

LASER INTERFEROMETER GRAVITATIONAL WAVE OBSERVATORY

E080128 -00- D

COMPONENT SPECIFICATION

Drawing No Rev. Group

Sheet 1 of 1

ALIGO RTP crystals for Phase Modulators

			APPROVALS		
AUTHOR:	CHECKED:	DATE	DCN NO.	REV	DATE
Volker Quetschke		03-28-08			

Requirements

Material	Rubidium titanyl phosphate (RbTiOPO4 ₄)		
Orientation	Long dimension along Y-axis, short dimensions		
	along X- and Z-axis.		
Dimensions	40 x 4 x 4 mm		
Flatness	lambda/10 wave at 633 nm wavelength		
End faces wedged against Z-axis	$2.85^{\circ} \pm 0.1^{\circ}$		
Surface Quality	10 - 5 scratch-dig per MIL-0-13830A		
Reflectivity - AR coating for 1064nm on faces	< 0.05%		

Measurement Matrix - Frequency and Method

Specification	Test Method	Frequency of Inspection	Data Delivered	
Physical Dimensions	Visual Inspection	100%	Height, Width and Length	
Material	Process Control Material Certification	100%	Certification	
Absorption at 1.06 µm	Measure thermal lensing	100%	Effective thermal lens	