

LOW COST LED SPOTLIGHTS

High-power LEDs are a new class of light sources that have numerous applications in industrial, consumer, medical, and scientific fields. However, engineers and scientists often find that they have to design, fabricate heat sinks, optical mounts and solder electrical contacts before they can light up a high -power LED. Mightex provides ready-to-use high-power LED light sources with integrated heat sinks and mounted collecting optics. Sirius™ compact high-power light sources are designed as a universal light source for general lab use and OEM applications. The mechanical housing features multiple mounting holes compatible to common opto-mechanical mounts. Sirius™ light sources can be driven by Mightex's Sirius™ SLC-series multi-channel LED drivers or other LED drivers and current sources.

FEATURES

- 1W and 3W high-power emitters
- High-efficiency collecting optics
- Precision machined aluminum housing
- Multiple mounting features for lab and OEM applications
- Round and oval illumination profiles

APPLICATIONS

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- High-efficiency collecting optics
- Precision machined aluminum housing
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PERFORMANCE SPECIFICATIONS

SLS Series LED |



Part Number	Wavelength (nm)	Description	I _{op} (mA)	V _{op} (V)	Typical Luminous Flux ⁴ (lm)
SLS-0109-X ¹	395 ~ 410	1W UV	350	3.5	180 mW
SLS-0309-X ²	395 ~ 410	3W UV	700	3.5	350 mW
SLS-0301-X	455	3W Royal Blue	1000	3.9	450 mW
SLS-0302-X	470	3W Blue	1000	3.9	30
SLS-0303-X	505	3W Cyan	1000	3.9	80
SLS-0304-X	530	3W Green	1000	3.9	80
SLS-0305-X	590	3W Amber	1000	3	80
SLS-0306-X	617	3W Red-Orange	1000	3	90
SLS-0307-X	625	3W Red	1000	3	80
SLS-0310-X	657	3W Deep Red	1000	3.1	280 mW
SLS-0208-X ³	850	2.4W Near Infrared	1000	1.8 ~ 2.4	375 mW
SLS-0112-X	940	1W 940nm	700	1.5	180mW
SLS-0300-X	5,500K	3W White LED	1000	3.9	80

¹x represents the lens code. Please see table 3 below for the lens code description.

²Emitter consists of two dies. Divergence angle approximately doubles along one direction when used with collecting optics.

³Without collecting optics, this LED emits light from a 1mm x 1mm area onto a 60 degree cone.

⁴Due to variations in the manufacturing process and operating parameters such as temperature and current, the actual output of any given LED may vary. Specifications are intended to be used as a guideline.

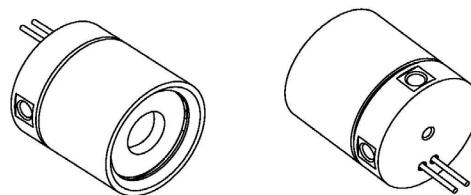
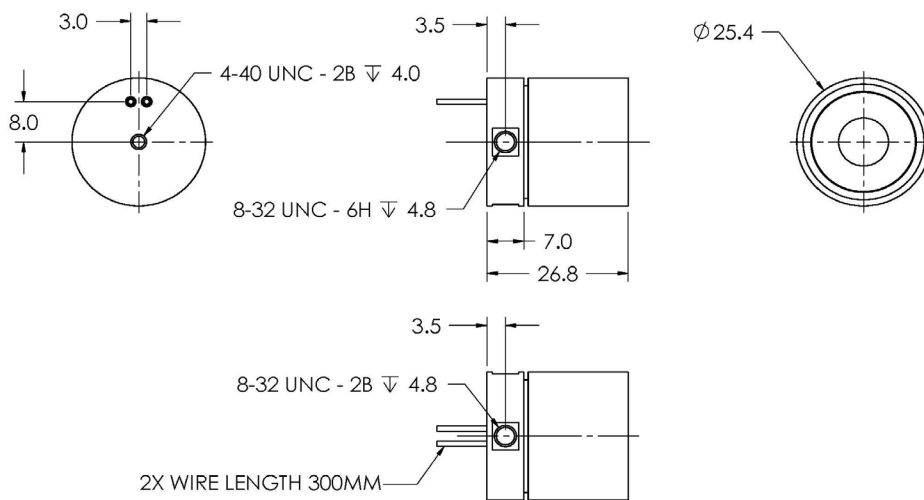
Table 3 | Collecting Optics Specifications

Lens Code	Description	Clear Aperture (mm)	X-Half Angle (degree)	Y-Half Angle (degree)	Efficiency (%)
A	Narrow Beam	19	5	5	85
B	Medium Beam	19	15	15	85
C	Wide Beam	19	25	25	85
D	Oval Beam	19	5	20	85
E ¹	Fiber Bundle Coupling	19	7mm Full Field	7mm Full Field	85

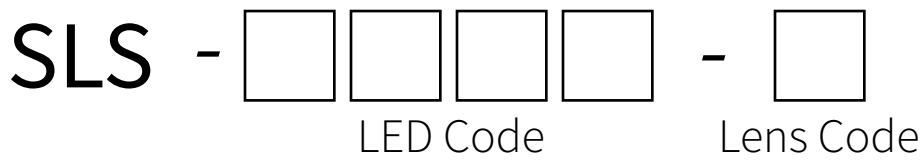
¹ Focuses light into a spot approximately 12 mm in front of the lens. Ideal for coupling light into fiber bundles, liquid lightguides and integrators.

INSTALLATION DRAWINGS

SLS Series LED Spotlights



PART NUMBER AND ORDERING INFORMATION

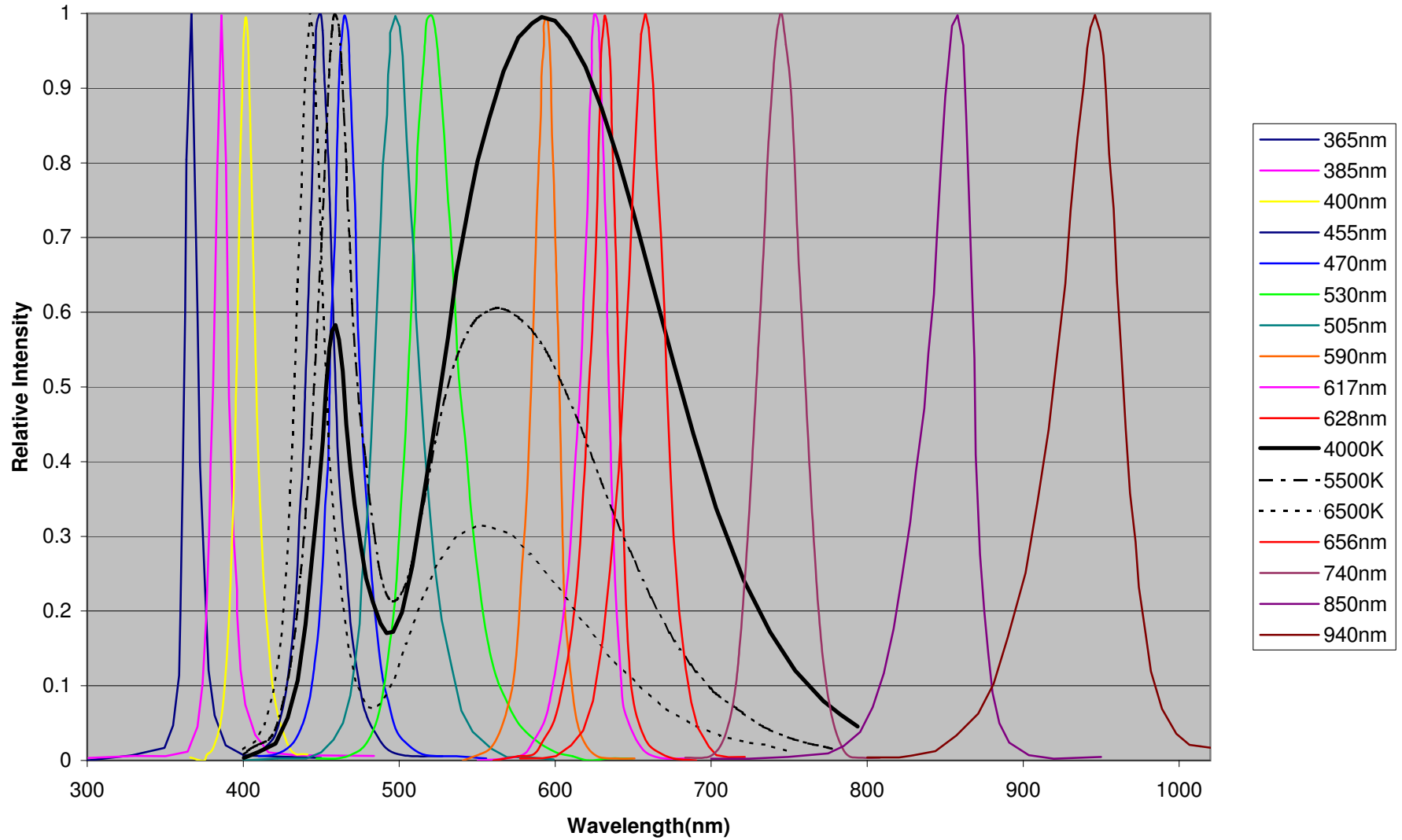


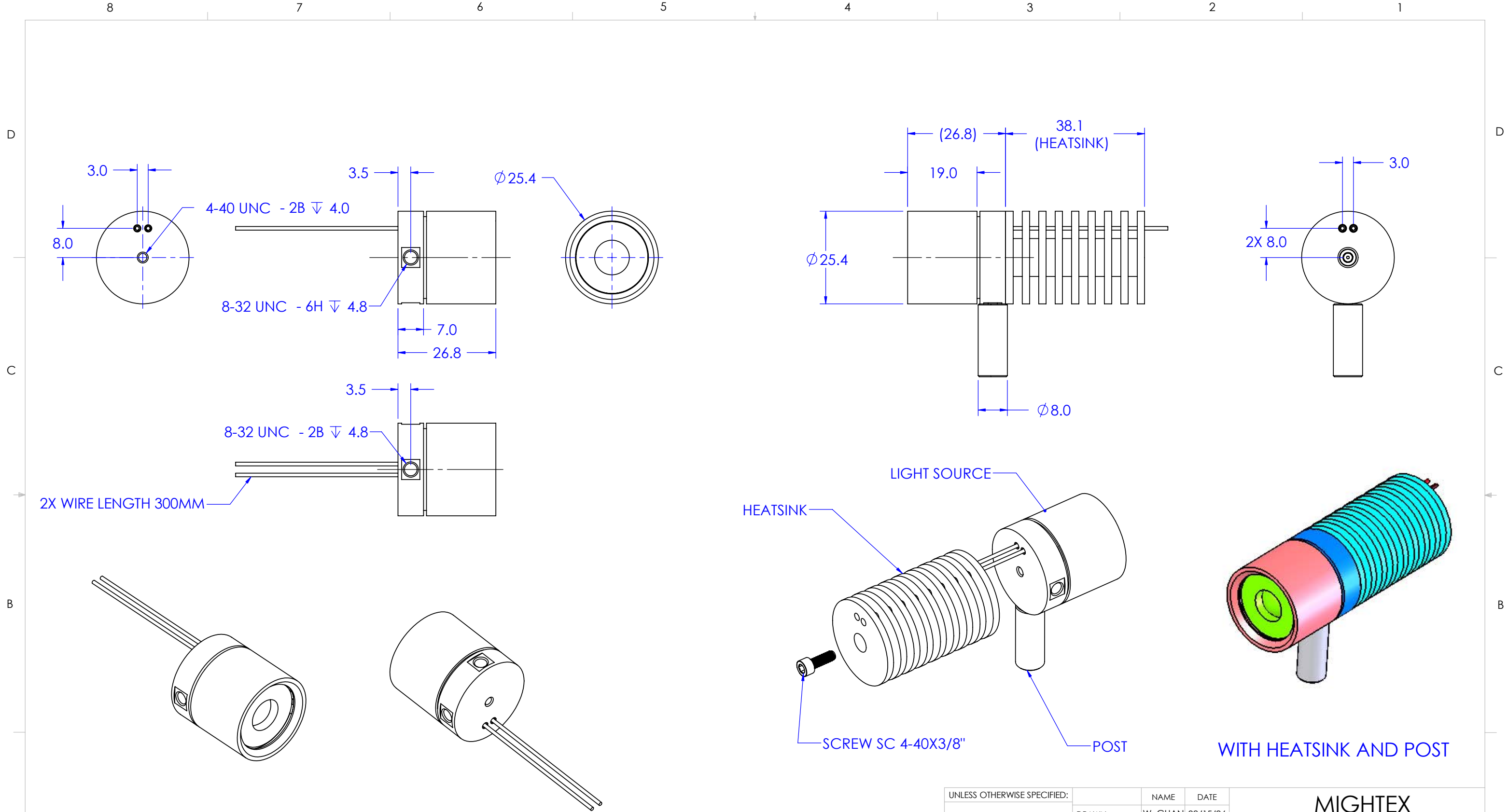
For example, SLS-0104-B is a light source with a 1W green emitter and 15-degree collecting optics.

With a world-class OEM design team, Mightex offers a broad range of customized solutions in order to meet individual customer's unique requirements. Please call [1-925-218 1885](tel:1-925-218-1885) or email sales@mightex.com for details.



Mightex LED Typical Spectra





NOTES: (UNLESS OTHERWISE SPECIFIED)
 1) HOUSING/BASE/BRACKET MATERIAL: AL 6061, BACK ANODIZE.

Distributor

where technologies meet solutions

info@amstechnologies.com
www.amstechnologies-webshop.com
Contact us

UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN MM		DRAWN	W. GUAN 08/15/06
TOLERANCES:		CHECKED	
FRACTIONAL ±		ENG APPR.	
ANGULAR: ± 1DEG BEND ±		MFG APPR.	
ONE PLACE DECIMAL ±0.20		Q.A.	
TWO PLACE DECIMAL ±0.10		PROPRIETARY AND CONFIDENTIAL	
INTERPRET GEOMETRIC TOLERANCING PER:	THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MIGHTEX. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF MIGHTEX, IS PROHIBITED.		
MATERIAL	SEE NOTES		
FINISH	32		
DO NOT SCALE DRAWING			

MIGHTEX		
TITLE:		
CUST INSTL LIGHT SOURCE WITH HEATSINK		
SIZE	DWG. NO.	REV
B	CID_LIGHT-SOURCE-HEATSINK	01
SCALE: 1:1	WEIGHT:	SHEET 1 OF 1