

CATALOG #	TYPE	
JOB NAME	WATTAGE	VOLTAGE

MRR-06815-5000L
MRR-06815-3500L
MRR-06815-2500L

Lighting for Patient Spaces

Lensed 6" Downlight • White Trim • LED

Up to 60,000 Hour Life • Wet Location

LM-80 Qualified • LM-79 Certified Photometry



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: -NFL 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

- Suitable for outdoor / indoor use: -30°C (-22°F) to 60°C (140°F).
- 120-277V / 50-60Hz standard. Load insensitive.
- 0-10V CCR dimming standard. (100-10%)**
- Trim / Optical Assembly - Fully Gasketed**
 - Seamless tapered aluminum self-flanged trim with white finish (field paintable).
 - Regressed tempered prismatic spread lens.
- 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.
 - Fully sustainable: 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 or see Option -79.
- 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: MRR-06815-5000L-120-30K-NFL
Product Number	Voltage	Options	
MRR-06815-5000L MRR-06815-3500L MRR-06815-2500L	-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.
- ECO Digital driver for Lutron EcoSystem controls. Dims to 1% or consult factory.
- EI REMOTE emergency inverter for 50% of rated lumens (-5000L or -3500L). Not available for -2500L. Run time: 90+ minutes. 120 or 277V, 60Hz input only.

Specify voltage. Not for use with Option -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.

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.
- WFL Wide flood distribution.

Lens and Trim

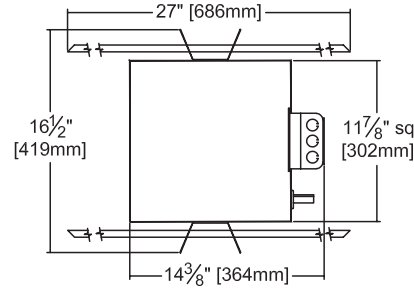
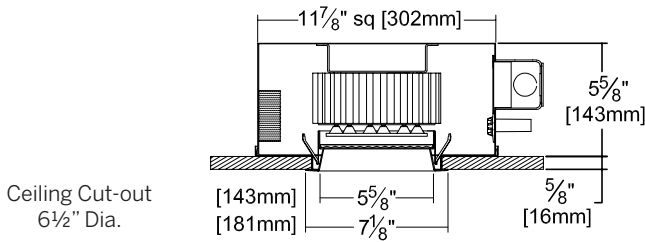
- 13 Clear poly lens below lens. Photometric distribution is unaffected.
- 23 Frosted microprismatic lens instead.
- 32 White oversize trim ring. Specify O.D.
- 35T Silver enameled trim (complete).
- 94 Custom color/finish. Specify. Consult factory.
- BG Anti-microbial Kirlin BioGard™ white (only) trim finish.
- CF Custom color filter (Rosco). Specify.
- WA White acrylic (flat) diffuser instead; will produce wide flood distribution.

Other

- 79 Extension collar for up to 2" thick ceilings.
- 99 Special modification. Consult factory.
- FS Single in-line fuse. Not for use with Option -EI.

PERFORMANCE

Dimensions



Detailed Photometry - Installed Fixture

Photometry from UL Verification Services, Allentown, PA

Photometric testing done in accordance with IESNA LM-79

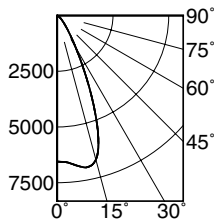
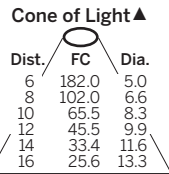
-5000L STANDARD (MFL)

Lumens: 4897
 Beam: ~35°
 SC: 0.8
 LPW: 82
 Efficiency: 82.4%
 UL Test: 11356591.10



Total System Watts 59.4

CANDLEPOWER DISTRIBUTION	0.0 22.5 45.0 67.5 90.0				
	0	6553	6553	6553	6553
5	6653	6653	6653	6653	6653
15	6691	6691	6691	6691	6691
25	3127	3127	3127	3127	3127
35	891	891	891	891	891
45	313	313	313	313	313
55	119	119	119	119	119
65	43	43	43	43	43
75	7	7	7	7	7
85	1	1	1	1	1
90	0	0	0	0	0



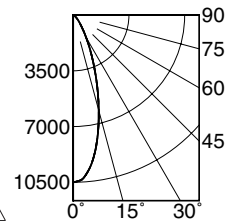
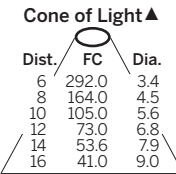
-5000L Option -NFL

Lumens: 4687
 Beam: ~31°
 SC: 0.6
 LPW: 79
 Efficiency: 78.8%
 UL Test: 11356591.09



Total System Watts 59.7

CANDLEPOWER DISTRIBUTION	0.0 45.0 90.0 135.0 180.0				
	0	10510	10510	10510	10510
5	9953	9953	9953	9953	9953
15	6198	6198	6198	6198	6198
25	2669	2669	2669	2669	2669
35	976	976	976	976	976
45	401	401	401	401	401
55	159	159	159	159	159
65	50	50	50	50	50
75	10	10	10	10	10
85	0	0	0	0	0
90	0	0	0	0	0

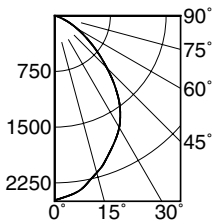
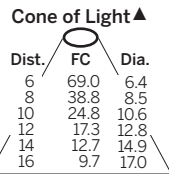


-5000L Option -WFL

Lumens: 4161
 Beam: ~56°
 SC: 1.1
 LPW: 7697
 Efficiency: 70.0%
 UL Test: 11356591.11

Total System Watts 60.1

CANDLEPOWER DISTRIBUTION	0.0 22.5 45.0 67.5 90.0				
	0	2484	2484	2484	2484
5	2424	2424	2424	2424	2424
15	2188	2188	2188	2188	2188
25	1892	1892	1892	1892	1892
35	1536	1536	1536	1536	1536
45	994	994	994	994	994
55	522	522	522	522	522
65	207	207	207	207	207
75	35	35	35	35	35
85	1	1	1	1	1
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 UL Verification Services (UL) 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

LIMITED WARRANTY: CATALOGED KIRLIN LED FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR THREE YEARS FROM DATE OF PURCHASE. INSTALLATION N.E.C. IN NORMAL USE. Manufacturer at this option will replace or repair such fixture or refund the purchase price on presentation of proof of purchase and defective fixture to the office of manufacturer within three 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 will render the warranty void.

Detailed Photometry - Installed Fixture

Photometry from UL Verification Services, Allentown, PA

MRR-06815-3500L PERFORMANCE

-3500L STANDARD (MFL)

Lumens: 3927
Beam: ~45°
SC: 0.8
LPW: 88
Efficiency: 82.4%
UL Test: 11356591.10S

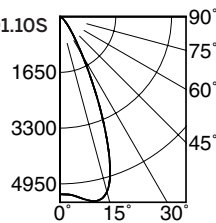


Total System Watts 44.4

	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	5256	5256	5256	5256	5256
5	5336	5336	5336	5336	5336
15	5366	5366	5366	5366	5366
25	2508	2508	2508	2508	2508
35	714	714	714	714	714
45	251	251	251	251	251
55	95	95	95	95	95
65	34	34	34	34	34
75	5	5	5	5	5
85	0	0	0	0	0
90	0	0	0	0	0

Cone of Light ▲

Dist.	FC	Dia.
6	146.0	5.0
8	82.1	6.6
10	52.6	8.3
12	36.5	9.9
14	26.8	11.6
16	20.5	13.3



MRR-06815-2500L PERFORMANCE

-2500L STANDARD (MFL)

Lumens: 2993
Beam: ~45°
SC: 0.8
LPW: 81
Efficiency: 80.5%
UL Test: 1259184

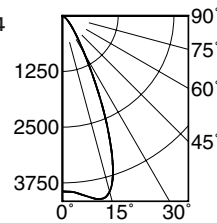


Total System Watts 36.9

	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	3942	3942	3942	3942	3942
5	4001	4001	4001	4001	4001
15	4085	4085	4085	4085	4085
25	1914	1914	1914	1914	1914
35	551	551	551	551	551
45	199	199	199	199	199
55	73	73	73	73	73
65	24	24	24	24	24
75	5	5	5	5	5
85	0	0	0	0	0
90	0	0	0	0	0

Cone of Light ▲

Dist.	FC	Dia.
6	109.0	5.01
8	61.6	6.69
10	39.4	8.36
12	27.4	10.0
14	20.1	11.7
16	15.4	13.4



-3500L Option -NFL

Lumens: 4002
Beam: ~31°
SC: 0.6
LPW: 90
Efficiency: 83.9%
UL Test: 11356591.09S

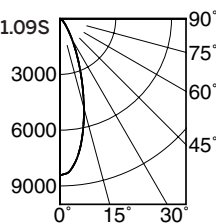


Total System Watts 44.7

	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	8426	8426	8426	8426	8426
5	7983	7983	7983	7983	7983
15	4971	4971	4971	4971	4971
25	2141	2141	2141	2141	2141
35	782	782	782	782	782
45	322	322	322	322	322
55	128	128	128	128	128
65	40	40	40	40	40
75	8	8	8	8	8
85	0	0	0	0	0
90	0	0	0	0	0

Cone of Light ▲

Dist.	FC	Dia.
6	234.0	3.4
8	132.0	4.5
10	84.3	5.6
12	58.5	6.8
14	43.0	7.9
16	32.9	9.0



-2500L Option -NFL

Lumens: 2888
Beam: ~17°
SC: 0.5
LPW: 78
Efficiency: 77.7%
UL Test: 1264617

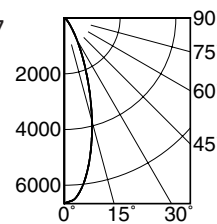


Total System Watts 37.0

	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	19590	19590	19590	19590	19590
5	15770	15770	15770	15770	15770
15	3513	3513	3513	3513	3513
25	958	958	958	958	958
35	313	313	313	313	313
45	115	115	115	115	115
55	42	42	42	42	42
65	17	17	17	17	17
75	5	5	5	5	5
85	1	1	1	1	1
90	1	1	1	1	1

Cone of Light ▲

Dist.	FC	Dia.
6	544.0	1.8
8	306.0	2.5
10	196.0	3.1
12	136.0	3.7
14	100.0	4.3
16	76.5	4.9



-3500L Option -WFL

Lumens: 3337
Beam: ~56°
SC: 1.1
LPW: 74
Efficiency: 70.0%
UL Test: 11356591.11S

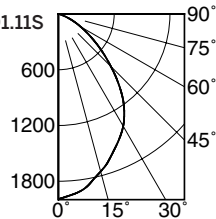


Total System Watts 44.9

	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	1992	1992	1992	1992	1992
5	1944	1944	1944	1944	1944
15	1755	1755	1755	1755	1755
25	1518	1518	1518	1518	1518
35	1232	1232	1232	1232	1232
45	798	798	798	798	798
55	419	419	419	419	419
65	166	166	166	166	166
75	28	28	28	28	28
85	1	1	1	1	1
90	0	0	0	0	0

Cone of Light ▲

Dist.	FC	Dia.
6	55.3	6.4
8	31.1	8.5
10	19.9	10.6
12	13.8	12.8
14	10.2	14.9
16	7.8	17.0



-2500L Option -WFL

Lumens: 2379
Beam: ~51°
SC: 1.0
LPW: 64
Efficiency: 64.0%
UL Test: 1259185

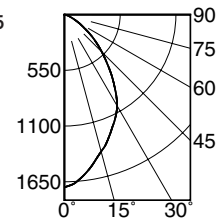


Total System Watts 37.0

	CANDLEPOWER DISTRIBUTION				
	0.0	22.5	45.0	67.5	90.0
0	1704	1704	1704	1704	1704
5	1637	1637	1637	1637	1637
15	1399	1399	1399	1399	1399
25	1165	1165	1165	1165	1165
35	860	860	860	860	860
45	523	523	523	523	523
55	257	257	257	257	257
65	93	93	93	93	93
75	22	22	22	22	22
85	0	0	0	0	0
90	0	0	0	0	0

Cone of Light ▲

Dist.	FC	Dia.
6	47.3	5.7
8	26.6	7.6
10	17.0	9.5
12	11.8	11.4
14	8.7	13.3
16	6.7	15.2



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 4768 lumen (-3500L) or 3717 lumen (-2500L) light engines (within the established tolerance).