

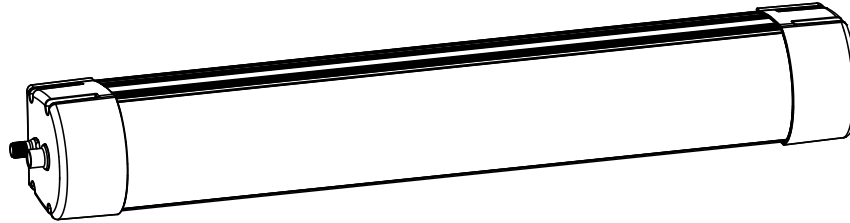
# WLB92 Industrial LED Light Bar (DC)



## Datasheet

Banner's WLB92 is a very bright LED fixture/luminaire that features an even light output for a no glare 'glow'. The WLB92 series is designed for a wide variety of environments and applications, including but not limited to work stations, machine lighting, and low bay lighting. The WLB92 uses advanced LED lighting technology to provide a high-quality and maintenance free industrial lighting solution.

- Increase worker productivity and ergonomics with bright, high-quality, uniform light
- Exceptionally energy efficient for overall cost savings
- Durable light stands up to your environment with a rugged metal housing and shatter-resistant window
- Easy installation with surface mount brackets or a choice of snap, swivel, or hanging brackets
- Intensity can be controlled from 0% to 100% using Pulse Width Modulation (PWM) dimming
- Rated for use at 24 V dc



WLB92 Industrial LED Light Bars are available in several configurations including different lengths, switches, dimming capabilities, and cord options. See [Accessories](#) on p. 4. To view or download the latest technical information about this product, including specifications, dimensions, accessories, and wiring, see [www.bannerengineering.com](http://www.bannerengineering.com).



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



**Important:** Read the following instructions before operating the light. Please download the complete WLB92 Industrial LED Light Bar (DC) technical documentation, available in multiple languages, from [www.bannerengineering.com](http://www.bannerengineering.com) for details on the proper use, applications, Warnings, and installation instructions of this device.



**Important:** Lea el siguiente instructivo antes de operar el luminario. Por favor descargue desde [www.bannerengineering.com](http://www.bannerengineering.com) toda la documentación técnica de los WLB92 Industrial LED Light Bar (DC), disponibles en múltiples idiomas, para detalles del uso adecuado, aplicaciones, advertencias, y las instrucciones de instalación de estos dispositivos.



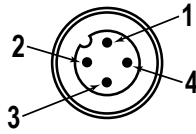
**Important:** Lisez les instructions suivantes avant d'utiliser le luminaire. Veuillez télécharger la documentation technique complète des WLB92 Industrial LED Light Bar (DC) sur notre site [www.bannerengineering.com](http://www.bannerengineering.com) pour les détails sur leur utilisation correcte, les applications, les notes de sécurité et les instructions de montage.

## Models

Family	Cascadable	LED Color	Lighted Length (mm)	Control	Connector
<b>WLB92</b>	<b>X</b>		<b>550</b>	<b>PB</b>	<b>Q</b>
	X = Non-Cascadable	Blank = Daylight White WW = Warm White G = Green R = Red Y = Yellow B = Blue	550 1100	PB = Switch, Dimming knob PWM = Dimmable via Pulse Width Modulation	Blank = 2 m Integral Cable Q = Integral 4-pin M12 Quick Disconnect (QD) fitting * * QD models require mating cordset



## Wiring Diagram



### Key

- Pin 1 brown – 24 V dc
- Pin 3 blue – dc common
- Pin 4 black – Pulse width modulation (PWM) input (PWM models only)
- Pin 2 white – Not Used



**Note:** For maximum intensity, leave the black wire floating or connected to common. There is no black wire present in the models with a dimming knob.

## Specifications

### Supply Voltage

Operating Voltage: 24 V dc ( $\pm 10\%$ )  
See electrical characteristics on product label  
Use only with a suitable Class 2 power supply (North America)  
Use only with a suitable Class III SELV power supply (Europe)

### Supply Current

Lighted Length (mm)	Max Current Draw (A)	Typical Current Draw at 24 V dc (A)
550	1.75	1.325
1100	3.50	2.650

### Supply Protection Circuitry

Protected against reverse polarity and transient voltages

### Light Characteristics

Daylight White and Warm White Efficacy: 110 lumens/watt typical at 24 V dc at 25 °C (77 °F)  
CRI: 82, typical

Color	Dominant Wavelength (nm) or Color Temperature (CCT)	Lighted Length Lumens (Typical at 25 °C)	
		550 mm	1100 mm
Daylight White	5000 K ( $\pm 300$ K)	3510	7150
Warm White	3000 K (+225 K, -125 K)	3510	7150
Green	525 nm	1430	2975
Red	625 nm	745	1545
Yellow	590 nm	620	1295
Blue	470 nm	405	840

### LED Lifetime

Lumen Maintenance -  $L_{70}$   
When operating within specifications, output will decrease less than 30% after 50,000 hours.

### Test Data

LM-79, LM-80, TM-21

### Switch/Dimming Knob (some models)

On/Off Switch and dimming knob, dimmable to 0% intensity

### Pulse Width Modulation (PWM) Dimming (some models)

**Frequency:** Up to 1000 Hz  
**Voltage:** 12 V dc to 24 V dc  
**Current:** 4 mA maximum  
Compatible with the LC65 Dimmer Module. For more information, refer to the LC65 LED Dimmer Module datasheet, p/n [177086](#).

### Construction

Anodized aluminum housing, polycarbonate window and end caps, and stainless steel mounting brackets

### Spacing Criterion

**Vertical:** 1.20  
**Horizontal:** 1.32

### Mounting

Surface mount brackets included (2)  
Compatible with integral 45 mm aluminum framing mounting slots  
Several optional mounting brackets available (see [Accessories](#) on p. 4)

### Connections

Integral 4-pin M12/Euro-style quick disconnect connector (4-pin connecting cordset required for QD models); or 2 m (6.5 ft) integral cable

### Environmental Rating

IEC IP40

### Operating Temperature

-40 °C to +70 °C (-40 °F to +158 °F)  
**550 Lighted Length Models:** Light output begins to decrease above 65 °C (149 °F); light output is approximately 90% of maximum intensity at 70 °C (158 °F).  
**1100 Lighted Length Models:** Light output begins to decrease above 45 °C (113 °F); light output is approximately 75% of maximum intensity at 60 °C (140 °F) and 65% of maximum intensity at 70 °C (158 °F).

### Storage Temperature

-40 °C to +70 °C (-40 °F to +158 °F)

### Vibration and Mechanical Shock

Vibration: 10 Hz to 55 Hz, 0.5 mm peak-to-peak amplitude per IEC 60068-2-6  
Shock: 5G 11 ms duration, half sine wave per IEC 60068-2-27

### Certifications



**CAUTION: To Reduce the Risk of Fire.** Do not install the 550 mm models in a compartment smaller than 305 mm by 305 mm by 675 mm. Do not install the 1100 mm models in a compartment smaller than 305 mm by 305 mm by 1350 mm.

## Spacing Criteria (SC)

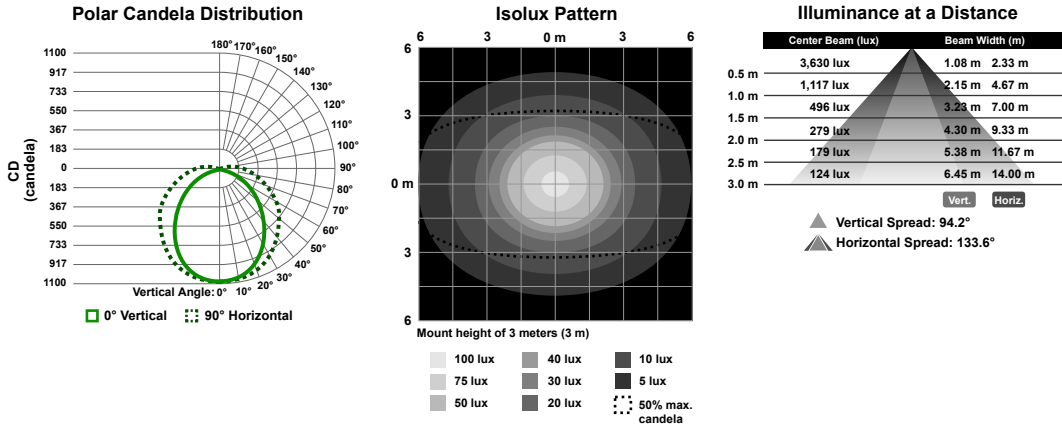
The spacing criteria is the fixture-spacing-to-mounting-height ratio and aids in laying out a pattern of fixtures. Multiply the spacing criteria by the mounting height to get the maximum fixture spacing that still provides even illumination (no shadowing between fixtures).

Luminaire Spacing = SC  $\times$  Height to Illuminated Plane

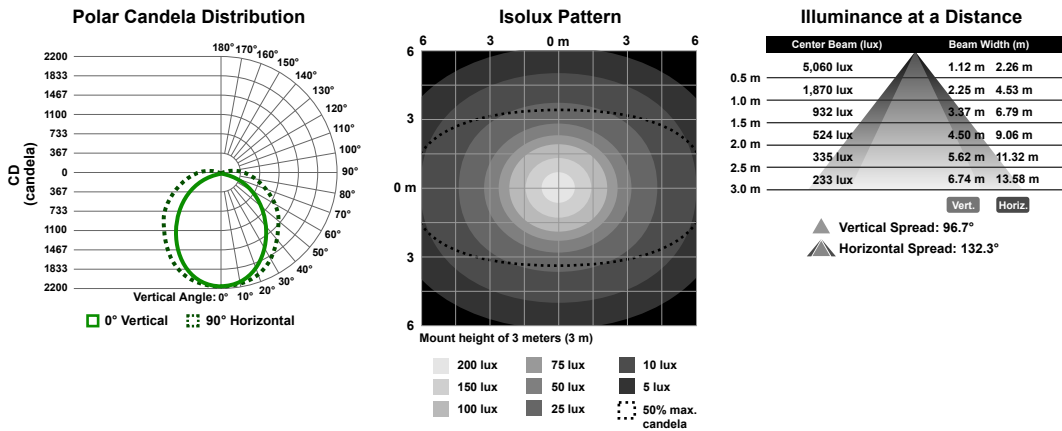
The mounting height is the distance from the fixture to the surface you are lighting.

## Performance Curves

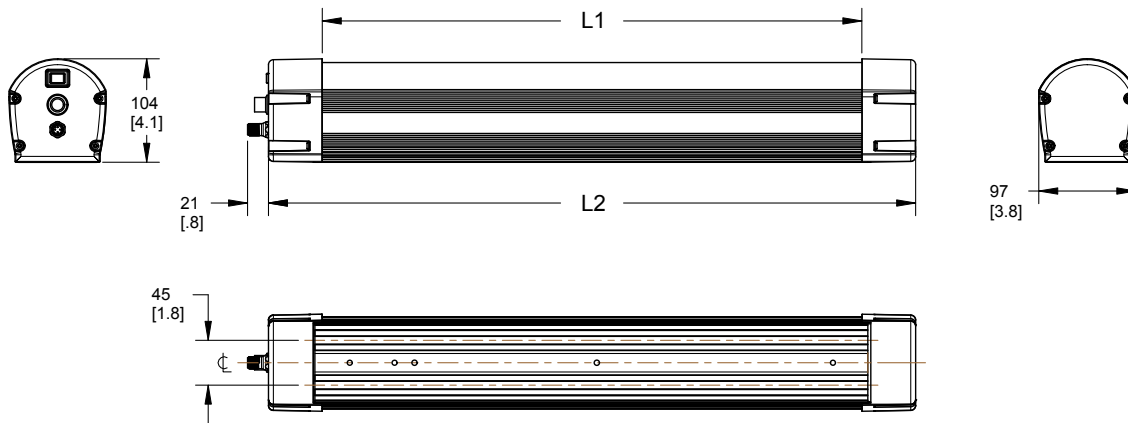
### 550 mm Models - Daylight White and Warm White



### 1100 mm Models - Daylight White and Warm White

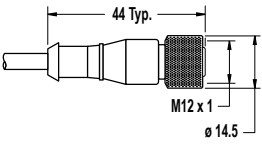
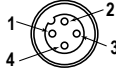
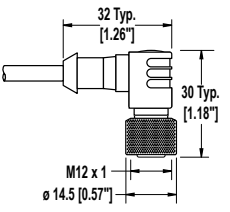


## Dimensions



Models	L1	L2
WLB92X...550..Q	542 mm (21.3 in)	650 mm (25.6 in)
WLB92X...1100..Q	1097 mm (43.2 in)	1205 mm (47.4 in)
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WLB92X...1100..	1097 mm (43.2 in)	1205 mm (47.4 in)

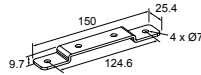
## Accessories

4-Pin Threaded M12/Euro-Style Cordsets (15 ft and Shorter)—Single Ended				
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-406RA	1.83 m (6 ft)	Right-Angle		
MQDC-415RA	4.57 m (15 ft)			

### Brackets

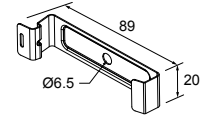
#### LMBWLB92

- Standard bracket that ships with the WLB92 light
- Stainless steel
- Includes two surface mount brackets, four screws, and four t-nuts



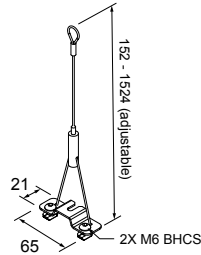
#### LMBWLB92CLIP

- Snap clip allows for tool-less installation
- Stainless steel
- Includes four snap clips, four screws, and two insulator caps



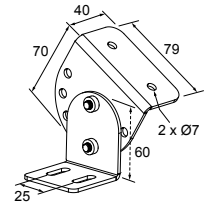
#### LMBWLB92HK5

- Hanging bracket kit allows for suspended installation
- Includes two hanging bracket assemblies, four screws, four t-nuts, and two 15-24 mm cables



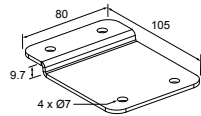
#### LMBWLB92RAS

- Swivel brackets allow for 180° of movement in seven fixed positions
- Stainless steel
- Includes two swivel bracket assemblies, eight screws, and four t-nuts



#### LMBWLB92S

- Surface mount brackets allow for mounting at the end of the light
- Stainless steel
- Includes two end brackets, four screws, and four t-nuts



## Banner Engineering Corp. Limited Warranty

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