

## 1100 Series - High Stability Flashlamps

# 1100 Series FX-1160

## High Output, Short Arc Xenon Flashlamp with Internal Reflector



### Description

The FX-1160 Reflector Lamp has greater than 40% more usable light intensity than our standard FX-1150 and is completely interchangeable. PerkinElmer customers have the option of either taking advantage of the greatly increased light output or they can operate the FX-1160 at a reduced input energy. Lower energy operation equates to increased lamp life and stability.

The hemispherical reflector internal to the FX-1160 should not be confused with competitive types employing paraboloids or ellipsoids in which all of the forward direct light is nonrecoverable and becomes a serious source of optical scattering. PerkinElmer's FX-1160 has an electrode orientation which does not block the forward light emission and therefore does not cause a "black hole" in the output beam profile.

The optical design of the FX-1160 is ideal for use with lenses and fiber bundles, and provides the additional advantage of reduced optical noise by preventing back-plane scattering caused by the pin base. Applications that will benefit from this new PerkinElmer product introduction include: Absorption Spectroscopy, Fluorimetry, HPLC and Machine Vision.

### Features

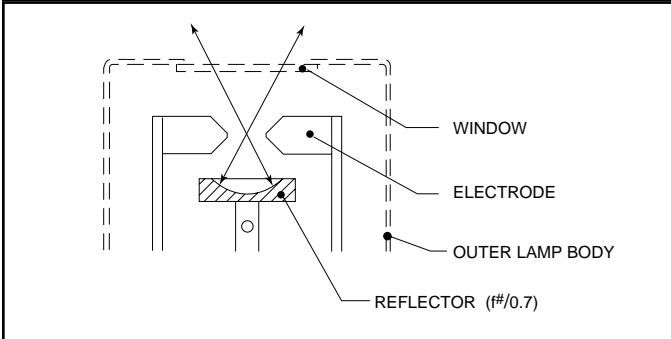
- Greater than 40% more usable light intensity than FX-1150
- Ideal for use with Optical Lenses and Fiber Bundles
- Low optical "noise"
- Continuous spectrum UV-VIS-IR
- Long life
- Low heat radiation
- Microsecond flash duration
- High efficiency output in the blue
- Interchangeable with FX-1150



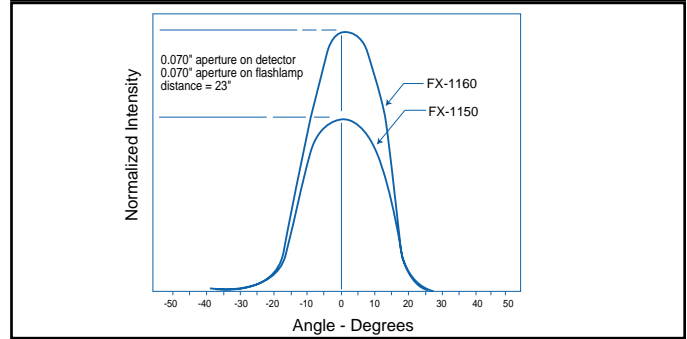
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Type	Arc Length (mm)	Spectral Distribution (nm)	Window Material	Energy per Flash (joules)	Average Power (watts)	Voltage (Vdc)	Flash Rate (Hz)	Life (flashes)	Total Light Output Stability	Spatial Movement	Lite-Pac Type
FX 1160	1.5	225 – 1100+	Borosilicate	0.5 MAX.	20 MAX.	350 – 1000	300 MAX.	>1 X 10 <sup>9</sup>	<1% * variation	<0.1 mm	FYD 1150
FX 1161		190 – 1100+	UV								
FX 1162		120 – 1100+	VUV								
FX 1163	3.0	225 – 1100+	Borosilicate	0.5 MAX.	20 MAX.	350 – 1000	300 MAX.	>1 X 10 <sup>9</sup>	<1% * variation	<0.1 mm	FYD 1150
FX 1164		190 – 1100+	UV								
FX 1165		120 – 1100+	VUV								

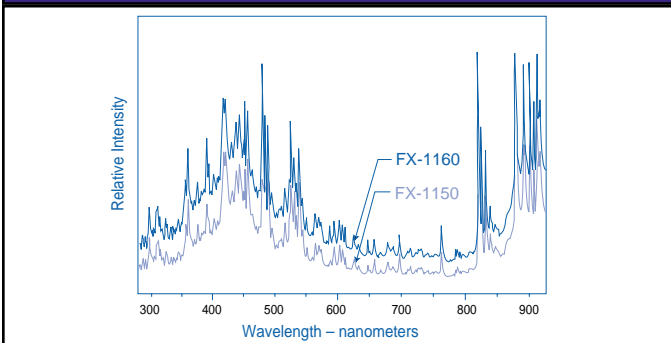
## Optical Profile of FX-1160



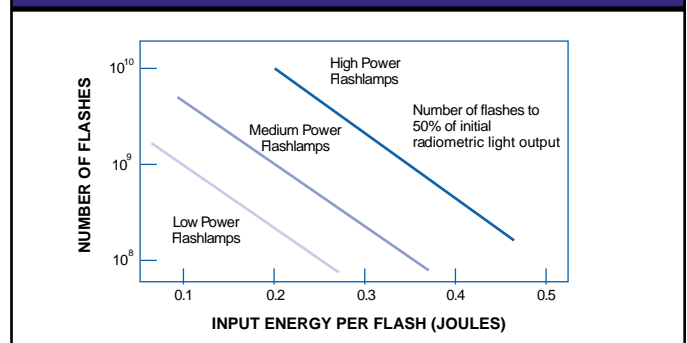
## Output Beam Profile



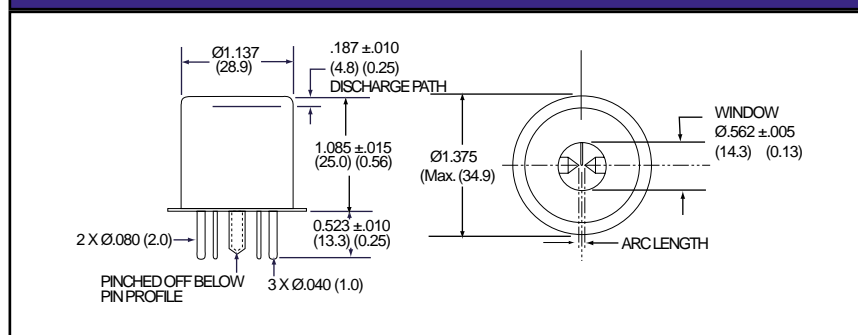
## Spectral Data



## Life vs. Input Energy



## Outline Dimensions



For more information email us at [opto@perkinelmer.com](mailto:opto@perkinelmer.com) or visit our web site at [www.perkinelmer.com/opto](http://www.perkinelmer.com/opto)

Note: All specifications subject to change without notice.

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