









Valiant[™] Full Cutoff LED Series AVPCL2

PRODUCT OVERVIEW



Applications:

Roadways Streetscapes Walkways Pathways Parks

Full Cutoff Vieux Option

17
(432)

18-1/2
(419)

16-1/2
(419)

Effective Projected Area (EPA)

The EPA for the AVPCL2 is 1.4 sq. ft.

The EPA for the AVPCL2 Vieux is 2.4 sq. ft.

Fixture weight = 38 lbs.

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. Valiant Full Cutoff LED Series - AVPCL2

Features:

OPTICAL

Producing between 3,300-14,700 lumens, the Valiant AVPCL2 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 16 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 black finish is matte texture. All other finishes are smooth 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.

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.



Valiant™ Full Cutoff LED Series AVPCL2

ORDERING INFORMATION

Series AVPCL2 Valiant Full				Perforn	nance Package			Voltage		
AVPCL2	Valiant Full Cutoff LED	Package P101 P102 P103 P151	Input Watts 30 40 50 50	Lumens (nominal) 3,400 4,300 5,200 5,500	Packag P300 P301 P302 P303	2 Input Watts 61 70 80 90	Lumens (nominal) 7,400 8,300 9,400 10,300		120-277V 347-480V 277-480V with enhance power quality protection	
		P151 P152 P153 P201 P202 P203	60 70 70 80 90	6,600 7,400 7,800 8,600 9,300	P304 P451 P452	100 100 110	10,300 11,100 12,200 13,200			
	Driver] [Color Tempera	nture (CCT)	Distribution		Paint (textured)		Top Receptacle	
ZT 0-10V dimmable driver D4I D4I driver		27K 2700K 30K 3000K 40K 4000K		00K	R2 Type II R3 Type III R4 Type IV R5 Type V		BK Black GY Gray DDB Dark Bronze WH White BZ Bronze	NTR PR3 PR7 ZRT	3 Pin NEMA receptacle 7 pin NEMA receptacle	
	Cupola	- —] [Tw	rist-Lock Photocontrols			Embedded Controls	-]		
SCC Standard cupola SNC Smart node cupola XC No cupola		PCLL Solid State Long Life Photocontrol, 120 PCSS Solid State Photocontrol 120-277V (fa P34 Solid State Long Life Photocontrol, 34: P48 Solid State Long Life Photocontrol, 480 SH Shorting cap DZP DTL DZP DC Zhaqa Photocontrol			on) (Not CSA Listed (fail off)	ALCF DDC	Local Connect Basic Local Connect Custom Local Connect Full DC Connect Photocontrol Cell Connect			

Miscellaneous Options

^-	HOL CON LISTCA
	(no terminal block cover)
A0	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

XI Not CSA Listed

LDR Ladder Rest

CR Epoxy Pre-Coat Finish

20kV 20kV/10kA surge protection device

Buy America(n) Act and/or Build America Buy America Qualified

Vieux Option

VXCA VX option with Clear Acrylic lens

HSS Factory Installed Louvered HSS

Prewired leads

L1H 1.5 ft. prewire leads

LO3 3 ft. prewire leads L10 10 ft. prewire leads

L20 20 ft. prewire leads

L25 25 ft. prewire leads

L30 30 ft. prewire leads

<u>Accessory</u> House Side Shield shipped separately and installed

in the field

FHSSLEM10-15R2/R5 P10x or P15x package, R2 or

R5 optic

FHSSLEM10-15R3 P10x or P15x package, R3 optic

FHSSLEM20-30R2/R5 P20x or P30x package, R2 or

R5 optic

FHSSLEM20-30R3 P20x or P30x package, R3 optic FHSSLEM45R2/R5 P45x package, R2 or R5 optic

FHSSLEM45R3 P45x package, R3 optic

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



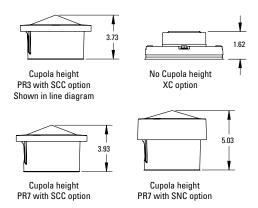
Valiant[™] Full Cutoff LED Series AVPCL2

OPTIONS MATRIX

AVDCI			Voltage		Dri	ver		Top Red	eptacle			Cupola			Twis	t-Lock Pl	notocont	rols			Embe	dded Con	trols		Other
AVPCL	.2	MVOLT	HVOLT	XVOLT	ZT	D4I	NTR	PR3	PR7	ZRT	SCC	SNC	XC	PCLL	PCSS	P34	P48	SH	DZP	ALCB	ALCC	ALCF	DDC	UBC	AO
	MVOLT				Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Voltage	HVOLT				Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
	XVOLT				Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y
Driver	ZT	Y	Y	Y			Υ	Υ	Υ	N	Y	Y	Υ	Υ	Υ	Υ	Υ	Υ	N	N	N	N	N	N	Y
Dilvei	D4I	Y	Y	Y			Υ	N	Υ	Υ	Υ	Y	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N
	NTR	Y	Y	Y	Y	Y					Υ	N	Υ	N	N	N	N	N	N	Y	Υ	Υ	Υ	Υ	Υ
Тор	PR3	Y	Y	Y	Y	N					Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	N	N	N	N	N	N	Y
Receptacle	PR7	Y	Y	Y	Y	Y					Υ	Y	Υ	Υ	Υ	Y	Y	Υ	N	N	N	N	N	N	Y
	ZRT	Y	Y	Y	N	Y					Υ	Υ	Υ	N	N	N	N	N	Y	N	N	N	N	N	N
	SCC	Y	Y	Y	Y	Y	Y	Y	Υ	Υ				Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Y	N	Y
Cupola	SNC	Y	Y	Y	Υ	Y	N	N	Υ	Υ				Υ	Υ	Υ	Υ	Υ	Y	Υ	Y	Υ	Y	N	Y
	XC	Y	Y	Y	Y	Y	Y	Υ	Υ	Υ				Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Y	Y	Υ
	PCLL	Y	N	Y	Y	Y	N	Υ	Υ	N	Y	Y	Υ							N	N	N	N	N	Y
	PCSS	Y	N	Y	Y	Y	N	Υ	Υ	N	Y	Y	Υ							N	N	N	N	N	Υ
Twist-Lock	P34	N	Y	Y	Y	Υ	N	Υ	Υ	N	Y	Y	Y							N	N	N	N	N	Y
Photocontrols	P48	N	Υ	Y	Y	Υ	N	Υ	Υ	N	Y	Y	Υ							N	N	N	N	N	Y
	SH	Y	Y	Y	Y	Y	N	Y	Υ	N	Y	Y	Υ							N	N	N	N	N	Y
	DZP	Y	Y	Y	N	Y	N	N	N	Υ	Y	Y	Υ							N	N	N	N	N	N
	ALCB	Y	Y	Y	N	Y	Υ	N	N	N	Y	Υ	Υ	N	N	N	N	N	N						N
Embedded	ALCC	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	Υ	N	N	N	N	N	N						N
Controls	ALCF	Y	Y	Y	N	Y	Y	N	N	N	Υ	Y	Υ	N	N	N	N	N	N						N
	DDC	Y	Y	Y	N	Y	Υ	N	N	N	Y	Y	Υ	N	N	N	N	N	N						N
	UBC	Y	Y	Y	N	Y	Y	N	N	N	N	N	Υ	N	N	N	N	N	N						N
0ther	AO	Υ	Y	Υ	Υ	N	Υ	Υ	Υ	N	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	N	N	N	N	N	

	Cupola Control Node Compatibility											
Cupola	Control Di	imensions	Acuity Brands Control									
Option	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.

			Dictril	bution		Driver/Voltage						
AVPC	L2		וואכווו	Jution		MV	OLT	HV	OLT	XVOLT		
		R2	R3	R4	R5	ZT	D4I	ZT	D4I	ZT	D4I	
	P101	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	N	Υ	
	P102	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	
	P103	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	
	P151	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	
	P152	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	
	P153	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	N	Υ	
	P201	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	
Lumen	P202	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	
Package	P203	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	
	P300	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	
	P301	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	
	P302	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	
	P303	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	
	P304	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	
	P451	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	N	Υ	
	P452	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	



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

Valiant[™] Full Cutoff LED Series AVPCL2

OPERATING CHARACTERISTICS

			AVPCL2								
			R	2	R	3	R	4	R5		
Performance Package	Wattage	ССТ	Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW	
		2700K	3,350	112	3,325	111	3,483	116	3,460	115	
P101	30	3000K	3,406	114	3,380	113	3,541	118	3,518	117	
		4000K	3,638	121	3,610	120	3,782	126	3,758	125	
		2700K	4,232	106	4,200	105	4,400	110	4,372	109	
P102	40	3000K	4,303	108	4,270	107	4,473	112	4,444	111	
		4000K	4,596	115	4,561	114	4,778	119	4,748	119	
		2700K	5,126	103	5,087	102	5,329	107	5,295	106	
P103	50	3000K	5,211	104	5,171	103	5,418	108	5,383	108	
		4000K	5,567	111	5,524	110	5,787	116	5,750	115	
		2700K	5,478	110	5,436	109	-	-	5,658	113	
P151	50	3000K	5,569	111	5,526	111	-	-	5,752	115	
		4000K	5,949	119	5,903	118	-	-	6,145	123	
		2700K	6,556	109	6,506	108	-	-	6,772	113	
P152	60	3000K	6,664	111	6,614	110	-	-	6,884	115	
		4000K	7,119	119	7,065	118	-	-	7,354	123	
		2700K	7,346	105	7,290	104	-	-	7,588	108	
P153	70	3000K	7,468	107	7,411	106	-	-	7,714	110	
		4000K	7,978	114	7,917	113	-	ı	8,241	118	
		2700K	7,715	110	7,656	109	8,021	115	7,969	114	
P201	70	3000K	7,843	112	7,783	111	8,154	116	8,101	116	
		4000K	8,378	120	8,314	119	8,710	124	8,654	124	
		2700K	8,515	106	8,451	106	8,853	111	8,796	110	
P202	80	3000K	8,657	108	8,591	107	9,000	113	8,942	112	
		4000K	9,248	116	9,177	115	9,614	120	9,552	119	
		2700K	9,262	103	9,192	102	9,629	107	9,567	106	
P203	90	3000K	9,416	105	9,344	104	9,789	109	9,726	108	
		4000K	10,059	112	9,982	111	10,457	116	10,390	115	
		2700K	7,335	120	7,279	119	7,625	125	7,576	124	
P300	61	3000K	7,456	122	7,400	121	7,752	127	7,702	126	
		4000K	7,965	131	7,905	130	8,281	136	8,228	135	
		2700K	8,228	118	8,165	117	8,554	122	8,499	121	
P301	70	3000K	8,364	119	8,301	119	8,696	124	8,640	123	
		4000K	8,935	128	8,867	127	9,289	133	9,230	132	
		2700K	9,275	116	9,204	115	9,642	121	9,580	120	
P302	80	3000K	9,429	118	9,357	117	9,802	123	9,739	122	
		4000K	10,072	126	9,996	125	10,471	131	10,404	130	
		2700K	10,174	113	10,097	112	10,577	118	10,509	117	
P303	90	3000K	10,343	115	10,264	114	10,753	119	10,684	119	
		4000K	11,049	123	10,965	122	11,487	128	11,413	127	
		2700K	10,968	110	10,884	109	11,402	114	11,329	113	
P304	100	3000K	11,150	112	11,065	111	11,591	116	11,517	115	
		4000K	11,911	119	11,820	118	12,383	124	12,303	123	
		2700K	12,053	121	11,961	120	-	-	12,450	125	
P451	100	3000K	12,253	123	12,159	122	-	-	12,656	127	
		4000K	13,089	131	12,989	130	-	-	13,520	135	
		2700K	13,090	119	12,991	118	-	-	13,522	123	
P452	110	3000K	13,308	121	13,206	120	-	-	13,746	125	
		4000K	14,216	129	14,108	128	-	-	14,684	133	

Optic	Lumen Factor				
AY	1.00				
PY	0.92				

Optic	Lumen Factor
SAY	1.00
SPY	0.92



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.

Lumen Maintenance (LLD)										
Performance Package	Initial	25k hours	36k hours	50k hours	60k hours	75k hours	100k hours			
P101	1.00	0.96	0.94	0.92	0.90	0.88	0.85			
P102, P300	1.00	0.95	0.93	0.91	0.90	0.87	0.84			
P151, P201, P301	1.00	0.95	0.93	0.91	0.89	0.87	0.83			
P103, P152, P202, P302, P303, P451	1.00	0.95	0.93	0.90	0.89	0.86	0.82			
P304, P452	1.00	0.94	0.92	0.90	0.88	0.85	0.81			
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 $^{\circ}$ C (32-104 $^{\circ}$ F).

Ambient Temperature Lumen Multipliers										
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 Opt	ion Defaults			
Setting	Top Receptacle / Photocontrol	Default Value	Alternate Values		
	NTR	ON	Off		
	ALCB / ALCF / ALCC	ON	none		
DALI Power Bus	DDC	ON	none		
DALI POWER BUS	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		

 $[\]hbox{*To program different settings, consult factory; RFD is required}\\$

