

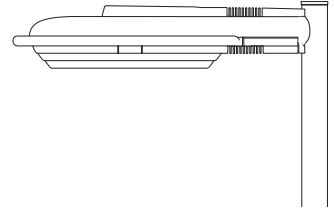
Job:  
Type:  
Notes:



# Circa LED

## CR20L

Philips Gardco Circa LED products are cutoff luminaires featuring LED arrays. Circa LED luminaires provide performance excellence and advanced Philips Gardco LED thermal management technology. High performance Class 1 LED systems offer energy savings potential up to 50 % compared to HID systems. The housings are one-piece, die cast aluminum and mount directly to a pole, mast arm or wall without the need of a separate support arm. The shallow, rounded form produces extremely low effective projected areas for superior wind loading capability. Circa LED may be ordered with a decorative acrylic rod shaped to follow the contour of luminaire illuminated at each end by light emitting diode (LED) illuminator assemblies in your choice of five (5) colors. Luminaires are also available with aluminum rings, stainless steel rings, or without ring. Circa LED luminaires provide full cutoff performance.



PREFIX	MOUNTING	DISTRIBUTION	LED WATTAGE	LED SELECTION	VOLTAGE	RING	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"/>	<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

**CR20L** 20" Circa Luminaire LED - Constant Wattage  
**CR20L-DIM** 20" Circa Luminaire LED - 0-10V Dimming

Standard arm, without any RPA (Round Pole Adapter), mounts to round poles from 3.85" to 4.5" O.D.

Retrofit Kits for existing Circa 20" 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  
**W** Wall Mount  
**WS** Wall Mount Over Surface Conduit

### 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 <sup>1</sup>	LED Current (mA)	LED Selection	Luminaire Initial Absolute Lumens <sup>2,3</sup>				Basis of Lumen Data  Photometric tests performed in compliance with IESNA LM-79.
				TYPE 2	TYPE 3	TYPE 4	TYPE 5	
<b>70LA</b>	70.2	350	CW	6,105	6,422	6,141	6,200*	
			NW	5,638	5,850	5,373	5,643*	
<b>85LA</b>	85.9	350	CW	7,509*	7,900*	7,554*	7,605*	
			NW	6,935*	7,196*	6,855*	7,042*	

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.

\* Lumen values for this particular configuration are estimated based on tests of a similar, but not identical configuration.

### 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

© 2012 Koninklijke Philips Electronics N.V. All Rights Reserved.

Philips Gardco reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program.

G200-027/0212

**PHILIPS**





RING	FINISH	OPTIONS
<b>AR</b> <sup>4</sup> Aluminum Ring <i>(Painted to match housing.)</i>	<b>BRP</b> Bronze Paint	<b>F</b> <sup>5</sup> Fusing In Head
<b>SR</b> Stainless Steel Ring Brushed	<b>BLP</b> Black Paint	<b>LF</b> In-Line/In-Pole Fusing
<b>OR</b> <sup>4</sup> Optional Color Ring <i>(Painted a different color than housing.)</i>	<b>WP</b> White Paint	<b>PC</b> <sup>5</sup> Photocontrol and Receptacle
<b>LR</b> Less Ring	<b>NP</b> Natural Aluminum Paint	<b>PCR</b> Photocontrol Receptacle only
	<b>OC</b> Optional Color Paint Specify Optional Color or RAL ex: OC-LGP or OC-RAL7024.	<b>MA</b> <sup>6</sup> Mast Arm Mounting Kit <i>(internal)</i>
		<b>RPAI</b> <sup>7</sup> 3" Round Pole Adapter
		<b>SPA</b> <sup>8</sup> Square Pole Adapter
		<b>PTF2</b> Pole Top Fitter - 2 3/8" - 3" Dia. Tenon
		<b>TB</b> Terminal Block
		<b>SPR</b> Surge Protection for 120V through 277V Input
		<b>SPRH</b> Surge Protection for 347V through 480V Input
		<b>SPRA</b> Surge Protection for 120V through 277V Input meeting ANSI C62.41.2
		<b>SPRAH</b> Surge Protection for 347V through 480V Input meeting ANSI C62.41.2

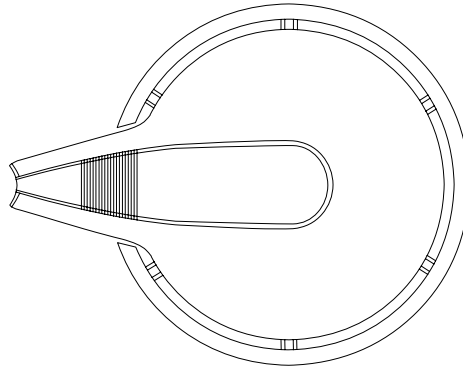
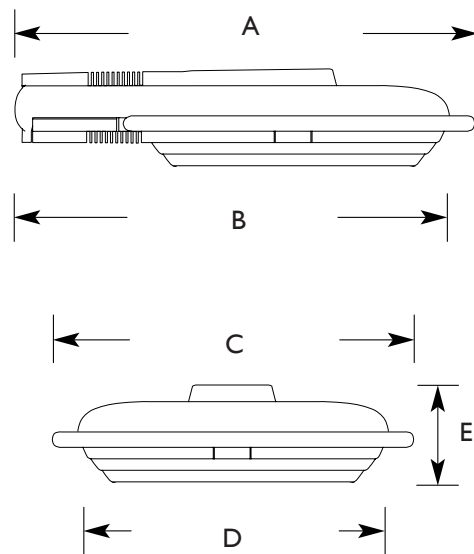
### LED RING

<b>LER</b>	Red
<b>LEO</b>	Orange
<b>LEA</b>	Amber
<b>LEG</b>	Green
<b>LEB</b>	Blue

4. (AR) Ring supplied same color as housing standard.  
For optional color ring (OR), specify finish or RAL. Ex. OR-BLP or OR-RAL-7024

5. Not available with 480V. Provide specific input voltage.  
6. Requires 2 3/8" O.D. Mast Arm.  
7. Required for 3" O.D. round or tapered round poles where top O.D. is less than 3.85".  
8. 2 3/4" O.D. Minimum Pole Width.

### DIMENSIONS AND EPA



### EPA

CR20L	Single	Twin	3-4 way
Flat Lens	.60 ft <sup>2</sup>	1.20 ft <sup>2</sup>	1.63 ft <sup>2</sup>
	.06 m <sup>2</sup>	.11 m <sup>2</sup>	.15 m <sup>2</sup>

Size	A	B	C	D	E
<b>CR20L</b>	29 5/8"	28"	23 1/4"	20"	6 1/4"
	75.25 cm	71.12 cm	59.05 cm	50.80 cm	15.87 cm

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

© 2012 Koninklijke Philips Electronics N.V. All Rights Reserved.

Philips Gardco reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program.

G200-027/0212

**PHILIPS**





### 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:** Philips Gardco Circa LED products are cutoff luminaires featuring LED arrays. Circa LED luminaires provide performance excellence and advanced Philips Gardco LED thermal management technology. High performance Class 1 LED systems offer energy savings potential up to 50 % compared to HID systems. The housings are one-piece, die cast aluminum and mount directly to a pole, mast arm or wall without the need of a separate support arm. The shallow, rounded form produces extremely low effective projected areas for superior wind loading capability. Circa LED may be ordered with a decorative acrylic rod shaped to follow the contour of luminaire illuminated at each end by light emitting diode (LED) illuminator assemblies in your choice of five (5) colors. Luminaires are also available with aluminum rings, stainless steel rings, or without ring. Circa LED luminaires provide full cutoff performance.

**HOUSING:** A one-piece diecast aluminum housing mounts directly to a pole, mast arm or wall without the need for a support arm.

**LENS:** A single-piece die cast aluminum lens frame hinges down from the housing and is secured by a concealed stainless steel hinge and hinge pin. An optically clear, heat and impact resistant tempered flat glass lens is mechanically secured with six retainers. The electrical and optical chambers are thoroughly sealed with a one-piece memory retentive hollow-core silicone gasket to prevent intrusion by rain, dust, and insects.

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

#### LED RELIABILITY:

PREDICTED LUMEN DEPRECIATION DATA		
Ambient Temperature °C	LED Wattage / Driver mA	L <sub>70</sub> Hours <sup>9</sup>
25 °C	70LA or 85LA / 350 mA	150,000
40 °C	70LA or 85LA / 350 mA	100,000

9. 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<sub>70</sub> is the predicted time when LED performance depreciates to 70% of initial lumen output.

**OPTICAL SYSTEMS:** Philips Gardco Circa 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 I LED systems.

**LED RING:** If selected with an LED ring, the luminaire shall be provided with a decorative acrylic rod shaped to follow contour of luminaire illuminated at each end by light emitting diode (LED) illuminator assemblies.

The rod will have reflective coating causing an even brightness along its length resembling luminous tube lighting. There shall be no breaks, discrete spots, or other discontinuities visible in the intended viewing angle of 60° to 90° above nadir.

The method of rod attachment to luminaire shall allow for thermal expansion and contraction from -70° to +120°F (-57° to +49°C) without causing damage to the assembly. The rod shall not use adhesives for any structural support.

The illuminator assembly at each end shall consist of a polycarbonate thermoplastic housing which encloses LEDs. The housing shall be potted with a water-clear compound, after assembly, which will totally encapsulate all components to protect against water and other environmental contamination.

Electrical supply powering each illuminator directly or indirectly shall be 30 volts RMS or less and be supplied by an isolation transformer. Primary wavelengths for the available colors shall be: Red - 626-635 nm; Orange - 605-609 nm; Amber - 590-592 nm; Green - 520-525 nm; Blue - 465-470 nm.

**ELECTRICAL:** Luminaires include a complete prewired LED driver 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:** Anodized housings are created with an Aluminum Association Architectural Class I anodizing process to achieve a bronze, black or natural aluminum finish. Painted units are finished with hardcoat, fade resistant, electrostatically applied TGIC polyester powdercoat or polyurethane.

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

**WARRANTY:** Philips Gardco Form 10 Round LED luminaires feature a 5 year limited warranty, including a 5 year limited warranty covering the LED arrays. See Warranty Information on [www.sitelighting.com](http://www.sitelighting.com) 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.

**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.

1611 Clovis Barker Road, San Marcos, TX 78666

(800) 227-0758 (512) 753-1000 FAX: (512) 753-7855 [sitelighting.com](http://www.sitelighting.com)

© 2012 Koninklijke Philips Electronics N.V. All Rights Reserved.

Philips Gardco reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program.

G200-027/0212

**PHILIPS**

