Halco AL-Series Area Light

The Halco AL-Series is one of the most innovative area lighting solutions on the market today. While maintaining a slim, aesthetic design, the AL-Series is of the upmost quality. With an IP66 Rated housing, the product is built to withstand the harshest weather conditions and is also built to last at over 10 years of lifetime. The optics are highly functional and designed to deliver optimal lumen output in the right spot. All products come standard with integrated NEMA 7-pin Receptacle and IP66 Rated Shorting Cap. This feature is to "future-proof" your area lighting projects and avoid extra long lead times or unnecessary costs. The AL-Series is backed by Halco's 5 year standard warranty.

Performance

- Available in Lumen Packages from +10,000 to +38,000 lumens
- LEDs are rated for greater than 100,000 hour life with calculated lumen maintenance >70% (L70) at 25°C.
- 0-10V dimmable driver standard available in 120-277V or 347-480V
- -30° to +55°C Ambient Operating Temperature
- NEMA 7-Pin Receptacle with IP66 Rated Shorting Cap Standard

Design

- Easy-Access, Swinging Driver Door
- Field-replaceable driver functionality
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2

Optics

- Available in Type II, Type III, Type IV, and Type V optics to meet diverse application requirements

Construction

- IK 09 Die Cast Aluminum Housing with Integral Heat Sink for Heat Dissipation
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- High Effciency, recessed optics for increased visual comfort
- 12" - 18/3 SJTW 3C shielded power feed cord included standard (Power and Control wires)"

Mounting

- Straight Arm, Round & Square Pole Adapter featuring Easy Install Mounting Plate
- Slipfitter Knuckle (2 3/8" Mounting)
- Trunnion Swivel Mount

Note: Mounting options sold separately

Environment

- IP66 Rated
- UL Wet Location Listed
- RoHs Compliant
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions

Finishes

- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Bronze Finish Standard

Applications

- Outdoor Site & Area Lighting

Halco AL-Series Area Light

Ordering Information

Example: AL150/T5U50/7PRS							
Product Series	Wattage		Optics	Voltage	CCT		Recepticals	Options
AL	150	/	T5	U	50	/	7PRS	
AL= AL-Series	**100**=100 Watt **150**=150 Watt **200**=200Watt **240**=240 Watt **300**=300 Watt		**T2**=Type II Optics **T3**=Type III Optics **T4**=Type IV Optics **T5**=Type V Optics	**U**=120-277VAC **H**=347-480VAC	**40**=4000K **50**=5000K		**7PRS**=NEMA 7-Pin Receptacle with Shorting Cap	**MS**=Factory Installed Motion Sensor

Type 2 and 4 Optics are assembled to order. Lead times apply. Please see page 2 for controls options available. MOQ and Lead Times Apply for Custom Finish 347-480V Drivers are Assembled to Order. Lead times apply. **Note:** Mountings sold separately

Product Specification Table

Rated Wattage	100	150	200	240	300
Energy Savings	250W MH replacement equating to 60% energy savings	320W PSMH replacement equaling 66% energy savings	400W MH replacement equaling 66% energy savings	600W MH replacement equating to 70% energy savings	750W PSMH replacement equating to 60% energy savings
Power Factor	0.95	0.92	0.93	0.93	0.92
L70 Lifetime*	>100,000 hrs				
Input Voltage	120-277VAC; 347-480VAC				
Total Harmonic Distortion (THD)	12.11	13.59	12.79	10.63	6.13
Surge Protection	10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2				
Optical Distributions	Type II, III, IV, and V Optics				
Type II	Type II provides a lateral distribution ideal for walkways, on-ramps, and other pathways				
Type III	Type III projects light outward and is ideal for roadways, general parking areas, and any large application where general lighting is required				
Type IV	Type IV is semi-circular and provides a forward throw light and is ideal for perimeter applications such as the perimeter of parking areas, sides of buildings				
Type V	Type V produces a circular distribution that has the same intensity at all angles. This type is for intersections, or a large, commercial parking lot lighting as well as areas where sufficient, evenly distributed light is necessary.				
Mounting Options	Straight arm square & round pole, slipfitter knuckle, trunnion swivel				
CCT	4000K & 5000K available				
Warranty	Halco Standard 5 Year, 10 Year Available				
Finish	Bronze Std				
Wet	IP66 and UL Wet Listing				
DLC	DLC Premium				
Weight (lbs)	14	18	18	27	27
Dimension (w/o Mounting)	D-3.77" x W-20 x L-9.9"	D-3.81" x W-22.4 x L-11.09"	D-3.81" x W-22.4 x L-11.09"	D-4" x W-26.5 x L-14.03"	D-4" x W-26.5 x L-14.03"
EPA	.42 sq/ft	.53 sq/ft	.53 sq/ft	.85 sq/ft	.85 sq/ft

*Lumen maintenance values at 25℃ are calculated per TM-21 based on LM-80 data and in-situ luminaire testing 2 In accordance with IESNA TM-21-11

Electrical Load

			Input Current (A)		
	LED Count	Rated Wattage	120V	277V	480V
100W	128	100	0.83A	0.36A	0.21A
150W	240	150	1.25A	0.54A	0.31A
200W	288	200	1.67A	0.72A	0.42A
240W	384	240	2A	0.87A	0.5A
300W	448	300	2.5A	1.08A	0.625A

* Electrical data at 25℃ (77℉). Actual wattage may differ by +/- 10% when operating between 120-480V +/- 10%

Performance Data

		Initial Delivered Lumens*			Initial Delivered Lumens*			BUG Ratings**		
		System Wattage	4000K	Lm/W	System Wattage	5000K	Lm/W	B (Backlight)	U (Uplight)	G (Glare)
100W	T2	94	11200	119	94	11352	121	1	0	2
	T3	94	10890	118	94	11032	120	1	0	2
	T4	94	11063	118	94	11207	119	2	0	2
	T5	94	11029	117	94	11172	119	3	0	2
150W	T2	145	19026	131	145	19273	133	2	0	2
	T3	143	17508	122	143	17736	124	2	0	2
	T4	145	18264	126	145	18501	128	3	0	2
	T5	150	18763	125	150	19007	127	4	0	2
200W	T2	195	24318	125	195	24634	126	2	0	2
	T3	191	23058	121	191	23358	122	2	0	2
	T4	194	24126	124	194	24440	126	3	0	3
	T5	195	24098	124	195	24411	125	4	0	3
240W	T2	236	30917	131	236	31319	133	2	0	3
	T3	235	29468	125	235	29851	127	3	0	3
	T4	236	30869	131	236	31270	133	3	0	4
	T5	236	31080	132	236	31484	133	4	0	4
300W	T2	295	38067	129	295	38562	131	3	0	4
	T3	294	36087	123	294	36556	124	3	0	4
	T4	295	37560	127	295	38048	129	4	0	4
	T5	295	38165	129	295	38661	131	5	0	4

*Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
**For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf

Controls

Motion Sensor Quick Connect Kit
The area light's swinging driver door can be easily removed. We offer a pre-installed driver door with motion sensor and quick connect wire clips. All that is required is easy adjustment of driver and replacement of the driver door with the Motion Sensor Quick Connect door.

Motion Sensor Options

Remote Programmable Multi-Level Daylight/Motion Sensor
This is a microwave motion sensor offering multi-level dimming based on both motion and natural-ambient lighting. The sensor can be commissioned via DIP Switches or also via compatible remote control (MS/RC100). Please see table for Default DIP Switch settings.

Motion Sensor DIP Switch Default Settings	
Detection Range	100%
Hold Time Setting	10 Seconds
Ambient Light Sensitivity	50 Lux
Stand By Light Level	0%
Stand By Time Delay	Disabled
Motion Sensor Specification	
Detection Range	20%, 50%, 75%, and 100%
Hold Time Setting	10s, 10min, 30min, 60min
Ambient Light Sensitivity	Disabled, 1fc, 3fc, 5fc
Stand By Light Level	0%, 10%, 30%, 50%
Stand By Time Delay	Disabled, 1min, 30min, 60min
Power Supply	120/277VAC
Max Load	800W/1200W @ 120/277V
HF System	5.8GHz CW
Dimming	0-10V 25mA Sinking Current
Operating Temperature	-40° to +70°C
Wet Rating	Wet Location Rated, 95% RH

Accessory Specifications

| Integrated 7-Pin Receptacle Technical Data		Integrated Shorting Cap Technical Data	
Voltage Range	0-480VAC	Rated Load	480V Max
Rated Frequency	50/60Hz	Surge Protection	460 (J)
Max Load	15 AMP	Rating	IP66
Ambient Temperature	-40°C ~ +70°C		

Accessory Options

Product Number	Product Code	Description
10197	MS/QCKCNNT/1	Motion sensor; quick connect size 1; multi-level programmable sensor and driver door
10198	MS/QCKCNNT/2	Motion sensor; quick connect size 2; multi-level programmable sensor and driver door
10199	MS/QCKCNNT/3	Motion sensor; quick connect size 3; multi-level programmable sensor and driver door
10192	MS/RC100	Remote control programmer for commissioning multi level/daylight motion sensor
10231	PC/JL205C	Photocell; twist lock, 120-277vac, jl-205c

7-Pin Receptacle advanced dimming leads are not connected. Only On/Off leads connected standard. Please specify request for advanced control lead connection on orders.

Dimensions

20"

9.9"

100 Watt

22.4"

11.9"

150 & 200 Watt

26.5"

14.3"

240 & 300 Watt

3.77"

3.81"

4"
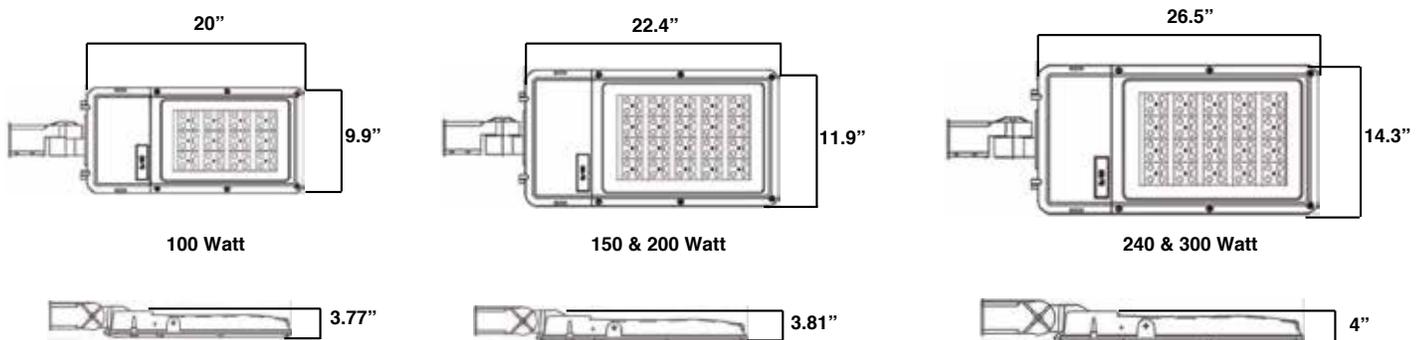
Watt	Dimensions
100W	D-3.77" x W-20 x L-9.9"
150 & 200W	D-3.81" x W-22.4 x L-11.09"
150 & 300W	D-4" x W-26.5 x L-14.03"

Mounting Hardware - (sold separately)

ALM/SASR 10193 MOUNT:
Area light; straight arm; square and round pole adaptor

ALM/SKN 10194 MOUNT:
Area light; slipfitter knuckle

ALM/TRS 10195 MOUNT:
Trunnion Swivel

Mounting Hardware Dimensions - (sold separately)

4.680"

3.076"

3.076"

7.6

4.680"

4.680"

4.724"

7.677

Slipfitter

Square and Round Pole Arm Mount

5.433"

2.755"

7.086"

Trunnion Swivel
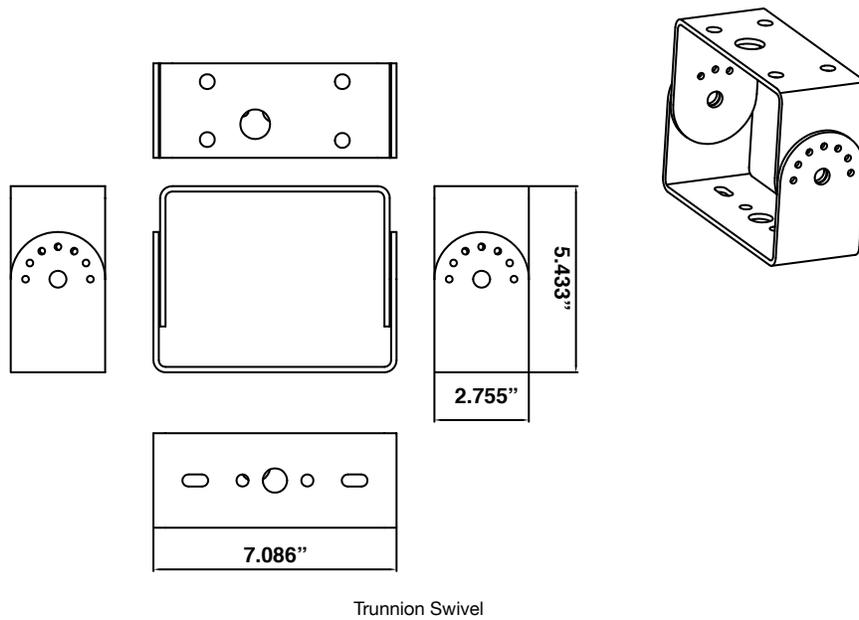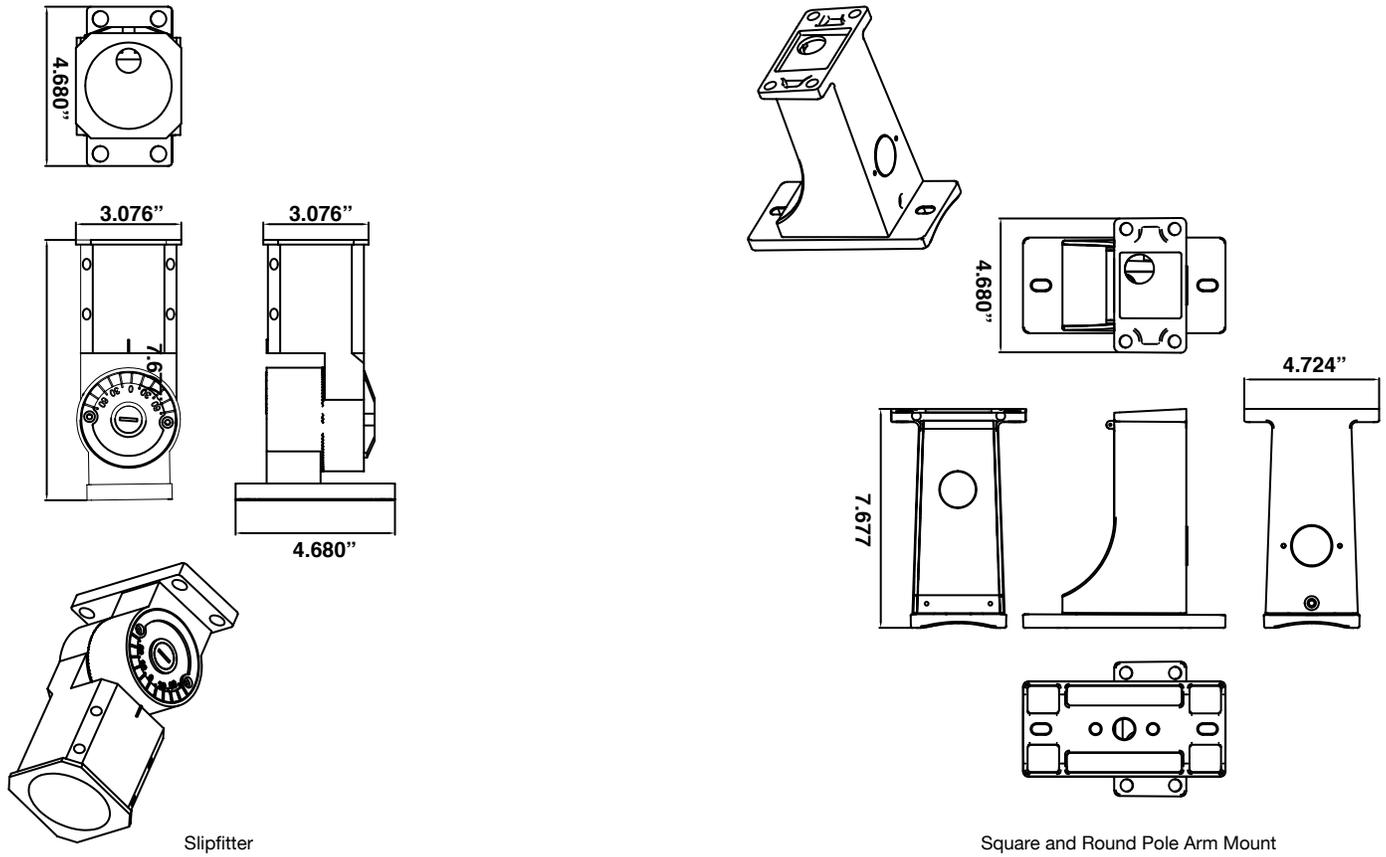
Halco AL-Series Area Light

Quick Ship Models Ordering Information

| Ordering Code	Product Number	Product Description
AL100/T5U50/7PRS	10200	AREA LIGHT, 100 WATT, 120-277V, TYPE V, 5000K, 7-PIN RECEPTACLE, SHORTING CAP
AL100/T3U50/7PRS	10201	AREA LIGHT, 100 WATT, 120-277V, TYPE III, 5000K, 7-PIN RECEPTACLE, SHORTING CAP
AL150/T5U50/7PRS	10202	AREA LIGHT, 150 WATT, 120-277V, TYPE V, 5000K, 7-PIN RECEPTACLE, SHORTING CAP
AL150/T3U50/7PRS	10203	AREA LIGHT, 150 WATT, 120-277V, TYPE III, 5000K, 7-PIN RECEPTACLE, SHORTING CAP
AL200/T5U50/7PRS	10204	AREA LIGHT, 200 WATT, 120-277V, TYPE V, 5000K, 7-PIN RECEPTACLE, SHORTING CAP
AL200/T3U50/7PRS	10205	AREA LIGHT, 200 WATT, 120-277V, TYPE III, 5000K, 7-PIN RECEPTACLE, SHORTING CAP
AL240/T5U50/7PRS	10206	AREA LIGHT, 240 WATT, 120-277V, TYPE V, 5000K, 7-PIN RECEPTACLE, SHORTING CAP
AL240/T3U50/7PRS	10207	AREA LIGHT, 240 WATT, 120-277V, TYPE III, 5000K, 7-PIN RECEPTACLE, SHORTING CAP
AL300/T5U50/7PRS	10208	AREA LIGHT, 300 WATT, 120-277V, TYPE V, 5000K, 7-PIN RECEPTACLE, SHORTING CAP
AL300/T3U50/7PRS	10209	AREA LIGHT, 300 WATT, 120-277V, TYPE III, 5000K, 7-PIN RECEPTACLE, SHORTING CAP
AL100/T5U40/7PRS	10210	AREA LIGHT, 100 WATT, 120-277V, TYPE V, 4000K, 7-PIN RECEPTACLE, SHORTING CAP
AL100/T3U40/7PRS	10211	AREA LIGHT, 100 WATT, 120-277V, TYPE III, 4000K, 7-PIN RECEPTACLE, SHORTING CAP
AL150/T5U40/7PRS	10212	AREA LIGHT, 150 WATT, 120-277V, TYPE V, 4000K, 7-PIN RECEPTACLE, SHORTING CAP
AL150/T3U40/7PRS	10213	AREA LIGHT, 150 WATT, 120-277V, TYPE III, 4000K, 7-PIN RECEPTACLE, SHORTING CAP
AL200/T5U40/7PRS	10214	AREA LIGHT, 200 WATT, 120-277V, TYPE V, 4000K, 7-PIN RECEPTACLE, SHORTING CAP
AL200/T3U40/7PRS	10215	AREA LIGHT, 200 WATT, 120-277V, TYPE III, 4000K, 7-PIN RECEPTACLE, SHORTING CAP
AL240/T5U40/7PRS	10216	AREA LIGHT, 240 WATT, 120-277V, TYPE V, 4000K, 7-PIN RECEPTACLE, SHORTING CAP
AL240/T3U40/7PRS	10217	AREA LIGHT, 240 WATT, 120-277V, TYPE III, 4000K, 7-PIN RECEPTACLE, SHORTING CAP
AL300/T5U40/7PRS	10218	AREA LIGHT, 300 WATT, 120-277V, TYPE V, 4000K, 7-PIN RECEPTACLE, SHORTING CAP
AL300/T3U40/7PRS	10219	AREA LIGHT, 300 WATT, 120-277V, TYPE III, 4000K, 7-PIN RECEPTACLE, SHORTING CAP

Mounting Sold Separately

Mount Options - (sold separately)

Product Code	Product Number	Product Description
ALM/SASR	10193	MOUNT: AREA LIGHT; STRAIGHT ARM; SQUARE AND ROUND POLE ADAPTOR
ALM/SKN	10194	MOUNT: AREA LIGHT; SLIPFITTER KNUCKLE
ALM/TRS	10195	MOUNT: AREA LIGHT; TRUNNION SWIVEL

Drill Patterns

Pole Mount Drill Pattern For Trunnion Swivel Mount

2-∅ .35" (9)

∅ .70" (18)

4.65"(118)

2.32"(59)
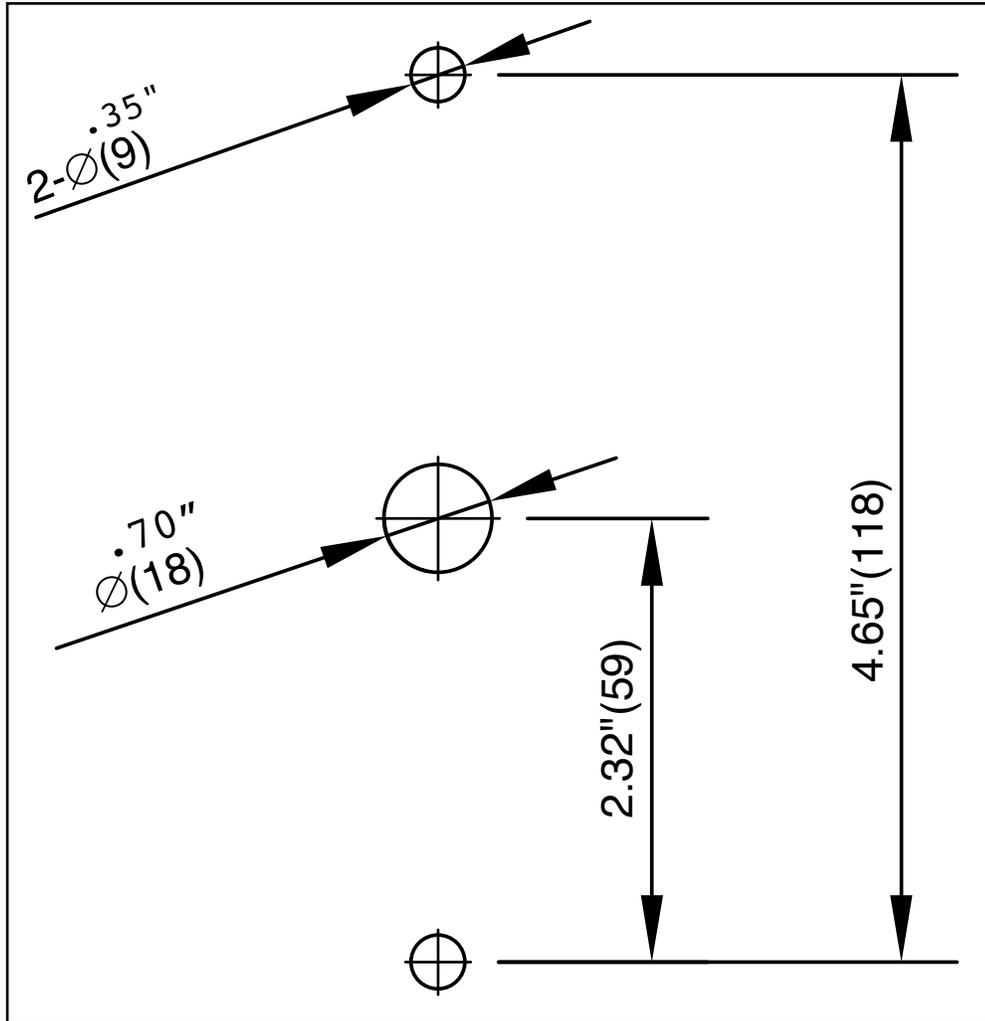
Pole Mount Drill Pattern For round Pole Adapter

2-∅ .35" (9)

∅ .70" (18)

2.00" (51)

(25.5)

1.00"
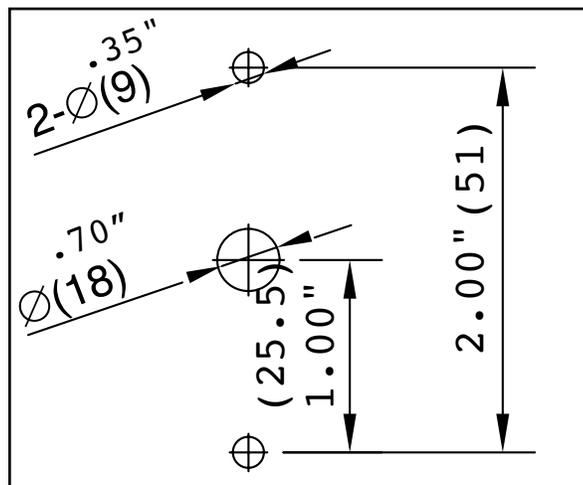
ISO Footcandle Plots

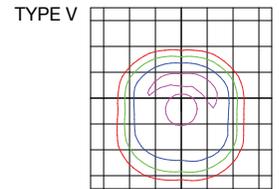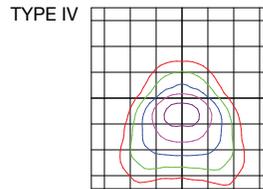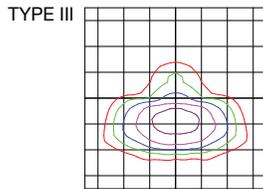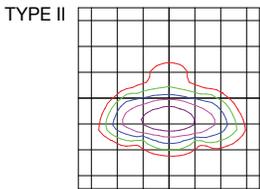Each gridline represents the mounting height shown. The grid scale is the based on the mounting height.

For mounting heights other than noted, use the below formula.

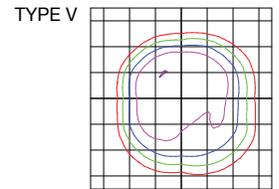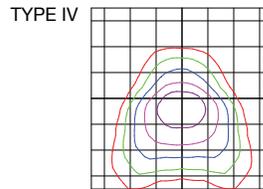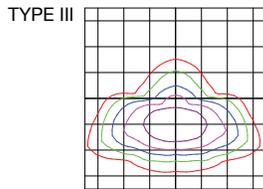$$Factor = \frac{(Chart's\ Mtg.\ Height)}{(Actual\ Mtg.\ Height)}$$

LEGEND
- 🟥 0.25 fc
- 🟩 0.5 fc
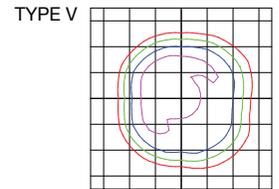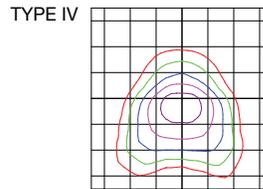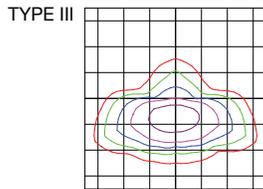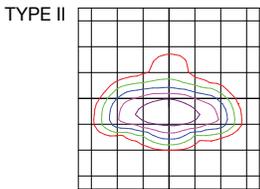- 🟦 1 fc
- 🟪 2 fc
- 🟪 5 fc

100 WATT
20ft Mounting Height

TYPE II   TYPE III   TYPE IV   TYPE V

150 WATT
20ft Mounting Height

TYPE II   TYPE III   TYPE IV   TYPE V
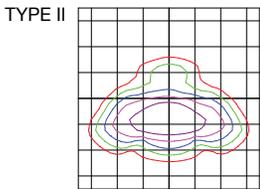
200 WATT
25ft Mounting Height

TYPE II   TYPE III   TYPE IV   TYPE V
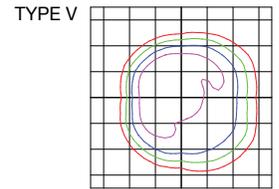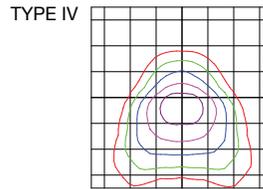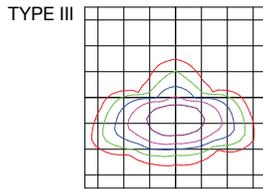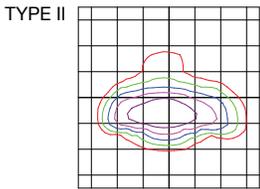
240 WATT
30ft Mounting Height

TYPE II   TYPE III   TYPE IV   TYPE V

300 WATT
40ft Mounting Height

TYPE II   TYPE III   TYPE IV   TYPE V