MEDMASTER™

MMAC SERIES - TUNABLE WHITE LED

PRODUCT FEATURES:

- » High-output, high-CRI LED lamp sources with 2700K-6500K white tuning capability
- » Ceiling mount flange, recessed grid or surface; $1'\times4'$, $2'\times2'$ and $2'\times4'$
- » 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
- » Ligature resistant construction

PROJECT INFORMATION
Job Name
Fixture Type
Catalog Number
Approved by

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). Phillips head stainless steel fasteners secure door to housing – eight (8) for (1×4, 2×2) or ten (10) for (2x4). Extruded closed cell gasket seals doorframe to housing. Outer lens sealed to doorframe with a vinyl gasket.

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.

LED MODULE: Serviceable tunable-white, mid-power LED array provides 2700K through 6500K CCT range with a two-point path. Minimum 82 CRI standard (R9 > 20) with optional minimum 90 CRI (R9 > 50).

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.

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 Location and non-IC recessed installation. ETL certified IP65 per IEC 60598. NSF2 Splash/Non-Food Zone. Ligature resistant construction. Build America, Buy America Act compliant.















ORDERING INFORMATION (Ex: MMAC22-F-1/2-9-FA-45T-27/65K8-ATW-DV-FS)

Mod	el Mounting	Door/Housing	Outer Lens	Diffuser Type	Lamp Power	Lamp Color	Driver Type	Voltage	Options	Accessory		
				_				DV				
MMA	el AC14 1'×4' AC22 2'×2' AC24 2'×4'			Diffuser Type FA Frosted A CAP▲ Clear Act Lamp Power	Acrylic Cylic with Perforated	d Insert	AMF Antimic NLW^ 2700K	ED Emergency Bat crobial Finish on ex White LED Night L LED Night Light	cposed surfaces			
Moui F S G				1×4 45T 45 Watt Tunable White 2'×2'			FS Fuse & Holder LVC† Low Voltage Controller (Click <u>here</u> for specifications) LVCD† Low Voltage Controller with Dimming (Click <u>here</u> for specifications) Accessory IF Install Frame (Flange only; add .375 to each Ceiling Cutout dimension) TC T-Bar Clips (Grid Mount only)					
Door 0	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)			45T 45 Watt Tunable White 2'×4'								
Ā				67T 67 Watt	Tunable White Tunable White Tunable White		* Wired to cool white LED circuit. Option not available in combination with IVC or IVCD on 2'x2' model					
3 4					0K-6500K CCT Rai 0K-6500K CCT Rai		^ n/a with 1x4 size † Low Voltage Controller compatible with bed controls; CCT on Ambient contr separately; not compatible with DTW option. ▲ Selection results in significant reduction in lighting performance					
Oute 7 9 B	16-Ga SS (Brushed) r Lens Type .187" Clear Polycarl .250" Clear Polycarl .375" Clear Polycarl	bonate		DTW DALI Tun	0-10V) Dimming Tu able White Driver able White Driver (nable White Driver Consult Factory)	- selection resu	its in significant re	ouction in lighting pe	enonnance		
-	.575 Clear Folycan	oonace		Input Voltage DV 120-277	VAC, 50/60Hz							

ACCESSORIES ORDERED SEPARATELY

MPWS Low Voltage Wall Switch (Click here for Specifications)



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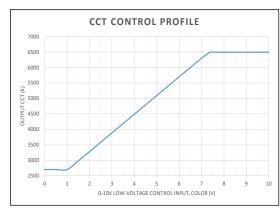
PERFORMANCE		Perfo	rmance at 400		
Model	Lamp Type	Lumen Output (lm)	Efficacy (lm/W)	Input Power (W)	Estd. L70 LED Life (Hrs)
MMAC14	45T-27/65K8	4,429	96	46	80,000
WIWAC 14	45T-27/65K9	3,570	78	46	80,000
MMAC22	45T-27/65K8	4,231	92	46	80,000
MINIACZZ	45T-27/65K9	3,410	74	46	80,000
	45T-27/65K8	5,186	113	46	80,000
	45T-27/65K9	4,180	91	46	80,000
MMAC24	67T-27/65K8	7,760	114	68	80,000
WIWAC24	67T-27/65K9	6,427	95	68	80,000
	90T-27/65K8	10,078	110	92	60,000
	90T-27/65K9	8,123	88	92	60,000

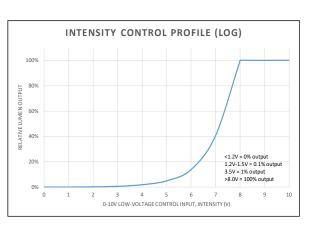
Displayed information is for type 'FA' diffuser. Apply lumen output factor of 1.05 for Type 7 and Type 9 lens. Information subject to change without notice. Photometry tested to the IESNA LM-79-08 standard by an ILAC/ISO17025 accredited laboratory. For photometric data, please go to www.kenall.com

PERFORMANCE SCALING, BY LAMP COLOR

		27/65K	8		27/65K9					
CCT (K)	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. It is recommended to limit the load on the CCT control circuit to twenty (20) 45T or ten (10) 67T/90T luminaires or less.

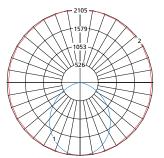


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PERFORMANCE

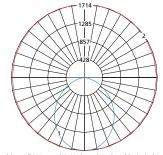
Model: MMAC14-F-1/1-FA-9-45T-27/65K8-ATW-DV



 $\mbox{Max Candela} = 2105 \mbox{ Located At Horizontal Angle} = 75, \mbox{Vertical Angle} = 2.5$

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

Model: MMAC22-F-1/1-FA-9-45T-27/65K8-ATW-DV

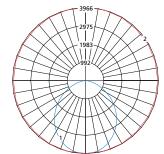


 $\mbox{Max Candela} = 1714 \mbox{ Located At Horizontal Angle} = 90, \mbox{Vertical Angle} = 2.5$

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

CROSS SECTION

Model: MMAC24-F-1/1-FA-9-90T-27/65K8-ATW-DV



 $\mbox{Max Candela} = 3966 \mbox{ Located At Horizontal Angle} = 75, \mbox{Vertical Angle} = 2.5$

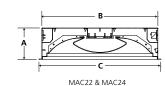
— 1 - Vertical Plane Through Horizontal Angles (75 - 255) (Through Max. Cd.) — 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)

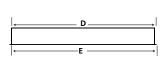
DIMENSIONAL DATA

GRID DIMENSIONAL DATA (IN INCHES)

	Α	В	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







SIDE VIEW

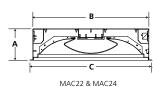
FLANGE MOUNT

GRID MOUNT

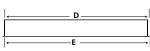
CROSS SECTION



MAC14



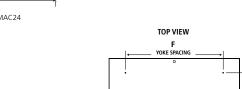




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FLANGE	DIMENSIONAL	DATA	ίN	INCHES)	
ILANGE	DIMILIAZIONAL	יאואט	(114	HVCHES/	

	Α	В	C	D	E	F	G
1×4	5.56	10.60	11.75	46.60	47.75	30.00	5.25
Recommen	ded Ceilir	ng Cuto	ut: 10.88	" × 46.88	3"		
2×2	6.10	22.60	23.75	22.60	23.75	12.00	12.00
Recommen	ded Ceilir	na Cuto	ut: 22.88	" × 22.88	3"		



SURFACE MOUNT

SURFACE DIMENSIONAL DATA (IN INCHES)

	Α	В	С	` D	É
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



