



Statement of Work Fabrication of Output Mode Cleaner Optical Prisms

The following documents are incorporated into and made a part of this purchase order. Click on the following LIGO Document Control Center (DCC) links to access these documents or go online to the LIGO Public DCC at <https://dcc.ligo.org/> to access the DCC#.

1.0 Terms:

<u>DCC #</u>	<u>Description</u>
C080185-v1	Laser Interferometer Gravitational Wave Observatory (LIGO) Commercial Items or Services Contract General Provisions California Institute of Technology “Institute”, LIGO Rev 11/12/08
F0810001-v5	Technical Direction Memorandum.

2.0 End Item Data Package:

- At the time of delivery of the parts, the Supplier shall also provide the following data, as a minimum:
- Any as-built modifications (with approval of the LIGO Contracting Officer) as mark-ups to the drawings
 - Certificate or statement of compliance with all contract and drawing process restrictions.
 - Test data for the parts, as described in the coating and substrate specifications E1101086 and E1101095.

3.0 Scope:

This SOW is for the manufacture, test, and delivery of coated optical “prisms”, to be used by the Customer as optics on a high finesse, low loss cavity. The properties of the substrates and coatings are fully described in:

<u>DCC #</u>	<u>Description</u>
E1101086-v4	Specification for OMC Optical Prisms
E1101088-v4	Specification for OMC Curved Optics
E1101095-v3	Specification for OMC Optical Coatings
D1101968	Machine Drawing for OMC Optical Prisms

If there is a conflict between the SOW and the specification, the specification has precedence.

Coating matching

A best effort should be made to match the transmission of the “Asymmetric Output Coupler”, Coating D, to ½ the transmission of the “Input/Output Coupler”, Coating A. Similarly, the transmissions of the “Input/Output Couplers” should be matched to each other, as best as possible. Quotation should address the bidder’s capabilities to match the transmissions and the expected tolerance.

4.0 Quantity Required:

Substrates:

Drawing Number	Description	Quantity
E1101086	Optical Prisms	70
E1101088	Curved Optics	40

Coatings:

Coating Type	# Prisms	# Curved optics
A Input/Output	15	0
B Beam splitter	15	0
C High reflector	20	20
D Asymmetric output	0	20
No coating	20	0

Small adjustments to these quantities may be made based on the lot size of the Supplier, in order to make most efficient use of the Supplier's capabilities. Therefore the quotation should include information about the bidder's lot or batch size for parts processing.

5.0 Delivery Requirements:

The deliveries are FOB at these destinations, i.e. the Supplier has responsibility for shipping title and control of goods until they are delivered and the transportation has been completed. The Supplier selects the carrier and is responsible for the risk of transportation and for filing claims for loss or damage.

The shipping location is still to be determined.

Shipping Containers:

The Supplier is responsible for providing shipping containers and transportation which protects these parts from damage from the transportation environment (weather, handling, accidents, etc.) and maintains their cleanliness in their original condition.

6.0 Delivery Schedule:

Partial delivery is acceptable and should be negotiated according to the capabilities of the Supplier. If batch orders or lot sizing is relevant, such information should be included in the quotation. However, final delivery is required by August 1, 2012.