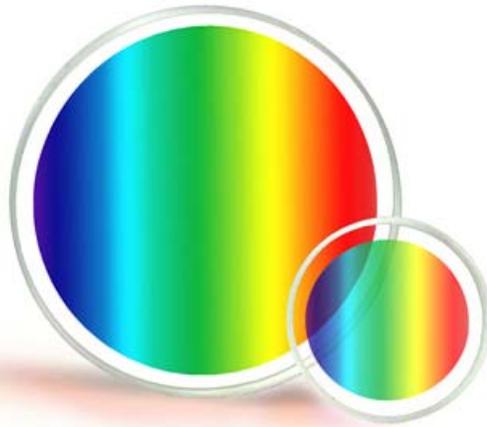


Wasatch Photonics

Ultimate Diffraction Gratings

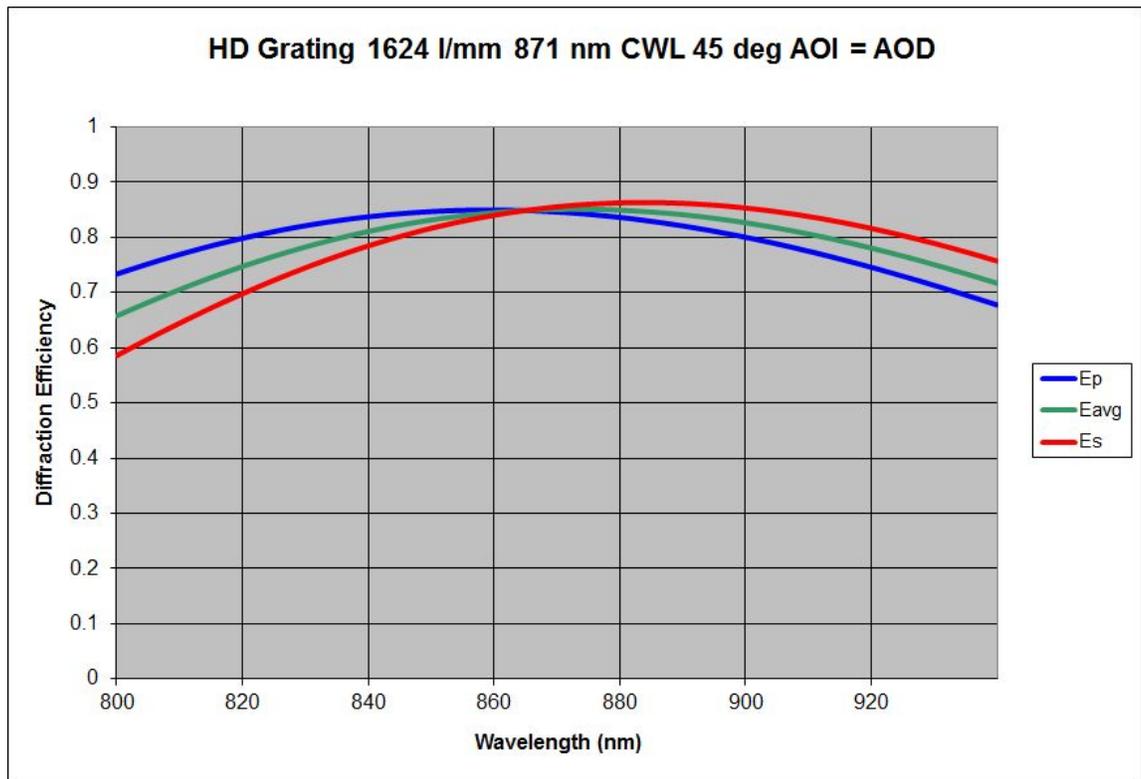
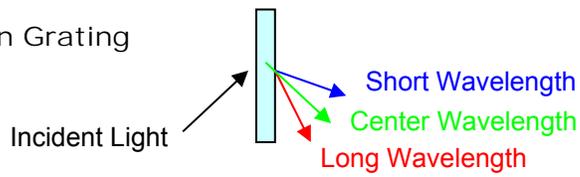


VOLUME PHASE HOLOGRAPHIC TRANSMISSION GRATINGS

HD 1624 l/mm at 871 nm

Our patented HD gratings have a wider bandwidth than conventional volume phase holographic gratings. This one is popular for Raman spectroscopy and other applications in the region of 871 nm. 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 other AR coated optics. These gratings are available in 25.4 mm and 50.8 mm diameter.

Transmission Grating Geometry



HD 1624 l/mm gratings at 871 nm

SPECIFICATIONS

General	
Surface quality	60-40 scratch-dig
Diffracted Wavefront	$< \lambda/5$ rms @ 632.8 nm
Spatial Frequency	1624 l/mm +/- 0.5 l/mm
CWL	871 nm
Angle of Incidence (AOI)	45° @ 871 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; 800 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

