

## FEATURES & SPECIFICATIONS

**INTENDED USE** — Typical applications include corridors, lobbies, conference rooms and private offices.  
**CONSTRUCTION** — Galvanized steel mounting/plaster frame; galvanized steel junction box with bottom-hinged access covers and spring latches. Reflectors are retained by torsion springs.

Vertically adjustable mounting brackets with commercial bar hangers provide 3-3/4" total adjustment. Two combination 1/2"-3/4" and four 1/2" knockouts for straight-through conduit runs. Capacity: 8 (4 in, 4 out). No. 12 AWG conductors, rated for 90°C.

Accommodates 12"-24" joist spacing.

Passive cooling thermal management for 25°C standard; high ambient (40°C) option available. Light engine and drivers are accessible from above or below ceiling.

Max ceiling thickness 1-1/2".

**OPTICS** — LEDs are binned to a 3-step SDCM; 80 CRI minimum. 90 CRI optional.

LED light source concealed with diffusing optical lens.

General illumination lighting with 1.0 S/MH and 55° cutoff to source and source image.

Self-flanged anodized reflectors in specular, semi-specular, or matte diffuse finishes. Also available in white and black painted reflectors.

**ELECTRICAL** — Multi-volt (120-277V, 50/60Hz) 0-10V dimming drivers mounted to junction box, 10% or 1% minimum dimming level available.

0-10V dimming fixture requires two (2) additional low-voltage wires to be pulled.

70% lumen maintenance at 60,000 hours.

**LISTINGS** — Certified to US and Canadian safety standards. Wet location standard (covered ceiling). IP55 rated. ENERGY STAR® certified product.

**WARRANTY** — 5-year limited warranty. Complete warranty terms located at:

[www.acuitybrands.com/support/customer-support/terms-and-conditions](http://www.acuitybrands.com/support/customer-support/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.

|                |
|----------------|
| Catalog Number |
| Notes          |
| Type           |

# LDN6

**6" OPEN and WALLWASH LED  
Non-IC  
New Construction Downlight**



### ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

**Example:** LDN6 35/15 L06AR LSS MVOLT EZ10

| LDN6   |               | Color temperature |           | Lumens <sup>1</sup> |                | Aperture/Trim Color |                       | Finish            |                       | Voltage |  |
|--------|---------------|-------------------|-----------|---------------------|----------------|---------------------|-----------------------|-------------------|-----------------------|---------|--|
| Series | LDN6 6" round | 27/ 2700K         | 30/ 3000K | 05 500 lumens       | 25 2500 lumens | L06 Downlight       | AR Clear              | LSS Semi-specular | MVOLT Multi-volt      |         |  |
|        |               | 35/ 3500K         | 40/ 4000K | 10 1000 lumens      | 30 3000 lumens | LW6 Wallwash        | WR <sup>2</sup> White | LD Matte diffuse  | 120 120V              |         |  |
|        |               | 50/ 5000K         |           | 15 1500 lumens      | 40 4000 lumens |                     | BR <sup>2</sup> Black | LS Specular       | 277 277V              |         |  |
|        |               |                   |           | 20 2000 lumens      | 50 5000 lumens |                     |                       |                   | 347 <sup>3</sup> 347V |         |  |

| Driver  | Options   |   |
|---|---|---|
| GZ10 0-10V driver dims to 10%   | SF <sup>4</sup> Single fuse   | N80 <sup>8</sup> nLight™ Lumen Compensation   |
| GZ1 0-10V driver dims to 1%   | TRW <sup>5</sup> White painted flange   | NPS80EZ <sup>7</sup> nLight® dimming pack controls 0-10V eldoLED drivers (EZ10, EZ1).   |
| EZ10 0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 10% | TRBL <sup>5</sup> Black painted flange  | NPS80EZER <sup>7</sup> nLight® dimming pack controls 0-10V eldoLED drivers (EZ10, EZ1). ER controls fixtures on emergency circuit.  |
| EZ1 0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 1%   | EL <sup>6</sup> Emergency battery pack with integral test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS                                 | HAO <sup>11</sup> High ambient option   |
|   | ELR <sup>6</sup> Emergency battery pack with remote test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS                                  | CP <sup>12</sup> Chicago Plenum   |
|   | ELSD <sup>6</sup> Emergency battery pack with self-diagnostics, integral test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS             | RRL___ RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature. Available only in RRLA, RRLB, RRLAE, and RRLC12S. |
|   | ELRSD <sup>6</sup> Emergency battery pack with self-diagnostics, remote test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS              | NLTAIR2 <sup>9,10</sup> nLight® Air enabled   |
|   | E10WCP <sup>6</sup> Emergency battery pack, 10W Constant Power with integral test switch. Certified in CA Title 20 MAEDB                                  | NLTAIRER2 <sup>9,10</sup> nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit, not available with battery pack options   |
|   | E10WCPR <sup>6</sup> Emergency battery pack, 10W Constant Power with remote test switch. Certified in CA Title 20 MAEDB                                   | USPOM US point of manufacture   |
|   | NPP16D <sup>7</sup> nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1).  | 90CRI High CRI (90+)  |
|   | NPP16DER <sup>7</sup> nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1). ER controls fixtures on emergency circuit. |   |

| Accessories: Order as separate catalog number. |   |
|--|---|
| PS1055CP                                       | FMC Power Sentry battery pack, T20 compliant, field installable, 10w constant power |
| <a href="#">EAC ISSM 375</a>                   | Compact interruptible emergency AC power system                                     |
| <a href="#">EAC ISSM 125</a>                   | Compact interruptible emergency AC power system                                     |
| GRA68 JZ                                       | Oversized trim ring with 8" outside diameter <sup>1</sup>                           |
| SCA6   | Sloped ceiling adapter. Refer to <a href="#">TECH-SCA</a> for more options.         |

### Notes

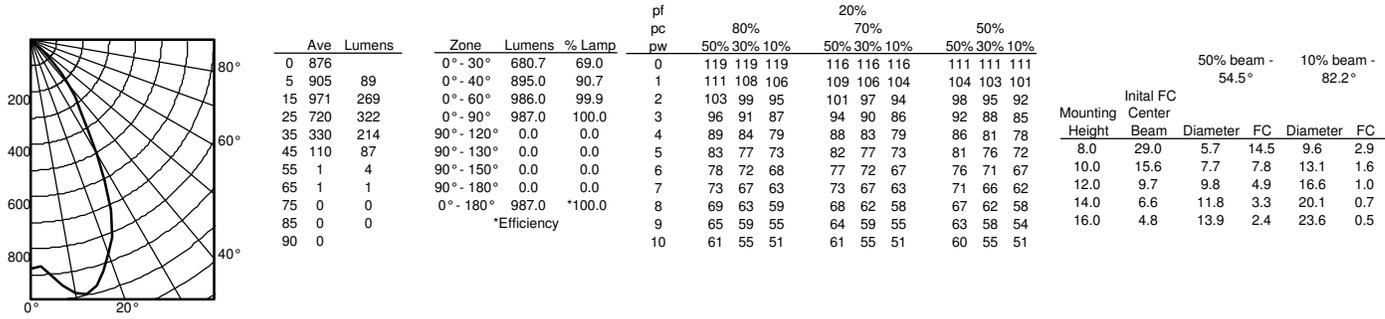
- Overall height varies based on lumen package; refer to dimensional chart on page 3.
- Not available with finishes.
- Not available with emergency options.
- Must specify voltage 120V or 277V.
- Available with clear (AR) reflector only.
- 12.5" of plenum depth or top access required for battery pack maintenance.
- Specify voltage. ER for use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
- Fixture begins at 80% light level. Must be specified with NPS80EZ or NPS80EZ ER. Only available with EZ10 and EZ1 drivers.
- Not available with CP, NPS80EZ, NPS80EZER, NPP16D, NPP16DER or N80 options.
- NLTAIR2 and NLTAIRER2 not recommended for metal ceiling installations.
- Fixture height is 6.5" for all lumen packages with HAO.
- Must specify voltage for 3000lm. 5000lm with marked spacing 24 L x 24 W x 14 H. Not available with emergency battery pack option.

# LDN6

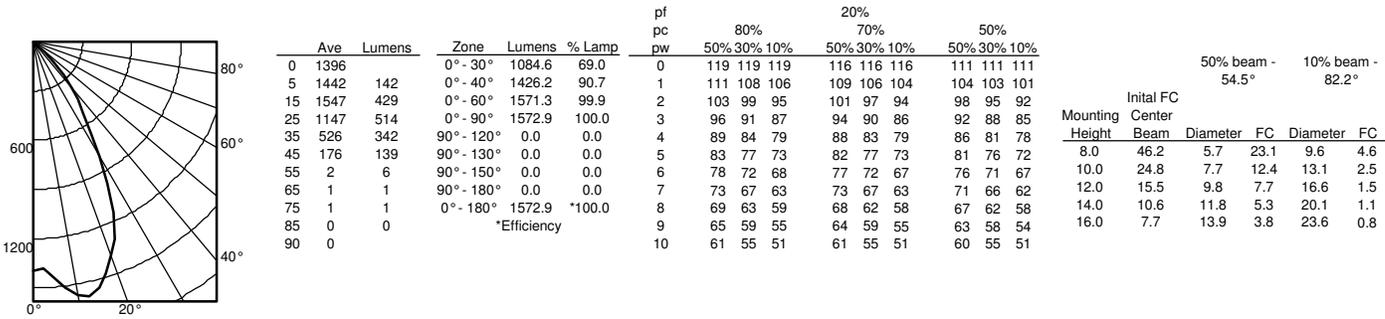
## PHOTOMETRY

Distribution Curve      Distribution Data      Output Data      Coefficient of Utilization      Illuminance Data at 30" Above Floor for a Single Luminaire

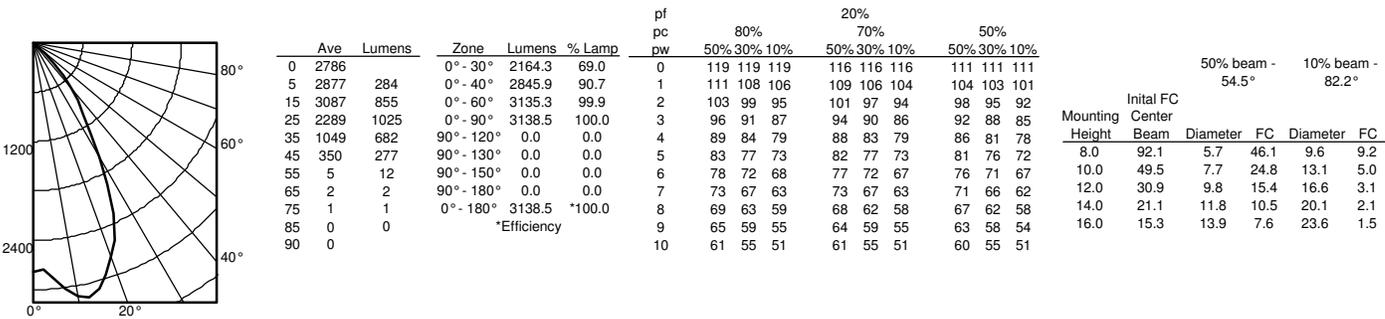
**LDN6 35/10 L06AR**, input watts: 10.44, delivered lumens: 987.10, LM/W = 94.54, spacing criterion at 0= 1.02, test no. ISF 30716P262.



**LDN6 35/15 L06AR**, input watts: 17.52, delivered lumens: 1572.9, LM/W = 89.77, spacing criterion at 0= 1.02, test no. ISF 30716P265.



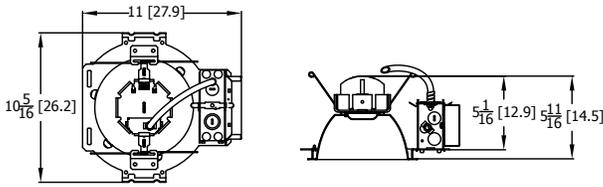
**LDN6 35/30 L06AR**, input watts: 34.75, delivered lumens: 3138.5, LM/W = 90.31, spacing criterion at 0= 1.02, test no. ISF 30716P274.



# LDN6

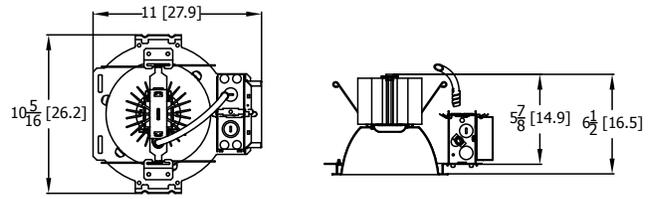
\* All dimensions are inches (centimeters) unless otherwise noted.

## LDN6 500-1500 LUMEN



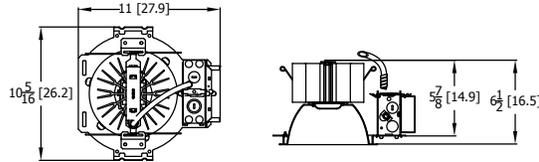
Aperture: 6-1/4 (15.9)  
Ceiling Opening: 7-1/8 (18.1)  
Overlap trim: 7-1/2 (19.1)

## LDN6 2000-3000 LUMEN



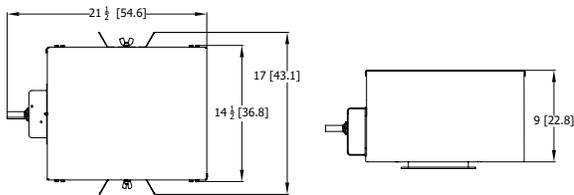
Aperture: 6-1/4 (15.9)  
Ceiling Opening: 7-1/8 (18.1)  
Overlap trim: 7-1/2 (19.1)

## LDN6 4000-5000 LUMEN



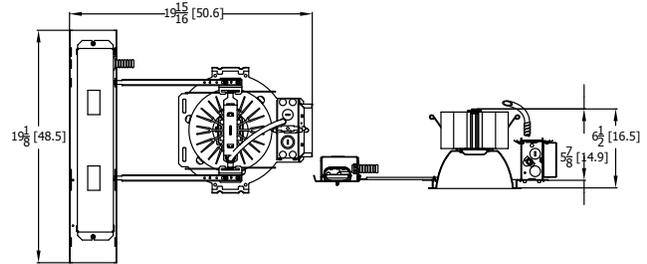
Marked Spacing: 24 x 24 x 10  
Aperture: 6-1/4 (15.9)  
Ceiling Opening: 7-1/8 (18.1)  
Overlap trim: 7-1/2 (19.1)

## LDN6 CP



Aperture: 6-1/4" (15.9)  
Ceiling Opening: 7-1/8" (18.1)  
Overlap trim: 7-1/2" (19.1)

## LDN6 EL-ELR



Marked Spacing above 3000 lumen: 24 x 24 x 10  
Aperture: 6-1/4 (15.9)  
Ceiling Opening: 7-1/8 (18.1)  
Overlap trim: 7-1/2 (19.1)

| LDN6           |        |         |      |
|----------------|--------|---------|------|
| Nominal Lumens | Lumens | Wattage | Lm/W |
| 500            | 527.9  | 5.8     | 90.5 |
| 750            | 758.1  | 8.9     | 85.1 |
| 1000           | 950.1  | 10.4    | 91.0 |
| 1500           | 1514   | 17.5    | 86.4 |
| 2000           | 2006   | 22.5    | 89.1 |
| 2500           | 2504   | 28.3    | 88.6 |
| 3000           | 3021   | 34.8    | 86.9 |
| 4000           | 4008   | 44.3    | 90.6 |
| 5000           | 4975   | 57.7    | 86.3 |

### HOW TO ESTIMATE DELIVERED LUMENS IN EMERGENCY MODE

Use the formula below to estimate the 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.

The LPW rating is also available at [Designlight Consortium](http://Designlight Consortium).

|                     | LUMEN OUTPUT MULTIPLIERS - FINISH |            |            |
|---------------------|-----------------------------------|------------|------------|
|                     | Clear (AR)                        | White (WR) | Black (BR) |
| Specular (LS)       | 1.0                               | N/A        | N/A        |
| Semi-specular (LSS) | 0.950                             | N/A        | N/A        |
| Matte diffuse (LD)  | 0.85                              | N/A        | N/A        |
| Painted             | N/A                               | 0.87       | 0.73       |

|       | LUMEN OUTPUT MULTIPLIERS - CCT |       |       |       |       |
|-------|--------------------------------|-------|-------|-------|-------|
|       | 2700K                          | 3000K | 3500K | 4000K | 5000K |
| 80CRI | 0.950                          | 0.966 | 1.000 | 1.025 | 1.101 |

### Notes

- Tested in accordance with IESNA LM-79-08.
- Tested to current IES and NEMA standards under stabilized laboratory conditions.
- CRI: 80 typical.

## ADDITIONAL DATA

| COMPATIBLE 0-10V WALL-MOUNT DIMMERS |   |                         |
|-------------------------------------|---|-------------------------|
| MANUFACTURER                        | PART NO.  | POWER BOOSTER AVAILABLE |
| Lutron®                             | Diva® DDTV  |                         |
|                                     | Diva® DVSTCTV   |                         |
|                                     | Nova T® NTFTV   |                         |
|                                     | Nova® NFTV  |                         |
| Leviton®                            | AWSMT-7DW   | CN100                   |
|                                     | AWSMG-7DW   | PE300                   |
|                                     | AMRMG-7DW   |                         |
|                                     | Leviton Centura Fluorescent Control System                                    |                         |
|                                     | IllumaTech® IP7 Series  |                         |
| Synergy®                            | ISD BC  | RDMFC                   |
|                                     | SLD LPCS  |                         |
|                                     | Digital Equinox (DEQ BC)  |                         |
| Douglas Lighting Controls           | WPC-5721  |                         |
| Entertainment Technology            | Tap Glide TG600FAM120 (120V)  |                         |
|                                     | Tap Glide Heatsink TGH1500FAM120 (120V)                                       |                         |
|                                     | Oasis 0A2000FAMU  |                         |
| Honeywell                           | EL7315A1019   | EL7305A1010 (optional)  |
|                                     | EL7315A1009   |                         |
| HUNT Dimming                        | Preset slide: PS-010-IV and PS-010-WH   |                         |
|                                     | Preset slide: PS-010-3W-IV and PS-010-3W-WH                                   |                         |
|                                     | Preset slide, controls FD-010: PS-IFC-010-IV and PS-IFC-010-WH-120/277V       |                         |
|                                     | Preset slide, controls FD-010: PS-IFC-010-3W-IV and PS-IFC-010-3W-WH-120/277V |                         |
|                                     | Remote mounted unit: FD-010   |                         |
| Lehigh Electronic Products          | Solitaire   | PBX                     |
| PDM Electrical Products             | WPC-5721  |                         |
| Starfield Controls                  | TR61 with DALI interface port   | RT03 DALInet Router     |
| WattStopper®                        | LS-4 used with LCD-101 and LCD-103  |                         |

### 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® control networks when ordered with drivers marked by a shaded background\*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options 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

# LDN6

## EXAMPLE

Group Fixture Control\*

\*Application diagram applies for fixtures with eldoLED drivers only.

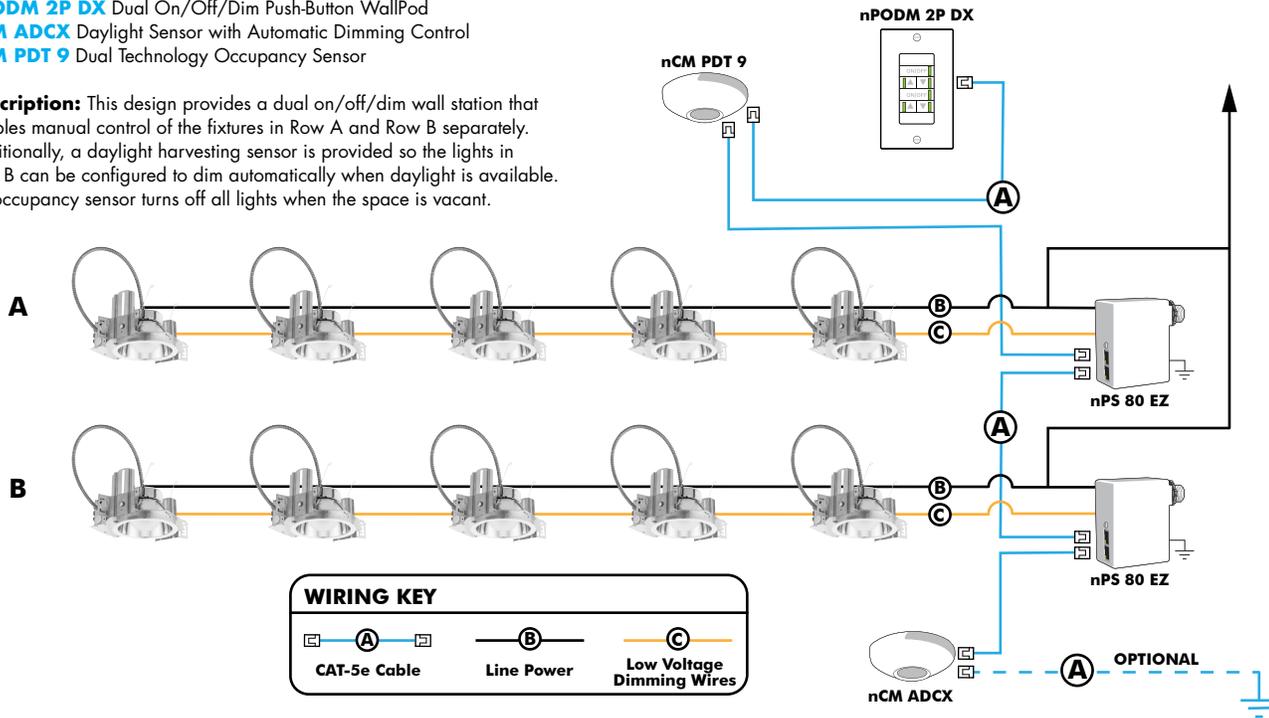
**nPS 80 EZ** Dimming/Control Pack (qty: 2 required)

**nPODM 2P DX** Dual On/Off/Dim Push-Button WallPod

**nCM ADCX** Daylight Sensor with Automatic Dimming Control

**nCM PDT 9** Dual Technology Occupancy Sensor

**Description:** This design provides a dual on/off/dim wall station that enables manual control of the fixtures in Row A and Row B separately. Additionally, a daylight harvesting sensor is provided so the lights in Row B can be configured to dim automatically when daylight is available. An occupancy sensor turns off all lights when the space is vacant.



## Choose Wall Controls

nLight offers multiple styles of wall controls - each with varying features and user experience.



**Push-Button Wallpod**  
Traditional tactile buttons and LED user feedback



**Graphic Wallpod**  
Full color touch screen provides a sophisticated look and feel

## nLight® Wired Controls Accessories:

Order as separate catalog number. Visit [www.acuitybrands.com/products/controls/nlight](http://www.acuitybrands.com/products/controls/nlight) for complete listing of nLight controls.

| WallPod Stations          | Model number        | Occupancy sensors                          | Model Number                |
|---------------------------|---------------------|--|-----------------------------|
| On/Off                    | nPODM (Color)       | Small motion 360°, ceiling (PIR/dual Tech) | nCM 9 / nCM PDT 9           |
| On/Off & Raise/Lower      | nPOD DX (Color)     | Large motion 360°, ceiling (PIR/dual tech) | nCM 10 / nCM PDT 10         |
| Graphic Touchscreen       | nPOD GFX (Color)    | Wide View (PIR/dual tech)                  | nWV 16 / nWV PDT 16         |
| <b>Photocell controls</b> | <b>Model Number</b> | Wall Switch w/ Raise/Lower (PIR/dual tech) | nWSX LV DX / nWSX PDT LV DX |
| Dimming                   | nCM ADCX            | <b>Cat-5 cables (plenum rated)</b>         | <b>Model Number</b>         |
|                           |                     | 10', CAT5 10FT                             | CAT5 10FT J1                |
|                           |                     | 15, CAT5 15FT                              | CAT5 15FT J1                |

## nLight® AIR Control Accessories:

Order as separate catalog number. Visit [www.acuitybrands.com/products/controls/nlightair](http://www.acuitybrands.com/products/controls/nlightair).

### Wall switches

|                                  | Model number              |
|----------------------------------|---------------------------|
| On/Off single pole               | rPODB [color]             |
| On/Off two pole                  | rPODB 2P [color]          |
| On/Off & raise/lower single pole | rPODB DX [color]          |
| On/Off & raise/lower two pole    | rPODB 2P DX [color]       |
| On/Off & raise/lower single pole | rPODBZ DX WH <sup>1</sup> |

### Notes

1 Can only be ordered with the RES7Z zone control sensor version.

## nLight AIR

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



### Simple as 1,2,3

1. Install the nLight® AIR fixtures with embedded smart sensor
2. Install the wireless battery-powered wall switch
3. With CLAIRITY app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome

