

CATALOG #	TYPE	
JOB NAME	WATTAGE	VOLTAGE

Lighting for Patient Spaces

Super Shallow Lensed 4" Downlight

Up to 90,000 Hour Life • Type IC • Wet Location
LM-80 Qualified • LM-79 Certified Photometry

MRR-04820



Specifications

Delivered System Performance*

- Lumen Series: **Must Specify**
 - 1500L (20W)
 - 1000L (11W)
- Distribution: MFL standard; optional: -NFL or -WFL
- Color temperature: 3500°K standard; optional: -27K, -30K, -41K, or -50K
- CRI: 80+ standard.; optional: -HC (90+)
- 90,000 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

- Aluminum heat sink and components for cool operation, long life, and low maintenance

LED Driver - INTERNAL

- Indoor/Outdoor: -30°C to 60°C (-22°F to 140°F)
- 0-10V CCR dimming standard (100-10%)
- Voltage Options: **Must Specify**
 - 120: -120V (50-60Hz); load insensitive
 - 277: -277V (50-60Hz); load insensitive

Trim Assembly

- Electrically isolated "dead front" gasketed trim
- Seamless tapered rustproof aluminum; self-flanged with white finish (field paintable)
- Regressed tempered prismatic spread lens

Acrylic Enameled Aluminum Housing

- Rustproof: exceeds 1000 hour ASTM 5% salt spray test; all components fully sustainable
- Shallow depth fits restricted plenums
- Cool operation extends component life
- Modular design; visible and fully serviceable through aperture
- Built-in plaster flange

Outlet Box (Galvanized)

- UL Listed, 14GA, insulated, removable cover
- 1/2" and 3/4" knockouts

Installation & Hardware

- Indoor/outdoor in ceilings up to 1 1/8" thick
- Compatible with fire rated enclosures (by others)
- 27" galvanized hanger bars & adjusting 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

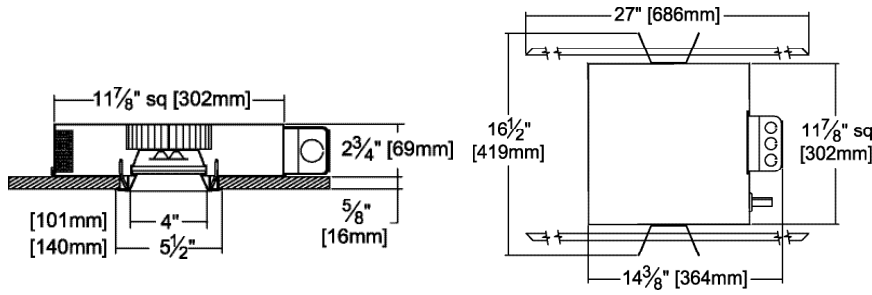


Options and Ordering Configuration

(Example: MRR-04820-1500L-120-30K-NFL)

Must Specify			Optional											
Model	Lumens	Volts	CCT & CRI	Beam	Driver Options	Emergency	Lens & Trim Options	Other Options						
MRR-04820	-1500L -1000L	-120 -277 -97: Other voltage; consult factory	(Blank): 35K, 80+ CRI 80+ CRI -27K: 2700°K -30K: 3000°K -41K: 4100°K -50K: 5000°K 90+ CRI -27K-HC: 2700°K -30K-HC: 3000°K -35K-HC: 3500°K -41K-HC: 4100°K -50K-HC: 5000°K	(Blank): MFL -NFL -SPT -WFL	(Blank): Standard 0-10V CCR 1.0% dim -D1: 0-10V 1.0% dim -D2†: 0-10V 0.1% dim -D3†: DALI 1.0% dim -D4†: DALI 100-0.1% dim -D5†: DMX512A 0%dim; -1000L only	(Blank): None -EI: Remote emergency inverter for 100% of rated lumens; 90+ minutes; 120V or 277V, 60Hz input only; specify voltage; N/A for options -FS -EM: Internal emergency battery pack; Delivers 500 lumens; CEC Compliant; 90+ minutes -ERH: Remote emergency battery pack; delivers 1000 lumens; CEC Compliant; 90+ minutes	(Blank): Clear aluminum self-flanged downlight cone with lens above Trim Finishes -30T: All white acrylic enameled cone -31: White acrylic enameled cone flange -94: Custom color; consult factory -BG: BioGard™ anti-microbial white -70T: SofTex™ clear self-flanged cone Other Trim Features -32: White trim extender, specify OD -33: Decorative Glow Ring; see last page for details -DF: Electrically isolated trim Lens Options -23: Frosted microprismatic lens -CF: Custom color filter (Rosco); specify -WA: White acrylic (flat) diffuser instead; will produce wide flood distribution	(Blank): None Mounting -79: Extension collar; ceilings up to 2" thick Other Options -99: Special modification; consult factory -FS: Fused primary; One per fixture; not for use with Option -EI						
*See note next page														
<table border="1"> <thead> <tr> <th colspan="2">Projected L70** for Kirlin Luminaires</th> </tr> </thead> <tbody> <tr> <td>In Open Plenum</td> <td>90,000 hours</td> </tr> <tr> <td>In Insulation (Type IC)</td> <td>60,000 hours</td> </tr> </tbody> </table>			Projected L70** for Kirlin Luminaires		In Open Plenum	90,000 hours	In Insulation (Type IC)	60,000 hours						
Projected L70** for Kirlin Luminaires														
In Open Plenum	90,000 hours													
In Insulation (Type IC)	60,000 hours													
**Hours at 70% lumen maintenance														
			† Consult factory for use with -2000L lumen series											

Dimensions



Ceiling Cut-out
5" Dia.

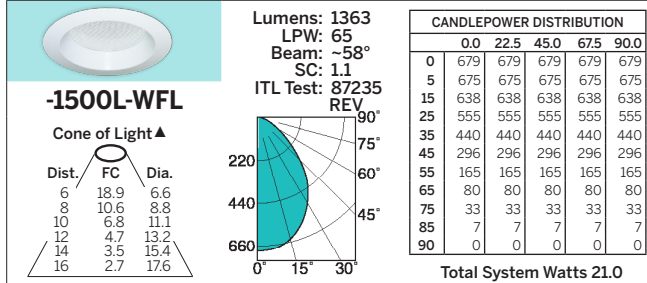
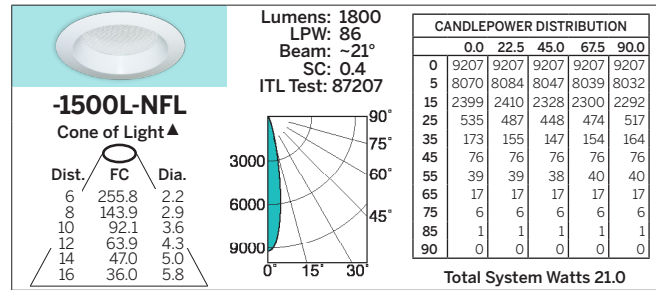
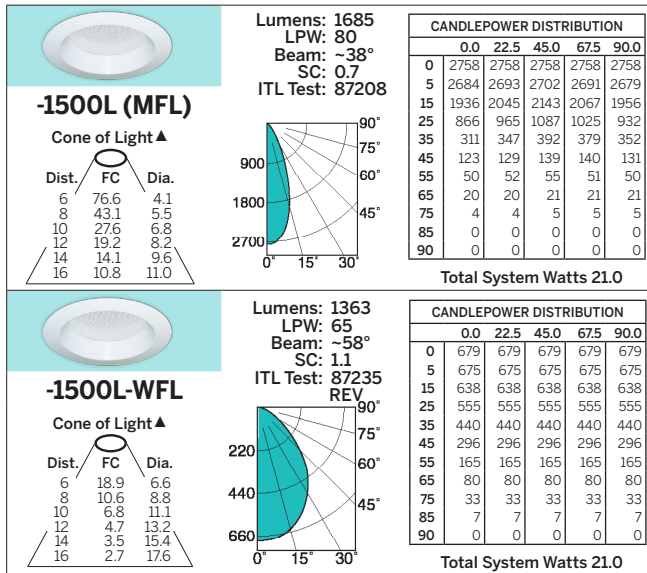
Performance Factors

NOMINAL LUMENS	LUMEN FACTOR	NOMINAL WATTS	LPW FACTOR
-1000L	0.58	0.50	1.17

Photometry - Installed Complete Fixture

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

LM-79 IESNA Certified Photometry from Independent Lab



*LED manufacturers maintain a tolerance of +/-7% on flux (lumens) and power (electrical) measurements.

▲ Cone of Light Key
 Dist. Distance (Ft.) from fixture
 Dia. (in ft.) shown is where FC value is half the FC at nadir.
 FC Footcandles at nadir (0°)
 Dia. Circle of light at 50% of FC