

These specifications assume Polished Substrates will be provided by FZU for coating.
Wavefront metrology data of uncoated substrates will be provided separately.

1. S1 coating specifications (Clear Aperture)

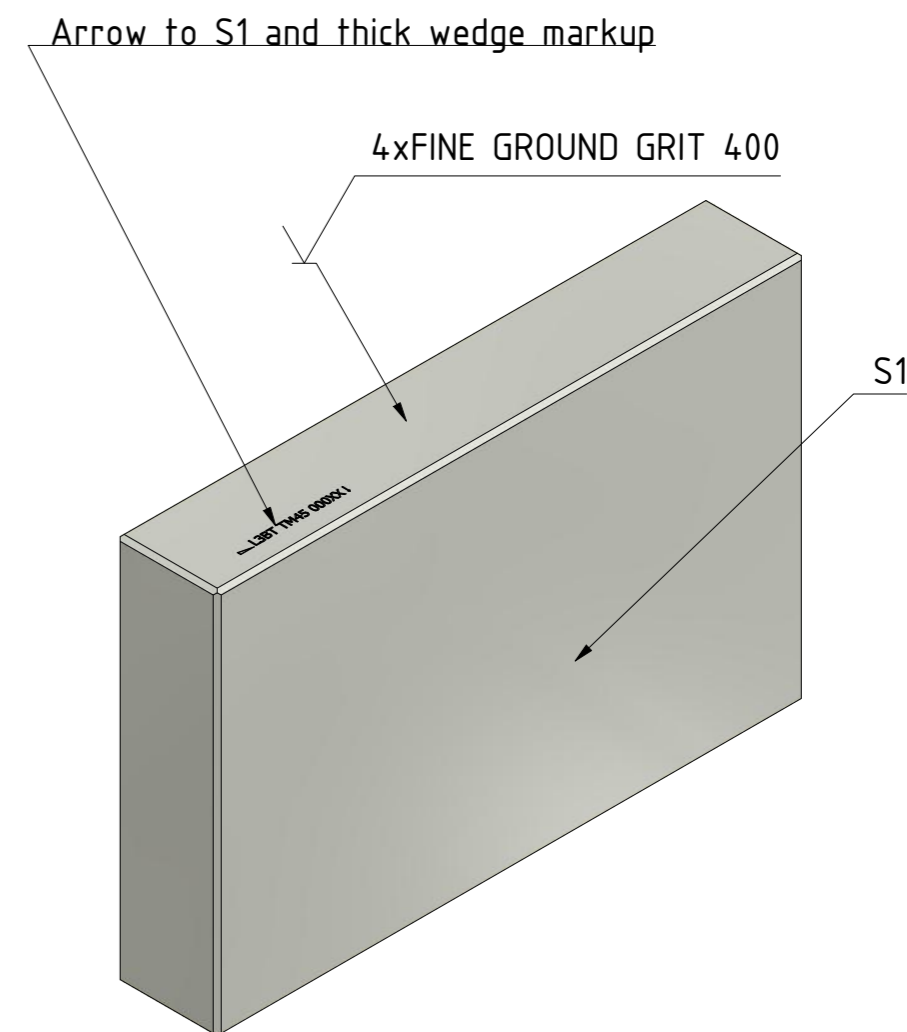
- 1.1 central wavelength 810 nm
- 1.2 full bandwidth 772 - 848 nm
- 1.3 angle of incidence AOI = $45 \pm 1^\circ$
- 1.4 reflectivity $R_p \geq 99.7\%$ for AOI and full bandwidth
- 1.5 reflectivity $R_s \geq 99.9\%$ for AOI and full bandwidth
- 1.6 transmission $T_p > 0.01\%$ average over full bandwidth at 45°
- 1.7 transmission $20\% > T_s > 4\%$ for 417nm at 45°
- 1.8 $|GDD|_p < 60 \text{ fs}^2$ for 772 - 848 nm
- 1.9 $|GDD|_s < 60 \text{ fs}^2$ for 760 - 860 nm
- 1.10 LIDT $\geq 350 \text{ mJ/cm}^2$ Beam Normal at 45° AOI 100k-on-1 10Hz to 1kHz $810 \pm 20 \text{ nm}$
- 1.11 all coating specifications must be valid for $1e-6 \text{ mbar}$ 20°C or dry air $RH < 0.5\%$
- 1.12 no stress induced crazing anywhere in the coating within 1 year from installation
- 1.13 Suitable for ultrasonic cleaning

2. S1 surface after coating

- 2.1 flatness P-V < 100 nm (power removed)
- 2.2 flatness RMS < 25 nm (power removed)
- 2.3 flatness P-V < 350 nm
- 2.4 S-D per MIL-PRF-13830B 30-10

3 S2 coating

- 3.1 uncoated



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Drawn by: DK	Projection	Scale	Sheet size	Dwg. title	
Checked by:		1:4	A2	L3BT TM45 coating	
Date:					
Material: UV Fused Silica	All dimensions in mm		Dwg. no.		Rev.
Raw mat.:	Tolerance: ISO2768-mk		00265452		D
Weight:	Note:		Eli no.:		Sheets 1 of 1