

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 MacAdam Ellipse; 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.

UGR — UGR is zero for fixtures aimed at nadir with a cut-off equal to or less than 60deg per CIE 117-1996 Discomfort Galre in Interior Lighting. [UGR FAQs](#)

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.

LUMEN MAINTENANCE — 70% lumen maintenance at 60,000 hours.

LISTINGS — Certified to US and Canadian safety standards. Wet location standard (covered ceiling). IP55 rated. Drivers are ROHS compliant

GOVERNMENT PROCUREMENT — BAA — Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA — Build America Buy America: Product with the BAA option also 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 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

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.

PERFORMANCE DATA

LDN4			
Nominal	Lumens	Wattage	Lm/W
500	523.6	5.74	91.2
750	751.1	8.6	87.3
1000	1045	10.58	98.8
1500	1512	17.5	86.4
2000	2006	22.12	90.7
2500	2551	26.1	97.7
3000	3007	32.1	93.7
4000	4212	43	98.0

Notes

Tested in accordance with IESNA LM-79-08

Tested to current IES and NEMA standards under stabilized laboratory conditions

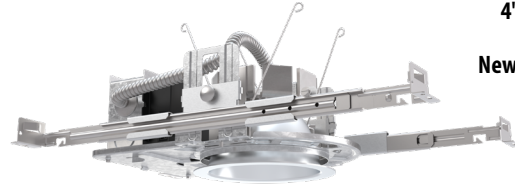
Based on LDN4 AR LSS 35K 80CRI



Catalog Number
Notes
Type

LDN4 STATIC WHITE

4" Open and Wallwash LED Non-IC New Construction Downlight

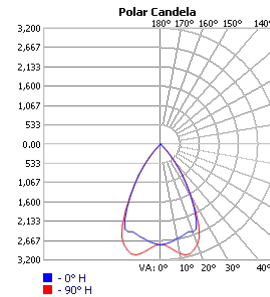


Open Trim

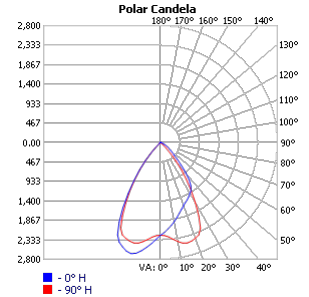


Wallwash Trim

DISTRIBUTIONS



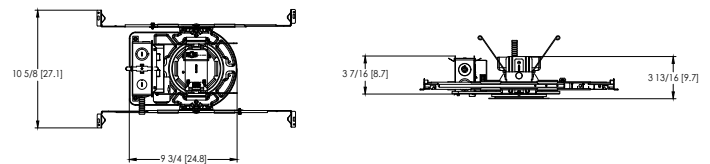
Open



Wallwash

DIMENSIONS

LDN4 500-2000 Lumens



Aperture: Ø 4-5/16" [11]
 Ceiling Cutout: Ø 5-1/8" [13] Self-flanged
 Overlap Trim: Ø 5-7/16" [13.8]
 Ceiling Cutout: Ø 5-1/4" [13.3] Flangeless

See page 4 for other fixture dimensions

ORDERING INFORMATION

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

Example: LDN4 35/15 L04 AR LSS MVOLT EZ1

LDN4	Color temperature	Lumens ‡	Trim Style	Trim Color	Trim Finish	Flange Color ‡
LDN4 4" round	27/ 2700K	05 500 lumens	L04 Downlight	AR Clear	LSS Semi-specular	TRW White painted flange
	30/ 3000K	07 750 lumens	LW4 Wallwash	WR ‡ White	LD Matte diffuse	TRBL Black painted flange
	35/ 3500K	10 1000 lumens		BR ‡ Black	LS Specular	FRALTBDD RAL painted flange only
	40/ 4000K	15 1500 lumens		TRALTBDD ‡ RAL painted trim		FCPC Custom painted flange only
	50/ 5000K			TCPC ‡ Custom painted trim		

Voltage	Driver	Emergency ‡	Control Input ‡
MVOLT Multi-volt	GZ10 0-10V driver dims to 10%	(blank) No emergency option	(blank) No control option
120 120V	GZ1 0-10V driver dims to 1%	EL Emergency battery pack with integral test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS	NPP16D nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1).
277 277V	D10 Minimum dimming 10% driver for use with SSAIR	ELR Emergency battery pack with remote test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS	NPP16DER nLight® network power/relay pack with 0-10V dimming for non-eldoLED drivers (GZ10, GZ1). ER controls fixtures on emergency circuit.
347 ‡ 347V	D1 Minimum dimming 1% driver for use with SSAIR	ELSD Emergency battery pack with self-diagnostics, 10W Constant Power, integral test switch. Not Certified in CA Title 20 MAEDBS	N80 nLight™ Lumen Compensation
	EZ1 0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 1%	ELRSD Emergency battery pack with self-diagnostics, 10W Constant Power, remote test switch. Not Certified in CA Title 20 MAEDBS	SSAIR Wireless standalone embedded control by SensorSwitch
	EDAB eldoLED DALI SOLDRIVE dim to dark	E10WCP Emergency battery pack, 10W Constant Power with integral test switch. Certified in CA Title 20 MAEDBS	NPS80EZ nLight® dimming pack controls 0-10V eldoLED drivers (EZ10, EZ1).
		E10WCPR Emergency battery pack, 10W Constant Power with remote test switch. Certified in CA Title 20 MAEDBS	NPS80EZER nLight® dimming pack controls 0-10V eldoLED drivers (EZ10, EZ1). ER controls fixtures on emergency circuit.
		E10WRSTAR Emergency battery pack, 10W with remote test switch and Iota STAR technology	NLTAIR2 nLight® Air enabled
			NLTAIRER2 nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit, not available with battery pack options
			NLTAIREM2 nLight® AIR Dimming Pack Wireless Controls. UL924 Emergency Operation, via power interrupt detection. Available with battery pack options.

Options	
HAO ‡	High ambient option (40°C)
CP ‡	Chicago Plenum
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.
BAA	Buy America(n) Act and/or Build America Buy America Qualified
90CRI	High CRI (90+)
SF ‡	Single fuse



Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

(Maximum order quantity for design select lead times is 160.)

‡ Option Value Ordering Restrictions	
Option value	Restriction
Lumen Packages	Overall height varies based on lumen package, refer to dimensional charts on page 4
WR, BR	Not available with finish (LSS, LD, LS)
TRALTBDD, FRALTBDD	RALTBDD for pricing only. Replace with applicable RAL number and finish when ready to order. See the RAL BROCHURE for available color options. Not available with TCPC or FCPC
TRW, TRBL	Available with clear (AR) trim color only
TCPC, FCPC	CPC options for pricing only. Custom color chip needs to be sent in to your Customer Resolution specialist before order can be processed. Click HERE for more details. Not available with TRAL or FRAL
347	Not available with emergency options
All Emergency	12.5" of plenum depth or top access required for battery pack maintenance.
NPP16D, NPP16DER	Not available with MVOLT. ER for use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
SF	Must specify 120 or 277 volt
N80	Fixture begins at 80% light level. Must be specified with NPS80EZ or NPS80EZ ER. Only available with EZ10 and EZ1 drivers.
NPP16D, NPP16DER, NPS80EZ, NPS80EZER	Specify voltage. ER for use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
NLTAIR2, NLTAIRER2, NLTAIREM2	Not available with CP, NPS80EZ, NPS80EZER, NPP16D, NPP16DER or N80 options. Not recommended for metal ceiling installations.
NLTAIR2	When combined with EZ1 or EZ10 drivers, can be used as a normal power
SSAIR	Must specify D10 or D1 driver. Not available with nLight options. Not available with CP. Not recommended for metal ceiling installation. Not for use with emergency backup power systems other than battery packs.
HAO	Fixture height is 5-11/16" for all lumen packages with HAO.
CP	Must specify voltage for 3000lm. Not available with emergency battery pack option.
E10WRSTAR	Not available with wet location, EC1, EC6, QDS, CP, 347V, NPS80EZ ER, NLTAIRER2, NLTAIREM2, ALO3 & ALO4 w/DALI, OR 2000-4500 lumens w/SSAIR. Top access installation or 17.5" plenum clearance required for roomside installation. Not available with integral test switch.

Accessories: Order as separate catalog number.

EAC ISSM 375	Compact interruptible emergency AC power system
EAC ISSM 125	Compact interruptible emergency AC power system
GRA46 JZ	Oversized trim ring with 6" outside diameter
SCA4	Sloped Ceiling Adapter. Degree of slope must be specified (5D, 10D, 15D, 20D, 25D, 30D). Ex: SCA4 10D.

Emergency Battery Pack Options - Field Installable

Battery Model Number	Wattage	Runtime (Minutes)	Lumen Output* @ 120 Lumens/Watt	Other
ILB CP07 2H A	7W	120	840	Storm Shelter/ 2-hour Runtime
ILB CP10 A	10W	90	1200	
ILBLP CP10 HE SD A+	10W	90	1200	Title 20, Self Diagnostic
ILBLP CP15 HE SD A+	15W	90	1800	Title 20, Self Diagnostic
ILB CP20 HE A	20W	90	2400	Title 20
ILB CP20 HE SD A	20W	90	2400	Title 20, Self Diagnostic
ILBHI CP10 HE SD A+	10W	90	1200	347-480V AC Input, Title 20, Self Diagnostic
ILBHI CP15 HE SD A+	15W	90	1800	347-480V AC Input, Title 20, Self Diagnostic

All the above are UL 924 Listed products that are certified for field install external/remote to the fixture.

*Minimum delivered lumen output to assist in product selection for increased fixture mounting height.

The CP10 delivered emergency illuminations outperforms legacy 1400 lumen fluorescent emergency ballasts.

Please contact us at techsupport@iotaengineering.com for any Emergency Battery related questions.

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 capability with simple commissioning when used with Acuity Brands controls products.

All configurations of this luminaire are calibrated and tested to meet the Acuity Brands' specification for chromatic consistency - including color rendering, color fidelity and color temperature tolerance around standard CIE chromaticity coordinates.

To learn more about A+, visit www.acuitybrands.com/aplus.

PHOTOMETRY

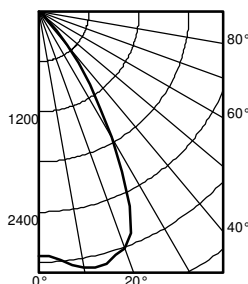
Distribution Curve

Distribution Data

Output Data

Illuminance Data at 30" Above Floor for a Single Luminaire

LDN4 35/30 L04AR, input watts: 32.1, delivered lumens: 3122.6, LM/W = 88.52, spacing criterion at 0= 1.04, test no. ISF 30712P249.



Ave	Lumens	Zone	Lumens	% Lamp
0	2927	0° - 30°	2301.2	73.7
5	2989	0° - 40°	2968.2	95.1
15	3120	0° - 60°	3121.1	100.0
25	2575	0° - 90°	3122.6	100.0
35	1062	90° - 120°	0.0	0.0
45	149	90° - 130°	0.0	0.0
55	3	90° - 150°	0.0	0.0
65	2	90° - 180°	0.0	0.0
75	0	0° - 180°	3122.6	*100.0
85	0			*Efficiency
90	0			

Mounting Height	Initial FC				50% beam - 55.6°		10% beam - 78.0°	
	Beam	Diameter	FC	Diameter	FC	Diameter	FC	
8.0	96.8	5.8	48.4	8.9	9.7			
10.0	52.0	7.9	26.0	12.2	5.2			
12.0	32.4	10.0	16.2	15.4	3.2			
14.0	22.1	12.1	11.1	18.6	2.2			
16.0	16.1	14.2	8.0	21.9	1.6			

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

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

Notes

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

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

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

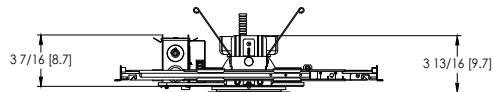
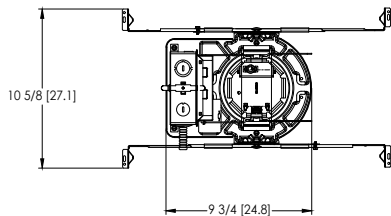
The LPW rating is also available at Designlight Consortium.

COMPATIBLE 0-10V WALL-MOUNT DIMMERS		
MANUFACTURER	PART NO.	POWER BOOSTER AVAILABLE
Lutron®	Diva® DVTV	
	Diva® DVSTCTV	
	Nova T® NTFTV	
	Nova® NFTV	
Leviton®	AWSMT-7DW	CN100
	AWSMG-7DW	PE300
	AMRMG-7DW	
	Leviton Centura Fluorescent Control System	
Synergy®	ISD BC	
	SLD LPCS	RDMFC
	Digital Equinox (DEQ BC)	
Douglas Lighting Controls	WPC-5721	
Entertainment Technology	Tap Glide TG600FAM120 (120V)	
	Tap Glide Heatsink TGH1500FAM120 (120V)	
	Oasis OA2000FAMU	
Honeywell	EL7315A1019	
	EL7315A1009	EL7305A1010 (optional)
HUNT Dimming	Presetslide: PS-010-IV and PS-010-WH	
	Presetslide: PS-010-3W-IV and PS-010-3W-WH	
	Presetslide, controls FD-010: PS-IFC-010-IV and PS-IFC-010-WH-120/277V	
	Presetslide, 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 DALI.net Router
WattStopper®	LS-4 used with LCD-101 and LCD-103	

LDN4

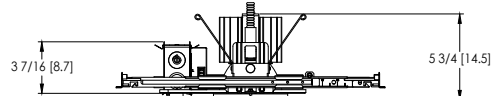
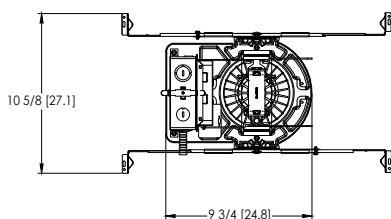
* All dimensions are inches (centimeters) unless otherwise noted.

LDN4 500-2000 Lumens



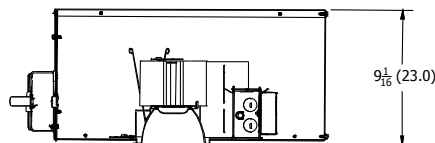
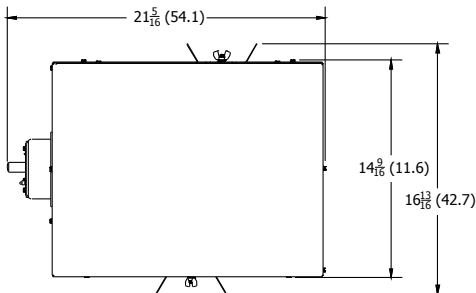
Aperture: \varnothing 4-5/16" [11]
 Ceiling Cutout: \varnothing 5-1/8" [13] Self-flanged
 Overlap Trim: \varnothing 5-7/16" [13.8]
 Ceiling Cutout: \varnothing 5-1/4" [13.3] Flangeless

LDN4 2000-4000 Lumens



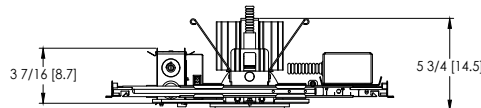
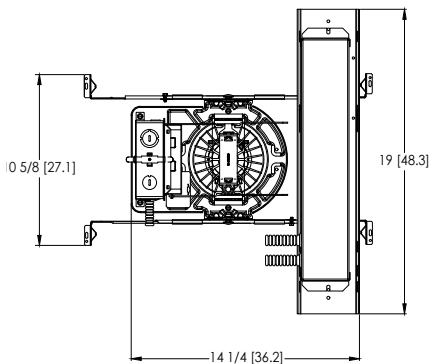
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 Overlap Trim: \varnothing 5-7/16" [13.8]
 Ceiling Cutout: \varnothing 5-1/4" [13.3] Flangeless

LDN4 CP



Aperture: 4-5/16" (11)
 Ceiling Opening: 5-1/8" (13)
 Overlap Trim: 5-7/16" (13.8)

LDN4 EL



Aperture: \varnothing 4-5/16" [11]
 Ceiling Cutout: \varnothing 5-1/8" [13] Self-flanged
 Overlap Trim: \varnothing 5-7/16" [13.8]
 Ceiling Cutout: \varnothing 5-1/4" [13.3] Flangeless



Performance You Can Count On

SensorSwitch™ offers standalone wired and wireless lighting controls solutions designed for room-based applications. Our products offer reliable performance and ease of installation.

Sensorswitch.com

Wireless Embedded Controls



1. Install the luminaires with embedded controls
2. Insert the pairing tool into the pinhole on the wall switch; press and hold any button for 6 seconds.
3. Once paired, each fixture will individually dim down to 10% brightness. All products will be fully functional.



SensorSwitch
WSXA SSA

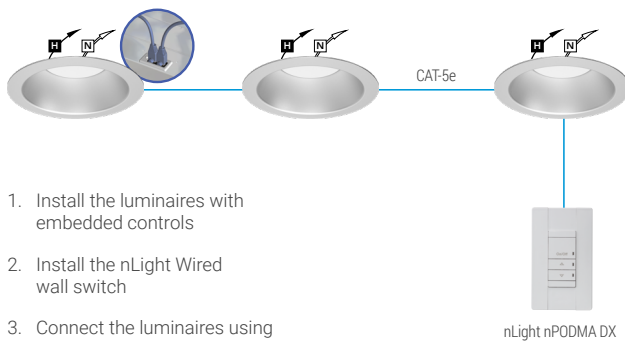


Single Lighting Controls Platform for Indoor & Outdoor Spaces

nLight® is your networked lighting controls platform, for indoor and outdoor applications, providing wired or wireless options. Scaling from room to campus-wide applications, it is the one platform that grows with your business today and tomorrow; to seamlessly address energy cost optimization, building code compliance, improved occupant comfort, and much more. nLight also interfaces with DALI®, BACnet®, DMX and additional third-party devices.

nlightcontrols.com

Wired Embedded Controls



1. Install the luminaires with embedded controls
2. Install the nLight Wired wall switch
3. Connect the luminaires using standard CAT-5e cables and the controls devices will automatically discover each other and work (plug and play)

Wireless Embedded Controls



1. Install the luminaires with embedded controls
2. Install the nLight AIR battery-powered wall switch
3. Use CLAIRITY+ mobile app to pair the fixtures with the wall switch and if desired, customize the sensor settings

UL924 Sequence of Operation

The below information applies to all nLight AIR devices with an EM option.

- EM devices will remain at their high-end trim and ignore wireless lighting control commands, unless a normal-power-sensed (NPS) broadcast is received at least every 8 seconds.
- Using the CLAIRITY+ mobile app, EM devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts.
- Only non-emergency rPP20, rLSXR, rSBOR, rSDGR, and nLight AIR luminaires with version 3.4 or later firmware can provide normal power sensing for EM devices. See specification sheets for control devices and luminaires for more information on options that support normal power sensing.