PROJECT [redacted] FIXTURE TYPE [redacted]

CATALOG # [redacted]

MEDMASTER™ MCRT-TW

ROUND TROFFER — TUNABLE WHITE LED

Architectural Luminaires for Healthcare Applications



PRODUCT FEATURES

- 24" Round shape provides a differentiated aesthetic to a variety of healthcare lighting applications
- Full backlit LED array with 2700K-6500K white tuning capability
- 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
- Optional low-voltage controller (LVC) for patient room lighting control

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 tunable-white, mid-power LED array provides 2700K through 6500K CCT range with a two-point path. Minimum 80 CRI standard (R9 >0) with optional minimum 90 CRI (R9 >50). Optional nightlight in 590 nm native amber or 2700K, 80CRI white.

DRIVER: 120-277VAC, 50/60Hz electrical input (PF ≥ 0.9, THD < 20%). Minimum 85% electrical efficiency. Serviceable, constant current multi-channel programmable driver with dual analog (0-10V) control inputs for intensity and CCT. Optional DALI (Type 8) driver. Logarithmic intensity profile with 0.1-100% range, with dim-to-dark capabilities. Linear profile on CCT adjustment. Refer to charts on page 2 for further details.

CONTROLS: Optional LVC and LVCD provides a low-voltage patient interface, controlling the lamp source intensity and optional night light with (LVCD) and without (LVC) dimming control. Separate 0-10V control required for CCT tuning.

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 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 Type-IC and Wet Location installations. IP64 rating per IEC60598. NSF2 Splash/Non-Food Zone rated. Standard CCEA compliance.

ORDERING INFORMATION (EX: MCRT-22-G-MW-45T-27/65K9-ATW-DV-LVCD-F-8021-NLW)

Model	Size	Ceiling Type	Finish	Lamp Power	Lamp Color	Driver Type	Voltage	LV Controller	Configuration	Options
MCRT	22	G					DV			

Nominal Size
22 2' Diameter

Ceiling Configuration
G 9/16" and 15/16" Grid

Finish - Room-Side
GW Anti-Microbial Gloss White
MW Anti-Microbial Matte White
CS Cool Satin Painted Anodized
WS Warm Satin Painted Anodized

Lamp Power
25T 25 Watt Tunable White
45T 45 Watt Tunable White

Lamp Color
27/65K8 2700-6500K CCT Range (80 CRI min)
27/65K9 2700-6500K CCT Range (90 CRI min)

Driver Type
ATW Analog (0-10V) Dimming Tunable White Driver
DALI DALI Tunable White Driver
DMX DMX Tunable White Driver (consult factory)

Input Voltage
DV 120-277VAC, 50/60Hz

Optional Low Voltage (LV) Controller
LVC Low Voltage Controller (n/a with DALI)
LVCD Low Voltage Controller with Dimming (n/a with DALI)

Optional LV Controller Configuration‡
LVC
F-8060 Ambient
F-8069▲ Ambient, Night Light
(click here for additional configurations & specifications)

LVCD
F-8021 Ambient
F-8045▲ Ambient, Night Light
(click here for additional configurations & specifications)

Options
LEL† Integral 10W Emergency Battery Backup (specified voltage required)
FS Fuse & Holder
NLW† 2700K White LED Night Light
NLA† Amber LED Night Light

Optional Image Selection*
Click here for iMAGINE series image selections and ordering numbers. Consult factory for alternate image selection approval.

‡ must be ordered in conjunction with corresponding controller
▲ must be ordered in conjunction with NLW or NLA option
* Only available with 25T-27/65K9 Lamp Power-Lamp Color selection.
† LEL not available with iMAGINE series option; NLA/NLW not recommended with iMAGINE.

MCRT-TW-082825

This product is able to comply with the latest domestic preference legislation, such as the Buy America Act (BAA), Trade Agreement Act (TAA), Build America, Buy America Act (BABA), and others. 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 ©2025 Kenall Mfg. Co.

A brand of legrand®

PERFORMANCE

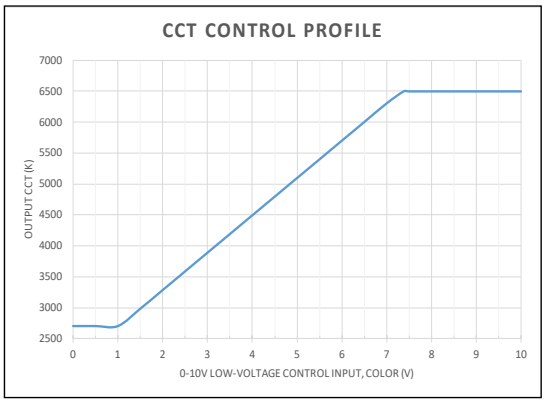
Model	Lamp Code	Performance at 4000K Tuning			TM-21 Reported L70 (hrs)
		Lumen Output (lm)	Efficacy (lm/W)	Input Power (W)	
MCRT-22	25T-27/65K8	3,164	104	30	>72,000
	25T-27/65K9	2,788	92		
	45T-27/65K8	5,481	110	50	
	45T-27/65K9	4,829	97		

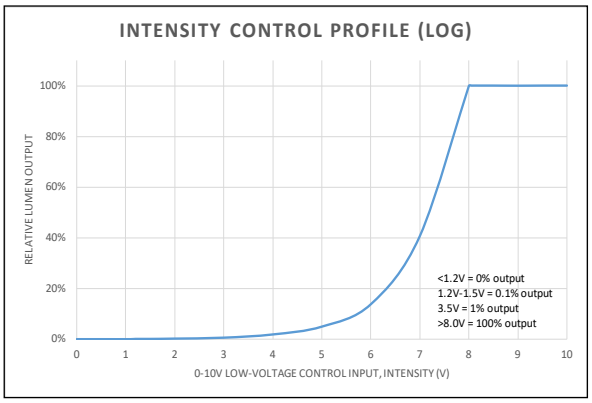
Information subject to change without notice. Visit www.kenall.com for .ies files and additional information

PERFORMANCE SCALING, BY LAMP COLOR

CCT (K)	27/65K8					27/65K9				
	LUMEN SCALE FACTOR	Ra	R9	Rf	Rg	LUMEN SCALE FACTOR	Ra	R9	Rf	Rg
2700	0.92	83	10	83	97	0.95	92	57	89	98
3000	0.95	84	15	83	98	0.97	94	70	91	99
3500	0.99	86	23	84	98	0.99	95	77	92	99
4000	1.00	86	26	84	98	1.00	96	83	92	99
4600	1.00	86	28	84	98	1.00	96	90	92	100
5000	1.01	86	25	83	98	1.01	96	96	91	101
5700	0.99	85	23	82	98	0.99	96	96	91	100
6500	0.99	84	16	82	96	0.99	96	96	90	100

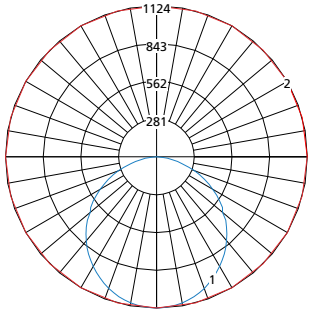
CCT AND INTENSITY ADJUSTMENT PROFILE - ATW DRIVER TYPE





NOTE: The provided information is the typical expected performance of a single luminaire. Additional luminaires on the same 0-10V line may result in different control profiles. Fine tuning of system performance should be completed after installation is complete. To avoid CCT shift between luminaires, care should be taken to minimize voltage drop on the CCT Control line.

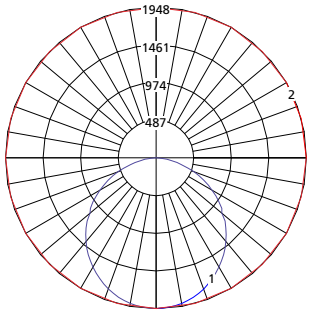
Model: MCRT-22-G-uu-25T-27 65K8-ATW-DV-zzzz



Maximum Candela = 1124 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.)

Model: MCRT-22-G-uu-45T-27 65K8-ATW-DV-zzzz



Maximum Candela = 1948 Located At Horizontal Angle = 0, Vertical Angle = 0

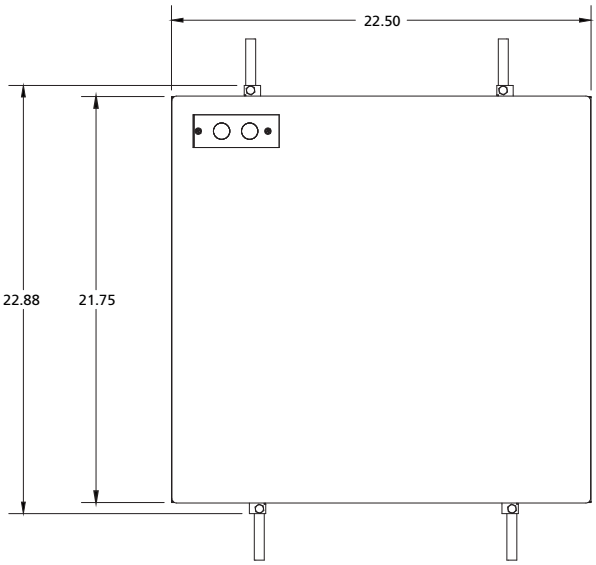
1 - Vertical Plane Through Horizontal Angles (0-180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

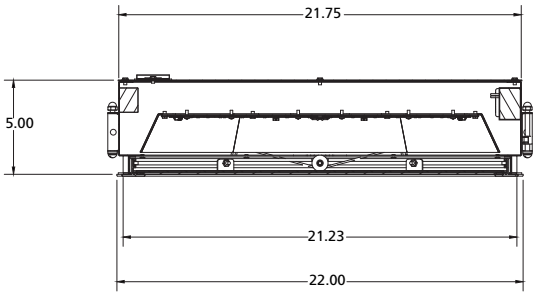
MCRT-TW-082825

This product is able to comply with the latest domestic preference legislation, such as the Buy America Act (BAA), Trade Agreement Act (TAA), Build America, Buy America Act (BABA), and others. 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 ©2025 Kenall Mfg. Co.

A brand of legrand®

DIMENSIONAL DATA





MCRT-TW-082825

This product is able to comply with the latest domestic preference legislation, such as the Buy America Act (BAA), Trade Agreement Act (TAA), Build America, Buy America Act (BABA), and others. 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 ©2025 Kenall Mfg. Co.

A brand of legrand®