

LASER INTERFEROMETER GRAVITATIONAL WAVE OBSERVATORY

COC QA TEST REPORT

E1300672 -v3-

Document No Rev.

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ITM09 Transmission

Test Date	Feb 27- Mar 2, 2015		
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Approval(s)			
Specification Doc.	LIGO-E0900041	Specification	0.013-0.015
Procedure Doc.	LIGO-E1000863	Mean ± Error*	0.0148 ± 0.0003
Conclusion	Qualified.		

^{*}Error is the calibration error, which is \sim 2%.

Discussions and Comments:

The scan was done over central 160 mm in diameter with the beam and step sizes of 1 mm while keeping the arrow on barrel 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 laser power is monitored and corrected.

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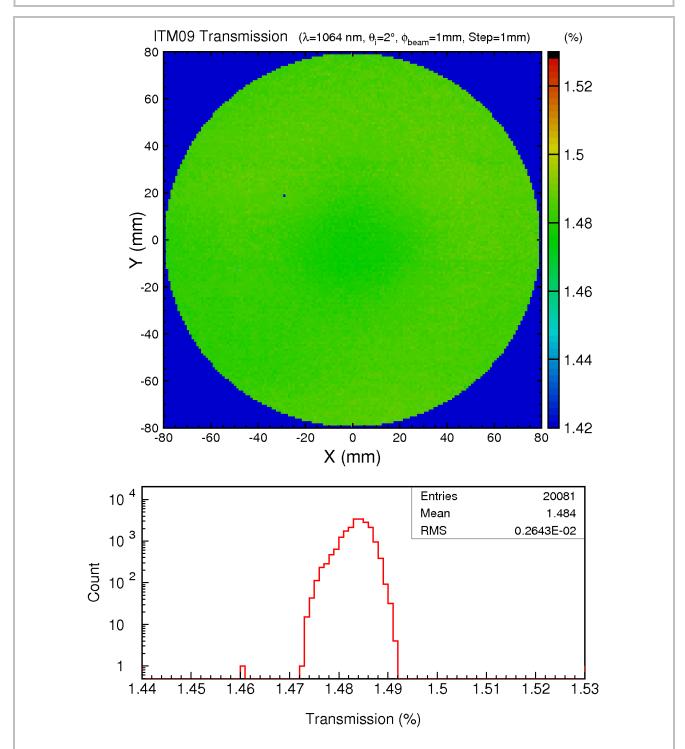


Fig. 1 ITM09 transmission over a 160 mm diameter aperture.