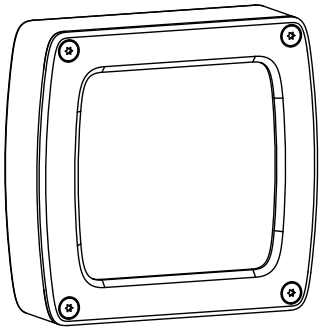
WLC90 Heavy Duty LED Light

Datasheet



Banner's WLC90 Heavy Duty Lights are designed to operate in harsh environments and withstand washdown and spray from water as well as many chemicals including coolants and detergents. They are compact and bright, making them an excellent choice for machining centers and food processing equipment.

- Oil, chemical, and water resistant with IP67, IP68g, and IP69K ratings
- Wide operating temperature range with an internal monitoring circuit that dims the LEDs to a safe level at extreme temperatures
- Three lens choices to suit many application needs
- Pan-and-tilt brackets for versatile mounting to direct the light in any direction
- Models have three discrete intensity level settings

Models	Lens Angle	Connection	Window
WLC90WL8Q	± 8 degrees	Integral 4-Pin Euro QD Side Exit	Polycarbonate
WLC90WL15Q	± 15 degrees		
WLC90WL30Q	± 30 degrees		
WLC90WL8RQ	± 8 degrees	Integral 4-Pin Euro QD Rear Exit	
WLC90WL15RQ	± 15 degrees		
WLC90WL30RQ	± 30 degrees		
WLC90WGL8Q	± 8 degrees	Integral 4-Pin Euro QD Side Exit	Borosilicate Glass
WLC90WGL15Q	± 15 degrees		
WLC90WGL30Q	± 30 degrees		
WLC90WGL8RQ	± 8 degrees	Integral 4-Pin Euro QD Rear Exit	
WLC90WGL15RQ	± 15 degrees		
WLC90WGL30RQ	± 30 degrees		

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, WLC90WL8. Models with a QD connector require a mating cable.

The following caution applies only to the "± 8 degrees" models:

CAUTION:

Risk Group 2: Possibly hazardous optical radiation emitted from this product.

Do not stare at the operating lamp. May be harmful to the eyes. Risk Group 2 (RG 2) products generally do not pose a realistic optical hazard if aversion responses limit the exposure duration or where lengthy exposures are unrealistic.

- IEC 62471

Specifications

Supply Voltage
Operating Voltage: 12 to 30 V dc

Max. Current
850 mA at 12 V dc
410 mA at 24 V dc
330 mA at 30 V dc
Max. input power: 10.2 Watts

Typical Current
720 mA at 12 V dc
336 mA at 24 V dc
269 mA 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/Euro-style QD (4-pin connecting cordset required for QD models)

Certifications
CE

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 33% lower at 70 °C (158 °F)

Light Characteristics
Color Temperature (CCT): 6000–7100 K
Color: Cool White
Lumen Output at 25 °C (77 °F) typical: 700
Luminous efficacy at 25 °C (77 °F) typical: 87 lumens per watt at 24V dc

Spacing Criterion
8 degree: 0.28
15 degree: 0.52
30 degree: 0.90

Environmental Rating
IEC IP67/IP68g / IP69K per DIN 40050

Storage Temperature
−40 °C to +70 °C (−40 °F to +158 °F)

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.

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).

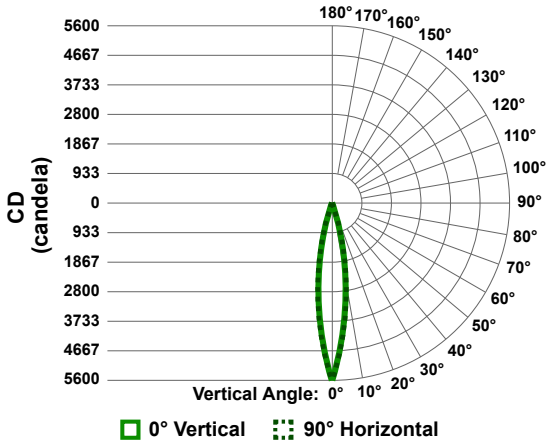
Luminaire Spacing = SC × Height to Illuminated Plane

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

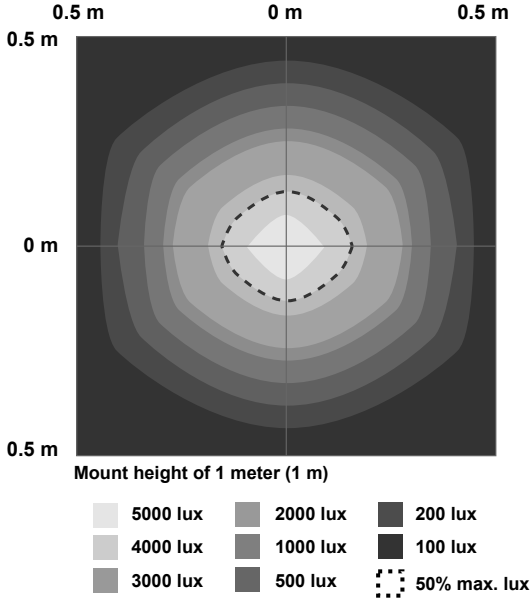
Light Characteristics

Max Lux at 1 M (L8 Lens)

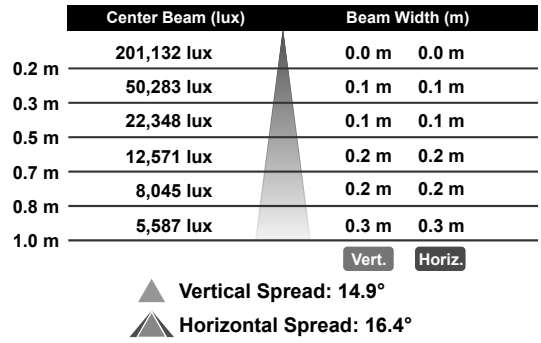
Polar Candela Distribution



Isolux Pattern



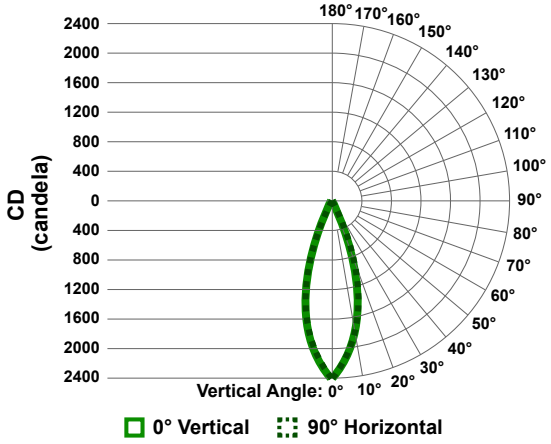
Illuminance at a Distance



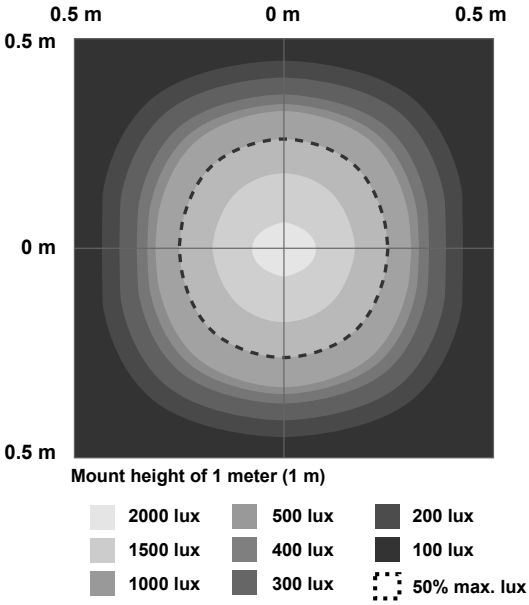
Horizontal = Connection on the bottom.

Max Lux at 1 M (L15 Lens)

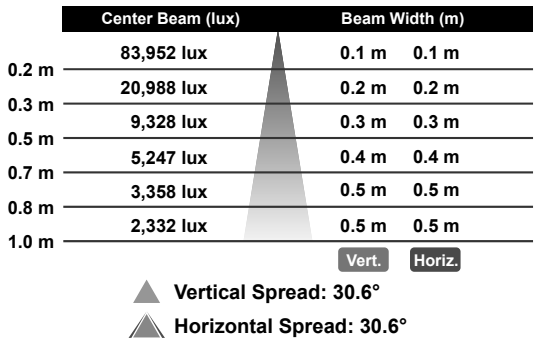
Polar Candela Distribution



Isolux Pattern

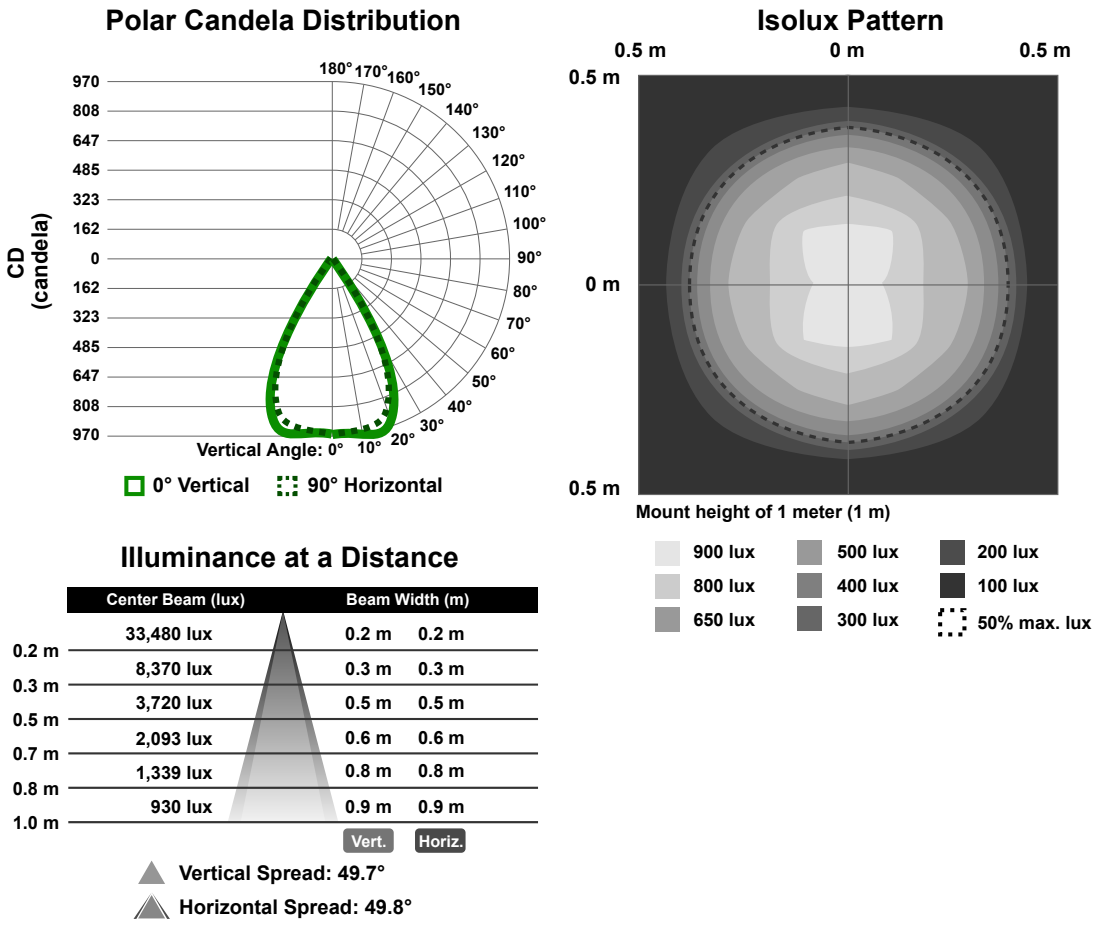


Illuminance at a Distance



Horizontal = Connection on the bottom.

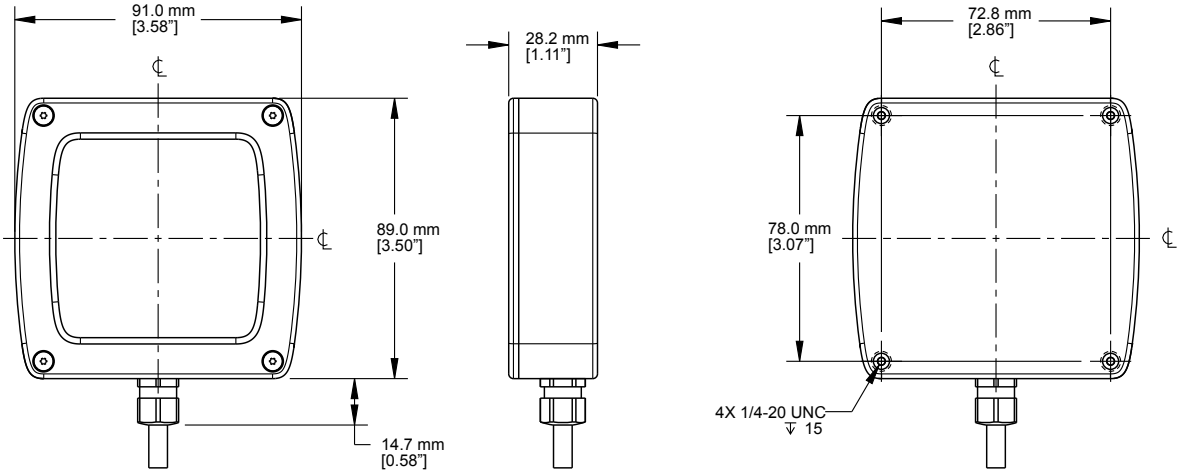
Max Lux at 1 M (L30 Lens)



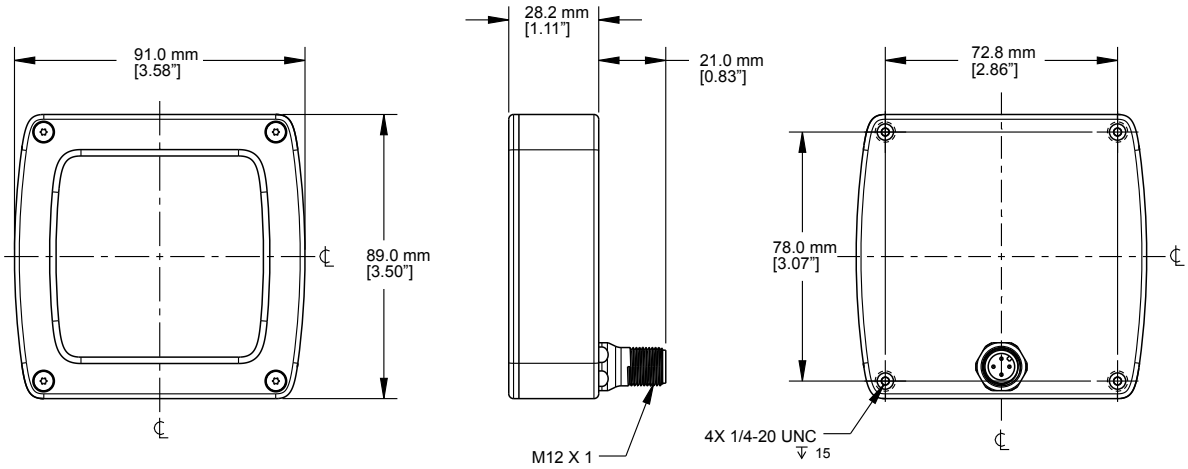
Horizontal = Connection on the bottom.

Dimensions

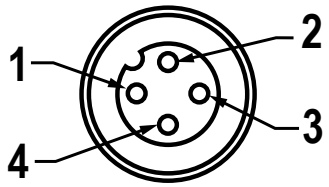
WLC90 Side Exit Models



WLC90 Rear Exit Models (WLC90...RQ)



Hookups



Pins	Color	Color/Connection
1	brown	12–30V dc
3	blue	dc common
4	black	Connect to 12–30V dc for 66% max. intensity
2	white	Connect to 12–30V dc for 33% max intensity

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

Accessories

Brackets

LMBWLC90PT

- Pan and tilt bracket
- 300 series stainless steel
- Hardware for connecting to light included

SMBAMS70AS

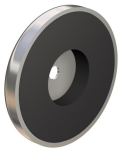
- 316 stainless steel right-angle bracket
- Articulated slots for 90+ degrees rotation
- Four ¼-20 stainless steel screws included

SMBFLXMAGR

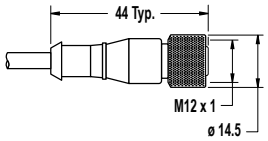
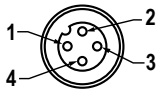
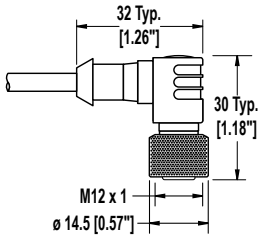
- Protective magnet cover prevents scratches to painted surfaces

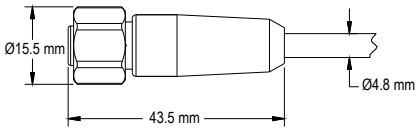
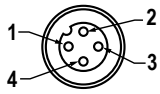
SMBMAG3

- 3.2 inch diameter magnet with 95 lbs pull force
- Use with LMBWLC90PT or SMBAMS70AS bracket
- Hardware for mounting to bracket included



Cordsets

4-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout
MQDC-406	1.83 m (6 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black
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—Washdown, Stainless Steel				
Model	Length	Style	Dimensions	Pinout
MQDC-WDSS-0406	1.83 m (6 ft)	Straight		 1 = Brown 2 = White 3 = Blue 4 = Black
MQDC-WDSS-0415	4.57 m (15 ft)			
MQDC-WDSS-0430	9.14 m (30 ft)			

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