

CATALOG #	TYPE	
JOB NAME	WATTAGE	VOLTAGE

# Lighting for Patient Spaces

## Ligature/Vandal Resistant 7" LED Downlight

Up to 90,000 Hour Rated Life • Type IC • Wet Location  
LM-80 Qualified • LM-79 Certified • ISO/Class 100 Clean Room (-SH)

# MRV-07840



## Specifications

### Delivered System Performance\*

- Lumen Series: **Must Specify**
  - 2000L (25W)
  - 1500L (20W)
- Distribution: MFL standard; optional: -NFL, -SPT or -WFL
- Color temperature: 3500°K standard; optional: -27K, -30K, -41K or -50K
- CRI: 80+ standard; optional: -HC (90+)
- 90,000 Hour Rated Life (L70\*\*)
- Fully sustainable: removable for servicing

### 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

- Ligature resistant smooth white seamless tapered aluminum self-flanged rigid cast 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; tamperproof tool included
- High strength clear prismatic acrylic above 1/8" clear flat polycarbonate
- Continuous ring secures lens to trim

### IP65 Sealed & Gasketed Trim

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

### Acrylic Enamelled Aluminum Housing

- Rustproof: exceeds 1000 hour ASTM 5% salt spray test; all components fully sustainable
- Shallow depth fits 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 1/2" and 3/4" knockouts

### Installation & Hardware

- Indoor/outdoor in covered locations in ceilings up to 1 1/8" thick

- Compatible with fire rated enclosures (by others)
- 27" galvanized hanger bars & adjustable mounting brackets (2) supplied

### UL, C-UL (Canada) Listings

- Wet, damp or dry locations, covered ceilings
- Type IC: for direct contact with insulation
- 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-07840-2000L-120-30K-NFL)

Made in the USA  
BABAA Compliant

Vandal Resistant

ISO 5/Class 100  
See Option -SH

BioGard™

IP65

FCC Part 15  
Certified

UL Listed  
Wet, Damp, Dry

Must Specify			Optional					
Model	Lumens	Volts	CCT & CRI	Beam	Driver Options	Emergency	Lens & Trim Options	Other Options
MRV-07840	-2000L	-120	(Blank): 35K, 80+ CRI	(Blank): MFL	(Blank): Standard 0-10V CCR 10% dim	(Blank): None	(Blank): White tamper-resistant trim, dual lens	(Blank): None
	-1500L	-277						
		-97: Other voltage; consult factory	80+ CRI	-NFL	-D1: 0-10V 1.0% dim	EI: Remote emergency inverter for 100% of rated lumens; 90+ minutes; N/A for option -FS	-32: White oversize trim ring; specify O.D.	-99: Special modification; consult factory
			-27K: 2700°K	-SPT	-D2: 0-10V 0.1% dim	-ERH: Remote emergency battery pack; delivers 1000 lumens; 90+ minutes (CEC Compliant)	-35T: Silver enamel (complete trim); (non BioGard™)	-AWN: Athena Wireless Node; N/A for Dimming Option -D5
			-30K: 3000°K	-WFL	-D3: DALI 1.0% dim		-94: Custom color/finish; specify; (non BioGard™); consult factory	-FS: Fused primary; One per fixture; not for use with option -EI
			-35K: 3500°K		-D4: DALI 100-0.1% dim		-94BG: BioGard anti-microbial custom color finish	-SH: Sealed housing and junction box; provides Cleanroom Rated luminaire (ISO 5 Class 100)
			-41K: 4000°K		-D5: DMX512A 0.1% dim		-CF: Custom color filter (Rosco); specify	
			-50K: 5000°K				-WA: White acrylic (flat) diffuser instead	*Note: For other integrated control solutions, such as nLight, contact factory
			90+ CRI					
			-27K-HC: 2700°K					
			-30K-HC: 3000°K					
			-35K-HC: 3500°K					
			-41K-HC: 4000°K					
			-50K-HC: 5000°K					

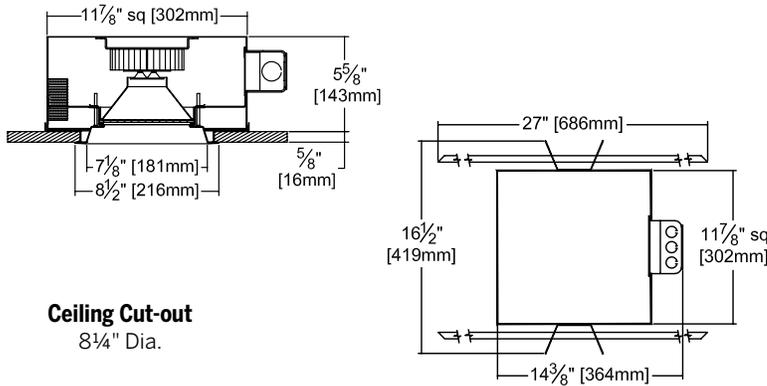
\*See note next page

Projected L70** for Kirlin Luminaires	
In Open Plenum	90,000 hours
In Insulation (Type IC)	60,000 hours

\*\*Hours at 70% lumen maintenance

† Consult factory for use with -2000L lumen series

## Dimensions



## Infection Control Levels

Level	Option	Patient Safety	Infection Protection
2+	Standard	<b>VR</b> Vandal Resistant	BioGard™ IP65
3+	-SH	<b>VR</b> Vandal Resistant	BioGard™ IP65 ISO 100 Class 100

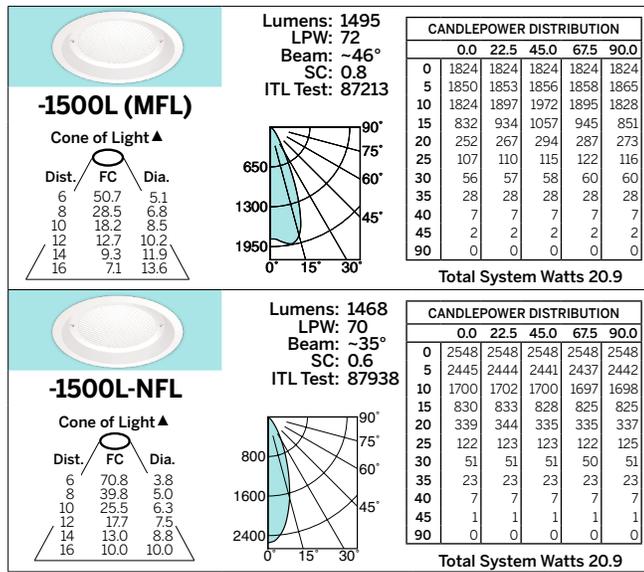
## Performance Factors

NOMINAL LUMENS	LUMEN FACTOR	NOMINAL WATTS	LPW FACTOR
-2000L	1.26	1.37	0.92
-1500L	1.00	1.00	1.00

## Photometry - Installed Complete Fixture

LM-79 IESNA Certified Photometry from Independent Lab

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



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

▲ Cone of Light Key  
Dist. (in ft.) shown is where FC value is half the FC at nadir.  
Dist. (Ft.) from fixture  
FC Footcandles at nadir (0°)  
Dia. Circle of light at 50% of FC