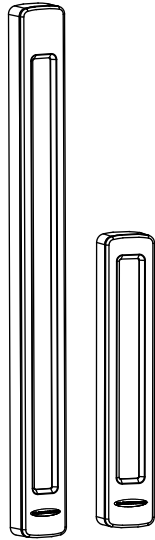


WLC60 Heavy Duty LED Light - PWM Dimmable



Datasheet



Banner's WLC60 Heavy Duty Lights are engineered to withstand harsh environments, making it the first choice for a machine lighting solution. A conservative mechanical design protects against liquid ingress and state-of-the-art LED technology delivers best of class brightness.

Choose between a durable polycarbonate window or a borosilicate glass (BSG) option featuring enhanced chemical and thermal resistance. This smart industrial lighting solution also features energy efficient eco-mode dimming states to tailor the lumen levels and power consumption to the application.

- Intensity can be controlled from 0 to 100% using Pulse Width Modulation (PWM) on an input control wire
- Rugged and durable for harsh environments
- Oil, chemical, and water resistant with IP67, IP68g, and IP69K ratings
- High brightness paired with advanced glare-reducing optics
- Easy to install with a wide variety of mounting solutions
- Highly resistant to vibration and shock
- Input voltage of 12 to 30 V dc
- Integral 4-pin M12 Euro-style Quick Disconnect connector
- Models have four discrete intensity level settings




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

Base Mount Side Exit Connection Models				
	Models ¹	Cascadable	Lighted Length (mm)	Window
	WLC60XW340APWMQ	No	340	Polycarbonate
	WLC60XW640APWMQ		640	
	WLC60CW340APWMQ	Yes	340	
	WLC60CW640APWMQ		640	
	WLC60XW340GAPWMQ	No	340	Borosilicate Glass
	WLC60XW640GAPWMQ		640	
	WLC60CW340GAPWMQ	Yes	340	
	WLC60CW640GAPWMQ		640	

¹ The listed models have 4-pin integral QDs. To order the 2 m (6.5 ft) cable models, omit the suffix "Q" from the model number. For example, WLC60XW340APWM. Models with a quick disconnect (QD) connector require a mating cable.



Base Mount Rear Exit Connection Models				
	Models ¹	Cascadable	Lighted Length (mm)	Window
	WLC60XW340ARPWMQ	No	340	Polycarbonate
	WLC60XW640ARPWMQ		640	
	WLC60CW340ARPWMQ	Yes	340	
	WLC60CW640ARPWMQ		640	
	WLC60XW340GARPWMQ	No	340	Borosilicate Glass
	WLC60XW640GARPWMQ		640	
	WLC60CW340GARPWMQ	Yes	340	
	WLC60CW640GARPWMQ		640	

Specifications

Supply Voltage

Operating Voltage: 12 to 30 V dc

Pulse Width Modulation (PWM)

Frequency: Up to 30 kHz
Voltage: 12 to 30 V dc
Current: 5 mA max.

Max. Current (340 mm Models)

1.4 A at 12 V dc
0.7 A at 24 V dc
0.56 A at 30 V dc
Max. Input Power: 16.8 Watts

Typical Current (340 mm Models)

1.3 A at 12 V dc
0.59 A at 24 V dc
0.47 A at 30 V dc

Max. Current (640 mm Models)

3.1 A at 12 V dc
1.53 A at 24 V dc
1.22 A at 30 V dc
Max. Input Power: 37.2 Watts

Typical Current (640 mm Models)

2.8 A at 12 V dc
1.17 A at 24 V dc
0.97 A at 30 V dc

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Construction

Nickel plated aluminum housing, polycarbonate or borosilicate glass window

Connections

Integral 4-pin M12 male quick disconnect (QD) (4-pin connecting cordset required); or 2 m (6.5 ft) integral cable

Vibration and Mechanical Shock

All models meet Mil. Std. 202F requirements method 201A (vibration: 10 to 60 Hz max., double amplitude 0.06", maximum acceleration 10G). Also meets IEC 947-5-2; 30G 11 ms duration, half sine wave.

Light Characteristics

Color temperature (CCT): 6000–7100K

Color: Cool white

Lumen output at 25 °C (77 °F) typical for 340 mm models: 1300 lumens

Lumen output at 25 °C (77 °F) typical for 640 mm models: 2600 lumens

Luminous efficacy at 25 °C (77 °F) typical: 92 lumens per watt at 24 V dc

Spacing Criterion

0.86

Operating Temperature

–40 to 50 °C (–40 to 122 °F) at the max. intensity setting

–40 °C to +70 °C (–40 °F to +158 °F) at any of the dim settings

Environmental Rating

IEC IP67/IP68g / IP69K per DIN 40050

Storage Temperature

–40 °C to +70 °C (–40 °F to +158 °F)

Application Notes

When connecting cascadable lights in series, it is important not to exceed the maximum current limitation of 4 Amps.

Input Voltage	Max. Number of Units	
	340 mm Models	640 mm Models
12 V dc	3	1
24 V dc	6	3
30 V dc	8	4

Certifications

Pending

Spacing Criteria (SC)

The spacing criteria is the fixture-spacing-to-mounting-height ratio and aids in laying out a pattern of fixtures. Multiply the spacing criteria by the mounting height to get the maximum fixture spacing that still provides even illumination (no shadowing between fixtures).

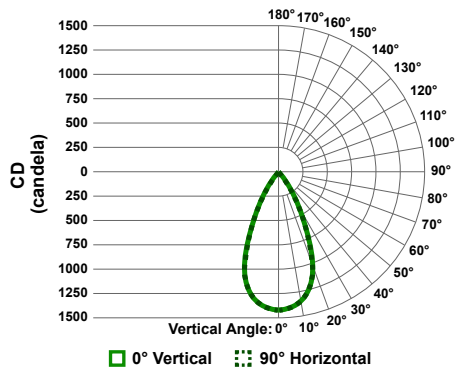
Luminaire Spacing = SC × Height to Illuminated Plane

The mounting height is the distance from the fixture to the surface you are lighting.

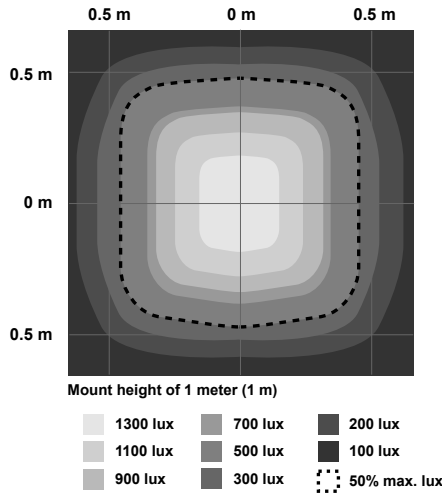
Light Characteristics

340 mm Models

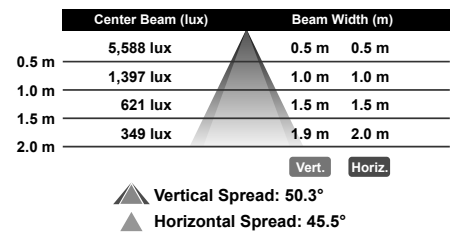
Polar Candela Distribution



Isolux Pattern

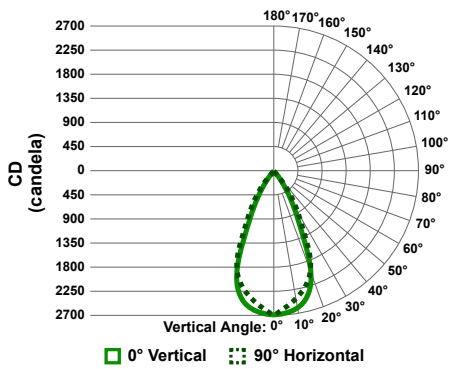


Illuminance at a Distance

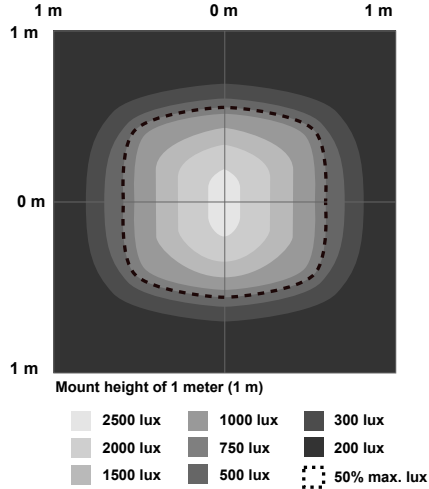


640 mm Models

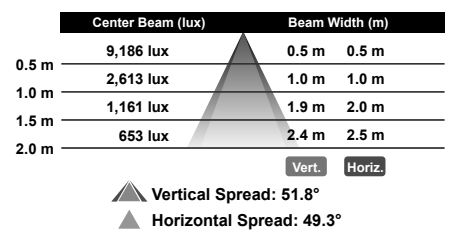
Polar Candela Distribution



Isolux Pattern

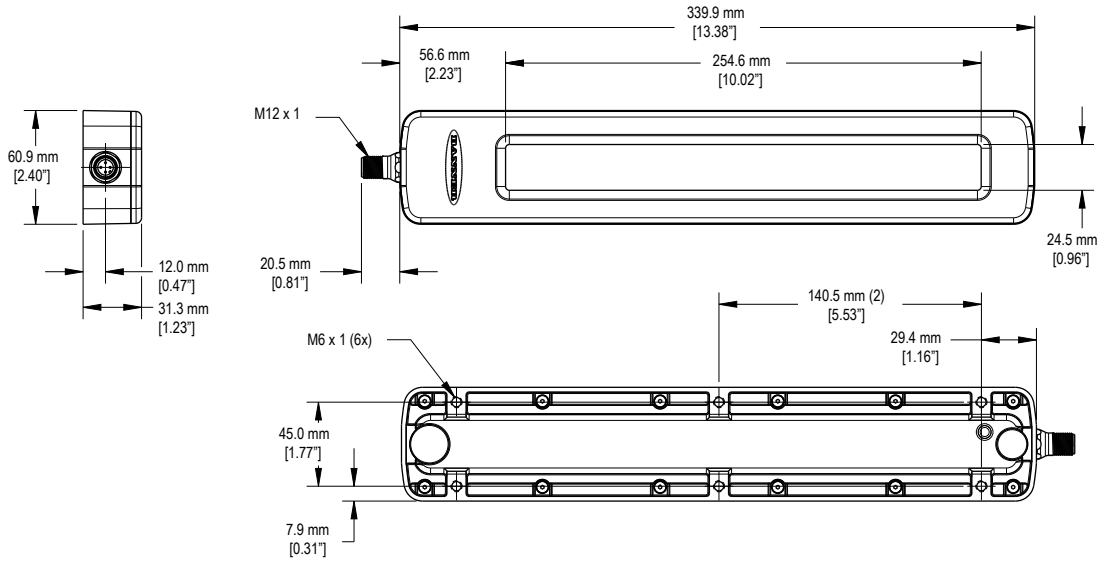


Illuminance at a Distance

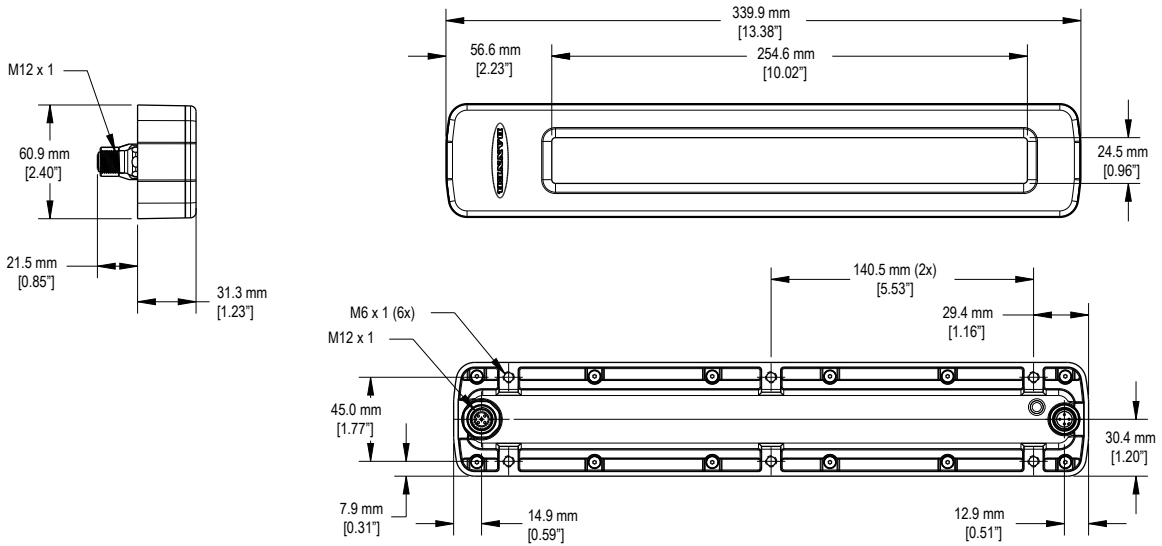


Dimensions for WLC60 (Dimmable) 340 mm Models

WLC60 (340 mm) Base Mount Side Exit Models

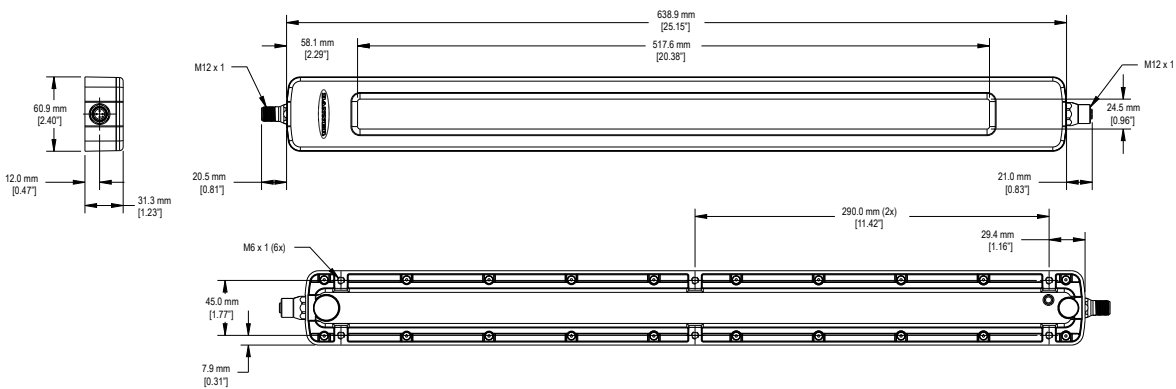


WLC60 (340 mm) Base Mount Rear Exit Models

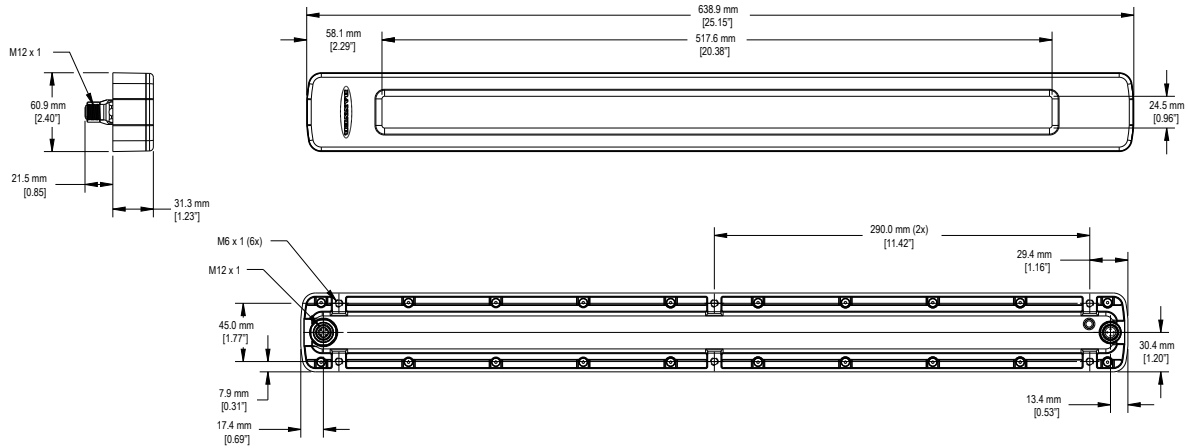


Dimensions for WLC60 640 mm Models

WLC60 (640 mm) Base Mount Side Exit Models Dimensions



WLC60 (640 mm) Base Mount Rear Exit Models Dimensions



Wiring

	Pins	Color	Connection
	1	brown	12 to 30 V dc
	3	blue	dc common
	4	black	Pulse width modulation (PWM) input
	2	white	Not used

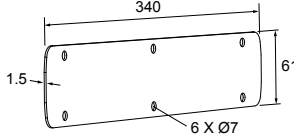
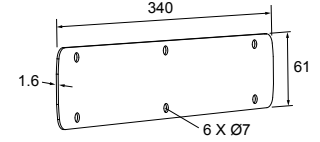
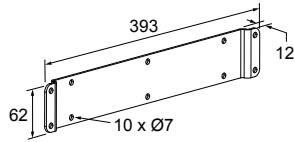
For maximum intensity, leave the white and black wires floating or connected to common.

Accessories

Brackets

<p>LMBWLC60F</p> <ul style="list-style-type: none"> Set of two flat brackets 300 series stainless steel Includes M6 flathead screws for mounting to light Clearance for M6 or 1/4-20 mounting hardware 		<p>LMBWLC60RA</p> <ul style="list-style-type: none"> Set of two right-angle brackets 300 series stainless steel Includes M6 buttonhead screws for mounting to light Clearance for M6 or 1/4-20 mounting hardware 	
<p>LMBWLC60MAG</p> <ul style="list-style-type: none"> Magnetic mounting kit (set of two) Two inch magnets Mounting hardware included 		<p>LMBWLC60RAS</p> <ul style="list-style-type: none"> Pair of two swivel mount, right-angle brackets 300 series stainless steel Includes hardware for mounting to light 	

<p>LMBWLC60B340</p> <ul style="list-style-type: none"> • Plate for sealing the cavity on the back of the 340 mm models • 300 series stainless steel • Includes hardware for mounting to the light 	<p>ACC-WLC60-340-GSK-FDA-1</p> <ul style="list-style-type: none"> • Blue FDA-approved silicone gasket • Thickness: 1.6 mm
<p>ACC-WLC60-340-GSK-N-1</p> <ul style="list-style-type: none"> • Black nitrile gasket • Thickness: 1.5 mm 	



Cordsets

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

4-Pin Threaded M12/Euro-Style Cordsets—Double Ended				
Model	Length	Style	Dimensions	Pinout
MQDEC-403RS	0.91 m (1 ft)	Male Right-Angle/ Female Straight		
MQDEC-406RS	1.83 m (3 ft)			
MQDEC-412RS	3.66 m (12 ft)			
MQDEC-420RS	6.10 m (20 ft)			
MQDEC-430RS	9.14 m (30 ft)			
MQDEC-450RS	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		<p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
MQDC-WDSS-0415	4.57 m (15 ft)			
MQDC-WDSS-0430	9.14 m (30 ft)			

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		<p>Female</p> <p>Male</p> <p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
MQDEC-WDSS-403SS	0.91 m (3 ft)			
MQDEC-WDSS-406SS	1.83 m (6 ft)			
MQDEC-WDSS-412SS	3.66 m (12 ft)			

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