

Catalog Number	
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

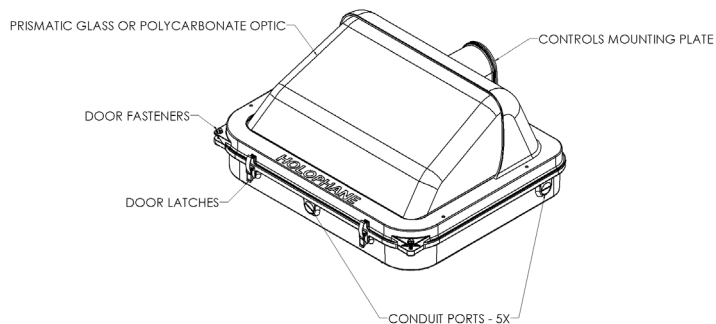
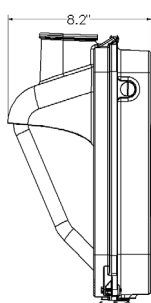
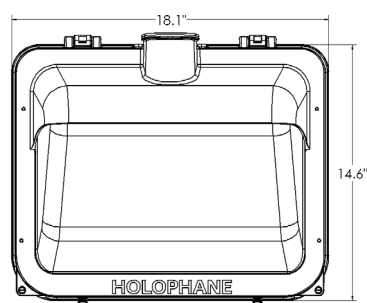
Warranty

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



ORDERING INFORMATION

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

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 ¹ 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				

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	A0 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		

Photo Control	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 0C)	BAA BAA compliant made is 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
WCNWWG	Wire guard
DLL127F1.5JU	Multivolt DLL photocontrol
DLL3471.5CULJU	347V DLL photocontrol
DLL4801.5CULJU	480V DLL photocontrol

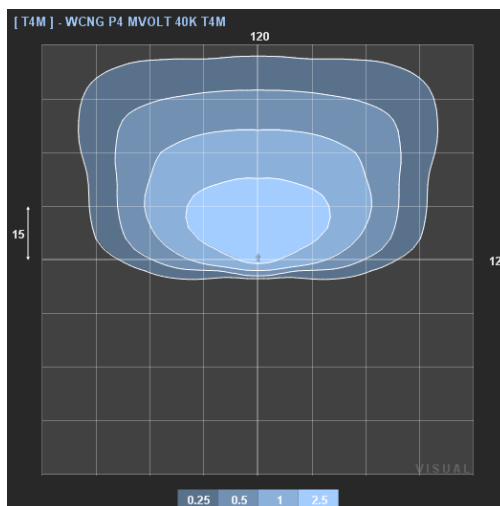
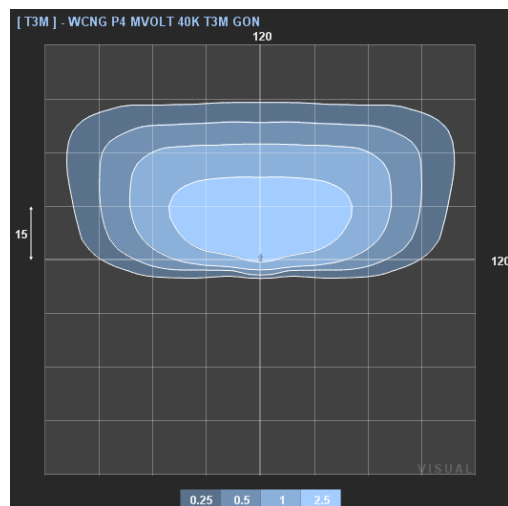
Notes

- P5, 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 sensor option 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
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	
WCNP	P1	T3M	16	1,942	121	1,977	124	2,059	129	2,100	131
	P2		35	3,765	108	3,831	109	3,992	114	4,071	116
	P3		51	5,942	117	6,046	119	6,301	124	6,423	126
	P4		72	8,199	114	8,343	116	8,694	121	8,864	123
	P5		93	10,861	117	11,042	119	11,795	127	11,960	129
	P6		117	12,991	111	13,206	113	14,108	121	14,303	122
	P7		128	14,262	111	14,498	113	15,488	121	15,703	123
	P8		152	16,167	106	16,435	108	17,557	116	17,801	117
	P1	T4M	16	1,974	123	2,008	126	2,093	131	2,134	133
	P2		35	3,827	109	3,893	111	4,058	116	4,137	118
	P3		51	6,019	118	6,124	120	6,382	125	6,507	128
	P4		72	8,306	115	8,451	117	8,808	122	8,979	125
	P1	U4W	16	1,947	122	1,982	124	2,066	129	2,105	132
	P2		35	3,776	108	3,841	110	4,004	114	4,082	117
	P3		51	5,617	110	5,716	112	5,957	117	6,073	119
	P4		72	7,752	108	7,888	110	8,220	114	8,380	116

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	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	50°C	0°C	40°C	-20°C	40°C
P6	-40°C	50°C	0°C	40°C	-20°C	40°C
P7	-40°C	40°C	N/A	N/A	N/A	N/A
P8	-40°C	40°C	N/A	N/A	N/A	N/A

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%