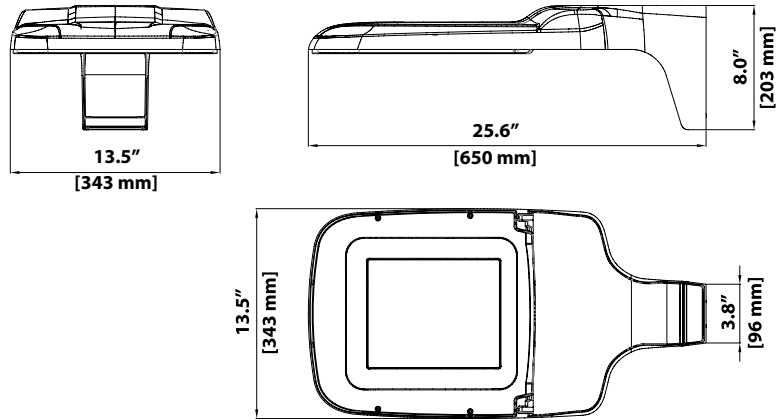


# ARIETA® 13 ComfortGuide™ Pedestrian & Site Luminaire

## AR13 CG1/CG2 Specification Data Sheet

### Luminaire Data

**Weight** 15.4 lbs [7 kg]  
**EPA** 0.47 ft<sup>2</sup>



### Ordering Information

Sample Catalog No. AR13-CG2-N-MV-27K-T2-DB-040-PCR7

Product	LED Code	Voltage	Nominal Color Temperature	Distribution	Finish <sup>1</sup>	Output Code <sup>2</sup>	Options
AR13-CG1 AR13-CG2	N	MV 120-277V	27K 2700K	T2 Type 2	BK Black	CG1 27K 30K 40K	FOC <sup>3</sup> Fixed Output Code PCR7 <sup>4</sup> ANSI 7-wire Photocontrol Receptacle
		HV 347-480V	30K 3000K 40K 4000K	T3 Type 3 T5 Type 5	DB Dark Bronze (RAL6022) DB1 Dark Bronze (RAL8019)		
					WH White	CG2 27K 30K 40K	MSL3 <sup>6</sup> Motion Sensor with L3 Lens MSL7 <sup>6</sup> Motion Sensor with L7 Lens
					GY Gray	070 075 075 080 085 090 090 100 100	SP2 <sup>7</sup> 20kV/10kA Surge Protector PND1 <sup>8</sup> Part-Night Dimming PND2 <sup>8</sup> Part-Night Dimming PND3 <sup>8</sup> Part-Night Dimming
					NA Natural Aluminum	110 115 120	WL Utility Wattage Label

- 1 Black, Dark Bronze, White, Gray, or Natural Aluminum standard. DB (RAL6022) is our original dark bronze. DB1 (RAL8019) is a new dark bronze option. Consult factory for other finishes. See page 2 for specifications.
- 2 Specified output code is the factory set lumen performance. Refer to performance data table on page 3 of this spec sheet. Field adjustable current selector enables fixture to be changed in the field to adjust light output for local conditions (not available with Fixed Output Code (FOC) or PCR7-CR option). Consult factory if wattage limits require a special drive current.
- 3 No field adjustable output. Specified output code set at the factory.
- 4 Includes current selector that enables field adjustability of light levels. Includes connectors to allow easy upgrade of wireless dimming via PCR7. Wireless node by others.
- 5 Control-ready wired at factory for wireless node dimming. Output selector not included in fixture. Not able to adjust above specified drive current.
- 6 See L7 or L3 Lens coverage details on page 4. Consult factory for MS specified with ANSI 7-wire Photocontrol Receptacle. PCR7 option is required for On/Off control using light detection.
- 7 Standard surge protection, 10kV/5kA, fail-to-on, meets enhanced surge protection based on ANSI 136.25-2015 3-part test.
- 8 For PND profile options see page 5. Only available with MV (120-277V).
- 9 Specify Color (GY, DB, DB1, BK, WH, NA)
- 10 Specify MV (120-277V) or HV (347V-480V)

Accessories <sup>†</sup>	
RPA <sup>9</sup>	Round Pole Adapter
PTF1 <sup>9</sup>	Square Pole Top Fitter Single
PTF2 <sup>9</sup>	Square Pole Top Fitter Twin at 180°
PTF4 <sup>9</sup>	Square Pole Top Fitter Quad
WM <sup>9</sup>	Wall Mount
BSK	Bird Deterrent Spider Kit
LLPC <sup>10</sup>	Long-Life Twist Lock Photocontrol
SC	Twist Lock Shorting Cap
FSIR100	Motion Sensor Configuration Tool

\*Accessories are ordered separately and not to be included in the catalog number

### Luminaire Specifications

#### Housing

Die cast aluminum housing with universal mounting design allows for attachment to existing pole without redrilling for retrofit applications. Aluminum housing provides passive heat-sinking of the LEDs and has upper surfaces that shed precipitation. Mounting provisions meet 3G vibration per ANSI C136.31-2010 Normal Application, Bridge & Overpass. Electrical components are accessed without tools and are mounted on removable power door.

#### Light Emitting Diodes

LEDs produce nominal 85% of initial intensity at 60,000 hours of life per IES recommended lumen maintenance life projection based on 6 times the duration of the collected LM-80 data. For details on IESNA position on LED Product Lifetime Prediction, refer to PS-10-18. LEDs have correlated color temperature of 2700K (27K), 3000K (30K), 4000K (40K), and 70 CRI minimum. LEDs are ROHS compliant, 100% mercury and lead free.

#### Field Adjustability

LED lumen output can be changed in the field to adjust for local conditions (not available with PCR7-CR option). The specified output code will be the factory set output. Field adjustments can be made with the output selector included in the fixture. Field adjustable range shown in performance data table.

#### Quality Control

Every luminaire is performance tested before and after a 2-hour burn-in period.

#### Optical Systems

ComfortGuide's patented light panel is fully sealed (IP66 rated) and designed to create large uniform source luminance that provides less contrast between the light source and the dark sky background. The combination of uniform source luminance and lower contrast greatly reduces glare, improves visual comfort, and enhances the user experience.

#### Electrical

Rated life of electrical components is 100,000 hours. Uses isolated power supply that is 1-10V dimmable. Power supply is wired with quick-disconnect terminals. Power supply features a minimum power factor of .90 and <20% Total Harmonic Distortion (THD). EMC meets or exceeds FCC CFR Part 15. Terminal block accommodates 6 to 14 gauge wire. Standard surge protection complies with IEEE/ANSI C62.41 and ANSI C136.2-2015, Enhanced (10kV/5kA). SP2 option provides Extreme level (20kV/10kA).

#### Controls

ANSI C136.41 7-wire (PCR7) photocontrol receptacle is available. Photocontrol receptacle has a tool-less rotatable base. Wireless control module is provided by others.

#### Finish

Housing receives a fade and abrasion resistant polyester powder coat finish with 3.0 mil nominal thickness. Finish tested to withstand 5000 hours in salt spray exposure per ASTM B117. Finish meets scribe creepage rating 8 per ASTM D1654. Finish tested 500 hours in UV exposure per ASTM G154 and meets ASTM D523 gloss retention.

#### Listings/Ratings/Labels

Luminaires are UL listed for use in wet locations in the United States and Canada. DesignLights Consortium™ Premium Classification qualified product. International Dark Sky Association listed. Luminaire is qualified to operate at ambient temperatures of -40°C to 40°C.

#### Photometry

Luminaires photometrics are tested by certified independent testing laboratories in accordance with IES LM-79 testing procedures.

#### Warranty

5-year limited warranty is standard on luminaire and components. 5-year limited warranty on luminaires and components with a motion sensor. See Leotek.com for warranty details

#### Vandal Resistance

Housing and optics rated to IK09

#### Standards

Luminaire complies with:  
ANSI: C136.2, C136.3, C136.10, C136.13, C136.15, C136.22, C136.31, C136.35, C136.37, C136.41, C62.41, C78.377, C82.77  
Other: FCC 47 CFR, IEC 60598, ROHS II, UL 1449, UL 1598

### Color Specifications

Order Code	Color	RAL #	Pantone Equivalent
<b>GY</b>	Gray	7040	429C
<b>BK</b>	Black	9004	426C
<b>DB</b>	Dark Bronze	6022	BLACK 2C
<b>DB1</b>	Dark Bronze	8019	412
<b>WH</b>	White	9003	11-0601
<b>NA</b>	Natural Aluminum	9006	N/A

### Performance Data 2700K (27K)

All data nominal. IES files are available at [leotek.com](http://leotek.com).

LED Code	Output Code	Delivered Lumens (Lm) <sup>1</sup>	System Wattage (W)	Efficacy (Lm/W)	Drive Current (mA)	Field Adjustable Output Range <sup>2</sup>
AR13-CG1	035 <sup>3</sup>	3400	30	113	370	↕
	040	4200	37	114	450	
	050	5300	45	118	580	
AR13-CG2	070	7000	59	119	770	↕
	080	8200	69	119	900	
	090	9400	81	116	1050	
	110	11100	97	114	1250	

### Performance Data 3000K (30K)

All data nominal. IES files are available at [leotek.com](http://leotek.com).

LED Code	Output Code	Delivered Lumens (Lm) <sup>1</sup>	System Wattage (W)	Efficacy (Lm/W)	Drive Current (mA)	Field Adjustable Output Range <sup>2</sup>
AR13-CG1	035 <sup>3</sup>	3600	30	120	370	↕
	045	4400	37	119	450	
	055	5600	46	122	580	
AR13-CG2	075	7400	60	123	760	↕
	085	8600	69	125	910	
	100	9800	80	123	1050	
	115	11700	97	121	1250	

### Performance Data 4000K (40K)

All data nominal. IES files are available at [leotek.com](http://leotek.com).

LED Code	Output Code	Delivered Lumens (Lm) <sup>1</sup>	System Wattage (W)	Efficacy (Lm/W)	Drive Current (mA)	Field Adjustable Output Range <sup>2</sup>
AR13-CG1	035 <sup>3</sup>	3600	29	124	360	↕
	045	4500	36	125	440	
	055	5600	45	124	570	
AR13-CG2	075	7500	60	125	760	↕
	090	8800	69	128	890	
	100	10000	80	125	1040	
	120	12000	97	124	1270	

Notes:

1 Normal tolerance ± 10% due to factors including distribution type, LED bin variance, driver variance, and ambient temperatures.

2 Performance codes available in two ranges for adjustable output as shown in performance data tables. Output set at factory to specified performance code.

3 DLC approved at 120V and 240V.

**Motion Sensor (Optional) Specifications**

**Description**

Digital passive infrared luminaire integrated outdoor occupancy sensor provides high/low/off control based on motion detection. Initial setup and subsequent sensor adjustments are made using a handheld configuration tool. PCR option is required for On/Off control using light detection. Available with both MV and HV input voltage options.

**Operation**

Standard factory setting will dim the luminaire to 50% until motion is sensed and then it will power to 100%. When motion is not detected for five minutes, the luminaire will dim back to 50%. Ramp up and fade down times are adjustable, but initially set to NONE. The percent dimming and time durations may be field adjusted as required using FSIR-100 configuration tool. FSIR-100 user guide available at: [www.wattstopper.com](http://www.wattstopper.com).

**Optical System**

Multi-cell, multi-tier Fresnel lens with a 360 degree view detects unobstructed motion within one mounting height, up to 20 ft. maximum (MSL3) or 40 ft. maximum (MSL7). Consult factory for higher mounting height requirements.

**Finish**

Sensor exterior ring and lens are white polycarbonate, UV and impact resistant.

**Listings/Ratings**

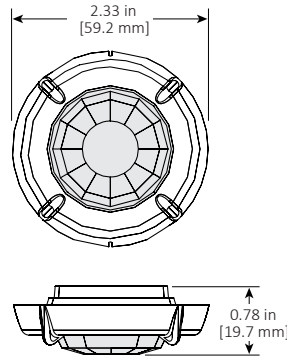
Sensor is TUV, UL and cUL listed, IP66 rated and CE compliant.

**Warranty**

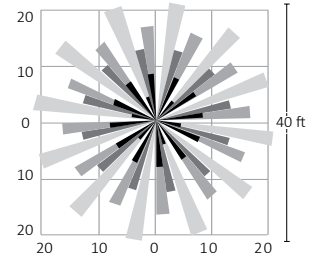
5-year limited warranty on luminaires and components with a motion sensor.

**Motion Sensor (Optional) Data**

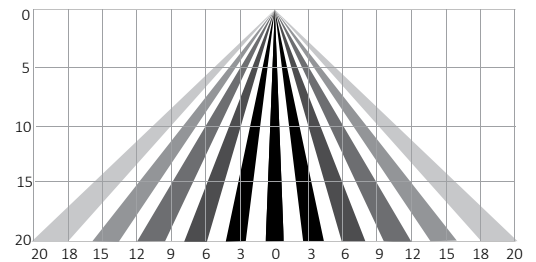
**MSL3 Lens Dimensions**



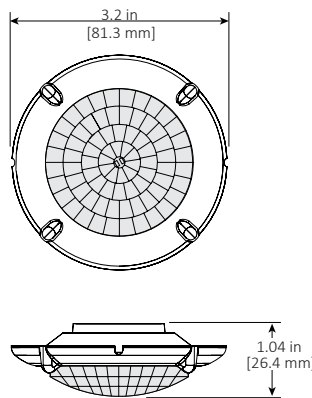
MSL3 Lens Coverage Top View



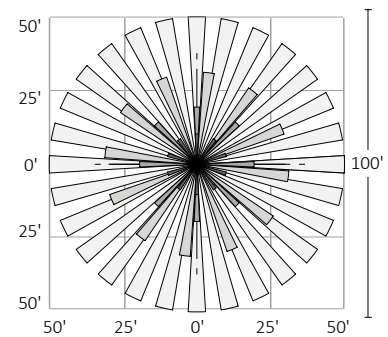
MSL3 Lens Coverage Side View



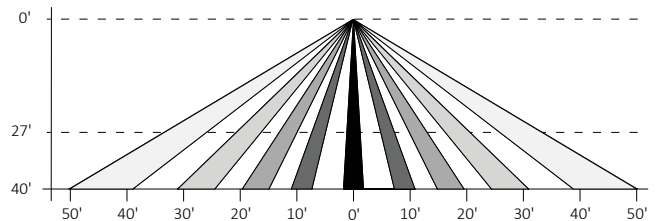
**MSL7 Lens Dimensions**



MSL7 Lens Coverage Top View



MSL7 Lens Coverage Side View



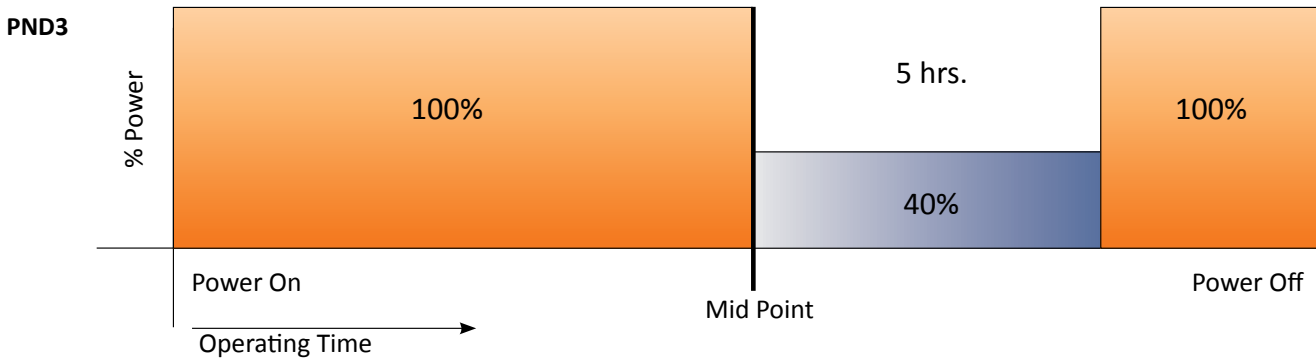
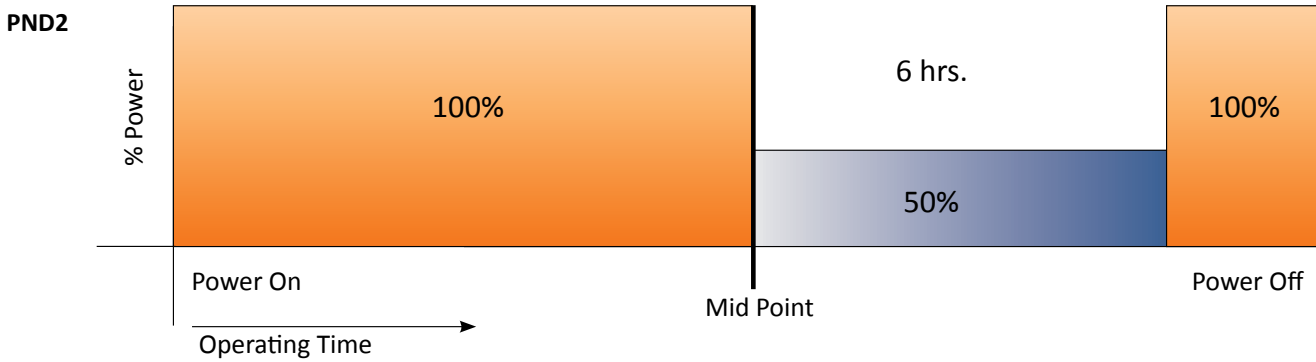
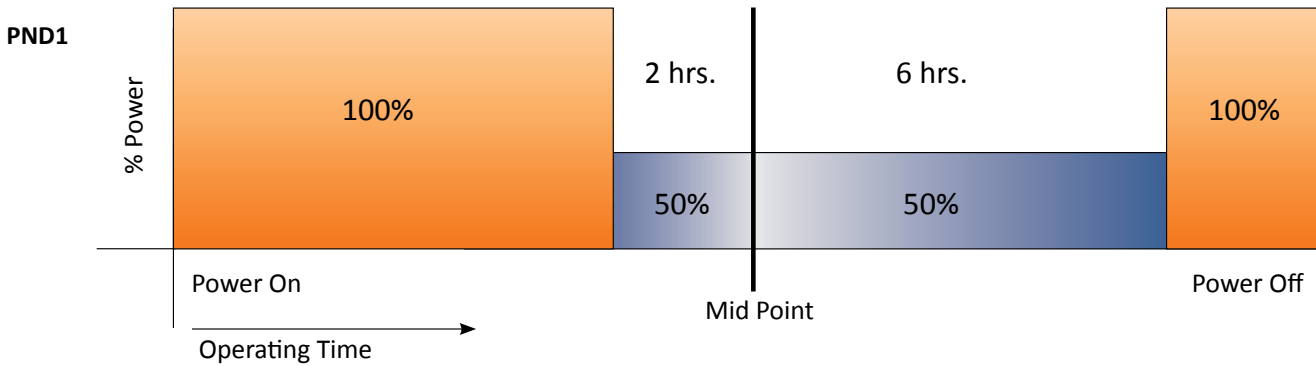
**Part-Night Dimming Specifications**

**Description**

Arieta’s Part-Night Dimming (PND) option enables significant energy savings by automatically dimming the luminaire during early morning hours when infrequent use is expected. Factory programmed dimming profiles automatically take into account seasonal changes based on geographical location by continuously monitoring the nighttime midpoint. PND does not provide power on/off control which is provided by external controls (example: time clock) or a photocontrol using PCR3 or PCR7 option. Dimming profile of PND option is not field adjustable.

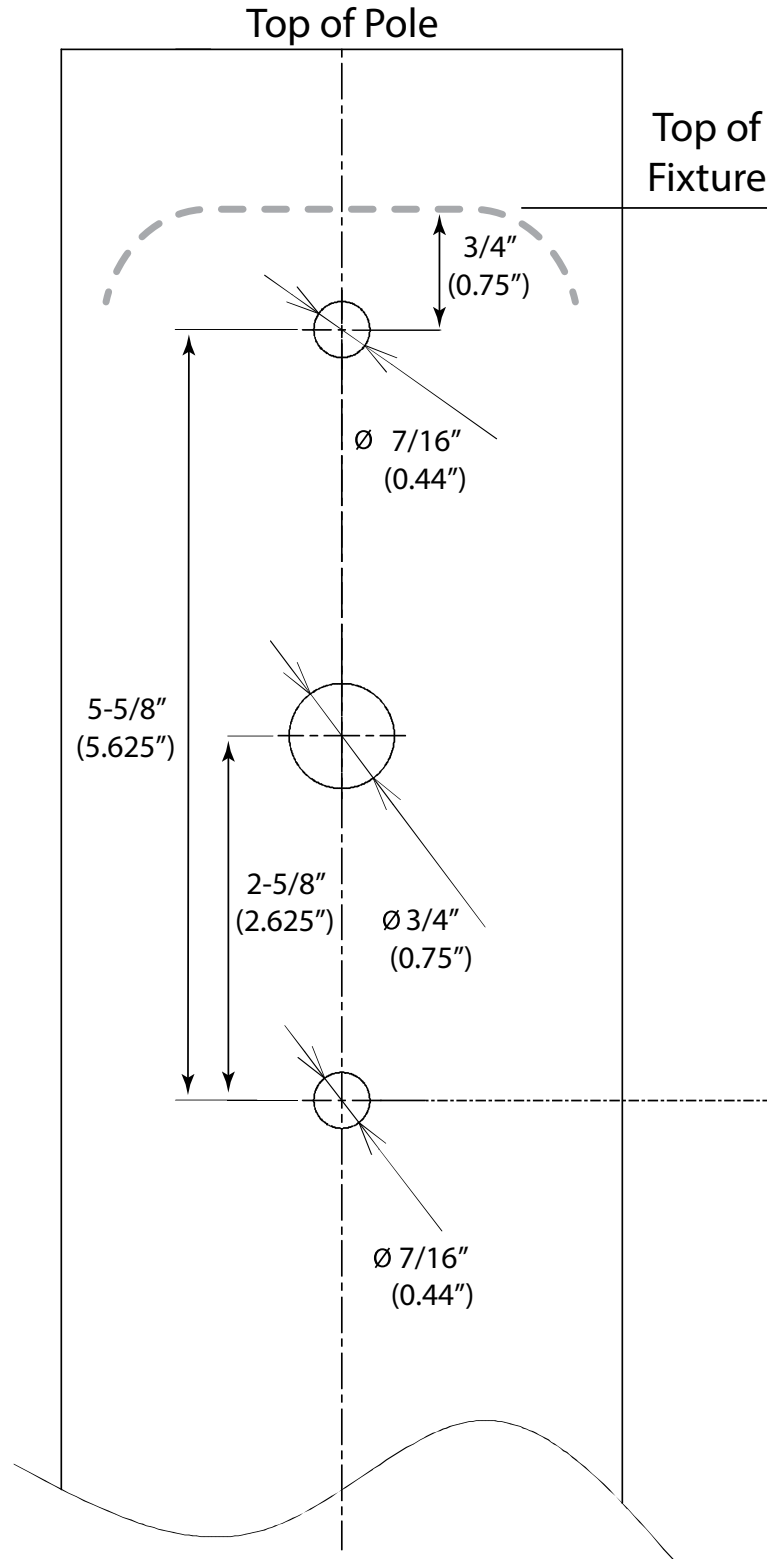
**Operation**

Based on the PND profile that is selected, the luminaire dims to the corresponding % power for the corresponding length of time (based on the nighttime mid-point) as shown below. Mid-point is continuously recalculated in the luminaire by monitoring the average length of time between when the light turns on (power on) and turns off (power off) over the previous two days. In effect, this functionality will take two days to initialize after installation before any dimming will occur. Power interruptions are ignored and do not affect the determination of mid-point. A motion sensor (MSL3 or MSL7) can be used with PND to temporarily override the dimming profile when motion is detected. Three factory programmed PND profiles are available for selection:



**Pole Mount Drilling Dimensions  
for New Construction**

For more details, consult  
the Arieta Installation Guide



**Mounting Pole Drilling Dimensions  
for New Construction**