

Light guides

Light guides are used primarily in cosmetic laser applications, such as handheld intense pulsed light (IPL) for beauty therapy devices.

Light guides are typically rectangular windows designed so light travels parallel to the width, entering through the bottom of the optic and relying on total internal reflection to exit through the top edge. In IPL applications light guides are used alongside a filter to focus a specific waveband onto the skin.



These are usually manufactured from BK7, UV fused silica or sapphire depending on the wavelength required. In IPL, the curved surface of the light guide is exposed so hardness and durability can be desirable.

Custom capabilities

Length/Width (mm)	5mm to 100mm+
Thickness (mm)	5mm+
Dimensional tolerances (mm)	+/-0.05
Flatness (fr.)	< 0.1
Parallelism (arcsec)	<3
Scratch/Dig	< 10:5
Polish	<P3
Material	Please discuss requirements
Coatings	Please discuss requirements

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 light guide requirements and discover how Knight Optical can help improve your supply chain experience. Alternatively, email us your requirements by clicking on the links below.