

CATALOG #	TYPE
JOB NAME	VOLTAGE

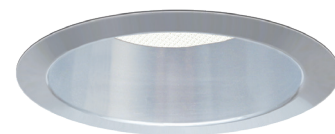
Open Appearance 6" Downlight • LED

Up to 60,000 Hour Life • Wet Location

10% Dimming • 3 Distributions • 5 CCT • 3-Step Binning

LM-80 Qualified • LM-79 Certified

LRR-06405-5000L
LRR-06405-3500L
LRR-06405-2500L



Specifications

Delivered System Performance*

- Lumen Series: **MUST SPECIFY**
- 5000L: 5000 nominal lumens (55W).
- 3500L: 3500 nominal lumens (42W).
- 2500L: 2500 nominal lumens (35W).
- Distribution: MFL standard.
- Optional: -SPT or -WFL.
- 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

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

Acrylic Enamelled 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 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.
- 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: LRR-06405-5000L-120-30K-SPT
Product Number	Voltage	Options	
LRR-06405-5000L LRR-06405-3500L LRR-06405-2500L	-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 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 -3500L or -2500L only.
- D40 -40°C driver with 0-10V 10% dimming instead for -3500L or -2500L only.
- ECO Digital driver for Lutron EcoSystem controls. Dims to 1% or consult factory.
- EI Remote emergency inverter for 50% of rated lumens for -5000L or -3500L. Not available for -2500L. Run time: 90+ minutes. 120 or 277V, 60Hz 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.

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

- SPT Spot distribution.
- WFL Wide flood distribution.

Trim

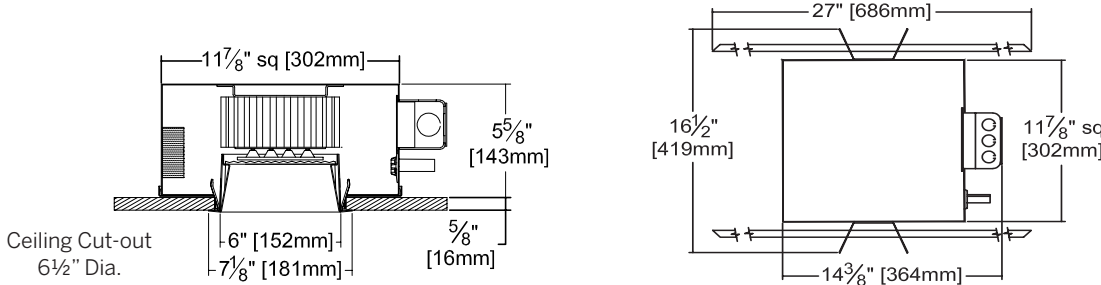
- 13 Clear poly lens below lens. Photometric distribution is unaffected.
- 23 Frosted microprismatic lens instead.
- 30T White enamel (complete trim).
- 30F White enamel (flange only).
- 32 White oversize trim ring. Specify O.D.
- 33 Decorative Glow Ring; see last page for details.
- 35T Silver enamel (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.
- 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. Not for use with Option -EI.
- NAT Modified for natatorium use.
- RH Residential mounting hardware instead. Suitable for wood joist ceilings with spacing from 14 5/8" to 25 5/8" with 5/8" vertical adjustability.
- SH Sealed housing and junction box.

Dimensions



Detailed Photometry - Installed Fixture

Photometric testing done in accordance with IESNA LM-79

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

-5000L STANDARD (MFL)

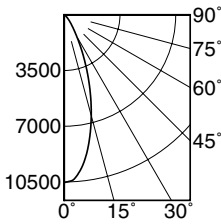
Lumens: 4892
Beam: ~33°
SC: 0.6
LPW: 86
Efficiency: 82.3%
ITL Test: 87783



Total System Watts 57.2

Cone of Light ▲

Dist.	FC	Dia.
6	292.7	3.5
8	164.6	4.7
10	105.4	5.9
12	73.2	7.1
14	53.8	8.3
16	41.2	9.5



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	10537	10537	10537	10537	10537
5	10025	10025	10025	10025	10025
15	6555	6555	6555	6555	6555
25	2825	2825	2825	2825	2825
35	876	876	876	876	876
45	278	278	278	278	278
55	70	70	70	70	70
65	2	2	2	2	2
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

-5000L Option -SPT

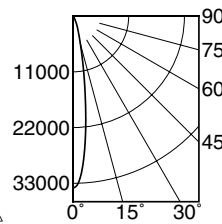
Lumens: 4893
Beam: ~16°
SC: 0.3
LPW: 84
Efficiency: 82.3%
ITL Test: 86309



Total System Watts 58.0

Cone of Light ▲

Dist.	FC	Dia.
6	939.7	1.7
8	528.6	2.3
10	338.3	2.9
12	234.9	3.4
14	172.6	4.0
16	132.1	4.6



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	33830	33830	33830	33830	33830
5	26433	26433	26433	26433	26433
15	5614	5614	5614	5614	5614
25	1537	1537	1537	1537	1537
35	420	420	420	420	420
45	141	141	141	141	141
55	39	39	39	39	39
65	1	1	1	1	1
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

-5000L Option -WFL

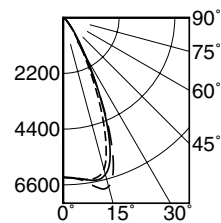
Lumens: 4746
Beam: ~46°
SC: 0.9
LPW: 82
Efficiency: 79.8%
ITL Test: 86308



Total System Watts 57.9

Cone of Light ▲

Dist.	FC	Dia.
6	175.1	5.2
8	98.5	6.9
10	63.1	8.6
12	43.8	10.3
14	32.2	12.0
16	24.6	13.7



	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	6305	6305	6305	6305	6305
5	6365	6377	6394	6382	6375
15	6196	6520	6904	6702	6406
25	2889	3126	3440	3492	3430
35	781	778	855	873	902
45	219	226	256	246	237
55	57	62	60	65	59
65	3	4	2	5	4
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

See following page for -3500L and -2500L performance

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 5946 lumen (-5000L) 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 _____ VOLTAGE _____
CATALOG NUMBER _____



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

Detailed Photometry - Installed Fixture

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

LRR-06405-3500L PERFORMANCE

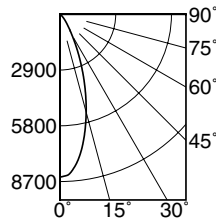
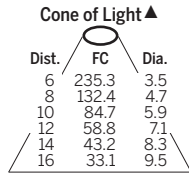
-3500L STANDARD (MFL)

Lumens: 3933
Beam: ~33°
SC: 0.6
LPW: 92
Efficiency: 82.5%
ITL Test: 88275



Total System Watts 42.7

CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	8472	8472	8472	8472	8472
5	8060	8060	8060	8060	8060
15	5270	5270	5270	5270	5270
25	2271	2271	2271	2271	2271
35	704	704	704	704	704
45	224	224	224	224	224
55	56	56	56	56	56
65	2	2	2	2	2
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0



LRR-06405-2500L PERFORMANCE

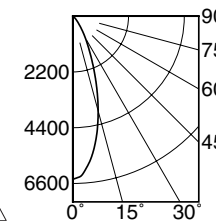
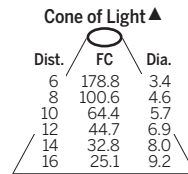
-2500L STANDARD (MFL)

Lumens: 2922
Beam: ~32°
SC: 0.6
LPW: 84
Efficiency: 78.6%
ITL Test: 88093



Total System Watts 34.9

CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	6436	6436	6436	6436	6436
5	6031	6031	6031	6031	6031
15	3869	3869	3869	3869	3869
25	1628	1628	1628	1628	1628
35	564	564	564	564	564
45	181	181	181	181	181
55	41	41	41	41	41
65	1	1	1	1	1
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0



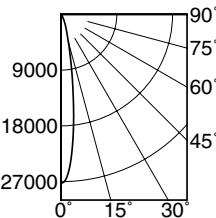
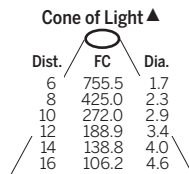
-3500L Option -SPT

Lumens: 3934
Beam: ~16°
SC: 0.3
LPW: 91
Efficiency: 82.5%
ITL Test: 88276



Total System Watts 43.3

CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	27199	27199	27199	27199	27199
5	21252	21252	21252	21252	21252
15	4514	4514	4514	4514	4514
25	1236	1236	1236	1236	1236
35	338	338	338	338	338
45	113	113	113	113	113
55	31	31	31	31	31
65	1	1	1	1	1
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0



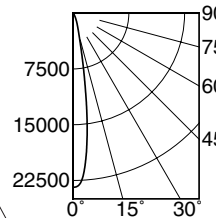
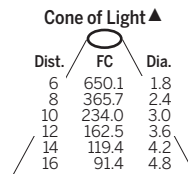
-2500L Option -SPT

Lumens: 3168
Beam: ~17°
SC: 0.3
LPW: 91
Efficiency: 85.2%
ITL Test: 87762



Total System Watts 35.0

CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	23404	23404	23404	23404	23404
5	19682	19682	19682	19682	19682
15	3163	3163	3163	3163	3163
25	915	915	915	915	915
35	247	247	247	247	247
45	72	72	72	72	72
55	18	18	18	18	18
65	1	1	1	1	1
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0



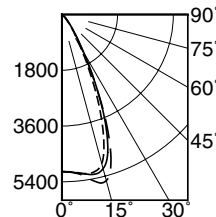
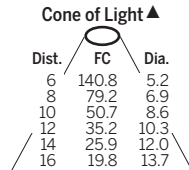
-3500L Option -WFL

Lumens: 3816
Beam: ~46°
SC: 0.9
LPW: 88
Efficiency: 80.0%
ITL Test: 88277



Total System Watts 43.3

CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	5069	5069	5069	5069	5069
5	5117	5127	5141	5131	5126
15	4982	5242	5551	5388	5150
25	2323	2513	2766	2808	2758
35	628	626	687	702	725
45	176	182	206	198	191
55	46	50	48	52	47
65	2	3	2	4	3
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0



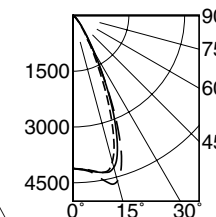
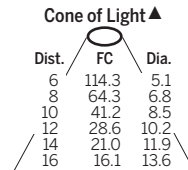
-2500L Option -WFL

Lumens: 3058
Beam: ~46°
SC: 0.9
LPW: 87
Efficiency: 82.3%
ITL Test: 87761



Total System Watts 35.0

CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	4115	4115	4115	4115	4115
5	4158	4177	4190	4176	4173
15	4075	4342	4613	4455	4231
25	1760	1960	2207	2249	2165
35	457	495	534	562	575
45	124	129	156	165	147
55	28	26	34	32	31
65	1	1	1	1	2
75	0	0	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0



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 4768 lumen (-3500L) and 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

THE KIRLIN COMPANY

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