Luminaires for Medical Applications

MDL SERIES using Indigo-Clean Technology

PRODUCT FEATURES:

- » 6" sealed, recessed downlight with regressed or flush lens trim
- » 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: 1,258 3,153 lm
- » 1% Dimming via 0-10V or DALI control

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. Universal mounting brackets accept 3/4" and 1-1/2" lathers channel, 1/2" EMT conduit and hanger bars. Quick-access junction box accessible post-installation from above and below ceiling. Includes (4) 1/2" and (2) 3/4" knock-outs to allow straight conduit runs. Listed for (8) 12AWG, 90°C conductors and feed-thru branch wiring. Provided with FMC with electrical quick-connect to Trim Section.

PROJECT INFORMATION

Job Name

Fixture Type

Catalog Number.

Approved by

TRIM/HOUSING SECTION: IP-rated housing section incorporates the heat sink, LED module, optics and lower trim. Configurable with an IP64-rated Regressed or Flush lens trim that is secured to the Rough-In frame with hidden torsion springs, and an IP65 Flush lens trim secured with four (4) Phillips-head, captive fasteners. Anti-microbial finish standard on all exposed painted surfaces. See trim ordering information for available options.

OPTICAL: High-efficiency mixing chamber design with regressed diffused tempered-glass lens produces uniform light output. Available with various reflector distribution patterns and finishes. Flush lens trim options include a clear lens. See distribution and 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. 120-277VAC 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 and IP65 rating per IEC60598. NSF2 Splash/Non-Food Zone. Optional CCEA compliance. 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: MDL6-R-5BR-22C-37K8-W-CS-RIG6-DV-DIM1)

TRIM		ROUGH-IN
Model Trim Style Trim Finish Lamp Power	Lamp Color Distribution Reflector Finish Flush Lens Type	Rough-In Input Voltage Driver Type Options
MDL6		RIG6
Trim Style R Regressed Lens (IP64) NF Flush Lens (Without Fasteners - IP64) FF Flush Lens (With Fasteners - IP65)	Lamp Color 32K8	Rough-In RIG6 6" Rough-In Input Voltage
Trim Finish DCFW Die-Cast Aluminum in Flat White (R and NF Trim Style)	Distribution M Medium W Wide	DV 120-277V, 50/60Hz 120 120VAC, 60Hz 277 277VAC, 60Hz 347 [▲] 347VAC, 60Hz
2FW Cold-Rolled Steel in Flat White 5BR Type 304 Stainless Steel with 4B Brushed Finish	Reflector Finish FW Flat White CS Clear Specular	Driver Type DIM1 0-10V Dimming to 1% DALI DALI Dimming to 1%
Lamp Power 22C 22 Watt White & Indigo LED 38C† 38 Watt White & Indigo LED	CSS Clear Semi-Specular Flush Lens Type (n/a Regressed Trim Style) T 1/8" Clear High-Impact Acrylic	Options LEL Emergency Battery Backup with Remote Test Switch FS Fuse & Holder CCEA CCEA Approved (specified voltage required; n/a 347V)
		 N/A with DALI Driver Type. N/A with LEL option Must be installed with a minimum 24" on-center spacing,



12" from wall, and have 3" clearance above the

Trim/Housing

Luminaires for Medical Applications

MDL SERIES using Indigo-Clean Technology

PERFORMANCE - REGRESSED LENS

Opt	Optic		Lamp Initial Delivered Lumens, By La				
Distribution	Reflector Finish	Power	32K8	37K8	43K8	Input Power (W)	Estd. L70 LED Life (hrs)
	CS	22C	1,737	1,737	1,850	24	75,000
	C3	38C	2,780	2,780	2,960	45	60,000
M	CCC	22C	1,456	1,456	1,551	24	75,000
IVI	CSS	38C	2,331	2,331	2,482	45	60,000
	FW	22C	1,523	1,523	1,622	24	75,000
		38C	2,438	2,438	2,596	45	60,000
	CC	22C	1,822	1,822	1,940	24	75,000
CS	CS	38C	2,916	2,916	3,105	45	60,000
W	CSS	22C	1,603	1,603	1,707	24	75,000
VV		38C	2,566	2,566	2,732	45	60,000
	FW	22C	1,850	1,850	1,970	24	75,000
		38C	2,961	2,961	3,153	45	60,000

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

	MDL6-R-22C	:-37K8-W-CS		MDL6-R-22C-37K8-M-CS			
Wide Distribution Candela Curve	Initial center beam foot-candles	Beam diameter (ft)	Distance to illuminated plane (ft)	Initial center beam foot-candles	Beam diameter (ft)	Medium Distribution Candela Curve	
381	42.0	7.5	5'	134.6	3.3	1029	
762	33.7	7.8	6'	93.5	3.6	2057	
1142	24.7	9.0	7'	68.7	4.2	3086 / 4115	
	18.9	10.5	8'	52.6	4.7		
	15.0	12.0	9'	41.6	5.4		
	12.1	13.0	10'	33.7	6.0		
Spacing Criteria: 1.42		Spacing Criteria: 0.64					
Beam Angle: 60°		Beam diameter is where foot-candles drop to 50% of maximum					

	MDL6-R-38C	-37K8-W-CS		MDL6-R-38C-37K8-M-CS			
Wide Distribution Candela Curve	Initial center beam foot-candles	Beam diameter (ft)	Distance to illuminated plane (ft)	Initial center beam foot-candles	Beam diameter (ft)	Medium Distribution Candela Curve	
609	67.2	7.8	5'	215.5	3.3	1646	
1219 1828 2438	53.9	8.0	6'	149.6	3.6	3293	
	39.5	9.2	7'	109.9	4.2	4939 / 6586	
2430	30.3	10.7	8'	84.2	4.8		
	24.0	12.0	9'	66.5	5.4		
	19.4	13.0	10'	53.9	6.0		
Spacing Criteria: 1.42	foot-candle multipliers for 32K8(1.0), 43K8(1.1)					Spacing Criteria: 0.64	
Beam Angle: 60°		Beam diameter is where foot-candles drop to 50% of maximum					



Luminaires for Medical Applications

MDL SERIES using Indigo-Clean Technology

PERFORMANCE - FLUSH LENS

Optio		Lamp	Lamp Initial Delivered Lumens, By Lamp Color				
Distribution	Reflector Finish	Power	32K8	37K8	43K8	Input Power (W)	Estd. L70 LED Life (hrs)
	CS	22C	1,357	1,357	1,445	24	80,000
	C3	38C	2,172	2,172	2,313	45	75,000
M	CCC	22C	1,274	1,274	1,357	24	80,000
M	CSS	38C	2,039	2,039	2,171	45	75,000
	FW	22C	1,258	1,258	1,340	24	80,000
		38C	2,014	2,014	2,145	45	75,000
CC	CS	22C	1,528	1,528	1,627	24	80,000
	CS	38C	2,445	2,445	2,604	45	75,000
W	CSS	22C	1,297	1,297	1,381	24	80,000
		38C	2,075	2,075	2,210	45	75,000
	FW	22C	1,437	1,437	1,530	24	80,000
		38C	2,299	2,299	2,448	45	75,000

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

	MDL6-FF-22C-37K8-W-CS-T			MDL6-FF-22C-37K8-M-CS-T			
Wide Distribution Candela Curve	Initial center beam foot-candles	Beam diameter (ft)	Distance to illuminated plane (ft)	Initial center beam foot-candles	Beam diameter (ft)	Medium Distribution Candela Curve	
319	35.4	7.7	5'	107.5	3.2	750	
638	28.0	7.8	6'	74.7	3.5	1500	
958	20.5	9.2	7'	54.9	4.0	2250 / 3000	
1277	15.7	10.5	8'	42.0	4.6		
	12.5	11.6	9'	33.2	5.2		
	10.1	13.0	10'	26.9	5.8		
Spacing Criteria: 1.4		Spacing Criteria: 0.62					
Beam Angle: 59°		Beam diameter is where foot-candles drop to 50% of maximum					

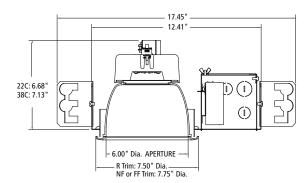
Wide Distribution Candela Curve	MDL6-FF-38C-	-37K8-W-CS-T		MDL6-FF-38C-37K8-M-CS-T		
	Initial center beam foot-candles	Beam diameter (ft)	Distance to illuminated plane (ft)	Initial center beam foot-candles	Beam diameter (ft)	Medium Distribution Candela Curve
511	56.7	7.7	5'	172.1	3.2	1201
1022	44.8	7.8	6'	119.5	3.5	2401
1532	32.8	9.2	7'	87.8	4.0	3602 / 4802
2043	25.1	10.5	8'	67.2	4.6	
	20.0	11.6	9'	53.1	5.2	
	16.2	13.0	10'	43.0	5.8	
Spacing Criteria: 1.4	foot-candle multipliers for 32K8(1.0), 43K8(1.1)					Spacing Criteria: 0.62
Beam Angle: 59°		Beam diameter is where foot-candles drop to 50% of maximum				

Luminaires for Medical Applications

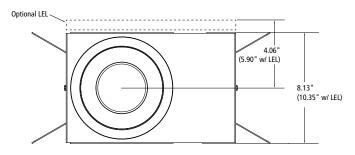
MDL SERIES using Indigo-Clean Technology

DIMENSIONAL DATA

CROSS SECTION



BOTTOM VIEW



RECOMMENDED CEILING CUT-OUT R and NF Trims: 7.13" Dia. FF Trims: 7.38" Dia.