

### UXR-300 Series



The UXR-300 is a compact, high pressure, xenon arc lamp, with a dedicated internal reflector. It offers a high intensity narrow beam, long life and broadband illumination. The radiation from the arc is collimated by an internal, parabolic reflector that is optically prealigned. It requires no adjustments for maximizing the collection angle and energy transmission.

The UXR-300 series has taken the state-of-the-art of ceramic xenon lamp technology to a higher level. The UXR series offers a regulated high intensity beam minimizing any cone angle deviation over time, thus establishing higher efficiency in light collection throughout the entire life of the lamp.

Further advances within this lamp have significantly reduced FM noise generation, which can interfere with sensitive monitors and communication equipment.

#### FEATURES

- Long life (500 hour non-prorated warranty)
- Regulated high intensity narrow beam light
- Pre-aligned reflector requiring no adjustments
- Reduced FM noise generation
- Anti-arc over feature
- Improved color maintenance over life
- Superior ignition reliability
- No mesh/screen needed for Olympus Systems
- Compact and rugged ceramic to metal seal
- Safety and reliability

#### APPLICATIONS

- Fiber optic illumination
- Analytical instrumentation
- Spectroscopy
- Audio-visual systems
- Microscopy
- Character recognition
- Data projection
- Endoscope and Laparoscope illumination
- Infrared and visual searchlights
- Infrared and ultraviolet systems
- Soft soldering heat source
- Machine vision

Refashioned mechanical and structural aspects of these lamps have established greater "ignition" reliability with time and starting attempts.

Each lamp is coated with a silicon elastomer which reduces the possibility of ignition problems and reflector breakdown, caused by arcing.

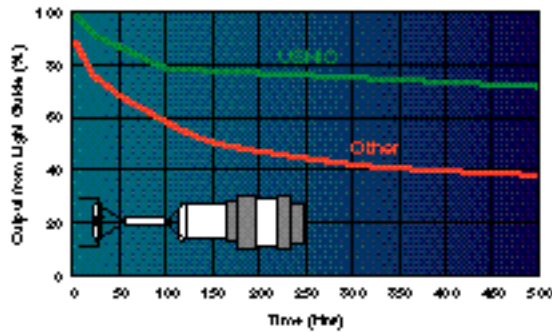
Unlike lamps from other manufacturers, no mesh or screen attachment is necessary on systems where high initial "heat load" is a problem. The benefit is, light levels are more reliably maintained throughout the full life of the lamp.

*With these significant engineering advancements, the user can experience greater lamp performance and life times. Our non-prorated warranty of 500 hours is the minimum service life you should ever expect from our lamp.*

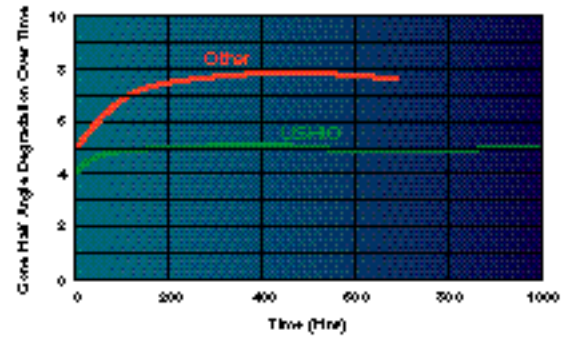
#### Spectral Distribution



Output Reliability Through Light Guide Over Time

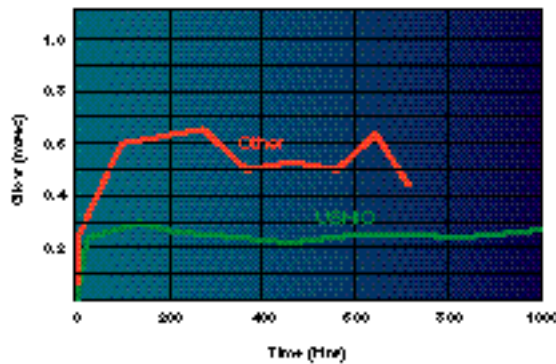


Projected Light Angle Reliability



### IGNITION RELIABILITY COMPARISON

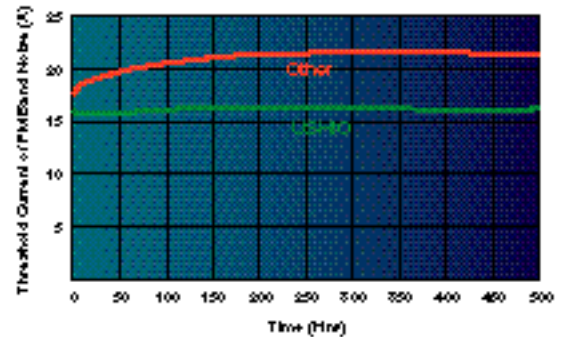
Comparison of Glow Transition to Arc



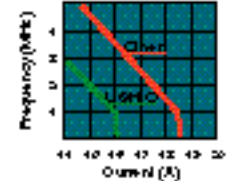
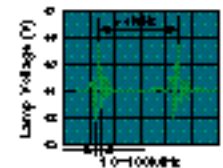
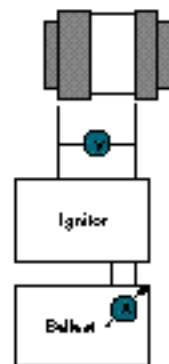
Ignition Reliability Comparison with 2 HV Pulse (%)

TIME (hr)	0	25	100	150	200	225	300	350	400	450	500
USHO	100	100	100	100	100	100	100	100	100	100	100
OTHER	100	100	67	67	67	67	33	33	33	33	33

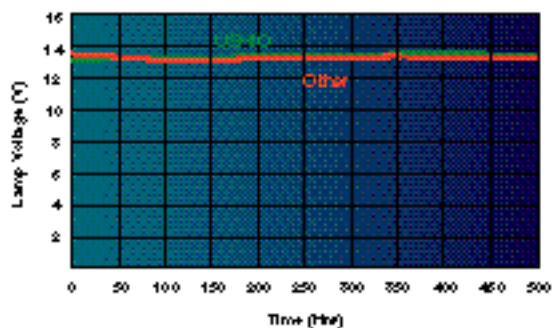
FM Noise Generation Over Time



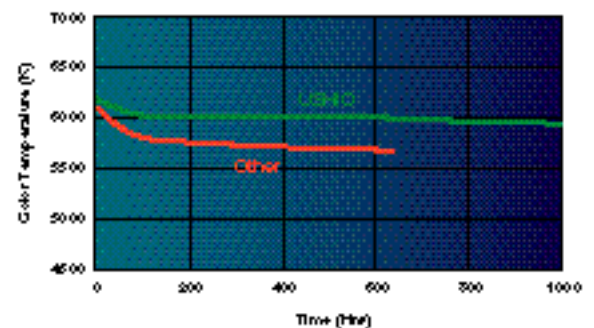
Demonstrate FM signal generation at lower operating amp-ages of USHO vs. Other



Voltage Stability Over Time



Color Temperature Comparison vs. Time



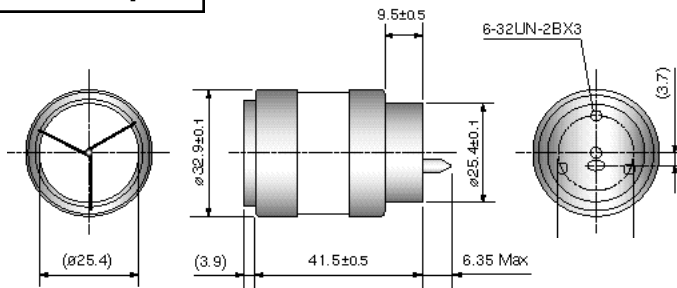
# Characteristics and Specifications

Hi-Tech LAMPS

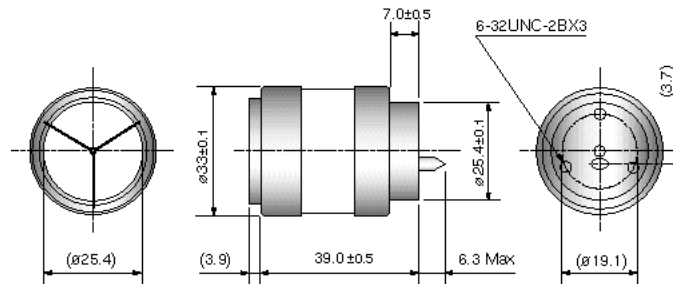
800-229-6509

info@hi-techlamps.com

**UXR-300AU, BU**



**UXR-300CU**



AU, and CU are continuous operation types. BU is a pulse type, but can be used at continuous mode.

Ushio Lamp Code	Ushio Ordering Code	Volts (V)	Watts (W)	Current (A)	Color Temp (K)	Ignition Voltage (kV)	Rising Time ( $\mu$ sec)	Max Luminous Intensity (cd)	Effective Luminous Flux (lm)	Cone Half Angle
UXR-300AU	5000380	14	300	20	6150	20	Less than 100	$5 \times 10^5$	5000 over entire spectrum	Less than $5^\circ$
UXR-300BU	5000381									
UXR-300CU	5000382									

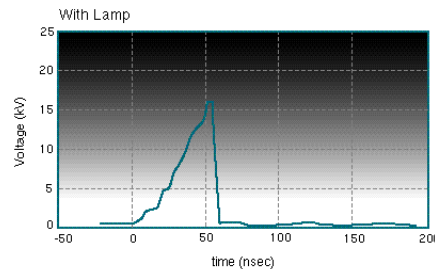
## Mercury Timer for UXR Series

UXR-MT      5000384

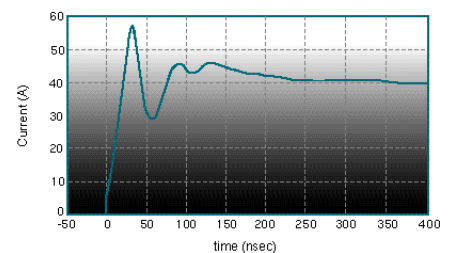
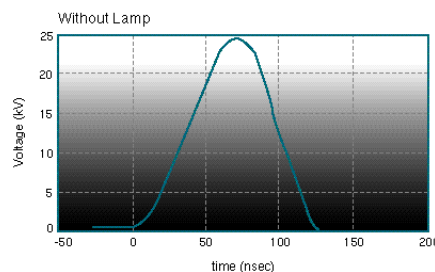
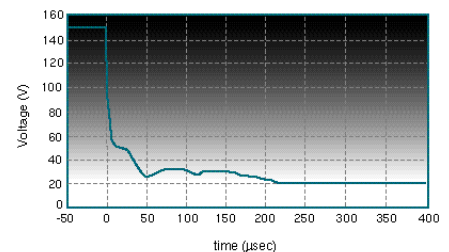


Mercury Timer (500 Hours)

## Ignition Voltage Profile



## Arc Transition Profiles



◆ There are no ozone depleting products contained within this lamp.