### **MEDMASTER™**

## Patient Room Luminaires

### MAC SERIES using Indigo-Clean Technology

### PRODUCT FEATURES:

- » 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\*
- » Surface, recessed grid or recessed flange mount -
- » Ingress Barrier Door provides consistent surface for cleanability

PROJECT INFORMATION							
Job Name							
Fixture Type							
Catalog Number							
Approved by							
,							

### **SPECIFICATIONS**

HOUSING: 20-gauge CRS. one-piece construction Housing Flanges — 18-gauge CRS, standard 4-piece construction, spotwelded to housing. White TGIC polyester powder coat — 5-stage pretreatment. Salt spray test 1,000 hours. Reflectance 92%. See Ordering Options for Antimicrobial Finish.

DOORFRAME: Heavy duty extruded aluminum with clear satin anodized finish. Doorframe supported to housing with aircraft cables (IB-AC) to provide NSF2 listing, or an optional continuous hinged doorframe (IB-HD). Select in ordering options below. Phillips head stainless steel fasteners secure door to housing — eight (8) with IB-AC (1×4, 2×2), ten (10) with IB-AC (2×4), two (2) with IB-HD (1×4, 2×2) and three (3) with IB-HD (1×4, 2×4). Extruded closed cell gasket seals doorframe to housing. Outer lens sealed to doorframe with a vinyl gasket.

OPTICS: Extruded high-efficiency frosted DR acrylic inner diffuser. Clear impact-resistant acrylic outer lens.

ELECTRICAL: (Single- and Dual-Mode ICT) 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. 120-277VAC and 347VAC electrical input with serviceable high power factor electronic, constant-current drivers (<10% THD, >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). 330µA maximum source current. 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: SURFACE MOUNT: Four .312" diameter holes. GRID MOUNT: Designed for 1" and 1.5" grid. (Housing includes hanging brackets to secure housing with wire to super structure). FLANGE MOUNT: Yoke mounting hardware & brackets included. Install Frame and Plaster Frames both positively locates yoke brackets within ceiling opening assures alignment of fixture. Install frame has no need for drywall backing; backing is supplied on the frame brackets.

WARRANTY: Limited five (5) year warranty.

LISTINGS: Luminare is certified to UL Standards by Intertek Testing Laboratory for Wet Location and non-IC recessed installations (G and F install types). ETL certified IP65 per IEC60598. NSF2 Splash Zone (IB-AC only). EPA Est. No. 99283-WI-1.

\* 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: MAC22-G-FA-23I/55C-37K8-DCC-DV-IB-AC-FS)

Model	Mounting	Diffuser	Lamp Power La	mp Color	Driver Type	Voltage	Doorframe	Options	Accessories		
		FA			DCC	. <u> </u>	IB-	_			
Model MAC14 1'×4 MAC22 2'×3 MAC24 2'×4	2'		Lamp Power  1×4  55C 55W Single-Mode ICT  23//55C 55W Dual-Mode ICT				Doorframe AC Ingress Barrier w/Aircraft Cables HD Ingress Barrier w/Continuous Piano Hinge (not NSF2 listed)				
Mounting O Flange Surfact Grid (1			2×2 55C 55W Single-Mode ICT 23I/55C 55W Dual-Mode ICT				Options  LEL** LED Emergency Battery Pack  AMF Antimicrobial Finish on exposed painted surfaces  NLW^ 2700K White LED Night Light  NLA^ Amber LED Night Light				
<b>Diffuser Type</b> <b>FA</b> Frosted Acrylic			2'x4' 55C 55W Single-Mode ICT 82C 82W Single-Mode ICT 110C 110W Single-Mode ICT 23I/55C 55W Dual-Mode ICT 34I/82C 82W Dual-Mode ICT				LVC* Low Voltage Controller (Click <u>here</u> for specifications) Low Voltage Controller with Secondary Conduit Entry (Click <u>here</u> for specifications) LVCD* Low Voltage Controller with Dimming (Click <u>here</u> for specifications) LVCDS* Low Voltage Controller with Dimming and Secondary				
		<b>46I/110C</b> 110W Dual-Mode ICT <b>Lamp Color</b>					Conduit Entry (Click <u>here</u> for specifications)  FS Single Fuse & Holder				
			37K8 3700K /	82 CRI min. 82 CRI min. 82 CRI min.				all Frame ter Frame			
			Driver Type DCC 0-10V Dimmi Input Voltage DV 120-277VAC,	Current		tions or 347V input ze in conjunction with LVC options; ensions. Flange mounting only.					
			<b>347</b> 347VAC, 50/6			ACCESSORIES ORDERED SEPARATELY MPWS Low Voltage Wall Switch (Click here for Specifications) IC150 External Room Control System for Dual-Mode ICT Products (click here for Specifications)					



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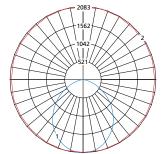
### **PERFORMANCE**

	Length	Lamp Code	Lumen	Output by Col	lor (lm)¹	Efficacy (lm/W)	Pov	Estd L70		
Technology			32K8	37K8	43K8		Occupied (W)	LPD (W)	Unoccupied (W)	LED Life (Hrs)
Single-Mode ICT	1 x 4	55C	4,629	4,749	4,797	76 - 79	61	51	n/a	80,000
	2 x 2	55C	4,690	4,812	4,861	77 - 80	61	51		
	2 x 4	55C	5,759	5,908	5,968	94 - 98	61	51		
		82C	8,695	8,921	9,012	93 - 97	93	77		
		110C	10,716	10,994	11,106	88 - 91	122	101		
	1 x 4	23I/55C	4,629	4,749	4,797	76 - 79	61	51	29	
Dual-Mode ICT	2 x 2	23I/55C	4,690	4,812	4,861	77 - 80	61	51	29	
	2 x 4	23I/55C	5,759	5,908	5,968	94 - 98	61	51	29	80,000
		34I/82C	8,695	8,921	9,012	93 - 97	93	77	44	
		46l/110C	10,716	10,994	11,106	88 - 91	122	101	58	

<sup>1</sup>Lumen output is with the FA lens type. Information subject to change without notice. Visit 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 84-202X. Power used toward germicidal disinfection has been 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: MAC-14-x-FA-55C-37K8-DCC-DV-IB-AC and MAC-14-x-FA-23I/55C-37K8-DCC-DV-IB-AC

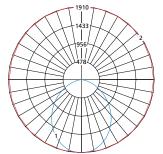


Max Candela = 2083 Located At Horizontal Angle = 75, Vertical Angle = 2.5

— 1 - Vertical Plane Through Horizontal Angles (75 - 255) (Through Max. Cd.)

— 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

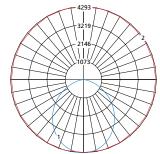
# Model: MAC-22-x-FA-55C-37K8-DCC-DV-IB-AC and MAC-22-x-FA-23I/55C-37K8-DCC-DV-IB-AC



Max Candela = 1910 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.)

# Model: MAC-24-x-FA-110C-37K8-DCC-DV-IB-AC and MAC-24-x-FA-46I/110C-37K8-DCC-DV-IB-AC



Max Candela = 4293 Located At Horizontal Angle = 75, Vertical Angle = 2.5

— 1 - Vertical Plane Through Horizontal Angles (75 - 255) (Through Max. Cd.)
— 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

# **MEDMASTER™**

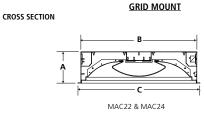
# Patient Room Luminaires

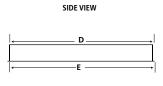
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# **DIMENSIONAL DATA**

#### **GRID DIMENSIONAL DATA (IN INCHES)** В D 10.60 11.75 5.56 46.60 47.75 22.60 23.75 6.10 23.75 22.60 6.10 22.60 23.75 46.60 47.75

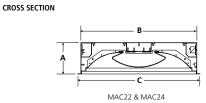






### FLANGE MOUNT

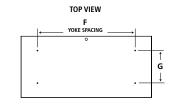






SIDE VIEW

FLANGE DIMENSIONAL DATA (IN INCHES)  A B C D F F G											
	A	D					u_				
1×4	5.56	10.60	11.75	46.60	47.75	30.00	5.25				
Recommended Ceiling Cutout: 10.88" × 46.88"											
2×2	6.10	22.60	23.75	22.60	23.75	12.00	12.00				
Recommended Ceiling Cutout: 22.88" × 22.88"											
2×4	6.10	22.60	23.75	46.60	47.75	30.00	12.00				
Recommended Ceiling Cutout: 22.88" × 46.88"											



# **SURFACE MOUNT**

**SURFACE DIMENSIONAL DATA (IN INCHES)** D 30.00 46.60 10.60 22.60 12.00 12.00 2×2 6.13 22.60 2×4 22.60 30.00 12.00 6.13 46.60



