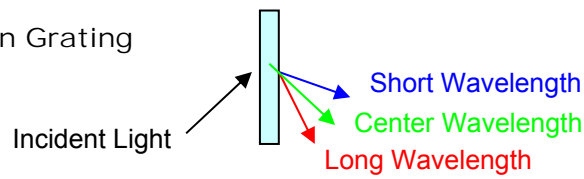


## VOLUME PHASE HOLOGRAPHIC TRANSMISSION GRATINGS

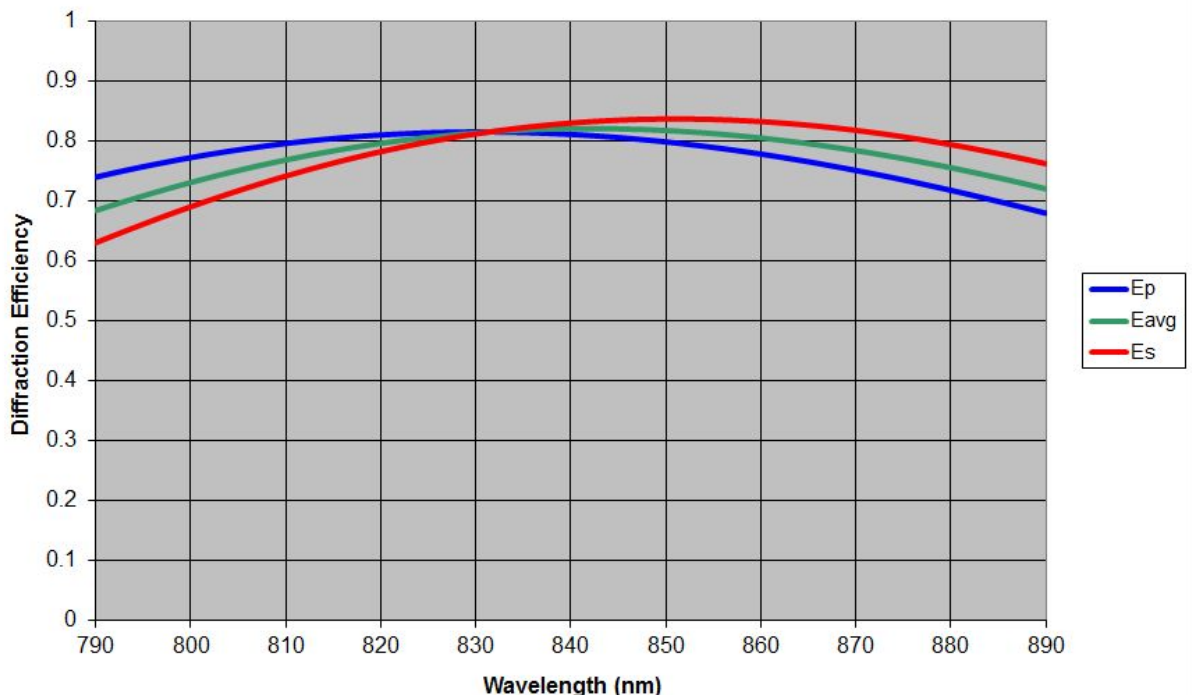
### HD 1800 l/mm at 840 nm

Our patented HD gratings have a wider bandwidth than conventional volume phase holographic gratings. This one is popular for OCT (Optical Coherence Tomography) and other applications in the region of 840 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



HD Grating 1800 l/mm 840 nm CWL 49.1 deg AOI = AOD



# SPECIFICATIONS

| General                   |                                    |
|---------------------------|------------------------------------|
| Surface quality           | 60-40 scratch-dig                  |
| Diffracted Wavefront      | $< \lambda/5$ rms @ 632.8 nm       |
| Spatial Frequency         | 1800 l/mm +/- 0.5 l/mm             |
| CWL                       | 840 nm                             |
| Angle of Incidence (AOI)  | 49.1° @ 840 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; 790 nm - 890 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             |

