



American Revolution Full Cutoff LED Series 247CL

PRODUCT OVERVIEW



Features:

OPTICAL

Producing between 2,200-9,900 lumens, the 247CL family replaces up to 250W HID luminaires with optimal performance and visual comfort in a variety of applications.

Zero uplight to minimize light pollution and protect the night skies.

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

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.

Applications:

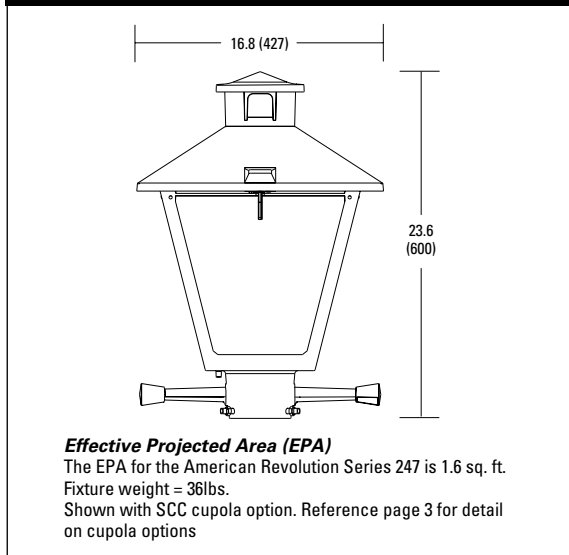
Roadways
Streetscapes
Walkways

Pathways
Parks



Consistent with LEED® goals & Green Globes® criteria for light pollution reduction

DIMENSIONS



Effective Projected Area (EPA)

The EPA for the American Revolution Series 247 is 1.6 sq. ft.

Fixture weight = 36lbs.

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 for additional information.

Note: Specifications subject to change without notice.

American Revolution Series 247CL LED



American Revolution Full Cutoff LED

Series 247CL

ORDERING INFORMATION

Series	Performance Package						Voltage
247CL American Revolution LED Full Cutoff	Package	Input Watts	Lumens (nominal)	Package	Input Watts	Lumens (nominal)	MVOLT 120-277V HVOLT 347-480V XVOLT 277-480V with enhanced power quality protection
	P101	20	2,400	P201	70	7,700	
	P102	30	3,300	P202	80	8,500	
	P103	40	4,200	P300	41	5,000	
	P104	49	5,000	P301	60	7,300	
	P151	30	3,700	P302	70	8,200	
	P152	40	4,500	P303	80	9,000	
	P153	50	5,400				
	P154	60	6,300				
	P155	70	7,100				
Driver	Color Temperature (CCT)	Distribution	Paint (smooth semi-gloss)	Top Receptacle			
ZT 0-10V dimmable driver D4I D4I driver	27K 2700K 30K 3000K 40K 4000K	R2 Type II R3 Type III R4 Type IV R5 Type V	BK Black GY Gray DDB Dark Bronze WH White BZ Bronze	NTR No Top receptacle PR3 3 Pin NEMA receptacle PR7 7 pin NEMA receptacle ZRT Zhage receptacle top			
Cupola	Twist-Lock Photocontrols	Embedded Controls					
SCC Standard cupola SNC Smart node cupola XC No cupola	PCLL Solid State Long Life Photocontrol, 120-277V (fail off) PCSS Solid State Photocontrol 120-277V (fail off) (Not CSA Listed) P34 Solid State Long Life Photocontrol, 347V (fail off) P48 Solid State Long Life Photocontrol, 480V (fail off) SH Shorting cap DZP DTL DZP DC Zhaga Photocontrol	ALCB Local Connect Basic ALCC Local Connect Custom ALCF Local Connect Full DDC DC Connect Photocontrol UBC Cell Connect					
Miscellaneous Options							
XL Not CSA Listed (no terminal block cover) AO Field Adjustable Output module SS Stainless Steel hardware TL Tool-less trigger latch entry NL1X1 1" x 1" NEMA label NL2X2 2" x 2" NEMA label	LDR Ladder Rest CR Epoxy Pre-Coat Finish 20kV 20kV/10kA surge protection device CNV Field convertible to full cutoff BAA Buy America(n) Act and/or Build America Buy America Qualified HSS Factory Installed Louvered HSS	Prewired leads L1H 1.5 ft. prewire leads L03 3 ft. prewire leads L10 10 ft. prewire leads L20 20 ft. prewire leads L25 25 ft. prewire leads L30 30 ft. prewire leads	Accessory House Side Shield shipped separately and installed in the field FHSSLEM10-15R2R5 P10x or P15x package, R2 or R5 optic FHSSLEM10-15R3R4 P10x or P15x package, R3 or R4 optic FHSSLEM20-30R2R5 P20x or P30x package, R2 or R5 optic FHSSLEM20-30R3R4 P20x or P30x package, R3 or R4 optic FHSSLEM45R2R5 P45x package, R2 or R5 optic FHSSLEDLEM45R3R4 P45x package, R3 or R4 optic				

Check the OPTIONS MATRIX on page 3 for compatibility and restrictions.



American Revolution Full Cutoff LED

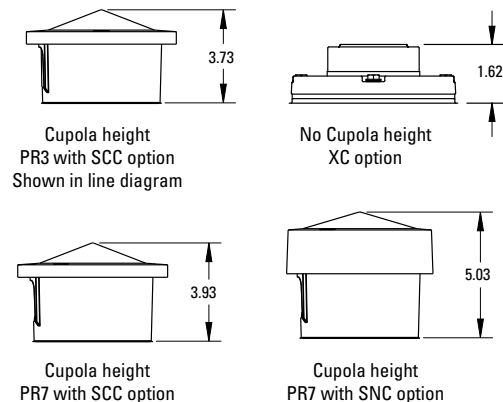
Series 247CL

OPTIONS MATRIX

247CL		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	Y
	HVOLT				Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	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	Y
Driver	ZT	Y	Y	Y			Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	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	Y	N
Top Receptacle	NTR	Y	Y	Y	Y	Y					Y	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	Y
	PR3	Y	Y	Y	Y	N					Y	N	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y
	PR7	Y	Y	Y	Y	Y					Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	Y
	ZRT	Y	Y	Y	N	Y					Y	Y	Y	N	N	N	N	N	N	N	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	Y	Y
	SNC	Y	Y	Y	Y	Y	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
	PCSS	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y													N
	P34	N	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y													N
	P48	N	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y													N
	SH	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y													N
DZP	Y	Y	Y	N	Y	N	N	N	Y	Y	Y	Y													N	
Embedded Controls	ALCB	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N
	ALCC	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N
	ALCF	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N
	DDC	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N
	UBC	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N
Other	AO	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N	N	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	
		R2	R3	R4	R5	ZT	D4I	ZT	D4I	ZT	D4I	
Lumen Package	P101	Y	Y	Y	Y	Y	Y	N	Y	N	Y	
	P102	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	
	P103	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	
	P104	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	
	P151	Y	Y	N	Y	Y	Y	Y	Y	N	Y	
	P152	Y	Y	N	Y	Y	Y	Y	Y	N	Y	
	P153	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	
	P154	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	
	P155	Y	Y	N	Y	Y	Y	Y	N	N	N	
	P201	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
	P202	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
	P300	Y	Y	N	Y	Y	Y	Y	Y	N	Y	
	P301	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	
	P302	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	
	P303	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	



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

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Series 247CL

OPERATING CHARACTERISTICS

Performance Package	Wattage	CCT	Optic							
			R2		R3		R4		R5	
			Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW
P101	20	2700K	2,407	120	2,394	120	2,256	113	2,472	124
		3000K	2,447	122	2,433	122	2,294	115	2,513	126
		4000K	2,614	131	2,599	130	2,450	123	2,684	134
P102	30	2700K	3,260	109	3,241	108	3,055	102	3,347	112
		3000K	3,314	110	3,295	110	3,106	104	3,403	113
		4000K	3,540	118	3,520	117	3,318	111	3,635	121
P103	40	2700K	4,186	105	4,162	104	3,924	98	4,298	107
		3000K	4,256	106	4,231	106	3,989	100	4,370	109
		4000K	4,546	114	4,520	113	4,261	107	4,668	117
P104	49	2700K	4,972	101	4,944	101	4,660	95	5,105	104
		3000K	5,055	103	5,026	103	4,738	97	5,190	106
		4000K	5,400	110	5,369	110	5,061	103	5,544	113
P151	30	2700K	3,674	122	3,653	122	-	-	3,772	126
		3000K	3,735	125	3,714	124	-	-	3,835	128
		4000K	3,990	133	3,967	132	-	-	4,097	137
P152	40	2700K	4,458	111	4,433	111	-	-	4,578	114
		3000K	4,532	113	4,506	113	-	-	4,654	116
		4000K	4,842	121	4,814	120	-	-	4,971	124
P153	50	2700K	5,388	108	5,357	107	-	-	5,532	111
		3000K	5,477	110	5,446	109	-	-	5,624	112
		4000K	5,851	117	5,818	116	-	-	6,008	120
P154	60	2700K	6,229	104	6,194	103	-	-	6,396	107
		3000K	6,332	106	6,296	105	-	-	6,502	108
		4000K	6,765	113	6,726	112	-	-	6,946	116
P155	70	2700K	7,064	101	7,024	100	-	-	7,254	104
		3000K	7,182	103	7,141	102	-	-	7,374	105
		4000K	7,672	110	7,628	109	-	-	7,877	113
P201	70	2700K	7,641	109	7,598	109	7,162	102	7,846	112
		3000K	7,768	111	7,724	110	7,281	104	7,976	114
		4000K	8,298	119	8,251	118	7,778	111	8,521	122
P202	80	2700K	8,383	105	8,335	104	7,857	98	8,608	108
		3000K	8,522	107	8,473	106	7,988	100	8,750	109
		4000K	9,104	114	9,052	113	8,533	107	9,348	117
P300	41	2700K	4,959	121	4,930	120	-	-	5,092	124
		3000K	5,041	123	5,012	122	-	-	5,176	126
		4000K	5,385	131	5,354	131	-	-	5,529	135
P301	60	2700K	7,222	120	7,180	120	-	-	7,415	124
		3000K	7,341	122	7,299	122	-	-	7,538	126
		4000K	7,842	131	7,798	130	-	-	8,053	134
P302	70	2700K	8,067	115	8,021	115	-	-	8,283	118
		3000K	8,200	117	8,154	116	-	-	8,420	120
		4000K	8,760	125	8,710	124	-	-	8,995	129
P303	80	2700K	8,898	111	8,847	111	-	-	9,137	114
		3000K	9,046	113	8,994	112	-	-	9,288	116
		4000K	9,663	121	9,608	120	-	-	9,922	124



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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). To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. 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

