# Linear Illumination System





#### **Features**

- Extruded aluminum linear wall mount system providing both direct and indirect light.

  24VDC Class 2 fixtures made
- to order up to 96".
- Suitable for wall mount applications
- Class 2 listed for damp locations
- Dot free even illumination
- Direct lumens output is 42.5% of total lumens output from Technical Information.
- High Color Quality options offer premium quality and vibrant colors with R9 values up to 97
- High Efficacy options offer best in class output and efficacy with over 780 lm/ft and up to 55 lm/W
- Proprietary strong bond solder method handles up to 50 lbs of pull force on wire leads and connectors
- 5 Year warranty



### Finish Options (see page 2 for additional information)

Silver Anodized Black

Bronze

☐ White Matte Black Warm Nickel









### **Technical Information**

MODEL	н	igh Color Quali	ity		High Efficacy			
OUTPUT OPTIONS	7250	72HO	72VHO	HE48LO	HE48SO	HE48MO	HE48HO	HE64VHO
Lumens Output (3000K) (with a Frosted Lens)	215 lm/ft	349 lm/ft	425 lm/ft	209 lm/ft	290 lm/ft	387 lm/ft	621 lm/ft	786 lm/ft
Average Power Consumption (for a 4' section)	5.6 W/ft	9.6 W/ft	12 W/ft	3.8 W/ft	5.6 W/ft	7 W/ft	13 W/ft	15 W/ft
Efficacy	38 lm/W	36 lm/W	35 lm/W	55 lm/W	52 lm/W	55 lm/W	48 lm/W	52 lm/W
Max Run Length (in series)	20 ft	16 ft	11 ft	24 ft	21 ft	17 ft	12 ft	8 ft
Max Ambient Temperature*	50°C [122°F]	40°C [104°F]	30°C [95°F]		50°C [122°F]		30°C [95°F]	25°C [77°F]

<sup>\*</sup>Max Ambient Temperature to maintain L70 of 50k+ hours. Exceeding Max Ambient Temperature may result in decreased life/output. Consult Technical Support for specific inquiries

	High Color Quality (72)											
CCT	Multiplier	TM-30										
ССТ	(reference - 3000K)	CRI	$R_{f}$	$R_g$	R9							
1900K	0.55	96	94	97	90							
2200K	0.70	96	95	101	89							
2400K	0.72	98	97	101	91							
2700K	0.74	97	96	101	91							
3000K	1.00	97	95	104	97							
3500K	1.02	97	94	105	97							
4100K	1.07	97	90	99	97							

High Eff	icacy (HE	48/HE64)
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сст	Multiplier		TM	-30	
	(reference - 3000K)	CRI	Rf	$R_g$	R9
2200K	0.73	92	91	97	42
2500K	0.81	93	96	96	62
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

## **Ordering Code**

MODEL	LENGTH1	OUTPUT	CCT	LENS <sup>2</sup>	MOUNTING	FINISH <sup>3</sup>	POWERFEED
	-	-	-	-			-
LUCW-Luceo Wall	24" - 96" 1" increments	72SO-Standard 72HO-High 72VHO-Very High	19K-1900K 22K-2200K 24K-2400K 27K-2700K 30K-3000K 35K-3500K 41K-4100K	<b>F</b> -Frosted	RND-Round Brackets REC-Rectangle Brackets	SA-Silver Anodized BK-Black BZ-Bronze WH-White MBK-Watte Black WN-Warm Nlickel AB-Aged Brass PG-Polished Gold <sup>4</sup>	R - Right Back L - Left Back
	24" - 96" 2" increments	HE48LO-Low HE48SO-Standard HE48MO-Medium HE48HO-High HE64VHO-Very High	22K - 2200K 25K - 2500K 27K - 2700K 30K - 3000K 35K - 3500K 40K - 4000K			CH-Chrome <sup>4</sup>	

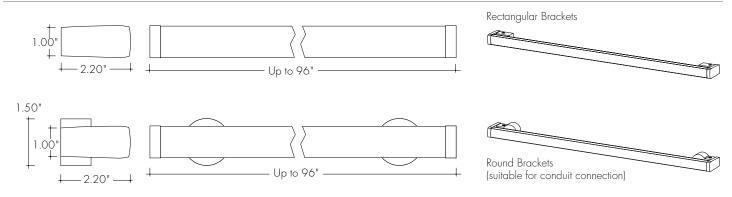
<sup>1 -</sup> Custom lengths and increments are available, please consult Inside Sales with specific request.

2 - All High Efficacy options can be used to comply with Title 24 JA8. High Color Quality options can be used to comply with Title 24 JA8 depending on Output, CCT, and lens selections. See multiplier charts to calculate specific efficacies.

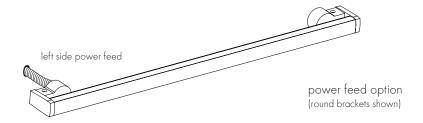
<sup>3</sup> - Non SA finishes may have extended lead times. Custom RALs are available, please consult Inside Sales with specific required 4 - Polished Gold finishes have a maximum fixture length of 48", and Chrome finishes have a maximum fixture length of 72".



### **Product Dimensions**

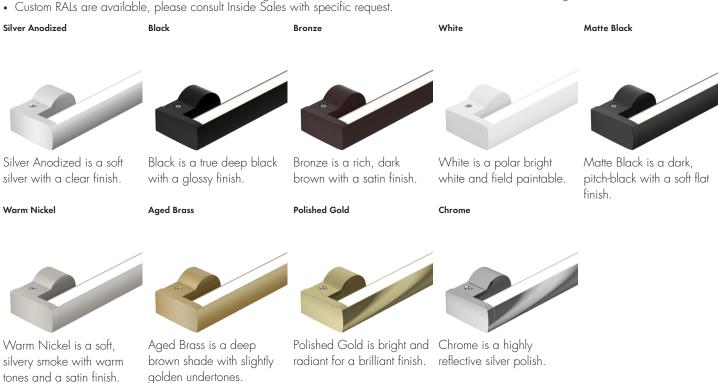


### **Power Feed Options**



### **Finish Options**

- Finish options are available in a wide variety, allowing for complete customization of style and aesthetic.
- Non Silver Anodized finishes may have extended lead times.
- Polished Gold finishes have a maximum fixture length of 48", and Chrome finishes have a maximum fixture length of 72".





# **Light Transmission and Dotting**

### Lens/Accessory

Output Options	Frosted
72SO	ND
72HO	ND
72VHO	ND
HE48LO	ND
HE48SO	ND
HE48MO	ND
HE48HO	ND
HE64VHO	ND
Transmission Percentage	100%



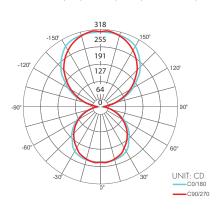
CD - Clear Dotting

**SD** - Slight Dotting **ND** - No Dotting

## **Photometry**

### LUC-48-72VHO-30K-F

Luceo, 4ft, 3000K, VHO, Frosted Lens, Direct/Indirect Mode



### Zonal Lumen Summary 3000K

		•
Zone	Lumen	% Fixture
0-30	188	11.1%
0-40	311	18.3%
0-60	557	32.8%
0-90	723	42.5%
0.180	1,600	100.0%

Total 📗

Beam Angle
194°



# **Power Consumption**

Tested at Full Power with PDC Series power supplies.
Standard Nominal Lengths offered provide minimal shadowing. For alternate lengths, please consult Inside Sales with specific request.

### High Color Quality (72)

Nominal Length	Actual Length		Watts	I	Nominal Length	Actual Length		Watts	I	Nominal Length	Actual Length		Watts	I
(in)	Longin	SO	НО	VHO	(in)	Longin	SO	НО	VHO	(in)	Longin	SO	НО	VHO
12	_	_	-	-	47	46 7/16	20.6	32.9	42.3	82	81 3/16	34.3	53.1	67.5
13	-	_	_	_	48	47 10/16	21.3	33.9	43.4	83	82 6/16	34.7	53.6	68.8
14	-	-	-	-	49	48 12/16	21.8	34.6	44.2	84	83 8/16	35.2	54.4	70.7
15	_	_	_	_	50	49 15/16	22.2	35.2	45.0	85	84 11/16	35.5	54.9	72.0
16	_	_	_	_	51	-	_	_	_	86	85 13/16	35.9	55.4	72.4
17	_	_	_	_	52	51 1/16	22.7	36.2	46.3	87	87	36.5	56.1	73.1
18	-	_	_	_	53	52 4/16	23.1	36.8	47.1	88	-	_	_	_
19	-	-	-	-	54	53 6/16	23.5	37.4	48.0	89	88 2/16	36.9	56.6	73.5
20	-	_	_	_	55	54 9/16	24.1	38.4	49.2	90	89 5/16	37.3	57.1	74.0
21	-	-	_	-	56	55 12/16	24.5	39.0	50.0	91	90 7/16	37.7	57.6	74.4
22	_	_	-	_	57	56 14/16	25.0	39.6	50.8	92	91 10/16	38.3	58.4	75.3
23	-	_	-	_	58	-	_	_	_	93	92 12/16	38.7	59.0	76.0
24	23 5/16	10.2	17.1	22.6	59	58 1/16	25.6	40.5	52.0	94	93 15/16	39.1	59.7	76.7
25	24 7/16	10.7	17.8	23.5	60	59 3/16	26.1	41.1	52.8	95	-	_	_	_
26	25 10/16	11.4	18.9	24.9	61	60 6/16	26.5	41.7	53.6	96	95 1/16	39.8	60.6	77.7
27	26 12/16	11.9	19.7	25.7	62	61 8/16	27.1	42.6	54.7	97	-	_	_	_
28	27 15/16	12.3	20.5	26.6	63	62 11/16	27.5	43.1	55.4	98	-	-	-	-
29	-	-	-	-	64	63 13/16	27.9	43.7	56.1	99	-	-	-	-
30	29 1/16	13.1	21.6	27.8	65	65	28.5	44.5	57.1	100	-	_	-	-
31	30 4/16	13.6	22.4	28.7	66	-	-	_	_	101	-	-	_	_
32	31 6/16	14.0	23.1	29.6	67	66 2/16	28.9	45.0	57.8	102	-	-	-	-
33	32 9/16	14.7	24.1	31.0	68	67 5/16	29.3	45.5	58.4	103	-	_	_	_
34	33 12/16	15.1	24.7	31.9	69	68 7/16	29.6	45.9	59.1	104	-	_	-	-
35	34 14/16	15.5	25.4	32.8	70	69 10/16	30.2	46.5	60.0	105	-	_	_	_
36	-	-	-	-	71	70 12/16	30.5	47.0	60.6	106	-	-	-	-
37	36 1/16	16.2	26.3	34.2	72	71 15/16	30.8	47.4	61.3	107	-	_	_	_
38	37 3/16	16.6	26.9	35.1	73	-	_	_	_	108	-	_	_	_
39	38 6/16	17.1	27.6	35.9	74	73 1/16	31.4	48.1	62.1	109	-	_	_	_
40	39 8/16	17.7	28.5	37.2	75	74 4/16	31.8	48.8	62.5	110	-	_	_	_
41	40 11/16	18.1	29.2	38.0	76	75 7/16	32.1	49.4	62.9	111	-	_	_	_
42	41 13/16	18.5	29.8	38.8	77	76 9/16	32.7	50.4	63.5	112	-	_	_	_
43	43	19.2	30.8	40.0	78	77 12/16	33.1	51.1	63.9	113	_	_	_	_
44	_	_	_	_	79	78 14/16	33.5	51.7	64.3	114	_	_	_	_
45	44 2/16	19.6	31.5	40.8	80	_	_	_	_	115	_	_	_	_
46	45 5/16	20.1	32.2	41.5	81	80 1/16		52.5	66.2	116	_	_	_	_
		1	l	I			1					1	l	l



# **Power Consumption**

Tested at Full Power with PDC Series power supplies.
Standard Nominal Lengths offered provide minimal shadowing. For alternate lengths, please consult Inside Sales with specific request.

### High Efficacy (HE48)

Nominal	Actual		W	atts		Nominal	Actual		W	atts		Nominal	Actual		W	atts	
Length (in)	Length	LO	so	МО	НО	Length (in)	Length	LO	so	МО	но	Length (in)	Length	LO	so	МО	но
12	-	-	-	-	_	47	46 9/16	14.3	22.6	27.5	47.9	82	-	-	-	-	-
13	-	-	-	-	-	48	-	-	-	-	-	83	82	22.6	38.4	47.6	78.5
14	-	-	_	-	-	49	48 9/16	14.7	23.3	28.5	49.4	84	84	22.8	39.3	48.8	79.4
15	-	_	-	-	_	50	-	-	-	-	-	85	-	-	_	-	-
16	-	_	-	-	-	51	50 8/16	15.3	24.1	29.6	51.3	86	85 15/16	23.1	40.1	49.9	80.3
17	-	-	-	-	-	52	-	-	-	-	-	87	-	-	-	-	-
18	-	-	-	-	-	53	52 8/16	15.8	25.0	30.7	53.2	88	87 15/16	23.3	41.0	51.0	81.2
19	-	-	-	-	-	54	_	-	-	-	-	89	-	-	-	-	-
20	-	-	-	-	-	55	54 7/16	16.4	25.9	31.9	55.2	90	89 14/16	23.5	41.9	52.1	82.0
21	-	-	-	-	-	56	-	-	-	-	-	91	-	-	-	-	-
22	-	_	_	-	_	57	56 7/16	17.0	26.8	33.1	57.0	92	91 14/16	24.0	42.9	53.4	82.7
23	-	-	-	-	-	58	-	-	-	-	-	93	-	-	-	-	-
24	-	-	-	-	-	59	58 6/16	17.5	27.7	34.3	58.7	94	93 13/16	24.6	43.8	54.7	83.3
25	24 15/16	7.4	11.7	14.5	26.3	60	_	-	-	-	_	95	-	-	-	-	-
26	-	_	_	_	_	61	60 6/16	18.1	28.6	35.5	60.5	96	95 13/16	25.2	44.8	56.0	84.0
27	26 14/16	8.0	12.9	15.7	28.5	62		_	_	-	_	97	-	-	_	-	-
28	-	_	_	_	_	63	62 5/16	18.4	29.5	36.6	63.8	98	-	-	_	-	-
29	28 14/16	8.7	14.0	17.0	30.6	64		_	_	-	_	99	-	-	_	-	-
30	-	_	_	_	_	65	64 5/16	18.8	30.4	37.7	67.0	100	-	-	_	-	_
31	30 13/16	9.4	15.2	18.2	32.6	66	-	-	-	-	-	101	-	-	-	-	_
32	-	_	_	_	_	67	66 4/16	19.1	31.2	38.9	70.2	102	-	-	_	-	-
33	32 13/16	10.0	16.1	19.2	34.7	68		_	_	-	_	103	-	-	_	-	-
34	-	_	-	_	_	69	68 4/16	19.5	32.3	40.0	71.2	104	-	-	_	-	-
35	34 12/16	10.7	17.0	20.3	36.7	70		_	_	-	_	105	-	-	_	-	-
36	-	-	-	-	-	71	70 3/16	20.0	33.3	41.1	72.3	106	-	-	_	-	_
37	36 12/16	11.3	17.9	21.4	38.7	72	_	-	-	-	-	107	-	-	-	-	-
38	-	_	_	-	-	73	72 3/16	20.4	34.4	42.3	73.4	108	-	-	_	-	_
39	38 11/16	11.9	18.9	22.7	40.5	74	_	-	_	-	-	109	-	-	_	-	-
40	-	-	-	-	-	75	74 2/16	21.0	35.2	43.4	74.6	110	-	-	_	-	-
41	40 11/16	12.5	19.9	23.9	42.2	76	_	-	-	-	-	111	-	-	-	-	_
42	-	_	_	-	-	77	76 2/16	21.5	36.0	44.5	75.7	112	-	-	_	-	
43	42 10/16	13.1	20.8	25.1	44.1	78	_	-	-	-	-	113	-	-	-	-	-
44	-	-	_	-	_	79	78 1/16	22.1	36.8	45.7	76.9	114	_	-	_	-	_
45	44 10/16	13.7	21.7	26.3	46.0	80	_	_	_	-	_	115	-	-	_	-	-
46	-	-	-	-	-	81	80 1/16	22.3	37.5	46.5	77.6	116	-	_	_	_	_



# **Power Consumption**

Tested at Full Power with PDC Series power supplies.

Standard Nominal Lengths offered provide minimal shadowing. For alternate lengths, please consult Inside Sales with specific request.

### High Efficacy (HE64)

Nominal	Actual	W	atts	Nominal	Actual	w	atts	Nominal	Actual	w	atts
Length (in)	Length	VHO	XHO	Length (in)	Length	VHO	хно	Length (in)	Length	VHO	хно
12	-	_	_	47	46 12/16	58.2	68.4	82	81 9/16	91.5	95.4
13	-	_	_	48	-	_	-	83	_	_	_
14	-	_	-	49	48 4/16	60.1	70.0	84	83 1/16	92.1	_
15	-	_	_	50	49 12/16	62.0	71.7	85	84 9/16	92.7	_
16	-	_	_	51	-	_	-	86	_	_	_
17	-	_	_	52	51 4/16	63.8	73.5	87	86 2/16	93.3	_
18	-	_	_	53	52 13/16	65.6	75.3	88	87 10/16	94.0	_
19	-	_	-	54	-	-	_	89	-	-	_
20	-	_	-	55	54 5/16	67.4	<i>77</i> .1	90	89 2/16	94.6	-
21	-	_	-	56	55 13/16	69.6	78.7	91	90 10/16	95.2	_
22	-	-	-	57	-	-	-	92	-	-	-
23	-	_	-	58	57 5/16	71.2	79.7	93	92 2/16	95.8	-
24	-	_	-	59	58 13/16	72.8	80.7	94	93 11/16	-	_
25	24	29.5	37.6	60	-	_	_	95	-	-	_
26	25 8/16	31.4	40.2	61	60 6/16	74.4	81.7	96	95 3/16	-	-
27	-	_	-	62	61 14/16	75.6	82.5	97	-	-	_
28	27 1/16	33.3	42.9	63	-	_	_	98	-	_	_
29	28 9/16	35.2	45.5	64	63 6/16	76.8	83.4	99	-	-	_
30	-	_	-	65	64 14/16	78.0	84.2	100	-	-	-
31	30 1/16	37.2	48.2	66	-	_	-	101	-	_	_
32	31 9/16	39.1	50.8	67	66 7/16	79.2	85.0	102	-	_	_
33	-	_	_	68	67 15/16	80.3	86.2	103	-	_	_
34	33 2/16	41.0	53.4	69	-	_	_	104	-	_	_
35	34 10/16	42.9	55.9	70	69 7/16	81.3	87.5	105	_	_	_
36	-	_	_	71	70 15/16	82.4	88.7	106	-	_	_
37	36 2/16	44.9	58.5	72	-	_	-	107	_	_	_
38	37 10/16	46.7	60.1	73	72 7/16	83.4	89.9	108	_	_	_
39	-	-	-	74	74	85.1	90.9	109	_	_	_
40	39 2/16	48.6	61.3	75	-	_	-	110	_	_	_
41	40 11/16	50.4	62.6	76	75 8/16	86.8	91.9	111	_	-	
42	-	-	_	77	-	-	-	112	-	_	-
43	42 3/16	52.3	63.8	78	77	88.5	92.8	113	-	_	_
44	43 11/16	54.2	65.3	79	78 8/16	90.2	93.8	114	-	_	_
45	-	-	_	80	-	-	-	115	-	-	_
46	45 3/16	56.2	66.8	81	80 1/16	90.8	94.6	116	_	_	_

# Linear Illumination System



# **Voltage Drop Calculator**

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

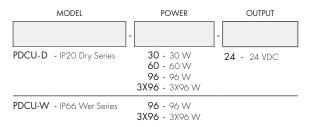
Wattage			Wire Length From	m Power Supply	to Start of Run [ft	.]	
[M]	12 AWG	14 AWG	16 AWG	18 AWG	20 AWG	22 AWG	24 AWG
5	1088.2	684.4	430.3	270.6	170.2	107.1	67.3
10	544.1	342.2	215.1	135.3	85.1	53.5	33.7
15	362.7	228.1	143.4	90.2	56.7	35.7	22.4
20	272.0	171.1	107.6	67.7	42.6	26.8	16.8
25	217.6	136.9	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



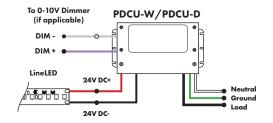
# **Power Supplies**

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.

### Universal Power Supply 1% 120VAC - 277VAC



0-10V dims down to 1%, MLV/ELV/TRIAC dims down to 1%. For a complete list of compatible dimmers, see  $\underline{\text{Compatible Dimming Chart}}$  on the Resources page.

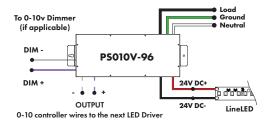


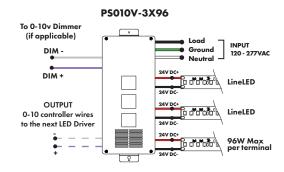
MODELS	PDCU-W 96W	PDCU-W 3X96W	PDCU-D 30W	PDCU-D 60W	PDCU-D 96W	PDCU-D 3X96W
Length	8.66"	11.85"	6.10"	7.93"	8.25"	9.57"
Width	3.73"	4.32"	3.35"	3.35"	4.10"	5.94"
Depth	1.61"	1.81"	1.33	1.32"	1.56"	1.13"

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

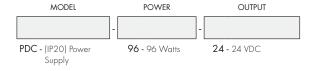


MODELS	96W	3X96
Length	14.40"	15.75"
Width	5.20"	6.62"
Depth	2.60"	4.95"

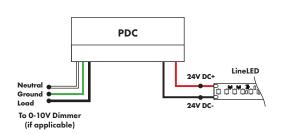




### Triac, MLV, & ELV Compatible Dimmers



96W
8.25"
4.10"
1.56"

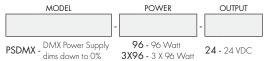




## **Power Supplies**

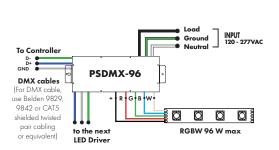
See Power Supply instructions and spec sheet for wiring information. For a complete list of compatible dimmers, see Compatible Dimming Chart on the Resources page.

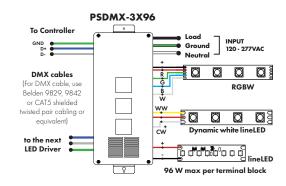
## DMX Dimming Power Supplies 120VAC - 277VAC



Features eldoLED's LINEARdrive configurable dimmable drivers

MODELS	96W	3X96
Length	14.40"	15.75"
Width	5.20"	6.62"
Depth	2.60"	4.95"



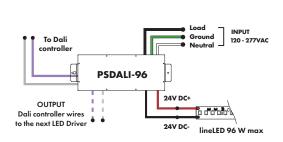


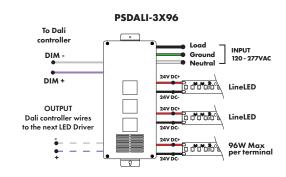
### DALI 0% Dimming Power Supplies 120VAC - 277VAC



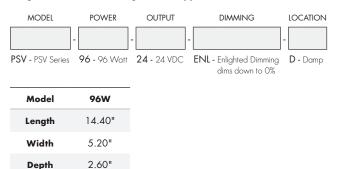
Features eldoLED's LINEARdrive configurable dimmable drivers

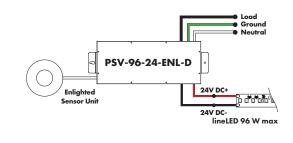
96W	3X96
14.40"	15.75"
5.20"	6.62"
2.60"	4.95"
	14.40" 5.20"





### Enlighted Enabled Dimming Power Supplies 120VAC - 277VAC



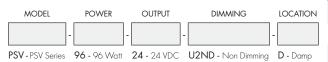




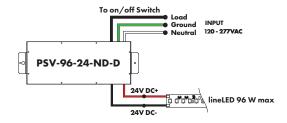
## **Power Supplies**

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.

### Non-Dimming Power Supply 120VAC - 277VAC



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



# **\$\text{LUTRON}**

Luminii is a Lutron OEM Advantage Partner

### **Lutron Power Supplies 1%**

MODEL

LTEA4U1UKL-CV240

Lutron - Hi-lume™ 1% 2-wire LED Driver
40W max

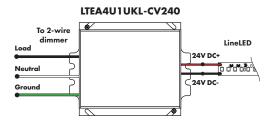
(120V forward phase only)

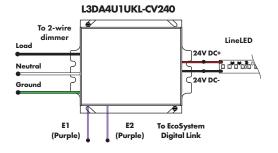
MODEL

L3DA4U1UKL-CV240

Hi-lume™ 1% EcoSystem Voltage LED driver
40W max

MODELS	LTEA41 UKL-CV240	L3DA4U1UKL-CV240
Length	4.89"	4.98"
Width	4.00"	4.00"
Depth	2.62"	2.62"





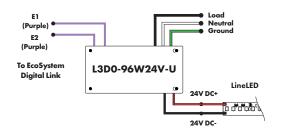
# **<b>%LUTRON**®

Luminii is a Lutron OEM Advantage Partner

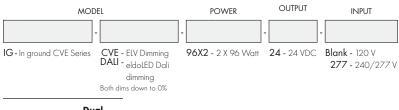
### **Lutron Power Supplies 0.1%**

L3D0-96W24V-U			
Hi-lume™ 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"



### **In-Ground Power Supplies**



MODELS	Dual Circuit
Length	8.40"
Width	8.30"
Depth	8.10"

