

# MEDMASTER DOWNLIGHT

Luminaires for Medical Applications

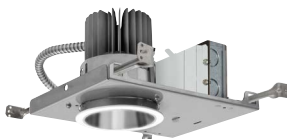
## MDL4 SERIES using Indigo-Clean Technology

### PROJECT INFORMATION

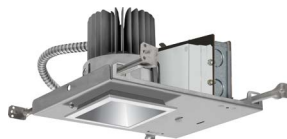
Job Name \_\_\_\_\_  
 Fixture Type \_\_\_\_\_  
 Catalog Number \_\_\_\_\_  
 Approved by \_\_\_\_\_

#### PRODUCT FEATURES:

- » 4" sealed, recessed downlight with round or square aperture
- » Provides on-demand environmental disinfection via LED light
- » Single, white disinfection mode
- » Independent laboratory tested to kill harmful bacteria, including Staph\*, such as MRSA\*\*
- » Delivered lumens: 1,592 - 1,946 lm



Round



Square

#### SPECIFICATIONS

**HEAT SINK:** Die-cast aluminum with external radial fins for natural convection.

**ROUGH-IN FRAME:** 18-gauge die-formed, corrosion-resistant steel. Vertically adjustable collar accommodates ceiling thicknesses up to 2", adjustable post-installation. Adjustable mounting bars for installation with wood and steel frame joists and T-grid ceiling systems spaced up to 24" on center. Quick-access junction box accessible post-installation from above and below ceiling. Includes (5) 1/2" knock-outs to allow straight conduit runs.

**TRIM/HOUSING SECTION:** IP-rated housing section incorporates the heat sink, LED module, optics and lower trim. Trim that is secured to the Rough-In frame with hidden torsion springs. Anti-microbial finish standard on all exposed painted surfaces.

**OPTICAL:** High-efficiency mixing chamber design with regressed diffused tempered-glass lens produces uniform light output. Round or square aperture. Available with various reflector finishes. See Reflector Finish Ordering Information for available options.

**ELECTRICAL:** Serviceable white and 405nm Indigo LED array. Available 3200K, 3700K and 4300K color temperature with 3-step MacAdam variation allowance. Minimum 82 CRI standard. 120, 277 and 347VAC, 50/60Hz electrical input with serviceable high power factor electronic, constant-current drivers (<10% THD, >0.90 PF). Minimum 85% driver efficiency. Standard 0-10V dimming with 1-100% range and dim-to-dark capabilities. 200µA maximum source current. Optional DALI and Lutron EcoSystem dimming drivers with 1-100% range. Single, white disinfection mode.

**PHOTOMETRICS:** Photometry tested to the IESNA LM-79-08 standard by an ILAC/ISO17025 accredited laboratory. For photometric information, go to [www.kenall.com](http://www.kenall.com).

**WARRANTY:** Limited five (5) year LED warranty.

**LISTINGS:** Luminaire is certified to UL standards by Intertek Testing Laboratory for non-IC and Wet Location installations. IP64 rating per IEC60598. NSF2 Splash/Non-Food Zone. Optional CCEA compliant.

\* Per independent lab report #5GS-09516076094. Contact Kenall for a copy of this report.

\*\*Antimicrobial Activity of a Continuous Visible Light Disinfection System by Rutala, et. al, ID Week 2016.



#### ORDERING INFORMATION (EX: MDL4-DCFW-22C-37K8-FW-RIG4-120-DIM1)

##### TRIM

Model                      Trim Finish                      Lamp Power                      Lamp Color                      Reflector Finish

**DCFW**

**22C**

**Model**  
**MDL4** 4" Medical - Round  
**MDL4S** 4" Medical - Square

**Trim Finish**  
**DCFW** Die-Cast Aluminum in Flat White

**Lamp Power**  
**22C** 22 Watt White & Indigo LED

**Lamp Color**  
**32K8** 3200K / 80 CRI min.  
**37K8** 3700K / 80 CRI min.  
**43K8** 4300K / 80 CRI min.

**Reflector Finish**  
**FW** Flat White  
**CD** Clear Diffuse  
**CSS** Clear Semi-Specular (round only)

##### ROUGH-IN

Rough-In                      Input Voltage                      Driver Type                      Options

**Rough-In**  
**RIG4** 4" Medical Rough-In - Round  
**RIG4S** 4" Medical Rough-In - Square

**Input Voltage**  
**120** 120VAC, 50/60Hz  
**277** 277VAC, 50/60Hz  
**347** 347VAC, 60Hz

**Driver Type**  
**DIM1** 0-10V Dimming to 1%  
**DALI** DALI Dimming to 1%  
**ECO1** Lutron EcoSystem®

**Options**  
**LEL** Emergency Battery Backup with Remote Test Switch  
**FS** Fuse & Holder  
**CCEA** CCEA Approved

<sup>1</sup> N/A with DALI or ECO1 Driver Type. N/A with LEL option



[www.kenall.com](http://www.kenall.com)

P: 800-4-Kenall

F: 262-891-9701

10200 55th Street Kenosha, Wisconsin 53144

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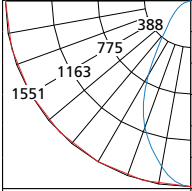
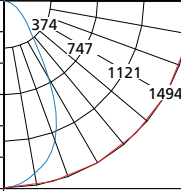
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## MDL4 SERIES using Indigo-Clean Technology

### PERFORMANCE

Optic		Lamp Power	Initial Delivered Lumens, By Lamp Color			Input Power (W)	Estd. L70 LED Life (hrs)
Reflector	Reflector Finish		32K8	37K8	43K8		
Round	CD	22C	1,592	1,592	1,695	24	75,000
	CSS	22C	1,690	1,690	1,800	24	75,000
	FW	22C	1,765	1,765	1,879	24	75,000
Square	CD	22C	1,694	1,694	1,804	24	75,000
	FW	22C	1,828	1,828	1,946	24	75,000

Subject to change without notice. Visit [www.kenall.com](http://www.kenall.com) for ies files and additional information.

Round Aperture Candela Curve	MDL4-DCFV-22C-37K8-FW		Distance to illuminated plane (ft)	MDL4S-DCFV-22C-37K8-FW		Square Aperture Candela Curve
	Initial center beam foot-candles	Beam diameter (ft)		Initial center beam foot-candles	Beam diameter (ft)	
	31.0	4.2	5'	29.9	4.3	
	21.5	5.3	6'	20.7	5.5	
	15.8	6.2	7'	15.2	6.8	
	12.1	7.0	8'	11.7	7.7	
	9.6	8.0	9'	9.2	8.6	
	7.8	8.9	10'	7.5	9.6	
Spacing Criteria: 0.88	foot-candle multipliers for 30K8(.96), 30K9(.80), 35K8(.96), 35K9(.81), 40K9(.81), 50K8(1.0)					Spacing Criteria: 0.92
Beam Angle: 57.1	Beam diameter is where foot-candles drop to 50% of maximum					Beam Angle: 58.6



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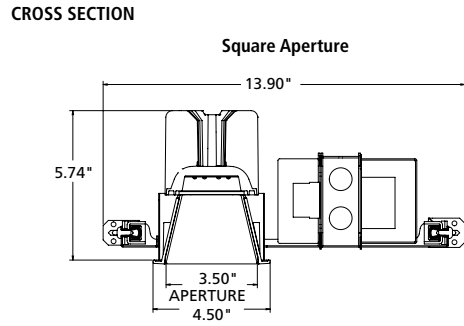
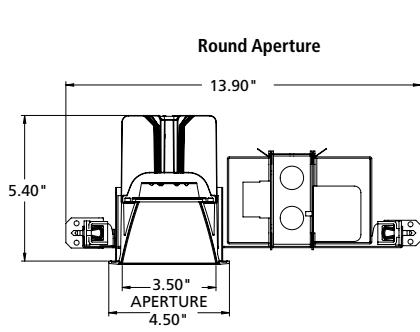
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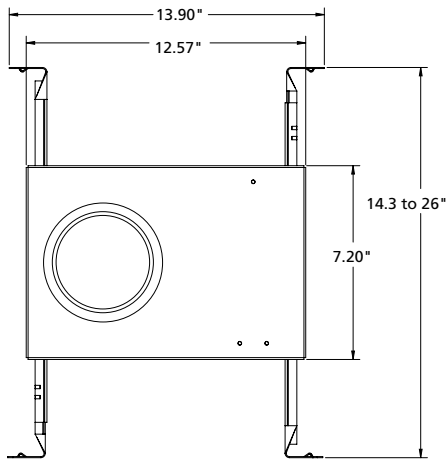
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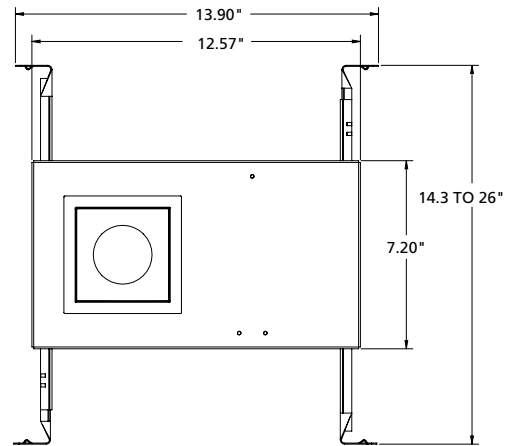
### DIMENSIONAL DATA



### BOTTOM VIEW



RECOMMENDED CEILING CUTOUT: 4.125" DIA.



RECOMMENDED CEILING CUTOUT: 4.125" x 4.125"



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MDL4-ICT-101118