

CATALOG #	TYPE	
JOB NAME	WATTAGE	VOLTAGE

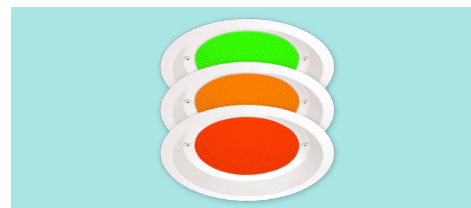
Lighting for Patient Spaces

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 Rated 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

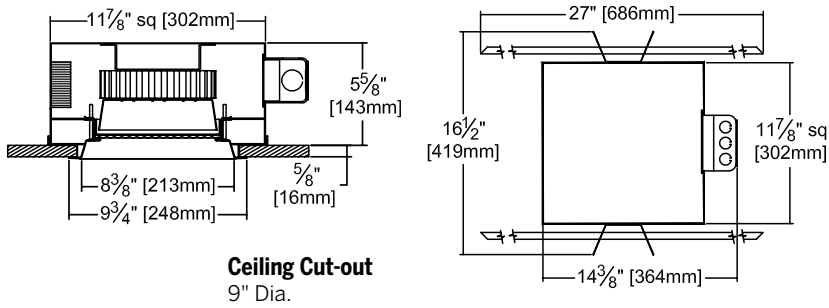
- Complete standard fixture

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 Trim Finishes -35T: Silver enamel trim -94: Custom color; consult factory -BKBG: BioGard™ anti-microbial black -94: Custom color; consult factory -94BG: BioGard™ anti-microbial custom color finish Other Trim Features -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



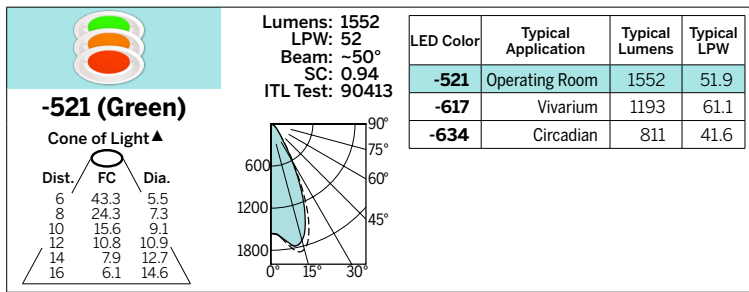
* See notes on page 1 for additional info on Lumen Factors

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

Photometry - Installed Complete Fixture

LM-79 IESNA Certified Photometry from Independent Lab



Available Infection Control Levels

Level	Option	Infection Protection			
1	Standard		BioGuard™		
2	-I65		BioGuard™	 IP65	
3	-I65-SH		BioGuard™	 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