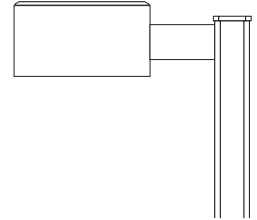


Job:
Type:
Notes:



Form 10 Square LED

The Philips Gardco arm mounted Square Form 10 LED products are cutoff luminaires featuring LED arrays. Square Form 10 LED luminaires provide performance excellence and advanced Philips Gardco LED thermal management technology. High performance Class 1 LED systems offer the potential for energy savings up to 50 % when compared to HID systems. The EH units are manufactured from mitered extruded aluminum and finished in an Architectural Class 1 anodizing. The H style luminaires are die formed aluminum with a thermoset polyester finish. Form 10 Square LED luminaires provide full cutoff performance and feature a flat glass lens.



PREFIX	MOUNTING	DISTRIBUTION	LED WATTAGE	LED SELECTION	VOLTAGE	FINISH	OPTIONS
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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

Available in 70LA and 85LA LED Wattages Only

EH14L	14" Square Extruded Luminaire LED - Constant Wattage
EH14L-DIM	14" Square Extruded Luminaire LED - 0-10V Dimming
H14L	14" Square Fabricated Luminaire LED - Constant Wattage
H14L-DIM	14" Square Fabricated Luminaire LED - 0-10V Dimming

Available in 110LA and 160LA LED Wattages Only

EH19L	19" Square Extruded Luminaire LED - Constant Wattage
EH19L-DIM	19" Square Extruded Luminaire LED - 0-10V Dimming
H19L	19" Square Fabricated Luminaire LED - Constant Wattage
H19L-DIM	19" Square Fabricated Luminaire LED - 0-10V Dimming

Retrofit Kits for existing Form 10 Square 14" and 19" HID luminaires are available. See Legacy LED Retrofit Kits Submittal Data Sheet (G200-21) for Retrofit Kit information.

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

DISTRIBUTION

2	Type II
3	Type III
4	Type IV
5	Type V

Type II, Type III and Type IV optics are field rotatable. Type V optics feature unitized lens.

LED WATTAGE AND LUMEN VALUES

Ordering Code	Average System Watts ¹	LED Current (mA)	LED Selection	Luminaire Initial Absolute Lumens ^{2,3}				Basis of Lumen Data: Photometric tests performed in compliance with IESNA LM-79, except where otherwise indicated. Notes: 1. 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. 2. Values shown are for luminaires without the HS external shield option. Tests are in process for luminaires with the HS option and WW luminaires. Contact Gardco.applications@philips.com if approximate estimates are required for design purposes. 3. LED arrays feature LEDs that provide from 100 to 130 lumens per watt when operated at 350 mA. Lumen values based on tests performed in compliance with IESNA LM-79. (s) Marked values are scaled from NW tests on the same luminaire.
				TYPE 2	TYPE 3	TYPE 4	TYPE 5	
70LA	70	350	CW	6,517	6,735	6,568	6,438	
			NW	5,938	6,124	5,989	5,874	
85LA	85	350	CW	7,860	8,114	8,342	8,245	
			NW	7,468	7,697	7,491	7,323	
110LA	110	350	9,535(s)	9,908(s)	9,641(s)	9,526(s)	9,758*	
			8,911	9,260	9,010	8,903	9,036	
160LA	160	530	13,170(s)	13,698(s)	13,244(s)	13,180(s)	13,786*	
			12,308	12,802	12,378	12,311	12,765	

LED SELECTION

CW	Cool White - 5700°K - 75 CRI
NW	Neutral White - 4000°K - 75 CRI
WW	Warm White - 3000°K - 75 CRI

VOLTAGE

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

1611 Clovis Barker Road, San Marcos, TX 78666
(800) 227-0758 (512) 753-1000 FAX: (512) 753-7855 sitelighting.com

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PHILIPS





Form 10 Square LED

FINISH

EH Style

- BRA** Bronze Anodized
- BLA** Black Anodized
- NA** Natural Anodized
- OC** Optional Color Paint
Specify Optional Color or RAL ex: OC-LGP or OC-RAL7024.
- SC** Special Paint
Specify. Must supply color chip.

H Style

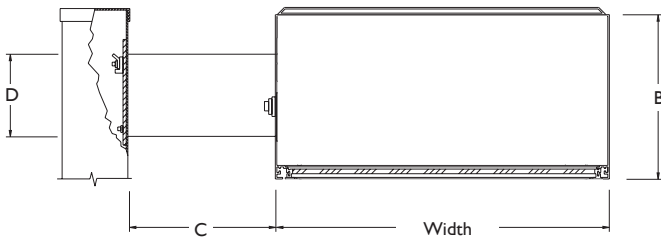
- BRP** Bronze Paint
- BLP** Black Paint
- OC** Optional Color Paint
Specify Optional Color or RAL ex: OC-LGP or OC-RAL7024.
- SC** Special Paint
Specify. Must supply color chip.

OPTIONS

- F⁴** Fusing In Head
- LF** In-Line/In-Pole Fusing
- PC⁴** Photocontrol and Receptacle
- PCR** Photocontrol Receptacle only
- MF** Mast Arm Fitter *Requires 2 3/8" OD mast arm.*
- MU** 10° Uptilt Bracket
- AP⁵** Adjustable Knuckle - Square Pole Mount
- PTF2** Pole Top Fitter - 2 3/8" - 3" Dia. Tenon
- PTF3** Pole Top Fitter - 3" - 3 1/2" Dia. Tenon
- PTF4** Pole Top Fitter - 3 1/2" - 4" Dia. Tenon
- SPR** Surge Protection for 120V through 277V Input
- SPRH** Surge Protection for 347V through 480V Input
- SPRA** Surge Protection for 120V through 277V Input meeting ANSI C62.41.2
- SPRAH** Surge Protection for 347V through 480V Input meeting ANSI C62.41.2

4. Not available in 480V. Specific input voltage required.
5. Only available with 1 way and 2 @ 180° mounting. Square pole mount only.

DIMENSIONS AND EPA



Size	Width	B	C	D
EH14	14" 35.56 cm	7" 17.78 cm	6" 15.24 cm	5" 12.70 cm
H14	14" 35.56 cm	7" 17.78 cm	6" 5.08 cm	5" 12.70 cm
EH19	19" 48.26 cm	10" 25.40 cm	9" 22.86 cm	5" 12.70 cm
H19	19" 48.26 cm	10" 25.40 cm	9" 5.08 cm	5" 12.70 cm

Size	Effective Projected Area (EPA)			Approximate Weight
	Single	Twin	3/4	Single
14"	1.1 ft ² .10 m ²	2.3 ft ² .21 m ²	2.9 ft ² .27 m ²	30 lbs 13.61 kg
	2.1 ft ² .20 m ²	4.0 ft ² .37 m ²	5.5 ft ² .51 m ²	55 lbs 24.95 kg

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PHILIPS





Form 10 Square LED

LUMINAIRE CONFIGURATION INFORMATION

CONSTANT WATTAGE CONFIGURATIONS: Standard LED luminaires provide constant wattage and constant light output when power to the luminaire is energized.

DIMMING "-DIM" CONFIGURATIONS: Dimmable LED luminaires are provided with 0 -10V dimming for connection to a control system provided by others.

SPECIFICATIONS

GENERAL: The Philips Gardco arm mounted Square Form 10 LED products are cutoff luminaires featuring LED arrays. Square Form 10 LED luminaires provide performance excellence and advanced Philips Gardco LED thermal management technology. High performance Class 1 LED systems offer the potential for energy savings up to 50 % when compared to HID systems. The EH units are manufactured from mitered extruded aluminum and finished in an Architectural Class 1 anodizing. The H style luminaires are die formed aluminum with a thermoset polyester finish. Form 10 Square LED luminaires provide full cutoff performance and feature a flat glass lens.

HOUSING: Extruded housings (EH style) are composed of precisely mitered anodized aluminum extrusions. Fabricated (H style) units are one piece, multi-formed aluminum with an integral reinforcing spline and a single concealed joint. Pressure injected silicone provides a continuous weather tight seal at all miters and points of material transition.

ARM: Extruded aluminum arm is wired and secured to luminaire by contractor. Assembly is suitable for mounting to pole without requiring access to luminaire.

LENS: Mitered, extruded anodized aluminum door frame retains the optically clear, heat and impact resistant tempered flat glass in a sealed manner using hollow section, high compliance, memory retentive extruded silicone rubber. Concealed stainless steel latch and hinge permit easy toolless access to the luminaire.

THERMAL MANAGEMENT: The Philips Gardco Form 10 Square LED luminaires utilize extruded aluminum integral thermal radiation fins to provide the excellent thermal management so critical to long LED system life.

OPTICAL SYSTEMS: Philips Gardco Form 10 Square LED luminaires utilize lensed LED arrays set to achieve IES Type II, Type III, Type IV and Type V distributions. Individual LED arrays are replaceable. Optical systems are field rotatable. Luminaires feature high performance Class 1 LED systems.

ELECTRICAL: Luminaires include a complete prewired LED driver assembly, provided as part of the optical assembly. Luminaires include 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%. Luminaires consume 0.0 watts in the off state.

FINISH: Extruded housings (EH style) are standard with natural, bronze, or black Aluminum Association Architectural Class I anodized finish. Special color polyester finishes are available. Formed housings (H style) are standard with a chromatic acid pretreatment. The finish coat is a thermosetting polyester baked at 450°F / 232°C to achieve an H-2H hardness measure. 2

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

WARRANTY: Philips Gardco Form 10 Square LED luminaires feature a 5 year limited warranty, including a 5 year limited warranty covering the LED arrays and the LED driver. See Warranty Information on www.sitelighting.com for complete details and exclusions.

LED RELIABILITY:

PREDICTED LUMEN DEPRECIATION DATA		
Ambient Temperature °C	Driver mA	L ₇₀ Hours ⁶
25 °C	350 mA	150,000
	530 mA	100,000
40 °C	350 mA	100,000
	530 mA	70,000

6. 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. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.

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.

CUTOFF PERFORMANCE: Cutoff performance means a luminaire distribution where the candela per 1000 lamp lumens does not numerically exceed 25 (2.5 percent) at an angle at or above 90° above nadir, and 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.