The latest development in EmArc® technology, the new SMR-75/LFL, 75 watt lamp, has an optimized design that addresses illumination challenges in fluorescent microscopy systems and other unique scientific or industrial optical applications.

The SMR-75/LFL lamp is another masterfully engineered lamp from Ushio America, that combines the benefits of our unique EmArc lamp discharge technology with precisely crafted and manufactured parts resulting in a powerful and compact lighting solution.

EmArc lamps are a progressive step ahead in lighting technology, possessing features that offer advantages to an array of users for imaging, fiber optic and other important optical applications.

**FEATURES & BENEFITS**

- Unique Long Focal Length Reflector Design Greatly Improves Optical Throughput Efficiency.
- 1.2 mm Arc Gap Size Enables Very Precise Optical Control and Well Defined Light Distribution Pattern.
- ‘Plug and Play’ Lamp Design Requires No Lamp to Lamp Adjustment or Alignment in Your Optical System Compared to Other Traditional Lamp Sources.
- Highly Durable and Precisely Machined Reflector Parts Ensure Lamp to Lamp Integrity, Alignment and Consistency in Your Equipment.
- EmArc DC, Metal-Arc Technology, Enables Operation on Simpler, Lower Cost DC Power Supplies Reducing OEM System Design Costs.
- Xenon-Like Correlated Color Temperature for Crisp, White, Bright Illumination.
- Excellent Field Uniformity and Intensity in Fluorescent Microscopy Applications, Featuring Outputs and Peak Intensities in Important Spectral Areas.

**APPLICATIONS**

- Microscopy
- Medical and Industrial Fiber Optic Illumination
- Bio-Technology and Bio-Medical Optical Instrumentation
**SPECIFICATIONS**

All dimensions are in millimeters.

<table>
<thead>
<tr>
<th>Lamp Current (A)</th>
<th>Maximum Allowable Starting Current</th>
<th>Arc Gap (mm)</th>
<th>Color Temp* (K)</th>
<th>Lumen Flux* (lm) nom</th>
<th>Average Rated Life** (h)</th>
<th>Typical Warm Up Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.33 nom.</td>
<td>2.3A</td>
<td>1.2</td>
<td>6800</td>
<td>700</td>
<td>600</td>
<td>90 sec. nom.</td>
</tr>
</tbody>
</table>

* Output and Correlated Color Temperature as measured through a 4mm aperture at 100mm from the reflector rim. Actual values are dependent upon optical set-up.

** Life at 50% down in luminous flux or 50% failure to operate. (Dependent upon system and operating conditions).

Ballast must be certified by USHIO.

<table>
<thead>
<tr>
<th>Wattage Power Range (W)</th>
<th>Ordering Code</th>
<th>Lamp Description</th>
<th>Lamp Voltage (V)</th>
<th>Ignition Voltage</th>
<th>Minimum Voltage After Start Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 - 75</td>
<td>5002312</td>
<td>SMR-75/LFL</td>
<td>55V DC (-8+12)</td>
<td>25kV (for Hot Re-ignition)</td>
<td>10 - 15V DC</td>
</tr>
</tbody>
</table>

**UBX-76 ELECTRONIC POWER SUPPLY**

**SMARTARC™ SERIES**

Operates EmArc DC lamps in power ranges between 50W-75W.

![UBX-76 SERIES](image)

**CALIFORNIA PROPOSITION 65 WARNING:** These products can expose you to Mercury known to the state of California to cause birth defects or other reproductive harm. For more information, please go to: [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov).

**contains mercury / contient du mercure**

Manage in Accord with Disposal Laws

www.lamprecycle.org  1-800-895-8842

© 2020 Ushio America, Inc. All rights reserved. | 5440 Cerritos Avenue, Cypress, CA 90630 | Toll-free: (800) 838-7446 | [www.ushio.com](http://www.ushio.com) Refer to website for product availability, compliance, and regulations. Specifications may be subject to change without prior notice.

Form No. S-EMARC75LFL/0820