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13.5nm, 25.4mm Dia, 5° AOI, EUV Spherical Mirror

TECHSPEC® Extreme Ultraviolet (EUV) Spherical Mirrors

Stock **#11-730** **20+ In Stock**

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General

Type:
Spherical Mirror

Physical & Mechanical Properties

Diameter (mm):
25.40 +0.00/-0.13

Thickness (mm):
6.35 ±0.25

Surface Roughness (□):
<3 RMS

Optical Properties

Coating Type:
Metal/Semiconductor

Coating:
Mo/Si Multilayer
Top Layer: Silicon

Surface Flatness (P-V):
λ/10 @ 632.8nm

Design Wavelength DWL (nm):
13.5

Effective Focal Length EFL (mm):
250.00

Substrate:
Fused Silica (Corning 7980)

Angle of Incidence (°):
5

Coating Specification:
R_{abs} >60% @ 13.5nm

Radius R_1 (mm):
500.00

Radius of Curvature (mm):
500.00

Full Width-Half Max FWHM (nm):
0.50

Regulatory Compliance

Certificate of Conformance:
View

Product Details

- Mo/Si Multilayer Coating on Super-Polished Substrates
- Maximum Achievable Reflection at 13.5nm
- Designed for EUV Beam Focusing Applications
- Narrow Pass Band for HHG Applications

Extreme Ultraviolet (EUV) Spherical Mirrors feature a multilayer Mo/Si coating providing greater than 60% reflection at 13.5nm. They are designed for a 5° angle of incidence and intended for focusing unpolarized EUV laser sources. A surface roughness of less than 3 RMS minimizes scatter. This is essential for EUV wavelengths which experience more scattering than longer wavelengths. EUV Spherical Mirrors have a very narrow pass band of approximately 0.5nm, ensuring that only the 13.5nm harmonic of interest is reflected in high harmonic generation (HHG) applications. **Typical applications** for EUV spherical mirrors include Coherent Diffractive Imaging (CDI), EUV imaging, and EUV nanomachining.

Note: Test data from each mirror's production run sample included.

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