

Optics Assembly Steps

version 0.2

- (a) inspect bar/mirror/wedge edges for chips – record sizes and locations found (2 hrs)
- (b) clean bars/mirror/wedge, all surfaces except metallized surface on mirror (2 hrs)
- (c) scan bars for coefficient of internal reflection (CIR) measurement (SLAC method) (4 hrs)
- (d) measure bar transmission over 125 cm length (both bars, several points) (2 hrs)
- (e) check wedge transmission over 45.6 cm dimension (1 hr)
- (f) check mirror transmission over 45.6 cm dimension (1 hr)
- (g) check position of focal point of mirror (*test to be developed*) (2 hrs)
- (h) epoxy quartz bars together, inspect for bubbles, **measure relative position of bars** (5 hrs)
- (i) measure bar transmission over 250 cm length (several points) (2 hrs)
- (j) epoxy mirror, inspect for bubbles, **measure relative position of mirror** (5 hrs)
- (k) check bar transmission+reflection off mirror, 522 cm length (several points) (2 hrs)
- (l) epoxy wedge, inspect for bubbles, **measure relative position of wedge** (5 hrs)
- (m) check bar+wedge transmission+reflection off mirror, 542 cm length (several points) (2 hrs)

Total optics assembly time per module:

35 hrs