

USHIO

# UXR-300ES

## Electrical Characteristics

(Initial)

Lamp Power	260W
Operating Voltage <sup>1</sup>	13V
Rated Lamp Current	20A
Lamp Current Range	18~21A

## Operating Condition

(Power Supply)

Power Supply	Constant Current Control Constant Power Control
Current Ripple (P-P)	Max 5%
Igniter Voltage	Min AC23kV
Supply Voltage	Min 140V

## Specifications

Arc Gap [Non-Operation]	1.0mm
Wavelength	390~1000nm
Window Diameter	φ25.4
Reflector	Parabola
Rated Lifetime <sup>2</sup>	500 Hours

## Operating condition

(Lamp)

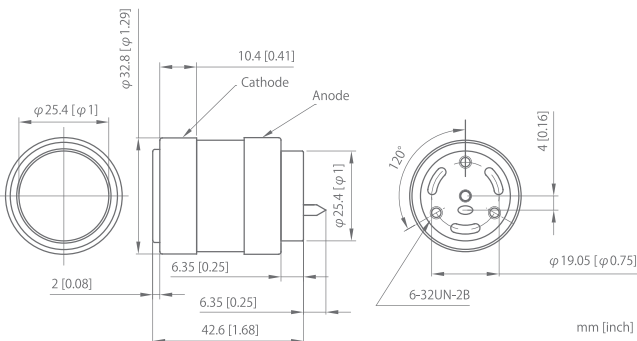
Operating Direction	Horizontal Direction
Cooling	Cermic body Max 150°C
	Base Max 200°C
Forced Cooling	Necessary

## Initial Output<sup>3</sup>

(Representative Values)

Radiant Output	43W
Visible Output	3250Lm
Visible Output (5mm Aperture)	1400Lm
Color Temperature	6100K

## Appearance



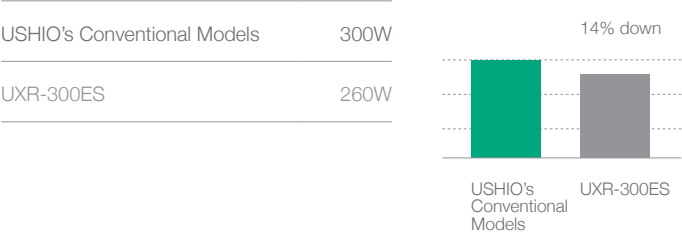
<sup>1</sup> Operating current: 20A

<sup>2</sup> Visible output (5mm aperture) is reduced to 50% of the initial value.

<sup>3</sup> Operating current: 20A

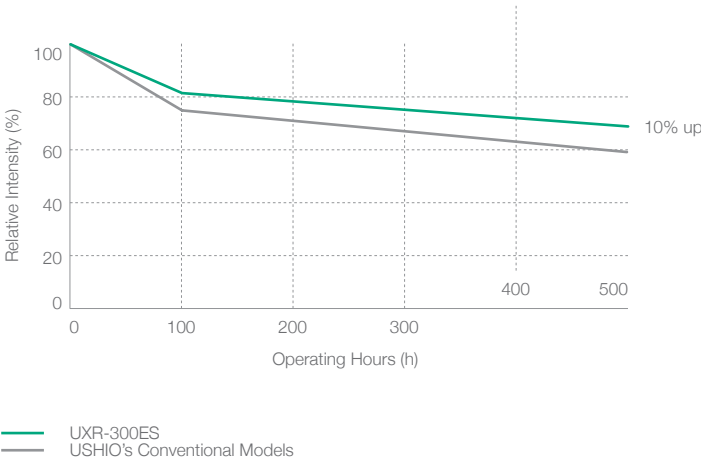
# Power Conservation Through Low Power Design

14% power reduction compared to USHIO's conventional models.



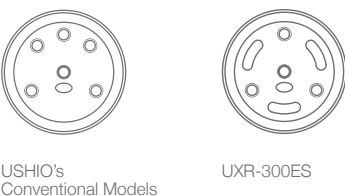
# High Illuminance Maintenance Ratio

Provides increased illuminance maintenance ratio compared to USHIO's Conventional Models



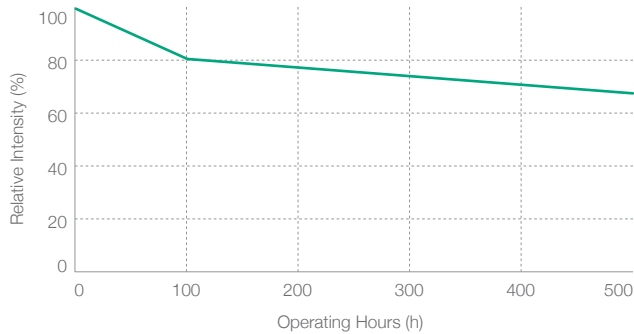
# Easy to Install Terminal Structure

Special lamp mounting structure reduces work load of lamp replacement  
Replace lamp without worrying about heat sink positioning.



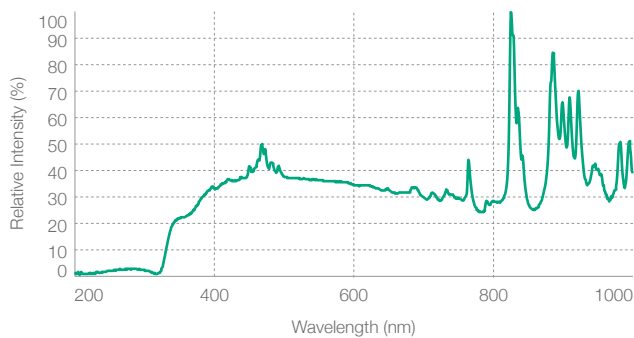
## Visible Output (5mm Aperture) Degradation

Reference value for operating at rated lamp current



## Spectral Distribution

Reference value when lamp is lit at rated lamp current



## ⚠ Important Operation Notes

- Correct polarity and burning position are critical.
- Lamp must be operated less than rated current.
- Window of the lamp should be free from bare hands or dust. In order to remove grease stains or dust, use alcohol soaked clothes.
- Replace the lamp at its life end, or when blackening becomes thicker or flickering of the output becomes severe.
- Remove the vinyl tube on the filling tip before installation.

## Safety Instructions

### ⚠ Warning

- ⊘ High internal pressure exists in the lamp. Do not apply any excessive shock, stress, or scratch to the lamp while handling. Otherwise the lamp may burst resulting in catastrophic failure.
- ⊘ Lamp should not be operated within 45° of vertical with the window up. Otherwise thermal stress can cause window failure.
- ⚡ Turn off the power before inserting, removing or cleaning the lamp, otherwise it could cause electrical shock.
- ⚠ High voltage is required for ignition. Do not touch the lamp nor heat sinks during operation, especially in the instant of ignition.
- ⚠ Do not look directly at the operating lamp. Intense infrared and ultraviolet radiation generated by the lamp can cause skin burns and severe eye damage.

### ⚠ Caution

- High temperature is built up during operation. Do not touch the lamp during operation and for 10 minutes, at least, after turning off.
- Do not operate the lamp near flammable gas or chemicals.
- Attach heat sinks on both bases and apply forced air cooling. Apply heat conductive grease on both bases sufficiently to obtain appropriate cooling condition.
- Lamp must be fixed at the anode base only, leaving cathode base free. Otherwise mechanical and thermal stress may cause explosion. Read all equipment instructions as well.
- The filling tip on the anode base of a replaced lamp should be cut off in order to reduce the internal pressure of the lamp.