

CATALOG #	TYPE
JOB NAME	VOLTAGE

LRS-04500-2500L

Open Appearance 4" Square • LED

Up to 60,000 Hour Life • Wet Location
 10% Dimming • 3 Distributions • 4 CCT • 3-Step Binning
 LM-80 Qualified • LM-79 Certified



Specifications

Delivered System Performance*

- Lumen Series: **MUST SPECIFY**
 -2500L: 2500 nominal lumens (35W).
- Distribution: MFL standard.
 Optional: -SPT or -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) standard.

- 120-277V / 50-60Hz standard. Load insensitive.
- 0-10V CCR dimming standard. (100-10%)**

Trim

- Specular clear aluminum self-flanged square downlight cone with tempered glass lens above.

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.
- 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 1¼" thick. 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.

MUST SPECIFY		OPTIONAL	Ordering Example: LRS-04500-2500L-120-30K-NFL
Product Number	Voltage	Options	
LRS-04500-2500L	-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 100-1.0% dimming instead.
- D2 0-10V 100-0.1% dimming instead.
- D3 DALI 100-1.0% dimming instead.
- D4 DALI 100-0.1% dimming instead.
- D40 -40°C driver with 0-10V 10% 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.
- SPT Spot distribution.

Trims

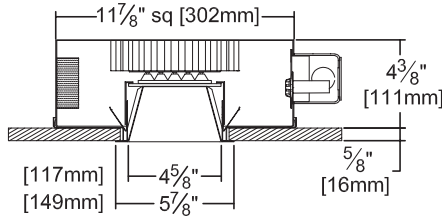
- 23 Frosted microprismatic lens instead.
- 30 All white acrylic enameled cone.
- 31 White acrylic enameled cone flange.
- 32 White oversize trim ring. Specify O.D.
- 33 Decorative Glow Ring suspended trim assembly. Consult factory.
- 37F Dark bronze acrylic enameled cone flange.
- 38F Black acrylic enameled cone flange.

- 45 Gasket between trim flange and ceiling.
- 70 SoftTex™ clear self-flanged cone.
- 94 Custom color/finish. Specify. Consult factory.
- WA White acrylic (flat) diffuser instead; will produce wide flood distribution.

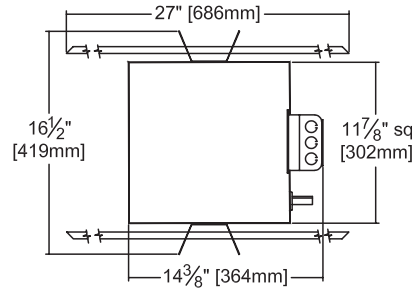
Other

- 79 Extension collar for ceilings up to 2" thick.
- 99 Special modification. Consult factory.
- FS Single in-line fuse.
- RH Residential mounting hardware instead. Suitable for wood joist ceilings with spacing from 14½" to 25½" with ⅛" vertical adjustability.

Dimensions



Ceiling Cut-out
5 1/4" Sq.



Detailed Photometry - Installed Fixture

Photometric testing done in accordance with IESNA LM-79

Photometry from UL Verification Services, Allentown, PA

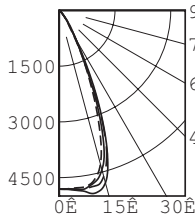
-2500L STANDARD (MFL)

Lumens: 2944
Beam: ~43°
SC: 0.7
LPW: 80
Efficiency: 79.2%
UL Test: 1259197



Total System Watts 36.6

CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	4811	4811	4811	4811	4811
5	4798	4846	4857	4824	4835
15	4282	4538	4803	4624	4438
25	1706	1777	2054	1901	1752
35	385	385	400	478	501
45	71	104	111	98	85
55	10	9	12	11	10
65	1	1	1	1	1
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0



Cone of Light ▲

Dist.	FC	Dia.
6	134.0	4.7
8	75.2	6.3
10	48.1	7.8
12	33.4	9.4
14	24.5	10.9
16	18.8	12.5

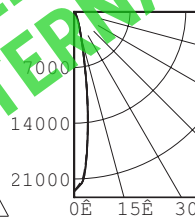
-2500L Option -SPT

Lumens: 3016
Beam: ~16°
SC: 0.3
LPW: 82
Efficiency: 81.1%
UL Test: 1259196



Total System Watts 36.6

CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	22540	22540	22540	22540	22540
5	17780	17940	17920	17970	18040
15	3487	3365	3339	3262	3300
25	825	902	1032	782	715
35	192	213	280	255	198
45	43	56	69	58	50
55	5	5	5	4	4
65	2	1	1	1	1
75	1	1	1	1	0
85	1	1	1	1	1
90	2	1	1	1	1



Cone of Light ▲

Dist.	FC	Dia.
6	625.0	1.7
8	352.0	2.3
10	225.0	2.9
12	157.0	3.5
14	115.0	4.0
16	88.0	4.6

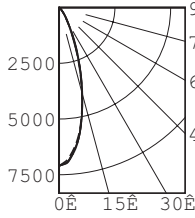
-2500L Option -NFL

Lumens: 2753
Beam: ~30°
SC: 0.5
LPW: 75
Efficiency: 74.1%
UL Test: 1264621



Total System Watts 36.5

CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	7099	7099	7099	7099	7099
5	6533	6581	6615	6643	6663
15	3935	3956	3959	3958	4008
25	1484	1472	1555	1423	1363
35	417	423	423	473	477
45	86	114	123	108	102
55	8	8	10	9	9
65	1	1	1	1	1
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0



Cone of Light ▲

Dist.	FC	Dia.
6	197.0	3.2
8	111.0	4.3
10	71.0	5.4
12	49.3	6.5
14	36.2	7.5
16	27.7	8.6

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 UL Verification Services (UL) 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

SUBMITTAL DATA

APPROVAL STAMP

JOB NAME _____
TYPE _____
WATTAGE _____ VOLTAGE _____
CATALOG NUMBER _____



LIMITED WARRANTY: CATALOGED KIRLIN FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR FIVE YEARS FROM DATE OF PURCHASE. INSTALL TO N.E.C. IN NORMAL USE. Manufacturer at the option will replace or repair such fixture or refund the purchase price on presentation of proof of purchase and defective fixture at the offices of manufacturer within five years of original shipment. Liability of manufacturer is limited to the original manufacturer and manufacturer shall not be liable for any other damages, direct or indirect, sustained or suffered by purchaser or any other 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.