

T1500049-v1 OFI Optical Test Results, LHO

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Measured Parameter	Value	Req
OFI S/N	3rd IFO	
Location	LHO	
Polarization Prism	iLIGO	
Faraday Rotator	iLIGO	
Optical Alignment		
input power at BS, V	8.08	
PD1, V	3.12	
PD2, V	4.96	
PD3, V	4.78	
PD4, V	2.66E-04	
BS Reflectivity	38.61%	
BS Transmissivity	61.39%	
BS total	1.00	
OFI Transmissivity	96.37%	95.00%
OFI Extinction Ratio	1.44E-04	1.00E-03

Parameter		Zernike Coeff., micron		
		SH Zernike, double pass data	SH Zernike single pass calc	Req (<10% coupling loss)
OFI S/N	3rd IFO			
Location	LHO			
Polarization Prism	iLIGO			
Faraday Rotator	iLIGO			
Wavefront Distortion				
Zernike #4, astigmatism		0.009		
Zernike #6, astigmatism		-0.011		
Zernike 4,6 average		-0.001	-0.001	< 0.04
Zernike #7 - 15		0.055	0.039	< 0.04