



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

### Achromatic Doublets for Holography

**Knight Optical** offer a range of [Stock Achromatic Doublet Lenses](#) for use within Holography.

Holography can be said to be a photographic recording of a light field, similar to an audio recording. This recording is typically 3 dimensional and does not require the use of any special equipment e.g. glasses or headset to view. These images are produced using laser light which are passed through a recording medium which “records” the depth an arrangement of the final image.

Achromatic Doublets are typically used in holographic systems and correct for chromatic aberrations which exist in singlet lenses. This is when different wavelengths of light refract at different rates. The doublet lens helps to correct this by facilitating the focusing of the light to the same point. In holographic systems the aim is to form an image which is as close to real life as possible. Therefore it is critical for the image to be as clear as possible and free from distortions and aberrations.

Knight Optical can supply competitive quotes for custom positive and negative achromatic doublets. These achromatic doublets can also come in the form of aspheric lenses.

#### We hold a large inventory of Achromatic Doublet Lenses.

- Stock sizes from 4mm to 110mm diameter.
- Custom sizes available to quotation.

#### Typical specs:

**Material:** BK7, SF11  
**Overall Diameter Tolerance:** +0/-0.10mm  
**Focal Length Tolerance:** ± 1.0%

**All our Achromatic Doublet Lenses are fully inspected on their quality in our ISO 9001 certified, state-of-the-art Metrology laboratory**, using our Trioptics Optispheric, 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 Dichroic Filters 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](#)