# LIGO

#### LASER INTERFEROMETER GRAVITATIONAL WAVE OBSERVATORY

## **COC QA TEST REPORT**

E1200544 -v2Document No Rev.

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## **CP08 AR Coating Absorption**

Test Date	Apr. 17 - 18, 2012		
Author(S)	Liyuan Zhang, Margot Phelps, GariLynn Billingsley		
Approval(s)			
Specification Doc.	LIGO-E0900074	Specification	< 1.0 ppm
Procedure Doc.	LIGO-E1000863	Avg. ± Error	$0.4 \pm 0.1$
Conclusion			

### **Discussion and Comment:**

With keeping the arrow on barrel at Y+ direction, 4 radial scans outside 120 mm aperture were carried out along X+- and Y+- on two surfaces (S1 and S2), as shown in following Fig.1 and Fig.2. The signal / noise ratio was kept as low as possible to avoid possible coating downgrade caused by dust burning.

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## **CP08 AR Coating Absorption**

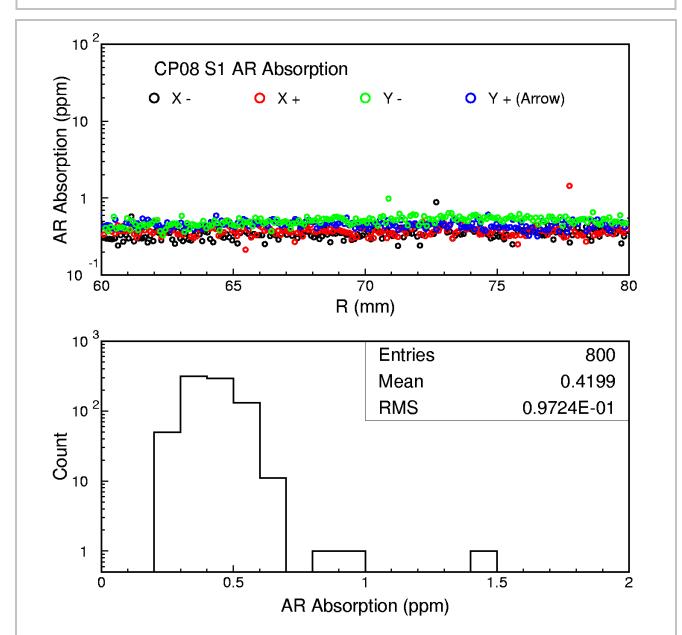


Fig.1 AR coating absorption measurements on CP08 S1 surface along 4 radial directions.

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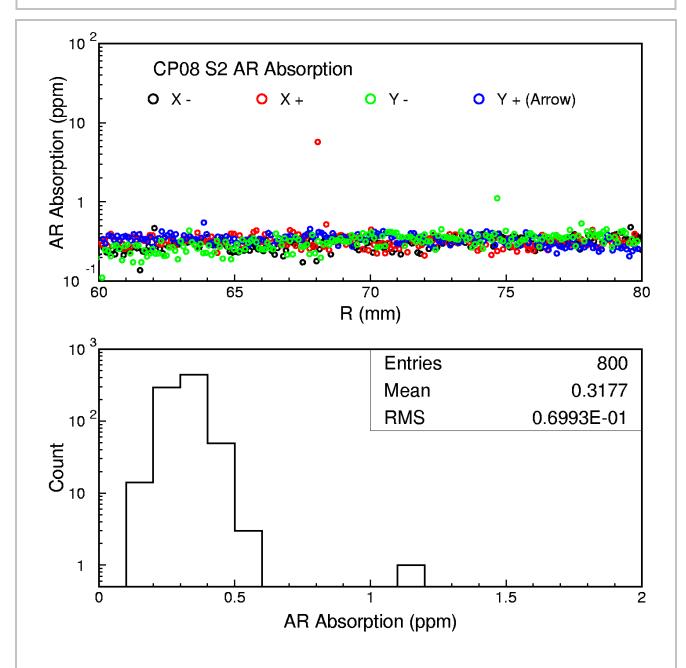


Fig.2 AR coating absorption measurements on CP08 S2 surface along 4 radial directions.