Features

- 24VDC Class 2 fixtures made to order up to 144".Fixtures can be linked up to 48' depending on output
- Suitable for millwork, recessed, architectural reveals, and accent lighting applications
- Approved for closet/storage space installation per NEC 410.16(Å)(3) and
- 410.16(C)(5)
- Class 2 listed for damp locations • Dot free even illumination with frosted lens
- 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 800 lm/ft and up to 114 lm/W
- Proprietary strong bond solder method handles up to 50 lbs of pull force on wire leads and connectors
- 5 Year warranty

0.36"		0.44"
	<u>+</u> _0.83" − +	
+	1 21"	-

Finish Options (see page 2 for additional information) Silver Anodized Black Bronze

- White Matte Black Warm Nickel
- Aged Brass Polished Gold Chrome



Technical Information

MODEL	High Color Quality		High I	fficacy		High Efficacy
OUTPUT OPTIONS	60X2HO	HE48LO	HE48SO	HE48MO	HE48HO	HE64VHO
Lumens Output (3000K) (with a Clear Lens)	543 lm/ft	216 lm/ft	298 lm/ft	398 lm/ft	639 lm/ft	809 lm/ft
Average Power Consumption (for a 4' section)	7.3 W/ft	1.9 W/ft	2.8 W/ft	3.5 W/ft	6.5 W/ft	7.5 W/ft
Efficacy	74 lm/W	114 lm/W	106 lm/W	114 lm/W	98 lm/W	108 lm/W
Max Run Length (in series)	26 ft	48 ft	42 ft	33 ft	21 ft	15 ft
Max Ambient Temperature*	50°C [122°F]		50°C	[122°F]		50°C [122°F]

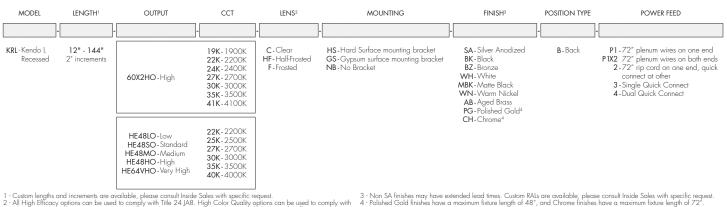
*Max Ambient Temperature to maintain L70 of 50k+ hours. Exceeding Max Ambient Temperature may result in decreased life/output. Consult Technical Support for specific inquiries

High Color Quality (72)

667	Multiplier		TM	-30	
ССТ	(reference - 3000K)	CRI	Rf	Rg	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 Efficacy (HE48/HE64)								
Multiplier		TM-30						
(reference - 3000K)	CRI	Rf	Rg	R9				
0.73	92	91	97	42				
0.81	93	96	96	62				
0.94	92	90	99	58				
1.00	92	89	99	57				
1.02	92	89	99	60				
1.02	92	86	94	71				
	Multiplier (reference - 3000K) 0.73 0.81 0.94 1.00 1.02	Multiplier (reference - 3000K) CRI 0.73 92 0.81 93 0.94 92 1.00 92 1.02 92	Multiplier (reference - 3000K) TM Rf 0.73 92 91 0.81 93 96 0.94 92 90 1.00 92 89 1.02 92 89	Multiplier TM-30 (reference - 3000K) CRI Rf Rg 0.73 92 91 97 0.81 93 96 96 0.94 92 90 99 1.00 92 89 99 1.02 92 89 99				

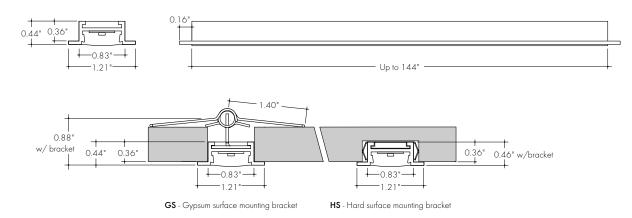
Ordering Code



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 aclaulate specific efficacies.



Product Dimensions



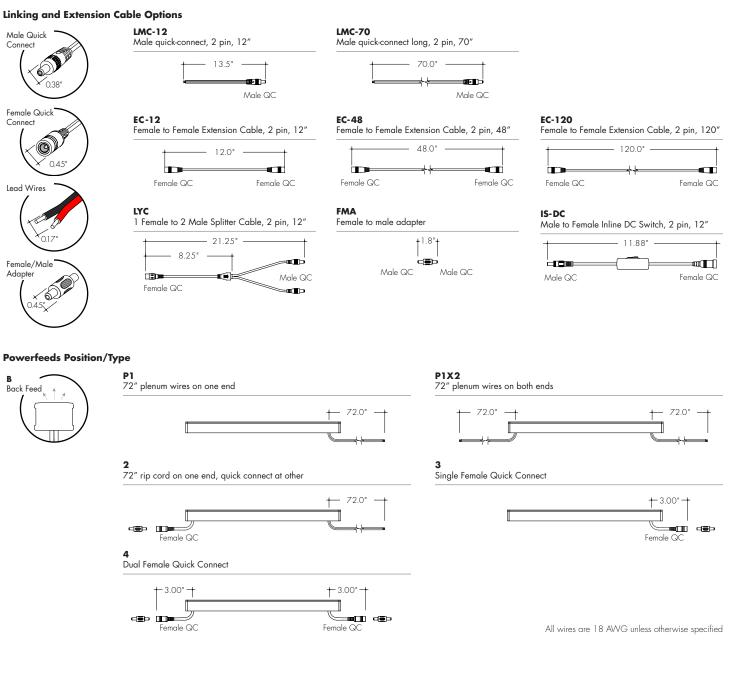
Finish Options

- 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.
- Polished Gold finishes have a maximum fixture length of 48", and Chrome finishes have a maximum fixture length of 72".
- Custom RALs are available, please consult Inside Sales with specific request.

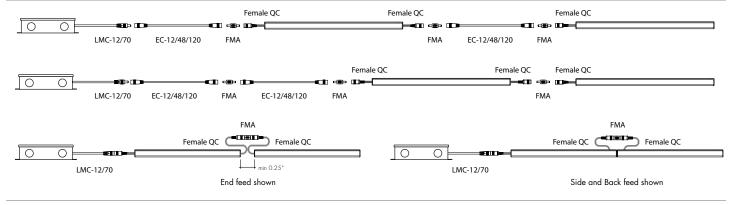




Powerfeeds and Connectors



Sample Layout



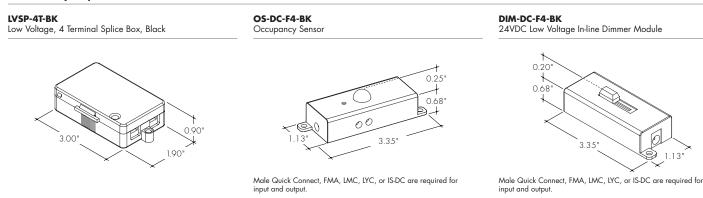
CD SD ND

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

Light Transmission and Dotting

Г	Lens/Accessory							
Output Options	Clear Lens	Half-Frosted Lens	Frosted Lens					
60X2HO	CD	CD	SD					
HE48LO	CD	CD	CD					
HE48SO	CD	CD	CD					
HE48MO	CD	CD	CD					
HE48HO	CD	CD	CD					
HE64VHO	CD	CD	ND					
Transmission Percentage	100%	83%	63%					



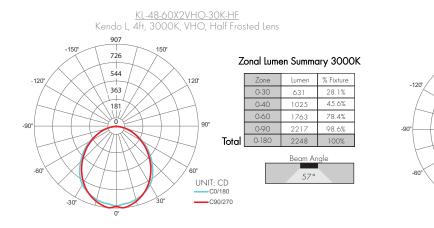


REV0.107242023

1.13" 2



Photometry



<u>KL-48-60X2VHO-30K-F</u> Kendo L, 4ft, 3000K, VHO, Frosted Lens

617

494

370

247

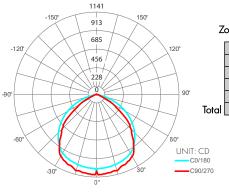
123

0

-150°

150° Zonal Lumen Summary 3000K Lumen % Fixture Zone 120° 25.5% 437 42.4% 0-40 0-60 76.3% 1306 90° 98.6% 1687 Total 0-180 1711 100% Beam Angle 69° UNIT: CD _____C0/180 -C90/270

<u>KL-48-60X2VHO-30K-C</u> Kendo L, 4ft, 3000K, VHO, Clear Lens



<u>_</u>	Conal Lumen Summary 3000K										
	Zone	Lumen	% Fixture								
	0-30	817	30.1%								
	0-40	1353	49.8%								
	0-60	2307	85.0%								
	0-90	2693	99.2%								
	0-180	2714	100%								



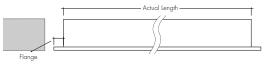
Power Consumption

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 (60X2)

Nominal Length	Back Feed Actual	Watts									
(in)	Length	HO	(in)	Length	HO	(in)	Length	HO	(in)	Length	НО
12	10 11/16	8.3	47	-	-	82	81	45.4	117	116 3/16	61.1
13	12 2/16	8.3	48	47 4/16	28.2	83	82 7/16	46.3	118	117 9/16	62.1
14	13 8/16	8.9	49	48 11/16	29.3	84	83 13/16	46.7	119	119	62.5
15	14 15/16	9.5	50	-	-	85	-	-	120	-	_
16	-	-	51	50 1/16	29.9	86	85 4/16	47.2	121	120 6/16	63.5
17	16 5/16	10.1	52	51 8/16	31.0	87	86 10/16	48.1	122	121 13/16	63.8
18	17 12/16	11.3	53	52 14/16	31.5	88	-	-	123	-	-
19	-	-	54	-	-	89	88 1/16	48.5	124	123 3/16	64.2
20	19 2/16	11.9	55	54 5/16	32.1	90	89 7/16	49.4	125	124 10/16	64.9
21	20 9/16	13.1	56	55 11/16	33.1	91	90 14/16	49.9	126	-	-
22	21 15/16	13.7	57	-		92	-		127	126	65.2
23	-	-	58	57 2/16	33.7	93	92 4/16	50.3	128	127 7/16	65.9
24	23 6/16	14.3	59	58 8/16	34.8	94	93 11/16	51.2	129	128 13/16	66.3
25	24 12/16	15.5	60	59 15/16	35.3	95	-	-	130	-	-
26	-	-	61	-	-	96	95 1/16	51.7	131	130 4/16	66.6
27	26 3/16	16.1	62	61 5/16	35.9	97	96 8/16	52.6	132	131 10/16	67.3
28	27 9/16	17.3	63	62 12/16	36.9	98	97 14/16	53.0	133	-	-
29	29	17.9	64	-	-	99	-	-	134	133 1/16	67.6
30	-	-	65	64 2/16	37.4	100	99 5/16	53.5	135	134 7/16	68.2
31	30 6/16	19.1	66	65 9/16	38.4	101	100 11/16	54.4	136	135 14/16	68.5
32	31 13/16	19.7	67	66 15/16	38.9	102	-	-	137	-	-
33	-	-	68	-	-	103	102 2/16	54.8	138	137 4/16	68.8
34	33 3/16	20.3	69	68 6/16	39.4	104	103 8/16	55.7	139	138 11/16	69.3
35	34 10/16	21.6	70	69 12/16	40.4	105	104 15/16	56.1	140	-	-
36	-	-	71	-	-	106	-	-	141	140 1/16	69.6
37	36	22.2	72	71 3/16	40.9	107	106 5/16	56.5	142	141 8/16	70.2
38	37 7/16	23.3	73	72 9/16	41.9	108	107 12/16	57.4	143	142 14/16	70.5
39	38 13/16	23.9	74	74	42.4	109	-	-	144	-	-
40	-	-	75	-	-	110	109 2/16	57.9	_		
41	40 4/16	24.4	76	75 6/16	43.2	111	110 9/16	58.8	_		
42	41 10/16	25.5	77	76 13/16	43.7	112	111 15/16	59.3	_		
43	-	-	78	-	-	113	-	-	_		
44	43 1/16	26.0	79	78 3/16	44.1	114	113 6/16	59.7	_		
45	44 7/16	27.1	80	79 10/16	45.0	115	114 12/16	60.7	_		
46	45 14/16	27.7	81	-	-	116	-	-			



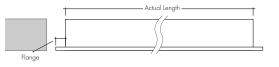
Power Consumption

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 (HE48)

Nominal	Back Feed		W	atts		Nominal			W	atts		Nominal			W	atts		Nominal			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 11/16	1.7	2.5	3.5	5.7	47	46 2/16	6.9	10.7	13.3	24.7	82	81 9/16	12.5	19.9	23.9	42.2	117	-	-	-		_
13	12 11/16	1.7	2.5	3.5	5.7	48	-		-	-	-	83	-	-	-	-		118	117	17.5	27.7	34.3	58.7
14	-		-	-	-	49	48 2/16	7.1	11.2	13.9	25.4	84	83 9/16	12.8	20.3	24.5	43.1	119	119	17.8	28.1	34.9	59.6
15	14 10/16	2.0	3.0	4.0	7.2	50		-	-	-	-	85		-	-	-	-	120	-	-	-	-	-
16	-	-	-	-	-	51	50 1/16	7.4	11.7	14.5	26.3	86	85 8/16	13.1	20.8	25.1	44.1	121	120 15/16	18.1	28.6	35.5	60.5
17	16 10/16	2.4	3.5	4.6	8.7	52	-	-	-	-	-	87		-	-	-	-	122	-	-	-	-	-
18	-	-	-	-	-	53	52 1/16	7.7	12.3	15.1	27.4	88	87 8/16	13.4	21.3	25.7	45.0	123	122 15/16	18.3	29.0	36.0	62.1
19	18 9/16	2.7	3.9	5.2	10.2	54	-	-	-	-	-	89		-	-	-	-	124	-	-	-	-	-
20	-	-	-	-	-	55	54	8.0	12.9	15.7	28.5	90	89 7/16	13.7	21.7	26.3	46.0	125	124 14/16	18.4	29.5	36.6	63.8
21	20 9/16	3.0	4.4	5.8	11.7	56	56	8.4	13.5	16.4	29.5	91		-	-	-	-	126	-	-	-	-	-
22	-	-	-	-	-	57	-		-	-	-	92	91 7/16	14.0	22.1	26.9	47.0	127	126 14/16	18.6	29.9	37.2	65.4
23	22 8/16	3.4	4.9	6.4	13.2	58	57 15/16	8.7	14.0	17.0	30.6	93		-	-			128	-				-
24	-	-	-	-	-	59	-	-	-	-	-	94	93 6/16	14.3	22.6	27.5	47.9	129	128 13/16	18.8	30.4	37.7	67.0
25	24 8/16	3.7	5.4	7.0	14.7	60	59 15/16	9.0	14.6	17.6	31.6	95	-	-	-	-		130	-	-	-	-	-
26	-	-	-	-	-	61	-	-	-	-	-	96	95 6/16	14.4	22.8	27.8	48.4	131	130 13/16	18.9	30.8	38.3	68.6
27	26 7/16	4.1	5.9	7.5	15.8	62	61 14/16	9.4	15.2	18.2	32.6	97	-	-	-	-		132	-	-	-	-	-
28	-	-	-	-	-	63	-	-	-	-	-	98	97 5/16	14.7	23.3	28.5	49.4	133	132 12/16	19.1	31.2	38.9	70.2
29	28 7/16	4.4	6.4	8.1	16.8	64	63 14/16	9.7	15.6	18.7	33.7	99	-	-	-	-	-	134	-	-	-	-	-
30	-	-	-	-	-	65	-	-	-	-	-	100	99 5/16	15.0	23.7	29.0	50.4	135	134 12/16	19.3	31.8	39.4	70.7
31	30 6/16	4.8	6.9	8.7	17.9	66	65 13/16	10.0	16.1	19.2	34.7	101	-	-	-	-	-	136	-	-	-	-	-
32	-	-	-	-	-	67	-	-	-	-	-	102	101 4/16	15.3	24.1	29.6	51.3	137	136 11/16	19.5	32.3	40.0	71.2
33	32 6/16	5.0	7.2	9.0	18.5	68	67 13/16	10.4	16.5	19.8	35.7	103	-	-	-	-	-	138	-	-	-	-	-
34	-	-	-	-	-	69	-	-	-	-	-	104	103 4/16	15.6	24.6	30.2	52.3	139	138 11/16	19.8	32.8	40.6	71.8
35	34 5/16	5.4	7.7	9.6	19.5	70	69 12/16	10.7	17.0	20.3	36.7	105	-	-	-	-	-	140	-	-	-	-	-
36	-	-	-	-	-	71	-		-	-	-	106	105 3/16	15.8	25.0	30.7	53.2	141	140 10/16	20.0	33.3	41.1	72.3
37	36 5/16	5.7	8.2	10.2	20.6	72	71 12/16	11.0	17.4	20.8	37.7	107	-	-	-	-	-	142	-	-	-	-	
38	-	-	-	-	-	73	-	-	-	-	-	108	107 3/16	16.1	25.5	31.3	54.2	143	142 10/16	20.2	33.9	41.7	72.8
39	38 4/16	6.0	8.7	10.8	21.5	74	73 11/16	11.3	17.9	21.4	38.7	109	-	-	-	-	-	144	-	-	-	-	-
40	-	-	-	-	-	75	-	-	-	-	-	110	109 2/16	16.4	25.9	31.9	55.2						
41	40 4/16	6.2	9.2	11.4	22.3	76	75 11/16	11.6	18.4	22.0	39.6	111		-	-			_					
42	-	-	-	-	-	77		-	-	-	-	112	111 2/16	16.7	26.4	32.5	56.1						
43	42 3/16	6.4	9.7	12.0	23.1	78	77 10/16	11.9	18.9	22.7	40.5	113		-	-	-		_					
44			-	-	-	79	-		-	-	-	114	113 1/16	17.0	26.8	33.1	57.0	_					
45	44 3/16	6.7	10.2	12.6	23.9	80	79 10/16	12.2	19.4	23.3	41.4	115		-	-			_					
46	-		-	-	-	81		-	-	-	-	116	115 1/16	17.3	27.3	33.7	57.9						



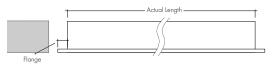
Power Consumption

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 Effic	acy (HEO4	•)				
Nominal	Back Feed Actual	Watts	Nominal	Back Feed Actual	Watts	Nominal	Back Feed Actual	Watts	Nominal	Back Feed Actual	Watts
Length (in)	Length	VHO	Length (in)	Length	VHO	Length (in)	Length	VHO	Length (in)	Length	VHO
12	11 8/16	7.6	47	46 5/16	28.2	82	81 2/16	50.4	117	-	-
13	13	7.6	48	47 13/16	29.5	83	82 10/16	51.7	118	117 8/16	72.8
14	_	-	49		-	84	_		119	119	73.3
15	14 8/16	8.9	50	49 5/16	30.1	85	84 3/16	52.3	120	-	_
16	-	-	51	50 14/16	31.4	86	85 11/16	53.6	121	120 8/16	74.4
17	16	9.5	52	-	-	87	-	_	122	-	_
18	17 9/16	10.7	53	52 6/16	32.0	88	87 3/16	54.2	123	122	74.8
19	_	-	54	53 14/16	33.3	89	88 11/16	55.5	124	123 8/16	75.6
20	19 1/16	11.4	55	-	-	90	-	-	125	-	-
21	20 9/16	12.6	56	55 6/16	34.0	91	90 3/16	56.2	126	125 1/16	76.0
22	-	_	57	56 14/16	35.2	92	91 12/16	57.5	127	126 9/16	76.8
23	22 1/16	13.2	58	-	-	93	-	-	128	-	-
24	23 9/16	14.5	59	58 7/16	36.5	94	93 4/16	58.2	129	128 1/16	77.2
25	-	-	60	59 15/16	37.2	95	94 12/16	59.5	130	129 9/16	78.0
26	25 2/16	15.1	61	-	-	96	_	-	131	-	-
27	26 10/16	16.4	62	61 7/16	38.4	97	96 4/16	60.1	132	131 2/16	78.4
28	-	-	63	62 15/16	39.1	98	97 13/16	61.4	133	132 10/16	79.2
29	28 2/16	17.0	64	-	-	99	-	-	134	-	-
30	29 10/16	18.2	65	64 8/16	40.4	100	99 5/16	62.0	135	134 2/16	79.6
31	-	-	66	66	41.0	101	100 13/16	63.2	136	135 10/16	80.3
32	31 3/16	18.9	67	-	-	102	-	-	137	-	_
33	32 11/16	20.1	68	67 8/16	42.3	103	102 5/16	63.8	138	137 2/16	80.6
34	-	-	69	-	-	104	103 13/16	65.0	139	138 11/16	81.3
35	34 3/16	20.7	70	69	42.9	105	-	-	140	-	-
36	35 11/16	22.0	71	70 8/16	44.2	106	105 6/16	65.6	141	140 3/16	81.7
37	-	-	72	-	-	107	106 14/16	66.8	142	141 11/16	82.4
38	37 3/16	22.6	73	72 1/16	44.9	108	-	-	143	-	_
39	38 12/16	23.9	74	73 9/16	46.1	109	108 6/16	67.4	144	143 3/16	82.7
40	-	-	75		-	110	109 14/16	68.5	_		
41	40 4/16	24.5	76	75 1/16	46.7	111	-	-	_		
42	41 12/16	25.7	77	76 9/16	48.0	112	111 7/16	69.6	_		
43	-	-	78	-	-	113	112 15/16	70.1	_		
44	43 4/16	26.4	79	78 2/16	48.6	114	-	-	_		
45	44 13/16	27.6	80	79 10/16	49.8	115	114 7/16	71.2	_		
46	-	-	81	-	-	116	115 15/16	71.7			

High Efficacy (HE64)





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 Lengt	h From Power Su	upply to Start of F	Run [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

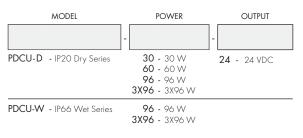
Power Supplies

the Resources page.

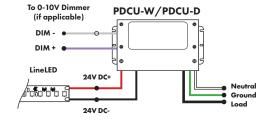
See Power Supply instructions and spec sheet for wiring information. For a complete list of compatible dimmers, see Compatible Dimming Chart on the Resources page.

Universal Power Supply 1% 120VAC - 277VAC

0-10V dims down to 1%, MLV/ELV/TRIAC dims down to 1%.

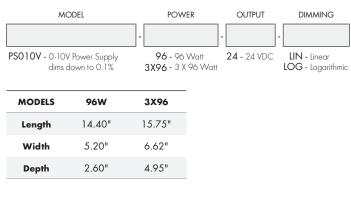


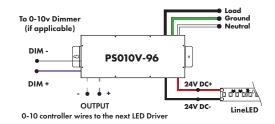
For a complete list of compatible dimmers, see <u>Compatible Dimming Chart</u> on

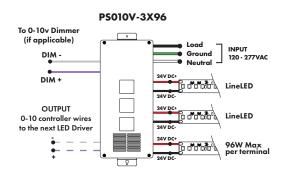


MODELS	PDCU-W 96W	PDCU-W 3X96W	PDCU-D 30W	PDCU-D 60W	PDCU-D 96W	PDCU-D 3X96W
Length	8.66"	11.85"	6.10"	7.93"	8.25"	9.57"
Width	3.73"	4.32"	3.35"	3.35"	4.10"	5.94"
Depth	1.61"	1.81"	1.33	1.32"	1.56"	1.13"

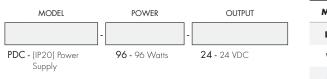
0-10V Dimming Power Supplies 0.1% 120VAC - 277VAC



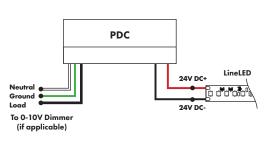




Triac, MLV, & ELV Compatible Dimmers



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

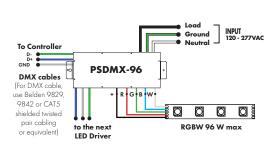


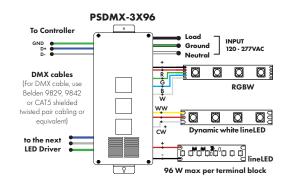
Power Supplies

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.

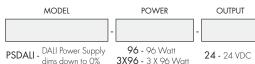
DMX Dimming Power Supplies 120VAC - 277VAC			MODELS	96W	3X96	
MODEL	POWER	OUTPUT		Length	14.40"	15.75"
		-		Width	5.20"	6.62"
PSDMX - DMX Power Supply dims down to 0% 96 - 96 Watt 3X96 - 3 X 96 Watt	24 - 24 VDC	1	Depth	2.60"	4.95"	
dims down to 0%	3X96 - 3 X 96 Watt	att				

Features eldoLED's LINEARdrive configurable dimmable drivers



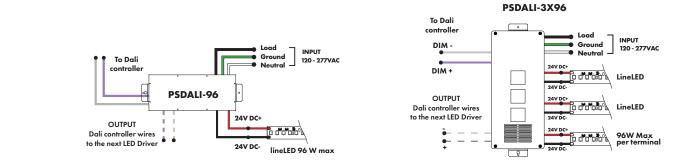


DALI 0% Dimming Power Supplies 120VAC - 277VAC

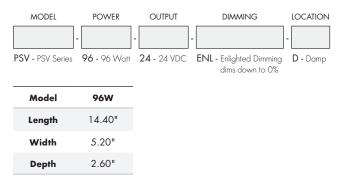


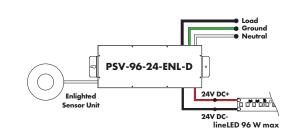
Features eldoLED's LINEARdrive configurable dimmable drivers

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.

