KIRLIN
HEALTHCARE LIGHTING

CATALOG #		TYPE	
JOB NAME		WATTAGE	VOLTAGE

Lighting for Patient Spaces

MRV-08540

Psychiatric 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

*"Sealed & Gasketed"
Impact Resistant Lens & Trim*

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
- Vandal resistant smooth 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 lenses to trim
- Tamperproof tool included

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
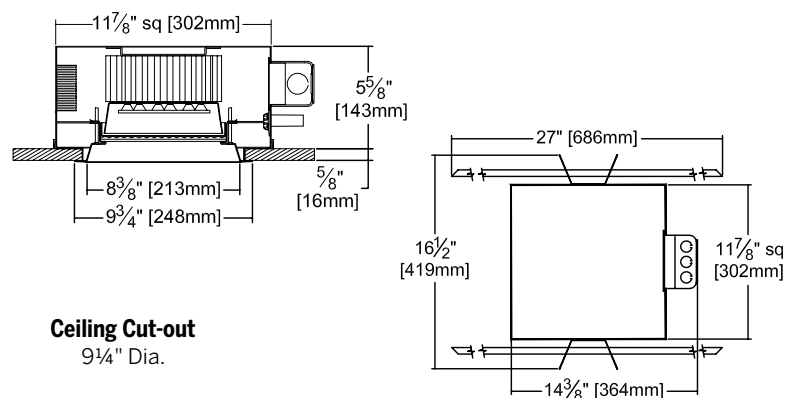- Complete standard fixture

Options and Ordering Configuration

(Example: MRV-08540-5000L-120-30K-MFL)

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

Must Specify			Optional					
Model	**Lumens**	**Volts**	**CCT & CRI**	**Beam**	**Driver Options**	**Emergency**	**Trim & Lens Options**	**Other Options**
MRV-08540	-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 tamper-resistant trim, dual lens **Trim Finishes** -BKBG: BioGard™ anti-microbial black -94BG: BioGard™ anti-microbial custom color finish	**(Blank):** None -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 -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

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HEALTHCARE LIGHTING

Dimensions

11⅞" sq [302mm]

5⅝" [143mm]

8⅜" [213mm]
9¾" [248mm]

⅝" [16mm]

Ceiling Cut-out
9¼" Dia.

27" [686mm]

16½" [419mm]

11⅞" sq [302mm]

14⅜" [364mm]

Infection Control Levels

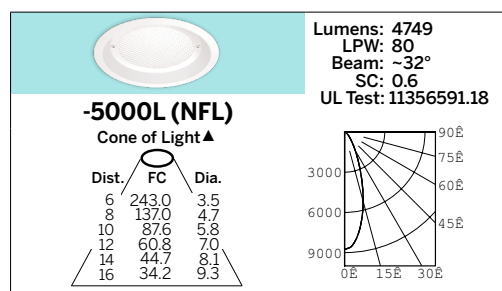| Level	Option	Patient Safety	Infection Protection	
2+	Standard	VR Vandal Resistant	BioGard™	IP65
3+	-SH	VR Vandal Resistant	BioGard™	IP65 — ISO 5/Class 100

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

LM-79 IESNA Certified Photometry from Independent Lab

Photometry from UL Verification Services, Allentown, PA

-5000L (NFL)

Lumens: 4749
LPW: 80
Beam: ~32°
SC: 0.6
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

432 396 295 187

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

350 326 256 175

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

-5000L-MFL

Lumens: 4857
LPW: 81
Beam: ~46°
SC: 0.9
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

261 277 276 203

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

211 223 228 188

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

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PATIENT SPACES
NOVEMBER 2024

Footcandle Distribution Data

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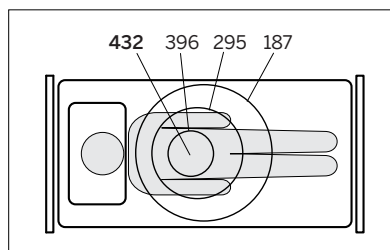
Photometry - Installed Complete Fixture

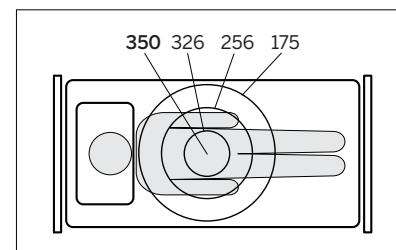Photometry from UL Verification Services, Allentown, PA

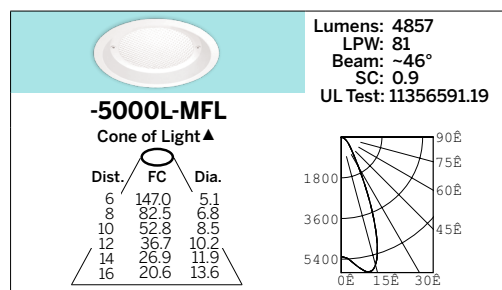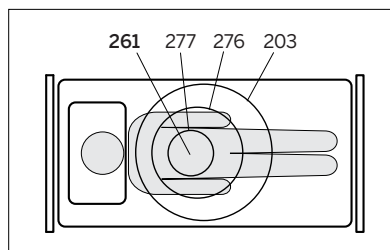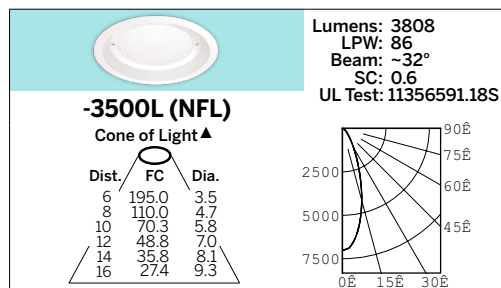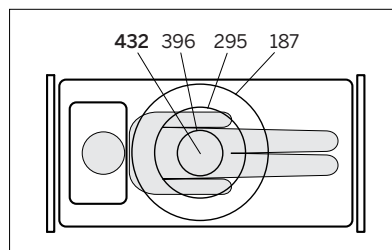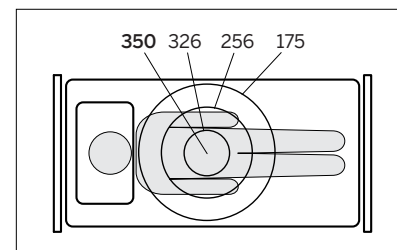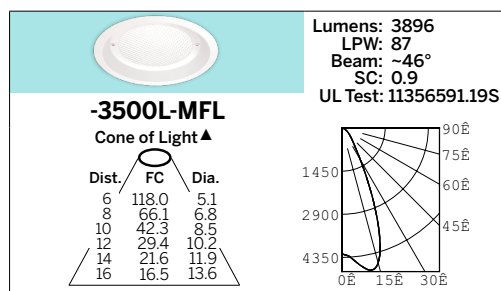LM-79 IESNA Certified Photometry from Independent Lab

-3500L (NFL)

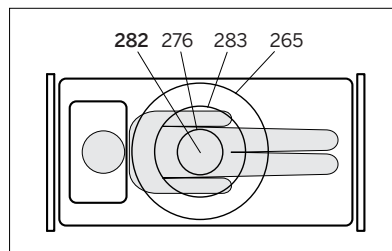Lumens: 3808
LPW: 86
Beam: ~32°
SC: 0.6
UL Test: 11356591.18S

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

432 396 295 187

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

350 326 256 175

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

-3500L-MFL

Lumens: 3896
LPW: 87
Beam: ~46°
SC: 0.9
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

282 276 283 265

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

230 228 208 159
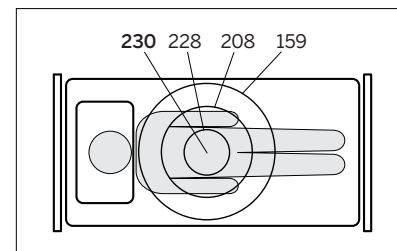
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