

Quality Test Plan - Physics lab Equipment

Equipment name : Michelson Interferometer

Mode/ Serial no : HO - ED -INT- 06

Standard Test procedure / method: All the experiments are done as per the theory of the experiment or by using calibrated devices.

No	Specific Test Required	Test Method	Specification/ Accepted values	No. of times to be repeated
1.	Micrometer Calibration	Set up Michelson interferometer & rotate the micrometer and count the number of fringes	One fringe corresponds to $\lambda/2$ (250-300 Microns)	5
2.	Laser: beam quality, power	Point the laser to a screen and verify the beam quality, check the power using a power meter	Power will be 5 mW 10% Error Accepted	
3.	Pressure cell	Check the leakage by applying some pressure and wait for 5 minutes	Max. 5% less of the value accepted	1
4.	Glass Slide rotation stage	Check the fringe movement by rotating the glass slide	8 Degree With 10% Error Accepted	3
5.	Wavelength of the Laser	Set up Michelson Interferometer with provided laser and note down the movement corresponds to N fringes	650 +/- 10 nm accepted	1
6.	Visual Inspection	Inspect all mechanical, electronic and optical parts.	As per design	



HOLMARC
OPTO-MECHATRONICS PVT.LTD

