



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

KO | BRINGING QUALITY INTO FOCUS

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Polarisers used within Skin Cancer Detection Devices

Within medicine the use of polarised light was first introduced back in the 1970's; since then it has come leaps and bounds. How it has been used to help with imaging skin pathologies, when the skin is illuminated by linearly polarised light it causes backscattering of the superficial layers of the skin where cancer often arises. This superficial backscattered light can be distinguished from the diffused reflected light when using a detector.

Polarised Beam-Splitter Cubes, Sheet Linear Polarisers, and Sheet Circular Polarisers are often used within detection devices for this type of skin pathology imaging.

Knight Optical hold a large inventory of Polarisers for use within Skin Cancer Detection devices.

- We stock large sheets up to 1270x480mm in some cases; we can cut these into special shapes at short notice.
- Mounting options are also available.
- Special Glass laminating to CAB polarisers
- Special AR coatings.

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

Material: [N-BK7 or Equivalent](#)
Diameter Tolerance: +0.0/-0.25mm
Length/width Tolerance: ±0.5mm (<100mm) ±1mm (100-400mm), nominal (>400mm)
Axis direction: ±2°

Non- glare coatings available on our circular polarisers with the option of left or right handed polarisation. We can also offer acrylic or glass laminations.

Knight optical can also provide custom made [Polarised Beam-Splitter Cubes](#).

Typical Specifications:

Material: [N-BK7 or Equivalent](#); [UV Grade Fused Silica](#)
Dimension Tolerances: +0, -0.02mm
Flatness: $\lambda/4$ over CA
Surface Quality: [<40/20 Scratch/Dig](#)
Angles: +/-1 arcmin
Coatings: Visible and NIR Coating options available; P-Polarisation Transmission >90%
S-Polarisation Reflection >99%

All our Polariser Optics 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.

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