



SPECIFICATION

Advanced LIGO Output Mode Cleaner Mounting Prisms

APPROVALS	DATE	R E V	DCN NO.	BY	CHEC K	DCC	DAT E
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DCC RELEASE							

1 Description

A 20x23x10 mm (WxDxH) fused silica prism with a thru hole

2 Material

Corning HPFS 7980 (high purity fused silica, UV grade)

3 Dimensions

FLAT-FLAT

Width: 20.0 ±0.1mm

Height: 23.0 ±0.1mm

Thickness (thin edge): 10.0mm ±0.1mm

Wedge: no specification

Perpendicularity: 90.0° ±30" front surface to bottom surface (see figure)

Chamfer: 1mm chamfer on back/top edge (see figure)

Minimal chamfer to prevent chipping on other edges

Marking: Etched or scribed "E1101087" on side

Through hole: 9 ±0.05mm hole located 15±0.05mm from bottom on centerline (see figure)

See [D1102069](#) for a machine drawing.

**SPECIFICATION**

DrawingNo Vers

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Advanced LIGO Output Mode Cleaner Mounting Prisms**4 Surface Specification****Side 1 (Front and Back)**

to be polished for Epoxy bonding

Micro-roughness: <10 nm rms over central 80%,

Surface figure: < 1 μm pk-pk over entire surface**Side 2 (Bottom)**

to be polished for bonding

Micro-roughness: <10 nm rms over central 80%

Surface figure: < 1 μm pk-pk over entire surface**Side 3 (sides and top)**

Inspection polish

Side 4 (thru hole)

Inspection polish