Sheet 1 of 1

SPECIFICATION

Mariner 40m silicon optics: Procurement: Polish & Material

AUTHOR(S)	DATE	Document Change Notice, Release or Approval
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1 Overview

LIGO

This document describes the procurement for custom polished silicon optics. This document provides context and a general overview of the custom optics but, in order to avoid duplication of information, all specific details can only be found in the linked documents.

2 Quantities required

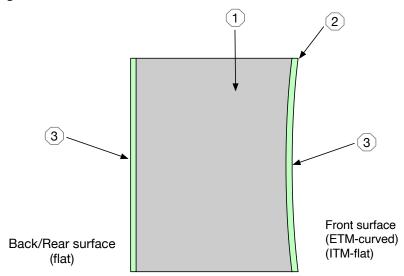
We require the following custom silicon optics:

- 3x "Type 1 ITM" optics: Float Zone silicon, per D2100536-v6
- 3x "Type 2 ETM" optics: Magnetic Czochralski silicon, per D2100536-v6

Both types are per the specifications provided below and in linked documents

3 General specifications

The Mariner 40m test masses are illustrated in the following cartoon. There are two types: Type 1 are designated ITM and Type 2 are designated ETM.



The features enumerated in the figure call out the following specifications:

- 1. The silicon optic substrate material as specified in document: D2100536-v6, will be provided by the customer.
- 2. The vendor will cut the material per the dimensions specified in the drawing: D2100536-v6.
- 3. The vendor will polish all surfaces per the specifications provided in:
 - a. Type 1 ITM: E2100299-v5
 - b. Type 2 ETM: E2100296-v5