

MEDMASTER ENVELA® Luminaires for MRI/Imaging Suites

ME11MRI SERIES

PRODUCT FEATURES:

- » Ceiling mount – 1'x1'
- » Non-ferrous construction safe for sensitive MRI equipment
- » Dimmable LED with same output as 32-watt CFL
- » Tool-less access for relamping and maintenance



PROJECT INFORMATION

Job Name _____
 Fixture Type _____
 Catalog Number _____
 Approved by _____

SPECIFICATIONS

HOUSING: .050" aluminum. One-piece seam welded construction. Black TGIC polyester powder coat – 5-stage pre-treatment. Salt spray test: 1,000 hours.

HOUSING FLANGE: .050" aluminum standard 4-piece construction, spot-welded to housing. Mitered and welded corners.

REFLECTOR/LENS ASSEMBLY: .032" aluminum. One-piece seam-welded construction. Tool-free lamp access. White high reflectance (94%) low gloss TGIC polyester powder coat – 5-stage pre-treatment. Salt spray test: 1,000 hours. Antimicrobial white high reflectance low gloss finish on exposed surfaces.

LAMP SHIELDING: Fully gasketed, sealed luminous shield of impact resistant DR acrylic. See Ordering Information for lens options.

INSTALLATION: Designed for 1" and Slot-T grid.

ELECTRICAL: Replaceable high-brightness ANSI 3000K, 3500K or 4000K LED array. 80 CRI minimum standard, 90 CRI available on 3000K lamp. Luminaire input 24VDC from remote-located 120-277VAC, high-power-factor power supply with EMI filter. Dimming line EMI filter required if utilizing dimming function. Dimming capability controlled through compatible 0-10V dimmer (supplied by others). Dimming capability range 10% to 100%. See below for ordering information.

PHOTOMETRICS: Photometry tested to the IESNA LM-79-08 standard by an ILAC/ISO17025 accredited laboratory. For additional photometric data, please go to www.kenall.com.

WARRANTY: Limited five (5) year LED warranty.

LISTINGS: UL and CUL Listed for Wet Location. UL certified IP64 per IEC 60598. NSF2 Splash/Non-Food Zone.



ORDERING INFORMATION (Ex: ME11MRI-G-24L35K-24VDC-FA)

Model	Mounting	Lamp Type	Voltage	Lens Type
ME11MRI			24VDC	
	Mounting Option	Lamp Type	Voltage	Lens Type
	G Grid (1")	24L30K 24 Watt 3000K LED	24VDC 24 Volts DC	FA Frost DR Acrylic
	ST Slot-T	24L30KH 24 Watt 3000K LED (90 CRI)		CAP Clear DR Acrylic with Internal Perforation
		24L35K 24 Watt 3500K LED		
		24L40K 24 Watt 4000K LED		

ACCESSORIES ORDERED SEPERATELY

- MRIPSF-480** Remote Power Supply with EMI Filter ([click here](#) for specifications)
- MRIFD-1A** Dimming Filter (one per dimming circuit, [click here](#) for specifications)

MRI LUMINAIRE CONNECTION PER POWER SUPPLY

Luminaire Number	Amps/Luminaire	Max Luminaires/Power Supply/Room
ME11MRI	1.46	13



www.kenall.com | P: 800-4-Kenall | F: 262-891-9701 | 10200 55th Street Kenosha, Wisconsin 53144, USA

This product complies with the Buy American Act: manufactured in the United States with more than 50% of the component cost of US origin. It may be covered by patents found at www.kenall.com/patents. Content of specification sheets is subject to change; please consult www.kenall.com for current product details. ©2019 Kenall Mfg. Co.

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MEDMASTER ENVELA®

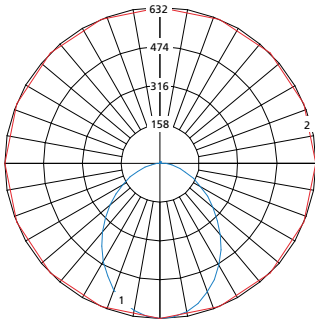
ME11MRI SERIES – TECHNICAL DATA

PERFORMANCE

Lamp Type	Initial Delivered Lumens		Input Power (W)	Drive Current (mA)	Estd. L70 LED Life (Hrs)
	@ 25°C (lm)	Efficacy (lm/W)			
24L30K	1458	42	34	700	100,000
24L30KH	1274	37	34	700	100,000
24L35K	1560	45	34	700	100,000
24L40K	1778	52	34	700	100,000

Displayed information is for selected luminaires only. Additional wattages and color temperatures are also available. Consult IES files at www.kenall.com.

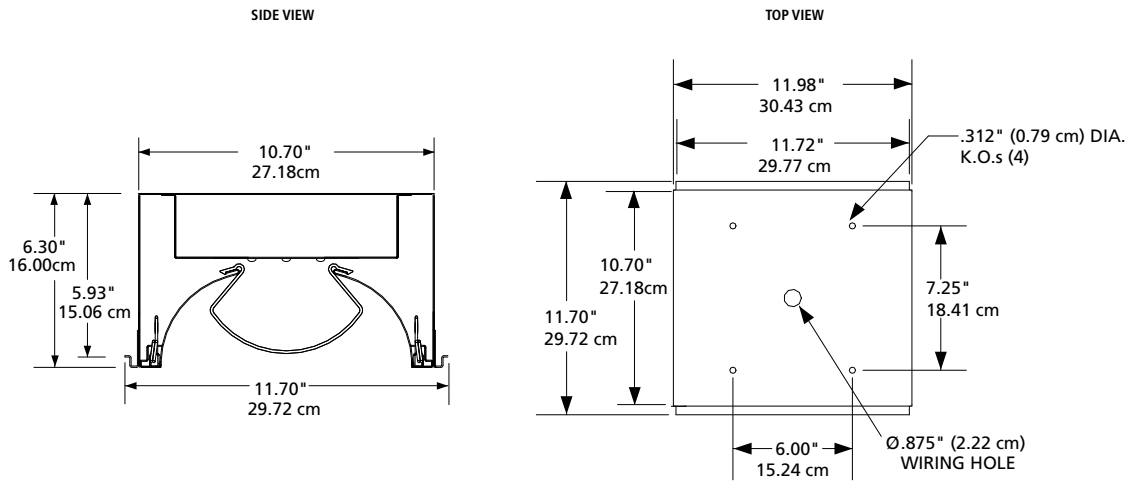
Model: ME11MRI-G-24L30K-24VDC-FA



Maximum Candela = 632 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



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ME11MRI SERIES



IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed, including the following:

THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED. DISCONNECT POWER TO ALL CIRCUITS BEFORE WIRING FIXTURE. INSTALL IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL CODES. DO NOT CONNECT TO AN UNGROUNDED SUPPLY. READ ALL FIXTURE MARKINGS AND LABELS TO ENSURE CORRECT INSTALLATION OF FIXTURE. SUPPLEMENTAL INSTRUCTIONS MAY BE LOCATED ON THE FIXTURE, IN ADDITION TO THIS INSTRUCTION SHEET, REGARDING ORIENTATION, OR MOUNTING RESTRICTIONS.

SAVE THESE INSTRUCTIONS

INSTALLATION INSTRUCTIONS

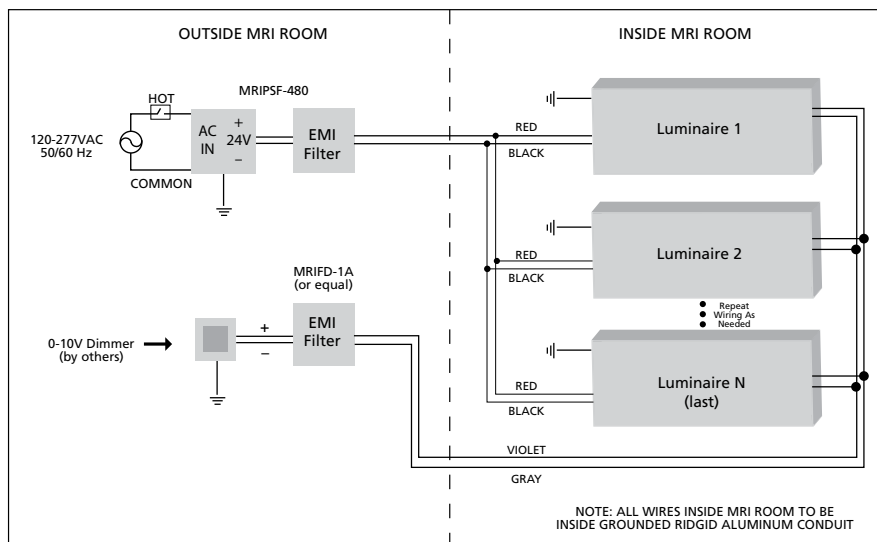
ELECTRICAL CONNECTION

1. Mount and wire the MRIPSF-480 external power supply system per the procedures provided in the supplementary instruction sheet. Run conduit and DC wiring to an MRI room EMI filter. Make sure wiring is completely enclosed in grounded aluminum conduit. Any gaps, regardless of size, must be closed or wrapped in copper foil tape.
2. If a 0-10V dimming circuit is to be connected, install at this time. The 0-10V dimmer must be installed outside the shielded MRI environment with the Kenall MRIFD-1A dimming line filter (or equivalent) installed in accordance with the supplied installation instructions. Kenall recommends the Lutron Diva (DVSTV) and Lutron Nova T (NTSTV-DV) series to ensure the full range of dimming can be achieved. Contact Kenall for suitability of using an alternate sink-type 0-10V dimmer.

WARNING: ALL DC POWER AND DIMMING SIGNAL WIRING MUST BE RUN THROUGH SEPARATE EMI FILTERS.

3. Remove junction box cover and make conduit connections to the appropriate 1/2" knockout(s).

Figure 1

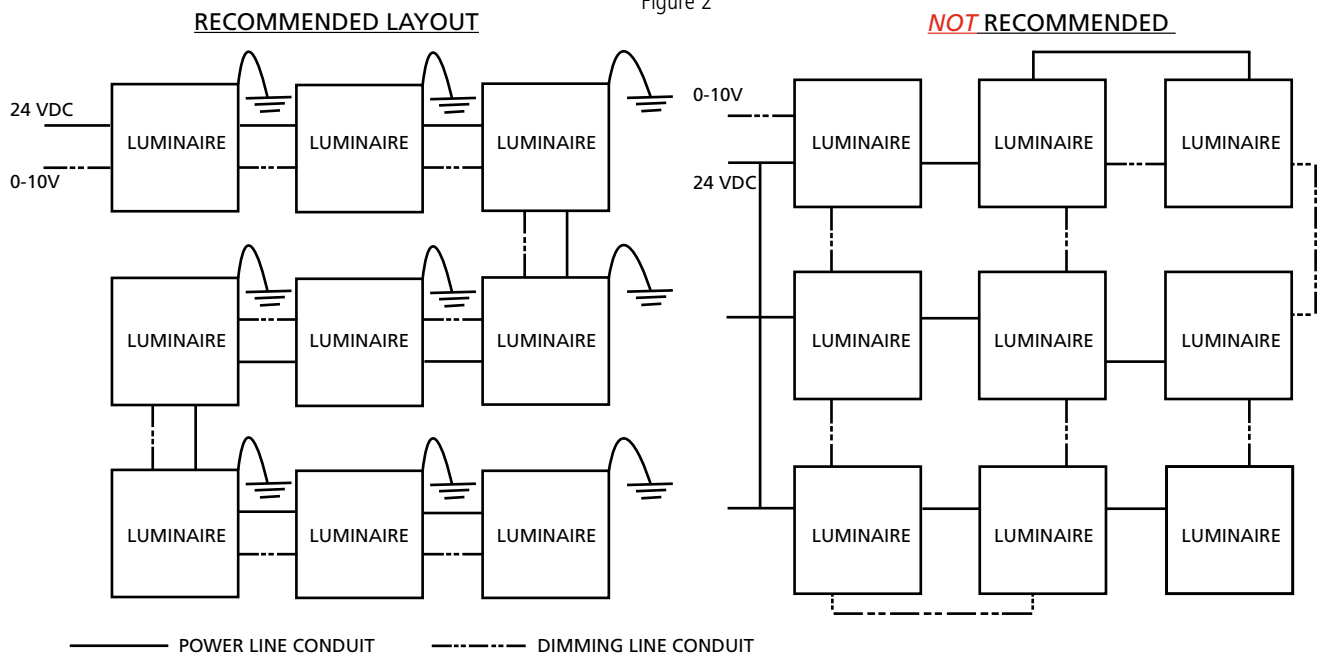


NOTE: 24VDC and Dimming Wires to be run through same conduit.



4. Run DC supply wiring, equal in size and temperature rating to the filter input wiring, between the filter output cables and the first luminaire within the shielded room. Follow recommended wiring layout described within Figures 1 and 2. All wiring must be within completely-enclosed, grounded conduit suitable for an MRI environment. Any gaps, regardless of size, must be closed or wrapped in copper foil tape. Special attention should be paid to the wiring entry point into the shielded space. Class 1 wiring methods are required.
5. Run the dimming signal wiring, equal in specification to the filter input wiring, between the filter output cables and the first luminaire within the shielded room. Maintain polarity between input and output sides of the filter and follow wiring recommendation in Figures 1 and 2. All wiring must be within completely enclosed, grounded conduit suitable for an MRI environment. Any gaps, regardless of size, must be closed or wrapped in copper foil tape. Special attention should be paid to the wiring entry point into the shielded space. Cap gray and violet leads at luminaire(s) if dimming function is not implemented.
6. Using at least an 18 AWG wire, ground the last housing in the sequence to the shielded ceiling. This can be done by fastening the wire the copper ground wire in the luminaire’s junction box.
7. Make DC supply and (optional) dimmer control connections within each luminaire.
8. Replace junction box cover and seal both covers using supplied copper foil tape.

Figure 2



CUSTOMER SERVICE

For technical assistance, call 1-800-4KENALL (1-800-453-6255).

WARRANTY

For warranty information visit www.kenall.com/Resources/Certified-Performance-Warranties



CUSTOMER ACKNOWLEDGEMENT

Customer acknowledges that these Installation Instructions are part of the product specification, and that the attached Installation Registration Form will be provided to the installer to sign and return to Kenall after installation is complete. This signed release is required by Kenall before order will be released into production.

Signature: _____

Date: _____

Print Name: _____

Company Name: _____

IMPORTANT SAFEGUARDS

To prevent MRI machine interference, all DC power and dimming signal wiring must be completely shielded within grounded aluminum conduit and a suitable MRI room EMI filter must be installed on each line.

When using electrical equipment, basic safety precautions should always be followed, including the following:
THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

SAVE THESE INSTRUCTIONS

-
- Disconnect power to all circuits before wiring system.
 - Install in accordance with all national, state, and local codes.
 - Do not connect to an ungrounded supply.
 - Wiring connections must be made internal to the enclosure.
 - Failure to install unit on a mechanically-sound surface may result in personal injury, physical damage, or potential fire hazard.
 - Use installation procedures appropriate for an environment involving MRI and sensitive electronic equipment.
 - Read all markings and labels to ensure correct installation of the power supply. Supplemental instructions may be located on the enclosure, in addition to this instruction sheet, regarding orientation, or mounting restrictions.
 - Read instructions provided with the MedMaster™ MRIPSF-480 remote power supply and DC filter system for proper installation and electrical connection to the lighting system.



CUSTOMER ACKNOWLEDGEMENT

MRI INSTALLATION REGISTRATION FORM

Customer acknowledges that the attached Installation Registration Form will be provided to the installer to sign and return to Kenall after installation is complete. For warranty purposes, please fill out this form and return to Kenall by fax at (262) 891-9701.

I certify that the lighting installation for the listed MRI suite location is completed per the provided installation instructions and to the best of my abilities.

Please check off items to denote status:

- Installation instruction sheets for MRIPSF-480 remote power supply and DC filter system and individual luminaire(s) read and followed.
- MRIPSF-480 power supply and EMI filters are located outside the shielded enclosure.
- All DC supply wiring is completely enclosed within grounded aluminum conduit. Installation has no ungrounded/unshielded portions of conduit or openings of any size or shape.
- All dimming signal wiring is completely enclosed within grounded aluminum conduit. Installation has no ungrounded/unshielded portions of conduit or openings of any size or shape. Check here if dimming is not applicable:
- MRI Room EMI filters for the 24VDC supply and dimming signal are of the type intended for MRI suites and are sized to the electrical load.
- DC supply power and dimming signal are NOT running through the same EMI filter. Check here if dimming is not applicable:
- Lighting system fully tested (including dimming operation, if applicable) while MRI machine is in idle and scan operation mode.

If any of these steps cannot be completed or you need technical assistance, please contact Kenall Technical Support at 1-800-4KENALL (1-800-453-6255).

Electrical Contractor

Name: _____

City/State: _____

Phone: _____

Installation Date: _____

Installation Site

Name: _____

City/State: _____

FAX FORM TO (262) 891-9701

(Do not write below line)

Kenall Received By: _____ Received Date: _____



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