Spot Diagrams for Laser Quality Molded Glass Aspheric Lens A110

Note: Black circle on plots indicates Airy Disk.

At Design Wavelength 780 nm
RMS Radius = 0.08 µm

Spot Diagrams for A-Coated Lens (A110-A)

633 nm
RMS Radius = 0.27 µm

670 nm
RMS Radius = 0.21 µm
Spot Diagrams for B-Coated Lens (A110-B)

810 nm
RMS Radius = 0.06 µm

980 nm
RMS Radius = 0.07 µm

Spot Diagrams for C-Coated Lens (A110-C)

1064 nm
RMS Radius = 0.11 µm

1550 nm
RMS Radius = 0.33 µm
Chromatic Focal Shift

Maximum Focal Shift Range: 433.27 µm (350 – 1620 nm)
Diffraction Limited Range: 4.82 µm

Table showing the focal length at various laser line wavelengths

<table>
<thead>
<tr>
<th>Wavelength (nm)</th>
<th>Focal Length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>405</td>
<td>5.968</td>
</tr>
<tr>
<td>633</td>
<td>6.185</td>
</tr>
<tr>
<td>670</td>
<td>6.202</td>
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<tr>
<td>780</td>
<td>6.240</td>
</tr>
<tr>
<td>810</td>
<td>6.248</td>
</tr>
<tr>
<td>830</td>
<td>6.254</td>
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<tr>
<td>980</td>
<td>6.286</td>
</tr>
<tr>
<td>1064</td>
<td>6.301</td>
</tr>
<tr>
<td>1550</td>
<td>6.375</td>
</tr>
</tbody>
</table>

1 Design Wavelength

Design Wavelength = 780 nm
Effective Focal Length = 6.24 mm