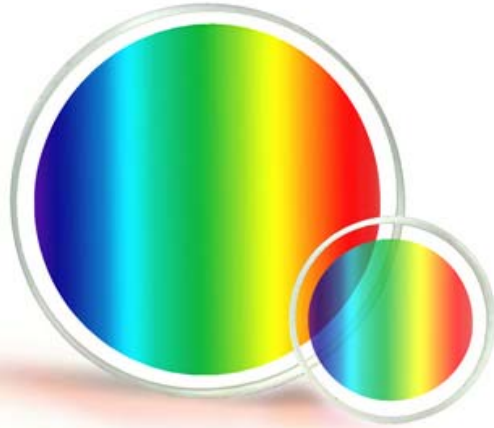


Wasatch Photonics

Ultimate Diffraction Gratings

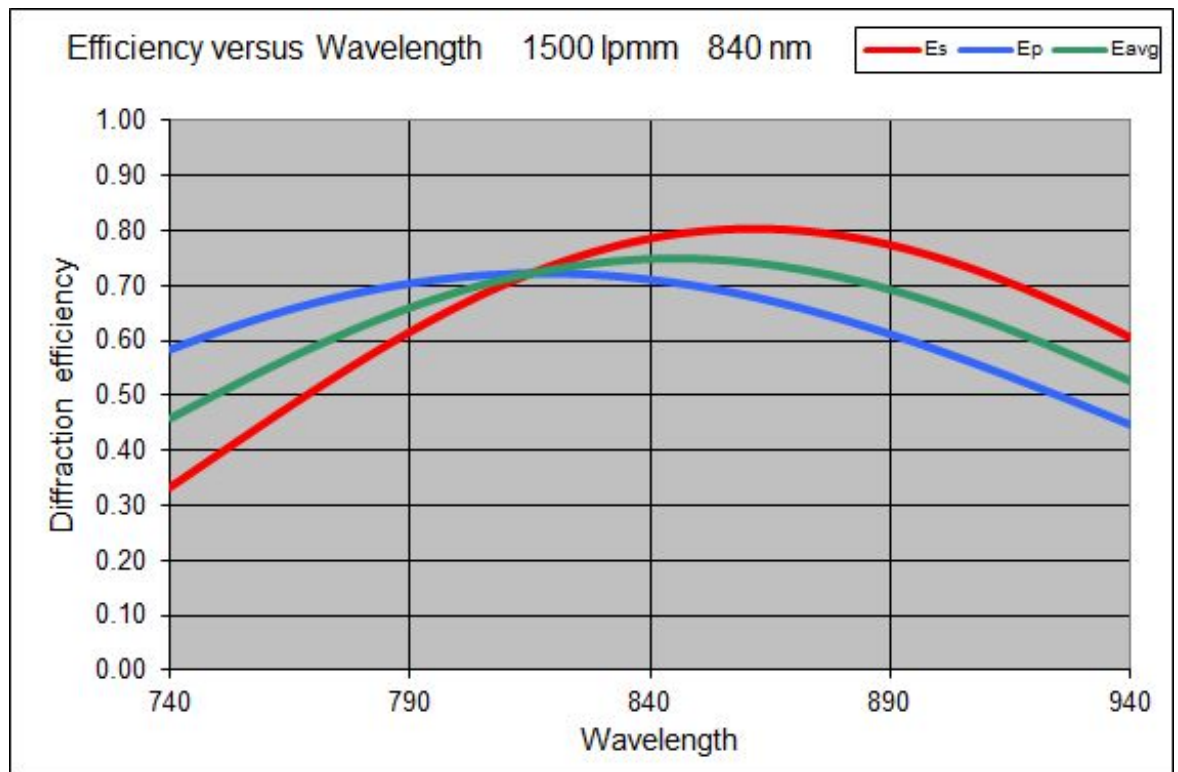
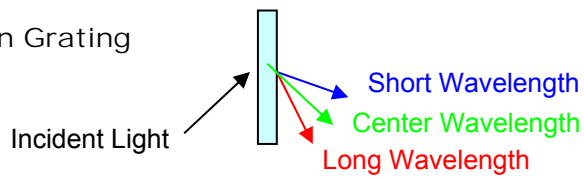


VOLUME PHASE HOLOGRAPHIC TRANSMISSION GRATINGS

1500 l/mm at 840 nm

These high-efficiency gratings work well in the visible spectrum region around 840 nm and often used for Optical Coherence Tomography. They are created by using coherent laser light to write the interference pattern in dichromated gelatin. After processing, the grating is capped with a protective glass cover and then AR coated. The results are a grating with low scatter, high diffraction efficiency and low wavefront distortion. The grating is durable and can be cleaned using the same methods to clean AR coated optics. These gratings are available in 25.4 mm and 50.8 mm diameter sizes

Transmission Grating Geometry



1500 l/mm gratings at 840 nm

SPECIFICATIONS

General	
Surface quality	60-40 scratch-dig
Diffracted Wavefront	$< \lambda/5$ rms @ 632.8 nm
Spatial Frequency	1500 l/mm +/- 0.5 l/mm
CWL	840 nm
Angle of Incidence (AOI)	39° @ 840 nm
Thickness Tolerance	+/- 0.25
Diameter Tolerance	+0/-0.15
Chamfers	0.25-0.75 mm face width
Chamfers Angle/Tolerance	45° +/-15°
AR Coating	< 0.5% Reflection; 740 nm-940 nm

25.4 mm gratings	
Substrate and Cover Glass	1.5 mm BK7 3 mm total thickness
Clear Aperture	20 mm
Dimensions	A = 25.4 mm B = 3 mm

50.8 mm inch gratings	
Substrate and Cover Glass	3 mm BK7 6 mm total thickness
Clear Aperture	45 mm
Dimensions	A = 50.8 mm B = 6 mm

