



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.

Project: _____

Location: _____

Cat.No: _____

Type: _____

Lumens: _____ Qty: _____

Notes: _____

Ordering guide

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

| Prefix | Distribution | Number of LEDs | Drive Current | Color Temperature | Voltage | Finish | Options | |
|--|---|--------------------|--|---|--|---|--|--------------------|
| DFL7 Designer Floodlight LED 7" with Standard Flat Door DFC7 Designer Floodlight LED 7" with Standard Cutoff Hood | SP Spot (12° round) (NEMA 2x2) RSP Rectangular Spot (NEMA 3x3) | 16L 16 LEDs | 350 350mA 530 530mA 700 700mA 900 900mA 1A 1 Amp 1.2A 1.2 Amp | CW-G2 Cool White 5000K, 70 CRI Generation 2 NW-G2 Neutral White 4000K, 70 CRI Generation 2 WW-G2 Warm White 3000K, 70 CRI Generation 2 | UNV 120-277V (50/60Hz) HVU 347-480V (50/60Hz) 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V | Textured BK Black WH White BZ Bronze DGY Dark Gray MGY Medium Gray Customer specified RAL Specify optional color or RAL (ex: OC-LGP or OC-RAL7024) CC Custom color (Must supply color chip for required factory quote) | none Leave blank DD² 0-10V Dimming Driver (controls by others) PCB^{1,2} Photocontrol Button ESB Extended Splice Box (can be used with all Mounting Accessories) Fusing none Leave blank F1¹ Single (120, 277, 347VAC) F2¹ Double (208, 240, 480VAC) F3¹ Canadian Double Pull (208, 240, 480VAC) Surge Protection blank 10kV / 10kA (standard) SP2 20kV / 10kA (option) | |
| | | | RM Rectangular Medium Flood (NEMA 7x4) RN Rectangular Narrow Flood (NEMA 7x5) A33 Asymmetric 33° Flood (NEMA 6x5) | | | | | 32L 32 LEDs |

1. Must specify applicable specific input voltage, not available with UNV or HVU. PCB only available with 120V, 208V, 240V, 277V.
2. Choose either DD or PCB. For DD the 0-10V dimming wires exit the luminaire for dimming controls by others.

DFL7/DFC7 Designer Flood LED

7" floodlights

Mounting Accessories

(order separately, field installed, specify finish at placeholder F)

| | |
|---------------------------------|--|
| - | Leave blank (no Mounting option; Floodlight fits directly on 1-1/2" (1.9" or 48.3mm O.D.) rigid conduit) |
| C RIGID CONDUIT MT (F) | Stub-up Rigid Conduit Mount. For direct mounting to (2) 1/2" (1.27cm) or 3/4" (1.91cm) rigid conduit such as GRC Galvanized Rigid Steel Conduit, IMC Intermediate Metal Conduit, etc. No j-box required. Must use factory supplied mounting insert when setting stub-ups. |
| J J-BOX MT (F) | J-Box Mount. For mounting onto weather-proof J-box (by others) |
| W WALL/CEIL. MT (F) | 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-combustible surfaces. |
| WMB WALL MT BULLHORN (F) | 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 MT (F) | 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. |

Additional Mounting Accessories

(order separately, field installed, specify finish at placeholder F)

| | |
|--------------------------------|---|
| ST 18" STANCHION (F) | Stanchion Mount. 18" (45.72cm) high stanchion for in-ground concrete burial mounting. |
| ST/SM 18" (F) | Surface Mount Stanchion. For mounting to 18" (45.72cm) high stanchion pole assembly. |
| PTA (F) | Pole top 2-3/8" (6.03cm) tenon adapter |
| TAB TWIN ARM BRKT (F) | Twin arm bracket for use with ST, SM, or PTA |
| PT2 DUAL HEAD ADPTR (F) | Pole top 2-3/8" (6.03cm) tenon adapter for twin back to back luminaire mounting. |

Accessories ¹

(order separately, field installed)

| | |
|-----|----------------------------------|
| PSO | Offset Polycarbonate Flat Shield |
| WG | Wire Guard |

1. PSO and WG cannot be used together - choose one or the other.

LED Wattage and Lumen Values - 3000K

| Ordering Codes | Total LEDs | LED Current (mA) | Color Temp. (K) | Average System Wattage | SP | | RSP | | RM | | RN | | A33 | |
|-----------------------------|------------|------------------|-----------------|------------------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|
| | | | | | Lumen Output | Efficacy (LPW) | Lumen Output | Efficacy (LPW) | Lumen Output | Efficacy (LPW) | Lumen Output | Efficacy (LPW) | Lumen Output | Efficacy (LPW) |
| DFC7 or DFL7-16L-350-WW-G2 | 16 | 350 | 3000 | 20 | 2,747 | 137 | 2,487 | 124 | 2,550 | 128 | 2,574 | 129 | 2,637 | 132 |
| DFC7 or DFL7-16L-530-WW-G2 | 16 | 530 | 3000 | 28 | 3,599 | 129 | 3,258 | 116 | 3,339 | 119 | 3,372 | 120 | 3,453 | 123 |
| DFC7 or DFL7-16L-700-WW-G2 | 16 | 700 | 3000 | 38 | 4,399 | 117 | 3,983 | 106 | 4,083 | 108 | 4,122 | 109 | 4,223 | 112 |
| DFC7 or DFL7-16L-900-WW-G2 | 16 | 900 | 3000 | 47 | 5,352 | 113 | 4,846 | 102 | 4,967 | 105 | 5,015 | 106 | 5,138 | 108 |
| DFC7 or DFL7-16L-1050-WW-G2 | 16 | 1050 | 3000 | 55 | 6,066 | 109 | 5,492 | 99 | 5,629 | 101 | 5,684 | 102 | 5,823 | 105 |
| DFC7 or DFL7-16L-1200-WW-G2 | 16 | 1200 | 3000 | 62 | 6,760 | 109 | 6,120 | 99 | 6,274 | 101 | 6,335 | 102 | 6,489 | 104 |
| DFC7 or DFL7-32L-350-WW-G2 | 32 | 350 | 3000 | 36 | 5,463 | 152 | 4,946 | 137 | 5,070 | 141 | 5,119 | 142 | 5,243 | 146 |
| DFC7 or DFL7-32L-530-WW-G2 | 32 | 530 | 3000 | 54 | 7,220 | 134 | 6,537 | 121 | 6,700 | 124 | 6,765 | 125 | 6,930 | 128 |
| DFC7 or DFL7-32L-700-WW-G2 | 32 | 700 | 3000 | 71 | 8,880 | 126 | 8,039 | 114 | 8,240 | 117 | 8,320 | 118 | 8,522 | 121 |
| DFC7 or DFL7-32L-900-WW-G2 | 32 | 900 | 3000 | 90 | 10,832 | 120 | 9,807 | 108 | 10,052 | 111 | 10,150 | 112 | 10,397 | 115 |

LED Wattage and Lumen Values - 4000K

| Ordering Codes | Total LEDs | LED Current (mA) | Color Temp. (K) | Average System Wattage | SP | | RSP | | RM | | RN | | A33 | |
|-----------------------------|------------|------------------|-----------------|------------------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|
| | | | | | Lumen Output | Efficacy (LPW) | Lumen Output | Efficacy (LPW) | Lumen Output | Efficacy (LPW) | Lumen Output | Efficacy (LPW) | Lumen Output | Efficacy (LPW) |
| DFC7 or DFL7-16L-350-NW-G2 | 16 | 350 | 4000 | 20 | 2,892 | 145 | 2,618 | 131 | 2,684 | 134 | 2,709 | 135 | 2,776 | 139 |
| DFC7 or DFL7-16L-530-NW-G2 | 16 | 530 | 4000 | 28 | 3,788 | 135 | 3,429 | 122 | 3,515 | 126 | 3,549 | 127 | 3,635 | 130 |
| DFC7 or DFL7-16L-700-NW-G2 | 16 | 700 | 4000 | 38 | 4,631 | 123 | 4,193 | 111 | 4,298 | 114 | 4,339 | 115 | 4,445 | 118 |
| DFC7 or DFL7-16L-900-NW-G2 | 16 | 900 | 4000 | 47 | 5,634 | 119 | 5,101 | 108 | 5,228 | 110 | 5,279 | 111 | 5,408 | 114 |
| DFC7 or DFL7-16L-1050-NW-G2 | 16 | 1050 | 4000 | 55 | 6,385 | 115 | 5,781 | 104 | 5,925 | 107 | 5,983 | 108 | 6,129 | 110 |
| DFC7 or DFL7-16L-1200-NW-G2 | 16 | 1200 | 4000 | 62 | 7,116 | 115 | 6,442 | 104 | 6,604 | 106 | 6,668 | 107 | 6,830 | 110 |
| DFC7 or DFL7-32L-350-NW-G2 | 32 | 350 | 4000 | 36 | 5,751 | 160 | 5,206 | 145 | 5,337 | 148 | 5,388 | 150 | 5,519 | 153 |
| DFC7 or DFL7-32L-530-NW-G2 | 32 | 530 | 4000 | 54 | 7,600 | 141 | 6,881 | 127 | 7,053 | 131 | 7,121 | 132 | 7,295 | 135 |
| DFC7 or DFL7-32L-700-NW-G2 | 32 | 700 | 4000 | 71 | 9,347 | 132 | 8,462 | 120 | 8,674 | 123 | 8,758 | 124 | 8,971 | 127 |
| DFC7 or DFL7-32L-900-NW-G2 | 32 | 900 | 4000 | 90 | 11,402 | 126 | 10,323 | 114 | 10,581 | 117 | 10,684 | 118 | 10,944 | 121 |

DFL7/DFC7 Designer Flood LED

7" floodlights

LED Wattage and Lumen Values - 5000K

| Ordering Codes | Total LEDs | LED Current (mA) | Color Temp. (K) | Average System Wattage | SP | | RSP | | RM | | RN | | A33 | |
|-----------------------------|------------|------------------|-----------------|------------------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|
| | | | | | Lumen Output | Efficacy (LPW) | Lumen Output | Efficacy (LPW) | Lumen Output | Efficacy (LPW) | Lumen Output | Efficacy (LPW) | Lumen Output | Efficacy (LPW) |
| DFC7 or DFL7-16L-350-CW-G2 | 16 | 350 | 5000 | 20 | 2,892 | 145 | 2,618 | 131 | 2,684 | 134 | 2,709 | 135 | 2,776 | 139 |
| DFC7 or DFL7-16L-530-CW-G2 | 16 | 530 | 5000 | 28 | 3,788 | 135 | 3,429 | 122 | 3,515 | 126 | 3,549 | 127 | 3,635 | 130 |
| DFC7 or DFL7-16L-700-CW-G2 | 16 | 700 | 5000 | 38 | 4,631 | 123 | 4,193 | 111 | 4,298 | 114 | 4,339 | 115 | 4,445 | 118 |
| DFC7 or DFL7-16L-900-CW-G2 | 16 | 900 | 5000 | 47 | 5,634 | 119 | 5,101 | 108 | 5,228 | 110 | 5,279 | 111 | 5,408 | 114 |
| DFC7 or DFL7-16L-1050-CW-G2 | 16 | 1050 | 5000 | 55 | 6,385 | 115 | 5,781 | 104 | 5,925 | 107 | 5,983 | 108 | 6,129 | 110 |
| DFC7 or DFL7-16L-1200-CW-G2 | 16 | 1200 | 5000 | 62 | 7,116 | 115 | 6,442 | 104 | 6,604 | 106 | 6,668 | 107 | 6,830 | 110 |
| DFC7 or DFL7-32L-350-CW-G2 | 32 | 350 | 5000 | 36 | 5,751 | 160 | 5,206 | 145 | 5,337 | 148 | 5,388 | 150 | 5,519 | 153 |
| DFC7 or DFL7-32L-530-CW-G2 | 32 | 530 | 5000 | 54 | 7,600 | 141 | 6,881 | 127 | 7,053 | 131 | 7,121 | 132 | 7,295 | 135 |
| DFC7 or DFL7-32L-700-CW-G2 | 32 | 700 | 5000 | 71 | 9,347 | 132 | 8,462 | 120 | 8,674 | 123 | 8,758 | 124 | 8,971 | 127 |
| DFC7 or DFL7-32L-900-CW-G2 | 32 | 900 | 5000 | 90 | 11,402 | 126 | 10,323 | 114 | 10,581 | 117 | 10,684 | 118 | 10,944 | 121 |

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

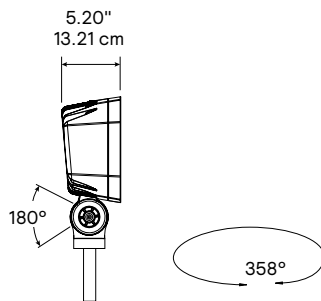
Predicted Lumen Depreciation Data

| Ambient Temperature °C | System Current | Calculated L ₇₀ hrs | L ₇₀ per TM21 | Lumen Maintenance @ 60,000hrs |
|------------------------|----------------|--------------------------------|--------------------------|-------------------------------|
| 25 °C | 1200 mA | >100,000 | >120,000 | 98% |

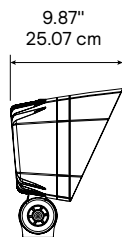
Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours.

Dimensions

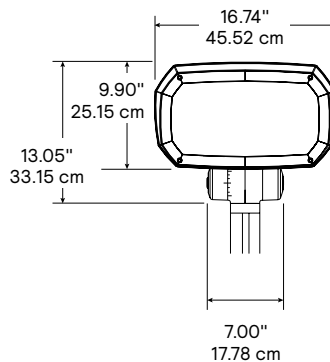
DFL7
Standard Flat Hood



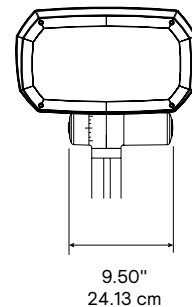
DFC7
Cutoff Hood



C Mounting
Stub-up Conduit Mount



ESB Option
Extended Splice Box
(for use with any Mounting
- C Mounting shown as an
example)

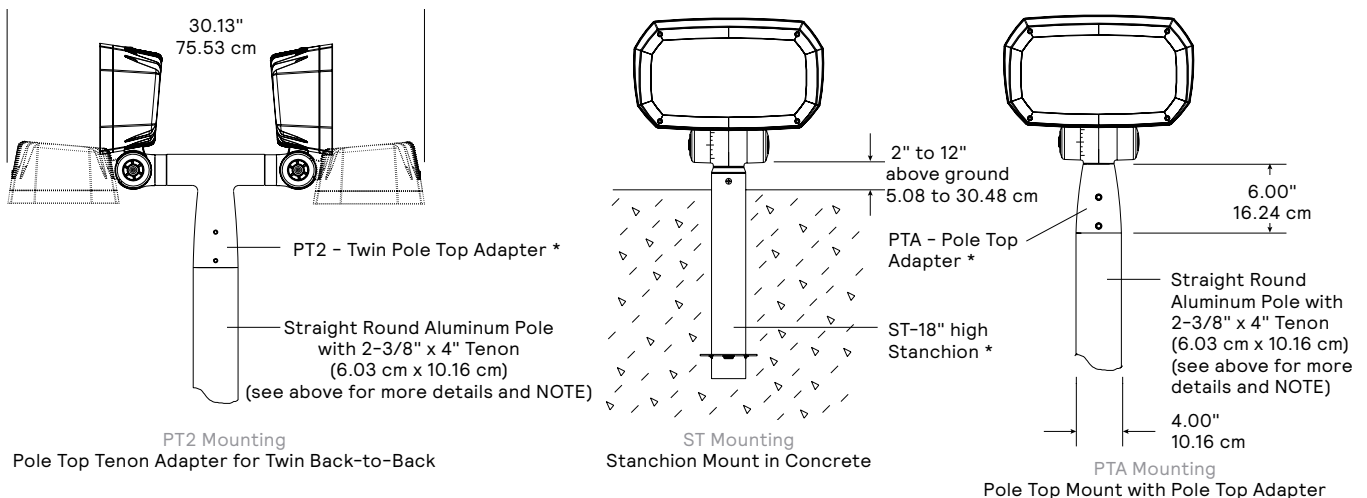
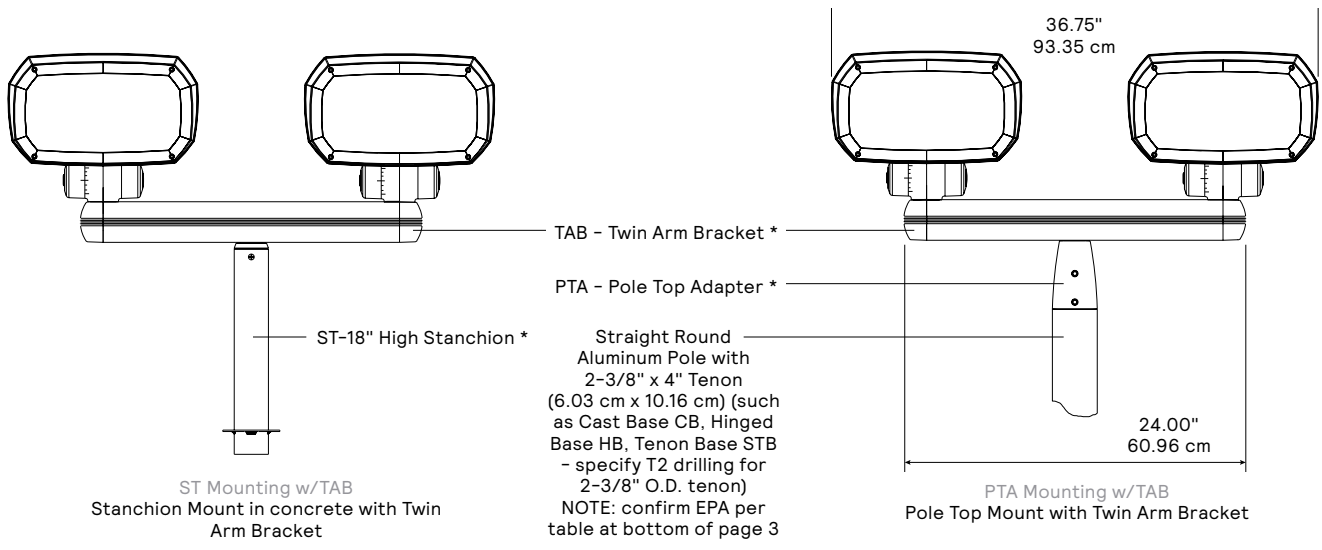
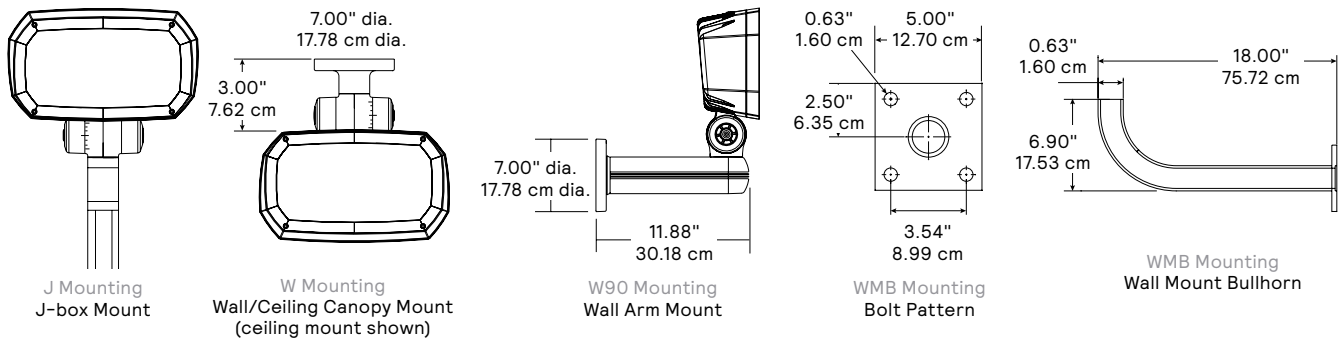


| Designer Flood LED 7" Pole Loading Data | EPA | |
|---|---|---|
| | DFL7 | DFC7 |
| Single Luminaire on PTA Adapter | 1.5 ft ² /0.14m ² | 1.8 ft ² /0.17m ² |
| Twin Luminaires on PTA Adapter | 2.1 ft ² /0.20m ² | 2.7 ft ² /0.25m ² |
| Twin Luminaires on TAB Adapter | 3.2 ft ² /0.30m ² | 3.9 ft ² /0.37m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

DFL7/DFC7 Designer Flood LED

7" floodlights

Dimensions



DFL7/DFC7 Designer Flood LED

7" floodlights

Specifications

Housing and Heat Sink

Single piece low copper die cast Aluminum alloy (A360) 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. 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.

IP66 Rating

IP66 rated luminaire in all aiming positions including up tilt aiming per ANSI C136.37 with seal around entire perimeter of the lens and electrical / driver compartment.

Knuckle

Up tilt aiming and down tilt aiming possible with all of the mounting accessories.
cULus Listed as suitable for mounting within 4' or 1.2m of the ground.
Low copper die cast Aluminum alloy (A360) for high resistance to corrosion. Integral cULus recognized Wet Location splice compartment for field wiring with seal around entire perimeter. A single captive 3/16" (.48cm) stainless steel allen head bolt and stainless steel nut securely lock the integral interlocking aiming teeth in 5' increments.

| 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.

Integrated Features

Please note that these integrated features always come with this luminaire standard at no additional cost. 0-10V dimming driver included as standard, dimming leads pre-wired to PCB controls option when selected. SP1: Surge protection device 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. Enhanced surge protection device SP2 20kV/10kA available as an option. Surge protection device wired in parallel so that if it fails open the luminaire will remain lit/powerd on.

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 board ensures greater heat transfer and longer lifespan.

LED Module

Composed of high performance white LEDs. Color temperature as per ANSI/NEMA bin 3000K nominal (3045K +/-175K) or 4000K nominal (3985K +/- 275K) or 5000K nominal (5029K +/- 283K), all CRI 70 min. / 75 typical.

Optical System

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 power factor of 90% min. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 or 347 to 480 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min). Driver enables setting LED drive current to meet your specific total wattage consumption, lumen output and/or efficacy needs - ETO Specials, contact factory.

Hardware and Seals

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 (false tripping) that can occur with fast acting fuses.

Finish

Five standard textured colors. RAL and custom color matching available - must contact factory prior to ordering, these are ETO Specials. 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.

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

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, Signify System Reliability Tool, Advance driver data and LED manufacturer LM-80/TM-21 data, expected to reach 100,000+ hours with L70 lumen maintenance @ 25°C. Luminaire Useful Life accounts for LED lumen maintenance AND all of these additional factors including: LED life, driver life, PCB substrate, solder joints, on/off cycles, burning hours and corrosion.

Certifications and Compliance

cULus Listed for Canada and USA, per UL1598 and UL8750, including suitable for mounting within 4' or 1.2m of the ground. Configurations are DesignLights Consortium qualified, consult DLC QPL Qualified Products List for more details. Luminaire complies with or exceeds the following ANSI C136 standards: .2, .3, .10, .15, .21, .22, .24, .25, .31, .32, .37, .41. 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 signify.com/warranties for details and restrictions.