

INCH-POUND

MIL-DTL-16377/11B(SH)

2 August 1996

SUPERSEDING

MIL-F-16377/11A(SH)

18 March 1982

DETAIL SPECIFICATION SHEET

FIXTURES, LIGHTING; FLUORESCENT, GENERAL LIGHTING,
34 WATTS, 120 VOLTS, 60 HERTZ, WATERTIGHT,
SYMBOLS 77.4, 77.5, 344.2 AND 344.3

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

The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of MIL-DTL-16377 listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation.

All dimensions in inches.

For tolerances, other than specified herein, see 3.5.2 of MIL-DTL-16377.

AMSC N/A

FSC 6210

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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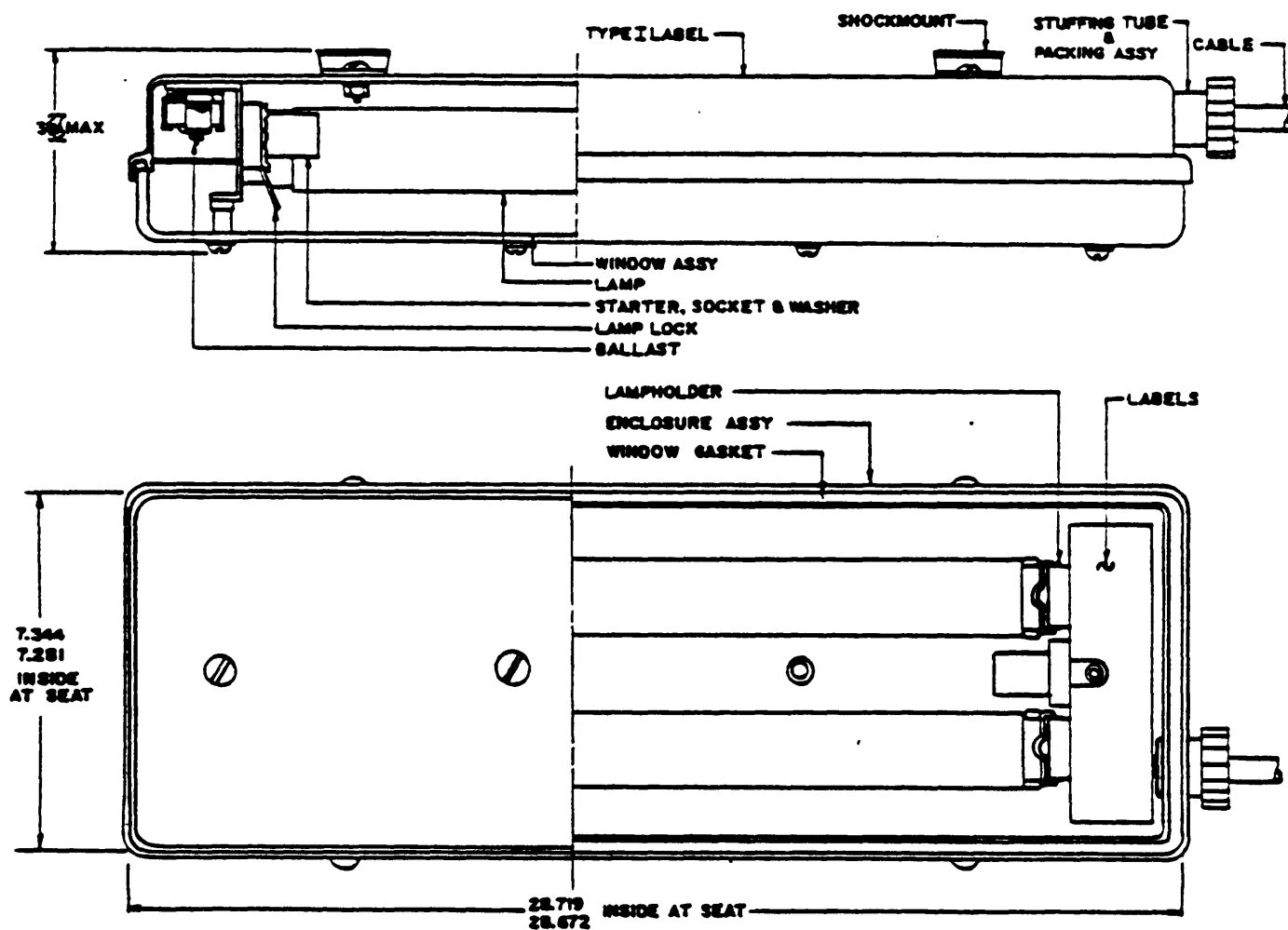


FIGURE 1. Typical view of Symbols 77.4 and 344.2.

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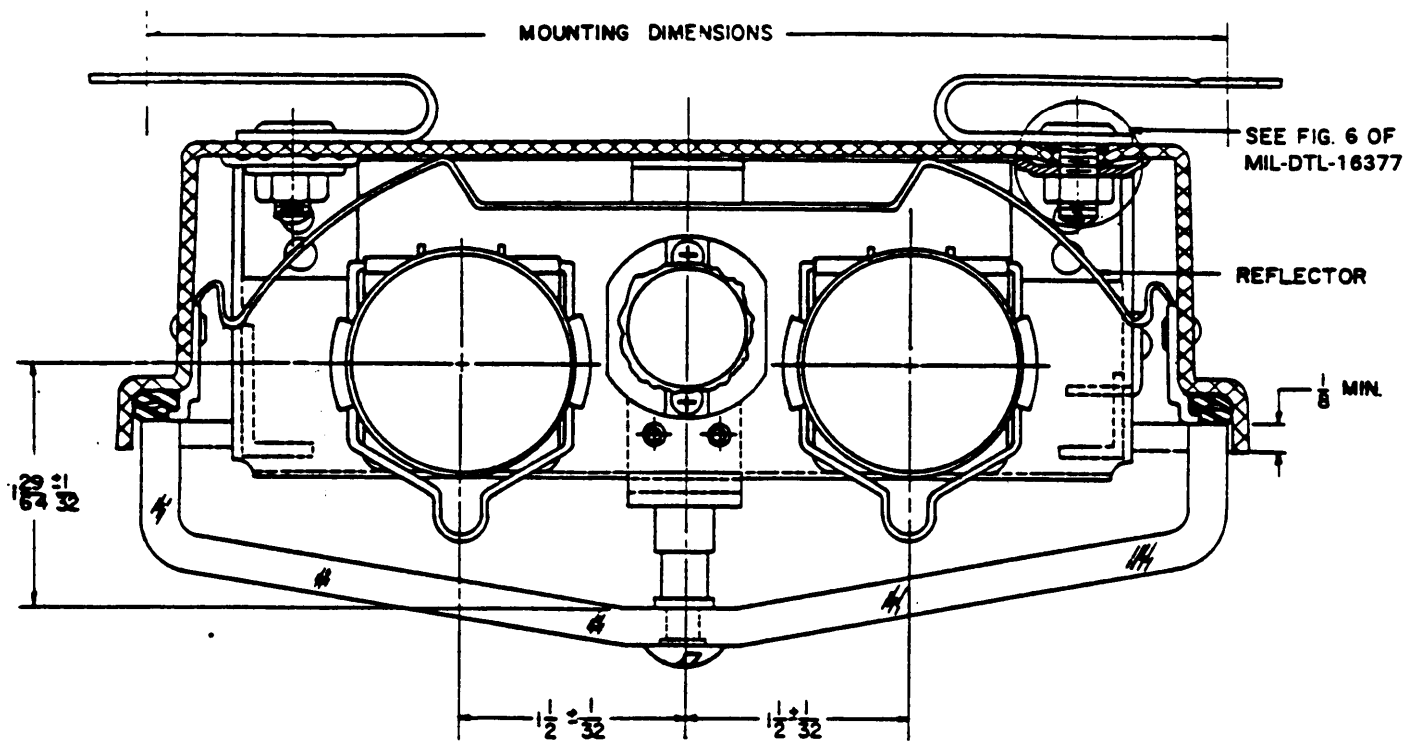


FIGURE 2. Typical section for Symbols 77.4 and 344.2.

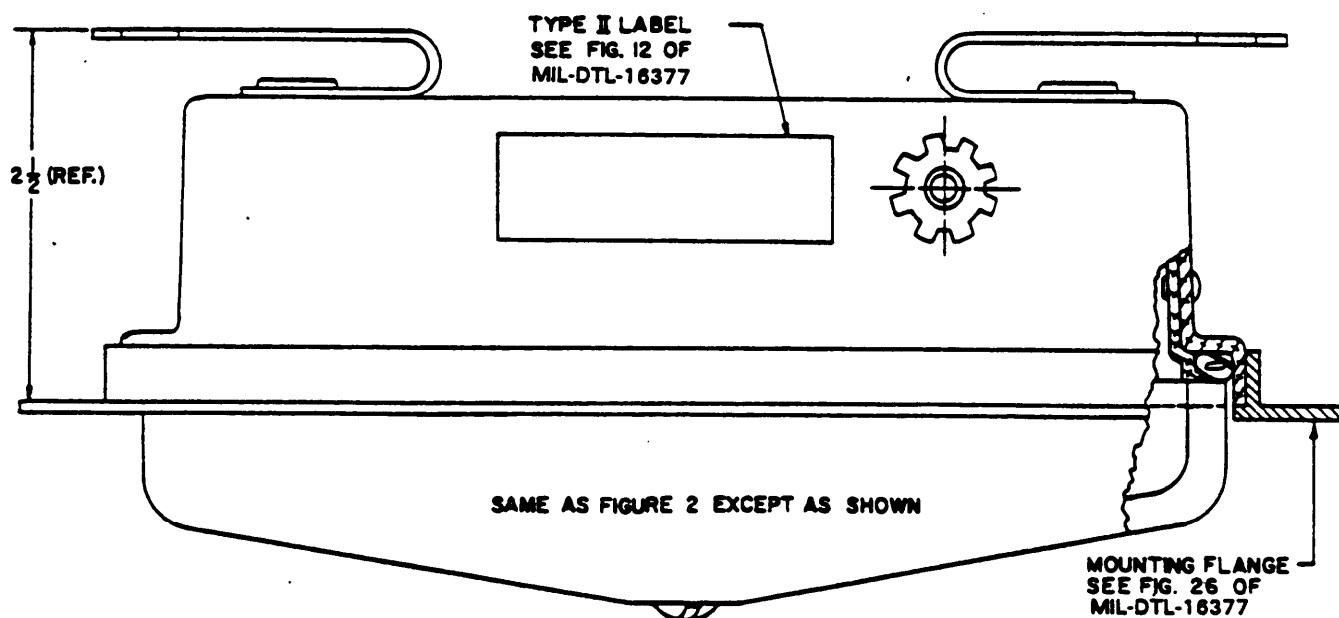
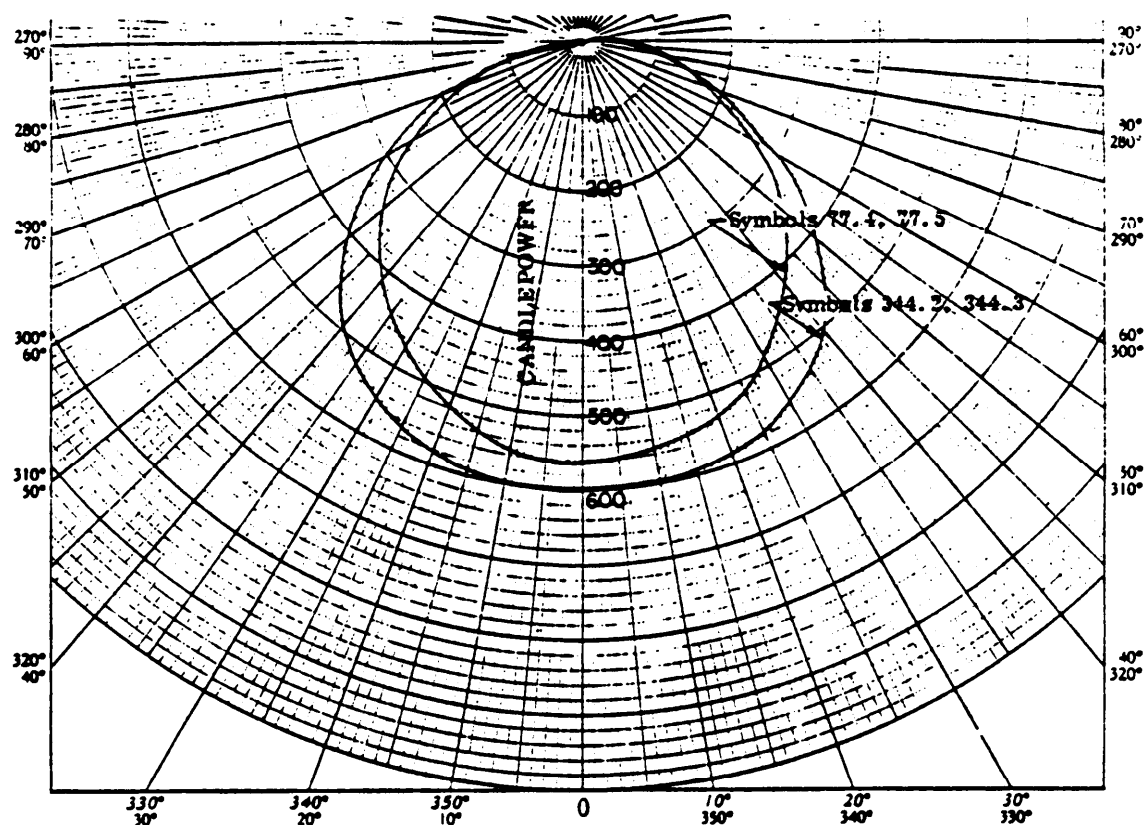


FIGURE 3. Typical section for Symbols 77.5 and 344.3

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ANGLE	CANDLEPOWER	
	SYMBOL NUMBER	
	77.4, 77.5	344.2, 344.3
0	560	590
5	550	590
10	550	590
15	540	590
20	520	580
25	505	570
30	470	550
35	450	530
40	410	500
45	385	460
50	350	410
55	310	360
60	265	300

ANGLE	CANDLEPOWER	
	SYMBOL NUMBER	
	77.4, 77.5	344.2, 344.3
65	230	240
70	180	190
75	135	140
80	90	100
85	60	90
90	50	50
95	30	42
100	25	20
105	20	10
110	10	0
115	0	0
120	0	0
125	0	0

Photometric test data:**Distance:** 10 feet.**Plane:** At right angles to long axis of fixture through geometric center of lamp.**Voltage:** 115 volts, 60 Hz.**Ambient temperature:** 76°F.**Lamps:** Use lamps furnished with fixtures seasoned for at least 100 hours.**Ballast:** Use ballast furnished with fixture.**Lamp correction:** Distribution curves based on 1280 lumens per lamp.FIGURE 4. Candlepower distribution curves.

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REQUIREMENTS:

CLASSIFICATION:

Type: I
Class: 2

SYMBOL NUMBERS:

- 77.4: Complete lighting fixture assembly, standard mounting, with two 17-watt cool white fluorescent lamps and white diffusing window assembly.
- 77.5: Complete lighting fixture assembly, flush mounting with two 17-watt cool white fluorescent lamps and white diffusing window assembly.
- 344.2: Complete lighting fixture assembly, standard mounting with two 17-watt cool white fluorescent lamps and clear and white prismatic window assembly.
- 344.3: Complete lighting fixture assembly, flush mounting, with two 17-watt cool white fluorescent lamps and clear and white prismatic window assembly.

DESIGN:

Electrical rating: 34 watts, 120 volts, 60 Hertz.

Dimension and configurations: See figures 1, 2, and 3 and figure 10 of MIL-DTL-16377.

Photometric data: See figure 4.

Lampholder spacing: See figure 21 of MIL-DTL-16377.

Wiring diagram: See figure 23 of MIL-DTL-16377.

Mounting dimensions:

Symbols 77.4 and 344.2: See figure 25 of MIL-DTL-16377.

Symbols 77.5 and 344.3: See figure 26 of MIL-DTL-16377.

Window assembly:

Symbols 77.4 and 77.5: Military part number M16377/11-001, figure 27 of MIL-DTL-16377.

Symbols 344.2 and 344.3: Military part number M16377/11-003, figure 27 of MIL-DTL-16377.

Enclosure: Watertight. See 3.5.11 of MIL-DTL-16377.

Cable: 10 feet of type LSTHOF-3 in accordance with MIL-C-24643/3.

Weight:

Symbols 77.4 and 344.2: 12 lbs maximum.

Symbols 77.5 and 344.3: 13 lbs 13 oz. maximum.

Designation and marking: The following labels shall be furnished in accordance with MIL-DTL-16377 applied as shown on figures 1 and 3:

- (a) Two type I.
- (b) One type II for Symbols 77.5 and 344.3 only.

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(c) One type IV label shall be "USE THE FOLLOWING REPAIR PARTS ONLY."

List all standard parts shown in table I and window assemblies of table IV by name and stock number only.

Standard parts: The standard parts shown in table I shall be used in the construction of the fixtures specified herein.

QUALITY ASSURANCE:

Quality assurance shall be as specified in MIL-DTL-16377 and as follows:

First article inspection:

Complete fixtures:

See table II.

Window assemblies:

See table III.

Conformance:

Same as the first article inspection.

Inspection of product for delivery:

Examination:

See MIL-DTL-16377.

Examination for preparation of delivery:

See MIL-DTL-16377.

Conformance tests:

See MIL-DTL-16377.

GENERAL INFORMATION:

Assignment of Military part numbers and general information is shown in table IV.

TABLE I. Standard parts.

Name	Specification or Military part number	National stock number (NSN)	Remarks
Lamp	A-A-50597		Industry number F17T12/CW
Lamp lock	M16377/40-002	6250-00-399-7040	
Lampholder	MIL-L-970/11	6250-00-284-0481	
Startersocket	MIL-L-970/13	6250-00-295-2738	
Starter	20W, type III of W-S-755	6250-00-299-2884	Commercial designation: FS2
Ballast	M16377/72-001		
Shockmount	M16377/41-009 or M16377/41-010	6210-00-973-1747 6210-00-973-1748	See 3.5.16 of MIL-DTL-16377
Red filter tube	M16377/42-003	6210-00-295-2838	Not furnished. See 3.7.7 of MIL-DTL-16377

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TABLE II. First article and comparison inspection for complete fixtures.

Test	Requirement	Test method	Remarks
Examination	3.13	4.5	
Operation	3.13	4.8.1	
Dielectric withstanding voltage	3.6.15	4.8.2	
Insulation resistance	3.6.16	4.8.3	
Enclosure effectiveness	3.5.11	4.8.14.4	Watertight
Shock	3.5.12	4.8.7	
Vibration	3.5.13	4.8.8	
Enclosure effectiveness	3.5.11	4.8.14.4	Watertight
Dielectric withstanding voltage	3.6.15	4.8.2	
Insulation resistance	3.6.16	4.8.3	
Noise	3.5.14	4.8.9	
Continuity of grounding	3.6.13.4	4.8.12	
Optical uniformity	3.7.4.1.1	4.8.4	
Stress relief	3.8.5.3	4.8.5	
Light output	3.7.1	4.8.6.1	Candlepower
Magnetic permeability	3.4.8	4.8.18	

TABLE III. First article and comparison inspection for window assemblies.

Test	Requirement	Test method	Remarks
Examination	3.13	4.5	
Optical uniformity	3.7.4.1.1	4.8.4	
Stress relief	3.8.5.3	4.8.5	
Shock	3.5.12	4.8.7	
Vibration	3.5.13	4.8.8	
Enclosure effectiveness	3.5.11	4.8.14.4	Watertight
Light output	3.7.1	4.8.6.1	Candlepower

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TABLE IV. Part number and general information.

Military part number <u>1</u> / M16377/11-	Item name	National stock number (NSN)	Remarks
77.4	Complete fixture, Symbol 77.4	6210-00-215-6355	<u>2</u> /
77.5	Complete fixture, Symbol 77.5		<u>2</u> /
344.2	Complete fixture, Symbol 344.2		New
344.3	Complete fixture, Symbol 344.3		New
001	Window assembly, white diffusing	6210-00-399-7035	<u>3</u> /
003	Window assembly, clear and white prismatic		New

1/ Military part number M16377/11-344, 344.1 and 002 have been superseded by Military part numbers M16377/11-344.2, 344.3 and M16377/67-004 respectively.

2/ Formerly covered on Drawing NAVSHIPS 9000-S6401-74363 and MS17179.

2/ Formerly covered on M616891-30.

Revision letters are not used to denote changes due to the extensiveness of the changes.

Preparing activity:
Navy - SH
(Project 6210-N661-06)