#### MEDMASTER DOWNLIGHT

### **Luminaires for Medical Applications**

#### **MDL4 SERIES using Indigo-Clean Technology**

#### **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





# PROJECT INFORMATION Job Name Fixture Type Catalog Number Approved by



#### **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: Single, white disinfection mode. 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 (non dim-to-dark with 347V); 165μA maximum source current. Optional eldoLED ECOdrive DALI driver with 1-100% range.

PHOTOMETRICS: Photometry tested to the IESNA LM-79-08 standard by an ILAC/ISO17025 accredited laboratory. For photometric information, go to 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. EPA Est. No. 99283-WI-1.

- \* Per independent lab report #SGS-09S17036476. 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					ROUGH-I	N			
Model	Trim Finish	Lamp Power	Lamp Color	Reflector Finish	Rough-In	Input Voltage	Driver Type	Options	
	DCFW	22C						_	
Model			Lamp Color		Rough-In				
MDL4 4" Medical - Round			<b>32K8</b> 32	200K / 80 CRI min.	RIG4 4" Medical Rough-In - Round				
MDL4S 4" Medical - Square				700K / 80 CRI min. 300K / 80 CRI min.	RIG4S4" Medical Rough-In - Square				
Trim Finish					Input Voltage				
	ast Aluminum in Flat White		Reflector Finish		<b>120</b> 120VAC, 50/60Hz				
20.11	ase, nammam m riae vinite		FW Flat W			7VAC, 50/60Hz			
Lamp Power			CD Clear Diffuse 347 <sup>A</sup> 347VAC, 60Hz						
22C 22 Watt White & Indigo LED				Semi-Specular (round only)	34, 31	7 1710, 00112			
22 Wat Winte a mago LED			CDD Cicui s	remi specular (round omy)	Driver Type				
					<b>DIM1</b> 0-10V Dimming to 1%				
					DALI DALI Dimming to 1%				
					Ditti	57 (El Dillillilling to 170			
					Options				
					<b>LEL</b> Em	ergency Battery Back	cup with Remote	Test Switch	
					FS Fu:	se & Holder			
					CCEA CC	EA Approved			

N/A with DALI Driver Type. N/A with LEL option



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#### PERFORMANCE

Optic		Lamp	Initial Deliv	vered Lumens, By	Lamp Color			
Reflector	Reflector Finish	Lamp Power	32K8	37K8	43K8	Input Power (W)	Estd. L70 LED Life (hrs)	
	CD	22C	1,592	1,592	1,695	24	75,000	
Round	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	
Square	FW	22C	1,828	1,828	1,946	24	75,000	

Subject to change without notice. Visit www.kenall.com for ies files and additional information.

	MDL4-DCFW-22C-37K8-FW			MDL4S-DCFW-22C-37K8-FW			
Round Aperture Candela Curve	Initial center beam foot-candles	Beam diameter (ft)	Distance to illuminated plane (ft)	Initial center beam foot-candles	Beam diameter (ft)	Square Aperture Candela Curve	
388	31.0	4.2	5'	29.9	4.3	374	
775	21.5	5.3	6'	20.7	5.5	747	
1163	15.8	6.2	7'	15.2	6.8	1121 /	
1331	12.1	7.0	8'	11.7	7.7	1494	
	9.6	8.0	9'	9.2	8.6	$HX \setminus Y \mid$	
	7.8	8.9	10'	7.5	9.6		
Spacing Criteria: 0.88	foot-c	Spacing Criteria: 0.92					
Beam Angle: 57.1		Beam Angle: 58.6					



# **MEDMASTER DOWNLIGHT**

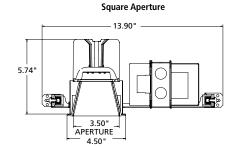
Luminaires for Medical Applications

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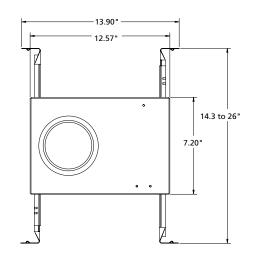
**DIMENSIONAL DATA** 

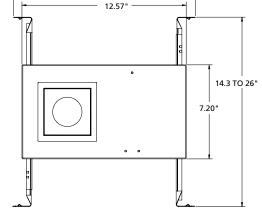
#### **CROSS SECTION**

# Round Aperture 13.90" 3.50" APERTURE



#### **BOTTOM VIEW**





13.90"

RECOMMENDED CEILING CUTOUT: 4.125" DIA.

RECOMMENDED CEILING CUTOUT: 4.125"× 4.125"