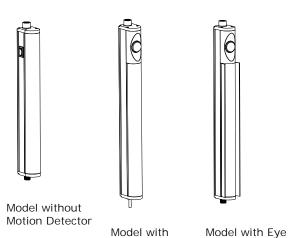
WLB32 Industrial LED Light Bar (DC)



Datasheet



Motion Detector

Shield and

Motion Detector

Banner's WLB32 is an ultra-bright LED fixture that features an even light output for a no glare 'glow'. Suitable for a variety of environments and applications, including work stations, 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.

- · Highly energy efficient for overall cost savings
- High/Low/Off switch
- · Models with eye shield block side glare
- · Daisy chain power to multiple lights
- · Motion detection models available
- Metal housing, shatterproof window
- Easy installation with snap clips, or a choice of magnetic or angle brackets

WLB32 Industrial LED Light Bars are available as cascadable models that can be "daisy-chained" together for a continuous length of lighting, with a minimum of wiring. Each light bar can be turned to high, low, or off independently of the other lights, upstream or downstream, in the chain. A double-ended accessory cordset must be used between each pair of cascading lights.

12 to 30 V dc Models				
Models	Lumens			
WLB32C285PBQ	285		650	
WLB32C570PBQ	570	4 nin M12 Quiek Dissennest	1300	
WLB32C850PBQ	850	4-pin M12 Quick Disconnect	1950	
WLB32C1130PBQ	1130		2600	
WLB32C285PB	285		650	
WLB32C570PB	570	2 m (4 F ft) coblo	1300	
WLB32C850PB	850	2 m (6.5 ft) cable	1950	
WLB32C1130PB	1130		2600	

- To order the light without the integral switch, omit the "PB" from the model number. For example, WLB32C285Q.
- To order the light with the integral motion detector, replace the 'PB' from the model number with 'M'. For example, WLB32C285MQ.
- To order the light with the eye shield, add an 'E' after the length. For example, WLB32C285EPBQ.

Specifications

Supply Voltage

12 to 30 V dc

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

Supply Current

Light Length (mm)	Max Current Draw (A)	Typical Current Draw (A)		
		12 V dc	24 V dc	30 V dc
285	0.8	0.66	0.31	0.24
570	1.6	1.36	0.62	0.48
850	2.4	2.19	0.93	0.72
1130	3.2	3.02	1.24	0.96



Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Light Characteristics

Color: Daylight white

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

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

Luminous efficacy: 87 lumens/Watt typical at 24 V dc at 25 °C (77 °F) CRI: 85, typical

Eye shield reduces lumens by about 25%

LED Lifetime

Lumen Maintenance - L₇₀

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

Push Button

II = 100% light intensity

I = 50% light intensity

Models with Motion Detection

Light turns off after approximately 60 seconds without detecting motion.

Range: 12 meters; ±45° field of view

Standby current: 170 µA

Construction

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

Spacing Criterion

Vertical: 1.22 Horizontal: 1.32

Mounting

Snap clips; optional magnetic mount or swivel bracket accessories available

Connections

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

Environmental Rating

IEC IP50

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 +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)

Models with motion detection: -20 °C to +60 °C (-4 °F to +140 °F)

Storage Temperature

-40 °C to +70 °C (-40 °F to +158 °F)

Test Data

LM-79, LM-80, TM-21

Certifications







installation in control cahinets

Application Note

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

Spacing Criteria (SC)

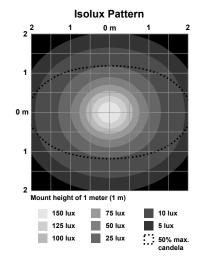
The spacing criteria is the fixture-spacing-to-mounting-height ratio and aids in laying out a pattern of fixtures. Multiply the spacing criteria by the mounting height to get the maximum fixture spacing that still provides even illumination (no shadowing between fixtures).

Luminaire Spacing = SC × Height to Illuminated Plane

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

Light Characteristics

Illuminance at a Distance 3202 lux 0.4 m 0.7 m 0.2 m 1721 lux 0.8 m 1.4 m 717 lux 1.2 m 2.1 m 0.5 m 1.6 m 382 lux 2.8 m 0.7 m 2.0 m 3.5 m 300 lux 0.8 m 194 lux 2.4 m 4.2 m 1.0 m Vert. Horiz. Vertical Spread: 101.5° ▲ Horizontal Spread: 128.8°



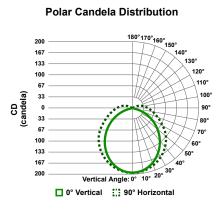


Figure 1. 285 mm Models

Illuminance at a Distance

	Center Beam (lux)	Beam Width (m)
m —	4105 lux	0.4 m 0.7 m
m –	2554 lux	0.8 m 1.4 m
m —	1182 lux	1.2 m 2.1 m
m –	683 lux	1.6 m 2.7 m
 m —	540 lux	2.0 m 3.4 m
 m —	392 lux	2.4 m 4.1 m
•••		Vert. Horiz.

Vertical Spread: 101.5° ▲ Horizontal Spread: 128.2°

Isolux Pattern 0 m 2 0 m Mount height of 1 meter (1 m) 300 lux 250 lux 100 lux 10 lux 200 lux 50 lux 50% max.

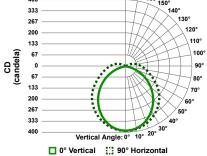
Figure 2. 570 mm Models

2 2

0 m

180°170°160° 150° 140° 333 267 200

Polar Candela Distribution

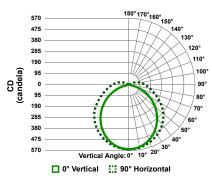


Illuminance at a Distance

	Center Beam (lux)	Beam Width (m)		
0.2 m —	4670 lux	0.4 m 0.7 m		
0.2 m — 0.3 m —	3017 lux	0.8 m 1.4 m		
0.5 m — 0.5 m —	1592 lux	1.3 m 2.1 m		
0.5 m —	959 lux	1.7 m 2.9 m		
0.7 m —	782 lux	2.1 m 3.6 m		
0.0 m 1.0 m —	563 lux	2.5 m 4.3 m		
		Vert. Horiz.		
Vertical Spread: 102.7°				

▲ Horizontal Spread: 130.1°

Isolux Pattern **Polar Candela Distribution** 0 m



Illuminance at a Distance



225 lux

150 lux

25 lux

10 lux

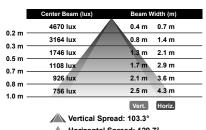
50% max.

Mount height of 1 meter (1 m) 450 lux

375 lux

300 lux

Illuminance at a Distance



▲ Horizontal Spread: 129.7°

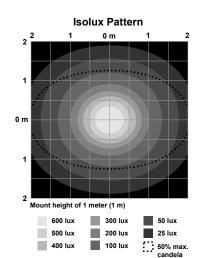
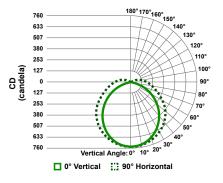


Figure 4. 1130 mm Models

Polar Candela Distribution



Beam Width (m) 3177 lux 0.4 m 0.4 m 0.2 m 1760 lux 0.8 m 0.8 m



Illuminance at a Distance

Vertical Spread: 98.7° ▲ Horizontal Spread: 102.8°

Isolux Pattern 0 m 2 0 m Mount height of 1 meter (1 m) 150 lux 75 lux 10 lux 125 lux 50 lux 5 lux 50% max. candela 100 lux 25 lux

Polar Candela Distribution

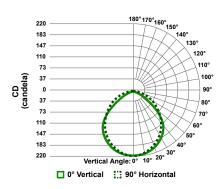
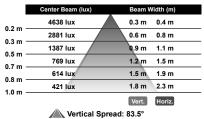


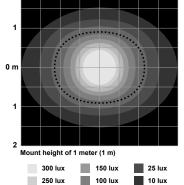
Figure 5. 285 mm Models with Eye Shields

Illuminance at a Distance



▲ Horizontal Spread: 97.0°

Isolux Pattern 0 m



Polar Candela Distribution

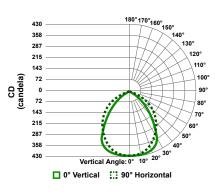


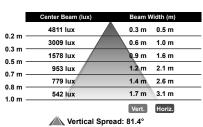
Figure 6. 570 mm Models with Eye Shields

50 lux

50% max.

200 lux

Illuminance at a Distance

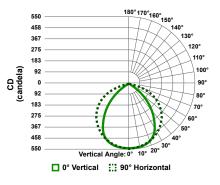


▲ Horizontal Spread: 114.2°

Isolux Pattern 2 2 0 m 0 m Mount height of 1 meter (1 m) 450 lux 225 lux 25 lux 375 lux 150 lux 10 lux 50% max. 300 lux 75 lux

Figure 7. 850 mm Models with Eye Shields

Polar Candela Distribution



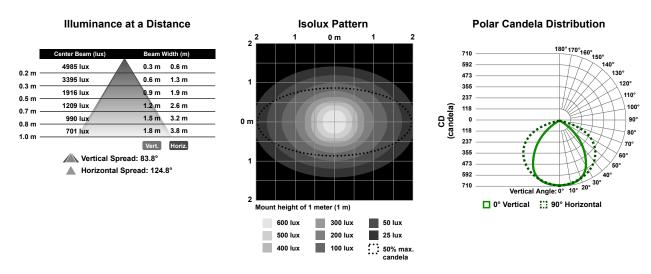
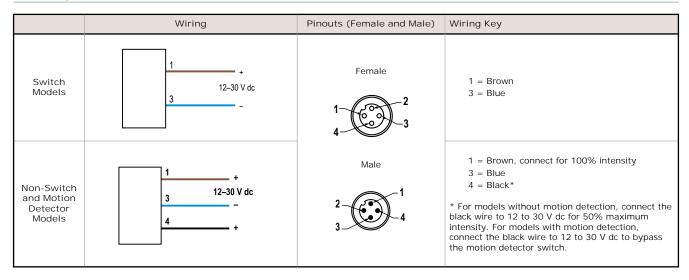
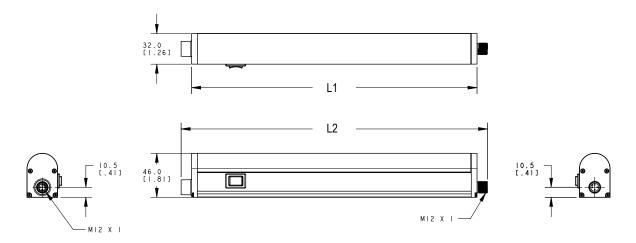


Figure 8. 1130 mm Models with Eye Shields

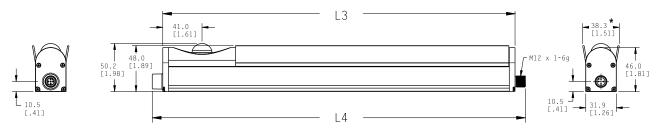
Wiring



Dimensions



Motion Detector and/or Eye Shield Models

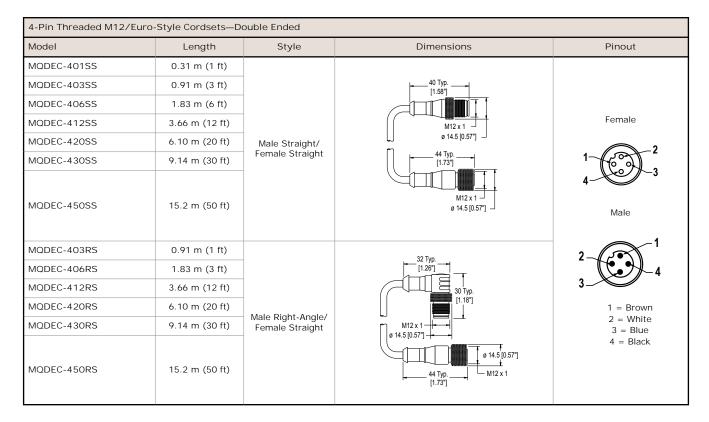


* Specific to models with shield

Models	Models without Motion Detector		Models with Motion Detector and/or Eye Shields		
	L1	L2	L3	L4	
WLB32C285Q	298 mm (11.7 in)	320 mm (12.6 in)	368 mm (14.5 in)	390 mm (15.4 in)	
WLB32C570Q	580 mm (22.8 in)	602 mm (23.7 in)	650 mm (25.6 in)	672 mm (26.5 in)	
WLB32C850Q	862 mm (33.9 in)	884 mm (34.8 in)	932 mm (36.7 in)	954 mm (37.6 in)	
WLB32C1130Q	1144 mm (45.0 in)	1166 mm (45.9 in)	1214 mm (47.8 in)	1236 mm (48.7 in)	
WLB32C285	298 mm (11.7 in)	313 mm (12.3 in)	368 mm (14.5 in)	383 mm (15.1 in)	
WLB32C570	580 mm (22.8 in)	595 mm (23.4 in)	650 mm (25.6 in)	665 mm (26.2 in)	
WLB32C850	862 mm (33.9 in)	877 mm (34.5 in)	932 mm (36.7 in)	947 mm (37.3 in)	
WLB32C1130	1144 mm (45.0 in)	1159 mm (45.6 in)	1214 mm (47.8 in)	1229 mm (48.4 in)	

Accessories

4-Pin Threaded M12/Euro-Style Cordsets					
Model	Length	Style	Dimensions	Pinout (Female)	
MQDC-406	1.83 m (6 ft)				
MQDC-415	4.57 m (15 ft)	Straight			
MQDC-430	9.14 m (30 ft)				
MQDC-450	15.2 m (50 ft)		M12 x 1 → ø 14.5 →	12	
MQDC-406RA	1.83 m (6 ft)		, 32 Тур.	4-3	
MQDC-415RA	4.57 m (15 ft)	Right-Angle		[1.26"]	
MQDC-430RA	9.14 m (30 ft)		30 Typ.	1 = Brown 2 = White	
MQDC-450RA	15.2 m (50 ft)		M12 x 1 0 14.5 [0.57"]	3 = Blue 4 = Black	



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		No trunk		
CSB-M1241M1241		0.30 m (1 ft)	1-	
CSB-M1248M1241	2 x 0.30 m (1 ft)	2.50 m (8 ft)	4-3	
CSB-M12415M1241	2 x 0.30 III (1 11)	4.57 m (15 ft)		
CSB-M12425M1241		7.60 m (25 ft)	Male	
CSB-UNT425M1241		7.60 m (25 ft) Unterminated		
Ø4.5 [0.18"]			1 = Brown 2 = White 3 = Blue 4 = Black	

Enclosure Accessories

LMBEDS Switch

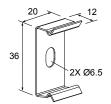
- Bracket with plunger switch to power lights when the enclosure is opened
- Refer to datasheet 160672 for more information



Mounting Brackets

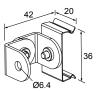
LMBWLB32

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



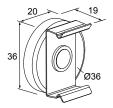
LMBWLB32-180S

 Swivel bracket kit allows 180° of movement



LMBWLB32MAG

 Magnetic mounting bracket for easy attachment to steel and iron surfaces



LMBWLB32U

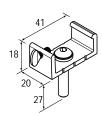
- Die cast bracket for rugged applications
- Secured to light with included thumb screw
- Clearance hole for 6 mm (1/4 in) button head screw



Mounting Brackets

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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