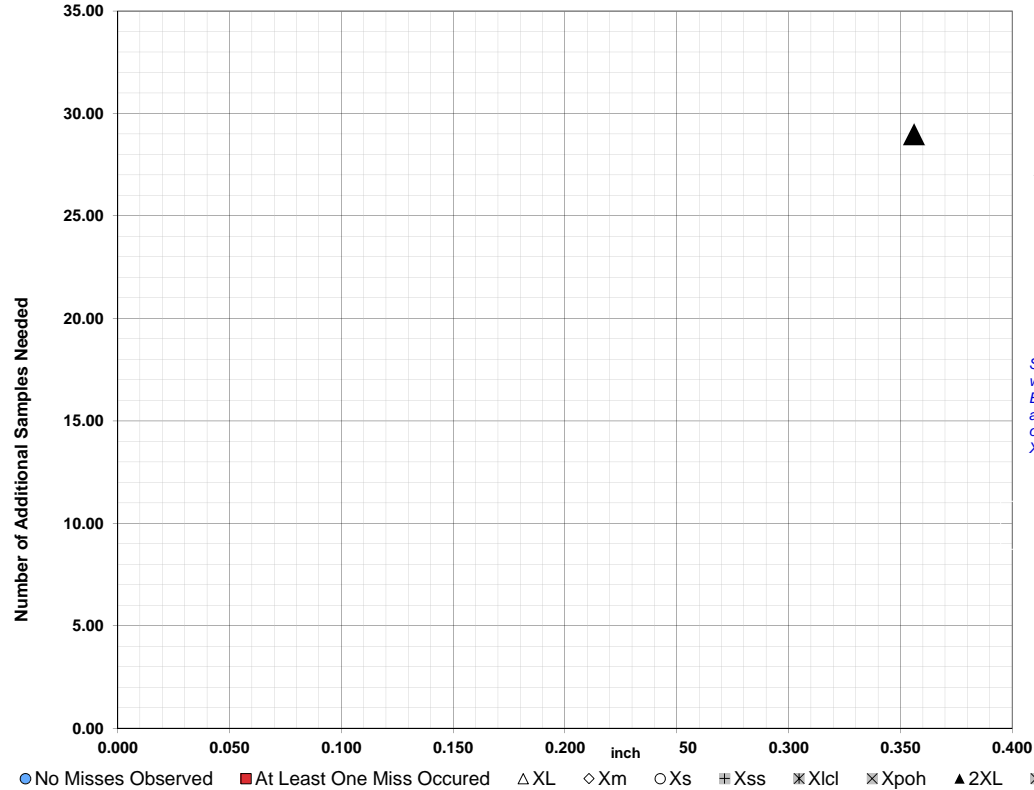


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.356	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.356 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

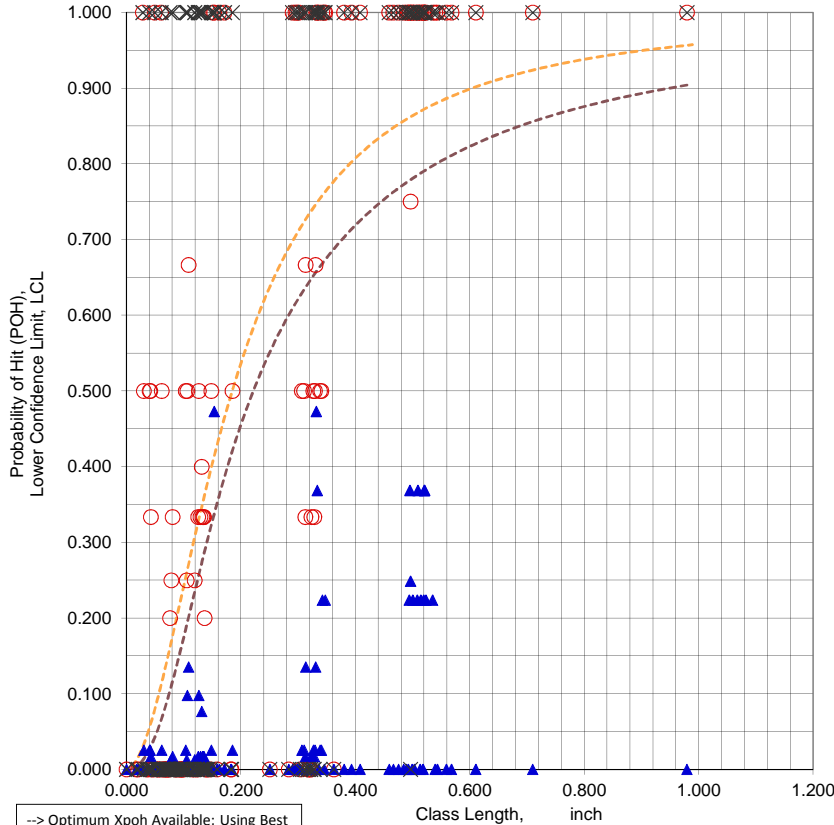
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **F12202CL.XLS**
 Data Set Name = **F12202CL(CRACK #)**
 Date & Time = 6/5/15 4:05 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.4729
 Classwidth @ Best LCL = 0.0020 inch
 Classlength @ Best LCL = 0.1530 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.4990 -0.002 inch 28 Samples

NTIAC 90% POD = 0.900 @ 0.605 inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.979 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.499 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 1.958 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F12202CL.XLS
 Data Set Name = F12202CL(CRACK #)

Directed DOE Options

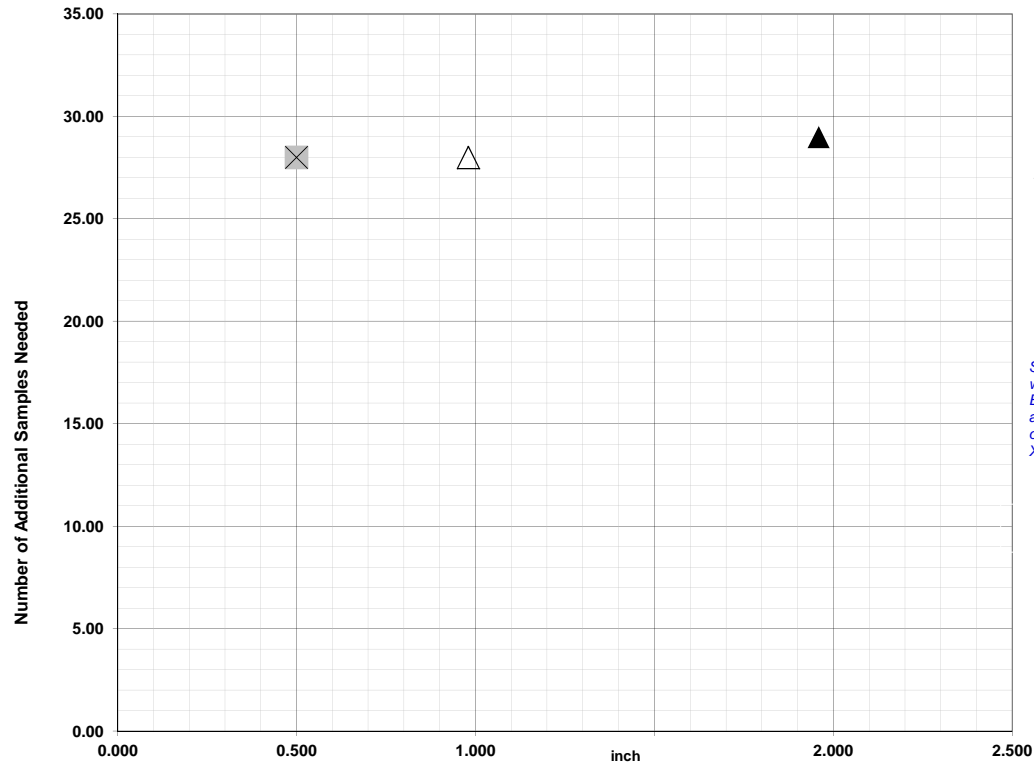


TABLE C

Class Length	Additional Samples
XL = 0.979	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.499	28
2XL = 1.958	29
**Alternate Xm =	
Xpodopt =	

XL = 0.979 28
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh = 0.499 28
 2XL = 1.958 29
 **Alternate Xm =
 Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs # Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

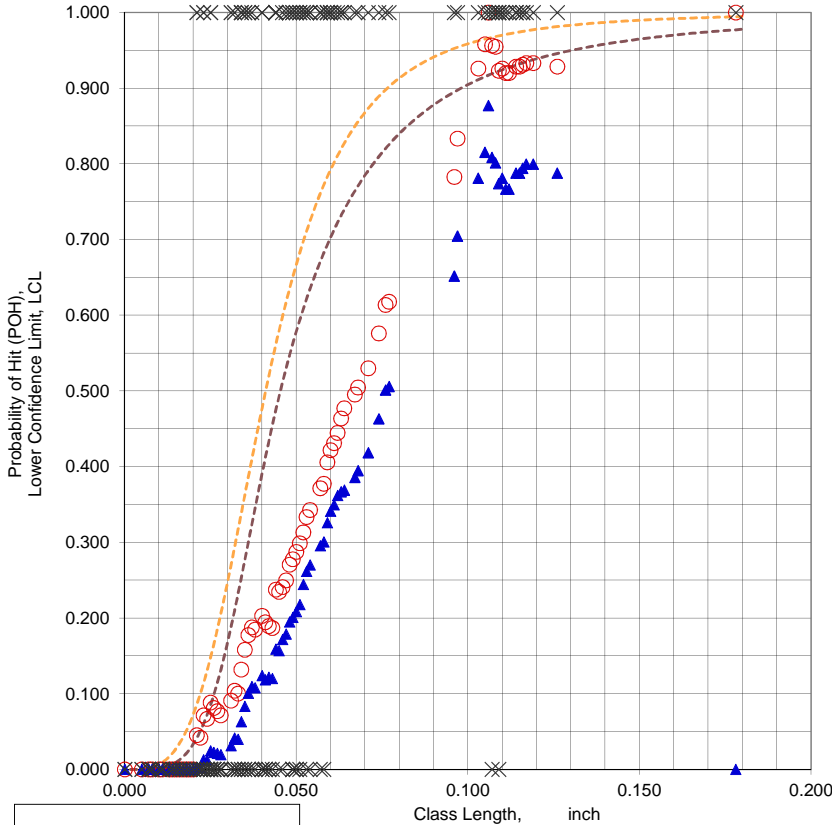
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = **F12203AD.XLS**
 Data Set Name = **F12203AD(CRACK #)**
 Date & Time = 6/5/15 4:07 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8768
 Classwidth @ Best LCL = 0.0470 inch
 Classlength @ Best LCL = 0.1060 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.1110 -0.001 inch 26 Samples
 NTIAC 90% POD = 0.913 @ 0.080 inch
 NTIAC 90/95 POD = 0.905 @ 0.100 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.178 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.178 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 0.356 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F12203AD.XLS
 Data Set Name = F12203AD(CRACK #)

Directed DOE Options

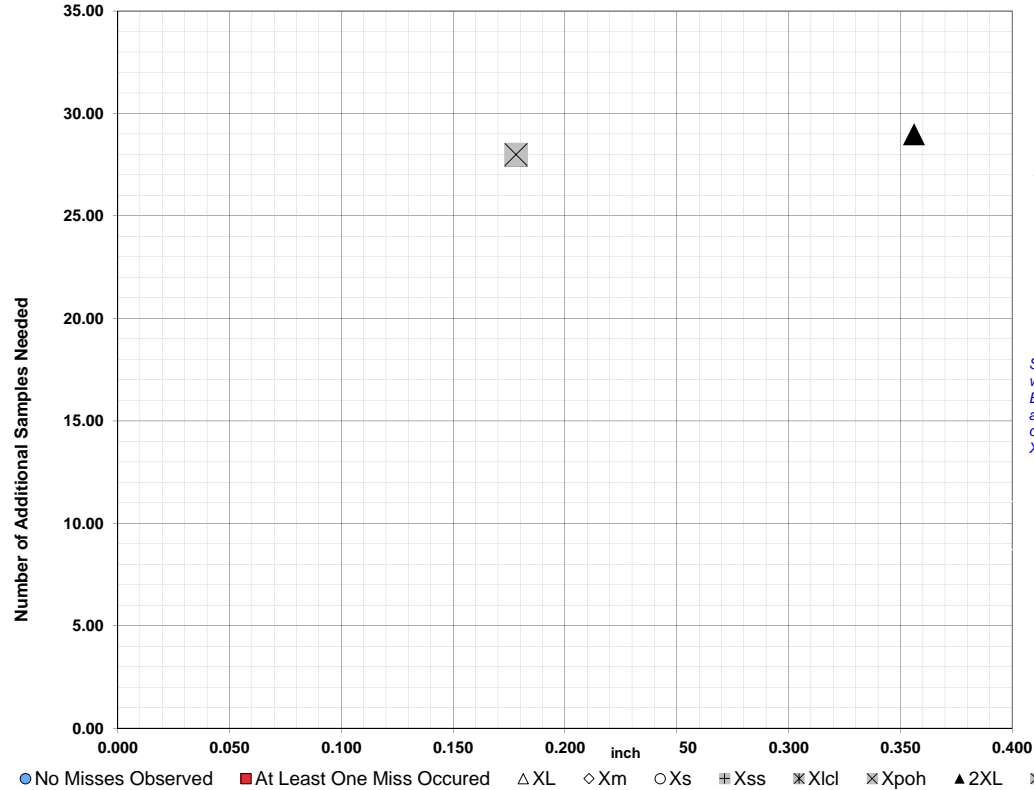


TABLE C

Class Length	Additional Samples
XL = 0.178	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.178	28
2XL = 0.356	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

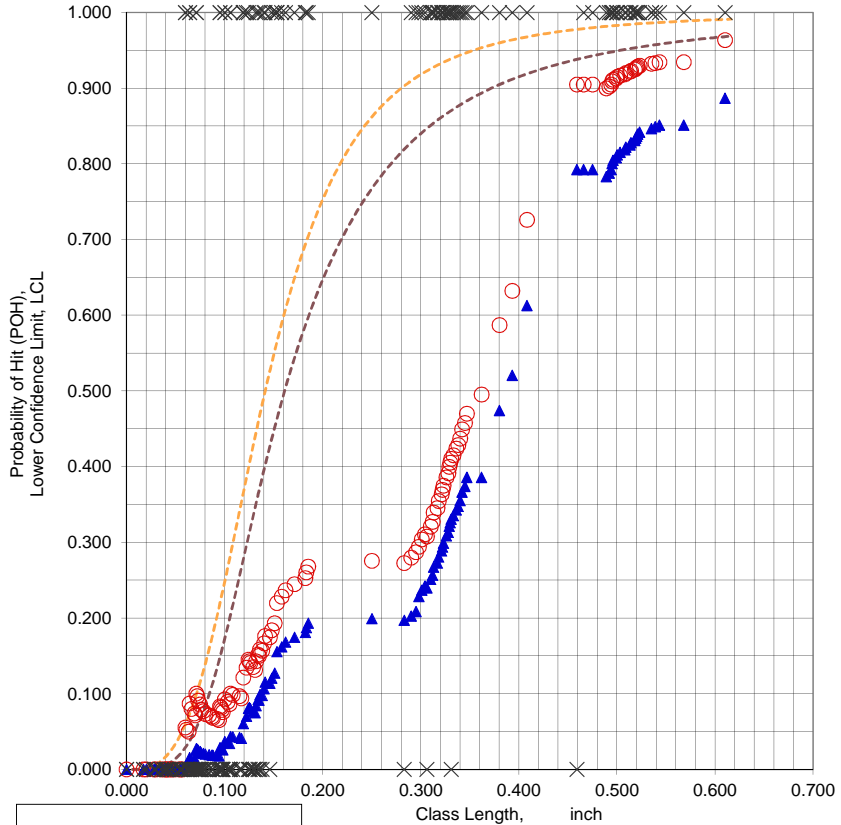
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss

— Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **F12203AL.XLS**
 Data Set Name = **F12203AL(CRACK #)**
 Date & Time = 6/5/15 4:08 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8868
 Classwidth @ Best LCL = 0.3000 inch
 Classlength @ Best LCL = 0.6100 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.4660 -0.006 inch 28 Samples

NTIAC 90% POD = 0.905 @ 0.285 inch
 NTIAC 90/95 POD = 0.902 @ 0.375 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 1.220 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F12203AL.XLS
 Data Set Name = F12203AL(CRACK #)

Directed DOE Options

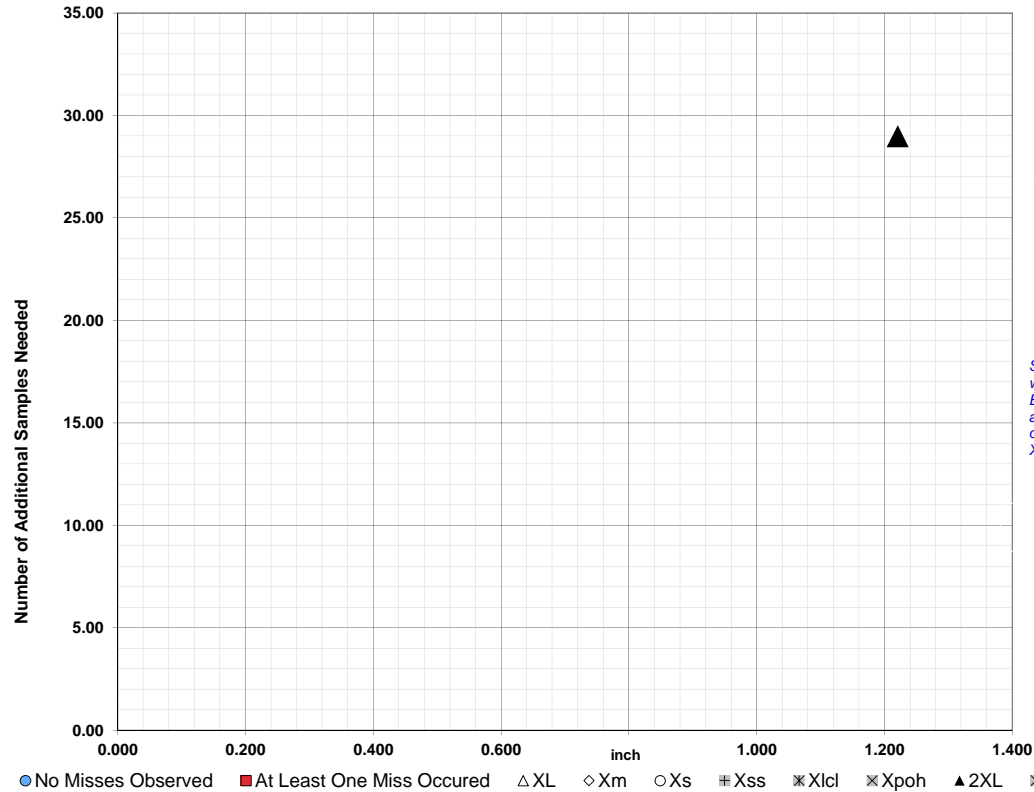


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 1.220	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 1.220 29
 **Alternate Xm =
 Xpodopt =

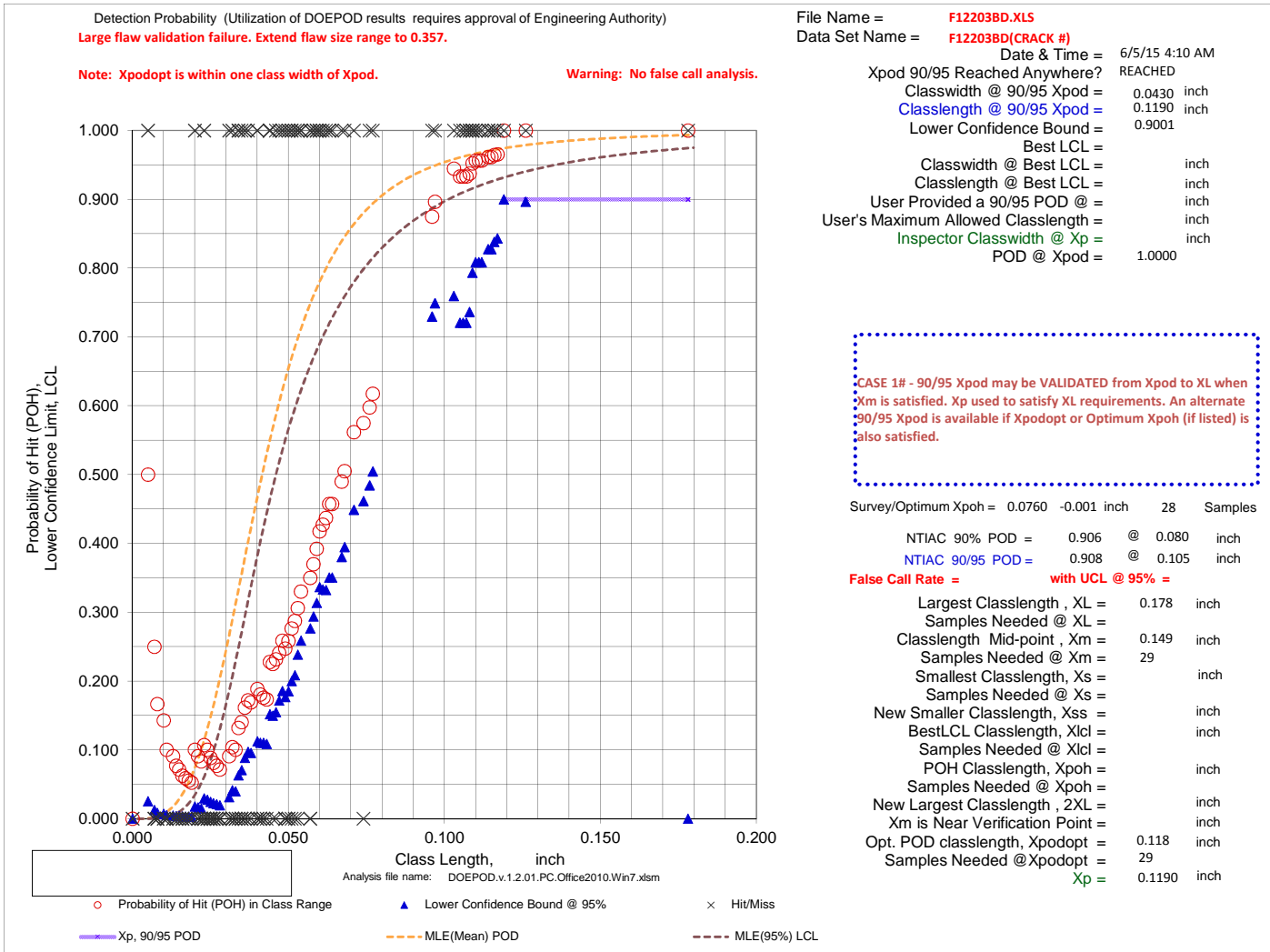
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F12203BD.XLS
 Data Set Name = F12203BD(CRACK #)

Directed DOE Options

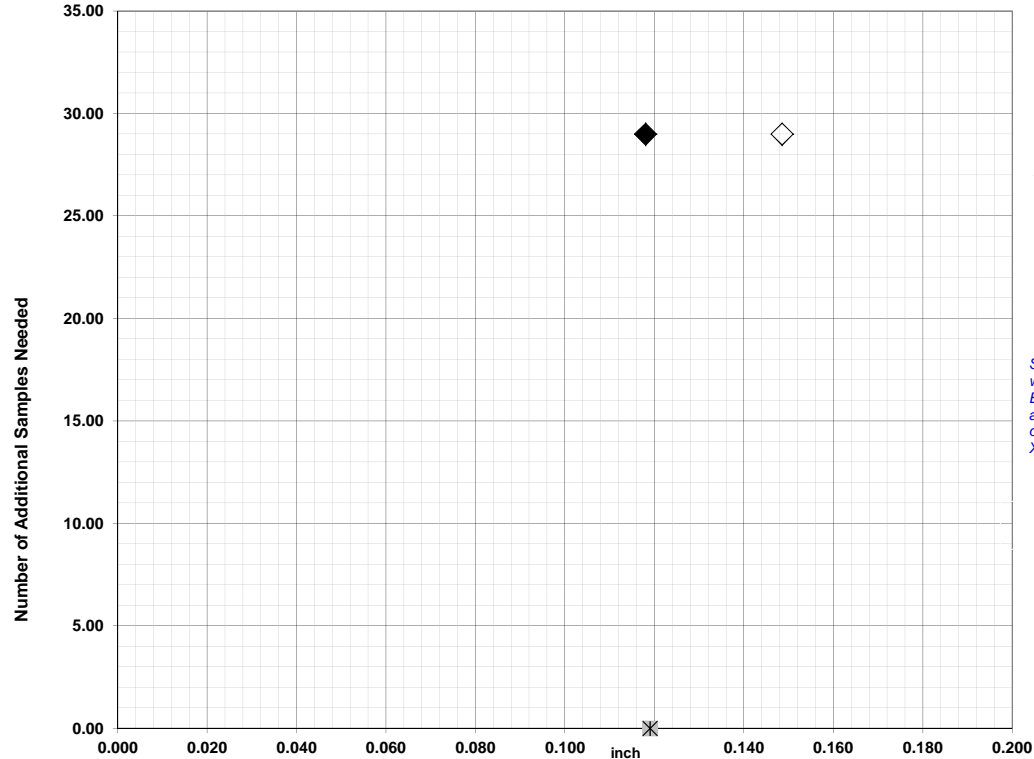


TABLE C

Class Length	Additional Samples
XL = 0.178	
Xm = 0.149	29
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt = 0.118	29

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

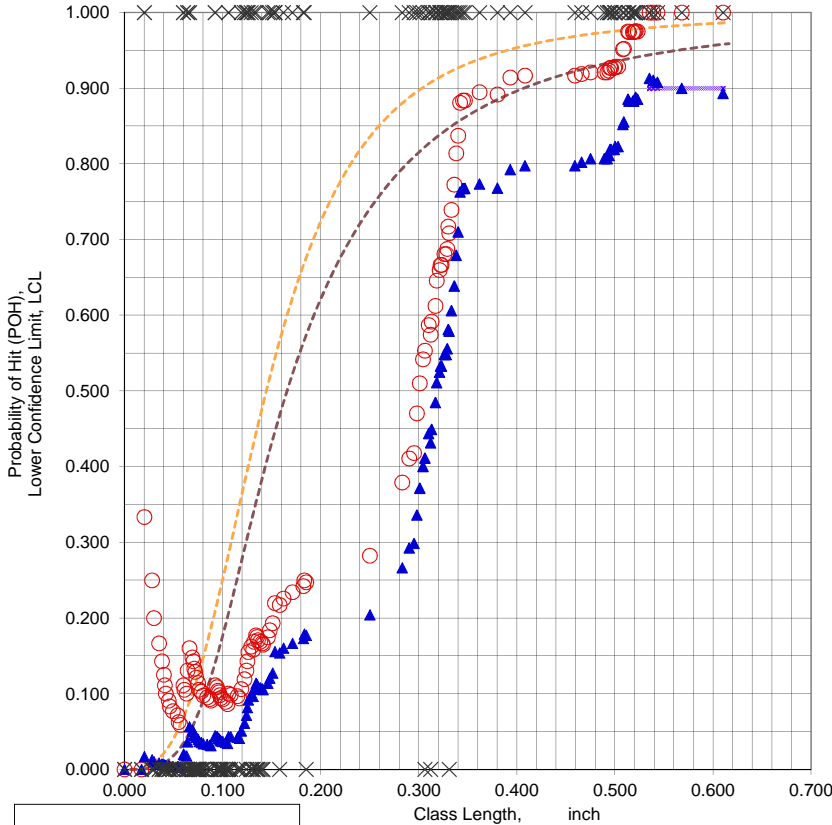
● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 1.605.

Note: Xpodopt is within one class width of Xpod.

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **F12203BL.XLS**
 Data Set Name = **F12203BL(CRACK #)**
 Date & Time = 6/5/15 4:11 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.2000 inch
 Classlength @ 90/95 Xpod = 0.5350 inch
 Lower Confidence Bound = 0.9129
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1# - 90/95 Xpod may be VALIDATED from Xpod to XL Xp used to satisfy XL requirements. An alternate 90/95 Xpod is available if Xpodopt or Optimum Xpoh (if listed) is also satisfied.

Survey/Optimum Xpoh = 0.3330 -0.001 inch 28 Samples

NTIAC 90% POD = 0.902 @ 0.305 inch
 NTIAC 90/95 POD = 0.902 @ 0.410 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.610 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.568 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = 0.529 inch
 Samples Needed @ Xpodopt = 29
 Xp = 0.5350 inch

File Name = F12203BL.XLS
 Data Set Name = F12203BL(CRACK #)

Directed DOE Options

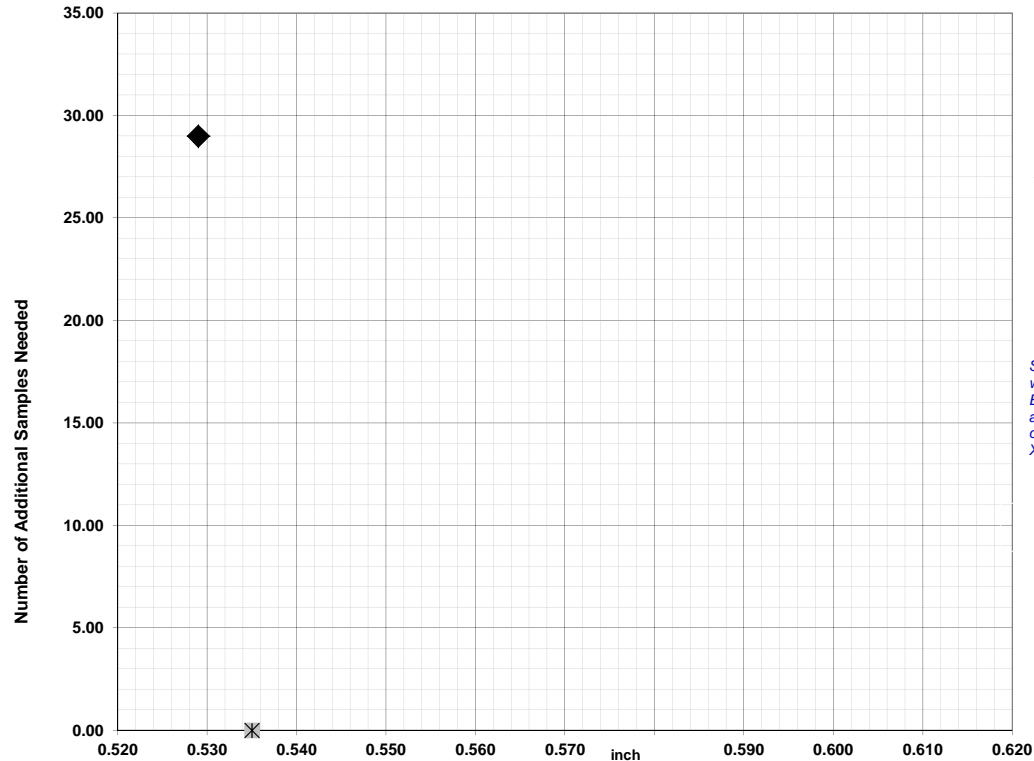


TABLE C

Class Length	Additional Samples
XL =	0.610
Xm =	0.568
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.529 29

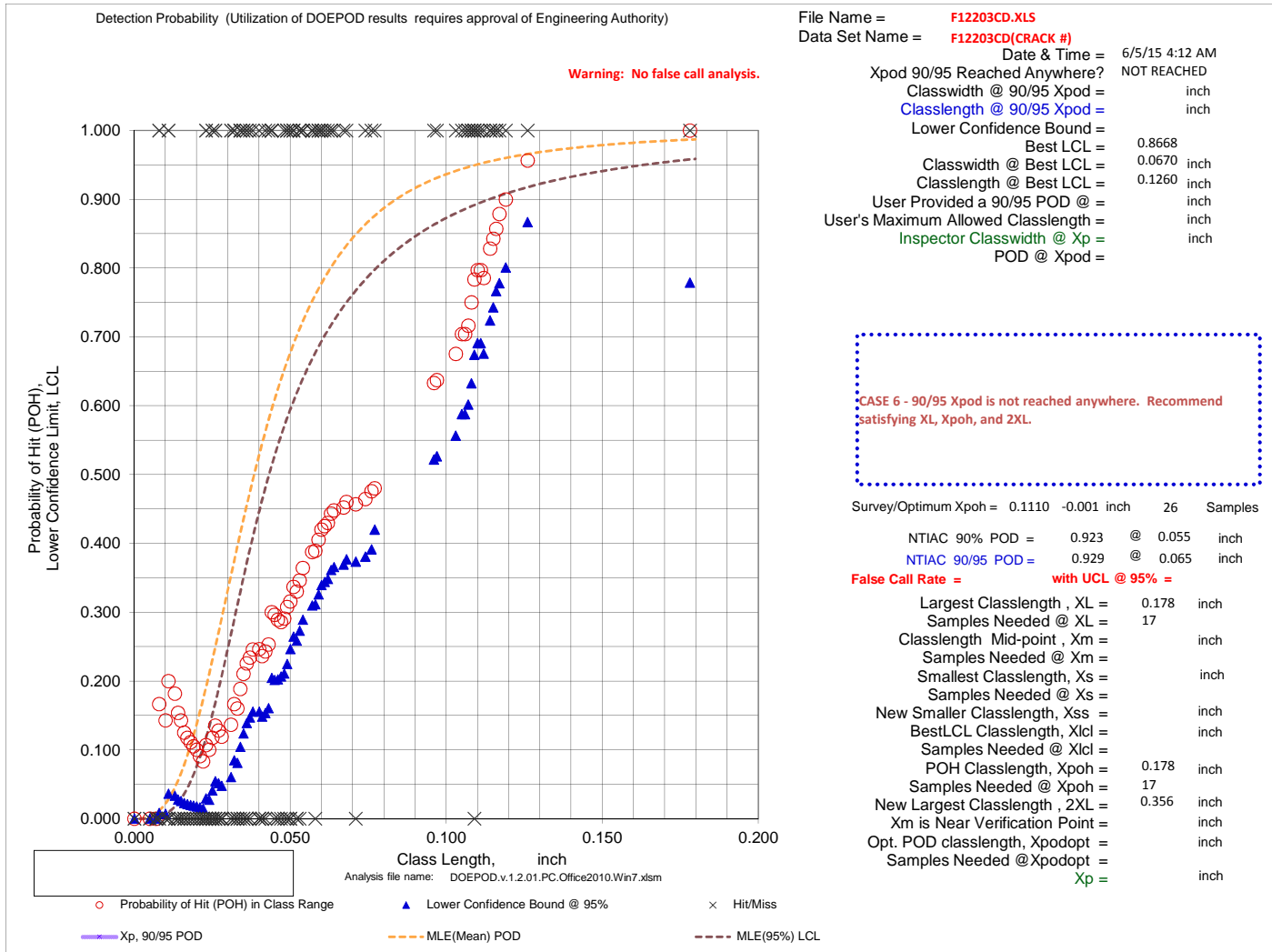
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F12203CD.XLS
 Data Set Name = F12203CD(CRACK #)

Directed DOE Options

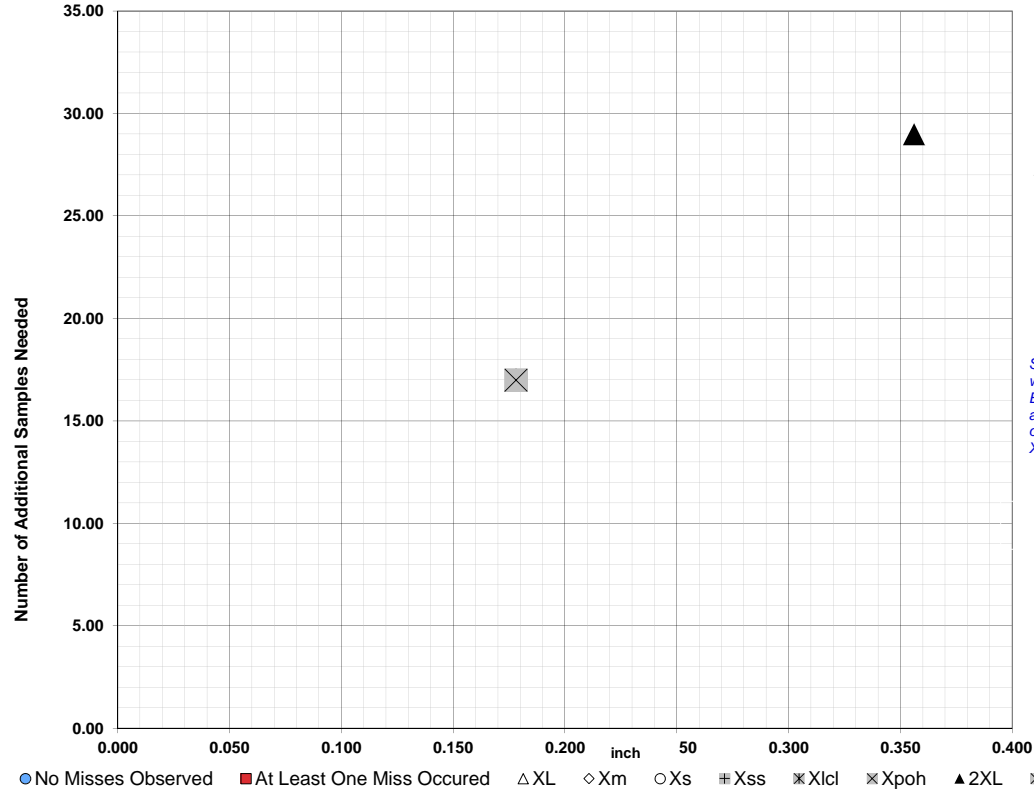


TABLE C

Class Length	Additional Samples
XL = 0.178	17
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.178	17
2XL = 0.356	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

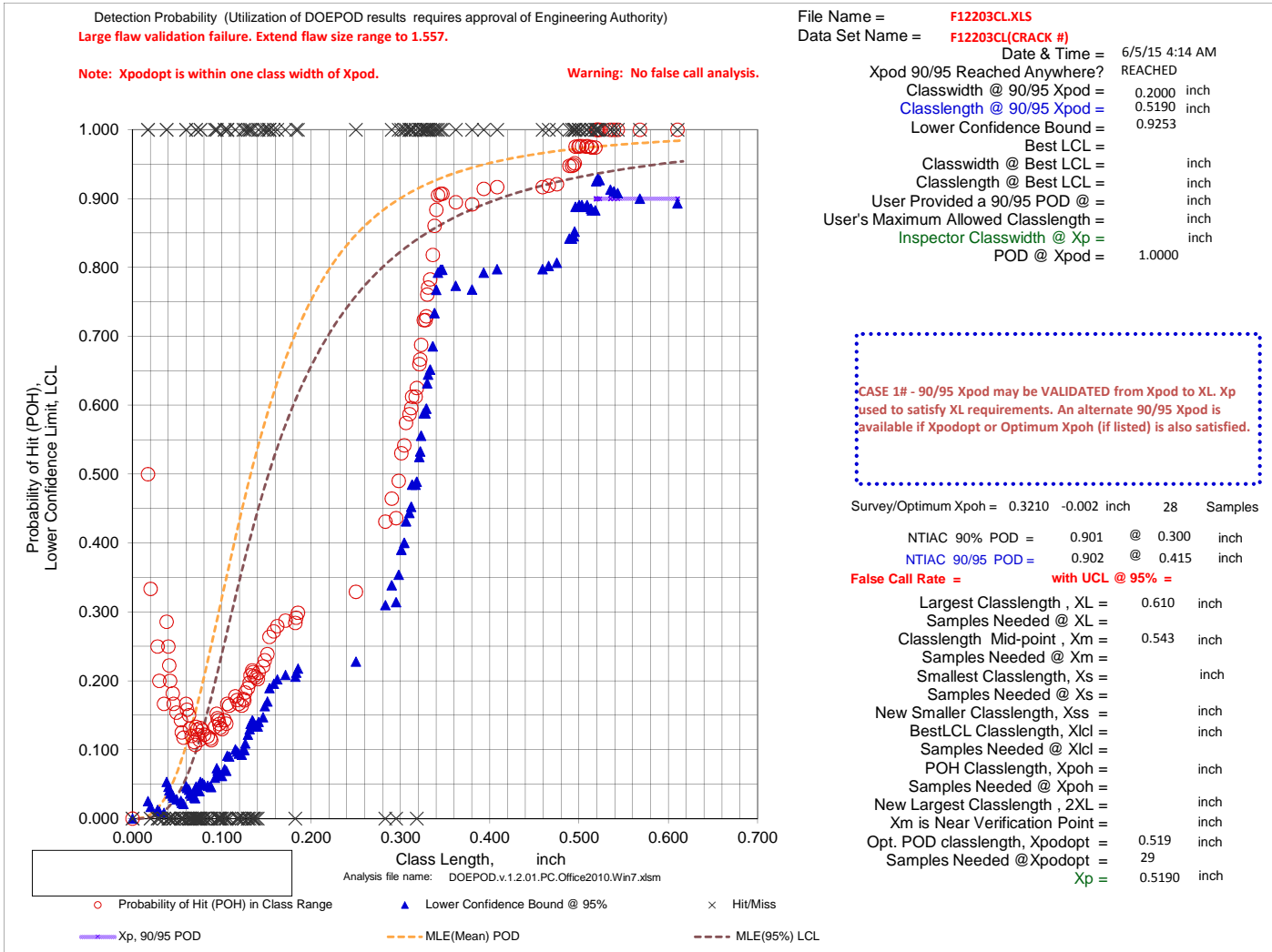
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F12203CL.XLS
 Data Set Name = F12203CL(CRACK #)

Directed DOE Options

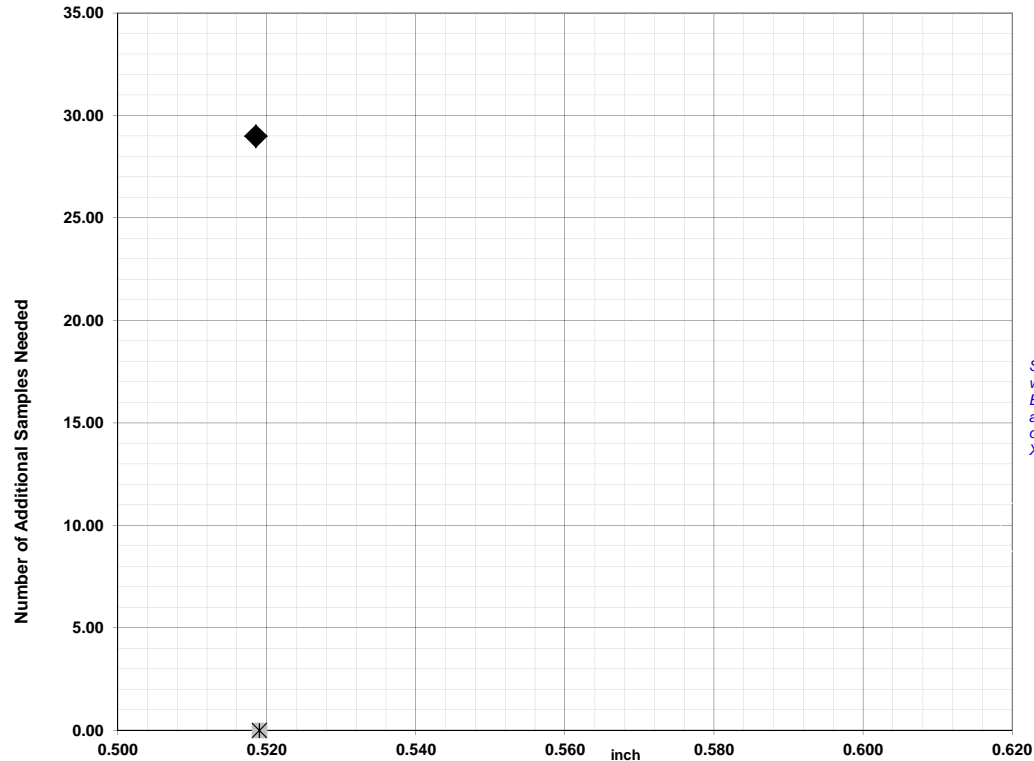


TABLE C

Class Length	Additional Samples
XL =	0.610
Xm =	0.543
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.519 29

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

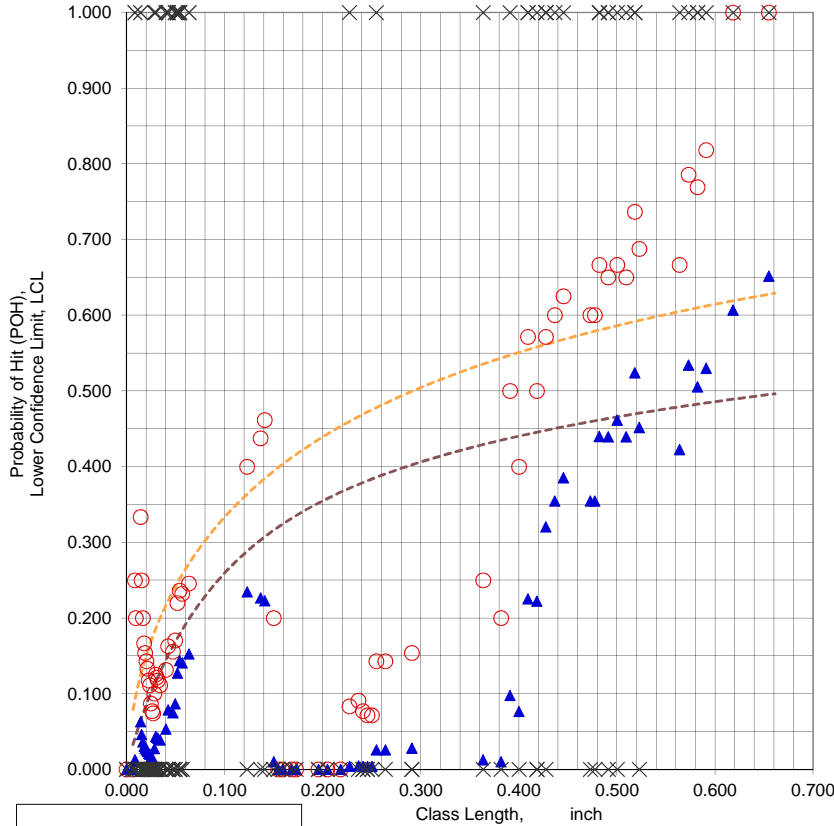
Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Probability of Hit (POH) in Class Range

Lower Confidence Bound @ 95%

Hit/Miss

Xp, 90/95 POD

MLE(Mean) POD

MLE(95%) LCL

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

File Name = F20002AA.XLS
 Data Set Name = F20002AA(CRACK #)
 Date & Time = 6/5/15 4:16 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6518
 Classwidth @ Best LCL = 0.0910 inch
 Classlength @ Best LCL = 0.6545 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.5636 -0.040 inch 28 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength, XL = 0.655 inch
 Samples Needed @ XL = 22
 Classlength Mid-point, Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.655 inch
 Samples Needed @ Xlcl = 22
 POH Classlength, Xpoh = 0.618 inch
 Samples Needed @ Xpoh = 23
 New Largest Classlength, 2XL = 1.309 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F20002AA.XLS
 Data Set Name = F20002AA(CRACK #)

Directed DOE Options

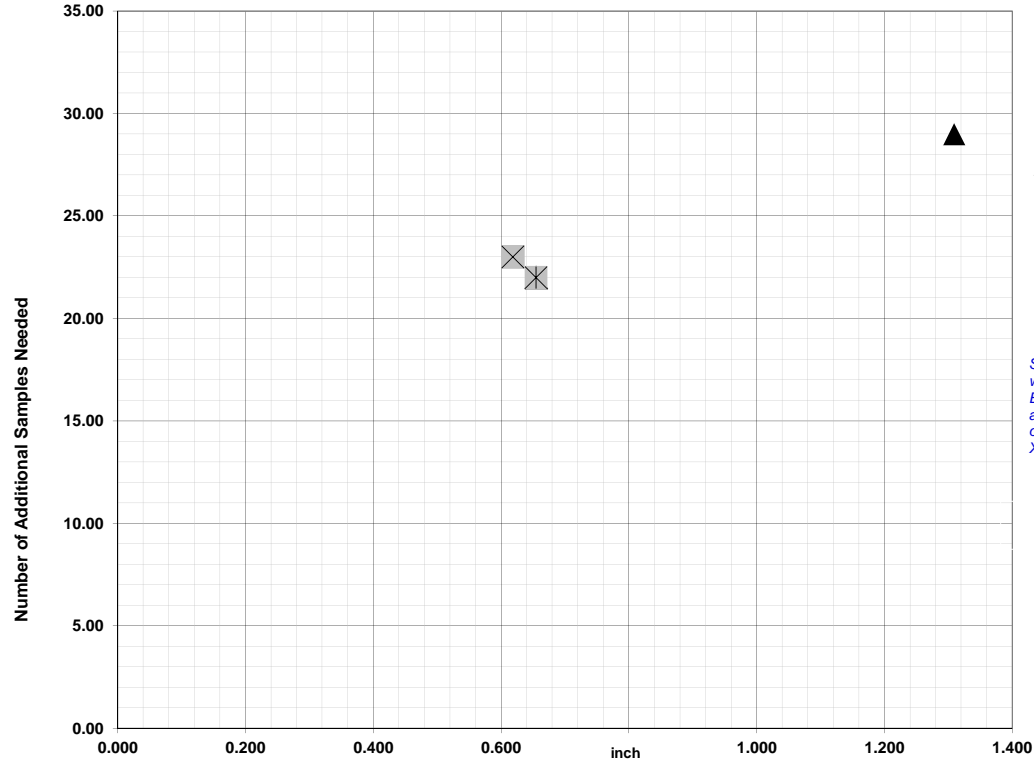


TABLE C

Class Length	Additional Samples
XL =	0.655 22
Xm =	
Xs =	
Xss =	
Xlcl =	0.655 22
Xpoh =	0.618 23
2XL =	1.309 29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

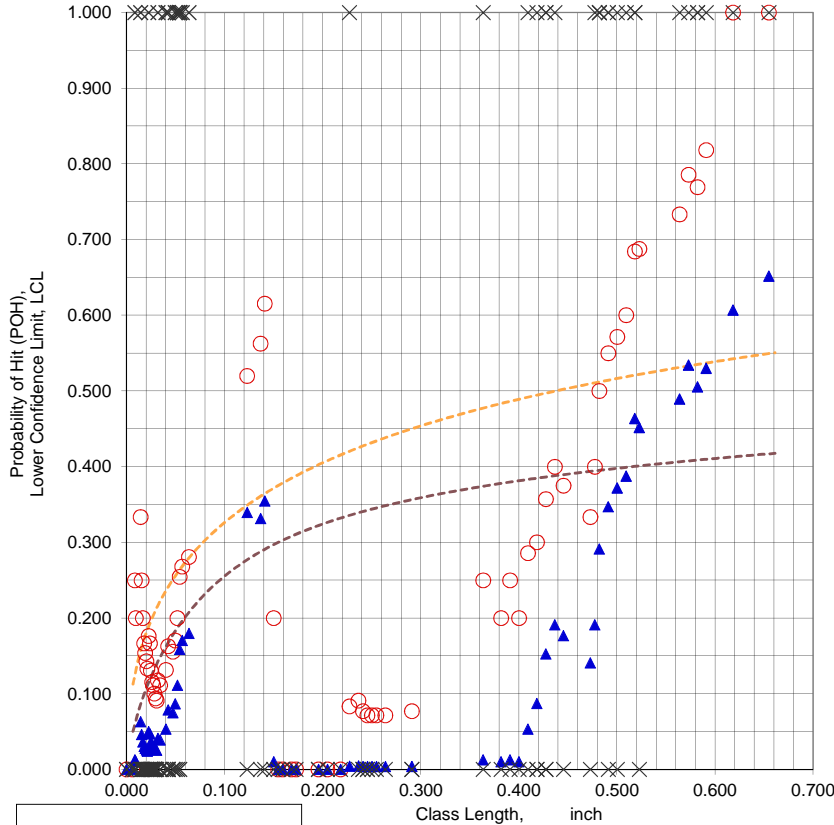
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = F20002BA.XLS
 Data Set Name = F20002BA(CRACK #)
 Date & Time = 6/5/15 4:17 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6518
 Classwidth @ Best LCL = 0.0910 inch
 Classlength @ Best LCL = 0.6545 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.5636 -0.040 inch 28 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.655 inch
 Samples Needed @ XL = 22
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.655 inch
 Samples Needed @ Xlcl = 22
 POH Classlength, Xpoh = 0.618 inch
 Samples Needed @ Xpoh = 23
 New Largest Classlength , 2XL = 1.309 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F20002BA.XLS
 Data Set Name = F20002BA(CRACK #)

Directed DOE Options

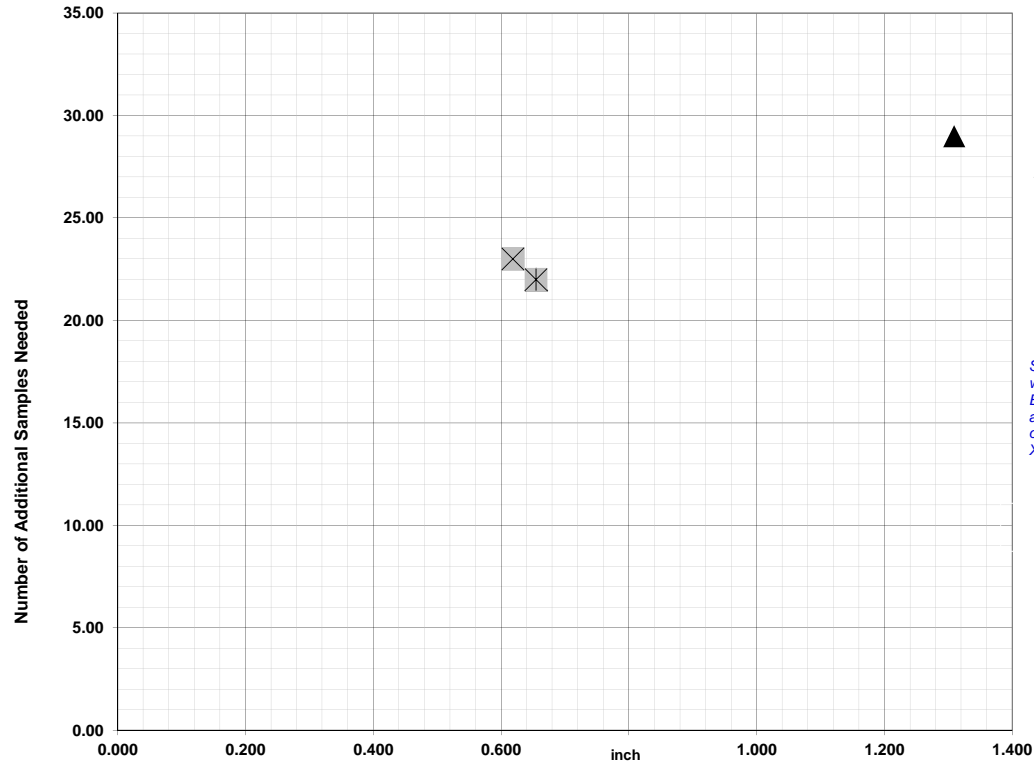


TABLE C

Class Length	Additional Samples
XL = 0.655	22
Xm =	
Xs =	
Xss =	
Xlcl = 0.655	22
Xpoh = 0.618	23
2XL = 1.309	29

**Alternate Xm =
 Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

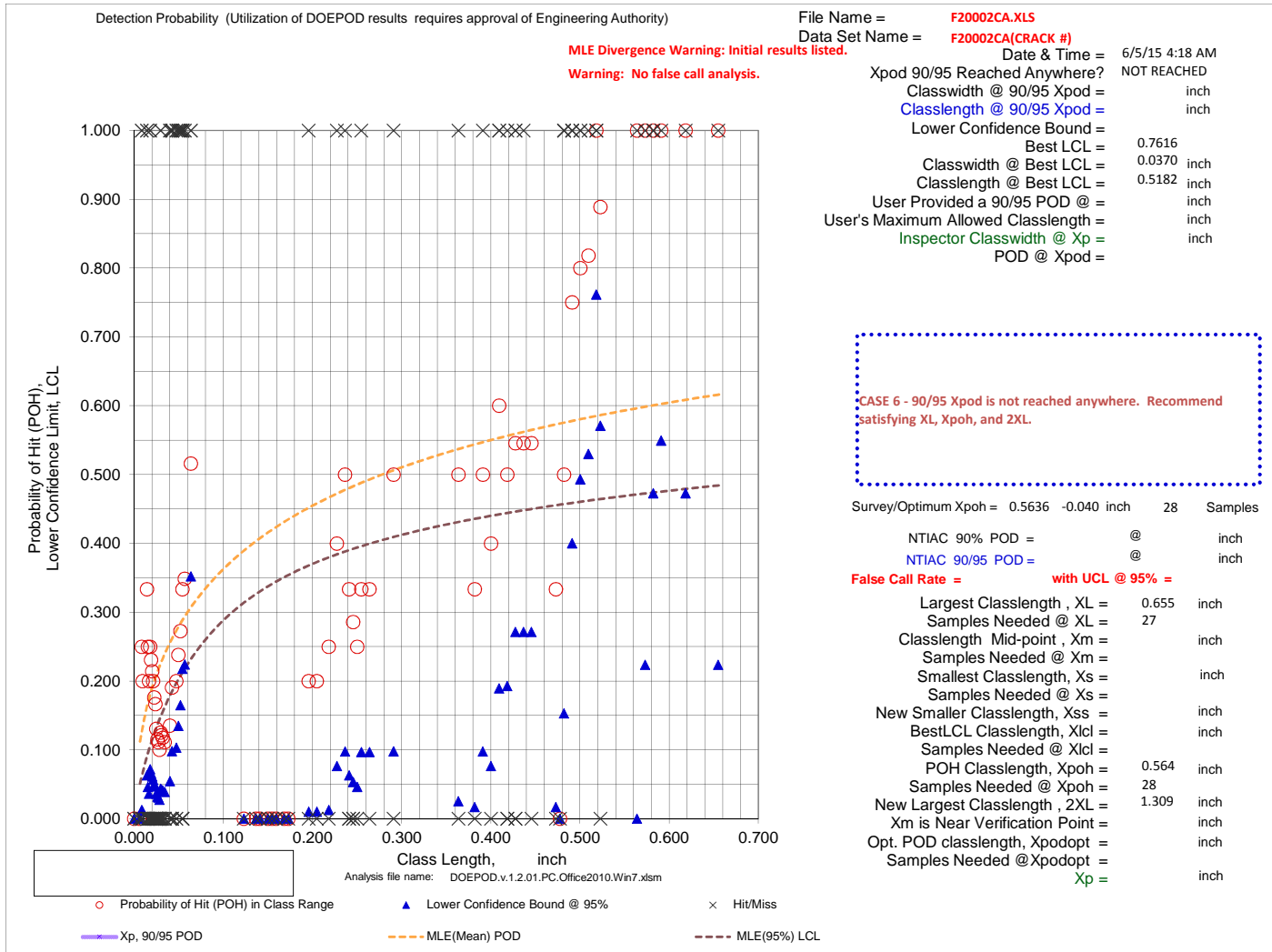
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F20002CA.XLS
 Data Set Name = F20002CA(CRACK #)

Directed DOE Options

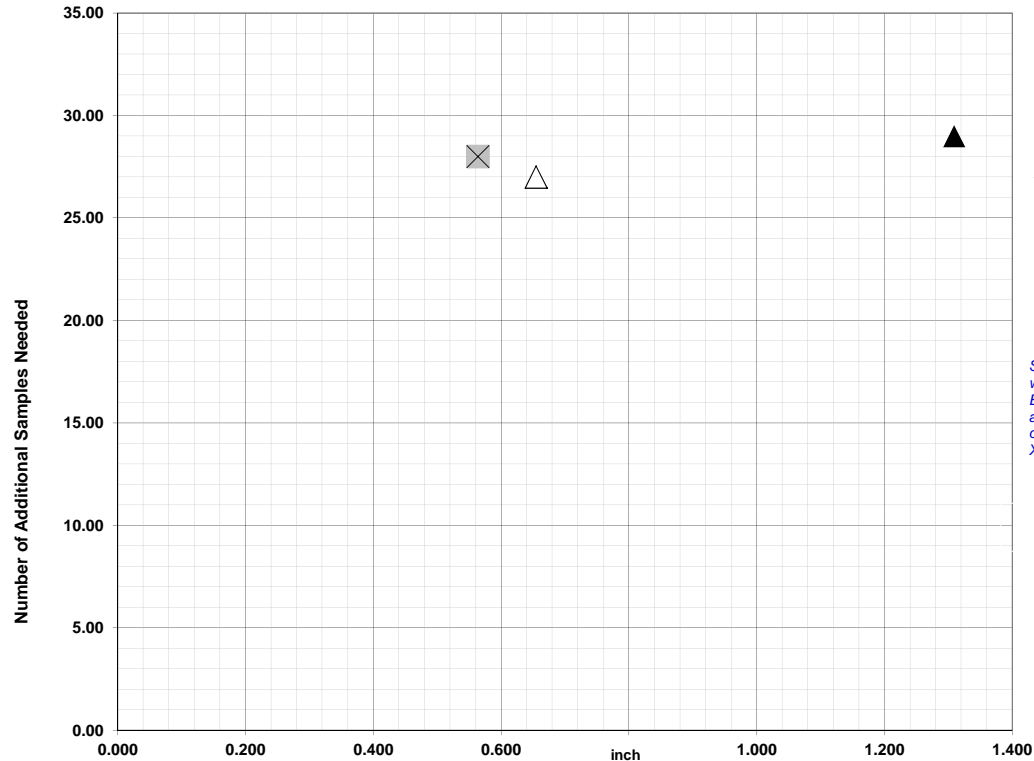


TABLE C

Class Length	Additional Samples
XL = 0.655	27
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.564	28
2XL = 1.309	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

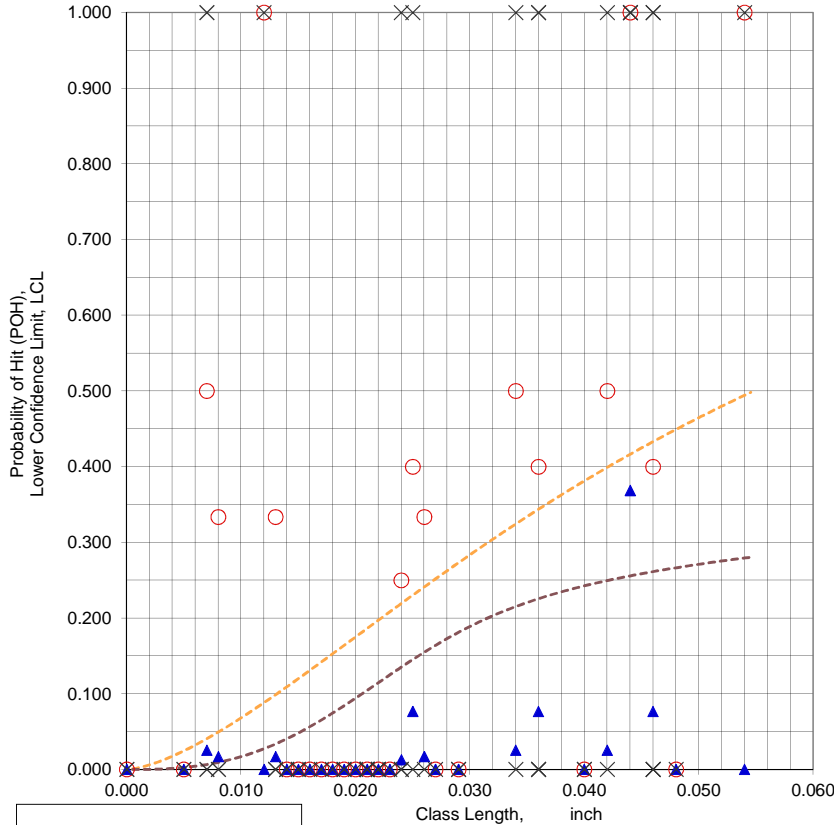
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ⊗ Xlcl ⊗ Xpoh ▲ 2XL ⊗ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
 — Xp, 90/95 POD
 - - - MLE(Mean) POD
 - - - MLE(95%) LCL

File Name = F20852AD.XLS
 Data Set Name = F20852AD(CRACK #)
 Date & Time = 6/5/15 4:20 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.3684
 Classwidth @ Best LCL = 0.0010 inch
 Classlength @ Best LCL = 0.0440 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.0540 -0.005 inch 28 Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.054 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.054 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 0.108 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F20852AD.XLS
 Data Set Name = F20852AD(CRACK #)

Directed DOE Options

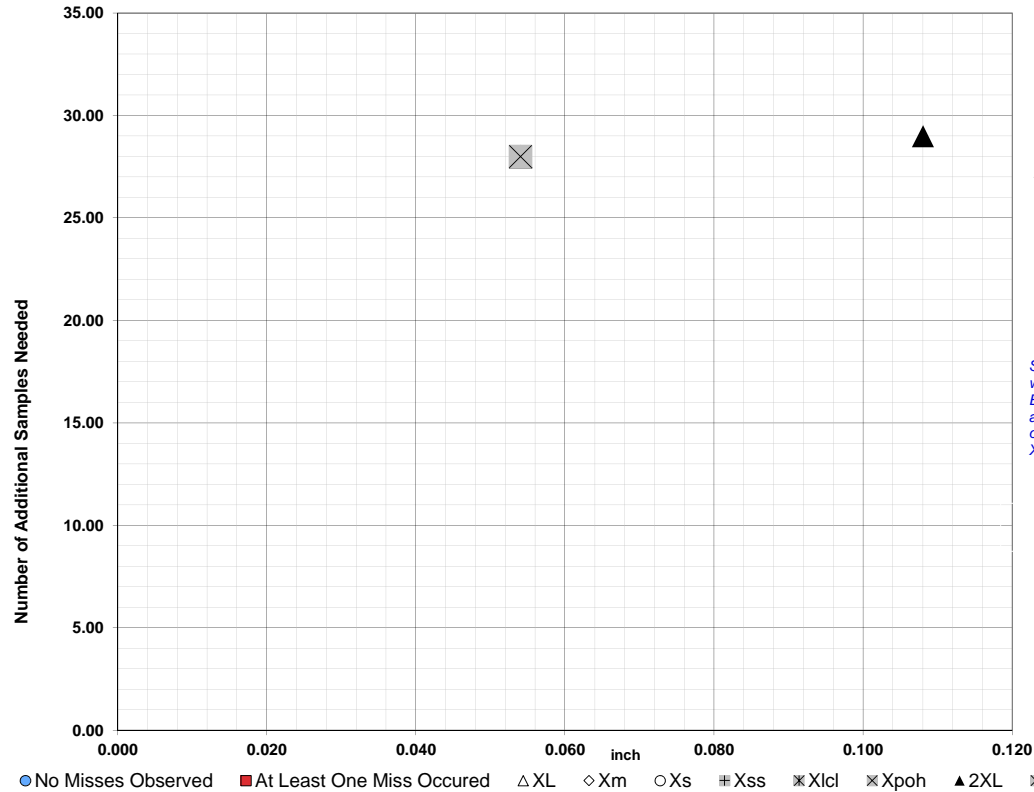


TABLE C

Class Length	Additional Samples
XL = 0.054	28
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 0.054	28
2XL = 0.108	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

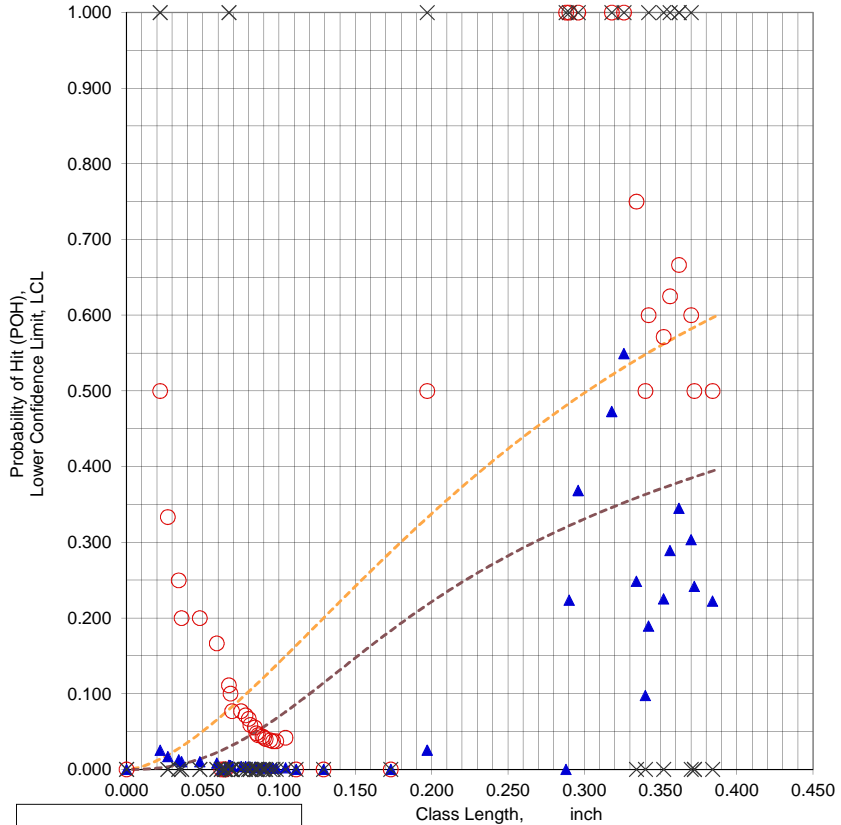
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Probability of Hit (POH) in Class Range

○ Probability of Hit (POH) in Class Range

— Xp, 90/95 POD

▲ Lower Confidence Bound @ 95%

--- MLE(Mean) POD

× Hit/Miss

--- MLE(95%) LCL

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

File Name = F20852AL.XLS
 Data Set Name = F20852AL(CRACK #)
 Date & Time = 6/5/15 4:20 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.5493
 Classwidth @ Best LCL = 0.0380 inch
 Classlength @ Best LCL = 0.3260 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.768 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F20852AL.XLS
 Data Set Name = F20852AL(CRACK #)

Directed DOE Options

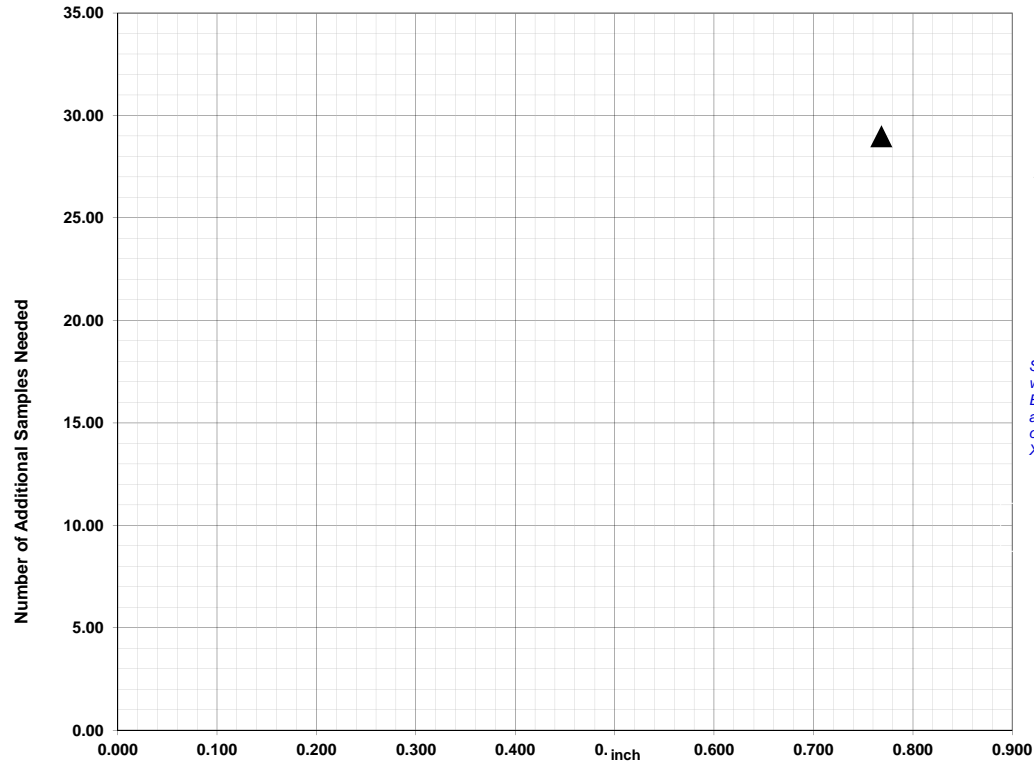


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.768	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.768 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

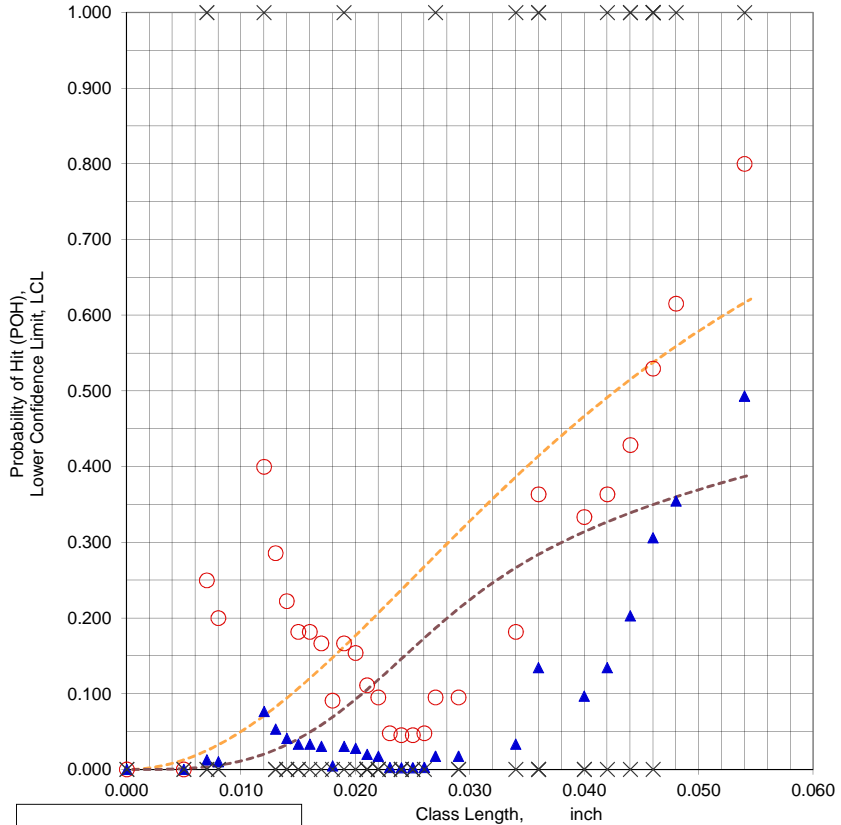
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **F20852BD.XLS**
 Data Set Name = **F20852BD(CRACK #)**
 Date & Time = 6/5/15 4:22 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.4931
 Classwidth @ Best LCL = 0.0100 inch
 Classlength @ Best LCL = 0.0540 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.0480 -0.001 inch 28 Samples
 NTIAC 90% POD = 0.905 @ 0.130 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.108 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F20852BD.XLS
 Data Set Name = F20852BD(CRACK #)

Directed DOE Options

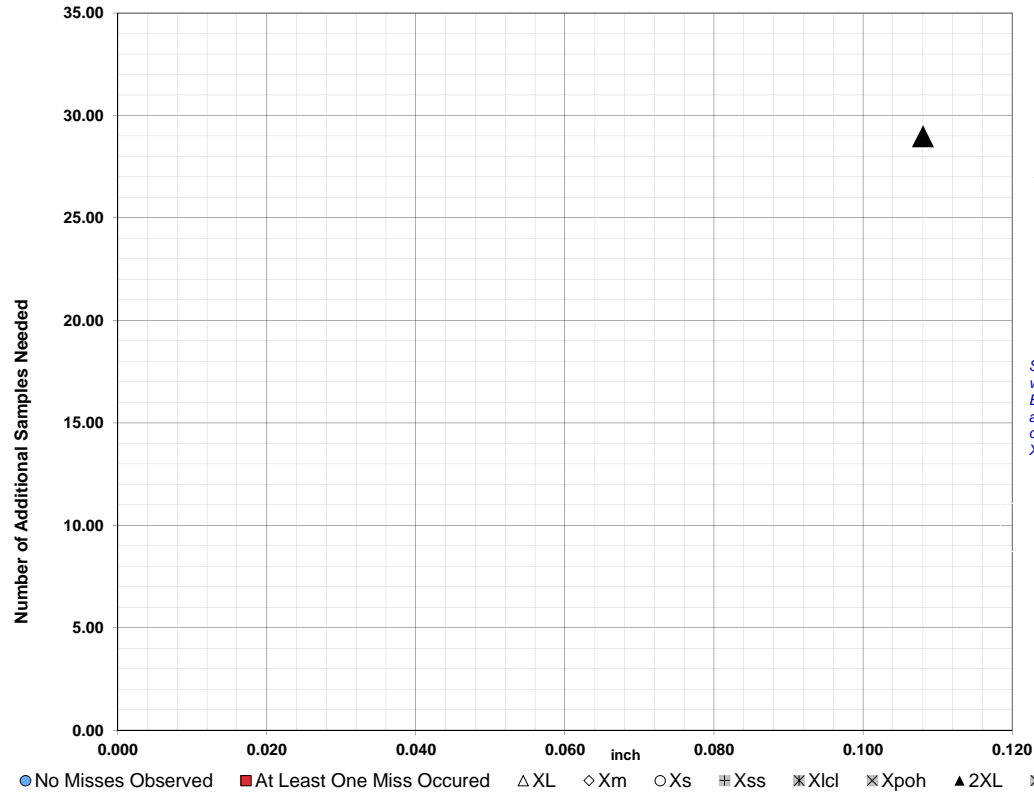


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.108	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.108 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

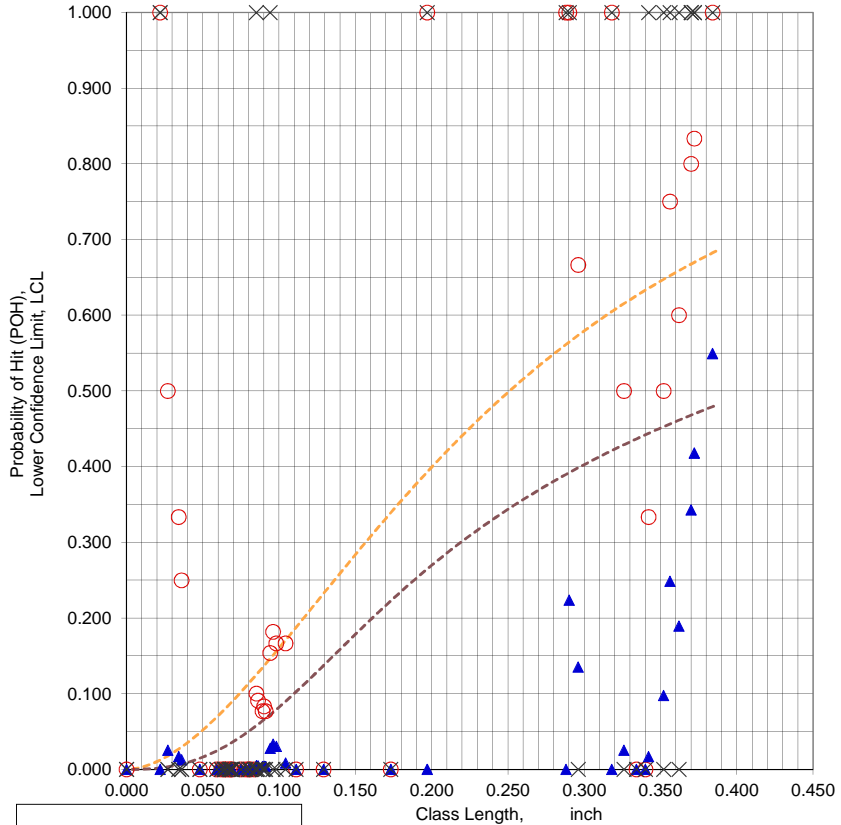
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **F20852BL.XLS**
 Data Set Name = **F20852BL(CRACK #)**
 Date & Time = 6/5/15 4:22 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.5493
 Classwidth @ Best LCL = 0.0140 inch
 Classlength @ Best LCL = 0.3840 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.3700 -0.007 inch 27 Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.384 inch
 Samples Needed @ XL = 24
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.384 inch
 Samples Needed @ Xlcl = 24
 POH Classlength, Xpoh = 0.384 inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.768 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = F20852BL.XLS
 Data Set Name = F20852BL(CRACK #)

Directed DOE Options

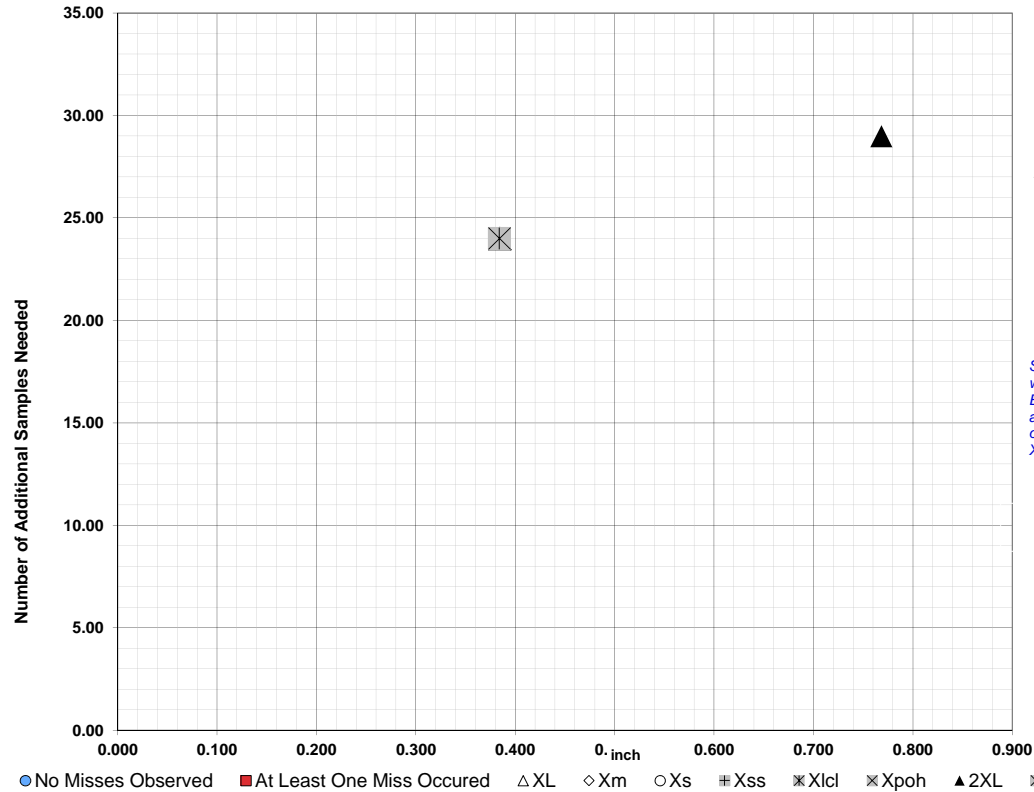


TABLE C

Class Length	Additional Samples
XL = 0.384	24
Xm =	
Xs =	
Xss =	
Xlcl = 0.384	24
Xpoh = 0.384	
2XL = 0.768	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

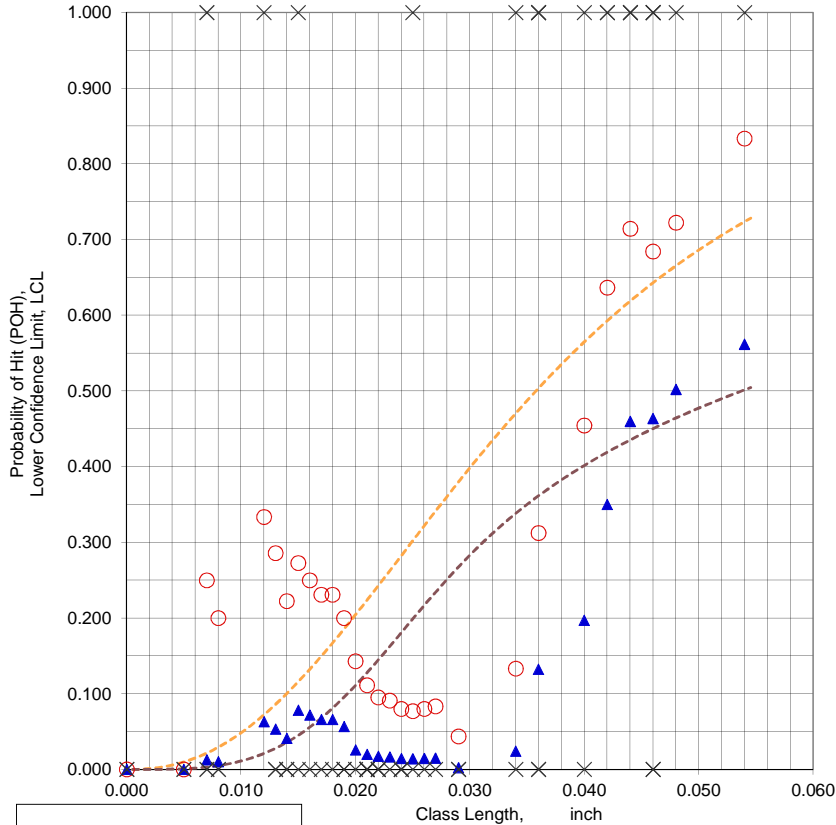
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **F20852CD.XLS**
 Data Set Name = **F20852CD(CRACK #)**
 Date & Time = 6/5/15 4:23 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.5619
 Classwidth @ Best LCL = 0.0120 inch
 Classlength @ Best LCL = 0.0540 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.0480 -0.001 inch 28 Samples
 NTIAC 90% POD = 0.908 @ 0.095 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.108 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F20852CD.XLS
 Data Set Name = F20852CD(CRACK #)

Directed DOE Options

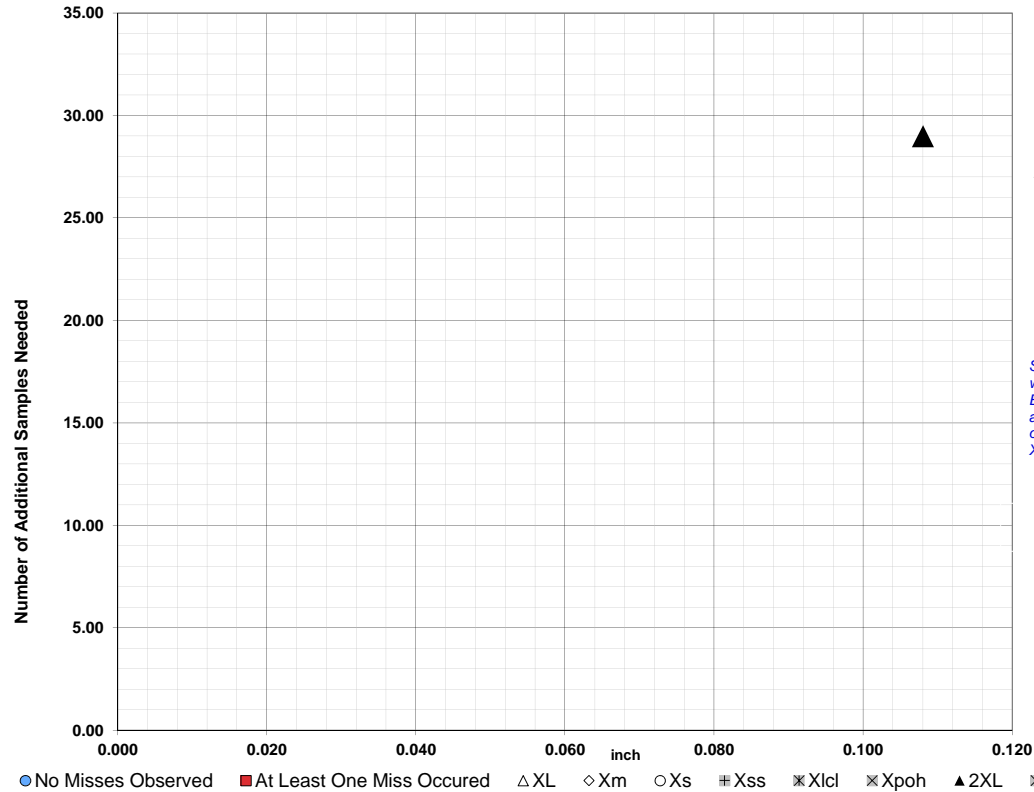


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.108	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.108 29
 **Alternate Xm =
 Xpodopt =

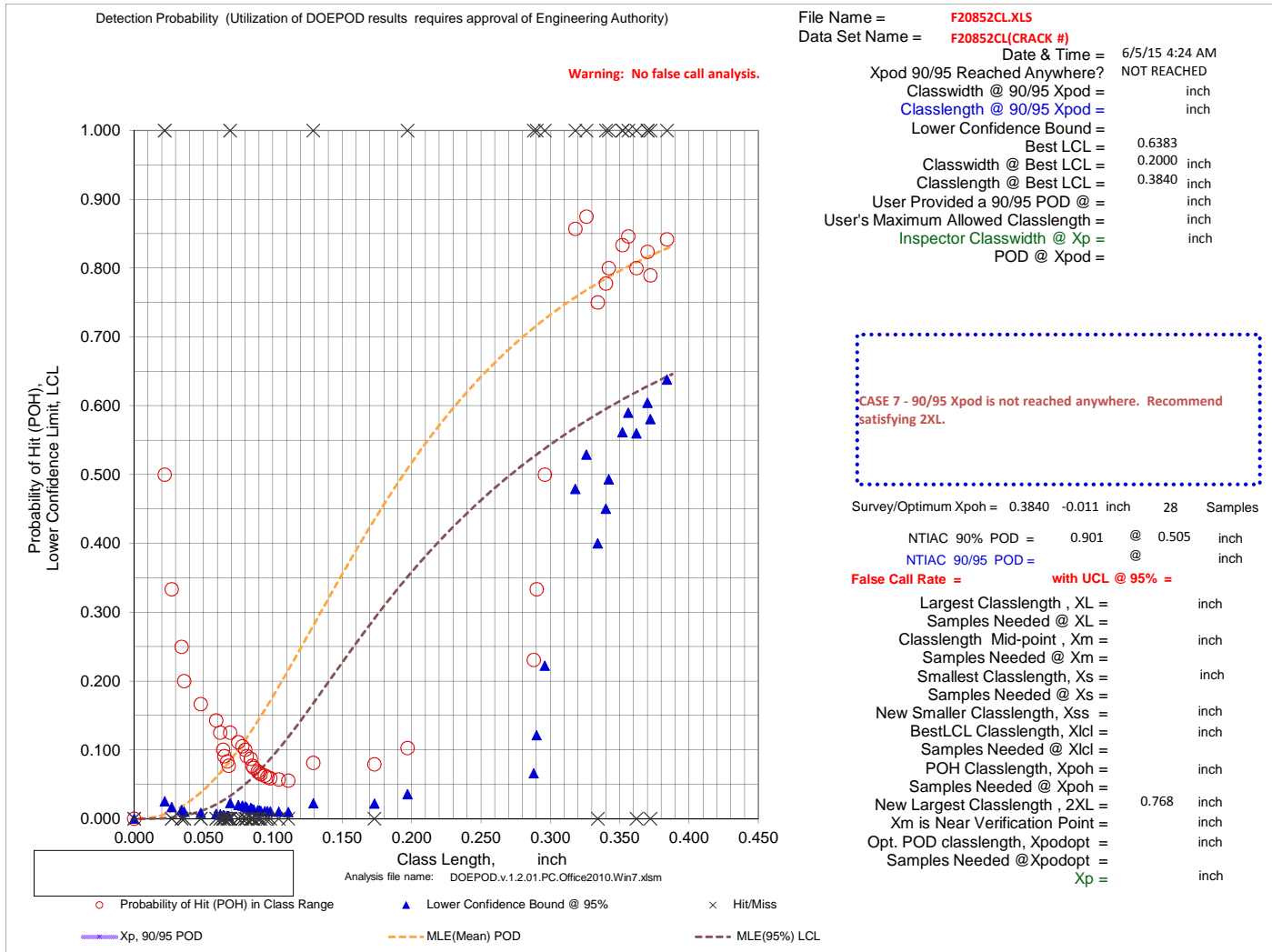
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F20852CL.XLS
 Data Set Name = F20852CL(CRACK #)

Directed DOE Options

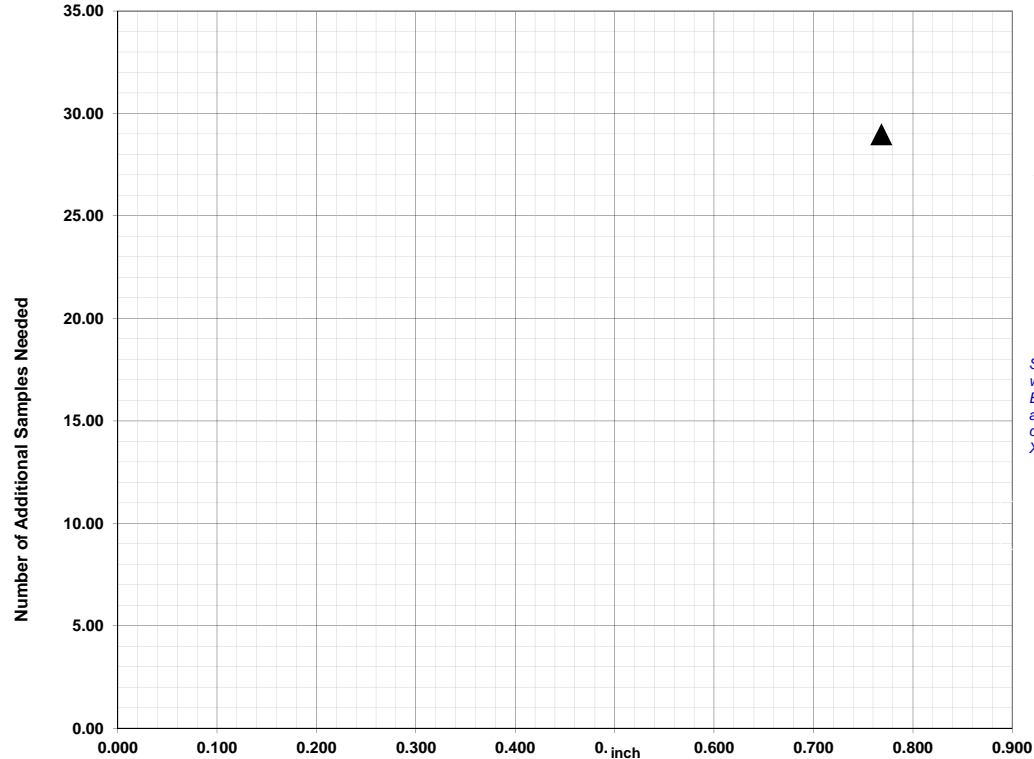


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.768	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.768 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

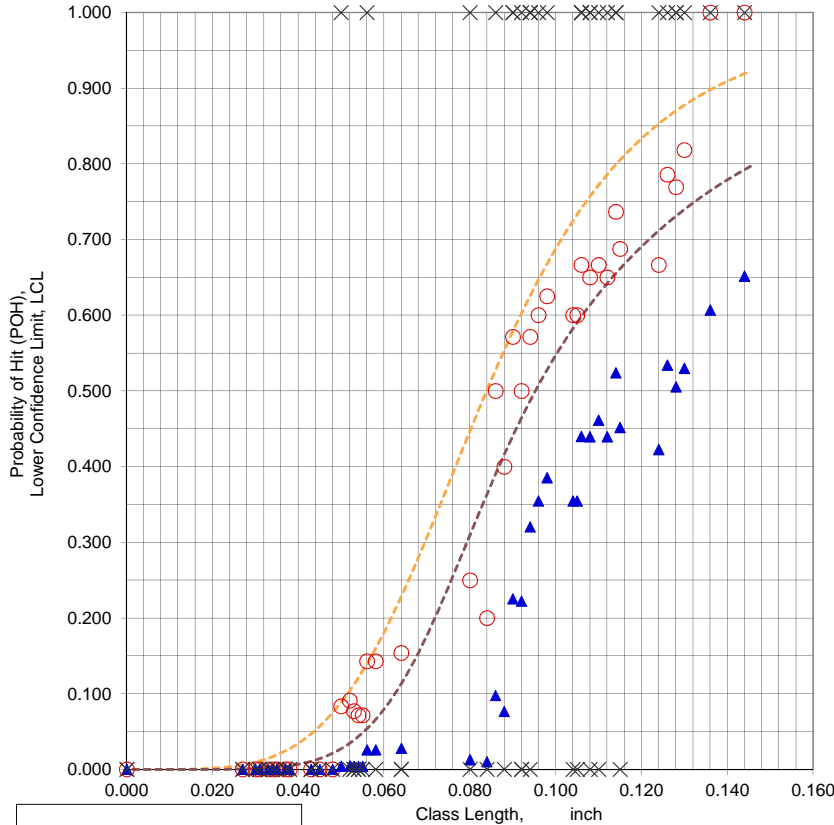
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **F22202AD.XLS**
 Data Set Name = **F22202AD(CRACK #)**
 Date & Time = 6/5/15 4:25 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6518
 Classwidth @ Best LCL = 0.0200 inch
 Classlength @ Best LCL = 0.1440 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.1240 -0.008 inch 28 Samples

NTIAC 90% POD = 0.909 @ 0.140 inch
 NTIAC 90/95 POD = 0.904 @ 0.200 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.144 inch
 Samples Needed @ XL = 22
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.144 inch
 Samples Needed @ Xlcl = 22
 POH Classlength, Xpoh = 0.136 inch
 Samples Needed @ Xpoh = 23
 New Largest Classlength , 2XL = 0.288 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
 — Xp, 90/95 POD
 - - - MLE(Mean) POD
 - - - MLE(95%) LCL

File Name = F22202AD.XLS
 Data Set Name = F22202AD(CRACK #)

Directed DOE Options

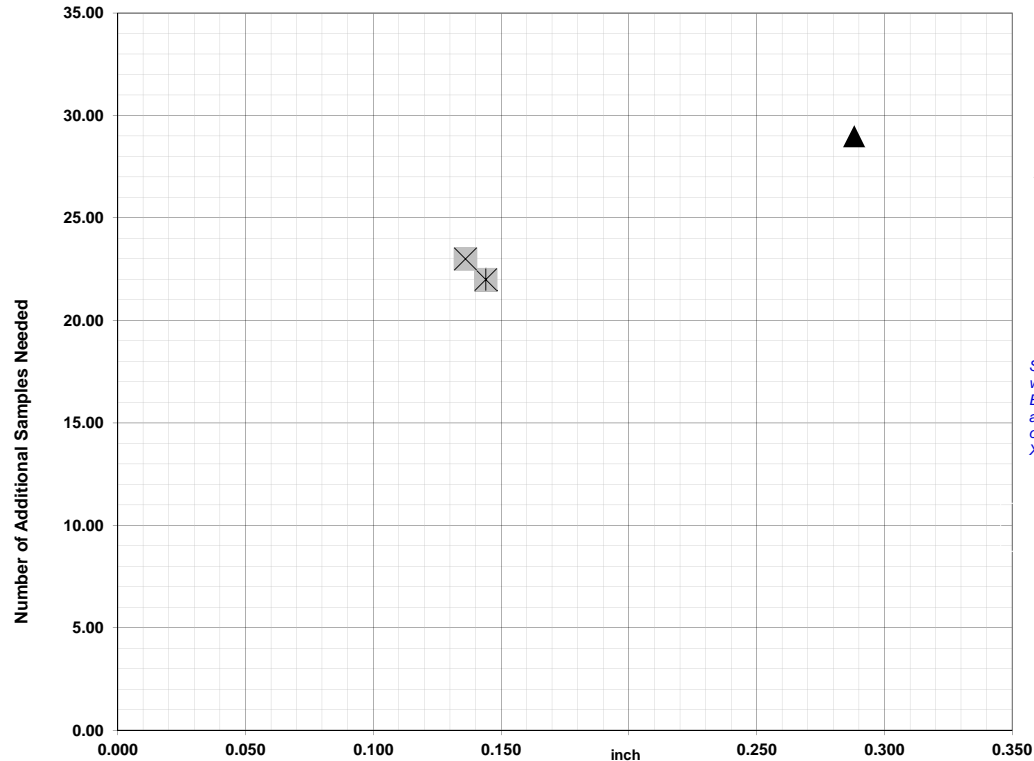


TABLE C

Class Length	Additional Samples
XL = 0.144	22
Xm =	
Xs =	
Xss =	
XLcl = 0.144	22
Xpoh = 0.136	23
2XL = 0.288	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

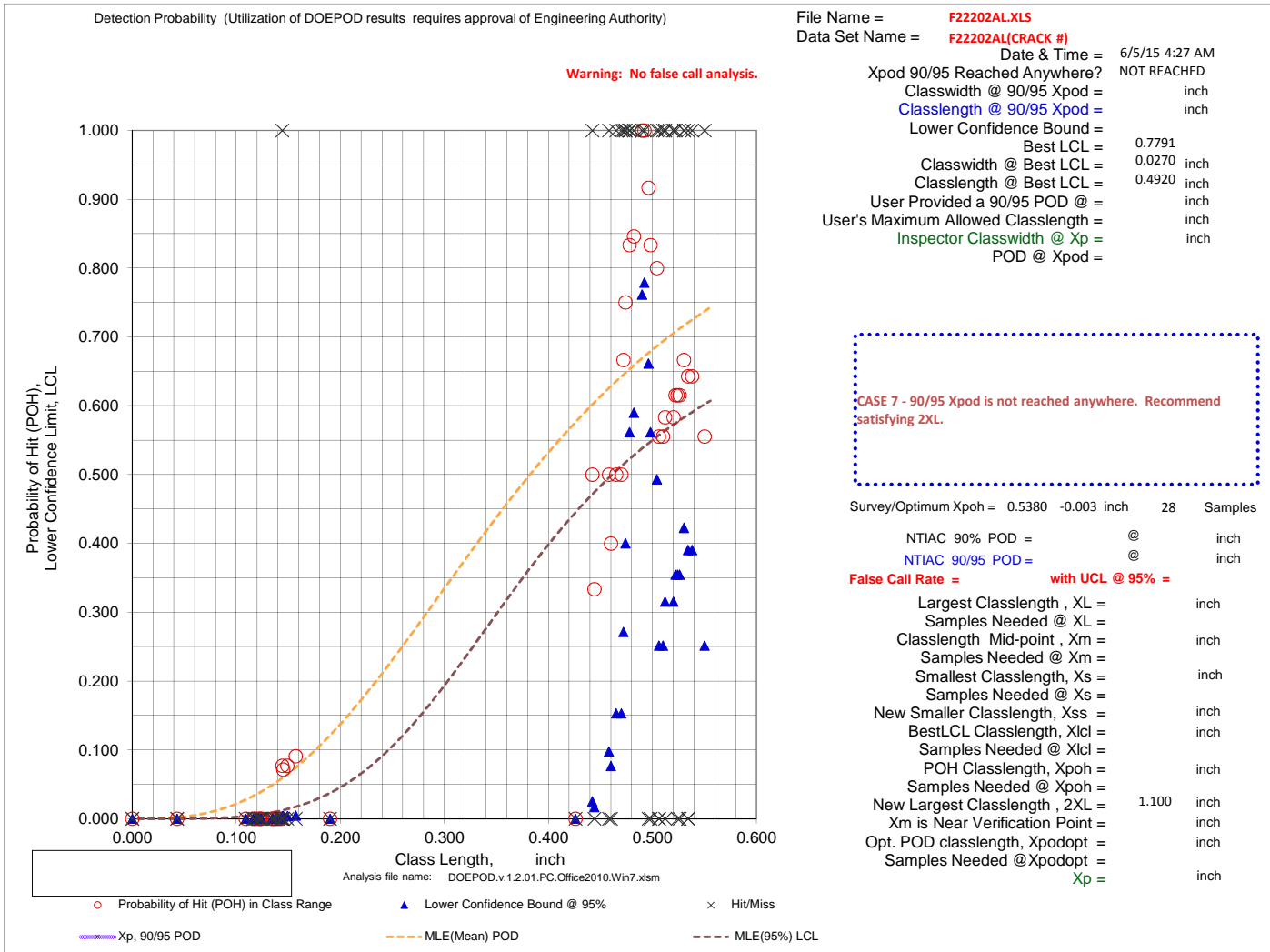
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ XLcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F22202AL.XLS
 Data Set Name = F22202AL(CRACK #)

Directed DOE Options

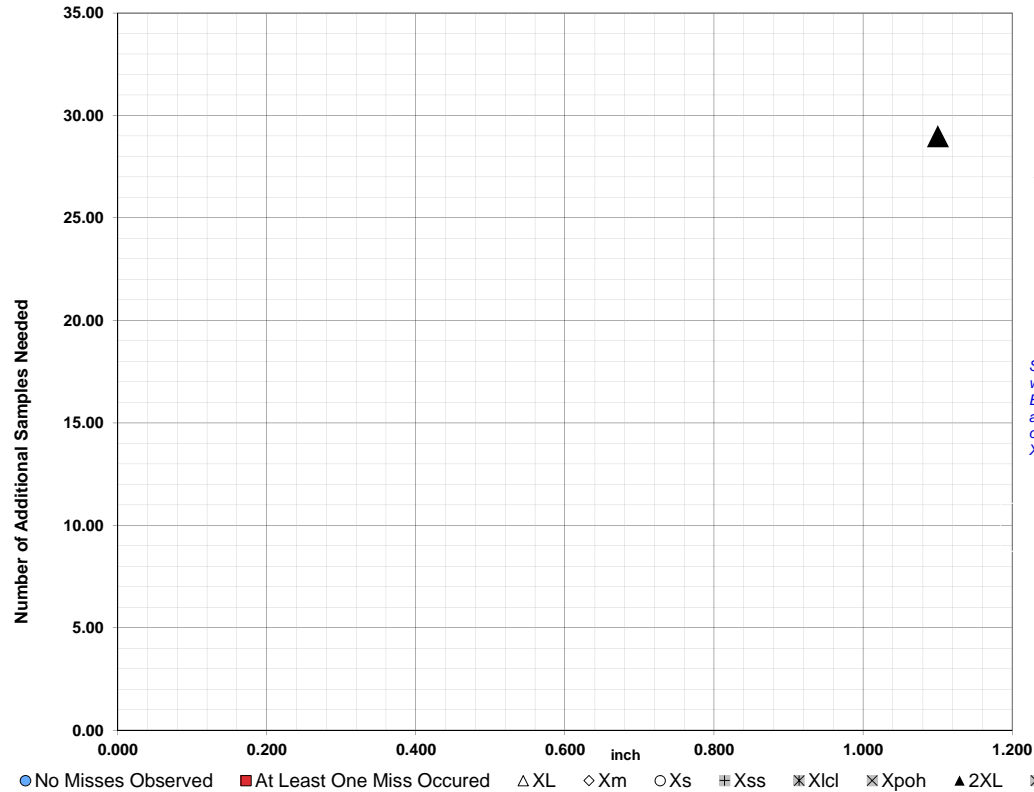


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 1.100	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 1.100 29
 **Alternate Xm =
 Xpodopt =

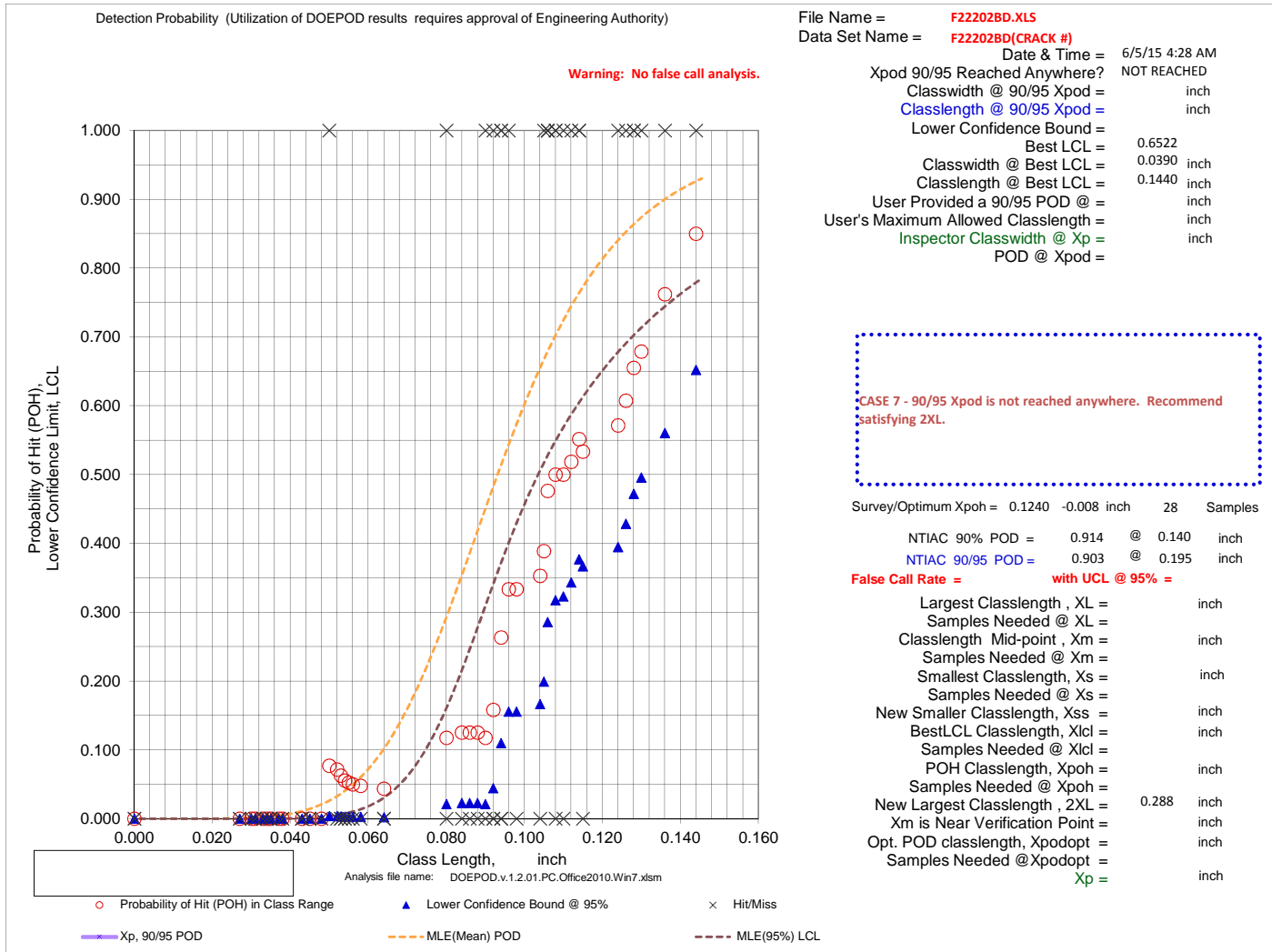
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F22202BD.XLS
 Data Set Name = F22202BD(CRACK #)

Directed DOE Options

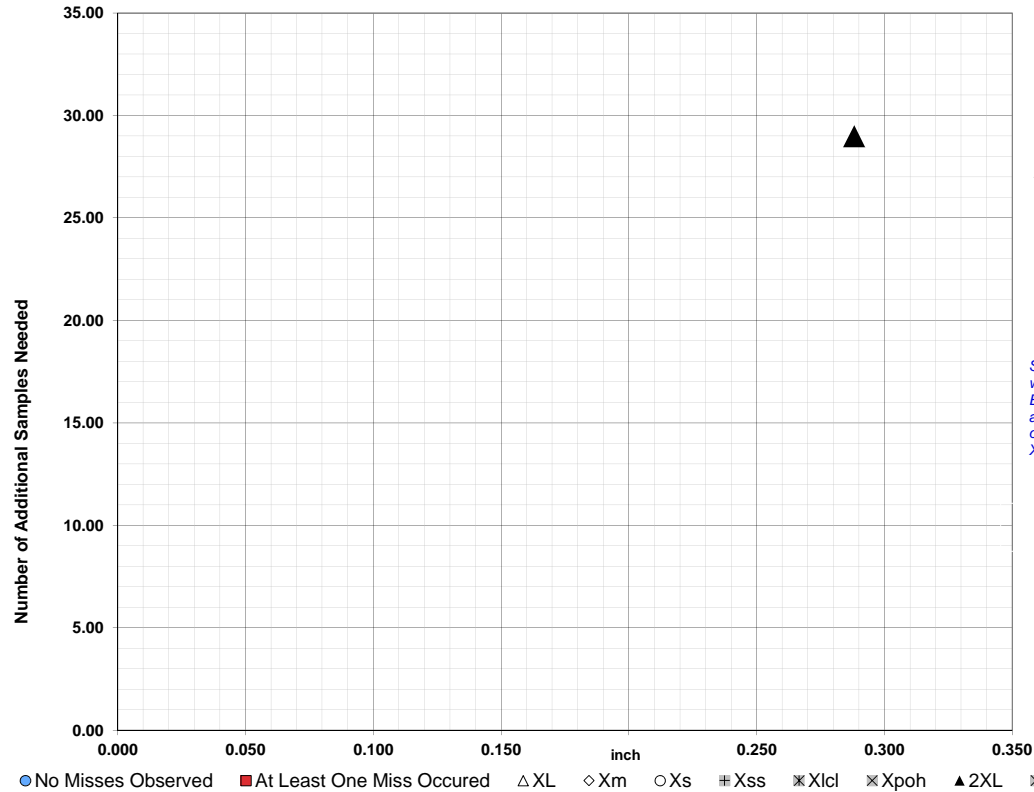


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.288	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.288 29
 **Alternate Xm =
 Xpodopt =

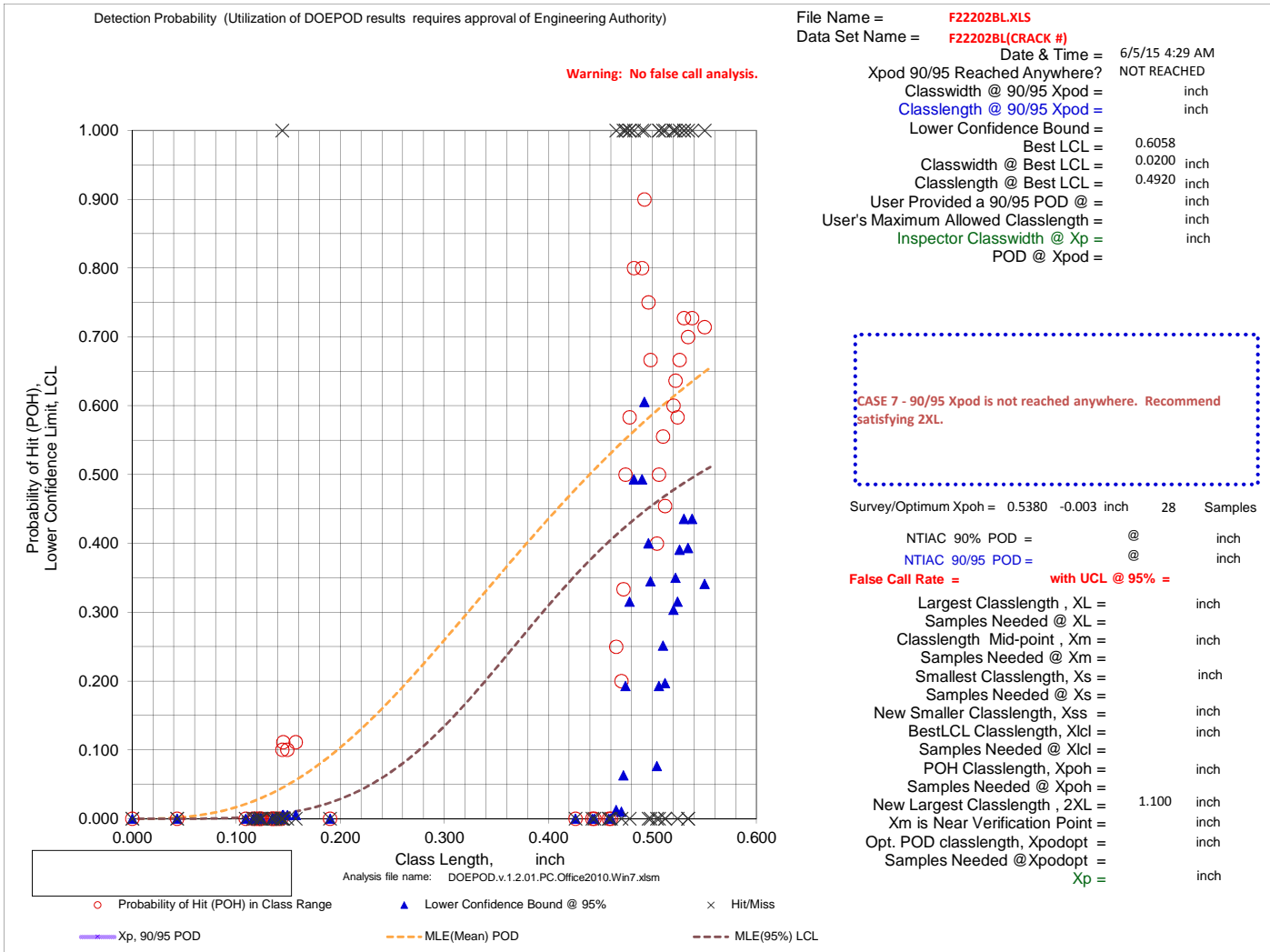
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F22202BL.XLS
 Data Set Name = F22202BL(CRACK #)

Directed DOE Options

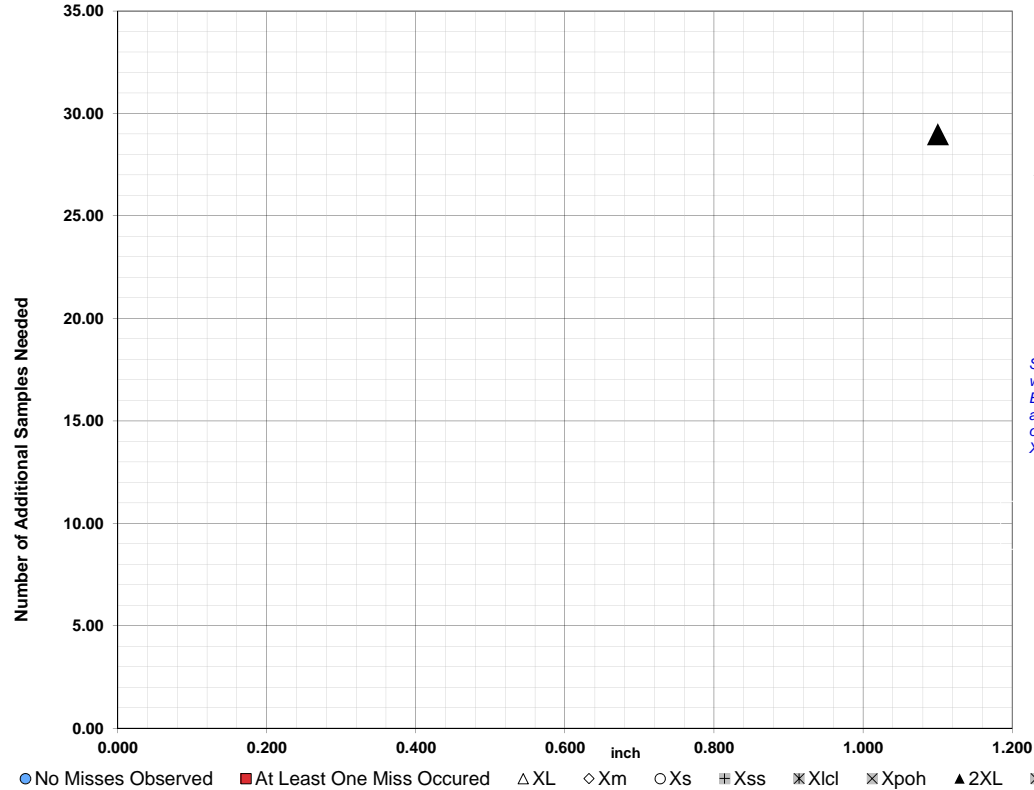


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 1.100	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 1.100 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

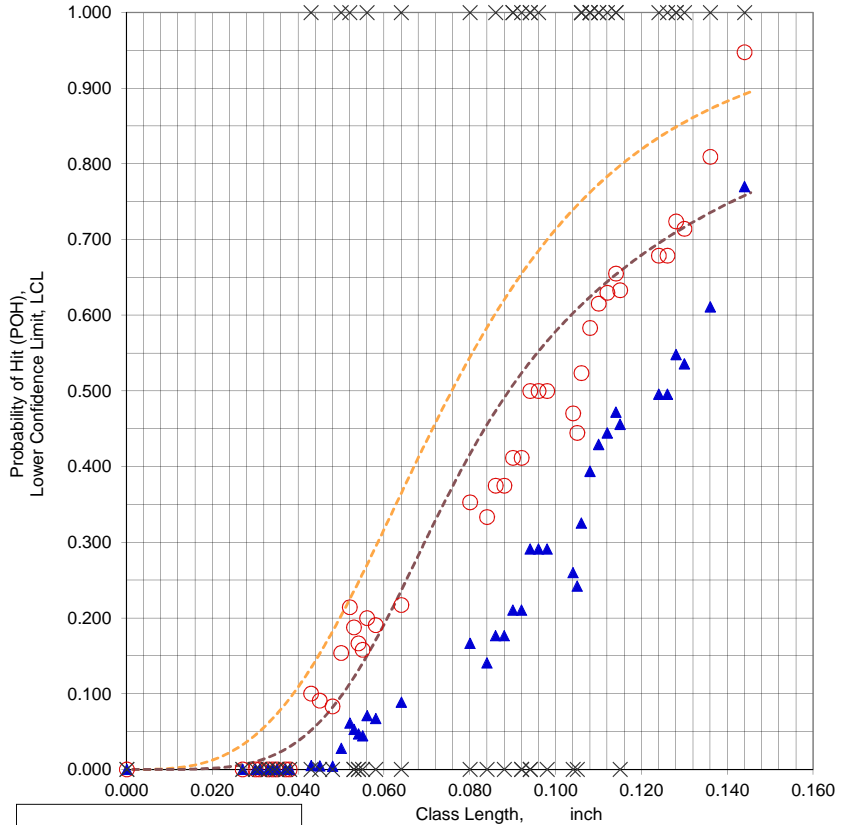
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
— Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **F22202CD.XLS**
 Data Set Name = **F22202CD(CRACK #)**
 Date & Time = 6/5/15 4:30 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7699
 Classwidth @ Best LCL = 0.0380 inch
 Classlength @ Best LCL = 0.1440 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.1240 -0.008 inch 28 Samples
 NTIAC 90% POD = 0.904 @ 0.150 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.288 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F22202CD.XLS
 Data Set Name = F22202CD(CRACK #)

Directed DOE Options

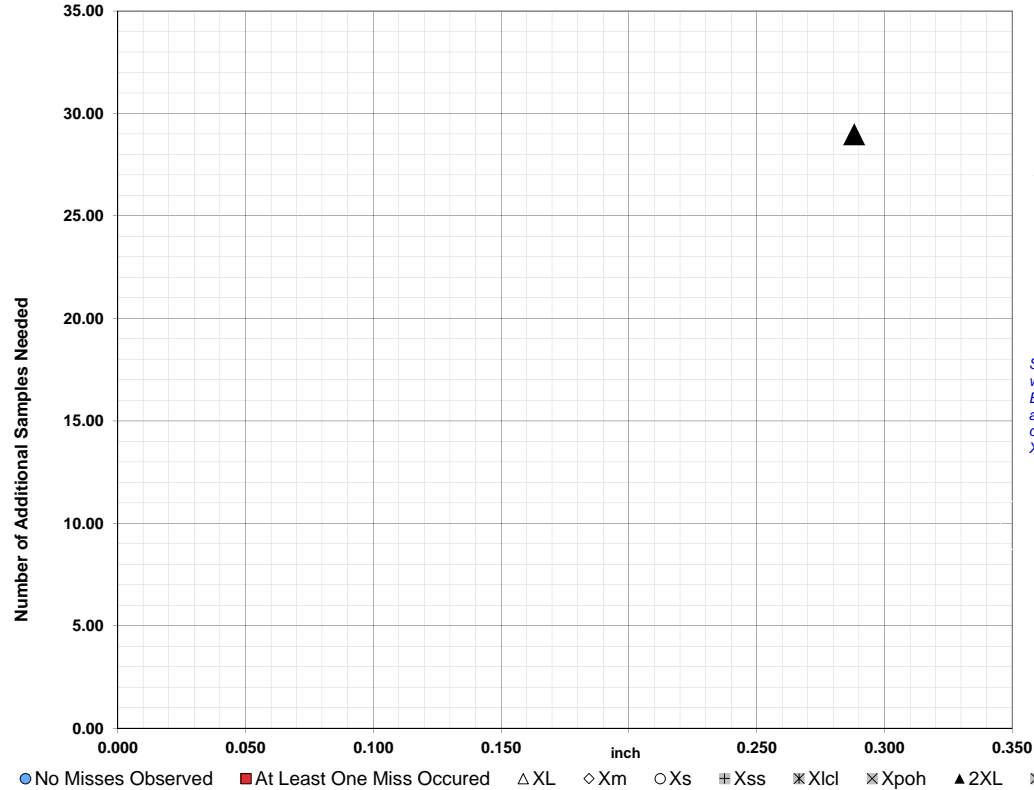


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.288	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.288 29
 **Alternate Xm =
 Xpodopt =

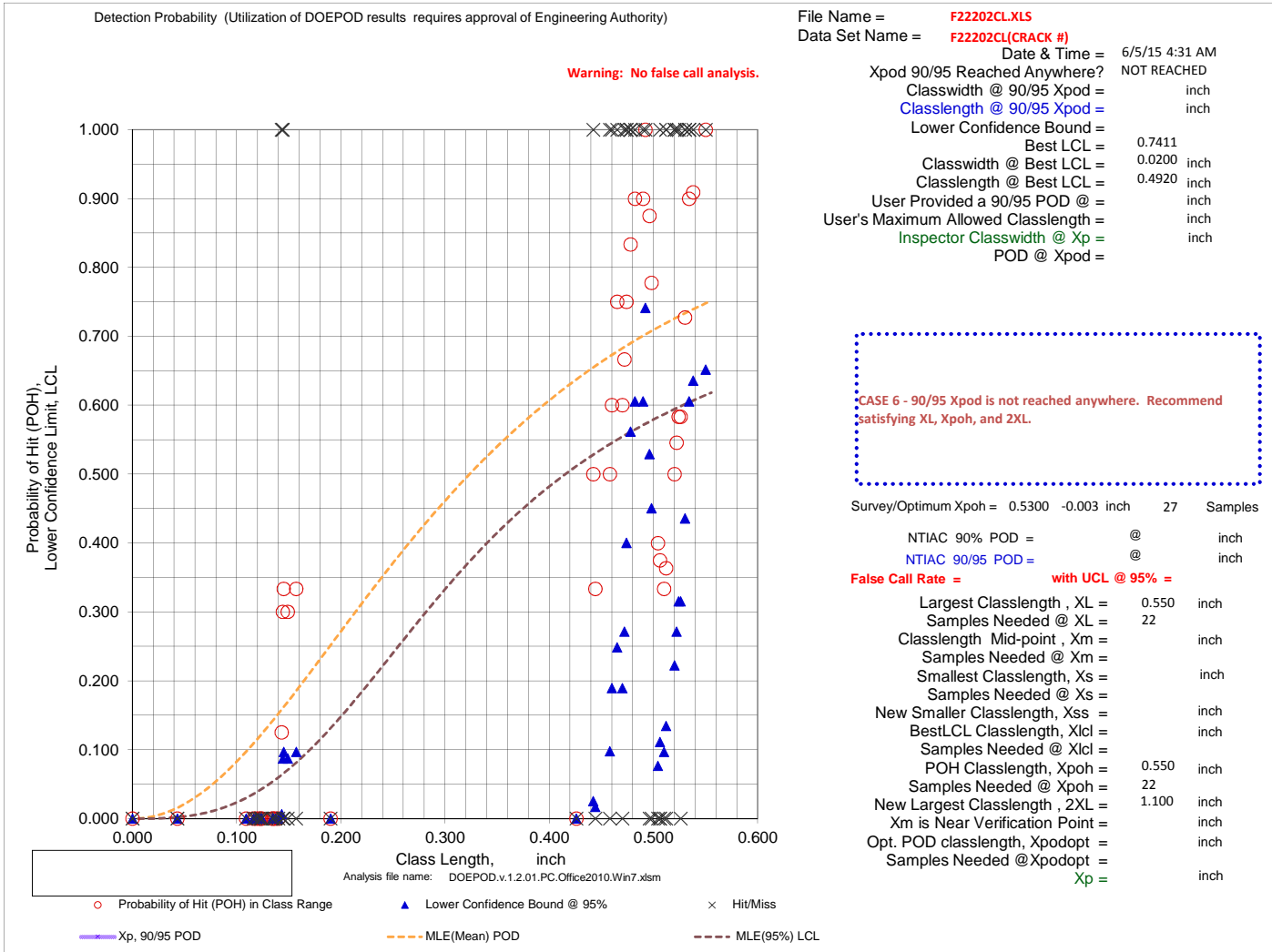
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F22202CL.XLS
 Data Set Name = F22202CL(CRACK #)

Directed DOE Options

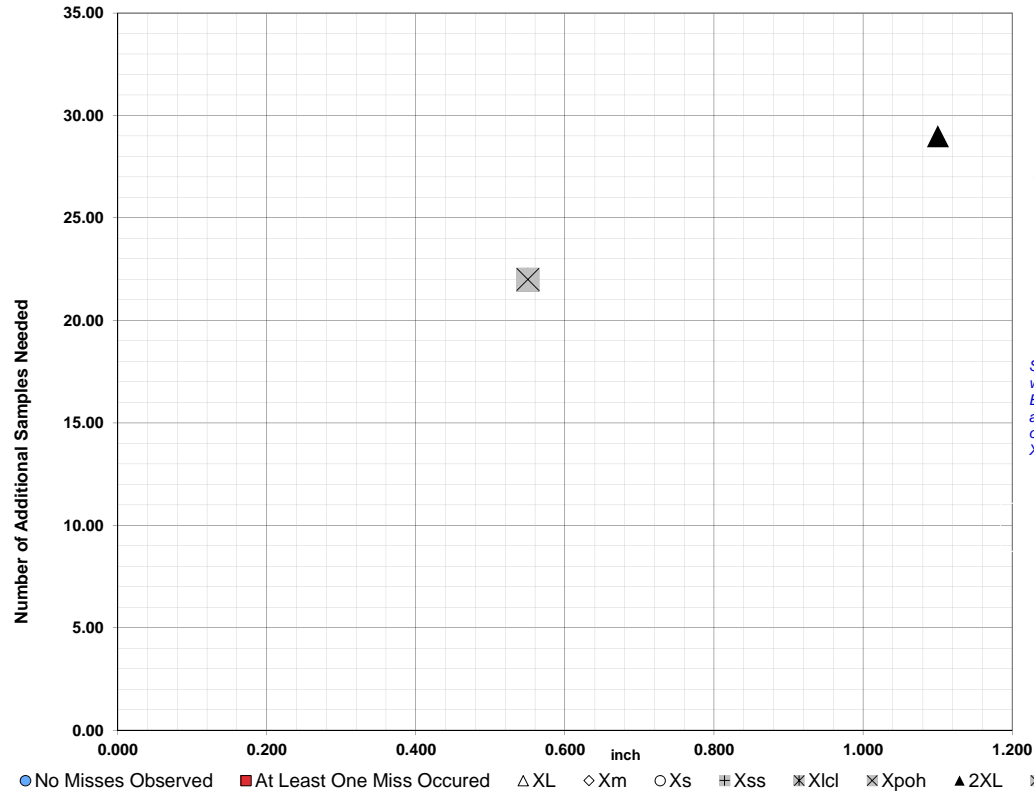


TABLE C

Class Length	Additional Samples
XL = 0.550	22
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.550	22
2XL = 1.100	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

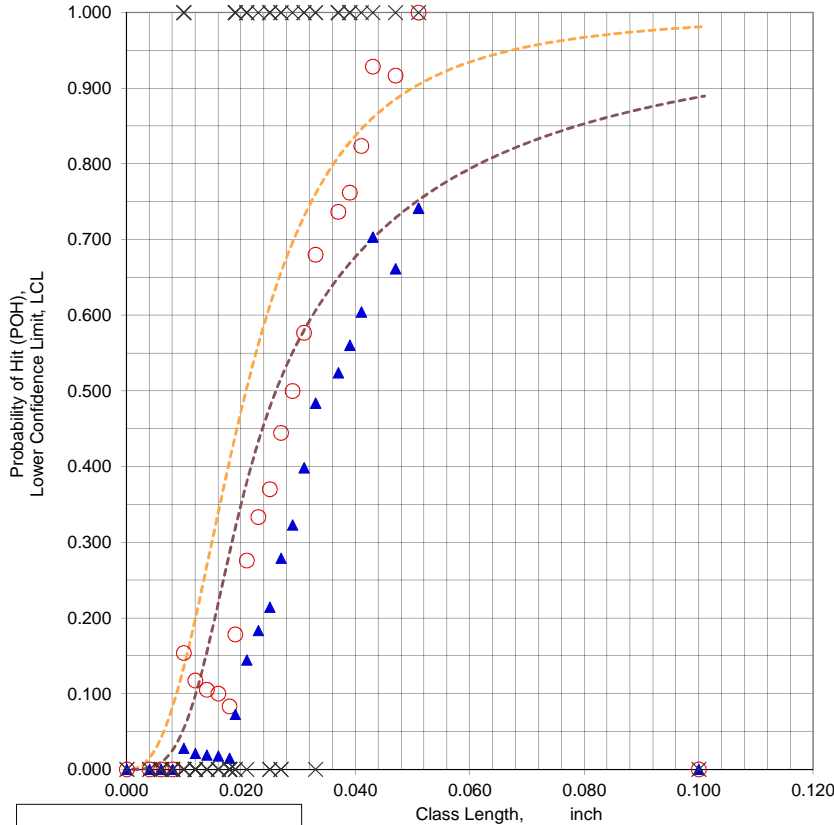
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = F30651AD.XLS
 Data Set Name = F30651AD(CRK #)
 Date & Time = 6/5/15 4:33 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7411
 Classwidth @ Best LCL = 0.0140 inch
 Classlength @ Best LCL = 0.0510 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.900 @ 0.050 inch
 NTIAC 90/95 POD = 0.901 @ 0.110 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.200 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F30651AD.XLS
 Data Set Name = F30651AD(CRK #)

Directed DOE Options

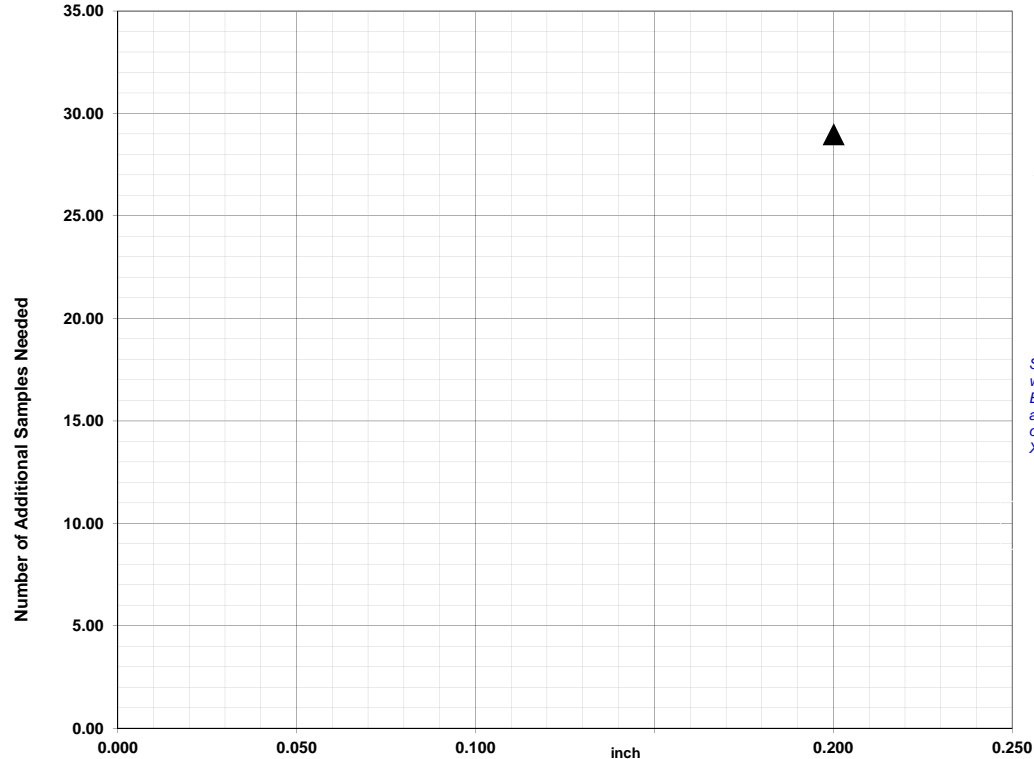


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.200	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.200 29
 **Alternate Xm =
 Xpodopt =

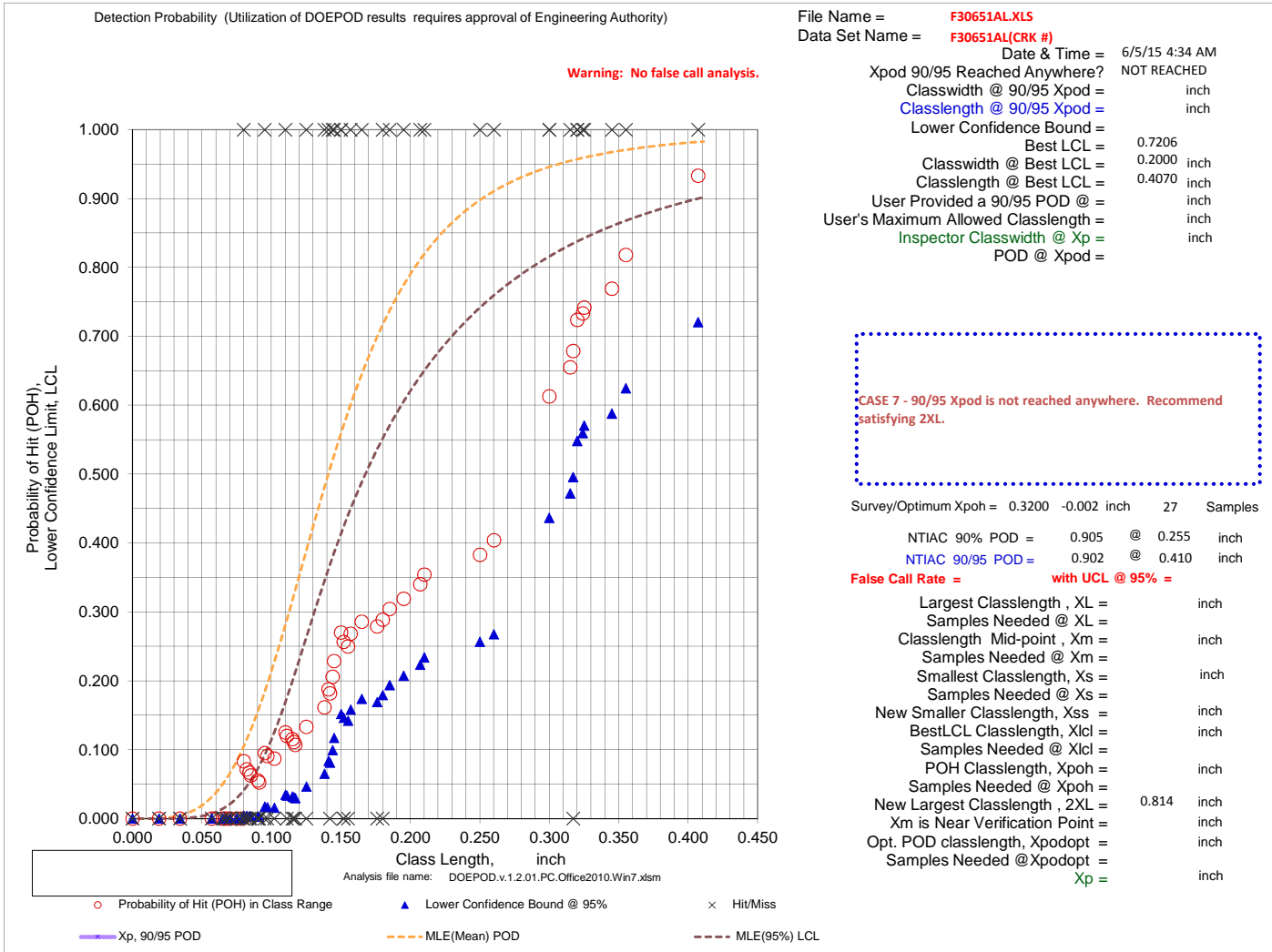
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F30651AL.XLS
 Data Set Name = F30651AL(CRK #)

Directed DOE Options

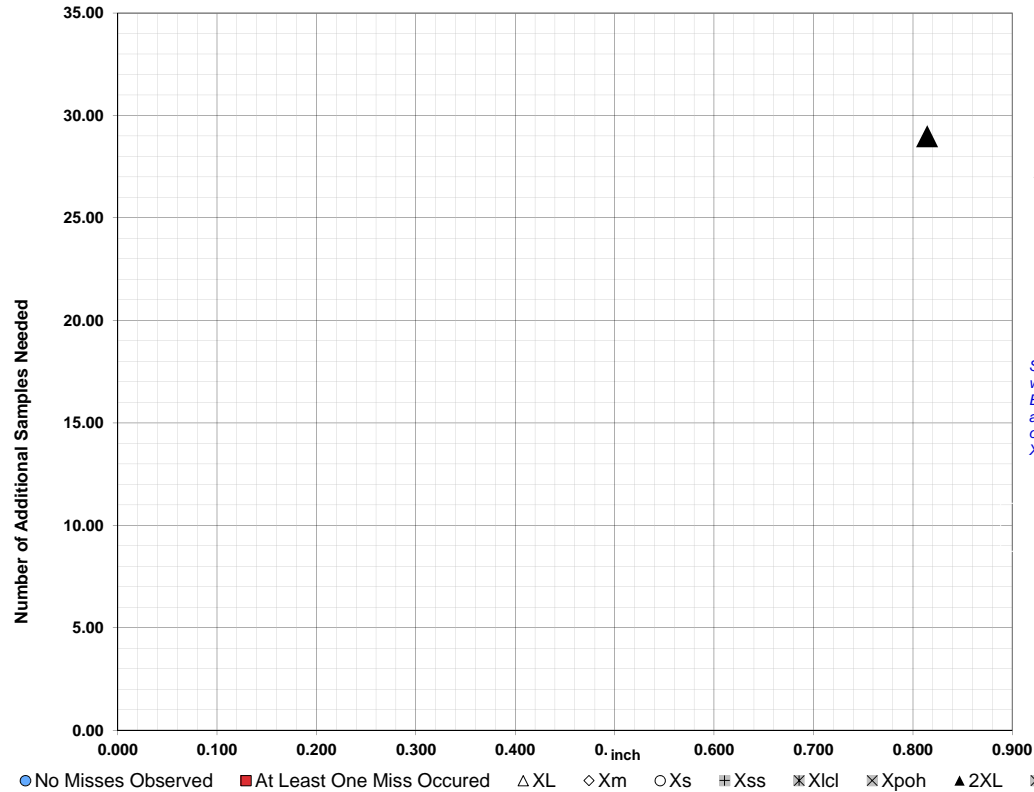


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.814	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.814 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

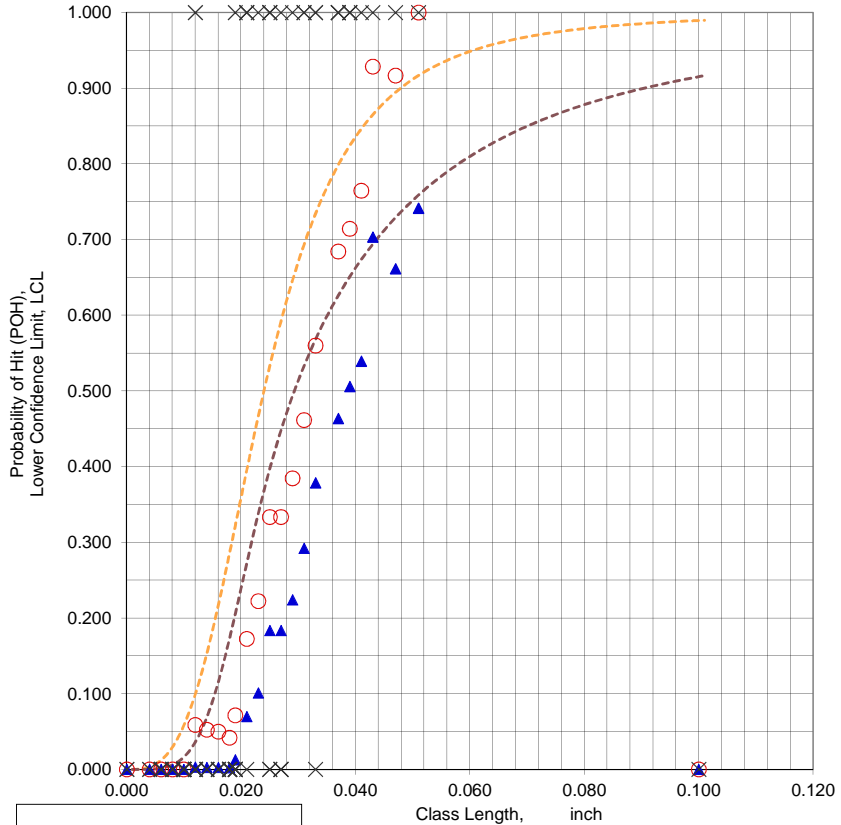
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **F30651BD.XLS**
 Data Set Name = **F30651BD(CRK #)**
 Date & Time = 6/5/15 4:35 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7411
 Classwidth @ Best LCL = 0.0140 inch
 Classlength @ Best LCL = 0.0510 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.912 @ 0.050 inch
 NTIAC 90/95 POD = 0.908 @ 0.095 inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.200 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F30651BD.XLS
 Data Set Name = F30651BD(CRK #)

Directed DOE Options

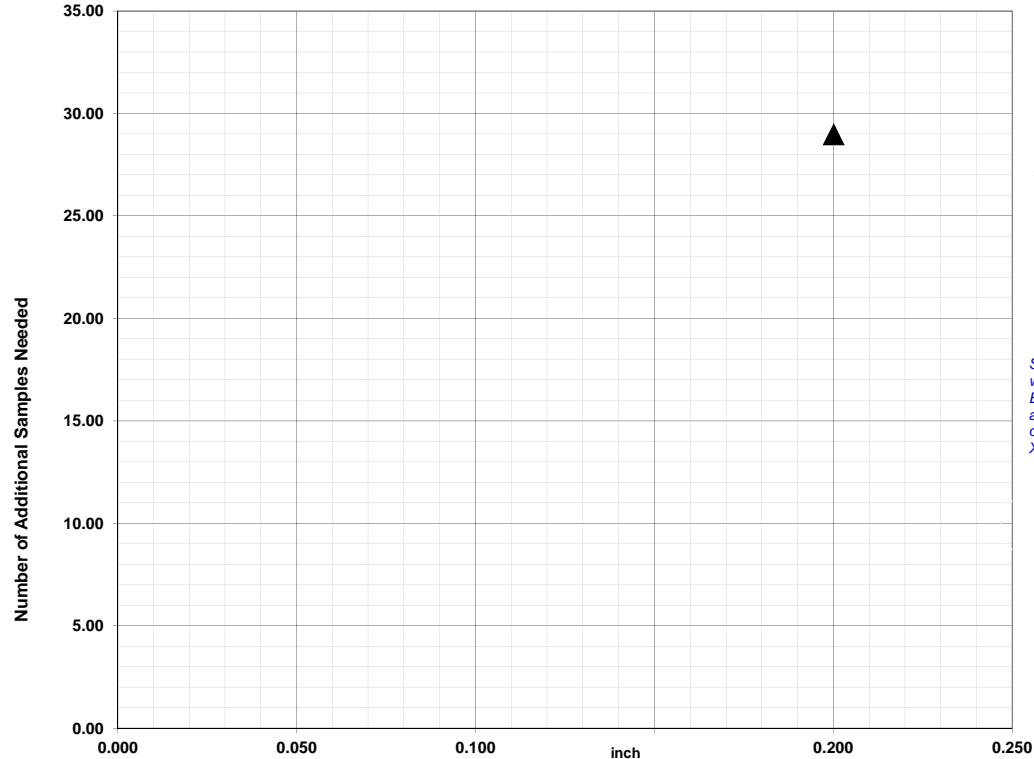


TABLE C

Class Length	Additional Samples
0.200	29

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.200 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

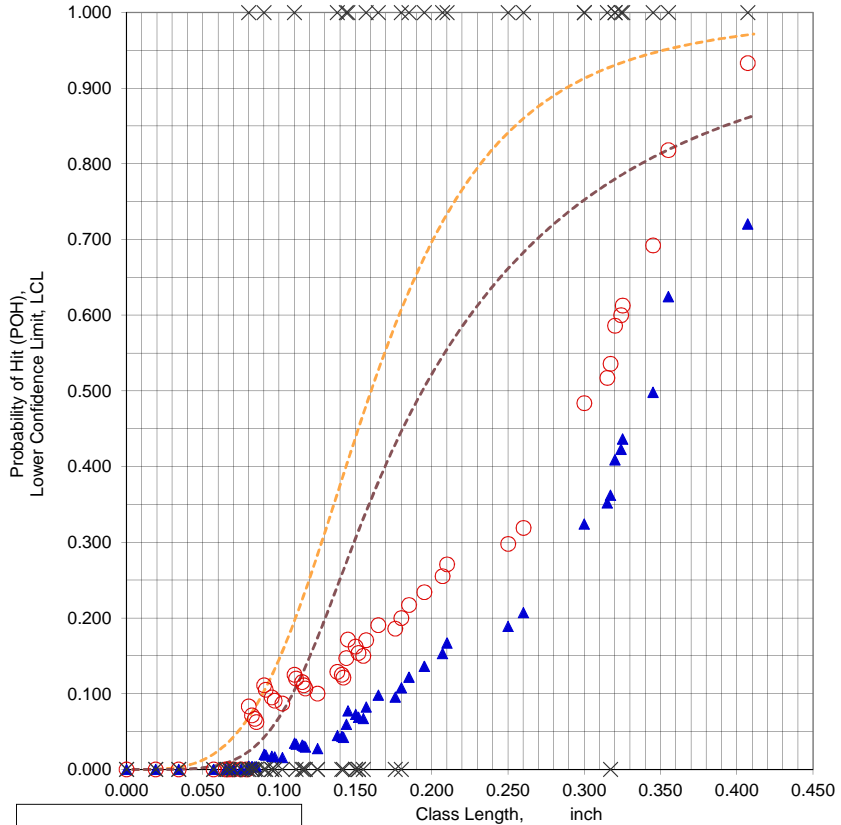
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = F30651BL.XLS
 Data Set Name = F30651BL(CRK #)
 Date & Time = 6/5/15 4:36 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7206
 Classwidth @ Best LCL = 0.2000 inch
 Classlength @ Best LCL = 0.4070 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.3200 -0.002 inch 27 Samples

NTIAC 90% POD = 0.902 @ 0.290 inch

NTIAC 90/95 POD = 0.900 @ 0.480 inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = inch

Samples Needed @ XL = inch

Classlength Mid-point , Xm = inch

Samples Needed @ Xm = inch

Smallest Classlength, Xs = inch

Samples Needed @ Xs = inch

New Smaller Classlength, Xss = inch

BestLCL Classlength, Xlcl = inch

Samples Needed @ Xlcl = inch

POH Classlength, Xpoh = inch

Samples Needed @ Xpoh = inch

New Largest Classlength , 2XL = 0.814 inch

Xm is Near Verification Point = inch

Opt. POD classlength, Xpodopt = inch

Samples Needed @ Xpodopt = inch

Xp = inch

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
 — Xp, 90/95 POD
 - - - MLE(Mean) POD
 - - - MLE(95%) LCL

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

File Name = F30651BL.XLS
 Data Set Name = F30651BL(CRK #)

Directed DOE Options

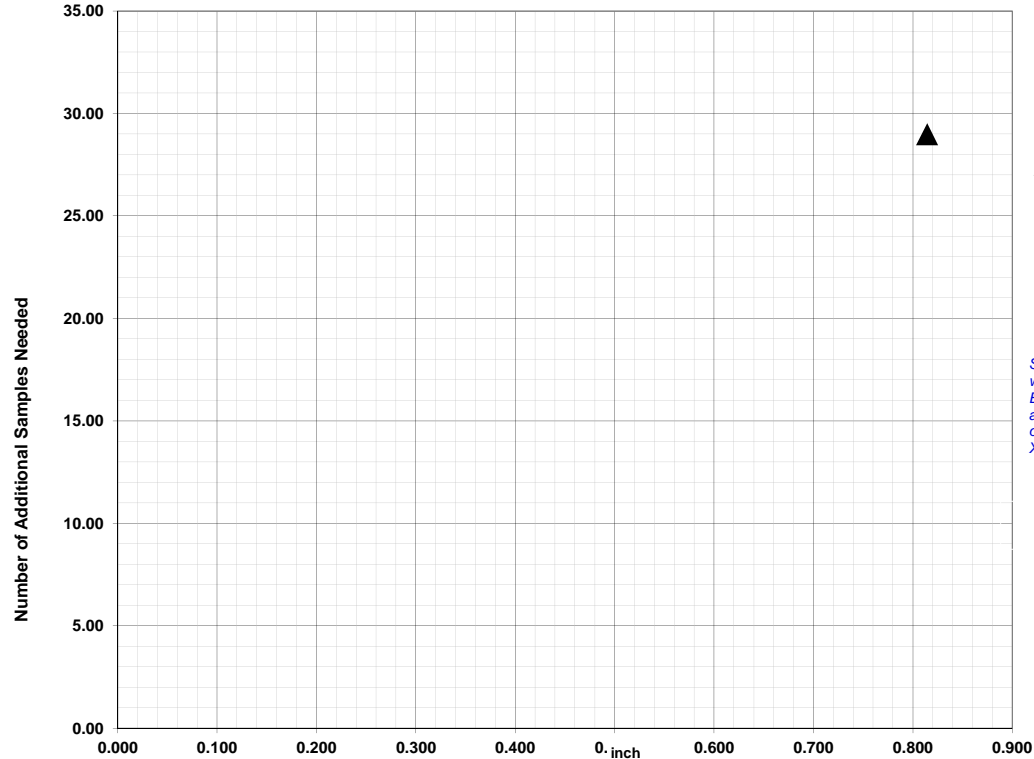


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.814	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.814 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

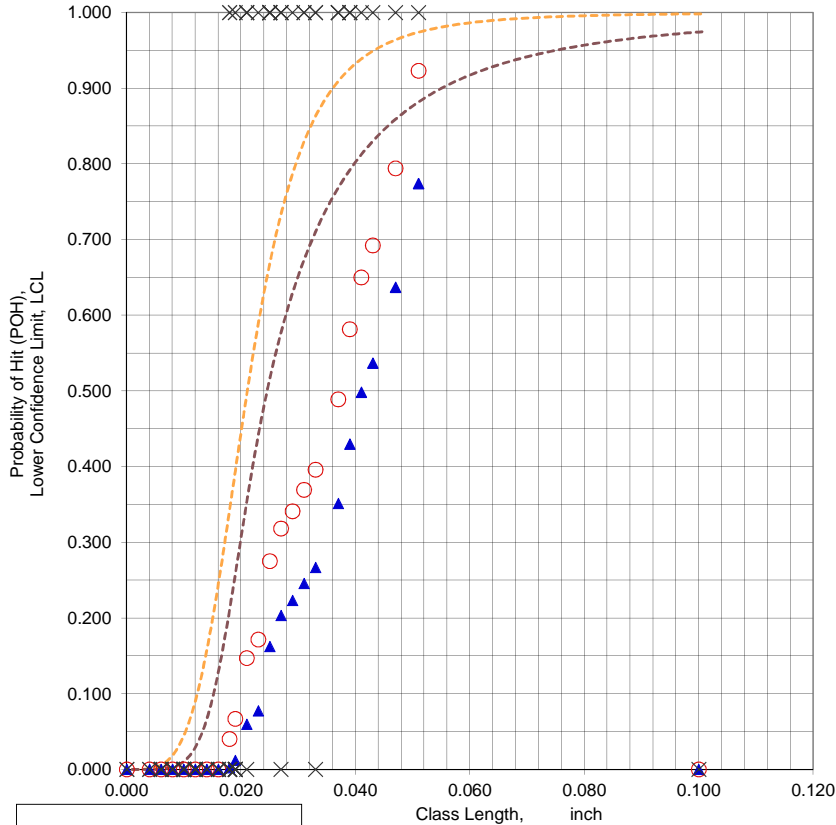
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **F30651CD.XLS**
 Data Set Name = **F30651CD(CRK #)**
 Date & Time = 6/5/15 4:37 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7740
 Classwidth @ Best LCL = 0.0280 inch
 Classlength @ Best LCL = 0.0510 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.933 @ 0.040 inch
 NTIAC 90/95 POD = 0.917 @ 0.060 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.200 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F30651CD.XLS
 Data Set Name = F30651CD(CRK #)

Directed DOE Options

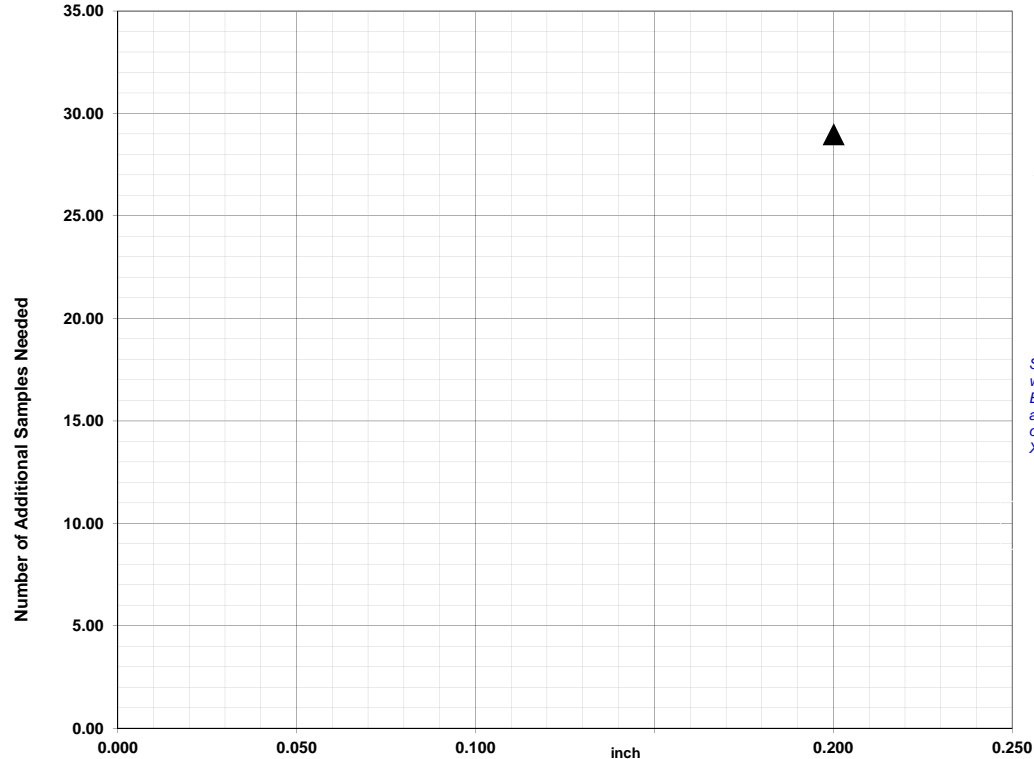


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.200	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.200 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

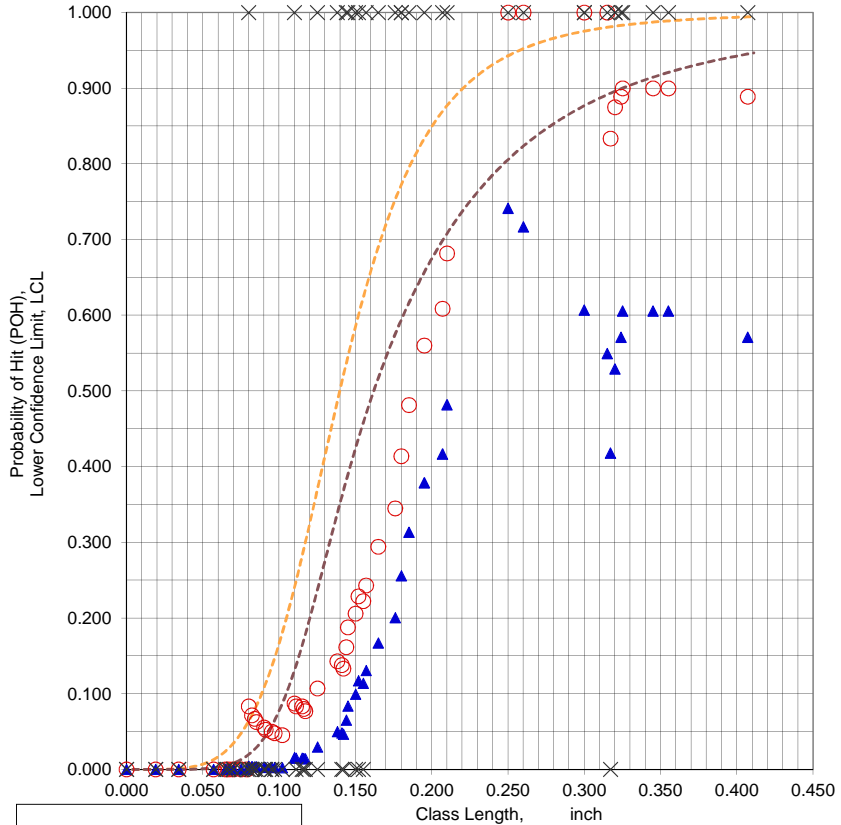
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **F30651CL.XLS**
 Data Set Name = **F30651CL(CRK #)**
 Date & Time = 6/5/15 4:39 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7411
 Classwidth @ Best LCL = 0.0930 inch
 Classlength @ Best LCL = 0.2500 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.3200 -0.002 inch 27 Samples
 NTIAC 90% POD = 0.909 @ 0.225 inch
 NTIAC 90/95 POD = 0.900 @ 0.325 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.814 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F30651CL.XLS
 Data Set Name = F30651CL(CRK #)

Directed DOE Options

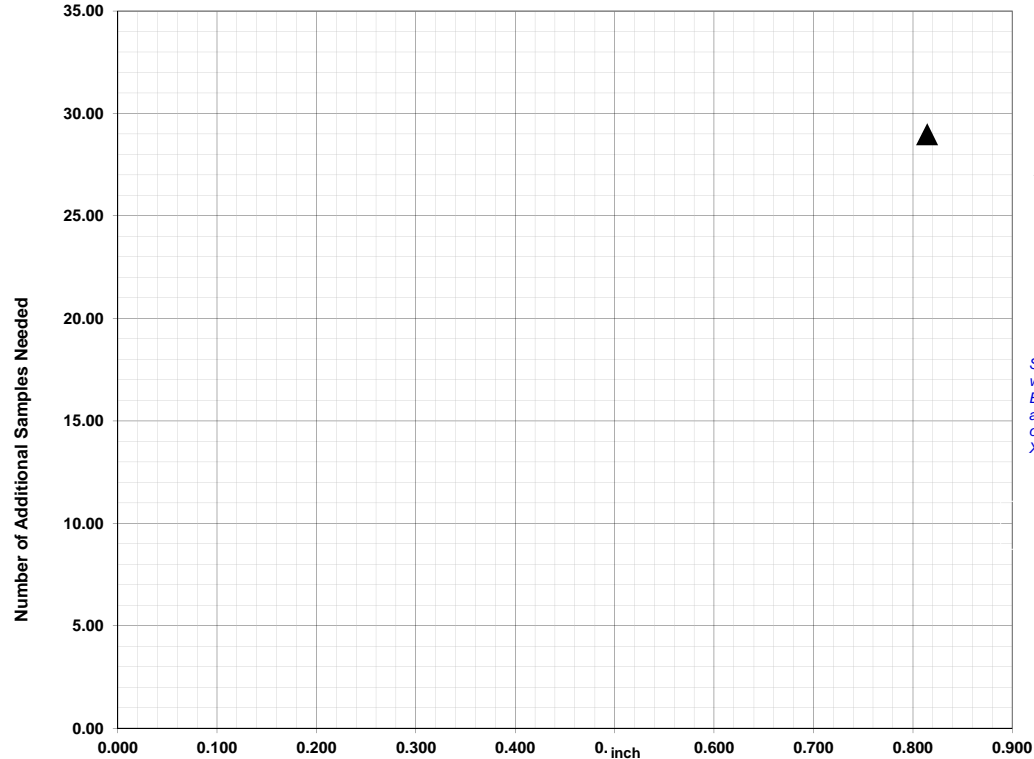


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.814	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.814 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

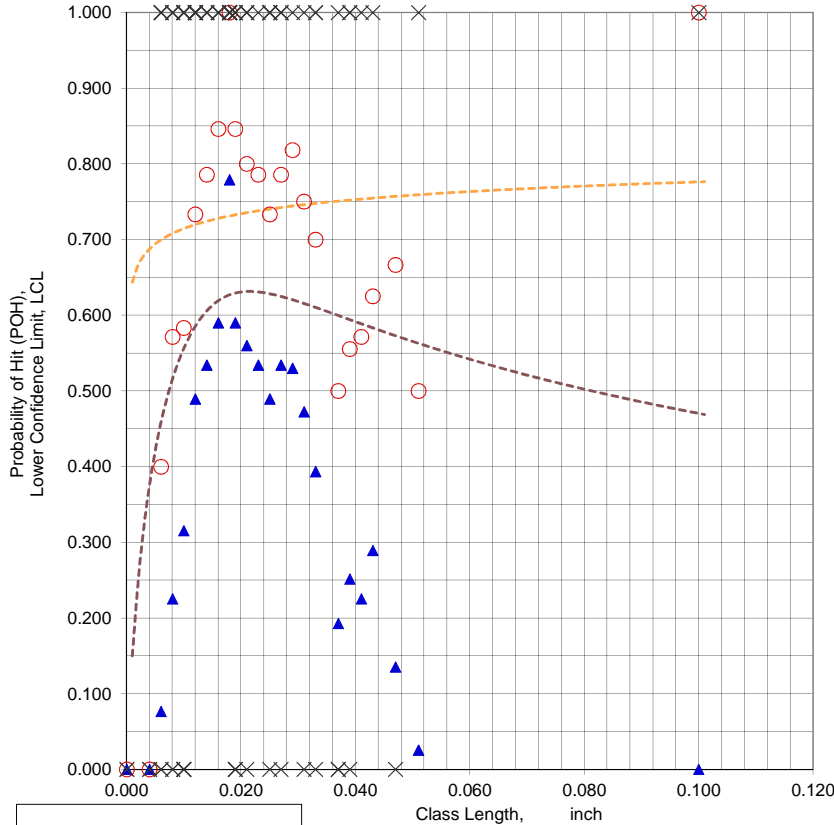
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = F30653AD.XLS
 Data Set Name = F30653AD(CRK #)
 Date & Time = 6/5/15 4:40 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7791
 Classwidth @ Best LCL = 0.0060 inch
 Classlength @ Best LCL = 0.0180 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.0510 -0.003 inch 28 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.100 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.100 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 0.200 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
 — Xp, 90/95 POD
 - - - MLE(Mean) POD
 - - - MLE(95%) LCL

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

File Name = F30653AD.XLS
 Data Set Name = F30653AD(CRK #)

Directed DOE Options

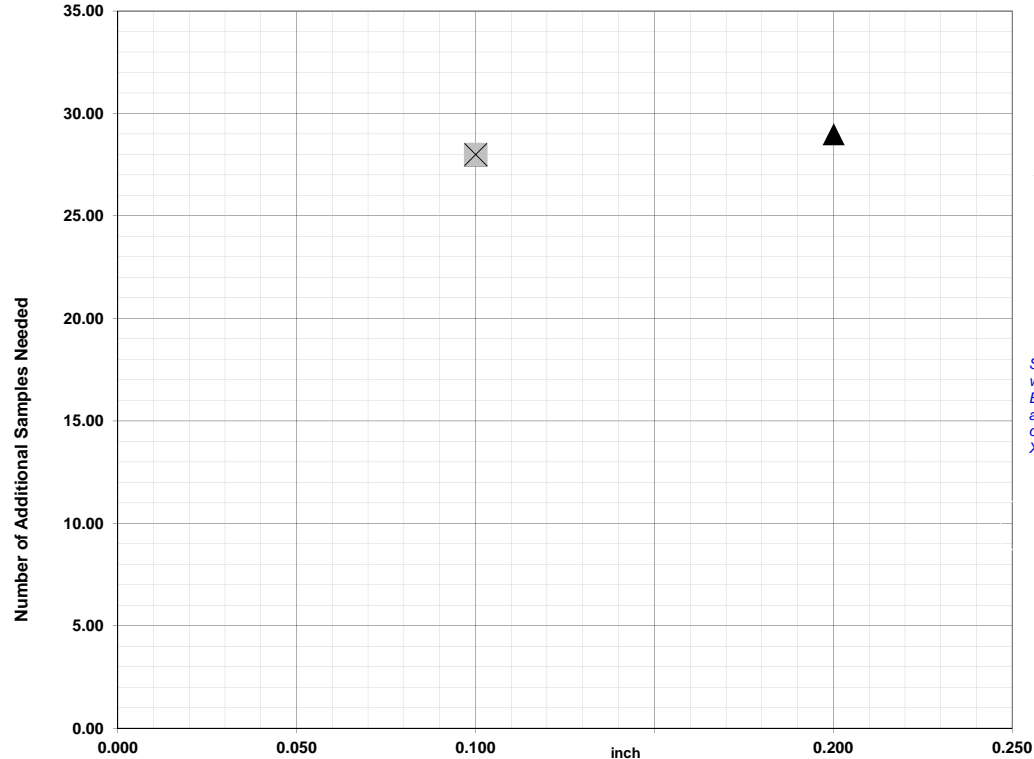


TABLE C

Class Length	Additional Samples
XL = 0.100	28
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 0.100	28
2XL = 0.200	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

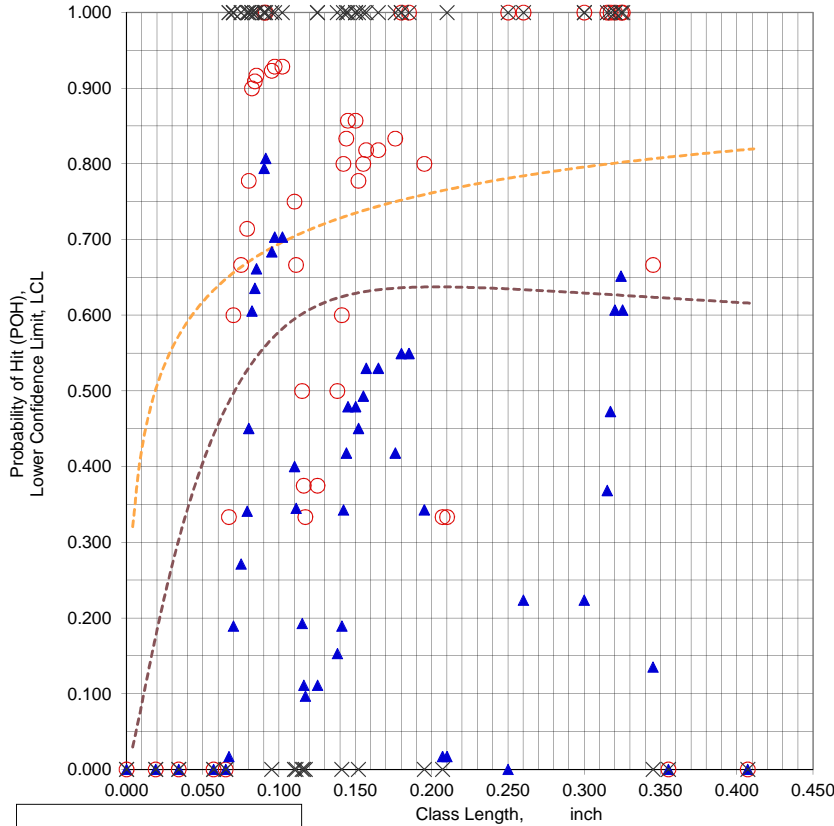
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ⊗ XLcl
 ⊗ Xpoh
 ▲ 2XL
 ⊗ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = F30653AL.XLS
 Data Set Name = F30653AL(CRK #)
 Date & Time = 6/5/15 4:41 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound = 0.8074
 Best LCL = 0.0240 inch
 Classwidth @ Best LCL = 0.0910 inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = inch

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.814 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F30653AL.XLS
 Data Set Name = F30653AL(CRK #)

Directed DOE Options

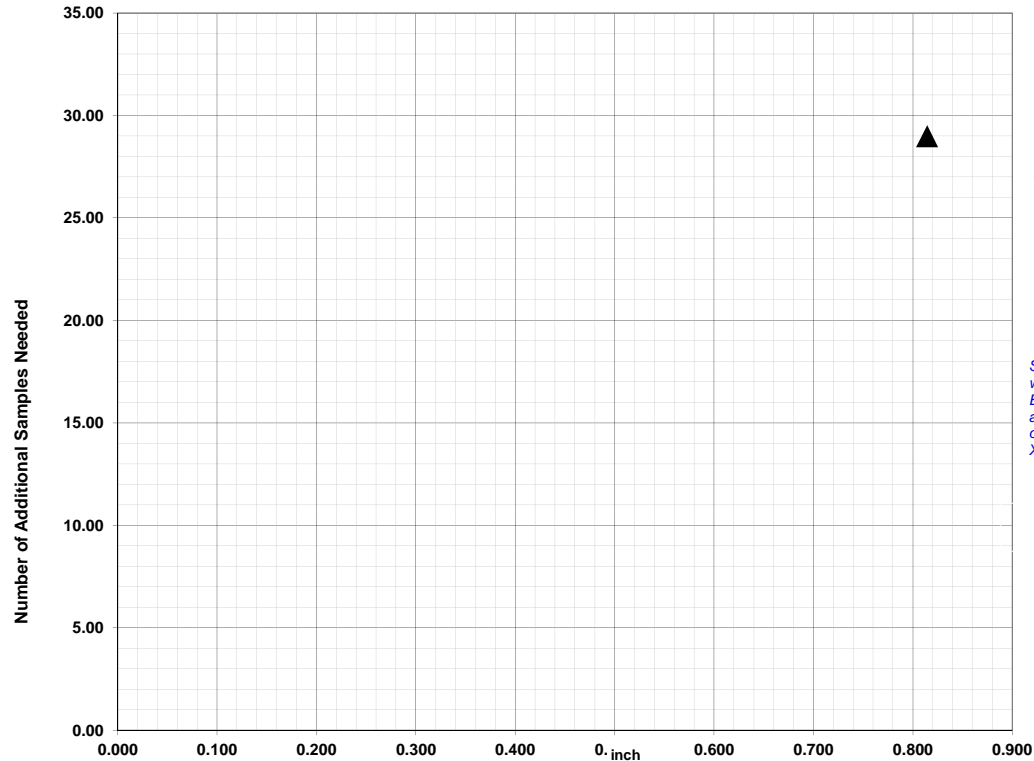


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.814	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.814 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

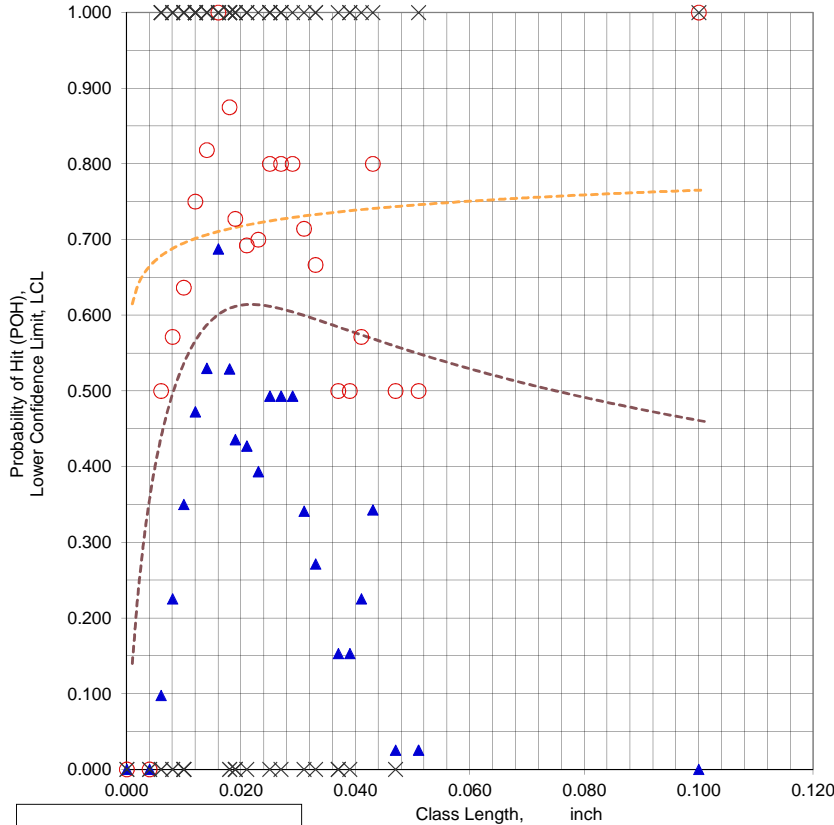
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **F30653BD.XLS**
 Data Set Name = **F30653BD(CRK #)**
 Date & Time = 6/5/15 4:42 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6877
 Classwidth @ Best LCL = 0.0040 inch
 Classlength @ Best LCL = 0.0160 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.0510 -0.003 inch 28 Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.100 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.100 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 0.200 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F30653BD.XLS
 Data Set Name = F30653BD(CRK #)

Directed DOE Options

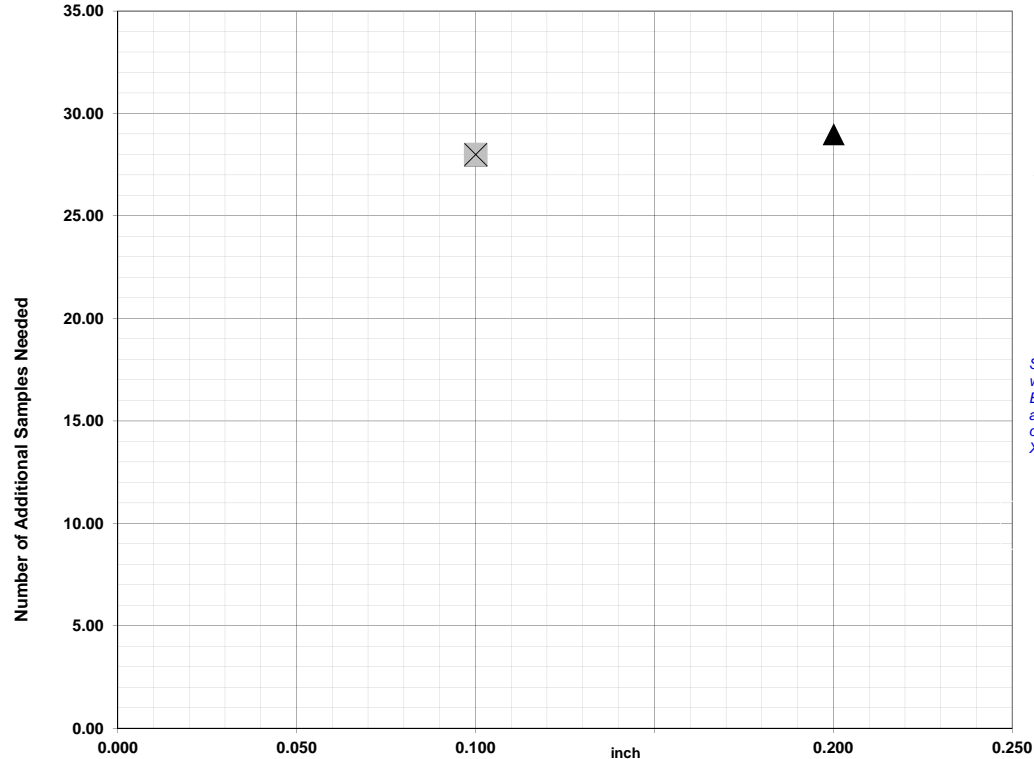


TABLE C

Class Length	Additional Samples
XL = 0.100	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.100	28
2XL = 0.200	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

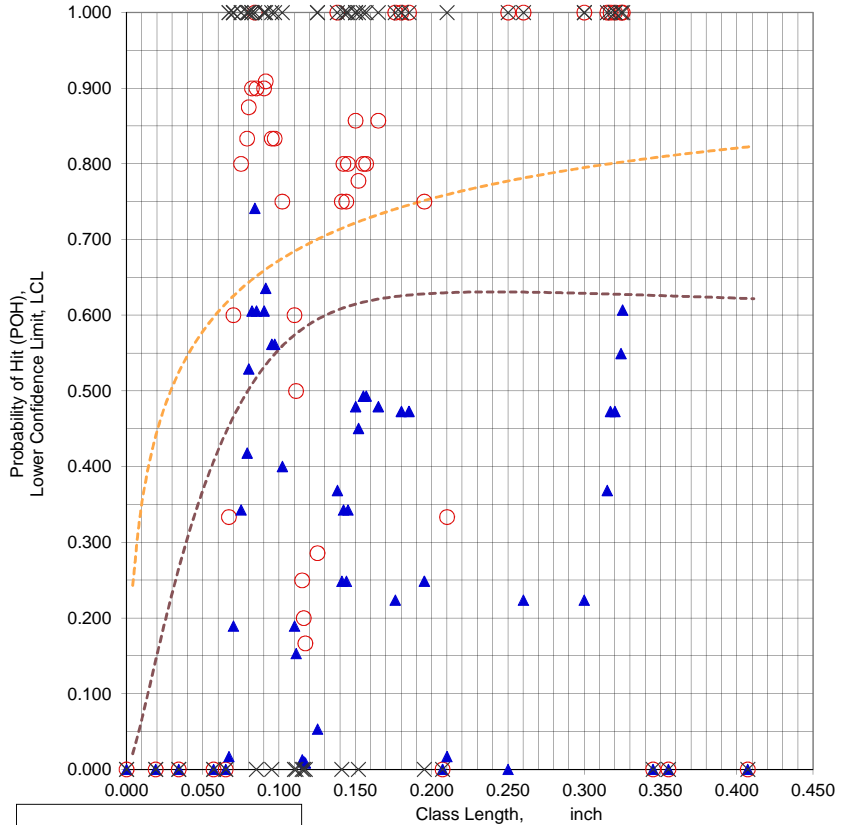
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = F30653BL.XLS
 Data Set Name = F30653BL(CRK #)
 Date & Time = 6/5/15 4:43 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7411
 Classwidth @ Best LCL = 0.0170 inch
 Classlength @ Best LCL = 0.0840 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.814 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F30653BL.XLS
 Data Set Name = F30653BL(CRK #)

Directed DOE Options

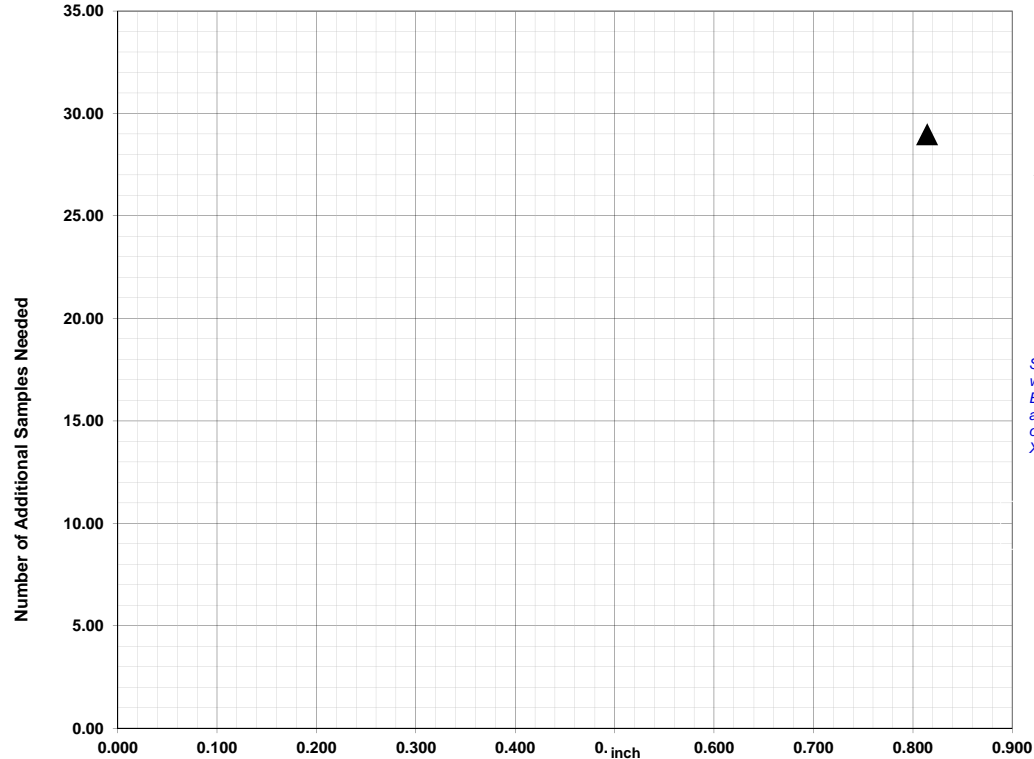


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.814	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.814 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

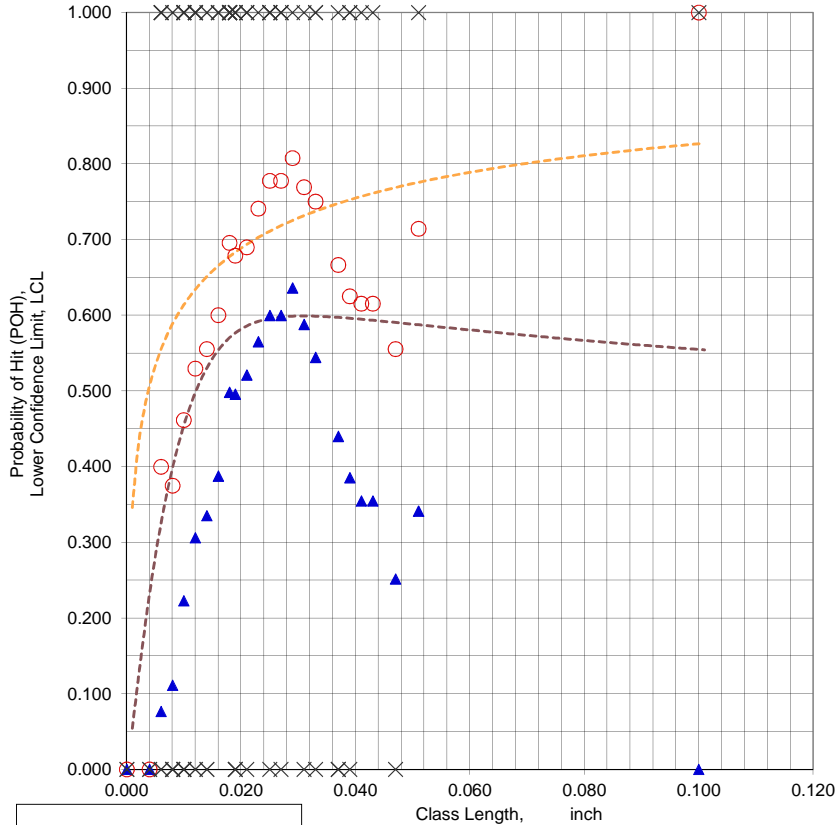
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **F30653CD.XLS**
 Data Set Name = **F30653CD(CRK #)**
 Date & Time = 6/5/15 4:45 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6360
 Classwidth @ Best LCL = 0.0130 inch
 Classlength @ Best LCL = 0.0290 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.0510 -0.003 inch 28 Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.100 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.100 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 0.200 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F30653CD.XLS
 Data Set Name = F30653CD(CRK #)

Directed DOE Options

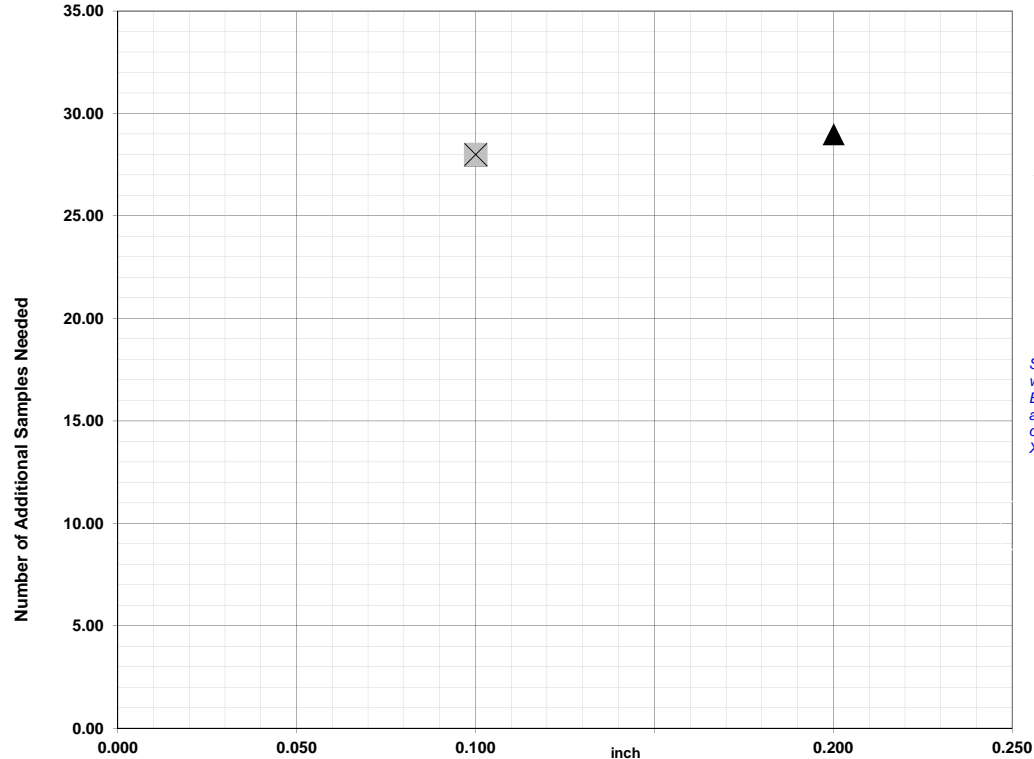


TABLE C

Class Length	Additional Samples
XL = 0.100	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.100	28
2XL = 0.200	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

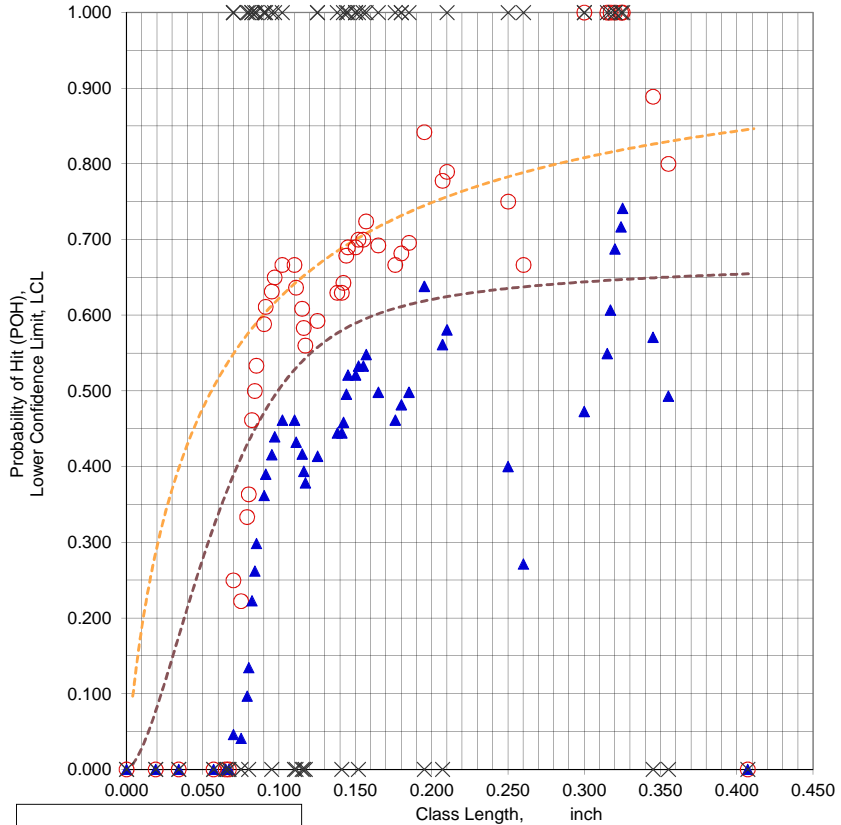
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = F30653CL.XLS
 Data Set Name = F30653CL(CRK #)
 Date & Time = 6/5/15 4:46 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7411
 Classwidth @ Best LCL = 0.0750 inch
 Classlength @ Best LCL = 0.3250 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.900 @ 0.730 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.814 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F30653CL.XLS
 Data Set Name = F30653CL(CRK #)

Directed DOE Options

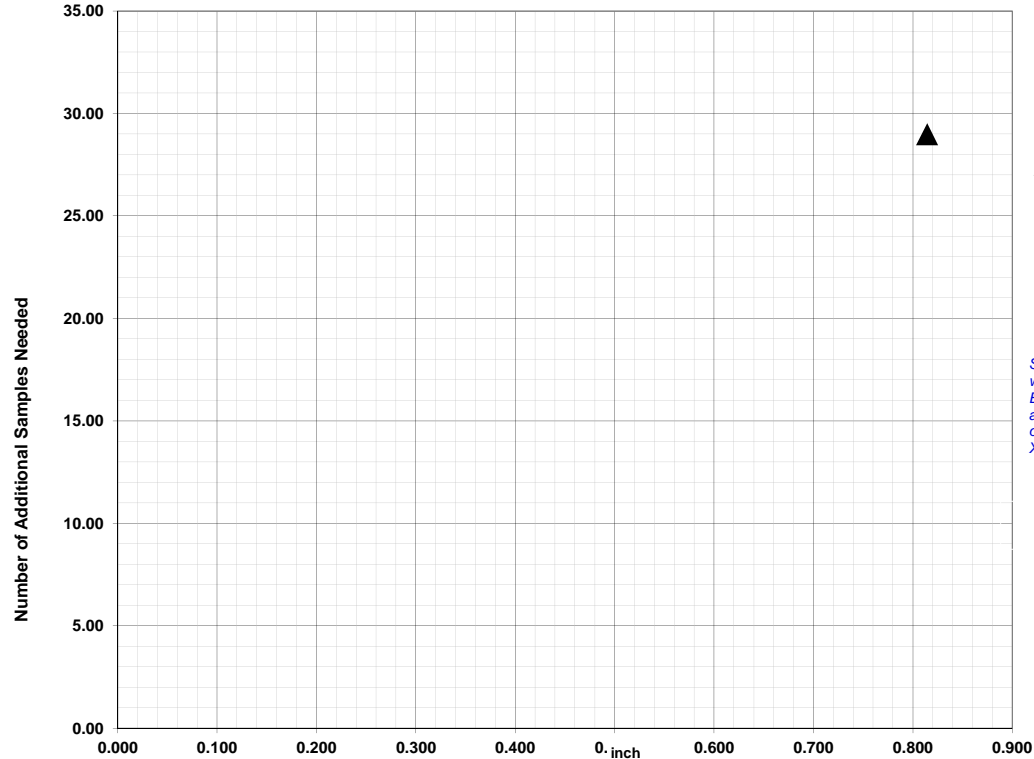


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.814	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.814 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

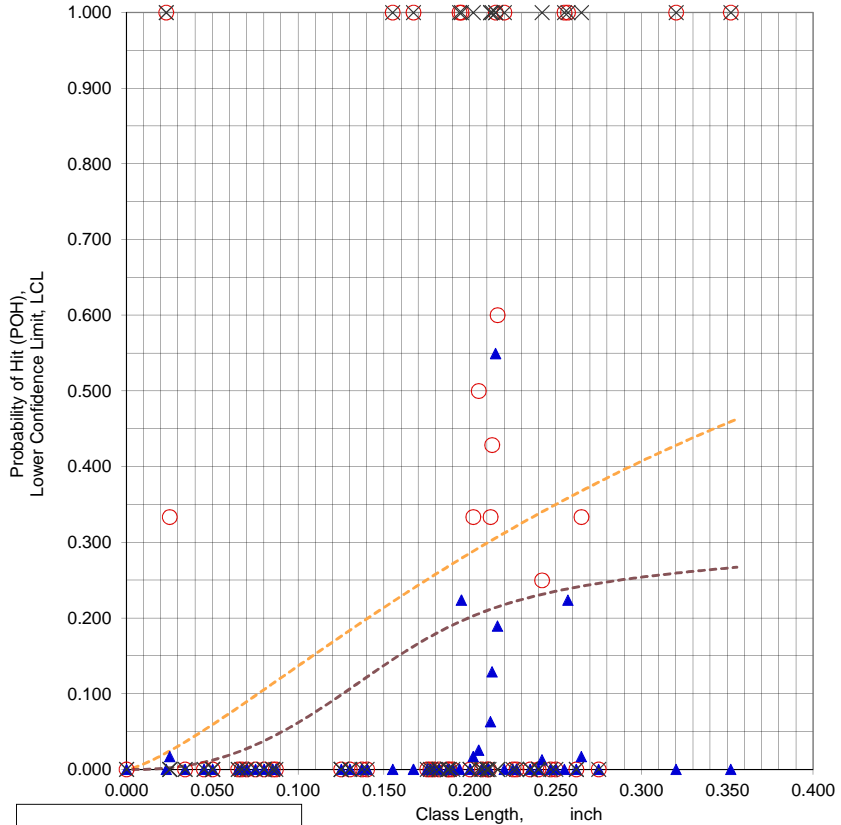
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = **F32251AD.XLS**
 Data Set Name = **F32251AD(CRK #)**
 Date & Time = 6/5/15 4:47 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.5493
 Classwidth @ Best LCL = 0.0030 inch
 Classlength @ Best LCL = 0.2150 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.3200 -0.044 inch 28 Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.352 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.320 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 0.704 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F32251AD.XLS
 Data Set Name = F32251AD(CRK #)

Directed DOE Options

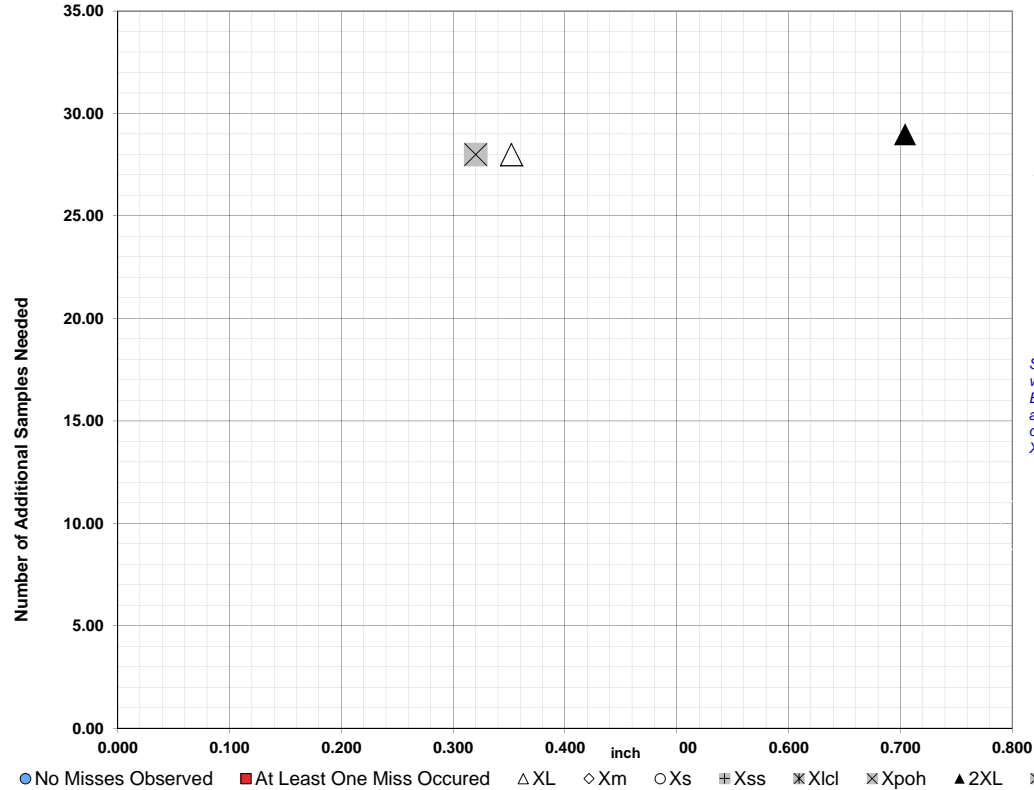


TABLE C

Class Length	Additional Samples
XL = 0.352	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.320	28
2XL = 0.704	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

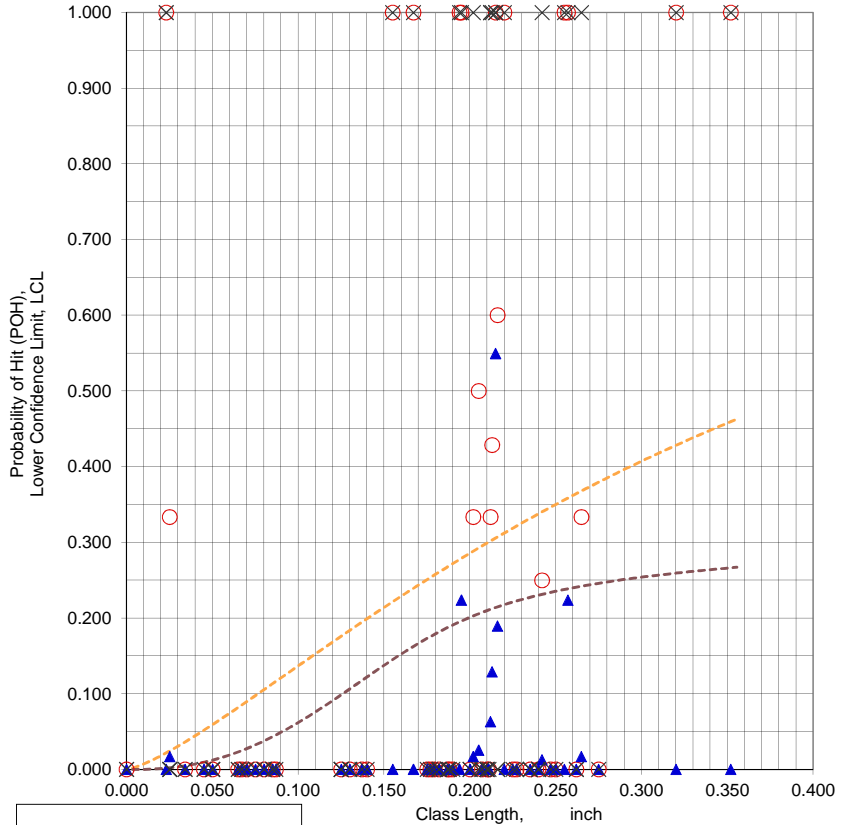
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ⊗ Xlcl
 ⊗ Xpoh
 ▲ 2XL
 ⊗ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **F32251AL.XLS**
 Data Set Name = **F32251AL(CRK #)**
 Date & Time = 6/5/15 4:49 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.5493
 Classwidth @ Best LCL = 0.0030 inch
 Classlength @ Best LCL = 0.2150 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.3200 -0.044 inch 28 Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.352 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.320 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 0.704 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F32251AL.XLS
 Data Set Name = F32251AL(CRK #)

Directed DOE Options

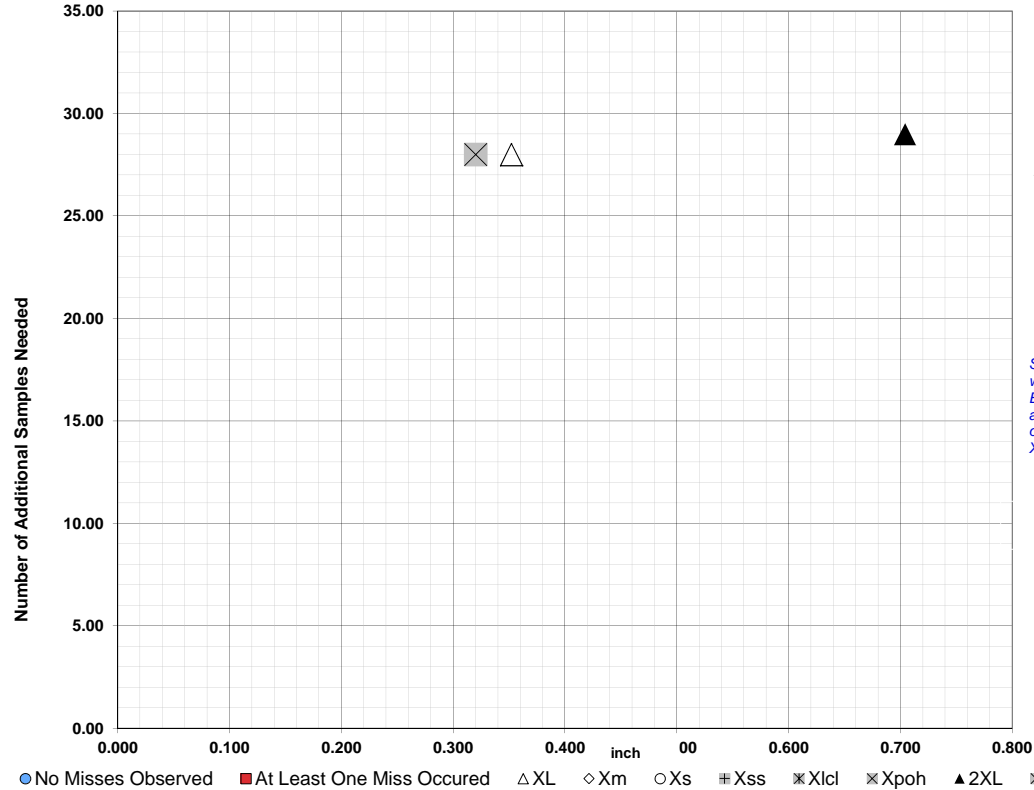


TABLE C

Class Length	Additional Samples
XL = 0.352	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.320	28
2XL = 0.704	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

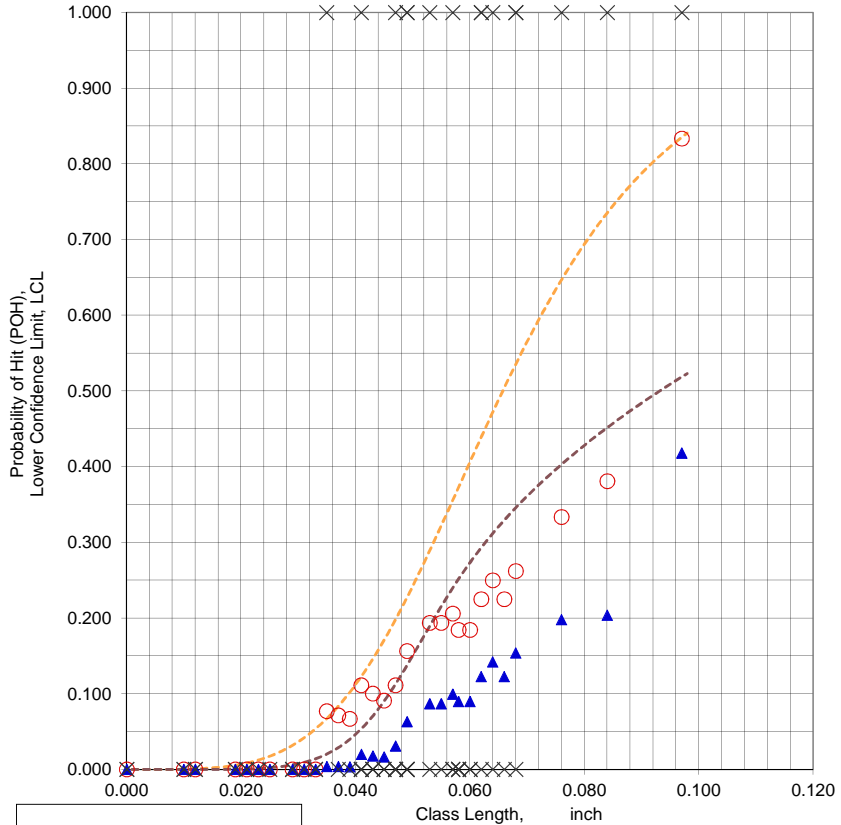
TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = **F32251BD.XLS**
 Data Set Name = **F32251BD(CRK #)**
 Date & Time = 6/5/15 4:52 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.4182
 Classwidth @ Best LCL = 0.0290 inch
 Classlength @ Best LCL = 0.0970 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.0760 -0.007 inch 28 Samples
 NTIAC 90% POD = 0.911 @ 0.115 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.194 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F32251BD.XLS
 Data Set Name = F32251BD(CRK #)

Directed DOE Options

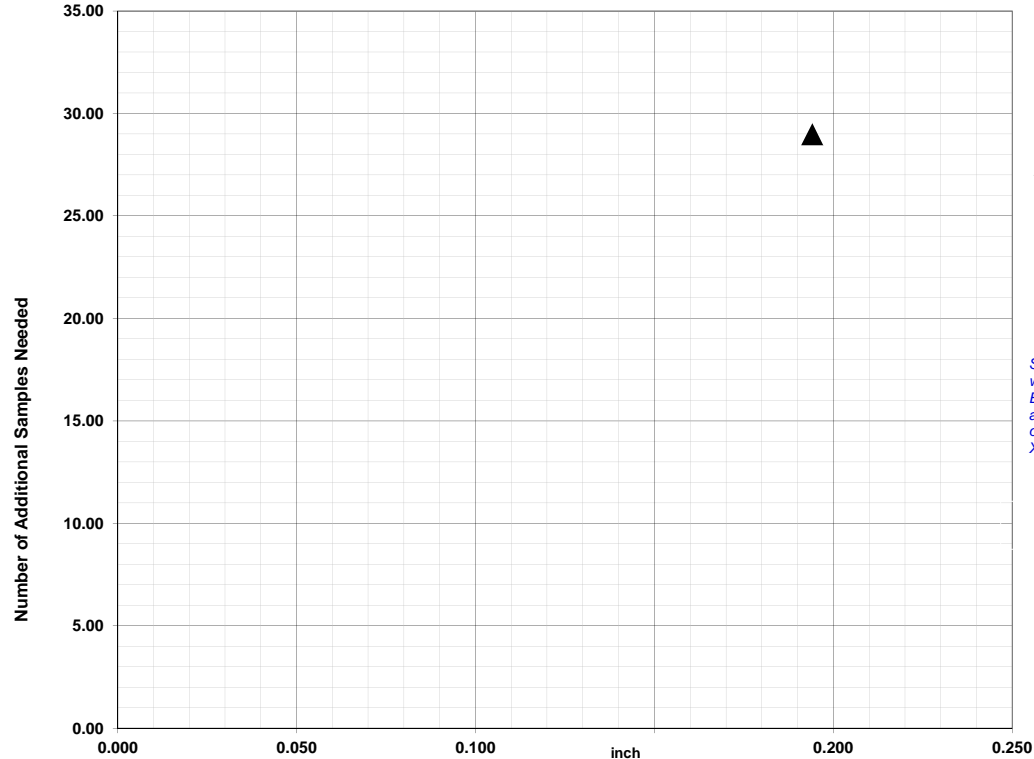


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.194	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.194 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

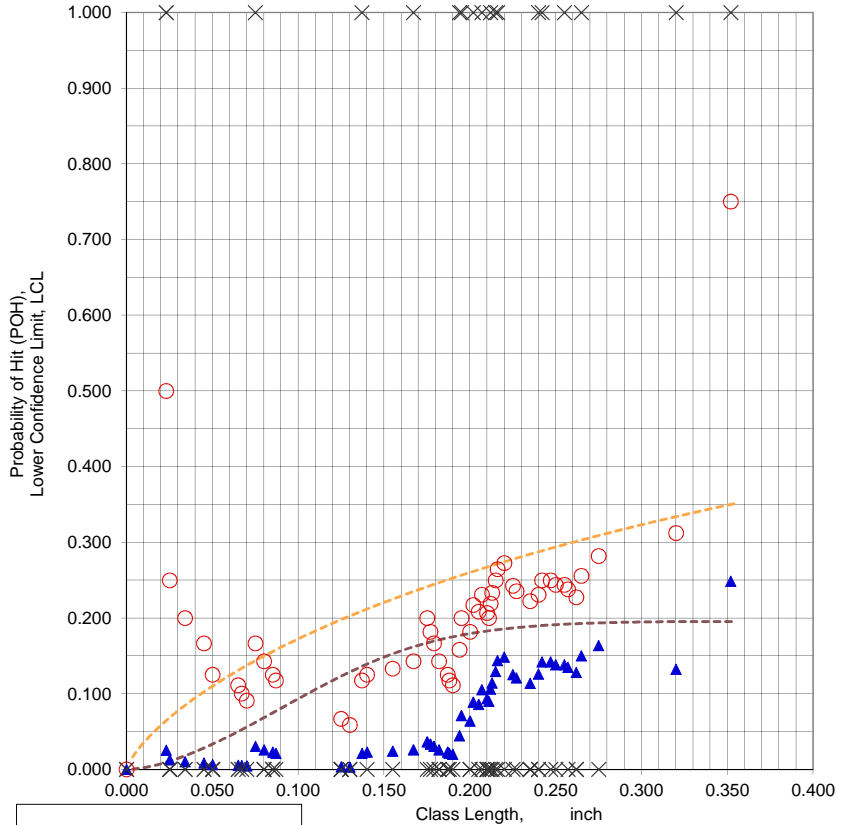
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **F32251BL.XLS**
 Data Set Name = **F32251BL(CRK #)**
 Date & Time = 6/5/15 4:53 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.2486
 Classwidth @ Best LCL = 0.0870 inch
 Classlength @ Best LCL = 0.3520 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.3200 -0.044 inch 28 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.704 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = F32251BL.XLS
 Data Set Name = F32251BL(CRK #)

Directed DOE Options

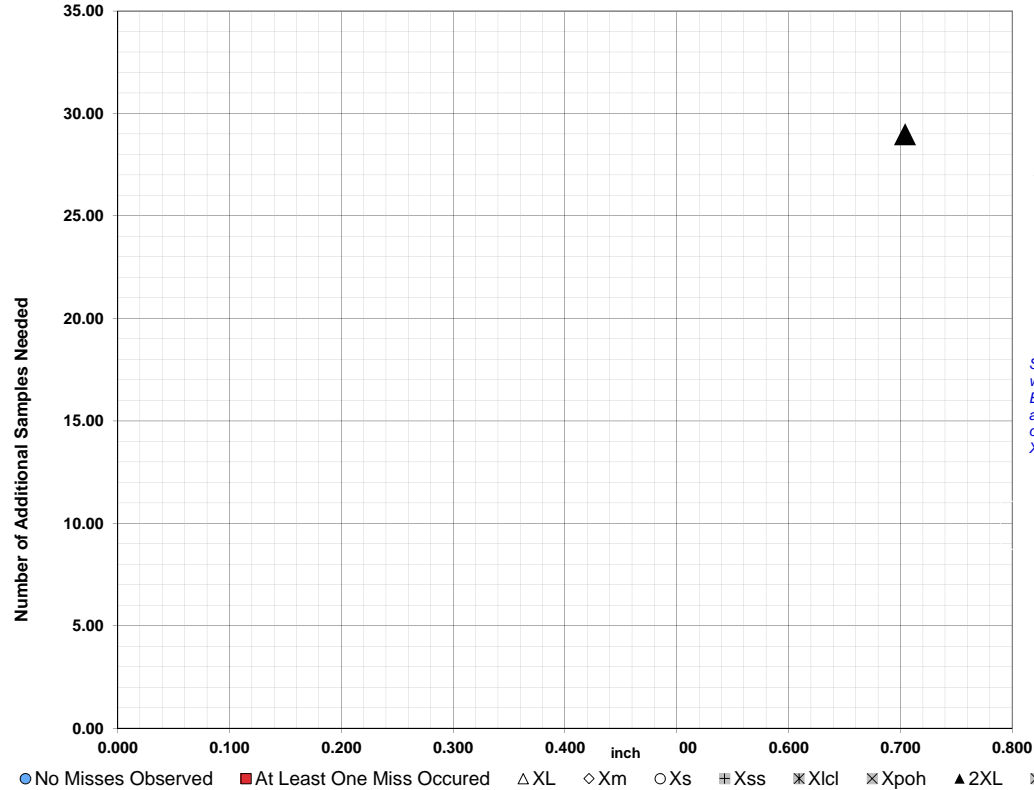


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.704	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.704 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

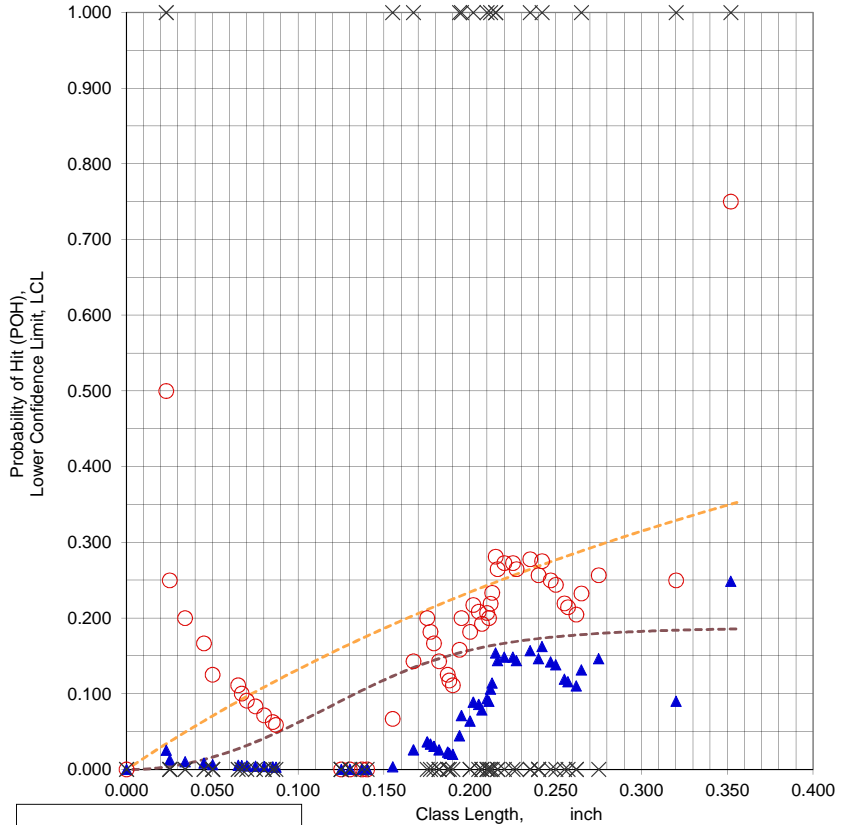
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = F32251CD.XLS
 Data Set Name = F32251CD(CRK #)
 Date & Time = 6/5/15 4:54 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.2486
 Classwidth @ Best LCL = 0.0870 inch
 Classlength @ Best LCL = 0.3520 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.3200 -0.044 inch 28 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.704 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F32251CD.XLS
 Data Set Name = F32251CD(CRK #)

Directed DOE Options

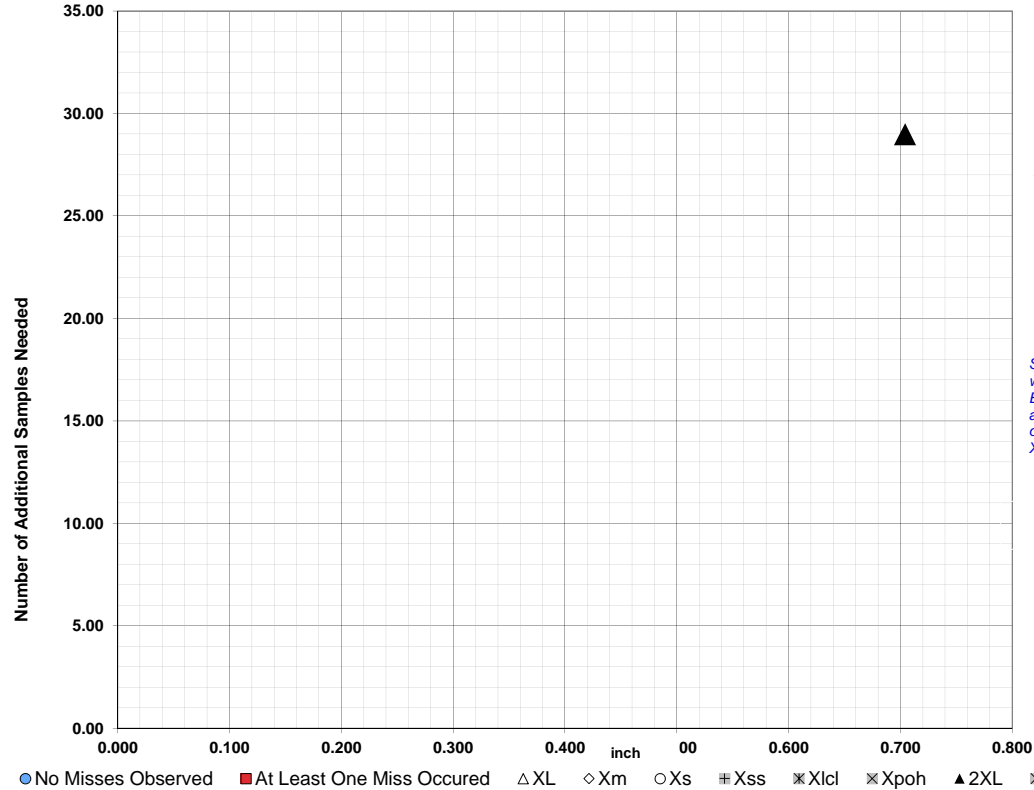


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.704	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.704 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

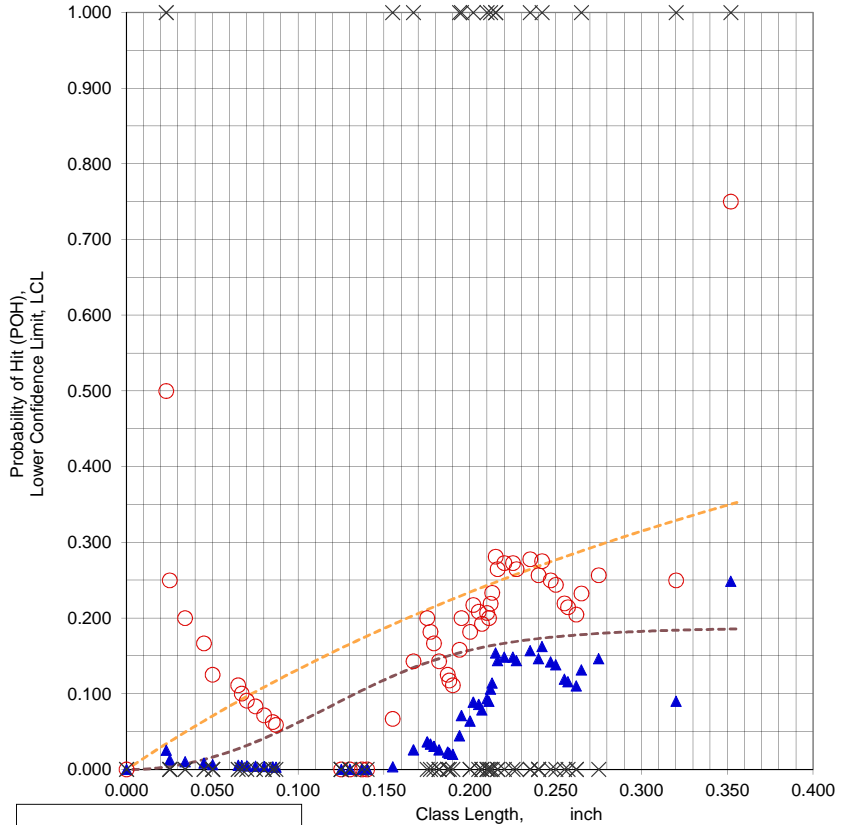
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = F32251CL.XLS
 Data Set Name = F32251CL(CRK #)
 Date & Time = 6/5/15 4:55 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.2486
 Classwidth @ Best LCL = 0.0870 inch
 Classlength @ Best LCL = 0.3520 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.3200 -0.044 inch 28 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = 0.704 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F32251CL.XLS
 Data Set Name = F32251CL(CRK #)

Directed DOE Options

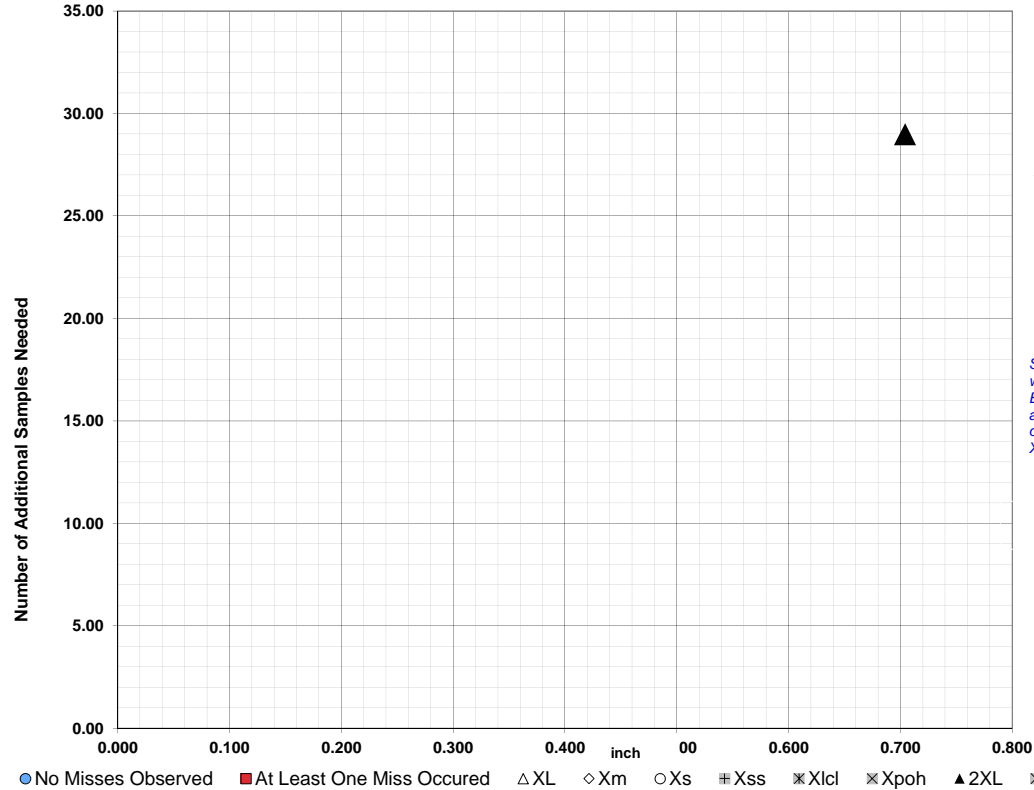


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.704	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.704 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

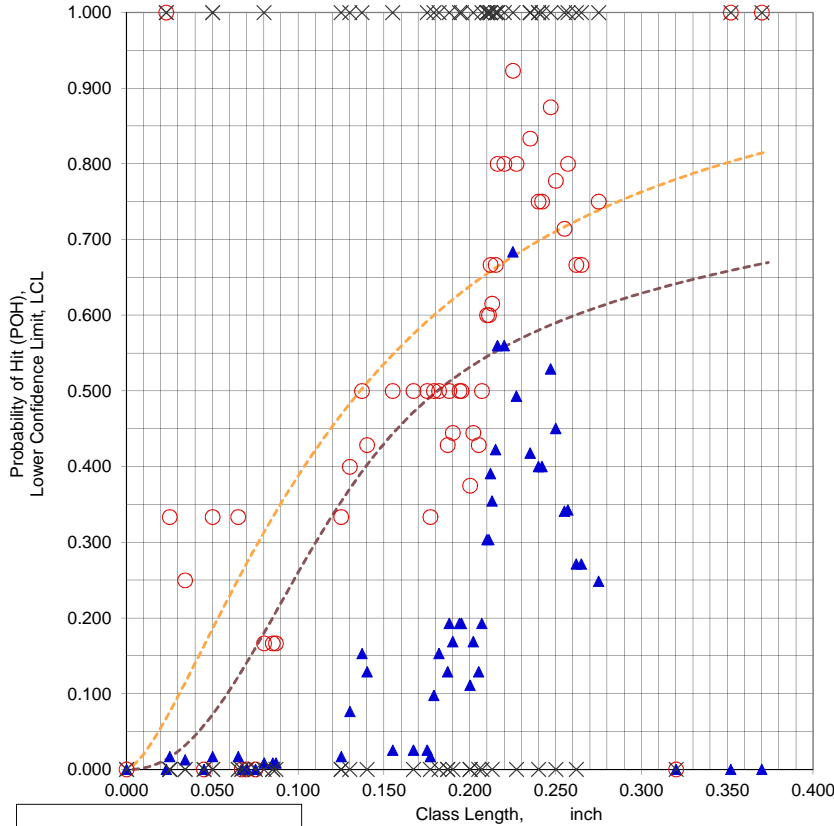
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = **F32253AD.XLS**
 Data Set Name = **F32253AD(CRK #)**
 Date & Time = 6/5/15 4:56 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6837
 Classwidth @ Best LCL = 0.0150 inch
 Classlength @ Best LCL = 0.2250 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.3520 -0.031 inch 28 Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.370 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.352 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 0.740 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F32253AD.XLS
 Data Set Name = F32253AD(CRK #)

Directed DOE Options

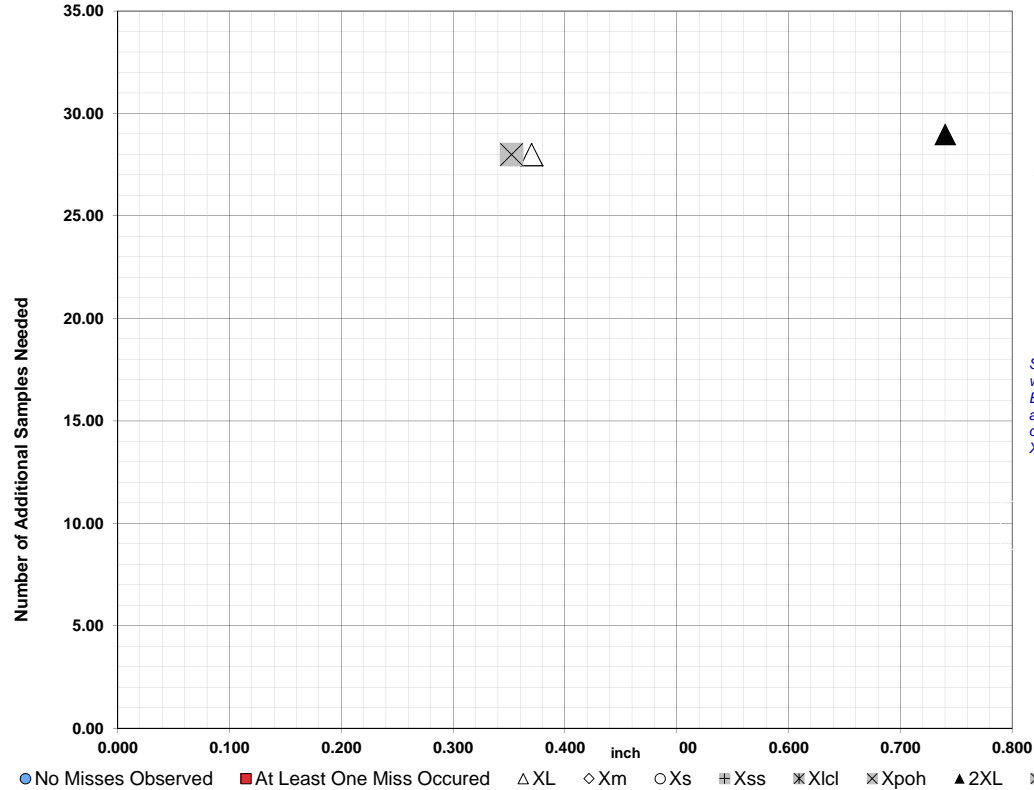


TABLE C

Class Length	Additional Samples
XL = 0.370	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.352	28
2XL = 0.740	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

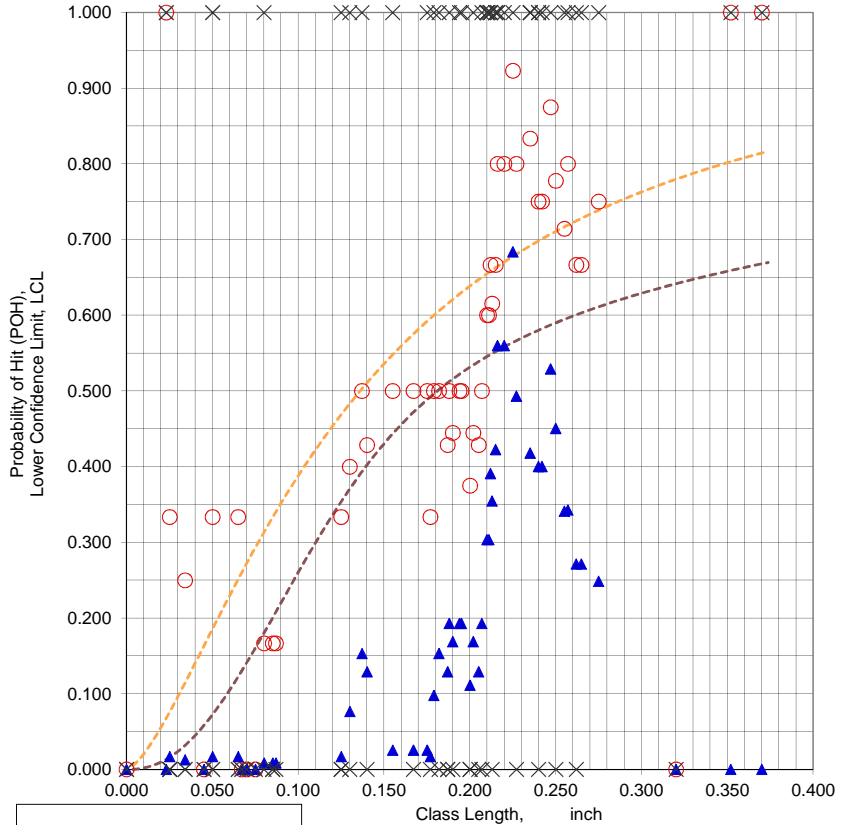
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = F32253AL.XLS
 Data Set Name = F32253AL(CRK #)
 Date & Time = 6/5/15 4:58 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6837
 Classwidth @ Best LCL = 0.0150 inch
 Classlength @ Best LCL = 0.2250 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.3520 -0.031 inch 28 Samples
 NTIAC 90% POD = 0.901 @ 0.605 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.370 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = 0.352 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 0.740 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F32253AL.XLS
 Data Set Name = F32253AL(CRK #)

Directed DOE Options

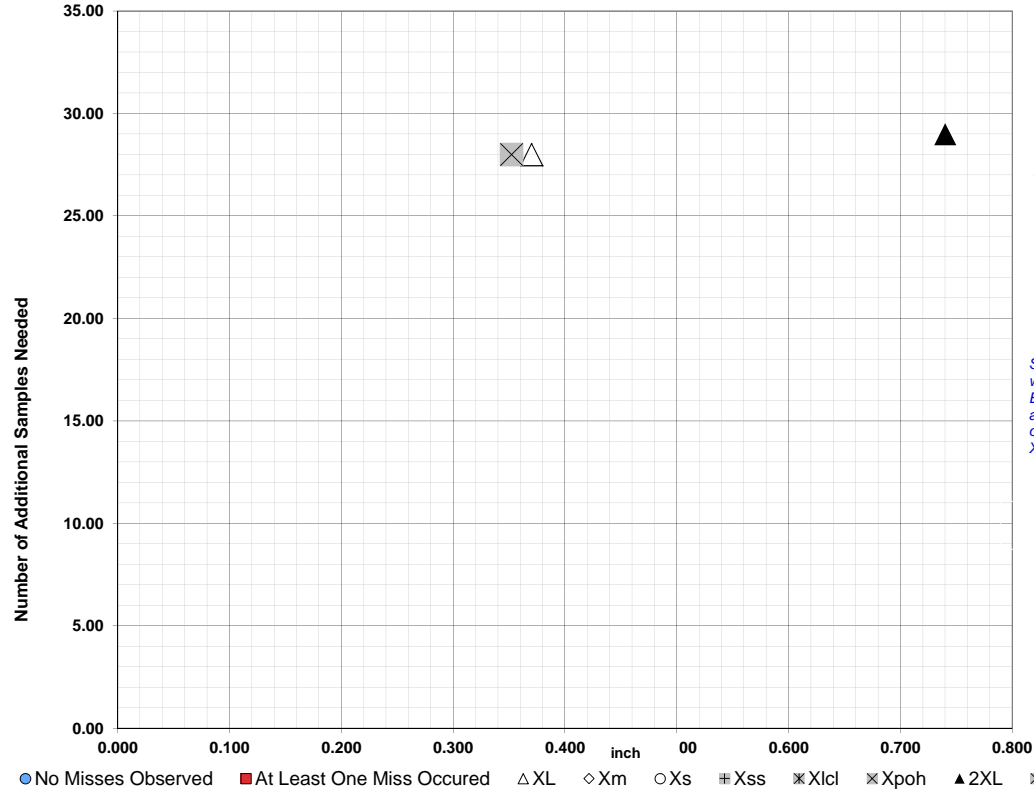


TABLE C

Class Length	Additional Samples
XL = 0.370	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.352	28
2XL = 0.740	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

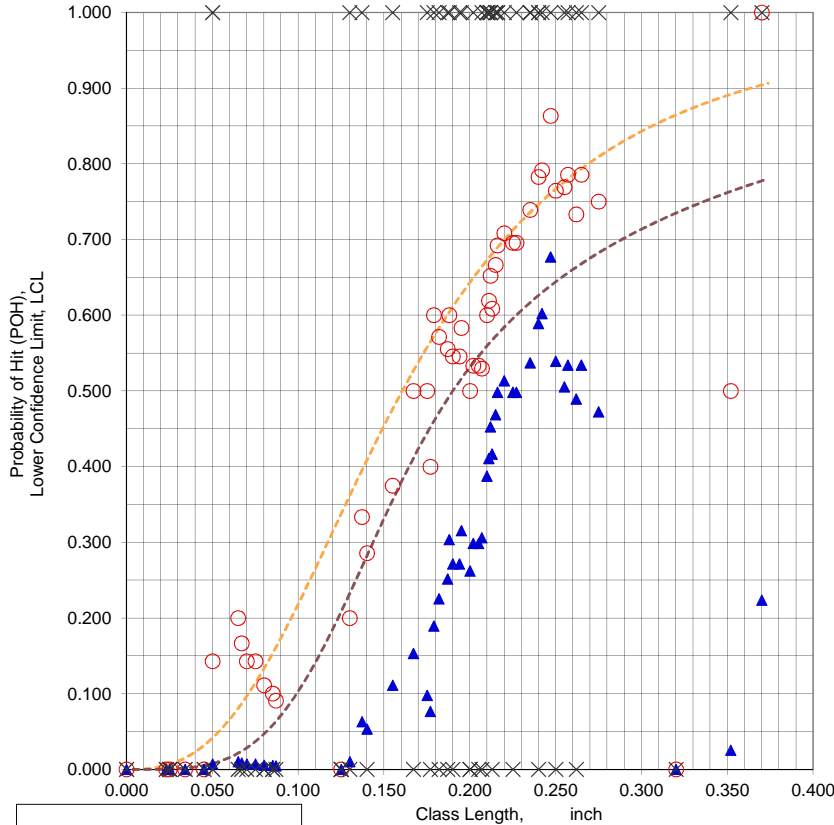
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **F32253BD.XLS**
 Data Set Name = **F32253BD(CRK #)**
 Date & Time = 6/5/15 4:59 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6770
 Classwidth @ Best LCL = 0.0370 inch
 Classlength @ Best LCL = 0.2470 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.3520 -0.031 inch 28 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.370 inch
 Samples Needed @ XL = 27
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.370 inch
 Samples Needed @ Xpoh = 27
 New Largest Classlength , 2XL = 0.740 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F32253BD.XLS
 Data Set Name = F32253BD(CRK #)

Directed DOE Options

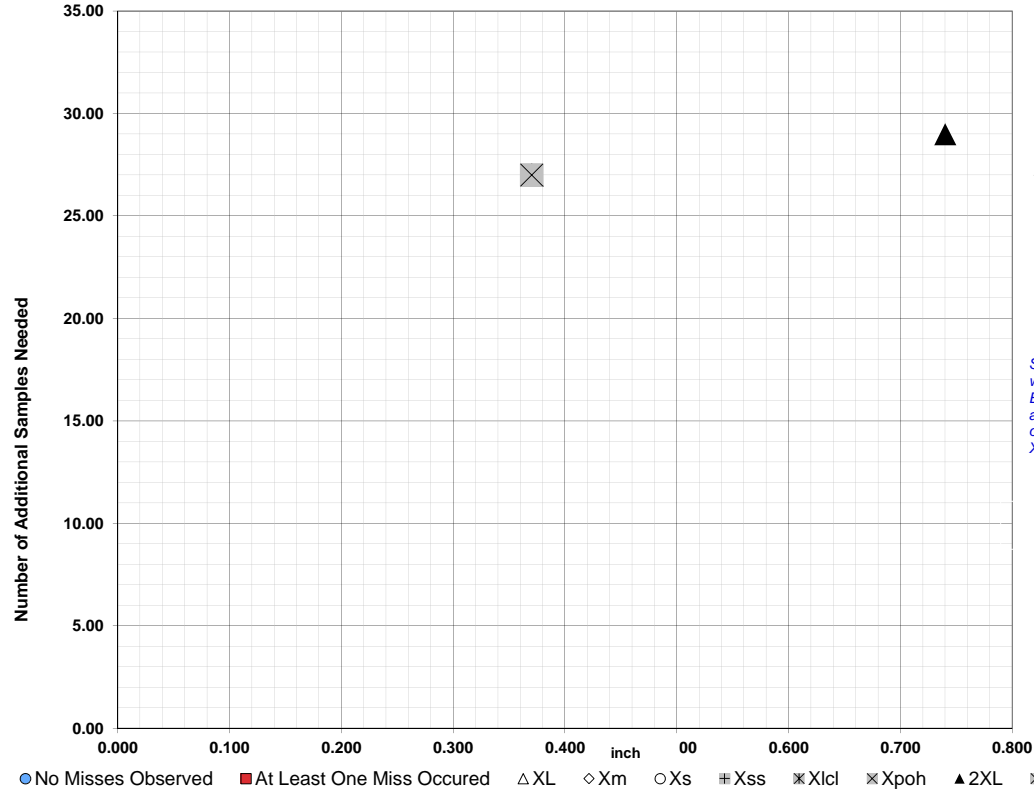


TABLE C

Class Length	Additional Samples
XL = 0.370	27
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.370	27
2XL = 0.740	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

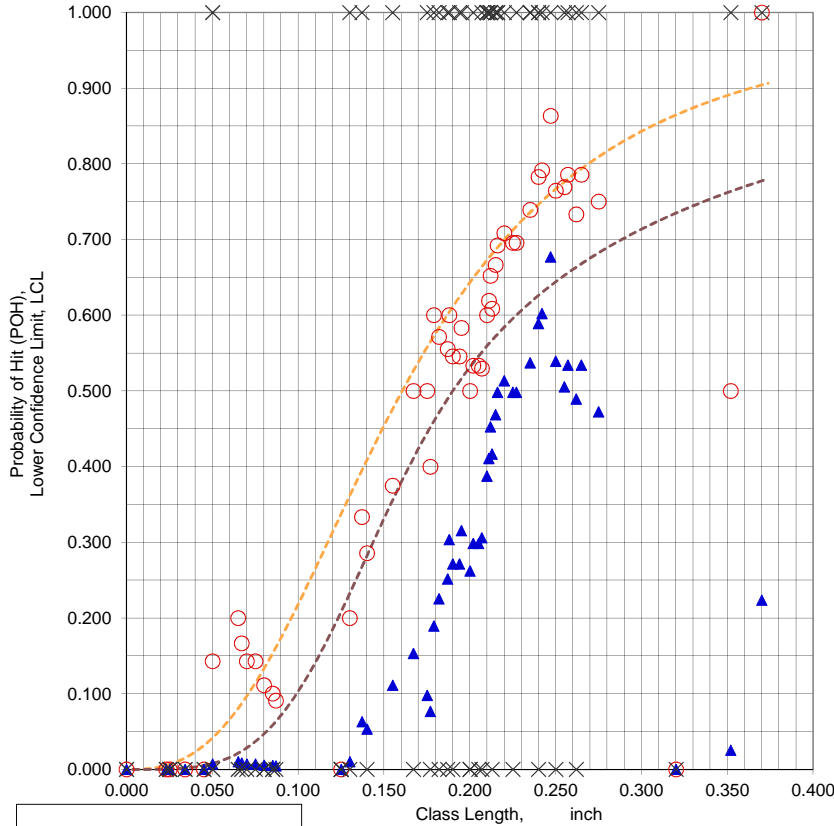
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = **F32253BL.XLS**
 Data Set Name = **F32253BL(CRK #)**
 Date & Time = 6/5/15 5:00 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6770
 Classwidth @ Best LCL = 0.0370 inch
 Classlength @ Best LCL = 0.2470 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.3520 -0.031 inch 28 Samples
 NTIAC 90% POD = 0.901 @ 0.365 inch
 NTIAC 90/95 POD = 0.900 @ 0.695 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.370 inch
 Samples Needed @ XL = 27
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.370 inch
 Samples Needed @ Xpoh = 27
 New Largest Classlength , 2XL = 0.740 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F32253BL.XLS
 Data Set Name = F32253BL(CRK #)

Directed DOE Options

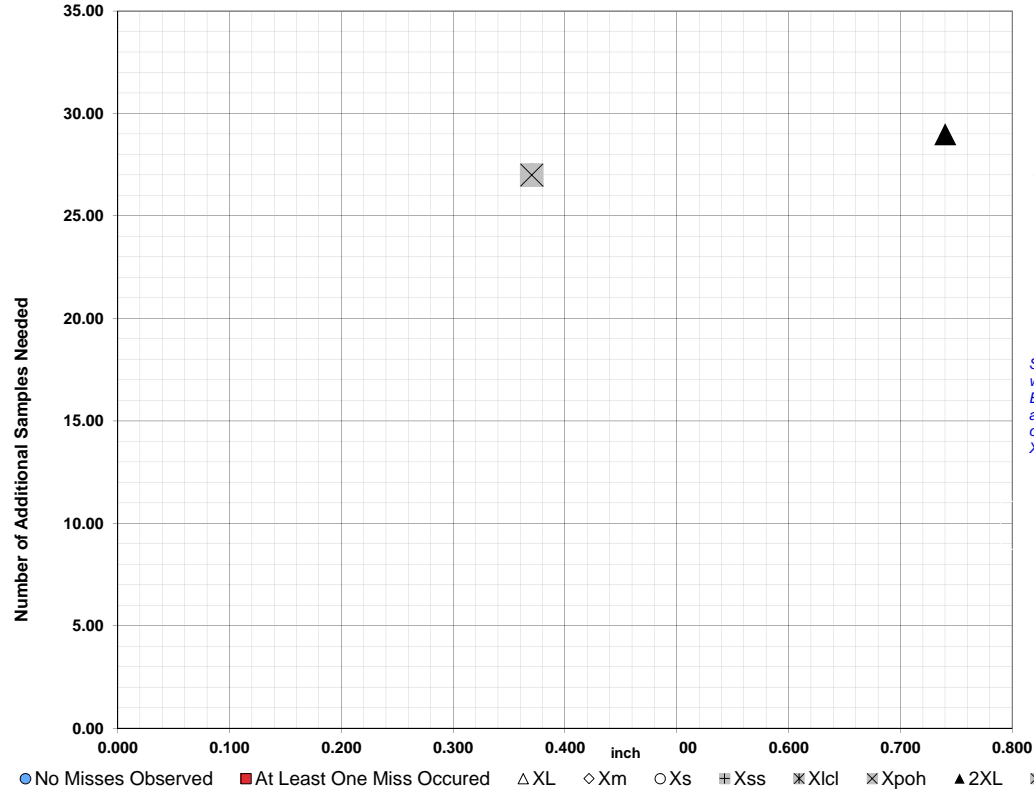


TABLE C

Class Length	Additional Samples
XL = 0.370	27
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.370	27
2XL = 0.740	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

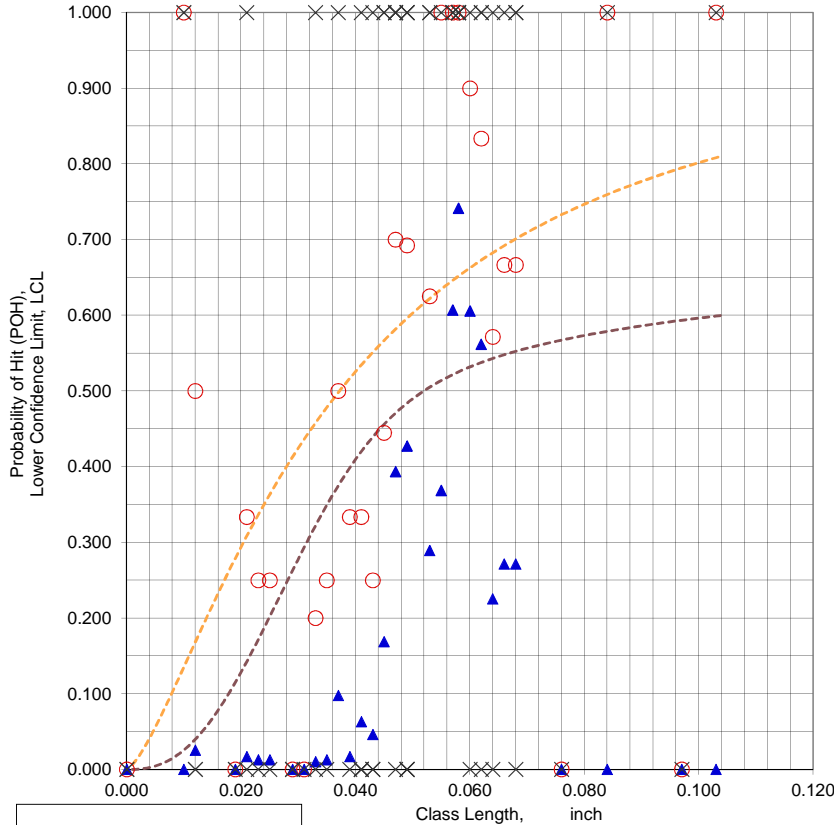
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **F32253CD.XLS**
 Data Set Name = **F32253CD(CRK #)**
 Date & Time = 6/5/15 5:01 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7411
 Classwidth @ Best LCL = 0.0050 inch
 Classlength @ Best LCL = 0.0580 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.1030 -0.005 inch 28 Samples
 NTIAC 90% POD = 0.903 @ 0.180 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.103 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.103 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 0.206 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F32253CD.XLS
 Data Set Name = F32253CD(CRK #)

Directed DOE Options

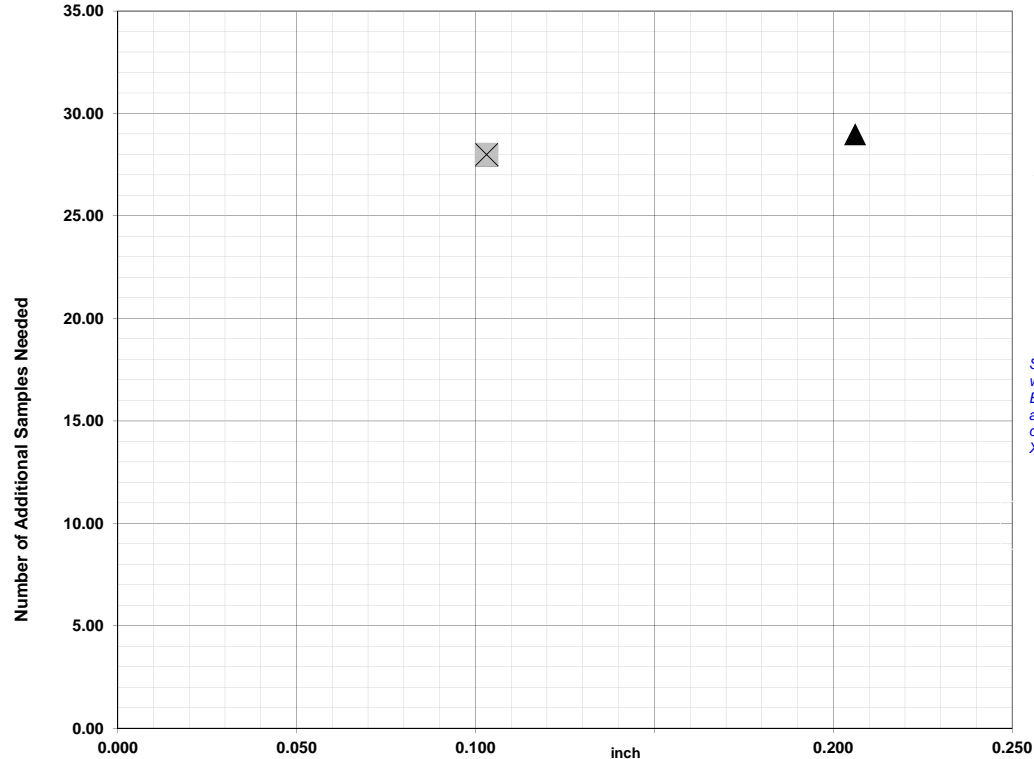


TABLE C

Class Length	Additional Samples
XL = 0.103	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.103	28
2XL = 0.206	29
**Alternate Xm =	
Xpodopt =	

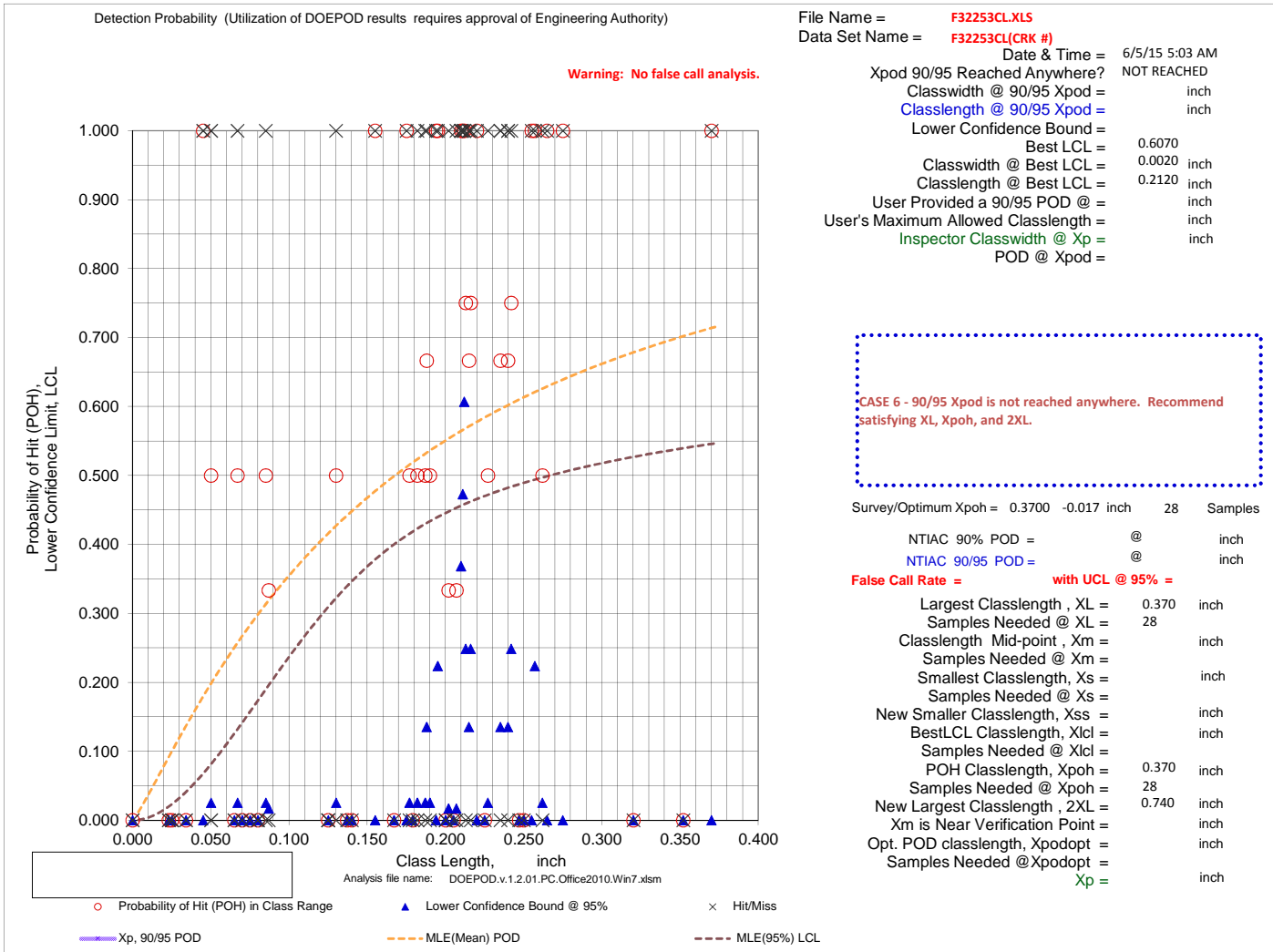
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F32253CL.XLS
 Data Set Name = F32253CL(CRK #)

Directed DOE Options

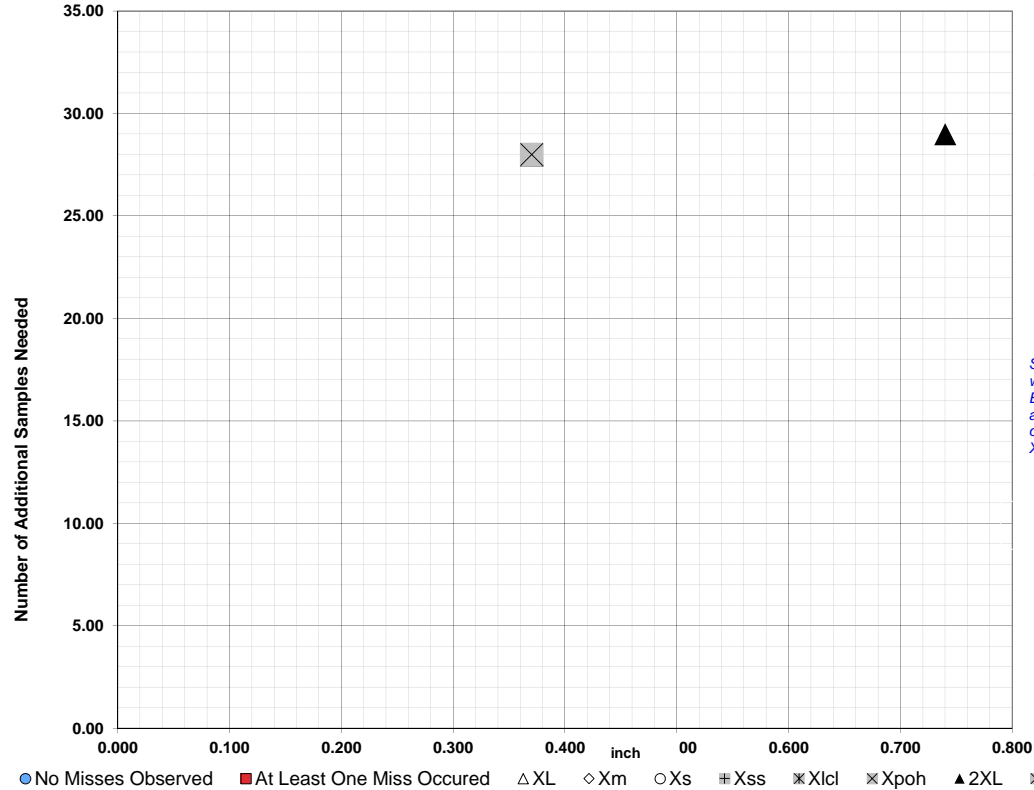


TABLE C

Class Length	Additional Samples
XL = 0.370	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.370	28
2XL = 0.740	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

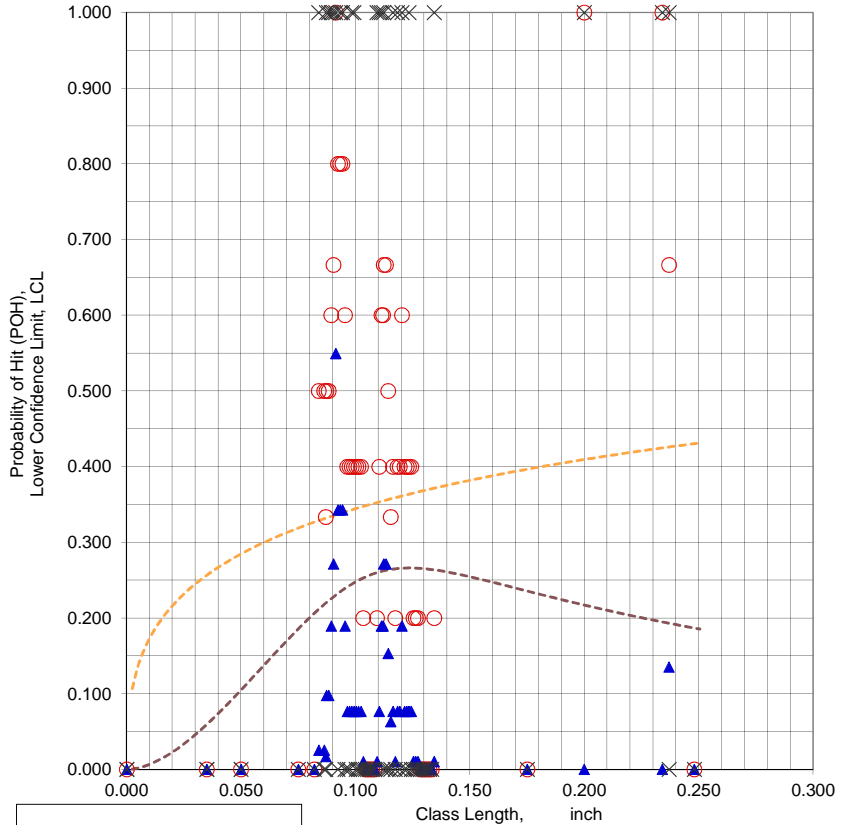
● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.

File Name = F40601A.XLS
 Data Set Name = F40601A(CRK #)
 Date & Time = 6/5/15 5:04 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound = Best LCL = 0.5493
 Classwidth @ Best LCL = 0.0040 inch
 Classlength @ Best LCL = 0.0913 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =



CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.496 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F40601A.XLS
 Data Set Name = F40601A(CRK #)

Directed DOE Options

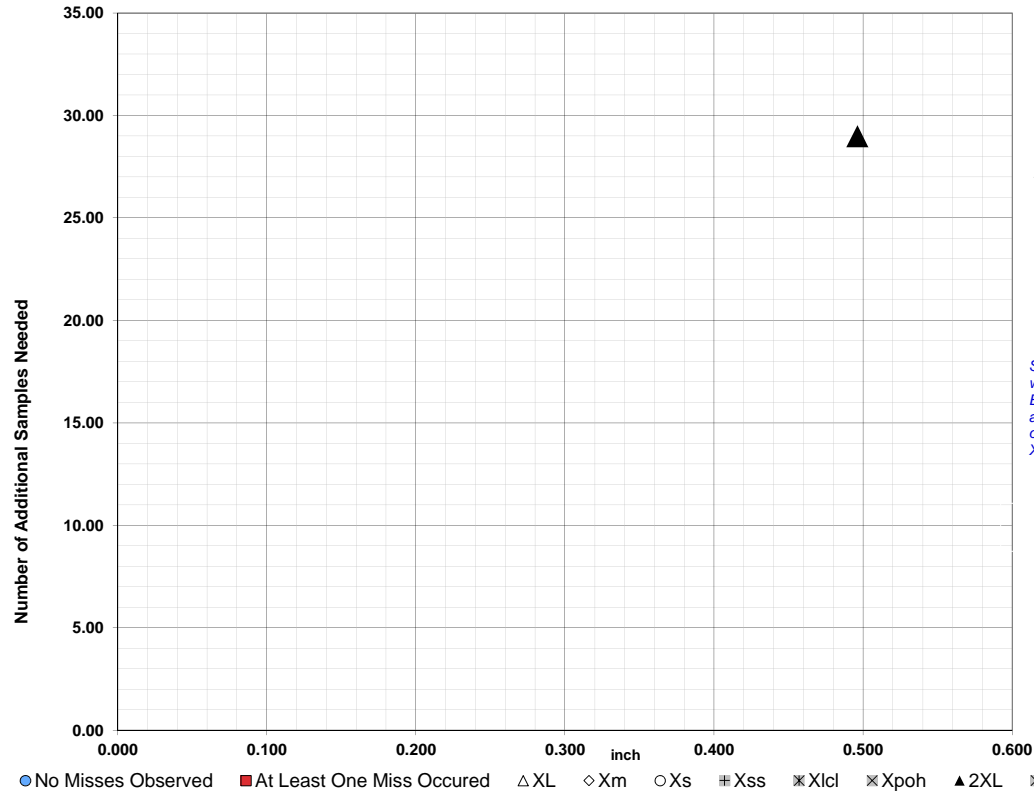


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.496	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.496 29
 **Alternate Xm =
 Xpodopt =

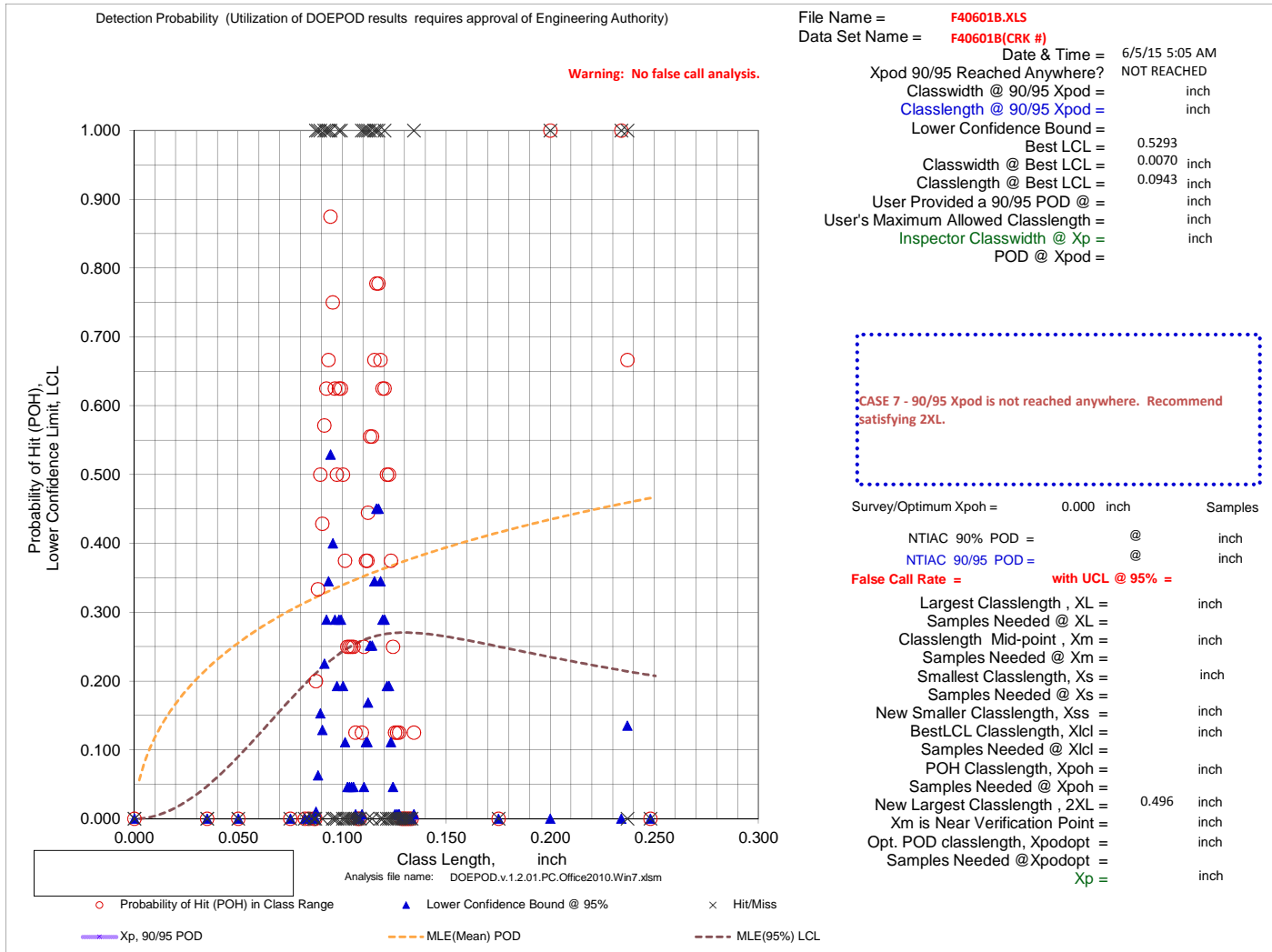
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ⊗ Xlcl
 ⊗ Xpoh
 ▲ 2XL
 ⊗ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F40601B.XLS
 Data Set Name = F40601B(CRK #)

Directed DOE Options

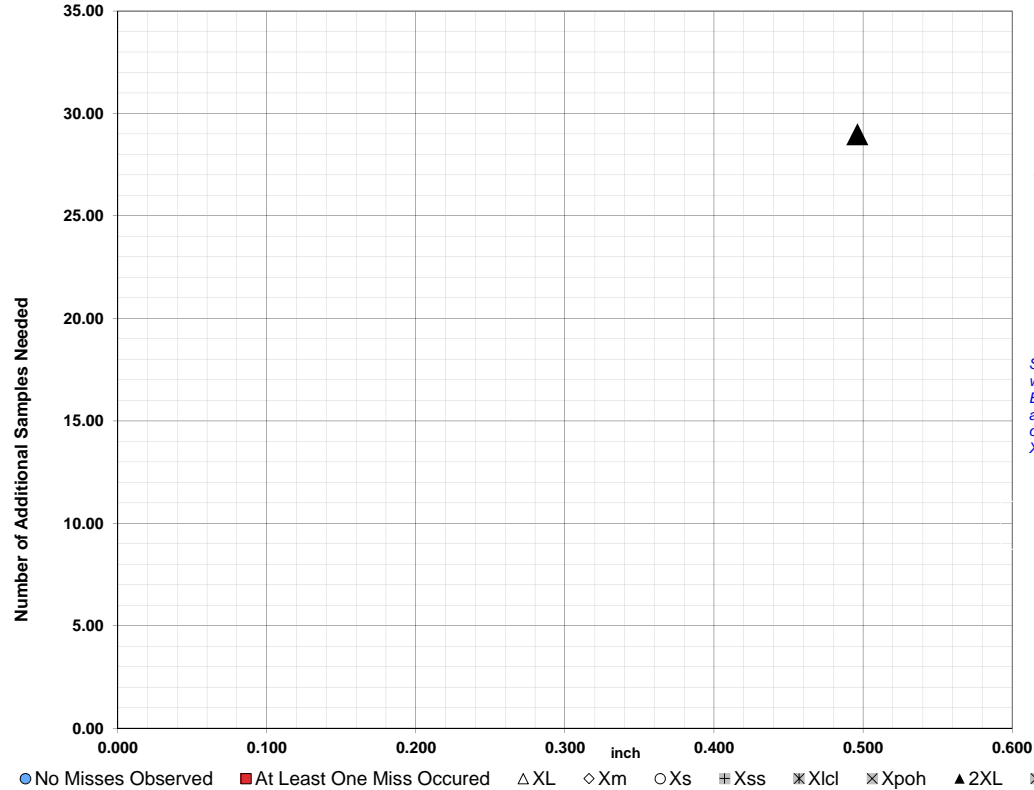


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.496	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.496 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

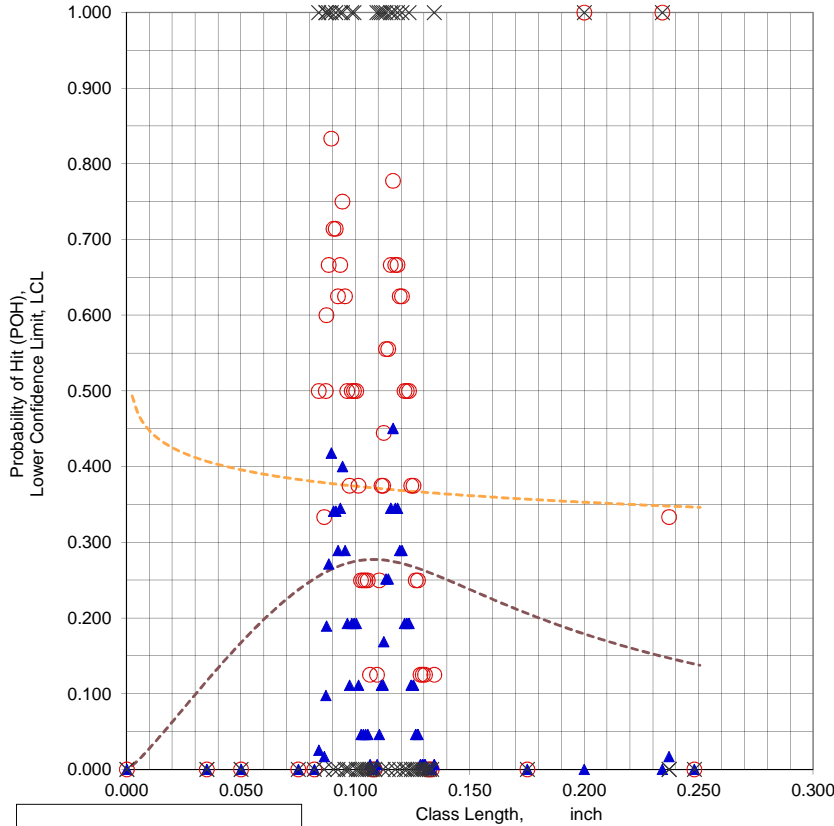
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = F40601C.XLS
 Data Set Name = F40601C(CRK #)
 Date & Time = 6/5/15 5:06 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.4504
 Classwidth @ Best LCL = 0.0070 inch
 Classlength @ Best LCL = 0.1163 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
 False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 0.496 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F40601C.XLS
 Data Set Name = F40601C(CRK #)

Directed DOE Options

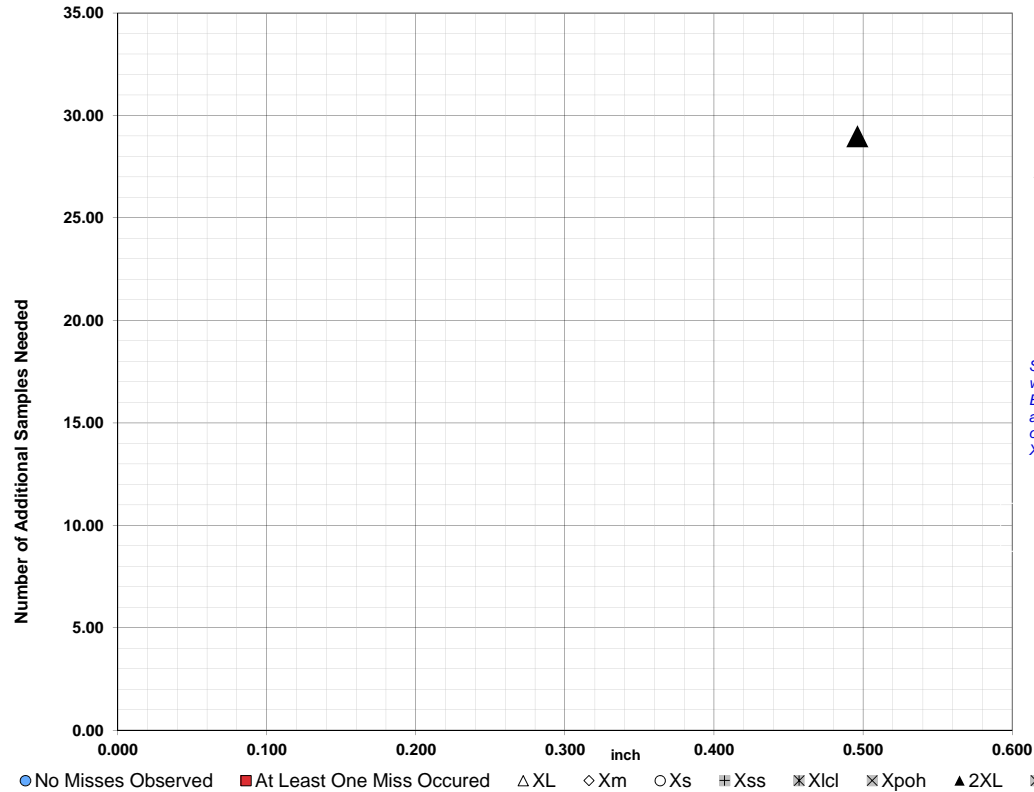


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.496	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.496 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

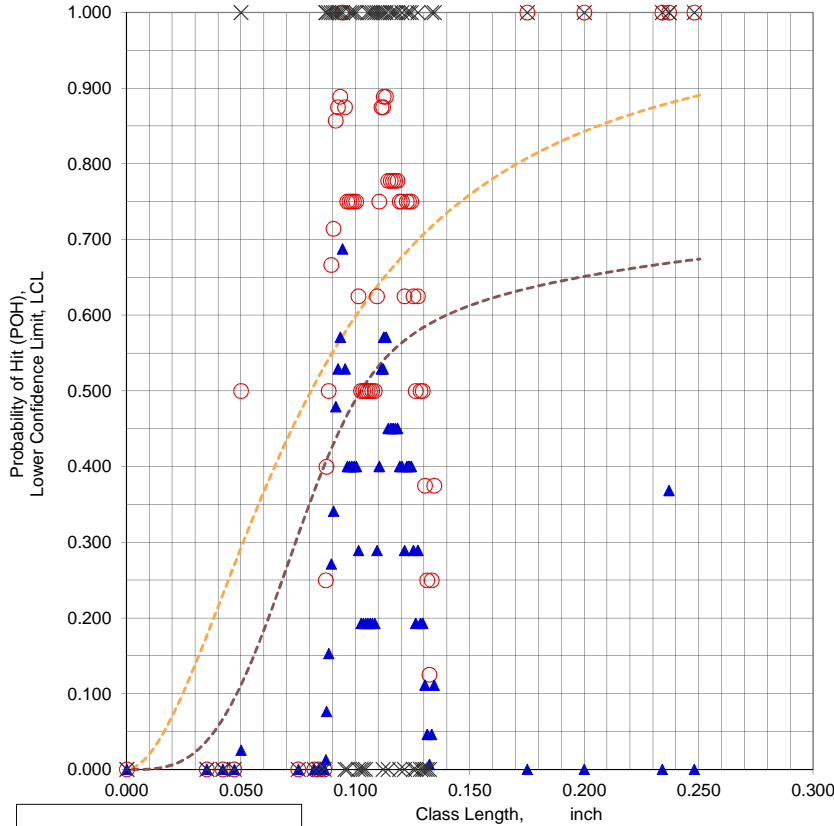
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = F40603A.XLS
 Data Set Name = F40603A(CRK #)
 Date & Time = 6/5/15 5:08 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6877
 Classwidth @ Best LCL = 0.0070 inch
 Classlength @ Best LCL = 0.0943 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.1343 -0.001 inch 27 Samples

NTIAC 90% POD = 0.900 @ 0.265 inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.248 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.175 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 0.496 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = F40603A.XLS
 Data Set Name = F40603A(CRK #)

Directed DOE Options

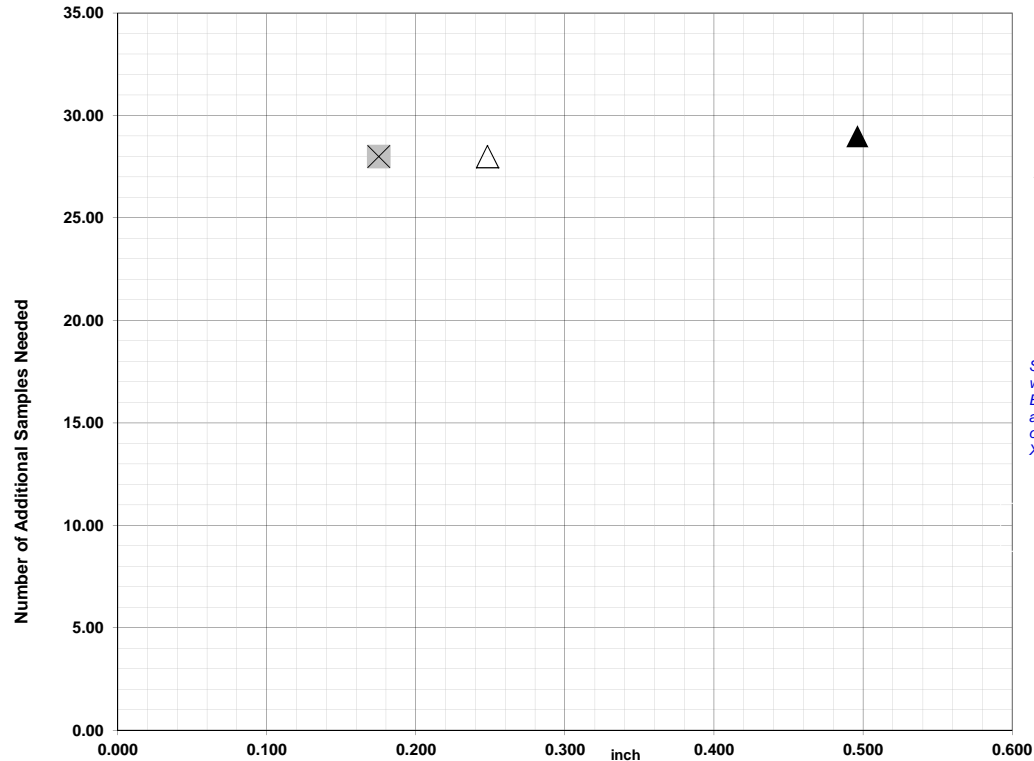


TABLE C

Class Length	Additional Samples
XL = 0.248	28
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 0.175	28
2XL = 0.496	29
**Alternate Xm =	
Xpodopt =	

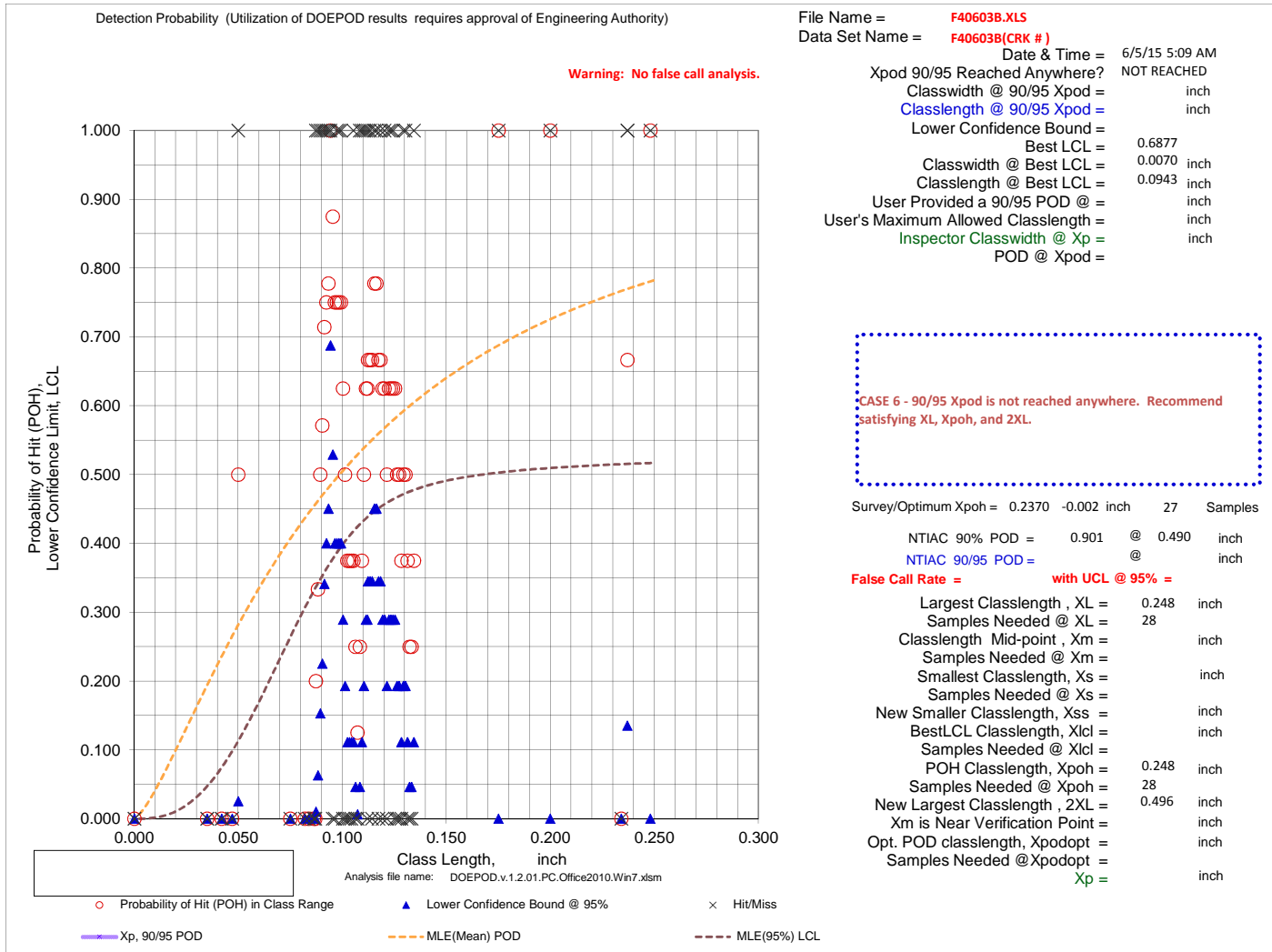
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ XLcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F40603B.XLS
 Data Set Name = F40603B(CRK #)

Directed DOE Options

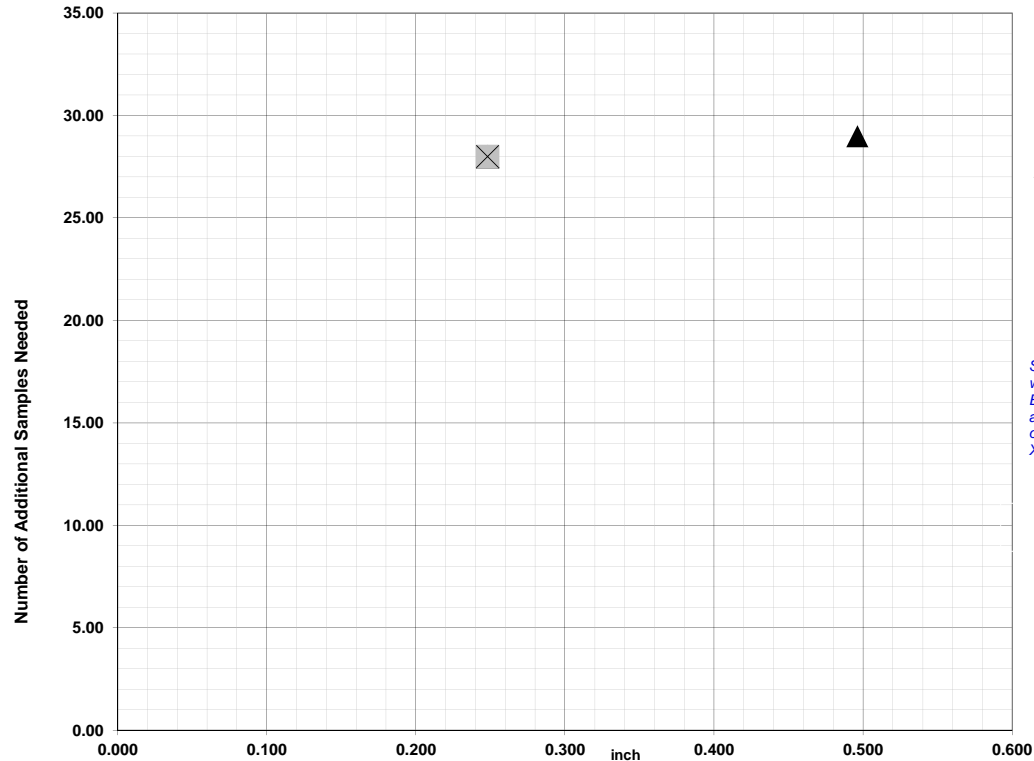


TABLE C

Class Length	Additional Samples
XL = 0.248	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.248	28
2XL = 0.496	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

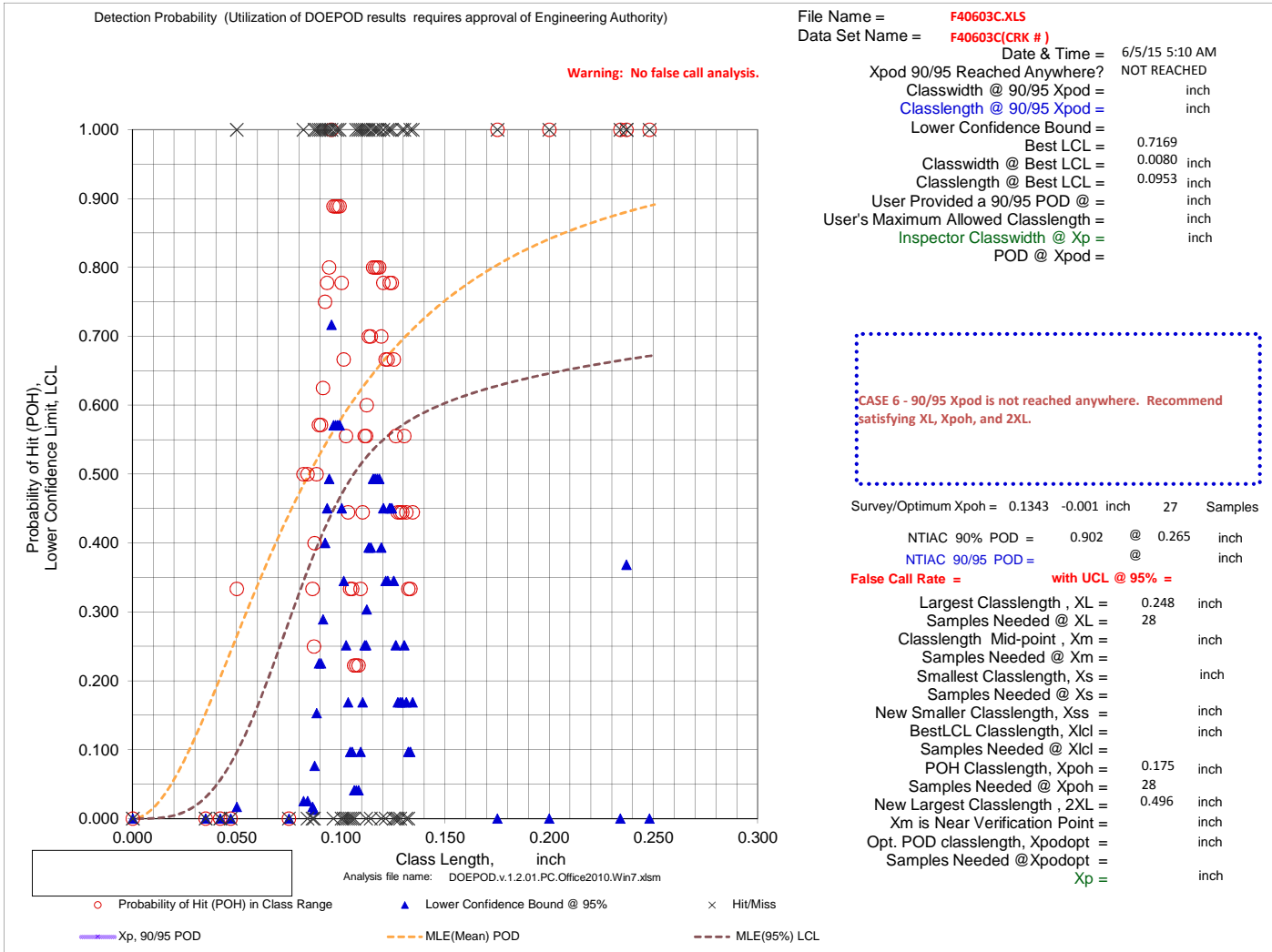
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F40603C.XLS
 Data Set Name = F40603C(CRK #)

Directed DOE Options

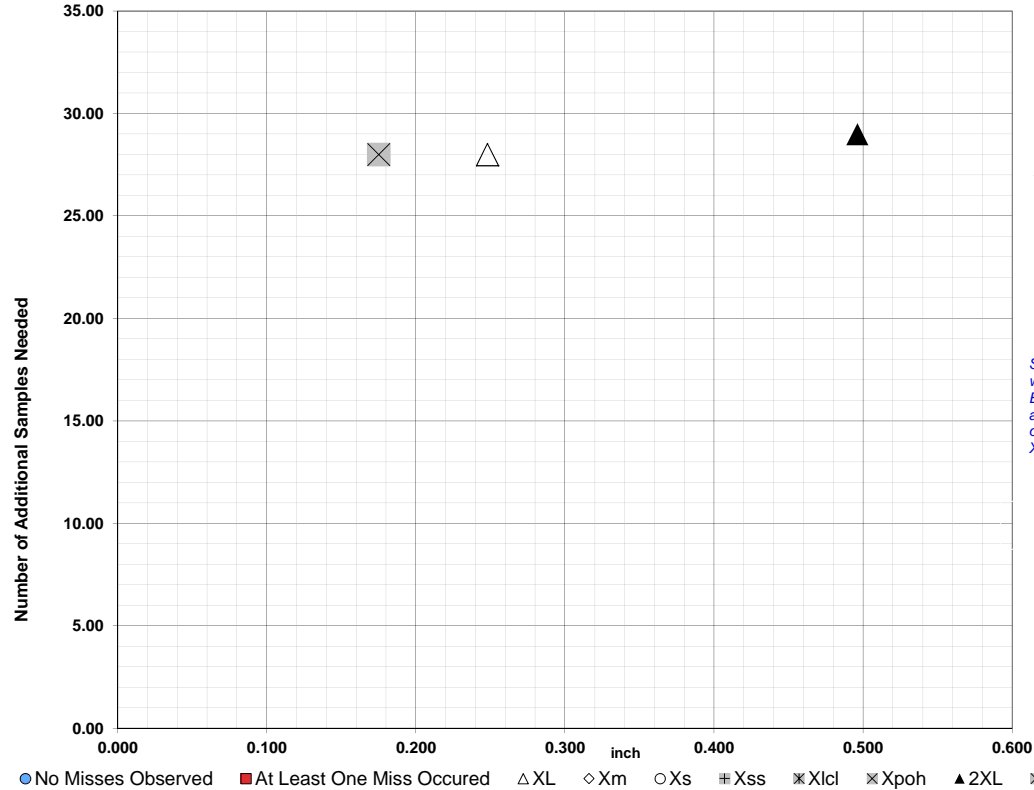


TABLE C

Class Length	Additional Samples
XL = 0.248	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.175	28
2XL = 0.496	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

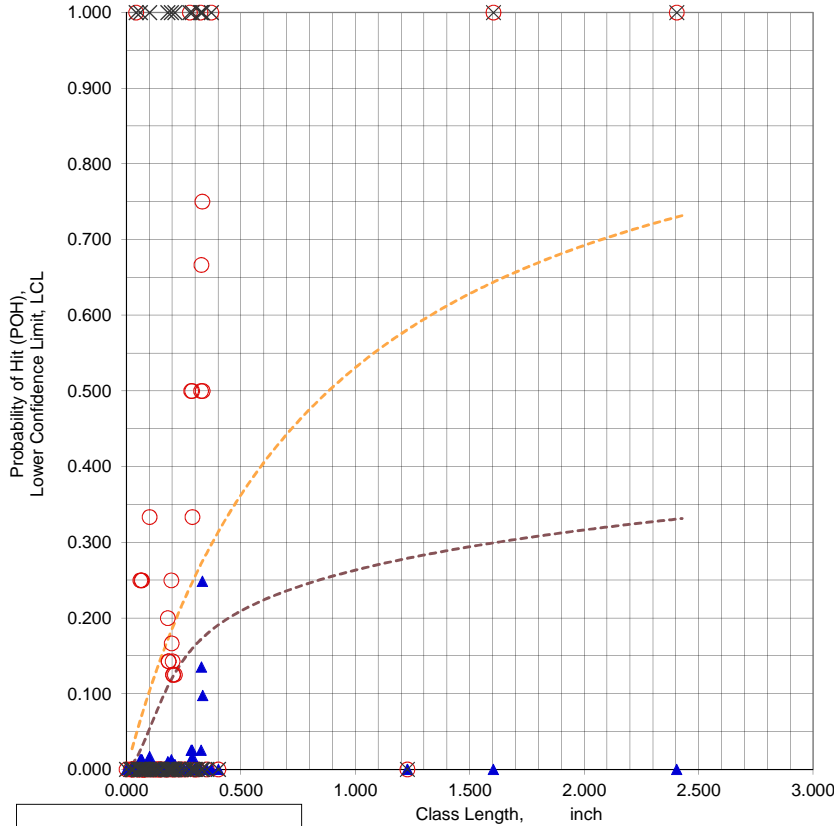
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = F42501A.XLS
 Data Set Name = F42501A(CRK #)
 Date & Time = 6/5/15 5:12 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.2486
 Classwidth @ Best LCL = 0.0080 inch
 Classlength @ Best LCL = 0.3300 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 1.6030 -0.300 inch 28 Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 2.403 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 1.603 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 4.806 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F42501A.XLS
 Data Set Name = F42501A(CRK #)

Directed DOE Options

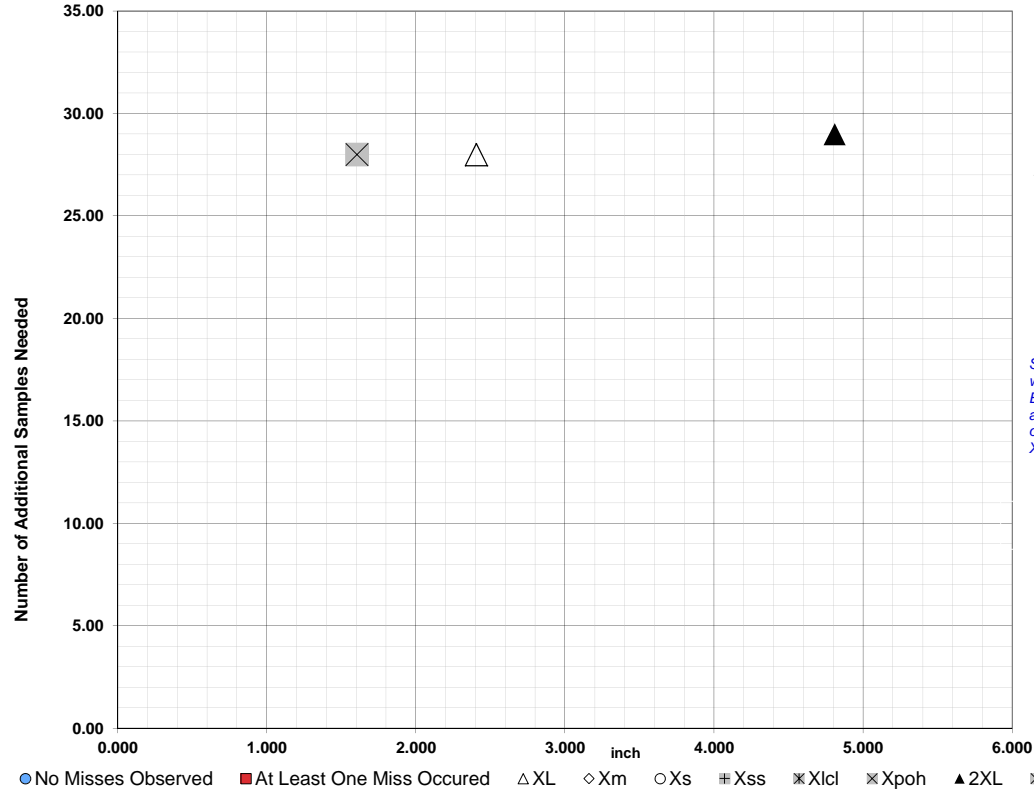


TABLE C

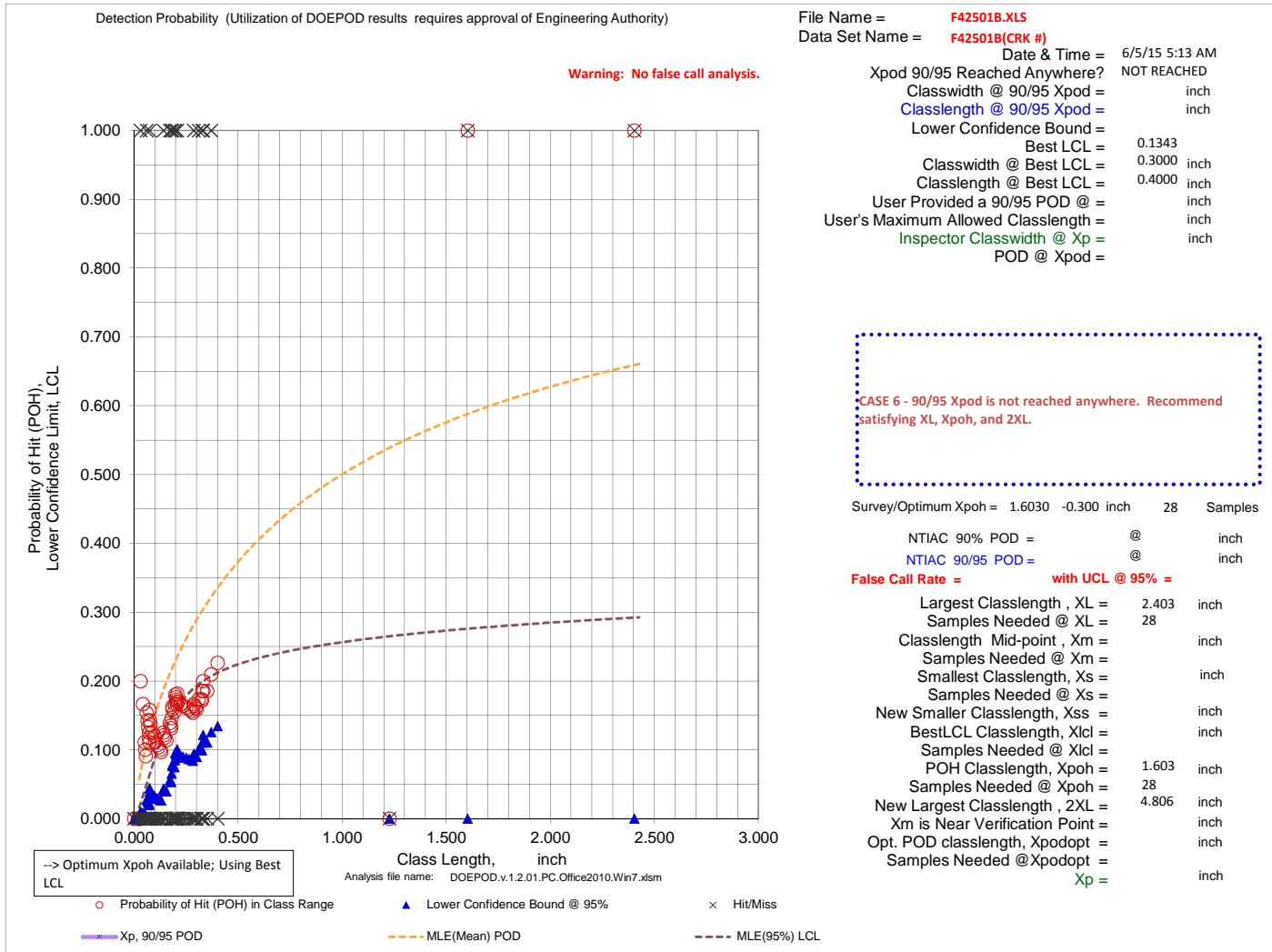
Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.603	28
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F42501B.XLS
 Data Set Name = F42501B(CRK #)

Directed DOE Options

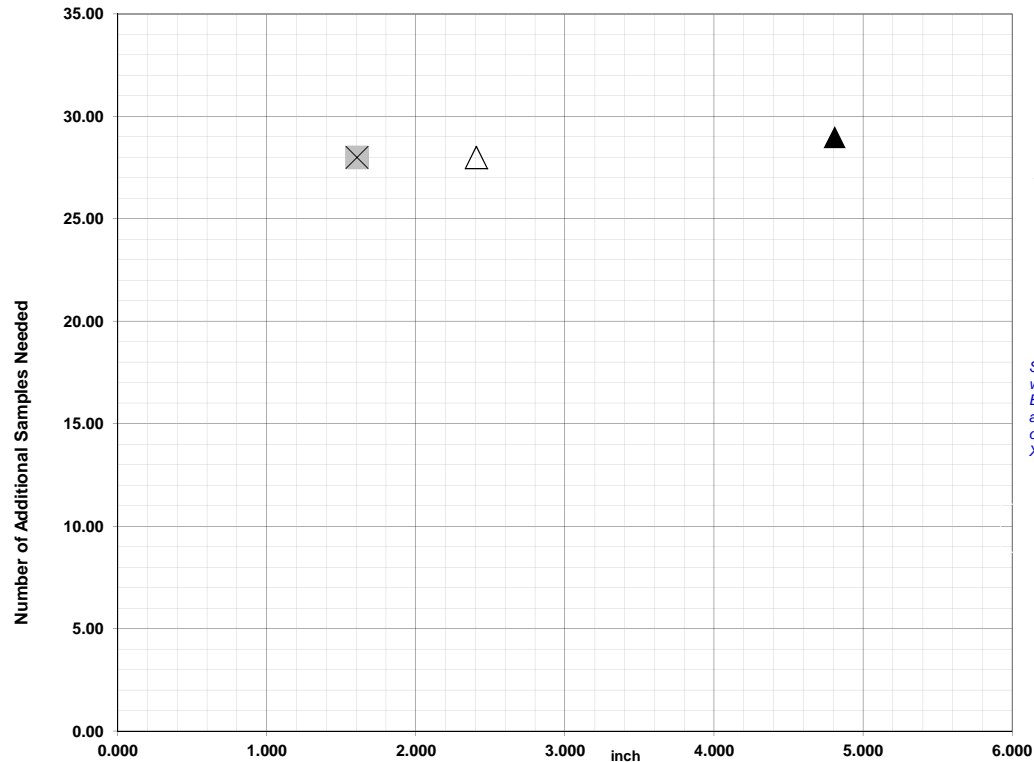


TABLE C

Class Length Additional Samples

XL = 2.403 28
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh = 1.603 28
 2XL = 4.806 29

**Alternate Xm =
 Xpodopt =

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs # Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

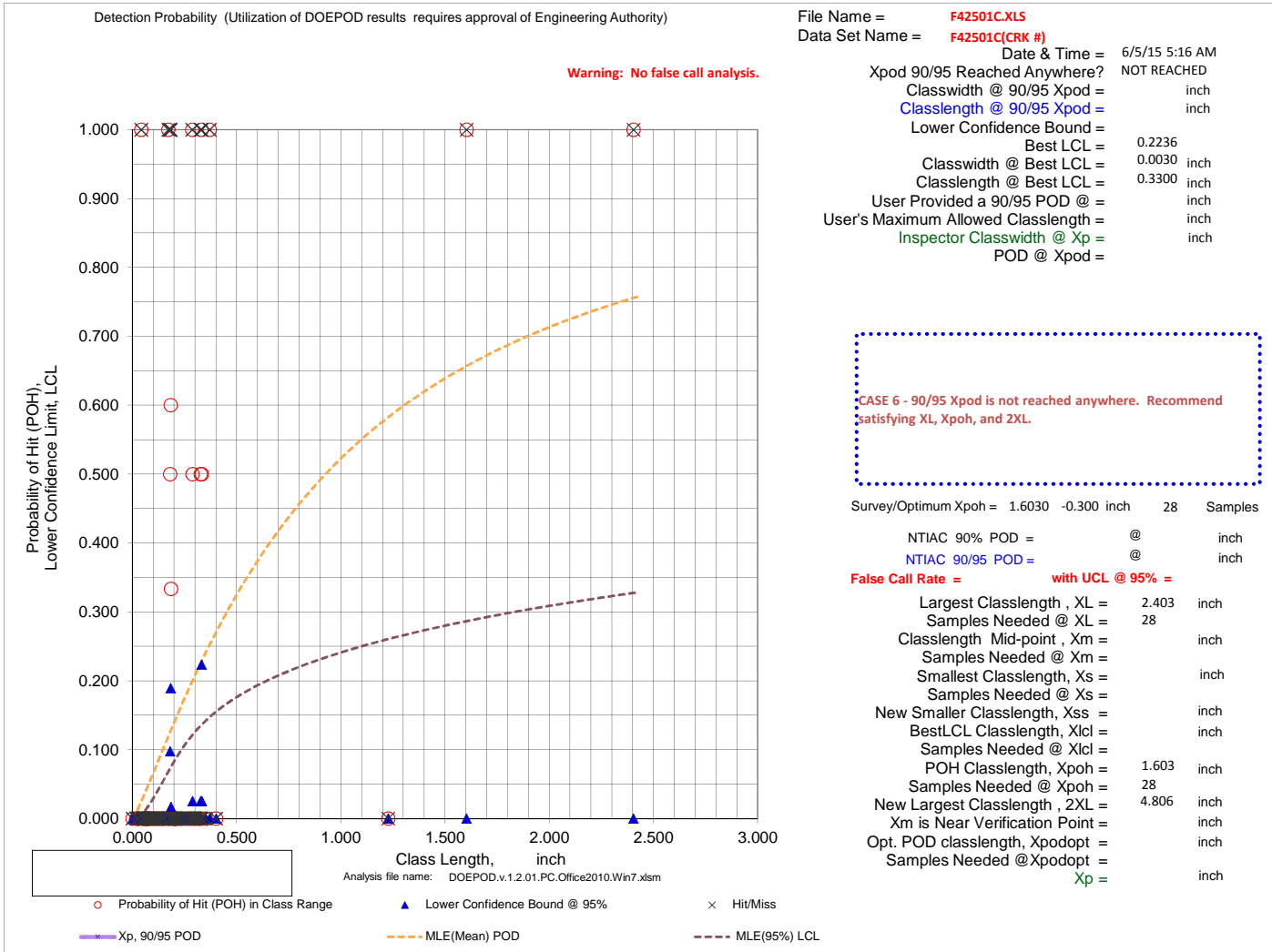
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.

The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.

Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.

**Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.

***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F42501C.XLS
 Data Set Name = F42501C(CRK #)

Directed DOE Options

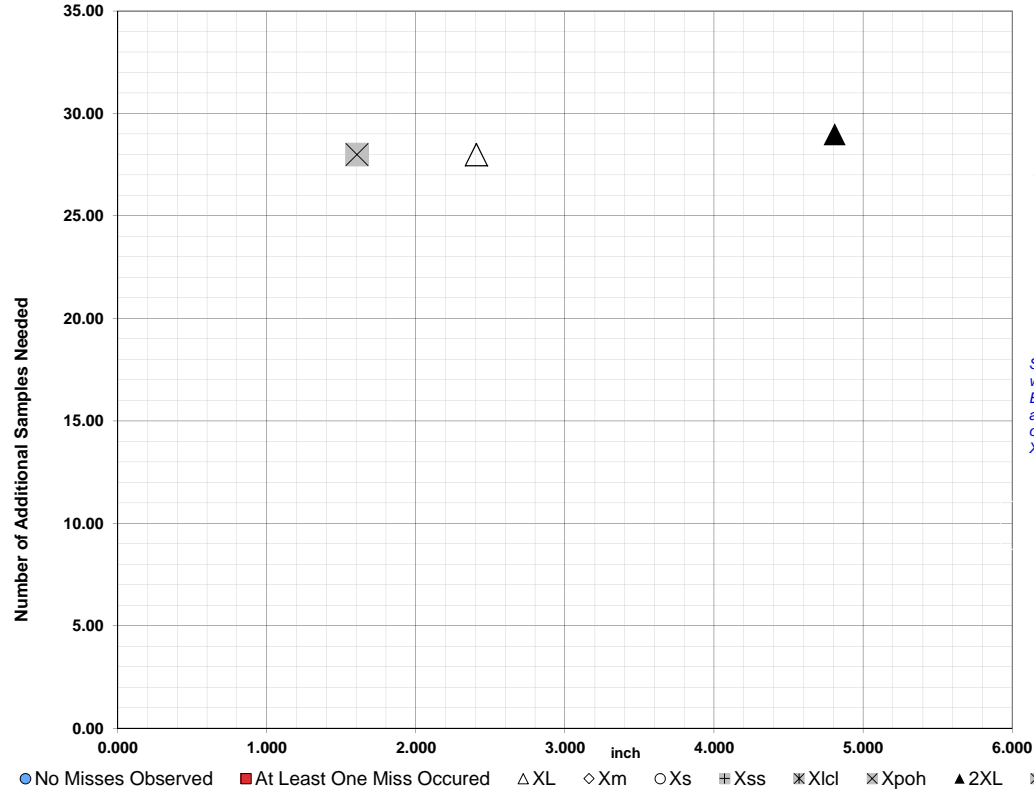


TABLE C

Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 1.603	28
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

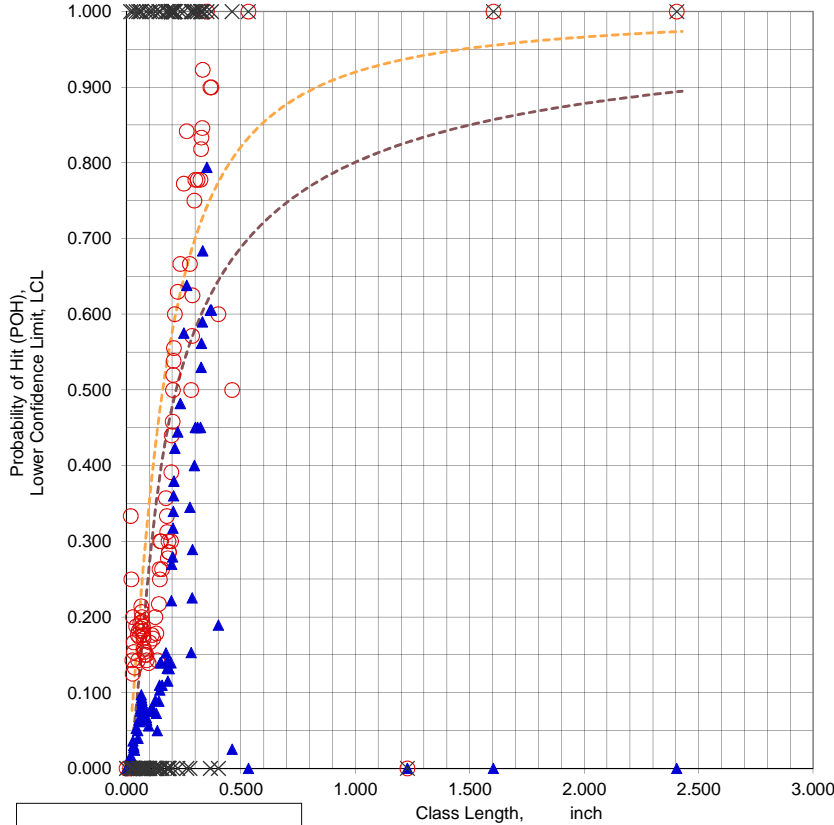
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = F42503A.XLS
 Data Set Name = F42503A(CRK #)
 Date & Time = 6/5/15 5:17 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7942
 Classwidth @ Best LCL = 0.0680 inch
 Classlength @ Best LCL = 0.3500 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 1.6030 -0.300 inch 28 Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 2.403 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 1.603 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = 4.806 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F42503A.XLS
 Data Set Name = F42503A(CRK #)

Directed DOE Options

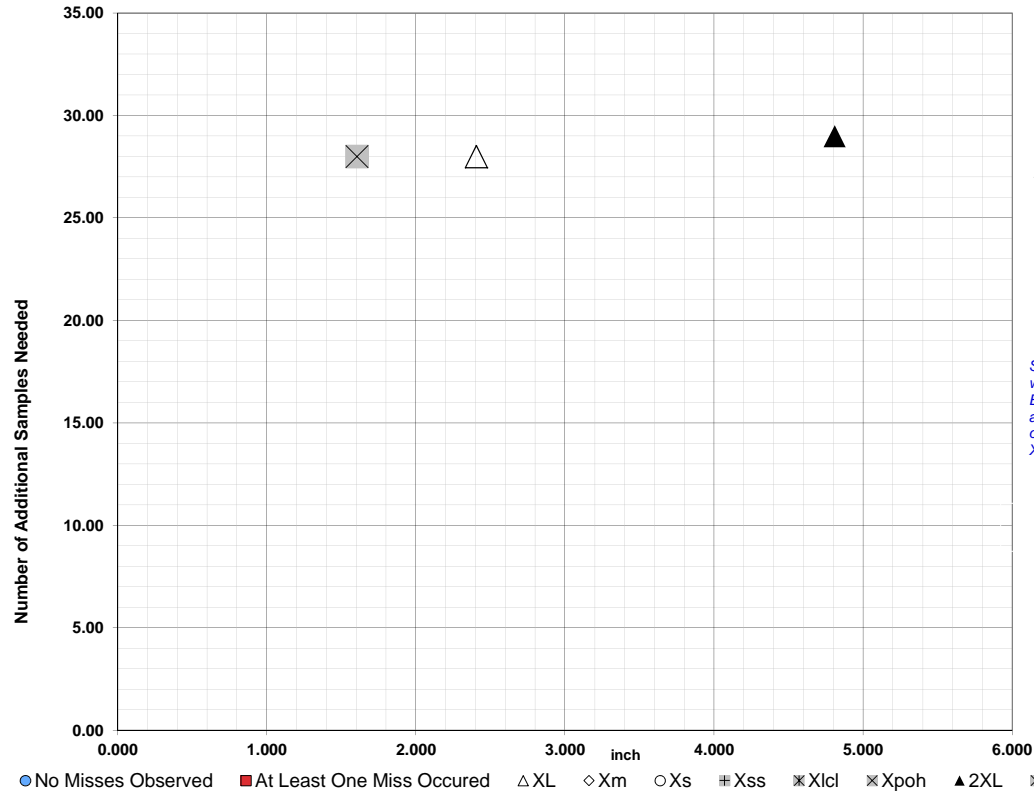


TABLE C

Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.603	28
2XL = 4.806	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

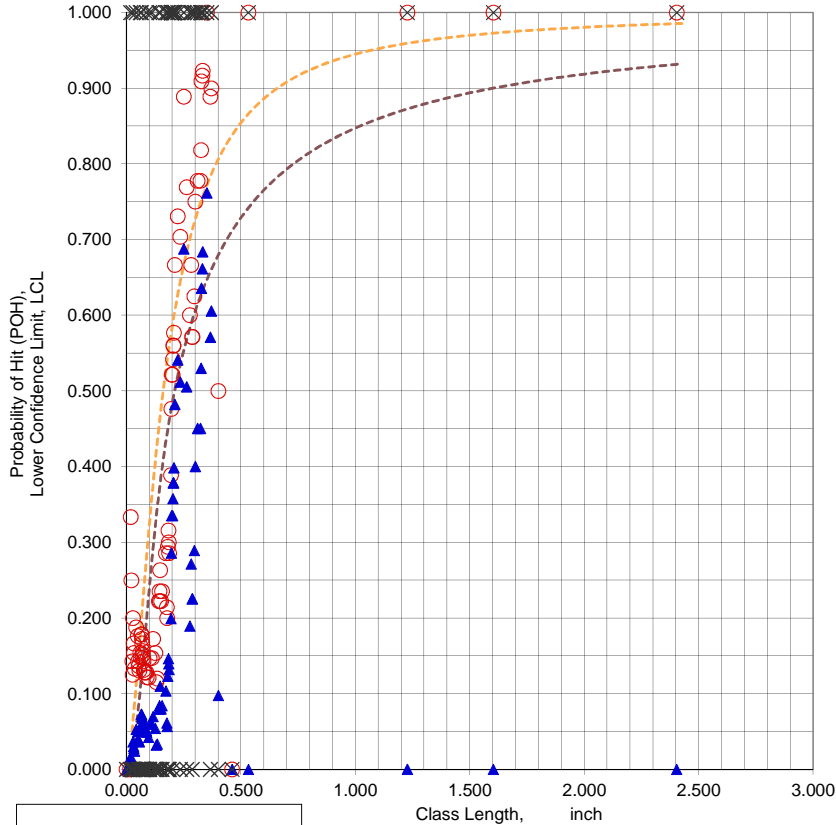
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **F42503B.XLS**
 Data Set Name = **F42503B(CRK #)**
 Date & Time = 6/5/15 5:19 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7616
 Classwidth @ Best LCL = 0.0630 inch
 Classlength @ Best LCL = 0.3500 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 5 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and Xpoh.

Survey/Optimum Xpoh = 0.5320 -0.071 inch 28 Samples

NTIAC 90% POD = 0.900 @ 0.660 inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 2.403 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = 0.532 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F42503B.XLS
 Data Set Name = F42503B(CRK #)

Directed DOE Options

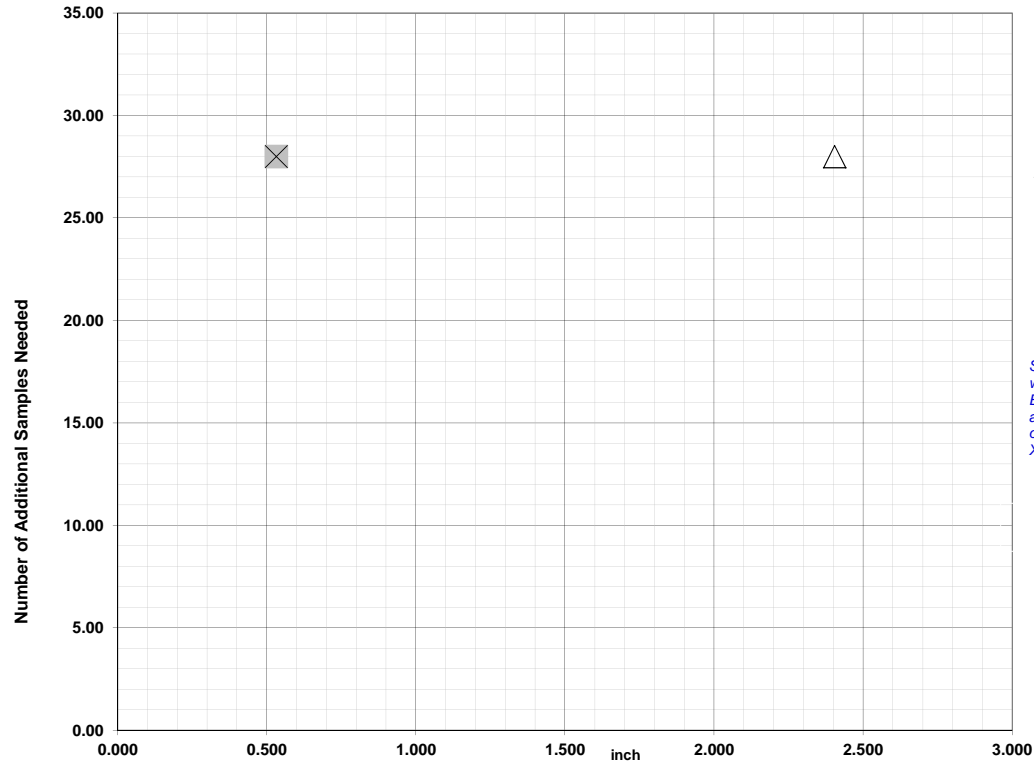


TABLE C

Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.532	28
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

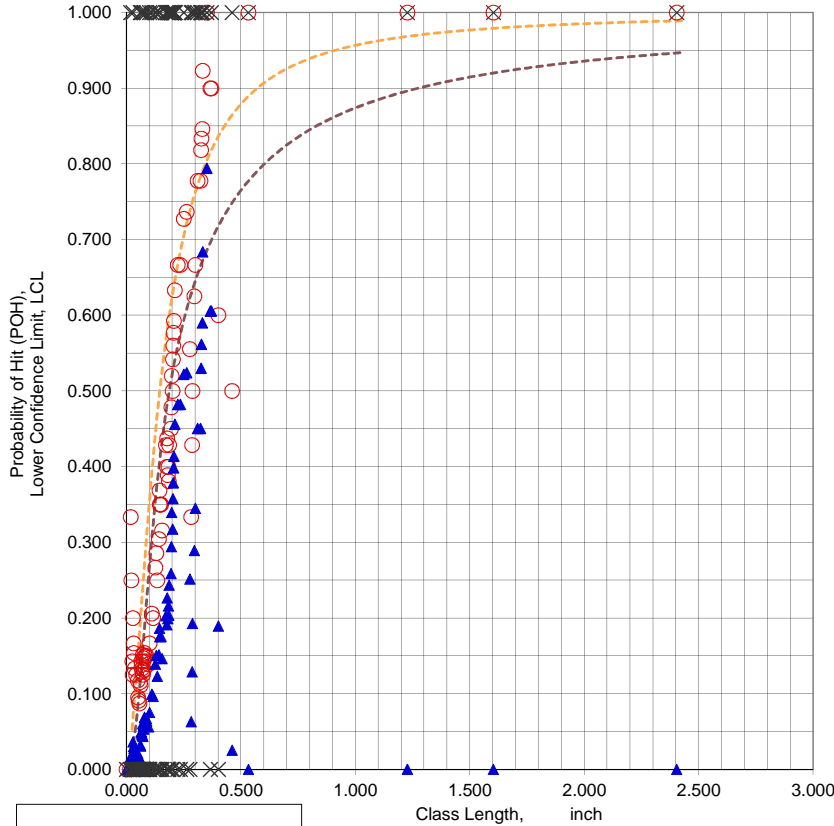
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
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No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **F42503C.XLS**
 Data Set Name = **F42503C(CRK #)**
 Date & Time = 6/5/15 5:20 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7942
 Classwidth @ Best LCL = 0.0680 inch
 Classlength @ Best LCL = 0.3500 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 5 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and Xpoh.

Survey/Optimum Xpoh = 0.4600 -0.059 inch 28 Samples

NTIAC 90% POD = 0.901 @ 0.575 inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 2.403 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.532 inch
 Samples Needed @ Xpoh = 28
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F42503C.XLS
 Data Set Name = F42503C(CRK #)

Directed DOE Options

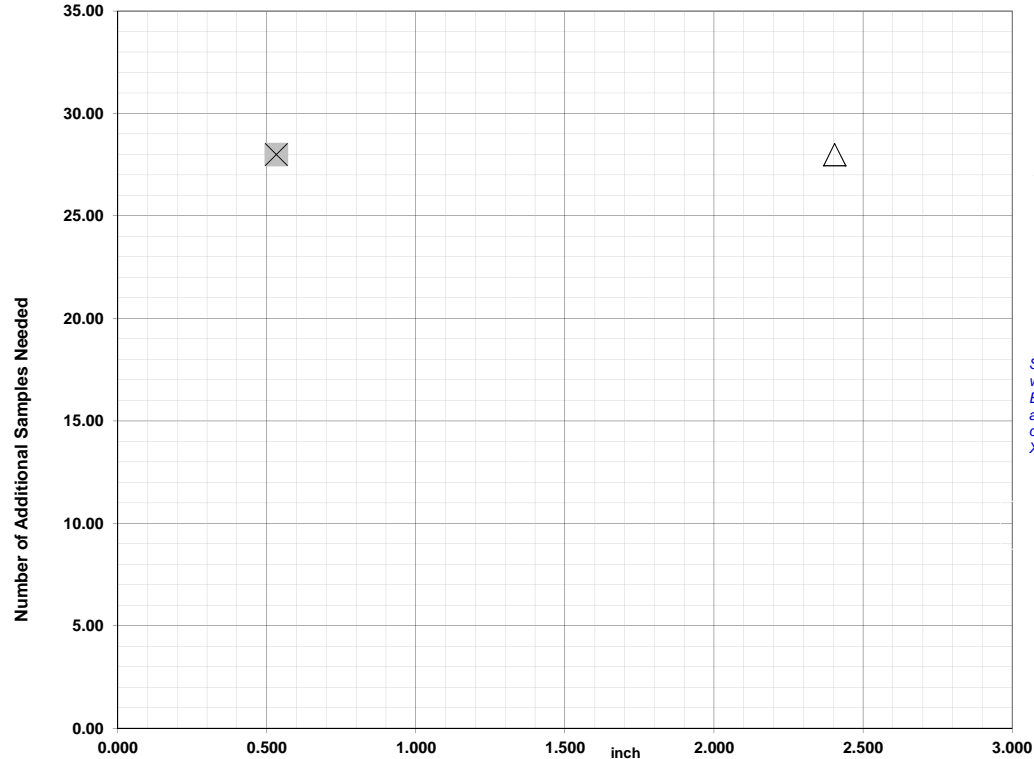


TABLE C

Class Length	Additional Samples
XL = 2.403	28
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.532	28
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

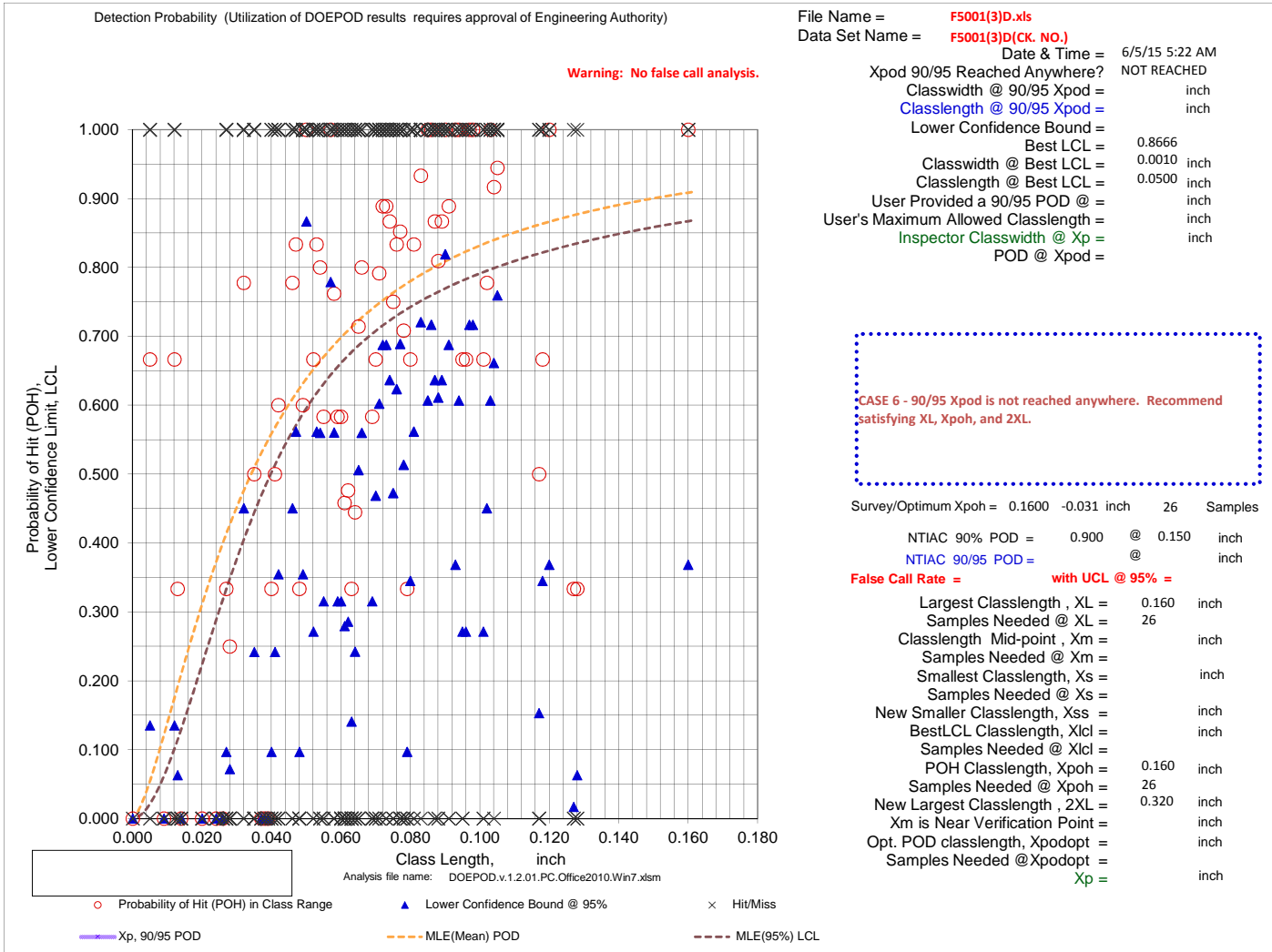
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F5001(3)D.xls
 Data Set Name = F5001(3)D(CK. NO.)

Directed DOE Options

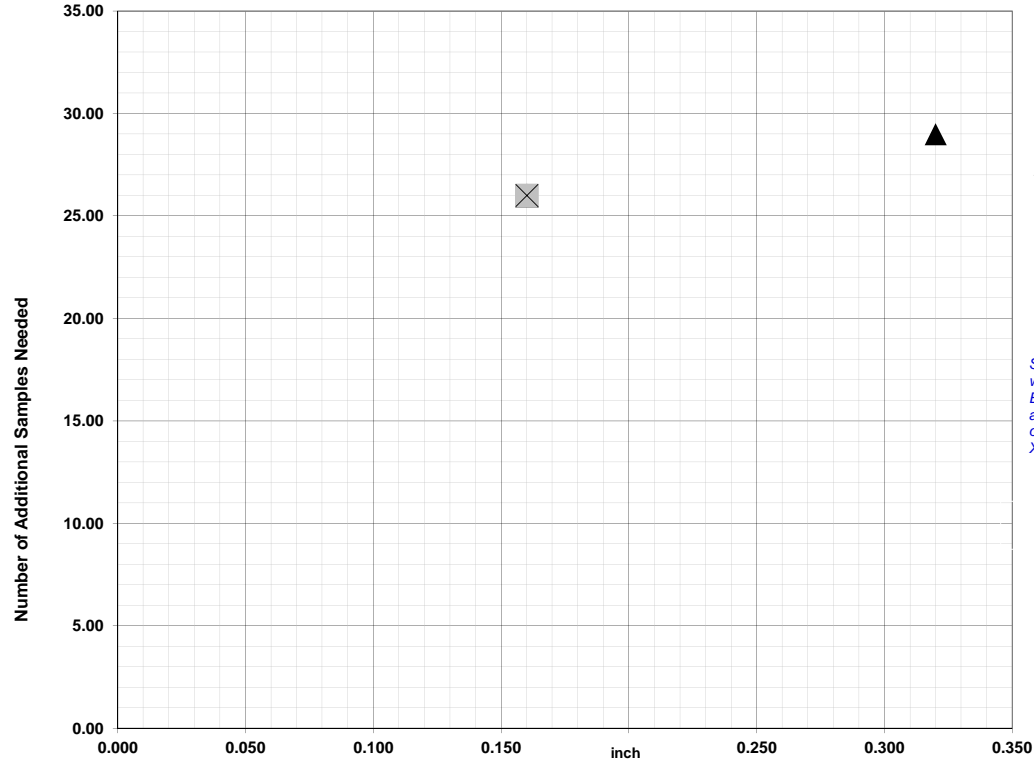


TABLE C

Class Length	Additional Samples
XL =	0.160 26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	0.160 26
2XL =	0.320 29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

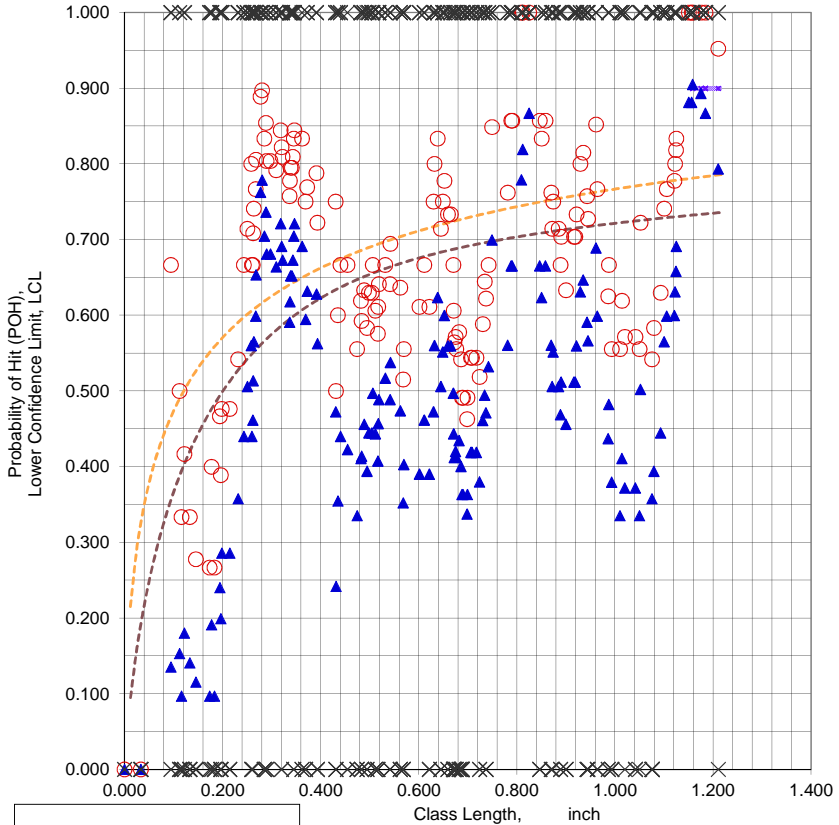
Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ⊗ Xlcl ⊗ Xpoh ▲ 2XL ⊗ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)
Large flaw validation failure. Extend flaw size range to 3.474.
 Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD — MLE(Mean) POD - - - MLE(95%) LCL

File Name = **F5001(3)L.xls**
 Data Set Name = **F5001(3)(CK. NO.)**
 Date & Time = 6/5/15 5:24 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0580 inch
 Classlength @ 90/95 Xpod = 1.1580 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. Xp may VALIDATE between Xpod and XL when causes of highlighted Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.210 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 1.175 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 1.1580 inch

File Name = F5001(3)L.xls
 Data Set Name = F5001(3)L(CK. NO.)

Directed DOE Options

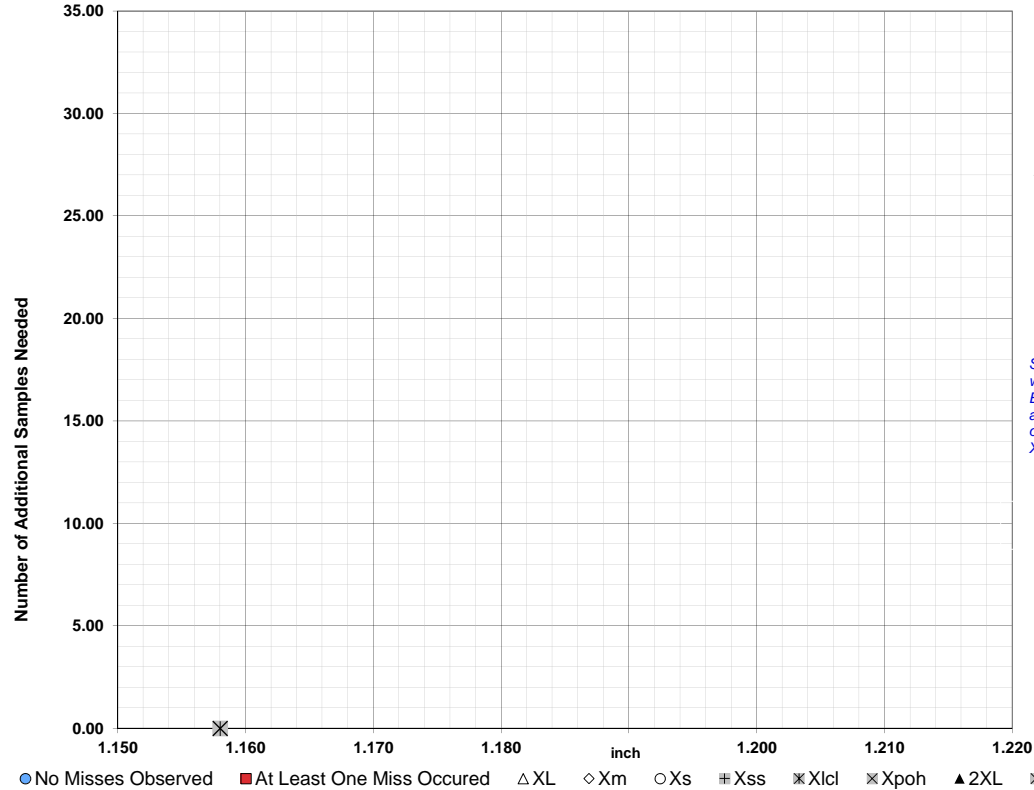


TABLE C

Class Length Additional Samples

XL = 1.210
 Xm = 1.175
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

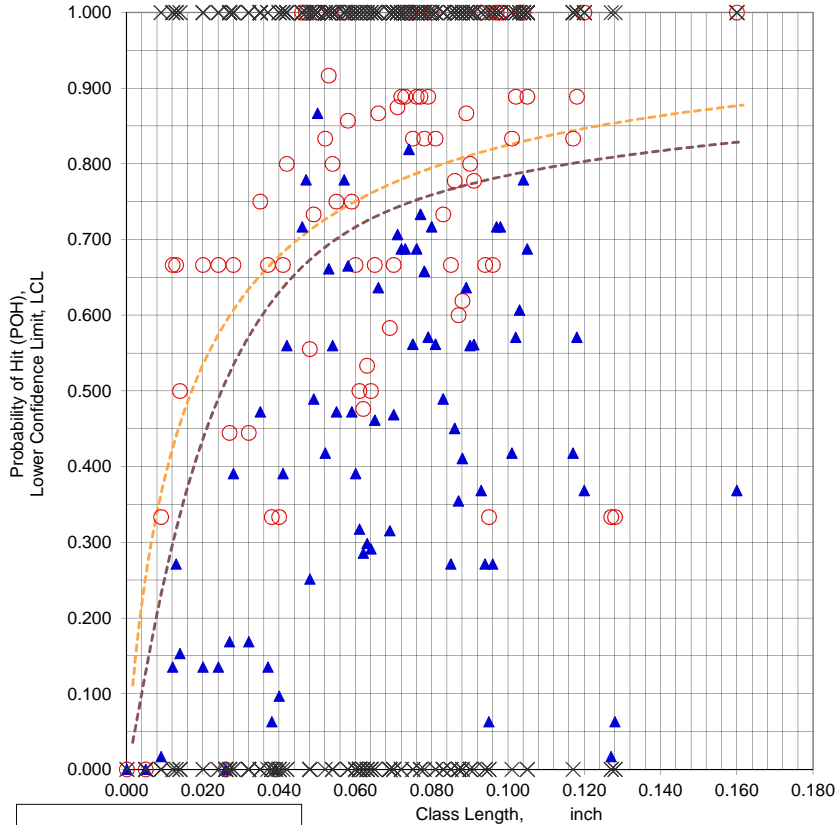
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = F5002(3)D.xls
 Data Set Name = F5002(3)D(CK. NO.)
 Date & Time = 6/5/15 5:26 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8666
 Classwidth @ Best LCL = 0.0010 inch
 Classlength @ Best LCL = 0.0500 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.1600 -0.031 inch 26 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.160 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.160 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 0.320 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F5002(3)D.xls
 Data Set Name = F5002(3)D(CK. NO.)

Directed DOE Options

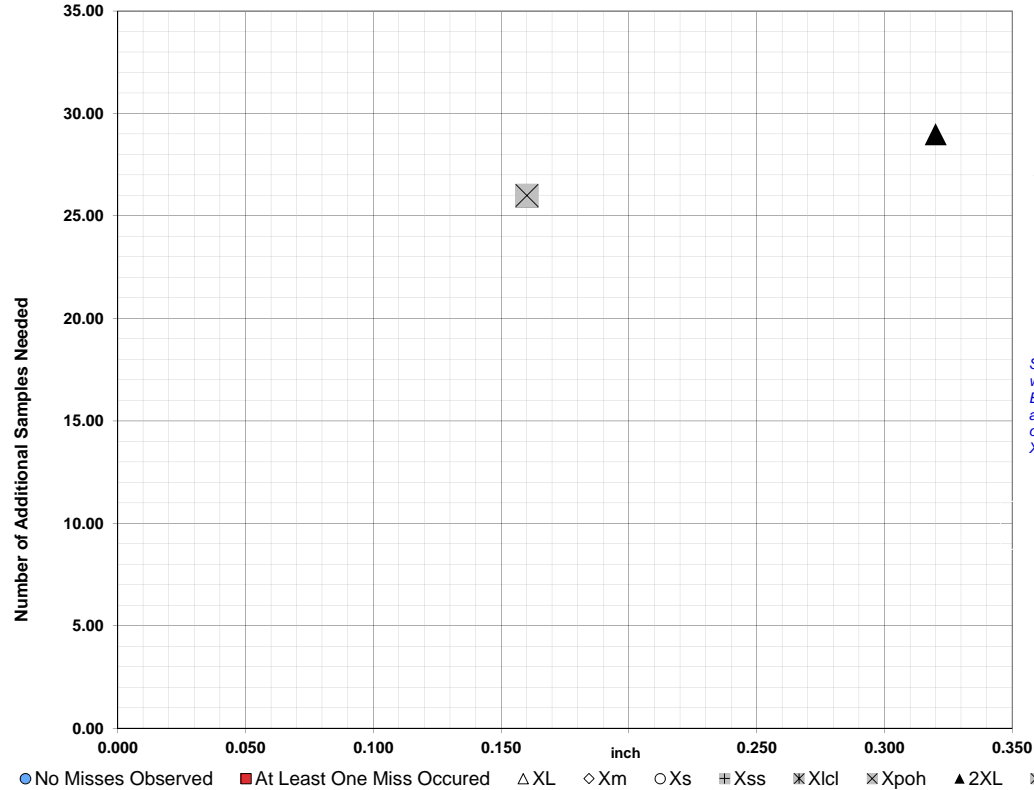


TABLE C

Class Length	Additional Samples
XL =	0.160 26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	0.160 26
2XL =	0.320 29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

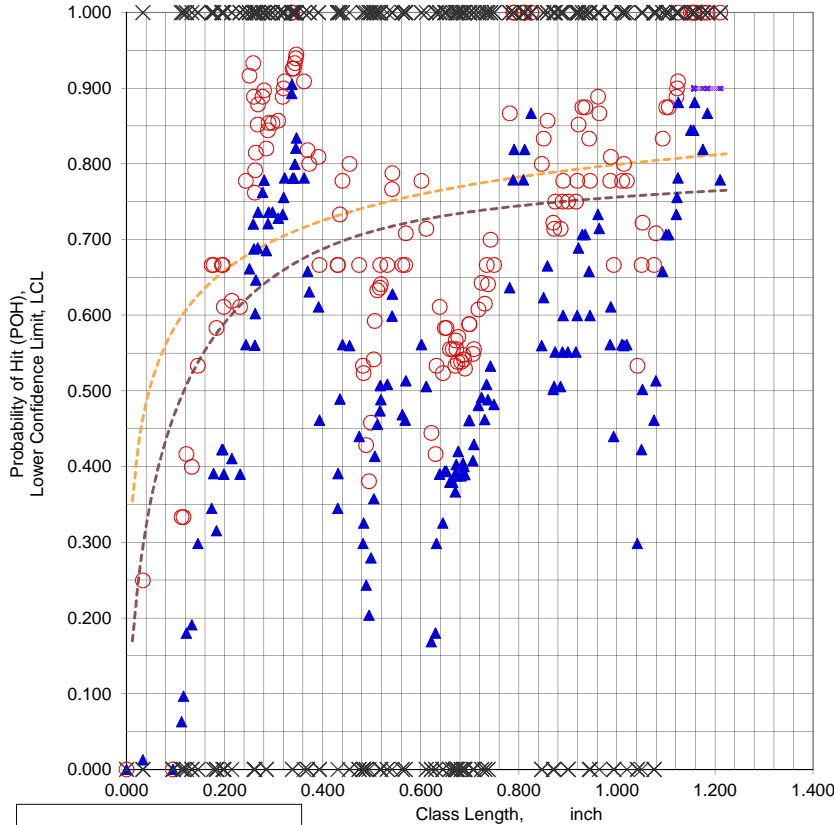
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation successful.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = F5002(3)L.xls
 Data Set Name = F5002(3)(CK. NO.)
 Date & Time = 6/5/15 5:28 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0490 inch
 Classlength @ 90/95 Xpod = 0.3370 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 2 - 90/95 Xpod is reached at a class length. Xp used to satisfy XL requirements. Further VALIDATION is required. Recommend satisfying Xm and the smallest Xpod in TABLE B that is greater than the largest Xpod in TABLE A, and/or the largest Xpod in T

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.210 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.825 inch
 Samples Needed @ Xm = 8
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 1.1560 inch

File Name = F5002(3)L.xls
 Data Set Name = F5002(3)L(CK. NO.)

Directed DOE Options

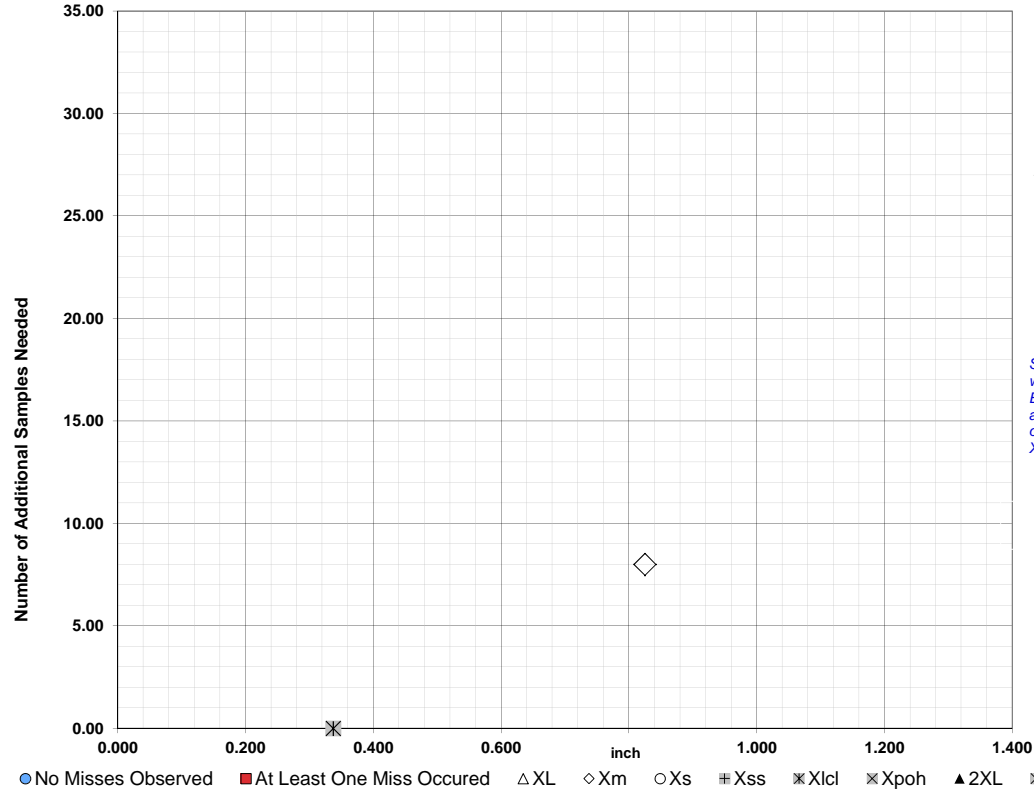


TABLE C

Class Length	Additional Samples
XL = 1.210	
Xm = 0.825	8
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

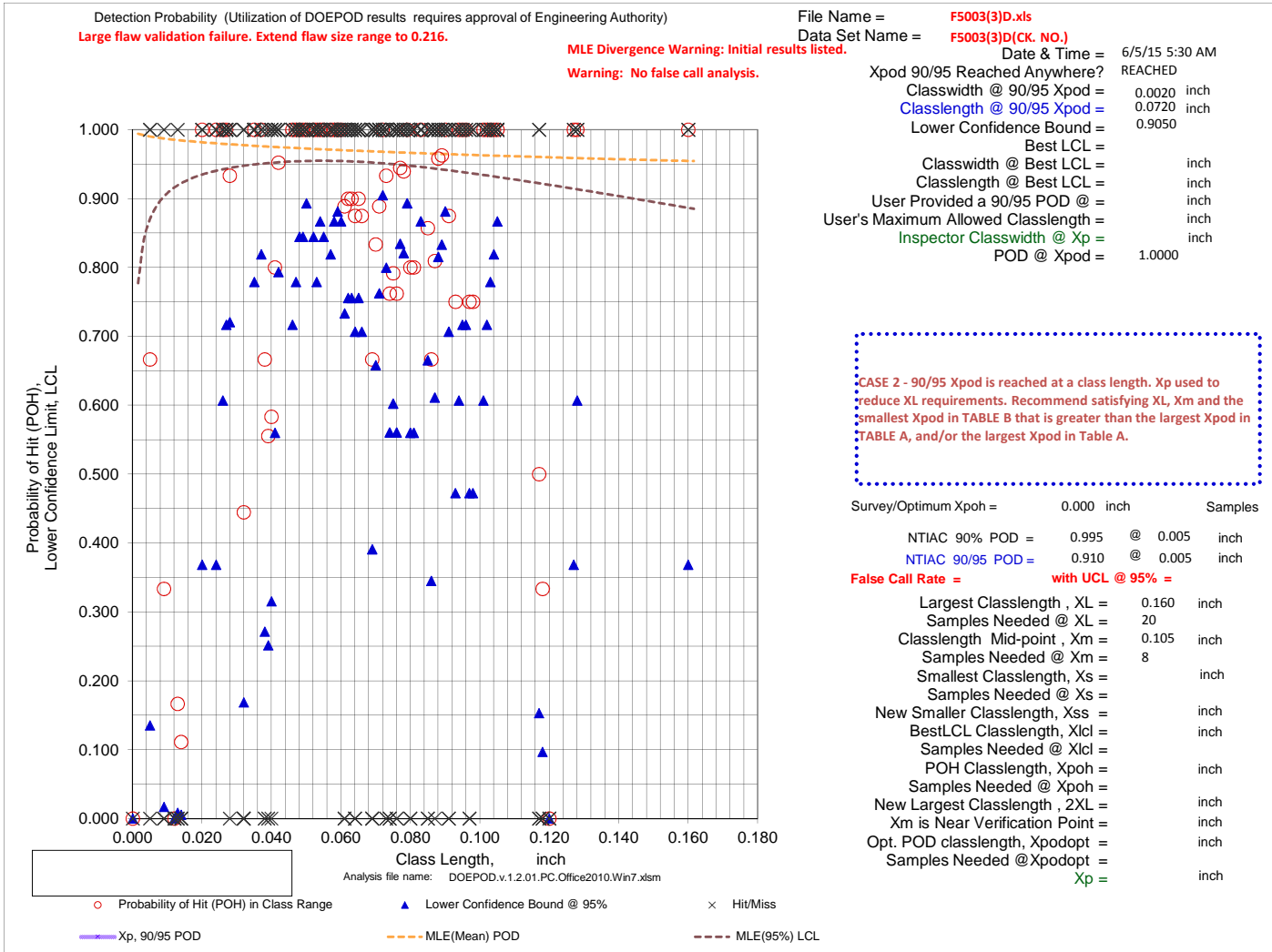
XL = 1.210
 Xm = 0.825 8
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F5003(3)D.xls
 Data Set Name = F5003(3)D(CK. NO.)

Directed DOE Options

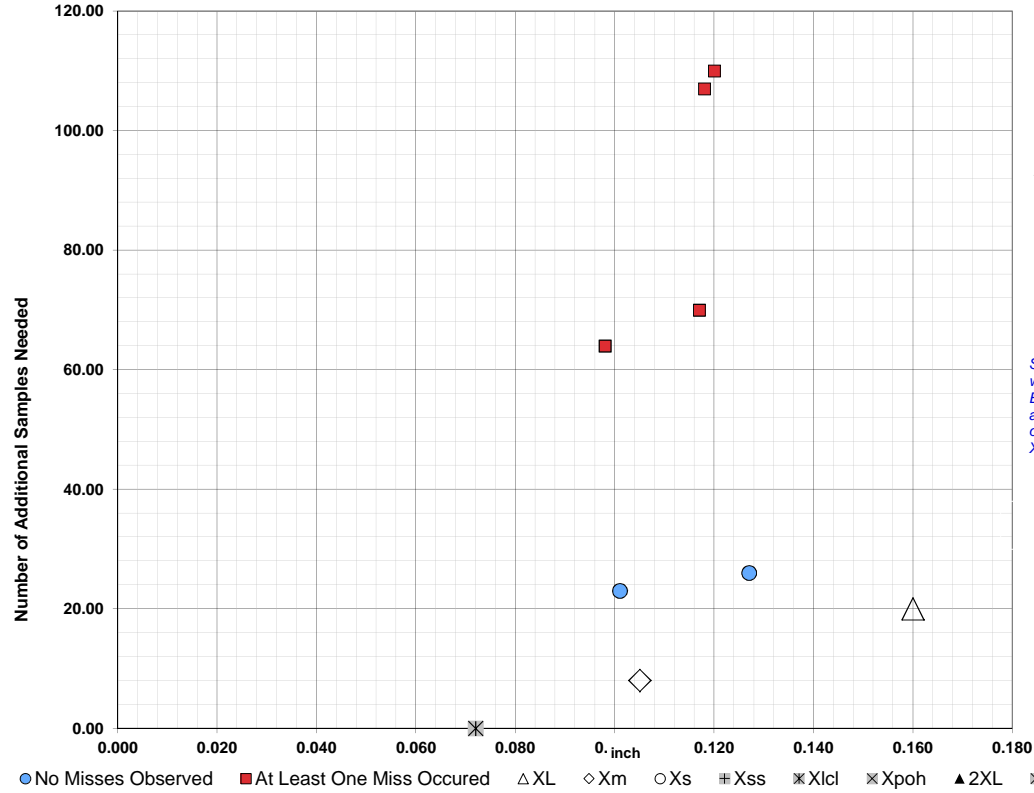


TABLE C

Class Length	Additional Samples
XL = 0.160	20
Xm = 0.105	8
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

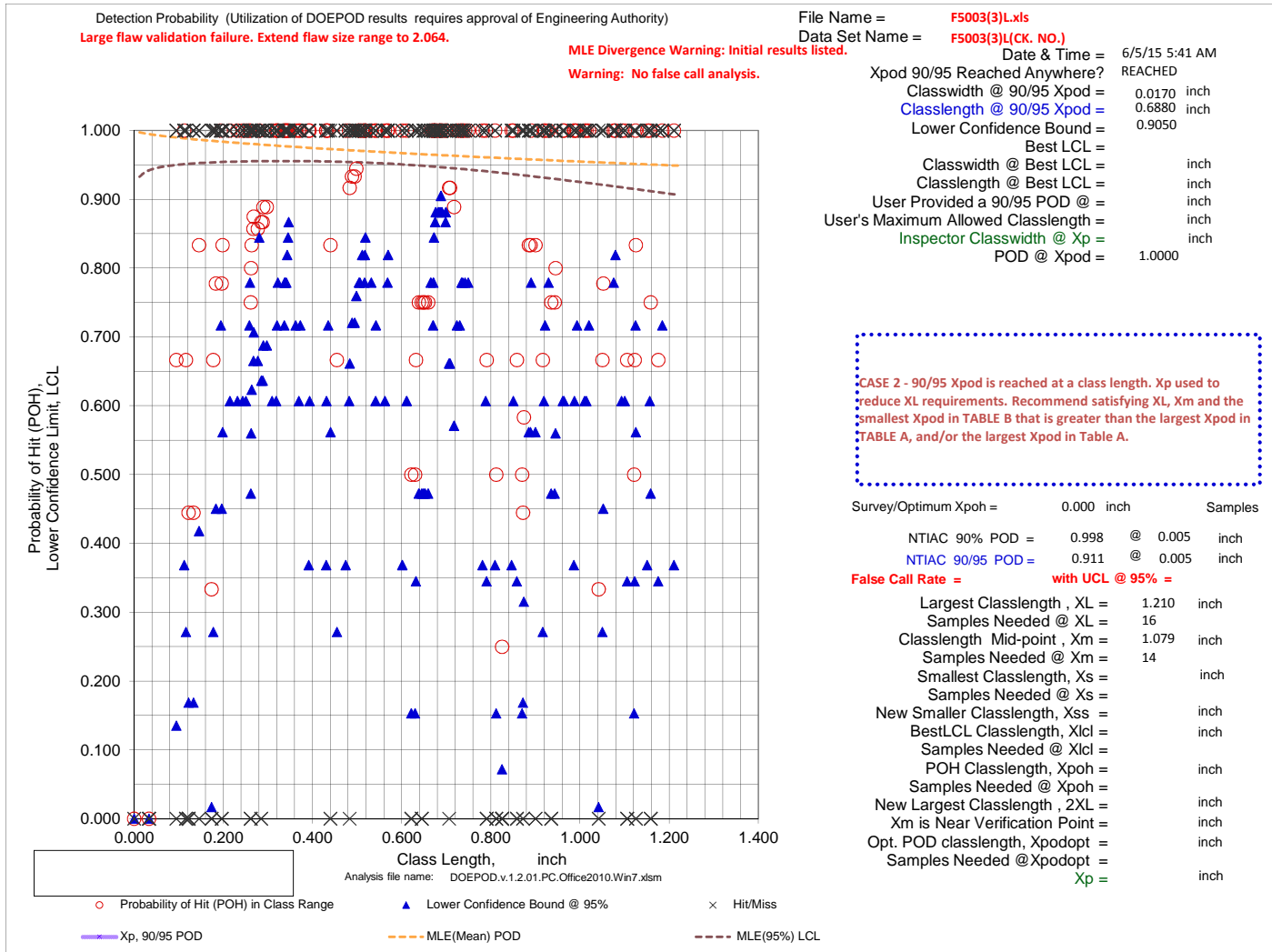
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
0.1200	110	0.1270	26
0.1180	107	0.1010	23
0.1170	70		
0.0980	64		

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F5003(3)L.xls
 Data Set Name = F5003(3)L(CK. NO.)

Directed DOE Options

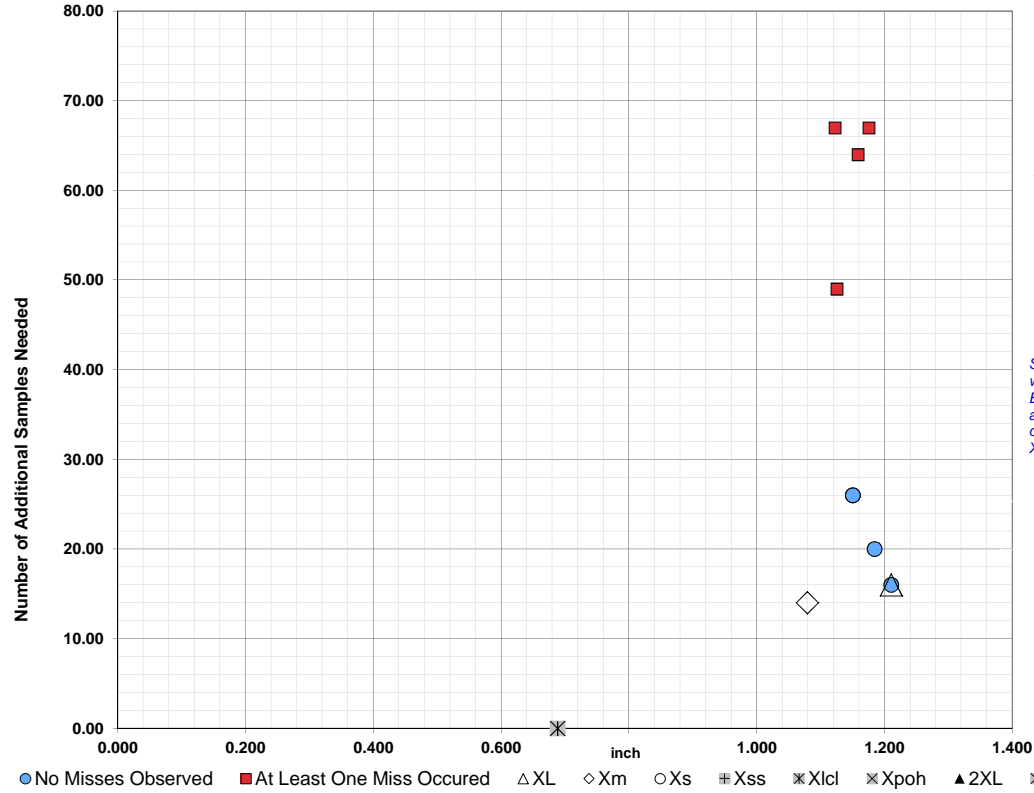


TABLE C

Class Length	Additional Samples
XL = 1.210	16
Xm = 1.079	14
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*

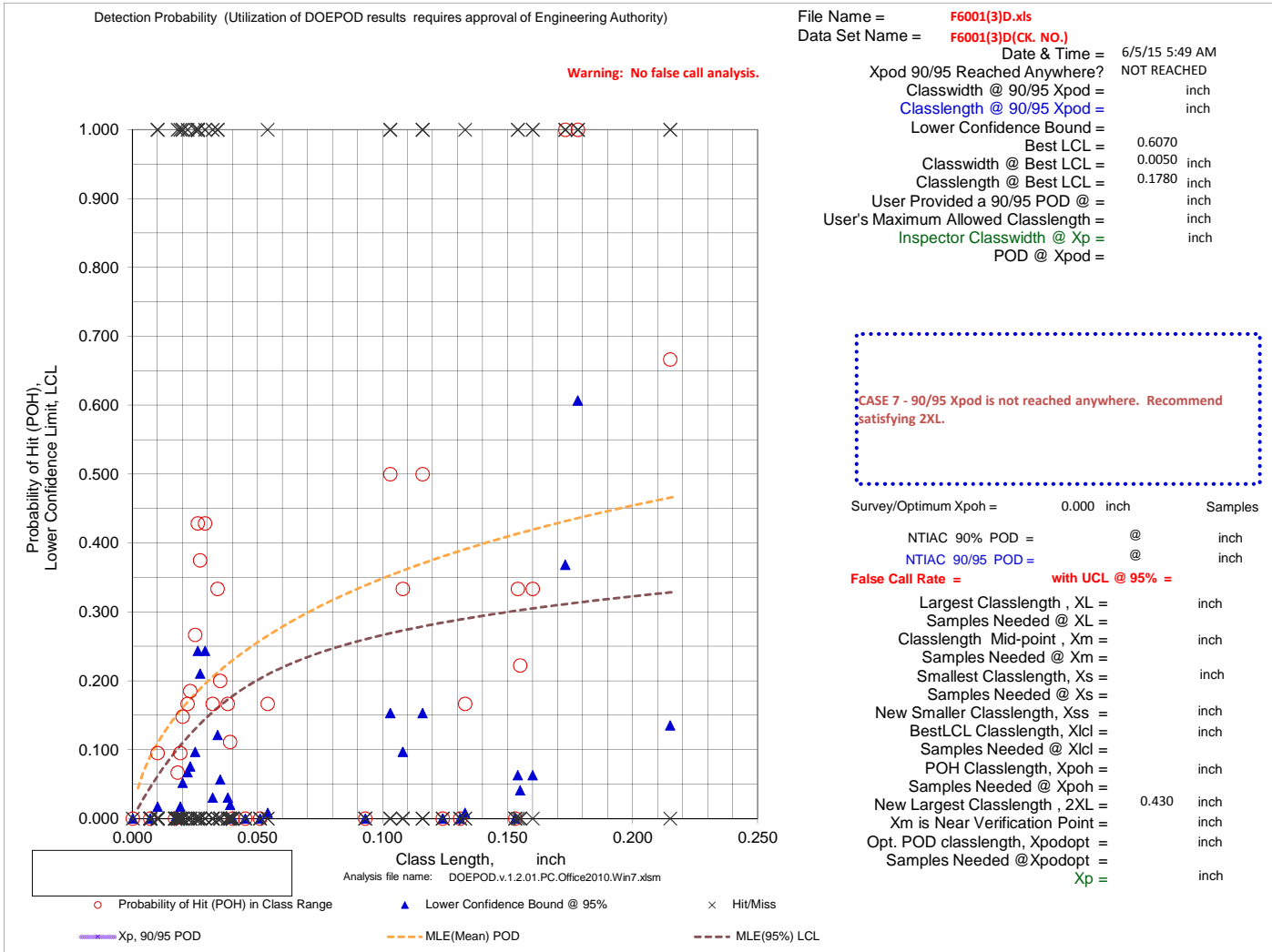
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need
1.1750	67	1.2100	16
1.1580	64	1.1840	20
1.1250	49	1.1500	26
1.1220	67	1.1500	26

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F6001(3)D.xls
 Data Set Name = F6001(3)D(CK. NO.)

Directed DOE Options

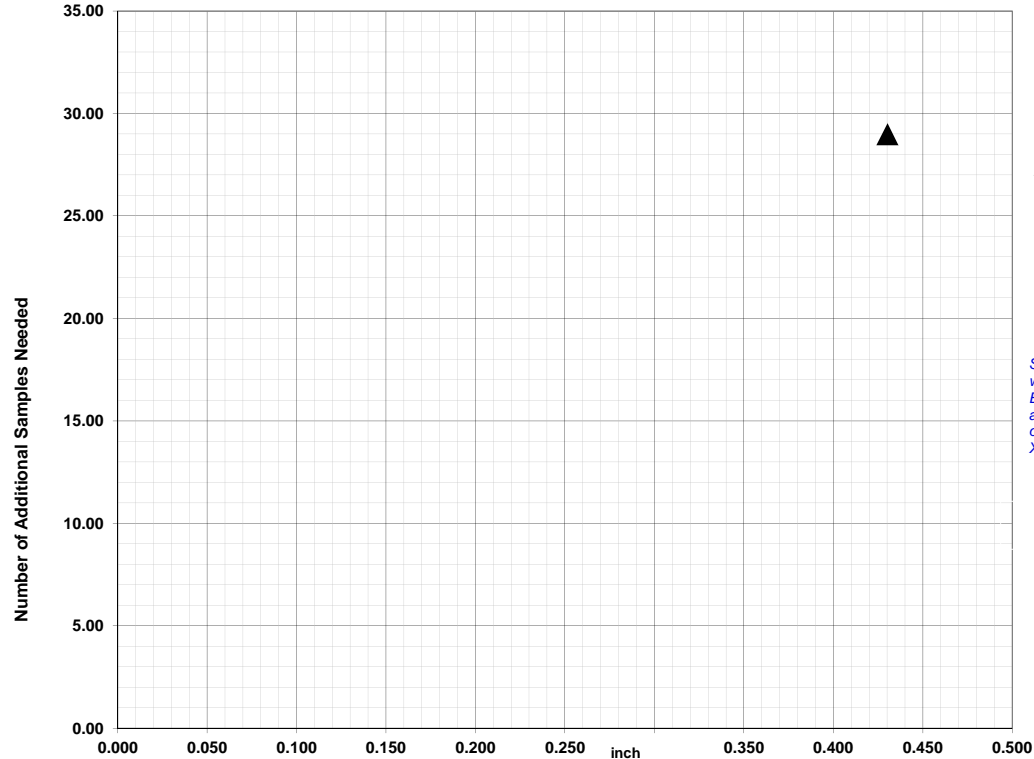


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.430	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.430 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

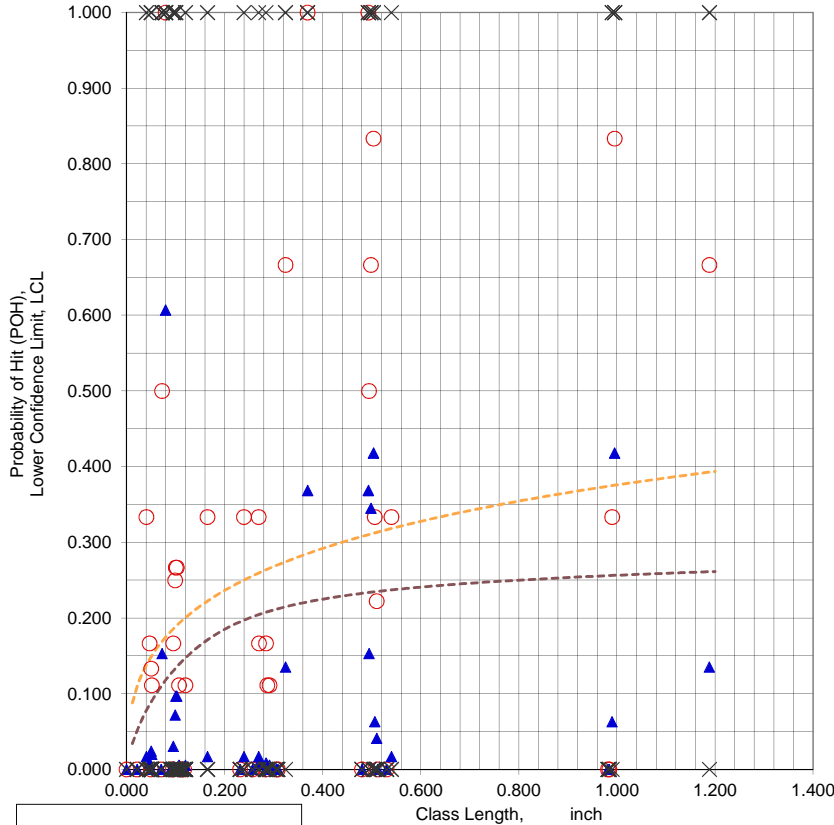
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ⊗ Xlcl
 ⊗ Xpoh
 ▲ 2XL
 ⊗ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = F6001(3)L.xls
 Data Set Name = F6001(3)(CK. NO.)
 Date & Time = 6/5/15 5:50 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6070
 Classwidth @ Best LCL = 0.0070 inch
 Classlength @ Best LCL = 0.0790 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 2.376 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F6001(3)L.xls
 Data Set Name = F6001(3)L(CK. NO.)

Directed DOE Options



TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 2.376	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 2.376 29
 **Alternate Xm =
 Xpodopt =

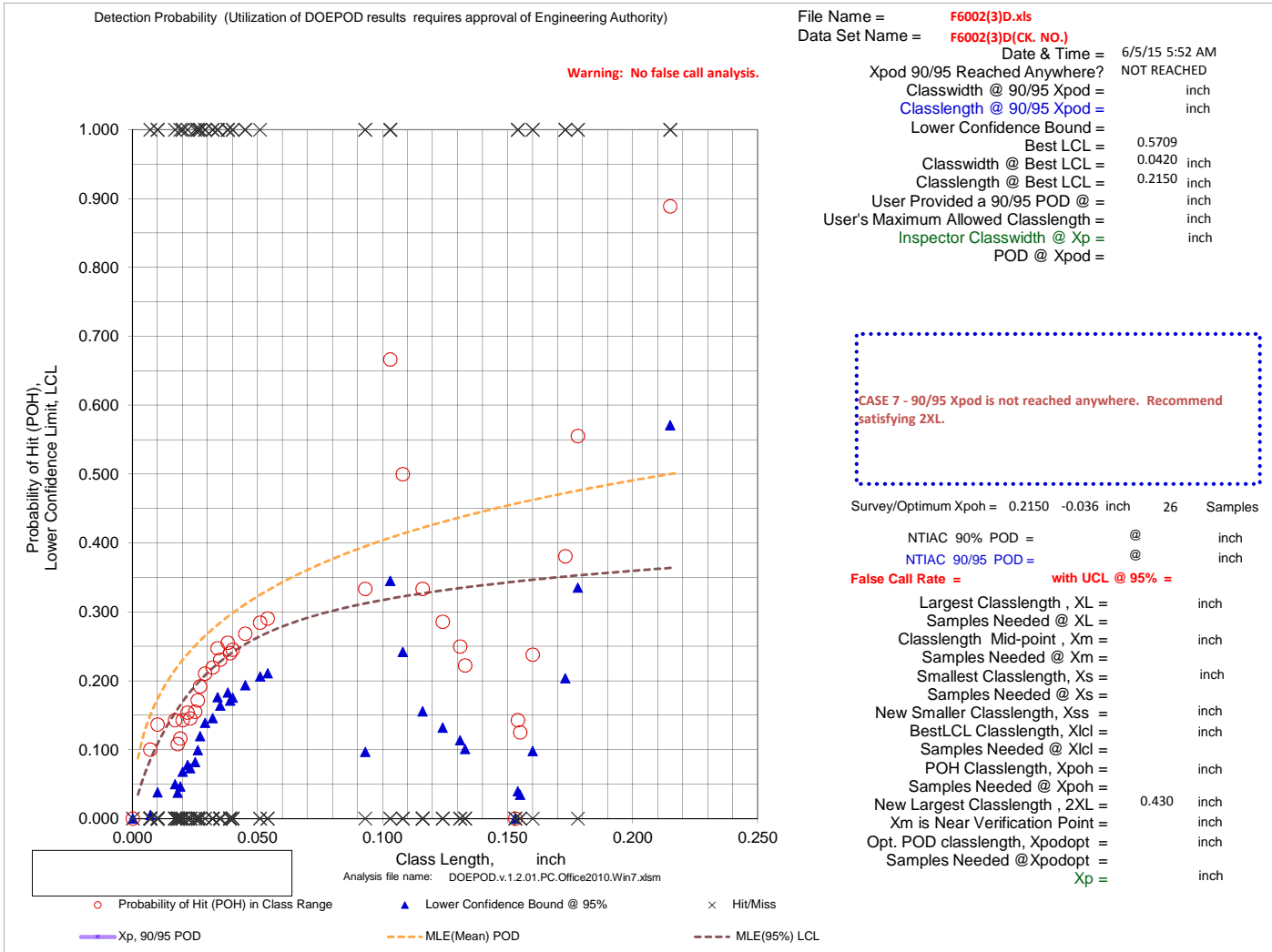
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F6002(3)D.xls
 Data Set Name = F6002(3)D(CK. NO.)

Directed DOE Options

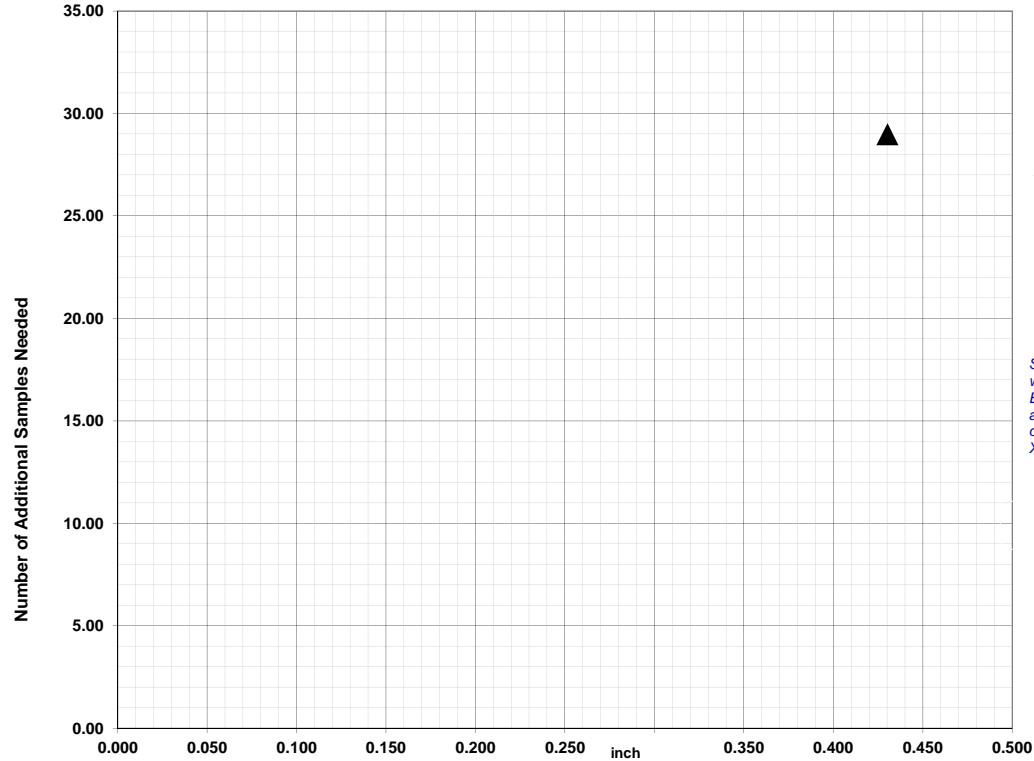


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.430	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.430 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

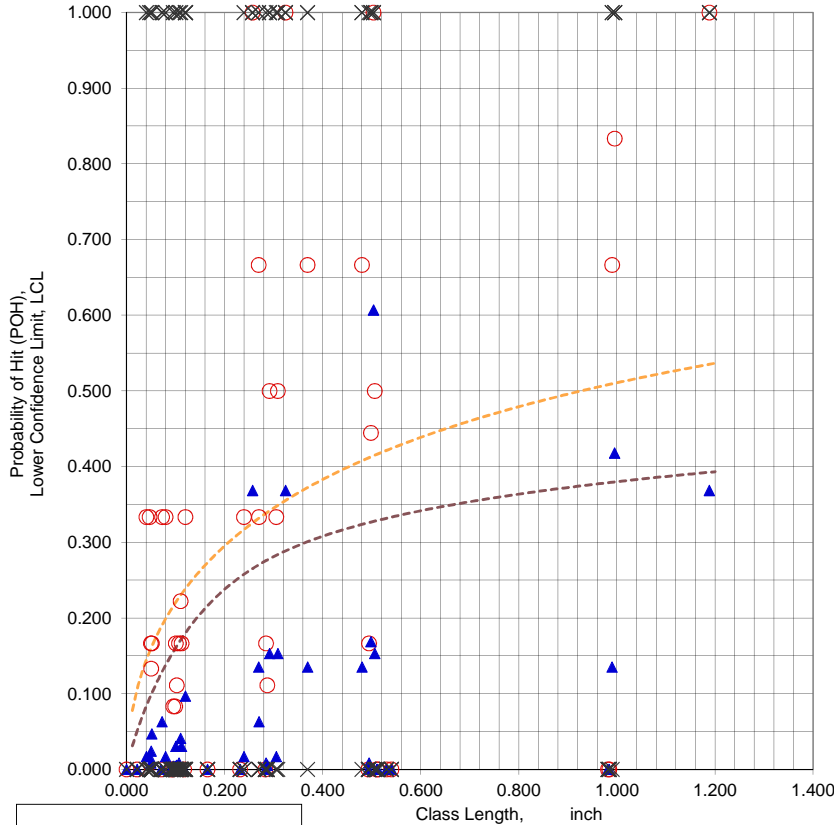
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
 — Xp, 90/95 POD
 - - - MLE(Mean) POD
 - - - MLE(95%) LCL

File Name = F6002(3)L.xls
 Data Set Name = F6002(3)(CK. NO.)
 Date & Time = 6/5/15 5:53 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6070
 Classwidth @ Best LCL = 0.0050 inch
 Classlength @ Best LCL = 0.5030 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.9950 -0.004 inch 26 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.188 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 1.188 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 2.376 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F6002(3)L.xls
 Data Set Name = F6002(3)L(CK. NO.)

Directed DOE Options

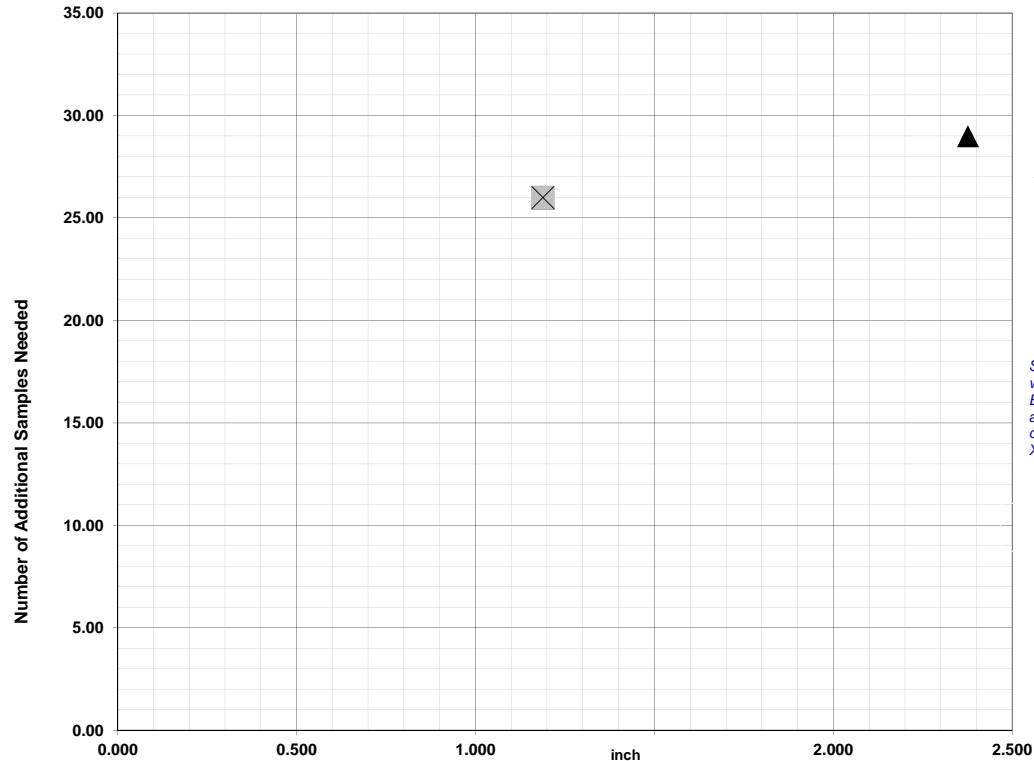


TABLE C

Class Length	Additional Samples
XL = 1.188	26
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 1.188	26
2XL = 2.376	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

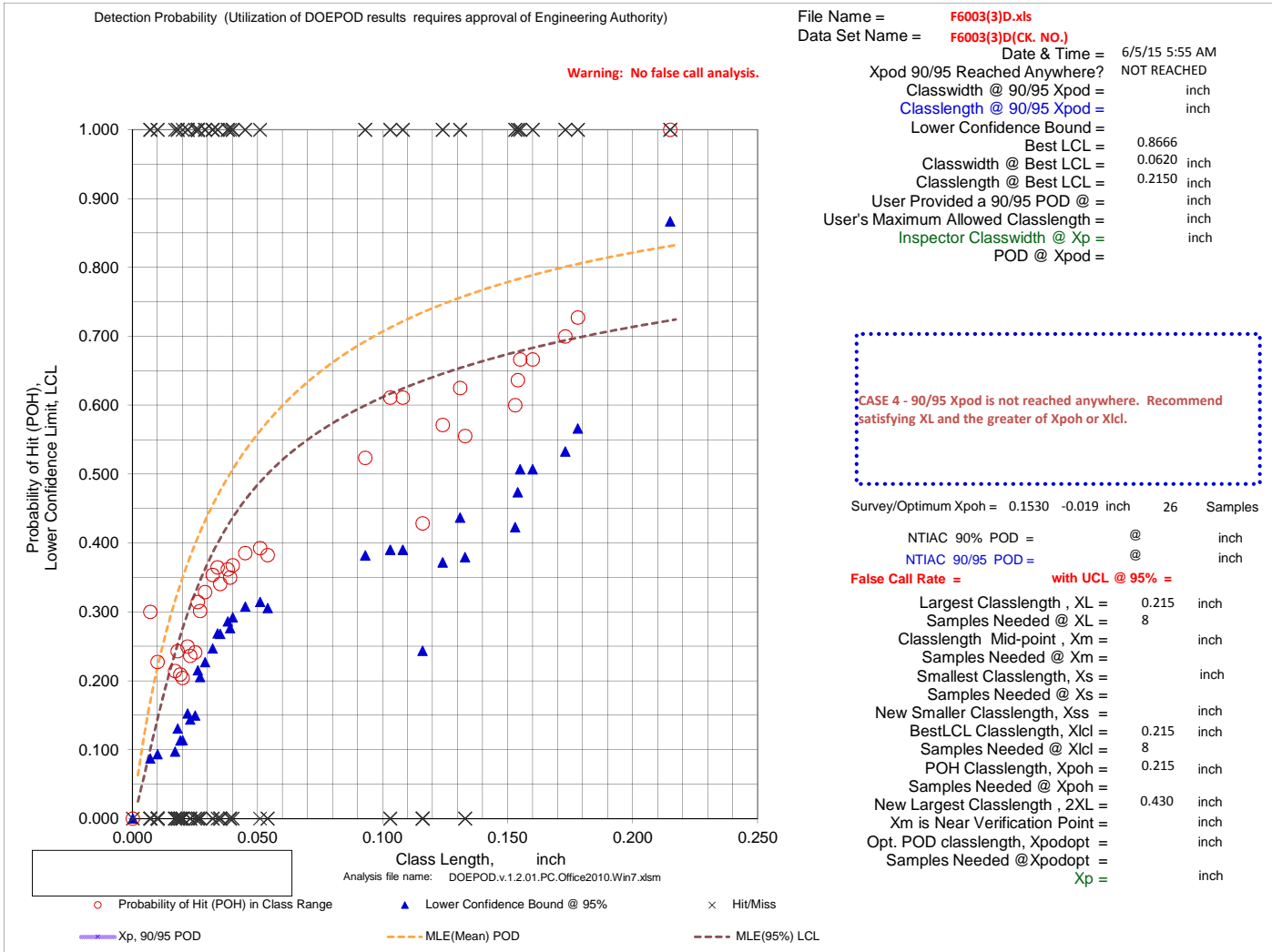
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ XLcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F6003(3)D.xls
 Data Set Name = F6003(3)D(CK. NO.)

Directed DOE Options

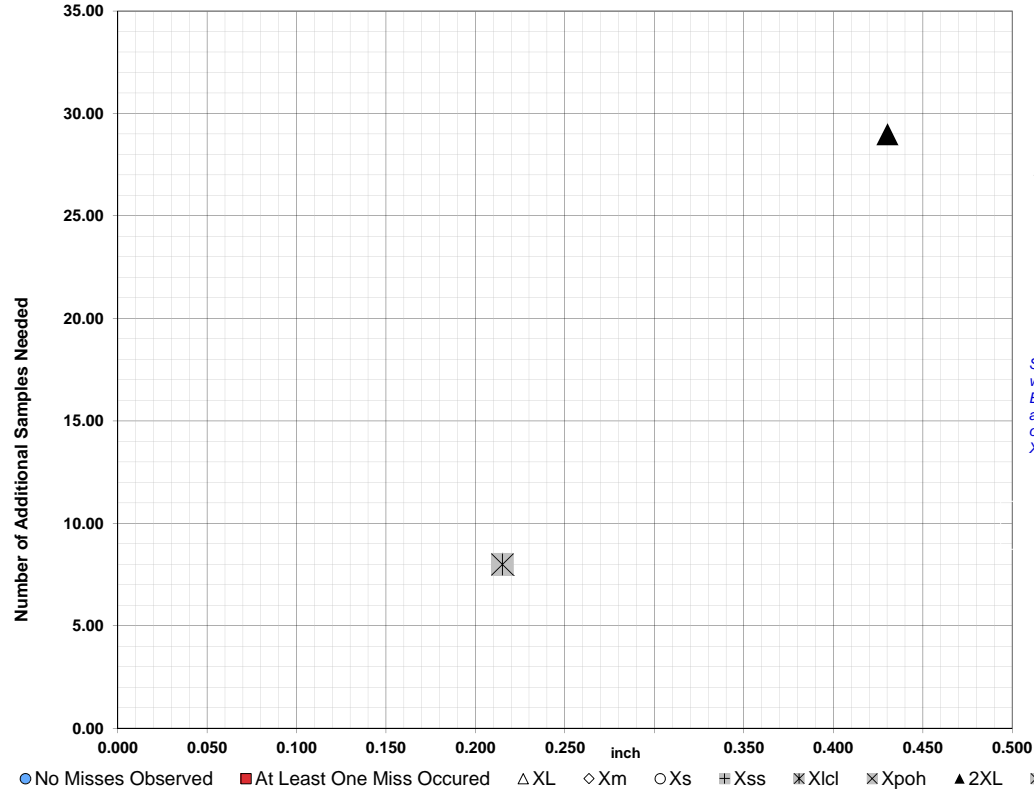


TABLE C

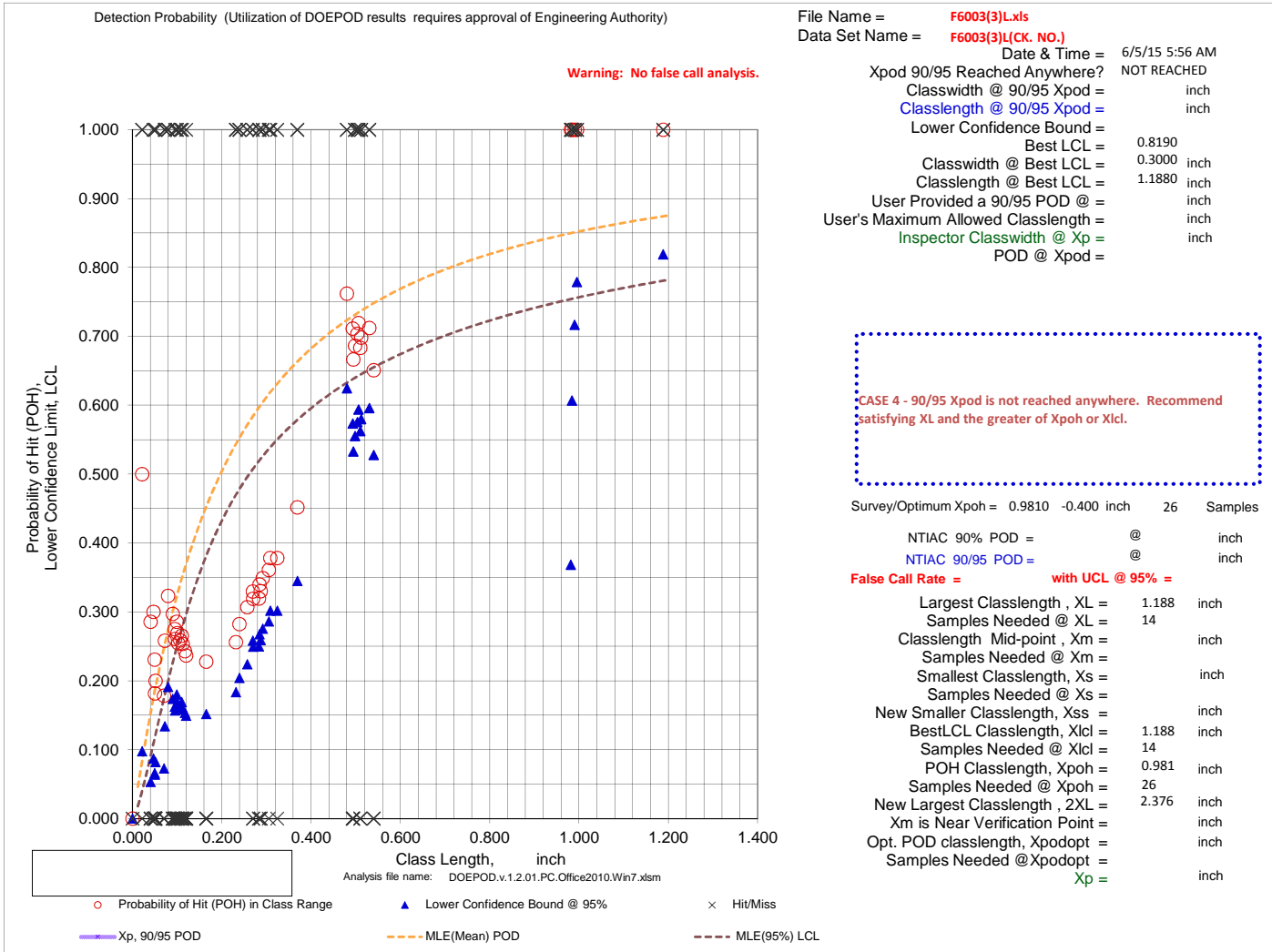
Class Length	Additional Samples
XL = 0.215	8
Xm =	
Xs =	
Xss =	
Xlcl = 0.215	8
Xpoh = 0.215	
2XL = 0.430	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F6003(3)L.xls
 Data Set Name = F6003(3)L(CK. NO.)

Directed DOE Options

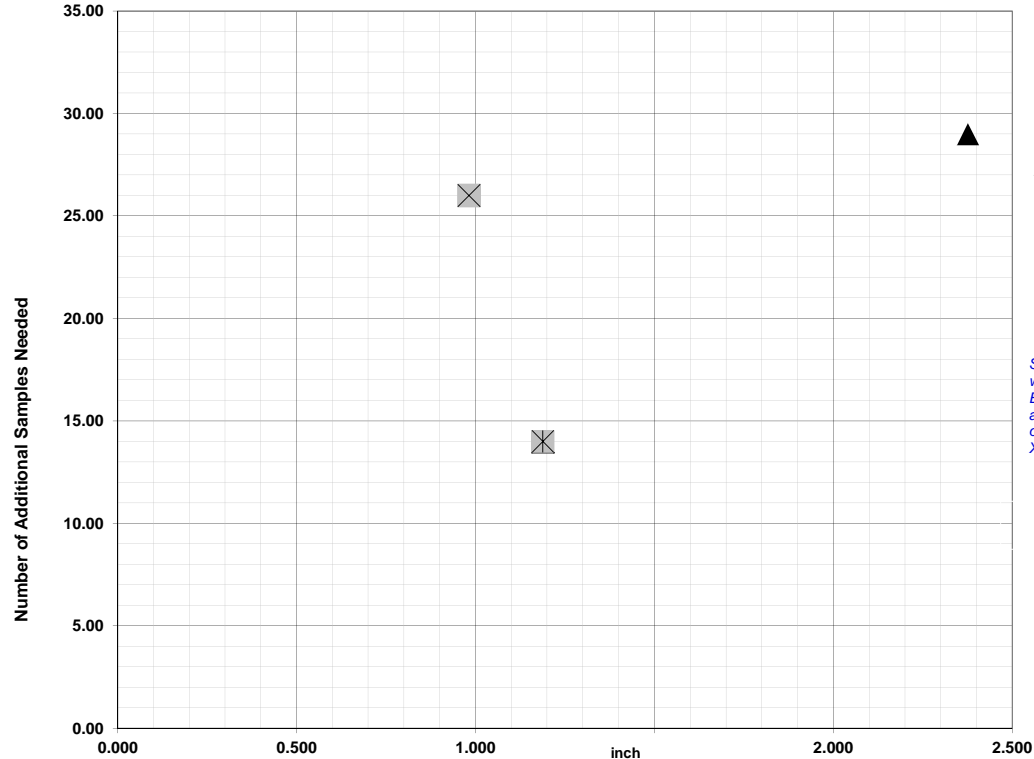


TABLE C

Class Length	Additional Samples
XL = 1.188	14
Xm =	
Xs =	
Xss =	
Xlcl = 1.188	14
Xpoh = 0.981	26
2XL = 2.376	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

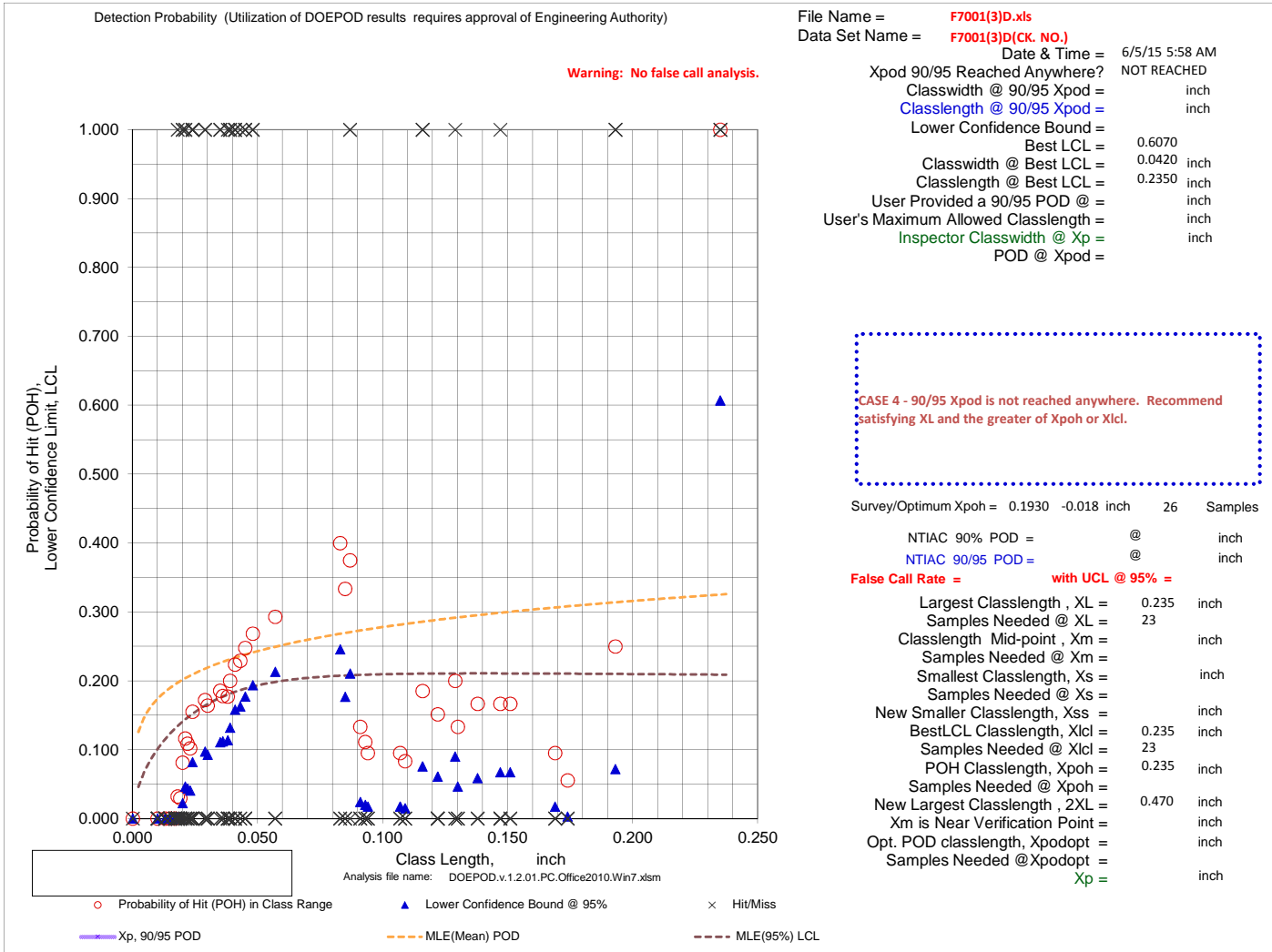
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F7001(3)D.xls
 Data Set Name = F7001(3)D(CK. NO.)

Directed DOE Options

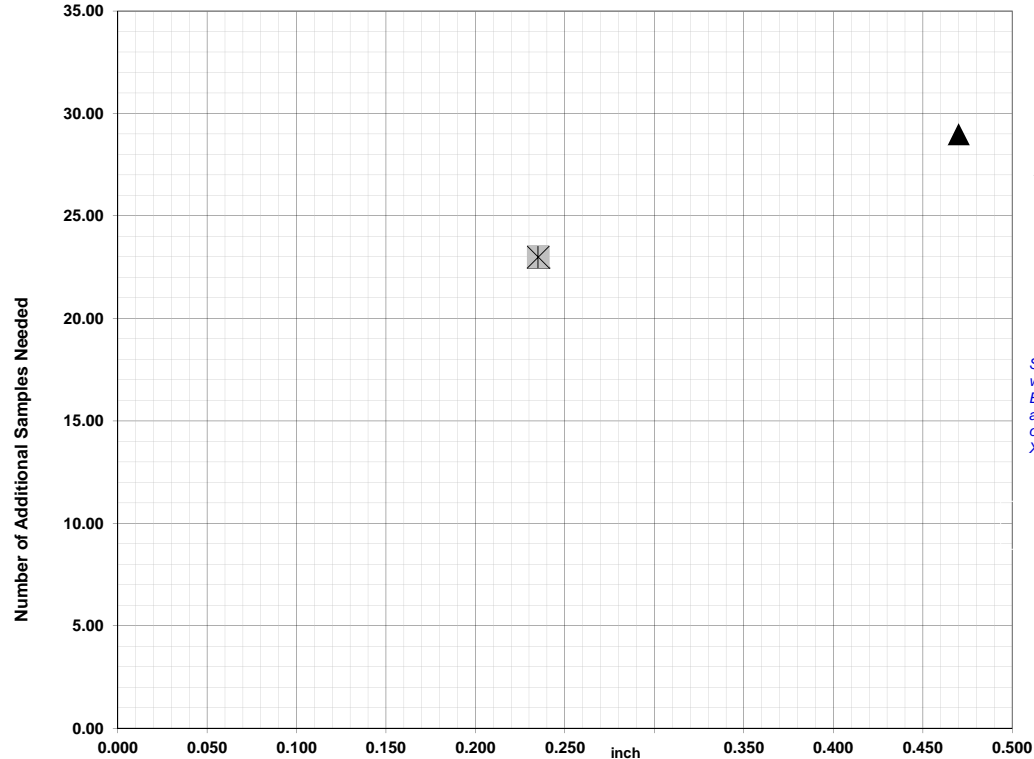


TABLE C

Class Length	Additional Samples
XL = 0.235	23
Xm =	
Xs =	
Xss =	
Xlcl = 0.235	23
Xpoh = 0.235	
2XL = 0.470	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

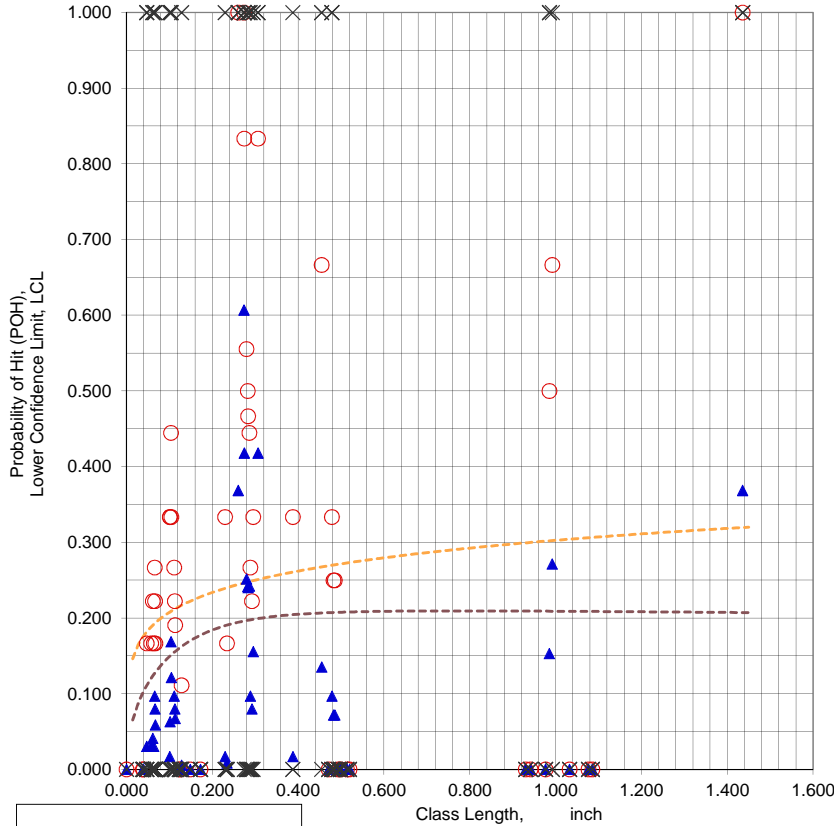
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = F7001(3)L.xls
 Data Set Name = F7001(3)(CK. NO.)
 Date & Time = 6/5/15 5:59 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6070
 Classwidth @ Best LCL = 0.0130 inch
 Classlength @ Best LCL = 0.2730 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 1.4350 -0.300 inch 26 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 1.435 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 1.435 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 2.870 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F7001(3)L.xls
 Data Set Name = F7001(3)L(CK. NO.)

Directed DOE Options

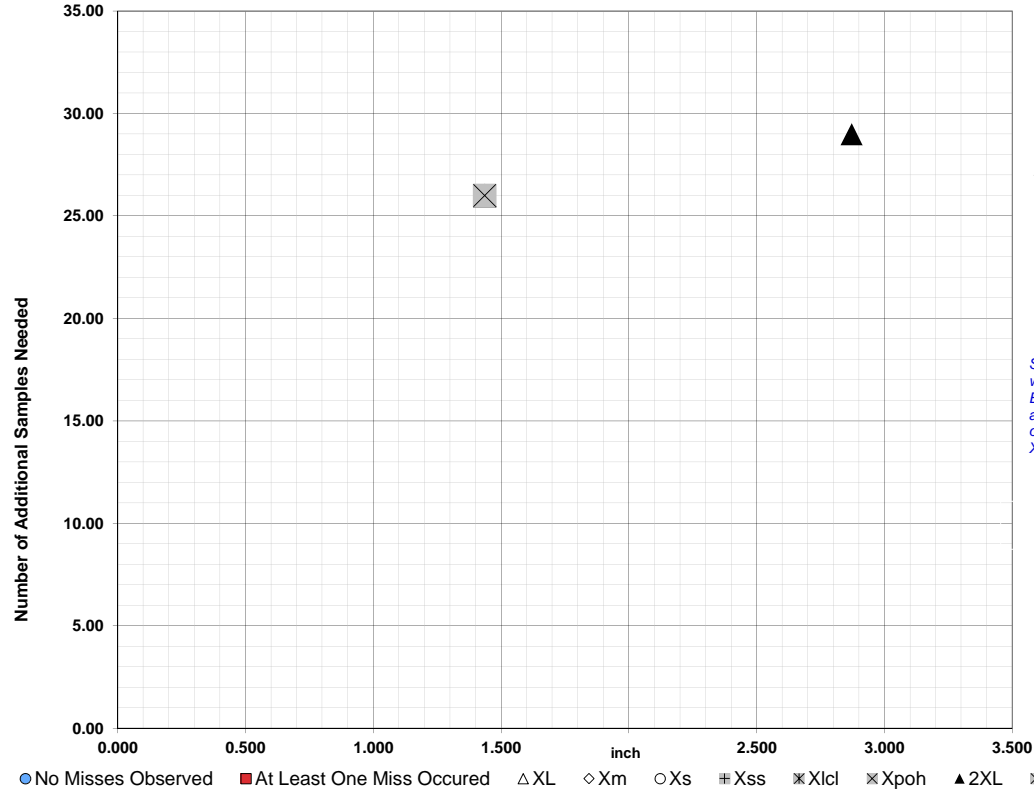


TABLE C

Class Length	Additional Samples
XL = 1.435	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 1.435	26
2XL = 2.870	29
**Alternate Xm =	
Xpodopt =	

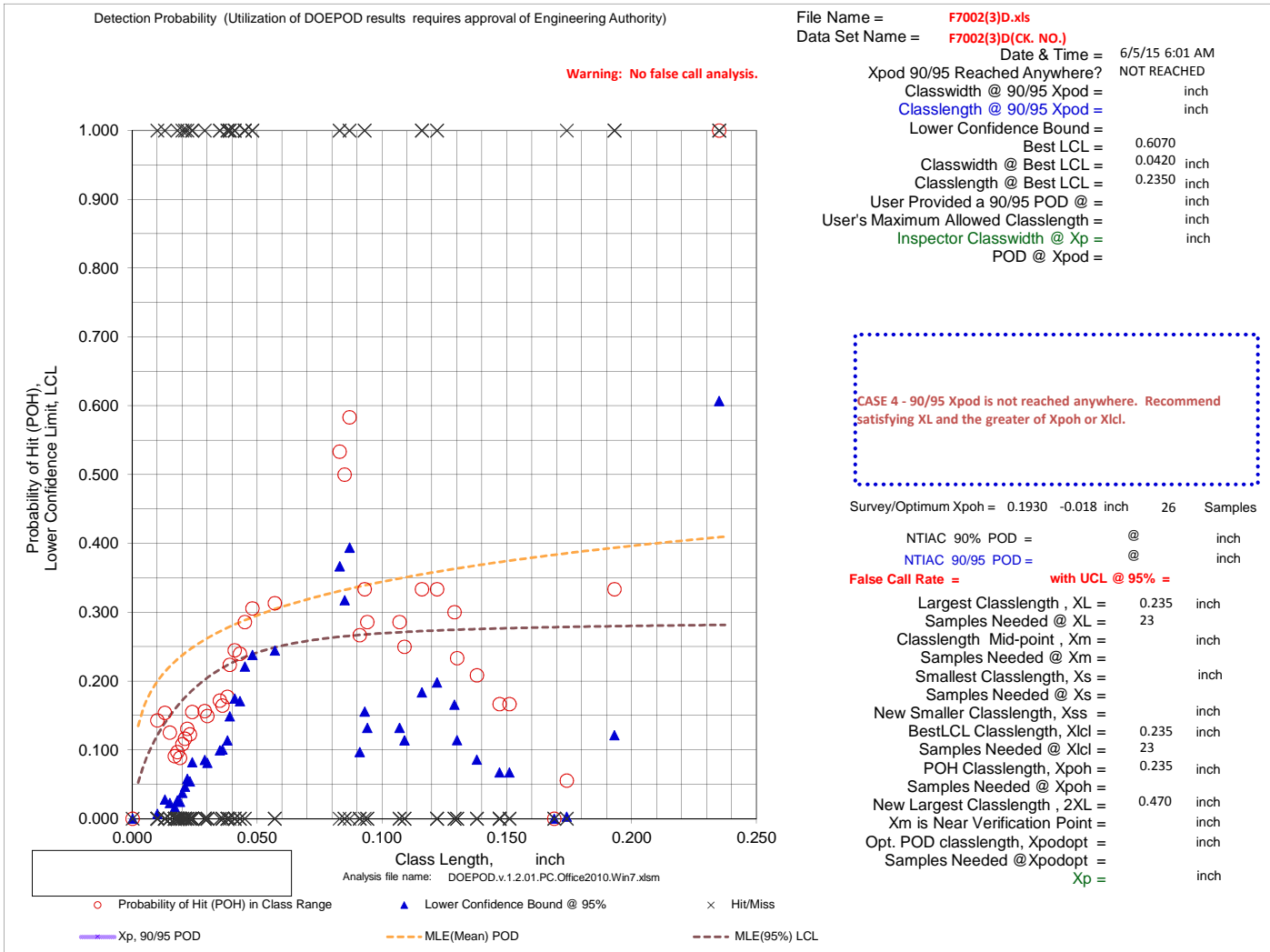
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F7002(3)D.xls
 Data Set Name = F7002(3)D(CK. NO.)

Directed DOE Options

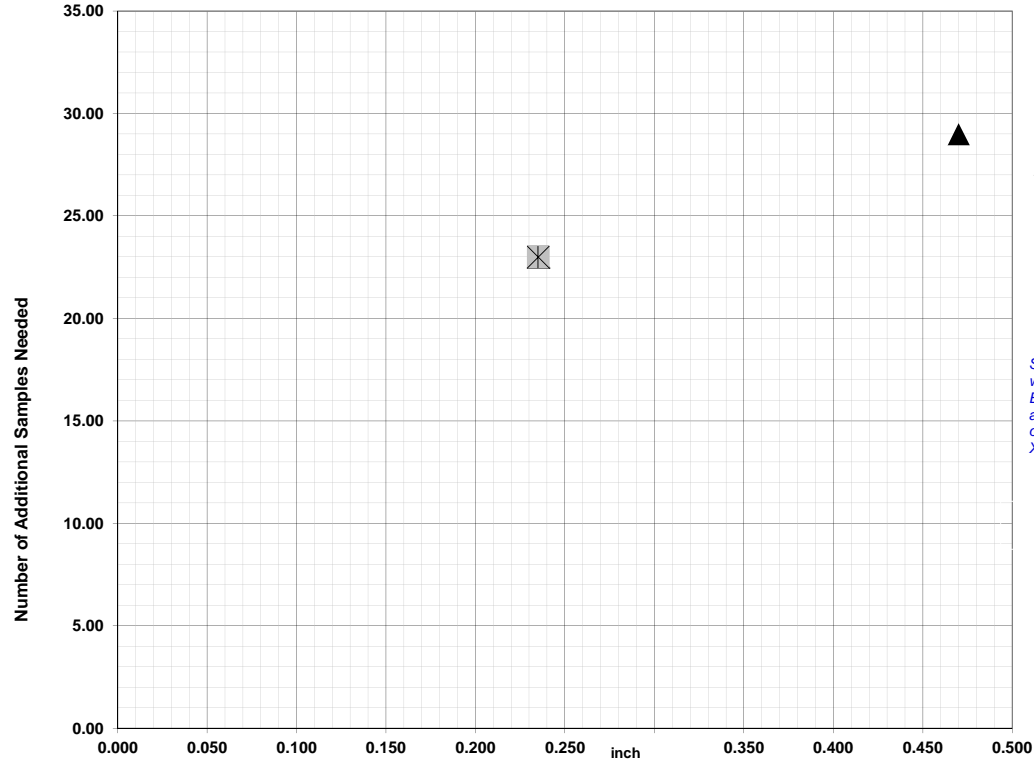


TABLE C

Class Length	Additional Samples
XL = 0.235	23
Xm =	
Xs =	
Xss =	
Xlcl = 0.235	23
Xpoh = 0.235	
2XL = 0.470	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

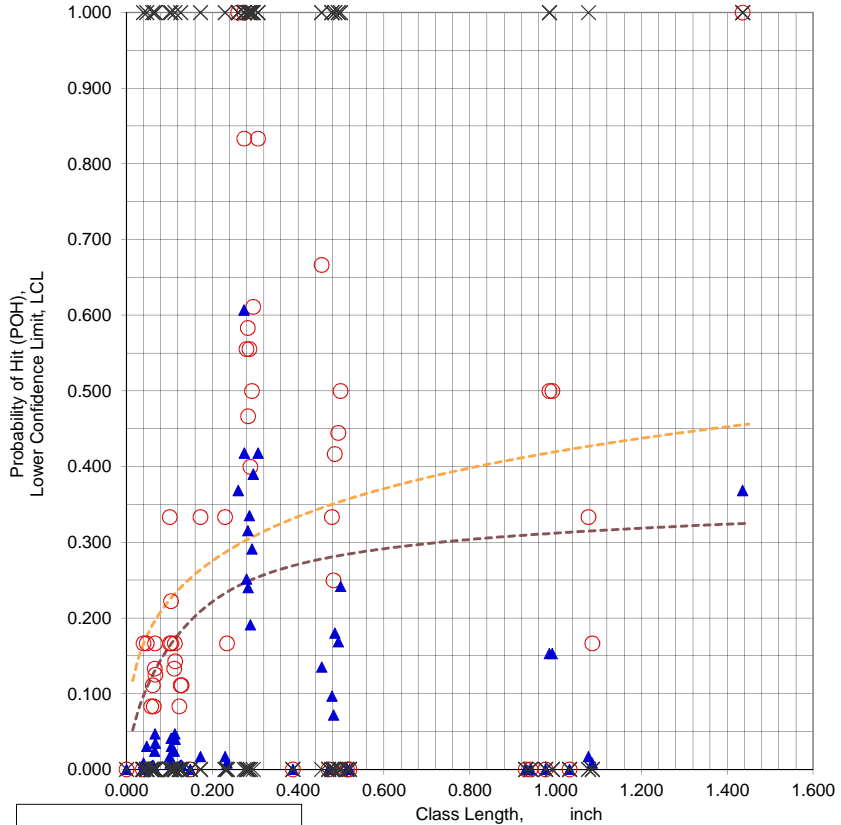
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 — Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = F7002(3)L.xls
 Data Set Name = F7002(3)(CK. NO.)
 Date & Time = 6/5/15 6:03 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6070
 Classwidth @ Best LCL = 0.0130 inch
 Classlength @ Best LCL = 0.2730 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 1.4350 -0.300 inch 26 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 1.435 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 1.435 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 2.870 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F7002(3)L.xls
 Data Set Name = F7002(3)L(CK. NO.)

Directed DOE Options

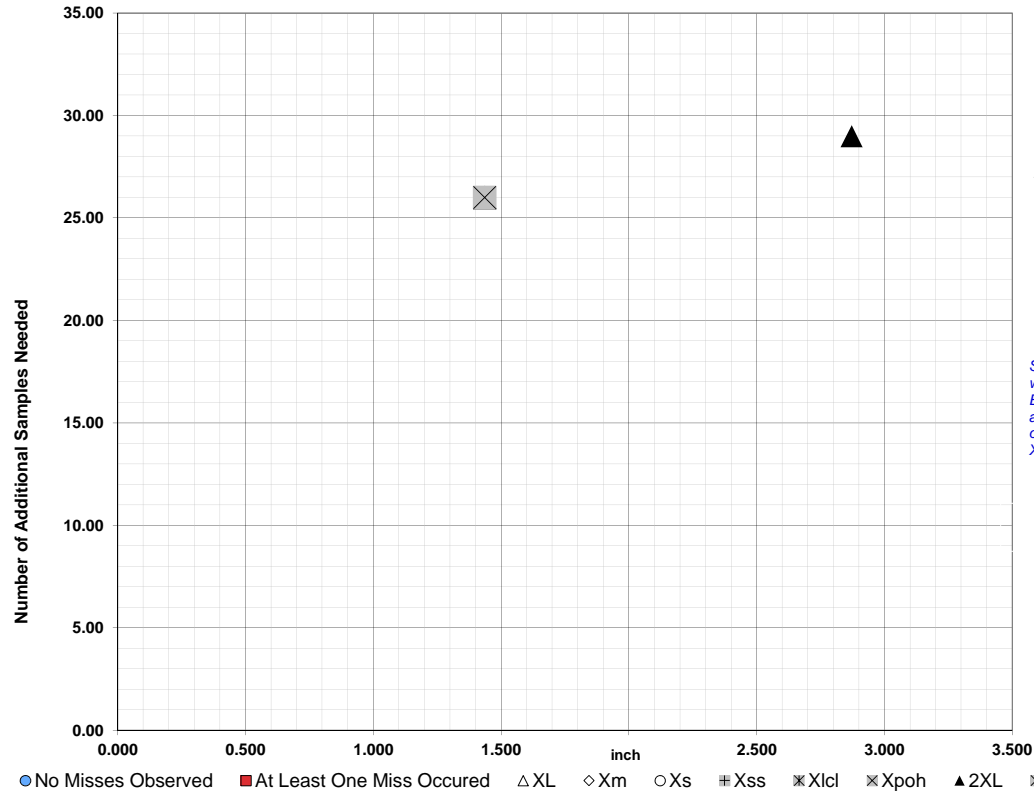


TABLE C

Class Length	Additional Samples
XL = 1.435	26
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 1.435	26
2XL = 2.870	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

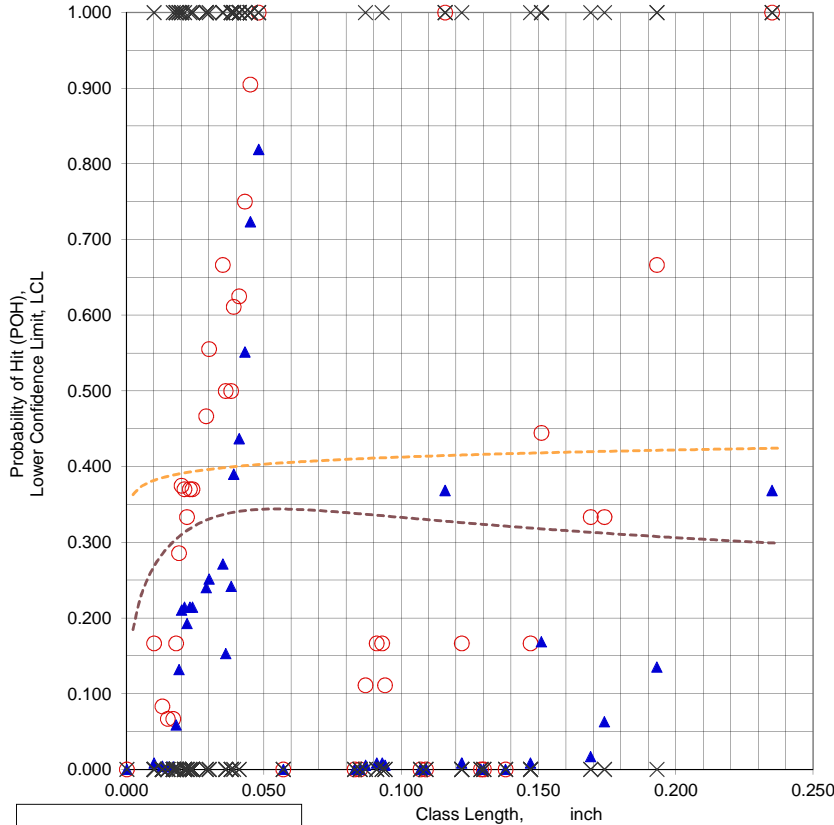
Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ⊗ XLcl ⊗ Xpoh ▲ 2XL ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = F7003(3)D.xls
 Data Set Name = F7003(3)D(CK. NO.)
 Date & Time = 6/5/15 6:05 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8190
 Classwidth @ Best LCL = 0.0050 inch
 Classlength @ Best LCL = 0.0480 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.2350 -0.041 inch 26 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.235 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.235 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 0.470 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F7003(3)D.xls
 Data Set Name = F7003(3)D(CK. NO.)

Directed DOE Options

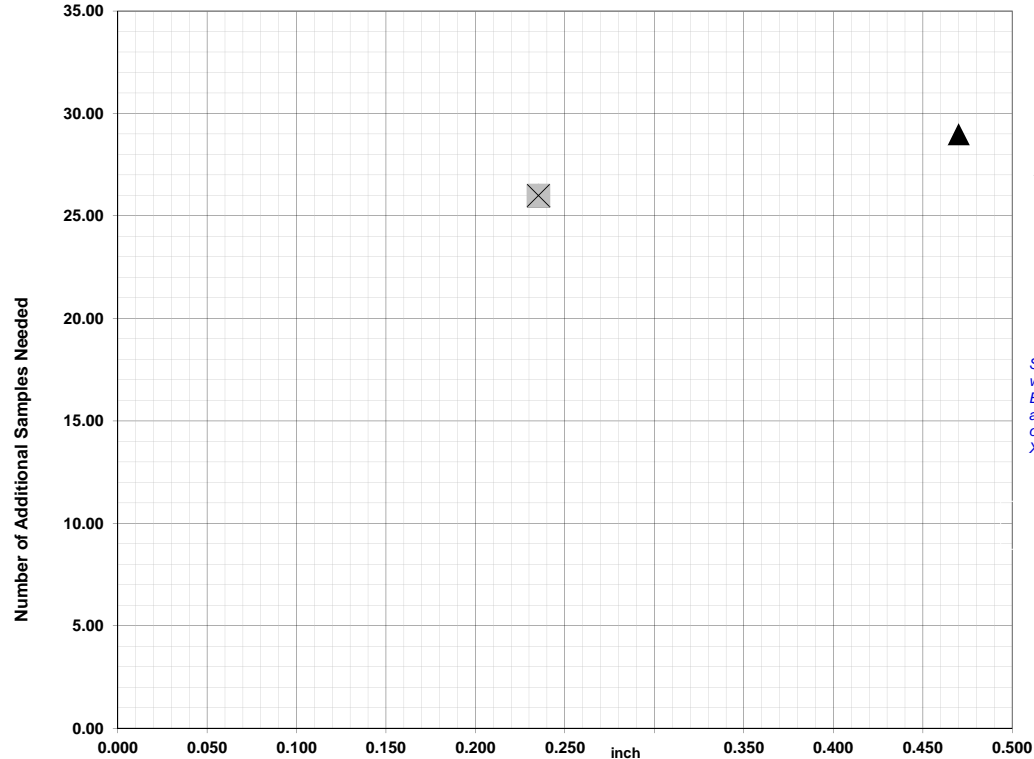


TABLE C

Class Length	Additional Samples
XL = 0.235	26
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.235	26
2XL = 0.470	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

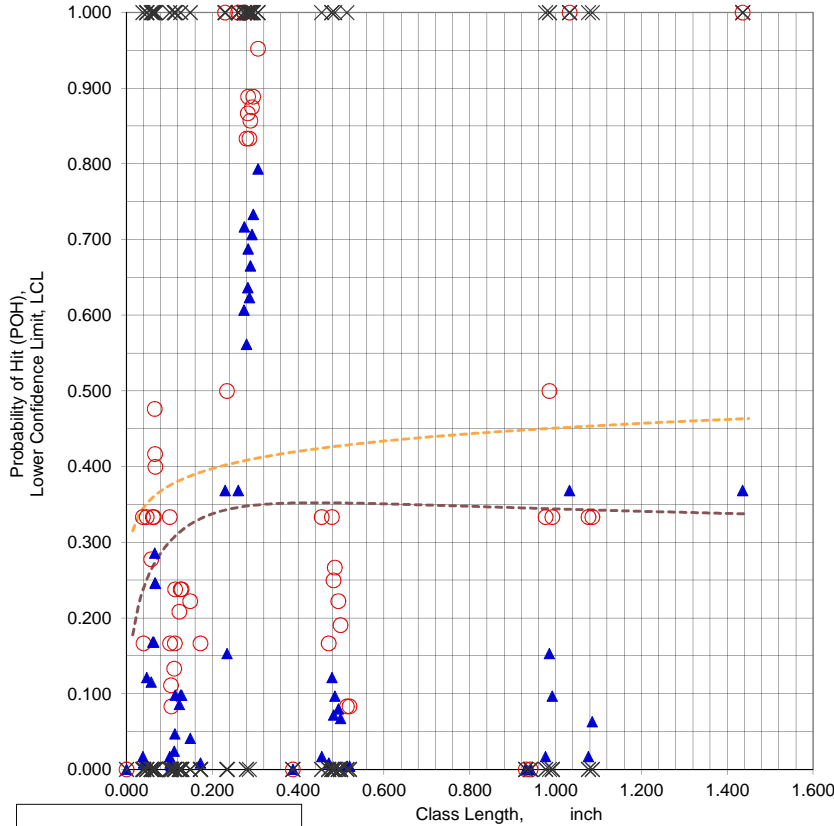
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ⊗ Xlcl
 ⊗ Xpoh
 ▲ 2XL
 ⊗ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

○ Probability of Hit (POH) in Class Range
 ▲ Lower Confidence Bound @ 95%
 × Hit/Miss
— Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **F7003(3)L.xls**
 Data Set Name = **F7003(3)(CK. NO.)**
 Date & Time = 6/5/15 6:06 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7933
 Classwidth @ Best LCL = 0.0240 inch
 Classlength @ Best LCL = 0.3060 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 1.4350 -0.300 inch 26 Samples

NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 1.435 inch
 Samples Needed @ XL = 26
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 1.435 inch
 Samples Needed @ Xpoh = 26
 New Largest Classlength , 2XL = 2.870 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = F7003(3)L.xls
 Data Set Name = F7003(3)L(CK. NO.)

Directed DOE Options

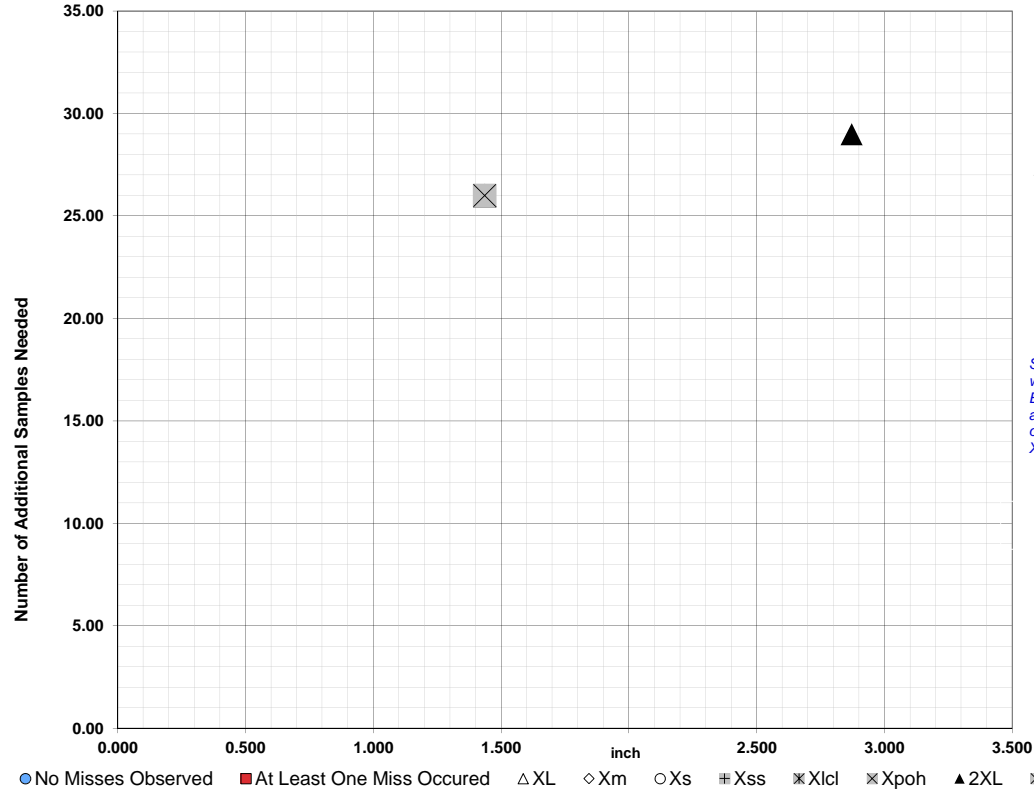


TABLE C

Class Length	Additional Samples
XL = 1.435	26
Xm =	
Xs =	
Xss =	
XLcl =	
Xpoh = 1.435	26
2XL = 2.870	29
**Alternate Xm =	
Xpodopt =	

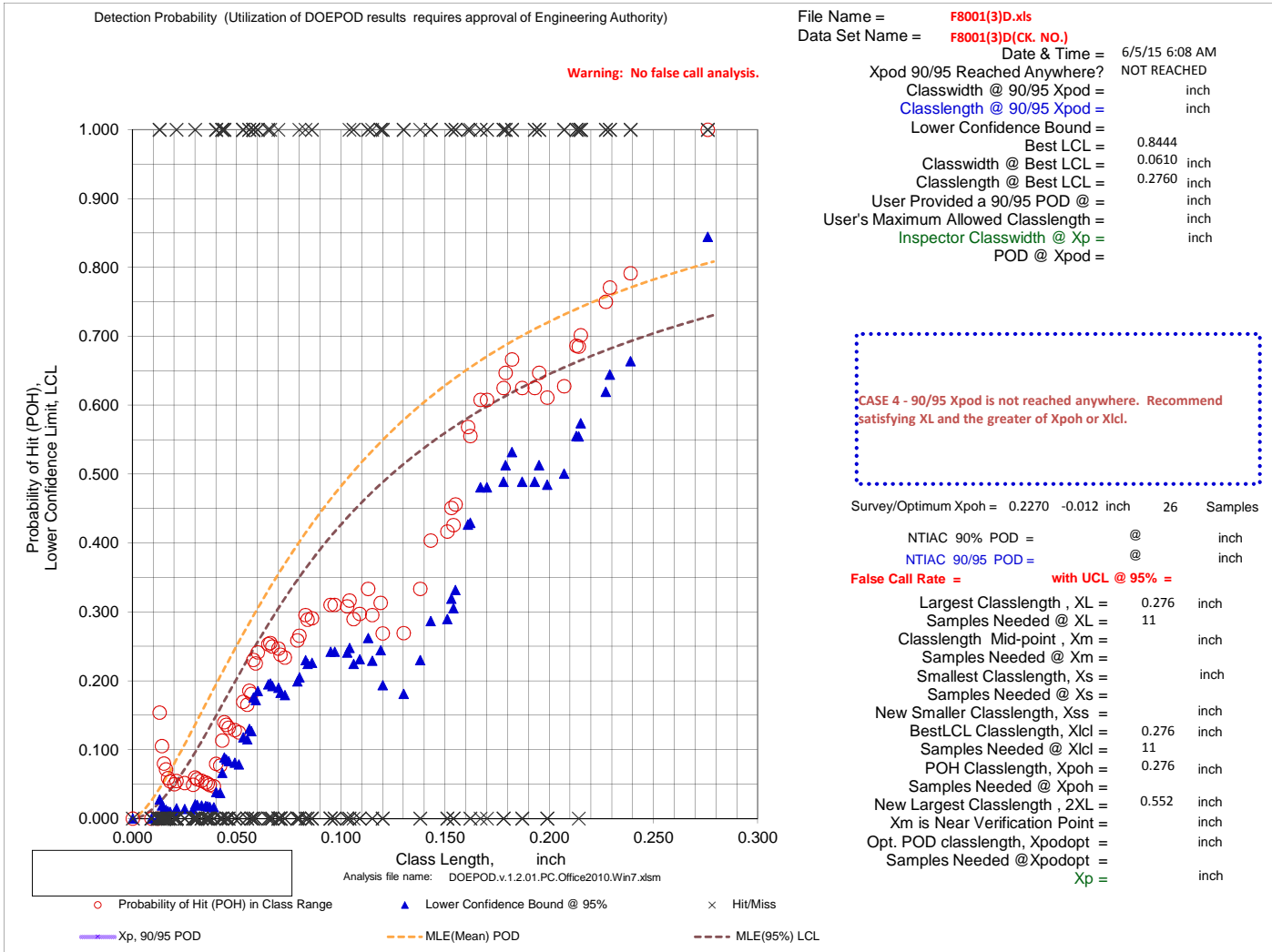
TABLE A*
 Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
 Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ⊗ XLcl ⊗ Xpoh ▲ 2XL ⊗ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F8001(3)D.xls
 Data Set Name = F8001(3)D(CK. NO.)

Directed DOE Options

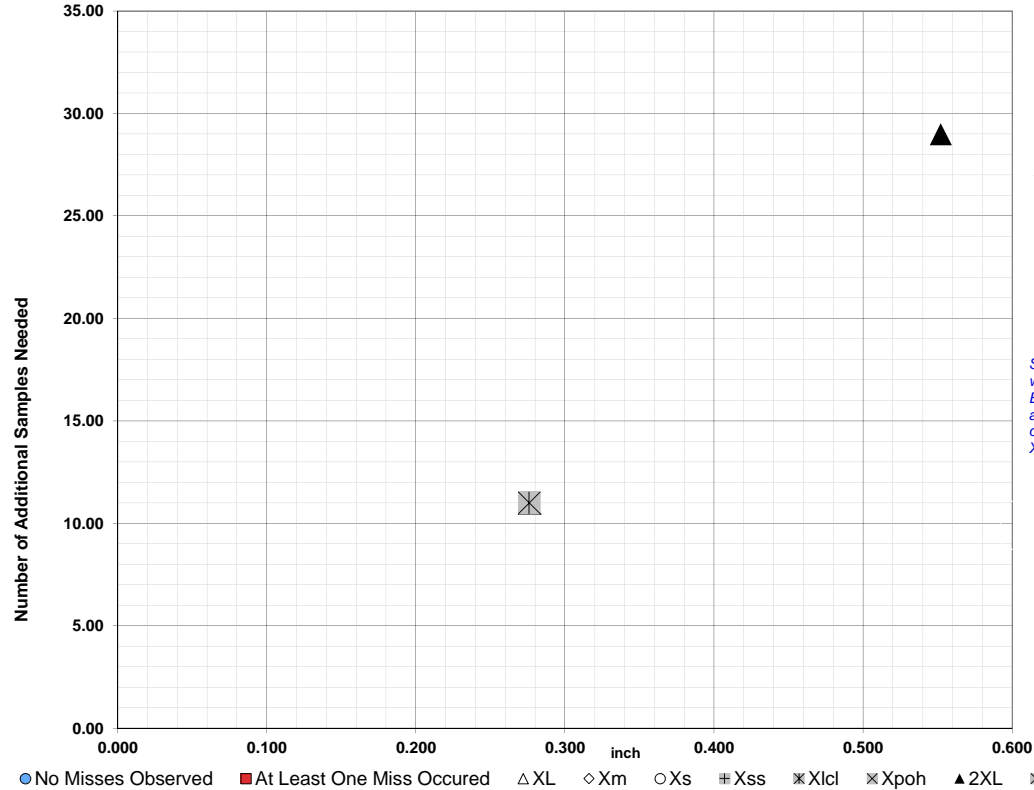


TABLE C

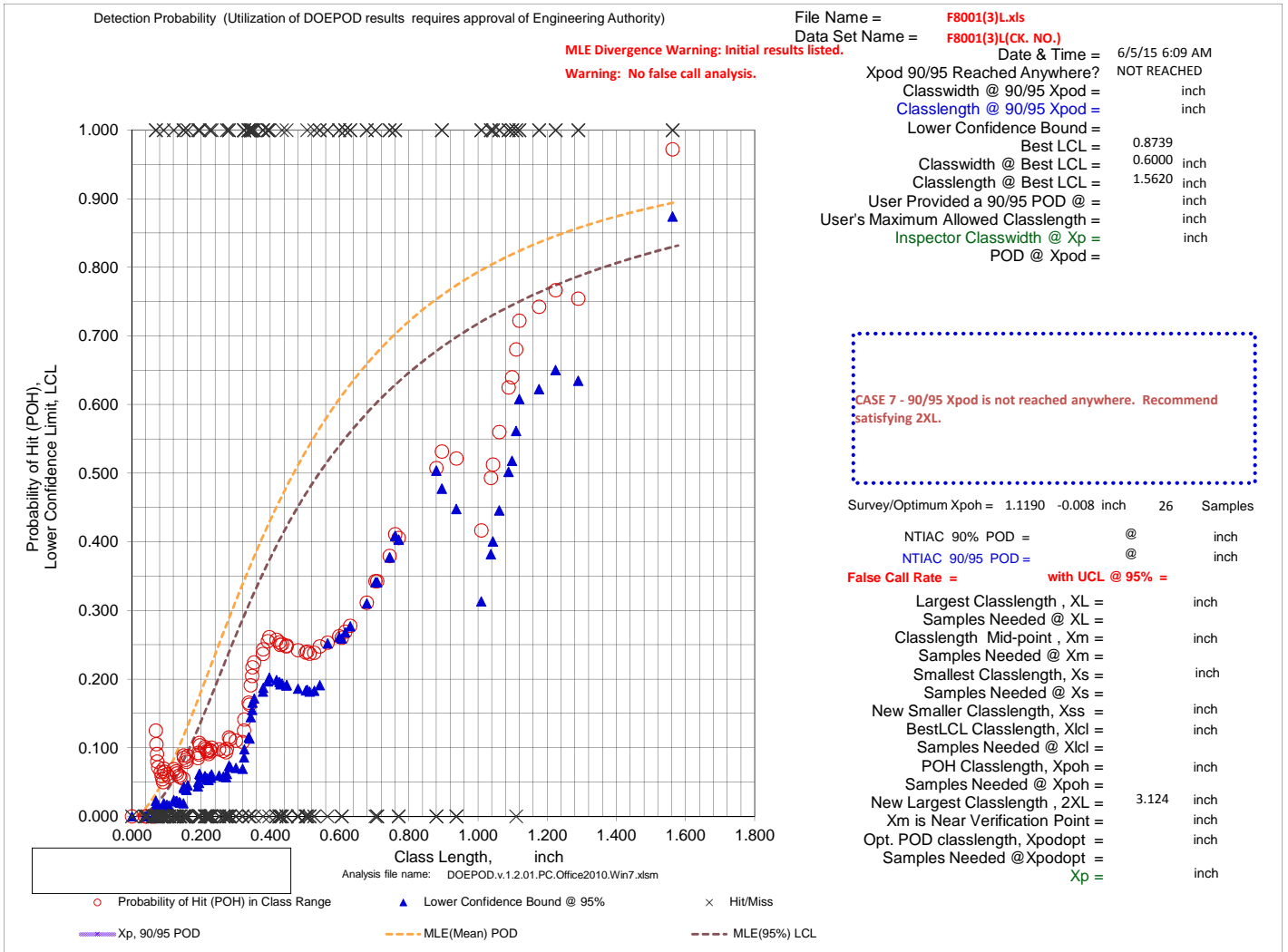
Class Length	Additional Samples
XL = 0.276	11
Xm =	
Xs =	
Xss =	
Xlcl = 0.276	11
Xpoh = 0.276	
2XL = 0.552	29
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F8001(3)L.xls
 Data Set Name = F8001(3)L(CK. NO.)

Directed DOE Options

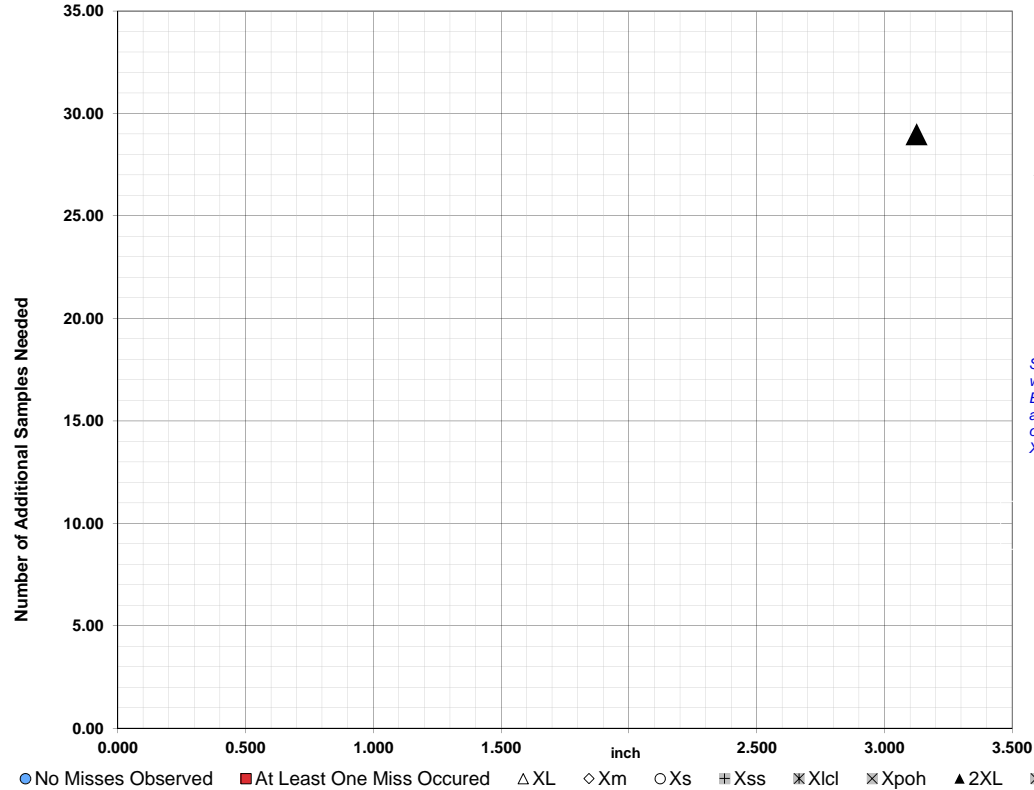


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 3.124	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 3.124 29
 **Alternate Xm =
 Xpodopt =

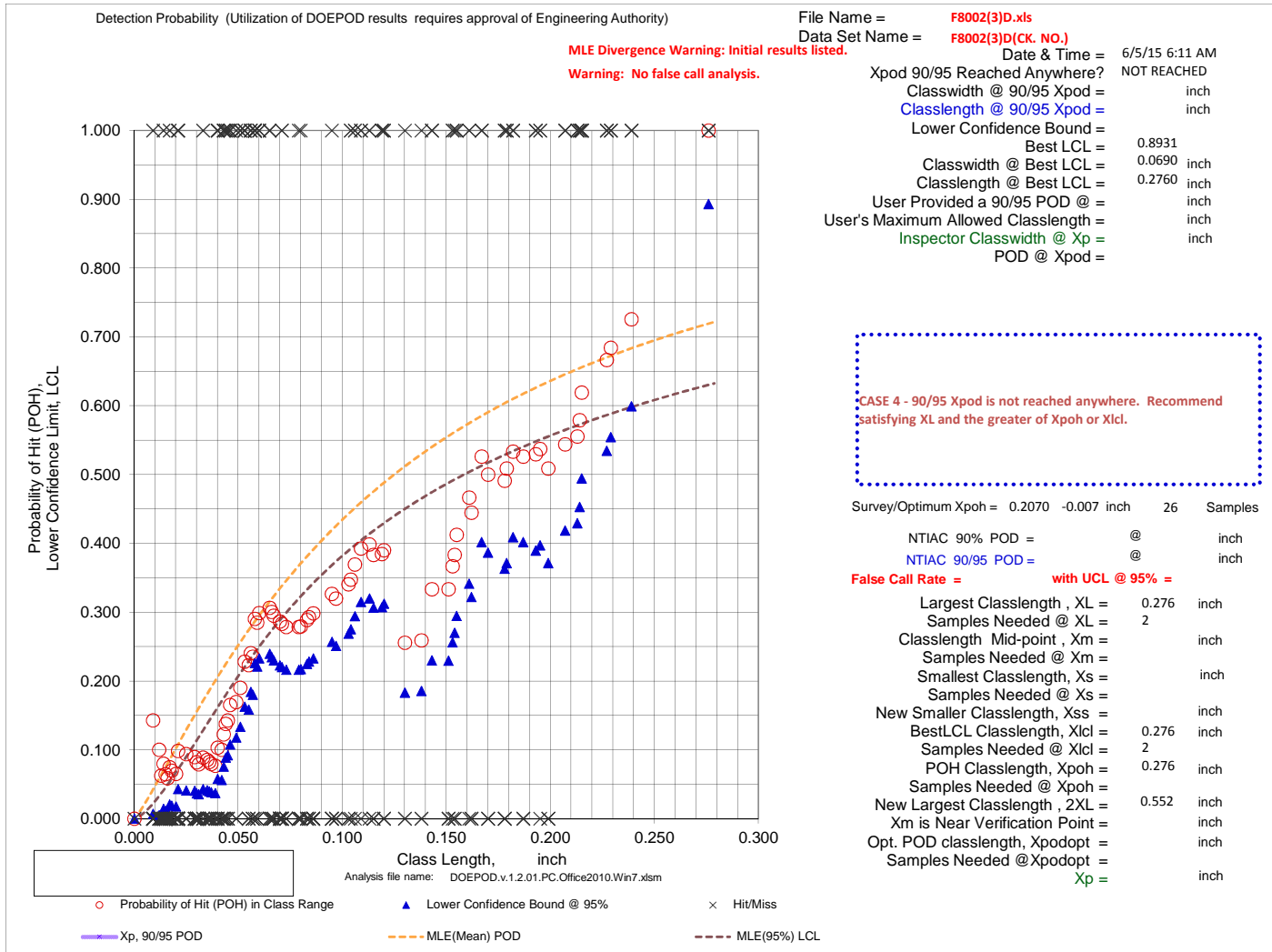
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F8002(3)D.xls
 Data Set Name = F8002(3)D(CK. NO.)

Directed DOE Options

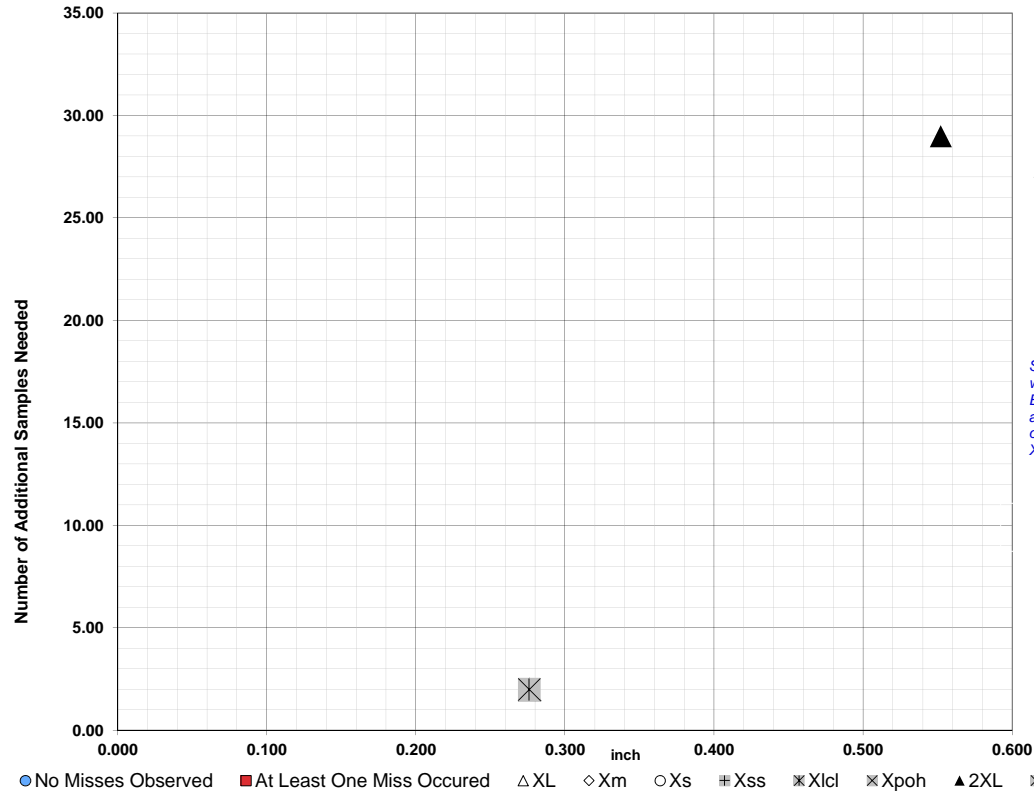


TABLE C

Class Length	Additional Samples
XL = 0.276	2
Xm =	
Xs =	
Xss =	
Xlcl = 0.276	2
Xpoh = 0.276	
2XL = 0.552	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

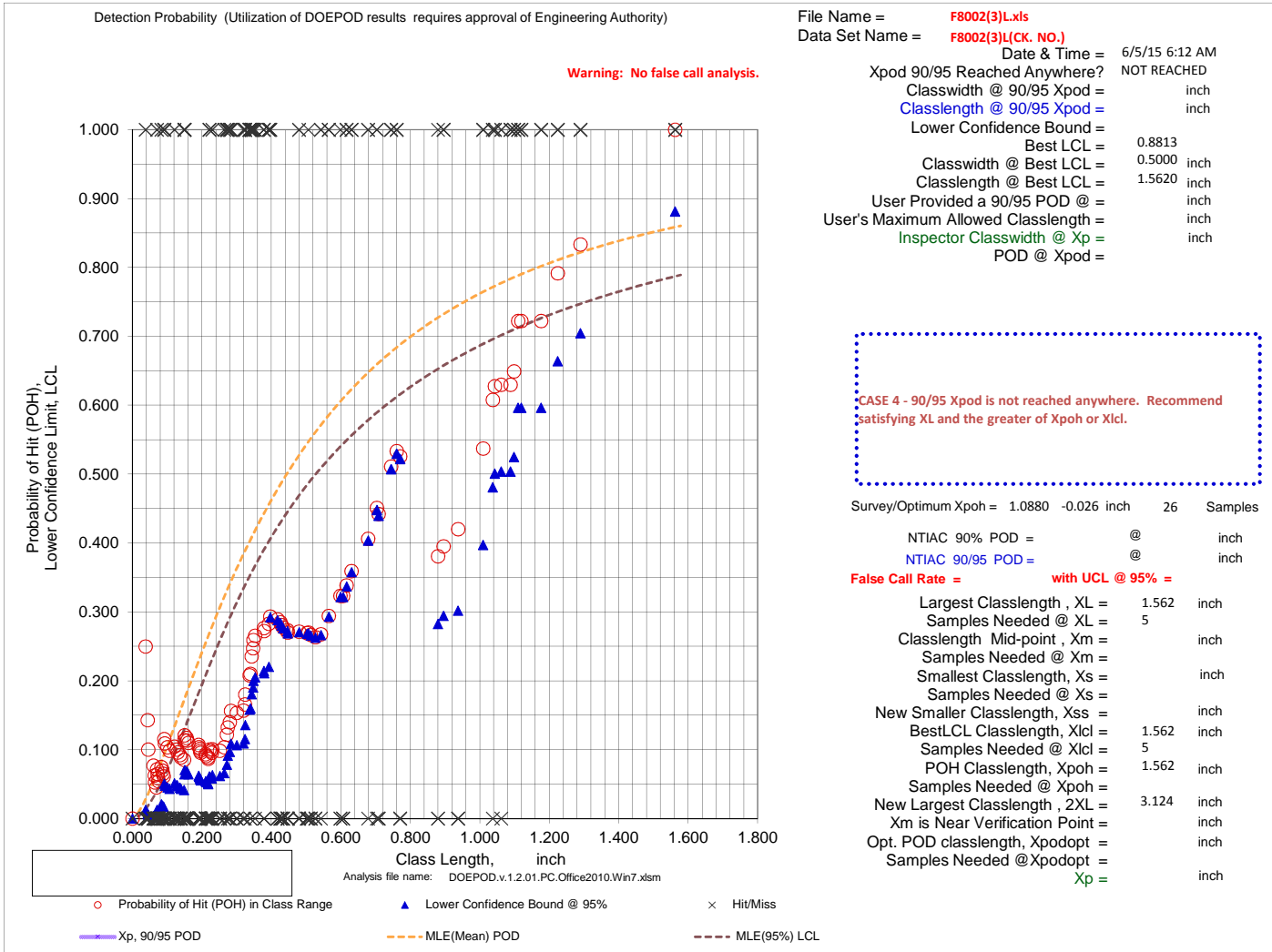
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F8002(3)L.xls
 Data Set Name = F8002(3)L(CK. NO.)

Directed DOE Options

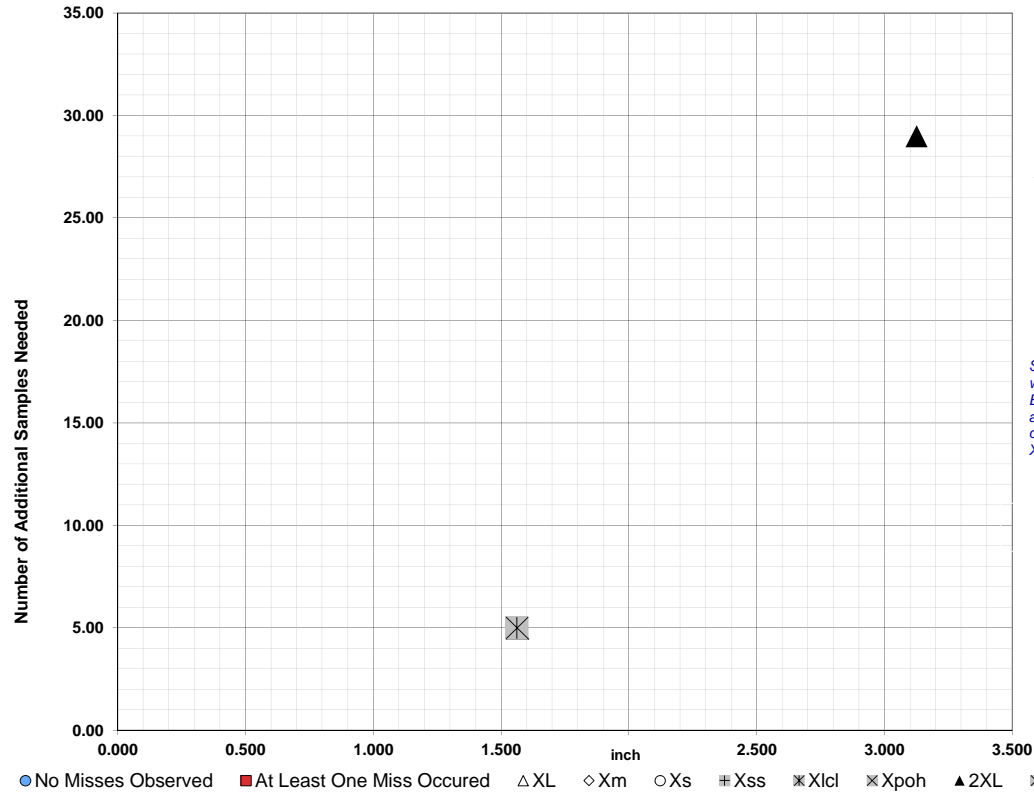


TABLE C

Class Length	Additional Samples
XL = 1.562	5
Xm =	
Xs =	
Xss =	
Xlcl = 1.562	5
Xpoh = 1.562	
2XL = 3.124	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

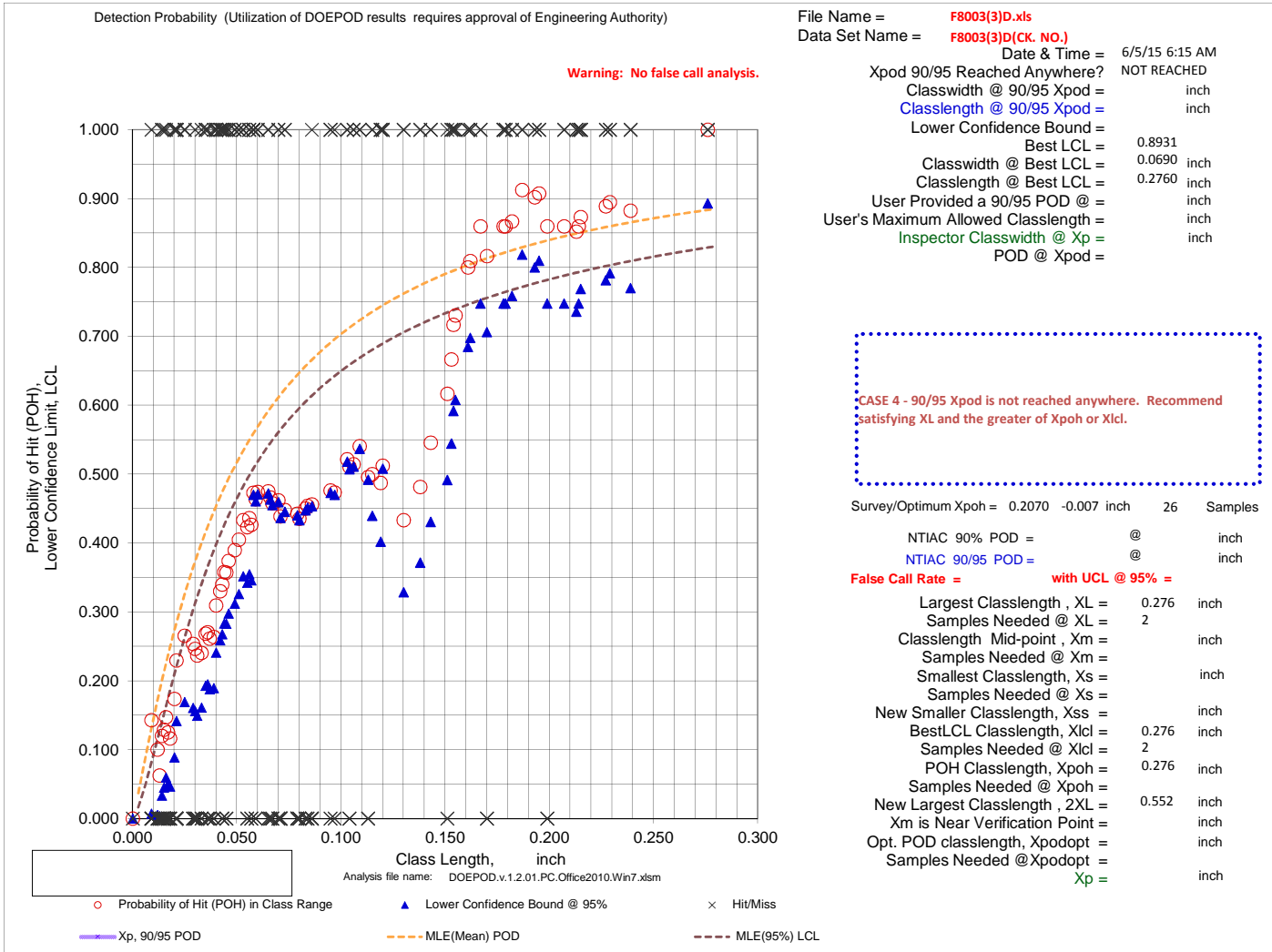
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F8003(3)D.xls
 Data Set Name = F8003(3)D(CK. NO.)

Directed DOE Options

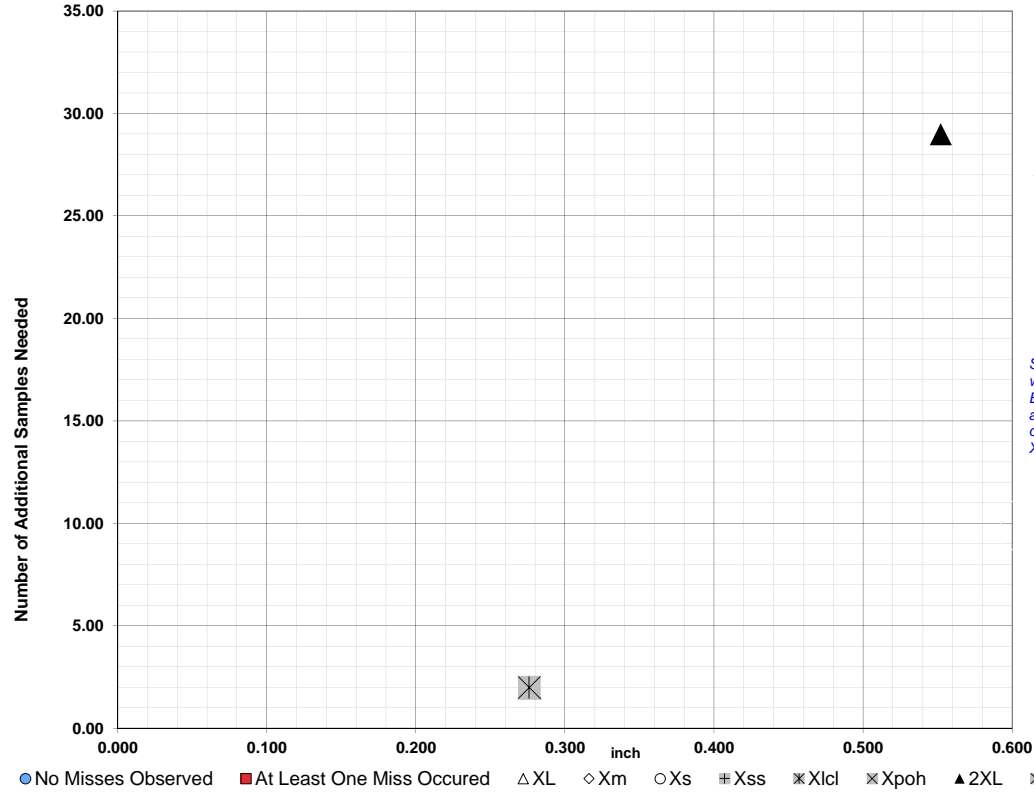


TABLE C

Class Length	Additional Samples
XL = 0.276	2
Xm =	
Xs =	
Xss =	
Xlcl = 0.276	2
Xpoh = 0.276	
2XL = 0.552	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

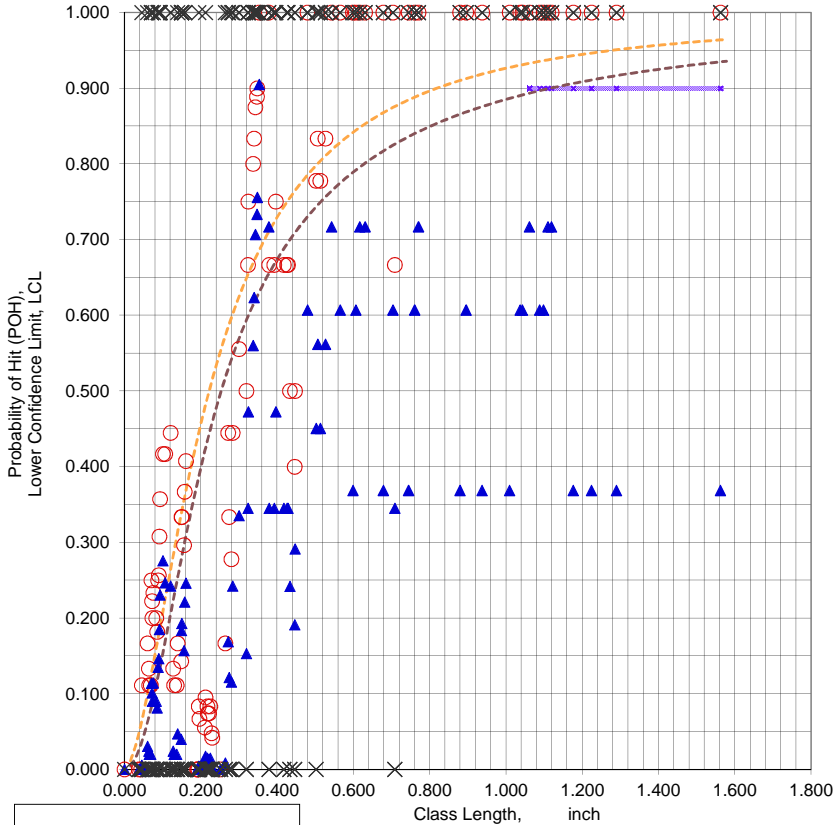
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
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Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Need 7 more large flaws.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 ┆ Xp, 90/95 POD ┆ MLE(Mean) POD ┆ MLE(95%) LCL

File Name = **F8003(3)L.xls**
 Data Set Name = **F8003(3)(CK. NO.)**
 Date & Time = 6/5/15 6:17 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0300 inch
 Classlength @ 90/95 Xpod = 0.3530 inch
 Lower Confidence Bound = 0.9050
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 1.562 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 1.119 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 1.0610 inch

File Name = F8003(3)L.xls
 Data Set Name = F8003(3)L(CK. NO.)

Directed DOE Options

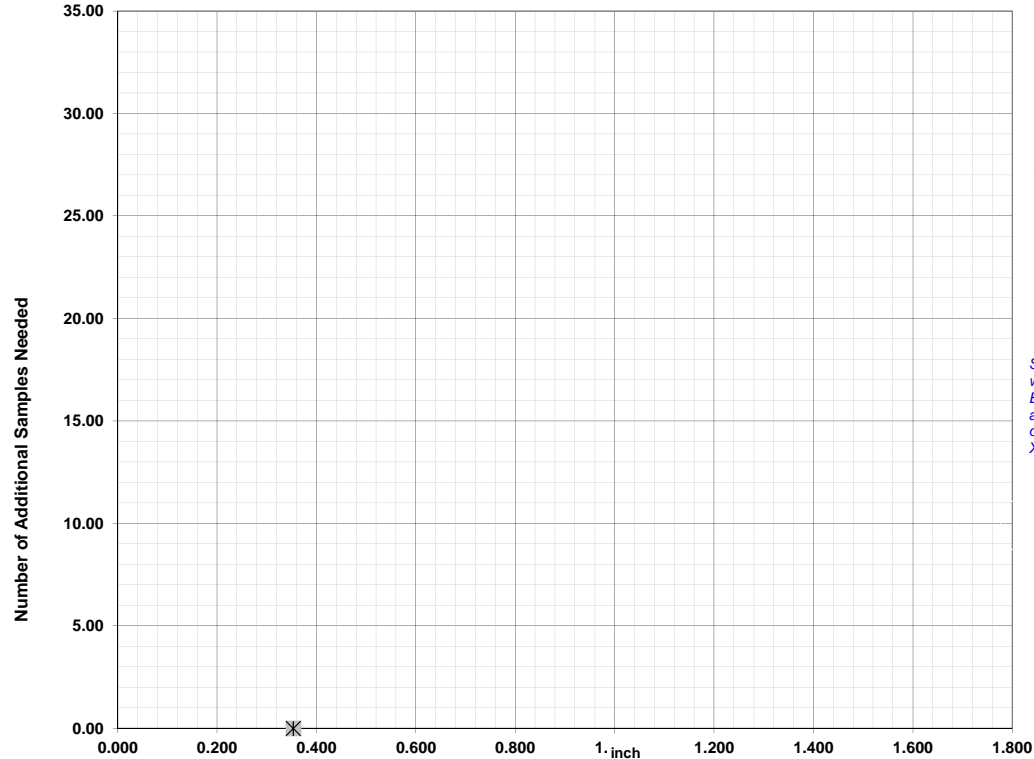


TABLE C

Class Length Additional Samples

XL = 1.562
 Xm = 1.119
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

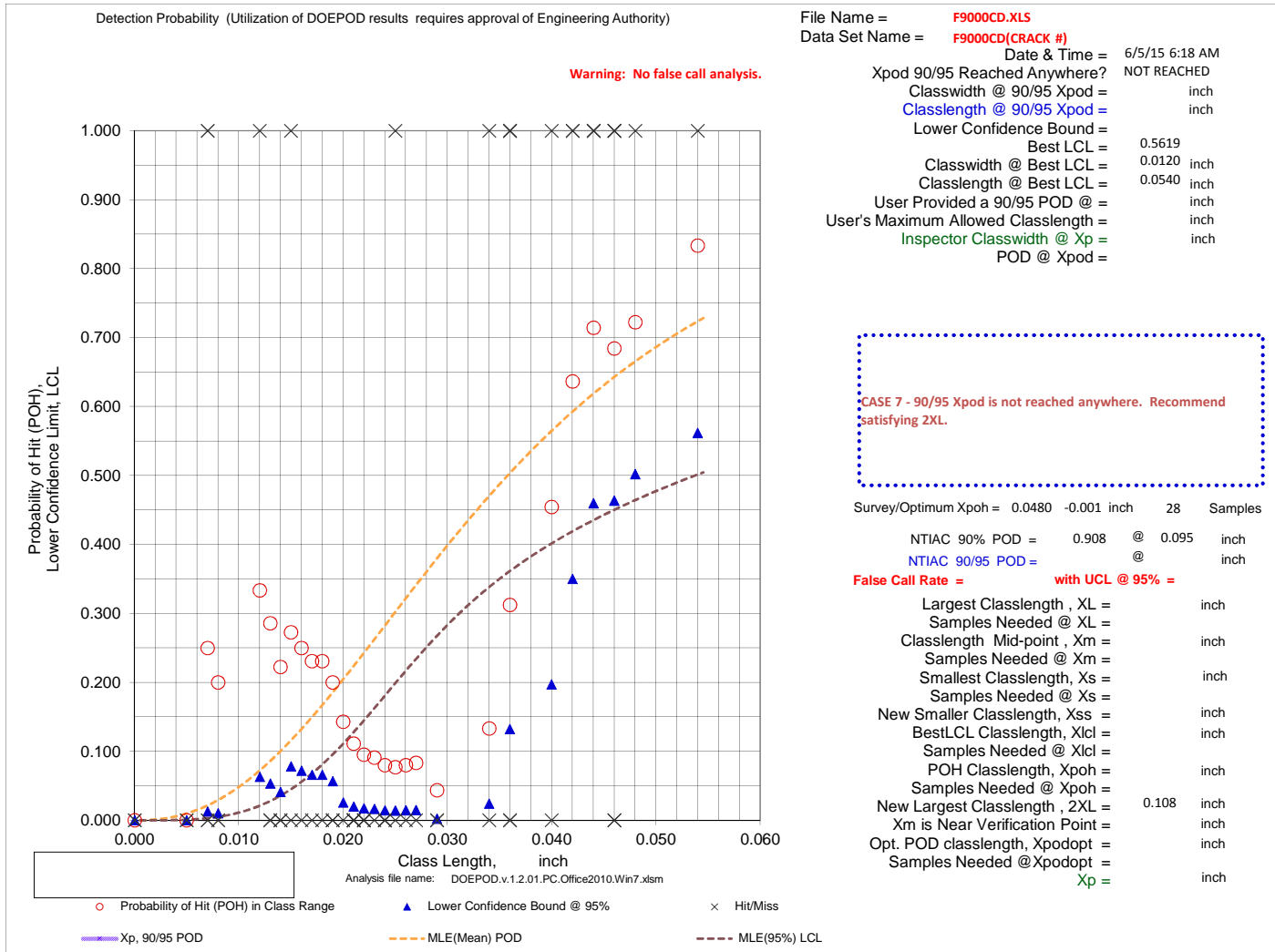
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
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File Name = F9000CD.XLS
 Data Set Name = F9000CD(CRACK #)

Directed DOE Options

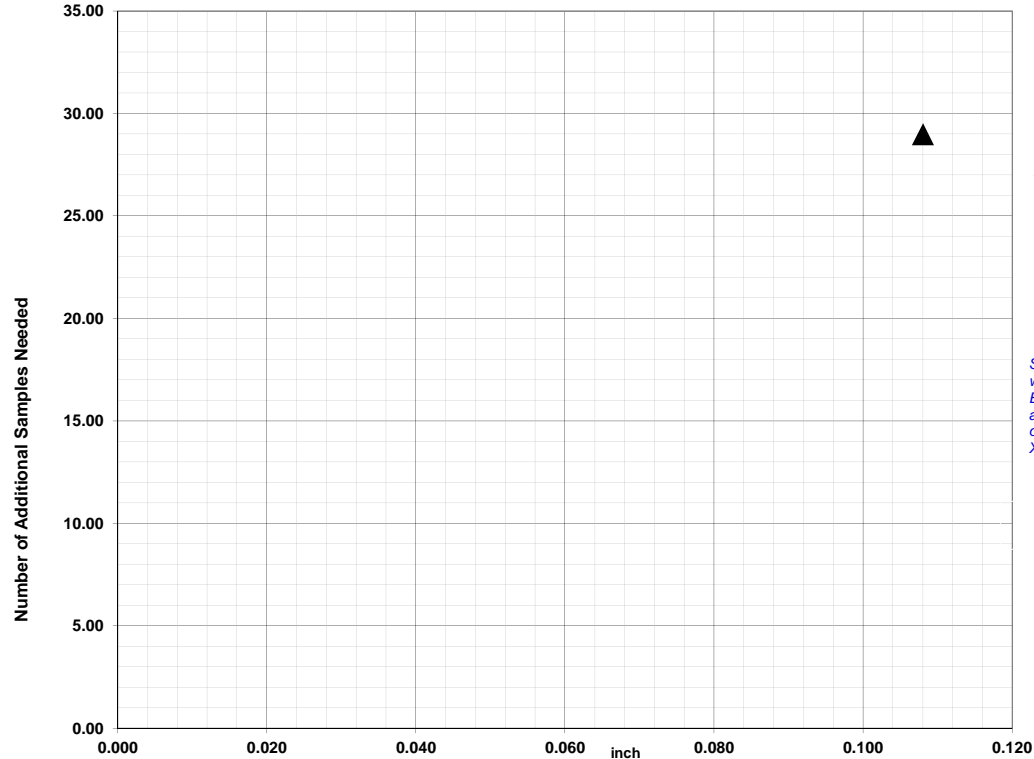


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.108	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.108 29
 **Alternate Xm =
 Xpodopt =

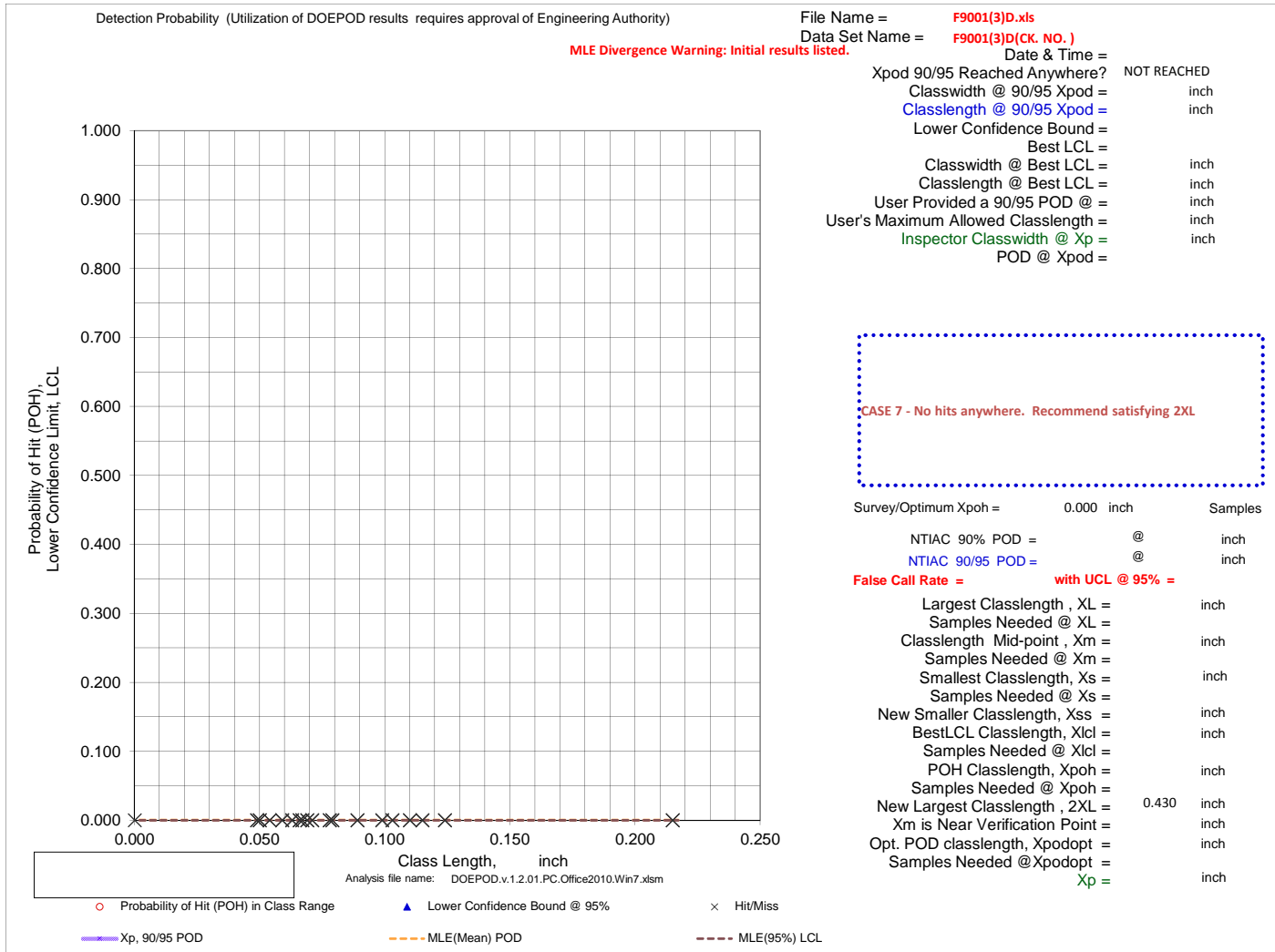
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured ▲ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
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File Name = F9001(3)D.xls
 Data Set Name = F9001(3)D(CK. NO.)

Directed DOE Options

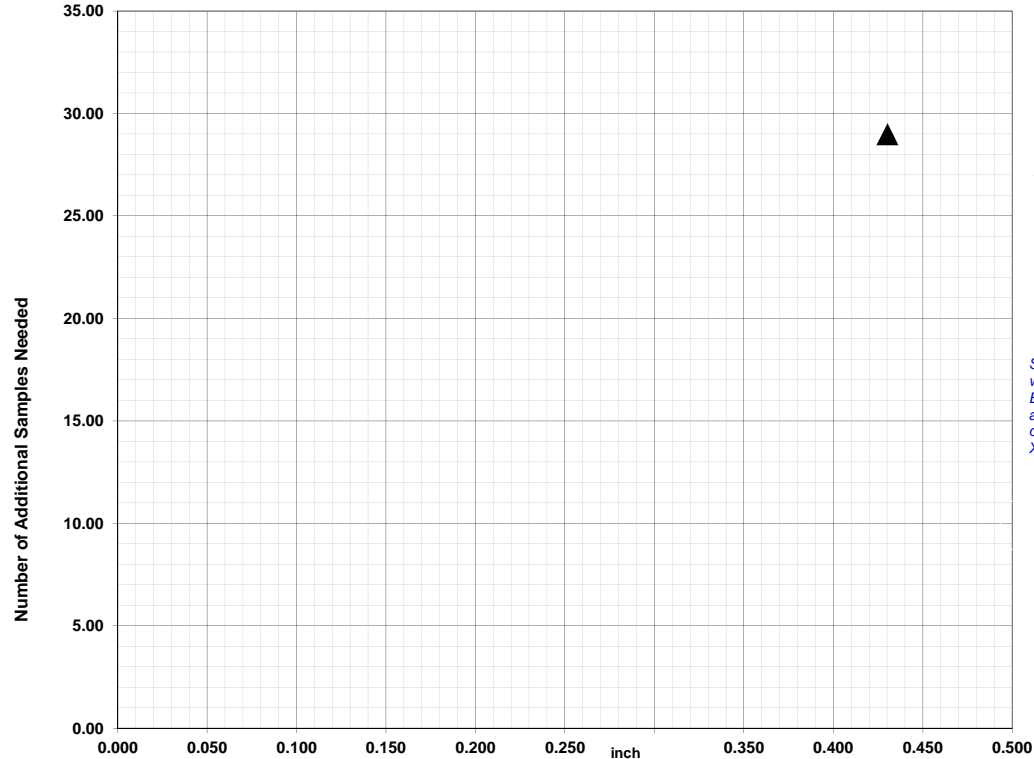


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.430	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.430 29
 **Alternate Xm =
 Xpodopt =

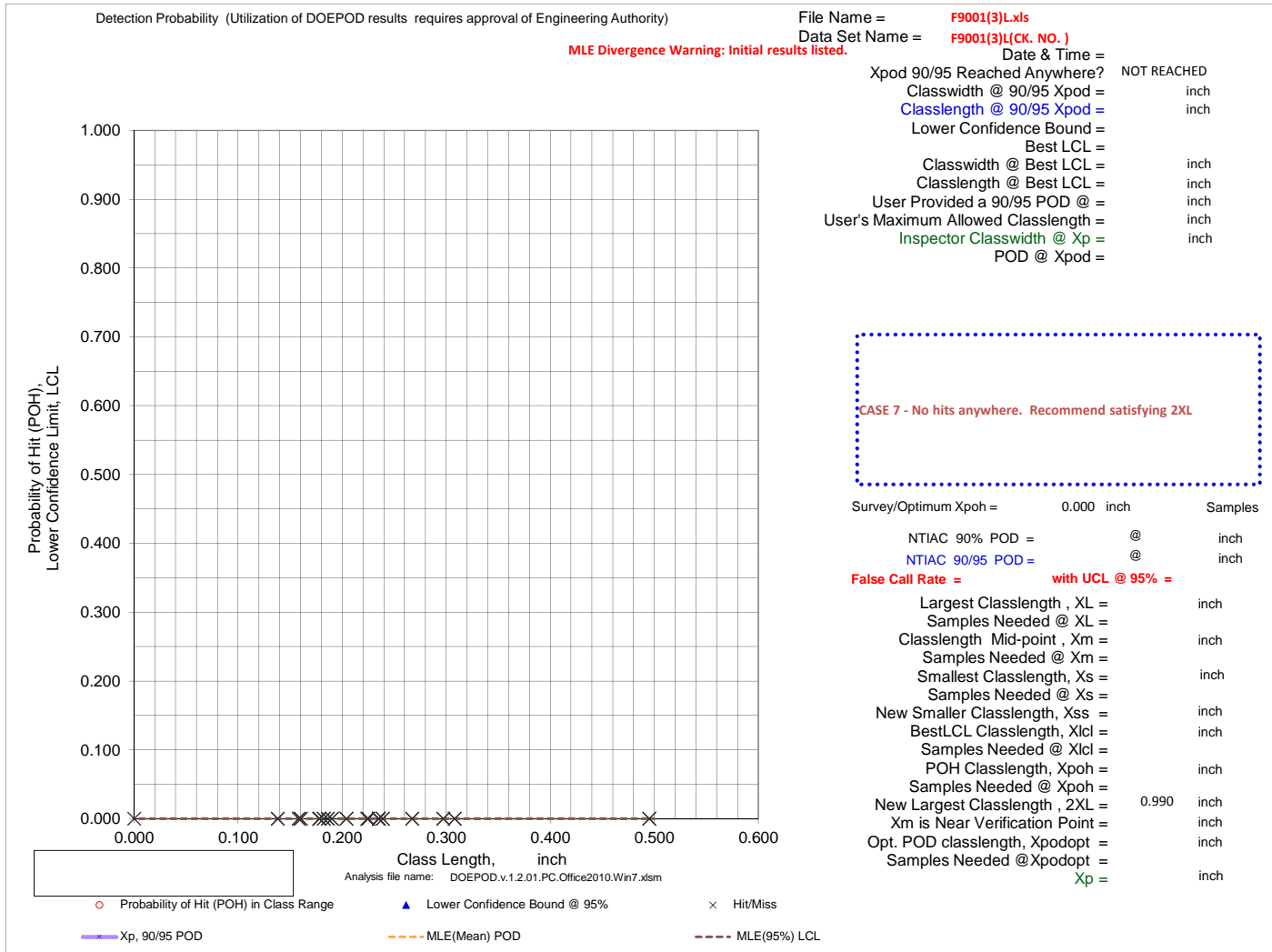
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ⊗ Xlcl
 ⊗ Xpoh
 ▲ 2XL
 ⊗ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
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File Name = F9001(3)L.xls
 Data Set Name = F9001(3)L(CK. NO.)

Directed DOE Options

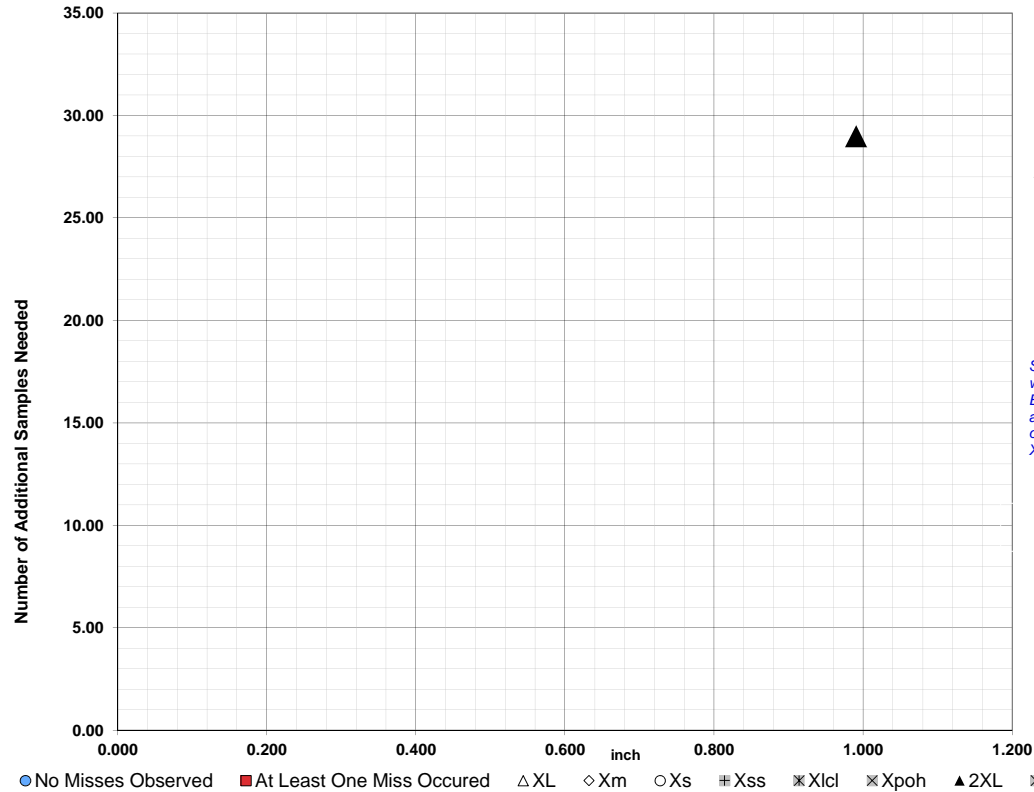


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.990	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.990 29
 **Alternate Xm =
 Xpodopt =

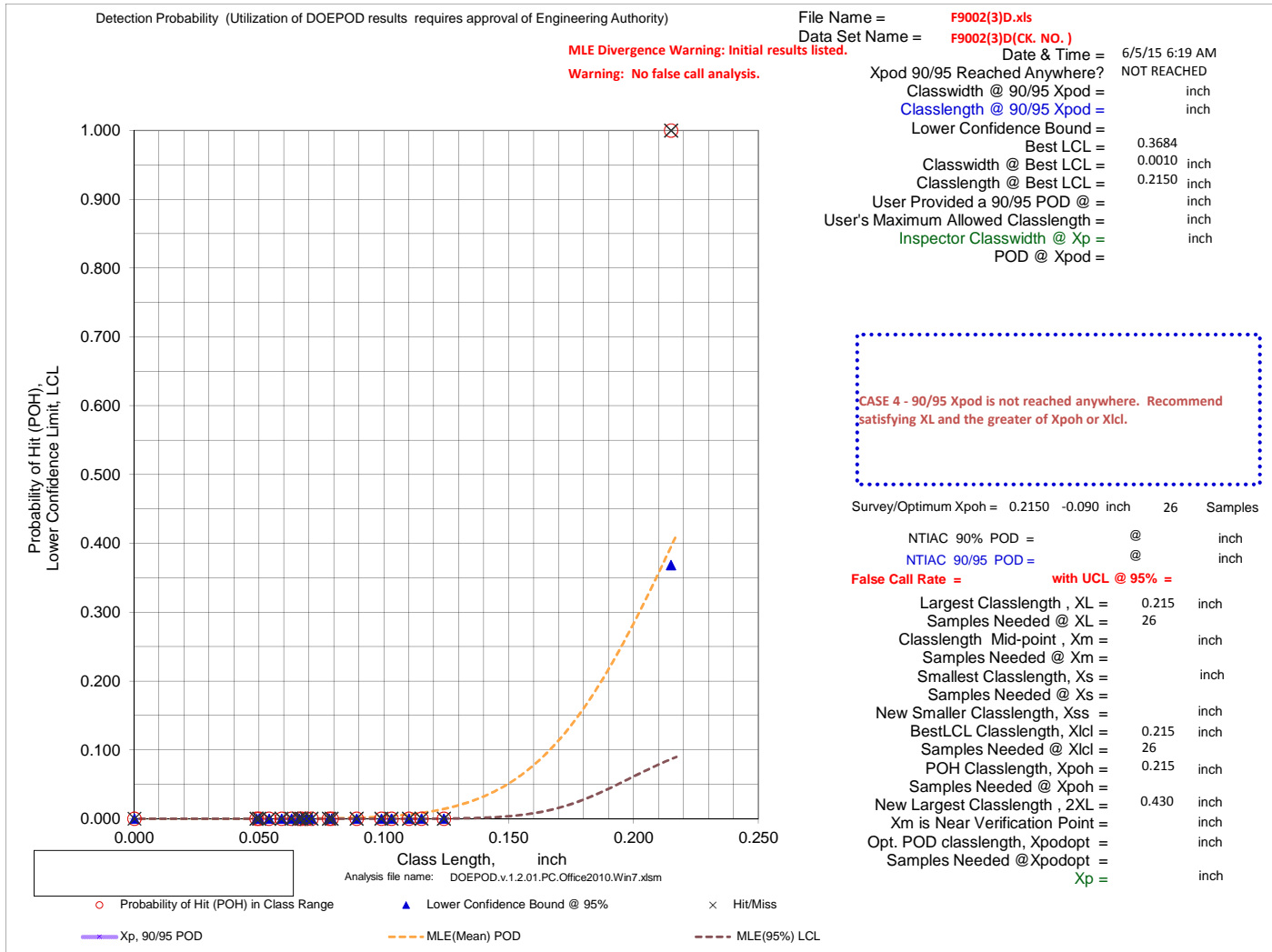
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✖ Xlcl ✖ Xpoh ▲ 2XL ✖ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
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 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F9002(3)D.xls
 Data Set Name = F9002(3)D(CK. NO.)

Directed DOE Options

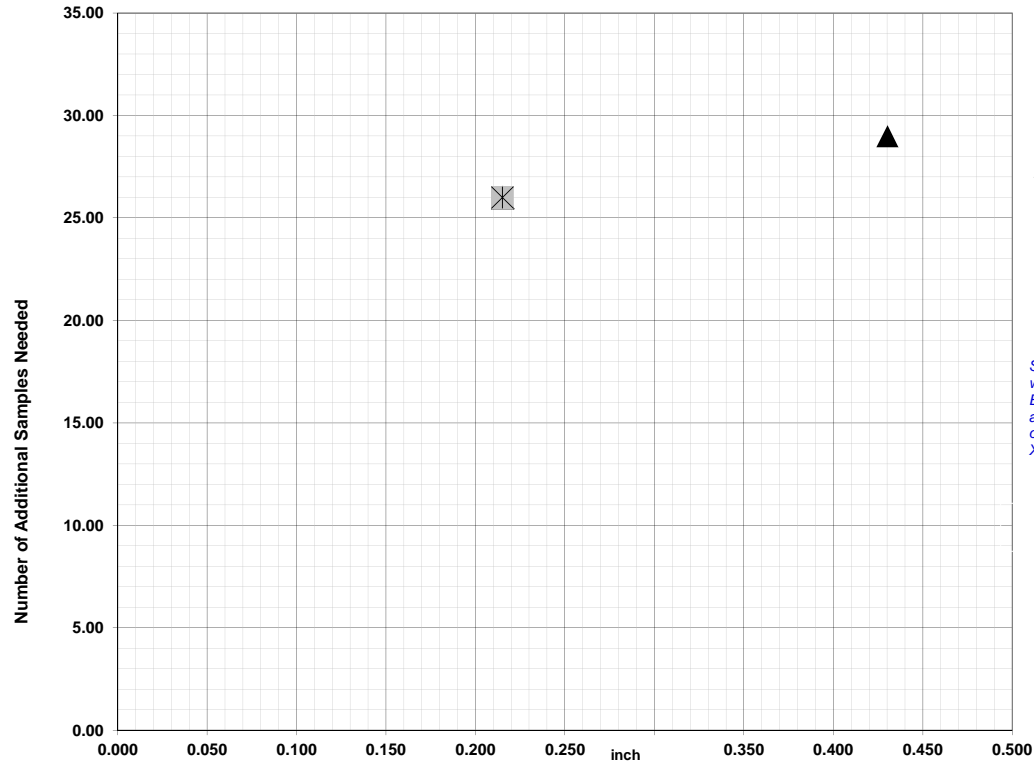


TABLE C

Class Length	Additional Samples
XL = 0.215	26
Xm =	
Xs =	
Xss =	
Xlcl = 0.215	26
Xpoh = 0.215	
2XL = 0.430	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

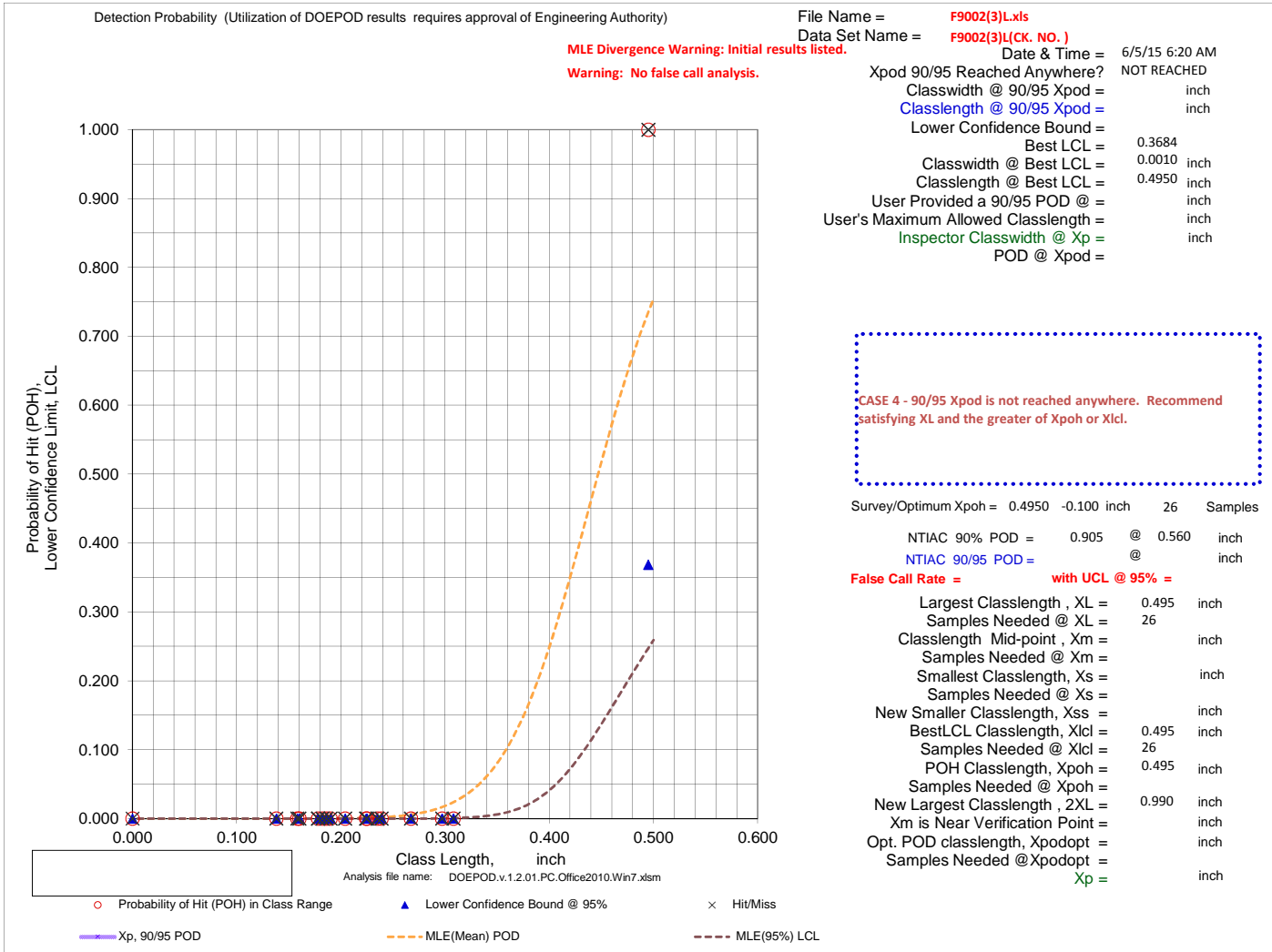
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
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 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F9002(3)L.xls
 Data Set Name = F9002(3)L(CK. NO.)

Directed DOE Options

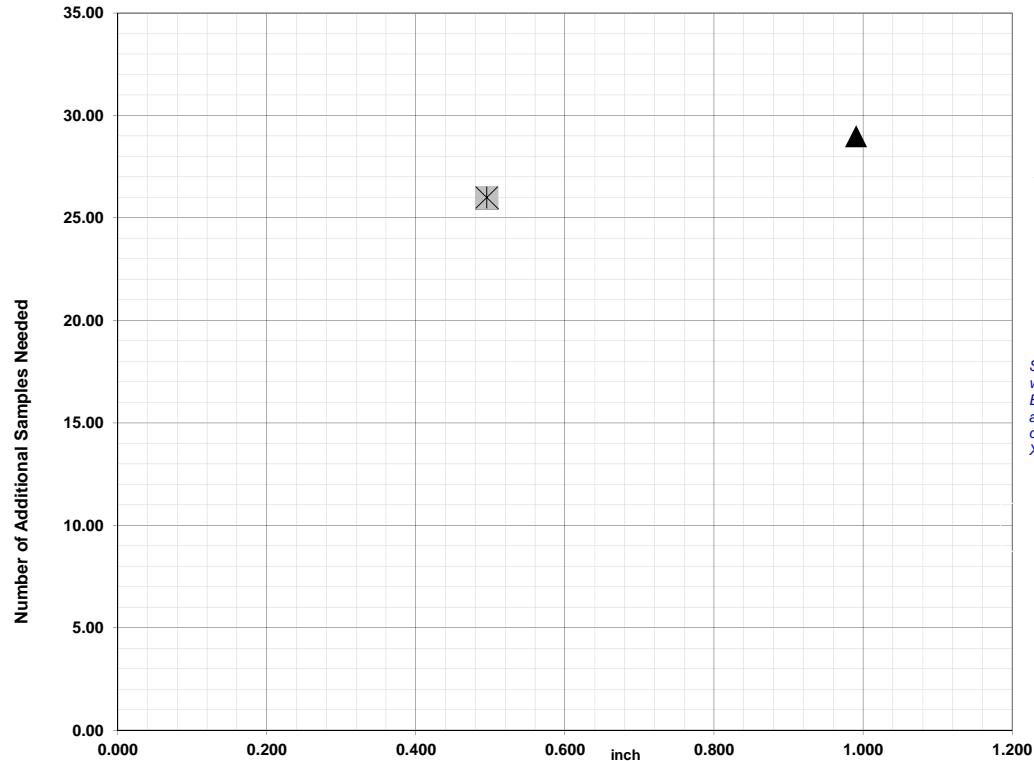


TABLE C

Class Length	Additional Samples
XL = 0.495	26
Xm =	
Xs =	
Xss =	
Xlcl = 0.495	26
Xpoh = 0.495	
2XL = 0.990	29
**Alternate Xm =	
Xpodopt =	

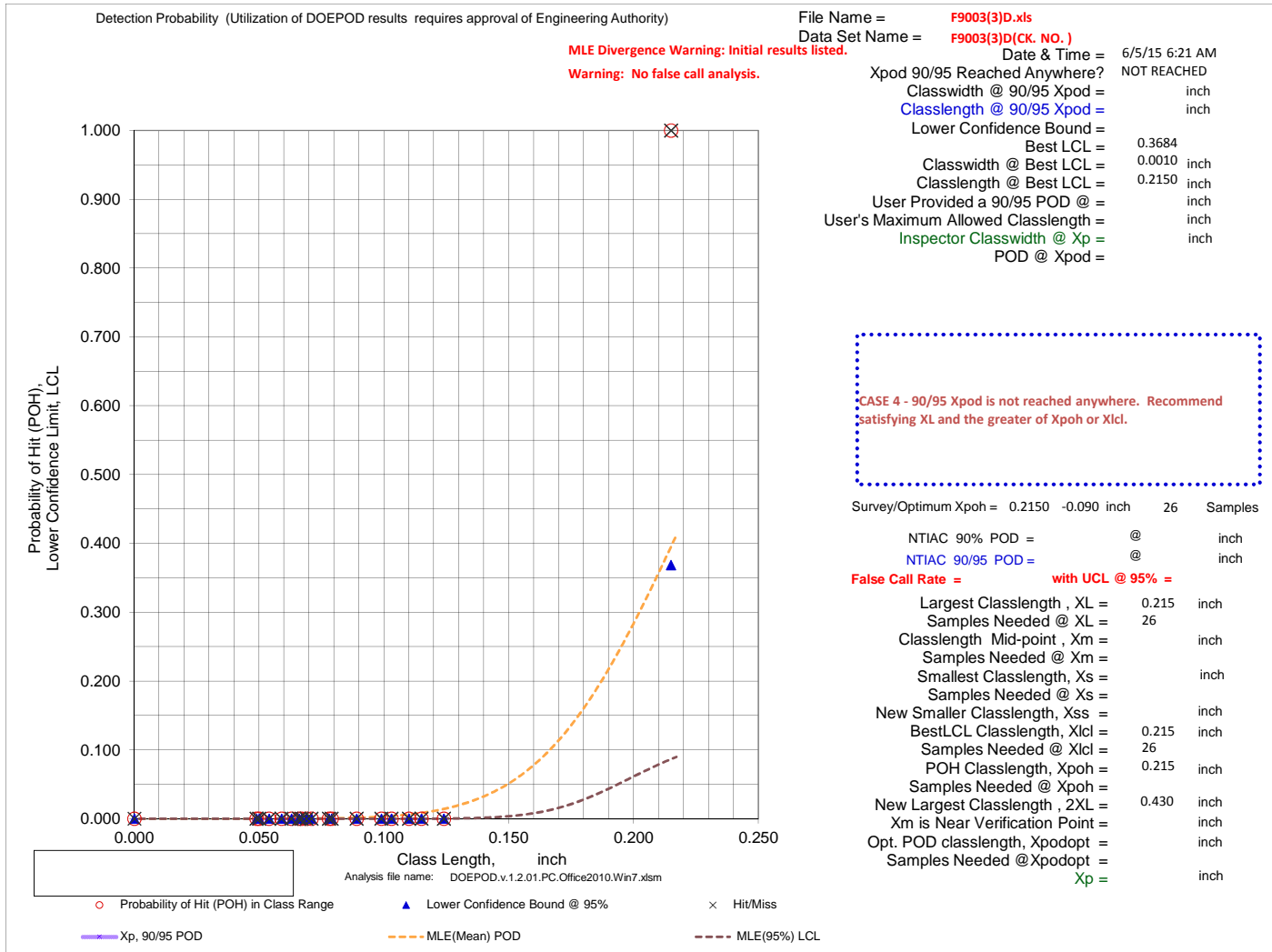
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod, Class Length	No. Need	Xpod, Class Length	No. Need

● No Misses Observed ■ At Least One Miss Occured △ XL ◇ Xm ○ Xs ■ Xss ✕ Xlcl ✕ Xpoh ▲ 2XL ✕ Xpod ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F9003(3)D.xls
 Data Set Name = F9003(3)D(CK. NO.)

Directed DOE Options

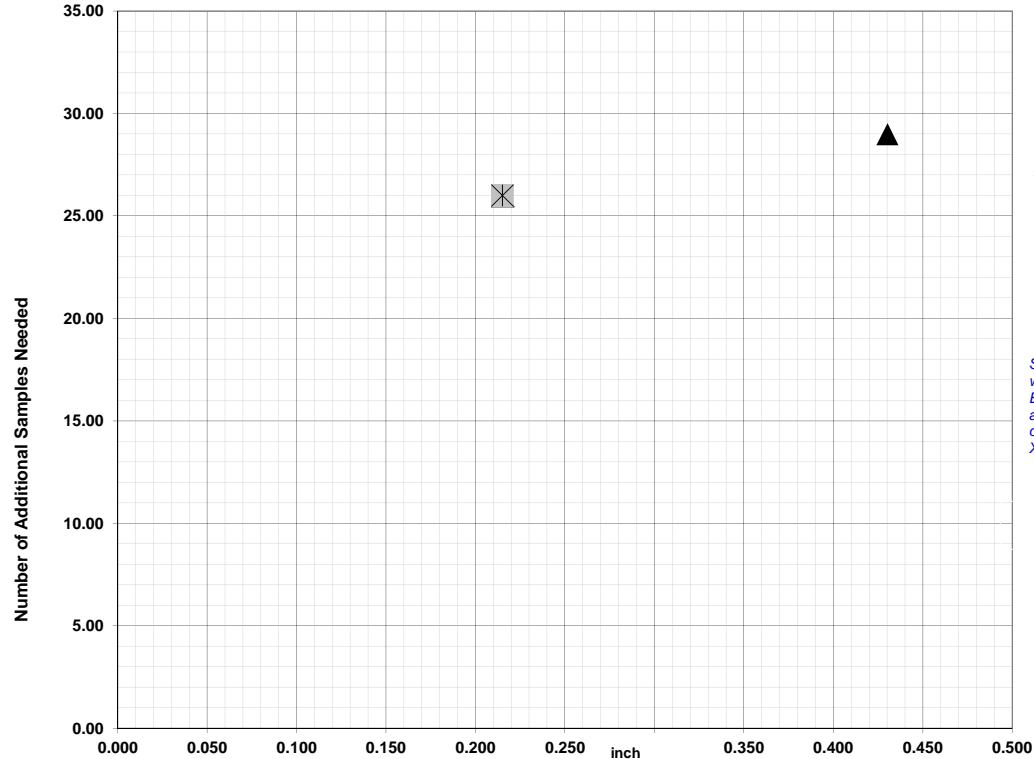


TABLE C

Class Length	Additional Samples
XL = 0.215	26
Xm =	
Xs =	
Xss =	
Xlcl = 0.215	26
Xpoh = 0.215	
2XL = 0.430	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

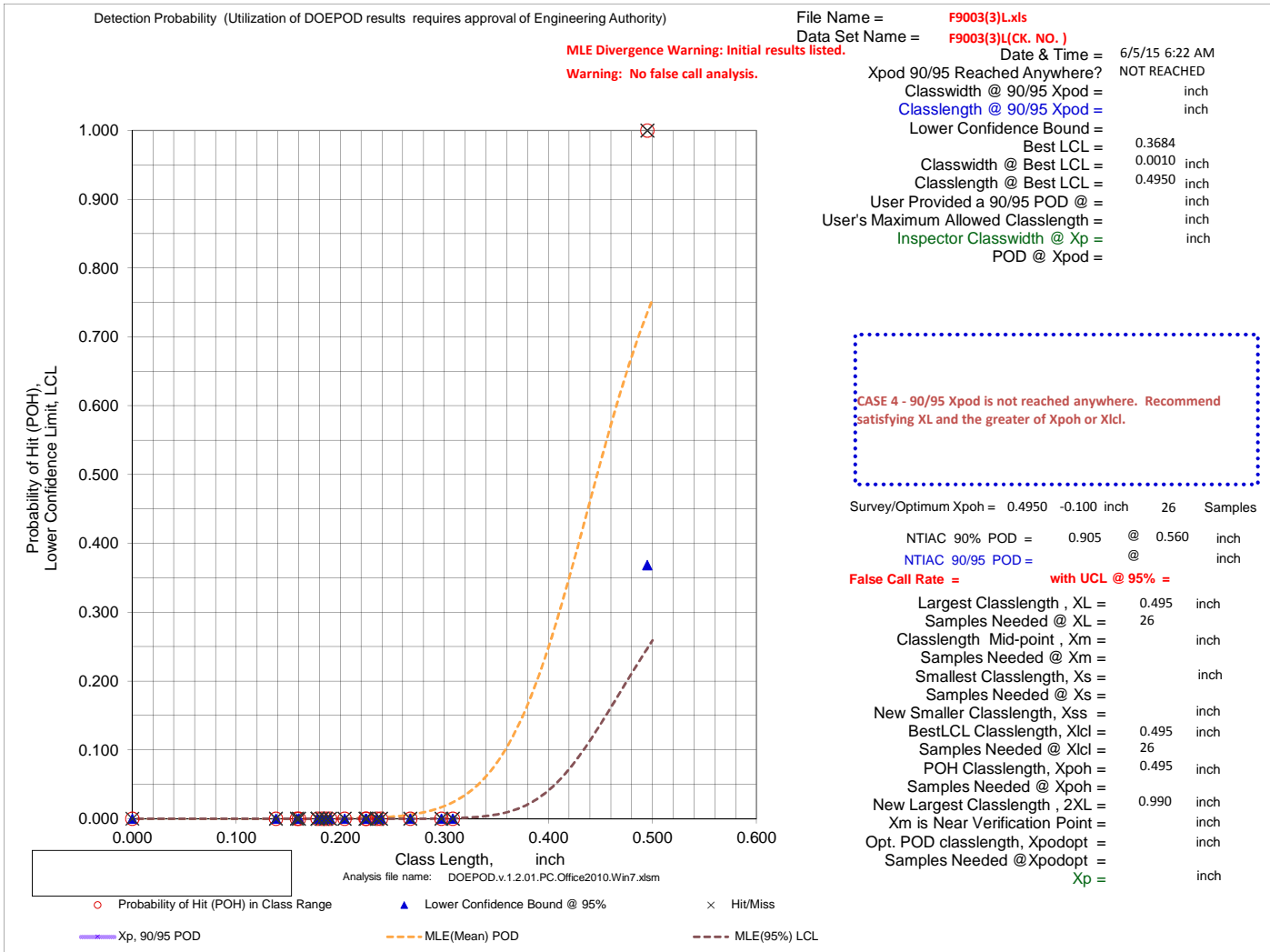
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = F9003(3)L.xls
 Data Set Name = F9003(3)L(CK. NO.)

Directed DOE Options

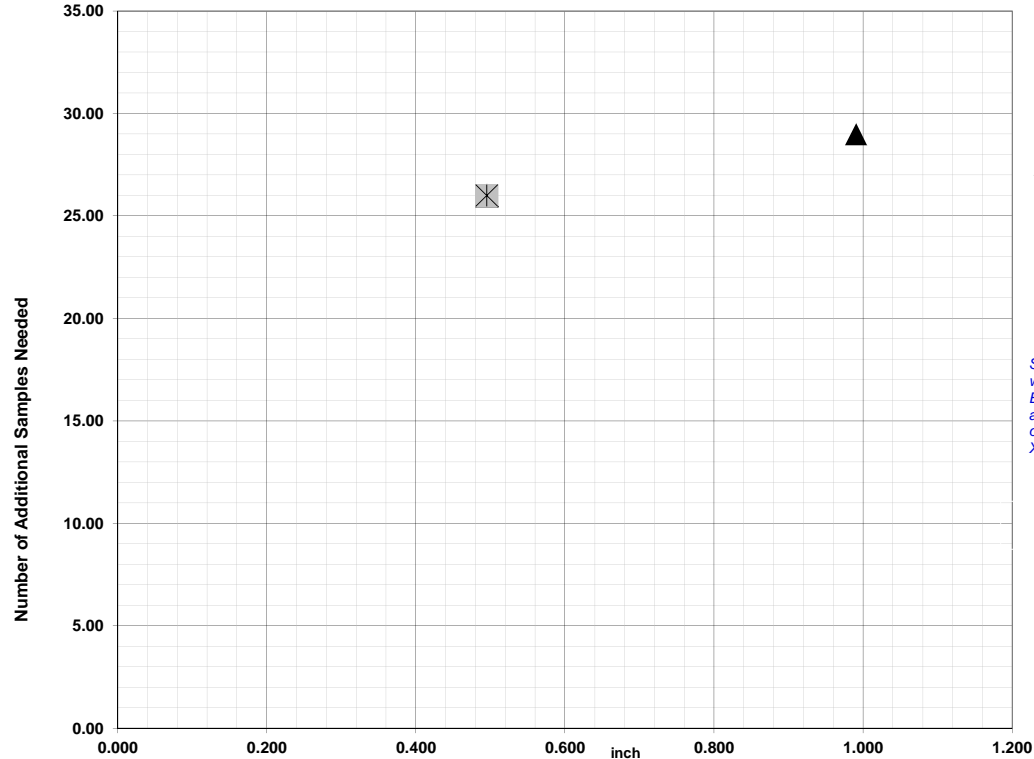


TABLE C

Class Length	Additional Samples
XL = 0.495	26
Xm =	
Xs =	
Xss =	
Xlcl = 0.495	26
Xpoh = 0.495	
2XL = 0.990	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

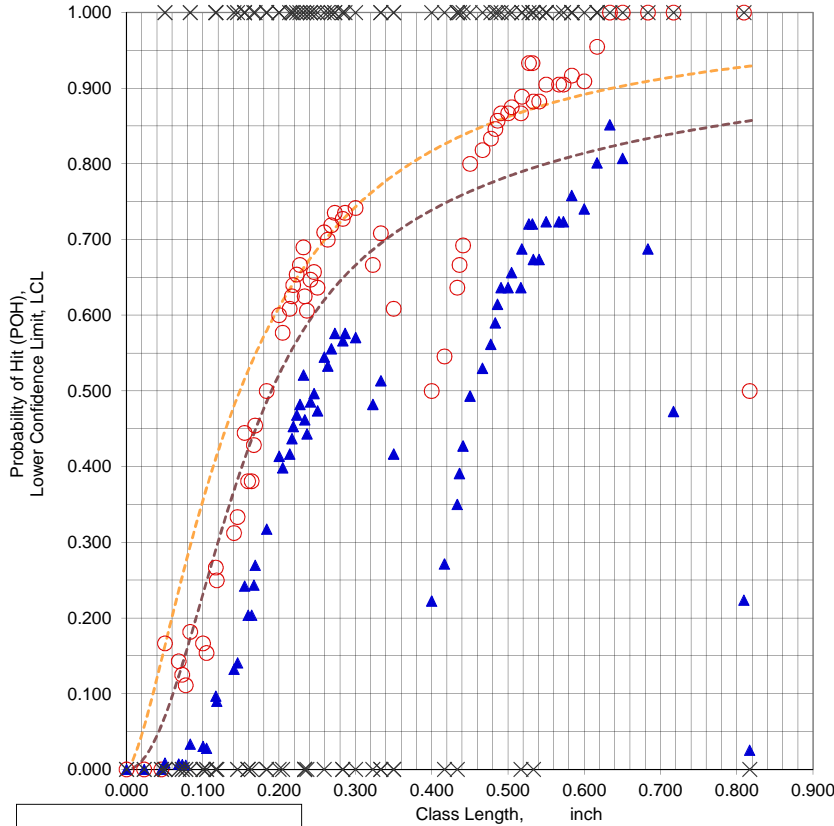
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ Xlcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



File Name = **G10003AA.XLS**
 Data Set Name = **G10003AA(CRACK #)**
 Date & Time = 6/5/15 6:23 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8514
 Classwidth @ Best LCL = 0.0930 inch
 Classlength @ Best LCL = 0.6333 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.901 @ 0.640 inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = 1.633 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = G10003AA.XLS
 Data Set Name = G10003AA(CRACK #)

Directed DOE Options

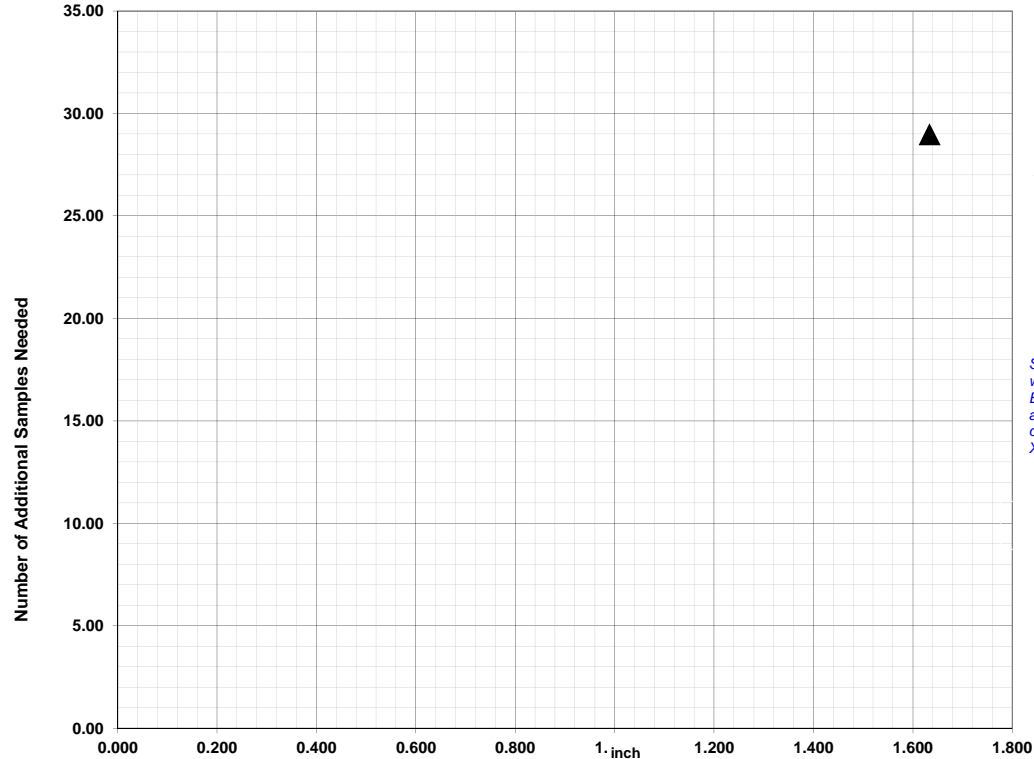


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 1.633	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 1.633 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

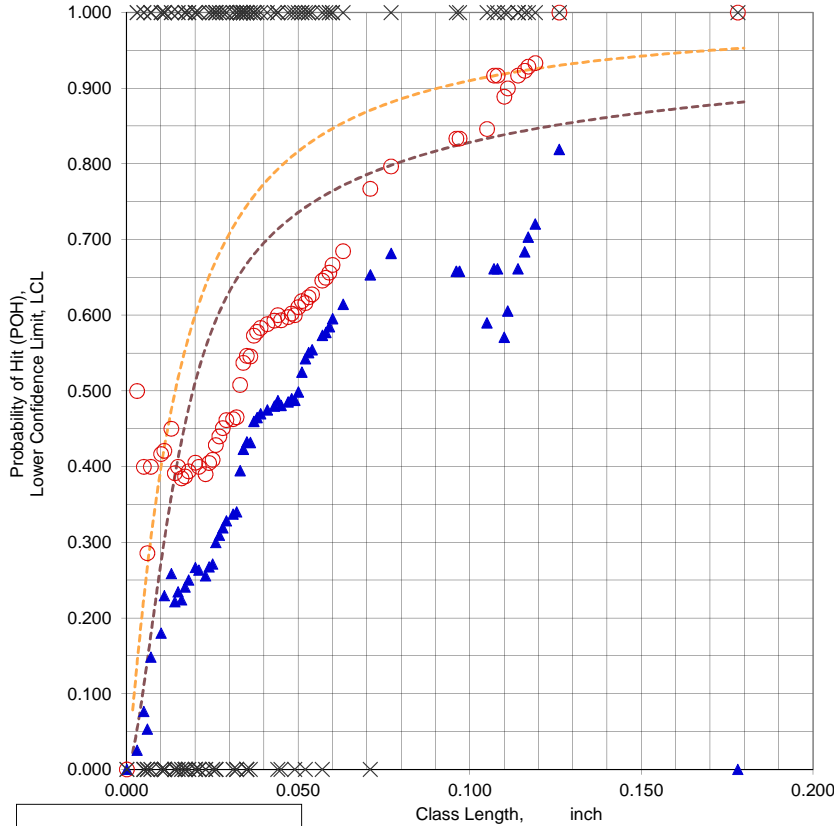
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 XL
 Xm
 Xs
 Xss
 Xlcl
 Xpoh
 2XL
 Xpod
 Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **G10003AD.XLS**
 Data Set Name = **G10003AD(CRACK #)**
 Date & Time = 6/5/15 6:25 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.8190
 Classwidth @ Best LCL = 0.0490 inch
 Classlength @ Best LCL = 0.1260 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 4 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL and the greater of Xpoh or Xlcl.

Survey/Optimum Xpoh = 0.0770 -0.005 inch 28 Samples

NTIAC 90% POD = 0.905 @ 0.095 inch
 NTIAC 90/95 POD = @ inch

False Call Rate = with UCL @ 95% =

Largest Classlength , XL = 0.178 inch
 Samples Needed @ XL = 28
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = 0.126 inch
 Samples Needed @ Xlcl = 14
 POH Classlength, Xpoh = 0.126 inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = G10003AD.XLS
 Data Set Name = G10003AD(CRACK #)

Directed DOE Options

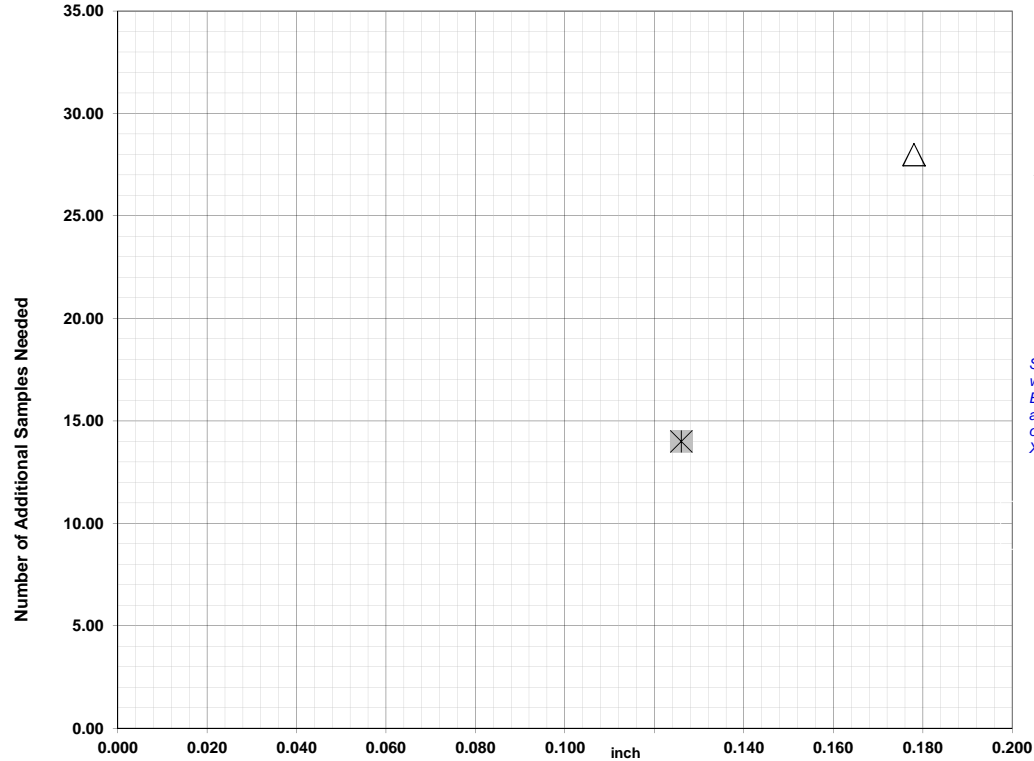


TABLE C

Class Length	Additional Samples
XL = 0.178	28
Xm =	
Xs =	
Xss =	
XLcl = 0.126	14
Xpoh = 0.126	
2XL =	
**Alternate Xm =	
Xpodopt =	

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✕ XLcl
 ✕ Xpoh
 ▲ 2XL
 ✕ Xpod
 ◆ Xpodopt

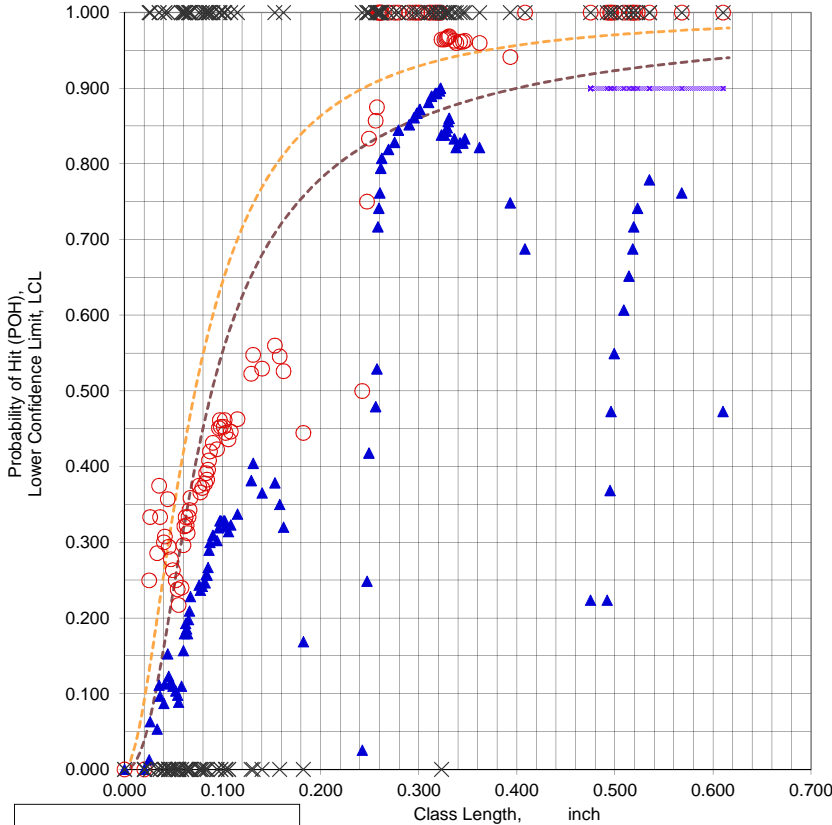
* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Large flaw validation failure. Extend flaw size range to 0.966.

Any highlighted Misses are RED and shown in Column A of this data sheet

Warning: No false call analysis.



○ Probability of Hit (POH) in Class Range ▲ Lower Confidence Bound @ 95% × Hit/Miss
 ─── Xp, 90/95 POD - - - MLE(Mean) POD - - - MLE(95%) LCL

File Name = **G10003AL.XLS**
 Data Set Name = **G10003AL(CRACK #)**
 Date & Time = 6/5/15 6:26 AM
 Xpod 90/95 Reached Anywhere? REACHED
 Classwidth @ 90/95 Xpod = 0.0750 inch
 Classlength @ 90/95 Xpod = 0.3220 inch
 Lower Confidence Bound = 0.9001
 Best LCL =
 Classwidth @ Best LCL = inch
 Classlength @ Best LCL = inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod = 1.0000

CASE 1* - 90/95 Xpod is reached. Xp used to satisfy XL and Xm requirements. VALIDATION GAP exists. Xp may VALIDATE between Xp and XL when causes of Misses are understood and corrected.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = 0.901 @ 0.245 inch
 NTIAC 90/95 POD = 0.900 @ 0.400 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.610 inch
 Samples Needed @ XL =
 Classlength Mid-point , Xm = 0.535 inch
 Samples Needed @ Xm =
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs =
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl =
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh =
 New Largest Classlength , 2XL = inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt =
 Xp = 0.4750 inch

File Name = G10003AL.XLS
 Data Set Name = G10003AL(CRACK #)

Directed DOE Options

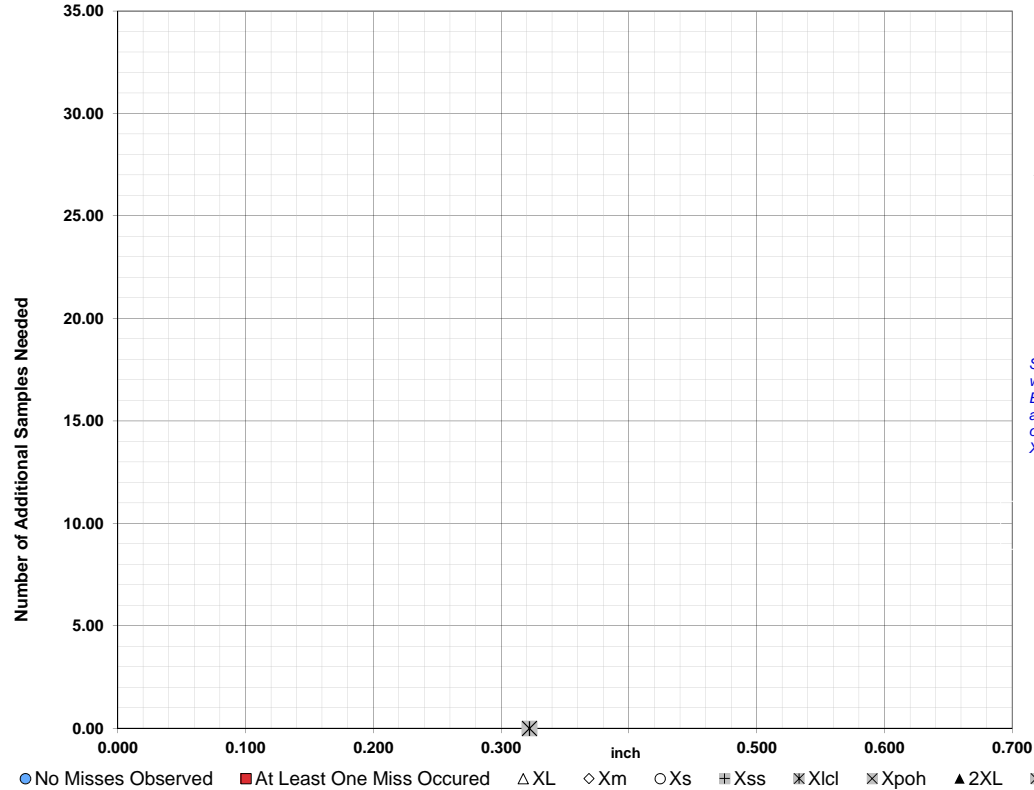


TABLE C

Class Length Additional Samples

XL = 0.610
 Xm = 0.535
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL =
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

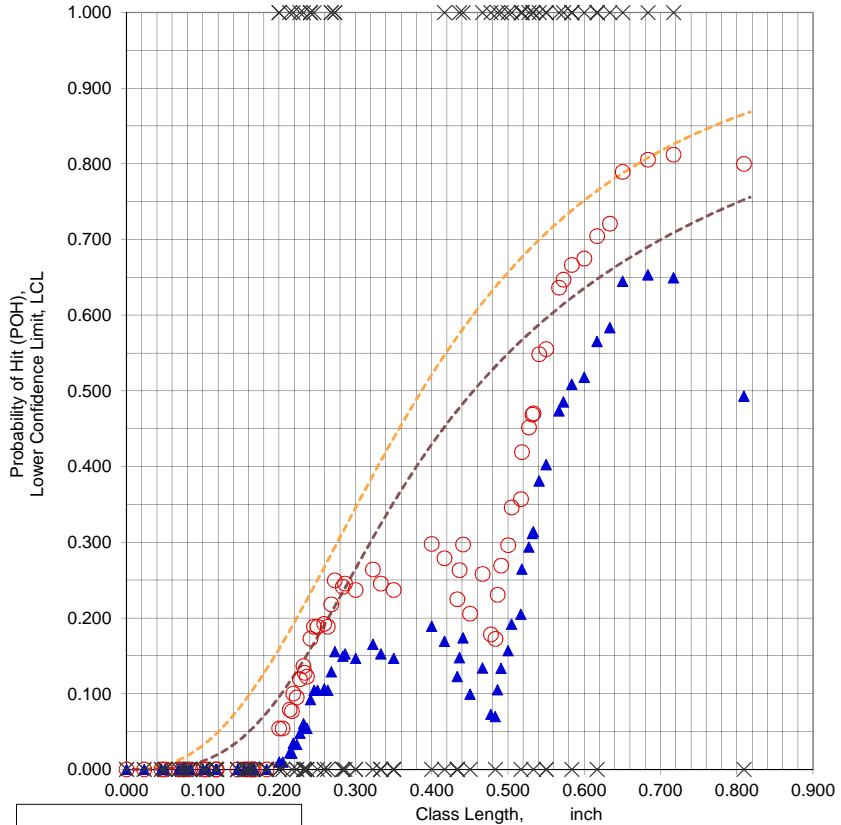
TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need
-------------------	----------	-------------------	----------

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown.
 The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown.
 Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- MLE(Mean) POD
- MLE(95%) LCL

File Name = G10003BA.XLS
 Data Set Name = G10003BA(CRACK #)
 Date & Time = 6/5/15 6:27 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.6532
 Classwidth @ Best LCL = 0.2000 inch
 Classlength @ Best LCL = 0.6833 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 7 - 90/95 Xpod is not reached anywhere. Recommend satisfying 2XL.

Survey/Optimum Xpoh = 0.000 inch Samples
 NTIAC 90% POD = @ inch
 NTIAC 90/95 POD = @ inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = inch
 Samples Needed @ XL = inch
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = inch
 Samples Needed @ Xpoh = inch
 New Largest Classlength , 2XL = 1.618 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = G10003BA.XLS
 Data Set Name = G10003BA(CRACK #)

Directed DOE Options

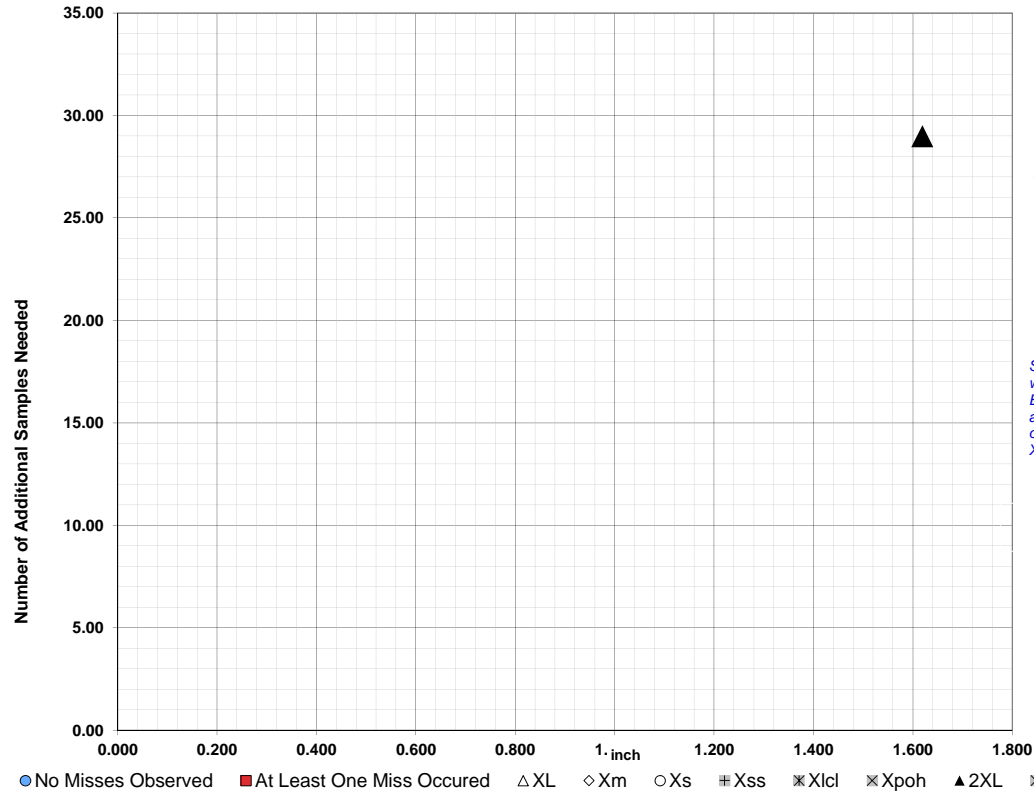


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 1.618	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 1.618 29
 **Alternate Xm =
 Xpodopt =

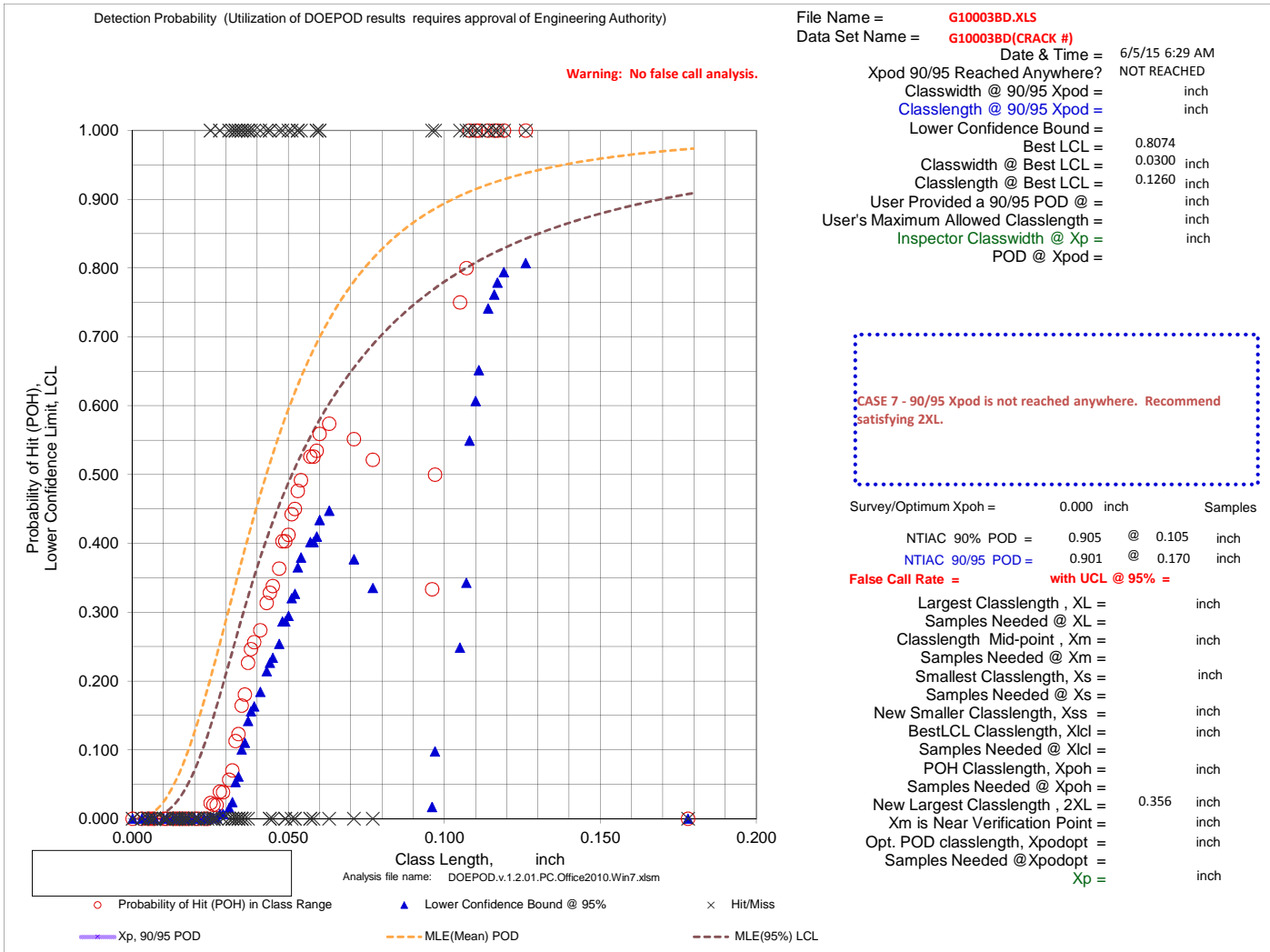
TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = G10003BD.XLS
 Data Set Name = G10003BD(CRACK #)

Directed DOE Options

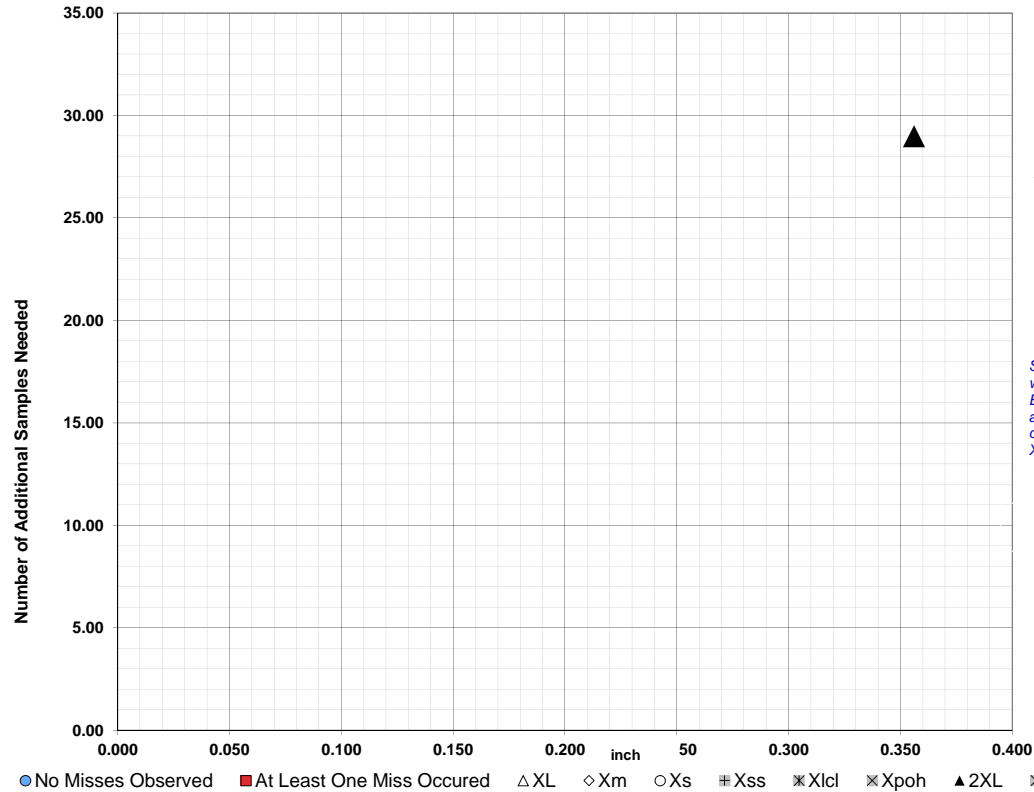


TABLE C

Class Length	Additional Samples
XL =	
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL = 0.356	29
**Alternate Xm =	
Xpodopt =	

XL =
 Xm =
 Xs =
 Xss =
 Xlcl =
 Xpoh =
 2XL = 0.356 29
 **Alternate Xm =
 Xpodopt =

TABLE A*
Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*
Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

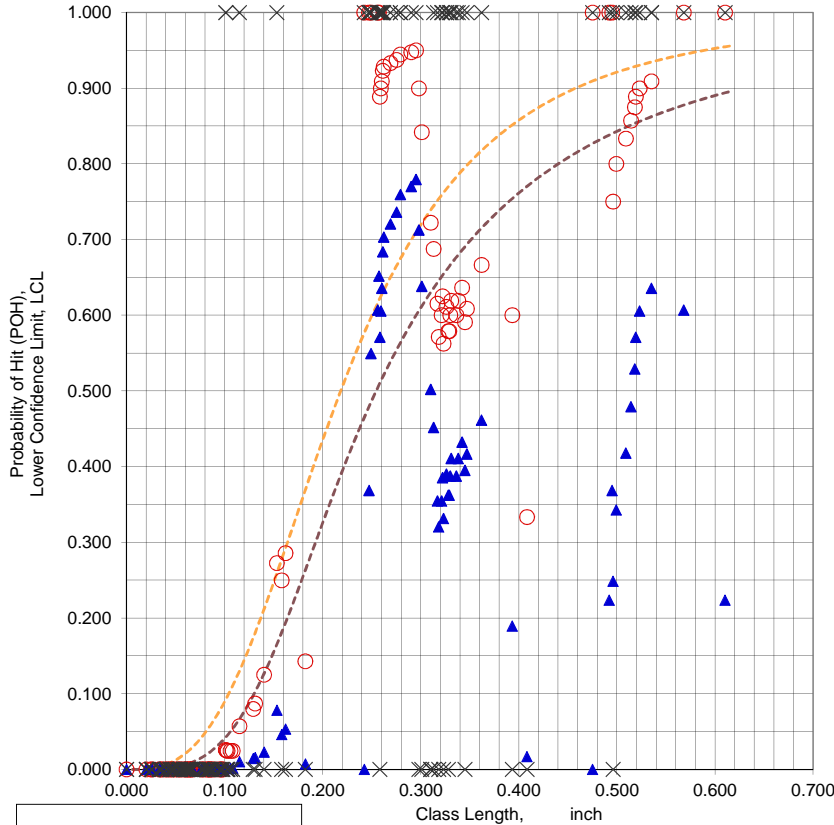
Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

No Misses Observed
 At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Detection Probability (Utilization of DOEPOD results requires approval of Engineering Authority)

Warning: No false call analysis.



Analysis file name: DOEPOD.v.1.2.01.PC.Office2010.Win7.xlsm

- Probability of Hit (POH) in Class Range
- ▲ Lower Confidence Bound @ 95%
- × Hit/Miss
- Xp, 90/95 POD
- - - MLE(Mean) POD
- - - MLE(95%) LCL

File Name = **G10003BL.XLS**
 Data Set Name = **G10003BL(CRACK #)**
 Date & Time = 6/5/15 6:30 AM
 Xpod 90/95 Reached Anywhere? NOT REACHED
 Classwidth @ 90/95 Xpod = inch
 Classlength @ 90/95 Xpod = inch
 Lower Confidence Bound =
 Best LCL = 0.7794
 Classwidth @ Best LCL = 0.0530 inch
 Classlength @ Best LCL = 0.2950 inch
 User Provided a 90/95 POD @ = inch
 User's Maximum Allowed Classlength = inch
 Inspector Classwidth @ Xp = inch
 POD @ Xpod =

CASE 6 - 90/95 Xpod is not reached anywhere. Recommend satisfying XL, Xpoh, and 2XL.

Survey/Optimum Xpoh = 0.4990 -0.002 inch 28 Samples
 NTIAC 90% POD = 0.901 @ 0.460 inch
 NTIAC 90/95 POD = 0.901 @ 0.630 inch
False Call Rate = with UCL @ 95% =
 Largest Classlength , XL = 0.610 inch
 Samples Needed @ XL = 27
 Classlength Mid-point , Xm = inch
 Samples Needed @ Xm = inch
 Smallest Classlength, Xs = inch
 Samples Needed @ Xs = inch
 New Smaller Classlength, Xss = inch
 BestLCL Classlength, Xlcl = inch
 Samples Needed @ Xlcl = inch
 POH Classlength, Xpoh = 0.568 inch
 Samples Needed @ Xpoh = 23
 New Largest Classlength , 2XL = 1.220 inch
 Xm is Near Verification Point = inch
 Opt. POD classlength, Xpodopt = inch
 Samples Needed @ Xpodopt = inch
 Xp = inch

File Name = G10003BL.XLS
 Data Set Name = G10003BL(CRACK #)

Directed DOE Options

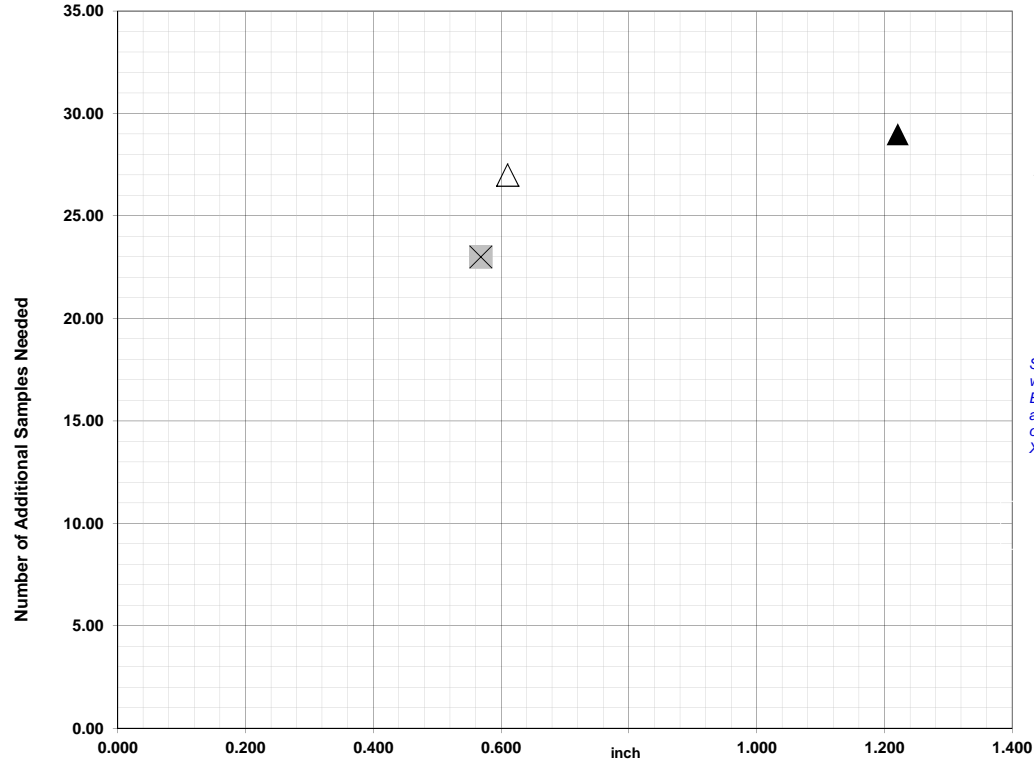


TABLE C

Class Length	Additional Samples
XL = 0.610	27
Xm =	
Xs =	
Xss =	
Xlcl =	
Xpoh = 0.568	23
2XL = 1.220	29
**Alternate Xm =	
Xpodopt =	

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

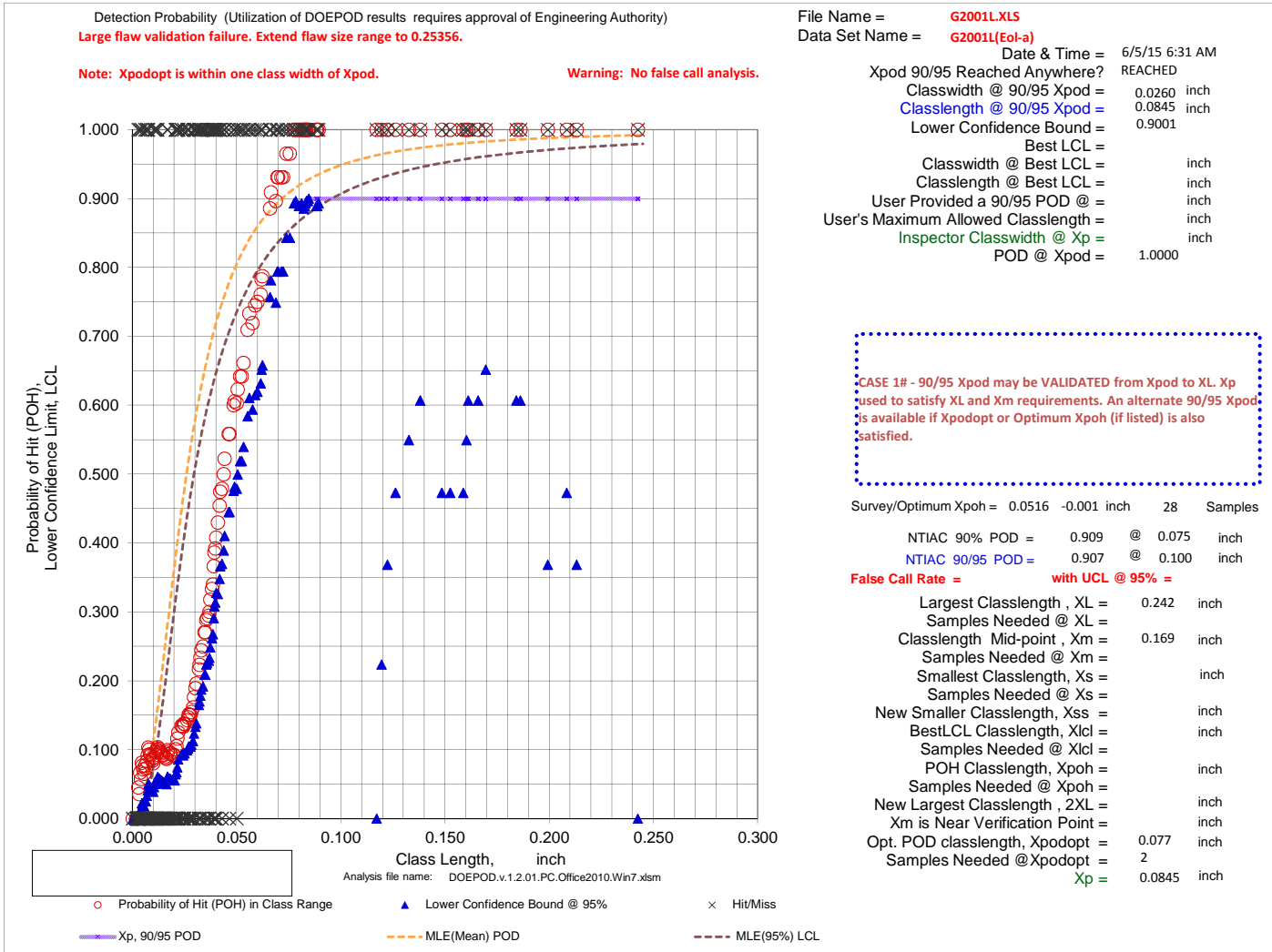
TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ⊗ Xlcl
 ⊗ Xpoh
 ▲ 2XL
 ⊗ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart



File Name = G2001L.XLS
 Data Set Name = G2001L(Eol-a)

Directed DOE Options

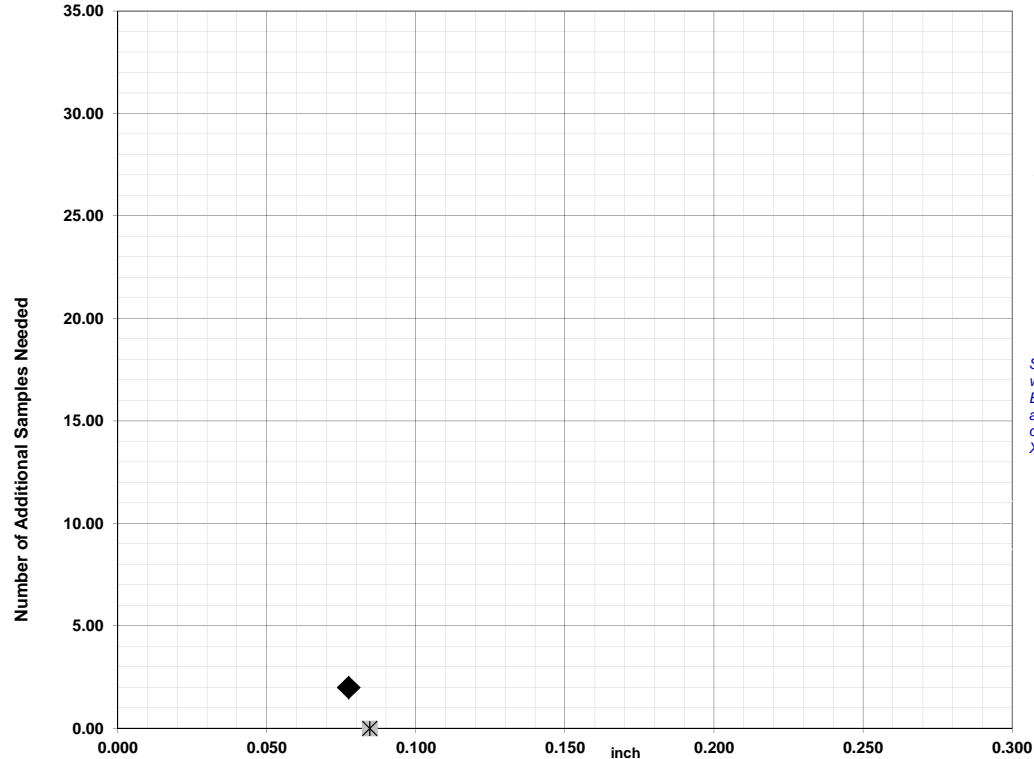


TABLE C

Class Length	Additional Samples
XL =	0.242
Xm =	0.169
Xs =	
Xss =	
Xlcl =	
Xpoh =	
2XL =	
**Alternate Xm =	
Xpodopt =	0.077 2

TABLE A*

Selected class lengths with existing misses. Each point requires additional samples in or to achieve the Xpod listed.

TABLE B*

Selected class lengths with no misses. Additional samples at these class lengths will achieve the Xpod listed.

Xpod,Class Length	No. Need	Xpod,Class Length	No. Need

● No Misses Observed
 ■ At Least One Miss Occured
 △ XL
 ◇ Xm
 ○ Xs
 ■ Xss
 ✖ Xlcl
 ✖ Xpoh
 ▲ 2XL
 ✖ Xpod
 ◆ Xpodopt

* Although Xpod appears to have been reached at a point, there are Misses at larger class lengths this indicates that the POH function may be oscillatory. This needs to be checked. The class lengths listed in Table A exhibited misses and resulted in LCL below 0.90. Only largest 4 class lengths are shown. The class lengths listed in Table B exhibited no misses, and these class lengths provide alternate target Xpod points. Only largest 4 class lengths are shown. Follow sample selection priority in the DOEPOD Manual.
Before adding flawed samples to satisfy elements of Table A or Table B, it is recommended that the cause of the Misses be determined (human factors, unexpected flaw type, etc) and resolved first.
 **Satisfying the Alternate Xm requirement removes the need to meet the adjacent Xm requirement.
 ***The added class lengths are to be at the class length indicated or smaller to within the class width indicated in the companion chart

Errata

NTIAC NDE Capabilities Book, 3rd Edition (November 1997) [NTIAC: DB-97-02]

DATA sets that do not appear to exist on the NTIAC CD:

B20011 (appears to be B2001)
B20012 (appears to be B2002)
B20013 (appears to be B2003)

G6001G (appears to be A6001G)
G6001GR (appears to be A6001GR)
G6002G (appears to be A6002G)
G6003G (appears to be A6003G)
G6004G (appears to be A6004G)

F40601AL (appears to be F40601A)
F40601BL (appears to be F40601B)
F40601CL (appears to be F40601C)

F40603AL (appears to be F40603A)
F40603BL (appears to be F40603B)
F40603CL (appears to be F40603C)

F42501AL (appears to be F42501A)
F42501BL (appears to be F42501B)
F42501CL (appears to be F42501C)

F42503AL (appears to be F42503A)
F42503BL (appears to be F42503B)
F42503CL (appears to be F42503C)

A4000(7) is listed in Mag Particle data index – should be B4000(7) with B4001L as the companion data set

DATA sets on the CD that are not listed in the index:

B1001AD (POD data not shown in book)
B1001BD (POD data not shown in book)
B1001CD (POD data not shown in book)

B1003AD (POD data not shown in book)
B1003BD (POD data not shown in book)
B1003CD (POD data not shown in book)

B4001L (see above)

B2001 (appears to be the missing B20011 above)

B2002 (appears to be the missing B20012 above)

B2003 (appears to be the missing B20013 above)

There are an additional 18 data sets (grouped) and not listed in the index:

DB001(3)D (POD data not shown in book)

DB001(3)L (POD data not shown in book)

DB002(3)D (POD data not shown in book)

DB002(3)L (POD data not shown in book)

DB003(3)D (POD data not shown in book)

DB003(3)L (POD data not shown in book)

DC001(3)D (POD data not shown in book)

DC001(3)L (POD data not shown in book)

DC002(3)D (POD data not shown in book)

DC002(3)L (POD data not shown in book)

DC003(3)D (POD data not shown in book)

DC003(3)L (POD data not shown in book)

DD001(3)D (POD data not shown in book)

DD001(3)L (POD data not shown in book)

DD002(3)D (POD data not shown in book)

DD002(3)L (POD data not shown in book)

DD003(3)D (POD data not shown in book)

DD003(3)L (POD data not shown in book)

DATA set duplicated:

F9000CD appears to be a duplicate identical to data file F20852CD

DATA Analysis integrity:

During validation of DOEPOD results on the entire NTIAC NDE Capabilities Book "DOEPOD(NTIAC)", some exceptions were noted in the results. There are 437 data sets and exceptions were identified in the 32 data sets listed below. The analysis results shown in the NTIAC NDE Capabilities Book, 3rd Edition (1997) [NTIAC: DB-97-02] for the data sets listed below are incorrect due to a data listing error. These data sets need to be re-run with data sorted.

A1001CL.XLS

A1002CL.XLS

A9003(3)L.xls
AA003(3)L.xls
AC001(3)L.xls
CB003(3)L.xls
CE032(6)D.xls
F10601AD.XLS
F10601BD.XLS
F10601CD.XLS
F10602AD.XLS
F10602BD.XLS
F10602CD.XLS
F10603AD.XLS
F10603BD.XLS
F10603CD.XLS
F12201AD.XLS
F12201BD.XLS
F12201CD.XLS
F12202AD.XLS
F12202BD.XLS
F12202CD.XLS
F12203AD.XLS
F12203BD.XLS
F12203CD.XLS
F32251AD.XLS
F32251CD.XLS
F32253AD.XLS
F32253BD.XLS
F8002(3)L.xls
G10003BD.XLS
G10003BL.XLS

OTHER:

C8003(3)L.xls - sample #136 shows 3 trials with -1 in the HIT/MISS column
C8003(3)D.xls - sample #136 shows 3 trials with -1 in the HIT/MISS column

C3002: Sample #16 shows 0.10" in depth. NASA CR 151098 pg 27. shows 0.010". Since the sample thickness is 0.063" this NTIAC entry is incorrect.

The primary and secondary scales on abscissa axes in Chart 1 may be incorrect. Compare actual flaw sizes and inspection data on data sheets available in electronic distributions.

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14. ABSTRACT This data book contains the Directed Design of Experiments for Validating Probability of Detection (POD) Capability of NDE Systems (DOEPOD) analyses of the nondestructive inspection data presented in the NTIAC, Nondestructive Evaluation (NDE) Capabilities Data Book, 3rd ed., NTIAC DB-97-02. DOEPOD is designed as a decision support system to validate inspection system, personnel, and protocol demonstrating 0.90 POD with 95% confidence at critical flaw sizes, a90/95. The test methodology used in DOEPOD is based on the field of statistical sequential analysis founded by Abraham Wald, "Sequential analysis is a method of statistical inference whose characteristic feature is that the number of observations required by the procedure is not determined in advance of the experiment. The decision to terminate the experiment depends, at each stage, on the results of the observations previously made. A merit of the sequential method, as applied to testing statistical hypotheses, is that test procedures can be constructed which require, on average, a substantially smaller number of observations than equally reliable test procedures based on a predetermined number of observations." A. Wald, 1947.					
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