

PE150A-10F

CERMAX® FOCUSED XENON ARC LAMPS



Description

The Cermax® xenon arc lamp is an innovative lamp design in the specialty lighting industry. These lamps were introduced in the early 1980's and are now used in endoscopes in most major hospitals worldwide, in high brightness projection display systems, and for a wide variety of other high performance applications.

Cermax® xenon arc lamps have always been known as rugged and compact sources of high quality illumination. The newest lamp in this distinguished family is the PE150A-10F. This 150 watt lamp sets new standards in size, economy, and ease of design. As with all Cermax® lamps, the PE150A-10F has an integral reflector, extremely high

brightness, excellent color rendering, stable color over life and operating range, instant-on operation and modulation capability. The PE150A-10F is designed with an elliptical reflector, giving an $f/1.0$ focused output and is intended for use in very compact optical systems.

Applications

- Fiberoptic illumination
- Analytical instrumentation
- Video projection

Features

- Miniature size
- Economical
- Focused output
- Stable white light
- Instant-on capability
- Modulation capability
- Extremely high brightness



PE150A-10F

Operational Specifications

Description	Nominal	Range
Power	150 watts	100-150 watts
Current	13 amps (DC)	11-15 amps (DC)
Operating Voltage	11.5 volts (DC)	11-13 volts (DC)
Ignition Voltage	28 kilovolts (recommended minimum)	
Temperature	180° C (maximum) at 150 watts	
Lifetime*	1000 hours (500 hour warranty)	

* End of lamp life is defined as 50% of initial output.

Output at Nominal Power

Description	PE150A-10F
Optical focus (F/1.0)	2.42 (8.14mm)
Radiant Output*	21 watts
UV Output*	2.8 watts
IR Output*	12 watts
Visible Output*	1500 Lumens
Color Temperature	5900 Kelvin
Peak Instabilities	4%
Spot Size at Crossover	.10" at 50% pts
Spot Size at Crossover	.23" at 10% pts

* Nominal values at 150 watts

** These values indicate total output in all directions.

Wavelengths = UV<390nm, IR>770nm, Visible 390nm to 770nm

Physical Specifications

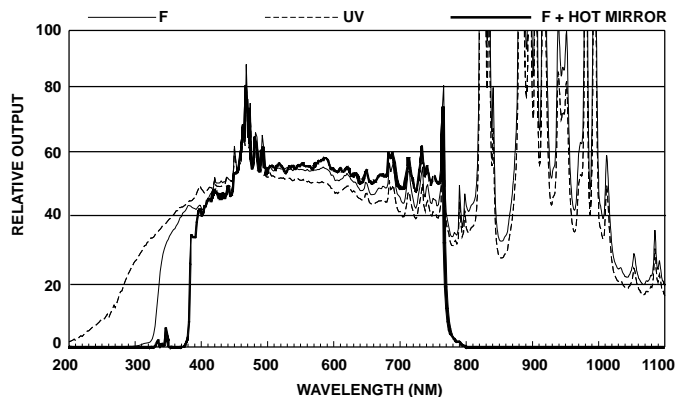
Description	Specification
Arc Gap	.038 inch (0.96mm)
Reflector Geometry	Ellipsoidal $1 = X^2/M^2 + Y^2/N^2$
Weight	100 grams
Window Diameter	.770 inch (19.55 mm)

Focused Output

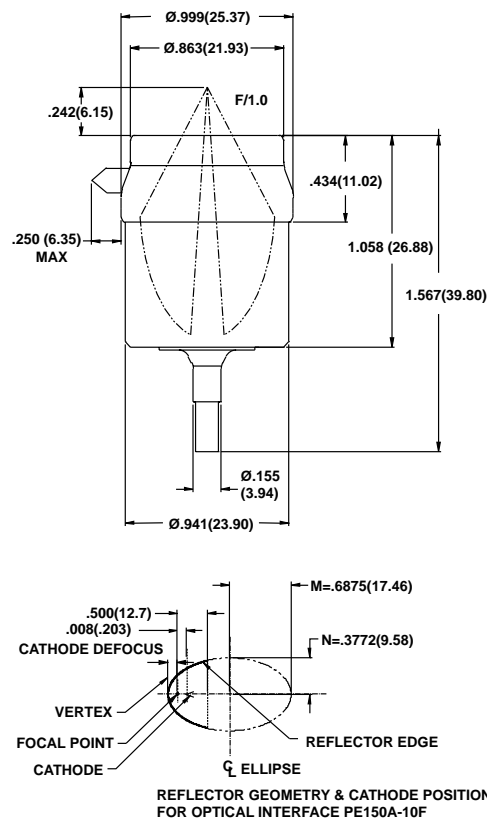
Description	Visible Output*	Total Output
6mm aperture	1500 Lumens	14 watts
3mm aperture	800 Lumens	7 watts

* Nominal values at 150 watts after 2 hour burn-in

Spectral Output



Dimensions



PerkinElmer welcomes inquiries about special lamps. We would be pleased to discuss the requirements of your application and the feasibility of designing a lamp specifically suited to your needs.

For more information e-mail us at opto@perkinelmer.com or visit our web site at www.perkinelmer.com/opto.

All values are nominal; specifications subject to change without notice.

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