

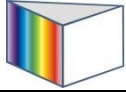
400mm/F2.0 Manual for MWIR thermal imaging

The lens **module 400mmF2.0 manual** is designed for cooled detector (InSb FPA Focal Plane Arrays) of 640x512-15 μ m of MWIR wavelength range 3.5~5.0 μ m, it is optimized optically for high transmission, good MTF and low distortion. The sealing of the housing is IP54, it is weight less than 5000grams. The improvements and changes of the design is available for customer's special request.

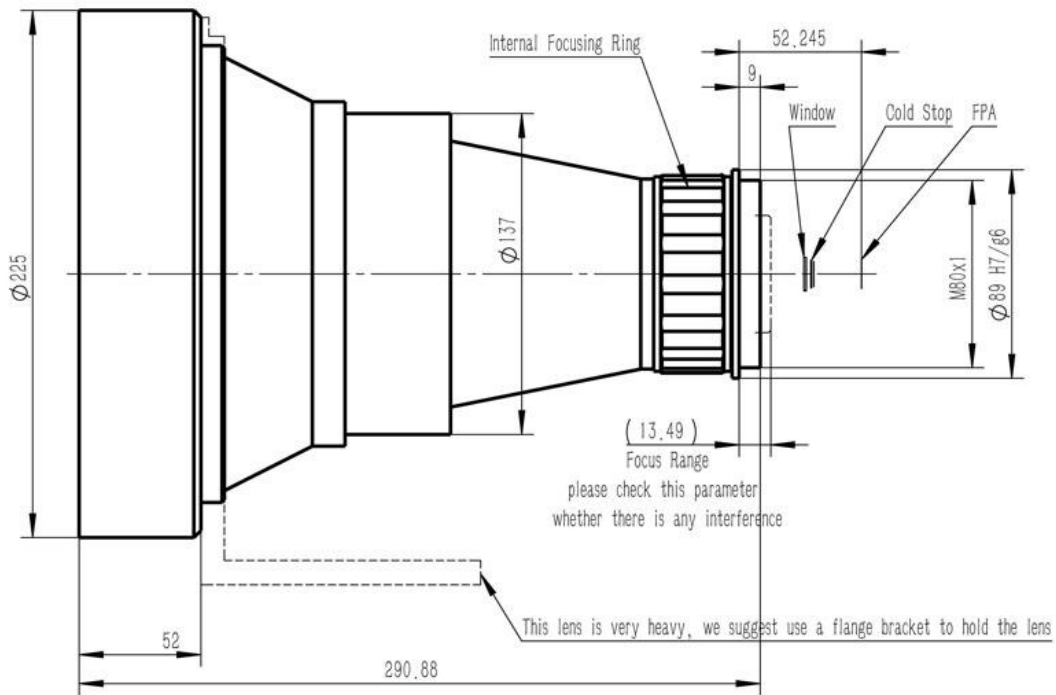


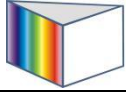
SPECIFICATIONS

| Optical Parameters | |
|-------------------------|---|
| EFL | 400mm |
| f Number (f#) | 2.0 |
| Wavelength range | 3.5~5micro |
| Detectors | 640x512-15um, cooled |
| FOV | 1.38°x1.1° (1.76°) |
| External Coating | DLC or AR |
| Average transmission | >81% for DLC external coating >86% for AR external coating |
| Working temperature | -40°C ~ +60°C |
| BFL | 48.55mm |
| Minium Working Distance | 40mm |
| Distortion | Maxium D-FOV distortion <3.5% |

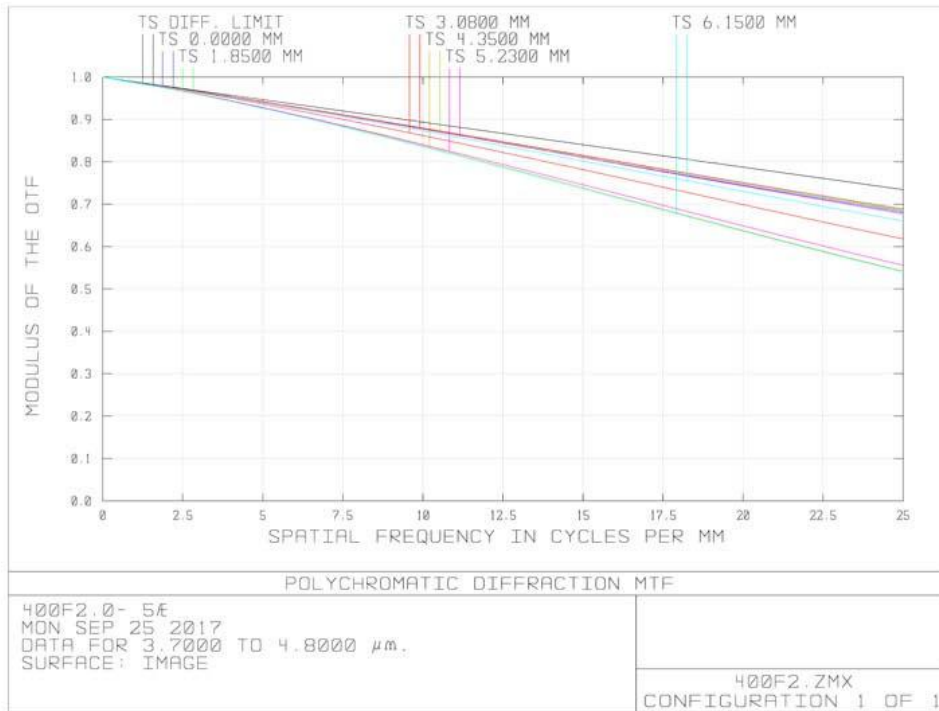


| Mechanical Parameters | |
|-----------------------|---|
| Dimensions | Length:290.88mm x Diameter 225mm |
| Focus Mechanism | Internal Manual Focusing |
| Sealing | IP54 |
| Mount | M80x1-6g; Back Flange Distance: 52.245 |
| Housing material | Aluminum, black anodized |
| Working Temperature | -40°C ~ +60°C |
| Storage Temperature | -50°C ~ +70°C |
| Weight | ~5000gram |

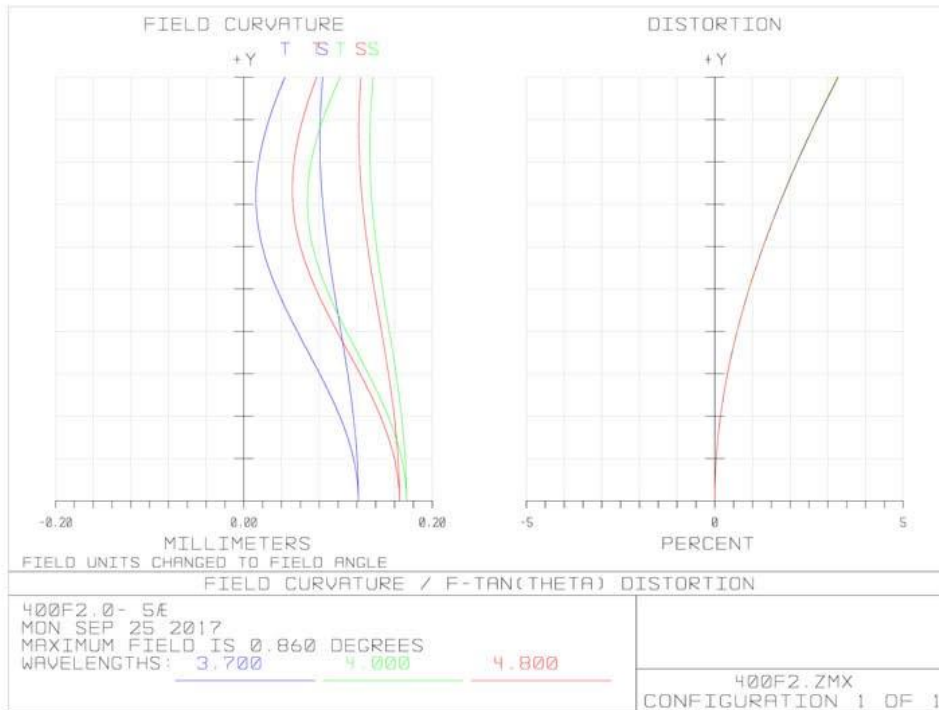


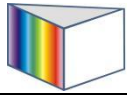


3.1 MTF@25lp/mm

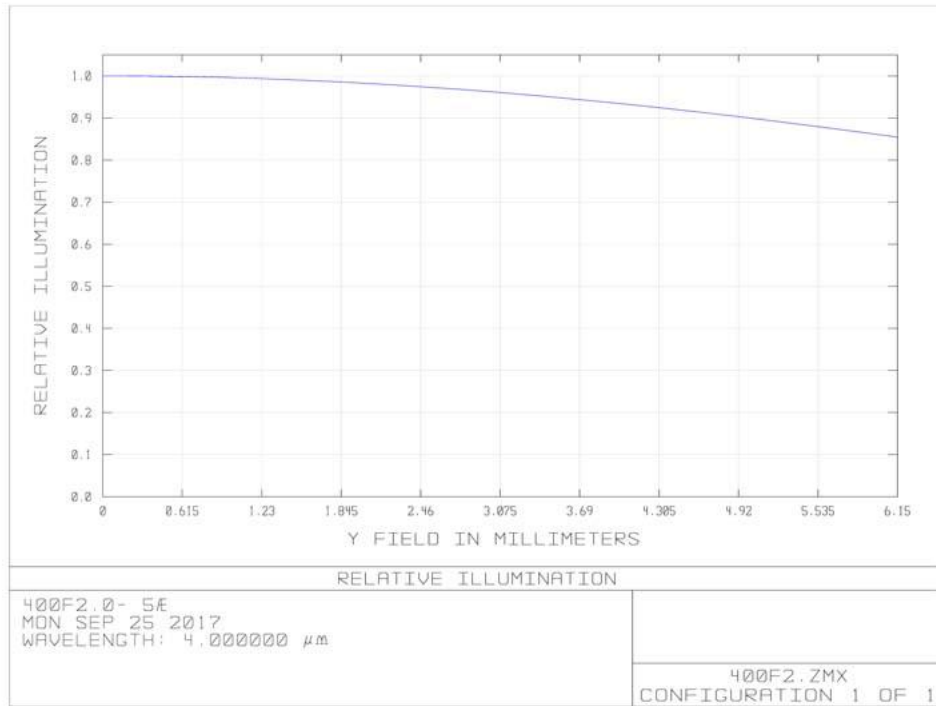


3.2 Field Curv and Distortion





3.3 Relative Illumination



3.4 Vignetting

