

CATALOG #	TYPE
JOB NAME	VOLTAGE

IP66 Rated 6" LED Downlight

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



LRR-06020-2000L
LRR-06020-1500L
LRR-06020-1000L



4" Lens Aperture

Specifications



Available -
See Options

Delivered System Performance*

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

Thermal Management System

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

LED Power Supply - INTERNAL

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

Trim / Lens Assembly

- Smooth white seamless tapered aluminum self-flanged rigid cast trim (field paintable).

- High strength prismatic acrylic above .125" clear flat polycarbonate lens. Also see -DA.
- Vandal and ligature resistant, see Option -25.
- BioGard™ antimicrobial trim, see Option -BGT.

IP66 Sealed and Gasketed Trim

- Silicone seal between trim and lens seals lens to trim.
- Closed cell gasketing on trim flange seals flange to ceiling.
- O-rings on stainless steel fasteners seal fasteners to trim.
- Meets ASTM E283 restricted airflow of 2CFM 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.
- 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

- Recesses indoor/outdoor in covered locations.
- 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-06020-2000L-120-30K-BN
Product Number	Voltage	Options	
LRR-06020-2000L LRR-06020-1500L LRR-06020-1000L	-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.
- 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, 60Hz input only. Specify voltage. Not for use with Option -29 or -FS.

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

- ERH REMOTE emergency battery pack. Delivers 1000 lumens. Run time: 90+ minutes. CEC Compliant.

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 instead.
- NFL Narrow flood distribution instead.

Lens and Trim

- 25 Vandal resistant trim, hardware and lensing. Provides ligature and vandal resistance. Not available with NSF rating.
- 35T Silver enamel (complete trim).
- 94 Custom color/finish. Specify. Consult

- BGT Antimicrobial white BioGard™ (complete trim).

- BN Brushed nickel cast trim.
- CF Custom color filter (Rosco). Specify.
- DA Diffuse acrylic lens above poly instead of prismatic acrylic. -WFL only.
- WA White acrylic (flat) diffuser above poly instead of prismatic acrylic. Will produce wide flood distribution.

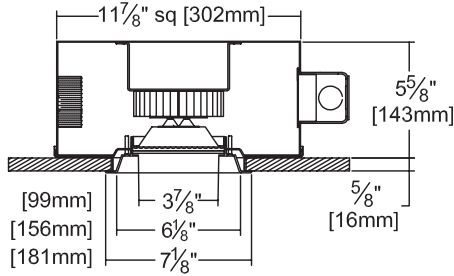
Other

- 99 Special modification. Consult factory.
- FS Single in-line fuse. Not for use with Option -EI.
- SH Sealed housing and junction box. Provides Cleanroom Rated luminaire. (ISO 5 Class 100)

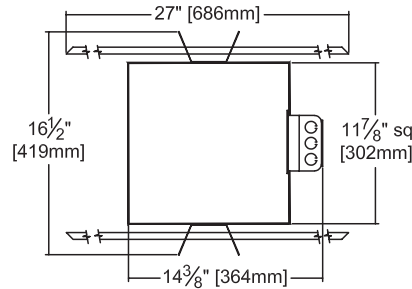
Projected L70** for Kirlin luminaires	
In Open Plenum	90,000 hours
In Insulation (Type IC)	60,000 hours

** Hours at 70% lumen maintenance

Dimensions



Ceiling Cut-out
6 3/4" Dia.



Detailed Photometry - Installed Fixture

Photometric testing done in accordance with IESNA LM-79

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

-1500L STANDARD (WFL)

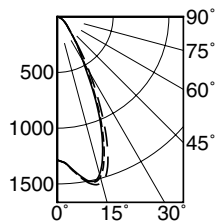
Lumens: 1366
Beam: ~50°
SC: 0.9
LPW: 75
Efficiency: 67.6%
ITL Test: 90894



Total System Watts 18.2

Cone of Light ▲

Dist.	FC	Dia.
6	35.7	5.6
8	20.1	7.5
10	12.9	9.4
12	8.9	11.2
14	6.6	13.1
16	5.0	15.0



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	1286	1286	1286	1286	1286
5	1365	1365	1364	1363	1359
10	1488	1509	1538	1499	1463
15	829	889	930	854	792
20	300	315	333	311	307
25	133	136	138	132	133
30	76	76	75	76	75
35	35	35	34	34	35
40	7	7	7	7	7
45	2	2	2	2	2
90	0	0	0	0	0

-1500L Option -NFL

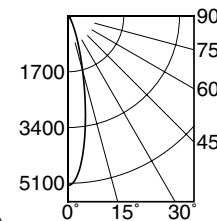
Lumens: 1358
Beam: ~22°
SC: 0.4
LPW: 75
Efficiency: 67.2%
ITL Test: 90895



Total System Watts 18.1

Cone of Light ▲

Dist.	FC	Dia.
6	143.5	2.4
8	80.7	3.1
10	51.7	3.9
12	35.9	4.7
14	26.4	5.5
16	20.2	6.3



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	5166	5166	5166	5166	5166
5	4526	4526	4526	4526	4526
10	1723	1723	1723	1723	1723
15	487	487	487	487	487
20	172	172	172	172	172
25	90	90	90	90	90
30	52	52	52	52	52
35	21	21	21	21	21
40	4	4	4	4	4
45	1	1	1	1	1
90	0	0	0	0	0

-1500L Option -MFL

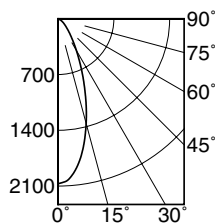
Lumens: 1273
Beam: ~35°
SC: 0.6
LPW: 71
Efficiency: 63.0%
ITL Test: 90900



Total System Watts 18.0

Cone of Light ▲

Dist.	FC	Dia.
6	57.5	3.7
8	32.4	5.0
10	20.7	6.2
12	14.4	7.5
14	10.6	8.7
16	8.1	10.0



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	2071	2071	2071	2071	2071
5	1976	1976	1976	1976	1976
10	1360	1360	1360	1360	1360
15	687	687	687	687	687
20	304	304	304	304	304
25	141	141	141	141	141
30	68	68	68	68	68
35	25	25	25	25	25
40	5	5	5	5	5
45	1	1	1	1	1
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

Dist. (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
CATALOG NUMBER

VOLTAGE

APPROVAL STAMP



LIMITED WARRANTY: CATALOGED KIRLIN FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR FIVE YEARS FROM DATE OF PURCHASE. INSTALLER 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 person. This warranty is supplied 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. 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.