NOT MEASUREMENT SENSITIVE

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9 June 1992
SUPERSEDING
DOD-STD-2121(NAVY)
1 March 1984

MILITARY STANDARD

DETERMINATION OF ELECTRONIC TEST EQUIPMENT PARAMETERS

AMSC N6737

FSC 6625

FOREWORD

1. This military standard is approved for use by the Naval Sea Systems Command, Department of the Navy, and is available for all Departments and Agencies of the Department of Defense.

2. Beneficial comments (recommendations, additions, deletions) and any pertinent data, which may be of use in improving this document, should be addressed to: Commander, Naval Sea Systems Command, SEA 55Z3, Washington, D.C. 20362-5101, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or, by letter.

3. This standard is to be utilized to determine the Electronic Test Equipment (ETE) required to support weapons system parameters. It provides information pertaining to the specification of Generic Classes of ETE for the measurement, generation or transformation of signals in recommended dimensions.

CONTENTS

1. SCOPE

1.1 Scope. This standard establishes:

a. The terms to be utilized for documenting the test parameters of a weapons system

b. A link between the parameters and the Electronic Test Equipment (ETE) required to support the weapons system at each maintenance level

c. The functional capability required of ETE to be procured, or for comparison to known available ETE within the DOD.

1.2 Purpose. The purpose of this standard is to standardize the process and terms to be used during the selection of ETE to support weapons system parameters.

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.2 Non-Government publications. The following document(s) form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DOD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issues of the documents cited in the solicitation (see 6.1).

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI/IEEE-100Standard Dictionary of Electrical and Electronic Terms

(Application for copies should be addressed to the American National Standards Institute, 1430 Broadway, New York, NY 10018.)

INTERNATIONAL STANDARDS ORGANIZATION (ISO)

ISO-1000 Standard Units and Recommendations for their use

ISO-31/0	General Principles Concerning Quantities, Units, and Symbols
ISO-31/1	Quantities and Units of Space and Time
ISO-31/2	Quantities and Units of Periodic and Related Phenomena
ISO-31/3	Quantities and Units of Mechanics

ISO-31/4	Quantities and Units of Heat
ISO-31/5	Quantities and Units of Electricity and Magnetism
ISO-31/6	Quantities and Units of Light and Related Electromagnetic Radiations
ISO-31/7	Quantities and Units of Acoustics

(Application for copies should be addressed to the International Organization for Standardization 1 rue de Varembe, 1211 Geneva 20, Switzerland.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, (except for related associated detail specification, specification sheets or MS standards), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. DEFINITIONS

3.1 Acronyms used in this standard. The acronyms in this standard are defined as follows:

a. DODISS - Department of Defense Index of Specifications and Standards

b. ETE - Electronic test equipment

c. GPETE - General purpose electronic test equipment

d. GSI - GPETE support item

e. TAR - Test accuracy ratio

f. WRA - Weapons replaceable assembly

3.2 Accuracy. This term is defined as the quality of freedom from mistake or error. Within the content of this standard, it is defined as an instrument's ability to perform the parameter expression it is applied to. Accuracy is further defined as a composite statement of class, value, and scale as indicated below.

3.2.1 Class. A term used to describe an accuracy dependency. Class terms are:

a. FULL SCALE - Indicates that the value is a range dependent error

b. INDICATED VALUE - Indicates that the value is a specific error

c. OFFSET - Indicates that the value is a residual or incremental error

d. INTERCONNECT - Indicates, for ATE application, that the value is an error or loss effect occurring in the interconnect between the ATE and the unit-under-test.

3.2.2 Value. The term defines numeric value of the composite statement.

3.2.3 Scale. This term defines the multiplier to be applied to the value in order to enumerate the real value of the accuracy (for example: percent, positive or negative exponent).

3.3 Active device. This term defines an ETE that is categorized by one or more of the following:

3.3.1 Measuring device. This term defines a device which provides a quantitative indication of a physical property (for example: meters, counters).

3.3.2 Generating device. This term defines a device that provides a source for a physical property (for example: signal generators, power supplies).

3.4 Automatic test equipment (ATE). This term defines equipment which is designed to conduct analysis of dynamic or static parameters, to evaluate the degree of performance degradation, and which may be designed to perform fault isolation of unit-under-test malfunctions. The decision making, central, or evaluation functions are conducted under preprogramming with minimum reliance on human intervention.

3.5 Digital test equipment (DTE). Within the content of this standard, the term "digital test equipment" is defined as ETE used to maintain digital circuit devices. DTE is classified as special purpose test equipment, and is not specified using this standard.

3.6 Electronic test equipment (ETE). Within the content of this standard, the term "electronic test equipment" is defined as GPETE, GSI, GAI, GA, GP-I, GAE, and ATE.

3.7 ETE code. Within the content of this standard, the term "ETE code" is an arbitrary three-letter code, as defined in Appendix A, which is used to reference a particular ETE noun name.

3.8 Feature. This term defines a physical characteristic of ETE (for example: input connector type, number of display digits). Within the content of this standard, an instrument may have one or many features. The features are identified in Appendix B.

3.9 Function. This term describes the capability of an instrument to measure (M), generate (G), or transform (T) a physical quantity, property, or attribute. An instrument must have at least one functional capability.

3.10 General purpose electronic test equipment (GPETE). GPETE is electronic test equipment capable of generating, modifying, or measuring a range electronic functions to test two or more systems or equipment of basically different design.

3.11 GPETE accessory (GA). Within the content of this standard, this term defines a support item used to complete or augment the operational capability of a specific item of GPETE or a group of GPETE (for example: probes, adapters). GPETE accessories are further defined as features of the GPETE item required.

3.12 GPETE auxiliary item (GAI). Within the content of this standard, this term defines a general purpose component or device used in support of a test measurement setup employing GPETE. GAI, used for signal conditioning, is further defined as a passive device that can modify/transform a signal in some manner (examples: ratio transformers, directional couplers). Active devices are never classified as auxiliary.

3.13 GPETE plug-in (GP-I). This term defines a removable assembly intended to complete or augment the operational capability of a specific item of GPETE or group of GPETE. Within the content of this standard, a GP-I is dependent upon a GPETE item for display or power requirements, and is not "stand alone" (for example: oscilloscope preamplifiers, heterodyne frequency extenders).

3.14 GPETE support item (GSI). GSI is the complement of equipment, supplemental to GPETE, which is necessary to facilitate a complete test measurement capability. GSI includes ratio transformers, couplers decade capacitors, adapters, attenuators, dummy loads, filters, terminations, oscilloscope probes, noise sources, and so forth.

3.15 Parameter descriptor group. This term is defined as a combination of terms that describe one function of an item of ETE in its entirety. Within the content of this standard, a parameter descriptor group is made up of at least one primary and one or more secondary descriptors. Primary and secondary descriptors are further defined below. Parameter descriptors are standard within an instrument class and consistent across all instrument classes.

3.15.1 Primary descriptor. This defines the ETE item's functional capability in terms of the primary dimension provided, (e.g. a voltmeter has a primary descriptor of voltage).

3.15.2 Secondary descriptor. This defines the second and subsequent terms used to modify or restrict the primary descriptor (e.g. resolution required, frequency limitations or ETE input impedance requirements).

3.16 Parametric specification. A specification that defines the functional capabilities and signal characteristics of ETE to support weapons system test requirements. Within the content of this standard, parametric specifications have been standardized with regard to functional capabilities and parameters to be specified and provide a common basis for the selection of generic classes of ETE. A parametric specification includes designated parameter descriptors, units (dimension), accuracy, range and/or point value data.

3.17 Signal characteristic. The ETE unique name used to describe a functional capability (e.g. power, phase angle, resistance).

3.18 Test accuracy ratio (TAR). Within the content of this standard the term "test accuracy ratio" is defined as the ratio of the accuracy required of the supported weapons system test parameter to the accuracy of the supporting ETE.

3.19 Weapon system. Within the content of this standard, the term "weapon system" refers to the system requiring support.

4. GENERAL REQUIREMENTS

4.1 Weapon system maintenance requirements. The generation and measurement of signals necessary for the maintenance of a weapon system shall be identified using terms contained in ANSI/IEEE-100 Standard Dictionary of Electrical and Electronic Terms.

4.1.1 ETE functional capability. The actual work an ETE is required to perform shall be described by a function and signal characteristic (for example: measure (M) - AC Voltage).

4.1.2 Parameter descriptors. The primary and secondary parameter descriptors for each ETE functional capability shall be assigned in accordance with the applicable ETE functional capability and parametric specification template contained in Appendix C.

4.1.3 Parametric specification. Parametric values shall be assigned to the primary and subsequent descriptors based on the dimension, point or range value(s), and the accuracy required by the weapon system. Parametric specifications are typically comprised of the following:

a. Descriptor name

b. Units

c. Range or point value

d. Accuracy statement.

4.1.4 Accuracy. Accuracy statements shall be assigned based on the accuracy required by the weapons system and an acceptable test accuracy ratio (TAR). Accuracy statements shall be comprised of class, value, and scale.

4.2 Functional signal requirement statements shall be identified for each of the following types of maintenance:

a. Performance monitoring

b. System alignment

c. Fault isolation to:

(1) Assembly, WRA

(2) Subassembly card/module

(3) Component.

d. Calibration of bit or bite.

4.3 Maintenance levels. The recommended maintenance levels shall be grouped as follows:

a. Organizational maintenance

b. Intermediate maintenance

c. Depot maintenance.

4.4 ETE requirements. The ETE required at each maintenance level shall be grouped as follows:

a. General purpose test equipment

b. Special purpose test equipment.

5. DETAILED REQUIREMENTS

5.1 Weapons system measurement requirements. The weapons system source document (for example: calibration/measurement requirements summary (CMRS) and technical manuals) shall be used to determine the weapon system signal values to be serviced. All values, accuracy requirements, input/output requirements, and any other relevant functional requirements for ETE shall be detailed on the Weapons System Work Sheet (NAVSEA 9491/3). When developing test requirements, the parameters shall be specified in the standard dimension units contained in the ISO-1000 using the guidance contained in ISO-31/0 to the maximum extent possible. Additional units, if required, shall be selected from the appropriate ISO-31/series.

5.2 ETE function requirements summary. Upon completion of the weapons system parameter worksheet(s) (NAVSEA 9491/3), the translated signal requirements shall be summarized for each type and level of maintenance. Upon completion of the summary, the functional capability requirements data for each recommended ETE item shall be transferred to an ETE Capability Requirements Summary (NAVSEA 9491/4). The latter shall be derived from the applicable ETE functional capability and parametric specification templates contained in Appendix C and shall contain the following data elements as applicable:

a. Functional capability (ETE functions and signal characteristics)

b. Parametric specifications (primary and secondary parameter descriptors, units, range/value, and accuracy). The primary and secondary parameter descriptors for an ETE shall be assigned values which support the weapons system requirements to a given TAR.

5.3 **ETE feature requirements.** The need for physical features for the ETE required is contingent upon both the weapon system design and the approved support plan. The table of ETE features, as indicated in Appendix B, shall be utilized to indicate selection criteria not appearing in the translated signal requirements. These requirements shall be annotated on the ETE Capability Requirements Summary (NAVSEA 9491/4).

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Data requirements. The following Data Item Descriptions (DID's) must be listed, as applicable, on the Contract Data Requirements List (DD Form 1423) when this standard is applied on a contract, in order to obtain the data, except where DOD FAR Supplement 27.475-1 exempts the requirement for a DD Form 1423.

Reference Paragraph	DID Number	DID Title	Suggested Tailoring
5.1	DI-ATTS-81267	Weapon System Parameter Worksheet	-
5.2	DI-ATTS-81268	Electronic Test Equipment (ETE) Capability Requirements	-

The above DID's were those cleared as of the date of this standard. The current issue of DOD 5010.12L, Acquisition Management Systems and Data Requirements Control List (AMSDL), must be researched to ensure that only current, cleared DID's are cited on the DD Form 1423.

6.2 The invocation of these CDRL items requires the submission of one data set to the:

Naval Weapons Station, Seal Beach
Fleet Analysis Center (Corona Annex)
Metrology Engineering Department (Code 31)
Corona, CA 91720-5000

6.3 Forms. The referenced forms NAVSEA 9491/3 and NAVSEA 9491/4 may be obained from the following:

Commanding Officer
Naval Publications and Forms Center
Code 106
Philadelphia, PA 19111-5094.

6.3 Subject term (key word) listing.

Calibration/measurement requirements summary (CMRS)
Digital marker
System alignment
Weapons systems management requirements

6.4 Changes from previous issue. Asterisks, marginal lining, or other symbols have not been used in this document to identify changes from the previous issue because the changes are extensive.

Review activities:
Navy - SH

User activities:
Navy - OS, AS

Preparing activity:
Navy - SH
(Project No. 6625-N991)

APPENDIX A

ETE CODES AND NOUN NAMES

NOUN NAME	ETE CODE
Ammeter, AC	AM1
Ammeter, AC-DC	AM2
Ammeter, DC	AM0
Amplifier	AA0
Analyzer, Distortion	AN0
Analyzer, Network	AN2
Analyzer, Real Time	AN3
Analyzer, Spectrum	AN1
Attenuator	AT0
Bridge, Syncro/Resolver	BR2
Capacitor, Decade	CP1
Converter, Frequency, AC	CF1
Counter	CO0
Coupler, Directional	DC0
Curve Tracer	TE5
Detector	DEO
Divider, Power	DP1
Divider, Voltage	DR3
Filter	FLO
Generator, Data, Telcom	TKQ
Generator, Signal	GE0
Generator, Waveform	WF0
Inductor, Decade	LN1
Isolator	SR1
Meter, Frequency	FR0
Meter, Grid Dip	GD0
Meter, Gain/Phase	GP0
Meter, Vector Impedance	MZ1
Meter, Modulation, AM/FM	MD0
Meter, Modulation, AM	MD1
Meter, Modulation, FM	MD2
Modulator	ML0
Multimeter	MU0
Ohmmeter	OH0
Oscilloscope	OS0
Power Supply, AC	PS2
NOUN NAME	ETE CODE
Power Supply, DC	PS1
Resistor, Decade	RE1

Simulator, Syncro/Resolver	GES
Stabilizer, Radio Frequency	SY0
Termination	TM0
Test Set, Frequency Response	TS8
Test Set, Impedance	IM0
Test Set, Insulation	TE4
Test Set, Logic	TS3
Test Set, Measuring, Radiation Hazard	RHQ
Test Set, Measuring, SWR	TS2
Test Set, Power Measuring, Electronic	WA0
Test Set, Power Measuring	WA1
Test Set, TTY, Distortion Analyzer/Generator	TSC
Test Set, TTY, Distortion Generator	TSG
Test Set, TTY Distortion Analyzer	TSF
Transformer, Isolation	TR3
Voltmeter, AC	VO1
Voltmeter, AC-DC	VO3
Voltmeter, DC	VO0
Voltmeter, Differential AC	VO2
Voltmeter, Differential AC-DC	VO7
Voltmeter, Differential DC	VO5
Voltmeter, Frequency Selective	VO6
Voltmeter, Phase Angle	VO8
Voltmeter, Vector	VO4

APPENDIX B

ETE FEATURE NUMBERS

B. Features are divided between common and generic specific items.

B.1 Common.

Interface Bus:

BUS, IEEE-488	BUS001
BUS, RS-232(*)	BUS002
BUS, VME	BUS003

Input Power Requirements:

Freq, 400 Hz	PWR001
Freq, 50 Hz	PWR002
Freq, 50-400 Hz	PWR003
Freq, 60 Hz	PWR004
Volt, 115 Vac	PWR006
Volt, 220/240 Vac	PWR007
Volt, 28 Vdc	PWR008
Volt, 18 Vdc	PWR009
Volt, 12 Vdc	PWR010
Volt, 9 Vdc	PWR011
Volt, 6 Vdc	PWR012
Volt, 3 Vdc	PWR013
Volt, 1.5 Vdc	PWR014
Volt, Internal DC	PWR015

Connector: (Note - Prefix with I for input, O for output)

Ground Isolated	CN001
Isolated	CN002
Ungrounded	CN003
Ports, 2	CN005
Ports, 3	CN006
Ports, 4	CN007
Ports, 8	CN008
2 Terminal	CN009

Connector *(Contd.)*:

3 Terminal	CN010
4 Terminal	CN011
5 Terminal	CN012
Connector, 874	CN013
Connector, 900	CN014
Connector, APC-3.5 (3.5MM)	CN015
Connector, APC-7 (7MM)	CN016
Connector, Banana	CN017
Connector, Binding Post	CN018
Connector, BNC (F)	CN019
Connector, BNC (M)	CN020
Connector, Button	CN021
Connector, C (F)	CN022
Connector, C (M)	CN023
Connector, CA56	CN024
Connector, High Voltage	CN025
Connector, HN (F)	CN026
Connector, HN (M)	CN027
Connector, MB (F)	CN028
Connector, MB (M)	CN029
Connector, MHV (F)	CN030
Connector, MHV (M)	CN031
Connector, N (F)	CN032
Connector, N (M)	CN033
Connector, Phone Jack	CN034
Connector, SMA (F)	CN035
Connector, SMA (M)	CN036
Connector, SMB (F)	CN037
Connector, SMB (M)	CN038
Connector, SMC (F)	CN039
Connector, SMC (M)	CN040
Connector, Thumbscrew	CN041
Connector, TNC	CN042
Connector, TNC (F)	CN043
Connector, TNC (M)	CN044
Connector, Triax (F)	CN045
Connector, Triax (M)	CN046
Connector, Twinax (F)	CN047
Connector, Twinax (M)	CN048

Connector *(Contd.)*:

Connector, UHF (F)	CN049
Connector, UHF (M)	CN050
Connector, WG (WR010)	CN051
Connector, WG (WR012)	CN052
Connector, WG (WR015)	CN053
Connector, WG (WR019)	CN054
Connector, WG (WR022)	CN055
Connector, WG (WR028)	CN056
Connector, WG (WR034)	CN057
Connector, WG (WR042)	CN058
Connector, WG (WR051)	CN059
Connector, WG (WR062)	CN060
Connector, WG (WR075)	CN061
Connector, WG (WR090)	CN062
Connector, WG (WR102)	CN063
Connector, WG (WR112)	CN064
Connector, WG (WR137)	CN065
Connector, WG (WR159)	CN066
Connector, WG (WR187)	CN067
Connector, WG (WR229)	CN068
Connector, WG (WR284)	CN069
Connector, WG (WR340)	CN070
Connector, WG (WR430)	CN071
Connector, WG (WR510)	CN072
Connector, WG (WR650)	CN073

Displays and Indicators.

Displays:

Analog	DID001
Bar Graph	DID002
Digital, 4.5 Digits	DID003
Digital, 5.5 Digits	DID004
Digital, 6.5 Digits	DID005
Digital, < =3.5 Digits	DID006
Digital, >6.5 Digits	DID007
Gas Discharge	DID008
Light Emitting Diode	DID009
Liquid Crystal	DID010
Nixie Tube	DID011

Indicators:

Audible Go/No Go	DID012
Audio Frequency	DID013
Average AC	DID014
Caution	DID015
Degrees	DID016
Direct Readout	DID017
Error Readout	DID018
High Voltage	DID019
Overflow	DID020
Overload	DID021
Peak AC	DID022
Peak-Peak	DID023
Phase Gain	DID024
Polarity	DID025
RMS	DID026
TRMS	DID027
VSWR	DID028
Phase Magnitude	DID029

General:

Auto Ranging	GEN001
Calib Mismatches	GEN002
Conversion Charts	GEN003
Coolant, Air	GEN004
Coolant, Oil	GEN005
Coolant, Water	GEN006
Detector, Crystal	GEN007
Detector, Bolometer	GEN008
Detector, VSWR	GEN009
Double Shielded	GEN010
Electrostatic Shield	GEN011
Enclosed Frame	GEN012
EXT Sensors Required	GEN013
Flange, Choke	GEN014
Flange, Circular	GEN015

General *(Contd.)*:

Flange, Contact	GEN016
Flange, Cover	GEN017
Flange, Pressure	GEN018
Flexible	GEN019
Flip-Tilt Case	GEN020
Front Panel Keyboard	GEN021
Hermetically Sealed	GEN022
Mainframe	GEN023
Math Functions	GEN024
Microprocessor Control	GEN025
Moisture Seal	GEN026
Overload Prot, Current	GEN027
Overload Prot, Voltage	GEN028
Overload Prot, Rev Power	GEN029
Open Frame	GEN030
Plug-In Capability	GEN031
Plug-In Sensors	GEN032
Point Contact	GEN033
Protective Cover	GEN034
Rack Mount	GEN035
Rear Input/Output	GEN036
Rectangular Flange	GEN037
Self-Test/Calibration	GEN038
Shorting Bars	GEN039
Temperature Sensor, Internal	GEN040
Tiltable Stand	GEN041

B.2 Type specific.

CRT Type Devices: (Note - Prefix with ETE code of recommended item)

A-Weight Levels	001
Adj Astigmatism	002
Adj Attenuator	003
Adj Bias Supply	004
Adj Focus	005
Adj Geometry	006
Adj Number of Steps	007
Adj Persistance	008
Adj Trace Rotation	009

CRT Type Devices *(contd.)*:

Auto Filter Selection	010
Auto Trace Positioning	011
Bandwidth Limiting	012
Beam Finder	013
Calibrator, Amplitude	014
Calibrator, Current Probe	015
Camera Mount	016
Channel Delay	017
DC Offset	018
Digital Marker	019
Digital Storage	020
Display, 10 × 10 CM	021
Display, 2 Traces	022
Display, 8 × 10 CM	023
Display, >2 Traces	024
Display, Cursor Select	025
Display, Invert	026
Display, Polar	027
Ext Gate/Trigger	028
Ext Mixers	029
Ext Modulation	030
Filter, 1/3 Octave	031
Filter, Anti-Aliasing	032
Filter, Crystal	033
Filter, Low Pass	034
Filter, Video	035
Flexible Arm	036
Harm Freq Converter	037
Input, Differential	038
Input, Horizontal Amp	039
Input Microphone	040
Input, Tape	041
Input, Transducer	042
Input, 2-Axis	043
Int Amplifier Output	044
Int Graticule	045
Int Modulation	046
Int Phase Lock	047
Int Preselector/Tracking	048
Limited Bandwidth	049

CRT Type Devices *(contd.)*:

Looping Compensation	050
Magnifier, Horiz	051
Magnifier, Vert	052
Mode, Algebraic	053
Mode, Alternate	054
Mode, Chopped	055
Mode, DC	056
Mode, Full Sweep	057
Mode, Leakage	058
Mode, Linear	059
Mode, Log	060
Mode, Symmetrical Sweep	061
Mode, Video Sweep	062
Output, Horiz	063
Output, Sweep	064
Output, Vert	065
Output, Video	066
Output, X-Y	067
Peak Power Limiting	068
Polarity Reversal	069
Probe 1000X	070
Probe 100X	071
Probe 10X	072
Probe 1X	073
Probe Ident	074
Probe Power Supply	075
Probe, Clamp-On Ammeter	076
Pulsed Step	077
Random Sampling	078
Rate, Fast Step	079
Refl/Transmission Kit	080
Refl/Transmission Test Unit	081
S-Parameter Test Set	082
Signal Averaging	083
Step Atten	084
Storage Capability	085
Storage Normalizer	086
Swp Cal Adj	087
Sweep Time, Var	088
Sweep, Delayed	089

CRT Type Devices *(contd.)*:

Sweep, Delayed Intensified	090
Sweep, Mixed	091
Sweep, Single	092
Switchable Input Channel	093
Test, Bipolar Transistor	094
Test, Fet	095
Test, Rectifier Diode	096
Test, SCR	097
Test, Diode	098
Test, Step Reversal	099
Test, Thyristor	100
Test, Tunnel Diode	101
Test, Zener Diode	102
Transient Capture	103
Trigger, Auto	104
Trigger, External	105
Trigger, Line	106
Trigger, Single	107
Trigger View	108
X-Y Operation	109
X-Y Printout	110

Counter Type Devices: (Note - Prefix with ETE code of recommended item)

External Gate/Trigger	200
Manual Start/Stop	201
Output, IF	202
Single Shot Time Interval	203
Time Base, Crystal Non-Oven	204
Time Base, Crystal Oven	205
Time Base, External	206
Totalizer, Amplitude Hit	207
Totalizer, Coincident Hit	208
Totalizer, Dropout	209
Totalizer, Phase Hit	210

Meter Type Devices: (Note - Prefix with ETE code of recommended items)

Adj Int Test Voltage	300
Adj Ohms % Measurement	301

Meter Type Devices *(contd):*

Adj Sensitivity	302
Auto Freq Control	303
Auto Phase Lock	304
Auto Zero	305
Calibrator, Crystal	306
Capacitance, Parallel	307
Capacitance, Series	308
Carrier Reinsertion	309
DC Offset	310
Ext Bias	311
Ext Detector	312
Ext Filter	313
Ext Generator	314
Ext Range Extension	315
Filter, Bell Weighting	316
Inductance, Parallel	317
Inductance, Series	318
Int Detector	319
Int Audio Oscillator	320
Kelvin-Varley Divider	321
Lever Balancing	322
Linear DB Scale	323
Linear Voltage Scale	324
Log A Function	325
Log B Function	326
Log B/A Function	327
Log DB Scale	328
Log Voltage Scale	329
Noise Free Tone	330
Output, Balanced Signal	331
Output, BCD-Decimal	332
Output, Recorder	333
Output, Signal	334
Plug-In Coils	335
Probe, Clamp-On Ammeter	336
Probe, High Voltage	337
Probe, RF	338
Probe, RF Voltage Divider	339
Probe, Temperature	340
Reference Isolated	341

Meter Type Devices *(contd)*:

Swept Frequency	342
Switchable Frequency	343
Switchable Input Channel	344
Test Diode	345
Wheatstone	346
Variable (Adjustable)	347

Signal-Source Type Devices: (Note - Prefix with ETE code of recommended item)

Adj Attenuator	400
Adj Delay	401
Adj Fall Time	402
Adj Pulse Delay	403
Adj Pulse Duration	404
Adj Pulse Rate	405
Adj Pulse Width	406
Adj Rise Time	407
Adj Step Size	408
Adj Symmetry	409
AFC	410
ALC	411
Auto Phase Lock	412
Auto Ranging	413
Auxiliary Modulator	414
Calibrator, Crystal	415
CW Mode	416
DC Offset	417
Ext AM Source	418
Ext Gate/Trigger	419
Ext Leveling	420
Ext Marker Input	421
Ext Mod AM	422
Ext Mod FM	423
Ext Mod Phase	424
Ext Mod Pulse	425
Ext Mod Square Wave	426
Ext Sync	427
Ext VCG	428
Fade, Diversity	429

Signal Source Type Devices *(contd):*

Fade, Fast	430
Fade, Manual	431
Fade, Slow	432
Freq Overrange	433
Freq Phase Lock	434
Freq Stepping	435
Freq Vernier	436
Gated Operation	437
Indicator, Audio Freq	438
Indicator, VSWR	439
Input, 1200BPS Diff Polar	440
Input, 75BPS Diff Polar	441
Input, External AF	442
Input, Sync	443
Input, Sync Lock	444
Int AM	445
Int Blanking	446
Int Burst	447
Int Deviation Meter	448
Int FM	449
Int Freq Counter	450
Int Leveling	451
Int Load	452
Int Markers	453
Int Phase Mod	454
Int Pulse Mod	455
Int Square Wave Mod	456
Int Audio Oscillator	457
Noise Free Tone	458
Noise, Pseudorandom	459
Noise Spectra, ANSI	460
Noise Spectra, Pink	461
Noise Spectra, White	462
Noise, True Random	463
Output Limiting	464
Output Monitor	465
Output, Delayed Binary	466
Output, Delayed Sync	467
Output, Dual Pulse	468
Output, Ecl	469

Signal Source Type Devices *(contd):*

Output, Horiz	470
Output, Neg Pulse	471
Output, Pos Pulse	472
Output, Reference	473
Output, RF Monitor	474
Output, Signal	475
Output, Tracking	476
Output, TTL	477
Output, Uncal RF	478
Output, VCG	479
Output, Video	480
Output, Video Pulse	481
Pen Lift	482
Phase Lock	483
Pulse, Double	484
Pulse, Single	485
RF Blanking	486
Single Cycle	487
Start-Stop	488
Step Attenuator	489
Step Down Control	490
Step Frequency	491
Step Up Control	492
Sweep, Automatic	493
Sweep, Digital	494
Sweep, Ext	495
Sweep, Int	496
Sweep, Man	497
Sweep, Marker	498
Sweep, Single	499
Swept Freq	500
Switchable Freq	501
Time Base, Ext	502
Trigger Pulse Output	503
Triggered Operation	504
Two-Tone	505

Passive Type Devices: (Note - Prefix with ETE code of recommended item)

Adj Input Current	600
Barrel	601
Bend, 45 Degree	602
Bend, 60 Degree	603
Bend, 90 Degree	604
Bend, E-Plane	605
Bend, H-Plane	606
Bidirectional	607
Bifilar Wound	608
Bolometer	609
Bridge Connections	610
Compensation Network,	
Parallel	611
Series-Parallel	612
Cryogenic	613
Crystal	614
Decade	615
Filament Wound	616
High Power	617
Hybrid (Wilkinson)	618
Kelvin-Varley Divider	619
Line-to-Line, 11.8 Vac	620
Line-to-Line, 115 Vac	621
Line-to-Line, 26 Vac	622
Line-to-Line, 90 Vac	623
Low Output Imp Unbal	624
Matched Pair	625
Output, Neg	626
Output, Null Det	627
Output, Pos	628
Output, Shielded	629
Reactive	630
Reference Excit 115 Vac	631
Reference Excit 26 Vac	632
Right Angle	633
Schottky	634
Shielded Core	635
Sliding	636
Sq Law Load	637
Std Cell Ref	638
Step	639

Passive type devices (contd):

Thermal	640
Thermal Mass	641
Thermometer Well	642
Toroidally Wound	643
Transfer	644
Trnsfrmtn Ratio, 1:1	645
Transition	646
Twist, 45 Deg	647
Twist, 90 Deg	648
Unifilar Wound	649
Unmatched	650
Variable (Adjustable)	651

APPENDIX C

ELECTRONIC TEST EQUIPMENT FUNCTIONAL CAPABILITY AND PARAMETRIC SPECIFICATION TEMPLATES

10 SCOPE

10.1 Purpose. This appendix provides functional capability and parametric specification templates for generic classes of ETE. The templates provide guidance for specifying ETE in terms of functional capabilities and performance parameters required to support weapon system test requirements. Use of the templates as a basis for ETE specification preparation serves to standardize the process and terms used for the designation and selection of ETE for support of Naval Weapons Systems.

20 APPLICATION

20.1 The templates contained in this appendix are used in conjunction with weapon System Parameter Worksheet (DID-DI-ATTS-81267, NAVSEA 9491/3) and ETE Capability Requirements Summary (DID-DI-ATTS-81268, NAVSEA 9491/4) to establish weapons system test requirements and ETE functional capabilities and parametric specifications.

20.2 Template application. A description of each data element contained on the template is provided below.

20.2.1 Functional capability. Describes the primary function(s) the ETE is designed to perform as follows:

a. *Sequence number.* A number used to identify each functional capability and its associated parametric specification. The number provides a means for referencing and tracking the applicable ETE functions and capabilities and recording them on the ETE Capability Requirements Summary (NAVSEA 9491/4).

b. *Function.* M-measure, G-generate, T-transform.

NOTE:

The designator, (E), is used to denote the environmental capabilities of the ETE (see paragraph 20.2.3 below).

c. *Characteristic*. Describes the characteristics of a signal that the ETE measures, generates, or transforms (e.g., AC voltage (measure), amplitude modulation (generate), attenuation (transform)).

NOTE:

When utilizing the templates to prepare the ETE Capability Requirements Summary (NAVSEA 9491/4) only those functional capabilities applicable to the particular weapon system test requirement should be addressed.

20.2.2 Parametric specification. Defines the performance capabilities to be specified for the ETE in terms of parameters, units (dimension), accuracy, range and/or point value data as follows:

a. *Parameter descriptor*. Defines the terms applicable to a given functional capability. The first descriptor listed for a given characteristic is the "primary" descriptor which is the primary dimension measured, generated, or transformed. For example, an RMS voltmeter has a primary descriptor of voltage, RMS. Subsequent descriptors are terms which modify or restrict the primary descriptor, e.g., frequency limitations, instrument input impedance, etc. In general, and where applicable, the parameter descriptor, "resolution" is the first secondary descriptor listed under a given primary descriptor and assumes the same units as the primary descriptor.

b. *Units*. Units were derived from the standard dimension units contained in ISO-1000 and ANSI/IEEE Standard C/ATLAS. Where applicable, the parameter descriptor "resolution" immediately follows the primary descriptor and is expressed as an integer in the same units as the primary descriptor. When the unit "ratio" is designated on the template, the ISO-1000 or C/ATLAS dimensional unit should be substituted, i.e., DB, or percent.

c. *Range/value*. Parametric specifications include range and/or point values for each listed descriptor. When annotated with an "X", range data is typically included for the applicable descriptor.

d. *Accuracy*. When annotated with an "X", accuracy data is typically included for the applicable descriptor.

20.2.3 Environmental conditions. In addition to functional capability and parametric specification data, the designation of environmental conditions, i.e., operating temperature and relative humidity, is required to fully characterize ETE operational capability. Environmental conditions are included in all parametric specifications and are annotated with an (E) in the Functional Capability (Function) column of the template.

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: DC AMMETER

ETE GENERIC CODE: AM0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	DC Input current	1.0	Current	Ampere	X	X	
			1.1	Resolution	Integer			
			1.2	Res	Ohm			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: AC AMMETER

ETE GENERIC CODE: AM1

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	AC Input current	1.0	Current	Ampere	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Res	Ohm			
			1.4.	Voltage	Volt			
			1.5	Noise	Ratio			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: AC-DC AMMETER

ETE GENERIC CODE: AM2

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	DC Input current	1.0	Current	Ampere	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Res	Ohm			
			1.4	Voltage	Volt			
			1.5	Noise	Ratio			
2	M	DC Input Current	2.0	Current	Ampere	X	X	
			2.1	Resolution	Integer			
			2.2	Res	Ohm			
3	E	Environmental constraints	3.0	Oper-temp	Degree C	X	X	
			3.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: ANALYZER, SPECTRUM
ETE GENERIC CODE: AN1

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Input frequency	1.0	Freq	Hertz	X	X	
			1.1	Resolution	Integer			
			1.2	Bandwidth	Hertz			
			1.3	Power	Ratio			
			1.4	Span	Hertz			
			1.5	Test-equip-imp	Ohm			
2	M	Input amplitude	2.0	Voltage	Volt	X	X	
			2.1	Resolution	Integer			
			2.2	Ref-voltage	Volt			
			2.3	Freq	Hertz			
			2.4	Bandwidth	Hertz			
			2.5	Span	Hertz			
3	M	Input amplitude, log	3.0	Power	Ratio	X	X	
			3.1	Resolution	Integer			
			3.2	Ref-power	Ratio			
			3.3	Freq	Hertz			
			3.4	Bandwidth	Hertz			
			3.5	Span	Hertz			
4	M	Frequency	4.0	Freq	Hertz	X	X	
			4.1	Voltage	Volt			
			4.2	Stability	Ratio			
			4.3	Test-equip-imp	Ohm			
5	E	Environmental constraints	5.0	Oper-temp	Degree C	X	X	
			5.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: ANALYZER, NETWORK

ETE GENERIC CODE: AN2

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	VSWR	1.0	SWR	Integer	X	X	
			1.1	Freq	Hertz			
			1.2	Test-equip-imp	Ohm			
2	M	Return loss	2.0	Power	Ratio	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	SWR	Ratio			
			2.4	Test-equip-imp	Ohm			
3	M	Insertion loss	3.0	Thru-atten	Decibels	X	X	
			3.1	Freq	Hertz			
			3.2	Test-equip-imp	Ohm			
4	M	Phase angle	4.0	Phase-angle	Degree	X	X	
			4.1	Resolution	Integer			
			4.2	Freq	Hertz			
			4.3	Voltage	Volt			
			4.4	Ref-Volt	Volt			
			4.5	Test-equip-imp	Ohm			
			4.6	Bandwidth	Hertz			
			4.7	Harm-XXX-power	DB			
5	T	Input attenuation	5.0	Atten	Ratio	X	X	
			5.1	Resolution	Integer			
			5.2	Freq	Hertz			
			5.3	Power	Dbm			
			5.4	Test-equip-imp	Ohm			
6	E	Environmental constraints	6.0	Oper-temp	Degree C	X	X	
			6.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: ANALYZER, REAL TIME
ETE GENERIC CODE: AN3

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Input frequency	1.0	Freq	Hertz	X	X	
			1.1	Resolution	Integer			
			1.2	Bandwidth	Hertz			
			1.3	Power	Ratio			
			1.4	Span	Hertz			
			1.5	Test-equip-imp	Ohm			
2	M	Input amplitude	2.0	Voltage	Volt	X	X	
			2.1	Resolution	Integer			
			2.2	Ref-voltage	Volt			
			2.3	Freq	Hertz			
			2.4	Bandwidth	Hertz			
			2.5	Span	Hertz			
3	M	Input log amplitude	3.0	Power	Ratio	X	X	
			3.1	Resolution	Integer			
			3.2	Ref-power	Ratio			
			3.3	Freq	Hertz			
			3.4	Bandwidth	Hertz			
			3.5	Span	Hertz			
4	M	Frequency	4.0	Freq	Hertz	X	X	
			4.1	Resolution	Intreger			
			4.2	Voltage	Volt			
			4.3	Test-equip-imp	Ohm			
5	E	Environmental constraints	5.0	Oper-temp	Degree C	X	X	
			5.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: ANALYZER, SIGNATURE
ETE GENERIC CODE:

Functional capability			Parametric specifications				
Seq. No.	Function	Signal characteristic	Parameter descriptor	Units	Range/ value	Accuracy	Notes
1	M	TTL HI	VOLTAGE-ONE	VOLTS	X	X	
			CURRENT	AMPS			
			PRF	HZ			
			PULSE WIDTH	SEC			
			TEST-EQUIP-IMP	OHMS			
2	M	TTL LO	VOLTAGE-ONE	VOLTS	X	X	
			CURRENT	AMPS			
			PRF	HZ			
			PULSE WIDTH	SEC			
			TEST-EQUIP-IMP	OHMS			
3	M	CMOS HI	VOLTAGE-ONE	VOLTS	X	X	
			CURRENT	AMPS			
			PRF	HZ			
			PULSE WIDTH	SEC			
			TEST-EQUIP-IMP	OHMS			
4	M	CMOS LO	VOLTAGE-ONE	VOLTS	X	X	
			CURRENT	AMPS			
			PRF	HZ			
			PULSE WIDTH	SEC			
			TEST-EQUIP-IMP	OHMS			
5	M	FREQUENCY	VOLTAGE-ONE	VOLTS	X	X	
			CURRENT	AMPS			
			PRF	HZ			
			PULSE WIDTH	SEC			
			TEST-EQUIP-IMP	OHMS			
6	M	ENVIRONMENTAL CONSTRAINTS	OPER-TEMP	DEGREE C	X	X	
			RELATIVE-HUMIDITY	PERCENT			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: ATTENUATOR
ETE GENERIC CODE: AT0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	T	Attenuation	1.0	ATTEN	Ratio	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Temp-coeff	PPM/Deg C			
			1.4	Power-AV	Ratio			
			1.5	Power-P	Ratio			
			1.6	Test-equip-imp	Ohm			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: BRIDGE, SYNCRO/RESOLVER
ETE GENERIC CODE: BR2

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	G	Rotor Output	1.0	Voltage	Volt	X	X	
			1.1	Freq	Hertz			
			1.2	Test-equip-imp	Ohm			
2	T	Stator input	2.0	Angle	Degree	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	Voltage	Volt			
			2.4	Test-equip-imp	Ohm			
3	E	Environmental constraints	3.0	Oper-temp	Degree C	X	X	
			3.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: FREQUENCY CONVERTER
ETE GENERIC CODE: CF1

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	T	Input signal, CW	1.0	Power	Ratio	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	SWR	Ratio			
			1.4	Test-equip-imp	Ohm			
2	T	Output signal	2.0	Angle	Degree	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	SWR	Ratio			
			2.4	Test-equip-imp	Ohm			
3	T	Input signal (pulsed)	3.0	Voltage-P	Volt	X	X	
			3.1	PRF	Hertz			
			3.2	Resolution	Integer			
			3.3	Rise-time	Second			
			3.4	Fall-time	Second			
			3.5	Pulse-width	Second			
			3.6	Duty-cycle	Ratio			
			3.7	Delay	Second			
			3.8	DC-offset	Volt			
			3.9	Time-jit	Second			
			3.10	Droop	Ratio			
			3.11	Overshoot	Ratio			
			3.12	Preshoot	Ratio			
			3.13	Ringing	Ratio			
			3.14	Rounding	Ratio			
			3.15	Undershoot	Ratio			
			3.16	Test-equip-imp	Ohm			
			3.17	Burst-count	Counts			
			3.18	Burst-rate	Hertz			
4	E	Environmental constraints	4.0	Oper-temp	Degree C	X	X	
			4.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: COUNTER
ETE GENERIC CODE: CO0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	G	Std frequency output	1.0	Freq	Hertz	X	X	
			1.1	Resolution	Integer			
			1.2	Voltage	Volt			
			1.3	Test-equip-imp	Ohm			
2	M	Frequency	2.0	Freq	Hertz	X	X	
			2.1	Resolution	Integer			
			2.2	Dynamic-range	Ratio			
			2.3	Test-equip-imp	Ohm			
			2.4	Capacitance	Farad			
3	M	Ratio B/A	3.0	Freq-ratio	Unit	X	X	
			3.1	Resolution	Integer			
			3.2	Dynamic-range	Ratio			
			3.3	Freq	Hertz			
4	M	Input power	4.0	Power	Ratio	X	X	
			4.1	Resolution	Integer			
			4.2	Freq	Hertz			
			4.3	SWR	Ratio			
			4.4	Test-equip-imp	Ohm			
5	M	Totalize	5.0	Totalize	Units	X	X	
			5.1	Freq	Hertz			
6	M	DC input voltage	6.0	Voltage	Volt	X	X	
			6.1	Resolution	Integer			
			6.3	Test-equip-imp	Ohm			
7	M	Time interval	7.0	Time	Time	X	X	
			7.1	Resolution	Integer			
			7.2	Average	Units			
			7.3	Resolution	Integer			
			7.4	Trig	Volt			
8	M	Period	8.0	Period	Second	X	X	
			8.1	Resolution	Integer			
			8.2	Gate-time	Second			
			8.3	Trig	Volt			

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: COUNTER
ETE GENERIC CODE: CO0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
9	E	Environmental constraints	9.0	Oper-temp	Degree C	X	X	
			9.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: CAPACITOR
ETE GENERIC CODE: CP1

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	T	Capacitance	1.0	Cap	Farad	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Diss-factor	Ratio			
			1.4	Temp-coeff	PPM/Deg C			
			1.5	Stability	PPM/Yr			
			1.6	IND	Henry			
			1.7	Res	Ohm			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: COUPLER, DIRECTIONAL
ETE GENERIC CODE: DC0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	T	Input signal attributes	1.0	Power-AV	Ratio	X	X	
			1.1	Power-P	Ratio			
			1.2	Freq	Hertz			
			1.3	SWR	Ratio			
			1.4	Test-equip-imp	Ohm			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: DETECTOR

ETE GENERIC CODE: DE0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	T	Input signal attributes	1.0	Freq	Hertz	X	X	
			1.1	Sensitivity	Ratio			
			1.2	Power-AV	Ratio			
			1.3	Power-P	Ratio			
			1.4	Test-equip-imp	Ohm			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: DIVIDER, POWER

ETE GENERIC CODE: DP1

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	T	Insertion loss	1.0	Thru-atten	Decibels	X	X	
			1.1	Freq	Hertz			
			1.2	Test-equip-imp	Ohm			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: DIVIDER, VOLTAGE
ETE GENERIC CODE: DR3

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	T	Voltage division	1.0	Voltage-ratio	Ratio	X	X	
			1.1	Resolution	Integer			
			1.2	Test-equip-imp	Ohm			
			1.3	Power-AV	Watt			
			1.4	Power-P	Watt			
			1.5	Current	Ampere			
2	Ė	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: RIFE TEST SET
ETE GENERIC CODE: F10

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Input frequency	1.0	Freq	Hertz	X	X	
			1.1	Resolution	Integer			
			1.2	Bandwidth	Hertz			
			1.3	Power	Ratio			
			1.4	Span	Hertz			
			1.5	Test-equip-imp	Ohm			
2	M	Input amplitude	2.0	Power	Ratio	X	X	
			2.1	Resolution	Integer			
			2.2	Ref-power	Ratio			
			2.3	Freq	Hertz			
			2.4	Bandwidth	Hertz			
			2.5	Span	Hertz			
3	E	Environmental constraints	3.0	Oper-temp	Degree C	X	X	
			3.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: FILTER

ETE GENERIC CODE: FL0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	T	Filter	1.0	Power-diff	Ratio	X	X	
			1.1	Freq	Hertz			
			1.2	Power-AV	Ratio			
			1.3	Power-P	Ratio			
			1.4	Slope	Ratio			
			1.5	Test-equip-imp	Ohm			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: METER, FREQUENCY

ETE GENERIC CODE: FR0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	T	Input freq dip at resonance	1.0 1.1 1.2	Freq Resolution Power-diff	Hertz Integer Ratio	X	X	
2	E	Environmental constraints	2.0 2.1	Oper-temp Relative-humidity	Degree C Percent	X	X	

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: METER, GRID DIP
ETE GENERIC CODE: GD0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Induced frequency	1.0	Freq	Hertz	X	X	
2	E	Environmental constraints	2.0 2.1	Oper-temp Relative-humidity	Degree C Percent	X	X	

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: SIGNAL GENERATOR

ETE GENERIC CODE: GE0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	G	Frequency	1.0	Freq	Hertz	X	X	
			1.1	Resolution	Integer			
			1.2	Power	Ratio			
			1.3	Trans-time	Second			
			1.4	Test-equip-imp	Ohm			
			1.5	Dynamic-range	Ratio			
			1.6	Capacitance	Farad			
2	G	Power	2.0	Power	Ratio	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	Test-equip-imp	Ohm			
			2.4	SWR	Ratio			
			2.5	Trans-time	Second			
			2.6	Signal-to-phase-noise	Ratio			
			2.7	Residual-AM	Ratio			
			2.8	Residual-FM	Hertz			
			2.9	Residual-noise	Ratio			
			2.10	Spurious-output	Ratio			
			2.11	Noise-sidebands	Ratio			
			2.12	Separation	Hertz			
			2.13	Intermod-dist	Hertz			
3	G	Amplitude modulation	3.0	Mod-ampl	Ratio	X	X	
			3.1	Mod-freq	Hertz			
			3.2	Car-freq	Hertz			
			3.3	Car-ampl	Ratio			
			3.4	Mod-dist	Ratio			
4	G	Frequency modulation	4.0	Car-ampl	Ratio	X	X	
			4.1	Car-freq	Hertz			
			4.2	Mod-freq	Hertz			
			4.3	Freq-dev	Hertz			
			4.4	Mod-dist	Ratio			
5	G	Pulse modulation	5.0	Car-ampl	Ratio	X	X	
			5.1	Car-freq	Hertz			
			5.2	On-off-ratio	Ratio			
			5.3	PRF	Hertz			
			5.4	Fall-time	Second			
			5.5	Raise-time	Second			

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: SIGNAL GENERATOR

ETE GENERIC CODE: GE0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
6	G	Phase modulation	6.0	Car-ampl	Ratio	X	X	
			6.1	Car-freq	Hertz			
			6.2	Phase-dev	Degree			
			6.3	Mod-dist	Ratio			
			6.4	Mod-freq	Hertz			
7	M	Input power	7.0	Power	Ratio	X	X	
			7.1	Resolution	Integer			
			7.2	Freq	Hertz			
			7.3	SWR	Ratio			
			7.4	Test-equip-imp	Ohm			
8	M	Frequency deviation	8.0	Freq-dev	Hertz	X	X	
			8.1	Car-freq	Hertz			
			8.2	Car-ampl	Ratio			
			8.3	Mod-ampl	Ratio			
			8.4	Test-equip-imp	Ohm			
9	E	Environmental constraints	9.0	Oper-temp	Degree C	X	X	
			9.1	Relative-humidity	Percent			
10	M	Frequency	10.0	Freq	Hertz	X	X	
			10.1	Resolution	Integer			
			10.2	Power	Ratio			
			10.3	Trans-time	Second			
			10.4	Test-equip-imp	Ohm			
			10.5	Dynamic-range	Ratio			
			10.6	Capacitance	Fard			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: SIMULATOR, SYNCRO/RESOLVE
ETE GENERIC CODE: GES

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	G	Stator output	1.0	Angle	Degree	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Voltage	Volt			
			1.4	Test-equip-imp	Ohm			
2	T	Rotor input	2.0	Voltage	Volt	X	X	
			2.1	Freq	Hertz			
			2.2	Test-equip-imp	Ohm			
3	E	Environmental constraints	3.0	Oper-temp	Degree C	X	X	
			3.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: METER, GAIN/PHASE

ETE GENERIC CODE: GP0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	G	Analog output	1.0	Voltage	Volt	X	X	
			1.1	Phase-angle	Degree			
			1.2	Test-equip-imp	Ohm			
2	M	Input voltage, log, A or B	2.0	Power-diff	Ratio	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	Bandwidth	Hertz			
			2.4	Test-equip-imp	Ohm			
			2.5	Capacitance	Farad			
3	M	Phase angle	3.0	Phase-angle	Degree	X	X	
			3.1	Resolution	Integer			
			3.2	Freq	Hertz			
			3.3	Voltage	Volt			
			3.4	Ref-volt	Volt			
			3.5	Test-equip-imp	Ohm			
			3.6	Bandwidth	Hertz			
			3.7	Harm-XXX-power	DB			
4	M	Input voltage ratio, log	4.0	Power-diff	Ratio	X	X	
			4.1	Resolution	Integer			
			4.2	Freq	Hertz			
			4.3	Bandwidth	Hertz			
			4.4	Test-equip-imp	Ohm			
			4.5	Capacitance	Farad			
5	E	Environmental constraints	5.0	Oper-temp	Degree C	X	X	
			5.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: DEVICE, IMPED MEASURING

ETE GENERIC CODE: IM0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Admittance	1.0	Admittance	Seimens	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
2	M	Conductance	2.0	Conductance	Seimens	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
3	M	Parallel capacitance	3.0	Cap-par	Farad	X	X	
			3.1	Resolution	Integer			
			3.2	Freq	Hertz			
			3.3	Diss-factor	Ratio			
4	M	Parallel inductance	4.0	Ind-par	Henry	X	X	
			4.1	Resolution	Integer			
			4.2	Freq	Hertz			
			4.3	Q	Ratio			
5	M	Reactance	5.0	Reactance	Ohm	X	X	
			5.1	Resolution	Integer			
			5.2	Freq	Hertz			
6	M	Resistance	6.0	Res	Ohm	X	X	
			6.1	Resolution	Integer			
			6.2	Voltage	Volt			
			6.3	Current	Ampere			
7	M	Series capacitance	7.0	Cap-ser	Farad	X	X	
			7.1	Resolution	Integer			
			7.2	Freq	Hertz			
			7.3	Diss-factor	Ratio			
8	M	Series inductance	8.0	Ind-ser	Henry	X	X	
			8.1	Resolution	Integer			
			8.2	Freq	Hertz			
			8.3	Q	Ratio			
9	E	Environmental constraints	9.0	Oper-temp	Degree C	X	X	
			9.1	Relative-humidity	Percent			

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: DEVICE, IMPED MEASURING

ETE GENERIC CODE: IM0

Functional capability			Parametric specifications				
Seq. No.	Function	Signal characteristic	Parameter descriptor	Units	Range/ value	Accuracy	Notes
10	M	Susceptance	10.0 Susceptance	Seimens	X	X	
			10.1 Resolution	Integer			
			10.2 Freq	Hertz			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: INDUCTOR

ETE GENERIC CODE: LN1

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	T	Inductance	1.0	Ind	Henry	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Q	Ratio			
			1.4	Temp-coeff	PPM/deg C			
			1.5	Stability	PPM/yr			
			1.6	Current-LMT	Ampere			
			1.7	Cap	Farad			
			1.8	Res	Ohm			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: METER, MOD, AM/FM

ETE GENERIC CODE: MD0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Amplitude modulation	1.0	Mod-ampl	Ratio	X	X	
			1.1	Resolution	Integer			
			1.2	Mod-freq	Hertz			
			1.3	Car-ampl	Ratio			
			1.4	Car-freq	Hertz			
			1.5	Mod-dist	Ratio			
			1.6	Test-equip-imp	Ohm			
2	M	FM deviation	2.0	Mod-freq	Hertz	X	X	
			2.1	Freq	Hertz			
3	E	Environmental constraints	3.0	Oper-temp	Degree C	X	X	
			3.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: METER, MODULATION, AM

ETE GENERIC CODE: MD1

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Amplitude modulation	1.0	Mod-ampl	Ratio	X	X	
			1.1	Resolution	Integer			
			1.2	Mod-freq	Hertz			
			1.3	Car-ampl	Ratio			
			1.4	Car-freq	Hertz			
			1.5	Mod-dist	Ratio			
			1.6	Test-equip-imp	Ohm			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: METER, MODULATION, FM
ETE GENERIC CODE: MD2

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	FM deviation	1.0	Mod-freq	Hertz	X	X	
			1.1	Freq	Hertz			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: MODULATOR

ETE GENERIC CODE: ML0

Functional capability			Parametric specifications				
Seq. No.	Function	Signal characteristic	Parameter descriptor	Units	Range/ value	Accuracy	Notes
1	T	Input RF signal					
2	T	Input AM signal					
3	T	Input PM signal					
4	E	Environmental constraints	4.0 Oper-temp	Degree C	X	X	
			4.1 Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: MULTIMETER
ETE GENERIC CODE: MU0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Resistance	1.0	Res	Ohm	X	X	
			1.1	Resolution	Integer			
			1.2	Voltage	Volt			
			1.3	Current	Ampere			
2	M	Resistance, ratio	2.0	Resistance-ratio	Ratio	X	X	
			2.1	Resolution	Integer			
			2.2	Voltage	Volt			
			2.3	Current	Ampere			
3	M	AC input voltage	3.0	Voltage	Volt	X	X	
			3.1	Resolution	Integer			
			3.2	Freq	Hertz			
			3.3	Crest-factor	Number			
			3.4	Bandwidth	Hertz			
			3.5	Test-equip-imp	Ohm			
			3.6	Cap	Farad			
4	M	AC input current	4.0	Current	Ampere	X	X	
			4.1	Resolution	Integer			
			4.2	Freq	Hertz			
			4.3	Res	Ohm			
			4.4	Voltage	Volt			
			4.5	Noise	Ratio			
5	M	Input voltage ratio	5.0	Voltage-ratio	Ratio	X	X	
			5.1	Resolution	Integer			
			5.2	Freq	Hertz			
			5.3	Test-equip-imp	Ohm			
			5.4	Capacitance	Farad			
6	M	Input current ratio	6.0	Current-ratio	Ratio	X	X	
			6.1	Resolution	Integer			
			6.2	Freq	Hertz			
			6.3	Test-equip-imp	Ohm			
			6.4	Capacitance	Farad			
7	M	DC input voltage	7.0	Voltage	Volt	X	X	
			7.1	Resolution	Integer			
			7.2	Test-equip-imp	Ohm			

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: MULTIMETER
ETE GENERIC CODE: MU0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
8	M	DC input current	8.0	Current	Ampere	X	X	
			8.1	Resolution	Integer			
			8.2	Res	Ohm			
9	E	Environmental constraints	9.0	Oper-temp	Degree C	X	X	
			9.1	Relative-humidity	Percent			
10	M	Conductance	10.0	Conductance	Seimens	X	X	
			10.1	Resolution	Integer			
			10.2	Freq	Hertz			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: METER, IMPED, VECTOR
ETE GENERIC CODE: MZ1

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Phase angle	1.0	Phase-angle	Degree	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Voltage	Volt			
			1.4	Ref-volt	Volt			
			1.5	Test-equip-imp	Ohm			
			1.6	Bandwidth	Hertz			
			1.7	Harm-XXX-power	DB			
2	M	Impedance	2.0	Impedance	Ohm	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
3	E	Environmental constraints	3.0	Oper-temp	Degree C	X	X	
			3.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: OHMMETER
ETE GENERIC CODE: OH0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Resistance	1.0	Res	Ohm	X	X	
			1.1	Resolution	Integer			
			1.2	Voltage	Volt			
			1.3	Current	Ampere			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: OSCILLOSCOPE

ETE GENERIC CODE: OS0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	G	Calibrator output	1.0	Voltage-PP	Volt	X	X	
			1.1	Freq	Hertz			
			1.2	Resolution	Integer			
			1.3	Rise-time	Second			
			1.4	Fall-time	Second			
			1.5	Duty-cycle	Ratio			
			1.6	Test-equip-imp	Ohm			
			1.7	Burst-count	Counts			
			1.8	Burst-rate	Hertz			
			1.9	Symmetry	Ratio			
2	M	Horizontal amplitude	2.0	Voltage-PP	Volt	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	Test-equip-imp	Ohm			
3	M	AC input signal	3.0	AM-comp	Volt	X	X	
			3.1	Bandwidth	Hertz			
			3.2	DC-offset	Volt			
			3.3	Freq	Hertz			
			3.4	Period	Sec			
			3.5	Phase-angle	Degree			
			3.6	Trans-time	Sec			
			3.7	Voltage-PP	Volt			
4	M	Frequency	4.0	Freq	Hertz	X	X	
			4.1	Resolution	Integer			
			4.2	Voltage	Volt			
			4.3	Test-equip-imp	Ohm			
5	M	Vertical amplitude	5.0	Voltage-PP	Volt	X	X	
			5.1	Resolution	Integer			
			5.2	Freq	Hertz			
			5.3	Test-equip-imp	Ohm			
6	M	DC imput signal	6.0	Voltage	Volt	X	X	
			6.1	Current	Ampere			
			6.2	Noise	Volt			

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: OSCILLOSCOPE

ETE GENERIC CODE: OS0

Functional capability			Parametric specifications				
Seq. No.	Function	Signal characteristic	Parameter descriptor	Units	Range/ value	Accuracy	Notes
7	E	Environmental constraints	7.0 Oper-temp 7.1 Relative-humidity	Degree C Percent	X	X	

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: PHASE JITTER METER

ETE GENERIC CODE: PJM

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Phase jitter signal	1.0	Phase-dev	Ratio	X	X	
			1.1	Car-freq	Hertz			
			1.2	Car-ampl	Ratio			
			1.3	Test-equip-imp	Ohm			
2	M	Input power	2.0	Voltage	Volt	X	X	
			2.1	Current	Ampere			
			2.2	Noise	Volt			
3	M	Input frequency	3.0	Freq	Hertz	X	X	
			3.1	Sensitivity	Ratio			
			3.2	Power-AV	Ratio			
			3.3	Power-P	Ratio			
			3.4	Test-equip-imp	Ohm			
4	E	Environmental constraints	4.0	Oper-temp	Degree C	X	X	
			4.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: DC POWER SUPPLY
ETE GENERIC CODE: PS1

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	G	DC output voltage	1.0	Voltage	Volt	X	X	
			1.1	Resolution	Integer			
			1.2	Current	Ampere			
			1.3	Test-equip-imp	Ohm			
2	G	DC output current	2.0	Current	Ampere	X	X	
			2.1	Resolution	Integer			
			2.2	Voltage	Volt			
			2.3	Test-equip-imp	Ohm			
3	E	Environmental constraints	3.0	Oper-temp	Degree C	X	X	
			3.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: AC POWER SUPPLY

ETE GENERIC CODE: PS2

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	G	AC output voltage	1.0	Voltage	Volt	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Current	Ampere			
			1.4	Test-equip-imp	Ohm			
			1.5	Noise	Ratio			
2	G	AC output current	2.0	Current	Ampere	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	Res	Ohm			
			2.4	Voltage	Volt			
			2.5	Noise	Ratio			
3	E	Environmental constraints	3.0	Oper-temp	Degree C	X	X	
			3.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: RESISTOR
ETE GENERIC CODE: RE1

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	T	Resistance	1.0	Res	Ohm	X	X	
			1.1	Resolution	Integer			
			1.2	Temp-coeff	PPM/Deg C			
			1.3	Stability	PPM/Year			
			1.4	Current-lmt	Ampere			
			1.5	Pwr-lmt	Watt			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: ISOLATOR

ETE GENERIC CODE: SR1

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	T	Forward attenuation	1.0	Atten	Ratio	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Temp-coeff	PPM/Deg C			
			1.4	Power-AV	Ratio			
			1.5	Power-P	Ratio			
			1.6	Test-equip-imp	Ohm			
2	T	Reverse attenuation	2.0	Power	Ratio	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	SWR	Ratio			
			2.4	Test-equip-imp	Ohm			
3	E	Environmental constraints	3.0	Oper-temp	Degree C	X	X	
			3.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: RF STABILIZER
ETE GENERIC CODE: SY0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	T	Input RF signal	1.0	Freq	Hertz	X	X	
			1.1	Sensitivity	Ratio			
			1.2	Power-AV	Ratio			
			1.3	Power-P	Ratio			
			1.4	Test-equip-imp	Ohm			
2	T	Output DC voltage	2.0	Voltage	Volt	X	X	
			2.1	Resolution	Integer			
			2.2	Current	Ampere			
3	E	Environmental constraints	3.0	Oper-temp	Degree C	X	X	
			3.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: TEST SET, INSULATION

ETE GENERIC CODE: TE4

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Insulation resistance	1.0	Res	Ohm	X	X	
			1.1	Resolution	Integer			
			1.2	Voltage	Volt			
			1.3	Current	Ampere			
2	M	Insulation breakdown volt	2.0	Voltage	Volt	X	X	
			2.1	Resolution	Integer			
			2.2	Current	Ampere			
3	E	Environmental constraints	3.0	Oper-temp	Degree C	X	X	
			3.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: CURVE TRACER
ETE GENERIC CODE: TE5

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	G	Collector supply, peak	1.0	Voltage-P	Volt	X	X	
			1.1	Current-P	Ampere			
			1.2	Res	Ohm			
2	G	Collector supply, trms	2.0	Voltage-trms	Volt	X	X	
			2.1	Current-P	Ampere			
			2.2	Res	Ohm			
3	G	DC current step	3.0	Current	Ratio	X	X	
			3.1	Division	Unit			
			3.2	Voltage	Volt			
4	G	Voltage step	4.0	Voltage	Ratio	X	X	
			4.1	Current	Ampere			
5	G	Collector supply	5.0	Voltage	Volt	X	X	
			5.1	Current-P	Ampere			
			5.2	Res	Ohm			
6	E	Environmental constraints	6.0	Oper-temp	Degree C	X	X	
			6.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: DATA GENERATOR, TELCOM

ETE GENERIC CODE: TKQ

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	G	Output signal	1.0	Voltage-P	Volt	X	X	
			1.1	PRF	Hertz			
			1.2	Resolution	Integer			
			1.3	Rise-time	Second			
			1.4	Fall-time	Second			
			1.5	Pulse-width	Second			
			1.6	Duty-cycle	Ratio			
			1.7	Delay	Second			
			1.8	DC-offset	Volt			
			1.9	Time-jit	Second			
			1.10	Droop	Ratio			
			1.11	Overshoot	Ratio			
			1.12	Preshoot	Ratio			
			1.13	Ringing	Ratio			
			1.14	Rounding	Ratio			
			1.15	Undershoot	Ratio			
			1.16	Test-equip-imp	Ohm			
			1.17	Burst-count	Counts			
			1.18	Burst-rate	Hertz			
			1.19	Voltage	Volt			
			1.20	Freq	Hertz			
			1.21	Pos-slope	Ratio			
			1.22	Neg-slope	Ratio			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: TERMINATION

ETE GENERIC CODE: TM0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	T	Input signal attributes	1.0	Power-AV	Ratio	X	X	
			1.1	Power-P	Ratio			
			1.2	Freq	Hertz			
			1.3	SWR	Ratio			
			1.4	Test-equip-imp	Ohm			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: TRANSFORMER, ISOLATION

ETE GENERIC CODE: TR3

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	T	Input/output turns ratio	1.0	Turns-ratio	Ratio	X	X	
			1.1	Voltage	Volt			
			1.2	Freq	Hertz			
			1.3	Power	Voltampere			
			1.4	Test-equip-imp	Ohm			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: TEST SET, MEASURING, SWR

ETE GENERIC CODE: TS2

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	VSWR	1.0	SWR	Integer	X	X	
			1.1	Freq	Hertz			
			1.2	Test-equip-imp	Ohm			
2	M	Attenuation	2.0	Atten	Ratio	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	Power	DBM			
			2.4	Test-equip-imp	Ohm			
3	M	Input power	3.0	Power	Ratio	X	X	
			3.1	Resolution	Integer			
			3.2	Freq	Hertz			
			3.3	SWR	Ratio			
			3.4	Test-equip-imp	Ohm			
4	T	Detector input signal	4.0	Freq	Hertz	X	X	
			4.1	Sensitivity	Ratio			
			4.2	Power-AV	Ratio			
			4.3	Power-P	Ratio			
			4.4	Test-equip-imp	Ohm			
5	E	Environmental constraints	5.0	Oper-temp	Degree C	X	X	
			5.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: RELAY TEST SET

ETE GENERIC CODE: TS4

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	G	DC output current	1.0	Current	Ampere	X	X	
			1.1	Resolution	Integer			
			1.2	Res	Ohm			
2	G	AC output current	2.0	Current	Ampere	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	Res	Ohm			
			2.4	Voltage	Volt			
			2.5	Noise	Ratio			
3	E	Environmental constraints	3.0	Oper-temp	Degree C	X	X	
			3.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: TEST SET, BIT ERROR

ETE GENERIC CODE:

Functional capability			Parametric specifications				
Seq. No.	Function	Signal characteristic	Parameter descriptor	Units	Range/ value	Accuracy	Notes
1	M	Input distortion	Distortion Word rate	Ratio Baud	X	X	
2	M	Environmental	Oper-temp Relative Humidity	Degree C Percent	X	X	

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: TEST SET, FREQUENCY RESP

ETE GENERIC CODE: TS8

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Frequency response	1.0	Power-diff	DB	X	X	
			1.1	Freq	Hertz			
			1.2	Power	DBM			
			1.3	Ref-freq	Hertz			
			1.4	Ref-power	DBM			
			1.5	Test-equip-imp	Ohm			
2	M	Input power	2.0	Power	Ratio	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	SWR	Ratio			
			2.4	Test-equip-imp	Ohm			
3	M	Signal input	3.0	Power-ratio	Ratio	X	X	
			3.1	Resolution	Integer			
			3.2	Freq	Hertz			
			3.3	Ref-level-offset	DB			
			3.4	Test-equip-imp	Ohm			
4	E	Environmental constraints	4.0	Oper-temp	Degree C	X	X	
			4.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME; TTY DIST ANALYZER/GEN

ETE GENERIC CODE: TSC

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	G	Output distortion	1.0 1.1	Distortion Word-rate	Ratio Baud	X	X	
2	M	Input distortion	2.0 2.1	Distortion Word-rate	Ratio Baud	X	X	
3	E	Environmental constraints	3.0 3.1	Oper-temp Relative-humidity	Degree C Percent	X	X	

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: TTY DISTORTION ANALYZER

ETE GENERIC CODE: TSF

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Input distortion	1.0 1.1	Distortion Word-rate	Ratio Baud	X	X	
2	E.	Environmental constraints	2.0 2.1	Oper-temp Relative-humidity	Degree C Percent	X	X	

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: TTY DISTORTION GENERATOR

ETE GENERIC CODE: TSG

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	G	Output distortion	1.0 1.1	Distortion Word-rate	Ratio Baud	X	X	
2	E	Environmental constraints	2.0 2.1	Oper-temp Relative-humidity	Degree C Percent	X	X	

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: VOLTMETER, DC

ETE GENERIC CODE: VO0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	DC input voltage	1.0	Voltage	Volt	X	X	
			1.1	Resolution	Integer			
			1.2	Test-equip-imp	Ohm			
2	M	Input voltage ratio	2.0	Voltage-ratio	Ratio	X	X	
			2.1	Resolution	Integer			
			2.2	Test-equip-imp	Ohm			
3	E	Environmental constraints	3.0	Oper-temp	Degree C	X	X	
			3.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: VOLTMETER, AC

ETE GENERIC CODE: V01

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	AC input voltage	1.0	Voltage	Volt	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Crest-factor	Number			
			1.4	Bandwidth	Hertz			
			1.5	Test-equip-imp	Ohm			
			1.6	Cap	Farad			
2	M	Input voltage	2.0	Power-diff	Ratio	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	Test-equip-imp	Ohm			
3	M	Input voltage ratio	3.0	Voltage-ratio	Ratio	X	X	
			3.1	Resolution	Integer			
			3.2	Freq	Hertz			
			3.3	Test-equip-imp	Ohm			
			3.4	Capacitance	Farad			
4	E	Environmental constraints	4.0	Oper-temp	Degree C	X	X	
			4.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: VOLTMETER, DIFF AC

ETE GENERIC CODE: VO2

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	AC input voltage	1.0	Voltage	Volt	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Crest-factor	Number			
			1.4	Bandwidth	Hertz			
			1.5	Test-equip-imp	Ohm			
			1.6	Cap	Farad			
2	M	AC input voltage null	2.0	Voltage	Volt	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	Current	Ampere			
			2.4	Test-equip-imp	Ohm			
			2.5	Noise	Ratio			
3	E	Environmental constraints	3.0	Oper-temp	Degree C	X	X	
			3.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: VOLTMETER, AC-DC
ETE GENERIC CODE: V03

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	AC input voltage	1.0	Voltage	Volt	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Crest-factor	Number			
			1.4	Bandwidth	Hertz			
			1.5	Test-equip-imp	Ohm			
			1.6	Cap	Farad			
			1.7	Power-diff	Ratio			
2	M	AC input voltage	2.0	Voltage	Volt	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	Crest-factor	Number			
			2.4	Bandwidth	Hertz			
			2.5	Test-equip-imp	Ohm			
			2.6	Cap	Farad			
			2.7	Power-diff	Ratio			
3	M	AC input voltage, ratio	3.0	Voltage-ratio	Ratio	X	X	
			3.1	Resolution	Integer			
			3.2	Freq	Hertz			
			3.3	Test-equip-imp	Ohm			
			3.4	Capacitance	Farad			
4	M	DC input voltage	4.0	Voltage	Volt	X	X	
			4.1	Resolution	Integer			
			4.2	Test-equip-imp	Ohm			
5	M	DC input voltage ratio	5.0	Voltage-ratio	Ratio	X	X	
			5.1	Resolution	Integer			
			5.2	Test-equip-imp	Ohm			
6	E	Environmental constraints	6.0	Oper-temp	Degree C	X	X	
			6.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: VOLTMETER, VECTOR

ETE GENERIC CODE: V04

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Phase angle	1.0	Phase-angle	Degree	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Voltage	Volt			
			1.4	Ref-volt	Volt			
			1.5	Test-equip-imp	Ohm			
			1.6	Bandwidth	Hertz			
			1.7	Harm-XXX-power	DB			
2	M	AC input voltage	2.0	Voltage	Volt	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	Crest-factor	Number			
			2.4	Bandwidth	Hertz			
			2.5	Test-equip-imp	Ohm			
			2.6	Cap	Farad			
3	M	AC input voltage, ratio	3.0	Power-diff	Ratio	X	X	
			3.1	Resolution	Integer			
			3.2	Freq	Hertz			
			3.3	Test-equip-imp	Ohm			
4	E	Environmental constraints	4.0	Oper-temp	Degree C	X	X	
			4.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: VOLTMETER, DIFF DC

ETE GENERIC CODE: VO5

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	DC input voltage	1.0	Voltage	Volt	X	X	
			1.1	Resolution	Integer			
			1.2	Test-equip-imp	Ohm			
2	M	DC null voltage	2.0	Voltage	Volt	X	X	
			2.1	Resolution	Integer			
			2.2	Test-equip-imp	Ohm			
3	E	Environmental constraints	3.0	Oper-temp	Degree C	X	X	
			3.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: VOLTMETER, FREQ SEL
ETE GENERIC CODE: V06

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Frequency	1.0	Freq	Hertz	X	X	
			1.1	Resolution	Integer			
			1.2	Bandwidth	Hertz			
			1.3	Power	Ratio			
			1.4	Span	Hertz			
			1.5	Test-equip-imp	Ohm			
2	M	AC input voltage, log	2.0	Power-diff	Ratio	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	Bandwidth	Hertz			
			2.4	Test-equip-imp	Ohm			
			2.5	Capacitance	Farad			
3	M	AC input voltage	3.0	Voltage	Volt	X	X	
			3.1	Resolution	Integer			
			3.2	Freq	Hertz			
			3.3	Crest-factor	Number			
			3.4	Bandwidth	Hertz			
			3.5	Test-equip-imp	Ohm			
			3.6	Cap	Farad			
4	E	Environmental constraints	4.0	Oper-temp	Degree C	X	X	
			4.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: VOLTMETER, DIFF AC-DC

ETE GENERIC CODE: V07

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	AC input voltage	1.0	Voltage	Volt	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Crest-factor	Number			
			1.4	Bandwidth	Hertz			
			1.5	Test-equip-imp	Ohm			
			1.6	Cap	Farad			
2	M	AC input voltage, null	2.0	Voltage	Volt	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	Current	Ampere			
			2.4	Test-equip-imp	Ohm			
			2.5	Noise	Ratio			
3	M	DC input voltage	3.0	Voltage	Volt	X	X	
			3.1	Resolution	Integer			
			3.2	Test-equip-imp	Ohm			
4	M	DC null voltage	4.0	Voltage	Volt	X	X	
			4.1	Resolution	Integer			
			4.2	Test-equip-imp	Ohm			
5	E	Environmental constraints	5.0	Oper-temp	Degree C	X	X	
			5.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: VOLTMETER, PHASE ANGLE

ETE GENERIC CODE: VO8

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Phase angle	1.0	Phase-angle	Degree	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Voltage	Volt			
			1.4	Ref-volt	Volt			
			1.5	Test-equip-imp	Ohm			
			1.6	Bandwidth	Hertz			
			1.7	Harm-XXX-power	DB			
2	E	Environmental constraints	2.0	Oper-temp	Degree C	X	X	
			2.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: TEST SET, MEAS, PWR, ELECT

ETE GENERIC CODE: WA0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	G	Calibrator output	1.0	Power	Ratio	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	SWR	Ratio			
			1.4	Test-equip-imp	Ohm			
2	M	Input power	2.0	Power	Ratio	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	SWR	Ratio			
			2.4	Test-equip-imp	Ohm			
3	M	Peak power	3.0	Power-P	Ratio	X	X	
			3.1	Resolution	Integer			
			3.2	Freq	Hertz			
			3.3	Pulse-width	Sec			
			3.4	PRF	Hertz			
			3.5	Duty-cycle	Percent			
			3.6	Power-offset	DBM			
			3.7	Mod-freq	Hertz			
			3.8	Test-equip-imp	Ohm			
4	M	Input signal	4.0	Power-ratio	Ratio	X	X	
			4.1	Resolution	Integer			
			4.2	Freq	Hertz			
			4.3	Ref-level-offset	DB			
			4.4	Test-equip-imp	Ohm			
5	M	Pulse peak power	5.0	Power-P	Ratio	X	X	
			5.1	Resolution	Integer			
			5.2	Freq	Hertz			
			5.3	Pulse-width	Sec			
			5.4	PRF	Hertz			
			5.5	Duty-cycle	Percent			
			5.6	Power-offset	DBM			
			5.7	Mod-freq	Hertz			
			5.8	Test-equip-imp	Ohm			
6	M	Instantous power	6.0	Power-inst	Ratio	X	X	
			6.1	Resolution	Integer			
			6.2	Freq	Hertz			
			6.3	SWR	Ratio			
			6.4	Test-equip-imp	Ohm			

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: TEST SET, MEAS, PWR, ELECT

ETE GENERIC CODE: WA0

Functional capability			Parametric specifications				
Seq. No.	Function	Signal characteristic	Parameter descriptor	Units	Range/ value	Accuracy	Notes
7	E	Environmental constraints	7.0 Oper-temp	Degree C	X	X	
			7.1 Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: TEST SET, MEASURING, POWER

ETE GENERIC CODE: WA1

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	M	Input power	1.0	Power	Ratio	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	SWR	Ratio			
			1.4	Test-equip-imp	Ohm			
2	M	Reflected power	2.0	Power	Ratio	X	X	
			2.1	Resolution	Integer			
			2.2	Freq	Hertz			
			2.3	SWR	Ratio			
			2.4	Test-equip-imp	Ohm			
3	M	Amplitude modulation	3.0	Mod-ampl	Ratio	X	X	
			3.1	Resolution	Integer			
			3.2	Mod-freq	Hertz			
			3.3	Car-ampl	Ratio			
			3.4	Car-freq	Hertz			
			3.5	Mod-dist	Ratio			
			3.6	Test-equip-imp	Ohm			
4	M	Return loss	4.0	Power	Ratio	X	X	
			4.1	Resolution	Integer			
			4.2	Freq	Hertz			
			4.3	SWR	Ratio			
			4.4	Test-equip-imp	Ohm			
5	M	VSWR	5.0	SWR	Integer	X	X	
			5.1	Freq	Hertz			
			5.3	Test-equip-imp	Ohm			
6	M	Peak pulse power	6.0	Power-P	Ratio	X	X	
			6.1	Resolution	Integer			
			6.2	Freq	Hertz			
			6.3	Pulse-width	Sec			
			6.4	PRF	Hertz			
			6.5	Duty-cycle	Percent			
			6.6	Power-offset	DBM			
			6.7	Mod-freq	Hertz			
			6.8	Test-equip-imp	Ohm			

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: TEST SET, MEASURING, POWER

ETE GENERIC CODE: WA1

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
7	M	Peak envelope power	7.0	Power-P	Ratio	X	X	
			7.1	Resolution	Integer			
			7.2	Freq	Hertz			
			7.3	Pulse-width	Sec			
			7.4	PRF	Hertz			
			7.5	Duty-cycle	Percent			
			7.6	Power-offset	DBM			
			7.7	Mod-freq	Hertz			
			7.8	Test-equip-imp	Ohm			
8	E	Environmental constraints	8.0	Oper-temp	Degree C	X	X	
			8.1	Relative-humidity	Percent			

NOTES:

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: GENERATOR WAVEFORM

ETE GENERIC CODE: WF0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
1	G	Sine wave output	1.0	Voltage	Volt	X	X	
			1.1	Resolution	Integer			
			1.2	Freq	Hertz			
			1.3	Distortion	Ratio			
			1.4	Test-equip-imp	Ohm			
			1.5	Burst-count	Counts			
			1.6	Burst-rate	Hertz			
2	G	DC output voltage	2.0	Voltage	Volt	X	X	
			2.1	Resolution	Integer			
			2.2	Test-equip-imp	Ohm			
3	G	Time	3.0	Time	Second	X	X	
			3.1	Resolution	Integer			
			3.2	Voltage-P	Volt			
4	G	Pulse output	4.0	Voltage-P	Volt	X	X	
			4.1	PRF	Hertz			
			4.2	Resolution	Integer			
			4.3	Rise-time	Second			
			4.4	Fall-time	Second			
			4.5	Pulse-width	Second			
			4.6	Duty-cycle	Ratio			
			4.7	Delay	Second			
			4.8	DC-offset	Volt			
			4.9	Time-jit	Second			
			4.10	Droop	Ratio			
			4.11	Overshoot	Ratio			
			4.12	Preshoot	Ratio			
			4.13	Ringing	Ratio			
			4.14	Rounding	Ratio			
			4.15	Undershoot	Ratio			
			4.16	Test-equip-imp	Ohm			
			4.17	Burst-count	Counts			
			4.18	Burst-rate	Hertz			
5	G	Ramp output	5.0	Voltage	Volt	X	X	
			5.1	Resolution	Integer			
			5.2	Freq	Hertz			
			5.3	Distortion	Ratio			
			5.4	Test-equip-imp	Ohm			
			5.5	Burst-count	Counts			
			5.6	Burst-rate	Hertz			

ETE FUNCTIONAL CAPABILITIES AND PARAMETRIC SPECIFICATION TEMPLATE

ETE NOUN NAME: GENERATOR WAVEFORM
ETE GENERIC CODE: WF0

Functional capability			Parametric specifications					
Seq. No.	Function	Signal characteristic	Parameter descriptor		Units	Range/ value	Accuracy	Notes
6	G	Noise output	6.0	Voltage	Volt	X	X	
			6.1	Resolution	Integer			
			6.2	Freq	Hertz			
			6.3	Distortion	Ratio			
			6.4	Test-equip-imp	Ohm			
			6.5	Burst-count	Counts			
			6.6	Burst-rate	Hertz			
7	G	Square wave output	7.0	Voltage-PP	Volt	X	X	
			7.1	Freq	Hertz			
			7.2	Resolution	Integer			
			7.3	Rise-time	Second			
			7.4	Fall-time	Second			
			7.5	Duty-cycle	Ratio			
			7.6	Test-equip-imp	Ohm			
			7.7	Burst-count	Counts			
			7.8	Burst-rate	Hertz			
			7.9	Symmetry	Ratio			
8	G	Triangle wave output	8.0	Voltage	Volt	X	X	
			8.1	Resolution	Integer			
			8.2	Freq	Hertz			
			8.3	Distortion	Ratio			
			8.4	Test-equip-imp	Ohm			
			8.5	Burst-count	Counts			
			8.6	Burst-rate	Hertz			
9	E	Environmental constraints	9.0	Oper-temp	Degree C	X	X	
			9.1	Relative-humidity	Percent			

NOTES:

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I RECOMMEND A CHANGE:

1. DOCUMENT NUMBER: MIL-STD-2121A(NAVY)
2. DOCUMENT DATE (YYMMDD): 9 JUNE 1992
3. DOCUMENT TITLE: DETERMINATION OF ELECTRONIC TEST EQUIPMENT PARAMETERS
4. NATURE OF CHANGE *(Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)*

5. REASON FOR RECOMMENDATION

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a. NAME *(Last, First, Middle Initial)*

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