

## 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. Light engine and drivers are accessible from above or below ceiling.

Ceiling thickness range 1/2" to 1-1/2".

**OPTICS** — 55° cutoff

80CRI standard (90CRI optional)

**ELECTRICAL** — Adjustable lumen output with four module options.

MVOLT 120/277V 50/60Hz driver (0-10V & 120V Phase Dimming to 10% or 1% min dimming level). DALI driver dimming to 1% also available. Factory-installed 347V step-down transformer available.

FCC CFR Title 47 Part 15 Class A for 277V. FCC CFR Title 47 Part 15 Class B for 120V.

L80 @ 60,000 hours

3 SDCM

**LISTINGS** — Certified to US and Canadian safety standards. Title 24 compliant (90CRI, up to 1000lm).

Wet location, requires covered ceiling. Wallwash suitable for damp locations only. Some configurations are Energy Star certified, please visit [www.energystar.gov](http://www.energystar.gov) for specific products.

**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](http://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.

Catalog Number
Notes
Type

# LDN8 SWITCHABLE

8" Open LED  
New Construction Downlight



LDN8 AR LS		80CRI							
Lumen Output	Wattage	30K/80CRI		35K/80CRI		40K/80CRI		50K/80CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
ALO1 (500LM)	6	596	99	606	100	614	100	622	101
ALO1 (750LM)	9	897	100	912	101	923	102	935	102
ALO1 (1000LM)	13	1250	97	1272	98	1287	98	1303	99
ALO2 (1000LM)	12	1341	110	1363	111	1380	112	1397	112
ALO2 (1500LM)	19	1975	106	2009	108	2034	108	2059	109
ALO2 (2000LM)	25	2511	101	2553	102	2584	103	2617	103
ALO3 (2000LM)	25	2617	104	2662	105	2694	106	2728	107
ALO3 (2500LM)	32	3169	99	3222	100	3262	101	3303	102
ALO3 (3000LM)	38	3618	95	3679	96	3724	96	3771	97
ALO4 (4000LM)	39	3990	103	4071	105	4152	107	4193	108
ALO4 (4500LM)	44	3991	91	4072	93	4153	95	4194	95
ALO4 (5000LM)	49	3992	81	4073	83	4154	84	4195	85

### 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

## ORDERING INFORMATION

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

**Example:** LDN8 ALO2 SWW1 L08AR LSS MVOLT UGZ

LDN8																	
Series	Lumens †		Color temperature †		Aperture/Trim Color			Reflector Flange	Finish	Distribution		Voltage					
LDN8 8" Round	ALO1	500/750/1000lm	SWW1	3000K-3500K-4000K-5000K	L08 †	Downlight	AR	Clear	(blank)	Self-flange	LSS	Semi-specular	(blank)	Medium	MVOLT	120V - 277V	
	ALO2	1000/1500/2000lm			LW8	Wallwash	WR †	White painted	TRW †	White	LD	Matte diffused	LD	Wide (1.0s/mh)	347	347V	
	ALO3	2000/2500/3000lm					BR †	Black painted	TRBL †	Black	LS	Specular	WD	Wide (1.2s/mh)		step-down transformer supplied	
	ALO4	4000/4500/5000lm															
		Fixed Lumen Output															
		05LM	500lm		30K	3000K											
		07LM	750lm		35K	3500K											
		10LM	1000lm		40K	4000K											
		15LM	1500lm		50K	5000K											
		20LM	2000lm														
		25LM	2500lm														
		30LM	3000lm														
		40LM	4000lm														
		45LM	4500lm														
		50LM	5000lm														

Driver	Options	nLight Options
UGZ	Universal dimming to 10% 0-10V; line voltage dimming (120V)	NPS80EZ † nLight® network power/relay pack with 0-10V dimming
UGZ1	Universal dimming to 1% 0-10V; line voltage dimming (120V)	NPS80EZER † nLight® network power/relay pack with 0-10V dimming; ER controls fixtures on emergency circuit.
DALI †	DALI dimming to 1%	NLTAIR2 † nLight® Air enabled
D10	Minimum dimming 10% driver for use with JOT D1 Minimum dimming 1% driver for use with JOT	NLTAIRER2 † nLight® AIR Dimming Pack Wireless Controls. Controls fixtures on emergency circuit
D1	Minimum dimming 1% driver for use with JOT	NLTAIREM2 † nLight® AIR Dimming Pack Wireless Controls. UL924 Emergency Operation, via power interrupt detection. Iota Emergency Transfer System
	90CRI High CRI (90+)	ETS †
	AT † Airtight (IP55)	
	CP † Chicago Plenum	
	EL † Batterypack (10W constant power) Non-T20 Compliant, integral test switch	
	ELR † Batterypack (10W constant power) Non-T20 Compliant remote test switch	
	E10WCP † Batterypack (10W constant power) T20 Compliant, integral test switch	
	E10WCPR † Batterypack (10W constant power) T20 Compliant, remote test switch	
	JOT † Wireless room control with "Just One Touch" pairing	

### † Option Restrictions

Options	Restriction
	<b>Lumens and Color Temp restriction note:</b> Fixed Lumens and CCT must be specified together (for example: 10LM 30K).
L08, LW8	Reflectors ship separately (example: L08AR LL LSS TRIM). See accessories for detail on how to order separately.
AT	Standard for CP and IP55, not available with WW
E10WCPR	Not available EC1, EC6, QDS, CP, 347V, NPS80EZ ER, NLTAIRER2, NLTAIREM2, or ALO3 (2000-3000L) DALI.
E10WCP	Not available with EC1, EC6, AT, QDS, CP, 347V, NPS80EZ ER, NLTAIRER2, NLTAIREM2, ALO3 (2000-3000L) DALI, OR WL.
ELR	Not available EC1, EC6, QDS, CP, 347V, NPS80EZ ER, NLTAIRER2, NLTAIREM2, or ALO3 (2000-3000L) DALI.
EC6	Not Available with CP, QDS, ELR, E10WCP, or E10WCPR.
WL	Not available with WW, All CP is wet location, except WW (Damp). IP55 rated.
QDS	Not Available with CP, ELR, E10WCP, or E10WCPR.
EC1	Not Available with CP, QDS, ELR, E10WCP, or E10WCPR.
JOT	Not available with CP, NPS80EZ, NPS80EZ ER, NLTAIR2, NLTAIRER2, NLTAIREM2, UGZ, or DALI drivers. Max 4500 lumens. Fixed lumens and CCT only.
NPS80EZ	Not available with CP, QDS, DALI, D1, OR D10 drivers. 120V OR 277V only. Not available with 347V.
NPS80EZER	Not available with CP, QDS, ELR, E10WCP, E10WCPR, DALI, D1, OR D10 drivers. 120V OR 277V only. Not available with 347V.
NLTAIR2	Not available with CP, QDS, DALI, D1, OR D10 drivers. Non-emergency luminaires with this option can be used as a normal power sensing device for nLight AIR devices and luminaires with EM emergency options.
NLTAIRER2	Not available with CP, QDS, ELR, E10WCP, E10WCPR, DALI, D1, OR D10 drivers. Not available with 347V.
NLTAIREM2	Not available with CP, QDS, ELR, E10WCP, E10WCPR, DALI, D1, OR D10 drivers. See UL 924 Sequence of Operation table.
CP	Not available with, QDS, EC1, EC6, ELR, E10WCP, E10WCPR, 347V, JOT, NPS80EZ, NPS80EZ ER, NLTAIR2, NLTAIRER2, NLTAIREM2, D1, OR D10 drivers. Not available with square trim.
ETS	Not available with, QDS, ELR, E10WCP, E10WCPR, 347V, JOT, NPS80EZ, NPS80EZ ER, NLTAIR2, NLTAIRER2, NLTAIREM2, DALI, D1, OR D10 driver
DALI	Not available with fixed lumens or CCT. Max 4500 lumens.
WW	Not available with WL, EL, E10WCP.
TRW, TRBL	Available with clear (AR) reflector only.
WR, BR	Not available with a reflector finish
347V	Not available with CP, QDS, EL, ELR, E10WCP, E10WCPR, NLTAIRER2, ETS, NPS80EZ, NPS80EZER, ALO1 ROUND TRIM, 05 LUMENS ROUND TRIM, AND 07 ROUND TRIM.

Accessories: Order as a separate catalog number.	
LO8AR LL ** TRIM	8" clear, specular reflector (** specify finish LS, LSS, or LS)
LO8WR LL TRIM	8" white reflector
LO8BR LL TRIM	8" black reflector
LW8AR LL ** TRIM	8" wallwash clear, specular reflector (** specify finish LS, LSS, or LS)
LW8WR LL TRIM	8" wallwash white reflector
LW8BR LL TRIM	8" wallwash black reflector
GRA810 JZ	Oversized trim ring with 10" outside diameter
SCA8	Sloped Ceiling Adapter. Degree of slope must be specified (5D, 10D, 15D, 20D, 25D, 30D). Ex: SCA6 10D.

UL924 Sequence of Operation
The below information applies to all nLight AIR devices with an EM option.
<ul style="list-style-type: none"> <li>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.</li> <li>Using the CLAIRITY+ mobile app, EM devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts.</li> <li>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.</li> </ul>

## 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 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 illumination outperforms legacy 1400 lumen fluorescent emergency ballast.

Please contact us at [productsupportemergency@acuitybrands.com](mailto:productsupportemergency@acuitybrands.com) for any Emergency Battery related questions.

LUMEN OUTPUT MULTIPLIERS - FINISH	
Specular (LS)	1.05
Semi-specular (LSS)	1.00
Matte diffuse (LD)	0.85

LUMEN OUTPUT MULTIPLIERS - CCT			
3000K	3500K	4000K	5000K
0.98	1.0	1.01	1.03

LUMEN OUTPUT MULTIPLIERS - CRI	
80	1.0
90	0.874

### 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).

# LDN8 SWW

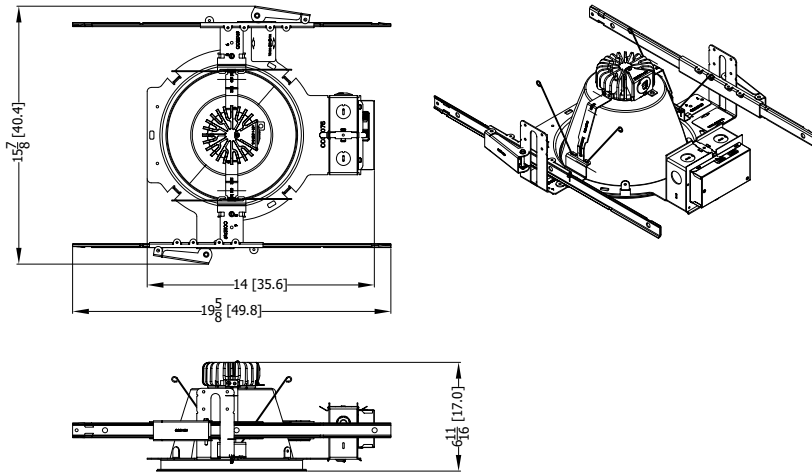
## PHOTOMETRY

LDN8 AR LS	90CRI								
	Wattage	30K/90CRI		35K/90CRI		40K/90CRI		50K/90CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
AL01 (500LM)	6	518	86	532	87	546	89	560	91
AL01 (750LM)	9	779	87	800	89	821	90	842	92
AL01 (1000LM)	13	1086	84	1116	86	1145	88	1175	89
AL02 (1000LM)	12	1165	95	1196	97	1228	99	1259	101
AL02 (1500LM)	19	1716	93	1763	94	1809	96	1856	98
AL02 (2000LM)	25	2181	88	2240	90	2299	92	2358	93
AL03 (2000LM)	25	2273	91	2335	92	2397	94	2458	96
AL03 (2500LM)	32	2753	86	2827	88	2902	90	2976	92
AL03 (3000LM)	38	3142	82	3228	84	3313	86	3398	87
AL04 (4000LM)	39	3311	86	3379	87	3447	89	3480	90
AL04 (4500LM)	44	3312	75	3380	77	3447	78	3481	79
AL04 (5000LM)	49	3313	67	3381	69	3448	70	3482	71

# LDN8 SWW

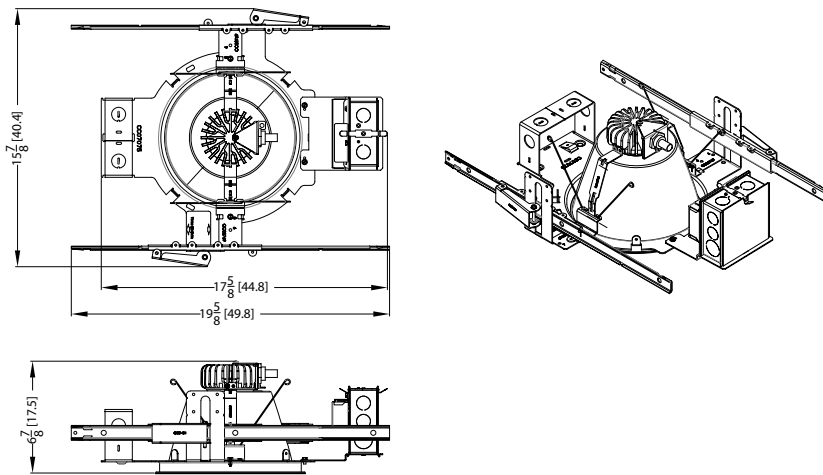
\* All dimensions are inches (centimeters) unless otherwise noted.

## LDN8 SWW1 500-3000LM



LDN8 SWW1 IC RATING	
AL01	IC
AL02	NON-IC
AL03	NON-IC

## LDN8 SWW1 CP 500-3000LM



### Notes

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

## DIMMER COMPATIBILITY

Not compatible with DALI or DMX dimmers. For specific compatible dimmers see below.

COMPATIBLE LINE VOLTAGE DIMMERS:						
Type	Forward Phase	ALO1 (500-1000lm)	ALO2 (1000-2000lm)	ALO3 (2000-3000lm)	ALO4 (3000-5000lm)	Comment
MLV	Sensorswitch WPD	YES	YES	YES	YES	
MLV	Sensorswitch CMR PDT10 ADC VLP	YES	YES	YES	YES	
MLV	Synergy ISD 600LV	YES, 2x *	YES	YES	YES	* min 2 fixtures
INC	Synergy ISD 600I	YES, 2x *	YES	YES	YES	* min 2 fixtures
MLV	Lutron Glyder GLV-600	YES	YES	YES	YES	
INC	Leviton SureSlide 6633	YES	YES	YES	YES	
MLV	Lutron Diva DVLV-600P	YES	YES	YES	YES	
MLV	Lutron Skylark SLV-600P	YES	YES	YES	YES	
INC	Lutron RadioRA 2 10ND	YES	YES	YES	YES	
MLV	Leviton SureSlide 6613-PLW	YES	YES	YES	YES	
INC	Lutron Diva DVCL-153P	YES	YES	YES	YES	
MLV	Leviton IPM06	YES, 2x *	YES	YES	YES	* min 2 fixtures
Type	Reverse Phase Dimmer Bank	ALO1 (500-1000lm)	ALO2 (1000-2000lm)	ALO3 (2000-3000lm)	ALO4 (3000-5000lm)	
ELV	Lutron Nova T NTELV-600	YES	YES	YES	YES	
ELV	Lutron Diva DVELV 600P	YES	YES	YES	YES	
ELV	Lutron Maestro MAELV 600	YES	YES	YES	YES	
ELV	Leviton Vizia VPE06-1LX	YES	YES	YES	YES	
ELV	Leviton Illumatech IPE04	YES	YES	YES	YES	
ELV	Control4 C4-APD 120 REVERSE PHASE	YES	YES	YES	YES	
Type	Miscellaneous Dimmers	ALO1 (500-1000lm)	ALO2 (1000-2000lm)	ALO3 (2000-3000lm)	ALO4 (3000-5000lm)	
PHA	Lutron RadioRA2 RRD-6NA	YES	YES	YES	YES	
PHA	Lutron Maestro PRO LED+ RRD-PRO	YES	YES	YES	YES	
Type	Control Systems	ALO1 (500-1000lm)	ALO2 (1000-2000lm)	ALO3 (2000-3000lm)	ALO4 (3000-5000lm)	
MLV	Lutron LP-RPM-4U	YES	YES	YES	YES	
PHA	Lutron LP-RPM-4A	YES	YES	YES	YES	
MLV	Lutron GRAPHIC EYE QSGRJ-3P	YES	YES	YES	YES	
PHA	Lutron PA Power Module PHPM-PA-120	YES	YES	YES	YES	
ELV	Lutron nLight nSP5PCD ELV	YES	YES	YES	YES	

COMPATIBLE 0-10V DIMMERS:							
Manufacturer	System Type	Description	P/N	ALO1 (500-1000lm)	ALO2 (1000-2000lm)	ALO3 (2000-3000lm)	ALO4 (3000-5000lm)
ACUITY	Wall Box	sensorswitch, dimming switch with multi-way option	SPODMRA	YES	YES	YES	YES
ACUITY	Wall Box	sensorswitch, wall switch sensor, occupancy controlled dimming	WSX D WH	YES	YES	YES	YES
ACUITY	Control System	nLight	nPP16D	YES	YES	YES	YES
ACUITY	Control System	nLight	nPS 80 EZ	YES	YES	YES	YES
ACUITY	Control System	nLight Air	rPP20 D	YES	YES	YES	YES
Lutron	Other	0-10V (sink or source) PowPak wireless dimming module	RMJ-5T-DV-B	YES	YES	YES	YES
Wattstopper	Control System	Digital single relay room controller (0-10V)	LMRC-211	YES	YES	YES	YES
Crestron	Control System	DIN Rail 0-10V fluorescent dimmer, 4 feeds, 4 channels (Green Light System)	DIN-4DIMFLV4	YES	YES	YES	YES
Lutron	Other	Grafik Eye 0-10V adapter	GRX-TVI	YES	YES	YES	YES
Leviton	Wall Box	Illumatech 0-10V	IP710-DLX	YES	YES	YES	YES
Lutron	Control System	Mounted in the Homeworks QS panel - 0-10V dimmer (sink or source)	GRX-TVM2	YES	YES	YES	YES
Lutron	Wall Box	Nova 0-10V wallbox dimmer (use with PP-120-H line voltage relay)	NTFTV	YES	YES	YES	YES
Lutron	Wall Box	Nova 0-10V wallbox dimmer (use with PP-120-H line voltage relay)	NTSTV-DV	YES	YES	YES	YES
Lutron	Wall Box	Nova T	NFTV	YES	YES	YES	YES
Leviton	Wall Box	Renior II 0-10V	AWSMG-7DW	YES	YES	YES	YES