

CATALOG #	TYPE	
JOB NAME	WATTAGE	VOLTAGE

**MRR-07833-2500L**

# Lighting for Patient Spaces

## Sealed & Gasketed 7" Downlight • LED



Up to 60,000 Hour Life • Wet Location • IP65 Rated • LM-80 Qualified •

LM-79 Certified Photometry • ISO 5 / Class 100 Clean Room (-SH)

### Specifications

#### Delivered System Performance\*

- Lumen Series: **MUST SPECIFY**
- 2500L: 2500 nominal lumens (35W).
- Distribution: MFL standard. Optional: -NFL.
- Color temperature: 3500°K standard. Optional: -27K, -30K, -41K or -50K.
- CRI: 80+ standard. Optional: -HC (90+).
- 60,000 hour life (L70).
- Fully sustainable: removable for servicing.

#### Thermal Protection: SPECIFY VOLTAGE

- Thermal protector for insulation detection per UL/NEC. Must specify input voltage.

#### Thermal Management System

- All aluminum heat sink, components and housing maximize cool operation and long life while minimizing maintenance.

#### LED Power Supply - INTERNAL

- Suitable for outdoor / indoor use: -30°C (-22°F) to 60°C (140°F).
- 120-277V / 50-60Hz standard. Load insensitive.
- 0-10V CCR dimming standard. (100-10%)**

#### Trim / Lens Assembly

- Rustproof 100% aluminum grooveless,

- smooth, self-flanged white trim.
- Kirlin BioGard™ antimicrobial white finish continuously inhibits growth of bacteria on the coating of the trim.
- Regressed tempered prismatic spread lens with high efficiency reflector above.

#### IP65 5X Sealed and Gasketed

- (1) Silicone seal between trim and lens seals lens to trim, (2) closed cell gasketing between trim and housing flange seals trim to housing, (3) closed cell gasketing on trim flange seals flange to ceiling (4) closed cell gasketing on bottom pan seals housing to ceiling and (5) neoprene O-rings on stainless steel fasteners seal fasteners to trim.
- Meets ASTM E283 restricted airflow of 2 CFM maximum.

#### Acrylic Enameled Aluminum Housing

- Rustproof and corrosion resistant: Exceeds 1000 hour ASTM 5% salt spray test.
- Shallow depth fits restricted plenums.
- Cool operation: Extends life of all components.
- Fully sustainable: Entire luminaire, including LED light engine, is modular, easily visible and

- serviced through aperture.
- Built-in plaster flange.

#### Outlet Box

- UL listed J-box with insulated removable cover. Prewired 14 GA (NEC) with ½" and ¾" knockouts.

#### Installation

- Recess indoor or outdoor.
- Accommodates ceilings up to 1-1/8" thick or see Option -79.
- Compatible with fire rated enclosures (by others).
- 27" galvanized hanger bars with adjustable mounting brackets (2) supplied.

#### UL, C-UL (Canada) Listings

- Wet, damp or dry locations, covered ceilings.
- Through-branch conductors (4 #12 AWG 90°C).

#### IEC & FCC Compliance

- Meets IEC/EN 60601-1-2 electromagnetic compatibility standard for medical electrical equipment.
- FCC Part 15 certified for EMI/RFI emissions.

#### FIVE YEAR Limited Warranty

- Complete standard fixture.

### Available Infection Control Levels

LEVEL	OPTION	INFECTION PROTECTION
2	Standard	BioGard™ IP65
3	-SH	BioGard™ IP65 ISO 5 / Class 100 Cleanroom

### Other Listings / Codes



-NS in Options

MUST SPECIFY		OPTIONAL	Ordering Example: <b>MRR-07833-2500L-120-30K-NFL</b>
Product Number	Voltage	Options	
<b>MRR-07833-2500L</b>	-120 (120 volts) -277 (277 volts) -97 (Specify other)	See "Options" below	

### Options

#### Input Power: SPECIFY

- 120 120V (50-60Hz) input for thermal protector.
- 277 277V (50-60Hz) input for thermal protector.
- 97 Specify other voltage. Consult factory.

#### LED Power Supply

- D1 0-10V 1.0% dimming instead.
- D2 0-10V 0.1% dimming instead.
- D3 DALI 1.0% dimming instead.
- D4 DALI 0.1% dimming instead.
- D5 DMX512A 0% dimming instead.
- ECO Digital driver for Lutron EcoSystem controls. Dims to 1% or consult factory.
- EM INTERNAL emergency battery pack. Delivers 500 lumens. Run time: 90+ minutes.
- ERH REMOTE emergency battery pack. Delivers 1000 lumens. Run time: 90+ minutes. CEC Compliant.

#### Color Temperature (CCT)

- 27K Color temperature 2700°K instead.
- 30K Color temperature 3000°K instead.
- 41K Color temperature 4100°K instead.
- 50K Color temperature 5000°K instead.
- HC 90+ CRI instead. Consult factory.

#### Optics

- NFL Narrow flood distribution.

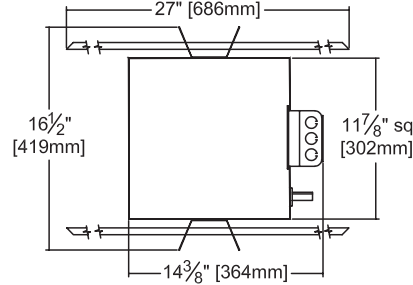
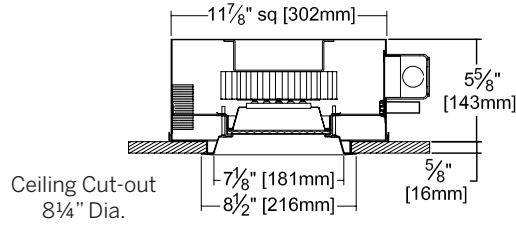
#### Lens and Trim

- 13 Clear poly lens below lens. Photometric distribution is unaffected.
- 17 Prismatic high strength acrylic lens instead.
- 23 Frosted micropismatic lens instead.
- 35T Silver enameled trim (complete).
- 94 Custom color/finish. Specify. Consult factory.
- CF Custom color filter (Rosco). Specify.
- GE Green acrylic filter mounted in lens assembly.
- NS NSF approved fixture.
- WA White acrylic (flat) diffuser instead; will produce wide flood distribution.

#### Other

- 79 Extension collar for up to 2" thick ceilings.
- 99 Special modification. Consult factory.
- FS Single in-line fuse.
- SH Sealed housing and junction box. Provides Cleanroom Rated luminaire. (ISO 5 Class 100)

Dimensions



Detailed Photometry - Installed Fixture

Photometry from I.T.L., Boulder, CO

Photometric testing done in accordance with IESNA LM-79

-2500L STANDARD (MFL)

Lumens: 3030  
 Beam: ~45°  
 SC: 0.8  
 LPW: 82  
 Efficiency: 81.5%  
 UL Test: 1259190

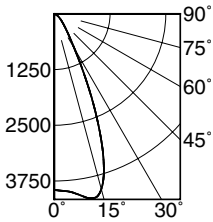


Total System Watts 36.9

	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	3951	3951	3951	3951	3951
5	4006	4006	4006	4006	4006
15	4072	4072	4072	4072	4072
25	1801	1801	1801	1801	1801
35	526	526	526	526	526
45	237	237	237	237	237
55	116	116	116	116	116
65	51	51	51	51	51
75	17	17	17	17	17
85	3	3	3	3	3
90	0	0	0	0	0

Cone of Light ▲

Dist.	FC	Dia.
6	110.0	4.9
8	61.7	6.6
10	39.5	8.2
12	27.4	9.9
14	20.2	11.5
16	15.4	13.1



-2500L Option -NFL

Lumens: 3010  
 Beam: ~31°  
 SC: 0.5  
 LPW: 83  
 Efficiency: 81.0%  
 UL Test: 1264619

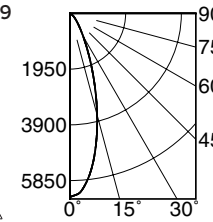


Total System Watts 36.5

	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	6426	6426	6426	6426	6426
5	6033	6033	6033	6033	6033
15	3679	3679	3679	3679	3679
25	1514	1514	1514	1514	1514
35	587	587	587	587	587
45	260	260	260	260	260
55	111	111	111	111	111
65	46	46	46	46	46
75	18	18	18	18	18
85	5	5	5	5	5
90	2	2	2	2	2

Cone of Light ▲

Dist.	FC	Dia.
6	179.0	3.3
8	100.0	4.4
10	64.3	5.5
12	44.6	6.6
14	32.8	7.7
16	25.1	8.8



LM-80 Qualified • LM-79 Certified Photometry

\* LED manufacturers maintain a tolerance of ±7% on flux (lumens) and power (electrical) measurements. Kirlin photometrics are actual test data from Independent Testing Laboratories (ITL) where photometry was measured from 3717 lumen (-2500L) light engines (within the established tolerance).

▲ Cone of Light Key  
 Dia. (in ft.) shown is where FC value is half the FC at nadir.

Dist. Distance (Ft.) from fixture  
 FC Footcandles at nadir (0°)  
 Dia. Circle of light at 50% of FC

LIMITED WARRANTY: CATALOGUED KIRLIN LED FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR THREE YEARS FROM DATE OF PURCHASE. INSTALLATION N.E.C. IN NORMAL USE. Manufacturer, at its option will replace or repair such fixture or refund the purchase price on presentation of proof of purchase and defective fixture to the office of manufacturer within three years of original shipment. Liability of manufacturer is limited to the foregoing, and manufacturer shall not be liable for any other damages, direct or indirect, sustained or suffered by purchaser or any person. This warranty is supplied to the buyer in place of all other warranties, expressed or implied. Seller does not warrant as to merchantability or fitness for a particular use, nor will any oral statement constitute a warranty or amend this specific warranty. Abnormal use, abuse of the fixture, improper installation, or repair or modification of the fixture without prior written authorization from the manufacturer will render the warranty void. REV. MAR 2023