

#### LASER INTERFEROMETER GRAVITATIONAL WAVE OBSERVATORY

## **COC QA TEST REPORT**

E1500143 -v1-

Document No Rev.

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## **ETM14 HR Coating Absorption**

Test Date	Oct. 27-30, 2014		
Author(S)	Liyuan Zhang, GariLynn Billingsley		
Approval(s)			
Specification Doc.	LIGO-E0900068	Specification	< 0.5 ppm
Procedure Doc.	LIGO-E1000863	Mean ± Error	$0.2 \pm 0.1$
Conclusion	Qualified.		

#### **Discussions and Comments:**

Four radial scans were carried out along X+- and Y+- with the arrow of barrel at Y+ direction, as shown in Fig.1. The calibration was done by a contamination cavity HR mirror (1" in dia.), of which the HR absorption was measured to be 0.6 ppm in the optical contamination test.

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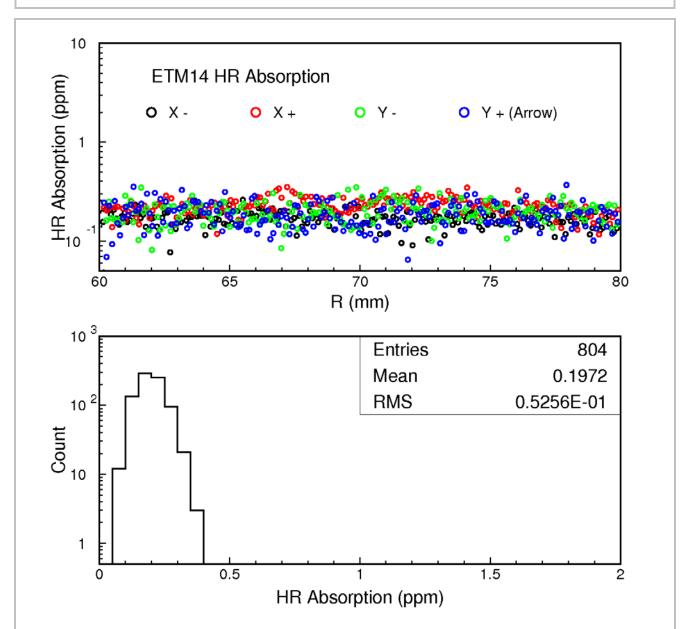


Fig.1 ETM14 HR absorption radial scans along 4 directions outside 120 mm aperture.