









# **Specifications**

# Luminaire

**Height:** 7-1/4" (18.4 cm)

Width: 16-1/4" (41.3 cm)

**Depth:** 9-1/8"

**Weight:** 17 lbs (7.7 kg)



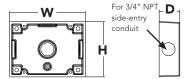
# **Optional Back Box (BBW)**

Height: 4"

(10.2 cm)

Width: 5-1/2" (14.0 cm)

**Depth:** 1-1/2"



# Catalog Number Notes Type

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

#### Introduction

The classic Architectural Wall Sconce is now available with the latest in LED technology. The result is a long-life, maintenance-free product with typical energy savings of 75% compared to metal halide versions. The integral battery backup option provides emergency egress lighting, without the use of a back-box or remote gear, so installations maintain their aesthetic integrity.

The WST LED is ideal for replacing existing 50 – 175W metal halide wall-mounted products. The expected service life is 20+ years of nighttime use.

# **Ordering Information**

#### **EXAMPLE: WST LED 2 10A700/40K SR3 MVOLT DDBTXD**

WST LED								
Series	Light Engines Performance Package		Distribution Voltage Mounting		Mounting	Options <sup>3</sup>	Finish (required)	
WST LED	1 One engine (10 LEDs) 2 Two engines (20 LEDs)	700 mA options: 10A700/30K 3000K 10A700/40K 4000K 10A700/50K 5000K	SR2 Type II SR3 Type III SR4 Type IV	MVOLT 1 120 1 208 1 240 1 277 1 347 480	Shipped included (blank) Surface mount Shipped separately <sup>2</sup> BBW Surface-mounted back box UT5 Uptilt 5 degrees	Shipped installed PE Photoelectric cell, button type 4,5 SF Single fuse (120, 277, 347V) 4 DF Double fuse (208, 240, 480V) 4 DMG 0-10V dimming driver (no controls) ELCW Emergency battery backup 6 WLU Wet location door for up orientation 7 PIR Motion/ambient light sensor 8 Shipped separately VG Vandal guard WG Wire guard	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone	

#### **Emergency Battery Operation**

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

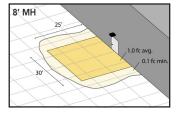
All ELCW configurations include an independent secondary driver with an integral relay to immediately detect AC power loss. Dual light engines are wired in parallel so both engines operate in emergency mode and provide additional component redundancy. These design features meet various interpretations of NFPA 70/NEC 2008 - 700.16

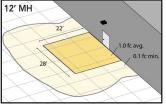
The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time supply power is lost, per International Building Code Section 1006 and NFPA 101 Life Safety Code Section 7.9, provided luminaires are mounted at an appropriate height and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

The examples at right show illuminance of 1 fc average and 0.1 fc minimum of the single-engine Type IV product in emergency mode.

WST LED 1 10A700/40K SR4 MVOLT ELCW 10' x 10' Gridlines

8' and 12' Mounting Height





# NOTES

- 1 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with photocell (PE option) or fusing (SF, DF options).
- 2 May also be ordered separately as an accessory. Ex: WSBBW DDBXD U. Must specify finish.
- Must be ordered with fixture; cannot be field installed.
- Not available with MVOLT option. Button photocell (PE) can be ordered with a dedicated voltage option. Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
- 5 Not available with 480V option. Not available with motion/ambient light sensor (PIR).
- 6 Integral battery pack is rated for -20° to 60°C operating temperature. ELCW warranty is 3-year period. Not available with 347V or 480V. Not available with WLU.
- 7 WLU not available with PIR or ELCW.
- Specifies the SensorSwitch SFOD-7-ODP control (photocell included); see Motion Sensor Guide for details. Not available with "PE" option (button type photocell). Dimming driver standard. Not available with WLU, VG or WG.



# **Performance Data**

#### **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. Actual wattage may differ by +/-8% when operating between 120-480V +/- 10%. Actual performance may differ as a result of end-user environment and application.

Light Engines	Drive Current (mA)	Performance Package	System Watts (MVOLT <sup>1</sup> )	Dist. Type	40K (4000K, 70 CRI)				
					Nominal Lumens	В	U	G	LPW
1	700	10A700/K	24W	SR2	2,005	1	0	1	84
(10 LEDs)				SR3	2,029	1	0	1	84
				SR4	1,959	1	0	1	82
2	700	10A700/K	47W	SR2	3,944	1	0	1	84
(20 LEDs)				SR3	4,028	1	0	1	86
				SR4	3,851	1	0	1	82

<sup>1</sup> See electrical load chart for 347/480V system watts.

#### **Lumen Ambient Temperature (LAT) Multipliers**

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

Amb	Lumen Multiplier				
0°C	32°F	1.10			
10°C	50°F	1.06			
20°C	68°F	1.02			
25°C	77°F	1.00			
30°C	86°F	0.98			
40°C	104°F	0.92			

### **Projected LED Lumen Maintenance**

Data references the extrapolated performance projections for the **WST LED 2 10A700** platform 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.

Operating Hours	0	25,000	50,000	100,000	
Lumen Maintenance Factor	1.0	0.94	0.88	0.77	

#### **Electrical Load**

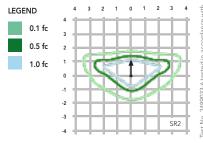
			Current (A)					
Light Engines	Drive Current (mA)	System Watts	120	208	240	277	347	480
1	700	24W	0.24	0.14	0.12	0.1	-	-
'		29W 1	-	-	-	-	0.09	0.07
2	700	47W	0.44	0.27	0.23	0.20	-	-
		53W1	-	-	-	-	0.17	0.12

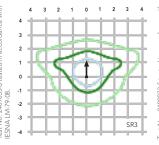
<sup>1</sup> Higher wattage is due to electrical losses from step-down transformer.

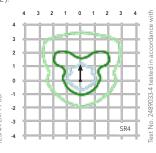
# **Photometric Diagrams**

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's WST LED homepage.

Isofootcandle plots for the WST LED 2 10A700/40K SR2, SR3, and SR4. Distances are in units of mounting height (12').



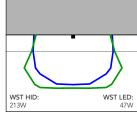




LEGEND

Distribution overlay comparison to 175W metal halide

LED, 0.5 fc WST HID, 0.5 fc 10' W Sidewalk LLDs: WST HID = 0.72 WST LED = 0.95



WST LED 2 10A700 40K SR4, WST 175M FT Probe, 12' Mounting Ht

## **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

Precision-molded acrylic lenses are engineered for superior distribution, uniformity, and spacing in wall-mount applications. Light engines are 4000K (70 CRI). The WST LED has zero uplight and qualifies as a Nighttime Friendly  $^{\rm TM}$  product, meaning it is consistent with the LEED® and Green Globes  $^{\rm TM}$  criteria for eliminating wasteful uplight.

# ELECTRICAL

Light engine(s) consist of 10 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 25°C, L77). 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. The integral bubble level on the mounting plate provides assistance for level placement on every installation.

#### LISTING

CSA certified to U.S. and Canadian standards. Light engines are IP66 rated; luminaire is IP65 rated and suitable for wet locations when mounted with the lenses down. WLU option offers wet location listing in "up" orientation. Rated for -30°C minimum ambient.

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org to confirm which versions are qualified.

#### WARRANTY

Five year limited warranty. Full warranty terms located at www.acuitybrands.com/ CustomerResources/Terms\_and\_conditions.aspx.

 $\textbf{Note:} \ \mathsf{Specifications} \ \mathsf{subject} \ \mathsf{to} \ \mathsf{change} \ \mathsf{without} \ \mathsf{notice}.$ 

