

CO25: Multi-Band CO₂ High-Reflectivity Coating

Key Features:

- Target laser types: CO₂ lasers
- Target applications: Converting, Cutting, Drilling, Selective Laser Sintering, Laser Coding
- Wavelength range: 9.3-10.6µm
- Reflectivity: ≥99.7%
- HeNe, 633 nm reflectivity: ≥75% @ 45°
- Angle of incidence: X: 30°-60°, Y: 22°-53°
- Polarization: Random

Maximum Rated Power Levels (estimated):

Note: Forced convection cooling can be implemented to increase power handling levels.

| Clear Aperture | Open Air | Enclosed* |
|----------------|----------|-----------|
| 10 mm | 300 W | 150 W |
| 14 mm | 450 W | 225 W |
| 20 mm | 650 W | 325 W |
| 30 mm | 1,000 W | 500 W |
| 50 mm | 1,500 W | 750 W |

*Includes scan heads and customer-designed enclosures that restrict air flow.

Substrate Types

| Material | Slab | Structured |
|--------------|------|------------|
| Silicon | ✓ | |
| Fused Silica | ✓ | |
| Beryllium | ✓ | ✓ |

This mirror coating can be purchased on a variety of mirror types and sizes that are integrated with Cambridge Technology galvanometers and scan heads. For mirror sizes other than those listed, please contact Cambridge Technology.

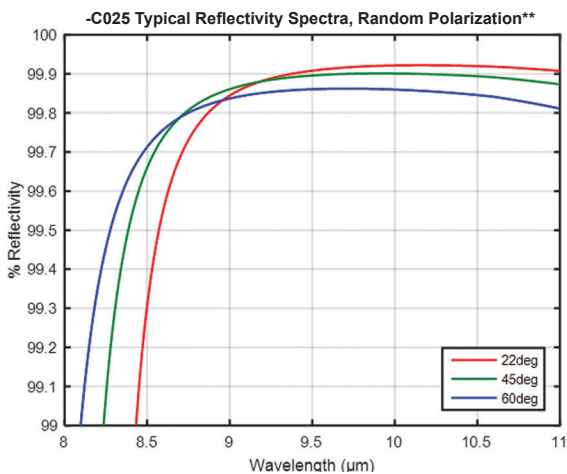


Figure 1: Typical reflectivity spectra, 8.0 to 11.0 µm.

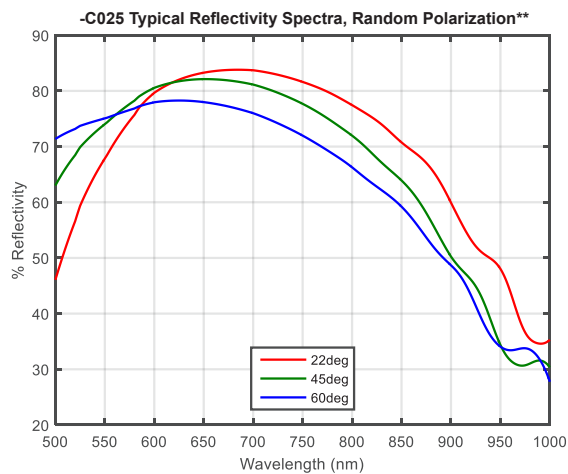


Figure 2: Typical reflectivity spectra, HeNe and visible wavelengths.

** Typical reflectivity spectra are not guaranteed beyond the published reflectivity and wavelength specifications and should not be used to determine maximum power and wavelength limitations.