

Ellipsoidal reflectors

Ellipsoidal reflectors, precision grade and cold type comprise; The precision ellipsoidal reflector has a hole through which a light source can be located at the focal point. The light will be focussed at the second focal point of the ellipsoidal reflector where a target could be located to determine its characteristics. The surface can be coated with similar ones discussed in the parabolic section, namely one for UV, visible, and NIR and the other transmitting the NIR. Thereby making the ellipsoidal reflector a cold system.

The most frequently requested specifications for ellipsoidal reflectors are as follows:

Diameter range	300mm to 600mm
Diameter tolerance	better than ± 0.5 mm
Centre thickness	1 to 10mm
Centre thickness tolerance	better than ± 0.2 mm at room temperature
Clear aperture	99% of diameter
Surface form error	better than 1 wave @ 632.8nm
Surface quality	< 60-40 scratch/dig
Coating finish	ground back and edge
Chamfer	0.3x0.3@45°

Coatings

Various surface coats are available, such as: protected aluminium, enhanced aluminium, bare gold, and protected gold.

Our capabilities are always expanding so if your requirement is not mentioned above please enquire as we have many years of experience in this field.

Contact our multilingual technical sales team and discover how Knight Optical's high quality ellipsoidal capabilities and service can improve your instrumentation and supply chain experience.