



# COC QA TEST REPORT

## ETM12 Integrated Scatter

Test Date	May 15-20, 2013		
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Approval(s)			
Specification Doc.	LIGO-E0900068	Specification	Not specified in LIGO-E0900068
Procedure Doc.	LIGO-E1000863		
1 <sup>st</sup> Scan (Mean ± Error*)	8.6 ± 2 ppm		
2 <sup>nd</sup> Scan (Mean ± Error*)	8.9 ± 2 ppm		
Conclusion	Qualified.		

\*An estimated systematic error from previous multiple measurements with one LIGO-1 mirror.

### Discussions and Comments:

Two TIS scans are carried out. One is of full coverage in central 48 mm in diameter with the beam and step sizes of 0.3 mm and other a sampling scan in central 160 mm in diameter with the same beam size and a step of 1.0 mm, as shown in Figs. 1 and 2 respectively.

ETM12 Integrated Scatter

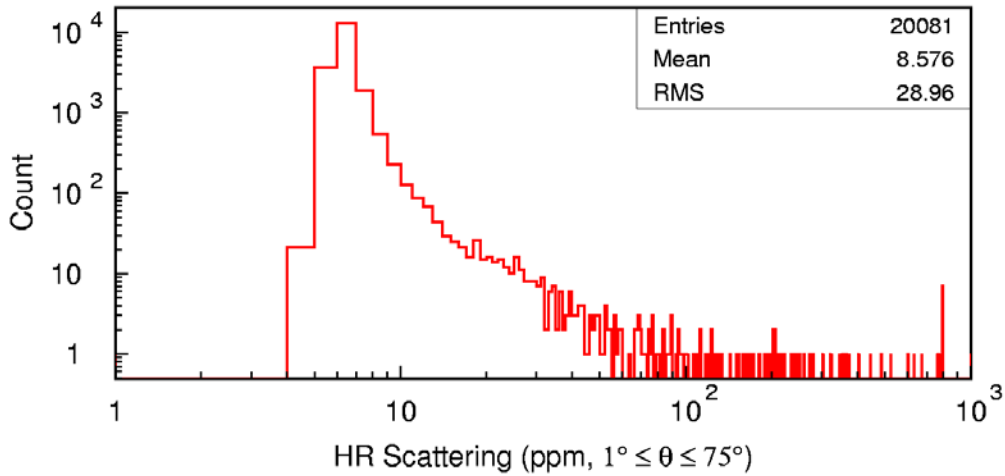
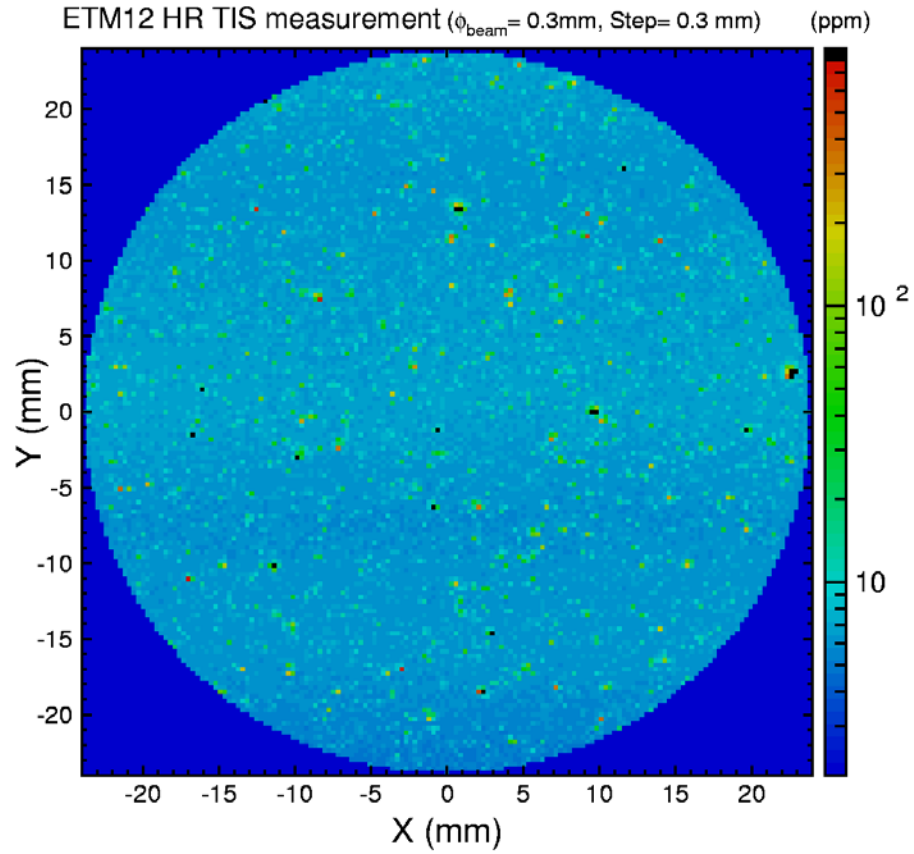


Fig. 1 ETM12 TIS full coverage scan over central 48 mm diameter aperture.

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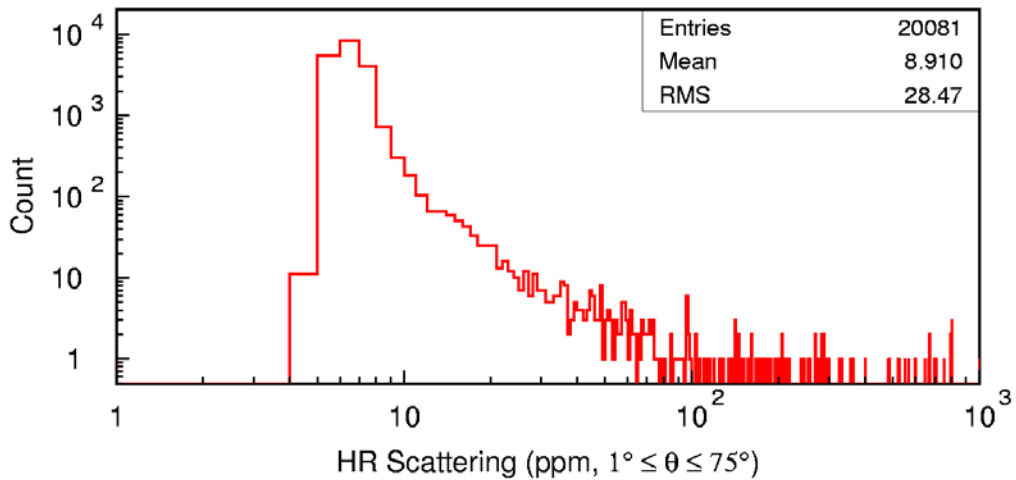
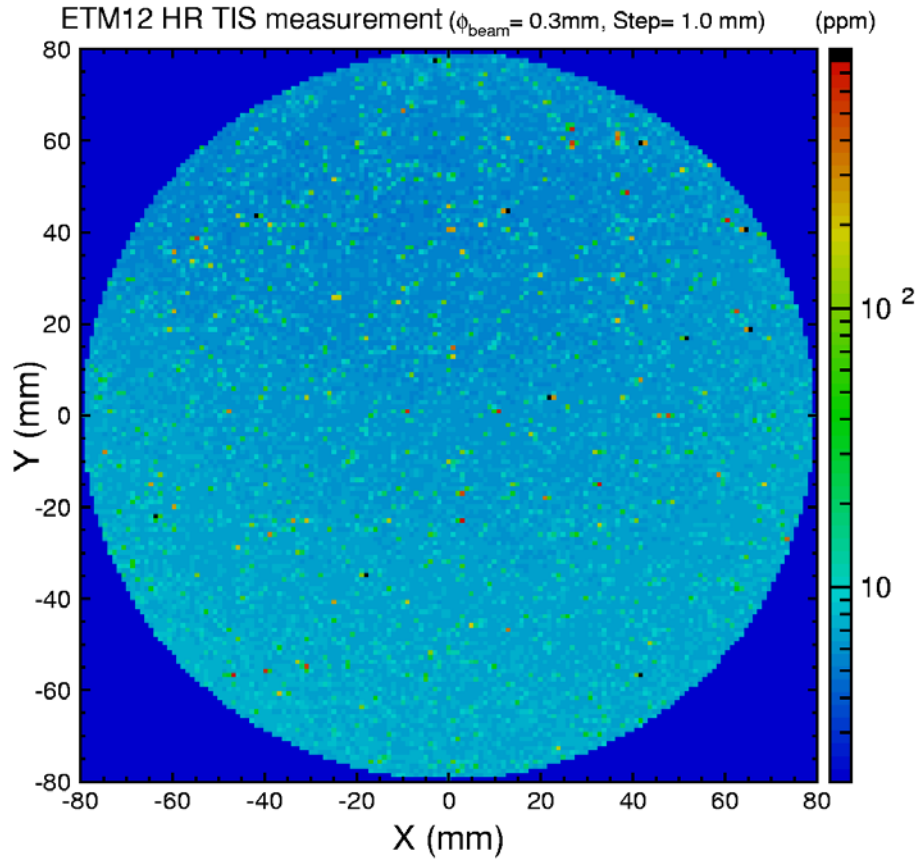


Fig. 2 ETM12 TIS full sampling scan over central 160 mm diameter aperture.