High Performance MERCURY SHORT ARC LAMP - Model HSA-100HP

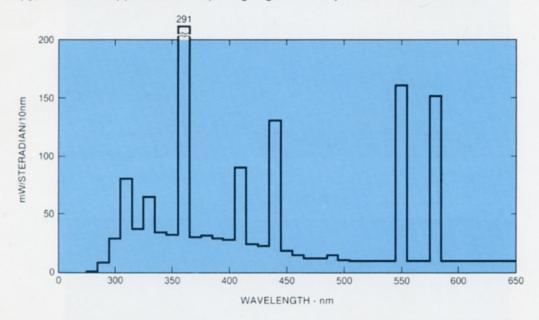


FEATURES

- Specially processed electrodes to increase arc stability
- New bulb construction to extend lamp life (light output)
- Formulated additives to enhance startability throughout lamp life
- Improved metallurgical techniques used in mechanical construction for increased reliability

This lamp represents a considerable advance in the performance of 100 watt mercury short arc sources. It was developed to satisfy the needs of recording instrumentation in which arc stability and long reliable life are necessary.

The output is maximized to provide intense ultraviolet radiation corresponding to the photosensitivity of most presently available recording papers. Because of the point source configuration of the arc this lamp is ideally suited for optical instrumentation, photochemistry, spectroscopy, and other applications requiring high intensity ultraviolet radiation.



The high performance mercury arc lamp emits radiation below 275 nm and above 650 nm shown in the presentation of the spectral distribution. However, there is only weak emission below the shorter wavelength limit presented, while above 650 nm the rather strong infrared radiation originates from the electrodes and hot quartz envelope of the lamp.



SPECIFICATIONS

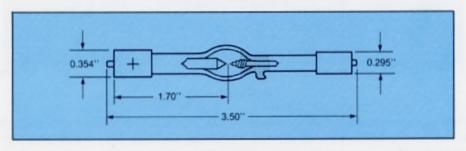
ELECTRICAL

Current Type:	D.C.
Power, Rated: Maximum: Minimum:	100 Watts 125 Watts 85 Watts
Operating Voltage:	20 ± 4 Volts
Operating Current:	4.2 - 6.2 Amperes
Starting Pulse:	10 Kilovolts

OPTICAL

Arc Size:	0.012X0.012 Inches
Total Luminous Flux:	2040 Lumens
Luminous Efficiency:	20.4 Lumens/Watt
Arc Brightness:	143,000 Cdla/Cm ²
Solid Angle of Output:	8.5 Steradians
Power Radiated:	
300 - 350 nm: 350 - 400 nm: 400 - 450 nm: 450 - 500 nm: 500 - 600 nm:	2.02 Watts 3.53 Watts 2.39 Watts .66 Watts 3.12 Watts
Total Radiation (275 - 650 nm):	12.6 Watts

MECHANICAL



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