

# LEDway® Series

LEDway® LED Street Light

## Product Description

Luminaire housing is all aluminum construction. Standard luminaire utilizes terminal block for power input suitable for #2-#14 AWG wire. Luminaire is designed to mount on a 2" (51mm) IP, 2.375" (60mm) O.D. horizontal tenon and/or a 1.25" (32mm) IP, 1.66" (42mm) O.D. horizontal tenon (minimum 8" [203mm] in length) and is adjustable +/- 5° to allow for luminaire leveling (two axis T-level included).

**Applications:** Roadway, parking lots, walkways and general area spaces

## Performance Summary

Patented NanoOptic® Product Technology

Made in the U.S.A. of U.S. and imported parts

**CRI:** Minimum 70 CRI

**CCT:** 4000K (+/- 300K), 5700K (+/- 500K) standard

**Limited Warranty\*:** 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

\*See <http://lighting.cree.com/warranty> for warranty terms

## Accessories

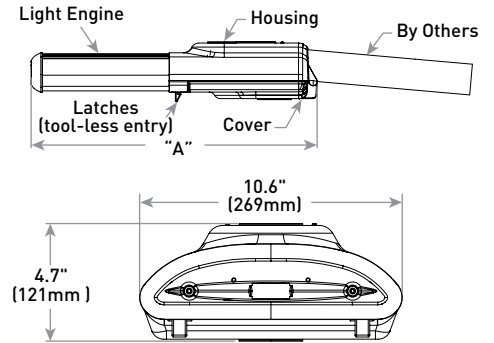
Field-Installed		
<b>Bird Spikes for Light Engine</b>	<b>Bird Spikes for Housing</b>	<b>External Backlight Shield</b>
XA-BRDSPK30 - 20-30 LED	XA-BRDSPKHSG	XA-XSLBLS30 - 20-30 LED
XA-BRDSPK60 - 40-60 LED		XA-XSLBLS60 - 40-60 LED
XA-BRDSPK90 - 70-90 LED		XA-XSLBLS90 - 70-90 LED
XA-BRDSPK120 - 100-120 LED		XA-XSLBLS120 - 100-120 LED

## Ordering Information

Example: STR-LWY-2M-HT-02-E-UL-SV-700

STR-LWY		HT		E				
Product	Optic	Mounting	LED Count (x10)	Series	Voltage	Color Options*	Drive Current	Options
STR-LWY	2M Type II Medium 2S Type II Short 3M Type III Medium 4M Type IV Medium 5M Type V Medium	HT Horizontal Tenon	02 03 04 05 06 07 08 09 10 11 12	E	UL Universal 120-277V UH Universal 347-480V	BK Black BZ Bronze SV Silver	525 525mA 700 700mA	<b>DIM 0-10V Dimming</b> - Control by others - Refer to <a href="#">Dimming spec sheet</a> for details - Can't exceed specified drive current <b>R NEMA® Photocell Receptacle</b> - 3-pin receptacle per ANSI C136.10 - Intended for downlight applications with maximum 45° tilt - Photocell and shorting cap by others <b>UTL Utility</b> - Includes exterior wattage label that reflects watts for the drive current selected. The ability to exceed selected drive current will be disabled <b>40K 4000K Color Temperature</b> - Minimum 70 CRI - Color temperature per luminaire

\* Light engine portion of extrusion is not painted and will remain natural aluminum regardless of color selection



LED Count (x10)	Dim. "A"	Weight
02	17.5" (443mm)	13.0 lbs. (5.9kg)
03	17.5" (443mm)	13.5 lbs. (6.1kg)
04	22.0" (559mm)	16.5 lbs. (7.5kg)
05	22.0" (559mm)	17.0 lbs. (7.7kg)
06	22.0" (559mm)	17.5 lbs. (7.9kg)
07	26.8" (681mm)	22.0 lbs. (10.0kg)
08	26.8" (681mm)	22.5 lbs. (10.2kg)
09	26.8" (681mm)	22.5 lbs. (10.2kg)
10	33.1" (842mm)	27.5 lbs. (12.5kg)
11	33.1" (842mm)	28.0 lbs. (12.7kg)
12	33.1" (842mm)	28.0 lbs. (12.7kg)



US: [lighting.cree.com](http://lighting.cree.com)

T (800) 236-6800 F (262) 504-5415

Rev. Date: V4 02/02/2018

Canada: [www.cree.com/canada](http://www.cree.com/canada)



T (800) 473-1234 F (800) 890-7507

## Product Specifications

### CONSTRUCTION & MATERIALS

- Housing is all aluminum construction
- Terminal block for power input suitable for #2-#14 AWG wire
- HT Mount is designed to mount on a 2" (51mm) IP, 2.375" (60mm) O.D. horizontal tenon and/or a 1.25" (32mm) IP, 1.66" (42mm) O.D. horizontal tenon (minimum 8" [203mm] in length) and is adjustable +/- 5° to allow for luminaire leveling (two axis T-level included)
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, and silver are available
- **Weight:** See Dimensions and Weight chart on page 1

### ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Quick disconnect harness suitable for mate and break under load provided on power feed to driver for ease of maintenance
- Integral 10kV surge suppression protection standard
- To address inrush current, slow blow fuse or type C/D breaker should be used
- **10V Source Current:** 20-60 LED: 0.15mA; 80-120 LED: 0.30mA

### REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Meets CALTrans 611 Vibration testing and GR-63-CORE Section 4.4.1/5.4.2 Earthquake Zone 4
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- 10K surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Luminaire and finish are endurance tested to withstand 5,000 hours of elevated ambient salt fog as defined in ASTM Standard B 117
- Meets Buy American requirements within ARRA
- Meets FCC Part 15 standards for conducted and radiated emissions

Electrical Data*								
LED Count (x10)	System Watts 120-277V	System Watts 347-480V	Total Current (A)					
			120V	208V	240V	277V	347V	480V
525mA								
02	35	39	0.30	0.18	0.16	0.15	0.12	0.10
03	53	55	0.45	0.26	0.23	0.21	0.16	0.13
04	66	71	0.56	0.33	0.29	0.26	0.21	0.16
05	86	87	0.72	0.42	0.37	0.33	0.25	0.19
06	100	103	0.84	0.49	0.43	0.38	0.30	0.22
07	120	124	1.01	0.60	0.54	0.49	0.37	0.28
08	139	140	1.17	0.69	0.62	0.56	0.41	0.31
09	149	156	1.26	0.74	0.66	0.59	0.46	0.34
10	167	172	1.41	0.83	0.73	0.65	0.50	0.38
11	182	188	1.54	0.89	0.79	0.70	0.55	0.41
12	197	204	1.67	0.96	0.85	0.75	0.59	0.44
700mA								
02	47	51	0.39	0.23	0.21	0.19	0.15	0.12
03	70	73	0.59	0.34	0.30	0.27	0.21	0.16
04	91	93	0.77	0.45	0.39	0.35	0.27	0.20
05	113	115	0.96	0.55	0.48	0.43	0.33	0.25
06	134	135	1.13	0.65	0.57	0.50	0.39	0.29
07	163	165	1.37	0.80	0.71	0.63	0.48	0.36
08	182	186	1.54	0.90	0.79	0.70	0.54	0.40
09	203	207	1.72	0.99	0.87	0.78	0.60	0.45
10	227	229	1.92	1.11	0.97	0.86	0.67	0.49
11	248	250	2.10	1.21	1.05	0.93	0.73	0.53
12	267	274	2.26	1.30	1.13	1.00	0.80	0.58

\* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-480V +/-10%

Cree LEDway® Ambient Adjusted Lumen Maintenance <sup>1</sup>					
Ambient	Initial LMF	25K hr Projected <sup>2</sup> LMF	50K hr Projected <sup>2</sup> LMF	75K hr Calculated <sup>3</sup> LMF	100K hr Calculated <sup>3</sup> LMF
5°C (41°F)	1.04	1.01	0.99	0.98	0.96
10°C (50°F)	1.03	1.00	0.98	0.97	0.95
15°C (59°F)	1.02	0.99	0.97	0.96	0.94
20°C (68°F)	1.01	0.98	0.96	0.95	0.93
25°C (77°F)	1.00	0.97	0.95	0.94	0.92

<sup>1</sup> Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors.

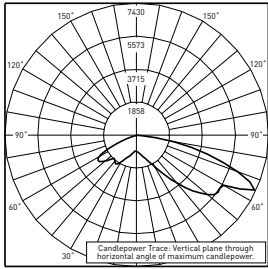
<sup>2</sup> In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (IDUT) i.e. the packaged LED chip.

<sup>3</sup> In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (IDUT) i.e. the packaged LED chip.

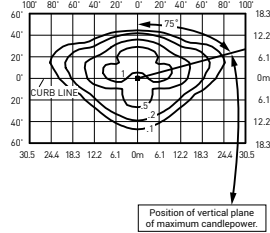
**Photometry**

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/street-and-roadway/ledway-series>

**2M**



CESTL Test Report #: 2015-0025  
STR-LWY-2M-\*\*-06-E-UL-700-40K  
Initial Delivered Lumens: 10,706



STR-LWY-2M-\*\*-03-E-UL-700-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 5,688  
Initial FC at grade

Type II Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
<b>525mA</b>				
02	3,064	B1 U0 G1	3,182	B1 U0 G1
03	4,550	B1 U0 G1	4,725	B1 U0 G1
04	6,079	B2 U0 G2	6,313	B2 U0 G2
05	7,549	B2 U0 G2	7,839	B2 U0 G2
06	9,000	B2 U0 G2	9,346	B2 U0 G2
07	10,532	B2 U0 G2	10,937	B2 U0 G2
08	11,982	B3 U0 G3	12,443	B3 U0 G3
09	13,419	B3 U0 G3	13,935	B3 U0 G3
10	14,994	B3 U0 G3	15,571	B3 U0 G3
11	16,440	B3 U0 G3	17,072	B3 U0 G3
12	17,880	B3 U0 G3	18,568	B3 U0 G3
<b>700mA</b>				
02	3,830	B1 U0 G1	3,977	B1 U0 G1
03	5,688	B2 U0 G2	5,907	B2 U0 G2
04	7,598	B2 U0 G2	7,891	B2 U0 G2
05	9,436	B2 U0 G2	9,799	B2 U0 G2
06	11,250	B3 U0 G3	11,683	B3 U0 G3
07	13,165	B3 U0 G3	13,671	B3 U0 G3
08	14,978	B3 U0 G3	15,554	B3 U0 G3
09	16,774	B3 U0 G3	17,419	B3 U0 G3
10	18,742	B3 U0 G3	19,463	B3 U0 G3
11	20,550	B3 U0 G3	21,340	B3 U0 G3
12	22,351	B3 U0 G3	23,210	B3 U0 G3

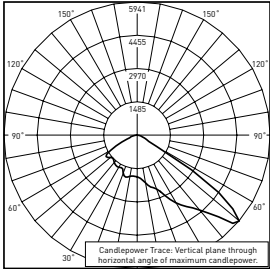
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>.

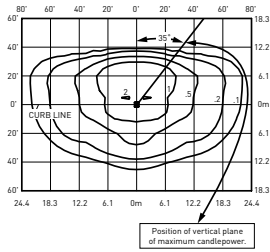
**Photometry**

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25



CESTL Test Report #: 2013-0072  
STR-LWY-25-\*\*-06-E-UL-700-40K  
Initial Delivered Lumens: 12,087



STR-LWY-25-\*\*-03-E-UL-700  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 6,290  
Initial FC at grade

Type II Short Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
<b>525mA</b>				
02	3,263	B1 U0 G1	3,388	B1 U0 G1
03	4,846	B2 U0 G2	5,032	B2 U0 G2
04	6,473	B2 U0 G2	6,722	B2 U0 G2
05	8,039	B2 U0 G2	8,348	B2 U0 G2
06	9,585	B3 U0 G3	9,953	B3 U0 G3
07	11,216	B3 U0 G3	11,647	B3 U0 G3
08	12,760	B3 U0 G3	13,251	B3 U0 G3
09	14,290	B3 U0 G3	14,840	B3 U0 G3
10	15,967	B3 U0 G3	16,582	B3 U0 G3
11	17,508	B3 U0 G3	18,181	B3 U0 G3
12	19,042	B3 U0 G3	19,774	B3 U0 G3
<b>700mA</b>				
02	4,079	B1 U0 G1	4,235	B1 U0 G1
03	6,057	B2 U0 G2	6,290	B2 U0 G2
04	8,092	B2 U0 G2	8,403	B2 U0 G2
05	10,048	B3 U0 G3	10,435	B3 U0 G3
06	11,981	B3 U0 G3	12,442	B3 U0 G3
07	14,020	B3 U0 G3	14,559	B3 U0 G3
08	15,950	B3 U0 G3	16,564	B3 U0 G3
09	17,863	B3 U0 G3	18,550	B3 U0 G3
10	19,959	B3 U0 G3	20,727	B3 U0 G3
11	21,884	B3 U0 G3	22,726	B3 U0 G3
12	23,802	B3 U0 G3	24,717	B4 U0 G4

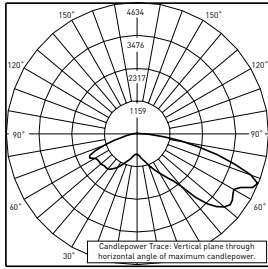
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

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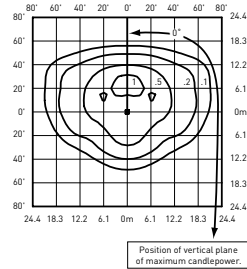
**Photometry**

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**3M**



CESTL Test Report #: 2013-0068  
 STR-LWY-3M-\*\*-06-E-UL-700-40K  
 Initial Delivered Lumens: 10,430



STR-LWY-3M-\*\*-03-E-UL-700  
 Mounting Height: 25' (7.6m) A.F.G.  
 Initial Delivered Lumens: 5,600  
 Initial FC at grade

Type III Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
<b>525mA</b>				
02	2,905	B1 U0 G1	3,016	B1 U0 G1
03	4,314	B1 U0 G1	4,480	B1 U0 G1
04	5,763	B2 U0 G2	5,985	B2 U0 G2
05	7,156	B2 U0 G2	7,432	B2 U0 G2
06	8,533	B2 U0 G2	8,861	B2 U0 G2
07	9,985	B3 U0 G3	10,369	B3 U0 G3
08	11,360	B3 U0 G3	11,797	B3 U0 G3
09	12,722	B3 U0 G3	13,211	B3 U0 G3
10	14,215	B3 U0 G3	14,762	B3 U0 G3
11	15,586	B3 U0 G3	16,185	B3 U0 G3
12	16,952	B3 U0 G3	17,604	B3 U0 G3
<b>700mA</b>				
02	3,631	B1 U0 G1	3,771	B1 U0 G1
03	5,392	B2 U0 G2	5,600	B2 U0 G2
04	7,204	B2 U0 G2	7,481	B2 U0 G2
05	8,945	B2 U0 G2	9,290	B3 U0 G3
06	10,666	B3 U0 G3	11,076	B3 U0 G3
07	12,481	B3 U0 G3	12,961	B3 U0 G3
08	14,200	B3 U0 G3	14,746	B3 U0 G3
09	15,902	B3 U0 G3	16,514	B3 U0 G3
10	17,769	B3 U0 G3	18,452	B3 U0 G3
11	19,483	B3 U0 G3	20,232	B3 U0 G3
12	21,190	B3 U0 G3	22,004	B3 U0 G3

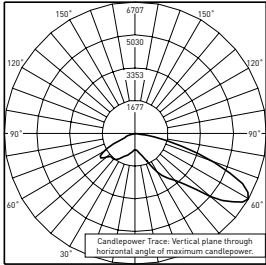
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

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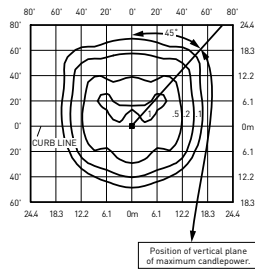
**Photometry**

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**4M**



CESTL Test Report #: 2013-0028  
STR-LWY-4M-\*\*-06-E-UL-700-40K  
Initial Delivered Lumens: 11,036



STR-LWY-4M-\*\*-03-E-UL-700  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 5,907  
Initial FC at grade

Type IV Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
<b>525mA</b>				
02	3,064	B1 U0 G1	3,182	B1 U0 G1
03	4,550	B2 U0 G1	4,725	B2 U0 G1
04	6,079	B2 U0 G1	6,313	B2 U0 G1
05	7,549	B2 U0 G2	7,839	B2 U0 G2
06	9,000	B2 U0 G2	9,346	B2 U0 G2
07	10,532	B2 U0 G2	10,937	B2 U0 G2
08	11,982	B3 U0 G2	12,443	B3 U0 G2
09	13,419	B3 U0 G3	13,935	B3 U0 G3
10	14,994	B3 U0 G3	15,571	B3 U0 G3
11	16,440	B3 U0 G3	17,072	B3 U0 G3
12	17,880	B3 U0 G3	18,568	B3 U0 G3
<b>700mA</b>				
02	3,830	B1 U0 G1	3,977	B1 U0 G1
03	5,688	B2 U0 G1	5,907	B2 U0 G1
04	7,598	B2 U0 G2	7,891	B2 U0 G2
05	9,436	B2 U0 G2	9,799	B2 U0 G2
06	11,250	B2 U0 G2	11,683	B3 U0 G2
07	13,165	B3 U0 G3	13,671	B3 U0 G3
08	14,978	B3 U0 G3	15,554	B3 U0 G3
09	16,774	B3 U0 G3	17,419	B3 U0 G3
10	18,742	B3 U0 G3	19,463	B3 U0 G3
11	20,550	B3 U0 G3	21,340	B3 U0 G3
12	22,351	B3 U0 G3	23,210	B4 U0 G3

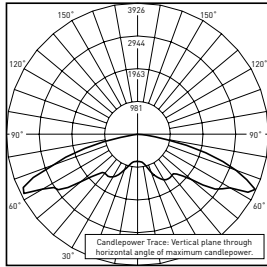
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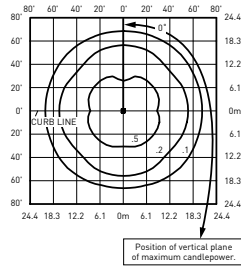
**Photometry**

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**5M**



CESTL Test Report #: 2013-0019  
 STR-LWY-5M-\*\*-06-E-UL-700-40K  
 Initial Delivered Lumens: 11,633



STR-LWY-5M-\*\*-03-E-UL-700  
 Mounting Height: 25' (7.6m) A.F.G.  
 Initial Delivered Lumens: 6,214  
 Initial FC at grade

Type V Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
<b>525mA</b>				
02	3,223	B2 U0 G1	3,347	B2 U0 G1
03	4,787	B3 U0 G1	4,971	B3 U0 G1
04	6,395	B3 U0 G2	6,640	B3 U0 G2
05	7,941	B3 U0 G2	8,246	B3 U0 G2
06	9,468	B3 U0 G2	9,832	B3 U0 G2
07	11,079	B4 U0 G2	11,505	B4 U0 G2
08	12,605	B4 U0 G2	13,089	B4 U0 G2
09	14,116	B4 U0 G3	14,659	B4 U0 G3
10	15,773	B4 U0 G3	16,379	B4 U0 G3
11	17,294	B4 U0 G3	17,959	B4 U0 G3
12	18,809	B4 U0 G3	19,533	B4 U0 G3
<b>700mA</b>				
02	4,029	B2 U0 G1	4,184	B2 U0 G1
03	5,983	B3 U0 G2	6,214	B3 U0 G2
04	7,993	B3 U0 G2	8,301	B3 U0 G2
05	9,926	B3 U0 G2	10,308	B3 U0 G2
06	11,835	B4 U0 G2	12,290	B4 U0 G2
07	13,849	B4 U0 G3	14,381	B4 U0 G3
08	15,756	B4 U0 G3	16,362	B4 U0 G3
09	17,645	B4 U0 G3	18,324	B4 U0 G3
10	19,716	B4 U0 G3	20,474	B4 U0 G3
11	21,618	B4 U0 G3	22,449	B5 U0 G3
12	23,512	B5 U0 G3	24,416	B5 U0 G3

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>.

## Luminaire EPA

Horizontal Tenon Mount							
LED Count (x10)	1 Luminaire	Single	2 @ 90°	2 @ 180°	3 @ 90°	3 @ 120°	4 @ 90°
	Horizontal Tenon Mount	Round External Mount / Square Internal Mount Horizontal Tenons with Luminaires					
		PT-1H/PD-1H4	PT-2H(90)/ PD-2H4(90)	PT-2H(180)/ PD-2H4(180)	PT-3H(90)/ PD-3H4(90)	PT-3H(120)	PT-4H(90)/ PD-4H4(90)
20-30	0.57	0.79	1.02	1.35	1.53	1.38	1.94
40-60	0.69	0.91	1.19	1.59	1.774	1.59	2.18
70-90	0.71	0.93	1.27	1.75	1.93	0.71	2.34
100-120	0.80	1.04	1.38	1.86	2.04	1.82	2.45

## Tenon EPA

Part Number	EPA
PD Series Tenons	0.09
PT Series Tenons	0.10
WM-2L	0.13
XA-TMDA8	0.07

Tenons and Brackets* (must specify color)	
<b>Square Internal Mount Horizontal Tenons (Aluminum)</b> - Mounts to 4" (102mm) square aluminum or steel poles PD-1H4 - Single      PD-3H4(90) - 90° Triple PD-2H4(90) - 90° Twin      PD-4H4(90) - 90° Quad PD-2H4(180) - 180° Twin	<b>Round External Mount Horizontal Tenons (Aluminum)</b> - Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons PT-1H - Single      PT-3H(90) - 90° Triple PT-2H(90) - 90° Twin      PT-4H(90) - 90° Quad PT-2H(180) - 180° Twin
<b>Wall Mount Brackets</b> - Mounts to wall or roof WM-2L - Standard	<b>Direct Arm Pole Adaptor Bracket</b> - Mounts to 3-6" (76-152mm) round or square aluminum or steel poles XA-TMDA8

\* Refer to the [Bracket and Tenons spec sheet](#) for more details