



Gardco SoftView LED parking garage luminaires feature edge lit technology, providing visual comfort with minimal glare to enhance the user experience. An added uplight feature reduces the cave effect for an increased sense of security. SoftView features multiple optical distributions, lumen packages and mounting options providing you with the ideal solution for your garage lighting needs. Optional emergency battery backup available for path of egress lighting and is integral to the luminaire.

Project: _____

Location: _____

Cat.No: _____

Type: _____

Lamps: _____ Qty: _____

Notes: _____

Ordering guide

example: SVPG-140L-2100-NW-G2-SM-5-BL-IMRI2-MGY

Luminaire	Number of LEDs	Drive Current	Color Temperature	Mounting	Distribution	Emergency	Voltage	Options			Finish
								Dimming controls	Motion sensing	Electrical	
SVPG	140L										
SVPG SoftView Parking Garage	140L 140 LEDs (comfort engine)	450 450mA 800 800mA 1200 1200mA 1675 1675mA 2100 2100mA	WW-G2 Warm White 3000K (70 CRI) Generation 2 NW-G2 Neutral White 4000K (70 CRI) Generation 2 CW-G2 Cool White 5000K (70 CRI) Generation 2 WY-G2 Warm Yellow 2700K (80 CRI) Generation 2 ⁵ BW-G2 Balanced White 3500K (80 CRI) Generation 2 ⁵	SM Surface / Pendant Mount (<i>pendant and junction box by others</i>) T¹⁵ Trunnion Mount (<i>ordered separately, see Accessories</i>) WM Wall Mount (<i>ordered separately, see Accessories</i>)	1R Type I/R Rectangular 3⁴ Type III Asymmetric 5 Type V CD Concentrated Downlight	NONE Leave Blank EBP^{12,3,7} Emergency Battery pack EBPC^{12,4,7,13} Emergency Battery pack cold rated	120 120V 208 208V 240 240V 277 277V UNV Universal 120-277V 347 347V 480 480V HVU Universal 347-480V	NONE Leave Blank DD^{9,10,13,14} 0-10V Dimming external leads (controls by others) BL^{10,11,14} Bi-level with motion sensor LLC^{6,7,10,11,14} Wireless Controls	NONE Leave Blank IMRI2¹² Integral Motion Response, #2 lens IMRI3¹² Integral Motion Response, #3 lens (<i>factory customizable, contact factory⁵</i>)	Fusing F1⁸ Single Fuse (120, 277, 347V) F2⁸ Double Fuse (208, 240, 480V) F3⁸ Double Fuse Canadian double pull (208, 240, 480V) Surge Protection blank SP1 10KV 5KA (standard) SP2 20KV 10KA (option)	BZ Bronze MGY Medium Gray WH White OC Optional Color Specify optional color or RAL ex: OC-LGP or OC-RAL7024. SC Special Color Must supply color chip. Requires factory quote.

- Choose either **EBP** suitable for 0°C (32°F) to +40°C (+104°F) or **EBPC** suitable for -20°C (-4°F) to +40°C (+104°F).
- Not available with **347V, 480V** or **HVU**
- Not available with 1200mA, 1675mA or 2100mA.
- Not available with 2100mA.
- Extended lead times apply. Contact factory for details.
- Not available with Emergency options (**EBP, EBPC**).
- Available with **120V, 208V, 240V, 277V** or **UNV** only.
- Provide specific input voltage.
- Luminaire includes 0-10V dimming wires for dimming control by others.
- 0-10V dimming driver standard.
- Must be combined with Motion Sensing option (**IMRI2** or **IMRI3**).
- Must be combined with Dimming Controls option (**BL** or **LLC**).
- Not available with Motion Sensing.
- Not available with other Dimming Controls.
- Trunnion Mount (**T**) not available with both **DD** and **EBP** or **EBPC**; is available with each individually (**DD** or **EBP** or **EPBC**).

SVPG SoftView LED

Garage & Canopy – Parking Garage Luminaires

Accessories (ordered separately)

FSIR-100 Hand-held programmer (For use with 'IMRI2' and 'IMRI3' motion response when field programming is required). If desired, only one is needed per job.

ES External House Side Shield (field installed)

SVPG-G2-TM-(F) Trunnion Mount kit (field installed)

SVPG-G2-WM-(F) Wall Mount (field installed)

(F) = specify finish

BXC Bird excluding coil (field installed, fits on all mounting options)

BXK Bird excluding spikes (field installed, fits on Pendant, Trunnion, and Wall mounts only)

BXS Bird excluding shroud (field installed, fits on Pendant mount only)

LED wattage and lumen values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 1R		Type 3		Type 5		Type CD	
					Lumen Output	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Lumen Output	Efficacy (LPW)
SVPG-140L-450-NW-G2-x	140	450	4000K	22	2,223	101	2,366	107	2,395	108	2,522	114
SVPG-140L-800-NW-G2-x	140	800	4000K	37	3,854	105	4,103	111	4,153	113	4,374	119
SVPG-140L-1200-NW-G2-x	140	1200	4000K	54	5,563	103	5,921	110	5,994	111	6,312	117
SVPG-140L-1675-NW-G2-x	140	1675	4000K	76	7,484	99	7,967	106	8,065	107	8,494	112
SVPG-140L-2100-NW-G2-x	140	2100	4000K	95	8,960	95	9,538	101	9,655	102	10,168	107
SVPG-140L-450-WW-G2-x	140	450	3000K	22	2,146	97	2,285	103	2,313	105	2,436	110
SVPG-140L-800-WW-G2-x	140	800	3000K	37	3,722	101	3,962	108	4,010	109	4,223	115
SVPG-140L-1200-WW-G2-x	140	1200	3000K	54	5,371	100	5,718	106	5,788	107	6,095	113
SVPG-140L-1675-WW-G2-x	140	1675	3000K	76	7,227	96	7,693	102	7,788	103	8,202	109
SVPG-140L-2100-WW-G2-x	140	2100	3000K	95	8,652	91	9,210	97	9,323	98	9,818	104
SVPG-140L-450-CW-G2-x	140	450	5000K	22	2,324	105	2,474	112	2,505	113	2,638	119
SVPG-140L-800-CW-G2-x	140	800	5000K	37	4,031	110	4,291	117	4,343	118	4,574	124
SVPG-140L-1200-CW-G2-x	140	1200	5000K	54	5,817	108	6,193	115	6,269	116	6,602	122
SVPG-140L-1675-CW-G2-x	140	1675	5000K	76	7,827	104	8,332	110	8,434	112	8,883	118
SVPG-140L-2100-CW-G2-x	140	2100	5000K	95	9,370	99	9,975	105	10,097	107	10,634	112

Emergency mode:

Ordering Code	Lumen output	Maximum mounting height
SVPG-140L-xxx-NW-G2-5-EBP	1696	14.8 ft
SVPG-140L-xxx-NW-G2-5-EBPC	2293	16.7 ft

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.

For emergency **EBP** and **EBPC** options, published values are based on initial lumens. It is highly recommended to confirm with a photometric layout that emergency performance meets your applicable ordinances.

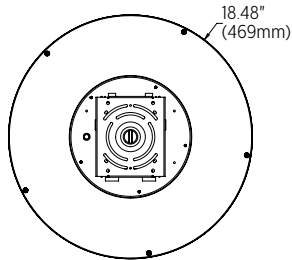
SVPG SoftView LED

Garage & Canopy – Parking Garage Luminaires

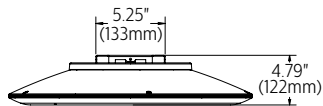
Dimension drawings

Surface / Pendant mount

Top view



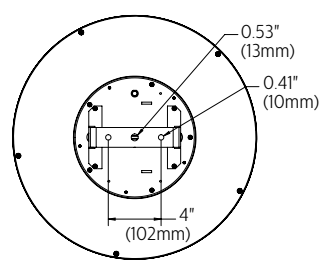
Side view



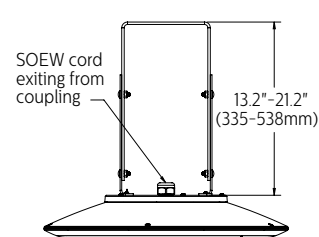
SoftView LED	Weight
Luminaire	8.2 lbs (3.7 Kg)
Luminaire with EBP	10.7 lbs (4.9 Kg)
Luminaire with EBPC	14.2 lbs (6.4 Kg)

Trunnion mount

Top view

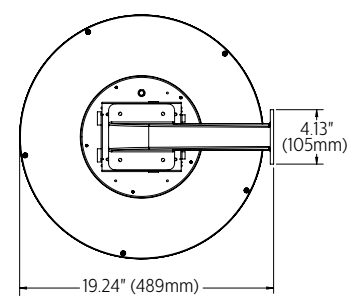


Side view

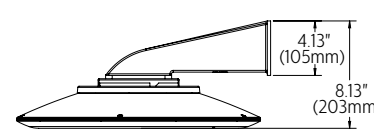


Wall mount

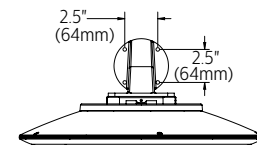
Top view



Side view

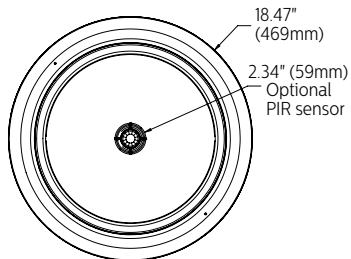


Front view

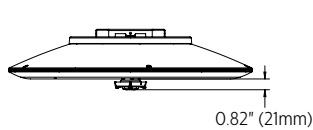


Motion response and wireless controls

Bottom view

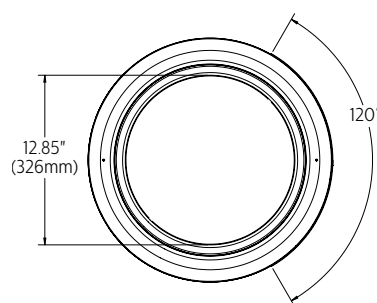


Side view

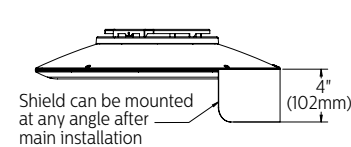


External house side shield

Bottom view

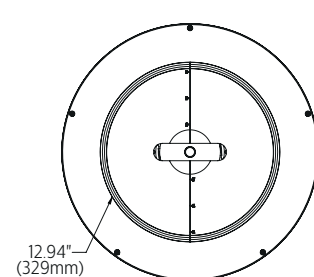


Side view

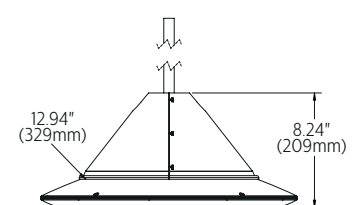


BXS Bird excluding shroud

Top view



Side view



SVPG SoftView LED

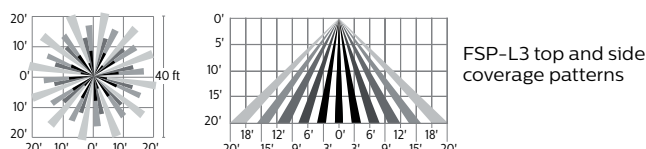
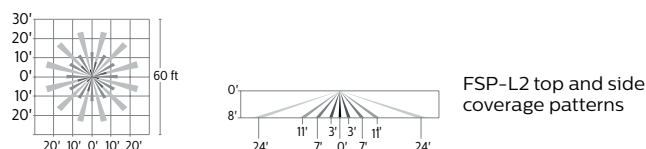
Garage & Canopy – Parking Garage Luminaires

Programmable motion response

SoftView luminaires with Programmable Motion Response (IMRI2 or IMRI3) include a passive infrared (PIR) motion sensor (WattStopper FSP-211 or FSP-221B) available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges (see charts below for approximate detection patterns). The PIR sensor is factory installed and integral to the luminaire as indicated in drawings on page 3. Motion sensor standby power is 0.5 watts.

Programmable Motion Response (IMRI2 or IMRI3) luminaires are programmed at the factory as follows: when no motion is detected for 10 minutes, the Motion Response system reduces the wattage by 80%, to 20% (per RP-20) of the normal constant wattage, reducing the light level accordingly. When motion is detected by the PIR, the luminaire returns to full wattage and full light output. Dimming on low is factory set to 80% with duration set at 10 minutes. Factory customizable luminaires are programmed at the factory per your custom requirements. Both IMRI2 and IMRI3 include a daylight sensor which enables daylight harvesting ; product ships with daylight harvesting disabled – enable in the field using FSIR-100 programming tool.

The approximate motion sensor coverage pattern is as shown below.



FSIR-100 Wireless Remote Programming Tool

If you want to change the factory programming, the FSIR-100 Wireless Remote Programming Tool accessory enables on-site field adjustment of sensor settings, including duration and dimming level on low, without the need to connect any wires to the luminaire.

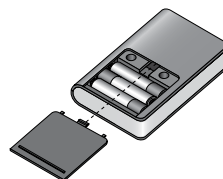
The FSIR-100 is a handheld tool that provides wireless access to the FSP-211 sensors for setup, testing and parameter changes.

The FSIR-100 display shows menus and prompts to lead you through each process. The navigation pad provides a familiar way to navigate through the customization fields.

Within 8-12' mounting height of the sensor, the FSIR-100 allows modification of the system without requiring ladders or tools simply with a touch of a few buttons.

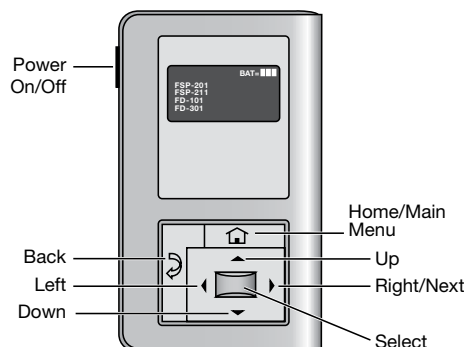
The FSIR-100 IR transceiver allows bi-directional communication between the FSP-211 and the FSIR-100 programming tool. Simple menu screens let you see the current status of the system and make changes. It can change FSP-211 sensor parameters such as high/low mode, sensitivity, time delay, cut off and more. With the FSIR-100 you can also establish and store FSP-211 parameter profiles.

The FSIR-100 operates on three standard 1.5V AAA Alkaline batteries or three rechargeable AAA NiMH batteries. The battery status displays in the upper right corner of the display. Three bars next to BAT= indicates a full battery charge. A warning appears on the display when the battery level falls below a minimum acceptable level. To conserve battery power, the FSIR-100 automatically shuts off 10 minutes after the last key press.



You navigate from one field to another using (up) or (down) arrow keys. The active field is indicated by flashing (alternates between yellow text on black background and black text on yellow background.)

Once active, use the Select button to move to a menu or function within the active field. Value fields are used to adjust parameter settings. They are shown in “less-than/greater-than” symbols: <value>. Once active, change them using (left) and (right) arrow keys. In general the up key increments and the down key decrements a value. Selections wrap-around if you continue to press the key beyond maximum or minimum values. Moving away from the value field overwrites the original value. The Home button takes you to the main menu. The Back button can be thought of as an undo function. It takes you back one screen. Changes that were in process prior to pressing the key are lost.

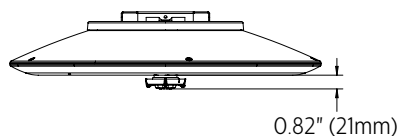


More information on the FSIR-100 Remote Programming Tool is available at wattstopper.com.

SVPG SoftView LED

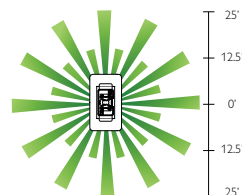
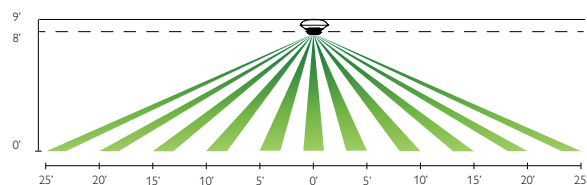
Garage & Canopy – Parking Garage Luminaires

Radio and motion sensor details



- Motion sensor coverage can be adjusted from a narrow to a wide (25' radius) detection range, which helps reduce false triggers to further increase energy savings.
- 1.8 Watts max (no load draw)
- Operating voltage 120-277 VAC RMS
- Communicates using the ZigBee protocol
- Carries out dimming commands from Gateway
- Reports ambient light readings to 1500 Ft-Cd
- Transmission Systems Operating within the band 2400-2483.5Mhz
- ROHS Compliant
- Sensing profiles can be updated to adapt to activity levels in the environment, such as occupancy level, wind, and mounting height.

Typical Sensor Coverage



Garage & Canopy – Parking Garage Luminaires

Specifications

Construction

Die-cast aluminum lower housing. Upper polycarbonate lens provides uplight, tapered shape of upper housing deters dirt accumulation, eases cleaning frequency, and deters birds from sitting or nesting. UV-resistant acrylic lower lens. Upper bracket and light engine frame are clear anodized Aluminum.

IP Rating

IP66 rated luminaire with seal around entire perimeter of the lens..

LED Thermal management

The luminaire design provides excellent thermal management critical to long LED, driver and system life.

Light engine

Edge-lit, light guide technology provides low-glare, uniform illumination. Composed of 140 mid power LEDs. Color temperatures per ANSI/NEMA bin Warm White 3000K nominal (3045 +/-175K), Neutral White 4000K nominal (3985 +/- 275K), or Cool White 5000K nominal (5029 +/- 283K). Minimum CRI of 70. 2700K 80CRI or 3500K 80CRI available – extended lead times apply, contact factory for details. LEDs tested by ISO 17025 accredited lab in accordance with IESNA LM-80 guidelines, extrapolations in accordance with IESNA TM-21.

Optical system

Type 1R Rectangular, Type 3 Asymmetric, Type 5 Symmetrical and Concentrated Downlight (CD) distributions available, designed for compliance to IES RP-20. Consider Type 1R for one luminaire per bay applications and ramps, Type 3 for wall mount applications and perimeter mounted luminaires to throw light into parking garage away from property line (LEED compliance, property cut-off, avoid light trespass), Type 5 for general use in parking bays, Concentrated Downlight and/or higher lumen configurations when enhanced lighting is required for entries and exits, ramps, payment areas, lobbies and waiting areas, etc. and for security lighting per IES G-1. Uplight (up to 4%) provided with Type 1R, Type 3 and Type 5 to eliminate cave effect; almost no uplight (<1%) available – extended lead times apply, contact factory for details.. Almost no uplight (<1%) provided with Type CD. Light guide plate composed of high performance optical grade PMMA (polymethyl methacrylate) acrylic. Light guide technology allows for optimal light distribution without direct view of the LEDs, providing low-glare, uniform illumination and visual comfort. Performance tested per LM-63 and LM-79 (IESNA) certifying its photometric performance.

Electrical

UL Class 2 constant current driver. High power factor (0.9 minimum except 450mA at 277V or 480V = 0.75 minimum). 50/60 Hz . Low THD (20% maximum except 450mA at 277V or 480V >20%). Ambient temperature range: -40°C (-40°F) to +40°C (+104°F). Open/short circuit protection and voltage overload protection, automatic recovery after correction. Driver comes standard with 6KV on-board surge protection. Dimming driver standard. 0-10V dimming to minimum 10% power. RoHS compliant. Surge protector standard and 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. Optional enhanced surge protector 20KV/10KA also available. When Emergency options **EBP** or **EBPC** are selected, two surge protectors are provided for complete protection – one for unswitched hot line and one for switched hot line.

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..

Mounting

For Surface Mount (**SM**) option, a die formed 16 ga. galvanized steel plate is supplied for mounting to a recessed or surface-mounted 4" (10.16 cm) junction box (by others) – flush ceiling mount to a recessed junction box, or direct mount to a surface-mounted junction box. Integral hanger tabs on the plate support the luminaire during wiring. Single screw secures luminaire for quick and easy installation. Surface Mount (**SM**) includes minimum 36" of 16AWG wires that exit the luminaire. For pendant mounting, order Surface Mount (**SM**) and mount to a wet location junction box (by others) which you then direct mount onto rigid pendant (by others). Trunnion Mount (**TM**) option is designed to mount to a concrete ceiling with an anodized aluminum trunnion bracket assembly (order separate line item accessory, painted to match luminaire finish). Trunnion Mount (**TM**) includes SEOW cord that exits the luminaire. The assembly permits (8) one inch incremental mounting height adjustments, ranging from 13 to 21 inches. Wall Mount (**WM**) option is designed to anchor directly on a wall with wall bracket assembly (order separate line item accessory, painted to match luminaire finish), includes minimum 36" of 16AWG wires that exit the luminaire.

Controls

Motion Response luminaires (IMRI2 and IMRI3) include a passive infrared (PIR) motion sensor. Motion sensor standby power is 0.5 watts. In Motion Response luminaires, when no motion is detected for 10 minutes, the Motion Response system reduces the wattage by 80%, to 20% of the normal constant wattage perRP-20, reducing the light level accordingly. When motion is detected by the PIR, the luminaire returns to full wattage and full light output. Includes a daylight sensor which enables daylight harvesting. Wireless Remote Programming tool available (FSIR-100) for field programming (ordered separately).

Wireless controls also available, which combine the intelligence of motion and daylight sensing with wireless technology, allowing you to connect with your lighting system via the web.

Vibration resistance

Surface Mount (**SM**) 1.5G vibration rating conforms to the standards set forth by ANSI C136.31. Tested in all three axes, all performed on the same luminaire. When 3G is required, contact Quotations for modified mounting bracket (available upon request).

Emergency battery backup

Optional internal emergency battery pack immediately detects AC power loss then provides emergency light output for a minimum of 90 minutes when power is lost compliant with UL 924/CSA22.2 No. 141 and NFPA 101 Life Safety Code path of egress requirements. Integral so there is a consistent look between emergency and non-emergency luminaires, separate accessory box is not required. **EBP** suitable for use in ambient temperature conditions from 0°C (+32°F) to +40°C (+104°F). **EBPC** suitable for use in ambient temperatures from -20°C (-4°F) to +40°C (+104°F). **EBP** and **EBPC** are not available for use with **347V**, **480V** or **HVU**. **EBP** and **EBPC** always include surge protection for both the switched and unswitched lines to ensure complete protection

IK Rating

IK10 high impact resistance rating for both the upper lens and the lower lens.

Garage & Canopy – Parking Garage Luminaires

Specifications (continued)

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (**TGIC**) textured polyester powdercoat finish on lower housing.

Standard textured finishes include: **BZ** – Bronze Textured, **WH** – White Textured, **MGY** – Medium Gray Textured. Consult factory for specs on optional (**OC**) or custom (**SC**) colors. All exposed surfaces achieve a minimum of 1000 hours Salt Fog Test for corrosion in accordance with the ASTM B117 standard.

Hardware and Seals

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.

LED Products

Manufacturing Standard

The electronic components sensitive to electrostatic discharge (**ESD**) such as 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.

LED 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. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, LED LM-80/TM-21 data, driver lifetime data, and System Reliability Tool.

Listings

cULus Listed for Canada and U.S. to the UL 1598 standard, suitable for Wet Locations. Suitable for use in ambients from -40°C (-40°F) to +50°C (+122°F) up to 1675mA, to +40°C (+104°F) for 2100mA. The quality systems of the facility where manufactured have been registered by UL to the ISO 9001 series standards. Emergency Battery Backup options (**EBP** and **EBPC**) are tested and listed emergency lighting devices per UL 924 and CSA 22.2 No. 141. SoftView configurations are DesignLights Consortium qualified, consult DLC QPL Qualified Products List for more details.

Limited Warranty

5-year limited warranty. See signify.com/outdoorluminaires for complete details and exclusions.

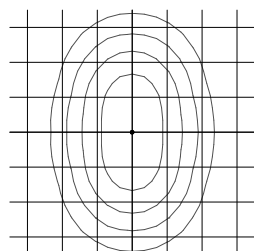
LED Performance:

PREDICTED LUMEN DEPRECIATION DATA				
Ambient Temperature °C	System Current	Calculated L ₇₀ Hours ^{1,2}	L ₇₀ Per TM-21 ^{2,3}	Lumen Maintenance % @ 60,000 hours
25°C	up to 2100mA	>100,000	>60,000	83%

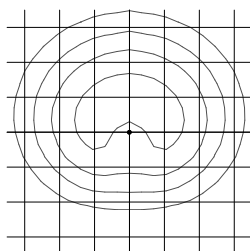
1. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
2. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated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

Optical Distributions

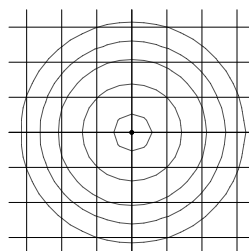
Based on 10' mounting height



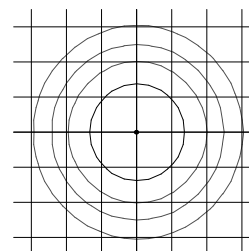
Type 1R



Type 3



Type 5



Type CD

