

Features

The High Efficacy (LLHE48) Wet Tube series is a small form factor high performance constant voltage LED strip. Designed to deliver best in class efficacy while operating at low temperature, LLHE48 Wet Tube delivers constant light output, outstanding color consistency and dimming performance without the need of an additional heat sink. Available in 3 different outputs with a tight LED pitch of 0.25", LLHE48 Wet Tube offers a clean dot free illumination in most Luminii profiles when paired with our frosted lenses.



Mounting

LED strip is equipped with 3M™ adhesive transfer tape (9472LE).

Applications

Applications: outdoor / wet location, above cabinet, cove lighting, counter accent, architectural accents, under banisters, decks, gazebos, barbeque stations and wet bars.

Approvals

IP65, IP67 and IP68 rated.

Operating voltage

24 VDC

Average Life (L70)

50,000 hours

Warranty

3 years



Technical information

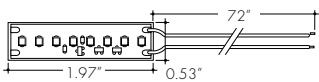
TYPE	LLHE48WET-T			
OUTPUT OPTIONS	LO	SO	MO	HO
Lumens Output (3000K)	231 lm/ft	330 lm/ft	441 lm/ft	694 lm/ft
Average Power Consumption (for a 4' section)	1.9 W/ft	2.8 W/ft	3.5 W/ft	6.5 W/ft
Efficacy	122 lm/W	118 lm/W	126 lm/W	107 lm/W
Cutting Increment (in)	1.97"			
Pitch Length	0.25"			
Max Run Length (in series)	48 ft	42 ft	33 ft	21 ft
Dimensions	0.53"W x 0.24" H			

CCT	Multiplier (reference - 3000K)	TM-30			
		CRI	R _f	R _g	R ₉
2700K	0.94	92	90	99	58
3000K	1.00	92	89	99	57
3500K	1.02	92	89	99	60
4000K	1.02	92	86	94	71

Section Start/End Options

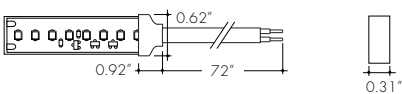
SL65

72" Soldered Leads, IP65 rated



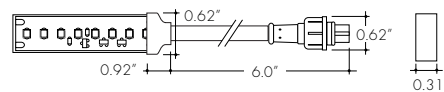
SL68

72" Soldered Leads, IP68 rated



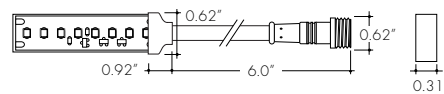
LF

Female Quick Connect End, IP67 rated



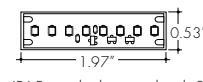
LM

Male Quick Connect End, IP67 rated

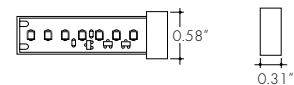


NC

No Connector



IP65 rated when used with SL65 selection



IP67 rated when used with LM or LF selection

IP68 rated when used with SL68 selection

Ordering code

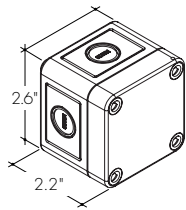
MODEL	OUTPUT	CCT	SECTION START ¹	SECTION END ¹	LENGTH
LLHE48WET-T-LineLED HE48 Wet Tube	LO-Low SO-Standard MO-Medium HO-High	27K-2700K 30K-3000K 35K-3500K 40K-4000K	SL65-IP65 Soldered lead wires (72") SL68-IP68 Soldered lead wires (72") LF-IP67 Female Quick Connect LM-IP67 Male Quick Connect NC-No Connector	SL65-IP65 Soldered lead wires (72") SL68-IP68 Soldered lead wires (72") LF-IP67 Female Quick Connect LM-IP67 Male Quick Connect NC-No Connector	Ordered in one foot increments. See chart above for max run length.

¹- IP rating of strip is equal to the lowest IP rating of section and start end options.

Accessories

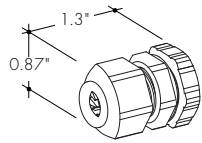
LVSP-WET

Splice box: wet rated, low voltage, gray



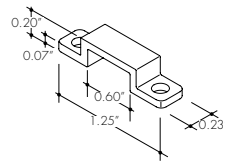
LVSP-WET-CM

Splice box connector, low voltage, gray



CL2

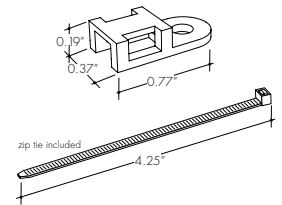
Mounting clip



Recommended every 12" when LineLED strip is facing down

LL-ZIP

Cable/Wire Strain Relief Clip



Lens Options / Light Transmission



Clear



Half (50%)
Frosted



Graze



Frosted



Flat
Frosted



Raised



Square
Frosted

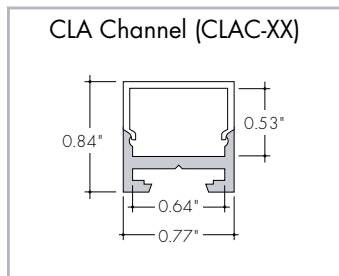


Round Square
Frosted



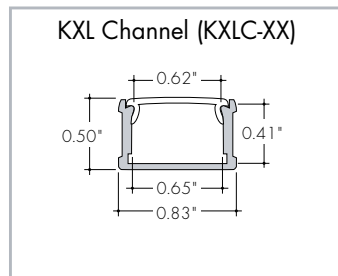
13°
Semi-Frosted

Not compatible with LF, LM, or IP68 selections

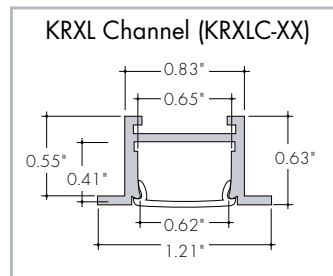


62% 65%

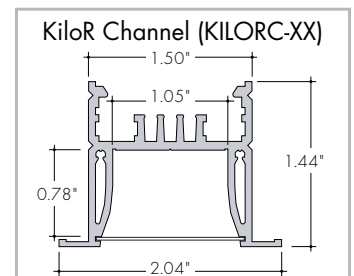
Not compatible with LF, LM, or IP68 selections



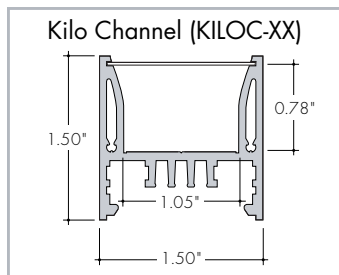
79% 66% 49%



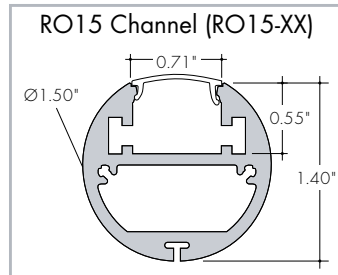
79% 66% 49%



85% 75%



85% 75%

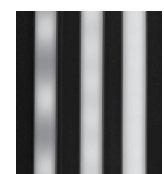


65% 41%

LED Dotting per Extrusion

using the frosted lens option

Extrusion	LED Model LLHE48WET
KXLC, KRXLC	ND
KLCL, KRCLC	SD
CLAC	ND
RO15	ND



CD SD ND
CD - Clear Dotting
SD - Slight Dotting
ND - No Dotting

Installation

All mounting channels are field cuttable using miter saw with circular blade suitable for cutting aluminum.

Ordering

Extrusions are sold separately. View respective specsheets for details on ordering extrusions and their accessories (endcaps, mounting brackets, etc).

Power Consumption

Tested at full power with PDC Series power supplies.

Nominal Length	HE48LO		HE48SO		HE48MO		HE48HO	
	W/ft	Total Wattage	W/ft	Total Wattage	W/ft	Total Wattage	W/ft	Total Wattage
1	1.7	1.7	2.5	2.5	3.5	3.5	5.7	5.7
2	1.9	3.7	2.7	5.4	3.5	7.0	7.3	14.7
3	2.0	5.7	2.8	8.2	3.5	10.2	7.1	20.6
4	1.8	7.1	2.8	11.2	3.5	13.9	6.5	25.4
5	1.8	9.0	3.0	14.6	3.6	17.6	6.4	31.6
6	1.9	11.3	2.9	17.9	3.5	21.4	6.4	38.7
7	1.8	13.1	2.9	20.8	3.5	25.1	6.2	44.1
8	1.8	14.7	2.9	23.3	3.6	28.5	6.2	49.4
9	1.8	16.4	2.9	25.9	3.5	31.9	6.1	55.2
10	1.8	18.1	2.9	28.6	3.5	35.5	6.1	60.5
11	1.7	19.1	2.8	31.2	3.5	38.9	6.4	70.2
12	1.7	20.4	2.9	34.4	3.5	42.3	6.1	73.4
13	1.7	22.1	2.8	36.8	3.5	45.7	5.9	76.9
14	1.6	22.8	2.8	39.3	3.5	48.8	5.7	79.4
15	1.6	23.5	2.8	41.9	3.5	52.1	5.5	82.0
16	1.6	25.6	2.8	45.3	3.5	56.5	5.2	84.3
17	1.7	28.5	2.8	48.1	3.5	59.4	5.0	86.2
18	1.7	30.4	2.8	51.0	3.5	62.8	4.9	88.1
19	1.8	33.6	2.8	53.3	3.5	65.8	4.7	90.2
20	1.8	35.8	2.8	56.0	3.5	69.0	4.6	91.5
21	1.8	37.7	2.8	59.4	3.4	71.4	4.4	93.1
22	1.8	39.5	2.8	61.3	3.3	73.5		
23	1.8	41.4	2.8	64.4	3.3	75.4		
24	1.8	43.1	2.8	66.0	3.2	77.2		
25	1.9	46.2	2.7	68.1	3.2	78.8		
26	1.9	48.2	2.7	70.7	3.1	79.8		
27	1.9	50.4	2.7	72.0	3.0	81.4		
28	1.9	52.2	2.6	73.6	3.0	82.9		
29	1.9	53.9	2.6	74.7	2.9	84.2		
30	1.9	57.7	2.5	76.1	2.9	86.1		
31	1.9	59.6	2.5	77.0	2.8	87.6		
32	1.9	61.4	2.4	77.7	2.8	89.2		
33	1.9	63.3	2.4	78.9	2.7	90.7		
34	1.9	65.0	2.3	78.0				
35	1.9	65.4	2.2	78.1				
36	1.9	67.1	2.2	79.5				
37	1.9	69.3	2.2	80.4				
38	1.9	71.1	2.1	80.9				
39	1.9	73.0	2.1	81.0				
40	1.9	74.7	2.0	81.2				
41	1.9	76.0	2.0	82.6				
42	1.8	77.3	2.0	83.0				
43	1.8	78.6						
44	1.8	79.9						
45	1.8	81.1						
46	1.8	81.8						
47	1.8	82.5						
48	1.7	83.1						

Voltage Drop Calculator

The below chart assumes nominal voltage of 24 Volts and a Voltage Drop Allowance of 3% through the wire

Wattage [W]	Maximum Wire Length From Power Supply to Start of Run [ft]						
	12 AWG	14 AWG	16 AWG	18 AWG	20 AWG	22 AWG	24 AWG
5	1088.2	684.4	430.3	270.6	170.2	107.1	67.3
10	544.1	342.2	215.1	135.3	85.1	53.5	33.7
15	362.7	228.1	143.4	90.2	56.7	35.7	22.4
20	272.0	171.1	107.6	67.7	42.6	26.8	16.8
25	217.6	136.9	86.1	54.1	34.0	21.4	13.5
30	181.4	114.1	71.7	45.1	28.4	17.8	11.2
35	155.5	97.8	61.5	38.7	24.3	15.3	9.6
40	136.0	85.5	53.8	33.8	21.3	13.4	8.4
45	120.9	76.0	47.8	30.1	18.9	11.9	7.5
50	108.8	68.4	43.0	27.1	17.0	10.7	6.7
55	98.9	62.2	39.1	24.6	15.5	9.7	6.1
60	90.7	57.0	35.9	22.6	14.2	8.9	5.6
65	83.7	52.6	33.1	20.8	13.1	8.2	5.2
70	77.7	48.9	30.7	19.3	12.2	7.6	4.8
75	72.5	45.6	28.7	18.0	11.3	7.1	4.5
80	68.0	42.8	26.9	16.9	10.6	6.7	4.2
85	64.0	40.3	25.3	15.9	10.0	6.3	4.0
90	60.5	38.0	23.9	15.0	9.5	5.9	3.7
96	56.7	35.6	22.4	14.1	8.9	5.6	3.5

Power Supplies

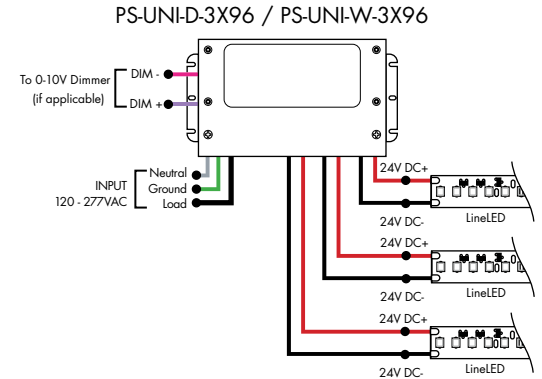
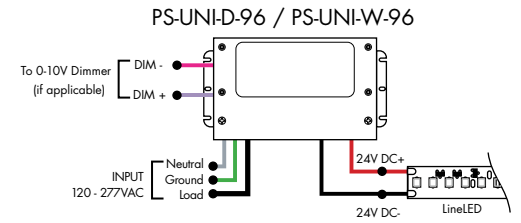
See Power Supply instructions and spec sheet for wiring information. For a complete list of compatible dimmers, see Compatible Dimming Chart on the Resources page.

Ordering Code Universal Dimming Power Supplies 1% 120VAC - 277VAC

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT
PS-Power Supply, 120-277VAC	UNI-0-10V Dimming, Phase Dimming	D-Dry W-Wet	30-30 Watts 60-60 Watts 96-96 Watts 3x96-3x96 Watts	24-24 VDC

Compatibility: View a complete list of compatible dimmers on product page [\(Link\)](#)

0-10V - 1% dimming
MLV/ELV/TRIAC - 1% dimming, consult dimming compatibility chart



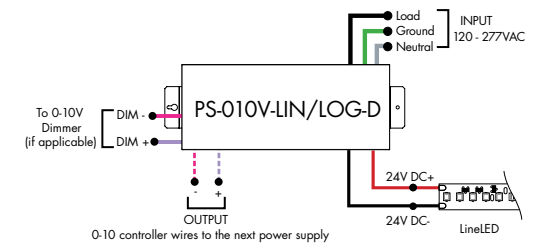
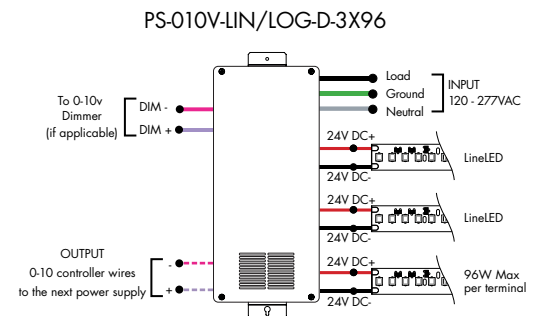
MODELS	PS-UNI-W-30W	PS-UNI-W-60W	PS-UNI-W-96W	PS-UNI-W-3X96W
Length	6.50"	7.40"	8.66"	11.85"
Width	3.73"	3.73"	3.73"	4.32"
Depth	1.61"	1.61"	1.61"	1.81"

MODELS	PS-UNI-D-30W	PS-UNI-D-60W	PS-UNI-D-96W	PS-UNI-D-3X96W
Length	8.77"	8.77"	8.11"	9.94"
Width	4.27"	4.27"	5.60"	7.61"
Depth	1.83"	1.83"	1.83"	2.02"

Ordering Code 0-10V Dimming Power Supplies 0.1% 120VAC - 277VAC

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT
PS-Power Supply, 120-277VAC	010V-LIN-0-10V Dimming (0.1%), Linear 010V-LOG-0-10V Dimming (0.1%), Logarithmic	D-Dry	96-96 Watts 3X96-3x96 Watts	24-24 VDC

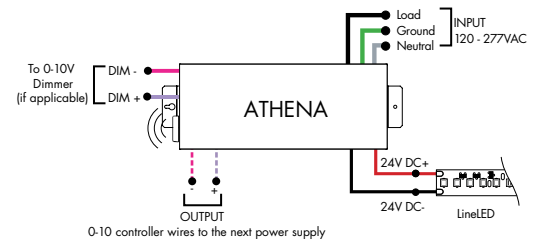
MODELS	96W	3X96
Length	14.40"	15.00"
Width	5.20"	6.62"
Depth	2.60"	4.45"



Athena 0-10V LED Driver

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT	FEATURE
PS-Power Supply, 120-277VAC	010V-LIN-0-10V Dimming, Linear 010V-LOG-0-10V Dimming, Logarithmic	D-Dry	96-96 W	24-24 VDC	AWNR-Athena

MODELS	96W
Length	14.40"
Width	5.20"
Depth	2.60"



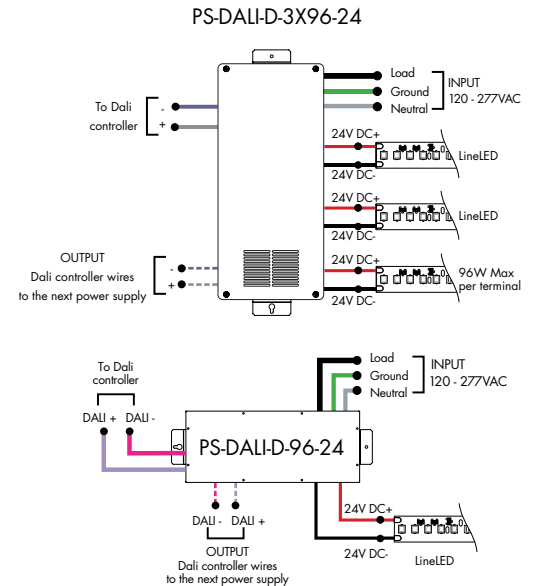
Power Supplies

See Power Supply instructions and spec sheet for wiring information. For a complete list of compatible dimmers, see Compatible Dimming Chart on the Resources page.

Ordering Code DALI1 Dimming Power Supplies 0.1% 120VAC - 277VAC

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT
PS-Power Supply, 120-277VAC	DALI-DALI (0.1%)	D-Dry	96-96 Watts 3X96-3X96 Watts	24-24 VDC

Model	96W	3X96
Length	14.40"	15.00"
Width	5.20"	6.62"
Depth	2.60"	4.56"

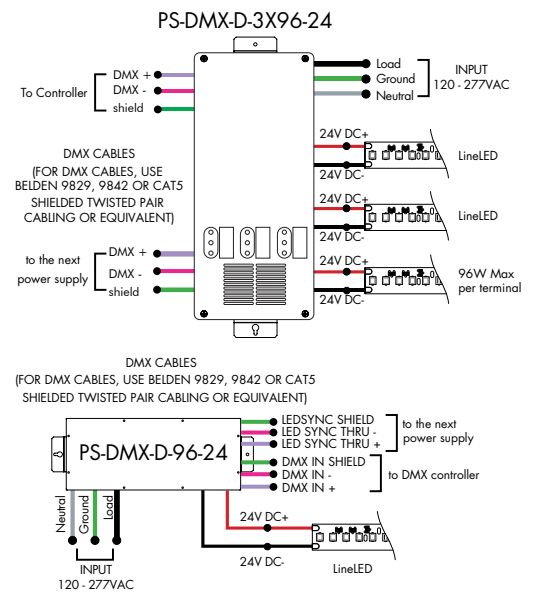


Ordering Code DMX Dimming Power Supplies 0.1% 120VAC - 277VAC Requires Zonal Control

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT
PS-Power Supply, 120-277VAC	DMX-DMX (0.1%)	D-Dry	96-96 Watts 3X96-3X96 Watts	24-24 VDC

*Zonal control power supplies. Control multiple tapes/zones using DMX channels.

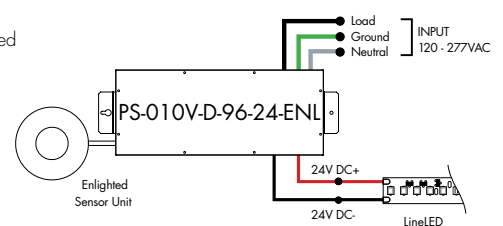
MODELS	96W	3X96
Length	14.40"	15.00"
Width	5.20"	6.62"
Depth	2.60"	4.56"



Ordering Code Enlighted Enabled Dimming Power Supplies 1% 120VAC - 277VAC

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT	FEATURE
PS-Power Supply, 120-277VAC	010V-0-10V Dimming (1%)	D-Dry	96-96 Watts	24-24 VDC	ENL-0-10V Enlightened

Model	96W
Length	14.40"
Width	5.20"
Depth	2.60"

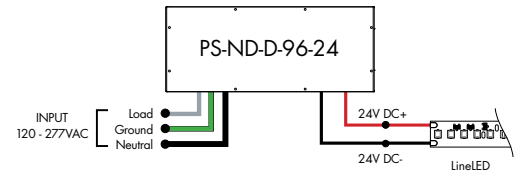


Power Supplies

See Power Supply instructions and spec sheet for wiring information. For a complete list of compatible dimmers, see Compatible Dimming Chart on the Resources page.

Ordering Code Non-Dimming Power Supply 120VAC - 277VAC

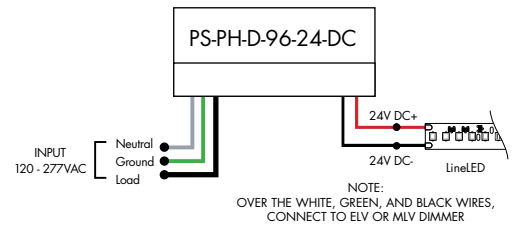
MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT
PS-Power Supply, 120-277VAC	ND-Non Dimming	D-Dry	96-96 Watts	24-24 VDC



MODELS	96W
Length	14.40"
Width	5.20"
Depth	2.60"

Ordering Code Phase Dimming Power Supply 1% 120VAC - 277VAC

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT	OUTPUT CONTROL
PS-Power Supply, 120-277VAC	PH-Phase Dimming (Triac, ELV, MLV)	D-Dry	96-96 Watts	24-24 VDC	DC-Direct Current

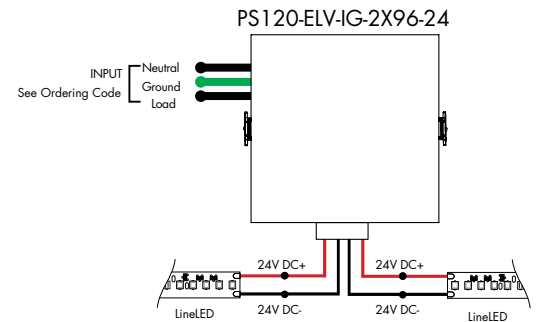


MLV/ELV/TRIAC - 1% dimming, consult dimming compatibility chart ([link](#))

MODELS	96W
Length	8.25"
Width	4.10"
Depth	1.56"

Ordering Code In-Ground Power Supplies

MODEL	INPUT CONTROL	ENVIRONMENT	WATTAGE	OUTPUT
PS120-Power Supply, 120VAC PS240-Power Supply, 240VAC PS277-Power Supply, 277VAC	ELV-ELV Dimming (1%)	IG-In Ground	2X96-2X96 Watts	24-24 VDC



MODELS	2X96W
Length	8.40"
Width	8.30"
Depth	8.10"

Power Supplies

See Power Supply instructions and spec sheet for wiring information. For a complete list of compatible dimmers, see Compatible Dimming Chart on the Resources page.



Luminii is a Lutron OEM Advantage Partner

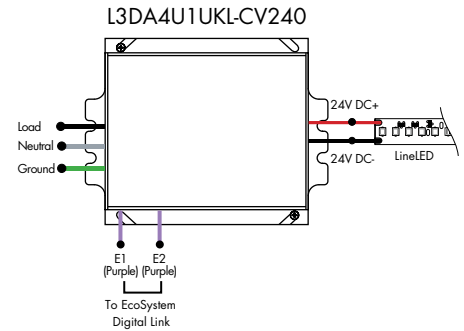
Lutron Power Supplies 1%

MODEL

L3DA4U1UKL-CV240

HiLume™ 1% EcoSystem Voltage LED driver
40W max

MODELS	L3DA4U1UKL-CV240
Length	4.98"
Width	4.00"
Depth	2.62"



Luminii is a Lutron OEM Advantage Partner

Lutron Power Supplies 0.1%

MODEL

L3D0-96W24V-U

HiLume™ 0.1% EcoSystem Voltage LED Driver with Soft-On, Fade-to-Black™
96W max

MODELS	L3D0
Length	10.50"
Width	5.50"
Depth	2.00"

