

CATALOG #	TYPE
JOB NAME	VOLTAGE

## OR / Clean Room / Vandal LED 8" Downlight

Up to 60,000 Hour Life • Wet Location

LM-80 Qualified • LM-79 Certified Photometry

MRV-08565-5000L  
MRV-08565-3500L

### Specifications

#### Delivered System Performance\*

- Lumen Series: **MUST SPECIFY**
  - 5000L: 5000 nominal lumens (55W).
  - 3500L: 3500 nominal lumens (42W)
- Distribution: NFL standard.
- Optional: -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 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).
- 120-277V / 50-60Hz standard. Load insensitive.
- 0-10V CCR dimming standard. (100-10%)**

#### Trim Assembly

- Vandal resistant smooth white seamless tapered aluminum self-flanged flare trim.
- Kirlin BioGard™ antimicrobial white finish continuously inhibits growth of bacteria on the coating of the trim.
- Flush center pin tamperproof hex screws and captive nuts secure trim to housing.

- Regressed tempered microprismatic above 1/8" clear flat polycarbonate lens.
- Continuous ring secures lens to trim.
- Tamperproof tool included.

#### IP65 5X Sealed and Gasketed

- (1) Silicone seal between trim and lens seals lens to trim, (2) closed cell gasketing between trim and housing flange seals trim to housing, (3) closed cell gasketing on trim flange seals flange to ceiling (4) closed cell gasketing on bottom pan seals housing to ceiling and (5) neoprene O-rings on stainless steel fasteners seal fasteners to trim.
- Meets ASTM E283 restricted airflow of 2 CFM 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.
- Fully sustainable: Entire luminaire, including LED light engine, is modular, easily visible and serviced through aperture.
- Built-in plaster flange.
- Sealed housing and junction box. Meets/ exceeds ASTM E283 restricted airflow (2 CFM maximum). CCEA Chicago Plenum Approved.

#### Outlet Box

- UL listed J-box with insulated removable cover. Previred 14 GA (NEC) with 1/2" and 3/4" knockouts.



Sealed Housing & Trim

**LEVEL 3+**  
**INFECTION**  
**PROTECTION**

#### Installation

- Recess indoor or outdoor.
- Accommodates ceilings up to 1-1/8" thick.
- Comptaible 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.

**5**  
**Year**

**FIVE YEAR**  
**Limited Warranty**

- Complete standard fixture.

MUST SPECIFY		OPTIONAL	Ordering Example: <b>MRV-08565-5000L-120-30K-MFL</b>
Product Number	Voltage	Options	
<b>MRV-08565-5000L</b> <b>MRV-08565-3500L</b>	<b>-120</b> (120 volts) <b>-277</b> (277 volts) <b>-97</b> (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

- 29 **Two wire** full range (100-1%) PWM dimming instead (Lutron). Consult factory. 120V only. Not available with Option -EI.
- 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. Run time: 90+ minutes. 120 or 277V, 60Hz input only. Specify voltage. Not for use with Option -29 or -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

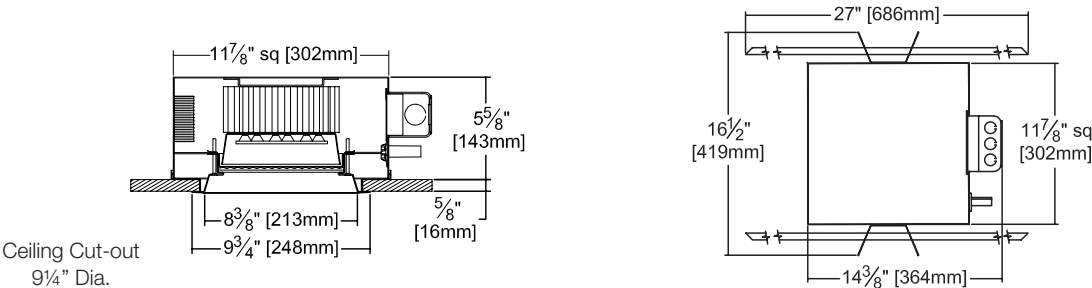
- MFL Medium flood distribution.

#### Other

- 99 Special modification. Consult factory.
- FS Single in-line fuse. Not for use with Option -EI.

\*Marked Spacings Caution: Install with minimum spacings as follows: 2 feet between centers of adjacent fixtures; 1/2" between fixture top and overhead building member; 1 foot between fixture center and side wall.

Dimensions



Footcandle Distribution Data

Photometry from UL Verification Services, Allentown, PA

- Notes:
1. All lighting levels are expressed in average footcandles, with distances expressed in feet, as measured at the work plane (3'6").
  2. The work plane (3'6") is defined as: examination bed height, plus patient body depth.

Photometric testing done in accordance with IESNA LM-79

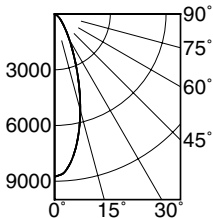
-5000L STANDARD (NFL)

Lumens: 4749  
Beam: ~32°  
SC: 0.5  
LPW: 80  
Efficiency: 79.9%  
UL Test: 11356591.18

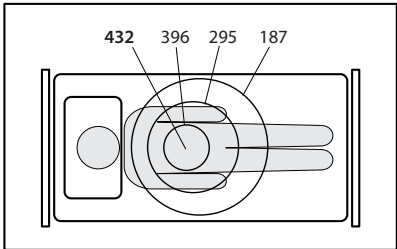


Cone of Light ▲

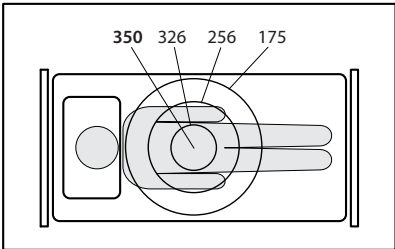
Dist.	FC	Dia.
6	243.0	3.5
8	137.0	4.7
10	87.6	5.8
12	60.8	7.0
14	44.7	8.1
16	34.2	9.3



Total System Watts 59.5



fc on Task: 8' Ceiling 3'6" Work Plane



fc on Task: 8'6" Ceiling 3'6" Work Plane

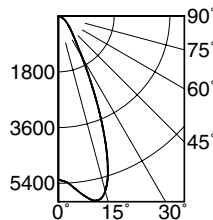
-5000L Option -MFL

Lumens: 4857  
Beam: ~46°  
SC: 0.8  
LPW: 81  
Efficiency: 81.7%  
UL Test: 11356591.19

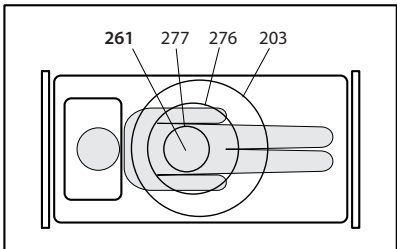


Cone of Light ▲

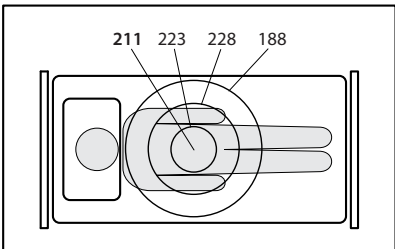
Dist.	FC	Dia.
6	147.0	5.1
8	82.5	6.8
10	52.8	8.5
12	36.7	10.2
14	26.9	11.9
16	20.6	13.6



Total System Watts 59.8



fc on Task: 8' Ceiling 3'6" Work Plane



fc on Task: 8'6" Ceiling 3'6" Work Plane

See following page for -3500L 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

SUBMITTAL DATA

APPROVAL STAMP

JOB NAME  
TYPE  
WATTAGE  
VOLTAGE  
CATALOG NUMBER



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 two 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 subject 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 the 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.

## Footcandle Distribution Data

Photometry from UL Verification Services, Allentown, PA

- Notes:
1. All lighting levels are expressed in average footcandles, with distances expressed in feet, as measured at the work plane (3'6").
  2. The work plane (3'6") is defined as: examination bed height, plus patient body depth.

Photometric testing done in accordance with IESNA LM-79-08

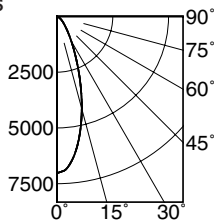
### -3500L STANDARD (NFL)

Lumens: 3808  
Beam: ~32°  
SC: 0.6  
LPW: 86  
Efficiency: 79.9%  
UL Test: 11356591.18S

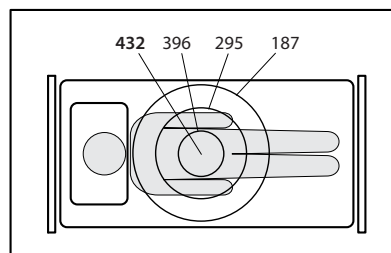


**Cone of Light ▲**

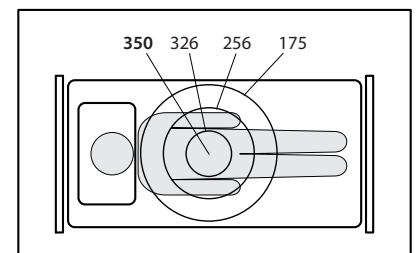
Dist.	FC	Dia.
6	195.0	3.5
8	110.0	4.7
10	70.3	5.8
12	48.8	7.0
14	35.8	8.1
16	27.4	9.3



Total System Watts 44.5



fc on Task: 8' Ceiling 3'6" Work Plane



fc on Task: 8'6" Ceiling 3'6" Work Plane

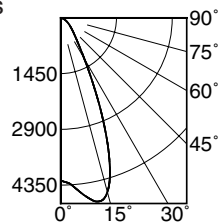
### -3500L Option -MFL

Lumens: 3896  
Beam: ~46°  
SC: 0.9  
LPW: 87  
Efficiency: 81.7%  
UL Test: 11356591.19S

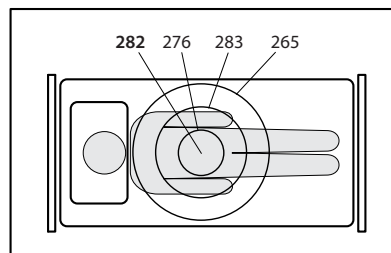


**Cone of Light ▲**

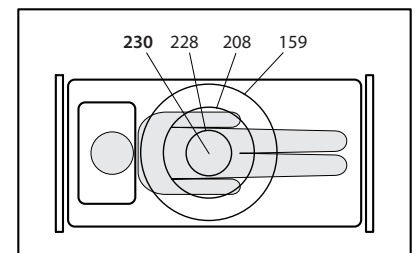
Dist.	FC	Dia.
6	118.0	5.1
8	66.1	6.8
10	42.3	8.5
12	29.4	10.2
14	21.6	11.9
16	16.5	13.6



Total System Watts 44.7



fc on Task: 8' Ceiling 3'6" Work Plane



fc on Task: 8'6" Ceiling 3'6" Work Plane

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▲ **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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