

Catalog Number	
WCNG P4 40K U4W MVOLT ZT 20KV BZSDP LTCH PR7 DF AO SH	
Notes	Type

WallConnect LED



Description

Perimeter and security lighting requires excellent control and uniformity while minimizing light trespass and glare. The WCNG/WCNP WallConnect LED luminaires excel at this, requiring fewer luminaires to achieve required light levels in infrastructure, industrial and municipal applications. With energy cost reductions up to 77% and expected service life of over 20 years, WallConnect LED provides the latest lighting technology from the company that introduced the very first Wallpack to the market.

Optics

- The WCNG uses a borosilicate glass refractor lens and the WCNP uses a protective polycarbonate lens that covers the light engine's precision-molded proprietary silicone lenses.
- Type 3 medium
- Type 4 medium and optional underpass optic

Mechanical

- The housing is constructed of die-cast aluminum and is fully gasketed for ease of maintenance
- Housing is completely sealed against moisture and environmental contaminants, IP66
- Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering.
- A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

Electrical

- Light engine(s) consist of 10-30 high-efficacy LEDs mounted to a metal-core circuit board and integral aluminum heat sink to maximize heat dissipation and promote long life
- The standard 0-10V dimmable electronic driver and optional XVOLT and DALI drivers have a power factor of >90%, THD <20%
- Zetashield driver (XVOLT option) is available for particularly challenging dirty power environments
- DALI dimmable driver supporting D4i is available as an option. Consult factory for custom programming.
- Adjustable output module (AO option) provides selectable lumens output control.
- Traditional button and twist lock photo controls are available as well as embedded Bluetooth (LCP) and motion sensing controls (RSBOR).
- SPD: 20kV/10kA standard
- CCT: 2700K, 3000K, 4000K, 5000K
- CRI: 70CRI
- Integrated UL924 emergency backup option is available.

Installation

- Top, bottom, left and right side 1/2" threaded wiring access
- Back access through removable 1/2" knockout
- Feed-thru wiring can be achieved by using a conduit tee

Certification and Standards

- UL listed for wet locations. Rated for -40 °C to 50 °C ambient, refer to page 4 for details
- LM-79 compliant
- The projected LED Lumen Maintenance shall be based only on IES LM-80-08 and TM-21

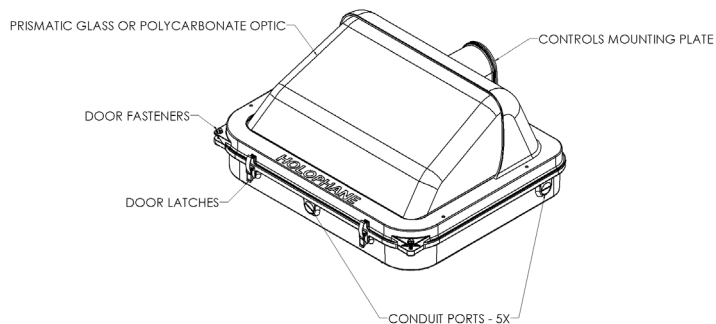
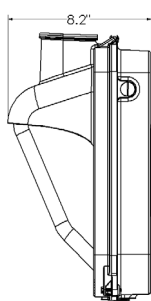
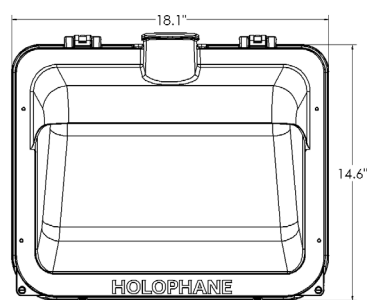
Warranty

5-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

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.



DIMENSIONAL DATA



WCNG Weight = 28.5 lbs
WCNP Weight = 22.5 lbs

ORDERING INFORMATION

Example: WCNG P8 30K T3M MVOLT ZT 20KV BKSDP SCRW PR7 PCLL ELCW

WCNG		P4	40K	U4W	MVOLT	ZT					
Series		Performance Package		Color Temperature		Distribution		Voltage		Driver	
WCNG	WallConnect LED Wallpack glass refractor	P1 ⁴	16W, 2,100 nominal lumens at 4K CCT	27K	2,700K CCT	T3M	TYPE III medium	MVOLT	Multivolt (120-277)	ZT	0-10V dimmable
WCNP	WallConnect LED Wallpack polycarbonate refractor	P2 ¹¹	35W, 4,100 nominal lumens at 4K CCT	30K	3,000K CCT	T4M	TYPE IV medium	120	120VAC	XVOLT277	Zetashield driver for 277VAC applications
		P3 ¹¹	51W, 6,200 nominal lumens at 4K CCT	40K	4,000K CCT	U4W	TYPE IV underpass	208	208VAC	XVOLT347	Zetashield driver for 347VAC applications
		P4	72W, 8,500 nominal lumens at 4K CCT	50K	5,000K CCT			240	240VAC	XVOLT480	Zetashield driver for 480VAC applications
		P5	93W, 12,000 nominal lumens at 4K CCT					277	277VAC	DALI2 ¹³	DALI D4i driver for 120-277VAC applications
		P6 ¹	117W, 14,300 nominal lumens at 4K CCT					347	347VAC		
		P7 ¹	128W, 15,800 nominal lumens at 4K CCT					480	480VAC		
		P8 ¹	152W, 17,700 nominal lumens at 4K CCT								

20KV		BZSDP	LTCH	PR7	DF	AO					
Surge Protection		Finish Color		Door Closure		Receptacles and Embedded Controls		Fusing		Adjustable Output	
10KV	10kV/5kA fail on style MOV pack	BKSDP	Black super durable paint	SCRW	Standard screw closure	NPR	No receptacle	SF ²	Single fused	AO	Adjustable output module
20KV ¹²	20kV/10kA fail off style SPD	BZSDP	Bronze super durable paint	LTCH	Toolless steel latches	ZREC ⁵	Zhaga receptacle with weather cover	DF ³	Double fused		
		GYSDP	Grey super durable paint	TMPS	Tamper resistant enclosure fasteners	PR7 ¹⁰	7 pin dimming capable NEMA photo control receptacle				
		WHSDP	White super durable paint			BSPC	Button style photocontrol integral				
						LCP ^{5,8}	Local Connect Bluetooth integral control				
						DCP ^{5,8}	DC embedded photo control				

SH		Sensor		Emergency Battery		POM		Factory installed guards	
SH ⁷	Shorting cap for NEMA receptacle	RSBOR ⁶	External mount RSBOR nLight motion sensing control	ELSW ¹⁴	Emergency battery backup (standard OC)	BAA	BAA compliant made in USA	WCNLVG	Vandal guard factory installed
PCLL ⁷	DTL DLL long life photo control			ELCW ¹⁴	Emergency battery backup (cold eather -20C)			WCNLWG	Wire guard factory installed

Accessories: (separately shipped).	
WCNVGU	Vandal guard
WCNWGU	Wire guard
DLL127F1.5JU	Multivolt DLL photocontrol
DLL3471.5CULJU	347V DLL photocontrol
DLL4801.5CULJU	480V DLL photocontrol

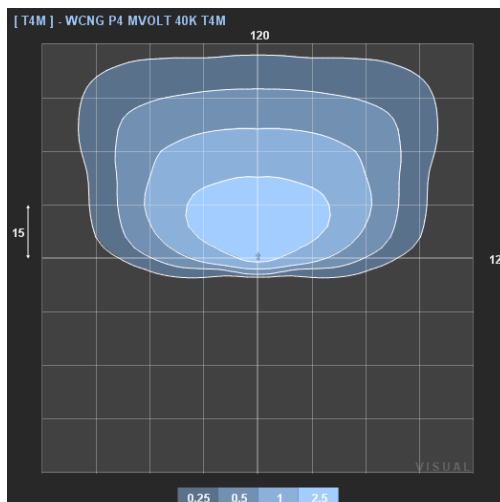
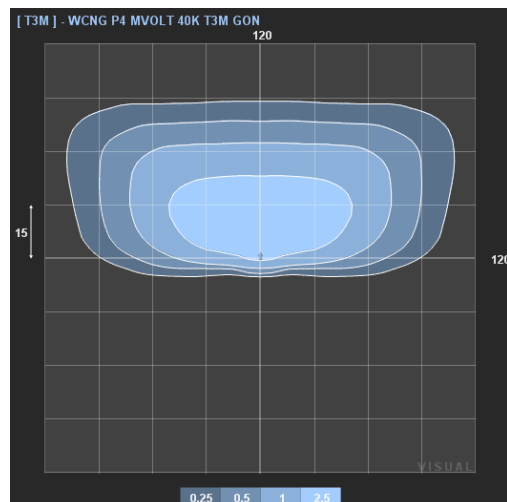
Notes

- P6, P7 and P8 performance packages are not available with T4M or U4W distribution.
- Single fusing (SF) option is only valid with 120, 277, 347 and 480 voltage selections.
- Double fusing (DF) option is only valid with 208, 240 and 480 voltage selections.
- P1 performance package is not available with either XVOLT or DALI drivers.
- ZREC, LCP and DCP options require selection of DALI2 driver.
- RSBOR must use NPR and is not valid with DALI2, PR7, ZREC, AO, BSPC, LCP, DCP, SH, NPR or PCLL options.
- Shorting cap (SH) and DTL photo control (PCLL) options require selection of PR7 receptacle.
- LCP and DCP embedded control options are not allowed with BSPC, PR7, ZREC, AO, RSBOR, SH or PCLL options and require DALI2 driver to be selected.
- Battery backup options ELSW and ELCW cannot be selected with XVOLT driver or 347V or 480V configurations.
- Cannot select PR7 receptacle with RSBOR sensor or LCP or DCP controls.
- P2 and P3 performance packages are not available with XVOLT option and DALI option is not available with 347V or 480V selection.
- 20KV option not available in combination with XVOLT with P7 and P8 performance packages.
- DALI2 not available with P1, performance package.
- ELSW and ELCW with P1, P2 or P3 performance package cannot be selected with 20KV surge protection.

OPERATIONAL DATA

Series	Performance Package	Distribution Type	Wattage	2700K CCT		3000K CCT		4000K CCT		5000K CCT	
				Lumens	LPW	Lumens	LPW	Lumens	LPW	Lumens	LPW
WCNG	P1	T3M	16	1,904	119	1,938	121	2,019	126	2,059	129
	P2		35	3,691	105	3,756	107	3,914	112	3,991	114
	P3		51	5,825	114	5,927	116	6,177	121	6,297	123
	P4		72	8,038	112	8,179	114	8,524	118	8,690	121
	P5		93	10,648	114	10,825	116	11,564	124	11,725	126
	P6		117	12,736	109	12,947	111	13,831	118	14,023	120
	P7		128	13,982	109	14,214	111	15,184	119	15,395	120
	P8		152	15,850	104	16,113	106	17,213	113	17,452	115
	P1	T4M	16	1,935	121	1,969	123	2,052	128	2,092	131
	P2		35	3,752	107	3,817	109	3,978	114	4,056	116
	P3		51	5,901	116	6,004	118	6,257	123	6,379	125
	P4		72	8,143	113	8,285	115	8,635	120	8,803	122
	P5		93	9,621	103	9,781	105	10,448	112	10,593	114
	P1	U4W	16	1,909	119	1,943	121	2,025	127	2,064	129
	P2		35	3,702	106	3,766	108	3,925	112	4,002	114
	P3		51	5,507	108	5,604	110	5,840	115	5,954	117
P4	72		7,600	106	7,733	107	8,059	112	8,216	114	
P5	93		9,432	101	9,588	103	10,243	110	10,385	112	
WCNP	P1	T3M	16	1,822	114	1,853	116	1,932	121	1,969	123
	P2		35	3,531	102	3,593	104	3,745	108	3,818	110
	P3		51	5,403	107	5,498	109	5,730	113	5,842	116
	P4		72	7,456	104	7,587	105	7,907	110	8,061	112
	P5		93	9,823	105	9,986	107	10,668	115	10,816	116
	P6		117	11,748	100	11,943	102	12,759	109	12,936	110
	P7		128	12,898	101	13,112	102	14,007	109	14,201	111
	P8		152	13,308	96	13,529	98	14,452	105	14,653	106
	P1	T4M	16	1,842	115	1,874	117	1,953	122	1,991	125
	P2		35	3,571	103	3,633	105	3,787	109	3,860	111
	P3		51	5,369	106	5,462	108	5,693	113	5,804	115
	P4		72	7,408	103	7,538	105	7,856	109	8,009	111
	P5		93	9,032	97	9,182	99	9,809	105	9,945	107
	P1	U4W	16	1,796	112	1,828	114	1,905	119	1,942	121
	P2		35	3,482	100	3,543	102	3,693	106	3,765	108
	P3		51	5,227	103	5,318	105	5,543	110	5,651	112
P4	72		7,213	100	7,339	102	7,649	106	7,798	108	
P5	93		8,864	95	9,012	97	9,627	103	9,760	105	

PHOTOMETRIC DISTRIBUTIONS



OPERATIONAL DATA

Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25° C ambient, based on 10,000 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.

WCN Lumen Maintenance				
Operating Hours	0	25,000	50,000	100,000
P1	1.000	0.956	0.915	0.839
P2				
P3				
P4	1.000	0.956	0.904	0.818
P5				
P6				
P7				
P8				
P8	1.000	0.930	0.866	0.750

WCN Electrical Load							
Performance Package	Watts	Current (A)					
		120 Vac	208 Vac	240 Vac	277 Vac	347 Vac	480 Vac
P1	16	0.133	0.077	0.067	0.058	0.046	0.033
P2	35	0.289	0.167	0.145	0.125	0.100	0.072
P3	51	0.421	0.243	0.211	0.182	0.146	0.105
P4	72	0.600	0.346	0.300	0.260	0.207	0.150
P5	93	0.776	0.448	0.388	0.336	0.268	0.194
P6	117	0.978	0.564	0.489	0.424	0.338	0.245
P7	128	1.068	0.616	0.534	0.463	0.369	0.267
P8	152	1.264	0.729	0.632	0.547	0.437	0.316

Lumen Ambient Temperature (LAT) Multipliers

Use this factors to determine relative lumen output for average ambient temperatures from 0-50° C (32-122°F)

Ambient Temperature Ratings

WCN Series		
Ambient		Lumen Temperature Factor
0° C	32° F	1.030
10° C	50° F	1.019
20° C	68° F	1.007
25° C	77° F	1.000
30° C	86° F	0.993
40° C	104° F	0.977
50° C	122° F	0.960

Performance Package	Without Battery Backup		With ELSW Option		With ELCW Option	
	Min Temperature	Max Temperature	Min Temperature	Max Temperature	Min Temperature	Max Temperature
P1	-40°C	50°C	0°C	40°C	-20°C	40°C
P2	-40°C	50°C	0°C	40°C	-20°C	40°C
P3	-40°C	50°C	0°C	40°C	-20°C	40°C
P4	-40°C	50°C	0°C	40°C	-20°C	40°C
P5	-40°C	40°C	0°C	40°C	-20°C	40°C
P6	-40°C	40°C	N/A	N/A	N/A	N/A
P7	-40°C	35°C	0°C	40°C	-20°C	40°C
P8	-40°C	35°C	0°C	40°C	-20°C	40°C

WCN FAO																
Performance Package	P1		P2		P3		P4		P5		P6		P7		P8	
A0 Position	% Lumen Output	% Wattage	% Lumen Output	% Wattage	% Lumen Output	% Wattage	% Lumen Output	% Wattage	% Lumen Output	% Wattage	% Lumen Output	% Wattage	% Lumen Output	% Wattage	% Lumen Output	% Wattage
1	22%	21%	22%	17%	22%	19%	22%	20%	22%	20%	22%	20%	23%	20%	23%	20%
2	34%	35%	32%	27%	32%	29%	33%	31%	32%	31%	33%	31%	33%	31%	34%	31%
3	46%	46%	46%	40%	46%	42%	47%	47%	47%	47%	47%	47%	48%	47%	49%	47%
4	60%	59%	61%	55%	61%	57%	62%	58%	61%	58%	62%	58%	63%	64%	64%	64%
5	70%	70%	71%	67%	71%	67%	72%	69%	72%	69%	73%	69%	73%	77%	74%	77%
6	82%	80%	82%	79%	82%	80%	83%	81%	83%	81%	83%	81%	84%	86%	85%	86%
7	93%	92%	93%	92%	93%	92%	93%	92%	93%	92%	94%	92%	94%	95%	94%	95%
8	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%