

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

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 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

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

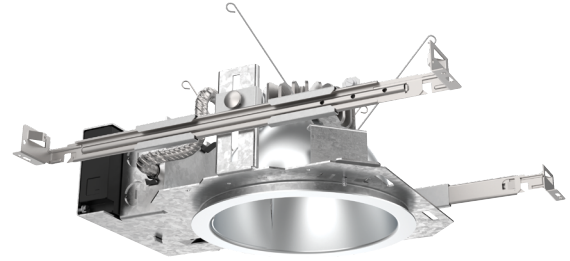
All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.

Catalog Number
Notes
Type

LDN6 SWITCHABLE

6" OPEN
New Construction Downlight



LDN6 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	605	100	615	101	623	102	630	102
ALO1 (750LM)	9	909	101	925	102	936	103	948	104
ALO1 (1000LM)	13	1268	98	1290	99	1306	100	1322	100
ALO2 (1000LM)	12	1360	112	1383	113	1400	113	1418	114
ALO2 (1500LM)	19	2004	108	2038	109	2063	110	2089	110
ALO2 (2000LM)	25	2547	103	2590	104	2622	104	2655	105
ALO3 (2000LM)	25	2655	106	2700	107	2733	108	2768	108
ALO3 (2500LM)	32	3214	101	3269	102	3309	103	3351	103
ALO3 (3000LM)	38	3670	96	3732	97	3778	98	3825	98
ALO4 (4000LM)	39	4035	104	4117	107	4199	109	4241	110
ALO4 (4500LM)	44	4453	101	4544	103	4635	105	4680	107
ALO4 (5000LM)	49	5345	108	5454	111	5563	113	5617	114

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

LDN6 SWW

ORDERING INFORMATION

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

Example: LDN6 ALO2 SWW1 L06AR LSS MVOLT UGZ

LDN6 Series	Lumens ‡	Color temperature ‡	Aperture/Trim Color	Reflector Flange	Finish	Distribution	Voltage	
LDN6 6" Round	ALO1 500/750/1000lm ALO2 1000/1500/2000lm ALO3 2000/2500/3000lm ALO4 4000/4500/5000lm Fixed Lumen Output 05LM 500lm 07LM 750lm 10LM 1000lm 15LM 1500lm 20LM 2000lm 25LM 2500lm 30LM 3000lm 40LM 4000lm 45LM 4500lm 50LM 5000lm	SWW1 3000K-3500K-4000K-5000K Fixed CCT 30K 3000K 35K 3500K 40K 4000K 50K 5000K	L06 Downlight LW6 Wallwash	AR Clear WR ‡ White painted BR ‡ Black painted	(blank) Self-flange TRW ‡ White TRBL ‡ Black	LSS Semi-specular LD Matte diffused LS Specular	(blank) Medium Wide (1.0s/mh) WD Wide (1.2s/mh)	MVOLT 120V - 277V 347 347V step-down transformer supplied

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

‡ Option Restrictions

Options	Restriction
	Lumens and Color Temp restriction note: Fixed Lumens and CCT must be specified together (for example: 10LM 30K).
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.	
LO6AR ** TRIM	6" clear, specular reflector (** specify finish LS, LSS, or LS)
LO6WR TRIM	6" white reflector
LO6BR TRIM	6" black reflector
LW6AR ** TRIM	6" wallwash clear, specular reflector (** specify finish LS, LSS, or LS)
LW6WR TRIM	6" wallwash white reflector
LW6BR TRIM	6" wallwash black reflector
GRA68 JZ	Oversized trim ring with 8" outside diameter
SCA6	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"> 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.

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 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.

LDN6 SWW

PHOTOMETRY

LDN6 AR LS		90CRI							
Lumen Output	Wattage	30K/90CRI		35K/90CRI		40K/90CRI		50K/90CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
ALO1 (500LM)	6	525	87	540	89	554	90	568	92
ALO1 (750LM)	9	790	88	811	90	833	92	854	93
ALO1 (1000LM)	13	1102	85	1132	87	1162	89	1191	90
ALO2 (1000LM)	12	1181	97	1213	99	1245	101	1277	103
ALO2 (1500LM)	19	1741	94	1788	96	1835	98	1882	99
ALO2 (2000LM)	25	2212	89	2272	91	2332	93	2392	95
ALO3 (2000LM)	25	2306	92	2369	94	2431	96	2494	97
ALO3 (2500LM)	32	2792	88	2868	89	2944	91	3019	93
ALO3 (3000LM)	38	3188	83	3274	85	3361	87	3447	88
ALO4 (4000LM)	39	3349	87	3417	88	3485	90	3520	91
ALO4 (4500LM)	44	3696	84	3771	86	3847	88	3885	88
ALO4 (5000LM)	49	4436	90	4527	92	4617	94	4662	95

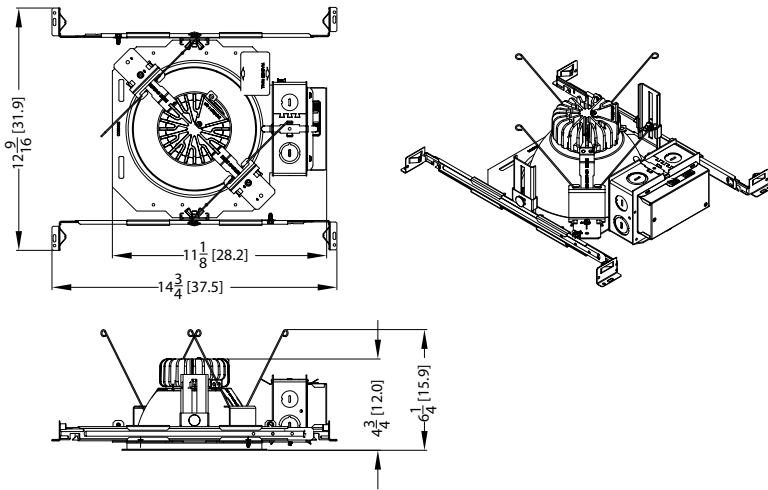
LDN6WW AR LS		80CRI							
Lumen Output	Wattage	30K/80CRI		35K/80CRI		40K/80CRI		50K/80CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
ALO1 (500LM)	6	602	100	612	101	620	101	628	102
ALO1 (750LM)	9	905	101	921	102	932	103	944	103
ALO1 (1000LM)	13	1263	98	1284	99	1300	99	1316	100
ALO2 (1000LM)	12	1354	111	1377	112	1394	113	1411	113
ALO2 (1500LM)	19	1995	108	2029	109	2054	109	2080	110
ALO2 (2000LM)	25	2536	102	2579	103	2610	104	2643	104
ALO3 (2000LM)	25	2643	105	2688	106	2721	107	2755	108
ALO3 (2500LM)	32	3200	100	3255	101	3294	102	3336	103
ALO3 (3000LM)	38	3654	96	3716	97	3761	97	3808	98
ALO4 (4000LM)	39	4007	104	4089	106	4171	108	4212	109
ALO4 (4500LM)	44	4423	101	4513	103	4603	105	4648	106
ALO4 (5000LM)	49	4810	98	4908	100	5006	102	5055	103

LDN6WW AR LS		90CRI							
Lumen Output	Wattage	30K/90CRI		35K/90CRI		40K/90CRI		50K/90CRI	
		Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW	Delivered Lumens	LPW
ALO1 (500LM)	6	523	86	537	88	551	90	566	92
ALO1 (750LM)	9	787	88	808	89	829	91	850	93
ALO1 (1000LM)	13	1097	85	1127	87	1156	88	1186	90
ALO2 (1000LM)	12	1176	96	1208	98	1240	100	1272	102
ALO2 (1500LM)	19	1733	93	1780	95	1827	97	1874	99
ALO2 (2000LM)	25	2203	89	2262	91	2322	92	2382	94
ALO3 (2000LM)	25	2296	91	2358	93	2421	95	2483	97
ALO3 (2500LM)	32	2780	87	2855	89	2931	91	3006	93
ALO3 (3000LM)	38	3174	83	3260	85	3346	86	3432	88
ALO4 (4000LM)	39	3326	86	3394	88	3462	90	3496	90
ALO4 (4500LM)	44	3671	84	3746	85	3821	87	3858	88
ALO4 (5000LM)	49	3992	81	4073	83	4155	84	4196	85

LDN6 SWW

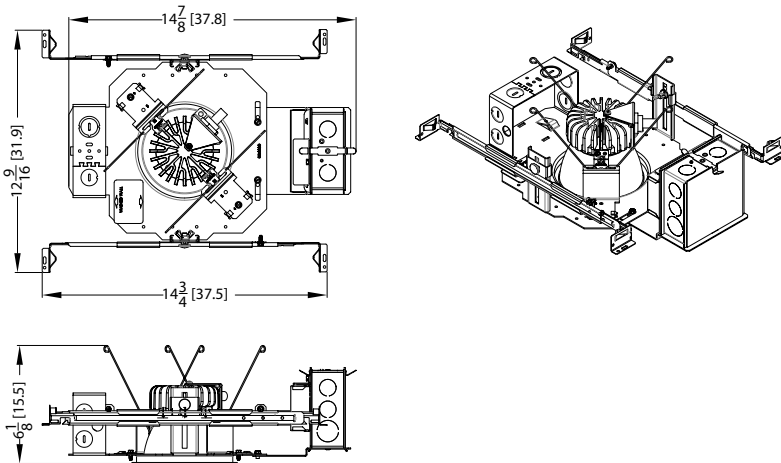
* All dimensions are inches (centimeters) unless otherwise noted.

LDN6 SWW1 500-3000LM



LDN6 SWW1 IC RATING	
AL01	IC
AL02	NON-IC
AL03	NON-IC

LDN6 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