WLA General Purpose LED Light - PWM Dimmable

Datasheet



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

- Intensity can be controlled from 0 to 100% using Pulse Width Modulation (PWM) on an input control wire
- 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



For PWM dimming, use with the LC65 Dimmer Module. For more information, refer to the LC65 LED Dimmer Module datasheet, p/n *177086*.

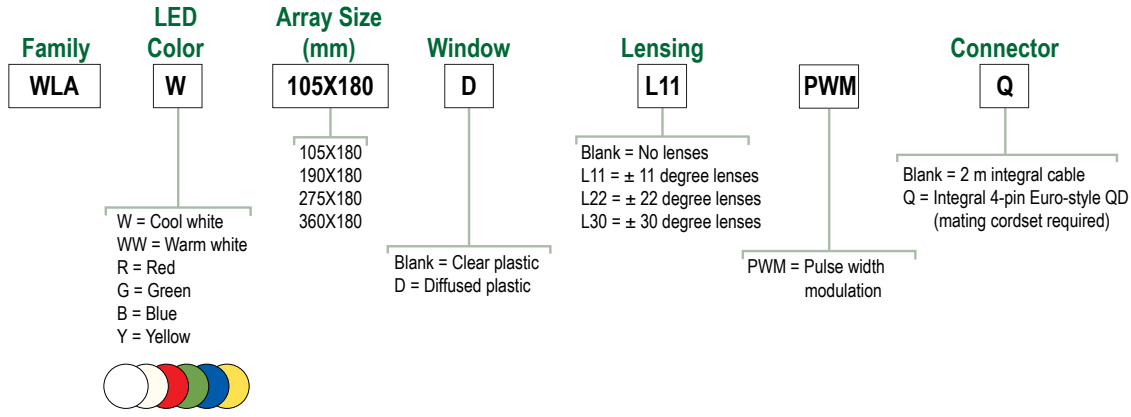
Important: Read the following instructions before operating the light. Please download the complete WLA Series Work Light technical documentation, available in multiple languages, from www.bannerengineering.com for details on the proper use, applications, Warnings, and installation instructions of this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

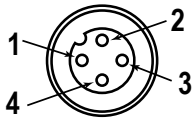
Non-Lensed Models	Lensed Models (xx) 11 = ± 11° lenses 22 = ± 22° lenses 30 = ± 30° lenses	Housing Length L1	Connection[1]	LED Color	Input Voltage
WLAW105X180PWMQ	WLAW105X180LxxPWMQ	105 mm	4-pin Euro integral QD connector	Cool white	12 to 30 V dc
WLAW190X180PWMQ	WLAW190X180LxxPWMQ	190 mm			
WLAW275X180PWMQ	WLAW275X180LxxPWMQ	275 mm			
WLAW360X180PWMQ	WLAW360X180LxxPWMQ	360 mm			

Additional color and window options listed in the model key.



[1] Integral QD models only are listed. To order the integral 2 m (6.5 ft) PVC cable models, omit the suffix Q from model number (example, **WLAW105X180PWM**). A model with a QD requires a mating cordset.

Wiring



Pins	Color	Connection
1	brown	12 to 30 V dc
3	blue	dc common
4	black	Pulse width modulation (PWM) input
2	white	Not used

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

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
Maximum current per length:

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

Pulse Width Modulation (PWM)
Frequency: Up to 300 Hz
Voltage: 8 to 30 V dc
Current: 4 mA max.

Lumens and Lux

Light Length	Lumens [2]					
	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[2] at 1m						L11 Lensed Models Max Lux[2] 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[2] at 1m						L30 Lensed Models Max Lux[2] 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

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

Light Characteristics
Cool White: 5300–7000K

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.

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

Environmental Rating
Rated IEC IP67 and IP69K, per DIN 40050

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

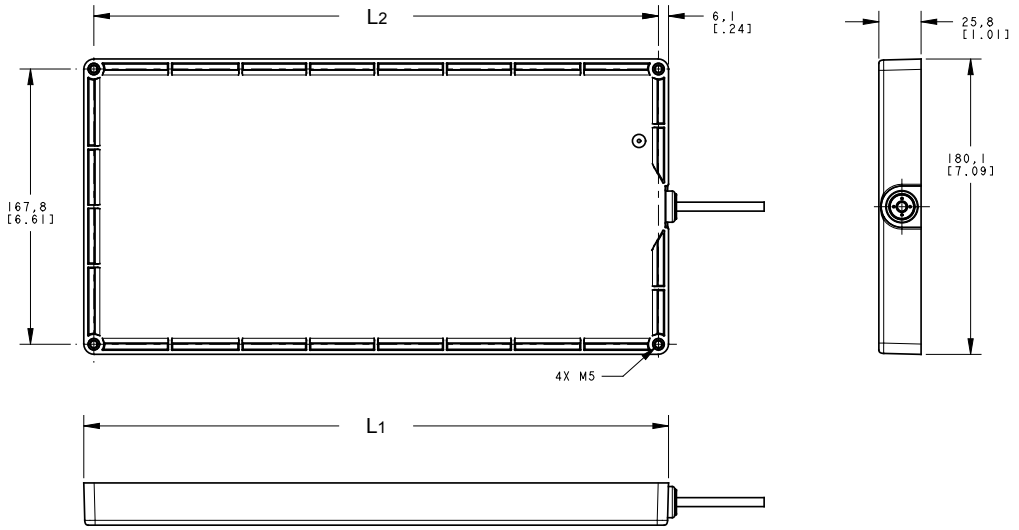
Operating Temperature
–20 °C to +50 °C (–4 °F to +122 °F)

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

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)

Beam Pattern

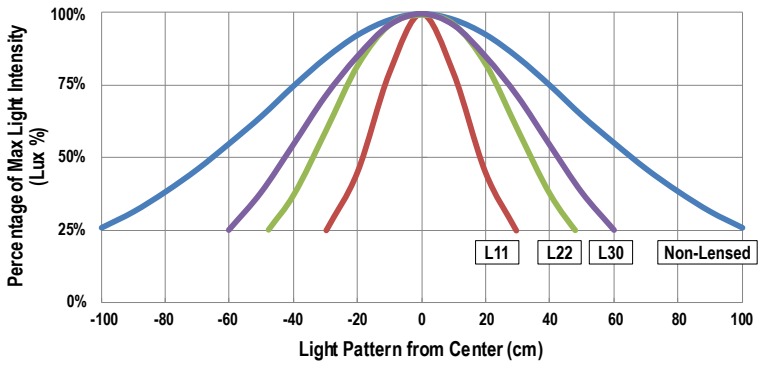
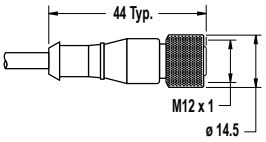
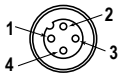
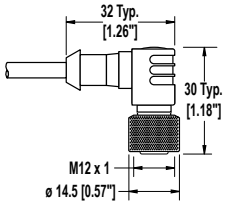


Figure 1. Percentage of Maximum Light Intensity for Lensed and Nonlensed Models at 1 Meter (Typical)

Accessories

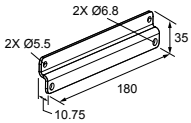
Cordsets

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

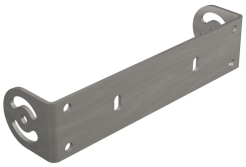
SMBBSSM

- 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
- ø = 51.8 mm (2.04 in)

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