

Tech Brief

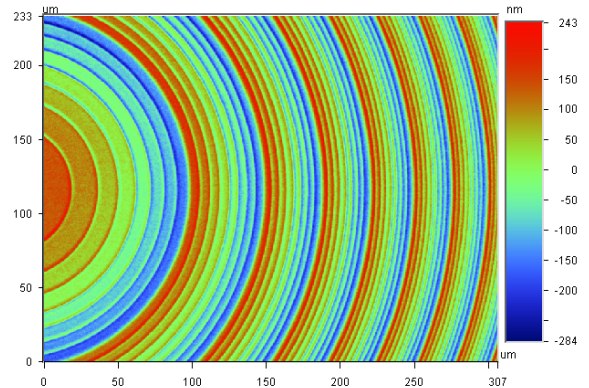
Diffraction Optical Elements (DOE)

High-End Diffractive Optical Elements

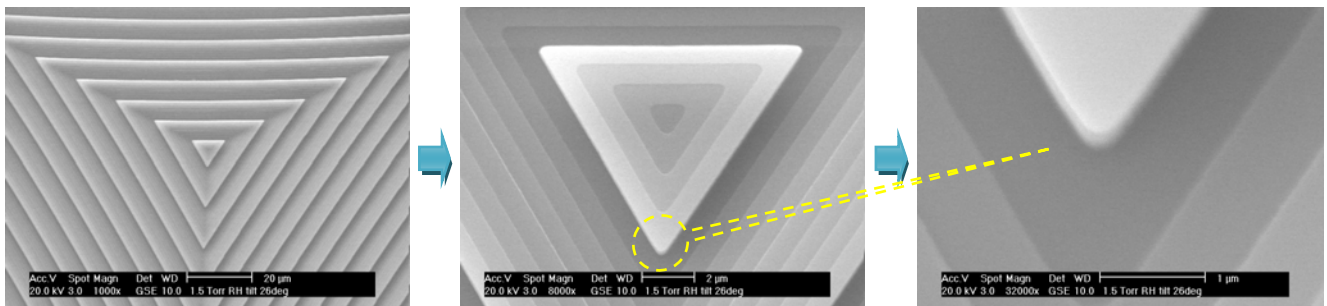
SUSS MicroOptics is a Premium Supplier for High-End Diffractive Optical Elements suitable for very demanding applications like DUV Wafer Stepper Illumination Systems, High-Power Laser Beam Shaping, Vortex Lenses for Fiber Interconnects, Random DOE for Beam Smoothing, Metrology, Medical Devices and Masters for Imprint or Replication.

Key Features

- **Fused Silica, Silicon, Borofloat, CaF₂**
- **4" or 8" wafer scale**
- **Binary, 8-level, 16-level**
- **0.5 μm min feature size**
- **< 50nm overlay accuracy**
- **Diffraction efficiency up to 98%**
- **190nm to 5μm wavelength range**



Our wafer-based technology (4" or 8" wafer scale) allows large scale manufacturing of diffractive optical elements for very competitive prices.



8-Level Diffractive Optical Element (Fresnel Design) for Excimer Laser Beam Shaping (193nm)

DOE Design Expertise and Partnership

SUSS MicroOptics' key scientists are worldwide recognized experts in DOE-Design and Laser Beam Shaping with more than 20 years of design experience and a large design base. Our partnership with well-known research institutes, mask manufacturers and production facilities makes us a "one-stop-shop" for diffractive and refractive micro-optics. Please don't hesitate to contact us!

Contact

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