

LED Dimming Options

Cree Edge™, LEDway®, Aeroblades™, LEDway SLM™, SLM IP66, 304 Series™, 227 Series™, 228 Series™, OL Series™, CPY Series, and VG Series Luminaires

Description:

Our 0-10V dimming option provides access to multiple drive currents and provides the flexibility to utilize combinations of these currents to optimize lumen output and energy savings needs. As the product is dimmed all LEDs are operated at the same current for longevity and lumen maintenance.

Unlike traditional source technologies, LED performance improves when dimmed in terms of efficacy, longevity and lumen maintenance. This powerful combination allows for the selection luminaires capable of delivering high levels of sustainable illumination performance when desired, but with the ability to be dimmed to deliver lower levels of illumination when appropriate with even greater energy savings.

If dimming leads remain open (factory shipped), luminaire will run at full power.

The 0-10V dimming control interface is compliant with the IEC EN 60929 Annex E which establishes controls for fluorescent products.

Several commercially available network dimming control systems are being qualified for use with our dimming option. These are typically factory installed into the luminaire and are purchased with a complete control system, please consult factory for more details.

Dimming Availability

LEDway Street Lights			LEDway SLM / SLM Area			Aeroblades Luminaires		
Drive Current	Voltage	LEDway	Drive Current	Voltage	SLM Street / Area Luminaires	Drive Current	Voltage	SLM Street / Area Luminaires
350mA	120-277	20-120 LED	525mA	120-277	20-60 LED	525mA	120-277	20-60 LED
	347-480	20-120 LED		347-480	20-60 LED		347-480	20-60 LED
525mA	120-277	20-120 LED	700mA	120-277	20-60 LED	700mA	120-277	20-60 LED
	347-480	20-120 LED		347-480	20-60 LED		347-480	20-60 LED
700mA	120-277	20-120 LED	1 AMP (1000mA)	120-277	20-40 LED	1 AMP (1000mA)	120-277	20-40 LED
	347-480	20-120 LED		347-480	N/A		347-480	N/A

304 Series Luminaires												
Drive Current	Voltage	Floodlight	Parking Structure			Recessed Canopy			Recessed Interior		Recessed Soffit	
		YM Mount	DM Mount	HC Mount	PD Mount	RS Mount	RD Mount	RT Mount	RM Mount	IC Rated RM Mount	RM Mount	IC Rated RM Mount
350mA	120-277	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED
	347/480	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED
525mA	120-277	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	N/A
	347/480	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED	N/A
700mA	120-277	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED ¹	40-60 LED ¹	N/A	N/A	N/A	N/A	N/A
	347/480	40-60 LED	40-60 LED	40-60 LED	40-60 LED	40-60 LED ¹	40-60 LED ¹	N/A	N/A	N/A	N/A	N/A

Marked spacing required

Cree Edge Luminaires											
Drive Current	Voltage	Area / Flood			High Output Area / Flood	Round Area / Flood	Canopy	Parking	Security	Transportation	
		DA, DL, AA Mounts	R3, R4 Mounts	SA Mount							
350mA	120-277	20-240 LED	40-240 LED	20-60 LED	N/A	40-120 LED	40-240 LED	40-100 LED	20-120 LED	40-100; 120-160; 200-240 LED	
	347/480	20-240 LED ^{1,2}	40-240 LED ^{1,2}	20-60 LED	N/A	40-120 LED ^{1,2}	40-240 LED ^{1,2}	40-100 LED ^{1,2}	20-120 LED ^{1,2}	40-100; 120-160; 200-240 LED ^{1,2}	
525mA	120-277	20-160 LED	40-160 LED	20-60 LED	N/A	40-120 LED	40-160 LED	40-100 LED	20-80 LED	40-100; 120-160; 200-240 LED	
	347/480	20-160 LED ^{1,2}	40-160 LED ^{1,2}	20-60 LED	N/A	40-120 LED ^{1,2}	40-160 LED ^{1,2}	40-100 LED ^{1,2}	20-80 LED ^{1,2}	40-100; 120-160 LED ^{1,2}	
700mA	120-277	20-60 LED	40-60 LEDs	20-60 LED	120-240 LED	40-60 LED	40-60 LED	40-60 LED ^{1,2}	20-60 LED	40-60; 200-240 LED	
	347/480	20-60 LED ^{1,2}	40-60 LED ^{1,2}	20-60 LED	120-240 LED ^{1,2}	40-60 LED ^{1,2}	40-60 LED ^{1,2}	40-60 LED ^{1,2}	20-60 LED ^{1,2}	40-60 LED ^{1,2}	
1 AMP 1000mA	120-277	N/A	N/A	N/A	120-240 LED	N/A	N/A	N/A	N/A	N/A	
	347/480	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

¹P (Photocell) option not available on 480 VAC

²Not available with F (Fuse) option



Rev. Date: 08/01/13



Dimming Availability Cont.

227 Series Luminaires					OL Series Linear Flood Luminaires		
Drive Current	Voltage	Recessed Canopy	Recessed Soffit		Drive Current	Voltage	OL Series
		RM Mount	RM Mount	RR Mount			
350mA	120-277	30-120 LED	30-120 LED	30 LED	350mA	120-277	14-112 LED
	347/480	30-120 LED	30-120 LED	30 LED		347/480	14-112 LED
525mA	120-277	30-120 LED	30-120 LED	30 LED	525mA	120-277	14-112 LED
	347/480	30-120 LED	30-120 LED	30 LED		347/480	14-112 LED
700mA	120-277	30-120 LED ¹	30-120 LED ¹	N/A	700mA	120-277	14-112 LED
	347/480	30-120 LED ²¹	30-120 LED ¹	N/A		347/480	14-112 LED

¹Marked spacing required
 Note: Dimming option not available with any multi-level options

0-10V Dimming Option - 350mA

Note: For use with products when 350mA drive current is specified. Specified drive current represents the maximum drive current that will be available with dimming option. Specifying the maximum allowed drive current for your product will provide the greatest range of dimming. Multipliers are for estimating purposes only. Check actual spec sheet data where available.

120-277V				347-480V			
Measured 0-10V	Current (mA)	System Watts Multiplier	Lumen Multiplier	Measured 0-10V	Current (mA)	System Watts Multiplier	Lumen Multiplier
≤ 1.11	75	0.23	0.24	≤ 1.0	75	0.25	0.24
1.3	88	0.26	0.28	1.1	88	0.28	0.28
1.6	113	0.33	0.36	1.6	113	0.35	0.36
1.9	138	0.40	0.43	1.9	138	0.41	0.43
2.2	163	0.46	0.51	2.2	163	0.48	0.51
2.3	175	0.50	0.54	2.3	175	0.50	0.54
2.7	213	0.60	0.65	2.7	213	0.63	0.65
3	238	0.67	0.72	2.9	238	0.69	0.72
3.3	263	0.74	0.78	3.2	263	0.76	0.78
3.4	275	0.79	0.81	3.3	275	0.79	0.81
3.6	288	0.81	0.85	3.4	288	0.83	0.85
3.8	313	0.87	0.91	3.6	313	0.90	0.91
4.2	350	1.00	1.00	4.0	350	1.00	1.00

0-10V Dimming Option - 525mA

Note: For use with products when 525mA drive current is specified. Specified drive current represents the maximum drive current that will be available with dimming option. Specifying the maximum allowed drive current for your product will provide the greatest range of dimming. Multipliers are for estimating purposes only. Check actual spec sheet data where available.

120-277V				347-480V			
Measured 0-10V	Current (mA)	System Watts Multiplier	Lumen Multiplier	Measured 0-10V	Current (mA)	System Watts Multiplier	Lumen Multiplier
≤ 1.4	75	0.15	0.18	≤ 1.7	75	0.15	0.18
2.2	125	0.23	0.29	2.4	125	0.24	0.29
2.6	150	0.28	0.34	2.7	150	0.29	0.34
3.0	175	0.32	0.40	3.1	175	0.33	0.40
3.7	225	0.42	0.50	3.7	225	0.42	0.50
4.5	275	0.51	0.60	4.3	275	0.51	0.60
5.2	325	0.60	0.69	4.9	325	0.60	0.69
5.6	350	0.65	0.73	5.3	350	0.65	0.73
6.7	425	0.80	0.85	6.2	425	0.80	0.85
7.4	475	0.90	0.93	6.9	475	0.89	0.93
≤ 8.2	525	1.00	1.00	≤ 7.7	525	1.00	1.00



0-10V Dimming Option - 700mA

Note: For use with products when 700mA drive current is specified. Specified drive current represents the maximum drive current that will be available with dimming option. Specifying the maximum allowed drive current for your product will provide the greatest range of dimming. Multipliers are for estimating purposes only. Check actual spec sheet data where available.

120-277V

Measured 0-10V	Current (mA)	System Watts Multiplier	Lumen Multiplier
≤ 1.1	75	0.11	0.14
1.7	125	0.18	0.23
1.9	150	0.21	0.28
2.3	175	0.24	0.32
2.8	225	0.31	0.40
3.4	275	0.38	0.48
3.9	325	0.45	0.56
4.2	350	0.48	0.59
5.1	425	0.59	0.69
5.6	475	0.66	0.76
6.1	525	0.74	0.82
6.4	550	0.78	0.85
6.7	575	0.81	0.87
7.3	625	0.89	0.93
≤ 8.5	700	1.00	1.00

347-480V

Measured 0-10V	Current (mA)	System Watts Multiplier	Lumen Multiplier
≤ 1.0	75	0.12	0.14
1.7	125	0.18	0.23
2.0	150	0.21	0.28
2.3	175	0.25	0.32
2.8	225	0.32	0.40
3.3	275	0.38	0.48
3.7	325	0.45	0.56
4.0	350	0.48	0.59
4.7	425	0.58	0.69
5.2	475	0.65	0.76
5.8	525	0.74	0.82
5.9	550	0.77	0.85
6.2	575	0.80	0.87
6.7	625	0.87	0.93
≤ 7.7	700	1.00	1.00

0-10V Dimming Option - 1000mA

Note: For use with products when 1000mA drive current is specified. Specified drive current represents the maximum drive current that will be available with dimming option. Specifying the maximum allowed drive current for your product will provide the greatest range of dimming. Multipliers are for estimating purposes only. Check actual spec sheet data where available.

120-277V

For use with 1000mA LEDway SLM, SLM IP66, Aeroblades, Edge Area High Output and 228 Series Luminares

Measured 0-10V	Current (mA)	System Watts Multiplier	Lumen Multiplier
≤ 1.0	105	0.07	0.19
1.4	150	0.11	0.23
1.6	175	0.13	0.25
1.7	200	0.15	0.27
2.1	250	0.20	0.31
2.5	300	0.24	0.35
2.9	350	0.29	0.39
3.2	400	0.33	0.43
3.6	450	0.38	0.47
4.0	500	0.42	0.51
4.2	525	0.44	0.53
4.3	550	0.47	0.55
4.7	600	0.51	0.59
5.1	650	0.56	0.63
5.4	700	0.60	0.67
5.8	750	0.65	0.71
6.2	800	0.69	0.75
6.5	850	0.74	0.79
6.9	900	0.78	0.83

120-277V

For use with 1000mA LEDway SLM, SLM IP66, Aeroblades, Edge Area High Output and 228 Series Luminares Cont...

Measured 0-10V	Current (mA)	System Watts Multiplier	Lumen Multiplier
6.9	900	0.78	0.83
7.3	950	0.83	0.87
7.6	1000	0.87	0.91
≤ 8.0	1050	1.00	1.00



LED Dimming Options

0-10V Dimming Option

Multipliers are for estimating purposes only. Check actual spec sheet data where available.

VG Series

Measured 0-10V	System Watts Multiplier	Lumen Multiplier
≤ 0.8	0.15	0.12
1.3	0.19	0.17
1.7	0.23	0.23
2	0.27	0.27
2.4	0.31	0.33
2.7	0.35	0.39
3.2	0.41	0.45
3.7	0.46	0.52
4.4	0.55	0.60
5.1	0.64	0.68
5.7	0.72	0.76
6.5	0.82	0.86
7.1	0.90	0.91
10	1.00	1.00

CPYSeries

Measured 0-10V	System Watts Multiplier	Lumen Multiplier
≤ 1	0.14	0.15
1.6	0.22	0.25
1.9	0.26	0.30
2.2	0.30	0.35
2.8	0.39	0.44
3.4	0.48	0.54
3.9	0.55	0.61
4.2	0.60	0.65
5.1	0.73	0.78
5.7	0.83	0.86
6.3	0.91	0.93
6.6	0.96	0.97
6.9	1.00	1.00
≥ 7.5	1.09	1.13