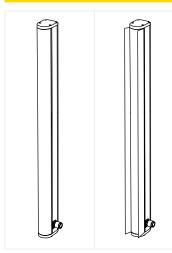
WLB32 Industrial PoE LED Light Instruction Manual



Features



Banner's WLB32 is an ultra-bright LED fixture with an even light output for a no-glare 'glow'. Suitable for a variety of environments and applications, including workstations, machine lighting, control cabinets, and manufacturing lines, the WLB32 uses advanced LED lighting technology to provide a high-quality and maintenance-free industrial lighting solution for years.

- · Cost-effective luminaire for use when AC power or a DC power supply are not available
- Connect directly to a Power over Ethernet (PoE) enabled port on a managed or unmanaged Ethernet switch
- 285 mm and 570 mm models compliant with PoE (Class 0 802.3af, 802.3at Type 1) hardware negotiation
- 850 mm and 1130 mm models compliant with PoE+ (Class 4 802.3at Type 2) hardware negotiation
- Dimming knob with 11 intensity settings between 0-100%
- · Metal housing, shatterproof window
- · Easy installation with snap clips included

IMPORTANT: Read the following instructions before operating the light. Please download the complete WLB32 Industrial PoE LED Light technical documentation, available in multiple languages, from www.bannerengineering.com for details on the proper use, applications, Warnings, and installation instructions of this device.

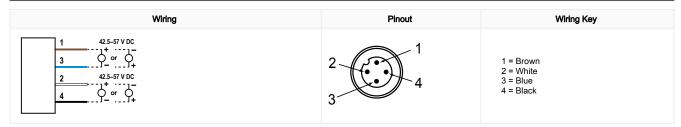
IMPORTANT: Lea el siguiente instructivo antes de operar el luminario. Por favor descargue desde www.bannerengineering.com toda la documentación técnica de los WLB32 Industrial PoE LED Light, disponibles en múltiples idiomas, para detalles del uso adecuado, aplicaciones, advertencias, y las instrucciones de instalación de estos dispositivos.

IMPORTANT: Lisez les instructions suivantes avant d'utiliser le luminaire. Veuillez télécharger la documentation technique complète des WLB32 Industrial PoE LED Light 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

Models	Lighted Length (mm)	Window	Connector	Lumens
WLB32EX285PQ	285	Standard	Integral 4-pin M12 quick-disconnect connector	750
WLB32EX570PQ	570			1500
WLB32EX850PQ	850			2250
WLB32EX1130PQ	1130			3000
WLB32EX285EPQ	285	Eye Shield		750
WLB32EX570EPQ	570			1500
WLB32EX850EPQ	850			2250
WLB32EX1130EPQ	1130			3000

Wiring



Specifications

Supply Voltage

42.5 V DC to 57 V DC

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Light Characteristics

Color: Daylight white

Color temperature (CCT): 5000K (±300K)

Lumen output: 750 (\pm 5%) per foot, typical at 25 °C (77 °F) Luminous efficacy: 120 lumens/Watt typical at 50 V DC at 25 °C (77 °F)

CRI: 80, minimum

Spacing Criterion

Vertical: 1.22 Horizontal: 1.32

Mounting

Snap clips; optional magnetic mount or swivel bracket accessories available

Connections

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

Environmental Rating

IP40

LED Lifetime

Lumen Maintenance - L₇₀

When operating within specifications, output will decrease less than 30% after 70,000 hours.

Construction

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

Dimming Knob

10 levels of intensity adjustment

Off position

Vibration and Mechanical Shock

Vibration 10-55 Hz 1.0 mm p-p amplitude per IEC60068-2-6 Shock 15G 11 ms duration, half sine wave per IEC60068-2-27

Operating Temperature

-40 °C to +50 °C (-40 °F to +122 °F)

Storage Temperature

-40 °C to +70 °C (-40 °F to +158 °F)

Test Data

LM-79, LM-80, TM-21

Supply Current

Lighted	Typical Current (A)		Max	Max	Power over	
Length (mm)	42.5 V DC	50 V DC	57 V DC	Current (A)	Wattage (W)	Ethernet Specification
285	0.155	0.14	0.13	0.17	7.25	PoE (Class 0 -
570	0.29	0.245	0.23	0.305	12.95	802.3af, 802.3at Type 1)
850	0.445	0.375	0.34	0.455	19.45	PoE+ (Class 4
1130	0.58	0.485	0.44	0.59	25	- 802.3at Type 2)

Application Note

WLB32 PoE models can be powered directly from a 42.5 to 57 V DC power source without using an Ethernet switch

Required Overcurrent Protection



WARNING: Electrical connections must be made by qualified personnel in accordance with local and national electrical codes and regulations.

Overcurrent protection is required to be provided by end product application per the supplied table.

Overcurrent protection may be provided with external fusing or via Current Limiting, Class 2 Power Supply.

Supply wiring leads < 24 AWG shall not be spliced.

For additional product support, go to www.bannerengineering.com.

Supply Wiring (AWG)	Required Overcurrent Protection (A)	Supply Wiring (AWG)	Required Overcurrent Protection (A)
20	5.0	26	1.0
22	3.0	28	0.8
24	1.0	30	0.5

Certifications



Banner Engineering BV Park Lane, Culliganlaan 2F bus 3 1831 Diegem, BELGIUM

Turck Banner LTD Blenheim House | Blenheim Court | Wickford, Essex SS11 8YT | Great Britain





FCC Part 15 Class B

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. 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:

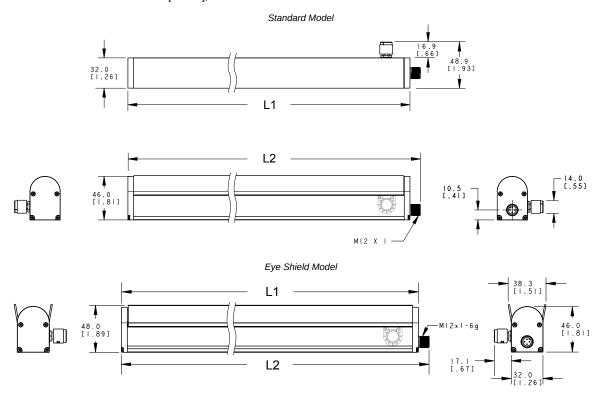
- · Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and receiver.
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Industry Canada ICES-003(B)
This device complies with 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.

Cet appareil est conforme à la norme NMB-3(B). Le fonctionnement est soumis aux deux conditions suivantes : (1) ce dispositif ne peut pas occasionner d'interférences, et (2) il doit tolérer toute interférence, y compris celles susceptibles de provoquer un fonctionnement non souhaité du dispositif.

Dimensions

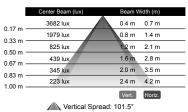
All measurements are listed in millimeters [inches], unless noted otherwise.



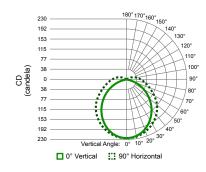
Models	L1	L2
WLB32EXW285Q	298 mm (11.7 in)	309 mm (12.17 in)
WLB32EXW570Q	580 mm (22.8 in)	591 mm (23.27 in)
WLB32EXW850Q	862 mm (33.9 in)	873 mm (34.37 in)
WLB32EXW1130Q	1144 mm (45.0 in)	1155 mm (45.47 in)

Light Characteristics

Illuminance at a Distance

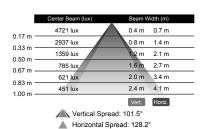


Isolux Pattern Polar Candela Distribution





Illuminance at a Distance



570 mm Models

75 lux

50 lux

25 lux

10 lux

5 lux

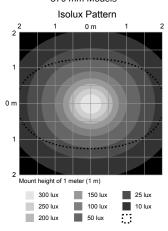
150 lux

125 lux 100 lux

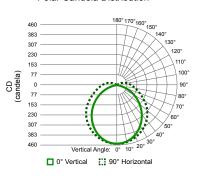
285 mm Models

0 m

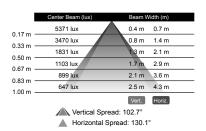
0 m



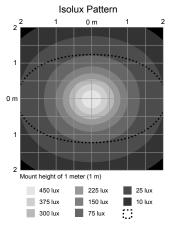
Polar Candela Distribution



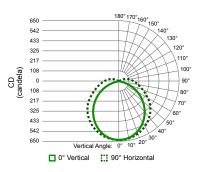
Illuminance at a Distance



850 mm Models

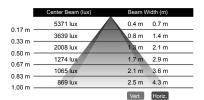


Polar Candela Distribution



Illuminance at a Distance

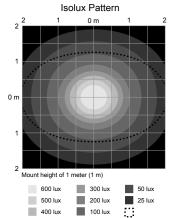
Illuminance at a Distance



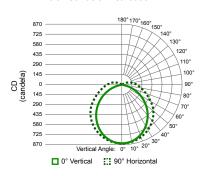
Vertical Spread: 103.3°

Horizontal Spread: 129.7°

1130 mm Models



Polar Candela Distribution



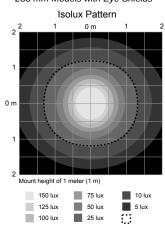
Illuminance at a Distance

	Center Beam (lux)	Beam Width (m)
0.17 m —	3654 lux	0.4 m 0.4 m
0.17 III —	2024 lux	0.8 m 0.8 m
0.50 m —	813 lux	1.2 m 1.3 m
0.50 m —	442 lux	1.6 m 1.7 m
0.83 m —	345 lux	2.0 m 2.1 m
1.00 m —	250 lux	2.3 m 2.5 m
1.00 111 —		Vert. Horiz.

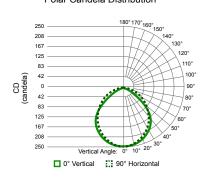
Vertical Spread: 98.7°

A Horizontal Spread: 102.8°

285 mm Models with Eye Shields



Polar Candela Distribution



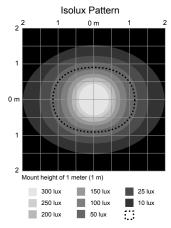
Illuminance at a Distance

	Center Beam (lux)	Beam Width (m)
	Center Beam (lux)	Beam Width (m)
0.17 m	5334 lux	0.3 m 0.4 m
0.17 m 0.33 m	3313 lux	0.6 m 0.8 m
0.50 m	1595 lux	0.9 m 1.1 m
0.50 m	884 lux	1.2 m 1.5 m
0.83 m	706 lux	1.5 m 1.9 m
1.00 m	484 lux	1.8 m 2.3 m
1.00111		Vert. Horiz.

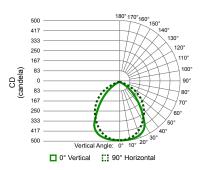
Vertical Spread: 83.5°

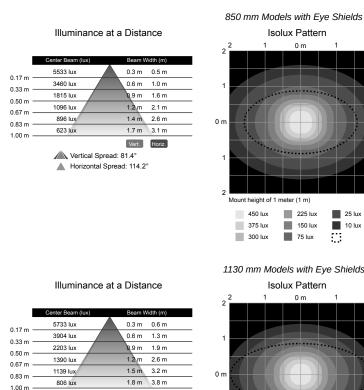
Horizontal Spread: 97.0°

570 mm Models with Eye Shields



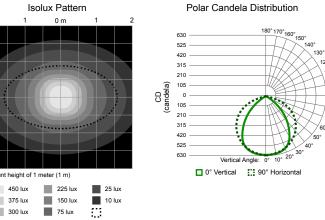
Polar Candela Distribution

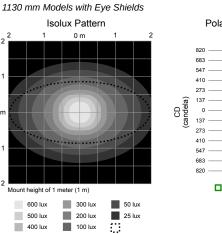


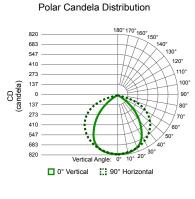


Vert. Horiz.

A Horizontal Spread: 124.8°

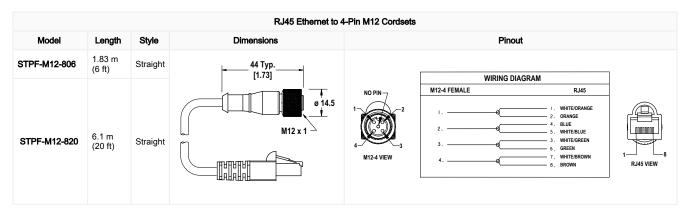






Accessories

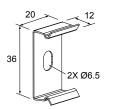
Cordsets



Mounting Brackets

LMBWLB32

- · Replaces the bracket that ships with the WLB32 light
- Stainless steel
- · Includes 4 snap clips, 4 screws, and 2 insulator caps



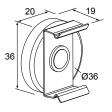
LMBWLB32-180S

· Swivel bracket kit allows 180° of movement



LMBWLB32MAG

· Magnetic mounting bracket for easy attachment to steel and iron surfaces



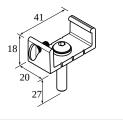
LMBWLB32U

- · Die-cast bracket for rugged applications
- · Secured to light with included thumb screw
- · Clearance hole for 6 mm (1/4 in) button head screw



LMBWLB32UT

- · Die-cast bracket for rugged applications
- Secured to light with included thumb screw
- Integral 1/4-20 stud for mounting



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Banner Engineering de Mèxico, S. de R.L. de C.V. | David Alfaro Siqueiros 103 Piso 2 Valle oriente | San Pedro Garza Garcia Nuevo Leòn, C. P. 66269

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