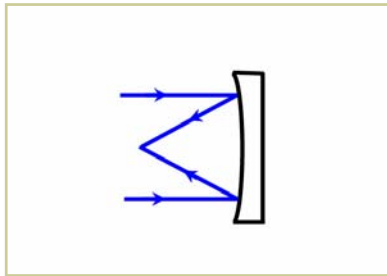


Concave Spherical Mirrors



Spherical mirrors are used to collect and concentrate light at a point. They have a focal length equal to half their radius of curvature. Either BK7 or fused silica mirror substrates used and these are made to laser standards ($\lambda/10$, 10/5).

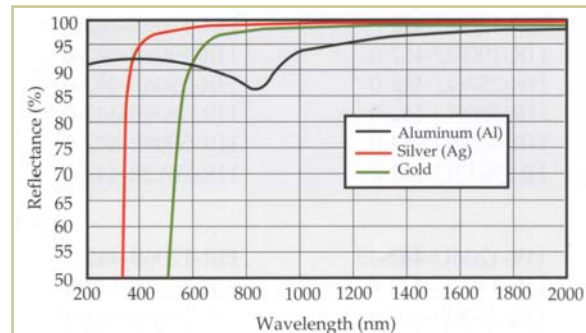
A variety of reflective coatings may be applied. Metallic coatings are excellent broadband



reflectors. Aluminium, silver or gold may be used. Aluminium has the broadest bandwidth extending from 200 nm to the near IR. Silver has the highest average reflectance and gold reflects well at longer wavelengths but cuts off at about 500 nm giving rise to its distinctive colour. As metal coatings are prone to oxidation, they are normally protected with a thin layer of silicon dioxide. If a mul-

tilayer stack is used instead of a simple dielectric layer, it is

possible to enhance the reflectance of metallic mirrors. 'Enhanced' metal mirrors should be selected when the highest reflectance is required.



Concave spherical mirrors are available in diameters of 12.7, 19.1, 25.4, 38.1 or 50.8 mm or any custom size.

The radius of curvature may be selected from the following range: 25, 50, 75, 100, 150, 200, 250, 300, 400, 500, 750, 1000 mm. Please ask if you need a different radius of curvature as these can be made to special order.

Typical Specifications	
Substrate material:	BK7A, UVFS
Surface flatness:	$\lambda/10$ @ 633 nm
Surface quality:	10/5
Parallelism:	< 3 arcmin
Radius tolerance:	$\pm 0.5\%$
Diameter:	+0.0 / -0.2 mm
Edge thickness:	± 0.25 mm
Clear aperture:	> 85% of diameter

To request a quote or to order, please specify:

Quantity — Diameter — Radius of Curvature — Coating Type — Wavelength Region (UV,Vis,NIR)

Optarius

PO Box 2271
Malmesbury SN16 9FA
United Kingdom

Optical Components

Phone: +44 1666 575185
Fax: +44 1666 577424
Email: optarius@optarius.com
Web: www.optarius.com

For a quotation — please phone, fax or email us with details of your requirements.