

Floodlight

Floodlights

FX2 LED

Gardco LED floodlight FX2 features a sleek design with precision injection molded optics. The numerous optical distributions provide versatility for use in many outdoor lighting applications.



Project:	
Location:	
Cat.No:	
Туре:	
Lamps:	Qty:
Notes:	

example: FX2160G2TAA33NA5EDDSP2

Ordering guide

Luminaire FX2	Number of LEDs	Generation	Mounting T	Finish	Distributions	LED Selection	Voltage	Drive Current	Photo Control ³	Dimming Control ⁴	Surge Suppression
FX2 LED floodlight	128 128 LEDs 160 160 LEDs	G2 Generation 2	T Tenon (1.5" - 2.375" O.D.)	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 ³ 630mA	E 120 VAC Button Eye H 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 6 Hrs 25% Reduction DE 6 Hrs 75% Reduction DF 6 Hrs 75% Reduction DG 8 Hrs 25% Reduction DG 8 Hrs 25% Reduction DJ 8 Hrs 75% Reduction DS 8 Hrs	Standard: SP1 Standard 10kV 5kA Optional: SP2 Optional 20kV 10kA

1. Available in 120-277VAC (A) only.

2. If using dimming in conjunction with a motion sensor, consult factory.

3. The 630mA (6) drive current is only available with 160LED (160) option

and it is not available with 347-480VAC (B) voltage.

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Accessories

· ·	ely, field installed,	Mounting Accessories (order separately, specify Finish at placeholder F)					
specify Finish at placeholder F)		FX1-WBT-(F)	Wall Mount Arm with 2-3/8" tenon (weight: 4 lbs, EPA: 0.25 sq.ft.)				
FX1-V	Vandal Shield	FX1-RSB-2-(F)	Twin Mount Bullhorn				
FX1-G-(F)	Glare Shield	FX1-RSB-3-(F)	Triple Mount Bullhorn				
Note: Can use Vandal Shield and		FX1-RSB-3-120-(F)	Triple Mount Bullhorn @ 120 degrees				
Glare Shield together. For FX2 order		FX1-RSB-4-(F)	Quad Mount Bullhorn				
quantity two (2) Accessories.		FX1-RSB-4-90-(F)	Quad Mount Bullhorn @ 90 degrees				

Note: Accessories have FX1 prefix, but are used with both FX1 and FX2, EXCEPT for SM which is FX1 only (not shown above).

LED Wattage and Lumen Values

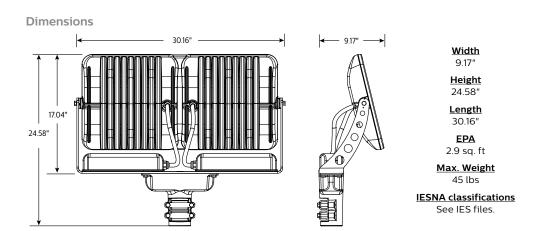
		LED	Color	Avgerage	SP		RSP		RM		RN		A33	
Neutral White Ordering Codes	Total LEDs	Current (mA)	Тетр . (К)	System Wattage ¹	Lumen Output ^{2,3}	Efficacy (LPW)								
FX2128G2N3	128	350	4000	139	17888	129	16100	116	16204	117	16399	118	17086	123
FX2128G2N5	128	530	4000	210	26087	124	23480	112	23632	112	23916	114	24918	118
FX2160G2N3	160	350	4000	171	22376	131	20140	118	20270	119	20513	120	21373	125
FX2160G2N5	160	530	4000	261	32771	126	29496	113	29687	114	30043	115	31302	120
FX2160G2N6	160	630	4000	311	37667	121	33903	109	34122	110	34532	111	35979	116

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.

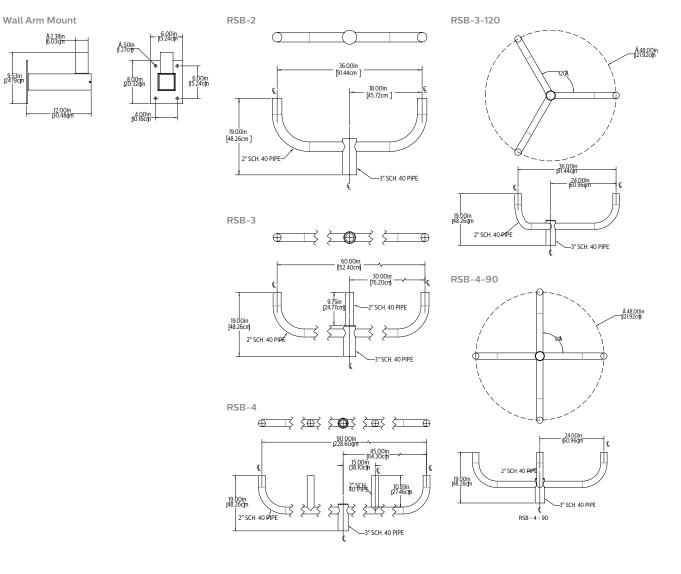
2. Lumen values based on photometric tests performed in compliance with IESNA LM-79.

 ${\tt 3. Contact outdoor lighting.applications@signify.com for additional photometric tests or information.}$



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Dimensions



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 FX2 has one mounting option, Tenon Mount. 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 FX2 utilizes a dual clamp mounting system made from HSLA structural steel that is zinc plated to protect against corrosion. The FX2 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.

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.

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Specifications

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).

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.

Predicted Lumen Depreciation Data

Ambient	System	Calculated	L ₇₀ per	Lumen Maintenance				
Temperature °C	Current	L ₇₀ hrs ^{1.2}	TM21 ^{2,3}	@ 60,000hrs				
25 °C	630 mA	>100,000	>60,000					

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.

Other Integrated Features

Surge Protection: Each luminaire is provided as standard with surge protector (designed SPI) 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

FX2 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 Normal Applications 1.5G.

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. FX2 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.

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200 Franklin Square Drive, Somerset, NJ 08873 Tel. 855-486-2216 Signify, Canada Ltd., 281 Hillmount Rd, Markham, ON Canada L6C 2S3 Tel. 800-668-9008