

# MEDMASTER™

## Luminaires for Hybrid Operating Rooms

### MRI4SESI SERIES – Green & White LED

#### PRODUCT FEATURES:

- » Green LED circuit creates an application optimized spectrum for increased visual acuity with no transmission loss due to filters
- » Non-ferrous construction and remote power supplies provide safe operation with advanced medical imaging devices
- » Symmetric, asymmetric/symmetric and full asymmetric optic distributions with uniform lens appearance
- » Suitable for surface ceiling installations
- » One-piece sealed housing; smooth exterior doorframe and lens for infection control and simplified cleaning protocols
- » For surface-mount Hybrid OR luminaires with all White LEDs, [click here](#)



2'x2'



2'x4'

#### SPECIFICATIONS

**HOUSING:** Hole-free, one-piece, seam-welded aluminum construction. Non-ferrous components and hardware. Gloss white TGIC polyester powder-coat finish with 5-stage pre-treatment. Antimicrobial finish on all exposed painted surfaces of installed luminaire.

**DOORFRAME:** 0.050" aluminum. One-piece inset-style construction with welded corners. Gloss white TGIC polyester powder coat finish with 5-stage pre-treatment. Doorframe secured to housing with aircraft cables and captive, flush-mounted Phillips-head fasteners. Non-ferrous hardware. Antimicrobial finish standard on all exposed painted surfaces of the installed luminaire. Closed-cell silicone gasket seals doorframe to housing.

**OPTICS:** High efficiency diffused, impact-resistant acrylic lens. Symmetric/asymmetric and full asymmetric optic adds internal Total Internal Reflection optics to work in conjunction with diffused lens providing asymmetry while maintaining uniform appearance.

**LED MODULE:** Serviceable mid-power LED array, specified as either all-green or green and white (see 'Green/White LED Layouts' diagram on page 3). 530nm green mid-power LED array. White LED circuit with minimum 80CRI standard, 90CRI optional. See Ordering Information for available color temperature options.

**DRIVER/CONTROLS:** Luminaire input 24VDC from remote-located 120-277VAC, high-power-factor power supply with EMI filter. White and green circuits must be powered from independent remote power supplies and dimmers. Dimming line EMI filter required if utilizing dimming function. Internal non-switch mode DC-DC driver. Standard 0-10V dimming with 1-100% range and dim-to-dark capabilities. See below for ordering information and power supply/filter accessories.

**INSTALLATION:** Surface mounting via four (4) 0.312" (0.79cm) holes. Singular side wiring feed hole provided. All power and signal wiring must be in completely grounded aluminum conduit. Light engine and internal driver are replaceable post-installation. MRI room EMI filters required (see Accessories below). Suitable for 0°C to 25°C ambient temperature environments.

**PHOTOMETRICS:** Photometry tested to the IESNA LM-79-08 standard. For additional photometric data, please 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 Laboratories for Wet Location. IP65 rated 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.



#### ORDERING INFORMATION (Ex: MRI4SESI-24-54G/50L-40K9-DIM1-24V-PAF-PAH-SYM)

Model	Size	Lamp Power	Lamp Color	Driver	Voltage	Doorframe	Housing	Optics
MRI4SESI				DIM1	24V	PAF	PAH	
<b>Size</b>				<b>Lamp Color•</b>		<b>Housing Options</b>		
22	2'x2' Nominal			30K8 3000K, 80 CRI		PAH .050" Antimicrobial Painted Aluminum		
24	2'x4' Nominal			30K8 3000K, 90 CRI		<b>Optics</b>		
				35K8 3500K, 80 CRI		SYM Symmetric, Diffused DR Acrylic		
<b>Lamp Power</b>				35K9 3500K, 90 CRI		ASYM Asymmetric/Symmetric Optic with Diffused DR Acrylic		
2'x2'				40K8 4000K, 80 CRI		FASYM Full Asymmetric Optic with Diffused DR Acrylic		
27G/25L	27 Watt Green/25 Watt White LED			40K9 4000K, 90 CRI				
54G	54 Watt Green LED							
				<b>Driver Type</b>		• n/a for all-green lamp configurations		
2'x4'				DIM1 0-10V Dimming to 1% with Dim-to-Dark				
54G/50L	54 Watt Green/50 Watt White LED			<b>Voltage</b>				
108G	108 Watt Green LED			24V 24VDC Input				
				<b>Doorframe Options</b>				
				PAF Antimicrobial Painted Fabricated Aluminum				

#### ACCESSORIES ORDERED SEPARATELY

MRIPSF	Remote Power Supply with EMI Filter ( <a href="#">click here</a> for specifications)
MRIFD-1A	Dimming Filter (one per dimming circuit, <a href="#">click here</a> for specifications)



**MRI4SESI SERIES – TECHNICAL DATA**

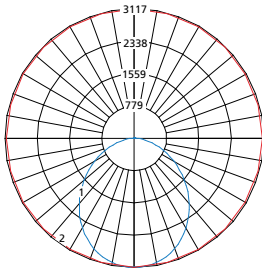
**PERFORMANCE**

**Green/White LED**

Size	Lamp Type	GREEN Circuit - Initial Delivered Lumens			White Circuit - Initial Delivered Lumens			Input Power (W)	Estd. L <sub>70</sub> LED Life (hrs)
		SYM/ASYM (lm)	FASYM (lm)	Input Power (W)	SYM (lm)	ASYM (lm)	FASYM (lm)		
2' × 2'	27G/25L-30K8	2,303	2,187	30	3,515	3,337	3,337	30	85,000 / 85,000
	27G/25L-30K9	2,303	2,187	30	3,038	2,884	2,884	30	85,000 / 85,000
	27G/25L-35K8	2,303	2,187	30	3,624	3,440	3,440	30	85,000 / 85,000
	27G/25L-35K9	2,303	2,187	30	3,112	2,954	2,954	30	85,000 / 85,000
	27G/25L-40K8	2,303	2,187	30	3,747	3,558	3,558	30	85,000 / 85,000
	27G/25L-40K9	2,303	2,187	30	3,189	3,028	3,028	30	85,000 / 85,000
2' × 4'	54G/50L-30K8	4,586	4,311	60	7,286	6,849	6,849	61	85,000 / 85,000
	54G/50L-30K9	4,586	4,311	60	6,298	5,920	5,920	61	85,000 / 85,000
	54G/50L-35K8	4,586	4,311	60	7,511	7,061	7,061	61	85,000 / 85,000
	54G/50L-35K9	4,586	4,311	60	6,450	6,063	6,063	61	85,000 / 85,000
	54G/50L-40K8	4,586	4,311	60	7,767	7,302	7,302	61	85,000 / 85,000
	54G/50L-40K9	4,586	4,311	60	6,610	6,214	6,214	61	85,000 / 85,000

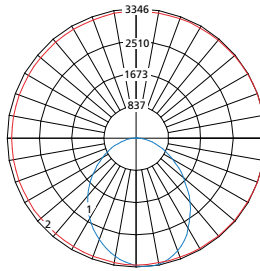
Information subject to change without notice. Visit [www.kenall.com](http://www.kenall.com) for .ies files and additional information

MRI4SESI-24-54G-50L-40K8-DIM1-24V-PAF-PAH-SYM (White)



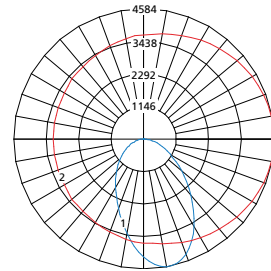
Max Candela = 3117 Located At Horizontal Angle = 90, Vertical Angle = 2.5  
 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)  
 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

MRI4SESI-24-54G-50L-40K8-DIM1-24V-PAF-PAH-ASYM (White)



Max Candela = 3346 Located At Horizontal Angle = 0, Vertical Angle = 5  
 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
 2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)

MRI4SESI-24-54G-50L-40K8-DIM1-24V-PAF-PAH-FASYM (White)



Max Candela = 4584 Located At Horizontal Angle = 0, Vertical Angle = 12.5  
 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
 2 - Horizontal Cone Through Vertical Angle (12.5) (Through Max. Cd.)

**Green LED**

Size	Lamp Type	Green LED - Initial Delivered Lumens			Input Power (W)	Estd. L <sub>70</sub> LED Life (hrs)
		SYM (lm)	ASYM (lm)	FASYM (lm)		
2' × 2'	54G	4,606	4,609	4,373	61	85,000
2' × 4'	108G	9,171	9,220	8,621	121	85,000

**MRI LUMINAIRE CONNECTION LIMITS PER POWER SUPPLY**

Size	Lamp Power	Amps per Luminaire	Max. Luminaires per Power Supply (MRIPSF-480)	Max. Luminaires per Power Supply (MRIPSF-240)	Max. Luminaires per Power Supply (MRIPSF-120)
22	27G/25L	1.55 (G)	12	6	3
		1.54 (W)	12	6	3
	54G	2.98	6	3	1
24	54G/50L	2.98 (G)	6	3	1
		2.98 (W)	6	3	1
	108G	5.96	3	1	0

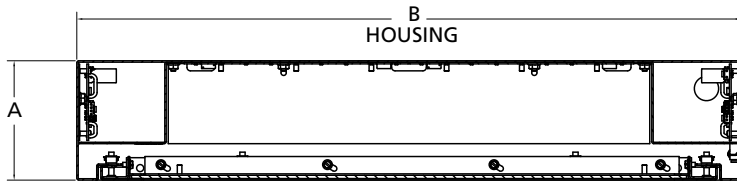
NOTE: Multiple Kenall MRI product types may be powered from a single power supply/filter as long as the maximum current rating is not exceeded (20A - 480W, 10A - 240W, 5A - 120W). Green circuits (G) and white circuits (W) on combined luminaires shall be powered by separate power supplies for switching purposes.



**MRI4SESI SERIES – TECHNICAL DATA**

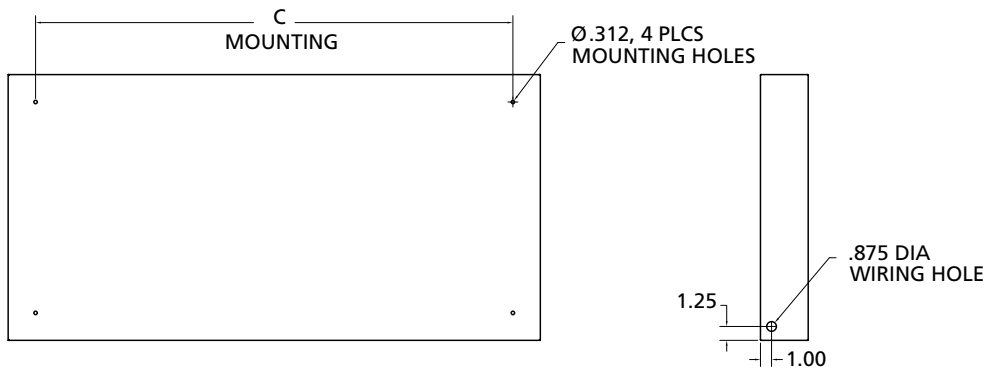
**DIMENSIONAL DATA**

CROSS SECTION

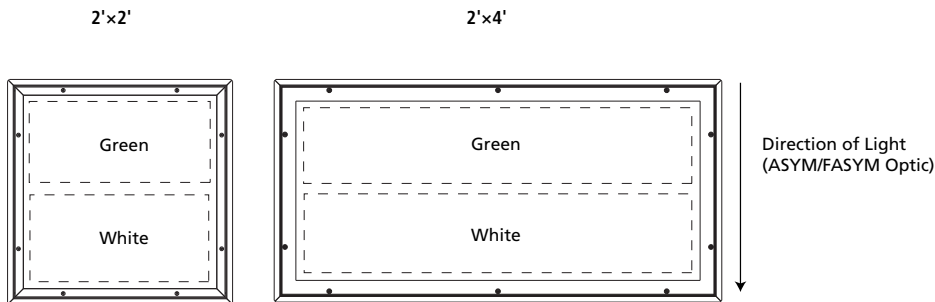


**DIMENSIONAL DATA (IN INCHES)**

	A	B	C
2x2	4.30	24.00 x 24.00	19.00 x 19.00
2x4	4.30	24.00 x 48.00	19.00 x 43.00



**GREEN/WHITE LED LAYOUTS**



NOTE: The 'ASYM' optic on green/white LED configurations provides a symmetric/asymmetric distribution on white LEDs. Green LEDs have a symmetric (Lambertian) distribution. The 'FASYM' optic selection for green/white LED configurations provides a full asymmetric distribution for both green and white LEDs.