

CATALOG #	TYPE	
JOB NAME	WATTAGE	VOLTAGE

# SmartLED™ MRI Lighting System

## 6" Open Appearance Adjustable

Up to 60,000 Hour Life • Type IC

LM-80 Qualified • LM-79 Certified Photometry

### Specifications

#### Delivered System Performance

- Lumen Series: **Must Specify**
  - 5000L: 5000 nominal lumens (55W)
  - 4000L: 4000 nominal lumens (42W)
  - 2500L: 2500 nominal lumens (35W)
- Distribution: NFL standard; optional: -SPT, or -MFL
- 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 Management System

- Aluminum heat sink and components for cool operation, long life, and low maintenance

#### Center Beam Optics

- Tilts up to 35°
- Rotates full 365° and locks in place
- Accommodates sloped ceilings up to 35°

#### SmartLED™ MRI Lighting System Required

- Kirlin remote driver modules, cabinet, and RFI filters required for operation
- Components ordered separately, see below for driver information and [MRI-CABNT](#) for additional components
- The [MRI Configurator](#) can help determine the necessary components

- SmartLED driver modules provide 0-10V dimming to 0.38%

#### SmartLED™ Emergency Backup System

- [EMI-21220](#) or [EMI-03120](#) available for emergency power
- See specification sheet; order separately

#### Trim and Lens Assembly

- Clear specular aluminum self-flanged, low glare 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; all components fully sustainable
- Shallow depth for restricted plenums
- Cool operation extends component life
- Modular design; visible and fully serviceable through aperture
- Built-in plaster flange

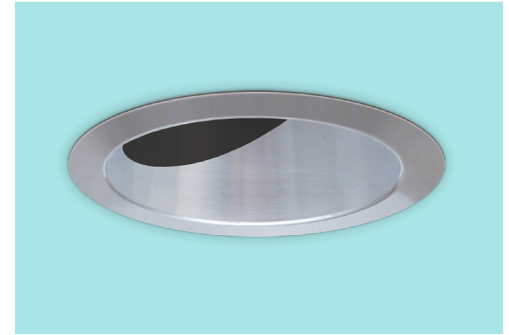
#### Outlet Box (Aluminum)

- UL listed J-box; prewired with ½" knockouts

#### Installation & Hardware

- Requires minimum 18 AWG twisted pair shielded wire from SmartLED™ MRI Lighting System to fixtures
- Recesses in ceilings up to 1-1/8" thick

# MRR-06422



- Aluminum 27" 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

#### IEC & FCC Compliance

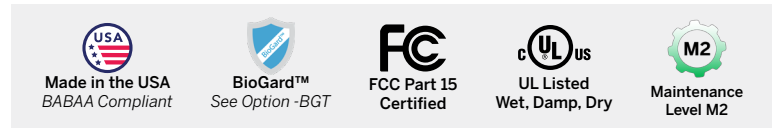
- FCC Part 15 certified for EMI/RFI emissions

#### FIVE YEAR Limited Warranty

- Complete fixture, must be installed with all SmartLED™ components

#### Maintenance and Future-Proofing

- M2 maintenance level standard- non-ferromagnetic phillips head screwdriver, and/or a basic wrench needed
- Lighthead, driver replaceable through the aperture of the fixture with quick-connections, no soldering required
- Backed by Kirlin's [25-Year Legacy Support Guarantee](#)



## Available Maintenance Levels

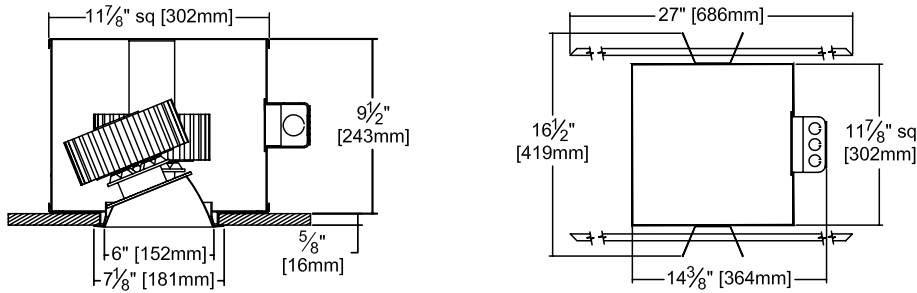
Level	Option	Tools Required to Service LED Module and Driver
	MRI	<ul style="list-style-type: none"> <li>⊗</li> <li>• Non-ferromagnetic phillips head screwdriver, and/or a basic wrench needed</li> </ul>

## Options and Ordering Configuration

(Example: MRR-06422-2500L-30K-MFL)

Must Specify		Optional			
Model	Lumens	CCT & CRI	Beam	Trim & Lens Options	Other Options
MRR-06422					
	-5000L -4000L -2500L	(Blank): 35K, 80+ CRI  <b>80+ CRI</b> -27K: 2700°K -30K: 3000°K -35K: 3500°K -41K: 4000°K -50K: 5000°K <b>90+ CRI</b> -27K-HC: 2700°K -30K-HC: 3000°K -35K-HC: 3500°K -41K-HC: 4000°K -50K-HC: 5000°K	(Blank): NFL  -SPT -NFL -MFL	(Blank): Clear specular aluminum self-flanged cone with lens above  <b>Trim Finishes</b> -30T: All white acrylic enameled cone -30F: White acrylic enameled cone flange -70T: SofTex™ semi-specular clear self-flanged cone -BGT: BioGard anti-microbial white -BKBG: BioGard anti-microbial black -94: Custom color; consult factory -94BG: BioGard anti-microbial custom color finish <b>Other Trim Features</b> -32: White trim extender, specify OD -45: Gasket between trim flange and ceiling <b>Lens Options</b> -WA: White acrylic (flat) diffuser instead; will produce wide flood distribution	(Blank): None  <b>Other Options</b> -99: Special modification; consult factory

# Dimensions



**Ceiling Cut-out**  
6 1/2" Dia.

# Photometry - Installed Complete Fixture

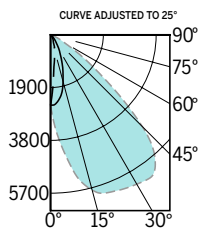
Photometry from I.T.L., Boulder, CO

LM-79 IES Certified Photometry from Independent Lab

## -5000L STANDARD -MFL

Lumens: 4345  
Beam: ~47°  
SC: 0.8  
LPW: 76  
Efficiency: 73.1%  
ITL Test: 87510

Total System Watts 57.0

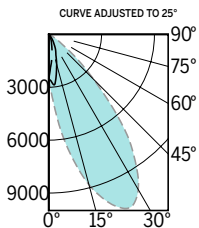


CANDLEPOWER DISTRIBUTION					
	0.0	45.0	90.0	135.0	180.0
0	2536	2536	2536	2536	2536
5	3866	3499	2462	1683	1323
15	5786	5002	1742	664	506
25	6133	5081	886	290	230
35	6273	3197	374	132	91
45	4672	1243	141	42	21
55	1466	386	48	7	2
65	300	95	8	0	0
75	28	9	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

## -5000L STANDARD (NFL)

Lumens: 4413  
Beam: ~35°  
SC: 0.6  
LPW: 77  
Efficiency: 74.2%  
ITL Test: 87784

Total System Watts 57.2

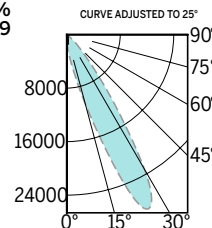


CANDLEPOWER DISTRIBUTION					
	0.0	45.0	90.0	135.0	180.0
0	2515	2515	2515	2515	2515
5	4351	3844	2831	1985	1662
15	8831	5316	1752	843	674
25	10855	4621	905	384	283
35	8451	2560	381	117	69
45	3631	885	116	30	17
55	815	251	25	3	1
65	129	40	5	2	0
75	9	4	1	0	0
85	0	0	0	0	0
90	0	0	0	0	0

## -5000L Option -SPT

Lumens: 4359  
Beam: ~16°  
SC: 0.3  
LPW: 77  
Efficiency: 73.3%  
ITL Test: 87509

Total System Watts 57.0



CANDLEPOWER DISTRIBUTION					
	0.0	45.0	90.0	135.0	180.0
0	1135	1135	1135	1135	1135
5	2355	2060	1392	992	685
15	10723	4106	850	444	398
25	28756	3483	476	223	185
35	11771	1470	212	75	51
45	2411	432	67	14	11
55	384	161	11	1	0
65	91	13	1	0	0
75	3	1	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

▲ 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

See following page for -4000L and -2500L performance

LIMITED WARRANTY: CATALOGED KIRLIN FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR FIVE YEARS FROM DATE OF PURCHASE. INSTALLED TO 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 at the offices of manufacturer within the warranty period. 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 applied 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**

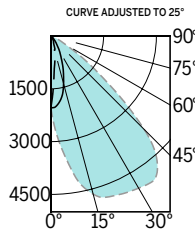
Photometry from I.T.L., Boulder, CO

**MRR-06422-4000L PERFORMANCE**

**-4000L STANDARD -MFL**

Lumens: 3493  
Beam: ~47°  
SC: 0.8  
LPW: 82  
Efficiency: 73.3%  
ITL Test: 88281

Total System Watts 42.6



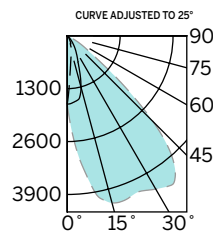
CANDLEPOWER DISTRIBUTION					
	0.0	45.0	90.0	135.0	180.0
0	2039	2039	2039	2039	2039
5	3108	2813	1979	1353	1064
15	4652	4022	1401	534	407
25	4931	4085	712	233	185
35	5043	2570	301	106	73
45	3756	999	113	34	17
55	1179	310	39	6	2
65	241	76	6	0	0
75	23	7	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

**MRR-06422-2500L PERFORMANCE**

**-2500L STANDARD -MFL**

Lumens: 2997  
LPW: 85  
Beam: ~46°  
SC: 0.8  
ITL Test: 87767

Total System Watts 35.1

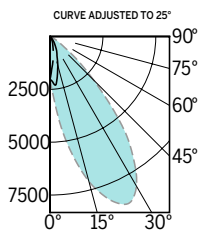


CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	1679	1679	1679	1679	1679
5	2889	2497	1646	1036	854
15	4253	4036	1307	617	464
25	4219	3861	580	250	207
35	4477	2115	274	105	82
45	2982	697	90	33	21
55	610	194	29	7	3
65	98	42	3	0	0
75	6	2	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

**-4000L Option -NFL**

Lumens: 3548  
Beam: ~35°  
SC: 0.5  
LPW: 83  
Efficiency: 74.4%  
ITL Test: 88279

Total System Watts 42.7

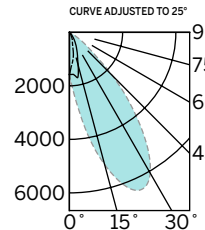


CANDLEPOWER DISTRIBUTION					
	0.0	45.0	90.0	135.0	180.0
0	2022	2022	2022	2022	2022
5	3498	3091	2276	1596	1336
15	7100	4274	1409	678	542
25	8727	3715	728	309	228
35	6795	2058	306	94	55
45	2919	712	93	24	14
55	655	202	20	2	1
65	104	32	4	2	0
75	7	3	1	0	0
85	0	0	0	0	0
90	0	0	0	0	0

**-2500L Option -NFL**

Lumens: 2732  
LPW: 78  
Beam: ~32°  
SC: 0.6  
ITL Test: 88094

Total System Watts 35.2

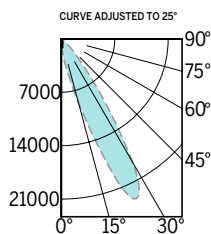


CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	1579	1579	1579	1579	1579
5	2462	2129	1578	1256	1177
15	5117	3210	1266	590	453
25	6470	2772	622	268	198
35	5038	1648	269	76	44
45	2264	600	88	17	13
55	559	164	14	1	1
65	89	21	2	1	0
75	5	2	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

**-4000L Option -SPT**

Lumens: 3504  
Beam: ~17°  
SC: 0.3  
LPW: 82  
Efficiency: 73.5%  
ITL Test: 88280

Total System Watts 42.6

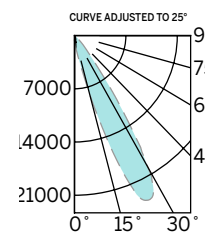


CANDLEPOWER DISTRIBUTION					
	0.0	45.0	90.0	135.0	180.0
0	913	913	913	913	913
5	1893	1656	1119	798	551
15	8621	3301	683	357	320
25	23120	2800	383	179	149
35	9464	1182	170	60	41
45	1938	347	54	11	9
55	309	129	9	1	0
65	73	10	1	0	0
75	2	1	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

**-2500L Option -SPT**

Lumens: 3008  
LPW: 86  
Beam: ~16°  
SC: 0.3  
ITL Test: 87766

Total System Watts 35.1



CANDLEPOWER DISTRIBUTION					
	0.0	22.5	45.0	67.5	90.0
0	638	638	638	638	638
5	1289	1052	689	464	440
15	7940	2048	646	260	213
25	23864	1730	314	136	112
35	9013	812	127	39	28
45	1382	228	38	4	5
55	215	58	1	0	0
65	28	3	0	0	0
75	1	1	0	0	0
85	0	0	0	0	0
90	0	0	0	0	0

▲ 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

LED manufacturers maintain a tolerance of +/-7% on flux (lumens) and power (electrical) measurements.

LIMITED WARRANTY: CATALOGED KIRLIN FIXTURES ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR FIVE YEARS FROM DATE OF PURCHASE. INSTALLED TO N.E.C. IN NORMAL USE. Manufacturer at his option will replace or repair such fixture or refund the purchase price on presentation of proof of purchase and defective fixture at the office 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 void where prohibited by law. 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.

## SmartLED™ MRI Driver Modules

Fully Digital Controlled Power Source for LED Luminaires

Mounted in Kirlin's **MRI-CABNT**

Drivers wired in series



Lumens	Driver Module	Maximum Capacity	Fixture Load Examples
-2500L	DVR-1400A	Qty 1: 2500L Luminaire	• Qty 1: MRR-06422-2500L
	DVR-1400B	Qty 2: 2500L Luminaires, wired in series	• Qty 2: MRR-06422-2500L • Qty 1: MRR-06422-2500L and Qty 1: MRR-06422-2500L
-4000L	DVR-1050A	Qty 1: 4000L Luminaire	• Qty 1: MRR-06422-4000L
	DVR-1050C*	Qty 2: 4000L Luminaires, 1 per LED output	• Qty 2: SRR-06610-4000L • Qty 1: MRR-06422-4000L and Qty 1: MRR-06422-4000L
-5000L	DVR-1400B	Qty 1: 5000L Luminaire	• Qty 1: MRR-06422-5000L

\* 100W DVR-XXXXC driver modules have 2 LED outputs each.

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 his 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 void where prohibited by law. Kirlin Lighting, Inc. does not warrant its products for use in any application other than that intended. 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.