

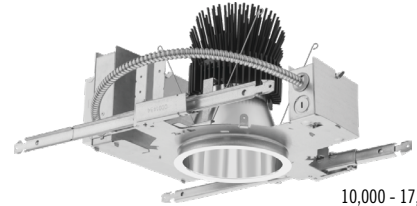


## General Illumination Round Downlight

6"



250 - 8,000 lumens



10,000 - 17,500 lumens

### Feature Set

- Bounding Ray™ optical design
- Unitized optics mechanically attach the light engine to the lower reflector for complete optical alignment.
- 45° cutoff to source and source image
- Fully serviceable and upgradeable lensed LED light engine
- 70% lumen maintenance at 60,000 hours
- 2.5 MacAdam Ellipse; 85 CRI typical, 90+ CRI optional
- Fixtures are wet location, covered ceiling
- Available with 10% dimming, 1% dimming, or dim to dark
- Batwing distribution with feathered edges provides even illumination on horizontal and vertical surfaces
- UGR of zero for fixtures aimed at nadir with a cut-off equal to or less than 60deg per CIE 117-1995 Discomfort Glare in Interior Lighting. [UGR FAQ](#)

### Distribution



### Superior Performance

Nominal Lumens	250	500	750	1000	1500	2000	2500	3000	3500	4000	4500	5000	6000	8000	10,000	12,000	15,000	17,500
Delivered Lumens	297	519	776	994	1471	2006	2537	3077	3542	4027	4533	5256	6371	8247	10637	12332	15776	17801
Wattage	3.4	6.2	8.2	9.6	14.7	19.7	24.7	29.5	33.8	39.0	47.3	48.7	57.6	74.9	97.1	115.0	150.9	175.3
Lumens per Watt	87.4	83.7	94.6	103.5	100.1	101.8	102.7	104.3	104.8	103.3	95.8	107.9	110.6	110.1	109.5	107.2	104.5	101.5

\*Based on 3500K AR LSS MWD 80CRI

### Coordinated Apertures | Multiple Layers of Light



General Illumination Layer | EVO



High Center Beam Layer | Incito



EVO + Incito — Multiple Layers of Light

### Core



Downlight



Adjustable



Open Wallwash



Lensed Wallwash



Cylinder



Pinhole



Bevel



Hyperbolic

### Healthcare



MRI



Surgical Suite



Patient Room

### Special Applications



Dynamic



Food Service



Vandal/Tamper



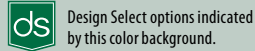
Clean Room



Shower



Steam Room



Luminaire Type:

Catalog Number:

EXAMPLE: EV06 35/150 AR MWD LSS MVOLT EZ1

Series	Color Temperature	Nominal Lumen Values	Reflector & Flange Color	Trim Style	Finish
EV06	27/ 2700 K 30/ 3000 K 35/ 3500 K 40/ 4000 K 50/ 5000 K	02 250 lumens 05 500 lumens 07 750 lumens 10 1000 lumens 15 1500 lumens 20 2000 lumens 25 2500 lumens 30 3000 lumens 35 3500 lumens	40 4000 lumens 45 4500 lumens 50 5000 lumens 60 6000 lumens 80 8000 lumens 100 10000 lumens 120 12000 lumens 150 15000 lumens 175 17500 lumens	AR Clear PR Pewter WTR Wheat GR Gold WR <sup>1</sup> White BR <sup>1</sup> Black WRAMF <sup>1</sup> White Anti-microbial TRALTD <sup>1,2</sup> RAL paint for pricing only TCPC <sup>1</sup> Custom paint color	(blank) Self-flanged FL Flangeless LSS Semi-specular LD Matte-diffuse LS Specular

Distribution	Voltage	Driver <sup>5</sup>	
VND Very Narrow (0.5 s/mh)	MVOLT	GZ10 0-10V driver dims to 10%	EDXB eldoLED POWERdrive DMX with RDM (remote device management). Square Law dimming to <1%. Includes termination resistor. Refer to <a href="#">DMXR Manual</a> . Minimum 1000 lumens/Maximum 15000 lumens.
ND Narrow (0.7 s/mh)	120	GZ1 0-10V driver dims to 1%	
MD Medium (0.9 s/mh)	277	EZ10 eldoLED 0-10V ECOdrive. Linear dimming to 10% min.	
MWD Medium Wide (1.0 s/mh)	347 <sup>3,4</sup>	EZ1 eldoLED 0-10V ECOdrive. Linear dimming to 1% min.	ECOD <sup>6</sup> Lutron Ecosystem digital Hi-Lume 1% soft-on, fade to black. Max: 4000LM.
WD Wide (1.2 s/mh)		EZB eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%.	
		EDAB eldoLED SOLOdrive DALI. Logarithmic dimming to <1%.	

Control Interface	Emergency Options	Options
NLT <sup>7</sup> nLight® dimming pack controls	EL Emergency battery pack, 10W, with integral test switch	SF Single fuse. Specify 120V or 277V.
NLTER <sup>3,7,8</sup> nLight® dimming pack controls emergency circuit	ELR Emergency battery pack, 10W, with remote test switch	TRW <sup>11</sup> White painted flange
NLTAIR <sup>2,9,10</sup> nLight® AIR enabled	ELSD Emergency battery pack, 10W, with self-diagnostics, integral test switch	TRBL <sup>12</sup> Black painted flange
NLTAIRER <sup>2,3,8,10</sup> nLight® AIR enabled emergency	ELRSD Emergency battery pack, 10W, with self-diagnostics, remote test switch	FRALTD <sup>2</sup> Flange ring only RAL color for pricing only
NLTAIREM <sup>2,3,9</sup> nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit with battery pack options.	E10WCP Emergency battery pack, 10W Constant Power, CA Title 20 compliant with integral test switch	FCPC Flange custom paint color
	E10WCPR Emergency battery pack, 10W Constant Power, CA Title 20 compliant with remote test switch	N80 <sup>13</sup> nLight® Lumen Compensation
	BGTD Bodine generator transfer device. Specify 120V or 277V.	GTD generator transfer device. Specify 120V or 277V
		90CRI High CRI (90+)
		CP <sup>14</sup> Chicago Plenum. Specify 120V or 277V for 5000lm and above.
		HAO <sup>15</sup> HAO High Ambient Option (40°C)
		RRL RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Available only with RRLA, RRLB, RRLAE, and RRLC12S. Refer to <a href="#">RRL</a> spec sheet on <a href="#">www.acuitybrands.com</a> for RELOC® product specifications. Above ceiling access required.

ACCESSORIES – order as separate catalog numbers (shipped separately)

SCA6	Sloped ceiling adapter. Degree of slope must be specified (5D, 10D, 15D, 20D, 25D, 30D). Ex: SCA6 10D. Refer to <a href="#">TECH-190</a> .
CTA EV06	6" Aperture ceiling thickness adapter, for up to 8,000LM (extends mounting frame to accommodate ceiling thickness up to 5").
CTA4-8 YK	4"-8" Aperture ceiling thickness adapter for use with EDXB or CP up to 8,000LM, or nTune options (extends mounting frame to accommodate ceiling thickness up to 5").
CTA4-8 YKHL	6" Aperture ceiling thickness adapter, for 10,000LM and up (extends mounting frame to accommodate ceiling thickness up to 5"). For use with CWW/DWW trims, EDXB, CP or nTune options.
ISD BC	0-10V wallbox dimmer. Refer to <a href="#">ISD-BC</a> .

ORDERING NOTES

- Not available with finishes.
- Replace with applicable RAL number and finish when ready to order. See [RAL BROCHURE](#) for available color options. Not available with emergency battery pack options.
- Not available with emergency battery pack options.
- Supplied with factory installed step down transformer. Max 5000LM.
- Refer to [TECH-240](#) for compatible dimmers.
- Not available with nLight®.
- Specify voltage.
- ER for use with generator supply power. Will require an emergency hot feed and normal hot feed.
- Not available DALI or DMX drivers. Not available with CP or N80 options. Not recommended for metal ceiling installations.
- When combined with the EZ1, EZ10, or EZB option, normal luminaires (non-emergency) can be used as a normal power sensing device for nearby nLight AIR devices and luminaires with EM emergency options.
- For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with WR (white reflector) or FL (flangeless) option.
- For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with BR (black reflector) or FL (flangeless) option.
- Fixture begins at 80% light level. Must be specified with NLT or NLTER. Only available with EZ10 and EZ1 drivers.
- 12,000LM max with EL or nLight® options. 5,000LM max with Lutron drivers combined with EL. Not available with ELR, HAO, or EXAB, or any nLight® AIR dimming options.
- Only available 5000LM - 15,000LM with eldoLED drivers.

## Optical Assembly

Optical design is a Bounding Ray™ design with 45° cutoff to source and source image. Top-down flash characteristic for superior glare control. Unitized optics shall have mechanical attachment of the light engine to the lower reflector for complete optical alignment.

## Electrical

The luminaire shall operate from a 50 or 60 Hz  $\pm 3$  Hz AC line over a voltage ranging from 120 VAC to 277 VAC. The fluctuations of line voltage shall have no visible effect on the luminous output.

The luminaire shall have a power factor of 90% or greater at all standard operating voltages and full luminaire output.

Sound Rated A+. Driver shall be >80% efficient at full load across all input voltages.

Input wires shall be 18AWG, 300V minimum, solid copper.

## Controls

Luminaire shall be equipped with interface for nLight wired or wireless network with integral power supply as per specification.

## Dimming

The luminaire shall be capable of continuous dimming without perceivable stroboscopic flicker as measured by flicker index (ANSI/IES RP-16-10) over a range of 100 – 10%, 100 – 1.0% or 100 – 0.1% of rated lumen output with a smooth shut off function to step to 0%.

eldoLED LED drivers shall conform to IEEE P1789 standards. Alternatively, manufacturers must demonstrate conformance with product literature and testing which demonstrates this performance. Systems that do not meet IEEE P1789 will not be considered.

Driver is inaudible in 24dB environment, and stable when input voltage conditions fluctuate over what is typically experienced in a commercial environment.

## Construction

Fully serviceable and upgradeable lensed LED light engine, both the driver and light engine are suitable for field maintenance and are serviceable from above or below the ceiling.

Luminaire housing shall be constructed of 16-gauge galvanized steel and have preinstalled telescopic mounting bars with maximum 32" and minimum 15" extension and 4" vertical adjustment.

Luminaires shall be suitable for installation in ceilings up to 1½" thick. (specify ceiling thickness adapter to extend frame to accommodate ceiling thickness up to 5").

Tool-less adjustments shall be possible after installation.

The assembly and manufacturing process for the luminaire shall be designed to assure all internal components are adequately supported to withstand mechanical shock and vibration.

25°C ambient temperature standard (1/2" clearance on all sides from non-combustible materials in non-IC applications, unless marked spacing noted otherwise). For use in insulated ceilings, a 3" clearance on all sides from insulation is required (unless marked spacing noted otherwise). 40°C high ambient optional.

## Listings

Fixtures are CSA certified to meet US and Canadian Standards: All fixtures manufactured in strict accordance with the appropriate and current requirements of the "Standards for Safety" to UL, wet location covered ceiling.

## 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](http://www.acuitybrands.com/buy-american) for additional information.

## Photometrics

LEDs tested to LM-80 standards. Measured by IESNA Standard LM-79-08 in an accredited lab. Lumen output shall not decrease by more than 30% over the minimum operational life of 60,000 hours.

Color appearance from luminaire to luminaire of the same type and in all configurations, shall be consistent both initially and at 60,000 hours and operate within a tolerance of <2.5 MacAdam ellipse as defined by a point at the intersection of the CCT line and the black body locus line in CIE chromaticity space.

## 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](http://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.

## Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control capability with simple commissioning when used with Acuity Brands controls products.

All configurations of this luminaire are calibrated and tested to meet the Acuity Brands' specification for chromatic consistency - including color rendering, color fidelity and color temperature tolerance around standard CIE chromaticity coordinates.

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

Marked Spacing in Inches 25°C Ambient			
Lumen Package	Fixed Center to Center MIN	Fixture Center to Building Member MIN	Space Above Fixture
500-5000	None	None	None
6000	24	12	5
8000	36	18	11
10000			9
12000			
15000			
17500	72	36	

EVO - eldoLED Driver Default Dimming Curve			
Nomenclature	Min Dimming	Driver Dim Curve	Control Dim Curve
EZ10	10%	Linear	Linear/Logarithmic
EZ1	1%	Linear	Linear/Logarithmic
EXA1	1%	Linear	Linear/Logarithmic
EZB	<1%	Logarithmic	Linear
EDAB	<1%	Logarithmic	Linear
EXAB	<1%	Logarithmic	Linear
EDXB	<1%	Square	Linear

Marked Spacing in Inches 40°C Ambient			
Lumen Package	Fixed Center to Center MIN	Fixture Center to Building Member MIN	Space Above Fixture
5000	24	12	5
6000			
8000	48	24	9
10000			
12000			
15000	72	36	9

Marked Spacing Chicago Plenum Open Frame in Inches 25°C Ambient			
Lumen Package	Fixed Center to Center MIN	Fixture Center to Building Member MIN	Space Above Fixture
250-5000	None	None	None
6000	24	12	5
8000	36	18	11
10000			9
12000			
15000			
17500	72	36	

Marked Spacing Chicago Plenum Enclosure in Inches 25°C Ambient			
Lumen Package	Fixed Center to Center MIN	Fixture Center to Building Member MIN	Space Above Fixture
250-6000	None	None	None
8000	36	18	6
10000	48	24	3
12000			

Control Provided (note: 347V/UVOLT versions provided with 347 option selected)					
Driver					
Nomenclature	Description	NLT	NLTER	NLTAIR2	NLTAIRER2
GZ10	0-10V driver dims to 10%	nPP16 D EFP	nPP16 D ER EFP	RPP20 D 24V G2	RPP20 D 24V ER G2
GZ1	0-10V driver dims to 1%	nPP16 D EFP	nPP16 D ER EFP	RPP20 D 24V G2	RPP20 D 24V ER G2
EZ10	eldoLED 0-10V ECOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2
EZ1	eldoLED 0-10V ECOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2
EZB	eldoLED 0-10V SOLOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2

### How to Estimate Delivered Lumens in Emergency Mode

$$\text{Delivered Lumens} = 1.25 \times P \times \text{LPW}$$

P = Output power of emergency driver. P = 10W for PS1055CP

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

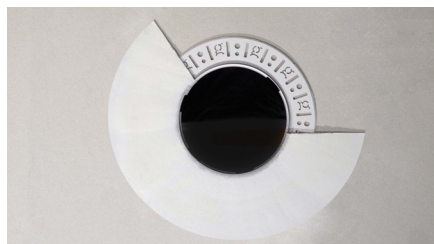
### Flangeless Installation

Gotham's flangeless option utilizes a micro-thin polymer mud ring that minimizes the amount of drywall compound required to finish the ceiling. The end result is a virtually undetectable flangeless downlight installation.

The polymer mud ring is installed independent of the of the recessed frame, therefore floating with the ceiling. This innovation minimizes any surface cracks during reflector installation, ceiling movement and any future service to the recessed frame, wiring, electronics, etc.



Partially finished mud ring, showing cross-section detail.



An EVO downlight requires only approximately 3" of plaster to finish.



EVO with flangeless trim

\*Dimensions in inches [centimeters]

Aperture: 6 1/4" [15.9]

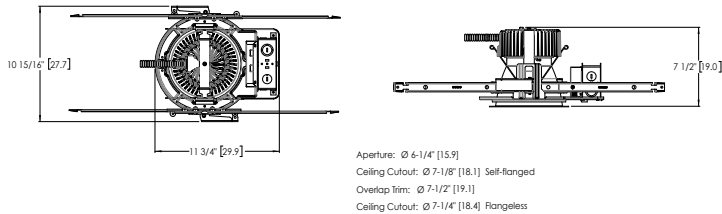
Ceiling Opening: 7 1/8" [18.1] self-flanged

Overlap Trim: 7 1/2" [19.1]

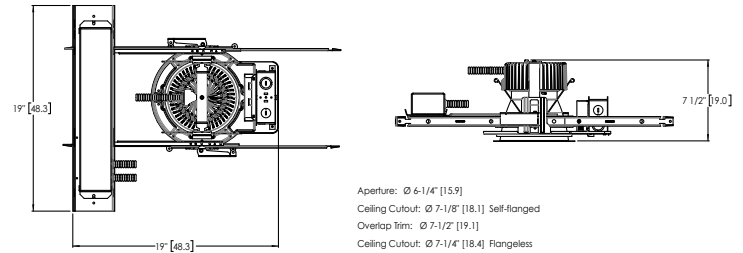
7 1/4" [18.4] flangeless

DIMENSIONAL DATA

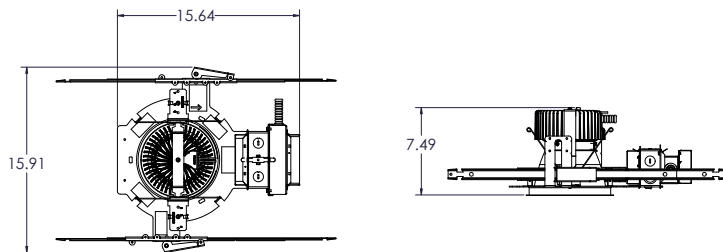
### 250LM-500LM Standard



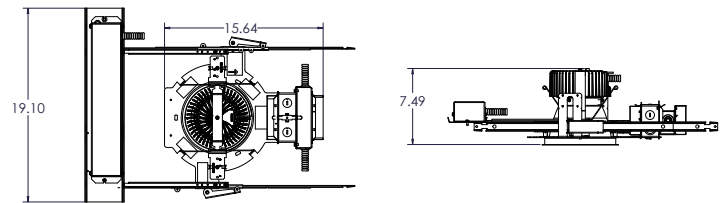
### 250LM-500LM Battery Pack



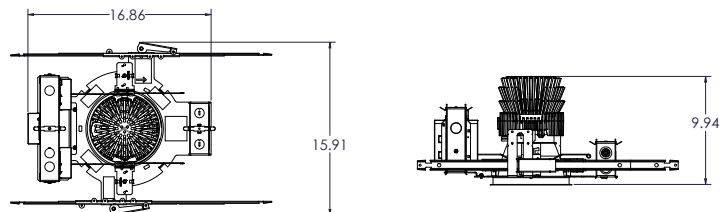
### 6000LM-8000LM Standard



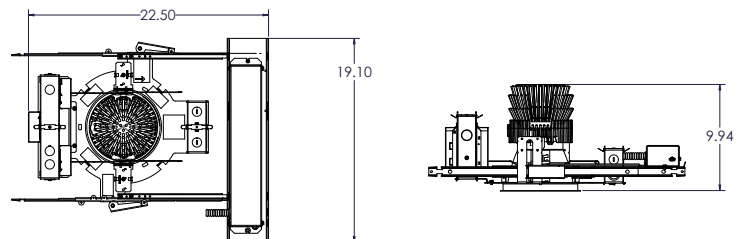
### 6000LM-8000LM Battery Pack



### 10,000LM-17,500LM Standard



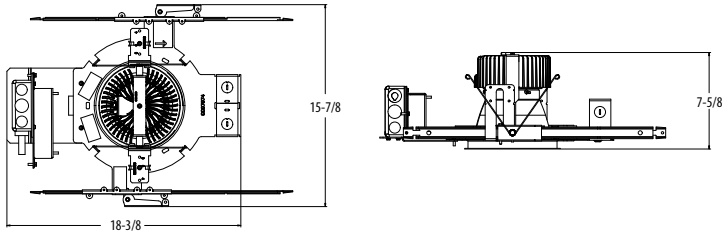
### 10,000LM-17,500LM Battery Pack



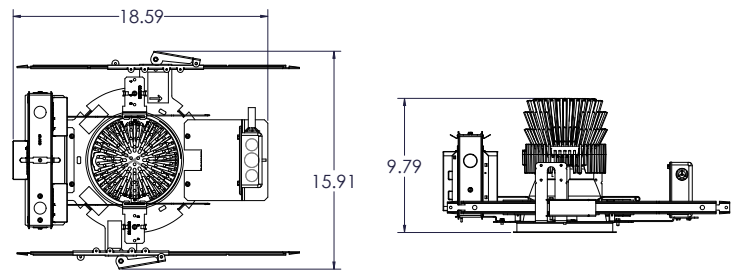
\*Dimensions in inches [centimeters]

DIMENSIONAL DATA

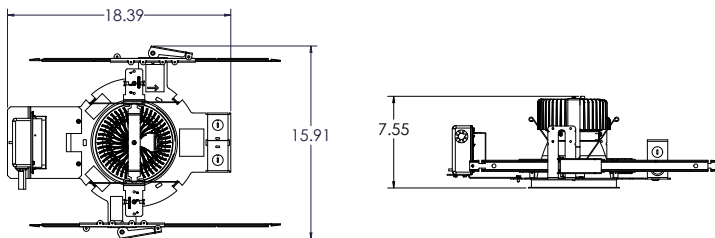
250LM-4500LM CP



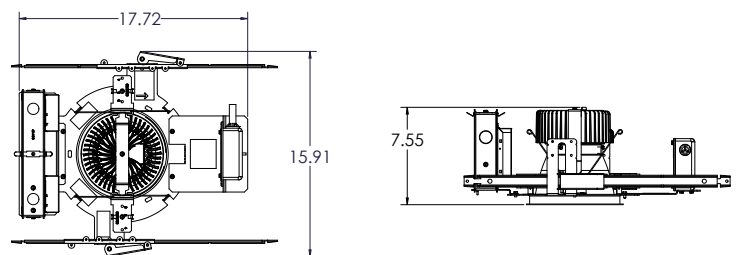
10000LM - 17,500LM Lumen Open Frame CP



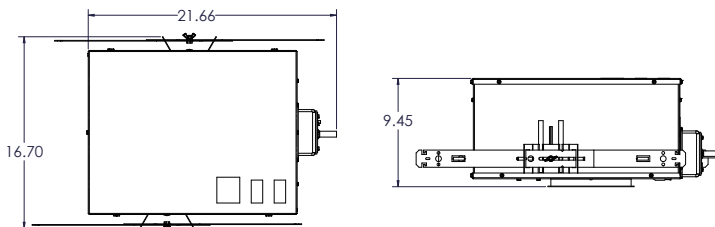
5000LM ECO/SOLO Drive Open Frame CP



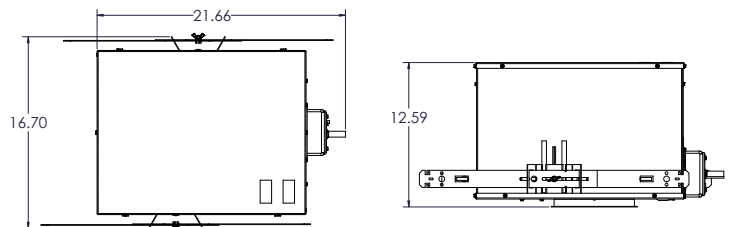
5000LM (Lutron & POWER Drive Only), 6000LM & 8000LM Open Frame CP



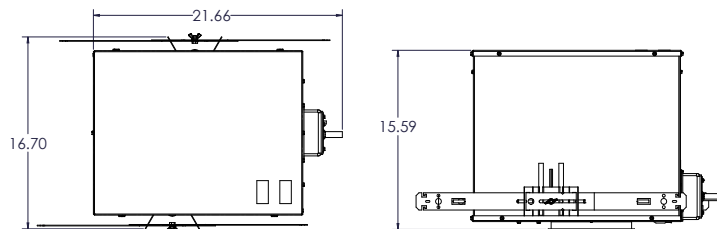
250LM - 6000LM CP Enclosed with Battery Pack and/or nLight™ Only



8,000LM CP Enclosed with Battery Pack and/or nLight™ Only

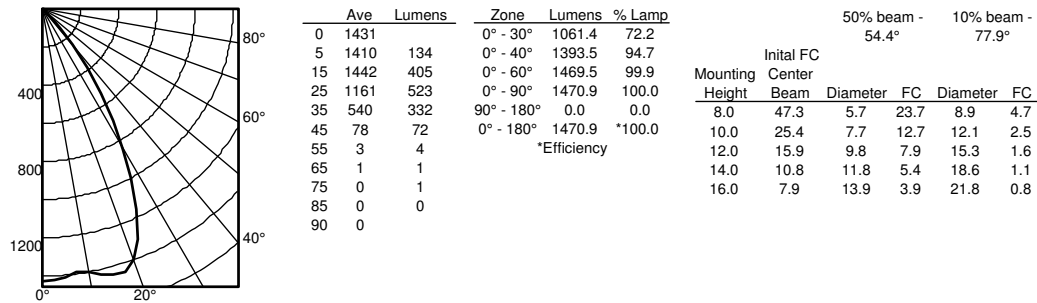


10,000LM-12,000LM CP Enclosed with Battery Pack and/or nLight™ Only

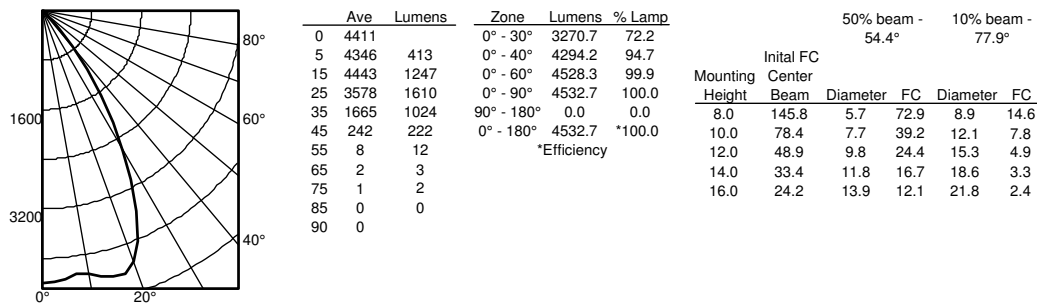




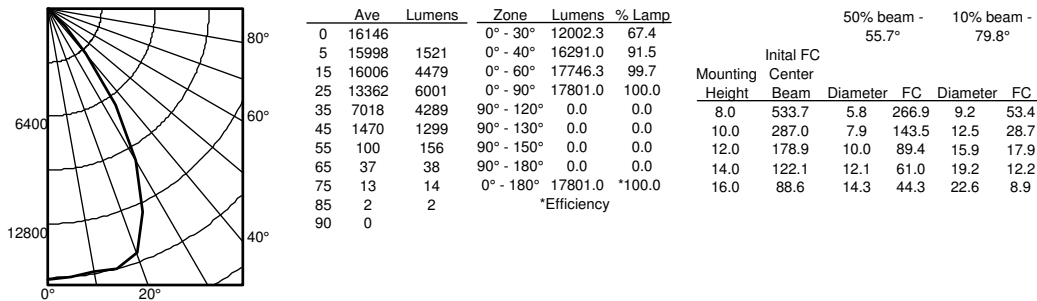
**EVO6 35/15 AR MWD LS INPUT WATTS: 14.7, DELIVERED LUMENS: 1471LM, LPW= 100, 1.03 S/MH, TEST NO. LTL27783P1505**



**EVO6 35/45 AR MWD LS INPUT WATTS: 47.3, DELIVERED LUMENS: 4532.7LM, LPW= 95.8, 1.03 S/MH, TEST NO. LTL27783P1649**



**EVO6 35/175 AR MWD LS INPUT WATTS: 175.3, DELIVERED LUMENS: 17801LM, LPW=101.5, 1.06 S/MH, TEST NO. ISF 34035P268**



Lumen Output Multiplier		
CRI	CCT	Multiplier
80	2700K	0.96
	300K	1.00
	3500K	1.00
	4000K	1.01
	5000K	1.07
90	2700K	0.80
	300K	0.83
	3500K	0.85
	4000K	0.87
	5000K	0.91

Reflector Finish Multiplier	
Reflector Finish	Multiplier
LS - Specular	1
LSS - Semi Specular	0.956
WR - White	0.87
LD - Matte Diffuse	0.85
BR - Black	0.73

Distributions		
Nomenclature	Beam Angle	Field Angle
VND	30	64
ND	44	69
MD	54	82
MWD	67	89
WD	71	92

**nLight® AIR** is the ideal solution for retrofit or new construction spaces where adding communication wiring is cost prohibitive. The integrated nLight AIR rPP20 Power Pack is part of each EVO Luminaire ordered with the NLTAIR option. These individually addressable controls offer the ultimate in flexibility during initial setup and for space repurposing.

#### nLight® AIR Control Accessories

Order as separate catalog number. Visit [nLight AIR](#).

##### Wall Switches

Model Number	
On/Off single pole	rPODB (color) G2
On/Off two pole	rPODB 2P (color) G2
On/Off & raise/lower single pole	rPODB DX (color) G2
On/Off & raise/lower two pole	rPODB 2P DX (color) G2

#### nLight® AIR Control Accessories (cont.)

##### Occupancy Sensors (PIR/dual tech)

Model Number	
Small motion 360°, ceiling	rCMS 9 / rCMS PDT 9
Large motion 360°, ceiling	rCMS 10 / rCMS PDT 10

#### UL924 Sequence of Operation

The below information applies to all nLight AIR devices with an EM option.

- EM devices will remain at their high-end trim and ignore wireless lighting control commands, unless a normal-power-sensed (NPS) broadcast is received at least every 8 seconds.
- Using the CLAIRITY+ mobile app, EM devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts.
- Only non-emergency rPP20, rLSXR, rSBOR, rSDGR, and nLight AIR luminaires with version 3.4 or later firmware can provide normal power sensing for EM devices. See specification sheets for control devices and luminaires for more information on options that support normal power sensing.

**nLight®** The nLight® solution is a digital networked lighting control system that provides both energy savings and increased user configurability by cost effectively integrating time-based, daylight-based, sensor-based and manual lighting control schemes.

#### nLight® Wired Control Accessories

Order as separate catalog number. Visit [nLight](#).

##### Wall Switches

Model Number	
On/Off single pole	nPODM (color)
On/Off two pole	nPODM 2P (color)
On/Off & raise/lower single pole	nPOD DX (color)
On/Off & raise/lower two pole	nPODM 2P DX (color)
Graphic touchscreen	nPOD GFX (color)

##### Photocell Controls

Dimming	nCM ADCX
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#### nLight® Wired Control Accessories (cont.)

##### Occupancy Sensors (PIR/dual tech)

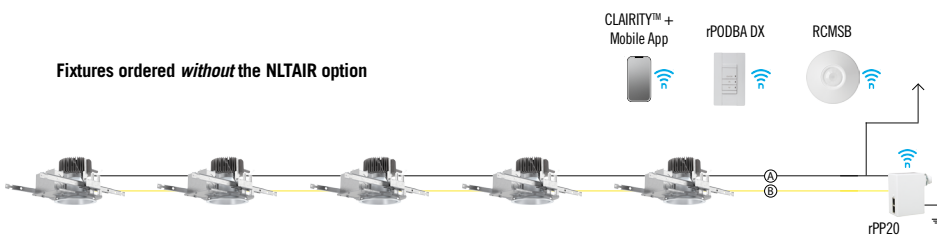
Model Number	
Small motion 360°, ceiling	nCM 9 / nCM PDT 9
Large motion 360°, ceiling	nCM 10 / nCM PDT 10
Wide View	nWV 16 / nWV PDT 16
Wall switch with raise/lower	nWSX LV DX / nWSX PDT LV DX

##### Cat-5 Cables (plenum rated)

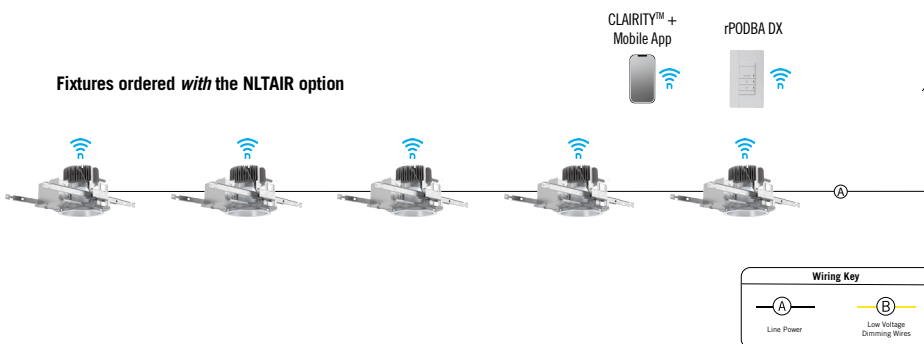
10', CAT5	CAT5 10FT J1
15', CAT5	CAT5 15FT J1

#### Possibilities for nLight® AIR

##### Fixtures ordered *without* the NLTAIR option

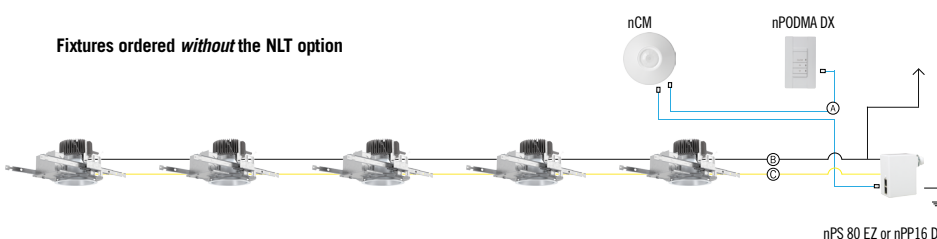


##### Fixtures ordered *with* the NLTAIR option

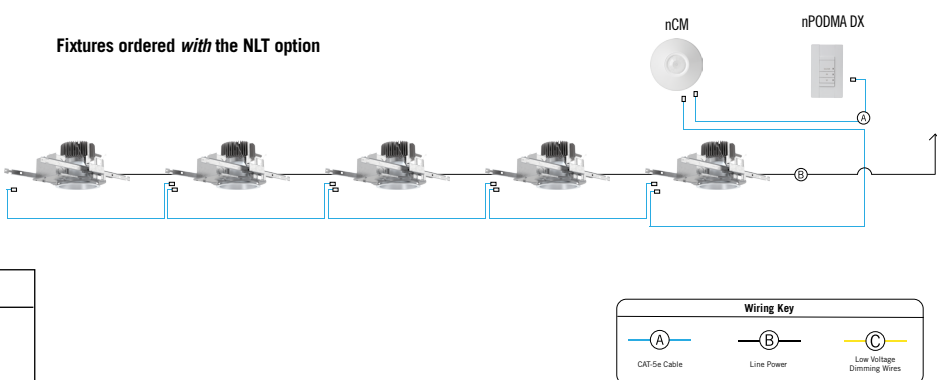


#### Possibilities for nLight® wired

##### Fixtures ordered *without* the NLT option



##### Fixtures ordered *with* the NLT option







# WST LED

## Architectural Wall Sconce



Catalog  
Number

Notes

Type

**TYPE Z1**

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

## Specifications

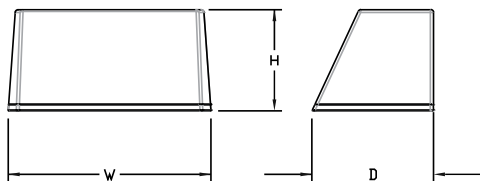
### Luminaire

**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)



A+ Capable options indicated  
by this color background.

## 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.

## 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 P2 3,000 Lumen package P3 6,000 Lumen package	27K 2700 K 30K 3000 K 40K 4000 K 50K 5000 K	VF Visual comfort forward throw VW Visual comfort wide	MVOLT <sup>1</sup> 277 <sup>2</sup> 120 <sup>2</sup> 347 <sup>2</sup> 208 <sup>2</sup> 480 <sup>2</sup> 240 <sup>2</sup>	<b>Shipped included</b> (blank) Surface mounting bracket PBBW Premium surface-mounted back box <sup>3,4</sup> <b>Shipped separately</b> BBW Surface-mounted back box <sup>3</sup>

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

See Accessories and Notes on next page.



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WST-LED  
Rev. 03/27/24

## Accessories

Ordered and shipped separately.

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

## NOTES

- 1 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- 2 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- 3 Also available as a separate accessory; see accessories information.
- 4 Top conduit entry standard.
- 5 Not available with VG or WG. See PER Table.
- 6 Reference Motion Sensor table.
- 7 Not available 347/480. E7WC or E23WHR, only available 120 or 277.
- 8 Need to specify 120, 208, 240 or 277 voltage.

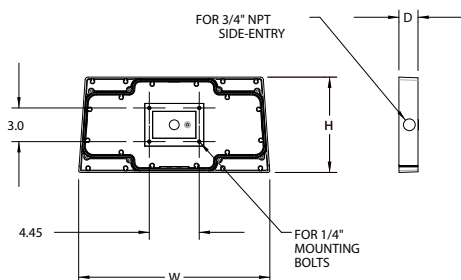
- 9 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included.
- 10 Not available with Emergency options, PE or PER options.
- 11 DMG option not available with standalone or networked sensors/controls.
- 12 Battery pack rated for -20° to 40°C.
- 13 Comes with PBBW.
- 14 Warranty period is 3-years.
- 15 Not available with BBW.
- 16 Must order with fixture; not an accessory.
- 17 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)

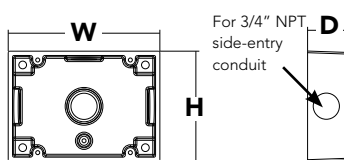


## Optional Back Box (BBW)

**Height:** 4"  
(10.2 cm)

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

**Depth:** 1-1/2"  
(3.8 cm)



## Emergency Battery Operation

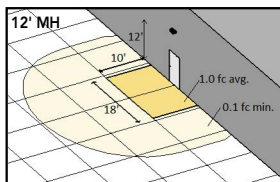
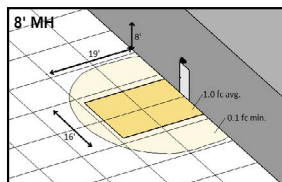
The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product.

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](#)

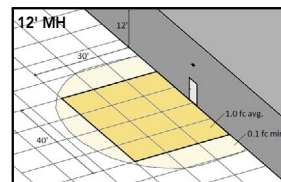
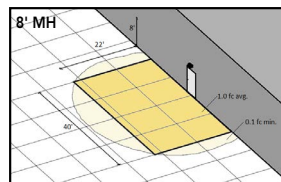
The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time supply power is lost, per [International Building Code Section 1006](#) and [NFPA 101 Life Safety Code Section 7.9](#), provided luminaires are mounted at an appropriate 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

### 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

### 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	---	---

### 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 <sup>1</sup> )	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

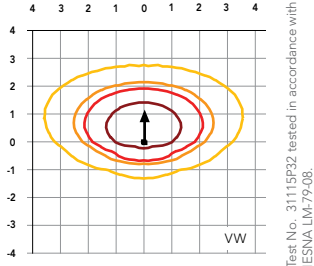
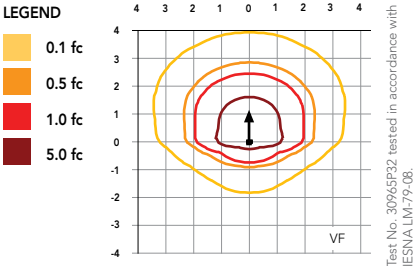


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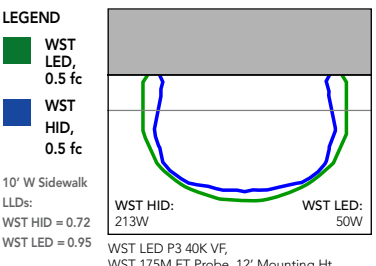
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WST-LED  
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Isofootcandle plots for the WST LED P3 40K VF and VW. Distances are in units of mounting height (10').



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](http://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](http://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.