



# American Revolution LED Series 247L

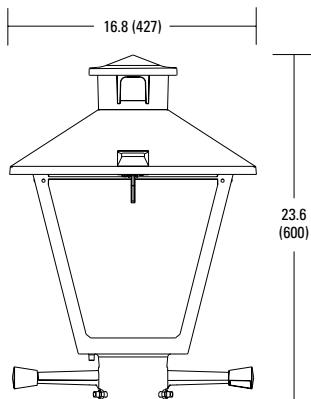
## PRODUCT OVERVIEW



### Applications:

Roadways      Pathways  
 Streetscapes      Parks  
 Walkways

### DIMENSIONS



#### Effective Projected Area (EPA)

The EPA for the American Revolution Series 247 is 1.6 sq. ft.  
 Fixture weight = 21lbs.  
 Shown with SCC cupola option. Reference page 3 for detail on cupola options

### STANDARDS

Rated from -40°C up to 40°C ambient  
 CSA Certified to U.S. and Canadian standards  
 Complies with all applicable ANSI C136 standards

#### Government Procurement

BAA – Buy America(n) Act: Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations.  
 BABA – Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.  
 Please refer to [www.acuitybrands.com/resources/buy-american](http://www.acuitybrands.com/resources/buy-american) for additional information.

## Features:

### OPTICAL

Producing between 2,300-9,700 lumens, the 247L family replaces up to 250W HID luminaires with optimal performance and visual comfort in a variety of applications.

Silicone optics provide superior optical efficiency, thermal performance, and reduction in dirt accumulation, all of which can lead to long term lumen degradation and a shift in optical distribution.

IP66 proven workhorse LED light engine in 15 different output packages.

Available in color temperature choices of 2700K, 3000K and 4000K, all at a 70 CRI minimum

Silicon optics provide crisp, well defined lighting distributions in four (4) distinct light distribution options; Type II, Type III, Type IV, and Type V

Acrylic or Polycarbonate panel lenses available

Available with single piece lens to allow for easy conversion to between lensed and full cut off styles, while also reducing SKU inventory.

### ELECTRICAL

LED light engines are rated >100,000 hours at 25°C, L70. Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Saves an expected of 40-60% over comparable HID luminaires.

Two different surge protection options provide a minimum of ANSI C136.2 10kV/5kA (standard) or 20kV/10kA protection.

Luminaire available with either a 0-10v dimmable driver or DALI D4i driver. Luminaire is continuous and step dimming capable via AO option or other installed controls.

XVOLT tank driver option for protection against dropped neutrals and other power quality issues.

### MECHANICAL

Die-cast aluminum housing, engineered for sturdy lifelong performance complete with die-cast aluminum hood featuring a trigger latch (TL) option and captive thumb screws for fast, easy electrical and optical chamber access.

Standard paint finish is smooth semi-gloss.

Housing is tenon pole-mounted and designed for use with a 3" tall by 2-3/8" to 3" diameter tenon, and secured by three set screws

Luminaire is rated for 3g vibration per ANSI C136.31(excluding TL option).

### CONTROLS

The Acuity designed ANSI 7-pin receptacle is available, which supports traditional locking style photocontrols such as the Extreme long-life solid-state locking style photocontrol - PCLL (20 year rated life).

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and also can allow a single fixture to be flexibly applied in many different applications.

The DC Connect option is a factory embedded low voltage dusk to dawn photocontrol that increases longevity vs. line voltage controls and also eliminates the need to separately inventory controls.

The Local Connect option provides a simple means to collect luminaire attribute data, asset location information and execute point-to-point on/off/dim commands via secure Bluetooth link using smartphone platforms.

Cell Connect is an embedded network photocontrol with cellular communication. It provides digital switching, precise dimming, and revenue grade metrology. Cell Connect leverage D4i drivers to communicate real-time data to UbiVu, a cloud-based asset management system.

Additionally, it can be equipped with sensor-ready technology to support Zhaga standard sensors enabling smart city solutions utilizing long range network nodes to enable remote monitoring and control.

Variety of cupola options to accommodate nearly any node on the market in an aesthetic shroud.

# American Revolution LED

## Series 247L

### ORDERING INFORMATION

Series	Performance Package					Voltage		
247L American Revolution LED	Package	Input Watts	Lumens (nominal)	Package	Input Watts	Lumens (nominal)	MVOLT	120-277V
	<b>P101</b>	20	2,400	<b>P201</b>	70	7,500	<b>HVOLT</b>	347-480V
	<b>P102</b>	30	3,200	<b>P202</b>	80	8,300	<b>XVOLT</b>	277-480V with enhanced power quality protection
	<b>P103</b>	40	4,100	<b>P300</b>	41	4,900		
	<b>P104</b>	49	4,900	<b>P301</b>	60	7,100		
	<b>P151</b>	30	3,600	<b>P302</b>	70	7,900		
	<b>P152</b>	40	4,400	<b>P303</b>	80	8,800		
	<b>P153</b>	50	5,300					
	<b>P154</b>	60	6,100					
	<b>P155</b>	70	7,000					

Driver	Color Temperature (CCT)	Distribution	Optics	Paint (smooth semi-gloss)
<b>ZT</b> 0-10V dimmable driver	<b>27K</b> 2700K	<b>R2</b> Type II	<b>AY</b> Acrylic	<b>BK</b> Black
<b>D4I</b> D4I driver	<b>30K</b> 3000K	<b>R3</b> Type III	<b>PY</b> Polycarbonate	<b>GY</b> Gray
	<b>40K</b> 4000K	<b>R4</b> Type IV	<b>SAY<sup>1</sup></b> Single Piece Acrylic	<b>DDB</b> Dark Bronze
		<b>R5</b> Type V	<b>SPY<sup>1</sup></b> Single Piece Polycarbonate	<b>WH</b> White
				<b>BZ</b> Bronze

Top Receptacle	Cupola	Twist-Lock Photocontrols	Embedded Controls
<b>NTR</b> No Top receptacle	<b>SCC</b> Standard cupola	<b>PCLL</b> Solid State Long Life Photocontrol, 120-277V (fail off)	<b>ALCB</b> Local Connect Basic
<b>PR3</b> 3 Pin NEMA receptacle	<b>SNC</b> Smart node cupola	<b>PCSS</b> Solid State Photocontrol 120-277V (fail off) (Not CSA Listed)	<b>ALCC</b> Local Connect Custom
<b>PR7</b> 7 pin NEMA receptacle	<b>XC</b> No cupola	<b>P34</b> Solid State Long Life Photocontrol, 347V (fail off)	<b>ALCF</b> Local Connect Full
<b>ZRT</b> Zhage receptacle top		<b>P48</b> Solid State Long Life Photocontrol, 480V (fail off)	<b>DDC</b> DC Connect Photocontrol
		<b>SH</b> Shorting cap	<b>UBC</b> Cell Connect
		<b>DZP</b> DTL DZP DC Zhaga Photocontrol	

Miscellaneous Options
-----------------------

<b>XL<sup>2</sup></b> Not CSA Listed (no terminal block cover)	<b>LDR</b> Ladder Rest	<b>Full Lens Panel</b>	<b>Accessories (ship separately):</b>
<b>AO</b> Field Adjustable Output module	<b>CR</b> Epoxy Pre-Coat Finish	<b>HSB</b> AY/PY House Side Black	<b>247LFHSW</b> Field installable white shield (HSW)
<b>SS</b> Stainless Steel hardware	<b>20kV</b> 20kV/10kA surge protection device	<b>HSW</b> AY/PY House Side White	<b>247LFHSB</b> Field installable black shield (HSB)
<b>TL</b> Tool-less trigger latch entry	<b>CNV</b> Field convertible to full cutoff	<b>HSSXY</b> SAY/SPY House Side Black	<b>247LFAY</b> Field installable acrylic (AY) optic
<b>NL1X1</b> 1" x 1" NEMA label	<b>BAA</b> Buy America(n) Act and/or Build America Buy America Qualified	<b>Prewired leads</b>	<b>247LFPPY</b> Field installable polycarbonate (PY) optic
<b>NL2X2</b> 2" x 2" NEMA label	<b>HSS</b> Factory Installed Louvered HSS	<b>L1H</b> 1.5 ft. prewire leads	<b>247LFSXYB</b> Field installable CNV Option SAY/SPY black shield
		<b>L03</b> 3 ft. prewire leads	
		<b>L10</b> 10 ft. prewire leads	<b>Note:</b>
		<b>L20</b> 20 ft. prewire leads	1. CNV must be selected with SAY or SPY
		<b>L25</b> 25 ft. prewire leads	2. CNV not available with XL
		<b>L30</b> 30 ft. prewire leads	Check the OPTIONS MATRIX on page 3 for compatibility and restrictions.



# American Revolution LED

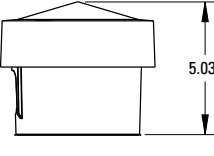
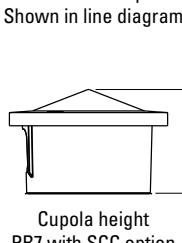
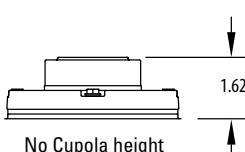
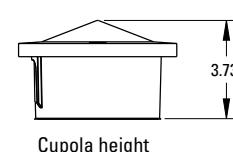
## Series 247L

### OPTIONS MATRIX

247L		Voltage			Driver		Top Receptacle			Cupola			Twist-Lock Photocontrols						Embedded Controls					Other		
		MVOLT	HVOLT	XVOLT	ZT	D4I	NTR	PR3	PR7	ZRT	SCC	SNC	XC	PCLL	PCSS	P34	P48	SH	DZP	ALCB	ALCC	ALCF	DDC	UBC	AO	
Voltage	MVOLT				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	
	HVOLT				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
	XVOLT				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
Driver	ZT	Y	Y	Y			Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	Y	
	D4I	Y	Y	Y			Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	
Top Receptacle	NTR	Y	Y	Y	Y	Y					Y	N	Y	N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	
	PR3	Y	Y	Y	Y	N					Y	N	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	Y	
	PR7	Y	Y	Y	Y	Y					Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	Y	
	ZRT	Y	Y	Y	N	Y					Y	Y	Y	N	N	N	N	N	Y	N	N	N	N	N	N	
Cupola	SCC	Y	Y	Y	Y	Y	Y	Y	Y	Y				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
	SNC	Y	Y	Y	Y	Y	N	N	N	N	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
	XC	Y	Y	Y	Y	Y	Y	Y	Y	Y				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Twist-Lock Photocontrols	PCLL	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y						N	N	N	N	N	N	Y	
	PCSS	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y						N	N	N	N	N	N	Y	
	P34	N	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y						N	N	N	N	N	N	Y	
	P48	N	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y						N	N	N	N	N	N	Y	
	SH	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y						N	N	N	N	N	N	Y	
	DZP	Y	Y	Y	N	Y	N	N	N	N	Y	Y	Y						N	N	N	N	N	N	N	
Embedded Controls	ALCB	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	Y													N
	ALCC	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	Y													N
	ALCF	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	Y													N
	DDC	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	Y													N
	UBC	Y	Y	Y	N	Y	Y	N	N	N	N	Y	N													N
Other	AO	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y						N	N	N	N	N	N	N	

Cupola Control Node Compatibility				
Cupola Option	Control Dimensions		Acuity Brands Control	
	Max. Height	Max. Diameter	nLight rTLN	DTL DIN
XC	Any	Any	Yes	Yes
SCC	2.34" (59 mm)	4.0" (102mm)	No	No
SNC	3.43" (87 mm)	4.0" (102mm)	No	Yes

Cupolas may affect 3rd party control performance.  
Always test 3rd party controls for fit and functionality.



\*See Cupola Control Node Compatibility chart to ensure compatibility with smart controls

All dimensions are inches (millimeters) unless otherwise noted.

247L	Distribution				Driver/Voltage									
	MVOLT		HVOLT		XVOLT		ZT		D4I		ZT		D4I	
	R2	R3	R4	R5	ZT	D4I	ZT	D4I	ZT	D4I	ZT	D4I	ZT	D4I
P101	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	N	Y
P102	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
P103	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
P104	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
P151	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
P152	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
P153	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
P154	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
P155	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N
P201	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
P202	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
P300	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
P301	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
P302	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
P303	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

# American Revolution LED

## Series 247L

### OPERATING CHARACTERISTICS

Performance Package	Wattage	CCT	AY Optic					
			R2		R3		R4	
			Lumens	LPW	Lumens	LPW	Lumens	LPW
P101	20	2700K	2,344	117	2,331	117	2,290	115
		3000K	2,383	119	2,370	119	2,328	116
		4000K	2,546	127	2,531	127	2,487	124
P102	30	2700K	3,174	106	3,156	105	3,101	103
		3000K	3,227	108	3,209	107	3,152	105
		4000K	3,447	115	3,428	114	3,367	112
P103	40	2700K	4,076	102	4,053	101	3,982	100
		3000K	4,144	104	4,121	103	4,048	101
		4000K	4,427	111	4,402	110	4,324	108
P104	49	2700K	4,841	99	4,814	98	4,729	97
		3000K	4,922	100	4,894	100	4,808	98
		4000K	5,258	107	5,228	107	5,136	105
P151	30	2700K	3,577	119	3,557	119	-	-
		3000K	3,637	121	3,616	121	-	-
		4000K	3,885	130	3,863	129	-	-
P152	40	2700K	4,341	109	4,317	108	-	-
		3000K	4,413	110	4,388	110	-	-
		4000K	4,714	118	4,688	117	-	-
P153	50	2700K	5,246	105	5,217	104	-	-
		3000K	5,333	107	5,303	106	-	-
		4000K	5,697	114	5,665	113	-	-
P154	60	2700K	6,065	101	6,031	101	-	-
		3000K	6,166	103	6,131	102	-	-
		4000K	6,587	110	6,550	109	-	-
P155	70	2700K	6,879	98	6,840	98	-	-
		3000K	6,993	100	6,954	99	-	-
		4000K	7,470	107	7,428	106	-	-
P201	70	2700K	7,441	106	7,399	106	7,268	104
		3000K	7,564	108	7,522	107	7,389	106
		4000K	8,080	115	8,035	115	7,893	113
P202	80	2700K	8,163	102	8,117	101	7,974	100
		3000K	8,298	104	8,252	103	8,106	101
		4000K	8,864	111	8,815	110	8,659	108
P300	41	2700K	4,828	118	4,801	117	-	-
		3000K	4,908	120	4,881	119	-	-
		4000K	5,243	128	5,214	127	-	-
P301	60	2700K	7,032	117	6,992	117	-	-
		3000K	7,148	119	7,108	118	-	-
		4000K	7,636	127	7,594	127	-	-
P302	70	2700K	7,855	112	7,811	112	-	-
		3000K	7,985	114	7,940	113	-	-
		4000K	8,530	122	8,482	121	-	-
P303	80	2700K	8,664	108	8,616	108	-	-
		3000K	8,808	110	8,759	109	-	-
		4000K	9,409	118	9,357	117	-	-

Optic	Lumen Factor
AY	1.00
PY	0.92

Optic	Lumen Factor
SAY	1.00
SPY	0.92

**Warranty** Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Please contact your sales representative for the latest product information.



# American Revolution LED

## Series 247L

### PROJECTED LED LUMEN MAINTENANCE

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 6,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11). For other lumen maintenance values, contact factory.

LED Lumen Maintenance							
Performance Package	Initial	25k hours	36k hours	50k hours	60k hours	75k hours	100k hours
P101, P102, P151, P300	1.00	0.96	0.94	0.92	0.90	0.88	0.85
P103, P152	1.00	0.95	0.93	0.91	0.90	0.87	0.84
P153, P301, P302	1.00	0.95	0.93	0.91	0.89	0.87	0.83
P104, P154, P201, P303	1.00	0.95	0.93	0.90	0.89	0.86	0.82
P155, P202	1.00	0.94	0.92	0.89	0.88	0.85	0.80

### LUMEN AMBIENT TEMPERATURE (LAT) MULTIPLIERS

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Luminaire Ambient Temperature (LAT) Multiplier									
0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	
1.04	1.03	1.02	1.02	1.01	1.00	0.99	0.98	0.97	

D4i Driver Option Defaults			
Setting	Top Receptacle / Photocontrol	Default Value	Alternate Values
DALI Power Bus	NTR	ON	Off
	ALCB / ALCF / ALCC	ON	none
	DDC	ON	none
	PR7	OFF	On
	ZRT	ON	Off
	DZP	ON	Off
Dimming Type	Any	LINEAR	Logarithmic
24V AUX	Any	ON (Not Connected)	none
Scenes Data	Any	0 (blank)	01-255

\*To program different settings, consult factory; RFD is required



AEL Headquarters, 1 Acuity Way, Decatur, GA 30035  
[www.americanelectriclighting.com](http://www.americanelectriclighting.com) Phone: 1-866-HOLOPHANE  
 Email: [TechSupport-Lighting@AcuityBrands.com](mailto:TechSupport-Lighting@AcuityBrands.com)  
 © 2019-2025 Acuity Brands Lighting, Inc. All Rights Reserved. 247L Rev. 10/20/25

**Warranty** Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

*Please contact your sales representative for the latest product information.*