

VUVAS 1000 Test Results

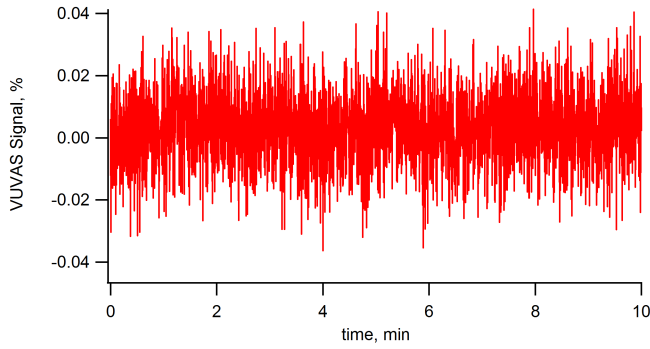
Summary:

<u>Test</u>	<u>Spec</u>	<u>Measured</u>
<u>Stability / Drift</u>	0.5%/hr	1.4%/hr* (see note)
<u>Spectral Reproducibility</u>	0.03nm	0.01nm
<u>Photometric Precision</u>	0.3%	0.102% RMS
<u>Noise</u>	0.17% Peak-to-Peak	<0.06% P-P 0.0135% RMS

Detailed Results & Misc. Data:

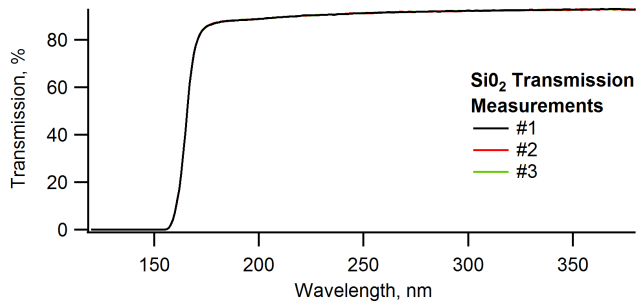
<u>Test</u>	<u>Data</u>	<u>Comments</u>
<u>Stability – 160 nm</u>		Drift at time of testing is approx 1.4%/hour. Shown are the experimental data (gray) and best-fit linear and exponential models of drift. Due to quasi-exponential drift, stability is projected to reach 0.5%/hr after 200 minutes of instrument usage.
<u>Spectral Reproducibility</u>		Spectral reproducibility < 0.015 nm. Three measurements plotted, but variation is << trace width. Inset – magnified peak at ~121nm.
<u>Photometric Precision</u>		Photometric precision, variation < 0.3% RMS variation= 0.102%

Noise



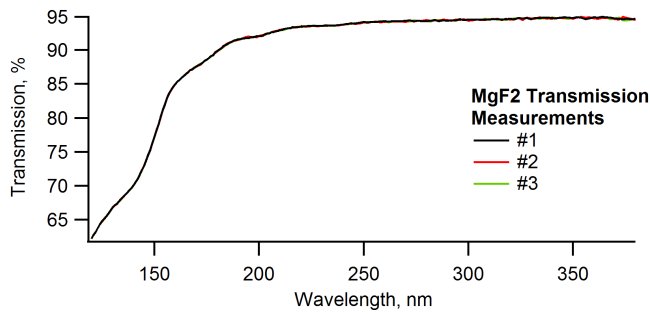
RMS noise – 0.0135%
Peak-Peak noise < 0.08%

SiO₂ Transmission



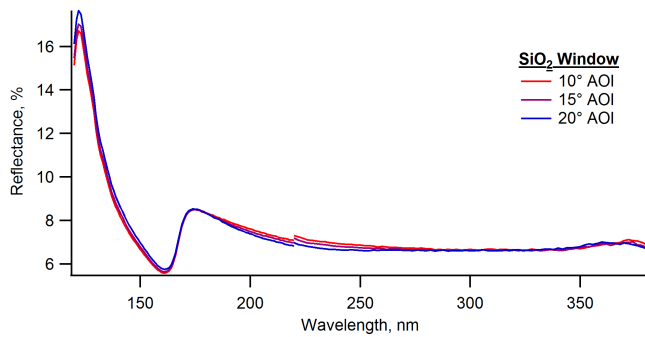
All traces plotted, but variation << trace width.

MgF₂ Transmission

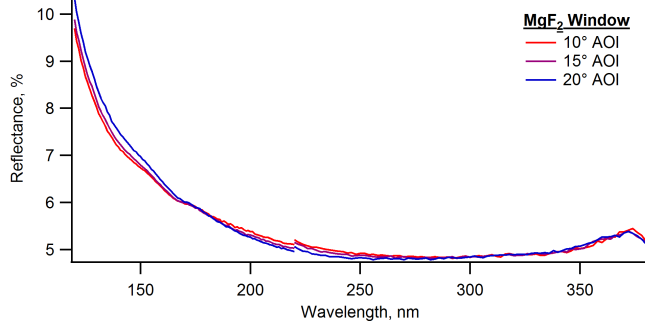


All traces plotted, but variation << trace width.

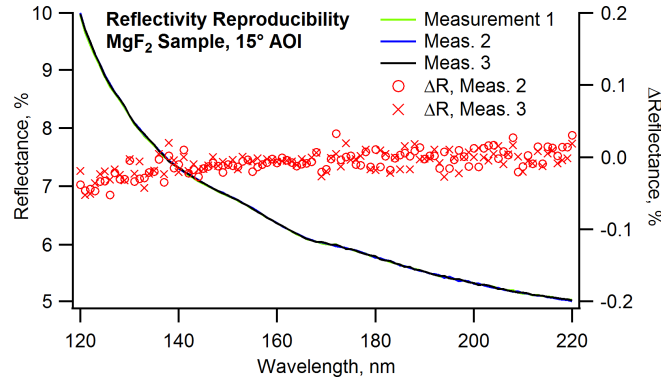
SiO₂ Reflectance



MgF₂
Reflectance



Reflectance
Reproducibility



RMS Reflectivity reproducibility < 0.2%

3 measurements shown at left, all original traces plotted but variation << trace width. Variation (measurement 1 - measurement 2, measurements 1 - measurement 3) plotted on righthand axis shows reproducibility.