



## VOLUME PHASE HOLOGRAPHIC TRANSMISSION GRATINGS

### Dickson™ 1145 l/mm at 1310 nm

These patented high-efficiency, high-dispersion gratings work well in the NIR spectrum around 1310 nm. These gratings are exposed using well-collimated laser light in dichromated gelatin. After processing, the gratings are capped with protective glass covers and then AR coated. The resulting gratings exhibit low scatter, high diffraction efficiency, and low wavefront distortion in an extremely durable package. They can be cleaned using the same methods used to clean AR coated lenses and prisms. These gratings are available in 1 inch and 2 inch diameter sizes mounted in black anodized aluminum optical rings.

### SPECIFICATIONS

#### 1 inch gratings

|                              |                                   |
|------------------------------|-----------------------------------|
| Substrate and Capping Glass: | 1 mm water white (similar to BK7) |
| Wavefront distortion:        | <1/2 wave rms at 632.8 nm         |
| Spatial Frequency:           | 1145 l/mm +/- 2 l/mm              |
| Clear Aperture:              | 20.4 mm                           |
| Optical Ring Outer Diameter: | 25.4 mm                           |
| Optical Ring Thickness:      | 2.5 mm                            |
| Coating:                     | AR coated                         |

#### 2 inch gratings

|                              |                                   |
|------------------------------|-----------------------------------|
| Substrate and Capping Glass: | 3 mm B270                         |
| Wavefront distortion:        | <1/2 wave rms at 632.8 nm over 1" |
| Spatial Frequency:           | 1145 l/mm +/- 2 l/mm              |
| Clear Aperture:              | 42.8 mm                           |
| Optical Ring Outer Diameter: | 50.8 mm                           |
| Optical Ring Thickness:      | 6.6 mm                            |
| Coating:                     | AR coated                         |

