TECHNICAL SPECIFICATIONS FOR TOROIDAL MIRROR WITH ACCESSORIES

Please find below the specification of **Toroidal mirror with accessories** we require for purchase. Kindly send us a quotation by the due date mentioned above.

<u>Minimum specification for Toroidal mirror with accessories (focal length</u> 350mm)

Sr no	Specification	Value		
1	Substrate	Preferably Quartz, but other suitable materials are fine.		
2	Dimension	Width: 100 ± 10 mm		
		Height: 26 ± 5mm Centre thickness: 20 ± 5 mm		
3	Focal length	340 - 360 mm		
4	Incident angle	$15^{\circ} \pm 5^{\circ}$ (grazing incidence)		
5	Radii of curvatures	Sagittal: 170 - 190 mm		
		Tangential: 2700 - 2720 mm		
Coating parameters				
Generated High harmonics		Energy range: 15-45eV,		
parameters		Extension up to 65eV is desirable but not critical		

Note: The radii of curvature values (in the mentioned range) must be such that the sagittal focal length is equal to the tangential focal length.

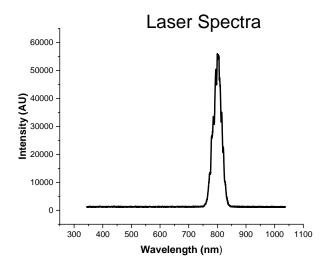
Additional Information:

This mirror is intended for use EUV and soft-xray photon beams produced by high-harmonic generation with femtosecond lasers with the following parameters -

Wavelength: 800 ± 20 nm; Energy per pulse (maximum): 3mJ

Least pulse width: 35fs,

Typical laser spectrum



Accessories required:

Dummy uncoated toroidal mirror with same dimensions - radii of curvature and same incident angle but without the coating for alignment purposes.

Please provide a clear warranty statement for 2 years

<u>Item 2:</u>Minimum specification for **Toroidal mirror with accessories** (focal length 650mm)

S. No.	Specification	Value
1	Substrate	Preferably Quartz, but other suitable
		materials are fine.
2	Dimension	Width: $150 \pm 10 \text{ mm}$
		Height: 30 ± 5 mm
		Centre thickness: 20 ± 5 mm
3	Focal length	640 - 660 mm
4	Incident angle	$8^{\circ} \pm 5^{\circ}$ (grazing incidence)

5	Radii of curvatures	Sagittal: 170 - 190 mm Tangential: 9320 - 9350 mm		
Coating parameters				
Generated High harmonics		Energy range: 15-45eV,		
parameters		Extension up to 65eV is desirable but not		
		critical		

Note: The radii of curvature values (in the mentioned range) must be such that the sagittal focal length is equal to the tangential focal length.

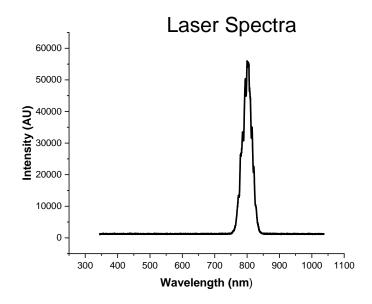
Additional Information:

This mirror is intended for use EUV and soft-xray photon beams produced by high-harmonic generation with femtosecond lasers with the following parameters -

Wavelength: 800 ± 20 nm; Energy per pulse (maximum): 3mJ

Least pulse width: 35fs,

Typical laser spectrum



Accessories required:

Dummy uncoated toroidal mirror with same dimensions - radii of curvature and same incident angle but without the coating for alignment purposes.

Please provide a clear warranty statement for 2 years