





# LED Multi-Level Options

## Product Availability

Cree Edge™ Series Luminaires												
Drive Current (mA)	Voltage	Area & Flood			Area & Flood Round		Canopy	Interior Round	Parking	Pathway <sup>1</sup>	Security	High Output Area & Flood
		Direct & Adjustable Arm Mounts	Post Top Mounts	SA Mounts	Direct & Adjustable Arm Mounts	Post Top Mounts <sup>1</sup>	All Mounts	All Mounts	All Mounts	All Mounts	Wall Mount	All Mounts
350	120-277	20-160 LEDs <sup>FPR</sup>	40-160 LEDs <sup>FP</sup>	N/A	40-120 LEDs <sup>F</sup>	N/A	40-160 LEDs <sup>FP</sup>	N/A	40-100 LEDs <sup>F</sup>	N/A	20-80 LEDs <sup>F</sup>	N/A
	347-480	20-160 LEDs	40-80 LEDs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
525	120-277	20-160 LEDs <sup>FPR</sup>	40-160 LEDs <sup>FP</sup>	N/A	40-120 LEDs <sup>F</sup>	N/A	40-160 LEDs <sup>FP</sup>	N/A	40-100 LEDs <sup>F</sup>	N/A	20-80 LEDs <sup>F</sup>	N/A
	347-480	20-160 LEDs	40-80 LEDs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
700	120-277	20-60 LEDs <sup>FPR</sup>	40-60 LEDs <sup>FP</sup>	N/A	40-60 LEDs <sup>F</sup>	N/A	40-60 LEDs <sup>FP</sup>	N/A	40-60 LEDs <sup>F</sup>	N/A	20-80 LEDs <sup>F</sup>	120, 240 LEDs <sup>FR</sup>
	347-480	20-60 LEDs	40-60 LEDs	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1000	120-277	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	120 LEDs <sup>FR</sup>
	347-480	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

<sup>1</sup> Consult TL spec sheet for availability

<sup>F</sup> Multi-Level option available with Fusing option

<sup>P</sup> Multi-Level option available with Photocell option

<sup>R</sup> Multi-Level option available with NEMA<sup>®</sup> Photocell Receptacle option

LEDway® Series Luminaires			
Drive Current (mA)	Voltage	LEDway® Streetlight	
		Horizontal Tenon Mount	IP66 Rated Mounts
350	120-277	N/A	20-120 LEDs <sup>FR</sup>
	347-480	N/A	N/A
525	120-277	N/A	20-120 LEDs <sup>FR</sup>
	347-480	N/A	N/A
700	120-277	N/A	20-120 LEDs <sup>FR</sup>
	347-480	N/A	N/A
1000	120-277	N/A	N/A
	347-480	N/A	N/A

<sup>F</sup> Multi-Level option available with Fusing option

<sup>R</sup> Multi-Level option available with NEMA<sup>®</sup> Photocell Receptacle option

304 Series™ Luminaires										
Drive Current (mA)	Voltage	Canopy			Parking Structure	Floodlight	Interior		Soffit	
		Recessed Mount for Single Skin Canopies	Recessed Mount for Double Skin Canopies	Recessed Upgrade Kit Mounts	All Mounts	Yoke Mounts	Recessed Mount	IC Rated Recessed Mount	Recessed Mount	IC Rated Recessed Mount
350	120-277	40-60 LEDs <sup>F</sup>	40-60 LEDs <sup>F</sup>	40-60 LEDs <sup>F</sup>	40-60 LEDs <sup>F</sup>	40-60 LEDs <sup>F</sup>	40-60 LEDs <sup>F</sup>	40 LEDs <sup>F</sup>	40-60 LEDs <sup>F</sup>	40 LEDs <sup>F</sup>
	347-480	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
525	120-277	40-60 LEDs <sup>F</sup>	40-60 LEDs <sup>F</sup>	40-60 LEDs <sup>F</sup>	40-60 LEDs <sup>F</sup>	40-60 LEDs <sup>F</sup>	40-60 LEDs <sup>F</sup>	N/A	40-60 LEDs <sup>F</sup>	N/A
	347-480	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
700	120-277	40-60 LEDs <sup>F</sup>	40-60 LEDs <sup>F</sup>	N/A	40-60 LEDs <sup>F</sup>	40-60 LEDs <sup>F</sup>	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

<sup>F</sup> Multi-Level option available with Fusing option

228 Series™ Luminaires						
Drive Current (mA)	Voltage	Canopy			Soffit	
		Recessed Mount	Recessed Upgrade Kit Mounts	Recessed Mount	IC Rated Recessed Mount	
350	120-277	90 LEDs	N/A	30, 60 LEDs	N/A	
	347-480	N/A	N/A	N/A	N/A	
525	120-277	30, 60, 90 LEDs	30, 60 LEDs	30, 60 LEDs	N/A	
	347-480	N/A	N/A	N/A	N/A	
700	120-277	30, 60, 90 LEDs	30, 60 LEDs	N/A	N/A	
	347-480	N/A	N/A	N/A	N/A	
900	120-277	60 LEDs <sup>1</sup>	N/A	N/A	N/A	
	347-480	N/A	N/A	N/A	N/A	
1000	120-277	30 LEDs <sup>1</sup>	N/A	N/A	N/A	
	347-480	N/A	N/A	N/A	N/A	

<sup>1</sup> Requires marked spacing 48" (1,219mm) x 24" (610mm) x 6" (152mm); 48" (1,219mm) luminaire to luminaire, 24" (610mm) luminaire to side wall, 6" (152mm) above luminaire.

## LED Multi-Level Options

### 350mA Drive Current

**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.

Position	Low Dimming Settings					
	120-277V			347-480V		
	Drive Current (mA)	System Watts Multiplier	Lumen Multiplier	Drive Current (mA)	System Watts Multiplier	Lumen Multiplier
0	0	0.00	0.00	0	0.00	0.00
1	75	0.15	0.15	38	0.10	0.11
2	125	0.26	0.27	63	0.17	0.18
3	150	0.31	0.31	75	0.20	0.22
4	175	0.36	0.37	88	0.23	0.29
5	225	0.45	0.45	113	0.31	0.35
6	275	0.55	0.53	138	0.38	0.41
7	325	0.64	0.62	163	0.45	0.48

Factory Dimming Settings		
Multi-Level Option	Low Dimming Setting	High Dimming Setting
ML4 (HL)	75mA	350mA
ML5 (HK)	175mA	350mA

Position	High Dimming Settings					
	120-277V			347-480V		
	Drive Current	System Watts Multiplier	Lumen Multiplier	Drive Current	System Watts Multiplier	Lumen Multiplier
0	350	0.67	0.70	175	0.49	0.52
1	425	0.83	0.80	213	0.59	0.60
2	475	0.92	0.89	238	0.66	0.66
3	525	1.00	1.00	263	0.74	0.73
4	525	1.00	1.00	275	0.77	0.76
5	525	1.00	1.00	288	0.81	0.79
6	525	1.00	1.00	313	0.88	0.85
7	525	1.00	1.00	350	1.00	1.00

### 525mA Drive Current

**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.

Position	Low Dimming Settings					
	120-277V			347-480V		
	Drive Current (mA)	System Watts Multiplier	Lumen Multiplier	Drive Current (mA)	System Watts Multiplier	Lumen Multiplier
0	0	0.00	0.00	0	0.00	0.00
1	75	0.15	0.15	75	0.15	0.15
2	125	0.26	0.27	125	0.26	0.27
3	150	0.31	0.31	150	0.31	0.31
4	175	0.36	0.37	175	0.45	0.45
5	225	0.45	0.45	225	0.45	0.45
6	275	0.55	0.53	275	0.55	0.53
7	325	0.64	0.62	325	0.64	0.62

Factory Dimming Settings		
Multi-Level Option	Low Dimming Setting	High Dimming Setting
ML (CL)	75mA	525mA
ML1 (CK)	175mA	525mA

## LED Multi-Level Options

### 525mA Drive Current Continued

**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.

Position	High Dimming Settings					
	120-277V			347-480V		
	Drive Current (mA)	System Watts Multiplier	Lumen Multiplier	Drive Current (mA)	System Watts Multiplier	Lumen Multiplier
0	350	0.67	0.70	350	0.67	0.70
1	425	0.83	0.80	425	0.83	0.80
2	475	0.92	0.89	475	0.82	0.89
3	525	1.00	1.00	525	1.00	1.00
4	525	1.00	1.00	525	1.00	1.00
5	525	1.00	1.00	525	1.00	1.00
6	525	1.00	1.00	525	1.00	1.00
7	525	1.00	1.00	525	1.00	1.00

### 700mA Drive Current

**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.

Position	Low Dimming Settings					
	120-277V			347-480V		
	Drive Current (mA)	System Watts Multiplier	Lumen Multiplier	Drive Current (mA)	System Watts Multiplier	Lumen Multiplier
0	0	0.00	0.00	0	0.0	0.0
1	75	0.11	0.12	75	0.14	0.12
2	125	0.19	0.21	125	0.19	0.21
3	150	0.23	0.25	150	0.23	0.25
4	175	0.26	0.29	175	0.26	0.29
5	225	0.32	0.35	225	0.33	0.35
6	275	0.40	0.42	275	0.40	0.42
7	325	0.78	0.49	325	0.47	0.49

Factory Dimming Settings		
Multi-Level Option	Low Dimming Setting	High Dimming Setting
ML2 (DL)	75mA	700mA
ML3 (DK)	175mA	700mA

Position	High Dimming Settings					
	120-277V			347-480V		
	Drive Current (mA)	System Watts Multiplier	Lumen Multiplier	Drive Current (mA)	System Watts Multiplier	Lumen Multiplier
0	350	0.50	0.56	350	0.49	0.56
1	425	0.62	0.63	425	0.60	0.63
2	475	0.68	0.70	475	0.67	0.70
3	525	0.76	0.79	525	0.73	0.79
4	550	0.80	0.80	550	0.78	0.80
5	575	0.83	0.84	575	0.81	0.80
6	625	0.90	0.91	625	0.88	0.91
7	700	1.00	1.00	700	1.00	1.00

## LED Multi-Level Options

### 1000mA Drive Current

**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.

Position	Low Dimming Settings			High Dimming Settings		
	120-277V			120-277V		
	Drive Current (mA)	System Watts Multiplier	Lumen Multiplier	Drive Current (mA)	System Watts Multiplier	Lumen Multiplier
0	0	0.00	0.00	525	0.44	0.53
1	110	0.08	0.16	650	0.56	0.63
2	175	0.13	0.25	750	0.65	0.71
3	225	0.19	0.25	825	0.73	0.77
4	270	0.22	0.30	850	0.75	0.79
5	350	0.29	0.39	900	0.78	0.83
6	425	0.36	0.43	1000	0.87	0.91
7	500	0.42	0.51	1050	1.00	1.00

Factory Dimming Settings		
Multi-Level Option	Low Dimming Setting	High Dimming Setting
ML6 (XL)	110mA	1000mA
ML7 (XK)	175mA	1000mA

### VG Series

**Note:** For use with VG Series luminaires

VG Series Luminaires		
Input Power Designator	Voltage	Availability
A	120-277	Available
	347, 480	Available

Position	Low Dimming Settings		High Dimming Settings	
	120-277V, 347V, 480V		120-277V, 347V, 480V	
	System Watts Multiplier	Lumen Multiplier	System Watts Multiplier	Lumen Multiplier
0	0.00	0.00	0.44	0.53
1	0.08	0.16	0.56	0.63
2	0.13	0.25	0.65	0.71
3	0.19	0.25	0.73	0.77
4	0.22	0.30	0.75	0.79
5	0.29	0.39	0.78	0.83
6	0.36	0.43	0.87	0.91
7	0.42	0.51	1.00	1.00

Factory Dimming Settings		
Multi-Level Option	Low Dimming Setting	High Dimming Setting
ML	5	7
ML1	5	4
ML2	1	7
ML3	1	4
ML4	1	0
ML5	5	0

## LED Multi-Level Options

### CPY Series

Note: For use with CPY250™ luminaires

CPY Series Luminaires		
Input Power Designator	Voltage	Availability
A	120-277	N/A
	347-480	N/A
B	120-277	Available
	347-480	N/A
C	120-277	N/A
	347-480	N/A
D	120-277	Available
	347-480	N/A

Factory Dimming Settings			
Input Power Designator	Multi-Level Option	Low Dimming Setting	High Dimming Setting
B	ML	4	5
D	ML	4	7

CPY Series – Input Power Designator B				
Position	Low Dimming Settings		High Dimming Settings	
	120-277V		120-277V	
	System Watts Multiplier	Lumen Multiplier	System Watts Multiplier	Lumen Multiplier
0	0.20	0.12	0.72	0.75
1	0.27	0.28	0.81	0.83
2	0.32	0.33	0.90	0.91
3	0.36	0.38	1.00	1.00
4	0.45	0.48	1.00	1.00
5	0.54	0.57	1.00	1.00
6	0.63	0.67	1.00	1.00
7	0.68	0.71	1.00	1.00

CPY Series – Input Power Designator D				
Position	Low Dimming Settings		High Dimming Settings	
	120-277V		120-277V	
	System Watts Multiplier	Lumen Multiplier	System Watts Multiplier	Lumen Multiplier
0	0.00	0.00	0.54	0.55
1	0.14	0.14	0.65	0.67
2	0.20	0.17	0.72	0.75
3	0.24	0.22	0.80	0.83
4	0.27	0.26	0.84	0.86
5	0.35	0.35	0.88	0.90
6	0.43	0.44	0.96	0.97
7	0.50	0.51	1.00	1.00

### OSQ Series

Note: For use with OSQ™ luminaires

OSQ Series Luminaires		
Input Power Designator	Voltage	Availability
A	120-277	Available <sup>F,R</sup>
	347-480	N/A
J	120-277	Available <sup>F,R</sup>
	347-480	N/A
S	120-277	Available <sup>F,R</sup>
	347-480	N/A

<sup>F</sup> Multi-Level option available with Fusing option

<sup>R</sup> Multi-Level option available with NEMA® Photocell Receptacle option

Position	Low Dimming Settings		High Dimming Settings	
	120-277V		120-277V	
	System Watts Multiplier	Lumen Multiplier	System Watts Multiplier	Lumen Multiplier
0	0.00	0.00	0.50	0.60
1	0.12	0.14	0.62	0.72
2	0.17	0.23	0.71	0.80
3	0.22	0.29	0.78	0.85
4	0.26	0.34	0.81	0.87
5	0.34	0.43	0.85	0.90
6	0.41	0.51	0.95	0.97
7	0.48	0.58	1.00	1.00

Factory Dimming Settings		
Multi-Level Option	Low Dimming Setting	High Dimming Setting
ML	5	7

## LED Multi-Level Options

### XSP Series

Note: For use with XSP1™, XSP2™, XSP2L™ and XSPW™ Luminaires

XSP Series Luminaires		
Input Power Designator	Voltage	Availability
XSP1, XSP2 Versions A&B A-I	120-277	Available <sup>FR</sup>
	347-480	Available <sup>R</sup>
XSP2L Version A L-P	120-277	Available <sup>FR</sup>
XSPW C	120-277	Available <sup>FR</sup>
	347	N/A
XSPW G	120-277	N/A
	347	N/A

<sup>F</sup> Multi-Level option available with Fusing option

<sup>R</sup> Multi-Level option available with NEMA<sup>®</sup> Photocell Receptacle option

XSP1, XSP2, & XSPW Luminaires				
Position	Low Dimming Settings		High Dimming Settings	
	120-480V		120-480V	
	System Watts Multiplier	Lumen Multiplier	System Watts Multiplier	Lumen Multiplier
0	0.00	0.00	0.47	0.51
1	0.16	0.12	0.55	0.60
2	0.18	0.16	0.63	0.68
3	0.22	0.21	0.71	0.75
4	0.26	0.26	0.82	0.85
5	0.31	0.33	0.88	0.90
6	0.35	0.38	1.00	1.00
7	0.41	0.44	1.00	1.00

Factory Dimming Settings			
Luminaire	Multi-Level Option	Low Dimming Setting	High Dimming Setting
XSP1, XSP2 and XSP2L	ML (K)	4	7
XSPW	ML (K)	5	7

XSP2L Luminaires				
Position	Low Dimming Settings		High Dimming Settings	
	120-277V		120-277V	
	System Watts Multiplier	Lumen Multiplier	System Watts Multiplier	Lumen Multiplier
0	0.00	0.00	0.61	0.69
1	0.18	0.18	0.71	0.78
2	0.25	0.28	0.81	0.86
3	0.30	0.34	0.91	0.94
4	0.34	0.40	1.00	1.00
5	0.41	0.41	1.00	1.00
6	0.45	0.53	1.00	1.00
7	0.53	0.62	1.00	1.00