MEDMASTER DOWNLIGHT

Luminaires for Medical Applications

MDL4 SERIES

PRODUCT FEATURES:

» 4" sealed, recessed downlight with round or square aperture

» Delivered lumens: 983 - 2,640 lm

» 1% Dimming via 0-10V or DALI control





Square

Job Name

Fixture Type

Catalog Number_ Approved by ____ PROJECT INFORMATION

SPECIFICATIONS Round

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. Regressed lens trim 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 acrylic lens producing uniform light output. Round or square aperture. Available with various reflector finishes. See Reflector Finish Ordering Information for available options.

ELECTRICAL: LED array available in multiple CCT and CRI combinations with a maximum 3-step MacAdam variation allowance. See Trim Ordering Information for available options. 120-277VAC or 347VAC, 50/60Hz electrical input with serviceable constant current driver (<20% 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.











ORDERING INFORMATION (EX: MDL4-DCFW-14L-35K8-FW-RIG4-277-DIM1-LEL)

ΓRIM		ROUGH-IN							
Model	Trim Finish	Lamp Power	Lamp Color	Reflector Finish	Rough-In	Input Voltage	Driver Type	Options	
	DCFW								
odel			Lamp Color		Rough-In				
MDL4 4" Medical - Round			30K8 3000K /	80 CRI min.	RIG4 4" Medical Rough-In - Round				
MDL4S 4" Medical - Square			30K9 3000K /	90 CRI min.	RIG4S 4" Medical Rough-In - Square				
	·		35K8 3500K /	80 CRI min.		3	•		
Trim Finish			35K9 3500K /	90 CRI min.	Input Voltage				
CFW Die-Cast Aluminum in Flat White			40K8 4000K /	80 CRI min.	120 120VAC, 50/60Hz				
			40K9 4000K /	90 CRI min.		/AC, 50/60Hz			
Lamp Power			50K8 5000K / 80 CRI min. 347† 347VAC, 60Hz						
1L 14 Wat	tt LED								
28L* 28 Watt LED			Reflector Finish		Driver Type				
			FW Flat White		DIM1 0-10V Dimming to 1%				
			CD Clear Diffuse		DALI DA	ALI Dimming to 1%			
			CS Clear Specula	ar (square only)		3			
				pecular (round only)	Options				
					LEL Eme	rgency Battery Back	up with Remote	Test Switch	
						& Holder			
					CCEA CCE	A Approved (n/a 34)	7V)		

- † 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 1/2" clearance above the Trim/Housing



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PERFORMANCE

Optic		Lamn	Initial Delivered Lumens, By Lamp Color						Efficacy	Input	Estd. L70	
Reflector	Reflector Finish	Lamp Power	30K8	30K9	35K8	35K9	40K8	40K9	50K8	(lm/W)	Power (W)	LED Life (hrs)
Round	CD	14L	1,175	983	1,175	995	1,222	995	1,249	61 - 78	16	80,000
		28L	2,152	1,800	2,152	1,822	2,239	1,822	2,287	58 - 74	31	85,000
	CSS	14L	1,248	1,044	1,248	1,056	1,298	1,056	1,326	65 - 83	16	80,000
		28L	2,286	1,911	2,286	1,934	2,377	1,934	2,428	62 - 78	31	85,000
	FW	14L	1,303	1,090	1,303	1,103	1,355	1,103	1,385	68 - 87	16	80,000
		28L	2,387	1,996	2,387	2,020	2,482	2,020	2,536	64 - 82	31	85,000
Square	CD	14L	1,251	1,046	1,251	1,059	1,301	1,059	1,329	65 - 83	16	80,000
		28L	2,291	1,916	2,291	1,939	2,383	1,939	2,435	62 - 79	31	85,000
	CS	14L	1,357	1,134	1,357	1,148	1,411	1,148	1,442	71 - 90	16	80,000
		28L	2,485	2,078	2,485	2,103	2,584	2,103	2,640	67 - 85	31	85,000
	FW	14L	1,350	1,129	1,350	1,142	1,404	1,142	1,434	71 - 90	16	80,000
		28L	2,472	2,067	2,472	2,092	2,571	2,092	2,627	67 - 85	31	85,000

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

	MDL4-DCFW-14L-40K8-FW			MDL4S-DCFW	-14L-40K8-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	
298	23.8	4.2	5'	22.9	4.3	287	
595	16.5	5.3	6'	15.9	5.6	574	
893	12.2	6.2	7'	11.7	6.8	861 /	
1131	9.3	7.1	8'	9.0	7.7		
$ \times / \uparrow \downarrow $	7.3	8.0	9'	7.1	8.7	$HT \setminus Y$	
	5.9	9.0	10'	5.7	9.7		
Spacing Criteria: 0.88	pacing 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 Angle: 58.6					

	MDL4-DCFW-28L-40K8-FW			MDL4S-DCFW	-28L-40K8-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	
545	43.6	4.2	5'	42.0	4.3	525	
1090	30.3	5.4	6'	29.2	5.6	1051	
1636	22.3	6.3	7'	21.4	6.8	1576 /	
2181	17.0	7.1	8'	16.4	7.7		
$ \times / \uparrow \downarrow \downarrow$	13.5	8.0	9'	13.0	8.6	$HT \setminus Y \mid$	
	10.9	8.9	10'	10.5	9.6		
Spacing Criteria: 0.88	30K8(.96), 30K9(.80), 35K8(.96), 35K9	(.81), 40K9(.81), 5	0K8(1.0)	Spacing Criteria: 0.92			
Beam Angle: 57.1			Beam Angle: 58.6				

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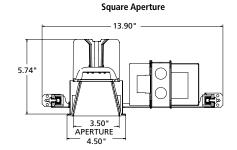
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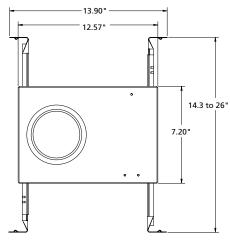
DIMENSIONAL DATA

CROSS SECTION

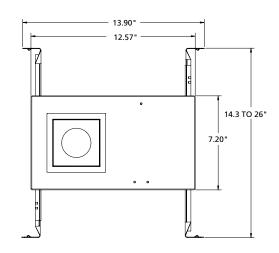
Round Aperture 13.90" 5.40 ---3.50" → APERTURE



BOTTOM VIEW







RECOMMENDED CEILING CUTOUT: 4.125"× 4.125"