



COC QA TEST REPORT

ITM06 AR Reflection

Test Date	Mar 4-6, 2015		
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Approval(s)			
Specification Doc.	LIGO-E0900041	Specification	< 50 ppm
Procedure Doc.	LIGO-E1000863	Mean ± Error*	41 ± 1 ppm
Conclusion	Qualified.		

* Error is the calibration error, which is ~2%.

Discussions and Comments:

The scan was done over a 160 mm diameter aperture with the beam and step sizes of 1 mm while keeping the arrow on barrel at Y+ direction. The calibration is done by normalizing the AR reflection signal to the signal from a 1" HR mirror (T=70 ppm) and the variation of laser power during scan is monitored and corrected, the result is summarized in Fig.1.

ITM06 AR Reflection

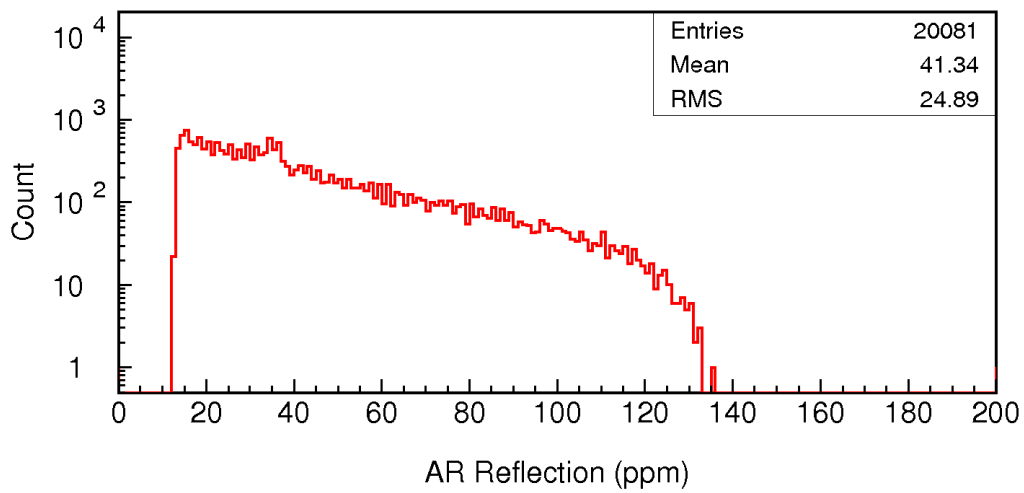
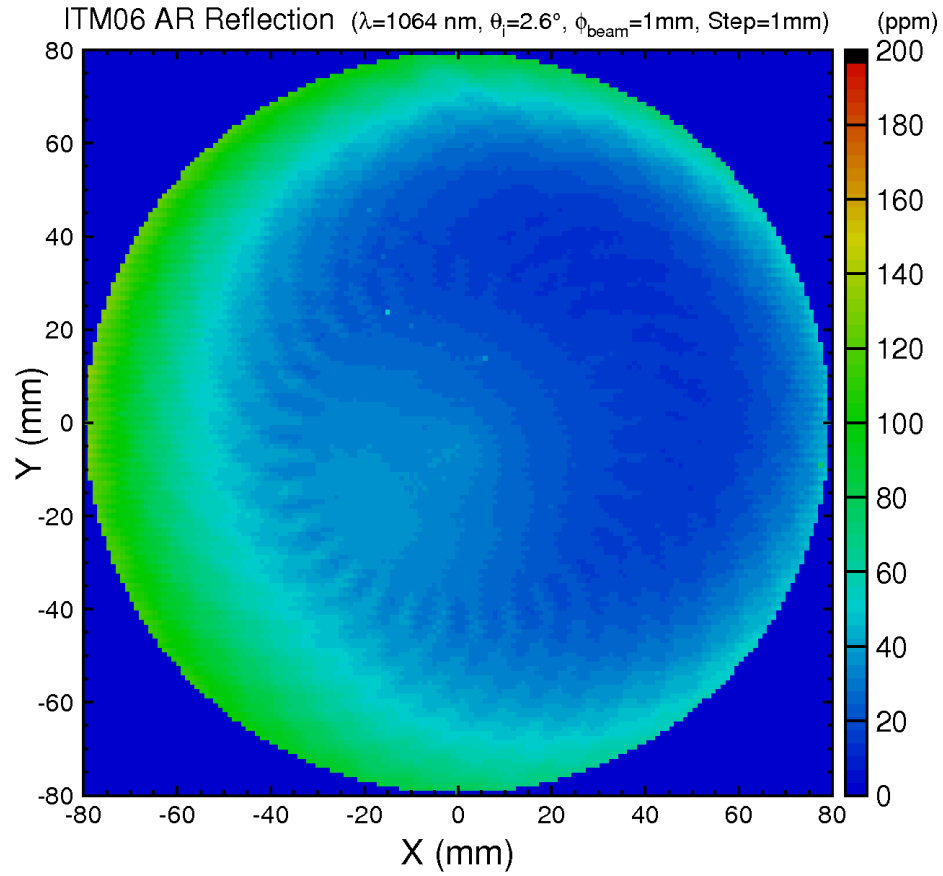


Fig. 1 ITM06 S2 AR reflection over a 160 mm diameter aperture.