

# FIBER OPTIC ILLUMINATORS



Sölarc® Arc lamps bring bright, white light into tight spaces. Our light engines and modules enable applications to deliver up to five times the brightness of halogen—with a whiter color temperature. Sölarc® technology is ideally suited for medical applications, as well as those found in more rugged, industrial environments.

USHIO offers a complete line of fiber optic illuminators and illuminator components. Included in this brochure are product images, a comparison graph and performance specifications.

The Sölarc® line offers wattages ranging from 24W to 60W, with corresponding outputs from 200 to 1200 lumens. Products LB24 (24W) and LB50IND (50W) are designed for industrial use. All Sölarc® products use Sölarc® light sources.

Offering the flexibility of battery or AC power, Sölarc® lamps have significantly longer lives than their halogen counterparts, and can be integrated into small, lightweight, yet durable products. Finally, the cost of use is noticeably less than with other illumination systems, further adding to customer satisfaction—and your profitability.

## LIGHT BOXES

USHIO's Fiber Optic Illuminators exhibit superior performance, lamp life and, most importantly, the end user's cost of ownership. If the cost of light is one of the primary factors motivating key purchase decisions, then look no further than USHIO. Below is our comprehensive OEM product line of fiber optic illuminators for either medical or industrial applications. See the Performance Specification table on page 2.

## LIGHT MODULES AND LIGHT ENGINES

USHIO makes available a variety of Sölarc® Light Engines and Modules that are designed to allow easy and reliable integration into your system. They provide the proper lamp environment, optical characteristics and a variety of flexible mechanical configurations. See the Performance Specification table on page 2.

LB24 (24W)



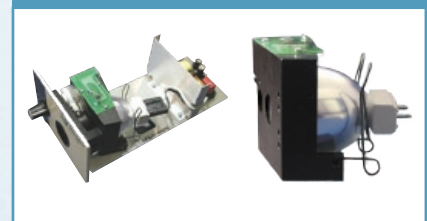
LB50IND (50W)



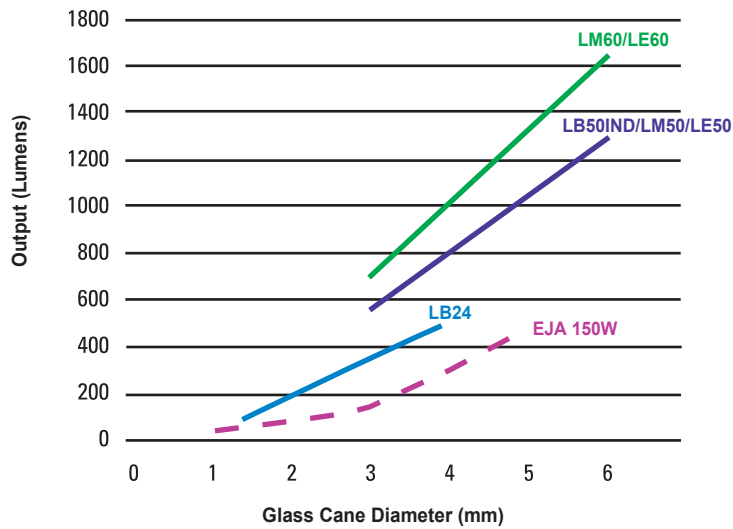
LE24 & LM24



LE50 & LM50



## Performance Comparisons—Lumen Output vs. Diameter



## Performance Specifications

Product	Dimension w x h x l (mm)	Weight	Lamp Power	Lumens	Color	Source	Source NA	Fiber Adapter	Intended Use	Optimal Fiber Size	Median Lamp Life
<b>Sōlarc® Line</b>											
LB24	81 x 64 x 114	0.8 kg	24W	590 <sup>1</sup>	90+CRI @ 5,500K	Sōlarc®	0.67	ACMI 12.5 mm	Industrial	2 mm–4 mm	750 hrs <sup>2</sup>
LB50IND LE50 LM50	93 x 230 x 230 86 x 64 x 208 66 x 82 x 73	2.4 kg 0.6 kg 0.4 kg	50W	800 <sup>1</sup>	80+CRI @ 7,200K	Sōlarc®	0.69	ACMI Wolf Storz Olympus Pentax Machida	Industrial	3 mm–6 mm	3,500 hrs <sup>3</sup>
LE60 LM60	86 x 64 x 208 66 x 82 x 73	0.6 kg 0.4 kg	60W	1000 <sup>1</sup>	80+CRI @ 6,500K	Sōlarc®	0.69	ACMI Wolf Storz Olympus Pentax Machida	Medical	3 mm–6 mm	800 hrs <sup>4</sup>

1. 4 mm glass rod
2. Duty cycle: 3.5 hrs on / .5 hr off
3. Duty cycle: 11 hrs on / 1 hr off
4. Duty cycle: 2 hrs on / 1 hr off