

## 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.

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 50,000 hours.

**LISTINGS** — Certified to US and Canadian safety standards. Damp location standard (wet location, covered ceiling optional). ENERGY STAR® certified product.

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

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

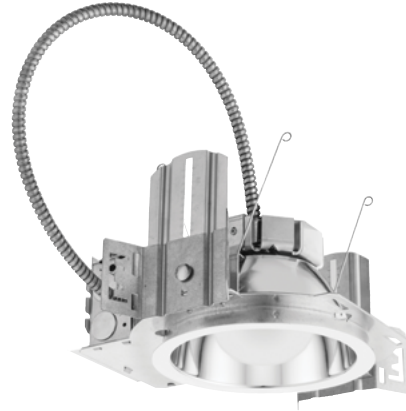
All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

Catalog Number
Notes
Type

# LDN6

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



A+ Capable options indicated by this color background.

### ORDERING INFORMATION

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

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

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

Driver	Options
GZ10 0-10V driver dims to 10%	SF <sup>4</sup> Single fuse
GZ1 0-10V driver dims to 1%	TRW <sup>5</sup> White painted flange
EZ10 0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 10%	TRBL <sup>5</sup> Black painted flange
	EL <sup>6</sup> Emergency battery pack with integral test switch
	ELR Emergency battery pack with remote test switch
	ELSD Emergency battery pack with self-diagnostics, integral test switch
	ELRSD Emergency battery pack with self-diagnostics, remote test switch
EZ1 0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 1%	E10WCP Emergency battery pack, 10W Constant Power, CA Title 20 compliant with integral test switch
	E10WCPR Emergency battery pack, 10W Constant Power, CA Title 20 compliant with remote test switch
	NPP16D <sup>7</sup> nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1).
	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.
	N80 <sup>8</sup> nLight™ Lumen Compensation
	NPS80EZ <sup>7</sup> nLight® dimming pack controls 0-10V eldoLED drivers (EZ10, EZ1).
	NPS80EZER <sup>7</sup> nLight® dimming pack controls 0-10V eldoLED drivers (EZ10, EZ1). ER controls fixtures on emergency circuit.
	HAO <sup>11</sup> High ambient option
	CP <sup>12</sup> Chicago Plenum
	WL Wet Location, specify for exterior use applications
	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.
	NLTAIR2 <sup>9, 10</sup> nLight® Air enabled
	NLTAIRER2 <sup>9, 10</sup> nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit
	USPOM US point of manufacture

Accessories: Order as separate catalog number.	
EAC ISSM 375	Compact interruptible emergency AC power system
EAC ISSM 125	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.

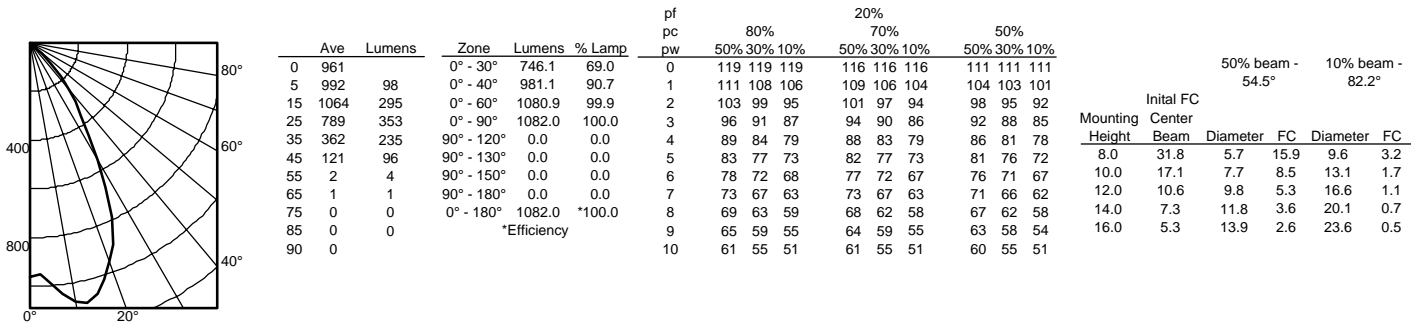
- Notes**
- Overall height varies based on lumen package; refer to dimensional chart on page 3.
  - Not available with finishes.
  - Not available with emergency options.
  - Must specify voltage 120V or 277V.
  - Available with clear (AR) reflector only.
  - Add "SD" for self-diagnostic option (i.e. ELSD)
  - 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 NPS80EZER. 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.

# LDN6

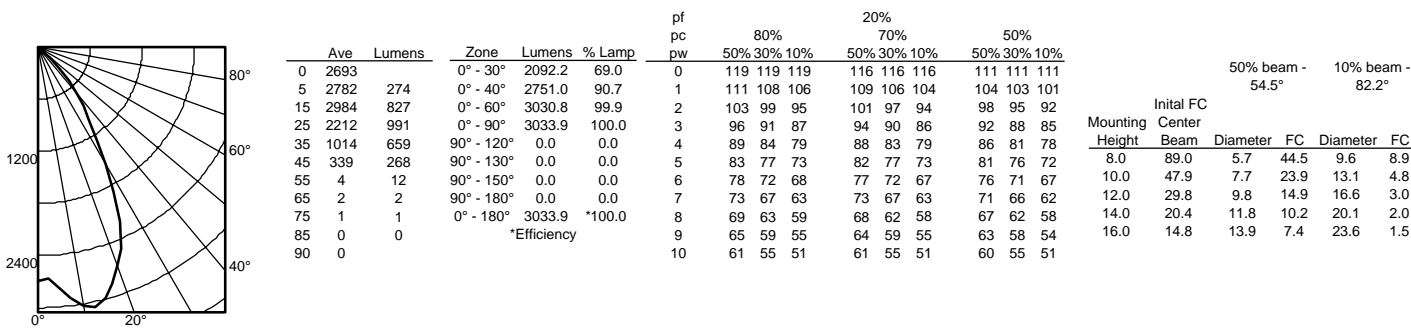
## PHOTOMETRY

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

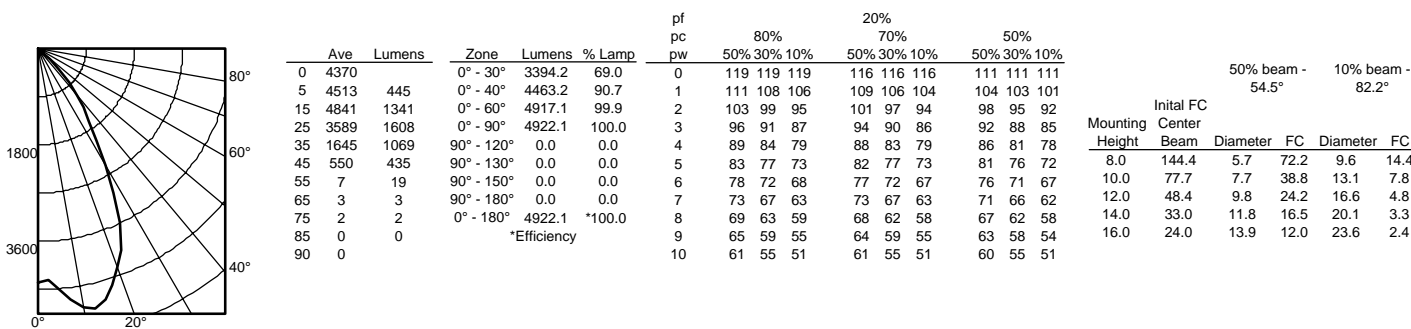
**LDN6 35/10 L06AR**, input watts: 12.75, delivered lumens: 1082, LM/W = 84.86, spacing criterion at 0= 1.02, test no. ISF 30716P31.



**LDN6 35/30 L06AR**, input watts: 34.69, delivered lumens: 3033.9, LM/W = 87.45, spacing criterion at 0= 1.02, test no. ISF 30716P22.



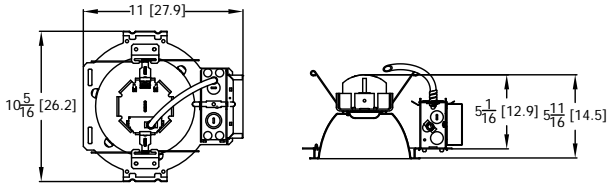
**LDN6 35/50 L06AR**, input watts: 55.56, delivered lumens: 4922.1, LM/W = 88.59, spacing criterion at 0= 1.02, test no. ISF 30716P40.



# LDN6

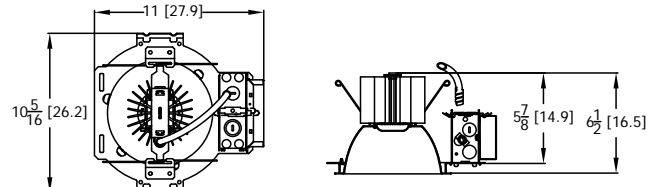
\*All dimensions are inches (centimeters) unless otherwise noted.

## LDN6 1500 LUMEN



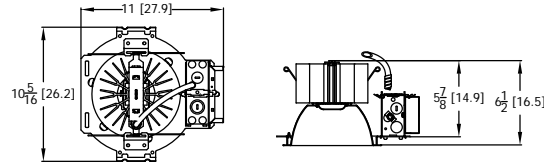
Aperture: 6-1/4 (15.9)  
Ceiling Opening: 7-1/8 (18.1)  
Overlap trim: 7-1/2 (19.1)

## LDN6 3000 LUMEN



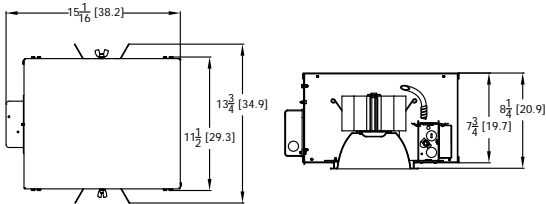
Aperture: 6-1/4 (15.9)  
Ceiling Opening: 7-1/8 (18.1)  
Overlap trim: 7-1/2 (19.1)

## LDN6 5000 LUMEN



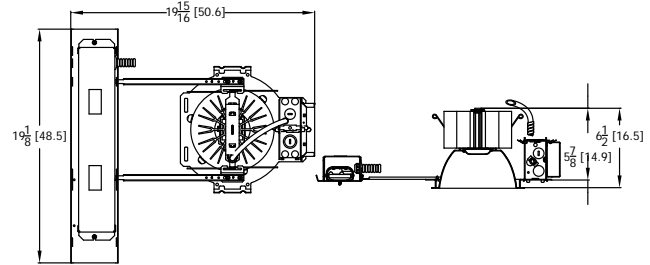
Marked Spacing: 24 x 24 x 10  
Aperture: 6-1/4 (15.9)  
Ceiling Opening: 7-1/8 (18.1)  
Overlap trim: 7-1/2 (19.1)

## LDN6 CP



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 1500 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			
Target Lumen	Lumens @ 3500K	Wattage	LPW
500	662.2	7.6	87.1
1000	1082.0	12.8	84.5
1500	1606.0	20.5	78.3
2000	2023.0	22.6	89.5
2500	2529.5	27.1	93.3
3000	3034.0	34.7	87.4
4000	3977.5	44.1	90.2
5000	4922.2	55.5	88.7

### 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

	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® DVSCTV	
	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 . \*See ordering tree for details

# LDN6

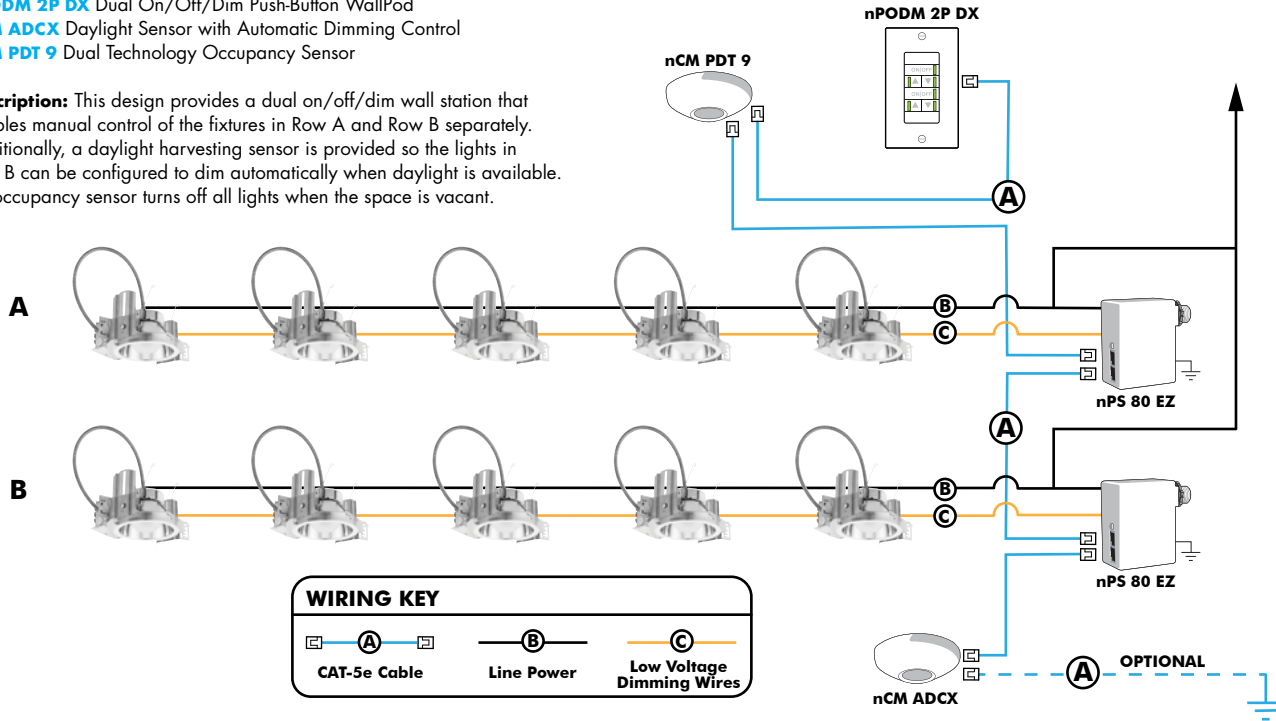
## EXAMPLE

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	CATS 10FT J1
		15, CAT5 15FT	CATS 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 Indy L-Series 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

