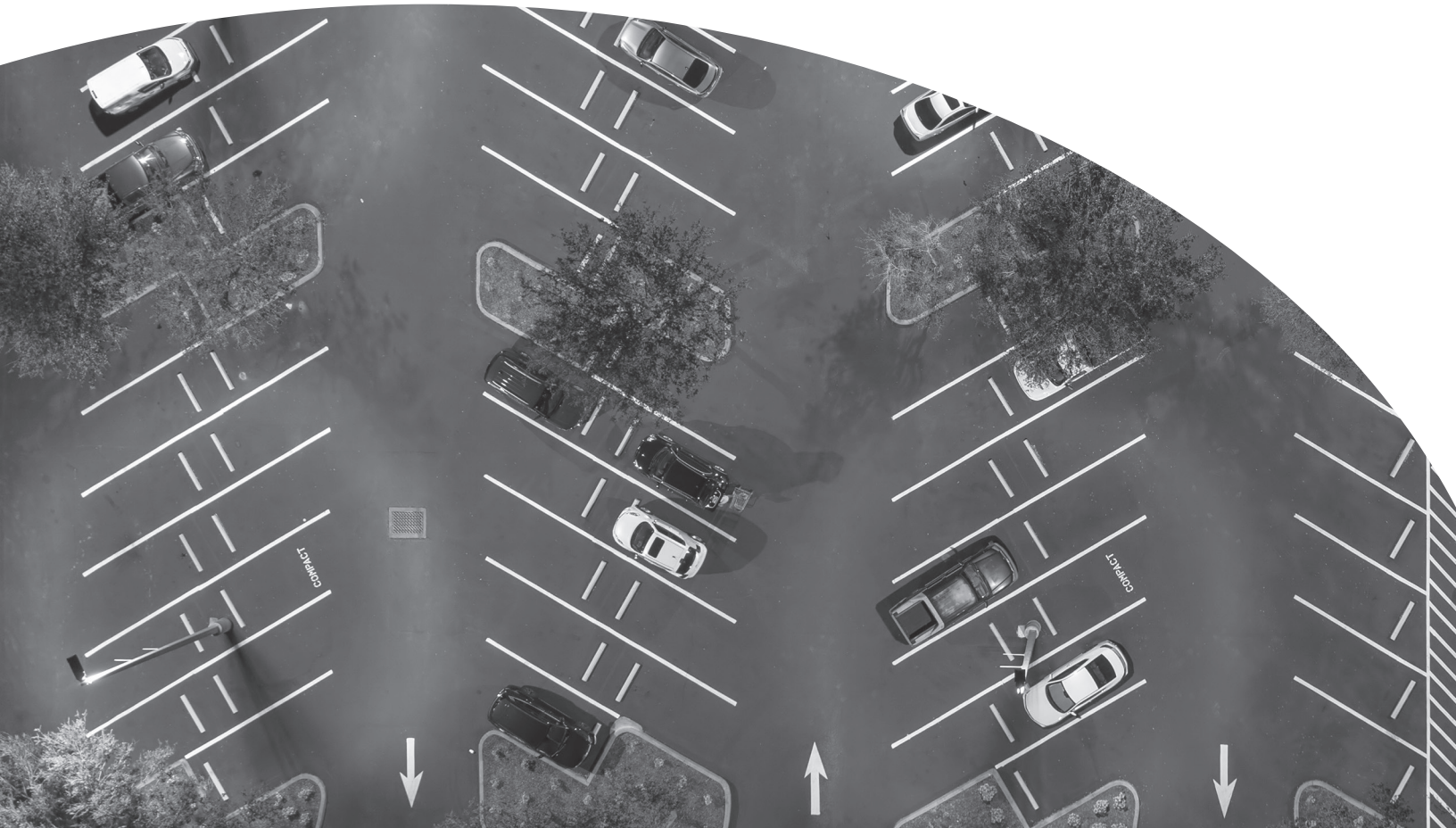
PacLights

Commercial & Industrial Lighting

The FALC™ Series

LED Area Light



LED Area Light

PROJECT:

DATE:

TYPE:

PREPARED BY:

5 YEAR WARRANTY

KEY FEATURES
Field-adjustable wattage/color on selected models
Standard **Secondary Surge Protector**
Multiple **Mounting options**
Optional **NEMA twist-lock control**
Optional **Bi-level motion control**

c UL us LISTED

DLC LISTED PREMIUM

OUTPUT & CCT FIELD ADJUSTABLE

SECONDARY SURGE PROTECTOR

CONTROLS COMPATIBLE

MOTION CONTROL OPTION

TECHNICAL SPECIFICATIONS

Compliance

UL Listed
UL 1598 Suitable for wet locations

IESNA LM79 & LM-80 Testing
Paclights LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

DLC Qualification
Selected models of this product are on the Design Lights Consortium (DLC) Qualified Products List and are eligible for rebates from DLC Member Utilities. To view our DLC qualified products, please consult the DLC Qualified Products List at www.designlights.org/qpl

LED Characteristics

LEDS
Long-life, high-efficacy, surface-mount LEDs

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

Lumen Maintenance
L90 ≥ 36,000 hours

Color Rendering Index
>80

Color Uniformity
PacLights' range of Correlated Color Temperature follows the guidelines of the American National Standard for Specications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377

Other

5-Year Limited Warranty**
The PacLights 5-year, limited warranty covers light output, driver performance and paint finish.

**PacLights's warranty is subject to all terms and conditions found at paclights.com/warranty

Construction

IP Rating
Ingress Protection rating of IP65 for dust and water

Ambient Temperature
Suitable for up to 50° C (122° F) ambient, minimum starting -40 F°/-40° C

Housing
Die-cast aluminum housing; stainless steel external hardware; silicone gasket.

Mounting Methods
2-3/8" Slipfitter, Trunnion, Pole (for round or square pole), Flood, or Wall mount.

Green Technology
Mercury and UV free, and RoHS compliant.

Lens
Polycarbonate.

Electrical

Driver(s)
Designed to last ≥50,000 hours when at allowable operating temperature
Input Voltage: 120-277v AC (-UV models) or 277-480v AC (-HV models), 50-60 Hz
0-10V dimming; Power Factor > 0.95; THD < 20%

MODEL	Watt.	120v	208v	240v	277v	480v
FALC/3-080	80W	0.70A	0.40A	0.35A	0.30A	0.18A
FALC/3-100	100W	0.88A	0.51A	0.44A	0.38A	0.22A
FALC/3-150	150W	1.32A	0.76A	0.66A	0.57A	0.33A
FALC/3-200	200W	1.75A	1.01A	0.88A	0.76A	0.44A
FALC/3-240	240W	2.11A	1.21A	1.05A	0.91A	0.53A
FALC/3-300	300W	2.63A	1.52A	1.32A	1.14A	0.66A
FALC/3-350	350W	3.07A	1.77A	1.54A	1.33A	0.77A
FALC/3-400	400W	3.51A	2.02A	1.75A	1.52A	0.88A
FALC/3-450	450W	3.95A	2.28A	1.97A	1.71A	0.99A

Surge Protector
Driver - L/N-PE: 6kV, L-N: 6kV; Secondary - 10kV.

Control Receptacle (optional)
NEMA 3-pin or 7-pin twist-lock receptacle. Compatible with ANSI C136.1 twist-lock photocell, or C136.41 0-10v 5 or 7-pin twist-lock dimming controls.

PERFORMANCE

Delivered Lumens, 80 CRI

Models	Lumen Package	Wattage	CCT Setting	Lumen Output	LPW
FALC/3-080	11,000	80w	3000K	10,080	126
			4000K	11,440	143
			5000K	10,880	136
FALC/3-100	13,000	100w	3000K	12,600	126
			4000K	14,300	143
			5000K	13,600	136
FALC/3-150	20,000	150w	3000K	18,900	126
			4000K	21,450	143
			5000K	20,400	136
FALC/3-200	27,000	200w	3000K	25,600	128
			4000K	28,800	144
			5000K	27,200	136
FALC/3-240	32,000	240w	3000K	30,720	128
			4000K	34,560	144
			5000K	32,640	136
FALC/3-300	40,000	300w	3000K	38,400	128
			4000K	43,200	144
			5000K	40,800	136
FALC/3-350	46,000	350w	3000K	43,400	124
			4000K	49,000	140
			5000K	46,550	133
FALC/3-400	53,000	400w	3000K	49,600	124
			4000K	56,000	140
			5000K	53,200	133
FALC/3-450	60,000	450w	3000K	55,800	124
			4000K	63,000	140
			5000K	59,850	133

ORDERING INFORMATION

FALC™ generation 3

Family	Model	Input Voltage	CCT	Optics	Mount	Housing Color	Options
FALC/3 –		–	–	–	–	–	–

Model

080 80w
100 100w
150 150w
200 200w
240 240w
300 300w
350 350w
400 400w
450 450w

150/100/080
150/100/80w Selectable

300/240/200
300/240/200w Selectable

450/400/350
450/400/350w Selectable

Input Voltage

UV 120-277v
HV 277-480v

CCT

30 3000K
40 4000K
50 5000K

30/40/50
3000K
4000K
5000K
Selectable

Optics

T2 IES Type II
T3 IES Type III
T4 IES Type IV
T5 IES Type V

Mount

SF Slipfitter mount
AM Arm mount
TM Trunnion mount
FM Flood mount
WM Wall mount

Housing Color

DB Dark Bronze
WH White

Options

VS Visor
3PR NEMA 3-pin twist-lock receptacle
7PR NEMA 7-pin twist-lock receptacle
PS Twist-lock on/off photocell
DL Twist-lock dimming daylight harvesting photocell
DM Twist-lock dimming daylight harvesting and midnight auto-dim photocell
MCW Microwave bi-level motion sensor control
MCP PIR bi-level motion sensor control
MCD Microwave bi-level motion + daylight sensor control
WBP Wireless bluetooth networked control w/ PIR & daylight sensor (NLC)
WBM Wireless bluetooth networked control w/ Microwave & daylight sensor (NLC)
WBN Wireless bluetooth networked control (NLC)

STANDARD FEATURES

Secondary Surge Protector

SECONDARY SURGE PROTECTOR

Secondary 10kV surge protector can act as the second line of defense, in addtional to the LED driver's intergrated lightning arrester.

Field Selectable Wattage/Color (selected models)

OUTPUT & CCT FIELD ADJUSTABLE

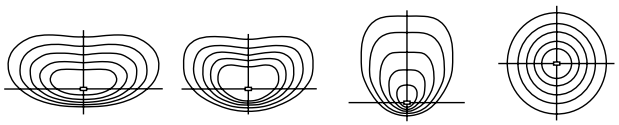
Select the desired output power by sliding the respective wattage and/or color selection Dip Switches left or right to the desired value, for different lumen or color outputs. Outputs can be changed before, during and after installation.

MODEL	Wattage Selectable	Color(CCT) Selectable
FALC/3-150	150W/100W/80W	3000K/4000K/5000K
FALC/3-300	300W/240W/200W	3000K/4000K/5000K
FALC/3-450	450W/400W/350W	3000K/4000K/5000K

PHOTOMETRIC Options

Optics (option: -T2/-T3/-T4/-T5)

For different application needs, FALC offers optics options including type II, type III, type IV and type V light distributions defined by Illuminating Engineering Society of North America (IESNA) classification system for light distribution patterns.



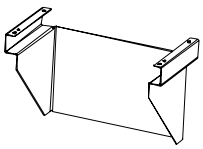
TYPE II TYPE III TYPE IV TYPE V

Standard:
IES Type III distribution (**-T3**), which is most common and used to provide a larger area of lighting from a position along the perimeter of where lighting is required, or parking lots.

Optional:
IES Type II distribution (option: **-T2**) is for wider walkways or entrance roadways.
IES Type IV distribution (option: **-T4**) will illuminate sides of building façades, walls.
IES Type V distribution (option: **-T5**) is perfect for general area lighting.

Visor (option: -VS)

For residential, tourist and conservation areas, facilities must be able to install lighting systems that avoid unwanted illumination onto adjacent properties. PacLights engineered optical systems include visor that control light and distribute it on the task at hand to limit light trespass. This allows facilities to install luminaires and poles where they are needed for maximum effectiveness.



FALC/3-080/100/150
AC-ALC-3VS-S
FALC/3-200/240/300/350/400/450
AC-ALC-3VS-L

BUG Rating

BUG Rating, also known as Backlight-Uplight-Glare Rating, is a system that evaluates and specifies the optical performance of outdoor light fixtures.

Models	IES Type	B backlight	U uplight	G glare
FALC/3-080 FALC/3-100	II	3	0	3
	III	3	0	3
	IV	3	0	2
	V	3	0	1
FALC/3-150 FALC/3-200	II	4	0	4
	III	3	0	3
	IV	3	0	3
	V	4	0	3
FALC/3-240	II	4	0	4
	III	4	0	4
	IV	4	0	4
	V	4	0	2
FALC/3-300 FALC/3-350	II	5	0	5
	III	5	0	5
	IV	4	0	5
	V	5	0	3
FALC/3-400 FALC/3-450	II	5	0	5
	III	5	0	5
	IV	5	0	5
	V	5	0	3

NEMA CONTROL RECEPTACLE Options

NEMA 3-pin Twist-lock Receptacle (option: -3PR)

NEMA 3-pin twist-lock receptacles provide the connector interface for locking type photocontrols. Locking Type Receptacle, 3-Pin, C136.10 Compliant.

NEMA 7-pin Twist-lock Receptacle (option: -7PR)

NEMA 7-pin twist-lock receptacles provides a receptacle for Locking Type photocontrols with dimming capabilities. The connector interface has a 3-prong power connection that is backward compatible with standard photocontrol units. Also, it offers four contact pads per ANSI C136.41 for dimming and additional control or sensor input.

7-pin receptacle
(option: -7PR)

CONTROL Options

NEMA Twist-lock Photocontrols (option: -PS/-DL/-DM)

PacLights advanced electronic **SE-TLP Series** Photocontrol provides a unique, durable, and multi-volt control especially designed for 15 years of operation. It utilises inter-locking base/cap design for excellent environmental housing. High temperature base material, along with a UV stabilised, opaque housing ensure our control will last years without degradation. PacLights uses a process of IR filtering a phototransistor which in turn gives a human eye response along with long-term, drift free light sensing for the life of the control.

Option **-PS** requires NEMA 3-pin Twist-lock Receptacle installed (option: **-3PR**)
Option **-DL/-DM** requires NEMA 7-pin Twist-lock Receptacle installed (option: **-7PR**)

- Multi-volt options (120-277v, 480v)
- Daylight On/Off function (option: **-PS**)
- Daylight harvesting function (option: **-DL**)
- Mid-Night dimming function (option: **-DM**)
- High-temperature components
- MOV surge protection
- Meets or exceeds ANSI C136.10

for detail refer to **SE-TLP Series** specification

Passive Infrared Bi-level Motion Control (option: -MCP)

A Passive Infrared (PIR) sensor is designed to detect variations in infrared radiation, which depend on the temperature and surface properties of objects within its range. This sensor can be installed at heights of up to 40 feet and features a distinctive three-step dimming function, ideal for locations that need a gradual transition in lighting before completely turning off. An optional daylight threshold function allows the fixture to automatically switch off based on a predefined level of ambient light. The control settings can be fine-tuned using an optional wireless commissioning device.

-MCP / -MCW / -MCD Optional Sensor Control Specification *default setting

Sensitivity	20%/50%/75%/100%*
Hold Time (before dim)	10s/1min/5min*/10min/15min/20min/30min/60min
Daylight Threshold	10/30/50/100/300/500 Lux, or Disable*
Stand-by Time(before turn off)	1min/30min/60min*, or Never
Stand-by Dimming Level	10%/30%*/50%
Detection Height	up to 40ft
Detection Radius	up to 50ft

Microwave Bi-level Motion Control (option: -MCW)

Microwave occupancy sensors are capable of detecting motion through plastic, glass, and thin non-metal materials. These sensors can be installed at heights of up to 40 feet and feature a distinctive three-step dimming function, ideal for spaces that need a gradual transition before complete shut-down. An optional daylight threshold function enables the fixture to automatically switch off based on a predetermined level of ambient light. The control settings can be fine-tuned using an optional wireless commissioning device.

SE-BC-RC100

Optional wireless commissioning device can be purchase separately to customize settings of controls option: -MCW/-MCP/-MCD.

Bi-level Motion and Daylight Harvesting Control (option: -MCD)

In addition to the features offered by a microwave bi-level occupancy control, daylight harvesting control also utilizes natural daylight to reduce the amount of electric lighting required to adequately illuminate a space. An optional wire-less commissioning device can be purchased separately for customizing settings.

Networked Lighting Controls (option: -WBP/-WBM/-WBN)

NLC
NETWORKED CONTROL OPTION

Network Lighting Controls (NLC) offer Luminaire Level Lighting Control (LLLC) based on Blue-tooth-enabled Mesh Networking of Luminaires. Individual addressability enables luminaires to be communicated with each other within the zone/network. Luminaires can be grouped, trim and controlled by using the smart device app or connected wall switches. Scheduling, scene and sensors can be added for automation among the lights within the zone/group.

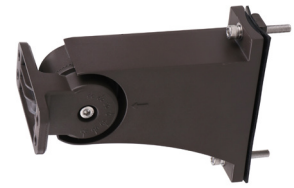
- **(-WBP)** Wireless bluetooth networked control with PIR occupancy and daylight harvesting sensor
- **(-WBM)** Wireless bluetooth networked control with microwave occupancy and photocell sensor
- **(-WBN)** Wireless bluetooth networked control (node only)

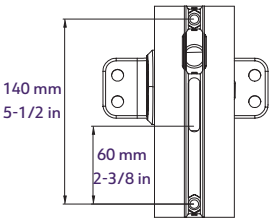
iOS/Andriod APP will be used to commission-ing or customize settings of options: -WBP/-WBM/-WBN networked controls.

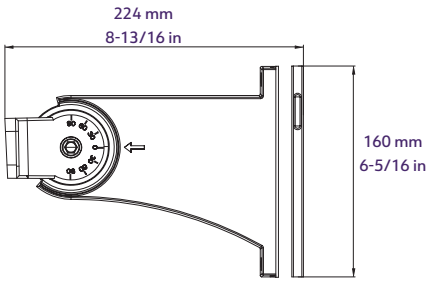
MOUNTING Options

Arm Mount (for square or round pole)

AC-ALC-3AM

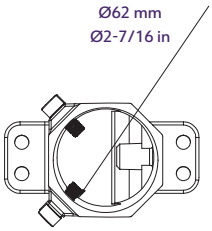


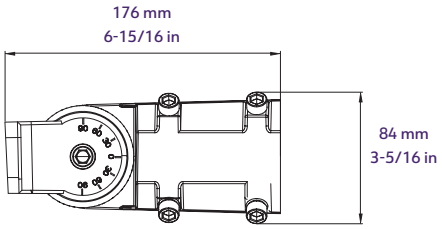




Slipfitter Mount

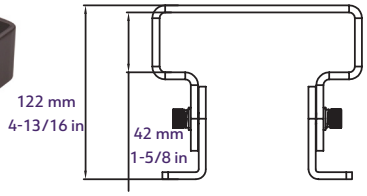
AC-ALC-3SF

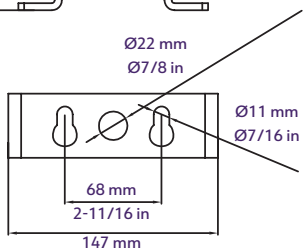




Trunnion Mount

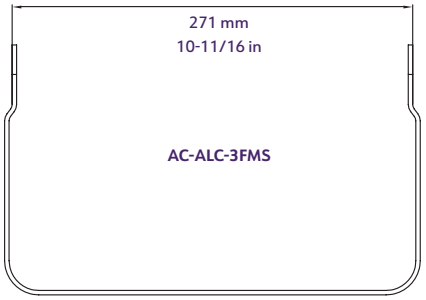
AC-ALC-3TM

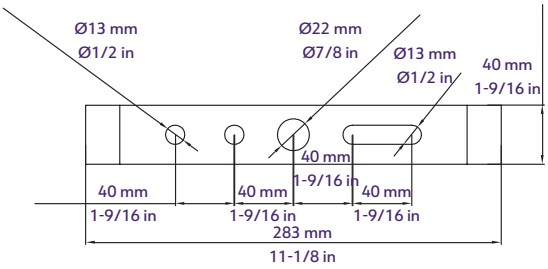


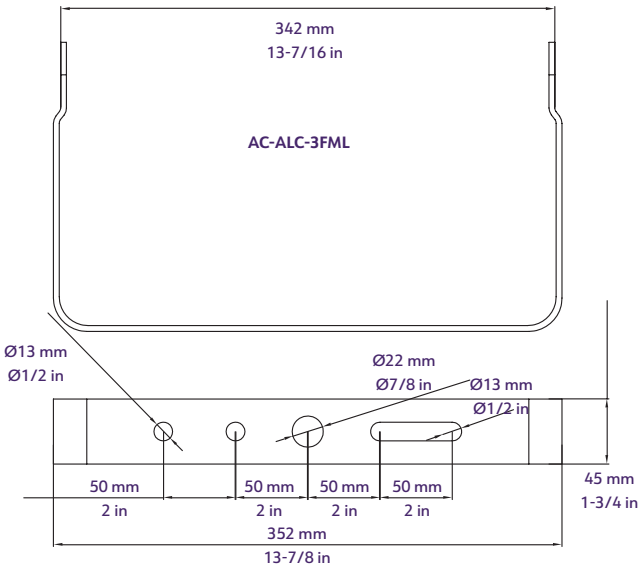


Flood Mount

FALC/3-080/100/150
AC-ALC-3FMS
FALC/3-200/240/300/350/400/450
AC-ALC-3FML



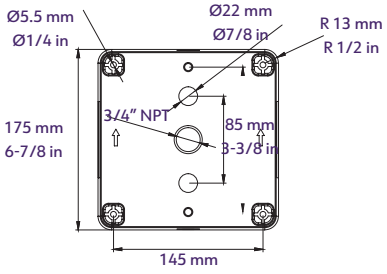




Wall Box

AC-ALC-3WB

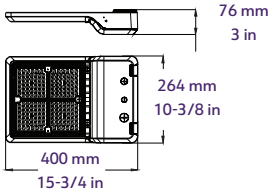
* requires Arm Mount



DIMENSIONS

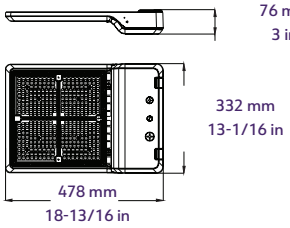
FALC/3 - 150/100/080

weight 8.7 lbs



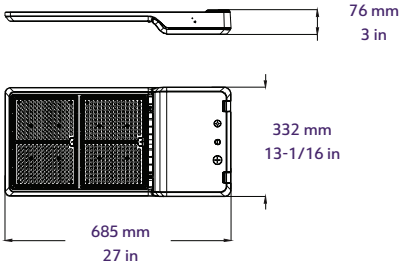
FALC/3 - 300/240/200

weight 11.4 lbs

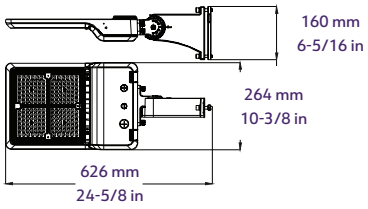


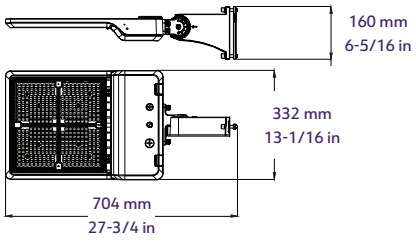
FALC/3 - 450/400/350

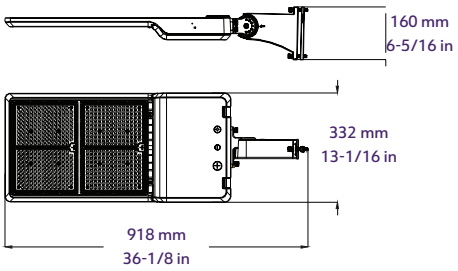
weight 16.8 lbs



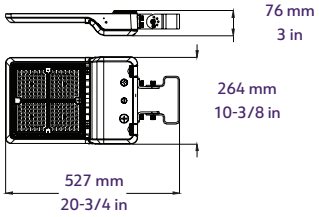
with arm mount

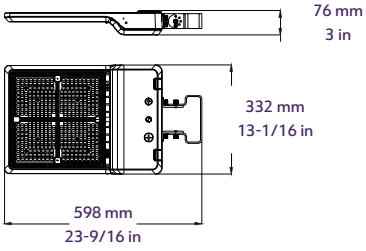


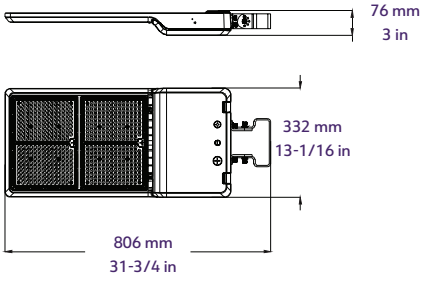




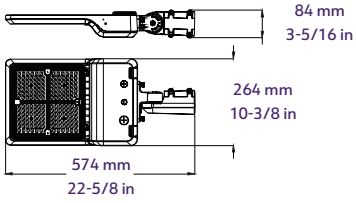
with trunnion mount

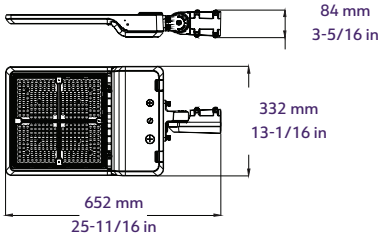


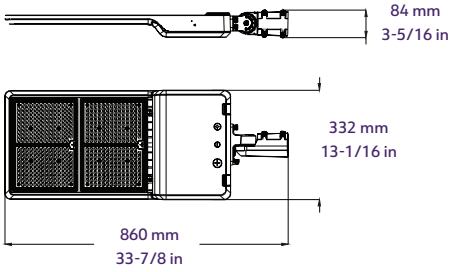




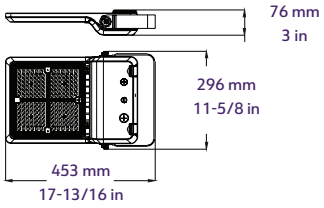
with slipfitter mount

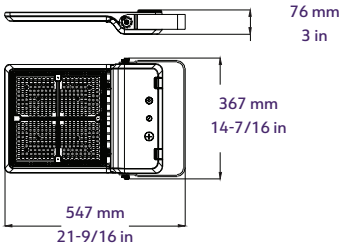


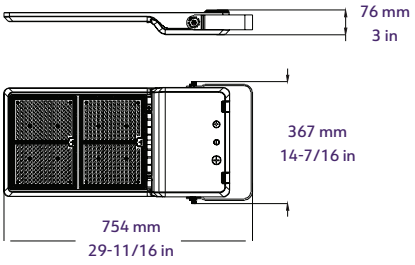




with flood mount







FINISHES	
standard	dark bronze or white

EPA CHART

Pole Mount	Tilt	Single	Dual at 90°	Dual at 180°	Triple at 90°	Triple at 120°	Quad at 90°	Dual side by side	Triple side by side	Quad side by side
FALC/3-150 FALC/3-100 FALC/3-080	0°	0.26	0.46	0.47	0.68	0.61	0.90	0.52	0.78	1.03
	10°	0.20	0.40	0.40	0.60	0.52	0.78	0.40	0.60	0.80
	20°	0.19	0.38	0.38	0.58	0.50	0.76	0.38	0.59	0.78
	30°	0.24	0.42	0.44	0.61	0.54	0.84	0.47	0.72	0.96
	40°	0.31	0.45	0.51	0.66	0.62	0.90	0.61	0.92	1.22
	45°	0.34	0.47	0.57	0.68	0.66	0.94	0.69	1.03	1.37
	50°	0.51	0.69	0.81	0.98	0.96	1.37	1.01	1.51	2.02
	60°	0.83	1.12	1.35	1.59	1.57	2.22	1.66	2.49	3.32
	70°	1.07	1.56	1.77	2.22	2.15	3.10	2.15	3.23	4.31
	80°	1.28	1.93	2.14	2.77	2.67	3.84	2.55	3.84	5.12
	90°	1.45	2.25	2.46	3.23	3.13	4.48	2.91	4.35	5.81
FALC/3-300 FALC/3-240 FALC/3-200	0°	0.28	0.50	0.51	0.73	0.66	0.97	0.56	0.84	1.11
	10°	0.22	0.43	0.43	0.65	0.56	0.84	0.43	0.65	0.86
	20°	0.21	0.41	0.41	0.62	0.54	0.82	0.41	0.63	0.84
	30°	0.26	0.45	0.47	0.66	0.58	0.90	0.51	0.78	1.03
	40°	0.33	0.49	0.55	0.71	0.67	0.97	0.66	0.99	1.31
	45°	0.37	0.51	0.61	0.73	0.71	1.01	0.74	1.11	1.47
	50°	0.55	0.74	0.88	1.06	1.03	1.47	1.08	1.63	2.18
	60°	0.89	1.21	1.45	1.72	1.69	2.39	1.79	2.68	3.58
	70°	1.16	1.68	1.91	2.39	2.31	3.34	2.31	3.48	4.64
	80°	1.38	2.08	2.30	2.98	2.87	4.14	2.75	4.14	5.51
	90°	1.56	2.42	2.65	3.48	3.37	4.82	3.13	4.69	6.26
FALC/3-450 FALC/3-400 FALC/3-350	0°	0.32	0.57	0.58	0.83	0.75	1.11	0.64	0.96	1.27
	10°	0.25	0.49	0.49	0.74	0.64	0.96	0.49	0.74	0.99
	20°	0.24	0.47	0.47	0.71	0.61	0.93	0.47	0.72	0.96
	30°	0.29	0.51	0.54	0.75	0.67	1.03	0.58	0.89	1.18
	40°	0.38	0.56	0.63	0.81	0.77	1.11	0.75	1.13	1.50
	45°	0.42	0.58	0.70	0.83	0.81	1.15	0.85	1.27	1.68
	50°	0.63	0.85	1.00	1.21	1.18	1.68	1.24	1.86	2.49
	60°	1.02	1.38	1.66	1.96	1.93	2.73	2.05	3.06	4.09
	70°	1.32	1.92	2.18	2.73	2.64	3.81	2.64	3.98	5.30
	80°	1.57	2.38	2.63	3.41	3.28	4.73	3.14	4.73	6.30
	90°	1.78	2.77	3.03	3.98	3.85	5.51	3.58	5.36	7.15

NETWORKED CONTROLS MADE EASY

Keilton Networked Controls, a DLC® Qualified Networked Lighting Controls Product, make it easy for facilities to save energy, improve occupancy comfort and achieve code compliance by adding Luminaire Level Lighting Controls (LLLC) to indoor and outdoor applications. It allows for easy field installation of sensors and network nodes with selected PacLights controls ready fixtures. Using the Keilton app, nodes can be commissioned without the need for a gateway or internet access.

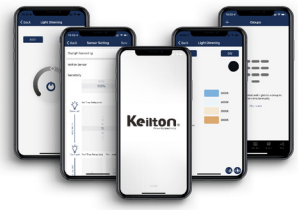
Keilton®

A Cost-Effective Decentralized Architecture

Direct Mobile Device Provisioning

Best-In-Class Scale, Performance & Reliability

INSTALL — COMMISSION — CONTROL



LEARN MORE, VISIT
www.paclights.com/NLC

FEATURES

- Luminaire Level Lighting Control (LLLC)
- Bluetooth-enabled Mesh Networking of Luminaires and Devices
- Individual Addressability, address individual or multiple luminaires
- High-end and Low-end Trim
- Zoning & Grouping
  - ◊ Add and control up to 100 devices per zone
  - ◊ Add unlimited zones to scale for bigger installation
  - ◊ Create unlimited groups (combination of sensor or network nodes) within a zone
  - ◊ Link and control the whole group or zone
- Scene control
  - ◊ Create and link scenes to individual lights or groups within a zone
  - ◊ Select scene with App or wall switch
- Time Scheduling for individual lights, groups or scenes
- Sensors integrated with BLE, occupancy and daylight sensing
- Multi-level Dimming, Daylight Harvesting and Occupancy controls
- Manual/Automatic ON/OFF and Automatic partial ON/OFF control capability
- Control with wireless wall switch or smart device
- Secure commissioning with Keilton App
- Up to 100 ft node-to-node and 50 ft node-to-device
- Demand Response option (works with OpenADR gateways)
- Controlled 120v 20A Receptacle available
- Other control features to meet code compliance

NETWORKED CONTROLS for FALC series

PacLights

NETWORKED NODES ONLY

SKU		DESCRIPTION	FUNCTION	CONTROL ORDER CODE
KEILTON-WPPA102-AUX		KEILTON WPPA102-AUX DC AUX BLUETOOTH MESH NODE	Enable network controlled - on & off, dim, trim, zone, group, scene & schedule, etc.	**-WBN**

NETWORKED NODES WITH SENSOR

SKU		DESCRIPTION	FUNCTION	CONTROL ORDER CODE
KEILTON-EFS106-AUX		KEILTON EFS106-AUX DC AUX BLUETOOTH MESH NODE W/ PIR DLH SENSOR	Enable network controlled - on & off, dim, trim, zone, group, scene & schedule, etc. And, PIR occupancy & daylight (harvesting) sensing.	**-WBP**
KEILTON-EFS116-AUX		KEILTON EFS116-AUX DC AUX BLUETOOTH MESH NODE W/ MICROWAVE PHOTOCELL SENSOR	Enable network controlled - on & off, dim, trim, zone, group, scene & schedule, etc. And, Microwave occupancy & photo sensing	**-WBM**