Wall Mount

PureForm

LED wall sconce

Gardco PureForm LED wall sconce PWS with precision optics offers a sleek, low profile design that will complement a range of architectural styles. PureForm wall sconce provides up to 21,800 lumens to accommodate multiple mounting heights, and is available with Type 2, 3, 4, as well as our back light control optics. A full range of control options is available for additional energy savings. Optional emergency battery backup option is available for path-of-egress and is integral to the luminaire.

Project:

Location:

Cat.No:

Type:

Lamps: Qty:

Notes:

Ordering guide

Example: PWS-48L-500-NW-G2-2-UNV-DGY

Prefix **PWS**	Number of LEDs	Drive Current		LED Color – Generation	Distribution		Emergency	Voltage	
PWS PureForm wall sconce	48L 48 LEDs	300 400 500 600 700	300mA[1] 400mA 500mA 600mA 700mA	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 [2] BW–G2 Balanced White 3500K, 80CRI Generation 2 [2] AM–G2 Direct Amber (590nm) Generation 2 [2,14]	2 3 4 BLC	Type 2 Type 3 Type 4 Back light control	EBPC Emergency Battery Pack Cold Weather [1,3,10] Leave blank to omit an emergency option	UNV 120–277V HVU 347–480V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V	
	64L 64 LEDs	600 700 800 900	600mA 700mA 800mA 900mA						

Options

Dimming controls	Motion-sensing lens		Photo-sensing	Options		Finish	
DD 0-10V External dimming (controls by others) [4] **DCC** Dual Circuit Control [4,5,6,9] **FAWS** Field Adjustable Wattage Selector [4,5] **DynaDimmer: Automatic Profile Dimming** [4,7] **CS50** Security 50% Dimming, 7 hours **CM50** Median 50% Dimming, 8 hours **CS30** Security 30% Dimming, 7 hours **CM30** Median 30% Dimming, 8 hours			**PCB** Photocontrol Button [7,8,12]	**Fusing** **F1** Single (120, 277, 347VAC) [8] **F2** Double (208, 240, 480VAC) [8] **F3** Canadian Double Pull (208, 240, 480VAC) [8] **Surge Protection (10kA is standard)** **SP2** Increased 20kA **BAC**[15] Meets the requirements of the Buy American Act of 1933 (BAA)		**Textured** **BK** Black **WH** White **BZ** Bronze **DGY** Dark Gray **MGY** Medium Gray **Customer specified** **RAL** Specify optional color or RAL (ex: RAL7024) **CC** Custom color (Must supply color chip for required factory quote)	
BL Bi-level functionality [12,13]	**IMRI2** Integral with #2 lens **IMRI3** Integral with #3 lens						
WIAP Wireless Interact (includes SR driver and SR receptacle) [4,12]	**LB** (7'-15' mounting height) sensor, Black color housing Wirless Interact, integral **LW** (7'-15' mounting height) sensor, White color housing						

1. Only 300mA can be used with battery backup (EBPC) configuration.
2. Extended lead times apply. Contact factory for details.
3. Not available with other dimming control options.
4. Not available with motion sensor.
5. Not available with photocontrol.
6. Not available in 347 or 480V.
7. Must specify input voltage.
8. Available with two modules per circuit (64L) at 600mA.
9. Not available with DCC and CS/CM.
10. Not available in 800 or 900mA.
11. Not available with 64L.
12. Must specify a motion sensor lens.
13. Limited to max. 600mA configurations.
14. Not available with DD, DCC, and FAWS dimming control options.
15. Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.
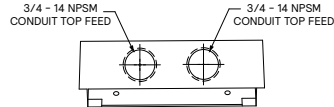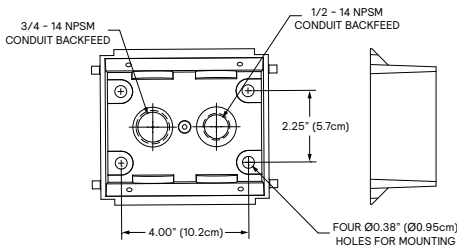16. Consult Signify to confirm whether specific accessories are BAA-compliant.

PWS PureForm LED wall sconce

Wall mount

PureForm PWS Accessories[16] (ordered separately)

Mounting Accessories

PWS-WS-G2 Wall mounted box for surface conduit painted black

3/4 – 14 NPSM
CONDUIT BACKFEED

1/2 – 14 NPSM
CONDUIT BACKFEED

2.25" (5.7cm)

4.00" (10.2cm)

FOUR Ø0.38" (Ø0.95cm)
HOLES FOR MOUNTING

3/4 – 14 NPSM
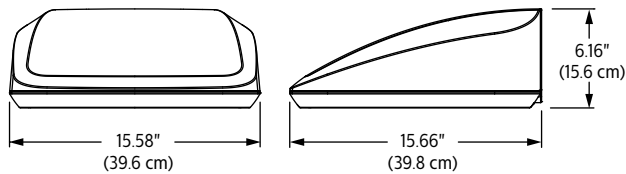CONDUIT TOP FEED

3/4 – 14 NPSM
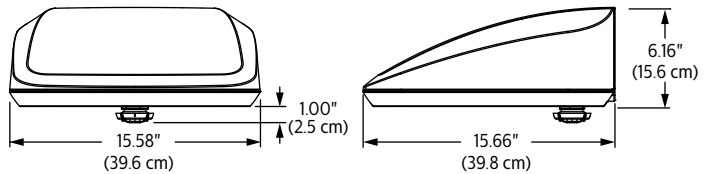CONDUIT TOP FEED

Controls Accessories

IRT9015 Handheld remote for grouping and configuration of Wireless Interact WIAP (at least 1 required per site or use the Interact Pro App).
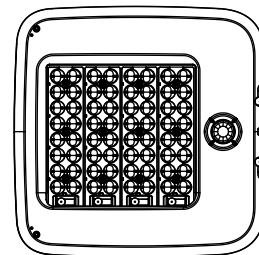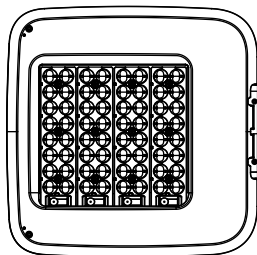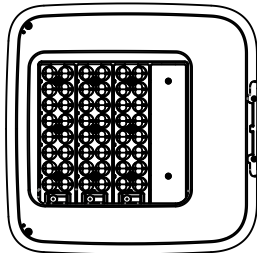
Dimensions

Standard Luminaire

6.16"
(15.6 cm)

15.58"
(39.6 cm)

15.66"
(39.8 cm)

Motion Response and Wireless System

6.16"
(15.6 cm)

1.00"
(2.5 cm)

15.58"
(39.6 cm)

15.66"
(39.8 cm)

4 modules

3 modules

Luminaire Weights

PureForm LED wall sconces PWS	Weight
Luminare	24 lbs
Luminaire – EBPC (EM battery pack)	27 lbs

PWS   PureForm LED wall sconce

Wall mount

LED Wattage and Lumen Values – 3000K

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Average System Watts	Type 2 Lumen Output	Type 2 BUG Rating	Type 2 Efficacy (LPW)	Type 3 Lumen Output	Type 3 BUG Rating	Type 3 Efficacy (LPW)	Type 4 Lumen Output	Type 4 BUG Rating	Type 4 Efficacy (LPW)	BLC BUG Rating	BLC Efficacy (LPW)
PWS-48L-300-WW-G2-x	48	300	3000	47	5755	B2-U0-G1	123	5667	B1-U0-G2	121	5744	B1-U0-G2	123	B0-U0-G1	94
PWS-48L-400-WW-G2-x	48	400	3000	61	7469	B2-U0-G2	122	7357	B1-U0-G2	120	7455	B1-U0-G2	122	B0-U0-G2	93
PWS-48L-500-WW-G2-x	48	500	3000	76	9072	B2-U0-G2	120	8935	B2-U0-G2	118	9056	B2-U0-G2	119	B0-U0-G2	92
PWS-48L-600-WW-G2-x	48	600	3000	91	10657	B2-U0-G2	117	10496	B2-U0-G2	115	10637	B2-U0-G2	117	B1-U0-G2	90
PWS-48L-700-WW-G2-x	48	700	3000	105	12339	B3-U0-G2	118	12154	B2-U0-G2	116	12317	B2-U0-G2	117	B1-U0-G2	90
PWS-64L-600-WW-G2-x	64	600	3000	118	14257	B3-U0-G2	121	14043	B2-U0-G3	120	14231	B2-U0-G3	121	B1-U0-G2	93
PWS-64L-700-WW-G2-x	64	700	3000	137	16076	B3-U0-G3	117	15834	B2-U0-G3	115	16046	B2-U0-G3	117	B1-U0-G2	90
PWS-64L-800-WW-G2-x	64	800	3000	158	17922	B3-U0-G3	113	17653	B3-U0-G3	112	17889	B3-U0-G3	110	B1-U0-G3	87
PWS-64L-900-WW-G2-x	64	900	3000	179	19692	B3-U0-G3	110	19396	B3-U0-G3	108	19656	B3-U0-G3	108	B1-U0-G3	84

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.

LED Wattage and Lumen Values – 4000K

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Average System Watts	Type 2 Lumen Output	Type 2 BUG Rating	Type 2 Efficacy (LPW)	Type 3 Lumen Output	Type 3 BUG Rating	Type 3 Efficacy (LPW)	Type 4 Lumen Output	Type 4 BUG Rating	Type 4 Efficacy (LPW)	BLC BUG Rating	BLC Efficacy (LPW)
PWS-48L-300-NW-G2-x	48	300	4000	47	6394	B2-U0-G1	137	6298	B1-U0-G2	135	6386	B1-U0-G2	136	B0-U0-G1	105
PWS-48L-400-NW-G2-x	48	400	4000	61	8299	B2-U0-G2	135	8175	B1-U0-G2	133	8290	B1-U0-G2	135	B0-U0-G2	104
PWS-48L-500-NW-G2-x	48	500	4000	76	10080	B2-U0-G2	133	9929	B2-U0-G2	131	10072	B2-U0-G2	133	B0-U0-G2	102
PWS-48L-600-NW-G2-x	48	600	4000	91	11841	B3-U0-G2	130	11664	B2-U0-G2	128	11833	B2-U0-G2	130	B1-U0-G2	100
PWS-48L-700-NW-G2-x	48	700	4000	105	13710	B3-U0-G2	131	13505	B2-U0-G2	129	13702	B2-U0-G3	130	B1-U0-G2	100
PWS-64L-600-NW-G2-x	64	600	4000	118	15841	B3-U0-G3	135	15603	B2-U0-G3	133	15814	B2-U0-G3	135	B1-U0-G2	103
PWS-64L-700-NW-G2-x	64	700	4000	137	17862	B3-U0-G3	130	17594	B3-U0-G3	128	17830	B3-U0-G3	130	B1-U0-G2	100
PWS-64L-800-NW-G2-x	64	800	4000	158	19913	B3-U0-G3	126	19614	B3-U0-G3	124	19878	B3-U0-G4	126	B1-U0-G3	97
PWS-64L-900-NW-G2-x	64	900	4000	179	21880	B3-U0-G3	122	21551	B3-U0-G4	120	21839	B3-U0-G4	122	B1-U0-G3	94

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.

LED Wattage and Lumen Values – 5000K

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Average System Watts	Type 2 Lumen Output	Type 2 BUG Rating	Type 2 Efficacy (LPW)	Type 3 Lumen Output	Type 3 BUG Rating	Type 3 Efficacy (LPW)	Type 4 Lumen Output	Type 4 BUG Rating	Type 4 Efficacy (LPW)	BLC BUG Rating	BLC Efficacy (LPW)
PWS-48L-300-CW-G2-x	48	300	5000	47	6394	B2-U0-G1	137	6297	B1-U0-G2	135	6382	B1-U0-G2	136	B0-U0-G2	105
PWS-48L-400-CW-G2-x	48	400	5000	61	8299	B2-U0-G2	135	8174	B2-U0-G2	133	8283	B1-U0-G2	135	B0-U0-G2	104
PWS-48L-500-CW-G2-x	48	500	5000	76	10080	B2-U0-G2	133	9928	B2-U0-G2	131	10062	B2-U0-G2	133	B1-U0-G2	102
PWS-48L-600-CW-G2-x	48	600	5000	91	11841	B3-U0-G2	130	11662	B2-U0-G2	128	11819	B2-U0-G2	130	B1-U0-G2	100
PWS-48L-700-CW-G2-x	48	700	5000	105	13710	B3-U0-G2	131	13504	B2-U0-G2	129	13685	B2-U0-G3	130	B1-U0-G2	100
PWS-64L-600-CW-G2-x	64	600	5000	118	15841	B3-U0-G3	135	15603	B2-U0-G3	133	15812	B2-U0-G3	135	B1-U0-G2	103
PWS-64L-700-CW-G2-x	64	700	5000	137	17862	B3-U0-G3	130	17593	B3-U0-G3	128	17829	B3-U0-G3	130	B1-U0-G3	100
PWS-64L-800-CW-G2-x	64	800	5000	158	19913	B3-U0-G3	126	19614	B3-U0-G3	124	19877	B3-U0-G4	126	B1-U0-G3	97
PWS-64L-900-CW-G2-x	64	900	5000	179	21880	B3-U0-G3	122	21551	B3-U0-G4	120	21840	B3-U0-G4	122	B1-U0-G3	94

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.

PWS PureForm LED wall sconce

Wall mount

LED Wattage and Lumen Values (Emergency Mode)

				Avg. System Watts		Type 2		Type 3		Type 4		BLC	
												Lumen Outputs	
Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode
PWS-48L-300-NW-G2-x-EBPC	48	300	4000	47	14	6394	2110	6297	2078	6382	2106	4896	1615

For emergency EBPC option, publish values are based on initial lumens.

Predicted Lumen Depreciation Data

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. L_{70} is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L_{70} hours limited to 6 times actual LED test hours

Ambient Temperature °C	Driver current	Calculated L_{70} Hours	L_{70} per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	up to 900 mA	>100,000 hours	>54,000 hours	>96%

Optical Distributions

Based on 20' mounting height

Type 2

Type 3

Type 4

BLC
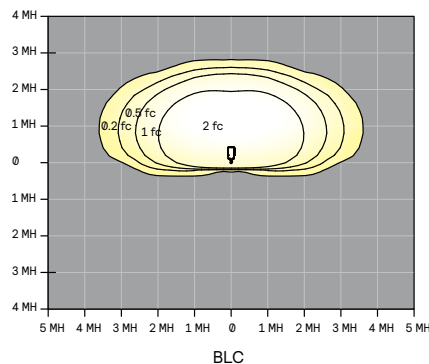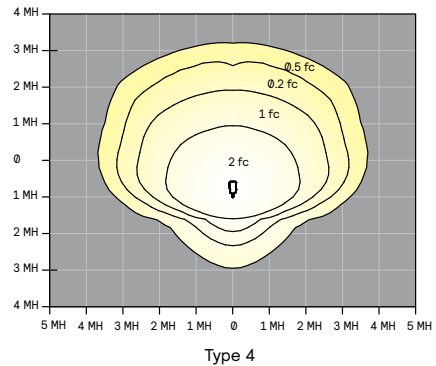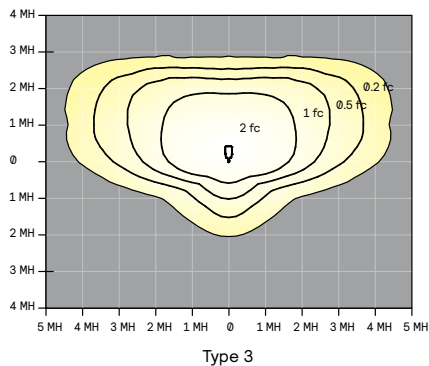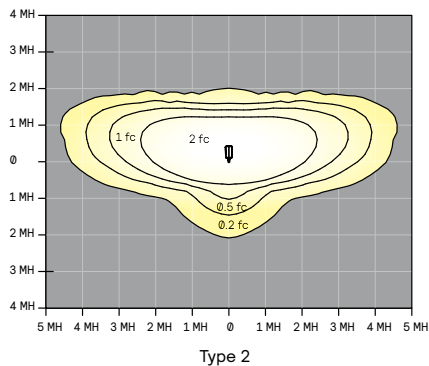
PWS PureForm LED wall sconce

Wall mount

Specifications

Housing

Main body housing and door frame made of low copper die cast aluminum alloy for a high resistance to corrosion. Door hinges secured by aircraft cable to allow access to driver or other electronic components for servicing. The door frame acts as the main heat transfer component and it is optimized to allowing the main housing to have no fins, giving the freedom to have a clean minimalist aesthetic design while allowing it to house emergency battery backup equipment and various other options. Luminaire housing rated to IP65, tested in accordance to Section 9 of IEC 60598-1.

Light engine

Light engine comprises of a module of 16-LED aluminum metal clad board fully sealed with optics offered in multiples of 3 and 4 modules or 48 and 64 LEDs. Module is RoHS compliant. Direct Amber LED is narrow spectrum with dominant wavelength at 596 nm (peak wavelength at 601 nm). Contact factory for details. LED light engine is rated IP66 in accordance to Section 9 of IEC 60598-1.

Optical systems

Type 2, 3, and 4 distributions available. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (U0 per IESNA TM-15).

Mounting

Mounting is completed through integral back plate that features a separate recessed feature for hook and lock quick mount plate that secures with two set screws from bottom of luminaire. Luminaire ships fully assembled, ready to install.

Control options

0-10V dimming (DD): Access to 0-10V dimming leads supplied through back of luminaire (for secondary dimming controls by others). Cannot be used with other control options.

Field Adjustable Wattage Selector (FAWS): Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

FAWS Position	Percent of Typical Lumen Output
1	25%
2	50%
3	55%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: Typical value accuracy +/- 5%

Automatic Profile Dimming (CS/CM): Standard dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. Dimming profiles include two dimming settings including dim to 30% or 50% of the total lumen output. When used in combination with not programmed motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic diming profile schedule. Automatic dimming profile scheduled with the following settings:

- **CS50/CS30:** Security for 7 hours night duration (Ex., 11 PM - 6 AM)
- **CM50/CM30:** Median for 8 hours night duration (Ex., 10 PM - 6 AM)

All above profiles are calculated from mid point of the night. Dimming is set for 6 hours after the mid point and 2, or 3 hours before depending of the duration of dimming. Cannot be used with other dimming control options.

Emergency Battery Backup Cold Pack (EBPC): Emergency battery pack is cold weather rated down to -20C (-4F) and integral to the luminaire, allowing for a consistent look between emergency and non-emergency sconces. A separate surface mount accessory box is not required. Emergency battery pack is used with 48L configuration in 300mA wired in parallel, operating in emergency mode to meet various redundancy requirements. Secondary driver with relay immediately detects AC power loss and powers luminaire for a minimum of 90 minutes from the time power is lost. Available in 120 or 277V only.

Motion response options

Bi-Level Infrared Motion Response (BL-IMRI3): Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. BL-IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. Other dimming settings can be provided if different dimming levels are required. This can also be done with FSIR-100 Wireless Remote Programming Tool (contact Technical Support for details).

Infrared Motion Response Lenses (IMRI2/IMRI3): Infrared Motion Response Integral module is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges. Lens #2 (IMRI2) is designed for lower mounting heights up to 8' with larger coverage areas up to 44' diameter coverage area. Lens #3 (IMRI3) is designed for mounting heights up to 20' with a 40' diameter coverage area. See charts for approximate detection patterns:

IMRI2 Luminaire or remote mount controller with #2 lens
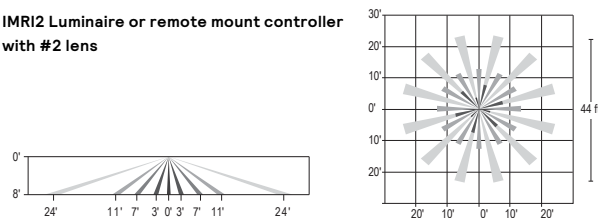

IMRI3 Luminaire or remote mount controller with #3 lens
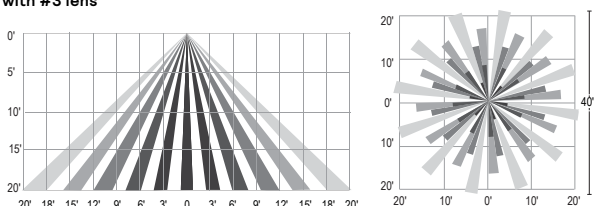
Specifications (cont'd)

Outdoor Interact (WIAP): Connected sensor with integral occupancy and daylight sensing, supports wireless mesh connectivity. Sensor works in the standalone mode when configured without a gateway. When used with a gateway you are able to access additional functionalities such as energy monitoring, scheduling and BMS integration. Interact offers an App, a portal and a broad portfolio of Interact-ready Indoor and Outdoor luminaires, lamps and retrofit kits all working on the same system. The App provides flexibility to choose between a standalone or gateway mode. Setup with the gateway requires wired Internet access to the gateway. WIAP includes SR driver and SR receptacle. Daylight harvesting supported through dimming - activated via the Interact App. Sensors IP66 rated.

For more information on Interact Pro visit: www.interact-lighting.com/interactproscalablesystem

LW low sensor
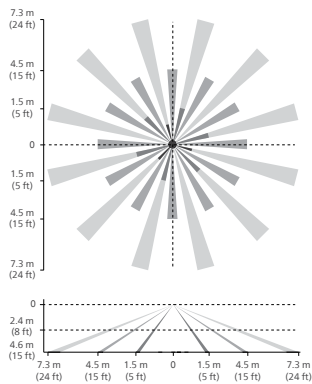
HW high sensor
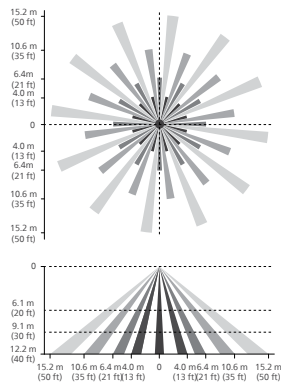
Note: The beam patterns shown are intended solely as a general guide and are not to scale. Sensing capabilities and coverage area depend on many factors including the size, speed and direction of travel of persons and vehicles; sensor mounting height; environmental and site conditions; etc.

Electrical

Driver: Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. Optional 0-10V dimming to 10% power. RoHS compliant.

Button Photocontrol (PCB): Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208-277V with a load rating of 1000 VA. The photocell will turn on with 1-4Fc of ambient light.

Surge protection (SP1/SP2): Each luminaire is provided as standard with surge protector 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, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High Test Level 10kV / 5kA. Optional 20kV is available for additional protection.

Listings

UL/cUL listed to the UL 1598 standard, suitable for wet locations when mounted downward facing. Also listed for damp locations when inverted upward facing when mounted in covered ceiling application. Suitable for use in ambient temperatures from -40° to 40°C (-40° to 104°F). Most PureForm PWS configurations are qualified under Premium DesignLights Consortium® category. Consult DLC Qualified Products list for more details. CCTs 3000K and warmer are IDA Dark Sky Approved.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. The surface treatment achieves a minimum of 1000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

Warranty

PureForm luminaires feature a 5-year limited warranty.
See signify.com/warranties for complete details and exclusions.

GENLYTE SOLUTIONS
a (S)ignify business

Signify North America Corp.
400 Crossing Blvd, Suite 600
Bridgewater, NJ 08807
Telephone: 800-555-0050

Signify Canada Ltd.
281 Hillmount Road,
Markham, ON, Canada L6C 2S3
Telephone: 800-668-9008

All trademarks are owned by Signify Holding or their respective owners.