

KO | BRINGING QUALITY INTO FOCUS

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 | Tel: +44 (0) 1622 859444 | Fax +44 (0) 1622 859555
Knight Optical (UK) Ltd | Roebuck Business Park | Harrietsham | Kent ME17 1SB UK

N-BK7 Windows for Underwater Lighting

Knight Optical offer a range of [Stock N-BK7 Dome Windows](#), for use with Underwater Lighting. A dome is an optical window composed of two parallel curved surfaces. Domes are commonly used in defence applications and often in extreme environments such as [Submersible ROV's](#). The shape of the window creates a naturally strong shape that gets tougher under pressure. Using a curved dome optical surface allows for an increased beam angle, therefore allowing a greater area to be lit from one light source.

For visible applications, N-BK7 with its high optical quality and uniform transmission and low absorption in the visible spectrum makes it an ideal material for underwater lighting. A tough and cost effective solution which allows for good transmission of the light source in the underwater environment will both protect the light source as well as transmitting from 300nm up to 2µm. Virtually free of bubbles and inclusions as well as being very clear and almost colourless in appearance allows of windows in this material to act in both a protective means as well as to seal the enclosure to protect the inside components of the system.

Knight Optical can supply high quality N-BK7 domes made to your exact specifications. Our highly skilled metrology and QA technicians are able to individually inspect and test each component to ensure it meets our exemplary quality standards.

We hold a large inventory of N-BK7 Dome Windows for Underwater Lighting.

- Custom domes available from 5mm to over 200mm diameter
- Parts may be AR coated from improved transmission. Other coating available upon request.
- Manufactures with or without flanges for your lighting application.
- Custom sizes available on quotation.

Typical specs for our stock Domes (custom capabilities available upon request):

Material:	N-BK7 or Equivalent
Diameter Tolerance:	±0.1
Thickness Tolerance:	±0.1 (±0.2 for >100mm diameter)
Surface Quality:	<60/40 Scratch/Dig
Chamfer:	0.2x45° typical
Centricity:	<0.1mm

All our N-BK7 Windows for graticules are fully inspected on their quality in our ISO 9001:2015 certified, state-of-the-art Metrology laboratory, with our Trioptics, Optispheric, Varian and Starrett AV300. 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 N-BK7 Windows and superior service can improve your instrumentation and supply chain experience.

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

USA & Canada: E-Mail usasales@knightoptical.com Tel +001 401-583-7846

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