



Discover how we can improve your  
instrumentation and supply chain  
experience today!

## KO | BRINGING QUALITY INTO FOCUS

[www.knightoptical.com](http://www.knightoptical.com) | Tel: +1 401 583 7846 | Fax: +1 401 583 7851  
Knight Optical (USA) LLC | 1130 Ten Rod Road, Suite D102 | North Kingsdown RI 02852 USA  
[www.knightoptical.com](http://www.knightoptical.com) | Tel: +44 (0) 1622 859444 | Fax +44 (0) 1622 859555  
Knight Optical (UK) Ltd | Roebuck Business Park | Harrietsham | Kent ME17 1SB UK

### Plane Mirrors for Fibre Optic Applications

**Knight Optical** can offer you [Plane Mirrors \(general,  \$\lambda/1\$  and  \$\lambda/4\$ \)](#), for use within Fibre Optic Applications in a range of materials such as Soda-lime float glass, white float glass, and BK7 glass.

Our plane mirrors are used within fibre optic applications such as testing the fibre optic signal to help understand the strength of the signal.

Plane mirrors also known as front surface mirrors or first surface mirrors are used widely within Fibre Optic applications. As stock we hold a number of general purpose,  $\lambda/1$  and  $\lambda/4$  with a range of up to 6 types of coatings such as Enhanced Aluminium, Al/SiO<sub>2</sub> and Al/MgF<sub>2</sub>. Our general purpose grade mirrors are made from good quality float glass and generally available in thicknesses of 1mm, 3mm and 6mm as standard.

#### Typical specs:

<b>Material:</b>	Soda lime float glass, BK7 or equivalent
<b>Diameter Tolerance:</b>	+0/-0.2mm
<b>Lengths/ width:</b>	±0.3mm (≤100mm), ±0.5mm (>100mm)
<b>Thickness:</b>	±0.25mm
<b>Surface Quality:</b>	<60-40 scratch/dig for general purpose, <40-20 scratch/dig for $\lambda/4$
<b>Flatness:</b>	
<b>1.1mmthk:</b>	1 $\lambda$ over 10mm dia.
<b>3/6mmthk:</b>	2 $\lambda$ over 25mm dia.
<b>Parallelism:</b>	<3 arcmin

**All our Flat Mirrors are fully inspected on their quality in our ISO 9001 certified, state-of-the-art Metrology laboratory**, our ZYGO interferometer and Radius Slide tests for the form error, irregularity and TWE on flat and spherical surfaces, and Starrett AV300 provides video imaging for non-contact testing on small dimensions. This allows us to work to the highest [QA standards](#) and meet the tolerance specifications on these **precision components**.

[Contact our technical sales team](#) to discover how Knight Optical's high quality Plane Mirrors and superior service can improve your instrumentation and supply chain experience.

UK, Europe, Asia & RoW: E-Mail [info@knightoptical.co.uk](mailto:info@knightoptical.co.uk) Tel +44 (0)1622 859444

USA & Canada: E-Mail [usasales@knightoptical.com](mailto:usasales@knightoptical.com) Tel +001 401-583-7846

- View our [QA and metrology information](#)
- Watch our [Corporate Video](#)
- [View Our Corporate Brochure](#)