



WST LED

Architectural Wall Sconce



Catalog
Number

Notes

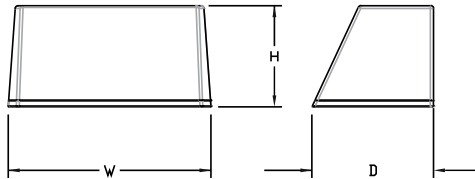
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Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

Luminaire

- Height:** 8-1/2" (21.59 cm)
- Width:** 17" (43.18 cm)
- Depth:** 10-3/16" (25.9 cm)
- Weight:** 20 lbs (9.1 kg)



Introduction

The WST LED is designed with the specifier in mind. The traditional, trapezoidal shape offers a soft, non-pixelated light source for end-user visual comfort. For emergency egress lighting, the WST LED offers six battery options, including remote. For additional code compliance and energy savings, there is also a Bi-level motion sensor option. With so many standard and optional features, three lumen packages, and high LPW, the WST LED is your "go to" luminaire for most any application.

A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: WST LED P1 40K VF MVOLT DDBTXD

WST LED						
Series	Performance Package	Color temperature	Distribution	Voltage	Mounting	
WST LED	P1 1,500 Lumen package	27K 2700 K	VF Visual comfort forward throw	MVOLT ¹ 277 ²	Shipped included (blank) Surface mounting bracket PBBW Premium surface-mounted back box ^{3,4} Shipped separately BBW Surface-mounted back box ³	
	P2 3,000 Lumen package	30K 3000 K	VW Visual comfort wide	120 ² 347 ²		
	P3 6,000 Lumen package	40K 4000 K		208 ² 480 ²		
		50K 5000 K		240 ²		

Options		Finish (required)
NLTAIR2 PIR	nLIGHT AIR Wireless enabled motion/ambient sensor for 8'-15' mounting heights ^{5,6,7}	DDBXD Dark bronze
NLTAIR2 PIRH	nLIGHT AIR Wireless enabled motion/ambient sensor for 15'-30' mounting heights ^{5,6,7}	DBLXD Black
PE	Photoelectric cell, button type ⁸	DNAXD Natural aluminum
PER	NEMA twist-lock receptacle only (controls ordered separate) ⁹	DWHXD White
PER5	Five-wire receptacle only (controls ordered separate) ⁹	DSSXD Sandstone
PER7	Seven-wire receptacle only (controls ordered separate) ⁹	DDBTXD Textured dark bronze
PIR	Motion/Ambient Light Sensor, 8-15' mounting height ^{5,6}	DBLBXD Textured black
PIR1FC3V	Motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc ^{5,6}	DNATXD Textured natural aluminum
PIRH	180° motion/ambient light sensor, 15-30' mounting height ^{5,6}	DWHGXD Textured white
PIRH1FC3V	Motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc ^{5,6}	DSSTXD Textured sandstone
SF	Single fuse (120, 277, 347V) ²	
DF	Double fuse (208, 240, 480V) ²	
DS	Dual switching ¹⁰	
DMG	0-10V dimming extend out back of housing for external control (control ordered separate) ¹¹	
E7WH	Emergency battery backup, Non CEC compliant (7W) ⁷	
E7WC	Emergency battery backup, CA Title 20 Noncompliant (cold, 7W) ^{7,12}	
E7WHR	Remote emergency battery backup, CA Title 20 Noncompliant (remote 7W) ^{7,13}	
E20WH	Emergency battery pack 18W constant power, Certified in CA Title 20 MAEDBS ⁷	
E20WC	Emergency battery pack -20°C 18W constant power, Certified in CA Title 20 MAEDBS ^{7,12}	
E23WHR	Remote emergency battery backup, CA Title 20 Noncompliant (remote 20W) ^{7,12,14}	
LCE	Left side conduit entry ¹⁵	
RCE	Right side conduit entry ¹⁵	
BAA	Buy America(n) Act Compliant	
	Shipped separately	
RBPW	Retrofit back plate ³	
VG	Vandal guard ¹⁵	
WG	Wire guard ¹⁵	

See Accessories and Notes on next page.



COMMERCIAL OUTDOOR

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WST-LED
Rev. 03/27/24

Accessories

Ordered and shipped separately.

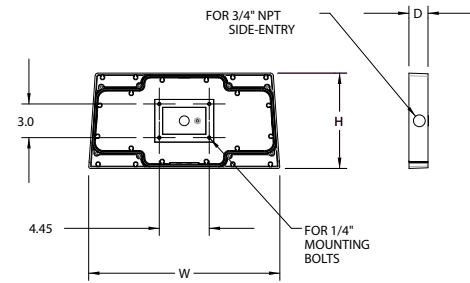
WSTVCPBBW DDBXD U	Premium Surface - mounted back box
WS8BW DDBXD U	Surface - mounted back box
RBPW DDBXD U	Retrofit back plate
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) ¹⁷
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) ¹⁷
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) ¹⁷

NOTES

- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Also available as a separate accessory; see accessories information.
- Top conduit entry standard.
- Not available with VG or WG. See PER Table.
- Reference Motion Sensor table.
- Not available 347/480. E7WC or E23WHR, only available 120 or 277.
- Need to specify 120, 208, 240 or 277 voltage.
- Photocell ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included.
- Not available with Emergency options, PE or PER options.
- DMG option not available with standalone or networked sensors/controls.
- Battery pack rated for -20° to 40°C.
- Comes with PBBW.
- Warranty period is 3-years.
- Not available with BBW.
- Must order with fixture; not an accessory.
- Requires luminaire to be specified with PER, PER5 or PER7 option. See PER Table.

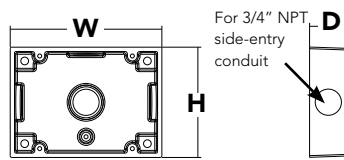
Optional Back Box (PBBW)

Height:	8.49" (21.56 cm)
Width:	17.01" (43.21 cm)
Depth:	1.70" (4.32 cm)



Optional Back Box (BBW)

Height:	4" (10.2 cm)
Width:	5-1/2" (14.0 cm)
Depth:	1-1/2" (3.8 cm)



Emergency Battery Operation

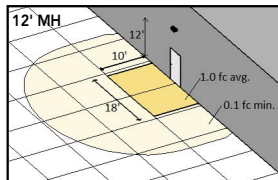
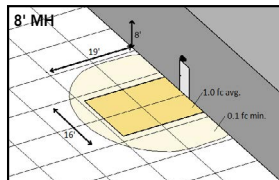
The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product.

All emergency backup configurations include an independent secondary driver with an integral relay to immediately detect AC power loss, meeting interpretations of [NFPA 70/NEC 2008 - 700.16](#)

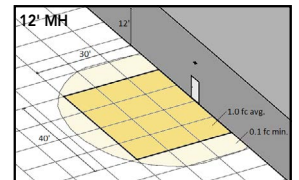
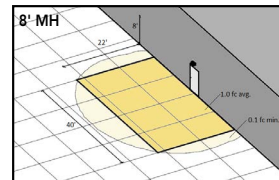
The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time supply power is lost, per [International Building Code Section 1006](#) and [NFPA 101 Life Safety Code Section 7.9](#), provided luminaires are mounted at an appropriate height and illuminate an open space with no major obstructions.

The examples below show illuminance of 1 fc average and 0.1 fc minimum of the P1 power package and VF distribution product in emergency mode.

10' x 10' Gridlines
8' and 12' Mounting Height



WST LED P1 27K VF MVOLT E7WH



WST LED P2 40K VF MVOLT E20WH

Performance Data

Lumen Ambient Temperature (LAT) Multipliers

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

Ambient		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98

Electrical Load

Performance package	System Watts	Current (A)					
		120	208	240	277	347	480
P1	11	0.1	0.06	0.05	0.04	---	---
	14	---	---	---	---	0.04	0.03
P1 DS	14	0.12	0.07	0.06	0.06	---	---
	P2	25	0.21	0.13	0.11	0.1	---
30		---	---	---	---	0.09	0.06
P2 DS	25	0.21	0.13	0.11	0.1	---	---
	P3	50	0.42	0.24	0.21	0.19	---
56		---	---	---	---	0.16	0.12
P3 DS	52	0.43	0.26	0.23	0.21	---	---

Projected LED Lumen Maintenance

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.95	>0.92	>0.87

Motion Sensor Default Settings

Option	Dimmed State	High Level (when triggered)	Photocell Operation	Ramp-up Time	Dwell Time	Ramp-down Time
*PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	3 sec	5 min	5 min
PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	3 sec	5 min	5 min

*for use with site wide Dusk to Dawn control

PER Table

Control	PER (3 wire)	PER5 (5 wire)			PER7 (7 wire)		
			Wire 4/Wire5		Wire 4/Wire5	Wire 6/Wire7	
Photocontrol Only (On/Off)	✓	⚠	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture	
ROAM	⊘	✓	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture	
ROAM with Motion	⊘	⚠	Wired to dimming leads on driver	⚠	Wired to dimming leads on driver	Wires Capped inside fixture	
Futureproof*	⊘	⚠	Wired to dimming leads on driver	✓	Wired to dimming leads on driver	Wires Capped inside fixture	
Futureproof* with Motion	⊘	⚠	Wired to dimming leads on driver	✓	Wired to dimming leads on driver	Wires Capped inside fixture	

✓ Recommended

⊘ Will not work

⚠ Alternate

*Futureproof means: Ability to change controls in the future.

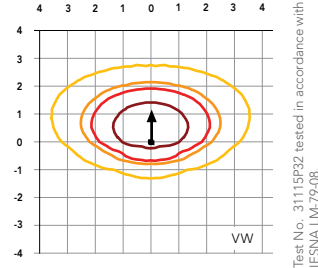
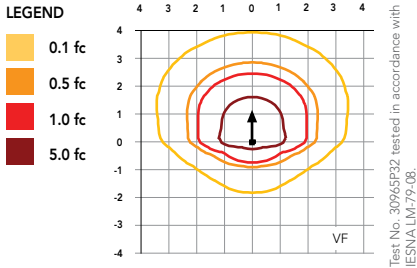
Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts.

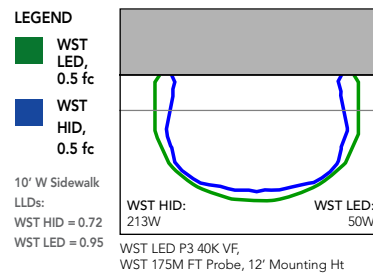
Performance Package	System Watts (MVOLT*)	Dist. Type	27K (2700K, 70 CRI)					30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	12W	VF	1,494	0	0	0	125	1,529	0	0	0	127	1,639	0	0	0	137	1,639	0	0	0	137
		VW	1,513	0	0	0	126	1,548	0	0	0	129	1,659	0	0	0	138	1,660	0	0	0	138
P2	25W	VF	3,163	1	0	1	127	3,237	1	0	1	129	3,469	1	0	1	139	3,468	1	0	1	139
		VW	3,201	1	0	0	128	3,276	1	0	0	131	3,512	1	0	0	140	3,512	1	0	0	140
P3	50W	VF	6,025	1	0	1	121	6,165	1	0	1	123	6,609	1	0	1	132	6,607	1	0	1	132
		VW	6,098	1	0	1	122	6,240	1	0	1	125	6,689	1	0	1	134	6,691	1	0	1	134



Isofootcandle plots for the WST LED P3 40K VF and VW. Distances are in units of mounting height (10').



Distribution overlay comparison to 175W metal halide.



FEATURES & SPECIFICATIONS

INTENDED USE

The classic architectural shape of the WST LED was designed for applications such as hospitals, schools, malls, restaurants, and commercial buildings. The long life LEDs and driver make this luminaire nearly maintenance-free.

CONSTRUCTION

The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP65 rating for the luminaire.

FINISH

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. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

OPTICS

Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall-mount applications. The WST LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine(s) consist of 98 high-efficacy LEDs mounted to a metal core circuit board and integral aluminum heat sinks to maximize heat dissipation and promote long life (100,000 hrs at 40°C, L87). Class 2 electronic driver has a power factor >90%, THD <20%. Easily-serviceable surge protection device meets a minimum Category B (per ANSI/IEEE C62.41.2).

INSTALLATION

A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections.

LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. PIR and back box options are rated for wet location. Rated for -30°C to 40°C ambient.

GOVERNMENT PROCUREMENT

BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to www.acuitybrands.com/buy-american for additional information.

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. Specifications subject to change without notice.