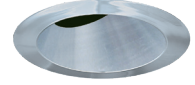


CATALOG #	TYPE
JOB NAME	VOLTAGE

Open Appearance 4" Adjustable • LED

Up to 90,000 Hour Life • Air Tight Optional • Type IC
10% Dimming • 3 Distributions • 5 CCT • 3-Step Binning
LM-80 Qualified • LM-79 Certified • Wet Location

LRR-04022-2000L
LRR-04022-1500L
LRR-04022-1000L



Specifications

Delivered System Performance*

- Lumen Series: **MUST SPECIFY**
- 2000L: 2000 nominal lumens (25W).
- 1500L: 1500 nominal lumens (20W).
- 1000L: 1000 nominal lumens (11W).
- Distribution: NFL standard.
- Optional: -SPT or -MFL.
- 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.

Center Beam Optics

- Self-aligns with trim for optimal performance.
- Hot aiming by hand.
- Tilts from 0° to 45° and locks in place.
- Rotates full 360° and locks in place.
- Accommodates sloped ceilings up to 45°.

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 Assembly

- Clear specular aluminum trim.
- Self-flanged, low glare angle-cut cone with lens above.
- Optional colors and finishes available.

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 1/2" and 3/4" knockouts.

Installation

- Recess indoor or outdoor.
- Accommodates ceilings up to 1-1/8" 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.
- Type IC: for direct contact with insulation.
- Through-branch conductors (4 #12 AWG 90°C) for Type IC Listing.

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: LRR-04022-2000L-120-30K-MFL
Product Number	Voltage	Options	
LRR-04022-2000L LRR-04022-1500L LRR-04022-1000L	-120 (120 volts) -277 (277 volts) -97 (Specify other)	See "Options" below	

Options

Input Power: SPECIFY

- 120 120V (50-60Hz) input.
- 277 277V (50-60Hz) input.
- 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 for -1000L only.
- D40 -40°C driver with 0-10V 10% dimming instead.
- EI Remote emergency inverter for 100% of rated lumens. Run time: 90+ minutes. 120 or 277V, 60 Hz input only. Specify voltage. Not for use with Options -FS.
- 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.

† Consult factory for use with -2000L lumen series.

Color (CCT and CRI)

- 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

- MFL Medium flood distribution.
- SPT Spot distribution.

Lens and Trim

- 30T White enamel (complete trim).
- 30F White enamel (flange only).
- 32 White oversize trim ring. Specify 06003 O.D.
- 35T Silver enamel (complete trim).
- 35F Silver enamel (flange only).
- 37T Dark bronze enamel (complete trim).
- 37F Dark bronze enamel (flange only).
- 38T Black enamel (complete trim).
- 38F Black enamel (flange only).
- 45 Gasket between trim flange and ceiling.
- 70T Clear semi-specular SofTex™ (complete trim).
- 94 Custom color/finish. Specify. Consult factory.
- CF Custom color filter (Rosco). Specify.
- DF Electrically isolated "dead front" gasketed trim.

- WA White acrylic (flat) diffuser instead; will produce wide flood distribution.

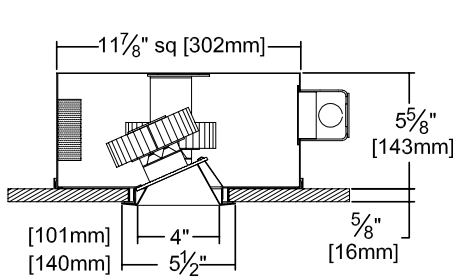
Other

- 99 Special modification. Consult factory.
- AT Air tight version. Meets ASTM E283 restricted airflow of 2 CFM maximum.
- DL Downlight cone instead. Clear specular finish standard or add optional trim selection.
- FS Single in-line fuse. Not for use with Option -EI.
- RH Residential mounting hardware instead. Suitable for wood joist ceilings with spacing from 14 1/8" to 25 1/8" with 5/8" vertical adjustability.

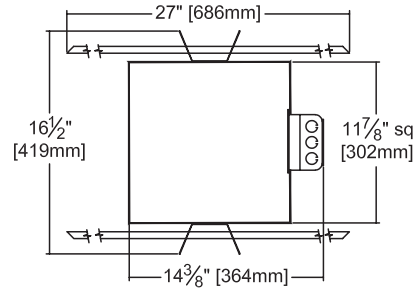
Projected L70** for Kirlin Luminaires	
In Open Plenum	90,000 hours
In Insulation (Type IC)	60,000 hours

** Hours at 70% lumen maintenance

Dimensions



Ceiling Cut-out
5" Dia.



Detailed Photometry - Installed Fixture

Photometric testing done in accordance with IESNA LM-79

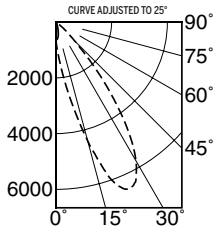
Photometry from I.T.L., Boulder, CO

-1500L STANDARD (NFL)

Lumens: 1564
Beam: ~27°
SC: 0.5
LPW: 75
Effic: 77.3%
ITL Test: 87186



Total System Watts 20.8



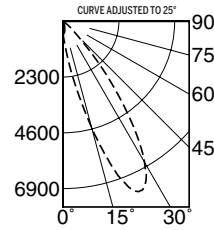
CANDLEPOWER DISTRIBUTION						
	0.0	45.0	90.0	135.0	180.0	
0	628	628	628	628	628	628
5	1313	1071	610	359	291	
15	4402	2006	324	100	70	
25	6503	1548	108	35	25	
35	4202	700	37	13	10	
45	949	140	10	3	3	
55	73	11	1	1	0	
65	1	1	0	0	0	
75	0	0	0	0	0	
85	0	0	0	0	0	
90	0	0	0	0	0	

-1500L Option -SPT

Lumens: 1566
Beam: ~24°
SC: 0.4
LPW: 75
Effic: 77.4%
ITL Test: 87185



Total System Watts 20.8



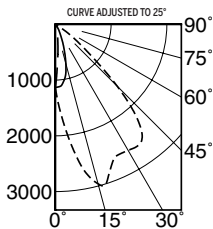
CANDLEPOWER DISTRIBUTION						
	0.0	45.0	90.0	135.0	180.0	
0	510	510	510	510	510	510
5	1084	862	489	289	242	
15	4525	1774	244	85	62	
25	7693	1397	86	31	23	
35	4626	587	32	12	9	
45	845	117	9	4	3	
55	57	10	1	1	0	
65	0	0	0	0	0	
75	0	0	0	0	0	
85	0	0	0	0	0	
90	0	0	0	0	0	

-1500L Option -MFL

Lumens: 1557
Beam: ~43°
SC: 0.8
LPW: 75
Effic: 77.0%
ITL Test: 87187



Total System Watts 20.8



CANDLEPOWER DISTRIBUTION						
	0.0	45.0	90.0	135.0	180.0	
0	1133	1133	1133	1133	1133	1133
5	1807	1635	1113	641	534	
15	2961	2446	729	184	124	
25	2601	1996	242	61	41	
35	2631	1034	67	21	15	
45	1571	284	20	7	4	
55	288	34	3	1	1	
65	2	1	0	0	0	
75	0	0	0	0	0	
85	0	0	0	0	0	
90	0	0	0	0	0	

LUMEN SERIES	LUMEN FACTOR	WATTAGE FACTOR	LPW FACTOR
-2000L	1.257	1.369	0.92
-1500L	1.000	1.000	1.00
-1000L	0.579	0.495	1.17

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 2022 lumen (-1500L) 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

JOB NAME _____
TYPE _____ VOLTAGE _____
CATALOG NUMBER _____

APPROVAL STAMP



LIMITED WARRANTY: CATALOGED KIRLIN FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR FIVE YEARS FROM DATE OF PURCHASE. INSTALLATION 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 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.