

# MEDMASTER® CEILING ROUND TROFFER

## Architectural Luminaires for Healthcare Applications

### MCRT SERIES using Indigo-Clean Technology

#### PRODUCT FEATURES:

- » 24" Round shape provides a differentiated aesthetic to a variety of healthcare lighting applications
- » Provides environmental disinfection and effective, efficient lighting performance via visible LED light
- » Dual-Mode Indigo-Clean Technology is independently tested to kill 94% of SARS CoV-2 and Influenza-A\*, in addition to MRSA
- » Single-Mode Indigo-Clean Technology is independently tested to kill harmful bacteria, such as Staph\*\*, including MRSA\*\*\*
- » Full backlit LED array and high diffusion lens provides uniformly-lit appearance
- » Standard IP64 and NSF2 rating without visible room-side fasteners
- » Extruded aluminum trim ring available in various color finishes
- » Suitable for recessed T-grid ceilings with minimal plenum ingress



#### SPECIFICATIONS

**HOUSING:** Fabricated 20ga CRS housing with white TGIC polyester powder-coat finish and five-stage pre-treatment. Roll-formed and butt-welded 6063-T5 aluminum extruded collar for door attachment, finished in selected color option using TGIC polyester powder with five-stage pre-treatment.

**DOOR ASSEMBLY:** Roll-formed and butt-welded 6063-T5 extruded aluminum with TGIC polyester powder-coat finish in selected color, with five-stage pre-treatment. Secured to housing with two internal torsion springs. Closed cell silicone gasketing seals doorframe to housing. High-efficiency diffused, impact-resistant acrylic lens is secured and sealed to doorframe.

**LED MODULE:** Serviceable mid-power white and 405nm Indigo LED array. Available 3200K, 3700K and 4300K color temperatures with 3-step MacAdam variation allowance. Minimum 82 CRI standard.

**DRIVER:** 120-277VAC and 347VAC electrical input with serviceable high power factor electronic, constant-current drivers (0.90 PF). Minimum 85% driver efficiency. Standard 0-10V dimming with 1-100% range and dim-to-dark capabilities (non-dim-to-dark on Dual-Mode ICT). 165µA maximum source current.

**CONTROLS:** **Single-Mode ICT** provides a single, white disinfection operational mode. **Dual-Mode ICT** provides two operational modes based on room occupancy. White Disinfection Mode is a white LED array for ambient lighting plus a simultaneous low-power 405nm LED array for low-level, continuous and safe environmental disinfection. Indigo Disinfection Mode is a higher-level 405nm array for continuous safe environmental disinfection during periods of room vacancy. The operational mode is determined via internal low-voltage device based upon the input signal provided by an external control device/system, such as the [IC150](#) product. Luminaire dimming is overridden in this operational state. Refer to the [Kenall Dual Mode ICT Control Application Guide](#) for further description.

**INSTALLATION:** Suitable for Type-IC recessed ceiling installation into 9/16" and 15/16" lay-in and tegular grid ceilings. Swing-out arms allow for securing of housing to grid structure. Ceiling tile cutout template provided. Ceiling tile by others.

**PHOTOMETRICS:** Photometry tested to the IESNA LM-79-08 standard by an ILAC/ISO17025 accredited laboratory. For detailed photometric information, please visit [www.kenall.com](http://www.kenall.com).

**WARRANTY:** Limited five (5) year warranty.

**LISTINGS:** Luminaire is certified to UL standards by Intertek Testing Laboratories for Type-IC and Wet Location installations. IP64 rating per IEC60598. NSF2 Splash/Non-Food Zone rated. Standard CCEA compliance.

\* Refer to [www.indigo-clean.com](http://www.indigo-clean.com) for details.

\*\* 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: MCRT-22-G-MW-28C-32K8-DIM1-DV-LEL)

Model	Size	Ceiling Type	Finish	Lamp Power	Lamp Color	Driver Type	Voltage	Options
<b>MCRT</b>	<b>22</b>	<b>G</b>						
	<b>Nominal Size</b> 22 2' Diameter			<b>Lamp Color</b> 32K8 3200K / 80 CRI min. 37K8 3700K / 80 CRI min. 43K8 4300K / 80 CRI min.		<b>Options</b> LEL* Integral 10W Emergency Battery Backup FS Fuse & Holder LVC^ Low Voltage Controller (click <a href="#">here</a> for specifications, DIM1 only) LVCD^ Low Voltage Controller with Dimming (click <a href="#">here</a> for specifications, DIM1 only) NLW* 2700K White LED Night Light NLA* Amber LED Night Light		
	<b>Ceiling Configuration</b> G 9/16" and 15/16" Grid			<b>Driver Type</b> DIM1 0-10V Dimming to 1% DALI^ DALI Dimming to 1%				
	<b>Finish - Room-Side</b> GW Anti-Microbial Gloss White MW Anti-Microbial Matte White CS Cool Satin Painted Anodized WS Warm Satin Painted Anodized			<b>Input Voltage</b> DV 120-277VAC, 50/60Hz 347 347VAC, 60Hz				* n/a with 347V ^ n/a with dual-mode ICT or 347V input
	<b>Lamp Power</b> 28C 28 Watt Single-Mode ICT 12I/28C 29 Watt Dual-Mode ICT 55C 55 Watt Single-Mode ICT 23I/55C 55 Watt Dual-Mode ICT							<b>ACCESSORIES ORDERED SEPARATELY</b> MPWS Low Voltage Wall Switch (Click <a href="#">here</a> for Specifications)



[www.kenall.com](http://www.kenall.com) | P: 800-4-Kenall | F: 262-891-9700 | 10200 55th Street Kenosha, Wisconsin 53144, USA

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#### PERFORMANCE

Technology	Size	Lamp Code	Initial Delivered Lumens, By Lamp Color			Efficacy (lm/W)	Power Consumption <sup>2</sup>			Estd L70 LED Life (hrs)
			32K8	37K8	43K8		Occupied (W)	LPD (W)	Unoccupied (W)	
Single-Mode ICT	2' Diameter	28C	3,151	3,232	3,265	99 - 102	32	26	0	80,000
		55C	5,416	5,556	5,613	96 - 99	57	47		
Dual-Mode ICT	2' Diameter	12I/28C	3,151	3,232	3,265	99 - 102	32	26	16	
		23I/55C	5,416	5,556	5,613	96 - 99	57	47	29	

<sup>1</sup> Information subject to change without notice. Visit [www.kenall.com](http://www.kenall.com) for IES files and additional information.

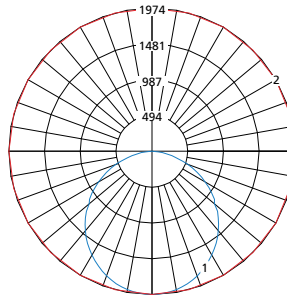
<sup>2</sup> Lighting Power and Energy Calculations:

Use **Occupied Power** for total electrical load calculations. Use this value to estimate branch circuit lighting loads.

Use **LPD Power** for lighting power density calculations. Only the power attributed to white light is required per NEMA LSD EB 84-2021. Power used toward germicidal disinfection can be removed for this calculation.

Use **Unoccupied and Occupied Power** for Energy calculations to determine the power consumed over time based on the use of the space.

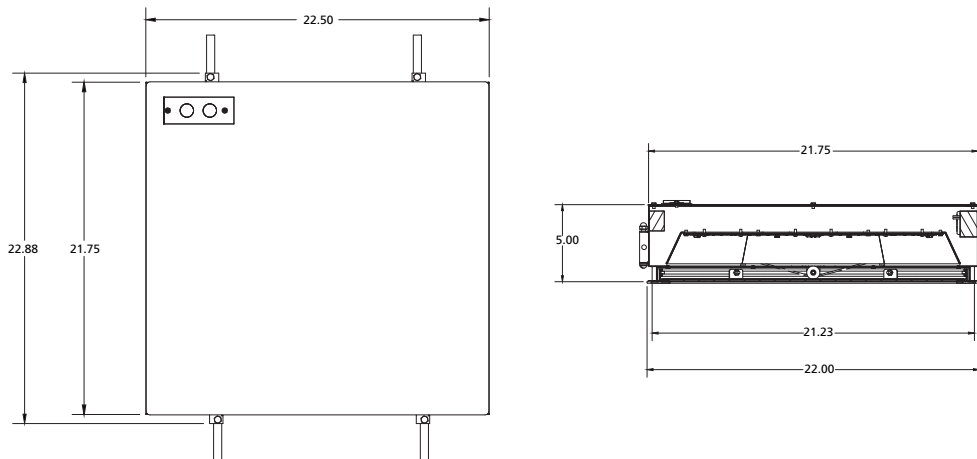
Model: MCRT-22-G-xx-55C-37K8-DIM1-yyy.zzzz



Maximum Candela = 1974 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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