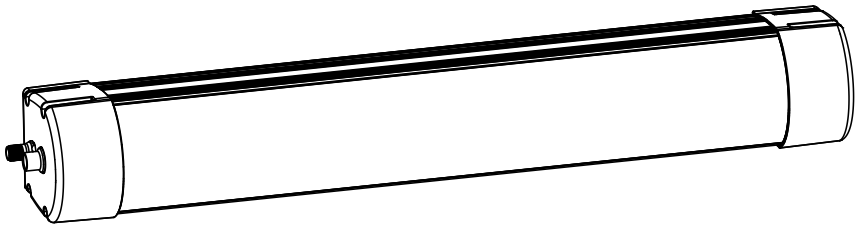
# WLB92 Industrial LED Light Bar (DC)

## 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* (p. 4). To view or download the latest technical information about this product, including specifications, dimensions, accessories, and wiring, see *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*.

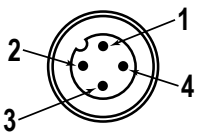
**Important:** Lea el siguiente instructivo antes de operar el luminario. Por favor descargue desde www.bannerengineering.com toda la documentación técnica de los WLB92 Industrial LED Light Bar (DC), disponibles en múltiples idiomas, para detalles del uso adecuado, aplicaciones, advertencias, y las instrucciones 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 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 |
|---|---|---|---|---|---|
| WLB92 | X | | 550 | PB | Q |
| | X = Non-Cascadable | Blank = Daylight White<br>WW = Warm White<br>G = Green<br>R = Red<br>Y = Yellow<br>B = Blue | 550<br>1100 | PB = Switch, Dimming knob<br>PWM = Dimmable via Pulse Width Modulation | Blank = 2 m Integral Cable<br>Q = Integral 4-pin M12 Quick Disconnect (QD) fitting *<br>* 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 (± 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 (±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* (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).

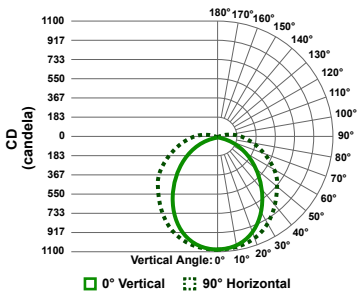
Luminaire Spacing = SC × Height to Illuminated Plane

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

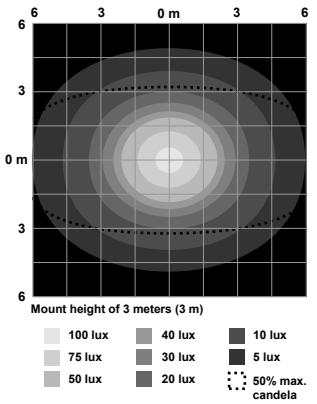
# Performance Curves

## 550 mm Models - Daylight White and Warm White

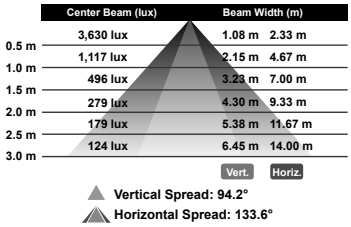
**Polar Candela Distribution**




**Isolux Pattern**

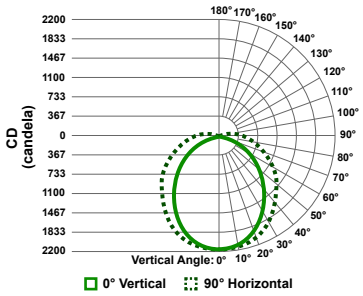



**Illuminance at a Distance**

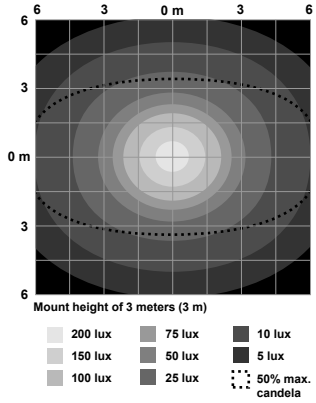



## 1100 mm Models - Daylight White and Warm White

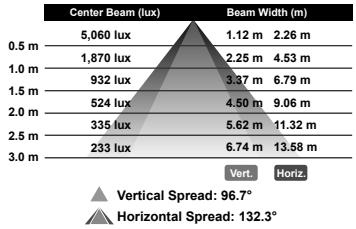
**Polar Candela Distribution**



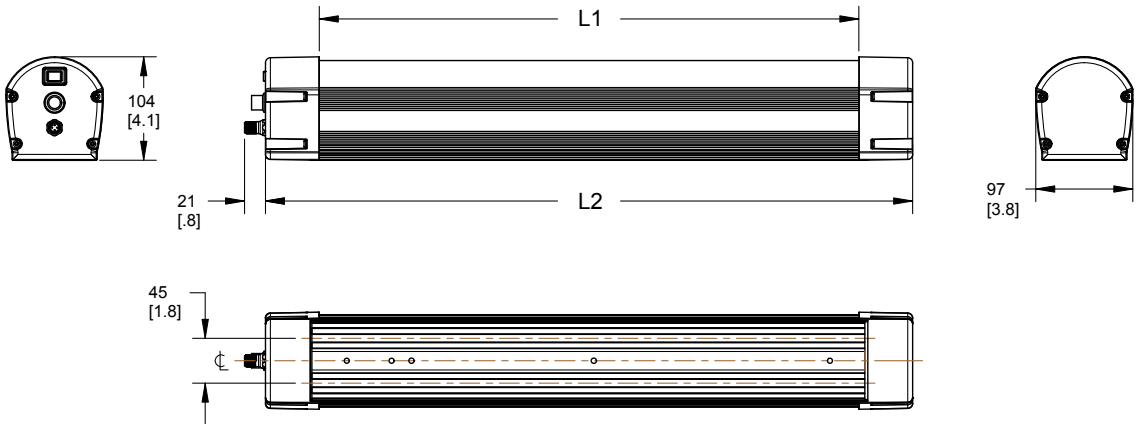

**Isolux Pattern**




**Illuminance at a Distance**

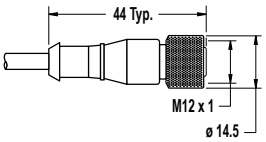
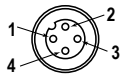
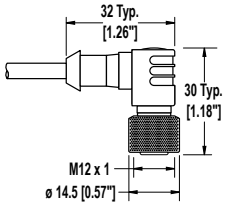



# Dimensions




| 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) |
| WLB92X...550.. | 542 mm (21.3 in) | 650 mm (25.6 in) |
| WLB92X...1100.. | 1097 mm (43.2 in) | 1205 mm (47.4 in) |

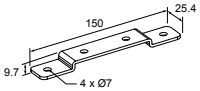
## Accessories

| 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 |  | <br>1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black |
| **MQDC-415** | 4.57 m (15 ft) | | | |
| **MQDC-406RA** | 1.83 m (6 ft) | Right-Angle |  | |
| **MQDC-415RA** | 4.57 m (15 ft) | | | |

### Brackets

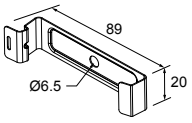
**LMBWLB92**

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



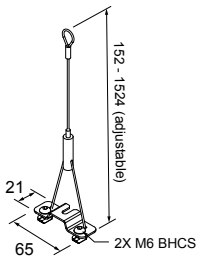

**LMBWLB92CLIP**

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



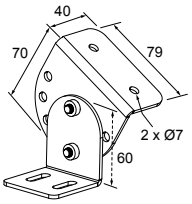

**LMBWLB92HK5**

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



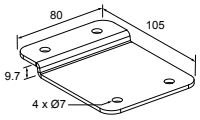

**LMBWLB92RAS**

- 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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## FCC Part 15 and CAN ICES-3 (B)/NMB-3(B)

This device complies with part 15 of the FCC Rules and CAN ICES-3 (B)/NMB-3(B). Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules and CAN ICES-3 (B)/NMB-3(B). These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the manufacturer.

## Mexican Importer

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