

# WLS27 LED Strip Light - PWM Dimmable



## Datasheet

Banner's WLS27 LED Strip Light has a sturdy aluminum housing and is encased in a shatterproof, UV-stabilized, copolyester shell, making it ideal for harsh indoor and outdoor applications.

- Intensity can be controlled from 0 to 100% using Pulse Width Modulation (PWM) on an input control wire
- Rugged, water-resistant IP69K rating
- Available in eight lengths from 145 mm to 1130 mm
- Daisy chain power to multiple lights to control intensity simultaneously
- Automatic temperature protection built into the unit. Above 50 °C, the light dims to manage heat and protect product lifetime



For PWM dimming, use with the LC65 Dimmer Module. For more information, refer to the LC65 LED Dimmer Module datasheet, p/n [177086](#).



Stand-Alone Light or End Light in a Cascade—QD

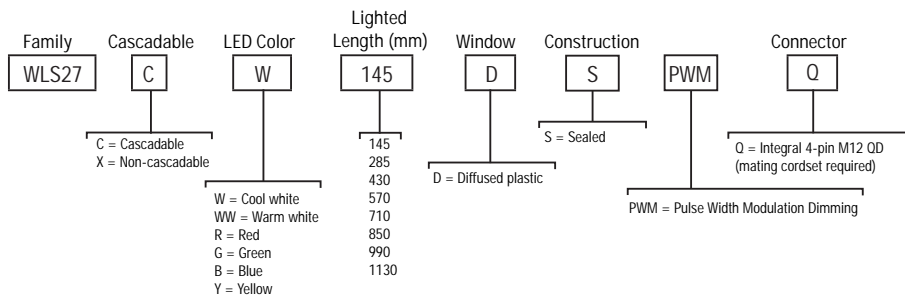


First or Middle of a Cascade—QD

These Work Light Strips are available as either stand-alone models, or as cascade models that can be "daisy-chained" together for a continuous length of lighting, with a minimum of wiring.

Stand-alone models have a male quick disconnect (QD) at one end for power connection and no connections at opposite end. A stand-alone model may be used as the last in the cascade series.

Cascade models have a male quick disconnect (QD) at one end for power connection, and a female QD at the opposite end for connecting to other lights in the cascade. A double-ended accessory cordset must be used between each pair of lights in a cascade.



Stand-Alone	Cascade	Lighted Length	Power Connector
WLS27XW145DSPWMQ	WLS27CW145DSPWMQ	145 mm	Integral 4-pin M12/Euro-style male quick disconnect (QD)
WLS27XW285DSPWMQ	WLS27CW285DSPWMQ	285 mm	
WLS27XW430DSPWMQ	WLS27CW430DSPWMQ	430 mm	
WLS27XW570DSPWMQ	WLS27CW570DSPWMQ	570 mm	
WLS27XW710DSPWMQ	WLS27CW710DSPWMQ	710 mm	
WLS27XW850DSPWMQ	WLS27CW850DSPWMQ	850 mm	
WLS27XW990DSPWMQ	WLS27CW990DSPWMQ	990 mm	



Stand-Alone	Cascade	Lighted Length	Power Connector
WLS27XW1130DSPWMO	WLS27CW1130DSPWMO	1130 mm	

## Specifications

### Operating Voltage

12 to 30 V dc

Use only with suitable Class 2 power supply (UL) or a SELV power supply (CE).

### Pulse Width Modulation (PWM)

Frequency: Up to 1000 Hz

Voltage: 8 to 30 V dc

Current: 4 mA max. per foot

### Supply Protection Circuitry

Protected against reverse polarity and transient voltages

### Light Characteristics

Color: Cool White

Color Temperature (CCT): 6000–7100K

Lumen output: 650 (± 5%) per foot, typical at 25 °C (77 °F)

Luminous efficacy: 90 lumens/Watt typical at 24 V dc at 25 °C (77 °F)

CRI: 85, typical

### LED Lifetime

Lumen Maintenance - L<sub>70</sub>

When operating within specifications, output will decrease less than 30% after 50,000 hours.

### Construction

FDA-grade copolyester

### Mounting

Bracket LMBWLS27EC included (2 for lights up to 570 mm or 3 for lights 710 mm and longer)

### Connections

Integral 4-pin M12 male quick disconnect (QD) (4-pin connecting cordset required)

### Storage Temperature

-40 °C to +70 °C (-40 °F to +158 °F)

### Operating Temperature

-40 °C to +70 °C (-40 °F to +158 °F)

Light output begins to decrease above 50 °C (122 °F) and will be approximately 65% of max intensity at 60 °C (140 °F) and 30% of max intensity at 70 °C (158 °F)

### Application Note

When connecting cascadable lights in series it is important not to exceed maximum current limitations:

Maximum length of light at 12 V dc: 1.4 m (4.6 ft)

Maximum length of light at 24 V dc: 3.0 m (9.8 ft)

Maximum length of light at 30 V dc: 3.1 m (10.2 ft)

Light Length	Typical Current			Max. Current A	Lumens (Typical @25 °C) Cool White
	12 V dc	24 V dc	30 V dc		
145 mm	0.33 A	0.15 A	0.12 A	0.4	325
285 mm	0.66 A	0.30 A	0.24 A	0.8	650
430 mm	1.01 A	0.46 A	0.36 A	1.2	975
570 mm	1.36 A	0.61 A	0.48 A	1.6	1300
710 mm	1.75 A	0.77 A	0.60 A	2.0	1625
850 mm	2.13 A	0.92 A	0.73 A	2.4	1950
990 mm	2.59 A	1.08 A	0.85 A	2.8	2275
1130 mm	3.04 A	1.24 A	0.97 A	3.2	2600



**NOTE:** Do not spray cable with high-pressure sprayer, or cable damage will result.

### Environmental Rating

Rated IEC IP66, IP67, and IP69K, per DIN 40050

### Vibration and Mechanical Shock

Vibration 10-55 Hz 1.0 mm p-p amplitude per IEC 60068-2-6

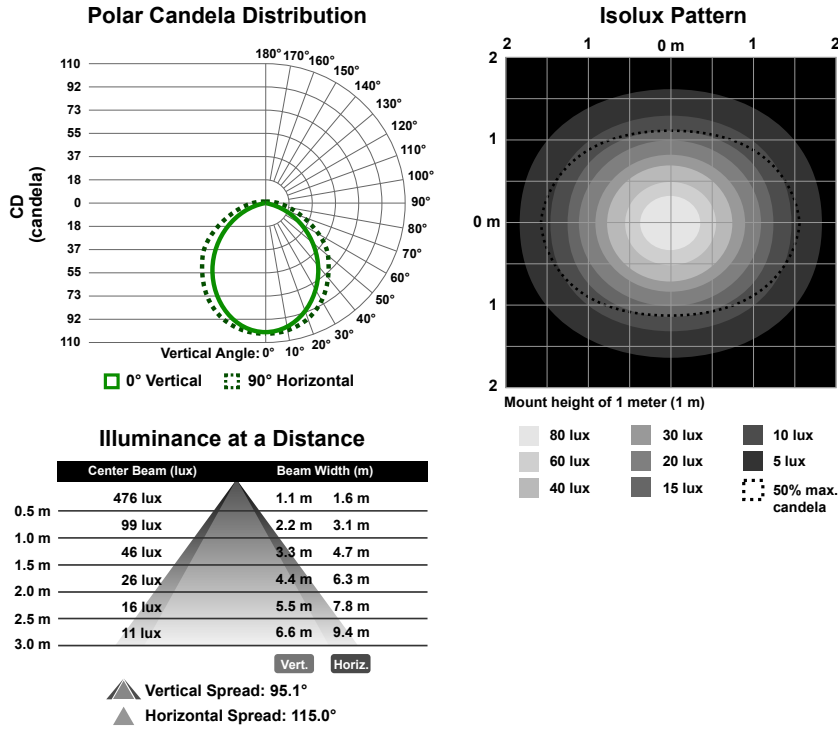
Shock 15G 11 ms duration, half sine wave per IEC 60068-2-27

### Certifications

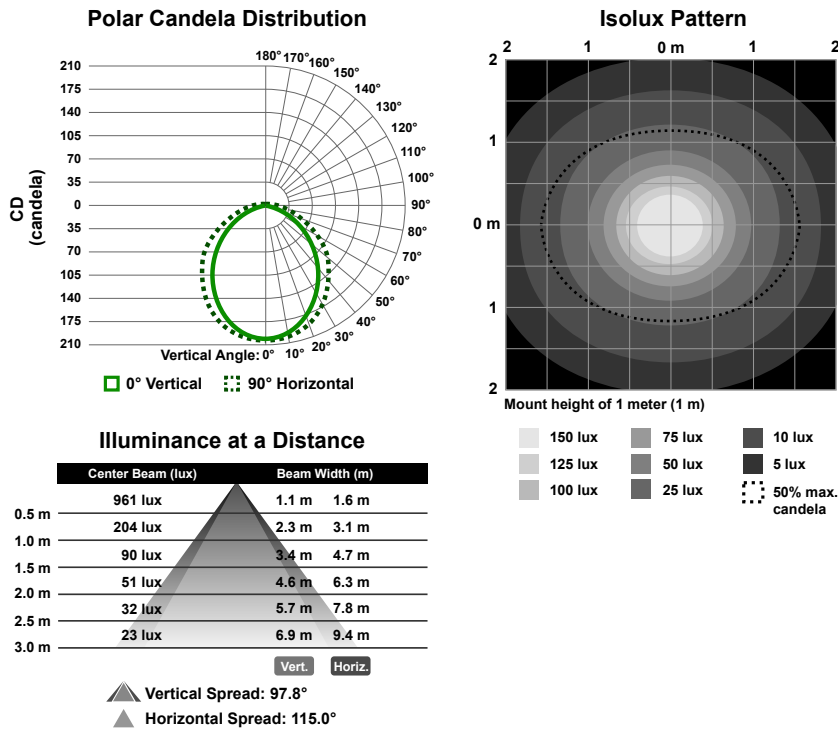


## Performance

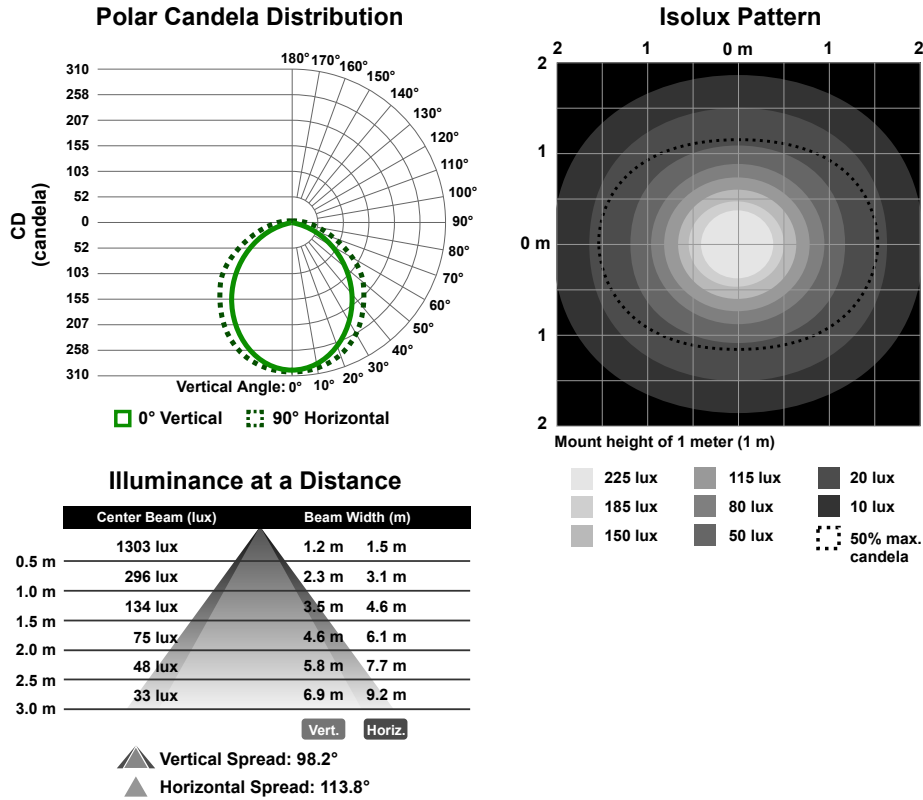
### 145 mm Models



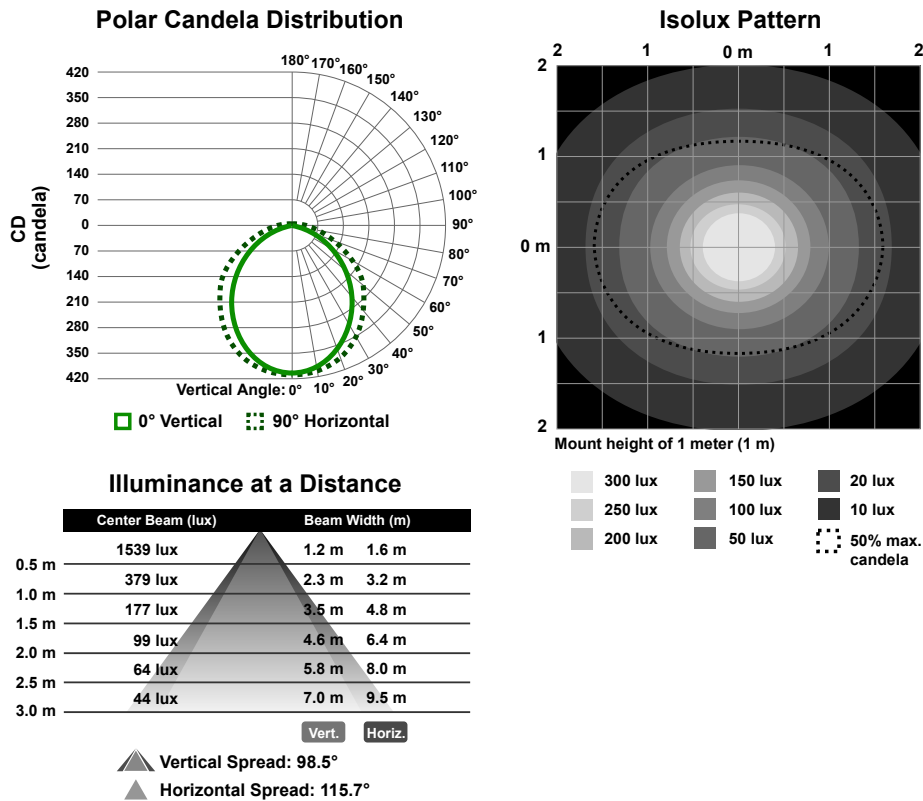
### 285 mm Models



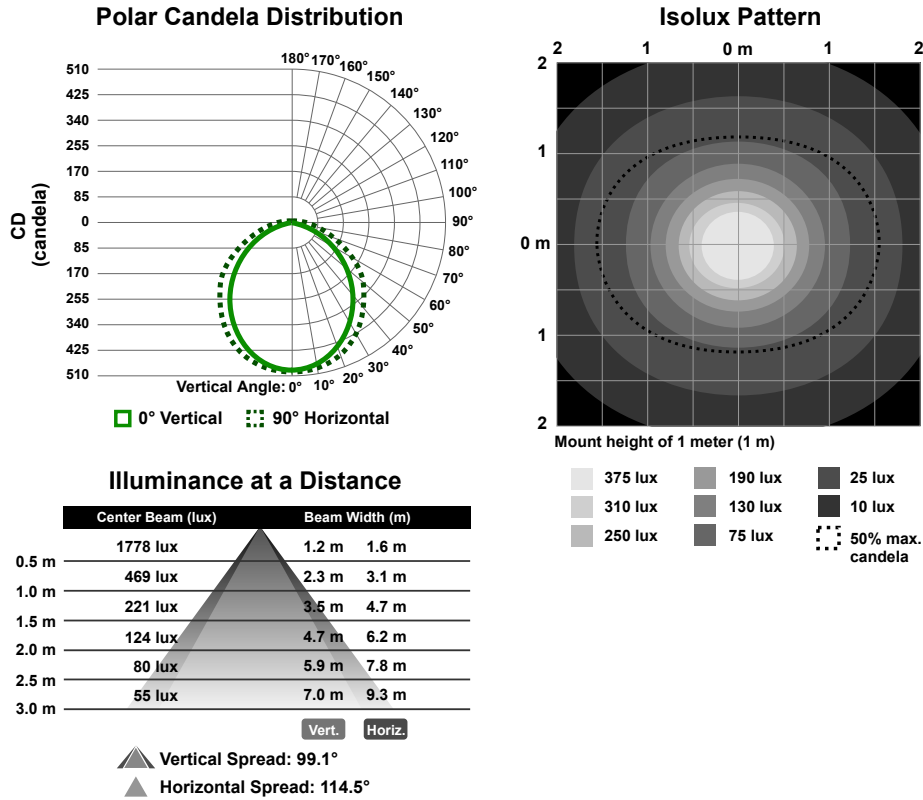
430 mm Models



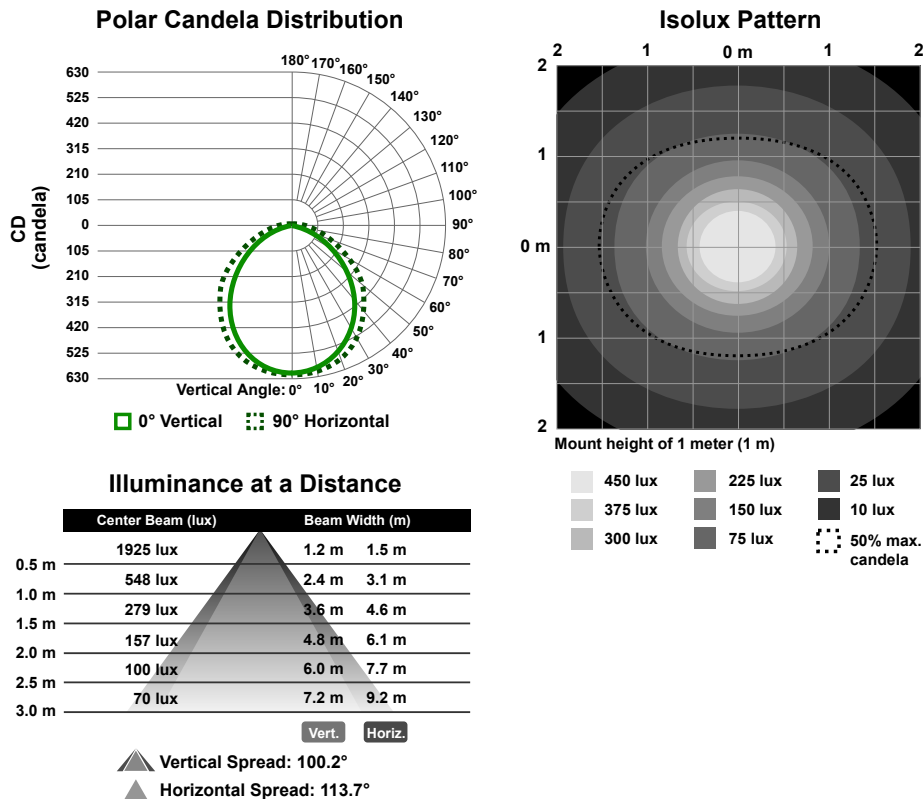
570 mm Models



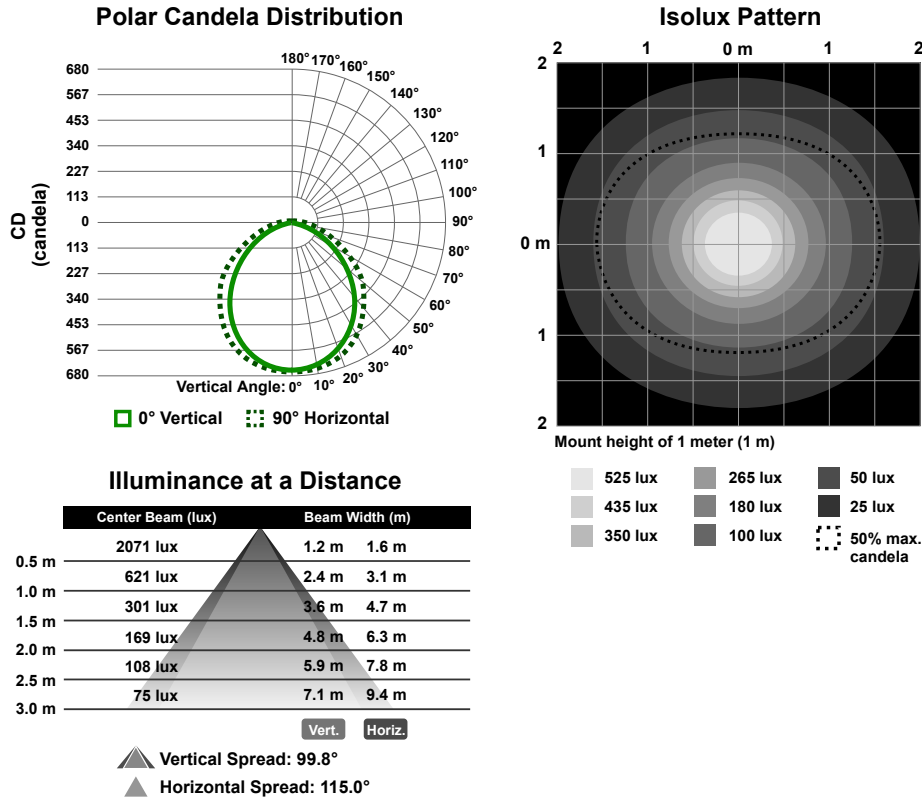
710 mm Models



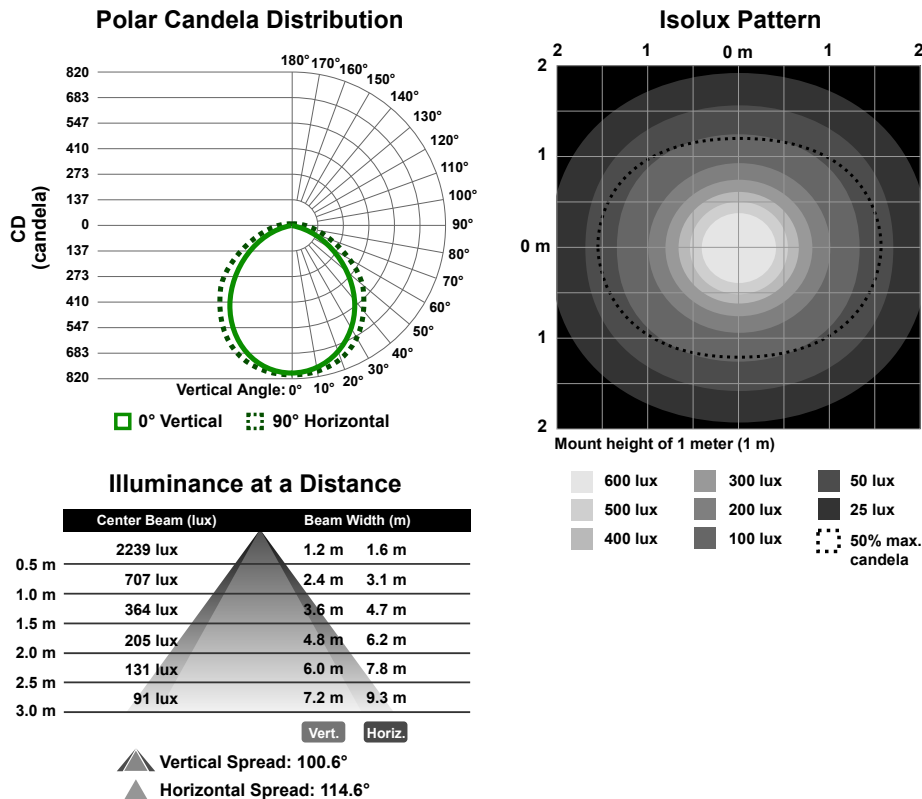
850 mm Models



990 mm Models

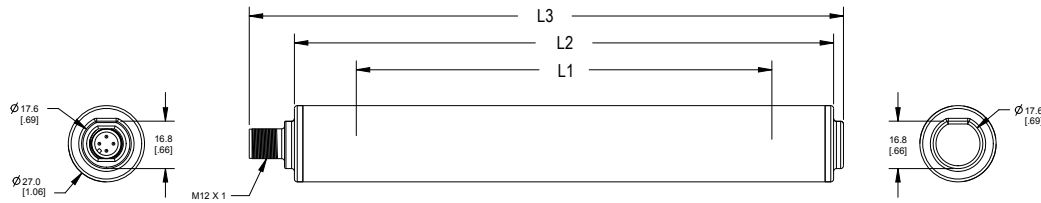


1130 mm Models

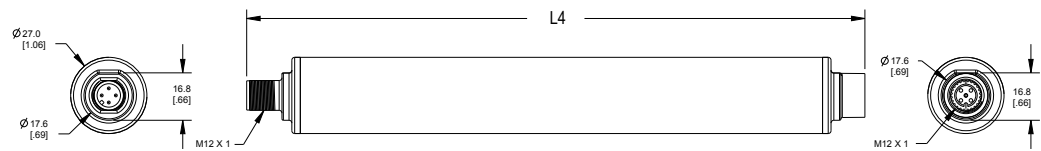


## Dimensions

### Quick Disconnect Models



### Cascade Models



Models	L1	L2	L3	L4
WLS27..145..	145 mm (5.7 in)	189 mm (7.4 in)	208.5 mm (8.2 in)	217 mm (8.5 in)
WLS27..285..	286 mm (11.3 in)	330 (13 in)	349.5 mm (13.8 in)	358 mm (14.1 in)
WLS27..430..	427 mm (16.8 in)	471 mm (18.5 in)	490.5 mm (13.3 in)	499 mm (19.6 in)
WLS27..570..	569 mm (22.4 in)	612 mm (24.1 in)	631.5 mm (24.9 in)	640 mm (25.2 in)
WLS27..710..	708 mm (27.9 in)	752 mm (29.6 in)	771.5 mm (30.4 in)	780 mm (30.7 in)
WLS27..850..	849 mm (33.4 in)	893 mm (35.2 in)	912.5 mm (35.9 in)	921 mm (36.2 in)
WLS27..990..	991 mm (39 in)	1035 mm (40.8 in)	1054.5 mm (41.5 in)	1063 mm (41.8 in)
WLS27..1130..	1120 mm (44.1 in)	1164 mm (45.8 in)	1183.5 mm (46.4 in)	1192 mm (46.9 in)

## Wiring Diagram

Male	Female	Pin	Wire Color	Connection
		1	brown	12 to 30 V dc
		3	blue	dc common
		4	black	Pulse width modulation (PWM) input. For maximum intensity, leave the black wire floating or connected to common.
		2	white	Not used

## Accessories

### Cordsets

Use single-ended cordsets between the power source and the QD connection of a stand-alone light or the first light in a cascade. Use double-ended cordsets between lights in a cascade.

4-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	1.83 m (6 ft)	Straight		
MQDC-415	4.57 m (15 ft)			
MQDC-430	9.14 m (30 ft)			
MQDC-450	15.2 m (50 ft)			
MQDC-406RA	1.83 m (6 ft)	Right-Angle		<p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
MQDC-415RA	4.57 m (15 ft)			
MQDC-430RA	9.14 m (30 ft)			
MQDC-450RA	15.2 m (50 ft)			

4-Pin Threaded M12/Euro-Style Cordsets—Double Ended				
Model	Length	Style	Dimensions	Pinout
MQDEC-401SS	0.31 m (1 ft)	Male Straight/ Female Straight		Female
MQDEC-403SS	0.91 m (3 ft)			
MQDEC-406SS	1.83 m (6 ft)			Male
MQDEC-412SS	3.66 m (12 ft)			
MQDEC-420SS	6.10 m (20 ft)			<p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
MQDEC-430SS	9.14 m (30 ft)			
MQDEC-450SS	15.2 m (50 ft)			

4-Pin Threaded M12/Euro-Style Cordsets—Washdown, Stainless Steel				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-WDSS-0406	1.83 m (6 ft)	Straight		
MQDC-WDSS-0415	4.57 m (15 ft)			
MQDC-WDSS-0430	9.14 m (30 ft)			
				<p>1 = Brown 2 = White 3 = Blue 4 = Black</p>



4-Pin Threaded M12/Euro-Style Cordsets—Double Ended, Washdown, Stainless Steel				
Model	Length	Style	Dimensions	Pinout
MQDEC-WDSS-401SS	0.3 m (1 ft)	Male Straight/ Female Straight		Female
MQDEC-WDSS-403SS	0.91 m (3 ft)			
MQDEC-WDSS-406SS	1.83 m (6 ft)			Male
MQDEC-WDSS-412SS	3.66 m (12 ft)			<p>1 = Brown 2 = White 3 = Blue 4 = Black</p>

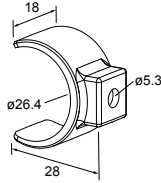
4-Pin Threaded M12/Euro-Style Splitter Cordsets—Flat Junction			
Model	Branches (Female)	Trunk (Male)	Pinout
CSB-M1240M1240	No branch	No trunk	Female
CSB-M1240M1241	2 x 0.30 m (1 ft)	No trunk	
CSB-M1241M1241		0.30 m (1 ft)	Male
CSB-M1248M1241		2.50 m (8 ft)	
CSB-M12415M1241		4.57 m (15 ft)	
CSB-M12425M1241		7.60 m (25 ft)	
CSB-UNT425M1241		7.60 m (25 ft) Unterminated	
			<p>1 = Brown 2 = White 3 = Blue 4 = Black</p>

Brackets

<p>LMBWLS27EC</p> <ul style="list-style-type: none"> <li>• Clear copolyester</li> <li>• Clearance for M5 or #10 hardware</li> </ul>	<p>LMBWLS27H</p> <ul style="list-style-type: none"> <li>• Stainless steel mounting brackets</li> <li>• M4 stainless steel hardware included</li> </ul>
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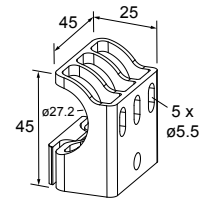
## LMBWLS27SP

- Clear copolyester
- Clearance for M5 or #10 hardware
- Snap bracket for light duty applications



## LMBWLS27U

- Clear copolyester
- Clearance for M5 or #10 hardware
- Clamps securely around the light body



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