Sōlarc LIGHT

LB50 SERIES

Arc Lamp-Based Light Source

USHIO's Sōlarc® Fiber-Optic Illuminators are based upon the use of low-wattage metal halide arc lamps. Sōlarc® Fiber-Optic Illuminators offer up to five times the light output per watt when compared to halogen light sources and even outperform some xenon-based sources.[1]

Brilliant White Light

Unlike many halogen-based light sources, Sōlarc® Illuminators deliver an intense amount of white light with a correlated color temperature (CCT) over 6,500K, providing true daylight illumination for improved color rendering and color balance.

Long Life/Cost Effective

The arc lamp used in Sōlarc® Illuminators has a significantly longer life than comparable halogen lamps. Depending on power-up/power-down cycles, the Sōlarc® lamp will last up to 10 times longer than many halogen lamps and up to five times longer than comparable xenon lamps.

Effective Light Coupling Into Fiber Bundles

The 1.2 mm short arc gap of USHIO's Sōlarc® lamps efficiently launches light into small-diameter fiber bundles. This is in contrast to a halogen light source, which may waste a great deal of available light when coupling to fiber-optic cables.

Compact Enclosure

The Sōlarc® Illuminator is housed in a compact metal chassis—so small, it may be mounted in or on test or inspection equipment.

Choice of Fiber Bundle Receptacles

The Sōlarc® Illuminator is available with a choice of industry-standard fiber connectors.

Universal Power Supply

The product is provided with an internal switching power supply capable of operation with voltages between 90 and 240 VAC, at 50 to 60 Hz. The AC input cord is detachable so that international cord sets may be used.

Cool and Quiet

The LB50 runs so quietly you will hardly notice that it is running. The low-wattage lamp ensures cool operation without compromising brightness.

[1] Internal laboratory measurements of multiple sources using glass canes, 2001.

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LB50 Specifications	
Physical Dimensions Weight	 230 mm [9.05"] wide x 93 mm [3.66"] high x 230 mm [9.05"] length Light Box: 2.42 kg [5.34 lbs]
Environmental Temperature—Operating Temperature—Storage Humidity—Operating	 0˚C (32˚F) to 40˚C (104˚F) -21˚C (-5.8˚F) to 54˚C (129.2˚F) 0% to 95% Relative Humidity, noncondensing
Electrical Power Supply Input Voltage Power cords available: Domestic, Japan, Europe, UK, Australia	 90 to 240 VAC, 50/60 Hz
Optical Interfaces Fiber Bundle Adapters Intensity Control	 LB50IND-001—Industrial Light Box, 50 W Pentax LB50IND-002—Industrial Light Box, 50 W Machida LB50IND-003—Industrial Light Box, 50 W Storz LB50IND-004—Industrial Light Box, 50 W ACMI LB50IND-005—Industrial Light Box, 50 W Wolf LB50IND-006—Industrial Light Box, 50 W Olympus (Custom on request) Provides 0% to 100% attenuation of output light using mechanical light vane
Reflector Specifications	Type: Elliptical MR-16 Numerical Aperture: 0.69 Spot Size @ Focal Plane: 6 mm [0.24"] @ 50% Intensity
Light Output—LB50IND Correlated Color Temperature	 White Light 7,200K (nominal)
Light Delivery Into Fiber Bundle—LB50IND Measured through 4 mm cladded glass rod (Numerical Aperture: 0.64)	800 Lumens (average)
Lamp Life—LB50IND Typical Laboratory Tested	3,500 hours (median) at 11 hours on, 30 minutes off duty cycle
Agency Certificates—LB50IND	Industrial Version (Optional) ETL Listed UL 61010-1 CAN/CSA – C22.2 No. 61010-1 (Spaced Intentionally) EN 61010-1 IEC 61010-1 (or IEC/EN 61010-1 in place of listing it separately) (Spaced Intentionally) FCC Part 15 Class A, EN55011, IEC/CISPR 11, EN/IEC 61000-6-2
Warranty	One Year, excluding Lamp
Mounting	Desktop Mounting on Rubber Feet
Replacement Bulb	Sōlarc® Metal Halide Arc Lamp, P/N AL-5060

Please Note: Continuous product improvement requires we reserve the right to change these specifications without notice.

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