MIT requests fixed-price quotations on price and delivery time for the following two optical elements, one piece each of M1 and M2. For questions, please contact Rob Simcoe at (617) 324-0542, or simcoe@space.mit.edu.

**Item 1: 33-30600.01 [Primary Mirror (M1)]**

Mechanical Dimensions: 142 x 60 mm, rectangular
Clear Aperture: 140 mm OD inscribed circle centered on the substrate
ROC: 399.022 mm +/- 0.04 mm (concave)
Spherical surface figure
Substrate: RSA-6061 T6 Aluminum
Coating: Protected gold
Reflectivity: average of >98%, minimum of >97% from 0.82-2.5 microns
Substrate thickness: 30.0 +/- 0.1 mm
Scratch / Dig: 60-40
Surface Figure: \( \frac{\lambda}{3} \) peak-to-valley at 0.6328 microns
Surface micro-roughness < 4 nm RMS.

Please refer to MIT element drawing number 33-30600.01 for complete definition.

**Item 2: 33-30600.02 [Pupil mirror (M2)]**

Dimensions: OD 23.0 +/-0.1/-0.0 mm (mechanical dimension)
Minimum Clear Aperture: 19.00 mm diameter circle centered on optical face
ROC: 199.511 mm +/- 0.02 mm (convex)
Spherical surface figure
Substrate: RSA-6061 T6 Aluminum
Coating: Protected gold
Reflectivity: average of >98%, minimum of 97% from 0.82-2.5 microns
Substrate thickness: 8.00 +/- 0.1 mm
Scratch-dig: 60-40
Surface Figure: \( \frac{\lambda}{3} \) peak-to-valley at 0.6328 microns
Surface micro-roughness < 4 nm RMS
This optic will contain a center bored hole of diameter 4.00 +/- 0.01 mm.

Please refer to MIT element drawing number 33-30600.02 for additional specification of runout tolerances on centration on the substrate and center bore. Overspray of gold coating into the center bore is acceptable.

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1 See http://www.rsp-technology.com/alloys.html