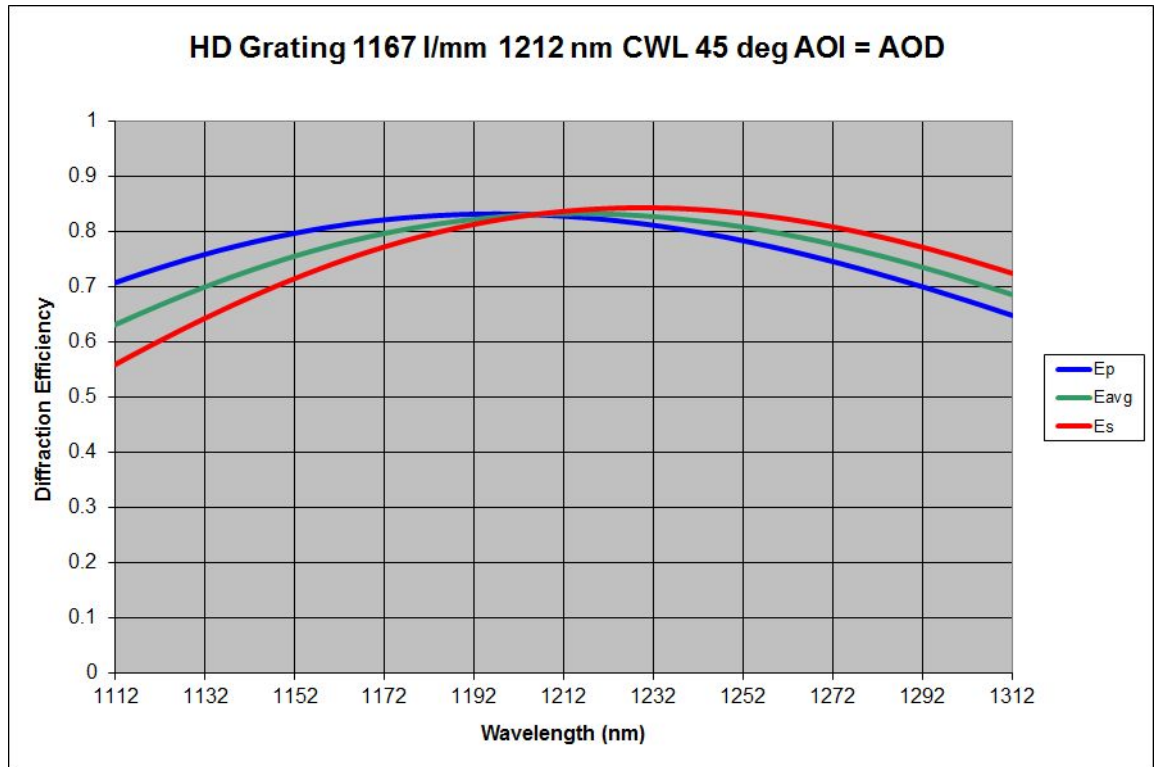
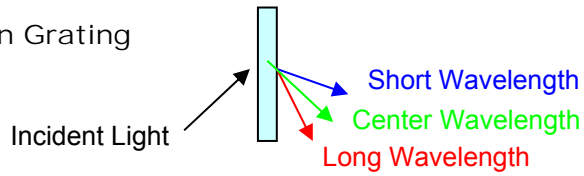


VOLUME PHASE HOLOGRAPHIC TRANSMISSION GRATINGS

HD 1167 l/mm at 1212 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 1212 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.

Transmission Grating Geometry



SPECIFICATIONS

General	
Surface quality	60-40 scratch-dig
Diffracted Wavefront	$< \lambda/5$ rms @ 632.8 nm
Spatial Frequency	1167 l/mm +/- 0.5 l/mm
CWL	1212 nm
Angle of Incidence (AOI)	45° @ 1212 nm
Thickness Tolerance	+/- 0.25
Dimension Tolerance	+0/-0.15
Lines Perpendicular to B	0.15°
Chamfers	0.25-0.75 mm face width
Chamfers Angle/Tolerance	45° +/-15°
AR Coating	< 0.5% Reflection; 1112 nm - 1312 nm
Substrate and Cover glass	3 mm BK7 6 mm total thickness
Clear Aperture	30 mm x 40 mm
Dimensions	A=35 mm B=45 mm T=6 mm

