Diffraction Gratings for Telecommunication

- Material from DUV to IR
- Custom dimension and shapes
- Wafer type: Plano or Prism
- Grating type: Transmission or reflection grating
- Line density: 940, 966.2, 1200, and even up to 3000 line/mm
- Line density tolerance: ± 0.5 line/mm
- Wavelength range: 1525-1575 nm
- Central wavelength: 1550 nm
- Angle of incidence (AOI): Littrow or Customized
- Optical polarization: TE/TM
- Diffraction efficiency: > 94.0%
- Clear aperture: ≥ 95%
- Wavefront distortion: λ/4@632.8 nm
- Surface quality: 40-20 S/D
- Parallelism: < 0.1°
- Coating: Au or Dielectric coatings

CASTECH typically employs fused silica or ULE characterized with low absorption and superior stability for the fabrication of gratings. Other optical glass are also available upon request.

Our high DE reflection and transmission grating is ideal for WSS and other applications in optical communication industry. Generated by our state-of-art projection photolithography, holographic and ion etching technology, the precise realization of grating designs enable gratings to provide high diffraction efficiency and perfect uniformity. Customized solution is available from prototype building to high volume production.

Kimmon He-Cd (Helium Cadmium) Laser

Holographic System