

Specifications

Construction:

- Heavy duty die cast aluminum housing with ample heat sinking
- Low-profile design delivers high-performance illumination and improves application site aesthetics
- Low profile, 1.5G 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
- Easy optic lens swap capability with only 4 screws, which secures the light fixture during its long lifespan and eliminates the risk of water intrusion
- Scalable Lumen Packages from 6700 to 50000 Lumens.
- Light engines are available in adjustable color temperature (3000K&4000K&5000K) configurations.
- The optics can conform to dark sky requirement.

Electrical:

- Universal 120-277 VAC or 277-480V AC input voltage
- 10KV(@120-277V) or 20KV(@277-480V) surge protection.
- 0-10V dimming driver standard for 10% to 100% dimming
- Power can support 4 levels Selectable
- THD: ≤20%
- Power Factor: ≥90%

Controls:

- Optional NEMA 3-pin photocell or 7-pin photocell.
- Optional Occupancy sensor or Microwave sensor or daylight sensor.
- Optional Bluetooth sensor or Bluetooth controller.
- Silvair/Sharkward/Haisen Luminaire Level Lighting Control (LLLC) optional.
- Also compatible with 3rd party smart network control system.
- Standard Integral Sensor Receptacle.

Ambient Temperature:

- Ambient operating temperature -40°C to 50°C (-40°F to 122°F).

Installation:

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

Lifespan:

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

Medium Size: 100W/160W



Large Size: 270W/330W



Certifications:

- UL wet location qualified.

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.

Finish:

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



Black



Dark Bronze



Silver Gray



White

Structural Design



PERFORMANCE DATA

IL-MAL09100W								
SETTING	SYSTEM WATTS	CRI	3000K		4000K		5000K	
			LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
LV1	100W	70	14500lm	145lm/W	15800lm	158lm/W	15000lm	150lm/W
LV2	80W	70	12000lm	151lm/W	13200lm	165lm/W	12500lm	156lm/W
LV3	60W	70	9500lm	159lm/W	10400lm	173lm/W	10000lm	164lm/W
LV4	40W	70	6700lm	167lm/W	7300lm	182lm/W	6900lm	172lm/W

IL-MAL09160W								
SETTING	SYSTEM WATTS	CRI	3000K		4000K		5000K	
			LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
LV1	160W	70	22500lm	141lm/W	25000lm	156lm/W	23500lm	147lm/W
LV2	128W	70	18800lm	147lm/W	20800lm	163lm/W	19600lm	153lm/W
LV3	96W	70	14900lm	155lm/W	16400lm	171lm/W	15500lm	161lm/W
LV4	64W	70	10400lm	163lm/W	11500lm	180lm/W	10800lm	169lm/W

IL-MAL09270W								
SETTING	SYSTEM WATTS	CRI	3000K		4000K		5000K	
			LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
LV1	270W	70	39000lm	144lm/W	43500lm	161lm/W	40500lm	150lm/W
LV2	216W	70	32800lm	152lm/W	36500lm	169lm/W	34000lm	158lm/W
LV3	162W	70	25700lm	159lm/W	28600lm	177lm/W	26700lm	165lm/W
LV4	108W	70	18000lm	167lm/W	20000lm	185lm/W	18600lm	173lm/W

IL-MAL09330W								
SETTING	SYSTEM WATTS	CRI	3000K		4000K		5000K	
			LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
LV1	330W	70	45000lm	136lm/W	50000lm	155lm/W	46800lm	140lm/W
LV2	300W	70	42500lm	140lm/W	48000lm	164lm/W	44000lm	144lm/W
LV3	264W	70	38000lm	144lm/W	42000lm	167lm/W	39000lm	148lm/W
LV4	198W	70	30000lm	152lm/W	33500lm	175lm/W	31000lm	156lm/W

MOUNTING

- Standard versatile mounting arm accommodates multiple drilling patterns as well as square and round poles
- Optional for cast aluminum slipfitter mounting adapterter Compatible with morCompatible with morCompatible with m e MEe MESTER mounting adaptors such as Tenon, suits for various application)

Mounting Options



Arm Mount
(4" and 5" Square and Round poles)
Standard versatile mounting arm is simple to install and can be used with existing poles for retrofit installations.



Slipfitter Mount
An optional cast aluminum mast adapter secures fixture head to nominal 2-3/8" O.D. horizontal steel tenon arm.



Wall Mount
Wall Mount is easy to install for direct wall mounting with 1/2" conduit wiring or standard J-box mounting

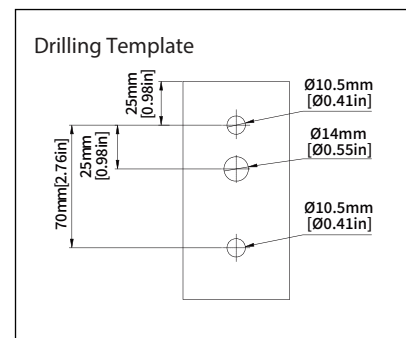
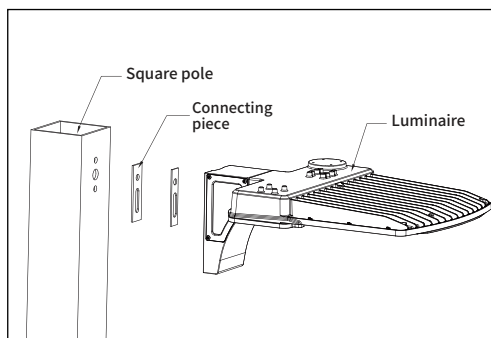
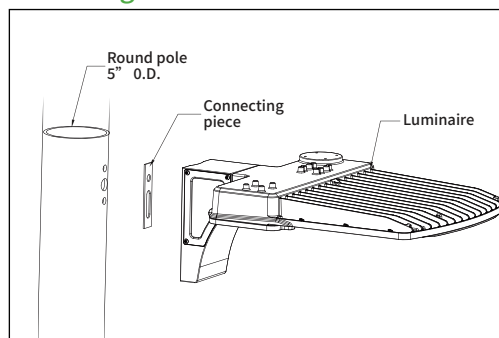


Yoke Mount
Die-cast aluminum trunnion is easily adapted to many surfaces and allows easy fixture aiming angles.



Adjustable Arm Mount
Standard versatile mounting arm is simple to install and can be used with existing poles for retrofit installations.

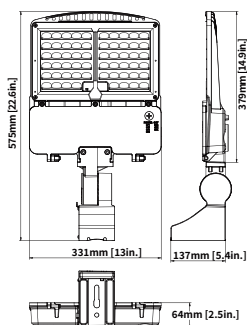
Mounting Dimensions



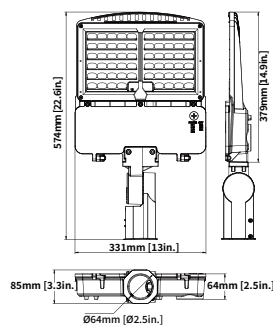
DIMENSION

unit: inch/mm

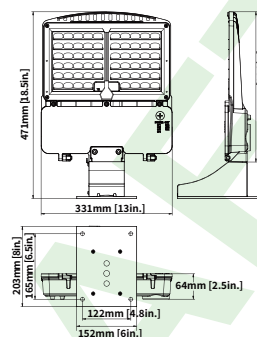
100W/160W
(Adjustable Square Mount)



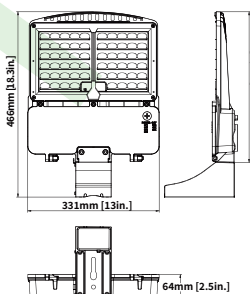
100W/160W
(Slipfitter Mount)



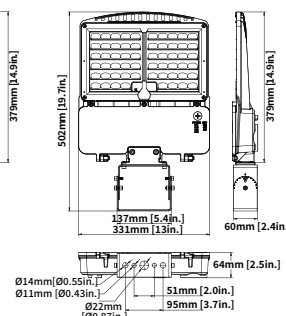
100W/160W
(Wall Mount)



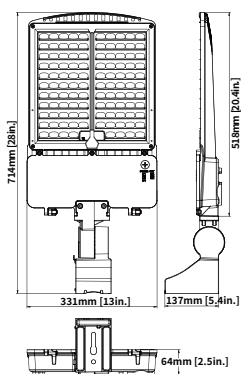
100W/160W
(Pole Mount)



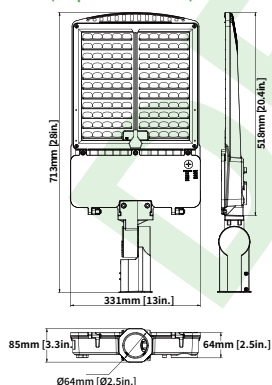
100W/160W
(Yoke Mount)



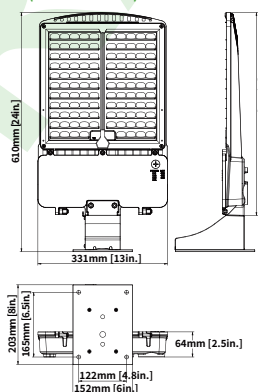
270W/330W
(Adjustable Square Mount)



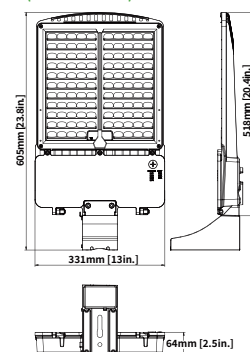
270W/330W
(Slipfitter Mount)



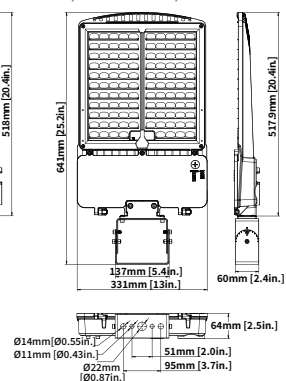
270W/330W
(Wall Mount)



270W/330W
(Pole Mount)



270W/330W
(Yoke Mount)



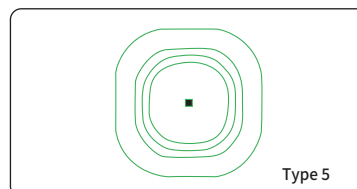
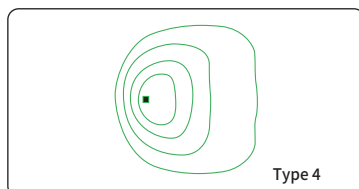
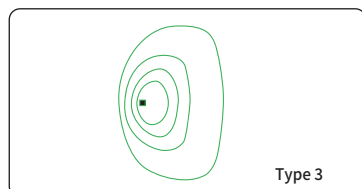
PHOTOMETRICS

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



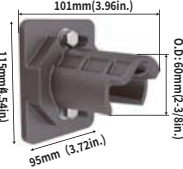
ACCESSORIES(Optional)

AL09 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	Plug-and-Play PIR Sensor PIR sensor: MHANT12VPH02 Bluetooth PIR sensor: MHANT12VPHB02	NEMA Photocell 3 pin NEMA Type: MS-PSUNVB1 3 pin NEMA Type(480V): JL-207F 7 pin NEMA Type: JL-241C
		
Photocell USE: 3 seconds plug-in 12-24VDC input		

ORDERING GUIDE											Example: IL-MAL09 160W 27V XXK YYY YYY	
Fixture Type	Wattage	Voltage	CCT	Finish	Photocell (Option)	Sensor (Option)	Mounting	Photometry	CCT and Power Adjustable	Internal Code		
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
IL-MAL09 Area Light Series	100 100W 160 160W 270 270W 330 330W	27V 120-277V 48V 277-480V	DDK Adjustable color temperature	D Dark Bronze B Black W White SG Silver Gray	P With Photocell Blank Without Photocell	M With Sensor Blank Without Sensor	SQ Square Pole Mount SP Slipfitter Mount WM Wall Mount YK Yoke Mount SQA Adjustable Square Mount	T3 TYPE III T4 TYPE IV T5 TYPE V	AD With adjustment dial	Blank Alphanumeric		

ADDITIONAL MOUNTING ACCESSORIES

POLE BRACKET • For mounting one fixture on an existing pole			
	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.		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.
	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.		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.
	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.		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.
	Horizontal Wall or Square or Round pole mount with 2-3/8" Tenon Bracket NO. SQR-SP-D Finish: Dark Bronze USE: This tenon bracket can be installed onto a wall Provides wiring access and a built-in 2-3/8" O.D. tenon to mount a fixture with our adjustable slipfitter. Suggested 3/8" diameter bolts for mounting.		Adjustable Arm Mount Kit NO.:SQADAL08-A Finish: Dark Bronze Description: Adjustable pole mount kit, suitable for 4" & 5" square or round pole

WALL BRACKET		Mid-Pole tenon Bracket	
• Attaches to any flat surface • Provides wiring access			
	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 abuilt-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.		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 a adjustable slipfitter onto a 2-3/8" OD horizontal tenon
Round External Mount Horizontal Tenon · To mount 2/3/4 fixtures on a existing pole			
	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		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
	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		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
	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		