

## Mess, Camie

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**From:** Mess, Camie  
**Sent:** Thursday, April 18, 2019 10:52 AM  
**To:** eh@mitchellmatthews.com  
**Cc:** Werner, Jeffrey B  
**Subject:** April BAR Action - 608 Preston Place

April 18, 2019

### Certificate of Appropriateness

BAR 14-04-07  
608 Preston Place  
Tax Parcel 050108000  
Psi Chapter of Sigma Chi Fraternity House Corp, Owner/John Matthews, Applicant  
Sigma Chi Renovations and Addition: Lighting

Dear Applicant,

The above referenced project was discussed before a meeting of the City of Charlottesville Board of Architectural Review (BAR) on April 16, 2019. The following action was taken:

**Motion: Schwarz moved having considered the standards set forth within the City Code, including City Design Guidelines for Site Design and Elements, I move to find that the proposed lighting plan satisfies the BAR's criteria and is compatible with this property and other properties in the Rugby Road-University Circle-Venable Neighborhood ADC District, and that the BAR approves the application as submitted, with the specification for the hanging pendent as described during the meeting (Type A LED blub.) Balut seconded. Approved (7-0).**

If you would like to hear the specifics of the discussion, the meeting video is on-line at:

[http://charlottesville.granicus.com/MediaPlayer.php?view\\_id=2&clip\\_id=1360](http://charlottesville.granicus.com/MediaPlayer.php?view_id=2&clip_id=1360)

This certificate of appropriateness shall expire in 18 months (October 16, 2020), unless within that time period you have either been issued a building permit for construction of the improvements if one is required, or if no building permit is required, commenced the project. You may request an extension of the certificate of appropriateness before this approval expires for one additional year for reasonable cause. (See City Code Section 34-280. Validity of certificates of appropriateness.)

If you have any questions, please contact me at 434-970-3998 or [messc@charlottesville.org](mailto:messc@charlottesville.org).

Sincerely,  
Camie Mess

Camie Mess  
Assistant Historic Preservation and Design Planner  
City of Charlottesville  
Phone: 434.970.3398  
Email: [messc@charlottesville.org](mailto:messc@charlottesville.org)

**CITY OF CHARLOTTESVILLE  
BOARD OF ARCHITECTURAL REVIEW  
STAFF REPORT  
April 16, 2019**



**Certificate of Appropriateness**

BAR 14-04-07

608 Preston Place

Tax Parcel 050108000

Psi Chapter of Sigma Chi Fraternity House Corp, Owner/John Matthews, Applicant

**Sigma Chi Renovations and Addition**

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**Background**

Constructed in 1929, 608 Preston Place is a contributing structure in the Rugby Road-University Circle-Venable Neighborhood ADC District.

The property is zoned R-3 Residential. The maximum height permitted is 45 feet, with additional height allowed by SUP; maximum density is 21 units/acre, or up to 87 DUA by special use permit. There is a 25 foot minimum rear setback. Parking required for a fraternity is 2.5 spaces per 3 bedrooms.

**Prior BAR Actions** (See appendix)

**Application**

Applicant submittal:

- Mitchell/Matthews submittal dated March 26, 2019: revised lighting plan (page 2-3), cut sheets (page 4-9), elevations and sconce placement (10-12), large sheet lighting plan (2 sheets)

Request for exterior lighting, cut sheets included.

**Discussion and Recommendations**

Staff recommends all exterior lighting, including the LED lighting mounted lights should have warm color temperature less than 3000K. Any exterior lamp that emits 3000 or more lumens shall be a full cutoff luminaire.

**Suggested Motions**

Having considered the standards set forth within the City Code, including City Design Guidelines for Site Design and Elements, I move to find that the proposed lighting plan satisfies the BAR's criteria and is compatible with this property and other properties in the Rugby Road-University Circle-Venable Neighborhood ADC District, and that the BAR approves the application as submitted (or with the following modifications...).

*...as submitted and with the following modifications/conditions:...*

**Denial:**

Having considered the standards set forth within the City Code, including City Design Guidelines for Site Design and Elements, I move to find that the proposed lighting plan does not satisfy or the BAR's criteria and

guidelines and is not compatible with this property and other properties in the Rugby Road-University Circle-Venable Neighborhood ADC District, and for the following reasons the BAR denies the application as submitted:...

### **Criteria, Standards, and Guidelines**

#### **Review Criteria Generally**

Sec. 34-284(b) of the City Code states that,

In considering a particular application the BAR shall approve the application unless it finds:

- (1) That the proposal does not meet specific standards set forth within this division or applicable provisions of the Design Guidelines established by the board pursuant to Sec.34-288(6); and
- (2) The proposal is incompatible with the historic, cultural or architectural character of the district in which the property is located or the protected property that is the subject of the application.

#### **Pertinent Standards for Review of Construction and Alterations include:**

- 1) Whether the material, texture, color, height, scale, mass and placement of the proposed addition, modification or construction are visually and architecturally compatible with the site and the applicable design control district;
- 2) The harmony of the proposed change in terms of overall proportion and the size and placement of entrances, windows, awnings, exterior stairs and signs;
- 3) The Secretary of the Interior Standards for Rehabilitation set forth within the Code of
- 4) Federal Regulations (36 C.F.R. §67.7(b)), as may be relevant;
- 5) The effect of the proposed change on the historic district neighborhood;
- 6) The impact of the proposed change on other protected features on the property, such as gardens, landscaping, fences, walls and walks;
- 7) Whether the proposed method of construction, renovation or restoration could have an adverse impact on the structure or site, or adjacent buildings or structures;
- 8) Any applicable provisions of the City's Design Guidelines.

#### **Pertinent Guidelines for Site Design and Elements**

##### **D. LIGHTING**

Charlottesville's residential areas have few examples of private site lighting. Most houses, including those used for commercial purposes, have attractive, often historically styled fixtures located on the house at various entry points. In the commercial areas, there is a wide variety of site lighting including large utilitarian lighting, floodlights and lights mounted on buildings. Charlottesville has a "Dark Sky" ordinance that requires full cutoff for lamps that emit 3,000 or more lumens. Within an ADC District, the BAR can impose limitations on lighting levels relative to the surrounding context.

- 1) In residential areas, use fixtures that are understated and compatible with the residential quality of the surrounding area and the building while providing subdued illumination.
- 2) Choose light levels that provide for adequate safety yet do not overly emphasize the site or building. Often, existing porch lights are sufficient.
- 3) In commercial areas, avoid lights that create a glare. High intensity commercial lighting fixtures must provide full cutoff.
- 4) Do not use numerous "crime" lights or bright floodlights to illuminate a building or site when surrounding lighting is subdued.
- 5) In the downtown and along West Main Street, consider special lighting of key landmarks and facades to provide a focal point in evening hours.
- 6) Encourage merchants to leave their display window lights on in the evening to provide extra illumination at the sidewalk level.
- 7) Consider motion-activated lighting for security.

### **Appendix: Prior BAR Actions**

June 21, 2011 - 608 Preston Place - Preliminary discussion. BAR accepted (6-0) the applicant's request for deferral regarding the BAR's recommendation on the Special Use Permit.

January 17, 2012 – BAR accepted (9-0) the applicant's request for deferral.

BAR issues focused on the effect on the character of the historic district, the effect on the building independent of surroundings, and the architectural detailing.

- the program is too intensive for the site (double the square footage);
- enormous increase in impervious area;
- need to use landscaping to screen activities;
- the house corporation should join the conversations that the architect has been having with the neighborhood, (the real issues are programmatic and managerial – need agreement how special events and parking could be handled);
- the addition does not meet the guidelines in terms of extent of demolition, size in relation to house, effect of building and activities pushed to the property lines;
- project is overwhelming and out of scale to house and neighborhood.

March 18, 2014: BAR approved (5-0) the renovations and addition as submitted, with bollards added to protect hedges, and option to use a metal roof over the additions.

March 13, 2019: BAR approved (5-1, with Miller opposed)

- Addition of a fence to be 6 foot metal back to the front plane of the house (on the north border), then 8 feet pressure treated from that point to the back of the property. This was considered because of the security concern, support from the neighborhood, and it was a fraternity house located next to a residential house.
- Replace the Japanese maple in the north corner with a medium/large size tree from the city's tree list or a larger, green species of Japanese maple
- Defer the spot lights, to come back for approval The drawing we are approving are dated December 18, 2018 and the amended drawings dated March 4, 2019.







PSI CHAPTER OF  
**SIGMA CHI**  
RENOVATIONS & ADDITION

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608 PRESTON PLACE  
CHARLOTTESVILLE, VIRGINIA

REVISED LIGHTING  
MARCH 26TH, 2019

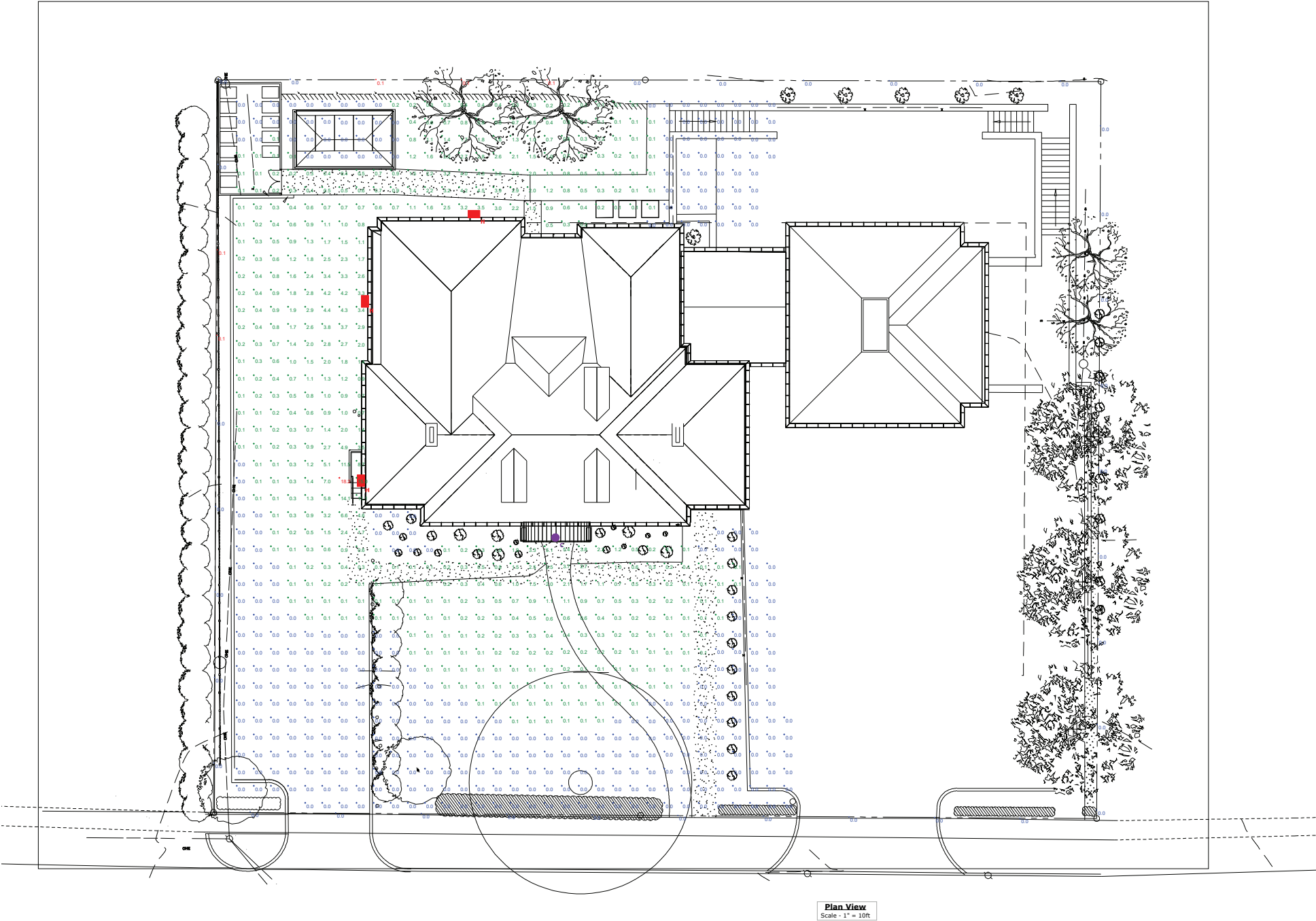
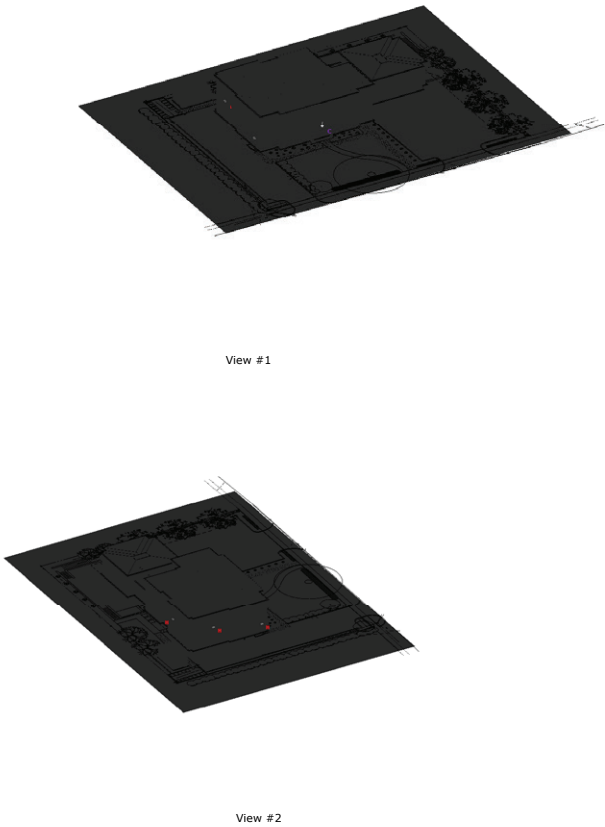


Schedule											
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	C	1	Winona Lighting	WFP5520 16DIA SCHOOL 2/32TRT 120 IMB OG AB	2/32W SYL TRIPLE CF 16"DIA SCHOOLHOUSE PENDANT LUMINAIRE WHITE SCHOOLHOUSE GLASS GLOBE UNIVERSAL BALLAST #C242UNVSE WATTS=84	2/32W SYL TRIPLE CF	2	WFP5520_16DIA_SCHOOL_2_42TRT_120_IMB_OG_AB.ies	3000	0.9	84
	H	3	Lithonia Lighting	WST LED P1 30K VW MVOLT	WST LED, Performance package 1, 3000 K, visual comfort wide, MVOLT	LED	1	WST_LED_P1_30K_VW_MVOLT.ies	1548	0.9	12


Luminaire Locations

No.	Label	MH	Orientation	Tilt
1	C	8.00	0.00	0.00
1	H	6.00	270.00	0.00
2	H	12.60	270.00	0.00
3	H	12.60	0.00	0.00

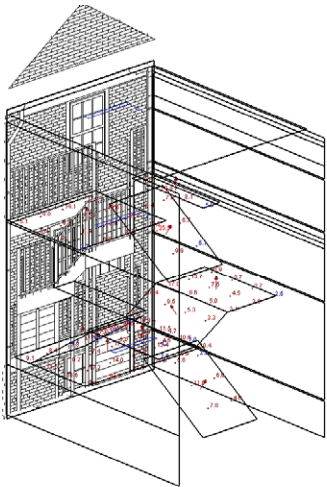
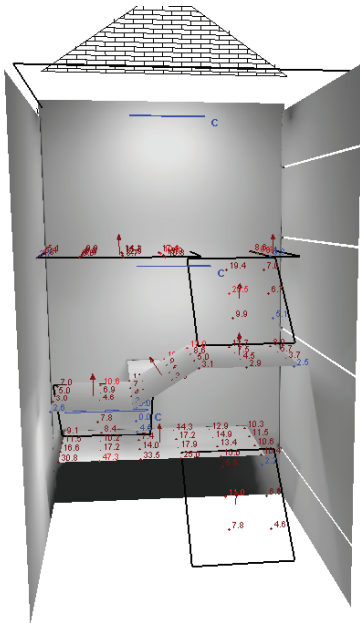
Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Property Line	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Sigma Chi Lighting on Existing House	◇	0.5 fc	18.2 fc	0.0 fc	N/A	N/A



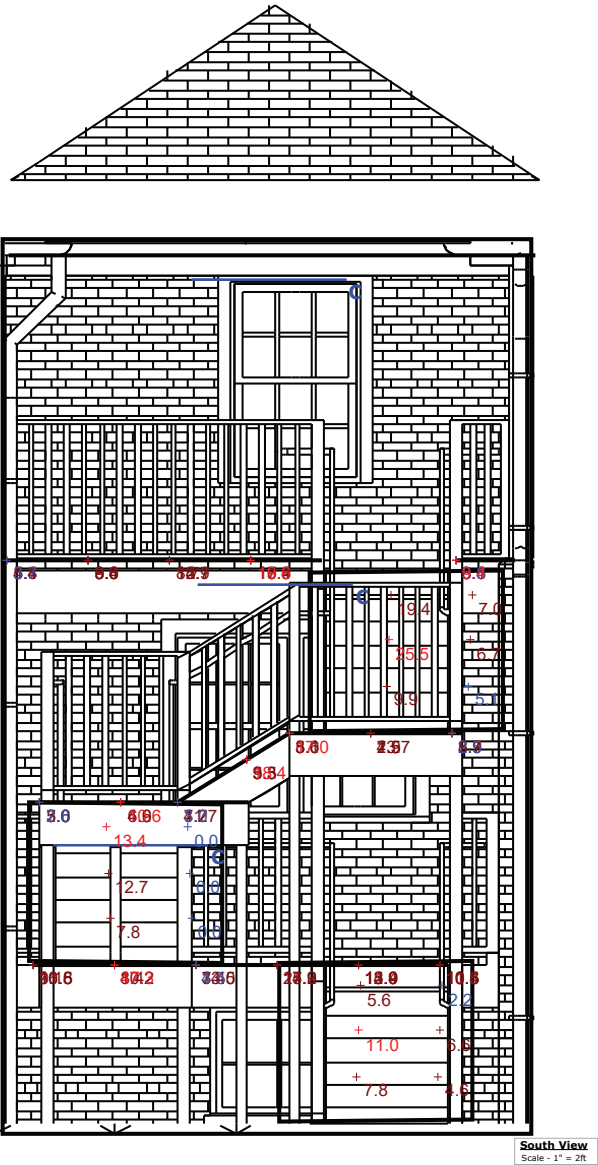
REVISED LIGHTING PLAN

Schedule											
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	A	0	FSC MIRUS LIGHTING	Motus 4-26WT D-OS-EMR IR-DL	MOTUS		1	MOTUS-4-26WT-8-40K-D-0			

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #2	+	7.9 fc	18.4 fc	3.0 fc	6.1:1	2.6:1
Calc Zone #3	+	5.8 fc	10.6 fc	2.6 fc	4.1:1	2.2:1
Calc Zone #4	+	6.3 fc	11.0 fc	2.2 fc	5.0:1	2.9:1
Calc Zone #5	+	16.0 fc	47.3 fc	4.5 fc	10.5:1	3.6:1
Calc Zone #6	+	12.3 fc	25.5 fc	5.1 fc	5.0:1	2.4:1
Calc Zone #7	+	8.0 fc	9.4 fc	5.8 fc	1.6:1	1.4:1
Calc Zone #8	+	10.4 fc	19.6 fc	3.7 fc	5.3:1	2.8:1
Calc Zone #10	+	5.6 fc	13.4 fc	0.0 fc	N/A	N/A
steps landing	+	6.9 fc	17.0 fc	2.5 fc	6.8:1	2.8:1



View #5



REVISED LIGHTING



FEATURES & SPECIFICATIONS

**INTENDED USE** — For wall or ceiling mounting, vertical or horizontal. The WL combines digital LED lighting and controls technologies with high-performance optical design to offer the most advanced wall-mount luminaire for general ambient lighting applications. High-efficacy light engine delivers long life and excellent color, ensuring a superior quality lighting installation that is highly efficient and sustainable.

**CONSTRUCTION** — Housing is roll formed from code-gauge steel. Refractor is retained in die cast ends providing secure installation and easy maintenance. Decorative die-cast end caps provide added durability.

Finish: All metal parts are post-painted in white polyester powder coat for smooth, finished edges and uniform light distribution.

**OPTICS** — Impact modified linear faceted refractor. Optically engineered for superior light distribution and maximum efficacy.

Crescent-shape linear faceted refractor system obscures and integrates individual LED images and uniformly washes fixture surface with light.

**ELECTRICAL** — Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life. 90% LED lumen maintenance at 60,000 hours (L90/60,000). The LEDs have a CRI of 82.

eldoLED driver options deliver choice of dimming range and choice for control, while assuring flicker-free, low-current inrush, 89% efficiency and low EMI.

Driver disconnect provided where required to comply with US and Canadian codes.

Optional nLight® embedded controls continuously monitor system performance and allow for constant lumen management function.

Lumen Management: Unique lumen management system (option N80) provides onboard intelligence that actively manages the LED light source so that constant lumen output is maintained over the system life, preventing energy waste created by the traditional practice of over-lighting.

**SENSOR** — **Integrated sensor (individual control):** Sensor Switch MSD7 (Passive Infrared (PIR)) integrated occupancy sensor photocell allows the luminaire to power off when the space is unoccupied. See page 4 for more details on the integrated sensor.

**Integrated Sensor (nLight Wired Networking):** The sensor is nLight-enabled, meaning it has the ability to communicate over an nLight network. When wired using CAT-5 cabling with other nLight-enabled sensors, power packs, or WallPods, an nLight control zone is created. Once linked to a Gateway, directly or via a Bridge, the zone becomes capable of remote status monitoring and control via SensorView software. See page 4 for the nLight sensor options.

**Interated Smart Sensor (nLight AIR Wireless Platform):** The RES7 sensor is nLight AIR enabled, meaning it has the ability to communicate over the wireless nLight control platform. It is available with an automatic dimming photocell, and either a digital PIR or a dual technology occupancy sensor. It pairs to other luminaires and wall switches through our mobile app, CLAIRITY, which allows for simple sensor adjustment. See page 4 for more details on the Integrated Smart Sensor.

**LISTINGS** — CSA certified to meet U.S. and Canadian standards. Suitable for damp location (excluding sensor option).

Patents pending. 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/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

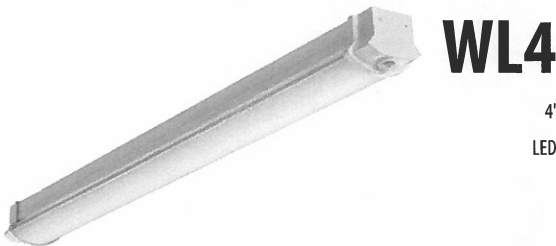
**WARRANTY** — 5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/CustomerResources/terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/terms_and_conditions.aspx)

**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.

Catalog Number	
Notes	
Type	“C” AT STAIR

W SERIES

Wall bracket & Surface Mount LED



WL4  
4'  
LED



A+ Capable Luminaire

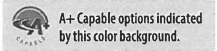
This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® or XPoint™ Wireless control networks when ordered with drivers marked by a shaded background\*

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

\*See ordering tree for details

WL4 Wall Bracket & Surface Mount LED



ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative. Example: WL4 30L EZ1 LP840

WL4					
Series	Lumens <sup>1</sup>	Voltage	Driver	Color temperature	nLight Interface
WL4 4' wall-mount LED	20L 2000 lumens 30L 3000 lumens 40L 4000 lumens	(blank) MVOLT 347 347V	EZ1 eldoLED dims to 1%, 0-10V EZB eldoLED dims to dark, 0-10V GZ1 Dims to 1% (0-10V dimming) <sup>2</sup> GZ10 Dims to 10% (0-10V dimming) <sup>2</sup>	LP830 3000 K LP835 3500 K LP840 4000 K LP850 5000 K	<b>nLight Wired</b> (blank) No nLight® interface N80 nLight® with 80% lumen management N80EMG nLight® with 80% lumen management. For use with generator supply EM power <sup>2</sup> N100 nLight® without lumen management N100EMG nLight® without lumen management. For use with generator supply EM power <sup>3</sup> <b>nLight Wireless</b> (blank) No nLight® interface NLTAIR2 nLight® Air Generation 2 enabled <sup>3</sup>

Control <sup>4</sup>	Standby mode <sup>5</sup>	Options	Finish <sup>11</sup>
<b>nLight Wired</b> (blank) No nLight control INES7 nLight® nES 7 PIR integral occupancy sensor <sup>6</sup> NESPDT7 nLight® nES PDT 7 dual technology integral occupancy control <sup>6</sup> NES7ADCX nLight® nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell <sup>6</sup>	(blank) Fixture turns off when unoccupied DIM10 Fixture dims to approximately 10% light output when unoccupied DIM50 Fixture dims to approximately 50% light output when unoccupied	EL7L 700 nominal lumen battery pack (Noncompliant with CA T20) <sup>11</sup> EL14L 1400 nominal lumen battery pack (Noncompliant with CA T20) <sup>11</sup> E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title 20 MAEDBS <sup>11</sup> SC Surface conduit end cap provisions	(blank) White
<b>nLight Wireless</b> RES7 nLight® AIR PIR integral occupancy sensor with automatic dimming photocell RES7PDT nLight® AIR microphonics dual technology integral occupancy sensor with automatic dimming photocell <b>Individual Control</b> MSD7 Sensor Switch® MSD 7 PIR Integral Occupancy Control <sup>7</sup>			

- Notes**
- Approximate lumen output.
  - GZ1, GZ10 not available with any Controls or sensor options.
  - nLight EMG option requires a connection to existing nLight network. Power is provided from a separate N80 or N100 enabled fixture
  - Must order with RES7, RES7PDT, or module. Only available with EZ1 driver.
  - See sensor options on page 4.
  - Requires N80, N100, N80EMG, or N100EMG. Cannot be ordered with EZB and EL7L or EL14L together.
  - Not available with nLight options or EZB.
  - Requires Occupancy Control.
  - Only available with RES7 or RES7PDT. Occupancy sensor disabled at factory but can be re-enabled upon commissioning.
  - Not available with 347V. Cannot be ordered with 40L, EZB, and sensor combination.
  - For additional paint finishes, refer to Architectural Colors.



WL4-LED

LED: One Lithonia Way Conyers, GA 30012 Phone: 800-858-7763 Fax: 770-929-8789 [www.lithonia.com](http://www.lithonia.com)

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CUT SHEETS

PSI CHAPTER OF SIGMA CHI  
CHARLOTTESVILLE, VIRGINIA  
MARCH 26, 2019

MITCHELL/MATTHEWS © 2019  
ARCHITECTS & URBAN PLANNERS  
CHARLOTTESVILLE 434.979.7550



WL4 Wall Bracket & Surface Mount LED

nLight® Wired Control Accessories: <small>Order as separate catalog number. Visit <a href="http://www.acuitybrands.com/products/controls/nlight">www.acuitybrands.com/products/controls/nlight</a>.</small>			
<b>WallPod stations</b>	<b>Model number</b>	<b>Occupancy sensors</b>	<b>Model number</b>
On/Off	nPODM [color]	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 RJB / nCM PDT 9 RJB
On/Off & raise/lower	nPODM DX [color]	Large motion 360°, ceiling (PIR / dual tech)	nCM10 RJB / nCM PDT 10 RJB
Graphic touchscreen	nPOD GFX [color]	Wall switch with raise/lower	nWSX PDT LV DX [color]
<b>Photocell controls</b>	<b>Model number</b>	<b>Cat-5 cable (plenum rated)</b>	<b>Model number</b>
Full range dimming	nCM ADCX RJB	10' cable	CATS 10FT J1
		30' cable	CATS 30FT J1

nLight® AIR Control Accessories: <small>Order as separate catalog number. Visit <a href="http://www.acuitybrands.com/products/controls/nlightair">www.acuitybrands.com/products/controls/nlightair</a>.</small>	
<b>Wall switches</b>	<b>Model number</b>
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
On/Off & raise/lower single pole	rPODBZ DX WH G2

ORDERING INFORMATION				
rCMS			Example: RCMS PDT 10 AR G2	
Series/Detection	Occupancy Detection	Lens (Required)	Operating Mode	Generation
RCMS nLight AIR occupancy and daylight sensor	(blank) PIR Detection PDT Dual Tech PIR/ Microphonics	10 Large Motion/Extended Range 360°	(blank) None AIR Auxiliary Relay	G2 Generation 2 compatibility
		9 Small Motion/Extended Range 360°		
		6 High Bay 360° Lens		



LITHONIA LIGHTING

WL4-LED

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CUT SHEETS

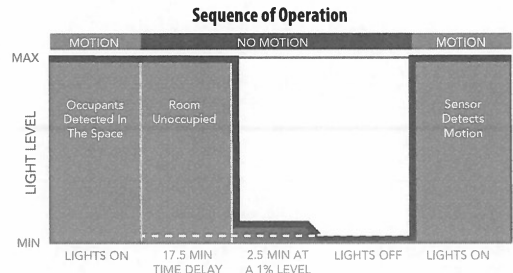
PSI CHAPTER OF SIGMA CHI  
CHARLOTTESVILLE, VIRGINIA  
MARCH 26, 2019

WL4 Wall Bracket & Surface Mount LED

Sensor Options					
Option	Automatic Dimming Photocell	Occupancy Sensing		nLight Wired Networking	nLight AIR Networking
MSD7		PIR	PDT		
NES7		X		X	
NES7ADCX	X	X		X	
NES7PDT			X	X	
RES7	X	X			X
RES7PDT	X	X	X		X

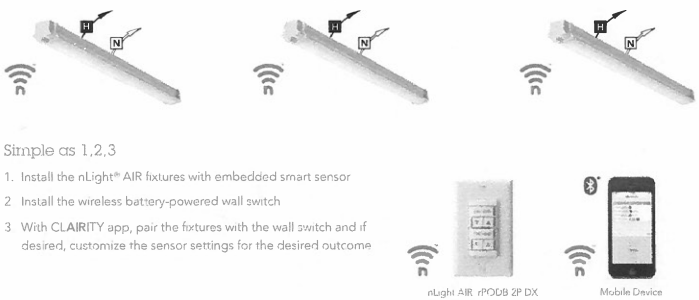
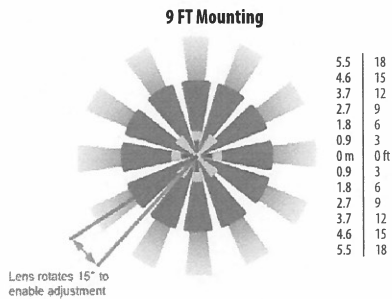
Integrated Sensor with Individual Control

The MSD7 PIR occupancy sensor is ideal for areas without obstructions and where daylight harvesting may be desired. Suggested applications include, but not limited to, hallways, corridors, storage rooms, and breakrooms or other areas where people are typically moving.



Sensor Coverage Pattern  
Mini 360° Lens

- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m)
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and 1.75x up to 20 ft (6.10 m).
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m)
- Initial detection will occur earlier when walking across sensor's field of view than when walking directly at sensor

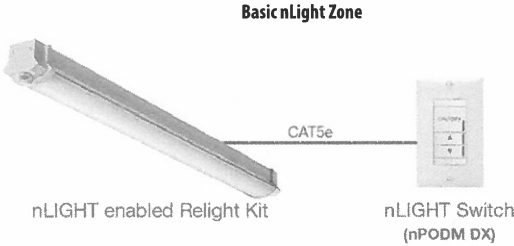


LITHONIA LIGHTING

WL4-LED

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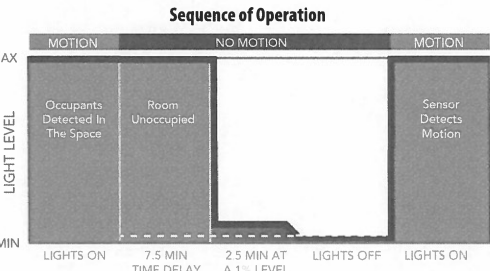
nLight Wired Networking

The nES 7 is ideal for small rooms without obstructions or areas with primarily walking motion. Ideal areas include hallways, corridors, storage rooms, and breakrooms. Additionally, the NES7ADCX includes an integrated photocell, which enables daylight harvesting controls.

For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy.

nLight AIR Wireless

nLight AIR is the ideal solution for retrofit or new construction spaces where adding additional wiring can be labor intensive and costly. nLight AIR is available with or without an integral sensor. The integrated RES7 or RES7PDT smart sensors are part of each luminaire in the nLight AIR network, which can be grouped to control multiple luminaires. The granularity of control with the digital PIR occupancy detection and daylight sensing makes a great solution for any application.



\*The presetting on the automatic dimming photocell is 5fc.

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CHARLOTTESVILLE 434.979.7550

WL4 Wall Bracket & Surface Mount LED

Performance Data			
Lumen package	Input watts	Lumens	LPW
20L LP830	18.7	2050	110
20L LP835	18.7	2152	115
20L LP840	18.7	2255	121
20L LP850	18.7	2410	129
30L LP830	28.2	2952	105
30L LP835	28.2	3095	110
30L LP840	28.2	3251	115
30L LP850	28.2	3239	115
40L LP830	39.5	3927	99
40L LP835	39.5	4124	104
40L LP840	39.5	4325	110
40L LP850	39.5	4571	116

DIMENSIONS

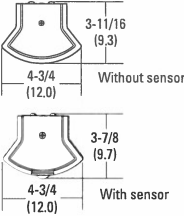
All dimensions are inches (centimeters) unless otherwise noted.

Specifications

Length: with sensor - 50-15/16 (129.40)  
without sensor - 46-13/16 (118.90)

Height: with sensor - 3-7/8 (9.7)  
without sensor - 3-11/16 (9.3)

Width: 4-3/4 (12.1)



How to Calculate Estimated Lumens in Emergency Mode

Use the formula below to estimate the delivered lumens in emergency mode

Delivered Lumens = 1.25 x P x LPW

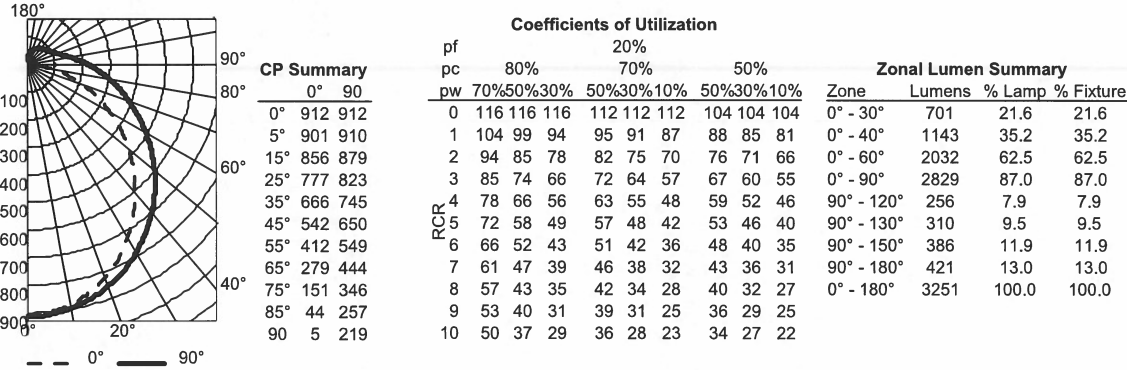
P = Output power of emergency driver. P = 10W for E10WLCP option.

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

LPW = Lumen per watt rating of the luminaire. LPW information available in Performance Data section.

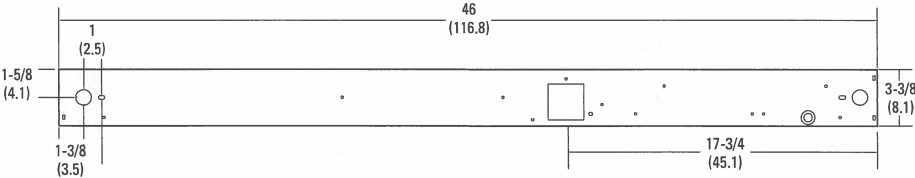
PHOTOMETRICS

WL4 30L EZ1 LP840, 3250.8 delivered lumens, test no. LTL25482P5, tested in accordance to IESNA LM-79



MOUNTING DATA

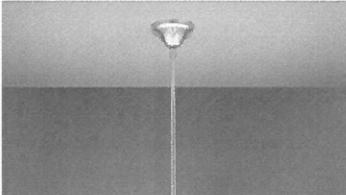
For unit installation; surface ceiling or wall mounting.

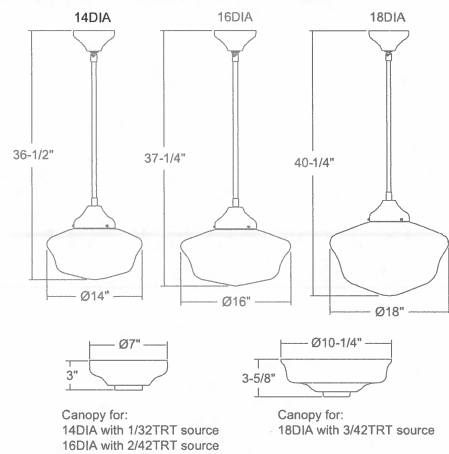


CUT SHEETS





SPECIFICATIONS	Interior	GLASSWORKS
	5520 LAURA	Type: "C" AT FRONT DOOR
		Project:
		Qty:



**Warranty**  
1-year limited warranty. Complete warranty terms located at [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

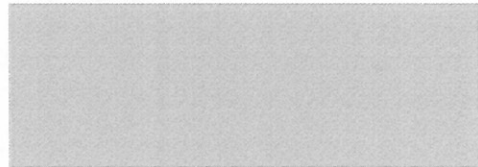
Actual performance may differ as a result of end-user environment and application.

CATALOG NUMBER

Example: WFP5520 14DIA SCHOOL 1/60A19 120 OG AB

Series	Diameter	Diffuser	Source	Voltage	Lens	Finish	Special
WFP5520 Glassworks Series	14DIA 14 Inch Nominal Diameter	SCHOOL Schoolhouse Globe	1/60A19 1/32TRT (1) 60w A19/Medium (1) 32w Triple Tube/GX24q3	120 120V 277 277V 347* 347V	OG Opal Glass	AB Antique Brass Over Brass PB Polished Brass PBP Pale Bronze PN Polished Nickel CPF* Custom Paint Finish CMF* Custom Metal Finish	MOD* Modification / Consult Factory
	16DIA 16 Inch Nominal Diameter		1/75A19 2/42TRT (1) 75w A19/Medium (2) 42w Triple Tube/GX24q4				
	18DIA 18 Inch Nominal Diameter		1/100A19 3/42TRT (1) 100w A19/Medium (3) 42w Triple Tube/GX24q4				

Describe Modification:



Notes

- UL listed and cUL approved.
- Winona Lighting products are union made.
- Custom Sizes and Finishes available upon request.
- All Fluorescent fixtures available in 120V and 277V.
- Winona Lighting reserves the right to make design changes without prior notice.
- Lamps not included.

Weight

1/60A19-14DIA	12lbs
1/32TRT-14DIA	15lbs
1/75A19-16DIA	15lbs
2/42TRT-16DIA	18lbs
1/100A19-18DIA	20lbs
3/42TRT-18DIA	23lbs

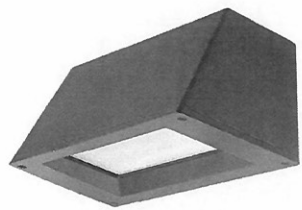
\* Available by modification only. Consult factory.

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Rev. 03/17/17  
WFP5520\_LAURA

CUT SHEETS

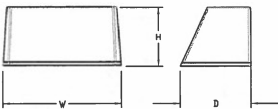


# WST LED Architectural Wall Sconce



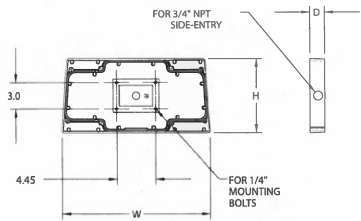
## Specifications Luminaire

**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)



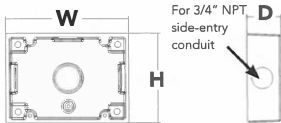
## Optional Back Box (PBBW)

**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)



Catalog Number

Notes

Type

"H"

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

## A+ Capable Luminaire

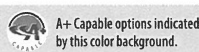
This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability<sup>1</sup>
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background<sup>1</sup>

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

See ordering tree for details.

A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: [Link to Roam](#); [Link to DTL DLL](#)



## 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>3</sup> 347 <sup>2</sup> 208 <sup>3</sup> 480 <sup>2</sup> 240 <sup>3</sup>	<b>Shipped included</b> (blank) Surface mounting bracket <b>Shipped separately</b> BBW Surface-mounted back box <sup>3</sup> PBBW Premium surface-mounted back box <sup>3,4</sup>

Options		Finish (required)
NLTAIR2 PIR	nLIGHT AIR Wireless enabled motion/ambient sensor for 8'-15' mounting heights <sup>5,6</sup>	DDBXD Dark bronze
NLTAIR2 PIRH	nLIGHT AIR Wireless enabled motion/ambient sensor for 15'-30' mounting heights <sup>5,6</sup>	DBLXD Black
PE	Photoelectric cell, button type <sup>7</sup>	DNAXD Natural aluminum
PER	NEMA twist-lock receptacle only (controls ordered separate) <sup>8</sup>	DWHXD White
PERS	Five-wire receptacle only (controls ordered separate) <sup>8</sup>	DSSXD Sandstone
PER7	Seven-wire receptacle only (controls ordered separate) <sup>8</sup>	DDBTXD Textured dark bronze
PIR	Motion/Ambient Light Sensor, 8'-15' mounting height <sup>2,8</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>9</sup>	
E7WH	Emergency battery backup, Non CEC compliant (7W) <sup>10</sup>	
E7WC	Emergency battery backup, Non CEC compliant (cold, 7W) <sup>10,11</sup>	
E7WHR	Remote emergency battery backup, Non CEC compliant (remote 7W) <sup>10,12</sup>	
E20WH	Emergency battery pack 18W constant power, CEC compliant <sup>10</sup>	
E20WC	Emergency battery pack -20°C 18W constant power, CEC compliant <sup>10,11</sup>	
E23WHR	Remote emergency battery backup, Non CEC compliant (remote 20W) <sup>10,13</sup>	
LCE	Left side conduit entry <sup>14</sup>	
RCE	Right side conduit entry <sup>14</sup>	
<b>Shipped separately</b>		
RBPW	Retrofit back plate <sup>3</sup>	
VG	Vandal guard <sup>15</sup>	
WG	Wire guard <sup>15</sup>	

## Accessories

Ordered and shipped separately.

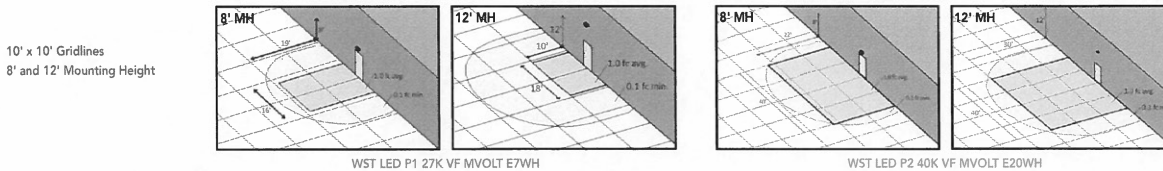
WSTVCPBBW DDBXD U	Premium Surface - mounted back box
WSBBW DDBTX U	Surface - mounted back box
RBPW DDBXD U	Retrofit back plate

## 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.
- 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.
- Not available with 347/480V.
- 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.

## 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 7.7; 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.



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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

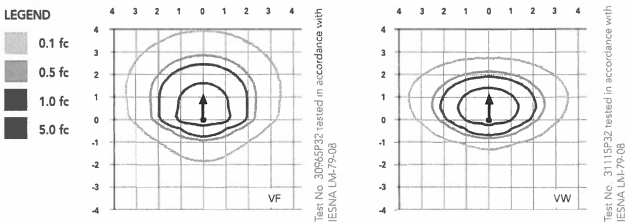
Electrical Load

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	—	—

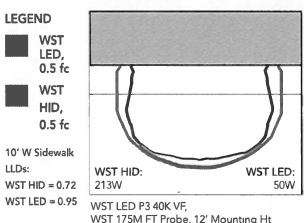
Photometric Diagrams

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 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.

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

WARRANTY

5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/resources/terms-and-conditions](http://www.acuitybrands.com/resources/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.

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 @ SFC	3 sec	5 min	5 min
PIR1FCV or PIRH1FCV	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	3 sec	5 min	5 min

\*for use with centrilize Dusk to Dawn

PER Table

Control	PER (3 wire)	PERS (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 (M/VOLT)	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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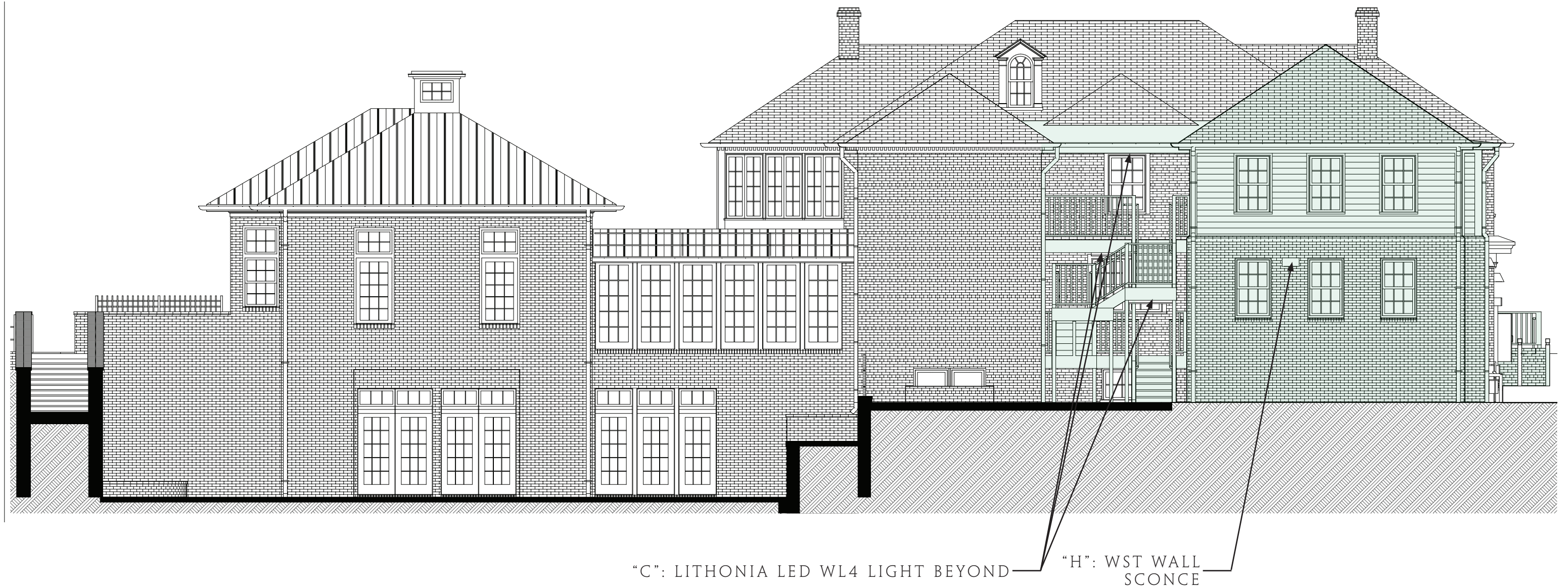
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## REAR ELEVATION





## NORTH ELEVATION



"C": WFP5520 PENDANT LIGHT

## FRONT ELEVATION

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