Optical design information is provided in this section. Some files are available in other formats, see this direct folder link to browse.

Primary Mirror

- Diameter: 90.00“ ± 0.0625” (2286 mm)
- Central Obscuration Diameter: 33.5“ ± 0.1” (851 mm)
- Conic Constant: -1.0646 ± 0.001
- Radius of Curvature: 12281 mm ± 4 mm
- Uncorrected Focal Length: 6140.5 mm
- Uncorrected Focal Ratio: f/2.69
- Measurement of the 90-inch Primary Mirror Optical Prescription

Corrector Optics

- Corrected Focal Length: 6829.2 mm
- Corrected Focal Ratio: f/2.98
- Optical Design and Specifications for the 90-inch Prime Focus Corrector (Rev E-2)
- Corrector Design Tolerances
- AR Coating Theoretical Reflectance
- AR Coating Measured Reflectance:
- Both Sides
- AR Coating Measured Reflectance: Side 1
- AR Coating Measured Reflectance: Side 2
- Vignetting Effects
- Ghost Analysis for the 90'' Prime Focus Corrector
- 90-Inch Prime Focus Corrector Lens 1 Testing Report (Michael Tuell)
- 90-Inch Prime Focus Corrector Lens 3 Testing Report (Michael Tuell)
- Corrector Optics Defects
- Lens 2 and Lens 3 Defects
- Lens 2 Defects
- Lens 3 Defects
- Unordered List ItemL2 asphere profile measurements (Steve Miller; SO Mirror Lab)

Baffles

- See Baffle and Baffles
- Inner Lens Can Baffling
- External Lens Can Baffling
- Baffling Inner Lens Can Baffling
- External Lens Can Baffling

Drawings

- Optics with dimensions & header
- Optics with dimensions & without header
- Optics without dimensions & without header