

## Floodlight

Floodlights

Designer Flood LED



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

The Gardco Designer Floodlight LED is an architectural LED flood luminaire with a choice of numerous precision LED optical systems. Each is designed to provide a specific distribution, minimizing stray light. Designer Floodlight LED luminaires outperform comparable HID units, while providing the energy saving benefits of LED technology. The luminaires feature integral LED thermal fins to provide the thermal control so vital to LED system performance and life.

### Ordering guide

example: DFL7-A33-32L-900-NW-G2-UNV-DGY-SP2-BD

Luminaire	Distribution	Number of LEDs	Drive Current	LED Color - Generation	Voltage	Finish	Options
<b>DFL7</b> Designer Floodlight LED 7" with Standard Flat Door	<b>SP</b> Spot (12" round)	<b>16L</b> 16 LEDs	<b>700</b> 700mA <b>1200</b> 1200mA	<b>CW-G2</b> Cool White 5700K, 70 CRI Generation 2	<b>UNV</b> 120-277V (50/60Hz)	<b>Textured</b>	<b>DD</b> 0-10V Dimming Driver (controls by others)
	<b>RSP</b> Rectangular Spot			<b>NW-G2</b> Neutral White 4000K, 70 CRI Generation 2	<b>HVU</b> 347-480V (50/60Hz)	<b>BK</b> Black	<b>PCB</b> Photocontrol Button <sup>2</sup>
	<b>RM</b> Rectangular Medium Flood	<b>32L</b> 32 LEDs	<b>700</b> 700mA <b>900</b> 900mA	<b>WW-G2</b> Warm White 3000K, 70 CRI Generation 2	<b>120</b> 120V	<b>WH</b> White	<b>BD</b> Barn Doors <sup>1</sup>
<b>DFC7</b> Designer Floodlight LED 7" with Standard Cutoff Hood	<b>RN</b> Rectangular Narrow Flood				<b>208</b> 208V	<b>BZ</b> Bronze	<b>PSO</b> Offset Polycarbonate Flat Shield <sup>4</sup>
	<b>A33</b> Asymmetric 33° Flood				<b>240</b> 240V	<b>DGY</b> Dark Gray	<b>ESB</b> Extended Splice Box
					<b>277</b> 277V	<b>MGY</b> Medium Gray	<b>WG</b> Wire Guard <sup>3</sup>
					<b>347</b> 347V	<b>Customer specified</b>	<b>Fusing<sup>2</sup></b>
					<b>480</b> 480V	<b>RAL</b> Specify optional color or RAL (ex: OC-LGP or OC-RAL7024)	<b>F1</b> Single (120, 277, 347VAC)
						<b>CC</b> Custom color (Must supply color chip for required factory quote)	<b>F2</b> Double (208, 240, 480VAC)
							<b>F3</b> Canadian Double Pull (208, 240, 480VAC)
							<b>Surge Protection</b>
							<b>SP2</b> 20KV 10KA 120-277VAC
							<b>SP2HV</b> 20KV 10KA 347-480VAC

1. Available in DFL7 only. Not available in DFC7. Barn Doors (BD) are painted to match the luminaire. Not Available with PSO or WG options.
2. Must specify specific input voltage.
3. Not Available with BD or PSO options. Field Installable.
4. Additional flat Polycarbonate shield. Not available with BD or WG options.

# DFL7/DFC7 Designer Flood LED

## Floodlights – 7"

### Mounting Accessories

(order separately, field installed)

- Leave blank (no Mounting option; Floodlight fits directly on 1.9" pipe)
- C** Stub-up Conduit Mount. For direct mounting to (2) 1/2" (1.27cm) or 3/4" (1.91cm) GRC or IMC conduits. No j-box required. Must use factory supplied mounting insert when setting stub-ups.
- J** J-Box Mount. For mounting into 1/2" (1.27cm) hub. Also suitable for direct surface mount to walls or ceilings when fed by EMT, BX, SJO, NM, etc. (For surface mount over outlet box, specify W or W90 mount).
- W** Wall/Ceiling Canopy Mount. For mounting over (not to) a 4" recessed outlet box. When mounted on vertical surface, provides vertical aiming from straight down to 100° up from nadir. When mounted on a vertical surface, long axis of luminaire must be horizontal (+/-30°). Mounts directly to wall or ceiling. The surface structure must be suitable to support the luminaire. Only suitable for use on non-combustable surfaces.
- WMB** Wall Mount Bullhorn. For mounting over (not to) a 4" (10.16cm) recessed outlet box. Provides full axial 180° vertical and 358° rotational aiming. Mounts direct to wall. Surface structure must be suitable to support the assembly. Outer end of WMB must be in the "straight up" position, as shown in diagram on page 3. Luminaire mounts with the knuckle below the body of the luminaire only.
- W90** Wall Arm Mount. For mounting over (not to) a 4" (10.16cm) recessed outlet box. Provides full axial 180° vertical and 358° rotational aiming range. Mounts direct to wall. Surface structure must be suitable to support the luminaire. When mounted in wet locations, luminaire must be mounted as shown in diagrams on page 3. In damp or dry locations, arm assembly may be inverted.
- ST** Stanchion Mount. 18" (45.72cm) stanchion for in-ground concrete burial mounting.
- SM** Surface Mount Stanchion. For mounting to 18" (45.72cm) stanchion pole assembly.

### Additional Mounting Accessories

(order separately, field installed)

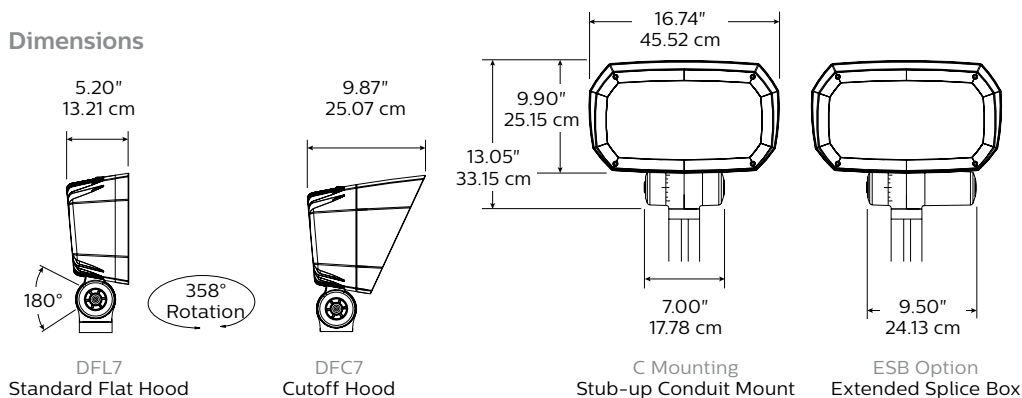
- PTA** Pole top 2-3/8" (6.03cm) tenon adapter
- TAB** Twin arm bracket for use with ST, SM, or PTA
- PT2** Pole top 2-3/8" (6.03cm) tenon adapter for twin back to back luminaire mounting.

## LED Wattage and Lumen Values

Neutral White Ordering Codes	Total LEDs	LED Current (mA)	Color Temp. (K)	Average System Wattage <sup>1</sup>	SP		RSP		RM		RN		A33	
					Lumen Output <sup>2,3</sup>	Efficacy (LPW)	Lumen Output <sup>2,3</sup>	Efficacy (LPW)	Lumen Output <sup>2,3</sup>	Efficacy (LPW)	Lumen Output <sup>2,3</sup>	Efficacy (LPW)	Lumen Output <sup>2,3</sup>	Efficacy (LPW)
DFL7-16L-700-NW-G2	16	700	4000	38	4208	111	3894	102	3825	101	3868	102	3901	103
DFL7-16L-1200-NW-G2	16	1200	4000	63	6420	103	5940	95	5835	93	5901	94	5951	95
DFL7-32L-700-NW-G2	32	700	4000	71	8412	118	7783	109	7646	107	7732	109	7798	110
DFL7-32L-900-NW-G2	32	900	4000	94	10301	109	9531	101	9363	99	9468	101	9549	101

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.
3. Contact outdoorlighting.applications@philips.com for additional photometric tests or information.

## Dimensions

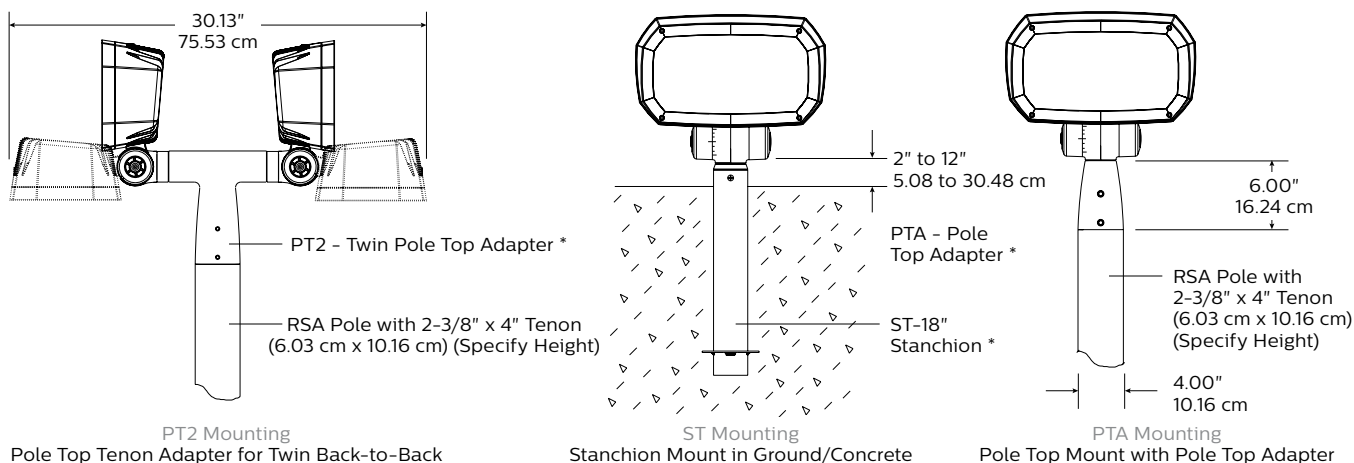
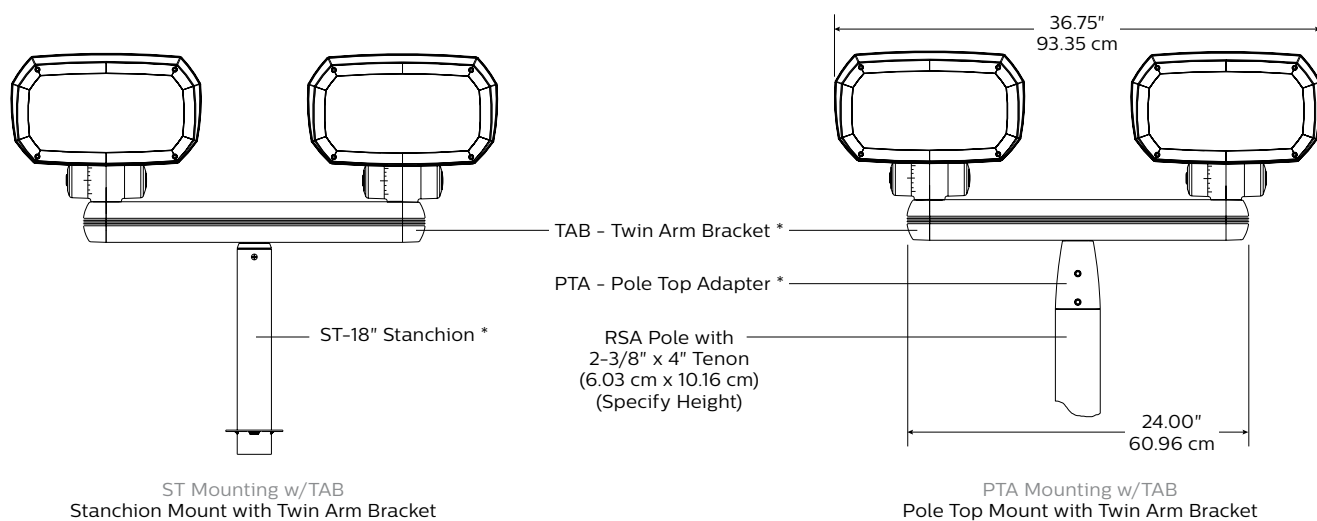
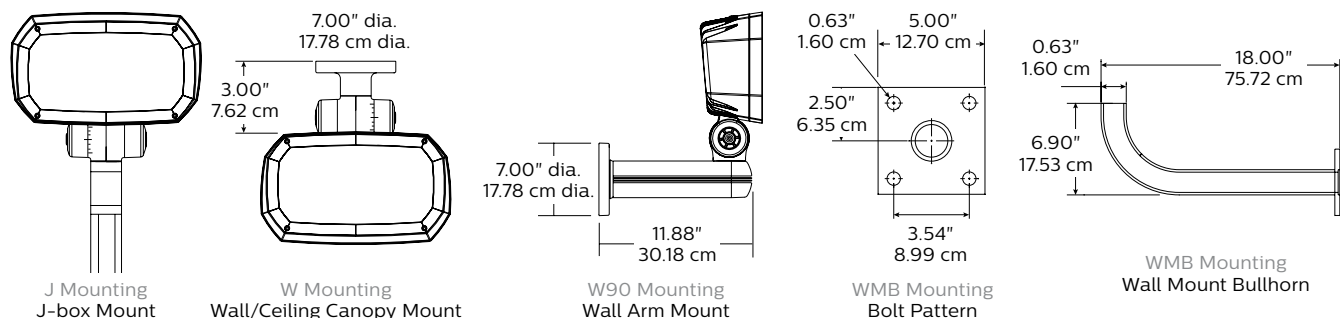


Designer Flood LED 7" Pole Loading Data	EPA	
	DFL7	DFC7
Single Luminaire on PTA Adapter	1.5 ft <sup>2</sup> 0.14m <sup>2</sup>	1.8 ft <sup>2</sup> 0.17m <sup>2</sup>
Twin luminaires on PTA Adapter	2.1 ft <sup>2</sup> 0.20m <sup>2</sup>	2.7 ft <sup>2</sup> 0.25m <sup>2</sup>
Twin luminaires on TAB Adapter	3.2 ft <sup>2</sup> 0.30m <sup>2</sup>	3.9 ft <sup>2</sup> 0.37m <sup>2</sup>
Approximate Single Luminaire Weight	19 lbs 8.62 kg	20.5 lbs 9.30 kg

# DFL7/DFC7 Designer Flood LED

## Floodlights - 7"

### Dimensions



\* Order mounting accessories separately.

# DFL7/DFC7 Designer Flood LED

## Floodlights – 7"

### Specifications

#### Housing and Heat Sink

Single piece low copper die cast Aluminum alloy for a high resistance to corrosion. Housing also acts as 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).

#### Door/Lens Assembly

A heat and impact resistant 1/8" (.3175cm) tempered glass lens and one piece silicone gasket are mechanically secured to door frame providing an IP66 seal. DFL7 luminaires feature a flat door and lens assembly. DFC7 luminaires include an integral cutoff hood door and lens assembly providing additional shielding from source glare.

#### Knuckle

Low copper die cast Aluminum alloy for a high resistance to corrosion. Knuckle features an integral cULus recognized splice compartment. A single captive 3/16" (.48cm) stainless steel allen-head bolt and stainless steel nut securely lock the knuckle aiming teeth in 5° increments. An opposite cover plate is removable for access to splices. The knuckle assembly is fully gasketed providing a cULus Wet Location seal.

Splice Compartment Capacity	Standard Units	Luminaires w/ Extended Splice Box (ESB) option
#12 AWG Conductors	5	9
#10 AWG Conductors	3	7

AWG Conductors include ground.

#### Other Integrated Features

Surge Protection: Each luminaire is provided as standard with surge protector (designed SP1) tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/5kA waveforms for Line Ground, Line Neutral and Neutral Ground. Enhanced surge protection (SP2 and SP2HV) is available as an option.

#### Predicted Lumen Depreciation Data

Ambient Temperature °C	System Current	Calculated L <sub>70</sub> hrs <sup>1,2</sup>	L <sub>70</sub> per TM21 <sup>2,3</sup>	Lumen Maintenance @ 60,000hrs
25 °C	900 mA	>100,000	>60,000	96%

1. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
2. L<sub>70</sub> is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated per IESNA TM 21-11. Published L<sub>70</sub> hours limited to 6 times actual LED test hours.

#### LED Module

16 or 32 high power LEDs. Metal core printed circuit board. LEDs tested by ISO 17025-2005 accredited lab in accordance with IESNA LM-80 guidelines extrapolations in accordance with IESNA TM-21. IP20 sealed light engines designed and tested to rating IK10 in accordance with European standard EN 62262 (equivalent of international standard IEC 62262 2002). RoHS compliant. Color temperatures as per ANSI/NEMA bin Warm White, 3000 Kelvin nominal (3045 +/- 175K), Neutral White, 4000 Kelvin nominal (3985 +/- 250K), or Cool White, 5700 Kelvin Nominal (5667 +/- 355K), CRI 70 Min.

#### Optical System

Choice of Spot (SP), Rectangular Spot (RSP), Asymmetric 33° Flood (A33), Rectangular Medium Flood (RM) and Rectangular Narrow Flood (RN) distributions. Composed of high performance UV stabilized optical grade polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance.

#### Driver

High efficiency multi-volt driver (50 or 60 Hz), maintains constant current flow to LEDs to accommodate LED variations. High power factor (0.9 standard). Voltage: 120-277, 347, 480. Ambient temperature range: -40°C (-40°F) to 40°C (104°F). Standard built in driver surge protection of 6kV (min). RoHS compliant. Open / short circuit protection. Output is protected from short circuits, voltage overload and current overload. When DD option is selected a 0-10V dimming driver is included.

#### Hardware

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

#### Wiring

#16 AWG wires from the primary circuit, located inside the knuckle splice compartment for field wiring. 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.

#### Finish

Five standard textured colors. RAL and custom color matching available. Color in accordance with the AAMA 2604 standard. Application of polyester powder coat paint (2.5 mils/62.5 microns) with ± 1 mils/24 microns of tolerance. The thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard.

#### IP66 Rating

Robust IP66 seal around the entire perimeter of the optical and electrical compartment.

#### 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.

#### Luminaire Useful Life

Luminaire Useful Life accounts for LED lumen maintenance. Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, LED LM-80/TM-21, expected to reach 100,000 + hours with >L70 lumen maintenance @ 25°C.

#### Certifications and Compliance

cULus Listed for Canada and USA. Designer Floodlight LED luminaires with neutral white color temperature are DesignLights Consortium qualified. Entire luminaire is rated for operation in ambient temperature of -40°C (-40°F) up to +40°C (+104°F).

#### 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.

