

Catalog
Number

Notes

Type

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

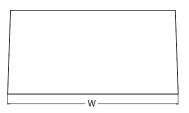
#### Introduction

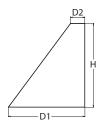
The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with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

WDGE3 has been designed to deliver up to 12,000 lumens through a precision refractive lens with wide distribution, perfect for augmenting the lighting from pole mounted luminaires.

## **Specifications**

Depth (D1): 8"
Depth (D2): 1.5"
Height: 9"
Width: 18"
Weight: (without options) 19.5 lbs





## **WDGE LED Family Overview**

| Luminaina | Optics               | Standard FM 00C  | Cold EM, -20°C | Sensor -            | Approximate Lumens (4000K, 80CRI) |        |        |        |        |        |        |  |
|-----------|----------------------|------------------|----------------|---------------------|-----------------------------------|--------|--------|--------|--------|--------|--------|--|
| Luminaire |                      | Standard EM, 0°C |                |                     | P0                                | P1     | P2     | Р3     | 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: WDGE3 LED P3 40K 70CRI R3 MVOLT SRM DDBXD**

| Series    | Package                    | Color Temperature                   | CRI            | Distribution                                    | Voltage                                       | Mounting  |   |  |
|-----------|----------------------------|-------------------------------------|----------------|---|---|---|---|--|
| WDGE3 LED | P0<br>P1<br>P2<br>P3<br>P4 | 30K 3000K<br>40K 4000K<br>50K 5000K | 70CRI<br>80CRI | R2 Type 2 R3 Type 3 R4 Type 4 RFT Forward Throw | MVOLT<br>347 <sup>1</sup><br>480 <sup>1</sup> | Shipped included  SRM Surface mounting bracket  ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only) <sup>2</sup> | Shipped separately AWS 3/8inch Architectural wall spacer PBBW Surface—mounted back box (top, left, right conduit entry). Use when there is no junction box available. |  |

| Options        |  |  |   | Finish                    |   |
|----------------|--|--|---|---------------------------|---|
| E15WH          | Emergency battery backup, Certified in CA Title 20 MAEDBS (15W, 5°C min)   | <b>Standalone Sens</b><br>PIR  | sors/Controls  Bi-level (100/35%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk to dawn switching.   | DDBXD<br>DBLXD            | Dark bronze<br>Black                          |
| E20WC<br>PE    | Emergency battery backup, Certified in CA<br>Title 20 MAEDBS (18W, -20°C min)<br>Photocell, Button Type <sup>3</sup> | PIRH   | Bi-level (100/35%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk to dawn switching  | DWHXD                     | Natural aluminum White                        |
| DMG            | 0–10V dimming wires pulled outside fixture (for use with an external control, ordered separately) <sup>4</sup>       | PIR1FC3V<br>PIRH1FC3V  | Bi-level (100/35%) motion sensor for 8-15'mounting heights with photocell pre-programmed for dusk to dawn operation.  | DSSXD<br>DDBTXD<br>DBLBXD | Sandstone Textured dark bronze Textured black |
| BCE            | Bottom conduit entry for back box (PBBW). Total of 4 entry points.   | Networked Sens   | Bi-level (100/35%) motion sensor for 15-30'mounting heights with photocell pre-programmed for dusk to dawn operation.  ors/Controls   | DNATXD<br>DWHGXD          | Textured natural aluminum Textured white      |
| SPD10KV<br>CCE | 10kV Surge pack <sup>5</sup><br>Coastal Construction <sup>6</sup>  | NLTAIR2 PIR  NLTAIR2 PIRH  NLTAIR2 PIR924  NLTAIR2 PIRH924  See page 4 for out of bo | nLightAIR Wireless enabled bi-level motion/ambient sensor for 8-15'mounting heights.  nLightAIR Wireless enabled bi-level motion/ambient sensor for 15-30'mounting heights.  nLIGHT AIR Wireless enabled, UL924 Listed motion/ambient sensor for 8-15' mounting heights <sup>7</sup> nLIGHT AIR Wireless enabled, UL924 Listed motion/ambient sensor for 15'-30' mounting heights <sup>7</sup> ox functionality | DSSTXD                    | Textured sandstone                            |

### Accessories

COMMERCIAL OUTDOOR

Ordered and shipped separately

WDGEAWS DDBXD WDGE 3/8inch Architectural Wall Spacer (specify finish)
WDGE3PBBW DDBXD U WDGE3 surface-mounted back box (specify finish)

#### NOTE

- 347V and 480V not available with E15WH and E20WC.
- 2 Not qualified for DLC. Not available with emergency battery backup or sensors/controls
- B PE not available in 480V and with
- sensors/controls.
- 4 DMG option not available with sensors/controls.
- 5 Not available with E20WC option.
- 6 For PBBW and AWS require an RFA.
- 7 Available with MVOLT only and only rated to 25C ambient.



### **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 | Contain Water | outon Water Diet Torr |        | K (3000K | , 70 C | RI) |   | 40     | K (4000K | , 70 C | RI) |   | 50     | K (5000K | , 70 C | RI) |   |
|-------------|---------------|-----------------------|--------|----------|--------|-----|---|--------|----------|--------|-----|---|--------|----------|--------|-----|---|
| Package     | System Watts  | Dist. Type            | Lumens | LPW      | В      | U   | G | Lumens | LPW      | В      | U   | G | Lumens | LPW      | В      | U   | G |
|             |               | R2                    | 6,172  | 151      | 1      | 0   | 1 | 6,104  | 149      | 2      | 0   | 1 | 6,394  | 156      | 2      | 0   | 1 |
| PO          | 41W           | R3                    | 6,071  | 148      | 1      | 0   | 2 | 6,004  | 146      | 1      | 0   | 2 | 6,290  | 153      | 1      | 0   | 2 |
| PU          | 4100          | R4                    | 6,256  | 153      | 1      | 0   | 2 | 6,187  | 151      | 1      | 0   | 2 | 6,481  | 158      | 1      | 0   | 2 |
|             |               | RFT                   | 6,126  | 149      | 1      | 0   | 2 | 6,058  | 148      | 1      | 0   | 2 | 6,347  | 155      | 1      | 0   | 2 |
|             |               | R2                    | 7,037  | 136      | 1      | 0   | 1 | 7,649  | 148      | 2      | 0   | 1 | 7,649  | 148      | 2      | 0   | 1 |
| D1          | F3W           | R3                    | 6,922  | 134      | 1      | 0   | 2 | 7,524  | 145      | 1      | 0   | 2 | 7,524  | 145      | 1      | 0   | 2 |
| ΥI          | P1 52W        | R4                    | 7,133  | 138      | 1      | 0   | 2 | 7,753  | 150      | 1      | 0   | 2 | 7,753  | 150      | 1      | 0   | 2 |
|             |               | RFT                   | 6,985  | 135      | 1      | 0   | 2 | 7,592  | 147      | 1      | 0   | 2 | 7,592  | 147      | 1      | 0   | 2 |
|             |               | R2                    | 7,968  | 135      | 2      | 0   | 1 | 8,661  | 147      | 2      | 0   | 1 | 8,661  | 147      | 2      | 0   | 1 |
| P2          | FOW           | R3                    | 7,838  | 133      | 1      | 0   | 2 | 8,519  | 144      | 1      | 0   | 2 | 8,519  | 144      | 1      | 0   | 2 |
| PZ          | 59W           | R4                    | 8,077  | 137      | 1      | 0   | 2 | 8,779  | 149      | 1      | 0   | 2 | 8,779  | 149      | 1      | 0   | 2 |
|             |               | RFT                   | 7,909  | 134      | 1      | 0   | 2 | 8,597  | 146      | 2      | 0   | 2 | 8,597  | 146      | 2      | 0   | 2 |
|             |               | R2                    | 9,404  | 132      | 2      | 0   | 1 | 10,221 | 143      | 2      | 0   | 1 | 10,221 | 143      | 2      | 0   | 1 |
| P3          | 71W           | R3                    | 9,250  | 130      | 2      | 0   | 2 | 10,054 | 141      | 2      | 0   | 2 | 10,054 | 141      | 2      | 0   | 2 |
| rs          | / 1VV         | R4                    | 9,532  | 134      | 2      | 0   | 2 | 10,361 | 145      | 2      | 0   | 2 | 10,361 | 145      | 2      | 0   | 2 |
|             |               | RFT                   | 9,334  | 131      | 2      | 0   | 2 | 10,146 | 142      | 2      | 0   | 2 | 10,146 | 142      | 2      | 0   | 2 |
|             |               | R2                    | 11,380 | 129      | 2      | 0   | 1 | 12,369 | 140      | 2      | 0   | 1 | 12,369 | 140      | 2      | 0   | 1 |
| P4          | 00///         | R3                    | 11,194 | 127      | 2      | 0   | 2 | 12,167 | 138      | 2      | 0   | 2 | 12,167 | 138      | 2      | 0   | 2 |
| r4          | 88W           | R4                    | 11,535 | 131      | 2      | 0   | 2 | 12,538 | 142      | 2      | 0   | 2 | 12,538 | 142      | 2      | 0   | 2 |
|             |               | RFT                   | 11,295 | 128      | 2      | 0   | 2 | 12,277 | 139      | 2      | 0   | 2 | 12,277 | 139      | 2      | 0   | 2 |

## Lumen Output in Emergency Mode (4000K, 70 CRI)

| Option | Dist. Type | Lumens |
|--------|------------|--------|
|        | R2         | 3,185  |
| E15WH  | R3         | 3,133  |
| ЕІЗМИ  | R4         | 3,229  |
|        | RFT        | 3,162  |
|        | R2         | 3,669  |
| E20WC  | R3         | 3,609  |
| EZUWC  | R4         | 3,719  |
|        | RFT        | 3,642  |

## **Electrical Load**

|  | Performance<br>Package | Custom Watts | Current (A) |       |       |       |       |       |  |  |  |
|--|------------------------|--------------|-------------|-------|-------|-------|-------|-------|--|--|--|
|  |                        | System Watts | 120V        | 208V  | 240V  | 277V  | 347V  | 480V  |  |  |  |
|  | P1                     | 52W          | 0.437       | 0.246 | 0.213 | 0.186 | 0.150 | 0.110 |  |  |  |
|  | P2                     | 59W          | 0.498       | 0.287 | 0.251 | 0.220 | 0.175 | 0.126 |  |  |  |
|  | P3                     | 71W          | 0.598       | 0.344 | 0.300 | 0.262 | 0.210 | 0.152 |  |  |  |
|  | P4                     | 88W          | 0.727       | 0.424 | 0.373 | 0.333 | 0.260 | 0.190 |  |  |  |

## **Lumen Multiplier for 80CRI**

| ССТ | Multiplier |
|-----|------------|
| 30K | 0.891      |
| 40K | 0.906      |
| 50K | 0.906      |

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

Use these factors to determine relative lumen output for average ambient temperatures from 0-40  $^{\circ}$  C (32-104  $^{\circ}$  F).

| Amb  | Lumen Multiplier |      |
|------|------------------|------|
| 0°C  | 32°F             | 1.05 |
| 10°C | 50°F             | 1.03 |
| 20°C | 68°F             | 1.01 |
| 25°C | 77°F             | 1.00 |
| 30°C | 86°F             | 0.99 |
| 40°C | 104°F            | 0.97 |

COMMERCIAL OUTDOOR

## **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).

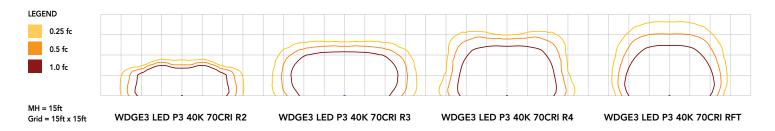
To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

| Operating Hours          | 0   | 25,000 | 50,000 | 100,000 |
|--------------------------|-----|--------|--------|---------|
| Lumen Maintenance Factor | 1.0 | >0.98  | >0.97  | >0.92   |



### **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**

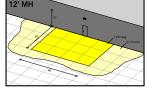
## **Emergency Battery Backup**

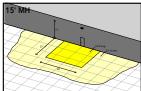
The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately 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, minimum of 60% of the light output at the end of 90minutes.

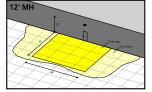
Applicable codes: NFPA 70/NEC - section 700.16, NFPA 101 Life Safety Code Section 7.9

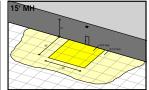
The examples below show illuminance of 1 fc average and 0.1 fc minimum in emergency mode with E15WH or E20WC and R4 distribution.

Grid = 10ft x 10ft









WDGE3 LED xx 40K 70CRI R4 MVOLT E15WH

WDGE3 LED xx 40K 70CRI R4 MVOLT E20WC



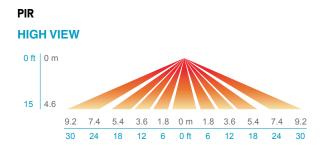
## **Control / Sensor Options**

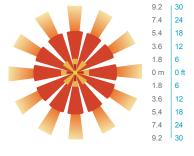
### Motion/Ambient Sensor (PIR\_, PIRH\_)

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.

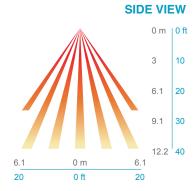
### **Networked Control (NLTAIR2)**

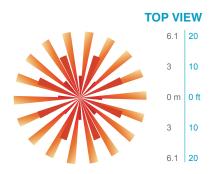
nLight® AIR is a wireless lighting controls platform that allows for seamless integration of both indoor and outdoor luminaires. Five-tier security architecture, 900 MHz wireless communication and app (CLAIRITY<sup>TM</sup> Pro) based configurability combined together make nLight® AIR a secure, reliable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





### **PIRH**





## **Motion/Ambient Sensor Default Settings**

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



### **Mounting, Options & Accessories**



NLTAIR2 PIR - nLight AIR Motion/Ambient Sensor

D = 8"

H = 11"

W = 18"



AWS - 3/8inch Architectural Wall Spacer

D = 0.38"

H = 4.4"

W = 7.5"



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

D = 1.75"

H = 9"

W = 18"

### **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 to optimize thermal transfer from the light engine 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 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

Individually formed acrylic lenses are engineered for superior application efficiency which maximizes the light in the areas where it is most needed. Light engines are available in 3000 K, 4000 K or 5000 K configurations. The WDGE LED has zero uplight and qualifies as a Nighttime Friendly TM product, meaning it is consistent with the LEED® and Green Globes TM criteria for eliminating wasteful uplight.

#### ELECTRICAL

Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L92/100,000 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. Light engines are IP66 rated; luminaire is IP65 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 <a href="https://www.designlights.org/QPL">www.designlights.org/QPL</a> 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 3000K color temperature 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 <a href="https://www.acuitybrands.com/buy-american">www.acuitybrands.com/buy-american</a> for additional information.

#### -----

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:

www.acuitybrands.com/support/warranty/terms-and-conditions

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

