

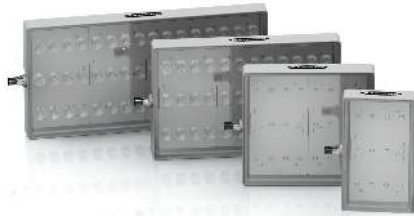
WLA Series Work Light



Datasheet

General-purpose LED work light

To view or download the latest technical information about this product, including specifications, dimensions, accessories, and wiring, see www.bannerengineering.com.



Lensed models shown at left; non-lensed models shown at right

- High power solid state LED array in white and color models
- Illuminates a large area with an even pattern of light and no shadows
- Designed for area and machine lighting
- Rugged thermoplastic housing rated to IP69K
- Lensed models provide a concentrated, more intense, beam pattern
- Available in four sizes
- Cabled and quick-disconnect models available



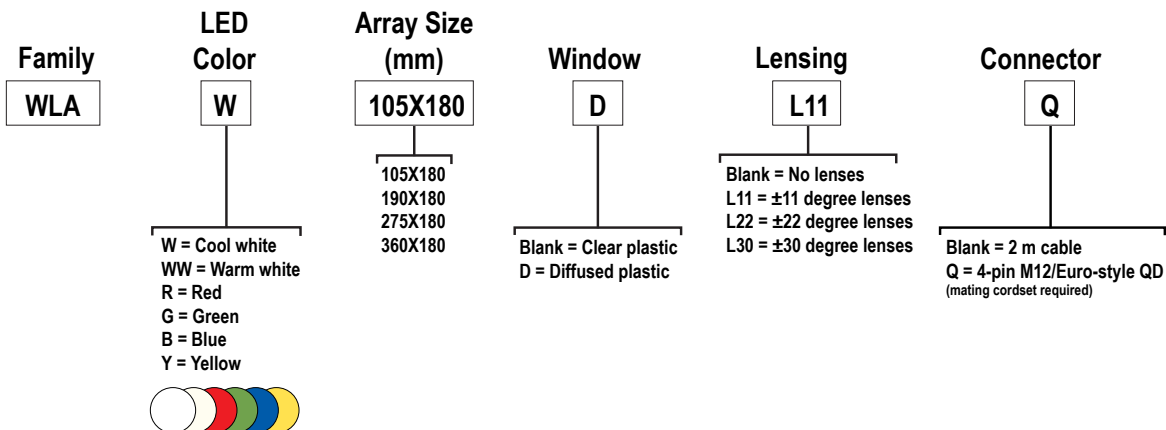
Important: Read the following instructions before operating the light. Please download the complete WLA Series Work Light technical documentation, available in multiple languages, from www.bannerengineering.com for details on the proper use, applications, Warnings, and installation instructions of this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



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

Models

| Non-Lensed Models ¹ | Lensed Models (xx) ¹ • 11 = ± 11° lenses • 22 = ± 22° lenses • 30 = ± 30° lenses | Housing Length "L1" ² | Connection ³ | LED Color | Environmental Rating | Input Voltage |
|--------------------------------|--|-------------------------------------|---|------------|----------------------|--------------------|
| WLAW105X180Q | WLAW105X180LxxQ | 105 mm | 4-pin M12/Euro-style integral QD connector | Cool white | IP69K | 12 C dc to 30 V dc |
| WLAW190X180Q | WLAW190X180LxxQ | 190 mm | | | | |
| WLAW275X180Q | WLAW275X180LxxQ | 275 mm | | | | |
| WLAW360X180Q | WLAW360X180LxxQ | 360 mm | | | | |



¹ Additional color and window options listed in the model key.

² See *Dimensions* (p. 3).

³ Integral QD models only are listed. For integral 2 m (6.5' ft) PVC cable, omit suffix **Q** from model number (example, **WLAW105X180**). A model with a QD requires a mating cordset (see *Accessories* (p. 4)).



Specifications

Supply Voltage and Current

12 V dc to 30 V dc (10% maximum ripple)
Use only with suitable Class 2 power supply (UL) or SELV power supply (CE).
See electrical characteristics on product label

| Light Length | Maximum Current per Length | | | |
|--------------|----------------------------|---------|---------|-------|
| | 12 V dc | 24 V dc | 30 V dc | Watts |
| 105 mm | 0.8 A | 0.4 A | 0.32 A | 9.6 |
| 190 mm | 1.6 A | 0.8 A | 0.64 A | 19.2 |
| 275 mm | 2.4 A | 1.2 A | 0.96 A | 28.8 |
| 360 mm | 3.2 A | 1.6 A | 1.28 A | 38.4 |

Lumens and Lux

| Light Length | Lumens [‡] | | | | | |
|--------------|---------------------|------------|-------|-----|--------|------|
| | Cool White | Warm White | Green | Red | Yellow | Blue |
| 105 mm | 550 | 435 | 325 | 125 | 275 | 95 |
| 190 mm | 1100 | 870 | 650 | 250 | 550 | 190 |
| 275 mm | 1650 | 1305 | 975 | 375 | 825 | 285 |
| 360 mm | 2200 | 1740 | 1300 | 500 | 1100 | 380 |

| Light Length | Non Lensed Models Max Lux [‡] at 1m | | | | | | L11 Lensed Models Max Lux [‡] at 1m | | | | | |
|--------------|--|------------|-------|-----|--------|------|--|------------|-------|------|--------|------|
| | Cool White | Warm White | Green | Red | Yellow | Blue | Cool White | Warm White | Green | Red | Yellow | Blue |
| 105 mm | 215 | 170 | 115 | 55 | 110 | 30 | 2865 | 2290 | 2910 | 1375 | 1795 | 815 |
| 190 mm | 430 | 340 | 230 | 110 | 220 | 60 | 5140 | 4110 | 4990 | 2605 | 3360 | 1385 |
| 275 mm | 645 | 510 | 345 | 165 | 330 | 90 | 7565 | 6050 | 6400 | 3345 | 4705 | 1760 |
| 360 mm | 860 | 680 | 460 | 220 | 440 | 120 | 8875 | 7100 | 7405 | 3730 | 5605 | 2030 |

| Light Length | L22 Lensed Models Max Lux [‡] at 1m | | | | | | L30 Lensed Models Max Lux [‡] at 1m | | | | | |
|--------------|--|------------|-------|------|--------|------|--|------------|-------|------|--------|------|
| | Cool White | Warm White | Green | Red | Yellow | Blue | Cool White | Warm White | Green | Red | Yellow | Blue |
| 105 mm | 1110 | 880 | 1125 | 530 | 695 | 315 | 760 | 600 | 770 | 365 | 475 | 215 |
| 190 mm | 2155 | 1705 | 2090 | 1090 | 1410 | 580 | 1500 | 1185 | 1450 | 760 | 980 | 405 |
| 275 mm | 3160 | 2500 | 2675 | 1400 | 1965 | 735 | 2210 | 1745 | 1870 | 975 | 1375 | 515 |
| 360 mm | 4160 | 3290 | 3470 | 1750 | 2625 | 950 | 2890 | 2285 | 2410 | 1215 | 1825 | 660 |

Light Characteristics

Cool White: 5300–7000K
Warm White: 2600–4300K
Green: 520–535 nm
Red: 620–630 nm
Yellow: 585–595 nm
Blue: 460–475 nm

Connections

Integral 4-pin M12 male quick disconnect (QD) (4-pin connecting cordset required); or 2 m (6.5 ft) integral cable

Construction

PBT housing; acrylic window; nickel-plated brass connector or PVC-jacketed cable

Mounting

When mounting light to combustible or insulating surfaces, a minimum of 1 inch of clearance around all sides is required. Use supplied standoffs or alternative mounting method to achieve spacing. Accessory bracket available.

Environmental Rating

Rated IEC IP67 and IP69K, per DIN 40050

Operating Temperature

–20 °C to +50 °C (–4 °F to +122 °F)

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.

Certifications



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 (Amps) |
|---------------------|--|
| 20 | 5.0 |
| 22 | 3.0 |
| 24 | 2.0 |
| 26 | 1.0 |
| 28 | 0.8 |
| 30 | 0.5 |



Note: Do not spray cable with high-pressure sprayer, or cable damage will result.

[‡] Lumen and lux values are typical when operating at 25 °C ambient. Values lowered by 35% on diffused windows models.

Beam Pattern

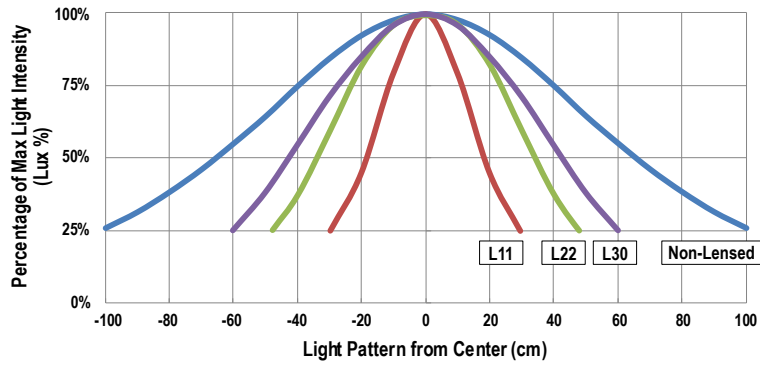
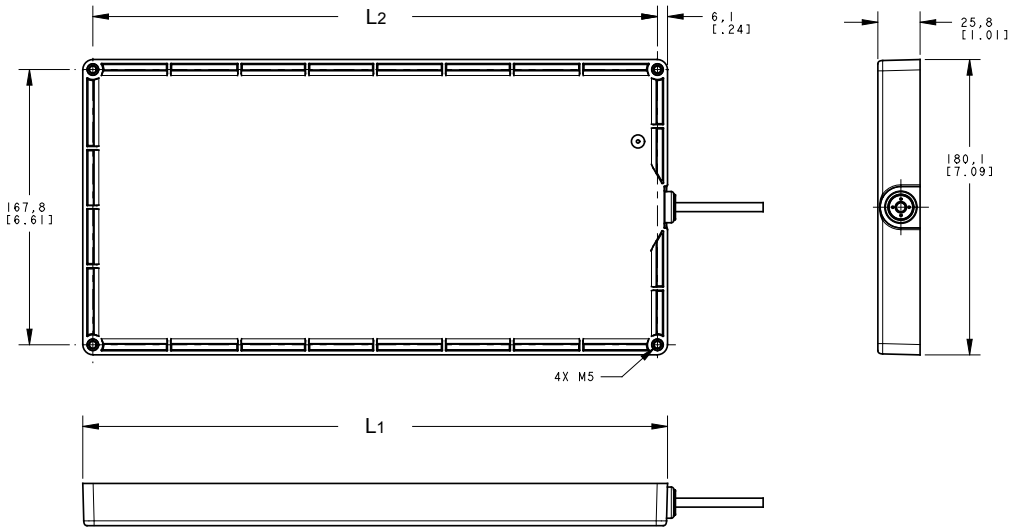


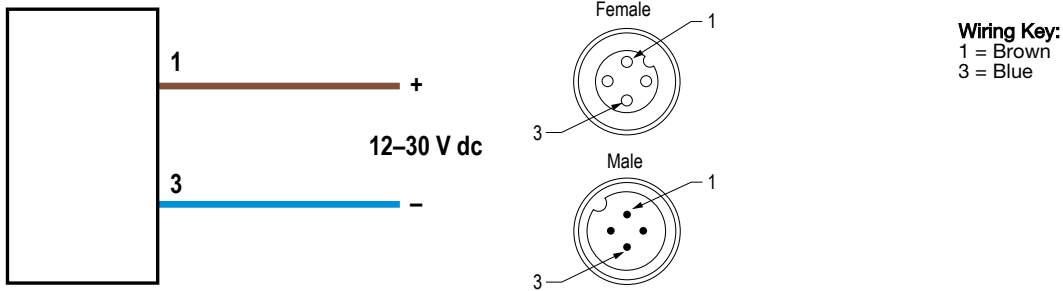
Figure 1. Percentage of Maximum Light Intensity for Lensed and Nonlensed Models at 1 Meter (Typical)

Dimensions



| Model | L1 | L2 |
|------------|---------------------|---------------------|
| WLAW105X.. | 105.1 mm (4.14 in) | 92.8 mm (3.66 in) |
| WLAW190X.. | 188.9 mm (7.44 in) | 176.7 mm (6.96 in) |
| WLAW275X.. | 272.7 mm (10.74 in) | 260.3 mm (10.25 in) |
| WLAW360X.. | 356.6 mm (14.04 in) | 344.3 mm (13.55 in) |

Wiring



Accessories

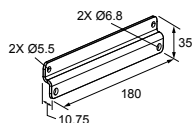
Cordsets

| 4-Pin Threaded M12/Euro-Style Cordsets—Single Ended | | | | |
|---|----------------|-------------|------------|---|
| Model | Length | Style | Dimensions | Pinout (Female) |
| 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) | | | |

Brackets

SMBSSM

- 316 stainless steel bracket and hardware
- Includes 2 brackets; four M5 socket drive, button head screws to attach to light

**SMBBSRA**

- 316 stainless steel bracket and hardware
- Right-angle swivel bracket for versatile orientation

**SMBWLAMAG**

- Kit includes two magnets, two M5 phillips head screws, and two M5 nuts with lock rings
- $\phi = 51.8$ mm (2.04 in)

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