# Linear Illumination System







- 24VDC Class 2 and IP68 rated for wet locations, fixtures made to order up to 144". Fixtures can be linked up to 48' depending on output
- Suitable for undercabinet, millwork, direct view, grazer, vanity, architectural reveals, accent lighting and surface mount applications
- Dot free even illumination with frosted lens and high color outputs
- · 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 425 lm/ft and up to 76 lm/W
- Proprietary strong bond solder method handles up to 50 lbs of pull force on wire leads and connectors
- 3 Year warranty





# Finish Options (see page 2 for additional information)

Silver Anodized Base Standard Black Bronze White Matte Black Warm Nickel Premium Polished Gold Chrome















### **Technical Information**

TYPE	H	ligh Color Quali	ty		High E	Efficacy	
OUTPUT OPTIONS	7250	7250	72VHO	HE48LO	HE48SO	HE48MO	НЕ48НО
Lumens Output (3000K) (with a Clear Lens)	148 lm/ft	241 lm/ft	293 lm/ft	144 lm/ft	200 lm/ft	267 lm/ft	428 lm/ft
Average Power Consumption (for a 4' section)	2.8 W/ft	4.8 W/ft	6 W/fi	1.9 W/ft	2.8 W/ft	3.5 W/ft	6.5 W/ft
Efficacy	53 lm/W	50 lm/W	49 lm/W	76 lm/W	71 lm/W	76 lm/W	66 lm/W
Max Run Length (in series)	40 ft	31 ft	22 ft	48 ft	42 ft	33 ft	21 ft
Max Ambient Temperature*	50°C [122°F]	45°C [113°F]	35°C [95°F]		50°C [122°F]		30°C [86°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

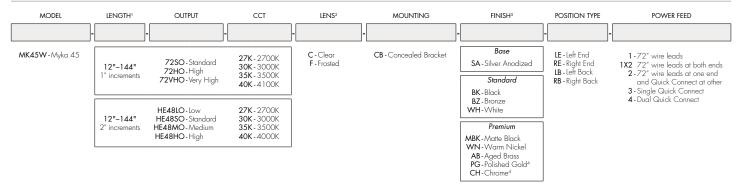
#### High Color Quality (72)

CCT	Multiplier		TM	-30	
ССТ	(reference - 3000K)	CRI	Rf	$R_g$	R9
2700K	0.97	97	96	99	93
3000К	1.00	96	95	99	92
3500K	1.01	96	95	100	94
4000K	1.34	97	96	102	92

### High Efficacy (HE48)

ССТ	Multiplier		TM-30						
CCI	(reference - 3000K)	CRI	Rf	$R_g$	R9				
2700K	0.94	92	90	99	46				
3000K	1.00	92	89	99	62				
3500K	1.02	92	89	99	58				
4000K	1.02	92	86	94	52				

### Ordering Code



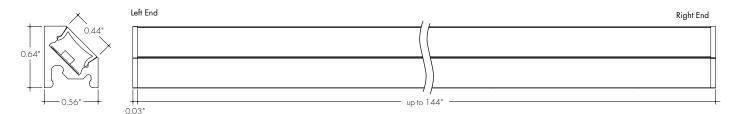
\*LUMINII RESERVES THE RIGHTS TO CHANGE SPECIFICATION & INSTRUCTION WITHOUT NOTICE

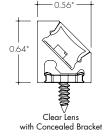
Custom lengths and increments are available, please consult Inside Sales with specific request.
 All High Efficacy options can be used to comply with Title 24 JA8. High Color Quality options can be used to comply with Title 24 JA8 depending on Output, CCT, and Lens selections. See multiplier charts to calculate specific efficacies.

<sup>3 -</sup> Non SA finishes may have extended lead times and price adder. Custom RAIs are available, please consult Inside Sales with specific reques 4 - Polished Gold, and Chrome finishes have a maximum fixture length of 96".



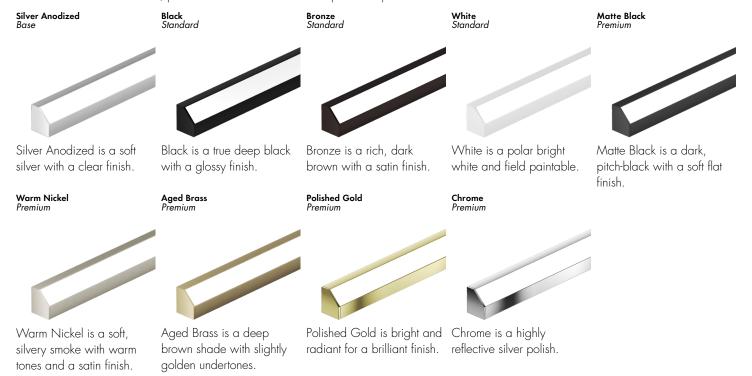
### **Product Dimensions**





# **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 and price adder.
- Polished Gold and Chrome finishes have a maximum fixture length of 96".
- Custom RALs are available, please consult Inside Sales with specific request.



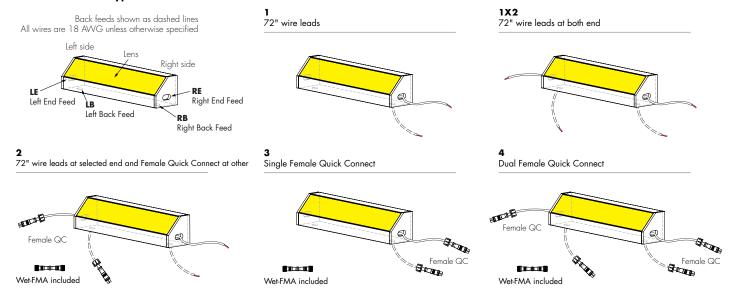


## **Powerfeeds and Connectors**

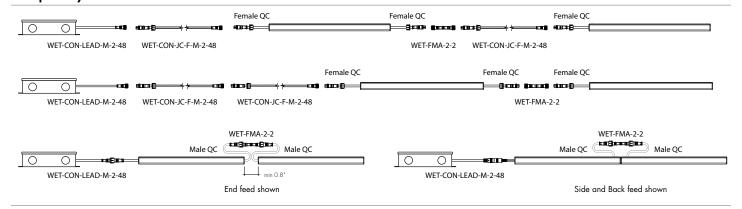
#### **Linking and Extension Cable Options** WET-FMA-2-2 WET-CON-LEAD-M-2-48 WET-CON-JC-F-M-2-48 Male Quick Female to Male Adapter, 2 pin Male Wet Connector Cable, 2 pin, 48" Female/Male Wet Jumper Cable, 2 pin, 48" 48.0" 48.0" 2.00" Male QC Male QC Male QC Female QC Male QC Female Quick

### **Powerfeeds Position/Type**

Lead Wires



## Sample Layout





# **Light Transmission and Dotting**

#### Lens/Accessory

Clear Lens	Frosted Lens
CD	ND
CD	ND
CD	ND
CD	SD
100%	58%
	CD CD CD CD CD CD CD CD CD



CD - Clear Dotting SD - Slight Dotting

# ND - No Dotting

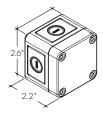
# **Accessory Options**

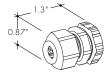
#### LVSP-WET

Splice box: wet rated, low voltage, gray

### LVSP-WET-CM

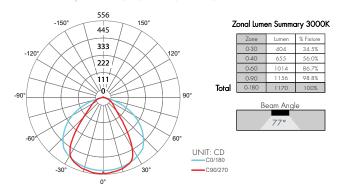
Connector for splice box, low voltage for cable management, gray.



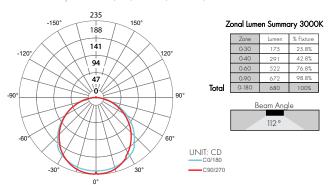


# **Photometry**

MK45W-48-30K-72VHO-C Myka 45 Wet, 4ft, 3000K, 72VHO, Clear Lens



### <u>MK45W-48-30K-72VHO-F</u> Myka 45 Wet, 4ft, 3000K, 72VHO, Frosted Lens





# **Power Consumption**

Tested at Full Power with PDC Series power supplies.

### **High Color Quality (72)**

Nominal	End Feed		Watts		Nominal	End Feed		Watts		Nominal	End Feed		Watts		Nominal	End Feed		Watts	
Length (in)	Actual Length*	so	но	VHO	Length (in)	Actual Length*	so	но	VHO	Length (in)	Actual Length*	SO	но	VHO	Length (in)	Actual Length*	so	НО	VHO
12	11	2.7	4.4	6.2	47	46 14/16	10.5	17.4	23.1	82	81 10/16	18.3	29.5	38.4	117	116 6/16	25.9	40.8	52.4
13	12 2/16	2.7	4.4	6.2	48	-	-	_	_	83	82 12/16	18.5	29.8	38.8	118	117 8/16	26.1	41.1	52.8
14	13 5/16	2.9	4.8	6.7	49	48 1/16	10.7	17.8	23.5	84	83 15/16	18.7	30.1	39.2	119	118 11/16	26.3	41.4	53.2
15	14 7/16	3.1	5.2	7.3	50	49 3/16	11.1	18.6	24.4	85	-	_	-	-	120	119 13/16	26.5	41.7	53.6
16	15 10/16	3.4	5.6	7.8	51	50 6/16	11.4	18.9	24.9	86	85 1/16	19.2	30.8	40.0	121	121	26.7	42.0	54.0
17	16 12/16	3.6	6.0	8.3	52	51 8/16	11.6	19.3	25.3	87	86 4/16	19.4	31.1	40.4	122	-	-	_	_
18	17 15/16	3.9	6.5	8.9	53	52 11/16	11.9	19. <i>7</i>	25.7	88	87 6/16	19.6	31.5	40.8	123	122 2/16	27.1	42.6	54.7
19	-	-	-	-	54	53 13/16	12.1	20.1	26.1	89	88 9/16	19.9	31.8	41.1	124	123 5/16	27.3	42.9	55.0
20	19 1/16	4.4	7.3	9.9	55	55	12.3	20.5	26.6	90	89 12/16	20.1	32.2	41.5	125	124 7/16	27.5	43.1	55.4
21	20 4/16	4.6	7.7	10.5	56	-	-	-	-	91	90 14/16	20.4	32.5	41.9	126	125 10/16	27.7	43.4	55.7
22	21 6/16	4.8	8.1	11.0	57	56 2/16	12.8	21.3	27.4	92	-	-	-	-	127	126 12/16	27.9	43.7	56.1
23	22 9/16	5.1	8.6	11.5	58	57 5/16	13.1	21.6	27.8	93	92 1/16	20.6	32.9	42.3	128	127 15/16	28.1	43.9	56.4
24	23 12/16	5.3	9.0	12.1	59	58 7/16	13.3	22.0	28.3	94	93 3/16	21.1	33.6	43.1	129	-	-	-	_
25	24 14/16	5.6	9.4	12.6	60	59 10/16	13.6	22.4	28.7	95	94 6/16	21.3	33.9	43.4	130	129 1/16	28.5	44.5	57.1
26	-	-	-	-	61	60 12/16	13.8	22.8	29.1	96	95 8/16	21.5	34.2	43.8	131	130 4/16	28.7	44.7	57.4
27	26 1/16	5.8	9.8	13.1	62	61 15/16	14.0	23.1	29.6	97	96 11/16	21.8	34.6	44.2	132	131 7/16	28.9	45.0	57.8
28	27 3/16	6.2	10.5	14.1	63	-	-	-	-	98	97 13/16	22.0	34.9	44.6	133	132 9/16	29.1	45.3	58.1
29	28 6/16	6.5	10.9	14.5	64	63 1/16	14.5	23.8	30.5	99	99	22.2	35.2	45.0	134	133 12/16	29.3	45.5	58.4
30	29 8/16	6.7	11.2	15.0	65	64 4/16	14.7	24.1	31.0	100	-	-	-	-	135	134 14/16	29.5	45.7	58.7
31	30 11/16	6.9	11.6	15.5	66	65 6/16	14.9	24.4	31.4	101	100 2/16	22.5	35.9	45.9	136	-	-	_	_
32	31 13/16	<i>7</i> .1	12.0	16.0	67	66 9/16	15.1	24.7	31.9	102	101 5/16	22.7	36.2	46.3	137	136 1/16	29.6	45.9	59.1
33	33	7.3	12.3	16.5	68	67 12/16	15.3	25.0	32.4	103	102 7/16	22.9	36.5	46.7	138	137 3/16	30.0	46.3	59.7
34	_	-	_	-	69	68 14/16	15.5	25.4	32.8	104	103 10/16	23.1	36.8	47.1	139	138 6/16	30.2	46.5	60.0
35	34 2/16	7.8	13.1	17.4	70	-	-	_	-	105	104 12/16	23.3	37.1	47.5	140	139 8/16	30.3	46.8	60.3
36	35 5/16	8.0	13.4	17.9	71	70 1/16	15.8	25.7	33.3	106	105 15/16	23.5	37.4	48.0	141	140 11/16	30.5	47.0	60.6
37	36 7/16	8.2	13.8	18.4	72	71 3/16	16.2	26.3	34.2	107	-	-	_	-	142	141 13/16	30.7	47.2	61.0
38	37 10/16	8.4	14.2	18.9	73	72 6/16	16.4	26.6	34.7	108	107 1/16	23.9	38.1	48.8	143	143	30.8	47.4	61.3
39	38 12/16	8.7	14.5	19.3	74	73 8/16	16.6	26.9	35.1	109	108 4/16	24.1	38.4	49.2	144	_	_	_	_
40	39 15/16	8.9	14.9	19.8	75	74 11/16	16.8	27.3	35.5	110	109 7/16	24.3	38.7	49.6					
41	_	_	_	_	76	75 13/16	1 <i>7</i> .1	27.6	35.9	111	110 9/16	24.5	39.0	50.0					
42	41 1/16	9.3	15.6	20.7	77	77	1 <i>7</i> .3	27.9	36.3	112	111 12/16	24.8	39.3	50.4					
43	42 4/16	9.6	16.0	21.2	78	_	-	_	_	113	112 14/16	25.0	39.6	50.8					
44	43 6/16	9.8	16.4	21.7	79	78 2/16	17.7	28.5	37.2	114	_	_	_	-					
45	44 9/16	10.0	16.7	22.1	80	<i>7</i> 9 5/16	17.9	28.9	37.6	115	114 1/16	25.2	39.9	51.2					
46	45 12/16	10.2	1 <i>7</i> .1	22.6	81	80 7/16	18.1	29.2	38.0	116	115 3/16	25.6	40.5	52.0					

<sup>\*</sup>For Back Feed add 4/16" (1/4") to Actual Length. Standard Nominal Lengths offered provide minimal shadowing. For alternate lengths, please consult Inside Sales with specific request.

# Linear Illumination System



# **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	End Feed		W	⁄atts		Nominal	End Feed		W	atts		Nominal	End Feed		W	atts		Nominal	End Feed		W	atts	
Length (in)	Actual Length*	LO	so	МО	НО	Length (in)	Actual Length*	LO	so	МО	НО	Length (in)	Actual Length*	LO	so	МО	НО	Length (in)	Actual Length*	LO	so	МО	НО
12	10 13/16	1.7	2.5	3.5	5.7	47	46 13/16	6.9	10.7	13.3	24.7	82	_	_	-	_	_	117	116 13/16	17.3	27.3	33.7	57.9
13	12 13/16	1.7	2.5	3.5	5.7	48	_	-	-	-	_	83	82 13/16	12.5	19.9	23.9	42.2	118	_	_	_	_	-
14	-	_	-	-	-	49	48 13/16	7.1	11.2	13.9	25.4	84	-	_	-	-	_	119	118 13/16	17.5	27.7	34.3	58.7
15	14 13/16	2.0	3.0	4.0	7.2	50	-	_	-	-	_	85	84 13/16	12.8	20.3	24.5	43.1	120	_	-	-	-	_
16	-	-	_	-	-	51	50 13/16	7.4	11.7	14.5	26.3	86	-	-	_	-	-	121	120 13/16	1 <i>7</i> .8	28.1	34.9	59.6
17	16 13/16	2.4	3.5	4.6	8.7	52	-	-	-	-	-	87	86 13/16	13.1	20.8	25.1	44.1	122	-	-	-	-	_
18	-	_	_	-	-	53	52 13/16	7.7	12.3	15.1	27.4	88	-	_	-	-	_	123	122 13/16	18.1	28.6	35.5	60.5
19	18 13/16	2.7	3.9	5.2	10.2	54	-	-	_	-	_	89	88 13/16	13.4	21.3	25.7	45.0	124	-	-	_	-	_
20	-	_	_	_	-	55	54 13/16	8.0	12.9	15.7	28.5	90	-	_	_	-	_	125	124 13/16	18.3	29.0	36.0	62.1
21	20 13/16	3.0	4.4	5.8	11.7	56	-	-	-	-	_	91	90 13/16	13.7	21.7	26.3	46.0	126	-	-	-	-	-
22	-	_	_	_	-	57	56 13/16	8.4	13.5	16.4	29.5	92	-	_	_	-	_	127	126 13/16	18.4	29.5	36.6	63.8
23	22 13/16	3.4	4.9	6.4	13.2	58	-	-	-	-	-	93	92 13/16	14.0	22.1	26.9	47.0	128	-	-	-	-	-
24	-	-	-	-	-	59	58 13/16	8.7	14.0	17.0	30.6	94	-	-	-	-	-	129	128 13/16	18.6	29.9	37.2	65.4
25	24 13/16	3.7	5.4	7.0	14.7	60	-	-	-	-	-	95	94 13/16	14.3	22.6	27.5	47.9	130	-	-	-	-	-
26	-	-	_	-	-	61	60 13/16	9.0	14.6	17.6	31.6	96	-	-	-	-	-	131	130 13/16	18.8	30.4	37.7	67.0
27	26 13/16	4.1	5.9	7.5	15.8	62	-	-	-	-	-	97	96 13/16	14.4	22.8	27.8	48.4	132	-	-	-	-	_
28	-	-	-	-	_	63	62 13/16	9.4	15.2	18.2	32.6	98	-	_	_	-	-	133	132 13/16	18.9	30.8	38.3	68.6
29	28 13/16	4.4	6.4	8.1	16.8	64	-	-	-	-	-	99	98 13/16	14.7	23.3	28.5	49.4	134	-	-	-	-	_
30	-	_	-	-	_	65	64 13/16	9.7	15.6	18.7	33.7	100	-	_	-	-	-	135	134 13/16	19.1	31.2	38.9	70.2
31	30 13/16	4.8	6.9	8.7	17.9	66	-	-	-	-	-	101	100 13/16	15.0	23.7	29.0	50.4	136	-	-	-	-	-
32	-	-	-	-	-	67	66 13/16	10.0	16.1	19.2	34.7	102	-	-	-	-	_	137	136 13/16	19.3	31.8	39.4	70.7
33	32 13/16	5.0	7.2	9.0	18.5	68	-	_	-	-	-	103	102 13/16	15.3	24.1	29.6	51.3	138	-	-	-	-	_
34	-	-	-	-	-	69	68 13/16	10.4	16.5	19.8	35.7	104	-	-	-	-	_	139	138 13/16	19.5	32.3	40.0	71.2
35	34 13/16	5.4	7.7	9.6	19.5	70	-	-	-	-	_	105	104 13/16	15.6	24.6	30.2	52.3	140	-	-	-	-	_
36	-	-	-	-	-	71	70 13/16	10.7	17.0	20.3	36.7	106	-	-	-	-	-	141	140 13/16	19.8	32.8	40.6	71.8
37	36 13/16	5.7	8.2	10.2	20.6	72	-	-	-	-	-	107	106 13/16	15.8	25.0	30.7	53.2	142	-	-	-	-	-
38	-	-	-	-	-	73	72 13/16	11.0	17.4	20.8	37.7	108	-	-	-	-	-	143	142 13/16	20.0	33.3	41.1	72.3
39	38 13/16	6.0	8.7	10.8	21.5	74	-	-	-	-	-	109	108 13/16	16.1	25.5	31.3	54.2	144	-	-	-	_	-
40	-	-	-	-	-	75	74 13/16	11.3	17.9	21.4	38.7	110	-	-	-	-	-	-					
41	40 13/16	6.2	9.2	11.4	22.3	76	-	-	-	-	-	111	110 13/16	16.4	25.9	31.9	55.2	-					
42	-	-	-	-	-	77	76 13/16	11.6	18.4	22.0		112	-	-	-	-	-	-					
43	42 13/16	6.4	9.7	12.0	23.1	78	-	-	-	-	-	113	112 13/16	16.7	26.4	32.5	56.1	-					
44	-	_	-	-	-	79	78 13/16	11.9	18.9	22.7	40.5	114	-	_	-	_	_	=					
45	44 13/16	6.7	10.2	12.6	23.9	80	-	_	-	-	_	115	114 13/16	17.0	26.8	33.1	57.0	-					
46	-	_	-	-	_	81	80 13/16	12.2	19.4	23.3	41.4	116	-	-	-	_	-						



# **Voltage Drop Calculator**

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

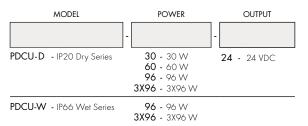
Wattage		Maxi	mum Wire Lengtl	n From Power Su	pply to Start of R	un [ft]	
[W]	12 AWG	14 AWG	16 AWG	18 AWG	20 AWG	22 AWG	24 AWG
5	1088.2	684.4	430.3	270.6	170.2	107.1	67.3
10	544.1	342.2	215.1	135.3	85.1	53.5	33.7
15	362.7	228.1	143.4	90.2	56.7	35.7	22.4
20	272.0	171.1	107.6	67.7	42.6	26.8	16.8
25	217.6	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



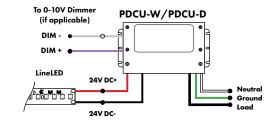
## **Power Supplies**

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

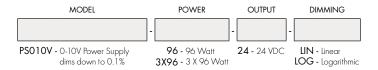


0-10V dims down to 1%, MLV/ELV/TRIAC dims down to 1%. For a complete list of compatible dimmers, see  $\underline{\text{Compatible Dimming Chart}}$  on the Resources page.



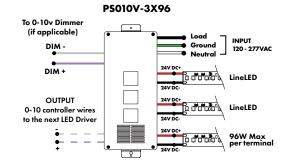
MODELS	PDCU-W 96W	PDCU-W 3X96W	PDCU-D 30W	PDCU-D 60W	PDCU-D 96W	PDCU-D 3X96W
Length	8.66"	11.85"	6.10"	7.93"	8.25"	9.57"
Width	3.73"	4.32"	3.35"	3.35"	4.10"	5.94"
Depth	1.61"	1.81"	1.33	1.32"	1.56"	1.13"

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

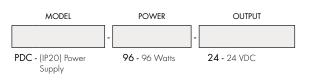


To 0-10v Dimmer (if applicable)	Load Ground Neutral
PS010V-96	
DIM+	24V DC+
OUTPUT 0-10 controller wires to the next LED Driver	24V DC- LineLED

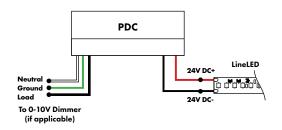




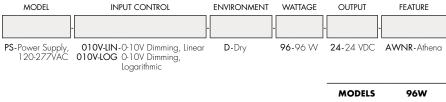
### Triac, MLV, & ELV Compatible Dimmers



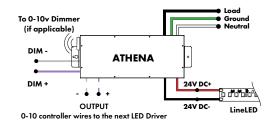
MODELS	96W
Length	8.25"
Width	4.10"
Depth	1.56"



#### Athena 0-10V LED Driver



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

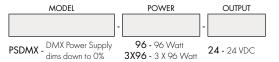




# **Power Supplies**

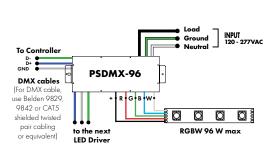
See Power Supply instructions and spec sheet for wiring information. For a complete list of compatible dimmers, see Compatible Dimming Chart on the Resources page.

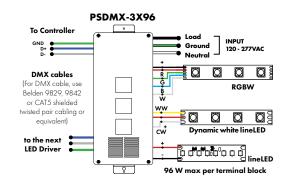
# DMX Dimming Power Supplies 120VAC - 277VAC



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"		



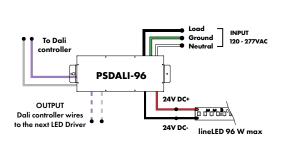


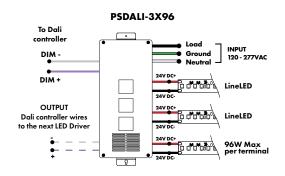
#### DALI 0% Dimming Power Supplies 120VAC - 277VAC



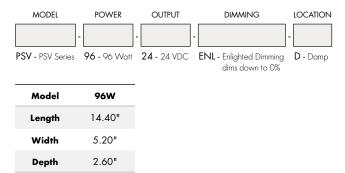
Features eldoLED's LINEARdrive configurable dimmable drivers

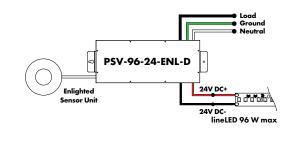
Model	96W	3X96
Length	14.40"	15.75"
Width	5.20"	6.62"
Depth	2.60"	4.95"





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



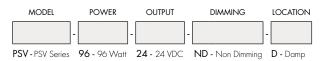




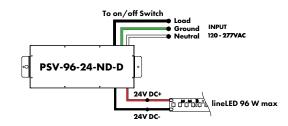
# **Power Supplies**

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

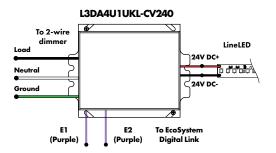
#### **Lutron Power Supplies 1%**

MODEL

# L3DA4U1UKL-CV240

 $Hi\text{-lume}^{TM}$  1% EcoSystem Voltage LED driver 40W max

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



# **\$LUTRON**

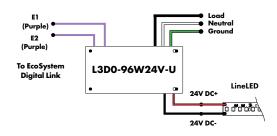
Luminii is a Lutron OEM Advantage Partner

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

MODEL

L3D0-96W24V-U	
	Hilluma <sup>TM</sup> O 1% EcoSystem Voltage LED Driver with Soft On Fade to Black <sup>TM</sup>

MODELS	L3D0
Length	10.50"
Width	5.50"
Depth	2.00"



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

96W max



Dims down to 0%

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

