WLH60 High Temperature LED Light

Features

Banner's WLH60 High Temperature Lights are engineered to withstand harsh, extreme temperature environments, making it the first choice for a machine lighting solution. A conservative mechanical design protects against liquid ingress and state-of-the-art LED technology delivers best of class brightness.



Choose between a durable polycarbonate window or a borosilicate glass (BSG) option featuring enhanced chemical and thermal resistance. This smart industrial lighting solution also features an energy-efficient eco-mode dimming state to tailor the lumen levels and power consumption to the applications.

- Approved for use in environments up to 100 °C (212 °F)
- Rugged and durable for harsh environments
- Oil, chemical, and water resistant with IP67, JIS C IP68G, and IP69K per ISO 20653 ratings
- Easy to install with a wide variety of mounting solutions
- Highly resistant to vibration and shock

IMPORTANT: Read the following instructions before operating the light. Please download the complete WLH60 High Temperature 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 WLH60 High Temperature 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 WLH60 High Temperature 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

Family	Cascadable	LED Color	Length (mm)	Window	Construction	Connection
WLH60	**X**	**W**	**340**		**B**	
	X = Non-cascadable	W = Cool white	340 640	Blank = Polycarbonate G = Borosilicate glass	B = Black E-coated aluminum	Blank = 2 m (6.5 ft) integral FEP cable W/15 = 5 m (15 ft) integral FEP cable W/30 = 10 m (30 ft) integral FEP cable

The following models are no longer available for order but are still covered by the information in this document.

- WLH60XW340B W/15
- WLH60XW640GB W/15
- WLH60XW340B W/30
- WLH60XW640B W/30
- WLH60XW340GB W/30

The following caution applies to white LED 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

Original Instructions
01-Apr-26

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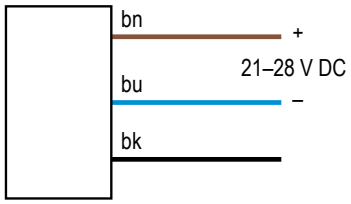
202832
p/n: 202832 Rev. E

ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

Wiring

Diagram	Wire Color	Description
	Brown	21 V DC to 28 V DC
	Blue	DC common
	Black	Connect to 21 V DC to 28 V DC for 50% intensity. For 100% intensity, leave the black wire floating or connected to common.

Specifications

Supply Voltage

21 V DC to 28 V DC

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

See the electrical characteristics on the product label.

Supply Current

Light Length	Typical Current (A) at 25 °C	Typical Current (A) at 100 °C	Maximum Current (A) at -40 °C
340 mm	0.8	0.55	1.05
640 mm	1.6	1.1	2.1

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Construction

Black E-coated aluminum housing, polycarbonate or borosilicate glass window

Spacing Criterion

Vertical: 1.17

Horizontal: 1.39

Operating Conditions

–40 to +100 °C (–40 to +212 °F)

90% maximum relative humidity (non-condensing)

Storage Temperature

–40 to +100 °C (–40 to +212 °F)

Environmental Rating

IP67, JIS C IP68G, IP69K per ISO 20653

Vibration and Mechanical Shock

Vibration: 10 Hz to 55 Hz, 1.0 mm peak-to-peak amplitude per IEC 60068-2-6

Shock: 15G 11 ms duration, half sine wave per IEC 60068-2-27

Certifications

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

c UL us LISTED

Light Characteristics

Cool white color temperature (CCT): 6500K (+600K/-500K)

CRI: 80 minimum

Light Length	Light Output[1]	
	Lumens at 25 °C	Lumens at 100 °C
340 mm	1150	740
640 mm	2300	1480

LED Lifetime

Lumen Maintenance: L_{70}

When operating within specifications, output decreases less than 30% after 36,000 hours

[1] Values shown at 25 °C - current and lumen values decrease 0.475% per 1 °C from ambient. For example, a 640 mm unit will have a maximum current of 2.10 A at -40 °C and 1.03 A at +100 °C.

Mounting

Multiple bracket options available

Connections

2 m (6.5 ft) Fluorinated Ethylene Propylene (FEP) integral cable

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	2.0	30	0.5

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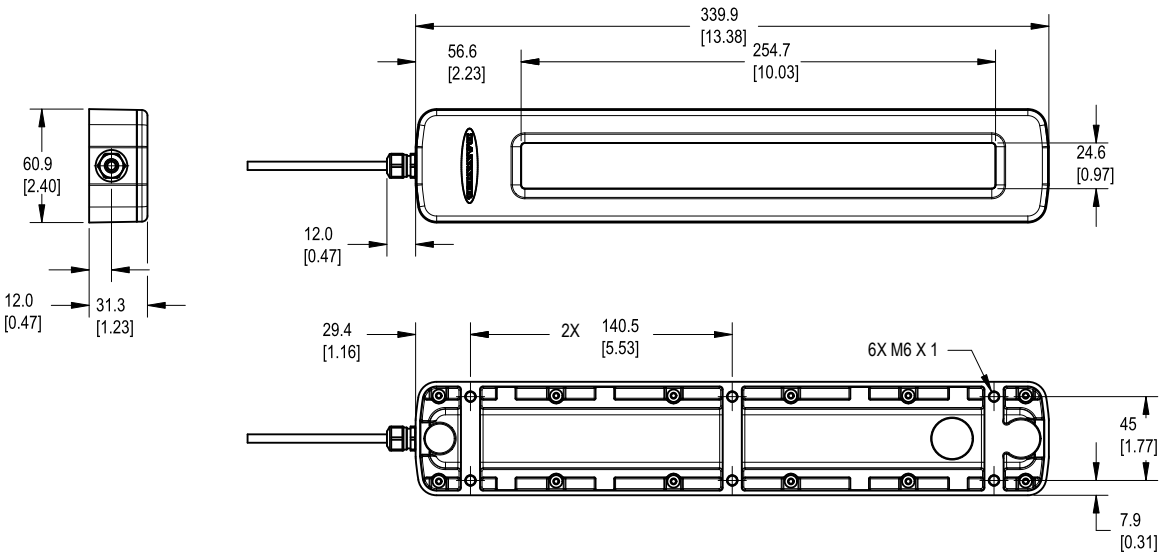
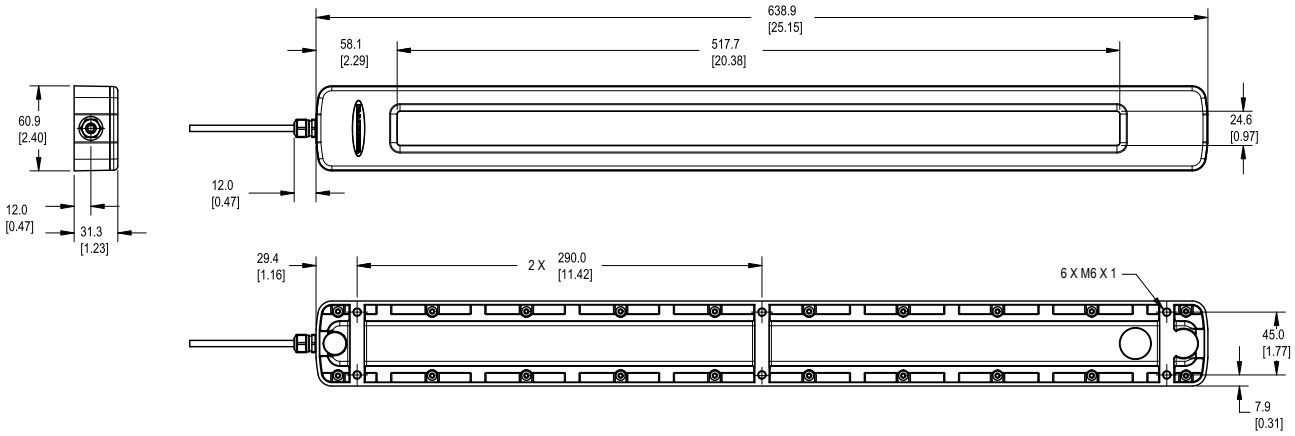
Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.

WLH60 (340 mm) Base Mount Side Exit Model



WLH60 (640 mm) Base Mount Side Exit Model



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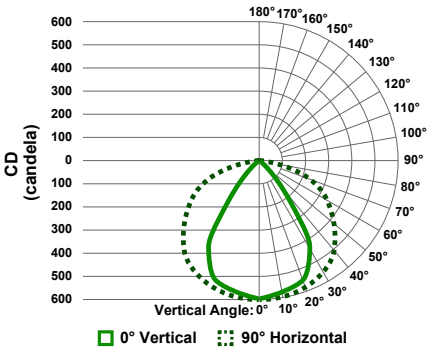
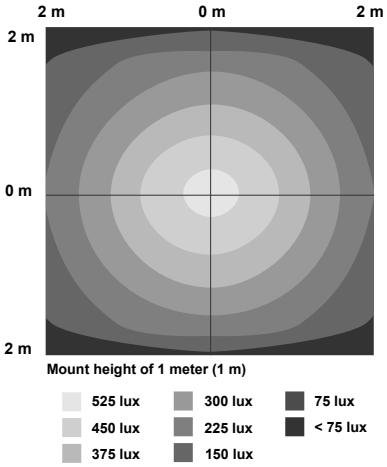
Optical Data

340 mm Models

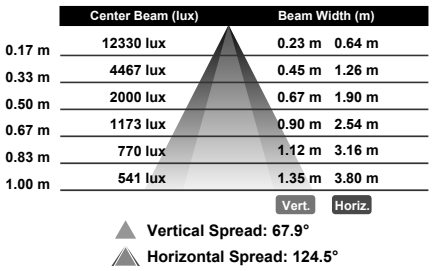
Polar Candela Distribution



Isolux Pattern

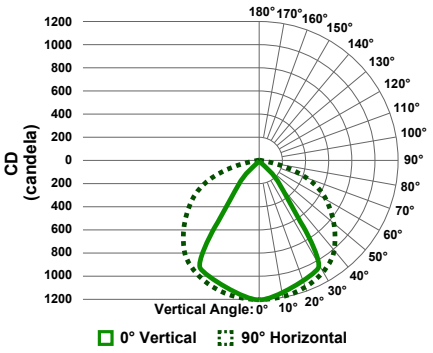


Illuminance at a Distance

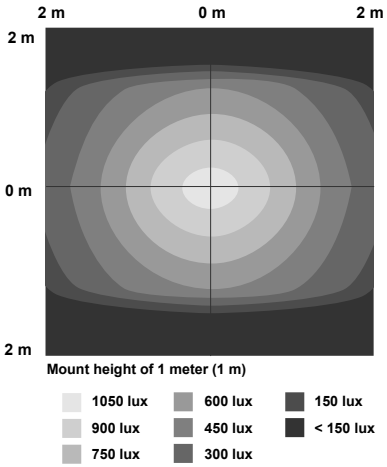


640 mm Models

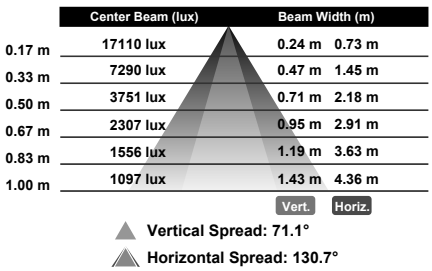
Polar Candela Distribution



Isolux Pattern



Illuminance at a Distance



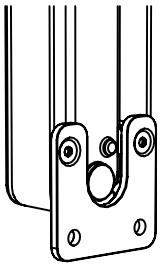
Accessories

Brackets

All measurements are listed in millimeters, unless noted otherwise. The measurements provided are subject to change.

LMBWLC60F

- Set of two flat brackets
- 300 series stainless steel
- Includes M6 flathead screws for mounting to light
- Clearance for M6 or 1/4-20 mounting hardware
- CAD Files: DXF, PDF, IGS, STP



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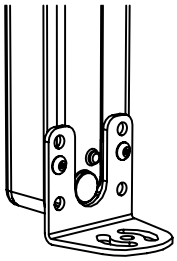
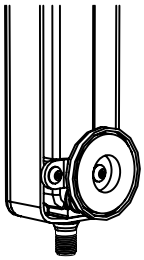
LMBWLC60RA

- Set of two right-angle brackets
- 300 series stainless steel
- Includes M6 button head screws for mounting to light
- Clearance for M6 or 1/4-20 mounting hardware
- CAD Files: DXF, PDF, IGS, STP



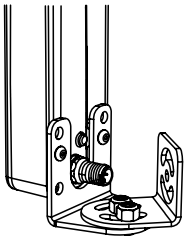
LMBWLC60MAG

- Magnetic mounting kit (set of two)
- Two-inch magnets
- Mounting hardware included
- CAD Files: DXF, PDF, IGS, STP



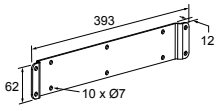
LMBWLC60RAS

- Pair of two swivel mount, right-angle brackets
- 300 series stainless steel
- Includes hardware for mounting to light
- CAD Files: DXF, PDF, IGS, STP



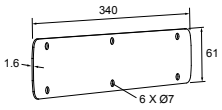
LMBWLC60B340

- Plate for sealing the cavity on the back of the 340 mm models
- 300 series stainless steel
- Includes hardware for mounting to the light
- CAD Files: DXF, PDF, IGS, STP



ACC-WLC60-340-GSK-FDA-1

- Blue FDA-approved silicone gasket
- Thickness: 1.6 mm
- CAD Files: DXF, PDF, IGS, STP



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