

CATALOG #	TYPE	
JOB NAME	WATTAGE	VOLTAGE

# Lighting for Patient Spaces

## Static Color 8" Downlight • LED

LM-79 Certified • LM-80 Qualified

Type IC • Wet Location

# MRR-08870



OPTION	LED COLOR	TYPICAL APPLICATION
-521	Green (521nm)	Operating Room
-617	Red / Orange (617nm)	Vivarium
-634	Red / Amber (634nm)	Circadian

## Specifications

### Delivered System Performance

- LED Color Suffix: **Must Specify**
  - 521: Green (521nm); 1552 typical lumens
  - 617: Red/Orange (617nm); 1193 typical lumens
  - 634: Red/Amber (634nm); 811 typical lumens
- Distribution: WFL
- 60,000 hour life (L70)

### 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 10% dimming standard
- 120-277V / 50-60 Hz standard; load insensitive

### Trim

- Rustproof 100% aluminum grooveless, smooth, self-flanged white trim (field paintable)
- Kirlin BioGard™ antimicrobial white finish continuously inhibits growth of bacteria on the coating of the trim
- Regressed tempered prismatic spread lens with high efficiency reflector above

### Acrylic Enameled Aluminum Housing

- Rustproof and corrosion resistant: exceeds 1000 hour ASTM 5% salt spray test
- 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, 14GA, insulated, removable cover
- ½" and ¾" knockouts

### Installation & Hardware

- Recess indoor/outdoor in ceilings up to 1½" thick or see Option -79
- Compatible with fire rated enclosures (by others)
- 27" hanger bars & adjusting 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) for Type IC Listing

### 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

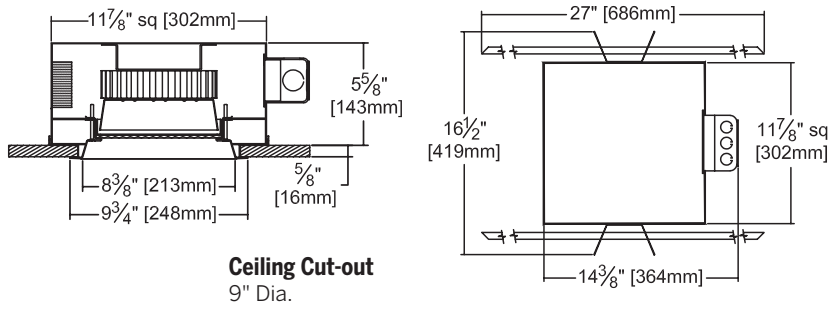
- Complete standard fixture

## Options and Ordering Configuration

(Example: MRR-08870-521-120-35T-25-I65-SH)

Must Specify			Optional			
Model	LED Color Suffix	Volts	Driver Options	Emergency Options	Trim Options	Other Options
MRR-08870	-521: green 521nm -617: red/orange 617nm -634: red/amber 634nm	(Blank): 120-277  -120 -277 -97†: Other Voltage	(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	(Blank): None  -EI: Remote emergency inverter for 100% rated lumens; Run time: 90+ minutes; 120 or 277V, 60 Hz only; N/A for options -29 or -FS -EM: Internal emergency battery pack; Delivers 500 lumens; Run time: 90+ minutes -ERH: Remote emergency battery pack; Delivers 1000 lumens; CEC Compliant; Run time: 90+ minutes	(Blank): White self-flanged downlight trim  <b>Trim Finishes</b> -35T: Silver enamel trim -94: Custom color; consult factory <b>Other Trim Features</b> -23: Frosted microprismatic lens instead -25: Vandal resistant trim, hardware and lensing. Not available with Option -NS -I65: IP65 Rated trim instead -NS: NSF approved fixture. Not available with Option -25 -WA: White acrylic (flat) diffuser instead	(Blank): None  -79: Extension collar for ceilings up to 2" thick -99: Special modification; consult factory -FS: Fused primary; One per fixture; N/A for option -EI -SH: Sealed housing and junction box. Provides Cleanroom Rated luminaire (ISO 5 Class 100)

## Dimensions



**Ceiling Cut-out**  
9" Dia.

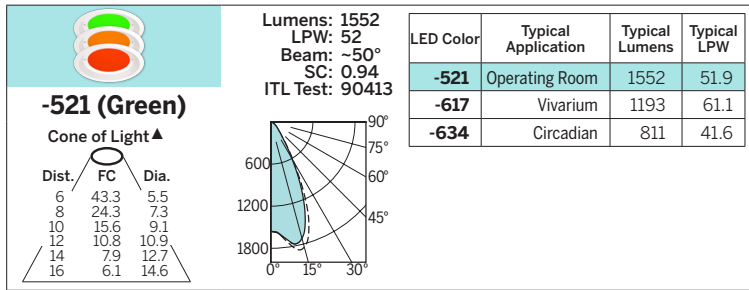
## Performance Factors

LED COLOR	LUMEN FACTOR	NOMINAL WATTS	LPW FACTOR
-521	1.00	29.9	1.00
-617	0.769	19.5	1.177
-634	0.523	19.5	0.801

\* See notes on page 1 for additional info on Lumen Factors

## Photometry - Installed Complete Fixture

LM-79 IESNA Certified Photometry from Independent Lab



## Available Infection Control Levels

Level	Option	Infection Protection
1	Standard	BioGard™
2	-165	BioGard™ IP65
3	-165-SH	BioGard™ IP65 ISO 5 / Class 100

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

▲ **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

LIMITED WARRANTY: KIRLIN LIGHTING PRODUCTS ARE WARRANTED FREE OF DEFECTS IN WORKMANSHIP OR MATERIAL FOR FIVE YEARS FROM DATE OF PURCHASE. INSTALLATION, IN-NORMAL USE, MANUFACTURER'S NEGLIGENCE, OR REPAIR OF THE FIXTURE OR REPAIR OF THE PURCHASE PRICE OR REPRESENTATION OF THE PURCHASE PRICE AND DEFECTIVE FIXTURE AT THE OFFICE OF THE MANUFACTURER WITHIN THE WARRANTY PERIOD SHALL NOT BE THE BASIS OF A WARRANTY CLAIM. 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.

PATENT SPACES  
DECEMBER 2023