

## 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

FX-1160, High Output Short Arc Xenon Flashlamp with Internal Reflector

| Type | Arc Length (mm) | Spectral Distribution (nm) | Window Material | Energy per Flash (joules) | Average Power (watts) | Voltage (Vdc) | Flash Rate <br> (Hz) | Life (flashes) | Total <br> Light <br> Output <br> Stability | Spatial Movement | Lite-Pac Type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FX 1160 | 1.5 | 225-1100+ | Borosilicate | $\begin{gathered} 0.5 \\ \text { MAX. } \end{gathered}$ | $\begin{gathered} 20 \\ \text { MAX. } \end{gathered}$ | $\begin{aligned} & 350- \\ & 1000 \end{aligned}$ | $\begin{gathered} 300 \\ \text { MAX. } \end{gathered}$ | >1 $\times 10^{9}$ | $\begin{aligned} & <1 \% \text { * } \\ & \text { variation } \end{aligned}$ | <0.1 mm | FYD 1150 |
| FX 1161 |  | 190-1100+ | UV |  |  |  |  |  |  |  |  |
| FX 1162 |  | 120-1100+ | VUV |  |  |  |  |  |  |  |  |
| FX 1163 | 3.0 | 225-1100+ | Borosilicate | $\begin{gathered} 0.5 \\ \text { MAX. } \end{gathered}$ | $\begin{gathered} 20 \\ \mathrm{MAX} . \end{gathered}$ | $\begin{aligned} & 350- \\ & 1000 \end{aligned}$ | $\begin{gathered} 300 \\ \text { MAX. } \end{gathered}$ | $>1 \times 10^{9}$ | $<1 \% \text { * }$ <br> variation | <0.1 mm | FYD 1150 |
| FX 1164 |  | 190-1100+ | UV |  |  |  |  |  |  |  |  |
| FX 1165 |  | 120-1100+ | VUV |  |  |  |  |  |  |  |  |




## Output Beam Profile



Life vs. Input Energy


Outline Dimensions


For more information email us at opto@perkinelmer.com or visit our web site at www.perkinelmer.com/opto Note: All specifications subject to change without notice.

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