

Specifications

Construction:

- The rugged, one-piece die-cast aluminum housing features a complete heat sink that optimizes heat dissipation through convection cooling management.
- Low profile, 3G vibration rated compact design minimizes wind load requirements.
- Housing is completely sealed against moisture and environmental contaminants.

Optics:

- Available in IES Type III, IV, V distributions
- Light engines are available in adjustable color temperature (3000K&4000K&5000K) configurations.
- Scalable Lumen Packages from 6,600 to 45,000 Lumens replaces up to 1000W Metal Halide.
- Optics is precisely designed to shape the distribution, maximizing efficiency and application spacing.
- The optics can conform to dark sky requirement.

Electrical:

- Universal 120-277 VAC or 347-480 VAC input voltage
- 10KA(@120-277V) or 20KA(@347-480V) surge protection
- Standard with 0-10V dimming driver
- Power adjustable: 100%, 80%, 60%, 40%.
- THD: ≤20%
- Power Factor: ≥90%

Controls:

- Optional occupancy sensor
- Optional Photocell

Ambient Temperature:

- Ambient operating temperature -40° C to 40° C (-40° F to 104° F).

Installation:

- Suitable for mounting heights ranging from 26-50' in area lighting applications
- Round pole, Square pole, slipfitter, wall mount and yoke are available.
- The design can be operated by one person to install the whole lamp

Lifespan:

- Estimated 100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

Finish:

- It's available in black or optional dark bronze, silvery gray or white.



Medium Size: 100W/140W/180W



Large Size: 250W/300W



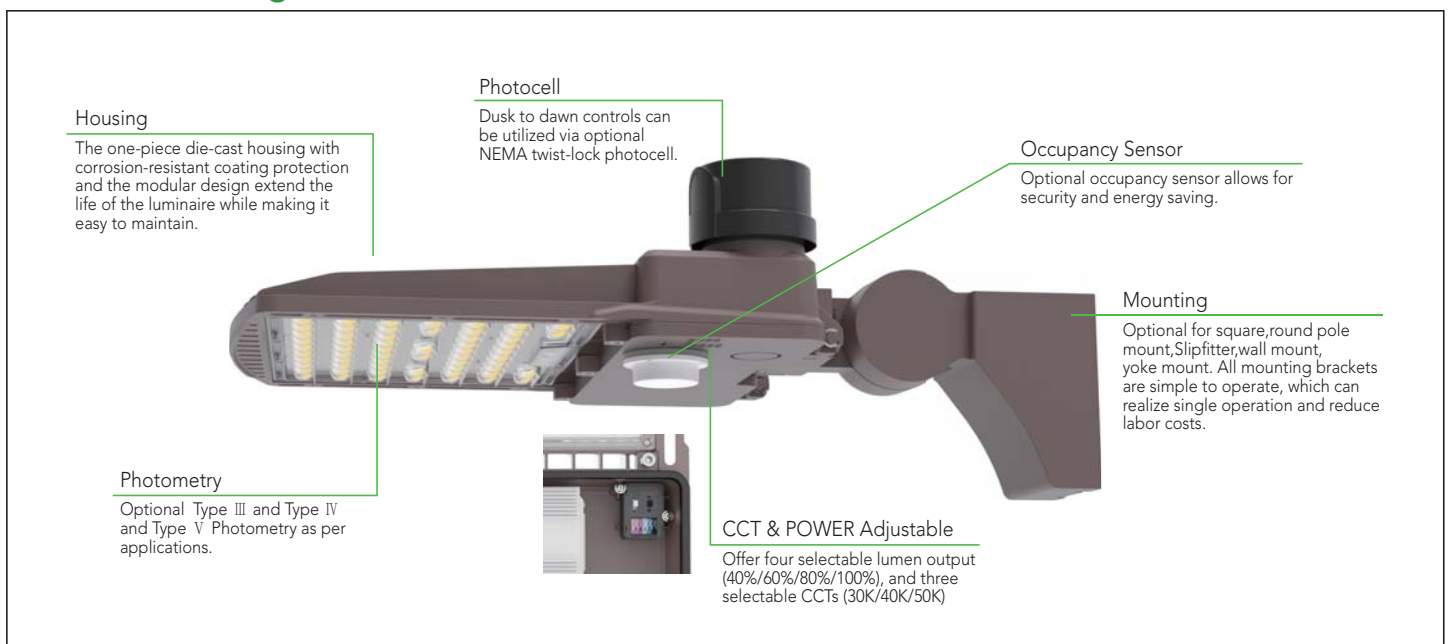
Certifications:

- UL wet location listed

Note:

Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 C (±5 C) specifications subject to change without notice.

Structural Design



PERFORMANCE DATA

MAL08100W									
SETTING	SYSTEM WATTS	DIST.TYPE	CRI	3000K		4000K		5000K	
				LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
100%	100W	3	70	14500lm	145 lm/W	15800lm	158 lm/W	15000lm	150 lm/W
80%	80W	3	70	12000lm	150 lm/W	13000lm	163 lm/W	12500lm	156 lm/W
60%	60W	3	70	9500lm	158 lm/W	10000lm	167 lm/W	9700lm	162 lm/W
40%	40W	3	70	6600lm	165 lm/W	7000lm	175 lm/W	6700lm	168 lm/W


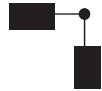



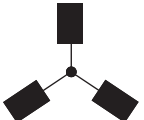

MAL08140W									
SETTING	SYSTEM WATTS	DIST.TYPE	CRI	3000K		4000K		5000K	
				LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
100%	140W	3	70	20000lm	143 lm/W	23000lm	164 lm/W	21000lm	150 lm/W
80%	120W	3	70	18000lm	150 lm/W	20000lm	167 lm/W	18500lm	154 lm/W
60%	90W	3	70	14000lm	156lm/W	15500lm	172 lm/W	14500lm	161 lm/W
40%	60W	3	70	9700lm	162 lm/W	10600lm	177 lm/W	10000lm	167 lm/W

MAL08180W									
SETTING	SYSTEM WATTS	DIST.TYPE	CRI	3000K		4000K		5000K	
				LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
100%	180W	3	70	24000lm	133 lm/W	27000lm	150 lm/W	25000lm	139 lm/W
80%	144W	3	70	20000lm	139 lm/W	22500lm	156 lm/W	21000lm	146 lm/W
60%	108W	3	70	16000lm	148 lm/W	18000lm	167 lm/W	17000lm	157 lm/W
40%	72W	3	70	11500lm	160 lm/W	12500lm	174 lm/W	12000lm	167 lm/W

MAL08250W									
SETTING	SYSTEM WATTS	DIST.TYPE	CRI	3000K		4000K		5000K	
				LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
100%	250W	3	70	33500lm	134 lm/W	37000lm	148 lm/W	34500lm	138 lm/W
80%	200W	3	70	28000lm	140 lm/W	31000lm	155 lm/W	29000lm	145 lm/W
60%	150W	3	70	22000lm	147 lm/W	24500lm	163 lm/W	23000lm	153 lm/W
40%	100W	3	70	15500lm	155 lm/W	17000lm	170 lm/W	16000lm	160 lm/W

MAL08300W									
SETTING	SYSTEM WATTS	DIST.TYPE	CRI	3000K		4000K		5000K	
				LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
100%	300W	3	70	41000lm	137 lm/W	45000lm	150 lm/W	42000lm	140 lm/W
80%	240W	3	70	35000lm	146lm/W	38500lm	160 lm/W	36000lm	150 lm/W
60%	180W	3	70	28000lm	156 lm/W	30000lm	167 lm/W	28500lm	158 lm/W
40%	120W	3	70	19200lm	160 lm/W	21500lm	179 lm/W	20000lm	167 lm/W

EPA OF AREA LIGHT

Item							
	1	2 @90°	2 @120°	2@180°	3 @90°	3 @120°	4 @90°
100W/140W/180W	0.3632	0.6849	0.8861	0.7264	1.0481	1.2078	1.0481
250W/300W	0.4758	0.8091	1.059	0.9516	1.2849	1.3923	1.2849

BUG @5000K

SYSTEM WATTS	VOLTAGE	DIST.TYPE	B	U	G
100W	120-277V/347-480V	3	3	0	3
140W	120-277V/347-480V	3	3	0	3
180W	120-277V/347-480V	3	3	0	3
250W	120-277V/347-480V	3	4	0	4
300W	120-277V/347-480V	3	4	0	4

ELECTRICAL DATA

Number Of Drivers	Driver Current (mA)	Nominal Power (W)	INPUT VOLTAGE (V)	CURRENT (Amps)
1	1200	100	120	0.83
		100	208	0.48
		100	240	0.42
		100	277	0.36
	2520	100	347	0.29
		100	480	0.21
1	1200	140	120	1.17
		140	208	0.67
		140	240	0.58
		140	277	0.51
		140	347	0.40
		140	480	0.29
1	960	180	120	1.50
		180	208	0.87
		180	240	0.75
		180	277	0.65
		180	347	0.52
		180	480	0.38
1	1200	250	120	2.08
		250	208	1.20
		250	240	1.04
		250	277	0.90
		250	347	0.72
		250	480	0.52
1	1500	300	120	2.50
		300	208	1.44
		300	240	1.25
		300	277	1.08
		300	347	0.86
		300	480	0.63

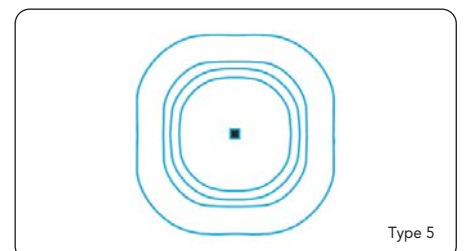
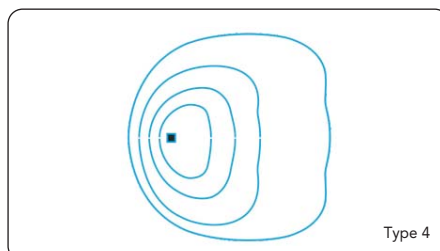
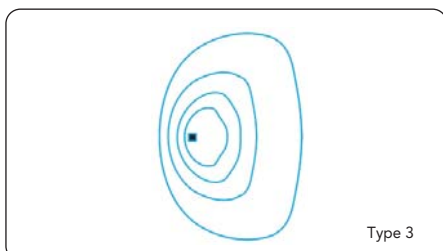
PHOTOMETRICS

Mester offers a complete set of optical systems to meet every site lighting requirement. These systems provide remarkable flexibility in precisely matching light distribution patterns to specific site requirements.

Type 3 optics produce an asymmetrical pattern that directs the majority of the light forward and equally on both sides of the luminaire. In a back-to-back configuration, it creates a rectangular pattern which can extend pole spacings.

Type 4 is suitable for applications where light is primarily required forward with minimal backlight. Typical installations include perimeter poles.

Type 5 optics produce a symmetrical square distribution pattern that distributes light equally on all sides of the luminaire. Type 5 luminaires is universal for most area lighting applications



ORDERING GUIDE

Example: MAL08 140W 27V XXK Y Y Y Y Y

Fixture Type	Wattage	Voltage	CCT	Finish	Photocell (Option)	Sensor (Option)	Mounting	Photometry	CCT and Power Adjustable	Internal Code
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MAL08 Area Light Series	100 100W	27V 120-277V	DDK ¹ Adjustable color temperature	D Dark Bronze	P0 120-277V Photocell	M With Sensor	SQ Square Pole Mount	T3 TYPE III	AD ¹ With adjustment dial Blank Without adjustment dial	Blank Alphanumeric
	140 140W	48V 347-480V		B Black	P3 347V Photocell	Blank Without Sensor	SP Slipfitter Mount	T4 TYPE IV		
	180 180W			W White	P4 480V Photocell		WM Wall Mount	T5 TYPE V		
	250 250W			SG Silver Gray	Blank Without Photocell		YK Yoke Mount			
	300 300W						SQA Adjustable Square Mount			



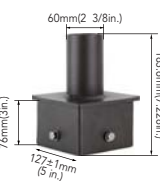




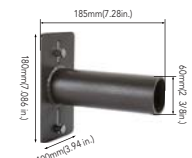





Note: CCT adjustable(3000K/4000K/5000K) and power adjustable(100%, 80%, 60%, 40%).

ACCESSORIES(Optional)

AL08 series features a backlight control which provides reduced pixilation and increased visual comfort without compromising performance. External Glare Shield: sold separately or as an accessory.

							
External Glare Shield		External Glare Full Visor		External Glare Full Visor		External Glare Full Visor	
							
Plug-and-Play PIR Sensor PIR sensor: ANT-6-4T Bluetooth PIR sensor: ANT-6-4T-BLE-SR		Plug-and-Play Microwave Sensor Microwave sensor: ANT-5-4T Bluetooth microwave sensor: ANT-5-4T-BLE-SR		120-277V PIR Sensor PIR sensor: BRI823-B-D Bluetooth PIR sensor: BRI823-B-D-BLE-SR		NEMA Photocell 3 pin NEMA Type: MS-PSUNVB1 3 pin NEMA Type(480V): JL-207F 7 pin NEMA Type: JL-241C	

ADDITIONAL MOUNTING ACCESSORIES

POLE BRACKET • For mounting one fixture on an existing pole			
	<p>4" Square Pole Mount with 2-3/8" O.D. Tenon No. 4SQ-SP-D Finish: Dark Bronze USE: For use with square, non-tapered steel and aluminum poles. Furnished with four 5/16" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.</p>		<p>4" Round Pole Mount with 2-3/8" O.D. Tenon NO. 4SQR-SP-D Finish: Dark Bronze USE: For use with Round, non-tapered steel and aluminum poles. Furnished with three 3/8" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.</p>
	<p>5" Square Pole Mount with 2-3/8" O.D. Tenon No. 5SQ-SP-D Finish: Dark Bronze USE: For use with square, non-tapered steel and aluminum poles. Furnished with four 5/16" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.</p>		<p>5" Round Pole Mount with 2-3/8" O.D. Tenon NO. 5SQR-SP-D Finish: Dark Bronze USE: For use with Round, non-tapered steel and aluminum poles. Furnished with three 3/8" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.</p>
	<p>Pole Bracket Accessories - Angle-Adjustment Adapter NO. SQA-ALDA Finish: Dark Bronze USE: Durable brackets are engineered to provide versatile mounting options. These arms are made from rugged die-cast aluminum. They allow optimal positioning of the light fixture to maximize the lighting effectiveness vertically and horizontally.</p>		<p>Pole Bracket accessories - Tenon & Yoke Adaptor NO. SP-TR-D Finish: Dark Bronze USE: The 2-3/8" OD Tenon Mount Adaptor for Yoke Fixtures is designed to mount MESTER light fixtures that are equipped with a yoke mount onto a 2-3/8" OD tenon. It may be utilized with the Mester Flood Light Series of light fixtures.</p>
WALL BRACKET • Attaches to any flat surface • Provides wiring access		Mid-Pole tenon Bracket	
	<p>90° Wall Mount Bracket with 2-3/8" O.D. Tenon NO. WM-SP-D Finish: Dark Bronze USE: The 90° wall mount bracket with 2-3/8" tenon attaches an MESTER floodlight to almost any surface: wall, roof, or wood pole. Provides wiring access and built-in 2-3/8" O.D. tenon to mount a fixture with our adjustable slipfitter. Suggested 3/8" diameter bolts for mounting. Mounting holes are spaced 3-1/4" apart.</p>		<p>2-3/8" OD Horizontal Tenon Mid-Pole Bracket NO. SQ-SP-D Finish: Dark Bronze USE: 2-3/8" OD Horizontal Tenon Mid-Pole Bracket is designed to mount light fixture that is equipped with an adjustable slipfitter onto a 2-3/8" OD horizontal tenon</p>
Round External Mount Horizontal Tenon • To mount 2/3/4 fixtures on a existing pole			
	<p>Double 90° Horizontal Tenon Adaptor NO. R60-SP2-90-D Finish: Dark Bronze USE: The Bracket is designed to mount over 2-3/8" (60mm) O.D. vertical tenon. Two fixtures can be mounted to the Round External Mount Horizontal Tenon and adjusted horizontally</p>		<p>Triple 120° Horizontal Tenon Adaptor NO. R60-SP3-120-D Finish: Dark Bronze USE: The Bracket is designed to mount over 2-3/8" (60mm) O.D. vertical tenon. Three fixtures can be mounted to the Round External Mount Horizontal Tenon and adjusted horizontally</p>
	<p>Double 180° Horizontal Tenon Adaptor NO. R60-SP2-180-D Finish: Dark Bronze USE: The Bracket is designed to mount over 2-3/8" (60mm) O.D. vertical tenon. Two fixtures can be mounted to the Round External Mount Horizontal Tenon and adjusted horizontally</p>		<p>Quad 90° Horizontal Tenon Adaptor NO. R60-SP4-90-D Finish: Dark Bronze USE: The Bracket is designed to mount over 2-3/8" (60mm) O.D. vertical tenon. Four fixtures can be mounted to the Round External Mount Horizontal Tenon and adjusted horizontally</p>
	<p>Triple 90° Horizontal Tenon Adaptor NO. R60-SP3-90-D Finish: Dark Bronze USE: The Bracket is designed to mount over 2-3/8" (60mm) O.D. vertical tenon. Three fixtures can be mounted to the Round External Mount Horizontal Tenon and adjusted horizontally</p>		