

# CAPABILITIES

## Laser mirrors

Laser mirrors comprise; YAG at high power, Excimer at high power, Argon-ion at high power, and Diode & Broadband. These mirrors are made from thin films of material that have differing refractive indices and thickness, layered on a substrate such as calcium fluoride and produce a high efficiency reflecting surface at the laser wavelength.



The coatings are assembled assuming that the mirror will be working in the plane of incidence. This is essential as any off-axis angles will push the pass band toward the shorter waveband that could be beyond the pass band for one or both polarizations (S and P). If off-axis reflections are needed then this coating needs to be applied for an angle of incidence (AOI) of 45°.

## Custom capabilities

<b>Dimensions:</b>	5mm to 100mm+
<b>Thickness:</b>	2mm to 10mm+
<b>Parallelism:</b>	< 3 arcseconds
<b>Surface form:</b>	< 0.1 fringes
<b>Surface quality:</b>	< 10:5
<b>Peak reflectivity:</b>	> 99.8%
<b>Material options:</b>	Fused silica, BK7 or equivalent
<b>Coating options:</b>	Argon-Ion, Excimer, Nd:YAG, Diode Laser

### Notes:

All products are tested in our state of the art metrology laboratory by our highly trained technicians to ensure compliance with the specification. Parts are then sent to our QA team to be cleaned and checked for surface imperfections before dispatch.

Please contact our technical sales team on (+44) 1622 849 444 to discuss your custom laser mirror requirements and discover how Knight Optical can help improve your supply chain experience. Alternatively, email us your requirements by clicking on the links below.



**EU:** [info@knightoptical.co.uk](mailto:info@knightoptical.co.uk)  
**US:** [usasales@knightoptical.com](mailto:usasales@knightoptical.com)

