

# DIRECTLED – IL-MAL04 Series

## FEATURES & SPECIFICATIONS SHEET

### Construction:

- Rugged one-piece, die-cast aluminum housing secures the thermally conductive LED panel and electrical chamber
- Low profile, 3G vibration rated compact design minimizes wind load requirements.
- Housing is completely sealed against moisture and environmental contaminants (IP65).

### Optics:

- Available in IES Type III, IV, V distributions
- Light engines are available in standard 4000 K and 5000 K (70 CRI) configurations.
- Scalable Lumen Packages from 5,360 to 41,700 Lumens replaces up to 1000W Metal Halide.
- Optics is precisely designed to shape the distribution, maximizing efficiency and application spacing.
- For the ultimate level of spill light control, an optional house-side shield accessory can be field or factory installed.
- The optics can conform to dark sky requirement.

### Electrical:

- Universal 120-277 VAC or 347-480 VAC input voltage
- Standard with 0-10V dimming driver(s)
- THD: ≤20%
- Power Factor: ≥90%

### Controls:

- Optional occupancy sensor
- Optional Photocell

### Ambient Temperature:

- Ambient operating temperature -40° C to 45° C (-40 °F to 113 °F).

### Installation:

- Suitable for mounting heights ranging from 26-40' in area lighting applications
- Round pole, Square pole, slipfitter and wall mount 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.



Small Size: 40W/70W/100W



Medium Size: 150W/200W



Large Size: 250W/300W



### Warranty:

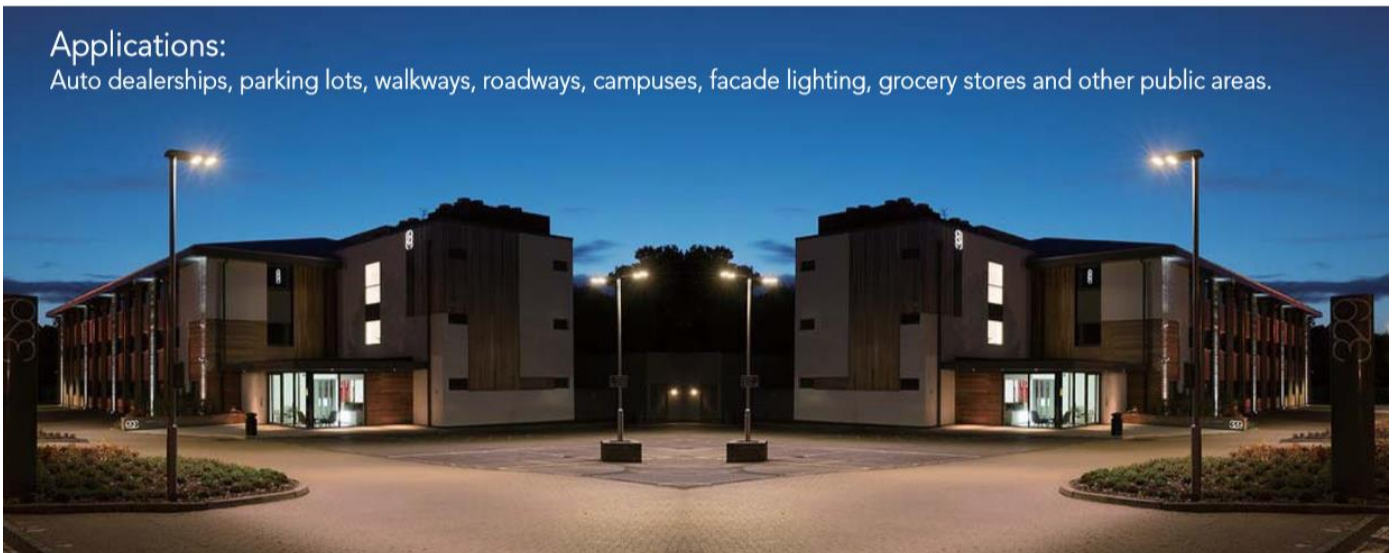
ILF Inc warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

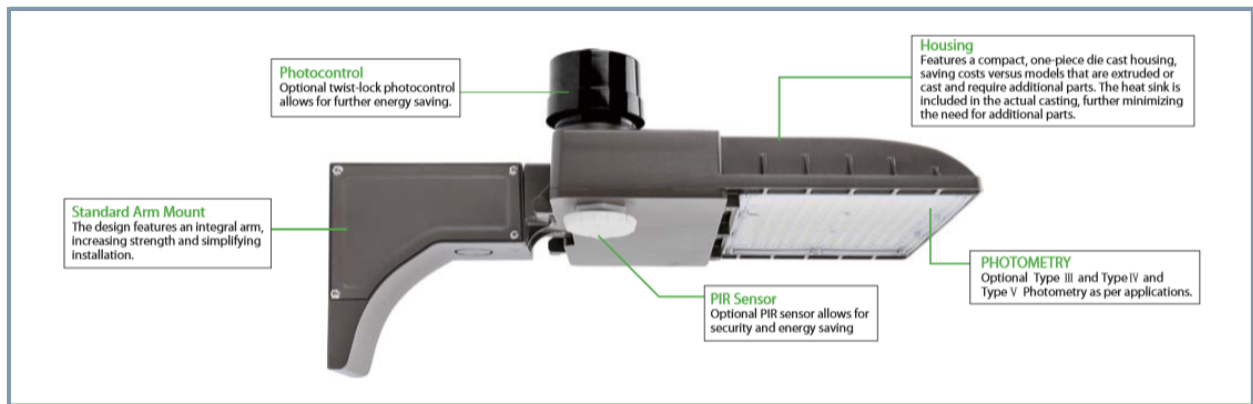
### Note:

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.

## Applications:

Auto dealerships, parking lots, walkways, roadways, campuses, facade lighting, grocery stores and other public areas.










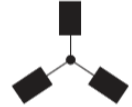

## PERFORMANCE DATA

SYSTEM WATTS	VOLTAGE	DIST. TYPE	4000k (70CRI)		5000k (70CRI)	
			LUMENS	LPW	LUMENS	LPW
40W	120-277V	3	5400lm	135 lm/W	5500lm	138 lm/W
	120-277V	4	5360lm	134 lm/W	5480lm	137 lm/W
	120-277V	5	5600lm	140 lm/W	5720lm	143 lm/W
45W	347-480V	3	5900lm	131 lm/W	6000lm	133 lm/W
	347-480V	4	5850lm	130 lm/W	5940lm	132lm/W
	347-480V	5	6120lm	136 lm/W	6210lm	138 lm/W
70W	120-277V	3	9400lm	134 lm/W	9500lm	136 lm/W
	120-277V	4	9310lm	133 lm/W	9450lm	132 lm/W
	120-277V	5	9730lm	139 lm/W	9800lm	140 lm/W
75W	347-480V	3	9800lm	131 lm/W	10000lm	133 lm/W
	347-480V	4	9750lm	130 lm/W	9900lm	132 lm/W
	347-480V	5	10200lm	136 lm/W	10350lm	138 lm/W
100W	120-277V	3	13300lm	133 lm/W	13400lm	134 lm/W
	120-277V	4	13200lm	132 lm/W	13300lm	133 lm/W
	120-277V	5	13800lm	138 lm/W	13900lm	139 lm/W
150W	120-277V/347-480V	3	20000lm	133 lm/W	20100lm	134 lm/W
	120-277V/347-480V	4	19800lm	132 lm/W	20000lm	133 lm/W
	120-277V/347-480V	5	20700lm	138 lm/W	20900lm	139 lm/W
200W	120-277V/347-480V	3	24700lm	124 lm/W	25000lm	125 lm/W
	120-277V/347-480V	4	24600lm	123 lm/W	24800lm	124 lm/W
	120-277V/347-480V	5	25800lm	129 lm/W	26000lm	130 lm/W
250W	120-277V/347-480V	3	33600lm	134 lm/W	34000lm	136 lm/W
	120-277V/347-480V	4	33250lm	133 lm/W	33750lm	135 lm/W
	120-277V/347-480V	5	34750lm	139 lm/W	35250lm	141 lm/W
300W	120-277V/347-480V	3	40000lm	133 lm/W	40200lm	134 lm/W
	120-277V/347-480V	4	39600lm	132 lm/W	39900lm	133 lm/W
	120-277V/347-480V	5	41400lm	138 lm/W	41700lm	139 lm/W

## ELECTRICAL DATA

# Drivers	Driver Current (MA)	Nominal Power (W)	Input Voltage (V)	Current (Amps)
1	980	40	120	1.25
		40	208	0.72
		40	240	0.63
		40	277	0.54
		45	347	0.43
		45	480	0.31
1	1720	70	120	1.25
		70	208	0.72
		70	240	0.63
		70	277	0.54
		75	347	0.43
		75	480	0.31
1	2450	100	120	1.25
		100	208	0.72
		100	240	0.63
		100	277	0.54
1	3900	150	120	1.25
		150	208	0.72
		150	240	0.63
		150	277	0.54
		150	347	0.43
		150	480	0.31
1	5100	200	120	1.25
		200	208	0.72
		200	240	0.63
		200	277	0.54
		200	347	0.43
		200	480	0.31
1	6400	250	120	1.25
		250	208	0.72
		250	240	0.63
		250	277	0.54
		250	347	0.43
		250	480	0.31
1	6000	300	120	1.25
		300	208	0.72
		300	240	0.63
		300	277	0.54
		300	347	0.43
		300	480	0.31

## EPA OF AREA LIGHT

Item							
	1	2 @90°	2 @120°	2@180°	3 @90°	3 @120°	4 @90°
40W/70W/100W	0.3413	0.5929	0.7983	0.6826	1.0239	1.0499	1.0239
150W/200W	0.423	0.735	0.873	0.846	1.158	1.185	1.158
250W/300W	0.4759	0.7889	1.0581	0.9518	1.2648	1.3711	1.2648

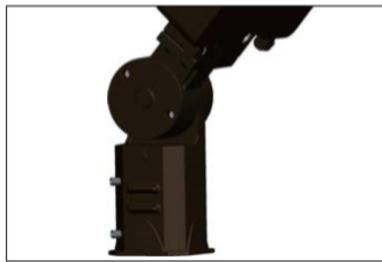
## MOUNTING

- Standard versatile mounting arm accommodates multiple drilling patterns as well as square and round poles
- Wall Mount available for direct wall mounting and J-box mounting
- Optional for cast aluminum slipfitter mounting adapter (Compatible with more EUSA mounting adapters such as Tenon, suitable for various applications)

### 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.

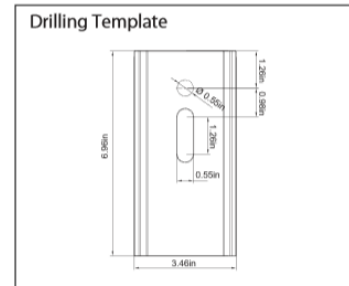
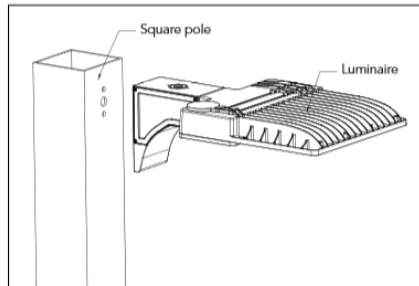
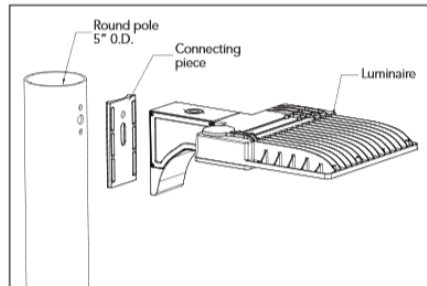


**Slipfitter Mount**  
An optional cast aluminum mast arm adapter secures fixture head to nominal 2"-3/8" O.D. pipe size horizontal steel tenon arm.



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

### Mounting Dimensions

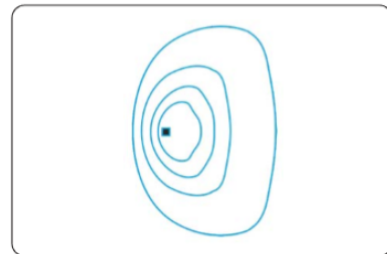


## PHOTOMETRICS

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

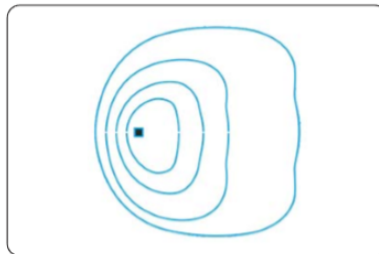
### Type 3:

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.



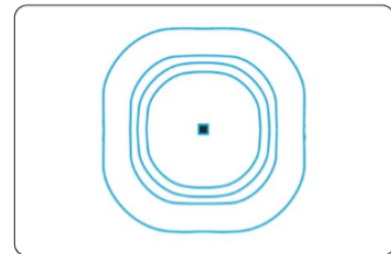
### Type 4:

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



### Type 5:

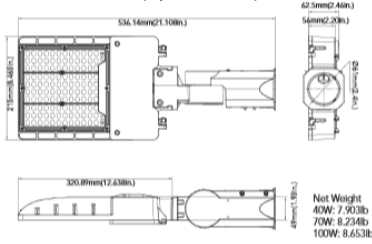
Type 5 optics produce a symmetrical square distribution pattern that distributes light equally on all sides of the luminaire. Type 5 luminaires is universal for most area lighting applications



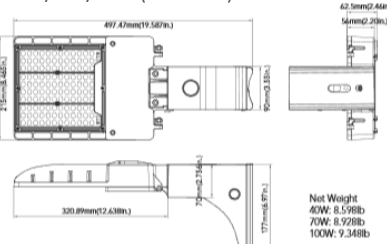
# DIMENSION

unit: inch/mm

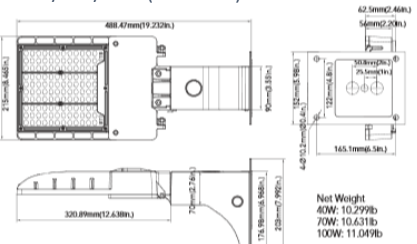
40W/70W/100W (Slipfitter Mount)



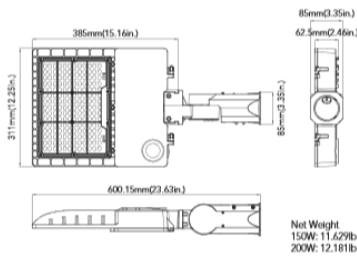
40W/70W/100W (Pole Mount)



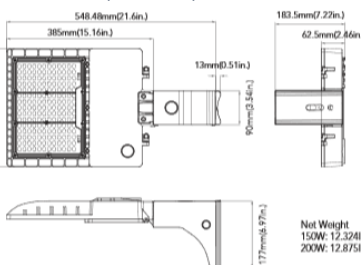
40W/70W/100W (Wall Mount)



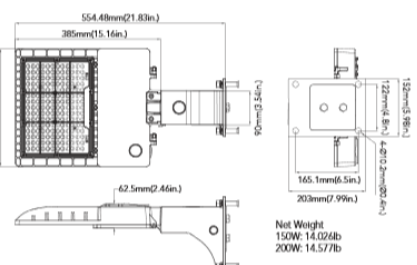
150W/200W (Slipfitter Mount)



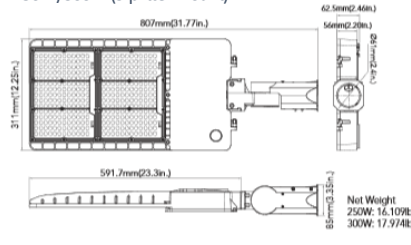
150W/200W (Pole Mount)



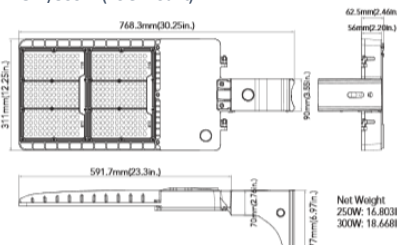
150W/200W (Wall Mount)



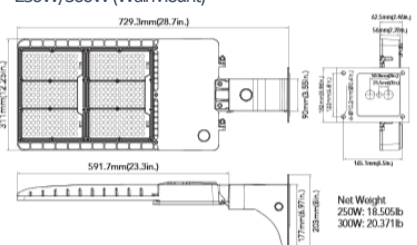
250W/300W (Slipfitter Mount)



25W/300W (Pole Mount)



250W/300W (Wall Mount)



## ORDERING GUIDE

Example: IL-MAL04 100W 27V XXK YYYYYY

Fixture Type	Wattage	Voltage	CCT	Finish	Photocell (Option)	Sensor (Option)	Mounting	Photometry	Surge Protection (Option)
IL-MAL04 Area Light Series	40 40W 45 45W 70 70W 75 75W 100 100W	27V 120-277V 48V 347-480V	40K 4000K 50K 5000K	D Dark Bronze B Black W White SG Silver Gray	P0 120-277V Photocell P3 347V Photocell P4 480V Photocell Blank Without Photocell	M With 120-277V Sensor Blank Without Sensor	SQ Square Pole Mount SP Slipfitter Mount WM Wall Mount	T3 TYPE III Photometry T4 TYPE IV Photometry T5 TYPE V Photometry	S Surge protection (Blank) No Surge protection

Note: 1. 100W is limited to 120-277V input only.  
2. The Watt is 40W when the voltage is 120-277V, while when it is 347-480V, the watt is 45W.  
3. The Watt is 70W when the voltage is 120-277V, while when it is 347-480V, the watt is 75W.

Example: IL-MAL04 150W 27V XXK YYYYYY

Fixture Type	Wattage	Voltage	CCT	Finish	Photocell (Option)	Sensor (Option)	Mounting	Photometry
IL-MAL04 Area Light Series	150 150W 200 200W 250 250W 300 300W	27V 120-277V 48V 347-480V	40K 4000K 50K 5000K	D Dark Bronze B Black W White SG Silver Gray	P0 120-277V Photocell P3 347V Photocell P4 480V Photocell Blank Without Photocell	M With 120-277V Sensor Blank Without Sensor	SQ Square Pole Mount SP Slipfitter Mount WM Wall Mount	T3 TYPE III Photometry T4 TYPE IV Photometry T5 TYPE V Photometry

## ADDITIONAL MOUNTING ACCESSORIES

POLE BRACKETS			
	<b>4\" Square Pole Mount with 2-3/8\" O.D. Tenon</b> 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.		<b>4\" Round Pole Mount with 2-3/8\" O.D. Tenon</b> NO. 4SOR-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.
	<b>5\" Square Pole Mount with 2-3/8\" O.D. Tenon</b> 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.		<b>5\" Round Pole Mount with 2-3/8\" O.D. Tenon</b> NO. 5SOR-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.
	<b>Pole Bracket accessories-Tenon &amp; Yoke Adaptor</b> 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.		
WALL BRACKET • Attaches to any flat surface, Provides wiring access		Mid-Pole Tenon Bracket	
	<b>90° Wall Mount Bracket with 2-3/8\" O.D. Tenon</b> 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.		<b>2-3/8\" OD Horizontal Tenon Mid-Pole Bracket</b> 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
Round External Mount Horizontal Tenon			
	<b>Double 90° Horizontal Tenon Adaptor</b> 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		<b>Triple 120° Horizontal Tenon Adaptor</b> 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
	<b>Double 180° Horizontal Tenon Adaptor</b> 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		<b>Quad 90° Horizontal Tenon Adaptor</b> 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
	<b>Triple 90° Horizontal Tenon Adaptor</b> 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		