

**ITM05 Transmission**

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Approval(s)			
Specification Doc.	LIGO-E0900041	Specification	0.013-0.015
Procedure Doc.	LIGO-E1000863	Mean \pm Error*	0.0138 \pm 0.0003
Conclusion	Qualified.		

*Error is the calibration error, which is ~2%.

Discussions and Comments:

The scan was done over central 160 mm in diameter with the beam and step sizes of 1 mm and positioning 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 during scan is monitored and corrected.

ITM05 Transmission

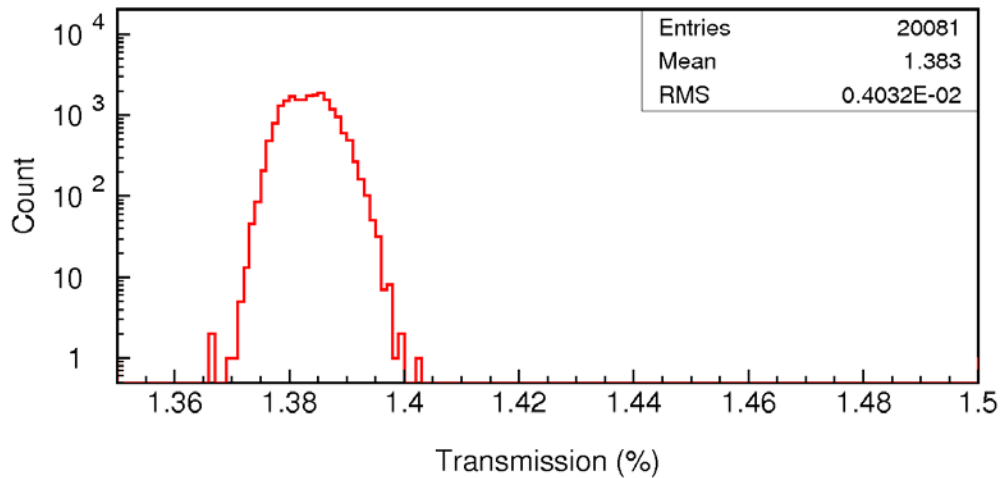
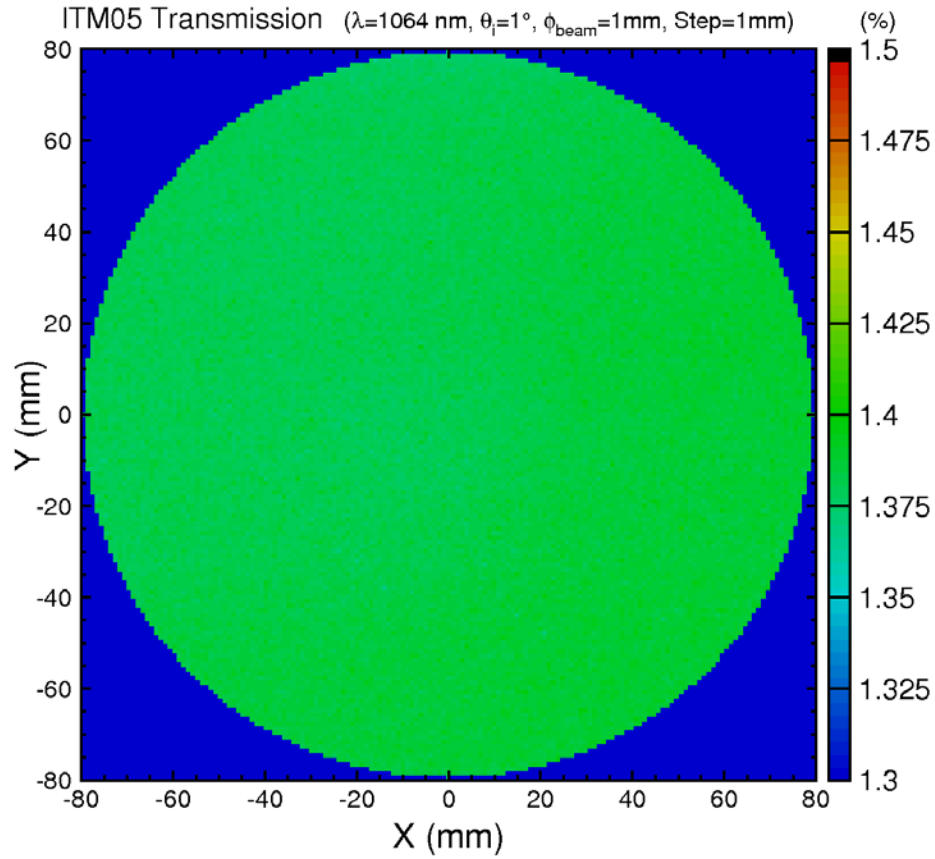


Fig. 1 ITM05 transmission over a 160 mm diameter aperture.