

# MAL ECO SERIES - LED Area Light

The MAL ECO SERIES - LED Area Light, Up to 143 lm/W, IP65 Wet Location, 0-10V Dimmable, Premium Outdoor Luminaire with Smart Technology.

## Premium Features

<b>Lumen Output</b>	5500 to 42000 lumens
<b>Efficacy</b>	Up to 143 lm/W
<b>Input Voltage</b>	120-277V or 347-480V
<b>Dimmable</b>	0-10V Continuous
<b>CCT</b>	4000K or 5000K
<b>IP Rating</b>	IP65 Wet Location
<b>Vibration Rating</b>	3g
<b>Warranty</b>	5 Years

## Applications

Premium outdoor luminaire suitable for parking areas, auto dealerships, industrial yards, building exteriors, roadways, alleys, and pedestrian walkways.

## Construction

Manufactured for weather-proof durability using solid heavy duty die cast aluminum housing with anti-UV polyester coating to resist water, salt, corrosion, discoloration, and scratching. IP65 Wet Location rated for dust-tight, water-jets: IEC 60529. Vibration Acceleration Rating 3g: IEC 6008-2-6:1995.

## Electrical

Input voltages 120-277V or 347-480V models with 0-10V Continuous Dimming. Operating temperatures -40°F to 113°F (-40°C to 45°C). Twist-lock top photocell sensor. Shorting Cap for manual switch or timer control.

## Mounting

Adjustable options include Slip-Fit Mount, Round /Square Pole Mount, Trunnion Mount, and Straight-Arm Wall Mount.

## Optics

Anti-UV Clear Polycarbonate IES / NEMA Type III Lens standard. Type IV and Type V Lens available.

## Controls

PIR Photocell Twist-Lock Top, integrated Microwave Bi-Level Dimming and Motion Detection sensor with Remote Control. Shorting Cap for manual switch or timer control.

## Listings

UL certified to meet US and Canadian standards. FCC, CE and RoHS compliant. Listed to qualify for energy-efficient LED lighting rebates.

## Warranty

5 yr /50K hrs. View at: <https://falkorindustry.com/warranty/>.

Project:
Date:
Catalog No:
Prepared By:

40W to 100W Models



150W, 200W Models



250W, 300W Models



Slip-Fit Mount



Trunnion Mount



Square /Round Pole Mount



Wall Mount



Twist-Lock Photocell

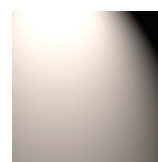


Dimming and Motion Sensor



## Correlated Color Temperatures (CCT)

4000K



5000K



## Specifications

### Energy Data

**Input Voltage:** 120-277V, 347-480V

**Input Frequency:** 50/60 Hz

**Wattage:** 40W, 45W, 70W, 75W, 100W, 150W, 200W, 250W, 300W

**Power Factor:** >0.9

**Total Harmonic Distortion (THD):** <20%

**Operating Temperature:** -40°F to 113°F (-40°C to 45°C)

### Lighting Data

**Lumens:** 5500, 6000, 9600, 1000, 20800, 21300, 26000, 34500, 42000

**Lumens Per Watt:** Up to 143 lm/W

**Color Correlated Temperature (CCT):** 4000K, 5000K

**Dimmable:** 0-10V

**Color Rendering Index (CRI):** >70

**L70:** 50000 hours

## Ordering Information

Model	Wattage	Voltage	Current	Lumens	Efficacy	CCT	Dimming	Color	Dimensions
MAL04 40W 4000K	40W	120-277V	0.33A@120V, 0.14A@277V	5500	138 lm/W	4000K	0-10V	Dark Bronze	12.64"L x 8.47"W x 2.46"H
MAL04 40W 5000K	40W	120-277V	0.33A@120V, 0.14A@277V	5500	138 lm/W	5000K	0-10V	Dark Bronze	12.64"L x 8.47"W x 2.46"H
MAL04 45W [480V] 4000K	45W	347-480V	0.13A@347V, 0.09A@480V	6000	133 lm/W	4000K	0-10V	Dark Bronze	12.64"L x 8.47"W x 2.46"H
MAL04 45W [480V] 5000K	45W	347-480V	0.13A@347V, 0.09A@480V	6000	133 lm/W	5000K	0-10V	Dark Bronze	12.64"L x 8.47"W x 2.46"H
MAL04 70W 4000K	70W	120-277V	0.58A@120V, 0.25A@277V	9600	137 lm/W	4000K	0-10V	Dark Bronze	12.64"L x 8.47"W x 2.46"H
MAL04 70W 5000K	70W	120-277V	0.58A@120V, 0.25A@277V	9600	137 lm/W	5000K	0-10V	Dark Bronze	12.64"L x 8.47"W x 2.46"H
MAL04 75W [480V] 4000K	75W	347-480V	0.22A@347V, 0.16A@480V	10000	133 lm/W	4000K	0-10V	Dark Bronze	12.64"L x 8.47"W x 2.46"H
MAL04 75W [480V] 5000K	75W	347-480V	0.22A@347V, 0.16A@480V	10000	133 lm/W	5000K	0-10V	Dark Bronze	12.64"L x 8.47"W x 2.46"H
MAL04 100W 4000K	100W	120-277V	0.83A@120V, 0.36A@277V	13800	138 lm/W	4000K	0-10V	Dark Bronze	12.64"L x 8.47"W x 2.46"H
MAL04 100W 5000K	100W	120-277V	0.83A@120V, 0.36A@277V	13800	138 lm/W	5000K	0-10V	Dark Bronze	12.64"L x 8.47"W x 2.46"H
MAL04 150W 4000K	150W	120-277V	1.25A@120V, 0.54A@277V	20800	139 lm/W	4000K	0-10V	Dark Bronze	15.16"L x 12.25"W x 2.46"H
MAL04 150W 5000K	150W	120-277V	1.25A@120V, 0.54A@277V	20800	139 lm/W	5000K	0-10V	Dark Bronze	15.16"L x 12.25"W x 2.46"H
MAL04 150W [480V] 4000K	150W	347-480V	0.43A@347V, 0.31A@480V	21300	143 lm/W	4000K	0-10V	Dark Bronze	15.16"L x 12.25"W x 2.46"H
MAL04 150W [480V] 5000K	150W	347-480V	0.43A@347V, 0.31A@480V	21300	143 lm/W	5000K	0-10V	Dark Bronze	15.16"L x 12.25"W x 2.46"H
MAL04 200W 4000K	200W	120-277V	1.67A@120V, 0.72A@277V	26000	130 lm/W	4000K	0-10V	Dark Bronze	15.16"L x 12.25"W x 2.46"H
MAL04 200W 5000K	200W	120-277V	1.67A@120V, 0.72A@277V	26000	130 lm/W	5000K	0-10V	Dark Bronze	15.16"L x 12.25"W x 2.46"H
MAL04 200W [480V] 4000K	200W	347-480V	0.58A@347V, 0.42A@480V	26000	130 lm/W	4000K	0-10V	Dark Bronze	15.16"L x 12.25"W x 2.46"H
MAL04 200W [480V] 5000K	200W	347-480V	0.58A@347V, 0.42A@480V	26000	130 lm/W	5000K	0-10V	Dark Bronze	15.16"L x 12.25"W x 2.46"H
MAL04 250W 4000K	250W	120-277V	2.08A@120V, 0.90A@277V	34500	138 lm/W	4000K	0-10V	Dark Bronze	23.30"L x 12.25"W x 2.46"H
MAL04 250W 5000K	250W	120-277V	2.08A@120V, 0.90A@277V	34500	138 lm/W	5000K	0-10V	Dark Bronze	23.30"L x 12.25"W x 2.46"H
MAL04 250W [480V] 4000K	250W	347-480V	0.72A@347V, 0.52A@480V	34500	138 lm/W	4000K	0-10V	Dark Bronze	23.30"L x 12.25"W x 2.46"H
MAL04 250W [480V] 5000K	250W	347-480V	0.72A@347V, 0.52A@480V	34500	138 lm/W	5000K	0-10V	Dark Bronze	23.30"L x 12.25"W x 2.46"H
MAL04 300W 4000K	300W	120-277V	2.50A@120V, 1.08A@277V	41000	140 lm/W	4000K	0-10V	Dark Bronze	23.30"L x 12.25"W x 2.46"H
MAL04 300W 5000K	300W	120-277V	2.50A@120V, 1.08A@277V	41000	140 lm/W	5000K	0-10V	Dark Bronze	23.30"L x 12.25"W x 2.46"H
MAL04 300W [480V] 4000K	300W	347-480V	0.86A@347V, 0.63A@480V	42000	140 lm/W	4000K	0-10V	Dark Bronze	23.30"L x 12.25"W x 2.46"H
MAL04 300W [480V] 5000K	300W	347-480V	0.86A@347V, 0.63A@480V	42000	140 lm/W	5000K	0-10V	Dark Bronze	23.30"L x 12.25"W x 2.46"H

Optics	Mount	Sensor	Accessory
(Blank)	Type III Lens (Standard)	<b>Slip-Fit</b> Slip-Fit (Adjustable)	<b>Photocell</b> Photocell Cap Sensor <b>RC100 Remote</b> Remote Control to Program Sensor
<b>Type IV Lens</b>	Type IV Lens	<b>Pole</b> Square or Round Pole (Adjustable)	<b>BRI823</b> Installed Photocell + Dimming and Motion Sensor <b>(Blank)</b> None
<b>Type V Lens</b>	Type V Lens	<b>Trunnion</b> Trunnion Mount (Adjustable)	<b>(Blank)</b> No Sensor, Shorting Cap
	<b>Wall</b> Straight Arm Wall Mount		
	<b>(Blank)</b> None		

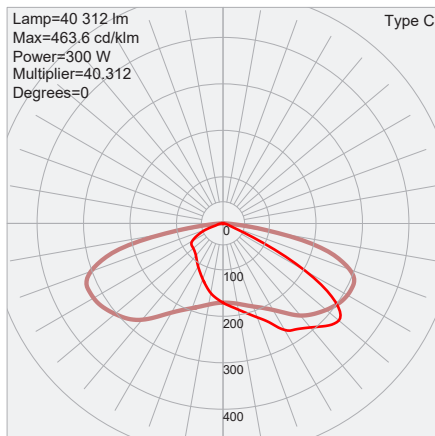


## Shipping Information

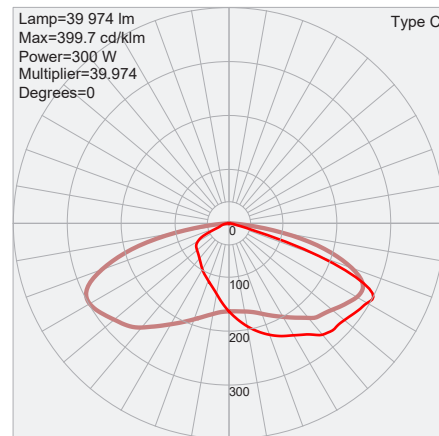
Model Wattage	Shipping Dimensions	Shipping Weight	Quantity /Box
40W	20.0"L x 12.0"W x 5.0"D	9.0 lbs	1
45W (480V)			
70W	20.0"L x 12.0"W x 5.0"D	9.4 lbs	1
75W (480V)			
100W	20.0"L x 12.0"W x 5.0"D	11.0 lbs	1
150W	22.0"L x 15.0"W x 5.0"D	11.0 lbs	1
150W (480V)			
200W	22.0"L x 15.0"W x 5.0"D	11.3 lbs	1
200W (480V)			
250W	31.0"L x 15.0"W x 5.0"D	20.0 lbs	1
250W (480V)			
300W	31.0"L x 15.0"W x 5.0"D	21.5 lbs	1
300W (480V)			

## Photometric Characteristics

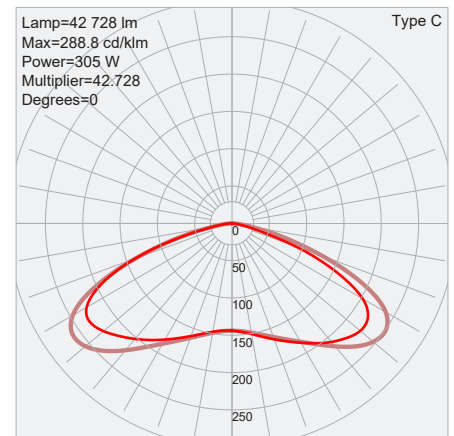
### Type III Lens



### Type IV Lens



### Type V Lens



\*Example of 300W 5000K

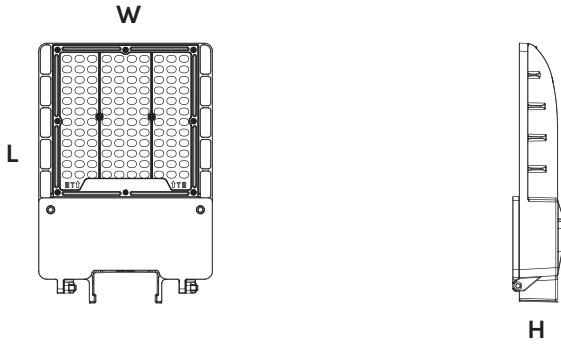
## B.U.G. Ratings

Wattage	Dist. Type	B	U	G
40W	3	1	0	1
45W	3	1	0	1
70W	3	2	0	2
75W	3	2	0	2
100W	3	2	0	2
150W	3	3	0	3
200W	3	3	0	3
250W	3	4	0	4
300W	3	4	0	4

# Physical Dimensions

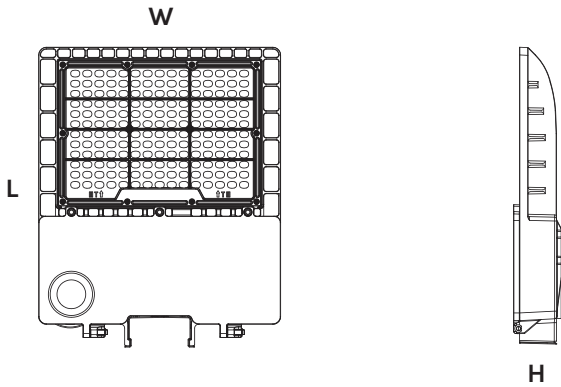
## 40W, 45W (480V), 70W, 75W (480V), 100W Models

12.64"L x 8.47"W x 2.46"D



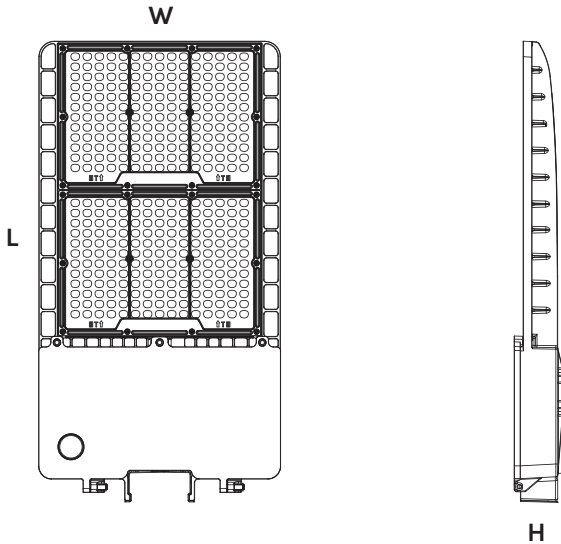
## 150W and 200W Models

15.16"L x 12.25"W x 2.46"D



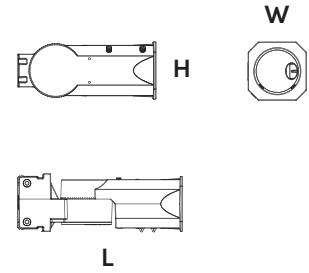
## 250W and 300W Models

23.30"L x 12.25"W x 2.46"D



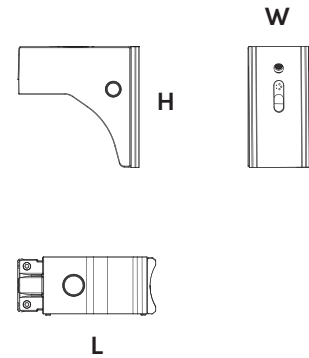
## Slip-Fit Mount

8.47"L x 3.35"W x 3.35"H



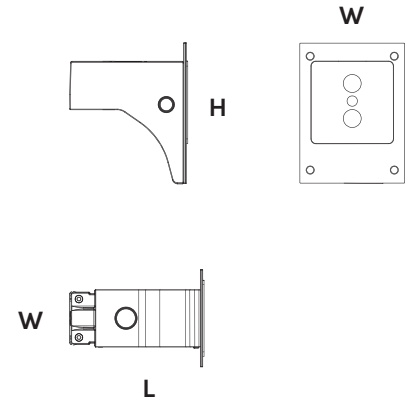
## Round /Square Pole Mount

6.95"L x 3.55"W x 6.97"H



## Trunnion Mount

Mount: 6.60"L x 3.55"W x 6.97"H  
Wall Plate: 5.97"W x 8.00"H



# Tenon Mounts and Adapters

Project:
Date:
Catalog No:
Prepared By:

## Tenon Mounts



### 4" Round Pole Mount with 2-3/8" O.D. Tenon

**Model Number: 4SQR-SP-D**

For use with Round, non-tapered poles. Includes three 3/8" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures can be directly Slip-Fit Mounted to this bracket for vertically and horizontally adjustability.



### 5" Round Pole Mount with 2-3/8" O.D. Tenon

**Model Number: 5SQR-SP-D**

For use with Round, non-tapered poles. Includes three 3/8" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures can be directly Slip-Fit Mounted to this bracket for vertically and horizontally adjustability.



### 4" Square Pole Mount with 2-3/8" O.D. Tenon

**Model Number: 4SQ-SP-D**

For use with Square, non-tapered poles. Includes three 3/8" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures can be directly Slip-Fit Mounted to this bracket for vertically and horizontally adjustability.



### 5" Square Pole Mount with 2-3/8" O.D. Tenon

**Model Number: 5SQ-SP-D**

For use with Square, non-tapered poles. Includes three 3/8" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures can be directly Slip-Fit Mounted to this bracket for vertically and horizontally adjustability.

## Tenon Adapters



### Tenon & Yoke Adaptor

**Model Number: SP-TR-D**

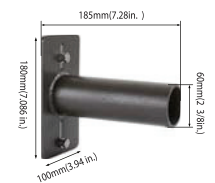
The 2-3/8" O.D. Tenon Mount Adaptor for Yoke Mounting a fixture onto a 2-3/8" O.D. tenon.



### Double 180° Horizontal Tenon Adaptor

**Model Number: R60-SP2-180-D**

The Double 180° Horizontal Tenon Adaptor mounts over a 2-3/8" O.D. vertical tenon. Two fixtures can be Slip-Fit Mounted.



### 2-3/8" OD Horizontal Tenon Mid-Pole Bracket

**Model Number: SQ-SP-D**

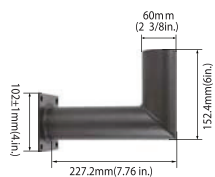
The 2-3/8" O.D. Horizontal Tenon Mid-Pole Bracket for Slip-Fit Mounting a fixture onto a 2-3/8" O.D. horizontal tenon.



### Triple 90° Horizontal Tenon Adaptor

**Model Number: R60-SP3-90-D**

The Triple 90° Horizontal Tenon Adaptor mounts over a 2-3/8" O.D. vertical tenon. Two fixtures can be Slip-Fit Mounted.



### 90° Wall Mount Bracket with 2-3/8" O.D. Tenon

**Model Number: WM-SP-D**

The 90° Wall Mount Bracket with 2-3/8" tenon attaches to: walls, roofs, or poles. Provides wiring access and a built-in 2-3/8" O.D. tenon to directly Slip-Fit Mount a fixture. 3/8" diameter bolts suggested for mounting. Mounting holes are spaced 3-1/4" apart.



### Triple 120° Horizontal Tenon Adaptor

**Model Number: R60-SP3-120-D**

The Triple 120° Horizontal Tenon Adaptor mounts over a 2-3/8" O.D. vertical tenon. Two fixtures can be Slip-Fit Mounted.



### Double 90° Horizontal Tenon Adaptor

**Model Number: R60-SP2-90-D**

The Double 90° Horizontal Tenon Adaptor mounts over a 2-3/8" O.D. vertical tenon. Two fixtures can be Slip-Fit Mounted.



### Quad 90° Horizontal Tenon Adaptor

**Model Number: R60-SP4-90-D**

The Quad 90° Horizontal Tenon Adaptor mounts over a 2-3/8" O.D. vertical tenon. Two fixtures can be Slip-Fit Mounted.

## Ordering Information

Model	Description	Color
4SQR-SP-D	4" Round Pole Mount with 2-3/8" O.D. Tenon	Dark Bronze
5SQR-SP-D	5" Round Pole Mount with 2-3/8" O.D. Tenon	Dark Bronze
4SQ-SP-D	4" Square Pole Mount with 2-3/8" O.D. Tenon	Dark Bronze
5SQ-SP-D	5" Square Pole Mount with 2-3/8" O.D. Tenon	Dark Bronze
SP-TR-D	Tenon & Yoke Adaptor	Dark Bronze
SQ-SP-D	2-3/8" OD Horizontal Tenon Mid-Pole Bracket	Dark Bronze
WM-SP-D	90° Wall Mount Bracket with 2-3/8" O.D. Tenon	Dark Bronze
R60-SP2-90-D	Double 90° Horizontal Tenon Adaptor	Dark Bronze
R60-SP2180-D	Double 180° Horizontal Tenon Adaptor	Dark Bronze
R60-SP3-90-D	Triple 90° Horizontal Tenon Adaptor	Dark Bronze
R60-SP3-120-D	Triple 120° Horizontal Tenon Adaptor	Dark Bronze
R60-SP3-90-D	Quad 90° Horizontal Tenon Adaptor	Dark Bronze