



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

## KO | BRINGING QUALITY INTO FOCUS

[www.knightrightoptical.com](http://www.knightrightoptical.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.knightrightoptical.com](http://www.knightrightoptical.com) | Tel: +44 (0) 1622 859444 | Fax +44 (0) 1622 859555  
Knight Optical (UK) Ltd | Roebuck Business Park | Harrietsham | Kent ME17 1SB UK

### Tapered Homogenizing Rods for IPL Applications

**Knight Optical** can offer [Custom Homogenizing Rods](#) for use within [IPL Applications](#).

Intense Pulsed Light Systems use not only use filters, that are used to filter out the UV wavelength range; and transmit between 400-1200nm for use within cosmetic lasers that are designed to remove unwanted hair, vascular treatment and even acne treatment. But they also use Homogenizing Rods to help evenly distribute light.

The Light source will enter a light pipe at a variety of incident angles, which is designed to utilise its total internal reflection to channel the light from the entrance of the light pipe to the exit. The material's refractive index is the only factor which affects the light pipes critical angle; this defines the angle of acceptance which the total internal reflection will occur at.

#### Typical specs:

<b>Material:</b>	BK7, UVFS or Other Optical Glass
<b>Length Tolerance:</b>	+/- 0.3mm
<b>Aperture Tolerance:</b>	+/-0.1mm
<b>Surface Quality:</b>	<60-40 Scratch/Dig
<b>Coating:</b>	Optional

All our Homogenizing Rods are fully inspected on their quality in our ISO 9001 certified, state-of-the-art Metrology laboratory, using our Trioptic's PrismMaster, and Starrett AV300 Video Imaging System. 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 Homogenizing Rod and superior service can improve your instrumentation and supply chain experience.

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

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

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