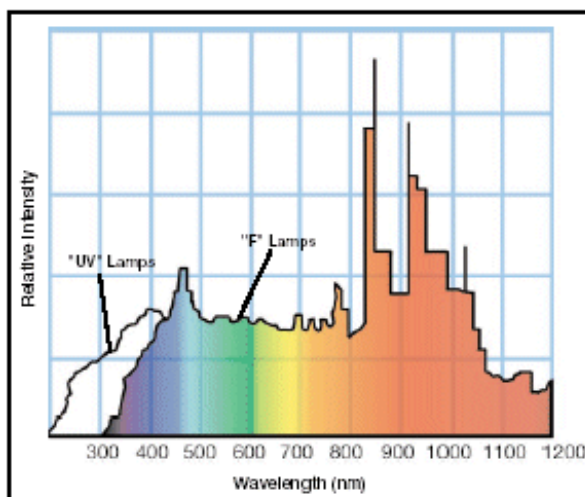




## CeraLux® Xenon Arc Lamps

**Luxtel's CeraLux** series of lamps provide the end market with a value supplier of ceramic lamps, wholly made in the United States. Originally engineered to be an exact replacement for lamps designed to operate in existing systems employing this type of ceramic, xenon short arc lamp. Today the series has been extended to provide custom designed lamps for major OEMs and includes collimated and focused, filtered and UV output in wattages from 150 to 500.

**CeraLux** lamps are designed to give the instrument builder a combination of rugged compactness and extremely high brightness, excellent color temperature over life and lamp to lamp repeatability.



CeraLux Xenon Collimated Arc Lamp



CeraLux Xenon Focused Arc Lamp

CeraLux xenon lamps produce broadband light with color temperatures of approximately 5900°K. This results in excellent white light for photopic, video and photographic applications.

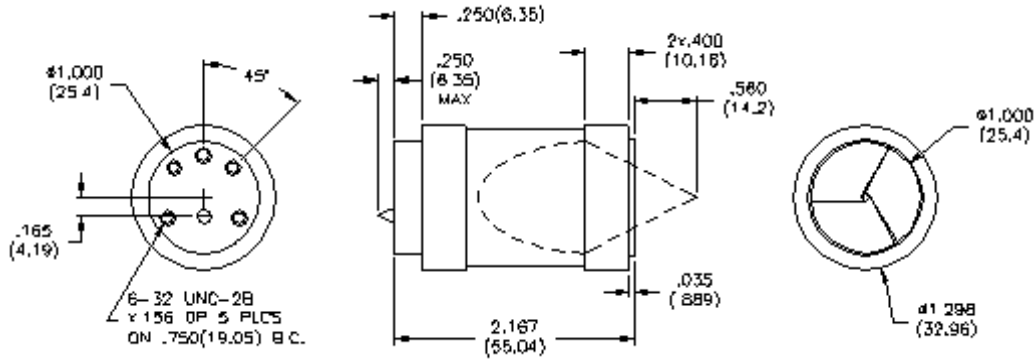
© 2003-2004, Luxtel Ilc. All rights reserved.

# CeraLux® Xenon Focused Arc Lamps With Elliptical Reflector B Body Size



## PHYSICAL SPECIFICATIONS

DESCRIPTION	SPECIFICATION
Reflector Geometry	Elliptical $1 = X^2/1.059^2 + Y^2/.50^2$
Window Diameter	1 inch (25.4 mm)
Weight	150 grams



Dimensions in parentheses are in millimeters

## OPERATIONAL SPECIFICATIONS

	CL300BF-10F	CL300BUV-10F	CL175BF-10F	CL175BUV-10F	CL125BF-10F	CL125BUV-10F
<b>POWER (WATTS)</b>						
Nominal	300	300	175	175	125	125
Range	175 - 330	175 - 330	150 - 200	150 - 200	75 - 150	75 - 150
<b>CURRENT (amps DC)</b>						
Nominal	22	22	14	14	11	11
Range	13 - 23	13 - 23	12 - 16	12 - 16	8 - 14	8 - 14
<b>VOLTAGE (volts DC)</b>						
Nominal	13.5	13.5	12.5	12.5	11	11
Range	11.5 - 15	11.5 - 15	10.5 - 13.5	10.5 - 13.5	10 - 12.5	10 - 12.5
Minimum Ignition Voltage (kV)	23	23	23	23	23	23
Maximum Temperature	150°C	150°C	150°C	150°C	150°C	150°C

Typical Lifetime of lamps is 1000 hours – to 50% of initial output

## OUTPUT AT NOMINAL POWER

	CL300BF-10F	CL300BUV-10F	CL175BF-10F	CL175BUV-10F	CL125BF-10F	CL125BUV-10F
Radiant Output (watts)	65	65	34	34	19	19
Visible Output (lumens)	6500	5900	2700	2500	1600	1400
UV Output (watts)	3	9	<2	5	1	3
IR Output (watts)	32	30	19	18	10	10
Color Temperature (°K)	5800	5100	5800	5100	5800	5100

All values and specifications subject to change without notice.

# CeraLux<sup>®</sup> Xenon Arc Lamps

Read all safety, cooling, operational and disposal notes prior to use. Consult the factory at the numbers listed below for any assistance in the proper operation and use of all lamps.

## SAFETY

- Always take precaution when handling lamps because they are under high pressure.
- The cold weld pinch-off tube is very sharp, care should be taken to not come into contact with it or disrupt it.
- During operation, the IR and UV radiation can cause skin and eye damage. Do not look directly into a lamp, get in the path of the output beam or touch the lamp while operating.
- Proper eye protection should be worn when handling lamps due to high pressure.
- Extra care should be exercised when using lamps that produce ultraviolet radiation.
- Protection of the eyes and skin should be undertaken when exposure to ultraviolet radiation is possible.
- When operating UV lamps, UV blocking eye protection should be worn during lamp operation.
- UV lamps will produce toxic ozone due to ultraviolet radiation below 242 nm acting upon oxygen in air. To avoid ozone, an inert atmosphere should be used. Select a non-UV lamp (filtered "F" series) if ultraviolet wavelengths are not needed.
- Due to high operating temperatures, care should be taken if handling lamps after operation.

## COOLING

- Proper cooling will provide optimum performance and extend life. Forced air cooling should be used.
- Seal temperatures should not be allowed to exceed 200° C. Under nominal operating conditions attempts should be made to maintain maximum lamp temperatures of 150 ° C.
- Appropriate thermal and electrically conductive compounds should be used to promote improved thermal conduction between lamps and heat sinks. Do not apply thermal compounds to the lamp window or ceramic body. A thick layer should be applied to all surfaces that contact heat sinks.

## OPERATION

- Lamp should not be operated with window facing upwards. Keep lamp oriented to within 45° of vertical.
- Lamps must be operated within stated current and voltage ranges. Overpowering can lead to electrode wear and shortened life. Underpowering may lead to instabilities and problems starting (depending on power source).
- Lamps should be mounted in suitable heat sinks.
- Assure proper polarity of power source when making electrical connections.
- Care should be taken when using filters or lenses that may reflect energy back into lamps.
- Consult the factory at the numbers below for proper use and operation of all lamps.

## DISPOSAL

- Proper eye protection should be worn when handling lamps.
- Care must be taken due to the sharp pinch-off tube on the rear of the lamp.
- The internal pressure of the lamp may be relieved by opening the pinch-off tube with a pair of heavy pliers.
- The internal gas will be heard escaping through the tube opening. The lamp may now be disposed of.

## WARRANTY

- LuxteL's CeraLux lamps are covered by a 500 hour warranty.
- Typical lifetime is 1000 hours (50% of initial output).



### LuxteL<sup>®</sup> llc

100 Ferncroft Road ~ Danvers, MA 01923 USA

Tel. 978.774.9136 ~ Fax. 978.774.1559

Email: [info@luxtel.net](mailto:info@luxtel.net) / Web: <http://www.luxtel.net>