



ETM09 Transmission

Test Date	May 2-3, 2013		
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Approval(s)			
Specification Doc.	LIGO-E0900068	Specification	5 ± 1 ppm
Procedure Doc.	LIGO-E1000863	Mean \pm Error*	3.6 ± 0.2 ppm
Conclusion	Qualified.		

*Error is the calibration error.

Discussions and Comments:

The scan was done over a 160 mm diameter aperture with the beam and step sizes of 1 mm and an orientation that the arrow at barrel is at Y+ direction as shown in Fig.1. The calibration is done by normalizing the transmitted signal to the signal without mirror and the variation of power during the scan is monitored and corrected. One defect with peak of about 900 ppm was found at X=-21, Y=26, (R=33.4 mm).



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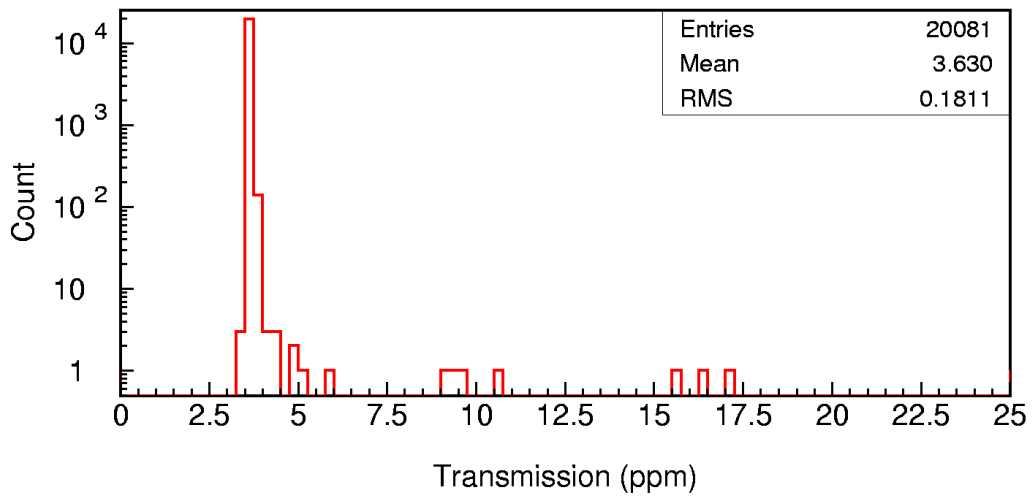
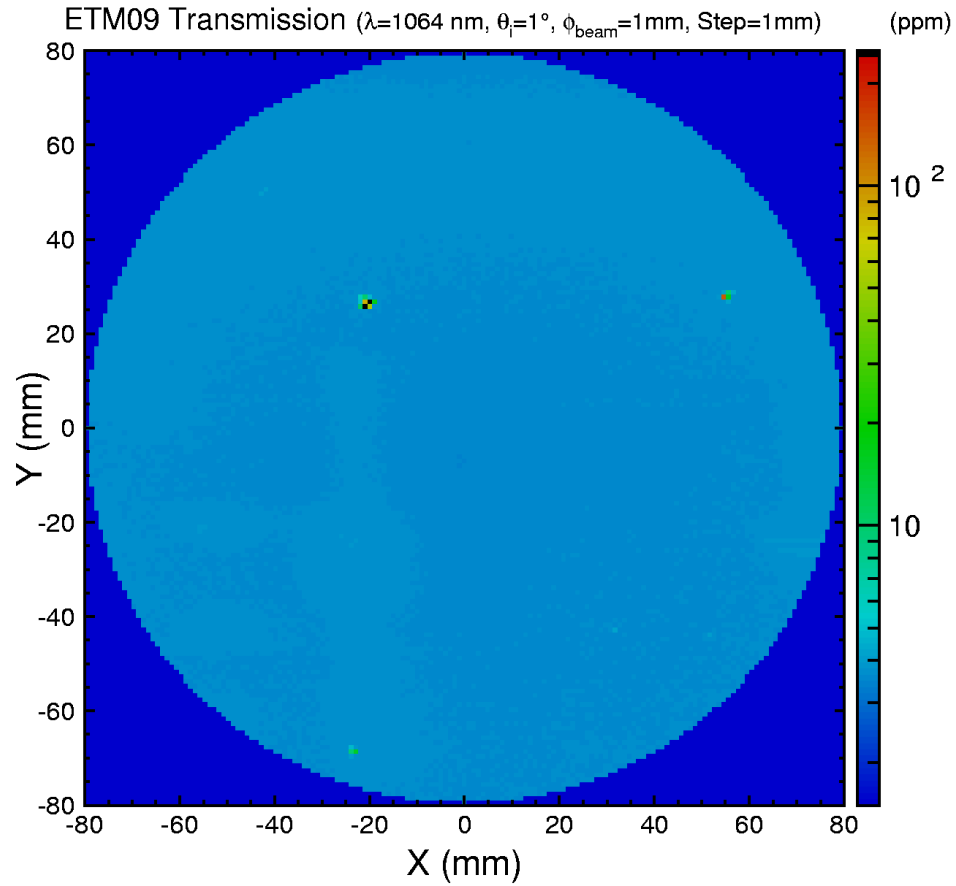


Fig. 1 ETM09 transmission over a 160 mm diameter aperture.