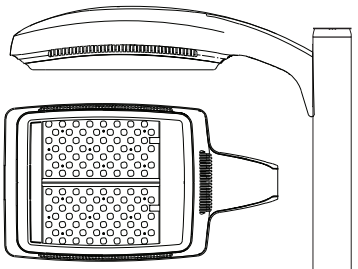
Job:
Type:
Notes:

Gullwing LED

GL18 Area Luminaires

Philips Gardco Gullwing LED luminaires combine LED performance excellence and advanced Gardco LED thermal management technology with the distinct Gullwing style to provide outdoor area lighting that is both energy efficient and aesthetically pleasing. The Philips Gardco Gullwing LED is defined by its high performance, sleek profile and rugged construction. The housing is one-piece, die cast aluminum and mounts directly to a pole or wall without the need of a separate support arm. The advanced LED optical systems provide IES Types II, III, IV and V distributions. The luminaire features a state of the art integral thermal control system to maximize LED performance and life, and to extend component life. All LED wattages utilize high performance Class 1 LED systems. The door frame is single-piece die cast aluminum. Luminaires are finished with a fade and abrasion resistant TGIC powdercoat. Gullwing LED luminaires provide full cutoff performance. Existing Philips Gardco Gullwing HID luminaires are suitable for field retrofit with the Gullwing LED retrofit kit.



PREFIX	MOUNTING	OPTICAL SYSTEM	LED WATTAGE	LED SELECTION	VOLTAGE	FINISH	OPTIONS

Enter the order code into the appropriate box above. Note: Philips Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

PREFIX

Complete Luminaires *(See page 3 and page 4 for details on luminaire configurations.)*

GL18	18" Gullwing LED Luminaire - Constant Wattage
GL18-DCC	18" Gullwing LED with Dual Circuit Control
GL18-DIM	18" Gullwing LED with 0-10V Dimming
GL18-MR50[1]	18" Gullwing LED with Motion Response - 50% Low
GL18-APD[2]	18" Gullwing LED with Automatic Profile Dimming
GL18-APD-MRO[1]	18" Gullwing LED - APD with Motion Response Override

Retrofit Kit *(See page 4 for details on retrofit kit configurations.)*

GL18-RK	18" Gullwing LED Retrofit Kit - Constant Wattage

1. *Motion Response luminaires require one motion sensor per pole, ordered separately. See **Accessories** on page 2. Motion Response luminaires available 120V or 277V only.*
2. *Available 120V through 277V only.*

MOUNTING

1	Single Pole Mount
2	Twin Pole Mount at 180°
2@90	Twin Pole Mount at 90°
3	3-way Pole Mount at 90°
3@120°	3-way Pole Mount at 120°
4	4-way Pole Mount
W	Wall Mount, Recessed J-Box
WS	Wall Mount, Surface Conduit

OPTICAL SYSTEM[3]

Optic Type	Standard Optic Position	Optic Rotated Left[4] (90°)	Optic Rotated Right[4] (270°)
Type II	**2**	**2-90**	**2-270**
Type III	**3**	**3-90**	**3-270**
Type IV	**4**	**4-90**	**4-270**
Type V	**5**[5]		
Backlight Control	**BLC**	**BLC-90**	**BLC-270**

3. *Luminaire door frame and optic assembly provided standard without glass lens. Specify CLR option for clear glass lens. See **Options** on page 2.*

4. *See pages 6 and 7 for information on optical rotation prior to ordering.*

5. *Features unitized lens.*

PHILIPS GARDCO

LED WATTAGE AND LUMEN VALUES

Ordering Code	Average System Watts[6]	LED Current (mA)	LED Selection	Luminaire Initial Absolute Lumens[7,8]				
				TYPE 2	TYPE 3	TYPE 4	TYPE 5	BLC
Single LED Arrays								
65LA	65	350	CW	5,211	4,988 (s)	4,986	6,025	3,433 (s)
95LA	95	530	CW	7,437	7,025	6,973	8,258	4,640 (s)
130LA	130	700	CW	8,868	8,658	8,478	10,223	5,614 (s)
Dual LED Arrays								
125LA	125	350	CW	9,953	9,550	9,360	11,241	5,917 (s)
200LA	200	530	CW	13,432	13,042	12,942	15,271	7,996 (s)
255LA	255	700	CW	16,209	15,740	15,529	18,254	9,436 (s)

6. Wattage 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.

7. Values shown are for luminaires without the HS or IS shield options. Tests are in process for many NW and all WW, as well as luminaires with the HS and IS options.

8. Lumen values based on tests performed in compliance with IESNA LM-79. "(s)" following value indicates that the value is scaled from tests on a similar, but not identical luminaire configuration. Contact Gardco.applications@ philips.com if any approximate estimates are required for design purposes.

LED SELECTION

CW Cool White - 6000°K - 75 CRI
NW Neutral White - 4000°K - 70 CRI
WW Warm White - 3000°K - 80 CRI

VOLTAGE

120
208
240
277
347
480
UNIV 120V through 277V, 50hz or 60hz
HVU 347V through 480V, 50hz or 60hz (High Voltage Universal)

FINISH

BRP Bronze Paint
BLP Black Paint
WP White Paint
NP Natural Aluminum Paint
OC Optional Color Paint
Specify Optional Color or RAL ex: OC-LGP or OC-RAL7024.
SC Special Paint
Specify. Must supply color chip.

OPTIONS *(Options are not available in GL18-RK retrofit kits, except as specifically noted below. See Note 16)*

LF[16] In-Line/In-Pole Fusing
PC[9,17] Photocontrol and Receptacle
PCR[17] Photocontrol Receptacle only
HS[16] External Houseside Shield
IS[16,18] Internal Houseside Shield
RPA1[10] 3" Round Pole Adapter
RPA2[11] 4" and 5" Round Pole Adapter
MF[12] Mast Arm Fitter
TR1[13] Single Transition
TR2[13] Twin Transition
PTF2[14] Pole Top Fitter - 2 3/8" - 3" Dia. Tenon
PTF3[14] Pole Top Fitter - 3" - 3 1/2" Dia. Tenon
PTF4[14] Pole Top Fitter - 3 1/2" - 4" Dia. Tenon
SQPTF[15] Square Pole Top Fitter
DL[16] Diffusing Lens *(reduces performance significantly)*
CLR[16] Clear Glass Lens *(reduces performance)*

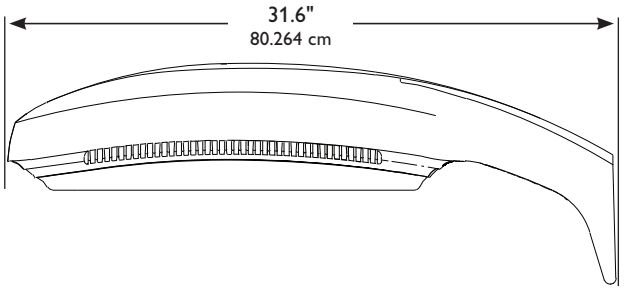
9. Not available above 277V. Provide specific input voltage.
10. Required for 3" O.D. round or tapered round poles where top O.D. is less than 4".
11. Required for 4"- 5" O.D. round poles.
12. Mounts to a 2-3/8" O.D. mast arm.
13. Mounts to a 2-3/8" Top Tenon. Specify a round pole with a 4.50" O.D. for a smooth transition.
14. Not available in 120° mounting configurations.
15. Requires a 2-3/8"O.D. x 4" tenon or a 2.4" round pole top O.D. Specify Drilling (1, 2, 2@90, 3 or 4 only.)
16. Available with GL18-RK retrofit kits (as well as other configurations.)
17. Available in GL18 Constant Wattage only.
18. Available with Type 2, Type 3 or Type 4 distributions only.

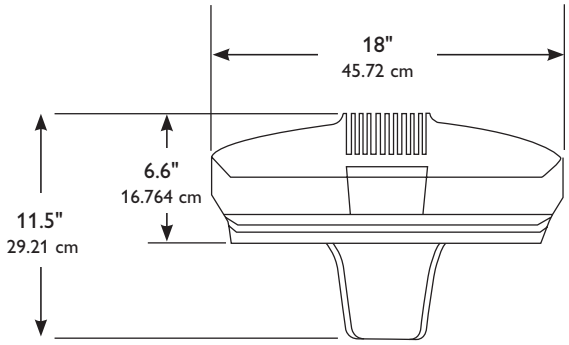
ACCESSORIES *(Ordered separately)*

MS-P 120V or 277V Input - Pedestrian Motion Sensor for GL18-MR (Motion Response) or GL18-APD-MRO (Automatic Profile Dimming with Motion Response Override)
MS-A-120V 120V Input - Area Motion Sensor for GL18-MR (Motion Response) or GL18-APD-MRO (Automatic Profile Dimming with Motion Response Override)
MS-A-277V 277V Input - Area Motion Sensor for GL18-MR (Motion Response) or GL18-APD-MRO (Automatic Profile Dimming with Motion Response Override)

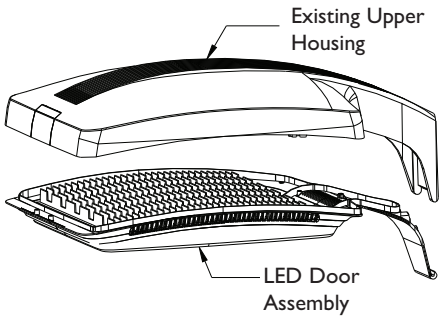
Motion Sensors are ordered separately, with one (1) motion sensor required per pole location for GL18-MR or GL18-APD-MRO luminaires. See Luminare Configuration Information on pages 4-5 for more details. Pedestrian sensor color is white. Area motion sensor color is Arctic White.

DIMENSIONS AND EPA





GL18-RK LED Retrofit Kit



Note: Removal of all components of existing G18 Gullwing luminaires, except the upper housing, is required to perform a retrofit.

GL18-RK includes all necessary retrofit components.

Note: TGIC polyester powdercoat will fade somewhat in exterior environments over time. Once the retrofit kit is installed, there is a possibility that the upper housing may have faded to a point where there is a noticeable paint difference between the upper housing (existing) and the new retrofit kit door frame.

EPA Data

1	2	3-4
1.2 ft^2	2.4 ft^2	3.2 ft^2
.12 m^2	.24 m^2	.30 m^2

Approximate Weight
Single Luminaire

40 lbs / 18.144 kg

LUMINAIRE CONFIGURATION INFORMATION *(CONTINUED ON PAGE 5)*

GL18: Philips Gardco Gullwing LED standard luminaire providing constant wattage and constant light output when power to the luminaire is energized.

GL18-DCC: Philips Gardco Gullwing LED luminaire provided with dual circuiting, permitting separate switching of each led array. Available on luminaires with dual led arrays only.

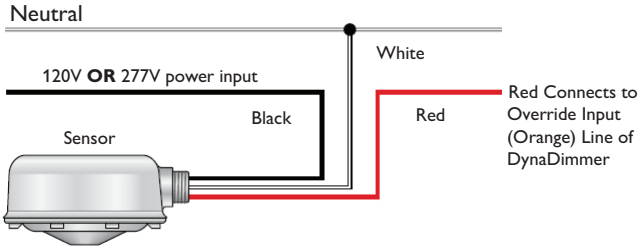
GL18-DIM: Philips Gardco Gullwing LED luminaire provided with 0 -10V dimming for connection to a control system provided by others.

GL18-MR-50: Philips Gardco Gullwing LED luminaire with motion response, providing a 50% power reduction on low and a commensurate reduction in light output. The power and light output reduction is accomplished utilizing the Philips DynaDimmer module, programmed for a constant 50% power. Power supplied by the motion sensor connected to the override line on the DynaDimmer takes the luminaire to high setting, 100% power and light output, when motion is detected. The luminaire remains on high until no motion is detected for the motion sensor duration period, after which the luminaire returns to low. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes.

This configuration is not available for use with wall mounted luminaires.

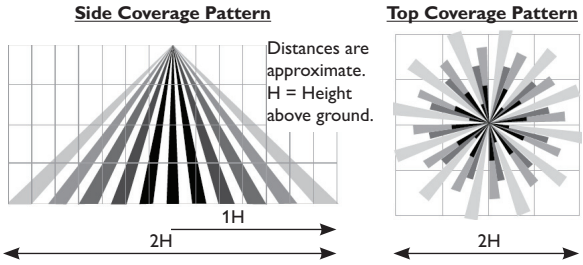
GL18-MR50 is available in 120V through 277V input only to the luminaire. Motion sensors require single voltage 120V or 277V input.

The Pedestrian PIR motion sensor is the WattStopper HB350W-L3. One motion sensor per pole is required and is ordered separately as the MS-P accessory, see page 2. The Pedestrian sensor accept 120V through 277V input.

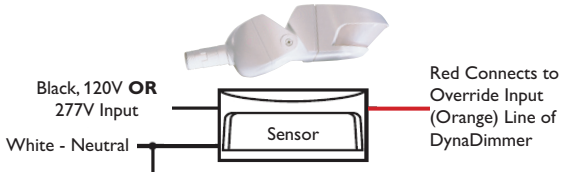


The pedestrian motion detector provides coverage equal to the sensor height above ground , in all directions from the sensor (360°.)

Pedestrian PIR Motion Sensor Coverage Pattern:

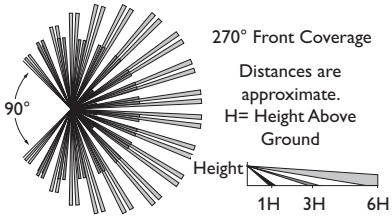


The Area PIR motion sensor is the WattStopper EW-200-120-W (120V Input - MS-GLA-120V) or the WattStopper EW-200-277-W (277V Input - MS-GLA-277V.) One motion sensor per pole is required and is ordered separately.
Area sensors require single voltage 120V or 277V input.



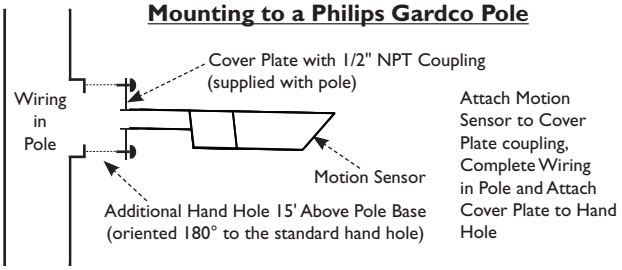
The area motion detector provides coverage equal to up to 6 times the sensor height above ground, 270° from the front-center of the sensor.

Area PIR Motion Sensor Coverage Pattern:



Motion response requires that the pole include an additional hand hole 15 feet above the pole base, normally oriented 180° to the standard hand hole. For Philips Gardco poles, order the pole with the Motion Sensor Mounting (MSM) option which includes the hand hole and a special hand hole cover plate for the sensor with a 1/2" NPT receptacle centered on the hand hole cover plate into which the motion sensor mounts. Once the motion sensor is connected to the hand hole cover plate, then wiring connections are completed in the pole. The plate (complete with motion sensor attached and wired) is then mounted to the hand hole. **If poles are supplied by others, the customer is responsible for providing suitable mounting accommodations for the motion sensor in the pole.**

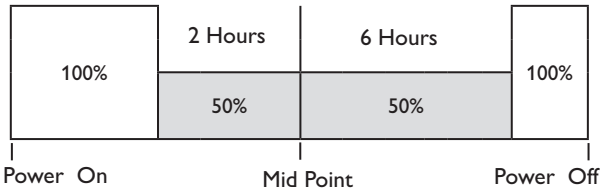
Mounting to a Philips Gardco Pole



GL18-APD: Philips Gardco Gullwing LED luminaire with Automatic Profile Dimming. Luminaire is provided with the Philips DynaDimmer module included. The DynaDimmer module is programmed to go to 50% power, 50% light output two (2) hours prior to night time mid-point and remain at 50% for six (6) hours after night time mid-point. Mid-point is continuously recalculated by the DynaDimmer module based on the average mid-point of the last two full night cycles. Short duration cycles, and power interruptions are ignored and do not affect the determination of mid-point.

GL18-APD is available in 120V through 277V input only.

GL18-APD Dimming Profile:



LUMINAIRE CONFIGURATION INFORMATION *(CONTINUED FROM PAGE 4)*

GL18-APD is available in 120V through 277V input only.

The GL18-APD offers many of the advantages of a sophisticated control system, including an average energy savings of at least 33% versus constant wattage, constant light output systems, without the need for a control system.

GL18-APD-MRO: Philips Gardco Gullwing LED luminaire with Automatic Profile Dimming, with Motion Response Override. The GL18-APD-MRO combines the benefits of both automatic profile dimming and motion response. The luminaire will dim to 50% power, 50% light output, per the dimming profile shown for the GL18-APD. If motion is detected during the time that the luminaire is operating at 50%, the luminaire returns to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns to low. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes.

This configuration is not available for use with wall mounted luminaires.

GL18-APD-MRO is available in 120V through 277V input only to luminaire. The motion sensor requires either 120V or 277V input to the motion sensor.

The GL18-APD-MRO has the same pole requirements and utilizes the same motion sensors as the GL18-MR-50. The motion sensor mounts and wires identically as well. The GL18-APD-MRO utilizes the identical dimming profile as shown for the GL18-APD.

By combining the benefits of automatic profile dimming and motion response, the GL18-APD-MRO assures maximum energy savings, and insures that adequate light is present if motion is detected.

Note: All motion sensors utilized consume 0.0 watts in the off state.

GL18-RK: Philips Gardco Gullwing LED Retrofit kit for existing Gullwing luminaires. The retrofit kit provides a simple way to convert existing sites that utilize Gullwing luminaires to LED. The retrofit kit includes all necessary components to complete the retrofit conversion. The existing optic, ballast tray and door assembly are removed and replaced by retrofit kit components. The retrofit kit includes the complete door frame and the LED driver assembly.

The GL18-RK is available only in a constant wattage, constant light output design, and is not available with any Options, except as specifically indicated on page 2.

Note: TGIC polyester powdercoat will fade somewhat in exterior environments over time. Once the retrofit kit is installed, there is a possibility that the upper housing may have faded to a point where there is a noticeable paint difference between the upper housing (existing) and the new retrofit kit door frame.

SPECIFICATIONS

GENERAL DESCRIPTION: The Philips Gardco Gullwing LED is defined by its high performance, sleek profile and rugged construction. The housing is one-piece, die cast aluminum and mounts directly to a pole or wall without the need of a separate support arm. Gullwing LED luminaires combine LED performance excellence and advanced Philips Gardco LED thermal management technology with the distinct Gullwing style to provide outdoor area lighting that is both energy efficient and aesthetically pleasing.

HOUSING: A one-piece die cast aluminum housing mounts directly to a pole or wall without the need for a support arm. The low profile rounded form reduces the effective projected area of the luminaire to only 1.2 ft^2 /.12 m^2.

IP RATING: Gullwing LED 18" luminaires have a rating of IP66.

LED RELIABILITY:

PREDICTED LUMEN DEPRECIATION DATA		
Ambient Temperature °C	Driver mA	L_{70} Hours[20]
25 °C	350 mA	130,000
	530 mA	100,000
	700 mA	70,000
40 °C	350 mA	100,000
	530 mA	70,000
	700 mA	50,000

20. 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.

THERMAL MANAGEMENT: The Philips Gardco Gullwing LED provides die cast aluminum integral thermal radiation fins combined with lateral air ways, to provide the excellent thermal management so critical to long LED system life.

OPTICAL SYSTEMS: LED arrays are set to achieve IES Type II, Type III, Type IV, Type V , and Backlight Control (BLC) distributions. Individual LED arrays are replaceable. Luminaires feature high performance Class 1 LED systems.

ELECTRICAL: Luminaires are equipped with an LED driver that accepts 120V through 277V, or 347V through 480V, 50hz to 60hz, input. Driver output is based on the LED wattage selected. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC at 302°F / 150°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher. Power factor is not less than 90%. Luminaire consumes 0.0 watts in the off state. All motion sensors utilized consume 0.0 watts in the off state. Surge protector standard. 10KA per ANSI/IEEE C62.41.2.

FINISH: Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WP), and natural aluminum (NP). Consult factory for specs on optional or custom colors.

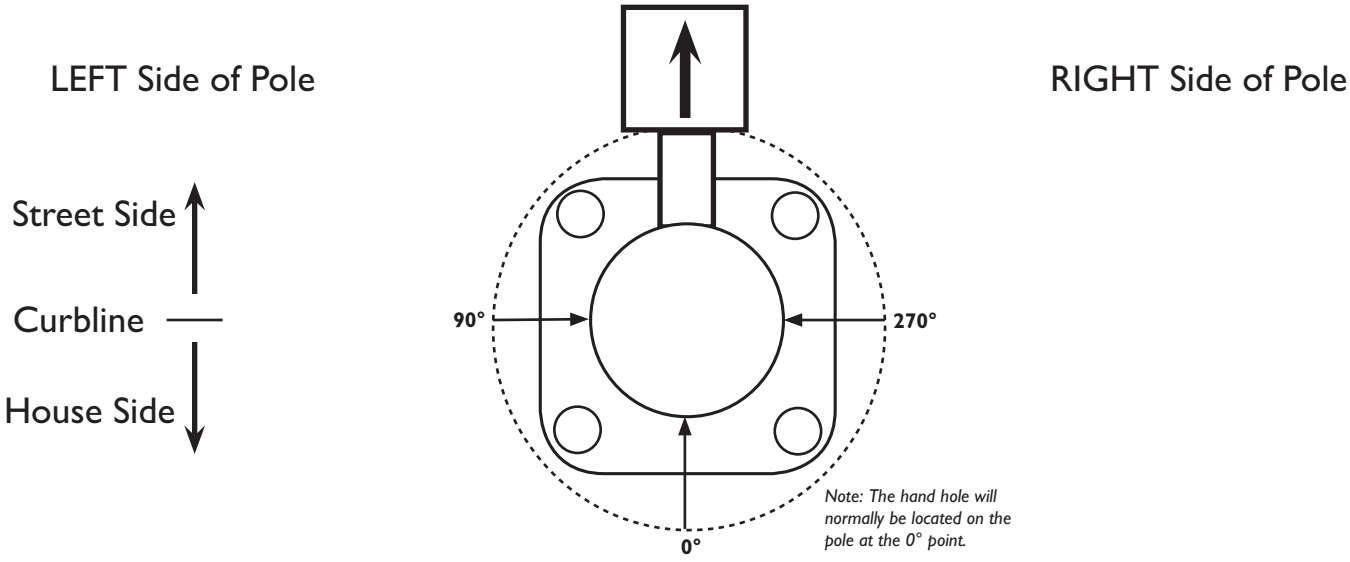
LABELS: All luminaires bear UL or CUL (where applicable) Wet Location labels.

WARRANTY: Philips Gardco luminaires feature a 5 year limited warranty. Philips Gardco LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays and LED drivers. Motion sensors are covered by warranty for 5 years by the motion sensor manufacturer. See Warranty Information on philips.com/luminaires for complete details and exclusions.

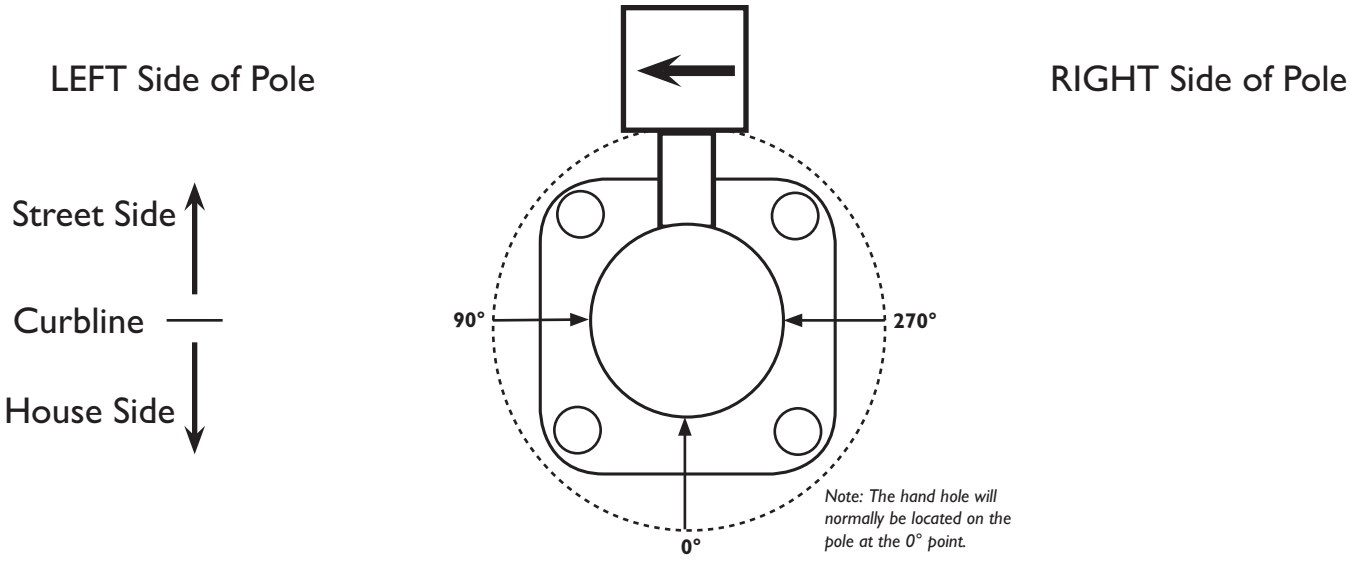
FULL CUTOFF PERFORMANCE: Full cutoff performance means a luminaire distribution where zero candela intensity occurs at an angle at or above 90° above nadir. Additionally, the candela per 1000 lamp lumens does not numerically exceed 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.

ASYMMETRIC OPTICAL ORIENTATION INFORMATION *(CONTINUED ON PAGE 7)*

STANDARD OPTIC POSITION:
Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:

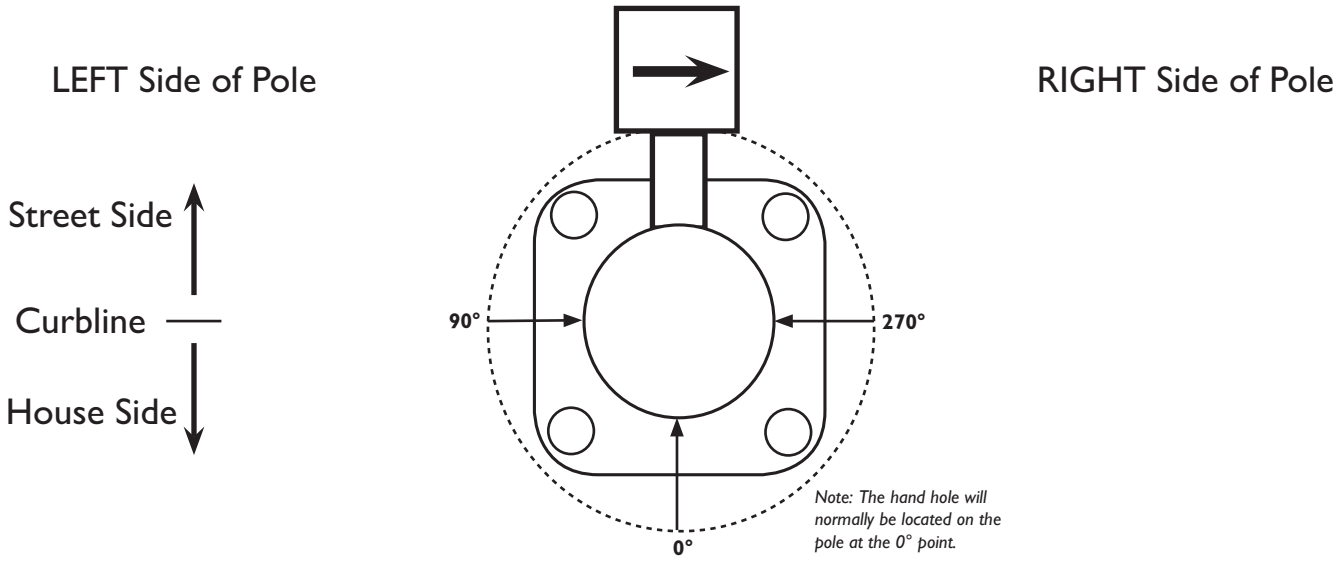


OPTIC ROTATED LEFT (90°) OPTIC POSITION:
Luminaires ordered with asymmetric optical systems in the **OPTIC ROTATED LEFT (90°)** optic position will have the optical system oriented as shown below:



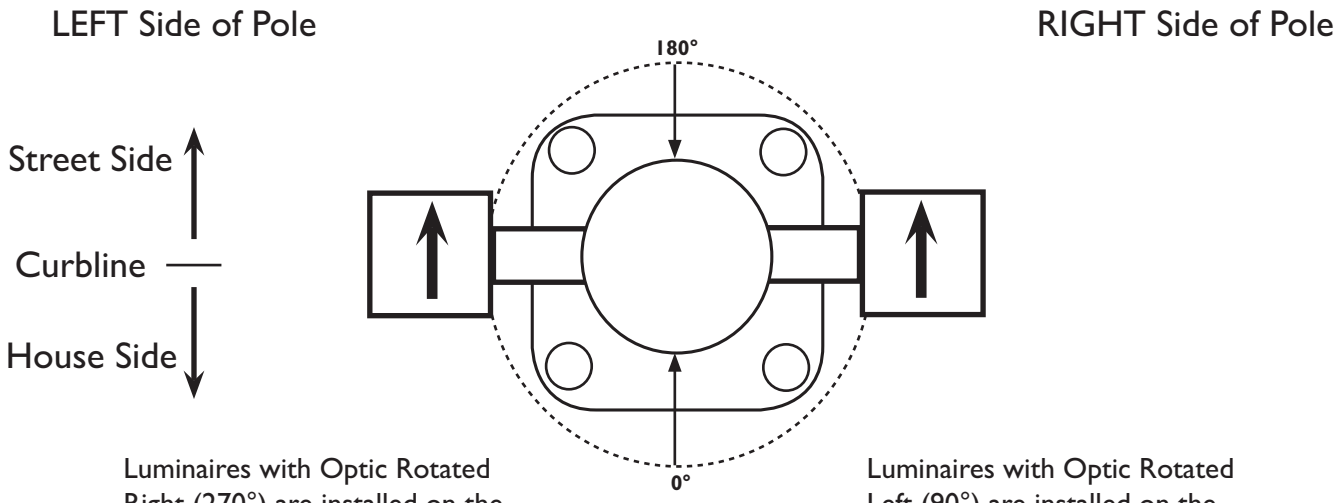
ASYMMETRIC OPTICAL ORIENTATION INFORMATION *(CONTINUED FROM PAGE 6)*

OPTIC ROTATED RIGHT (270°) OPTIC POSITION:
Luminaires ordered with asymmetric optical systems in the **OPTIC ROTATED RIGHT (270°)** optic position will have the optical system oriented as shown below:



Note: The hand hole will normally be located on the pole at the 0° point.

TWIN LUMINAIRE ASSEMBLIES WITH ROTATED OPTICAL SYSTEMS:
Twin luminaire assemblies installed with rotated optical systems are an excellent way to direct light toward the interior of the site (Street Side) without additional equipment. It is important, however, that care be exercised to insure that luminaires are installed in the proper location.



Luminaires with Optic Rotated Right (270°) are installed on the LEFT Side of Pole

Note: The hand hole location will depend on the drilling configuration ordered for the pole.

Luminaires with Optic Rotated Left (90°) are installed on the RIGHT Side of Pole

Philips Lighting
North America Corporation
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Somerset, NJ 08873
Tel. 855-486-2216

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A division of Philips Electronics Ltd.
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