MEDMASTER™
Behavioral Healthcare Luminaires
MMAC SERIES - LED

PRODUCT FEATURES:

» Surface, recessed grid or recessed flange mount – 1'×4', 2'×2', 2'×4'

» Center diffuser provides direct/indirect ambient lighting

» Heavy-duty one-piece TIG and spot welded housing

» Doorframe with Polycarbonate lens secured with Torx® fasteners for security

SPECIFICATIONS

HOUSING: Die-formed prime grade material as specified – see Ordering Information. TIG and spot welded construction.

DOOR: One-piece die-formed prime grade material as specified – see Ordering Information. Doorframe supported to housing with two aircraft cables. Corners continuously seam welded and smooth with no post grinding (TIG).

FINISH: TGIC polyester powder coat – 5-stage pre-treatment. Salt spray test: 1,000 hours; Reflectance: 92%. Optional antimicrobial finish.

OPTICS: Extruded high-efficiency frosted DR acrylic inner diffuser. Clear impact-resistant polycarbonate outer lens as specified—see Ordering Information.

GASKET: Closed cell silicone gasket seals door to housing.

FASTENERS: Torx® head with center pin hardened security screws. Fully recessed.

ELECTRICAL: Available 3000K, 3500K, 4000K and 5000K color temperatures, 82 CRI. 120-277VAC, or 347VAC 50/60Hz electrical input with serviceable high power factor electronic, constant-current driver (<20% THD, >0.95 PF). Standard 0-10V dimming with 1-100% range and dim-to-dark capabilities (non dim-to-dark with 347V); 330μA maximum source current. Optional LVC and LVCD provides a low-voltage patient interface, controlling the lamp source and optional night light with (LVCD) and without (LVC) dimming control.

SENSOR & CONTROLS: Optional sensor available with compatible third party controls. To see the full list of compatible controls, click here.

INSTALLATION: <u>SURFACE MOUNT:</u> Four .312" diameter holes. <u>GRID MOUNT:</u> Designed for 1" and 1.5" grid. (Housing includes hanging brackets to secure housing with wire to super structure). <u>FLANGE MOUNT:</u> 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: Luminaire is certified to UL Standards by Intertek Testing Laboratory for Wet Locations and non-IC recessed installations. ETL certified IP65 per IEC 60598. NSF2 Splash/Non-Food Zone.

ORDERING INFORMATION (Ex: MMAC24-F-0/0-9-FA-90L40K-DCC-DV-FS)

Model	Mounting	Door/Housing	Outer Lens	Diffuser Type	Lamp Type	Driver Type	Voltage	Options	Accessory
		/							

Model
MMAC14 1'×4'
MMAC22 2'×2'
MMAC24 2'×4'

Mounting Options
F Flange
S Surface
G Grid (1" and 1.5")

Door/Housing Material
0 14-Ga CRS (Painted)
1 16-Ga CRS (Painted)
2 18-Ga CRS (Painted) (n/a as Door Material)
A 18-Ga SS (Brushed) (n/a as Door Material)
B 18-Ga SS (Painted) (n/a as Door Material)
3 14-Ga SS (Painted)
4 16-Ga SS (Painted)
6 14-Ga SS (Brushed)
7 16-Ga SS (Brushed)

Outer Lens Type
7 .187" Clear Polycarbonate
9 .250" Clear Polycarbonate
B .375" Clear Polycarbonate

Diffuser Type
FA Frosted Acrylic
CAP▲ Clear Acrylic with Perforated Insert

Lamp Type
1×4
45L30K 45 Watt 3000K LED
45L35K 45 Watt 3500K LED
45L40K 45 Watt 4000K LED
45L50K 45 Watt 5000K LED

2×2
45L30K 45 Watt 3000K LED
45L35K 45 Watt 3500K LED
45L40K 45 Watt 4000K LED
45L50K 45 Watt 5000K LED

2×4
45L30K 45 Watt 3000K LED
45L35K 45 Watt 3500K LED
45L40K 45 Watt 4000K LED
45L50K 45 Watt 5000K LED
67L30K 67 Watt 3000K LED
67L35K 67 Watt 3500K LED
67L40K 67 Watt 4000K LED
67L50K 67 Watt 5000K LED
90L30K 90 Watt 3000K LED
90L35K 90 Watt 3500K LED
90L40K 90 Watt 4000K LED
90L50K 90 Watt 5000K LED

Driver Type
DCC 0-10V Dimming Constant Current

Input Voltage
DV 120-277VAC, 50/60Hz
347 347VAC, 60Hz

Options
AMF Antimicrobial Finish on exposed surfaces
LEL* 10W LED Emergency Battery Pack (n/a in combination with LVC or LVCD on 2x2 fixture)
NLW^ 2700K White LED Night Light
NLA^ Amber LED Night Light
FS Fuse & Holder
LVC* Low Voltage Controller (Click here for specifications)
LVCD* Low Voltage Controller with Dimming (Click here for specifications)
TC T-Bar Clips (Grid Mount only)

Accessory
IF Install Frame (Flange only; add .375 to each Ceiling Cutout dimension)

* n/a with 347V
^ n/a with 1x4 size or 347V
▲ Selection results in significant reduction in lighting performance

ACCESSORIES ORDERED SEPARATELY
MPWS Low Voltage Wall Switch (Click here for Specifications)

MEDMASTER™
## Behavioral Healthcare Luminaires

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PERFORMANCE

| Model	Optic		Lamp Power	Initial Delivered Lumens, By Lamp Color				Efficacy (lm/W)	Input Power (W)	Estd. L70 LED Life (hrs)
	Diffuser Type	Outer Lens		30K	35K	40K	50K			
MMAC14	FA	7	45L	3,921	4,042	4,180	4,466	80 - 91	49	80,000
		9	45L	3,928	4,049	4,187	4,474	80 - 91	49	80,000
		B	45L	3,749	3,865	3,997	4,270	77 - 87	49	80,000
MMAC22	FA	7	45L	4,007	4,131	4,272	4,564	82 - 93	49	80,000
		9	45L	4,014	4,138	4,280	4,572	82 - 93	49	80,000
		B	45L	3,832	3,950	4,085	4,364	78 - 89	49	80,000
MMAC24	FA	7	45L	5,027	5,182	5,359	5,726	103 - 117	49	80,000
			67L	7,648	7,884	8,153	8,711	106 - 121	72	80,000
			90L	9,827	10,131	10,477	11,193	102 - 116	97	80,000
		9	45L	5,036	5,192	5,369	5,736	103 - 117	49	80,000
			67L	7,662	7,899	8,168	8,727	106 - 121	72	80,000
			90L	9,845	10,150	10,496	11,214	102 - 116	97	80,000
		B	45L	4,807	4,956	5,125	5,476	98 - 112	49	80,000
			67L	7,314	7,540	7,797	8,330	102 - 116	72	80,000
			90L	9,398	9,688	10,019	10,704	97 - 111	97	80,000

Displayed information is for type 'FA' diffuser. Apply 0.52 derating factor to provided output values for 'CAP' diffuser option. Photometry tested to the IESNA LM-79-08 standard by an ILAC/ISO17025 accredited laboratory. For photometric data, please go to www.kenall.com
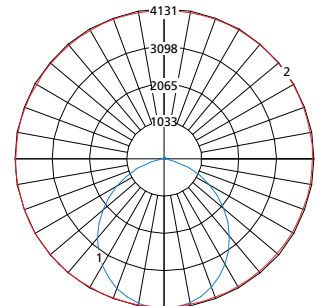
Model: MMAC14-x-y-z-9-FA-45L40K-DCC-120
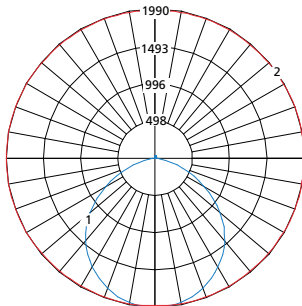
Maximum Candela = 1990 Located At Horizontal Angle = 75, Vertical Angle = 2.5

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

Model: MMAC22-x-y-z-9-FA-45L40K-DCC-120
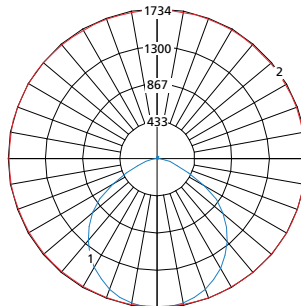
Maximum Candela = 1734 Located At Horizontal Angle = 90, Vertical Angle = 2.5

— 1 - Vertical Plane Through Horizontal Angles (90-270) (Through Max. Cd.)
— 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

Model: MMAC24-x-y-z-9-FA-90L40K-DCC-120

Maximum Candela = 4131 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.)
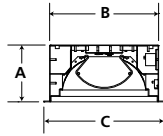
MEDMASTER™
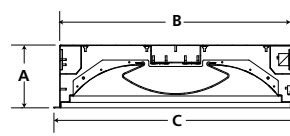## Behavioral Healthcare Luminaires
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PERFORMANCE

GRID MOUNT

CROSS SECTION   SIDE VIEW

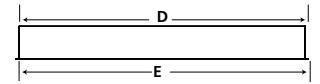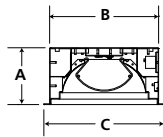| GRID DIMENSIONAL DATA (IN INCHES)				
	A	B	C	D	E
1×4	5.56	10.60	11.75	46.60	47.75
2×2	6.10	22.60	23.75	22.60	23.75
2×4	6.10	22.60	23.75	46.60	47.75

MAC14   MAC22 & MAC24

FLANGE MOUNT

CROSS SECTION   SIDE VIEW

MAC14   MAC22 & MAC24

TOP VIEW

YOKE SPACING

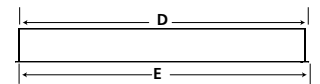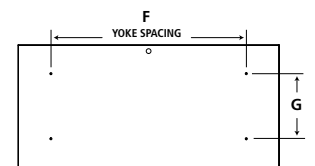| FLANGE DIMENSIONAL DATA (IN INCHES)						
	A	B	C	D	E	F	G
1×4	5.56	10.60	11.75	46.60	47.75	30.00	5.25
Recommended Ceiling Cutout: 10.88" × 46.88"						
2×2	6.10	22.60	23.75	22.60	23.75	12.00	12.00
Recommended Ceiling Cutout: 22.88" × 22.88"						
2×4	6.10	22.60	23.75	46.60	47.75	30.00	12.00
Recommended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

SURFACE MOUNT

CROSS SECTION   TOP VIEW

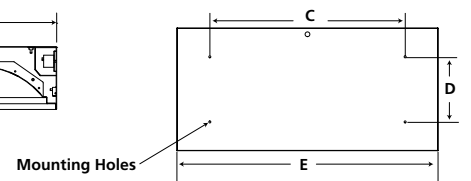| SURFACE DIMENSIONAL DATA (IN INCHES)				
	A	B	C	D	E
1×4	5.56	10.60	30.00	5.25	46.60
2×2	6.13	22.60	12.00	12.00	22.60
2×4	6.13	22.60	30.00	12.00	46.60

MAC14   MAC22 & MAC24

Mounting Holes