Baldwin Astronomical Optics Paraboloid Checklist

___ Test and photograph internal structure for stress.

___ If ok, bevel both edges, rough grind, fine grind and polish back.

___ Sign and serialize back. Serial Number _____

___ Map back for radii and zones.

___ Curve generate front, re-bevel front edge confirm adequately small wedge.

Thickness: 0^o _____ 90^o _____ 180^o _____ 270^o _____

___ Grind surface with 80, 120, 220, 500, 12 μ, 5 μ and 3 μ.

___ Fixed Post Polish enough to reflect light in astig test and Ronchi test.

___ Astig test.

___ If fail, regrind and work to this point again.

___ Polish whole mirror.

___ Sphere mirror.

___ Astig test. Astig _____ Surface of Revolution _____

___ If fail, regrind from 220 and return up to this point.

___ Parabolize, correct with slit wire test.

___ Confirm Caustic – SIT Test.

___ Mirror done if

1. SIT/Caustic shows P-V less than 1/10 wave, less than 1/26 wave RMS, and 0.94 or more Strehl,
2. mirror smooth,
3. no astig, Optical Diameter _____ R.O.C. _____ *f*.l. _____
4. no TDE,
5. edge cleaned, *f#* ____ P-V _____ RMS _____ Strehl _____
6. Star test excellent. λ = 550 nm

___ Photograph focogram, ronchigram, create test data sheet.

___ Clean surface, back mapping and side CeO.

___ Send to aluminizer. ___ Mirror returned.

___ Center mark mirror and check for customer acceptability, adhere sticker.

___ Ship mirror with data sheets, Foucault and Ronchi photos, and this list.

Sign off mirror _____ Date _____