PROJECT	Job Name	Catalog Number
INFORMATION	Fixture Type	 Approved by

MEDMASTER™

Surgical Suite Luminaires

M4SEDI SERIES – GREEN & WHITE LED USING KORE TECHNOLOGY™

PRODUCT FEATURES:

- » Green LED circuit creates an application-optimized spectrum for increased visual acuity with no transmission loss due to filters
- » Diffused high-efficiency lens for reduced glare
- » Symmetric, asymmetric/symmetric and full asymmetric optic distributions with uniform lens appearance
- » Universal housing accommodates either flange or grid applications
- » Sealed housing, smooth exterior doorframe and lens for infection control and simplified cleaning protocols
- » Radiated and conducted emissions controlled as per MIL-STD-461G
- » For M4SEDI with all White LEDs, click here

SPECIFICATIONS

HOUSING: Standard 24-gauge cold rolled steel with dust-tight, sealed construction. Alternate material options available. Rigid housing flange with mitered and welded corners. White TGIC polyester powder coat finish — 5-step pre-treatment. Salt spray test: 1,000 hours. Antimicrobial finish on all exposed painted surfaces of installed luminaire. Internal surfaces use a proprietary high reflectance coating (Reflectance: >92%). Flange finish matches housing, regardless of doorframe finish.

2'×2

2'×4'

DOORFRAME: Standard 20-gauge cold rolled steel. One-piece inset style construction with welded corners. Steel and Aluminum selections are finished with gloss white TGIC polyester powder coat finish with 5-stage pre-treatment. Optional 20-gauge type 304 stainless steel (#4 finish-post fabrication). Antimicrobial finish standard on all exposed painted surfaces. Doorframe secured to housing with stainless steel aircraft cables and captive flush-mounted Phillips head stainless steel fasteners - (6) for 1x2, (8) for 1x4 and 2x2, (10) for 2x4. One-piece, closed-cell silicone gasket seals charge to housing

OPTICS: Injection-molded, high refraction polycarbonate optics provided for each LED. Proprietary KORE Technology™ (Kenall Optical Radiance Engine) delivers improved visual performance and uniform diffuser luminance (<1.5:1 max/min ratio across full lens area). Impact-resistant diffused acrylic outer lens. Symmetric/asymmetric (ASYM) and full-asymmetric (FASYM) optics provide asymmetric throw while retaining uniform luminance.

ELECTRICAL: Serviceable mid-power white LED array. Available 3000K, 3500K, 4000K and 5000K color temperatures with maximum 3-step MacAdam variation allowance. Minimum 80 CRI standard with optional minimum 90 CRI (R9 > 50) available. 530 nm green mid-power LED array. 120/277VAC or 347VAC, 50/60Hz electrical input with replaceable high power factor electronic, constant-current driver (<10% THD, >0.90 PF). Minimum 85% driver efficiency. Standard 0-10V dimming with 1-100% range. and dim-to-dark capabilities on white and green circuit. Maximum dimming source current per luminaire 0.4mA (white) / 0.2mA (green). EMC meets or exceeds FCC CFR Part 15 and MIL STD 461F requirements. White and green circuit should be independently powered and dimmed.

INSTALLATION: Non-IC recessed ceiling mounting into grid and flange application types. Flange installation utilizes included adjustable swing-out mounting brackets. Grid installation suitable for 1" and 1.5" T-bar ceilings. Universal installation into grid or flange (drywall) ceiling applications. See below for install frames, optionally used for flange mount in hard ceilings (not required).

PHOTOMETRICS: Photometry tested to the IESNA LM-79-08 standard. For additional photometric data, please go to www.kenall.com.

WARRANTY: Limited five (5) year LED warranty.

LISTINGS: Luminaire is certified to UL standards by Intertek Testing Laboratories for Wet Location. ETL certified IP65 per IEC 60598. NSF2 Splash/Non-Food Zone. Meets FED-STD-209E/Class 1 (ISO 3) Cleanrooms. Compliant with MIL-STD 461G for radiated and conducted emissions (including when ordered with LEL option). CCEA Approved.















ORDERING INFORMATION (Ex: M4SEDI-14-30G/32L-40K9-DIM1-277-2F-4H-FASYM-LEL)

Model	Size	Lamp Power	Lamp (Color Drive	r Voltage	Doorframe	Housing	Optics	Options
M4SED	<u> </u>			DIN	Л1				
Size 12 14 22 24	1'×2' Nominal 1'×4' Nominal 2'×2' Nominal 2'×4' Nominal		Lamp 30K8 30K8 35K8 35K9 40K8	Color• 3000K, 80 CRI 3000K, 90 CRI 3500K, 80 CRI 3500K, 90 CRI 4000K, 80 CRI	 - 		Housin 4H 2H 5H PAH	20-Ga CRS in Antimic 20-Ga Type 304 Stain	
Lamp Pow 1'×2' 36G	r er 36 Watt Green L	ED	40K9 50K8 50K9	4000K, 90 CRI 5000K, 80 CRI 5000K, 90 CRI	 		Optics SYM ASYM FASYM		or Acrylic c Optic with Diffused DR Acrylic with Diffused DR Acrylic
1'×4' 30G/32L 38G	30 Watt Green/3 38 Watt Green L	32 Watt White LED ED		0-10V Dimming	to 1% with Dim-	to-Dark	Option LEL* 20KV	s 10W Emergency Batto	ery Pack
<u>2'×2'</u> 30G/45L 38G	30 Watt Green/4 38 Watt Green L	15 Watt White LED ED	Voltag 120 277 347	ge 120VAC, 50/60H 277VAC, 50/60H 347VAC, 60Hz			FS HJ IF*† RM*	Fuse & Holder Sealed Wireway Install Frame Continuous Row Mou	ction per IEEE/ANSI C62.41.2 Cat. A
<u>2'×4'</u> 22G/40L 22G/80L		0 Watt White LED Watt White LED	Doorf 2F PAF 5F	Fabricated Alum	ntimicrobial Gloss inum in Antimicro SS with 4B Brush	bial Gloss White	* Only a	EDI with all White LED:	s, click <u>here</u> g in drywall ceilings (flange mount)



▲ Wired to white LED when green/white lamping is selected; n/a 347V

n/a for all-green lamp configurations

MEDMASTER™

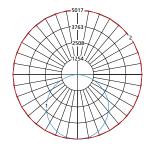
M4SEDI SERIES – TECHNICAL DATA

PERFORMANCE

Green/White LED		Green LED Circuit					White LED Circuit					
	Lamp	Delivered Lumens, By Optic (Im)		Input	Input Current @	Delivered Lumens, By Optic (lm)		Input	Input Current @	TM-21 Reported L70:		
Model	Power	SYM	ASYM	FASYM	Power (W)	120V/277V (A)	SYM	ASYM	FASYM	Power 120V	120V/277V (A)	Green/White (hrs)
M4SEDI14	30G/32L	4,478	4,115	4,132	35	0.379 / 0.144	4,896	4,499	4,517	37	0.379 / 0.144	>60,000 / >72,000
M4SEDI22	30G/45L	4,475	4,068	4,058	33	0.360 / 0.136	7,128	6,480	6,464	52	0.511 / 0.213	>60,000 / >72,000
M4SEDI24	22G/40L	4.733	4.425	4.426	27	0.335 / 0.130	7,496	7,009	7,010	48	0.423 / 0.202	>60,000 / >72,000
M4SEDI24	22G/80L	4,733	4,420	4,420	27	0.3337 0.130	14,413	13,476	13,478	97	0.846 / 0.403	>60,0007>72,000

All white LED circuit values reported at 4000K, 80CRI (40K8). Use Performance Scaling table to determine lumen output at desired lamp color. Subject to change without notice. Visit www.kenall.com for .ies files and additional information

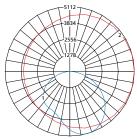
Model: M4SEDI-24-22G/80L-40K8-DIM1-vvv-www-xxx-SYM-zzzz (White)



 $\mbox{Max Candela} = 5017 \mbox{ Located At Horizontal Angle} = 0, \mbox{Vertical Angle} = 2.5$

— 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
— 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

Model: M4SEDI-24-22G/80L-40K8-DIM1-vvv-www-xxx-FASYM-zzzz (White)



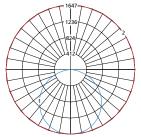
Max Candela = 5112 Located At Horizontal Angle = 0, Vertical Angle = 15

— 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
— 2 - Horizontal Cone Through Vertical Angle (15) (Through Max. Cd.)

Performance Scaling, by Lamp Color

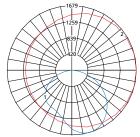
Model	Lamp Power			
30K8	0.92			
30K9	0.83			
35K8	0.95			
35K9	0.87			
40K8	1.00			
40K9	0.89			
50K8	0.96			
50K9	0.89			

Model: M4SEDI-24-22G/80L-40K8-DIM1-vvv-www-xxx-SYM-zzzz (Green)



Max Candela = 1647 Located At Horizontal Angle = 0, Vertical Angle = 2.5

— 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.) — 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.) Model: M4SEDI-24-22G/80L-40K8-DIM1-vvv-www-xxx-FASYM-zzzz (Green)



Max Candela = 1679 Located At Horizontal Angle = 0, Vertical Angle = 15

— 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
— 2 - Horizontal Cone Through Vertical Angle (15) (Through Max. Cd.)

MEDMASTER™

M4SEDI SERIES – TECHNICAL DATA

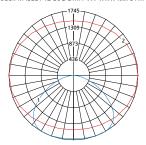
PERFORMANCE

Green	LED
-------	-----

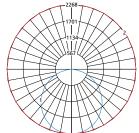
Green LED		Initial Deli	vered Lumens, By	Optic (Im)			
Model	Lamp Code	SYM	ASYM	FASYM	Input Power (W)	Input Current @ 120V/277V (A)	TM-21 Reported L70 (hrs)
M4SEDI12	36G	4,777	4,140	4,100	41	0.420 / 0.165	>60,000
M4SEDI14	38G	6,134	5,636	5,660	43	0.436 / 0.172	>60,000
M4SEDI22	38G	6,465	5,878	5,863	43	0.436 / 0.172	>60,000

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

Model: M4SEDI-12-36G-DIM1-vvv-www-xxx-SYM-zzzz



Max Candela = 1745 Located At Horizontal Angle = 0, Vertical Angle = 25 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.) Model: M4SEDI-22-38G-DIM1-vvv-www-xxx-SYM-7777

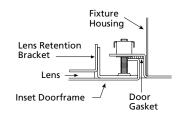


Max Candela = 2268 Located At Horizontal Angle = 0, Vertical Angle = 0

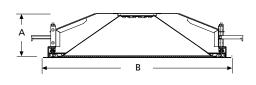
— 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.) — 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

DIMENSIONAL DATA

GASKET PROFILE



CROSS SECTION



CEILING CUTOUT



DIMENSIONAL DATA (IN INCHES)								
	Α	В	C	D				
<u>1×2</u>	5.22	11.75 × 23.75	10.85	22.85				
1×4	5.22	11.75 × 47.75	10.85	46.85				
2×2	5.22	23.75×23.75	22.85	22.85				
2×4	5.22	23.75 × 47.75	22.85	46.85				

* Add .375" to ceiling cut out dimensions when IF Option is specified