![LITHONIA LIGHTING®]

Catalog Number	
Notes	
Type	

FEATURES & SPECIFICATIONS

INTENDED USE — Typical applications include corridors, lobbies.

CONSTRUCTION — Galvanized steel mounting/plaster frame; galvanized steel junction box with bottom-hinged access covers and spring latches.

Vertically adjustable mounting brackets with commercial bar hangers provide 3-3/4" total adjustment. C-channel T-bar fastener options available.

Two combination ½"-3/4" and four ½" 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; light engine and drivers are accessible from above or below ceiling

Max ceiling thickness 1-1/2"

OPTICS — 3 SDCM; 80 CRI typical

Diffusing lens covers optical chamber

General illumination 1.0 S/MH

55° cutoff to source and source image

Self-flanged anodized reflectors in specular, semi-specular, or matte diffuse finishes.

ELECTRICAL — Multi-volt 0-10V dimming available.

0-10V dimming drivers mounted to junction box, 10% or 1% minimum dimming level

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).

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

LDN8

**8" OPEN
Non-IC
New Construction
Downlight**

CERTIFIED IN TITLE 20 — battery pack · 2016 PROGRESS Report · CA+ CAPABLE · nLight · WET LOCATION™ · DIMMABLE LED™

A+ Capable options indicated by this color background.

ORDERING INFORMATION   Lead times will vary depending on options selected. Consult with your sales representative.   **Example:** LDN8 35/50 LO8AR LSS MVOLT EZ1

LDN8							
Series	**Color temperature**	**Lumens**		**Aperture/Trim Color**		**Finish**	**Voltage**
LDN8 8" round	27/ 2700K 30/ 3000K 35/ 3500K 40/ 4000K	50 5000 lumens 60 6000 lumens 80 8000 lumens 100 10000 lumens	120 12000 lumens 150 15000 lumens 200 20000 lumens	LO8 Downlight LW8 Wallwash	AR Clear WR[2] White BR[2] Black	LSS Semi-specular LD Matte diffuse LS Specular	MVOLT Multi-volt 120 120V 277 277V 347[3] 347V

Driver	**Options**			
GZ10 0-10V driver dims to 10% GZ1 0-10V driver dims to 1% EZ10 0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 10% EZ1 0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 1%	SF[4] Single fuse TRW[5] White painted flange TRBL[6] Black painted flange EL Emergency battery pack with integral test switch. Not Certified in CA Title 20 MAEDBS ELR Emergency battery pack with remote test switch. Not Certified in CA Title 20 MAEDBS ELSD Emergency battery pack with self-diagnostics, integral test switch. Not Certified in CA Title 20 MAEDBS	ELRSD Emergency battery pack with self-diagnostics, remote test switch. Not Certified in CA Title 20 MAEDBS E10WCP Emergency battery pack, 10W Constant Power with integral test switch. Certified in CA Title 20 MAEDB E10WCPR Emergency battery pack, 10W Constant Power with integral test switch. Certified in CA Title 20 MAEDB NPP16D[6] nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1). NPP16DER[6] nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1). ER controls fixtures on emergency circuit.	N80[7] nLight™ Lumen Compensation NPS80EZ[6] nLight® dimming pack controls 0-10V eldoLED drivers (EZ10, EZ1). NPS80EZER[6] nLight® dimming pack controls 0-10V eldoLED drivers (EZ10, EZ1). ER controls fixtures on emergency circuit. WL Wet location, specify for exterior applications RRL___ Reloc®-ready NLTAIR2[8,9] nLight® Air enabled NLTAIRER2[8,9] nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit, not available with battery pack options	

Notes

1. 347V is 3' x 3' x 6" over top - Marked Spacing for 8000 lumens and above.
2. Not available with finishes.
3. 347V only available with EZ10 and EZ1 driver options. Supplied with step-down transformer. Not available with emergency options.
4. Voltage-specific 120, 277V.
5. Only available with AR finish.
6. Specify voltage. ER for use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
7. Fixture begins at 80% light level. Must be specified with NPS80EZ or NPS80EZ ER. Only available with EZ10 and EZ1 drivers.
8. Not available with CP, NPS80EZ, NPS80EZER, NPP16D, NPP16DER or N80 options.
9. NLTAIR2 and NLTAIRER2 not recommended for metal ceiling installations.
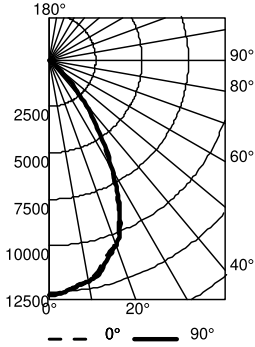
PHOTOMETRY

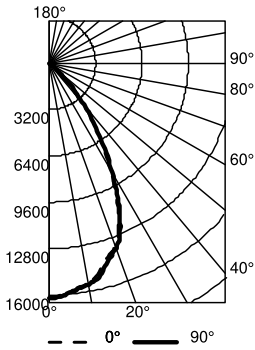| Distribution Curve	Distribution Data	Output Data	Coefficient of Utilization	Illuminance Data at 30" Above Floor for a Single Luminaire

LDN8 35/120 LO8AR LS, INPUT WATTS: 148.6, DELIVERED LUMENS: 12506.4, LM/W = 84.16, TEST NO. ISF 30850P28

CP Summary

	0°	90
0°	12639	12639
5°	12358	12418
15°	11223	11444
25°	8788	8999
35°	4493	4731
45°	1298	1393
55°	25	25
65°	6	6
75°	2	2
85°	0	1
90	0	0

Coefficients of Utilization

pf		20%						
pc	80%			70%			50%		
pw RCR	70%	50%	30%	50%	30%	10%	50%	30%	10%
0	119	119	119	116	116	116	111	111	111
1	113	111	108	108	106	104	104	103	101
2	108	103	99	101	97	94	98	95	92
3	102	96	90	94	90	86	92	88	84
4	97	89	83	88	83	79	86	81	78
5	92	83	77	82	77	72	80	75	72
6	87	78	72	77	71	67	75	70	67
7	82	73	67	72	66	62	71	66	62
8	78	68	62	68	62	58	67	61	58
9	74	64	58	64	58	54	63	58	54
10	71	61	55	60	55	51	59	54	51

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	8413	67.3	67.3
0° - 40°	11338	90.7	90.7
0° - 60°	12496	99.9	99.9
0° - 90°	12506	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	12506	100.0	100.0

LDN8 35/150 LO8AR LS, INPUT WATTS: 184.5, DELIVERED LUMENS: 16024.4, LM/W = 86.85, TEST NO. ISF 30850P25

CP Summary

	0°	90
0°	16194	16194
5°	15834	15911
15°	14381	14663
25°	11260	11530
35°	5757	6062
45°	1663	1785
55°	32	32
65°	8	8
75°	3	3
85°	0	1
90	0	0

Coefficients of Utilization

pf		20%						
pc	80%			70%			50%		
pw RCR	70%	50%	30%	50%	30%	10%	50%	30%	10%
0	119	119	119	116	116	116	111	111	111
1	113	111	108	108	106	104	104	103	101
2	108	103	99	101	97	94	98	95	92
3	102	96	90	94	90	86	92	88	84
4	97	89	83	88	83	79	86	81	78
5	92	83	77	82	77	72	80	75	72
6	87	78	72	77	71	67	75	70	67
7	82	73	67	72	66	62	71	66	62
8	78	68	62	68	62	58	67	61	58
9	74	64	58	64	58	54	63	58	54
10	71	61	55	60	55	51	59	54	51

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	10779	67.3	67.3
0° - 40°	14527	90.7	90.7
0° - 60°	16012	99.9	99.9
0° - 90°	16024	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	16024	100.0	100.0

LDN8 35/200 LO8AR LS, INPUT WATTS: 265.4, DELIVERED LUMENS: 20707.9, LM/W = 78.02, TEST NO. ISF 30850P22.

CP Summary

	0°	90
0°	20927	20927
5°	20462	20561
15°	18584	18949
25°	14551	14900
35°	7440	7834
45°	2149	2307
55°	42	42
65°	10	10
75°	3	3
85°	0	2
90	0	0

Coefficients of Utilization

pf		20%						
pc	80%			70%			50%		
pw RCR	70%	50%	30%	50%	30%	10%	50%	30%	10%
0	119	119	119	116	116	116	111	111	111
1	113	111	108	108	106	104	104	103	101
2	108	103	99	101	97	94	98	95	92
3	102	96	90	94	90	86	92	88	84
4	97	89	83	88	83	79	86	81	78
5	92	83	77	82	77	72	80	75	72
6	87	78	72	77	71	67	75	70	67
7	82	73	67	72	66	62	71	66	62
8	78	68	62	68	62	58	67	61	58
9	74	64	58	64	58	54	63	58	54
10	71	61	55	60	55	51	59	54	51

Zonal Lumen Summary

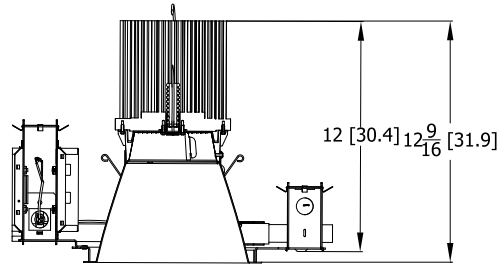| Zone	Lumens	% Lamp	% Fixture
0° - 30°	13930	67.3	67.3
0° - 40°	18773	90.7	90.7
0° - 60°	20691	99.9	99.9
0° - 90°	20708	100.0	100.0
90° - 180°	0	0.0	0.0
0° - 180°	20708	100.0	100.0

LDN8

*All dimensions in inches (centimeters) unless otherwise noted.

5000lm-6000lm below

$15\frac{7}{8}$ [40.4]

$16\frac{11}{16}$ [42.4]

$8\frac{1}{4}$ [20.9] $8\frac{13}{16}$ [22.3]
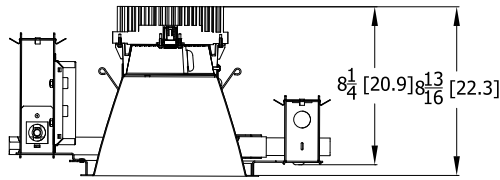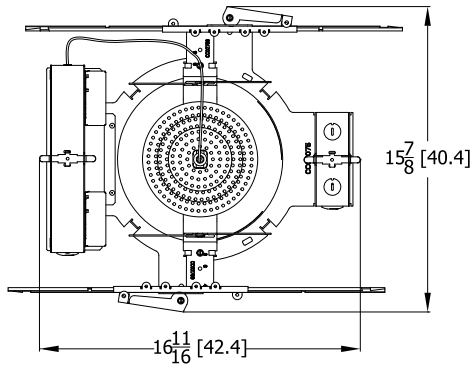
Aperture: $8\frac{5}{8}$ (21.9)
Ceiling Opening: $8\frac{3}{4}$ (22.2)

8000lm-12,000lm below

$15\frac{7}{8}$ [40.4]

$17\frac{1}{4}$ [43.8]

12 [30.4] $12\frac{9}{16}$ [31.9]
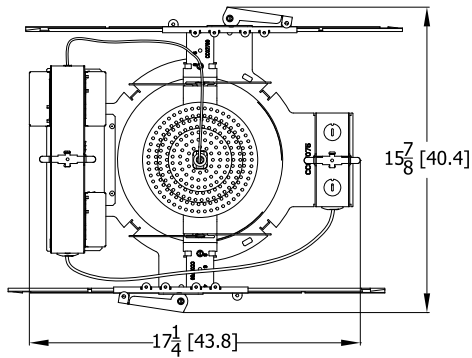
Aperture: $8\frac{5}{8}$ (21.9)
Ceiling Opening: $8\frac{3}{4}$ (22.2)

15,000lm-20,000lm below

$15\frac{7}{8}$ [40.4]

$17\frac{1}{4}$ [43.8]

12 [30.5] $12\frac{9}{16}$ [31.9]
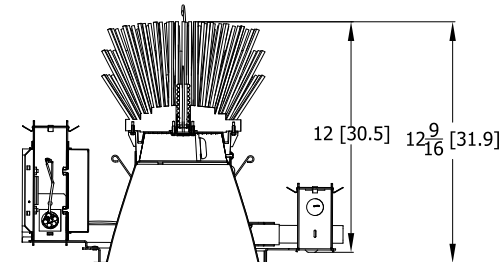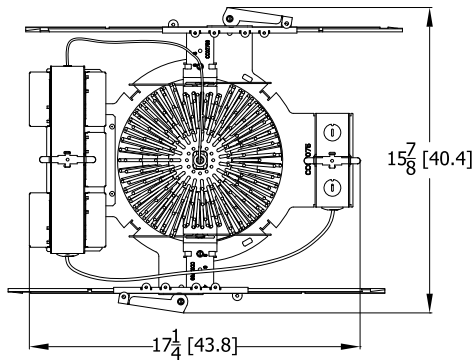
Aperture: $8\frac{5}{8}$ (21.9)
Ceiling Opening: $8\frac{3}{4}$ (22.2)
L 36"x W 36"x H18" marked spacing

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 AND LINE VOLTAGE DIMMERS		
MANUFACTURER	PART NO.	CONTOL DEVICE DIM CURVE
Synergy®	ISD 400 ELV 120	Logarithmic
	ISD 600 I 120	Logarithmic
	ISD 1000 I 120	Logarithmic
Leviton®	IllumaTech-IPE04	Logarithmic
	IllumaTech-IPI06	Logarithmic
	IllumaTech-IPI10	Logarithmic
	IllumaTech- IPL06-10	Logarithmic
	Sureslide 6633-P 600-watt 3-way	Linear
	Sureslide 6674-P 600-watt single pole	Linear
	Sureslide 6674-P 600-watt 3-way	Linear

WATTAGE CONSUMPTION MATRIX			
Nominal Lumens @ 3500K	Delivered Lumens	Wattage	LPW
5000	5353	61.1	87.6
6000	6138	73	84.1
8000	8520	92.1	92.5
10000	10582	118.83	89.1
12000	12506	148.7	84.1
15000	16025	184.5	86.9
20000	20707	265.4	78.0

HOW TO ESTIMATE DELIVERED 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 = Ouput 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.

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.
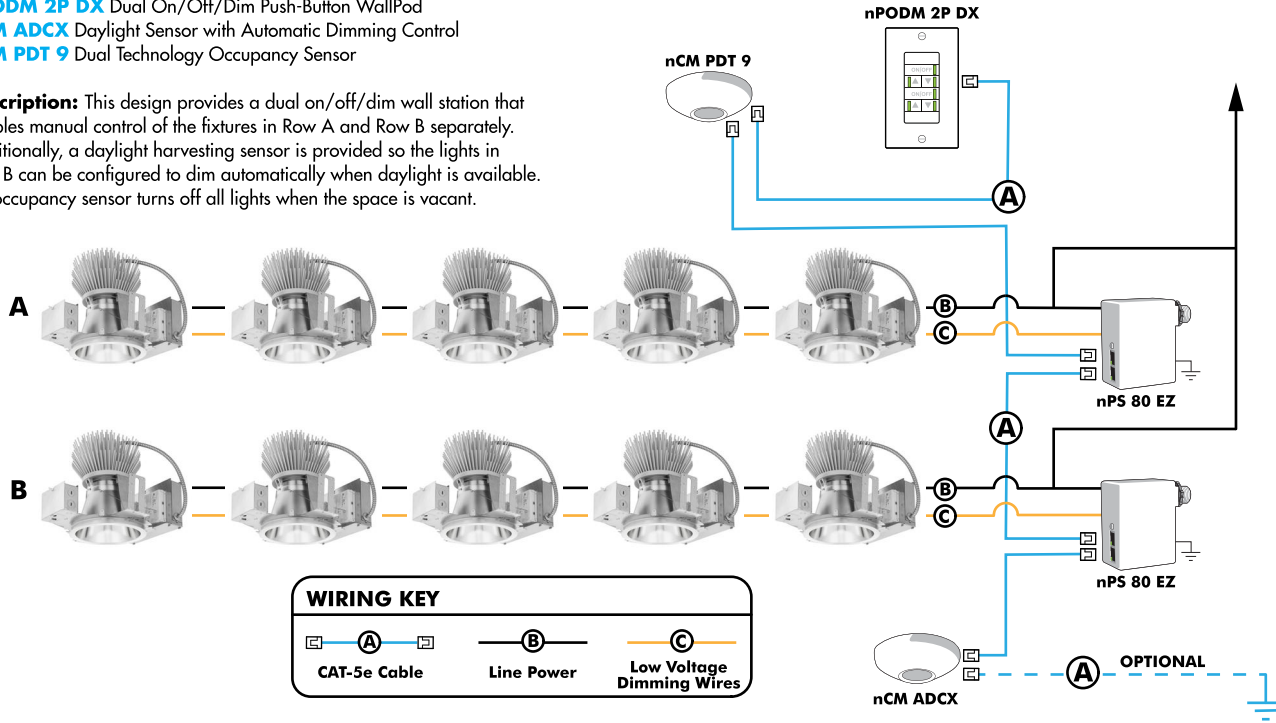
*See ordering tree for details

LDN8

EXAMPLE
Group Fixture Control*
*Appiication 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.

nCM PDT 9

nPODM 2P DX

nPS 80 EZ

nPS 80 EZ

nCM ADCX

WIRING KEY

CAT-5e Cable	Line Power	Low Voltage Dimming Wires
Ⓐ	Ⓑ	Ⓒ

OPTIONAL

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 for complete listing of nLight controls.

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

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[1]

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 pro-
hibitive. 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 CL**AIR**ITY app, pair the fixtures with the wall switch and if
    desired, customize the sensor settings for the desired outcome

nLight AIR rPODB 2P DX   Mobile Device