



Floodlights

General purpose flood

	_
Project:	
Location:	_
Cat.No:	_
Type:	_
Qty:	_
Notes:	_

The Philips LED Floodlights offer energy saving LED technology for long life and reduced maintenance. Versatile and stylish with five different sizes to choose from provides application flexibility for ground mount, wall mount, or pole mount installations. Ideal for sign lighting, building facades, security lighting, and general purpose floodlighting applications.

Ordering guide

example: PFL150-NW-G1-T-FL-8-BZ

Luminaire	LED Color	Generation G1	Mounting	Distribution FL	Voltage 8	Finish BZ
PFL20 LED Floodlight 20W	NW Neutral White 4000K, 80CRI	G1 Generation 1	K¹ Knuckle Mount ½" NPS male	FL Flood	8 120-277VAC	BZ Bronze
PFL40 LED Floodlight 40W						
PFL80 LED Floodlight 80W			T ² Trunnion Mount			
PFL150 LED Floodlight 150WP						
PFL300 LED Floodlight 300W						

- K Knuckle Mount only available with PFL20 and PFL40.
- 2. T Trunnion Mount only available with PFL80, PFL150 and PFL300.

LED Wattage and Lumen Values

Neutral White Ordering Codes	Total LEDs	LED Current (mA)	Color Temp. (K)	Avgerage System Wattage ¹	Lumen Output ^{1,2}	Efficacy (LPW)
PFL20-NW-G1-K-FL-8-BZ	32	500	4000	20	2122	109
PFL40-NW-G1-K-FL-8-BZ	64	1100	4000	39	4433	113
PFL80-NW-G1-T-FL-8-BZ	128	2450	4000	79	8856	113
PFL150-NW-G1-T-FL-8-BZ	248	4200	4000	146	16,325	112
PFL300-NW-G1-T-FL-8-BZ	544	2100	4000	301	34,025	113

- 1. Wattage and lumen output may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
- 2. Lumen values based on photometric tests performed in compliance with IESNA LM-79.

 $NOTE: Contact \ outdoor lighting. applications@philips.com \ for \ additional \ photometric \ tests \ or \ information. \ outdoor \ additional \ photometric \ tests \ or \ information. \ outdoor \ additional \ photometric \ tests \ or \ information. \ outdoor \ additional \ photometric \ tests \ or \ information. \ outdoor \ additional \ photometric \ tests \ or \ information.$



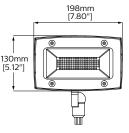




General purpose flood LED

PFL20/40/80/150/300

Dimensions



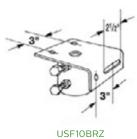
[6.26"]

159mm

323mm [12.70"] 200mm [7.87"]

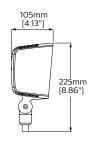
Accessory (ordered separately, field installed)



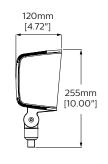


Mounting adapter for trunnion, fits 2-3/8" O.D. tenon, bronze finish.

PFL20 Front



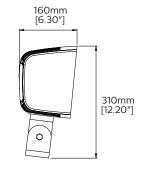
PFL20 Side



255mm [10.00"]

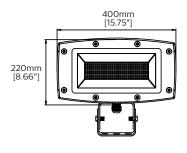
PFL40 Front

PFL40 Side

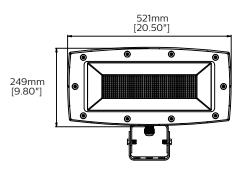


PFL80 Front

PFL80 Side



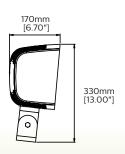
PFL150 Front



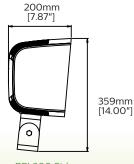
PFL300 Front

EPA and Weight

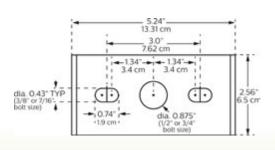
	Effective P	rojected Are		
Product	0° Aim	45° Aim	90° Aim	Weight
PFL20	0.238	0.271	0.316	4.6lbs (2.09kg)
PFL40	0.351	0.415	0.500	6.6lbs (2.99kg)
PFL80	0.595	0.680	0.798	15lbs (6.8kg)
PFL150	0.784	0.915	1.089	20lbs (9.1kg)
PFL300	1.199	1.369	1.604	33lbs (14.9kg)



PFL150 Side



PFL300 Side



Trunnion Mount Bolt Pattern



General purpose flood LED

PFL20/40/80/150/300

Specifications

Housing and Heat Sink

Single piece die cast aluminum alloy. Housing also acts as a heat sink, designed to ensure high efficacy and superior cooling by natural convection. Air flow pattern always close to LEDs and driver optimizing their efficiency and life. Product does not use any cooling device with moving parts (only passive cooling).

Mounting

Suitable for mounting within 4' (1.2m) of the ground.

Knuckle (K, see Ordering guide): Integral die cast Aluminum adjustable knuckle (K) with ½" NPS male threads, made of a lower copper alloy for resistance to corrosion, with locking teeth and bolt to lock in aiming angle. Ships fully assembled, ready to install. Six inch (6" or 152mm) leads exit out of Knuckle for connection by others.

Trunnion (T, see Ordering guide): Integral structural steel adjustable trunnion (T) for direct surface mounting, painted for resistance to corrosion, with bolt to lock in aiming angle. Ships fully assembled, ready to install. Six foot (6' or 1.83m) watertight STW 16 gauge cord exits out of Housing for connection by others, IP66 liquid tight connector to seal cord exit point.

Lens

Heat and impact resistant tempered glass lens with one piece silicone gasket surrounding the entire perimeter of the LED light engine and electronics compartment providing an IP66 seal. Lens secured with screws and recessed sleeve washers outside of gasket perimeter. Lens includes silk screen to help reduce glare and for aesthetic purposes.

Light Engine

Composed of 3 main components: LED Module / Optical System / Driver. Electrical components are RoHS compliant. LEDs tested by ISO 17025-2005 accredited lab in accordance with IESNA LM-80 guidelines extrapolations in accordance with IESNA TM-21. Metal core substrate ensures greater heat transfer and longer lifespan.

Predicted Lumen Depreciation Data

Ambient	System	L ₇₀ per	Lumen Maintenance
Temperature °C	Current	TM21 ^{1,2}	@ 42,000hrs
25°C	4200 mA	>42,000	

- 1. L₁₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.
- 2. Calculated per IESNA TM 21-11. Published L_{70} hours limited to 6 times actual LED test hours.

LED Module

Composed of mid-power performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985 +/- 275K or 3710K to 4260K), CRI 80 Min.

Optical System

Flood distribution, optimized for target lumens and a superior lighting uniformity. Photometric performance shall be tested per LM-79 (IESNA) certifying its photometric performance and published in accordance with LM-63.

Drive

High power factor of 90% min. Electronic driver, operating range 50/60 Hz, Class 1 or Class 2.

Other Integrated Features

Surge Protection: Each luminaire is provided as standard with surge protector (Philips designed SP1 or SP1HV) tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line Ground, Line Neutral and Neutral Ground.

Wiring

Insulated internal wiring located inside the housing, silicone seals all places where wiring passes through openings including sealed going into the knuckle or exiting the luminaire for trunnion mount. Due to the inrush current that occurs with electronic drivers, recommend using a time delay or slow blow fuse to avoid unnecessary and unwanted fuse blowing that can occur with fast acting fuses.

Hardware

All exposed screws shall be stainless steel and/or corrosion resistant and captive. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

Finish

Fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat textured bronze finish.

LED Products Manufacturing Standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with EC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

Vibration Resistance

Knuckle mounts meet the ANSI C136.31 Luminaire vibration specifications for normal applications (1.5G).

Certifications and Compliance

cULus Listed for Canada and USA. DesignLights Consortium qualified. Entire luminere is rated for operation in ambient temperature of -30°C (-22°F) up to +40°C (+104°F).

IP66 Rating

Entire luminaire including light engine and driver/electrical compartment IP66 rated in all aiming positions including upward aiming floodlighting applications.

Limited Warranty

5-year limited warranty. See philips.com/ warranties for details and restrictions. Visit our eCatalog or contact your local sales representative for more information.

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