

# WDGE2 LED

## Architectural Wall Sconce

### Visual Comfort Optic



Catalog  
Number

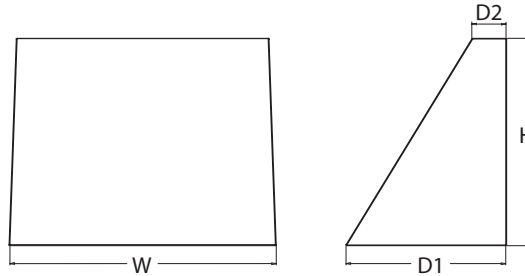
Notes

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## Specifications

**Depth (D1):** 7"  
**Depth (D2):** 1.5"  
**Height:** 9"  
**Width:** 11.5"  
**Weight:** 13.5 lbs  
(without options)



## Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE2 delivers up to 6,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

## WDGE LED Family Overview

Luminaire	Optics	Standard EM, 0°C	Cold EM, -20°C	Sensor	Approximate Lumens (4000K, 80CRI)						
					P0	P1	P2	P3	P4	P5	P6
WDGE1 LED	Visual Comfort	4W		--	750	1,200	2,000	--	--	--	--
WDGE2 LED	Visual Comfort	10W	18W	Standalone / nLight	--	1,200	2,000	3,000	4,500	6,000	--
WDGE2 LED	Precision Refractive	10W	18W	Standalone / nLight	700	1,200	2,000	3,200	4,200	--	--
WDGE3 LED	Precision Refractive	15W	18W	Standalone / nLight	6,000	7,500	8,500	10,000	12,000	--	--
WDGE4 LED	Precision Refractive			Standalone / nLight	--	12,000	16,000	18,000	20,000	22,000	25,000

## Ordering Information

**EXAMPLE:** WDGE2 LED P3 40K 80CRI VF MVOLT SRM DDBXD

Series	Package		Color Temperature		CRI	Distribution		Voltage	Mounting	
WDGE2 LED	P1 <sup>1</sup>	P1SW	27K	2700K	80CRI	VF	Visual comfort forward throw	MVOLT	<b>Shipped included</b>	<b>Shipped separately</b>
	P2 <sup>1</sup>	P2SW	30K	3000K	90CRI			347 <sup>3</sup>	SRM	AWS
	P3 <sup>1</sup>	P3SW	35K	3500K		VW	Visual comfort wide	480 <sup>3</sup>	ICW	PBBW
	P4 <sup>1</sup>	Door with small window (SW) is required to accommodate sensors. See page 2 for more details.		40K	4000K				Indirect Canopy/Ceiling Washer bracket (dry/damp locations only) <sup>4</sup>	
	P5 <sup>1</sup>			50K <sup>2</sup>	5000K					

### Options

**E4WH** Emergency battery backup, Certified in CA Title 20 MAEDBS (4W, 0°C min)  
**E10WH** Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 5°C min)  
**E20WC** Emergency battery backup, Certified in CA Title 20 MAEDBS (18W, -20°C min)  
**PE** Photocell, Button Type<sup>5</sup>  
**DS** Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details)<sup>6</sup>  
**DMG** 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)<sup>7</sup>  
**BCE** Bottom conduit entry for back box (PBBW). Total of 4 entry points.  
**DSLE** Dual Switching (1 Driver, 2 Light Engines)  
**CCE** Coastal Construction

### Standalone Sensors/Controls (only available with P1SW, P2SW & P3SW)

**PIR** Bi-level (100/35%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk to dawn switching.  
**PIRH** Bi-level (100/35%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk to dawn switching  
**PIR1FC3V** Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation.  
**PIRH1FC3V** Bi-level (100/35%) motion sensor for 15-30' mounting heights with photocell pre-programmed for dusk to dawn operation.

### Networked Sensors/Controls (only available with P1SW, P2SW & P3SW)

**NLTAIR2 PIR** nLightAIR Wireless enabled bi-level motion/ambient sensor for 8-15' mounting heights.  
**NLTAIR2 PIRH** nLightAIR Wireless enabled bi-level motion/ambient sensor for 15-30' mounting heights.  
**NLTAIR2 PIR924** nLIGHT AIR Wireless enabled, UL924 Listed motion/ ambient sensor for 8-15' mounting heights<sup>8</sup>  
**NLTAIR2 PIRH924** nLIGHT AIR Wireless enabled, UL924 Listed motion/ ambient sensor for 15'-30' mounting heights<sup>8</sup>

See page 4 for out of box functionality

**DDBXD** Dark bronze  
**DBLXD** Black  
**DNAXD** Natural aluminum  
**DWHXD** White  
**DSSXD** Sandstone  
**DBTDX** Textured dark bronze  
**DBLBD** Textured black  
**DNATXD** Textured natural aluminum  
**DWHGXD** Textured white  
**DSSTXD** Textured sandstone



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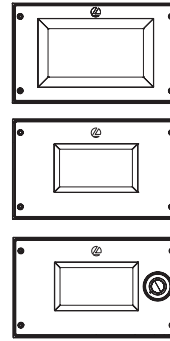
## Accessories

Ordered and shipped separately.

WDGEAWS DDBXD	WDGE 3/8inch Architectural Wall Spacer (specify finish)
WDGE2P8BW DDBXD U	WDGE2 surface-mounted back box (specify finish)

### NOTES

- 1 P1-P5 not available with sensors/controls. Sensors/controls only available with P1SW, P2SW and P3SW.
- 2 50K not available in 90CRI.
- 3 347V and 480V not available with E4WH, E10WH, E20WC, DS or DSLE.
- 4 Not qualified for DLC. Not available with emergency battery backup or sensors/controls.
- 5 PE not available in 480V or with sensors/controls.
- 6 DS option not available with E4WH, E10WH, E20WC or sensors/controls.
- 7 DMG option not available with sensors/controls.
- 8 Available with MVOLT only and only rated to 25C ambient.



Default configuration with no sensors/controls.

Power Packages: P1, P2, P3, P4, P5

Small Window (SW) configuration

Power Packages: P1SW, P2SW, P3SW

Configuration with sensors/controls

Power Packages: P1SW, P2SW, P3SW

## 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. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Dist. Type	27K (2700K, 80 CRI)					30K (3000K, 80 CRI)					35K (3500K, 80 CRI)					40K (4000K, 80 CRI)					50K (5000K, 80 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P1 / P1SW	10W	VF	1,166	119	0	0	0	1,209	123	0	0	0	1,251	128	0	0	0	1,256	128	0	0	0	1,254	128	0	0	0
		VW	1,197	122	0	0	0	1,241	126	0	0	0	1,284	131	0	0	0	1,289	131	0	0	0	1,286	131	0	0	0
P2 / P2SW	15W	VF	1,878	129	1	0	0	1,947	134	1	0	0	2,015	139	1	0	0	2,023	139	1	0	0	2,019	139	1	0	0
		VW	1,927	133	1	0	0	1,997	137	1	0	0	2,067	142	1	0	0	2,075	143	1	0	0	2,071	143	1	0	0
P3 / P3SW	23W	VF	2,908	129	1	0	0	3,015	134	1	0	0	3,119	138	1	0	0	3,132	139	1	0	0	3,126	139	1	0	0
		VW	2,983	132	1	0	0	3,093	137	1	0	0	3,200	142	1	0	0	3,213	143	1	0	0	3,206	142	1	0	0
P4	35W	VF	4,096	117	1	0	1	4,247	121	1	0	1	4,394	126	1	0	1	4,412	126	1	0	1	4,403	126	1	0	1
		VW	4,202	120	1	0	0	4,357	125	1	0	1	4,508	129	1	0	1	4,526	129	1	0	1	4,517	129	1	0	1
P5	48W	VF	5,567	115	1	0	1	5,772	119	1	0	1	5,972	123	1	0	1	5,996	124	1	0	1	5,984	124	1	0	1
		VW	5,711	118	1	0	1	5,921	122	1	0	1	6,127	126	1	0	1	6,151	127	1	0	1	6,139	127	1	0	1

### Electrical Load

Performance Package	System Watts	Current (A)					
		120V	208V	240V	277V	347V	480V
P1 / P1SW	10W	0.082	0.049	0.043	0.038	--	--
	13W	--	--	--	--	0.046	0.033
P2 / P2SW	15W	0.132	0.081	0.072	0.064	--	--
	18W	--	--	--	--	0.056	0.041
P3 / P3SW	23W	0.195	0.114	0.100	0.088	--	--
	26W	--	--	--	--	0.079	0.058
P4	35W	0.302	0.175	0.152	0.134	--	--
	38W	--	--	--	--	0.115	0.086
P5	48W	0.434	0.241	0.211	0.184	--	--
	52W	--	--	--	--	0.157	0.119

### Lumen Multiplier for 90CRI

CCT	Multiplier
27K	0.845
30K	0.867
35K	0.845
40K	0.885
50K	0.898

### Lumen Output in Emergency Mode (4000K, 80 CRI)

Option	Dist. Type	Lumens
E4WH	VF	646
	VW	647
E10WH	VF	1,658
	VW	1,701
E20WC	VF	2,840
	VW	2,913

### 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

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.96	>0.95	>0.91



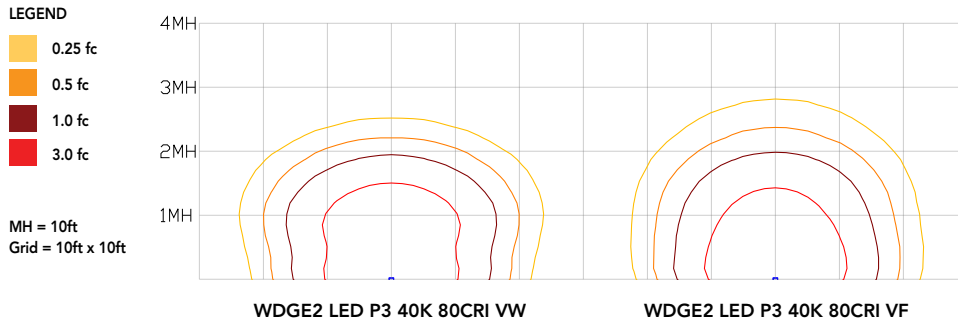
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WDGE2 LED  
Rev. 04/25/24

## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WDGE LED homepage.  
Tested in accordance with IESNA LM-79 and LM-80 standards.



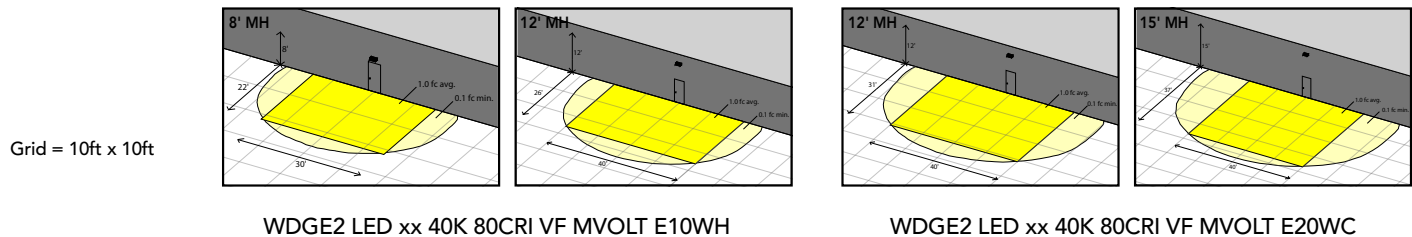
## Emergency Egress Options

### Emergency Battery Backup

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 battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain a minimum of 60% of the light output at the end of 90 minutes.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9

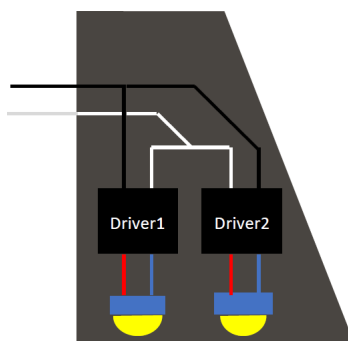
The examples below show illuminance of 1 fc average and 0.1 fc minimum in emergency mode with E10WH or E20WC and VF distribution.



### Dual Switching (DS) Option

The dual switching option offers operational redundancy that certain codes require. With this option the luminaire comes integrated with two drivers and two light engines. These work completely independent to each other so that a failure of any individual component does not cause the whole luminaire to go dark.

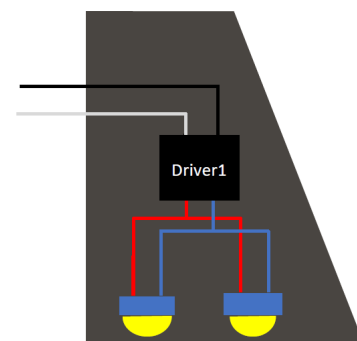
Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9



### Dual Switching Light Engine (DSLE) Option

The dual switching light engine option offers operational redundancy that certain codes require. With this option the luminaire comes integrated with one driver and two light engines. These work completely independent to each other so that a failure of either light engine does not cause the whole luminaire to go dark.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9



## Motion/Ambient Sensor (PIR\_, PIRH\_)

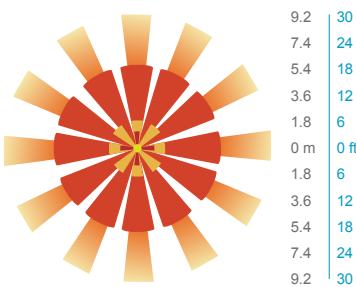
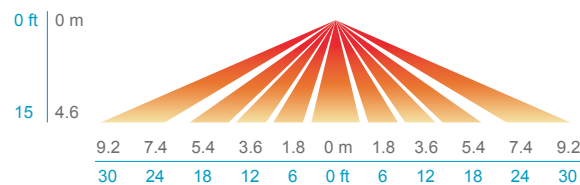
Motion/Ambeint sensor (Sensor Switch MSOD) is integrated into the the luminaire. The sensor provides both Motion and Daylight based dimming of the luminaire. For motion detection, the sensor utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The integrated photocell enables additional energy savings during daytime periods when there is sufficient daylight. Optimize sensor coverage by either selecting PIR or PIRH option. PIR option comes with a sensor lens that is optimized to provide maximum coverage for mounting heights between 8-15ft, while PIRH is optimized for 15-40ft mounting height.

## Networked Control (NLTAIR2)

nLight® AIR is a wireless lighting controls platform that allows for seamless integration of both indoor and outdoor luminaires. Five-tier security architecture, 900 MHz wireless communication and app (CLAIRITY™ Pro) based configurability combined together make nLight® AIR a secure, reliable and easy to use platform.

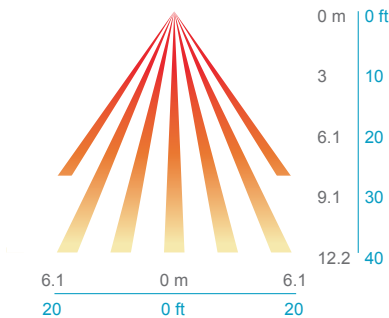
### PIR

#### HIGH VIEW

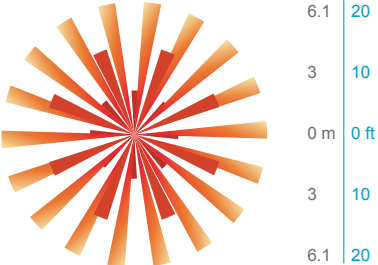


### PIRH

#### SIDE VIEW



#### TOP VIEW



Option	Dim Level	High Level (when triggered)	Photocell Operation	Motion Time Delay	Ramp-down Time	Ramp-up Time
PIR or PIRH	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 5fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec
PIR1FC3V, PIRH1FC3V	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 1fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec
NLTAIR2 PIR, NLTAIR2 PIRH (out of box)	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 5fc	7.5 min	5 min	Motion - 3 sec Photocell - 45 sec



**NLTAIR2 PIR – nLight AIR  
Motion/Ambient Sensor**

D = 7"

H = 11"

W = 11.5"



**PBBW – Surface-Mounted Back Box**  
Use when there is no junction box available.

D = 1.75"

H = 9"

W = 11.5"



**AWS – 3/8inch Architectural Wall Spacer**

D = 0.38"

H = 4.4"

W = 7.5"

## FEATURES & SPECIFICATIONS

### INTENDED USE

Common architectural look, with clean rectilinear shape, of the WDGE LED was designed to blend with any type of construction, whether it be tilt-up, frame or brick. Applications include commercial offices, warehouses, hospitals, schools, malls, restaurants, and other commercial buildings.

### 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 IP66 rating for the luminaire.

### FINISH

Exterior painted 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 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 WDGE 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 consists of high-efficiency LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L91/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire comes with built in 6kV surge protection, which meets a minimum Category C low exposure (per ANSI/IEEE C62.41.2). Fixture ships standard with 0-10v dimmable driver.

### INSTALLATION

A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections. The 3/8" Architectural Wall Spacer (AWS) can be used to create a floating appearance or to accommodate small imperfections in the wall surface. The ICW option can be used to mount the luminaire inverted for indirect lighting in dry and damp locations. Design can withstand up to a 1.5 G vibration load rating per ANSI C136.31.

### LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP66 rated. PIR options are rated for wet location. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or 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. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 2700K and 3000K color temperature only and SRM mounting only.

### GOVERNMENT PROCUREMENT

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.