KIRLIN HEALTHCARE LIGHTING

CATALOG #		TYPE
JOB NAME	WATTAGE	VOLTAGE

Lighting for Patient Spaces

Sealed & Gasketed IP65 8" LED Exam Light

Up to 60,000 Hour Rated Life • ISO 5/Class 100 Clean Room (-SH)
Antimicrobial Trim • LM-80 Qualified • LM-79 Certified Photometry

MRR-08530

Specifications

Delivered System Performance*
- Lumen Series: **Must Specify**
  -5000L (55W)
  -3500L (42W)
- Distribution: NFL standard; optional: -MFL
- Color temperature: 3500°K standard; optional: -27K, -30K or -41K
- CRI: 80+ standard; optional: -HC (90+)
- 60,000 Hour Rated 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
- Aluminum heat sink and components for cool operation, long life, and low maintenance

LED Driver - INTERNAL
- Indoor/Outdoor: -30°C to 60°C (-22°F to 140°F)
- 0-10V CCR dimming standard (100-10%)
- Voltage Options: **Must Specify**
  -120: -120V (50-60Hz); load insensitive
  -277: -277V (50-60Hz); load insensitive

Trim and Lens Assembly
- Rustproof 100% aluminum grooveless, smooth, self-flanged trim
- Kirlin BioGard™ antimicrobial white finish continuously inhibits growth of bacteria on the coating of the trim
- Regressed tempered microprismatic glass lens

IP65 Sealed & Gasketed Trim
- Liquid silicone seals between trim and lens
- O-rings seal stainless fasteners to trim
- Meets ASTM E283 restricted airflow of 2CFM

Acrylic Enameled Aluminum Housing
- Rustproof: 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 (Galvanized)
- UL listed J-box with insulated removable cover; prewired 14 GA (NEC) with ½" and ¾" knockouts

Installation & Hardware
- Indoor/outdoor in ceilings up to 1⅛" thick
- Compatible with fire rated enclosures (by others)
- 27" galvanized hanger bars & adjusting 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

ISO 5/Class 100 *See Option -SH* | NSF Certified *See Option -NS* | IP65 | BioGard™ | Made in the USA *BABAA Compliant* | FCC Part 15 Certified | UL Listed Wet, Damp, Dry

Options and Ordering Configuration

(Example: MRR-08530-5000L-120-30K-MFL)

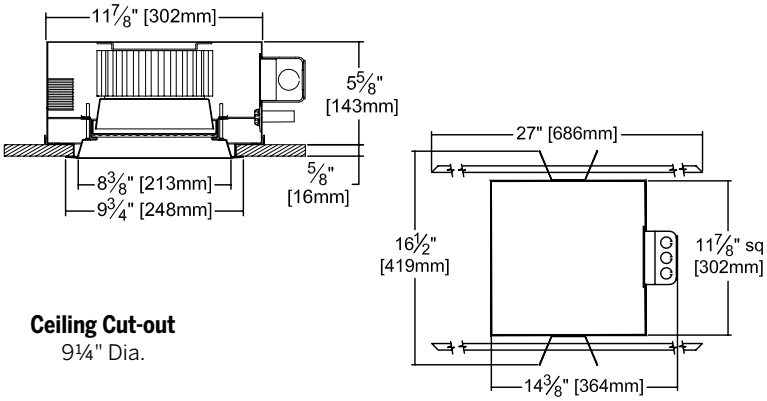
Must Specify			Optional					
Model	**Lumens**	**Volts**	**CCT & CRI**	**Beam**	**Driver Options**	**Emergency**	**Trim & Len Options**	**Other Options**
MRR-08530								
	-5000L **-3500L**	**-120** **-277** **-97:** Other voltage; consult factory	**(Blank):** 35K, 80+ CRI **80+ CRI** **-27K:** 2700°K **-30K:** 3000°K **-35K:** 3500°K **-41K:** 4000°K **-50K:** 5000°K **90+ CRI** **-27K-HC:** 2700°K **-30K-HC:** 3000°K **-35K-HC:** 3500°K **-41K-HC:** 4000°K **-50K-HC:** 5000°K	**(Blank):** NFL **-MFL**	**(Blank):** Standard 0-10V CCR 10% dim **-D1:** 0-10V 1.0% dim **-D2:** 0-10V 0.1% dim **-D3:** DALI 1.0% dim **-D4:** DALI 100-0.1% dim **-D5:** DMX512A 0.1% dim **-ECO:** For use with Lutron EcoSystem controls; dims to 1% or consult factory	**(Blank):** None **-EI:** Remote emergency inverter for 50% of rated lumens; 90+ minutes; 60Hz input only; N/A for option -FS **-EM:** Internal emergency battery pack; Delivers 500 lumens; 90+ minutes; (CEC Compliant) **-ERH:** Remote emergency battery pack; delivers 1000 lumens; 90+ minutes (CEC Compliant)	**(Blank):** White trim, regressed prismatic lens **Trim Finishes** **-BKBG:** BioGard™ anti-microbial black **-94BG:** BioGard™ anti-microbial custom color finish	**(Blank):** None **Mounting** **-79:** Extension collar; ceilings up to 2" thick **Other Options** **-99:** Special modification; consult factory **-AWN:** Athena Wireless Node; N/A for Dimming Options, -D5 -ECO **-FS:** Fused primary; One per fixture; not for use with option -EI **-NS:** NSF approved fixture **-SH:** Sealed housing and J-box; providesCleanroom Rated luminaire (ISO 5 Class 100) ***Note:** For other integrated control solutions, such as nLight, contact factory

*See note next page

Kirlin Lighting | 3401 E. Jefferson Ave., Detroit, MI 48207-4232, USA | P: 313.259.6400 | www.kirlinlighting.com

KIRLIN HEALTHCARE LIGHTING

Dimensions



Ceiling Cut-out
9¼" Dia.

Infection Control Levels

Level	Option	Infection Protection
2	Standard	BioGard™ IP65
3	-SH	BioGard™ IP65 ISO 5/ Class 100

Footcandle Distribution Data

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

Photometry - Installed Complete Fixture

Photometry from UL Verification Services, Allentown, PA

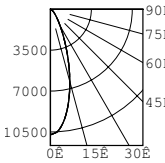
LM-79 IES Certified Photometry from Independent Lab

-5000L (NFL)

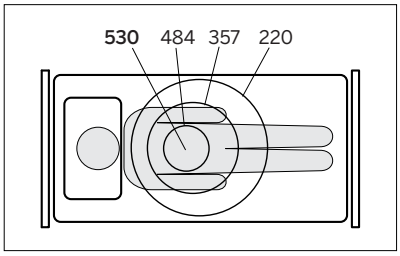
Lumens: 5298
LPW: 89
Beam: ~32°
SC: 0.5
UL Test: 11356591.15

Cone of Light▲

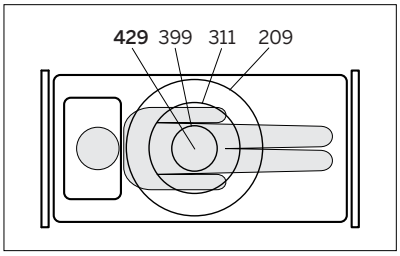
Dist.	FC	Dia.
6	298.0	3.4
8	168.0	4.5
10	107.0	5.7
12	74.6	6.8
14	54.8	7.9
16	42.0	9.1



Total System Watts 59.6



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



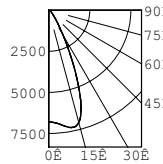
fc on Task: 8'6" Ceiling 3'6" Work Plane

-5000L-MFL

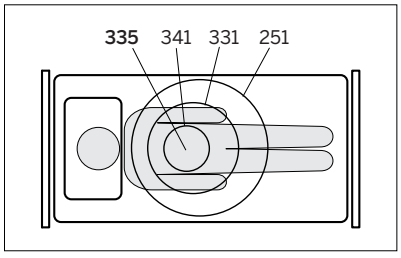
Lumens: 5310
LPW: 94
Beam: ~46°
SC: 0.8
UL Test: 11356591.16

Cone of Light▲

Dist.	FC	Dia.
6	188.0	5.1
8	106.0	6.7
10	67.8	8.4
12	47.1	10.1
14	34.6	11.8
16	26.5	13.5



Total System Watts 56.7



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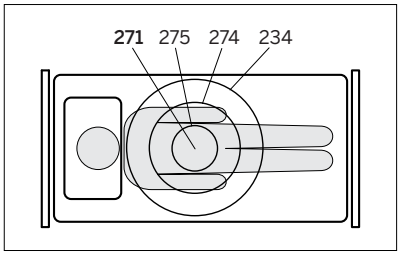

fc on Task: 8'6" Ceiling 3'6" Work Plane

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

See following page for -3500L performance

▲ 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

Footcandle Distribution Data

Notes:

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Photometry - Installed Complete Fixture

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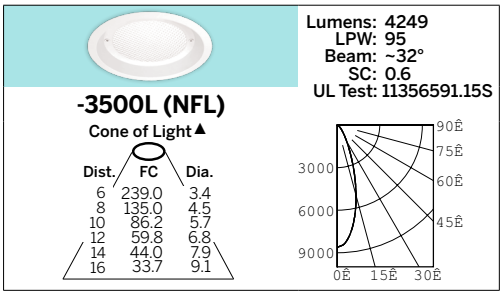
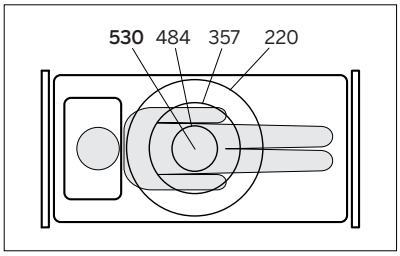
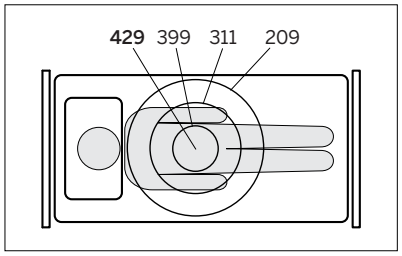
LM-79 IES Certified Photometry from Independent Lab



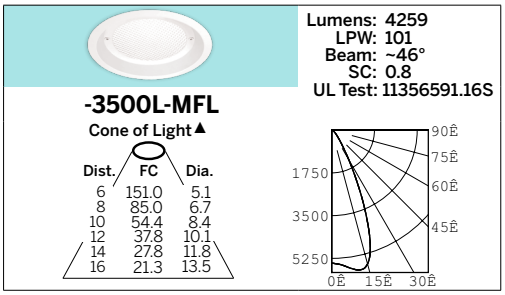
Total System Watts 44.6



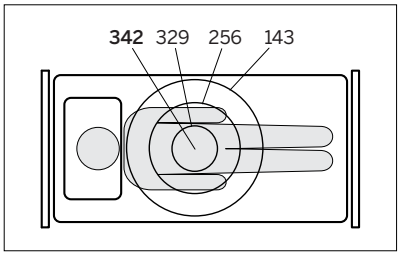
fc on Task: 8' Ceiling 3'6" Work Plane



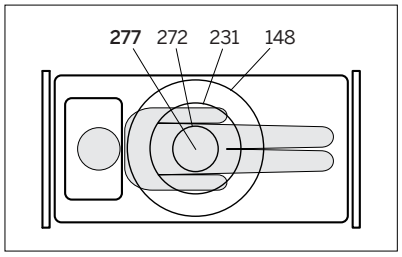
fc on Task: 8'6" Ceiling 3'6" Work Plane



Total System Watts 42.4



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