



Gardco LED floodlight FX1 features sleek contemporary design with precision designed injection molded optics. The numerous optical distributions and three mounting options provide versatility for use in many outdoor lighting applications.

Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Lamps: _____ Qty: _____
 Notes: _____

Ordering guide

example: FX180G2TASPNA5EDASP1

Luminaire	Number of LEDs	Generation	Mounting	Finish	Distributions	LED Selection	Voltage	Drive Current	Photo Control ³	Dimming Control ⁴	Surge Suppression
FX1		G2									
FX1 LED floodlight	32^s 32 LEDs 48 48 LEDs 64 64 LEDs 80 80 LEDs	G2 Generation 2	T Tenon (1.5" - 2.375" O.D.) W Wall mount Y Yoke mount	A Black B White H Bronze I Gray	SP Spot (12" round) RSP Rectangular Spot RM Rectangular Medium Flood RN Rectangular Narrow Flood A33 Asymmetric 33" Flood	N Neutral White 4000K, 70 CRI C Cool White 5700K, 70 CRI W Warm White 3000K, 70 CRI	A 120-277 VAC (50/60Hz) B 347-480 VAC (50/60Hz)	3 350 mA 5 530mA 6^s 630mA 7^s 700mA	E³ 120 VAC Button Eye H³ 208/240/277 VAC Button Eye N None	Standard: DMG 0-10V Dimming Driver (controls by others) Optional DynaDimmer:¹ DA 4 Hrs 25% Reduction DB 4 Hrs 50% Reduction DC 4 Hrs 75% Reduction DD 6 Hrs 25% Reduction DE 6 Hrs 50% Reduction DF 6 Hrs 75% Reduction DG 8 Hrs 25% Reduction DH 8 Hrs 50% Reduction DJ 8 Hrs 75% Reduction DZ Custom Dimming Schedule N None	Standard: SP1 Standard 10kV 5kA Optional: SP2 Optional 20kV 10kA

- Available in 120-277VAC (A) only.
- The 700mA (7) drive current only available with 32LED (32) option.
- Button Eye photo control is not available for wall or yoke mount.
- If using dimming in conjunction with a motion sensor, consult factory.
- The 630mA (6) drive current is only available with 80LED (80) option and it is not available with 347-480VAC (B) voltage.
- 32LED (32): 350mA (3) or 530mA (5) available with 120-277VAC (A) only, 700mA available with both 120-277VAC (A) or 347-480VAC (B).

FX1 LED floodlight

Floodlights

Accessories

Shield Accessories

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

FX1-V Vandal Shield
FX1-G-(F) Glare Shield

Note: Can use Vandal Shield and Glare Shield together.

Mounting Accessories

(order separately, specify Finish at placeholder F)

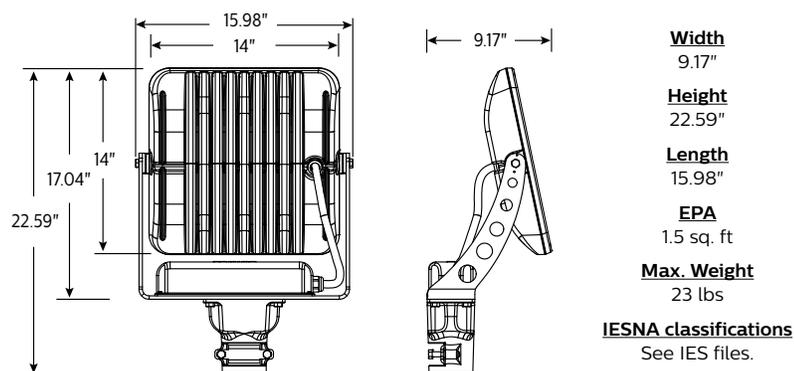
FX1-SM-(F) Stanchion Mount with 2-3/8" tenon
FX1-WBT-(F) Wall Mount Arm with 2-3/8" tenon (weight: 4 lbs, EPA: 0.25 sq.ft.)
FX1-RSB-2-(F) Twin Mount Bullhorn
FX1-RSB-3-(F) Triple Mount Bullhorn
FX1-RSB-3-120-(F) Triple Mount Bullhorn @ 120 degrees
FX1-RSB-4-(F) Quad Mount Bullhorn
FX1-RSB-4-90-(F) Quad Mount Bullhorn @ 90 degrees

LED Wattage and Lumen Values

Neutral White Ordering Codes	Total LEDs	LED Current (mA)	Color Temp. (K)	Average System Wattage ¹	SP		RSP		RM		RN		A33	
					Lumen Output ^{2,3}	Efficacy (LPW)								
FX132G2...N...3	32	350	4000	35	4554	129	4213	119	4118	116	4225	119	4295	121
FX132G2...N...5	32	530	4000	52	6422	124	5940	115	5807	112	5957	115	6056	117
FX132G2...N...7	32	700	4000	71	8397	118	7767	109	7593	107	7789	110	7919	111
FX148G2...N...3	48	350	4000	53	6889	130	6373	120	6230	118	6390	121	6497	123
FX148G2...N...5	48	530	4000	81	10088	125	9331	116	9122	113	9357	116	9513	118
FX164G2...N...3	64	350	4000	69	9170	133	8482	123	8293	121	8506	124	8648	126
FX164G2...N...5	64	530	4000	106	13402	127	12397	117	12119	115	12432	118	12639	120
FX180G2...N...3	80	350	4000	85	11335	134	10484	124	10250	121	10514	124	10689	126
FX180G2...N...5	80	530	4000	131	16622	127	15375	118	15031	115	15418	118	15675	120
FX180G2...N...6	80	630	4000	155	18781	121	17372	112	16983	110	17420	113	17711	115

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@signify.com for additional photometric tests or information.

Dimensions

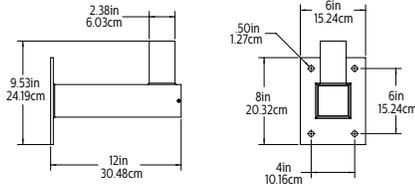


FX1 LED floodlight

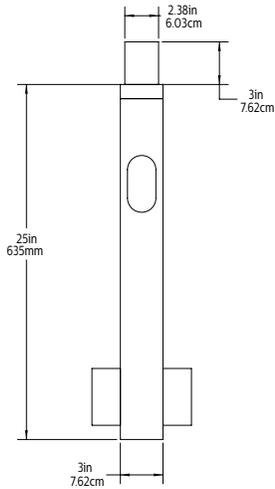
Floodlights

Dimensions

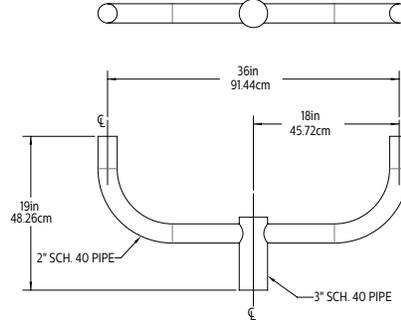
Wall Arm Mount



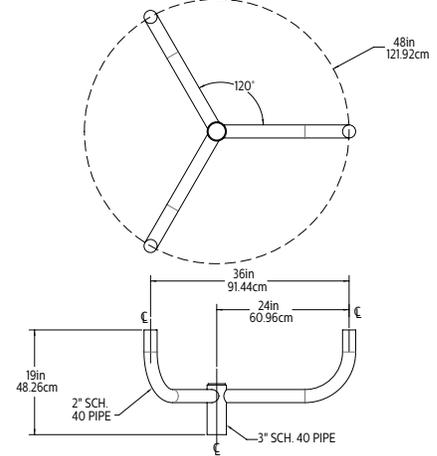
Stanchion Mount



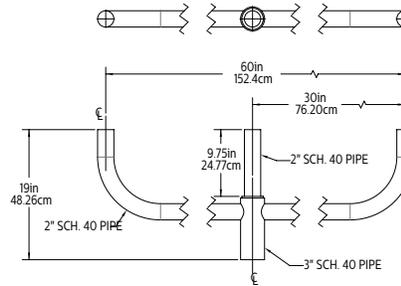
RSB-2



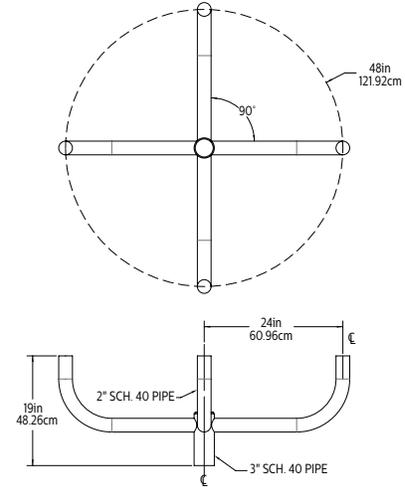
RSB-3-120



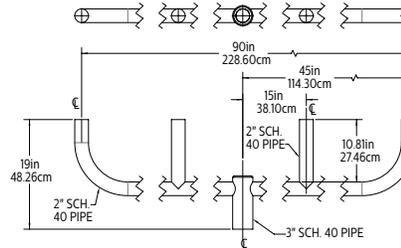
RSB-3



RSB-4-90



RSB-4



Specifications

Housing, Heat Sink and Lens Assembly

The housing is constructed of low copper die-cast aluminum with a sleek contemporary design and low EPA. The housing is a unique thermal dissipating design with wide channels that allow for natural removal of dirt and debris. The tempered glass lens is held in place with a low copper die cast aluminum lens frame and stainless steel hardware, one piece silicone gasket provides IP66 seal.

Mounting

The FX1 has three mounting options. Direct Yoke Mount, Tenon Mount, and Wall Mount. The direct yoke mount includes a 7/8" diameter center hole in the yoke, located under the driver box, for wiring and mounting to a 1/2-13 NPS x 1" long threaded nipple with locking nut (threaded nipple and locking nut not included). The tenon mount option includes a cast aluminum adaptor, cast from low copper aluminum allow for mounting to a 1.5" to 2.375" O.D. vertical tenon. The FX1 utilizes a single clamp mounting system made from HSLA structural steel that is zinc plated to protect against corrosion. The wall mount option

is similar to the direct yoke mount with the addition of a secondary, laser-cut aluminum mounting plate. The secondary mounting plate includes (4) 1/2" diameter holes for mounting to a wall surface and will cover a standard 4" x 4" square electrical junction box. 5/16" hex head lag bolts or similar can be used to secure fixture to wall surface (mounting fasteners not included) Aluminum mounting plate and yoke include 7/8" diameter center cut hole, located under the driver box, for wiring. The FX1 is field rotatable by 10 degree increments (180 degrees backward and 90 degrees forward) on a yoke which is formed from a 1/4" thick, laser-cut aluminum sheet.

FX1 LED floodlight

Floodlights

Specifications

LED Module

Composed of high performance white LEDs. Color temperatures as per ANSI/NEMA bin Warm White, 3000 Kelvin nominal (3045 +/- 175K or 2870K to 3220K), Neutral White, 4000 Kelvin nominal (3985 +/- 275K or 3710K to 4260K), or Cool White, 5700 Kelvin Nominal (5667 +/- 355K or 5312K to 6020K), CRI 70 Min. 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. RoHS compliant.

Optical System

Choice of Spot (SP), Rectangular Spot (RSP), Asymmetric 33° Flood (A33), Rectangular Narrow Flood (RN) and Rectangular Medium Flood (RM). 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

Driver comes standard with dimming compatible 0-10V. High power factor of 90%. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC or 347 to 480 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. Certified in compliance to UL1310 cULus requirement (dry and damp location). 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).

Predicted Lumen Depreciation Data

Ambient Temperature °C	System Current	Calculated L ₇₀ hrs ^{1,2}	L ₇₀ per TM21 ^{2,3}	Lumen Maintenance @ 60,000hrs
25 °C	630 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. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated per IESNA TM 21-11. Published L70 hours limited to 6 times actual LED test hours.

Finish

Thermoset polyester powdercoat is electrostatically applied after a five-stage conversion cleaning process and bonded by heat fusion thermosetting. Laboratory tested for superior weatherability and fade resistance in accordance with ASTM B117 specifications. Powdercoat is 3.0 - 6.0 mil thickness. Textured finish.

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) is available as an option.

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.

Wiring

#18 AWG wires provided for field wiring, at least 12" accessible. 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 and/or corrosion resistant. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

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, using LM-80 data from LED manufacturers and engineering prediction methods, the luminaire useful life is expected to reach 100,000+ hours with >L70 lumen maintenance @ 25°C. Luminaire useful life accounts for LED lumen maintenance and additional factors, including LED life, driver life, PCB substrate, solder joints on/off cycles and burning hours for nominal applications.

Vibration Resistance

FX1 meets the ANSI C136.31, American National Standard for Roadway and Area Lighting Luminaire Vibration specifications tested for over 100,000 cycles in each plane by an independent lab for Bridge/Overpass Applications 3G.

Options

Custom 0-10V dimming schedule (DZ) is available by contacting the factory. As an alternative, Wireless Controls options are also available - contact the factory for details.

IP Rating

Robust IP66 seal around the entire perimeter of the optical compartment. Flexible IP67 rated anti-wicking connector between optical and electrical compartments.

Certifications and Compliance

cULus Listed for Canada and USA. FX1 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 signify.com/warranties for details and restrictions. Visit our eCatalog or contact your local sales representative for more information.

