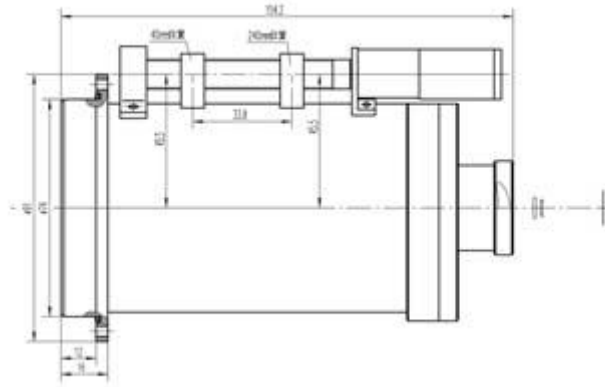


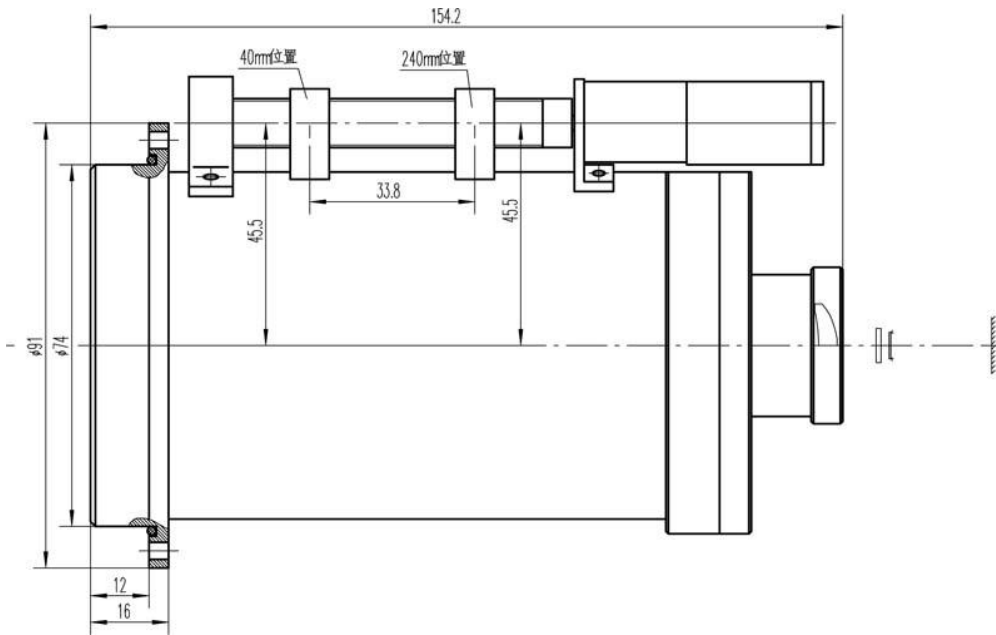
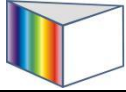
## 40mm/240mm Double FOV Lens for MWIR Thermal Cameras

The **Double FOV 40mm/240mm lens module** is designed for cooled detector ( InSb FPA Focal Plane Arrays ) of 640x512-15 $\mu$ m of MWIR wavelength range 3.5~5.0 $\mu$ m, it is optimized optically for high transmission, good MTF and low distortion. The improvements and changes of the design is available for customer's special request.

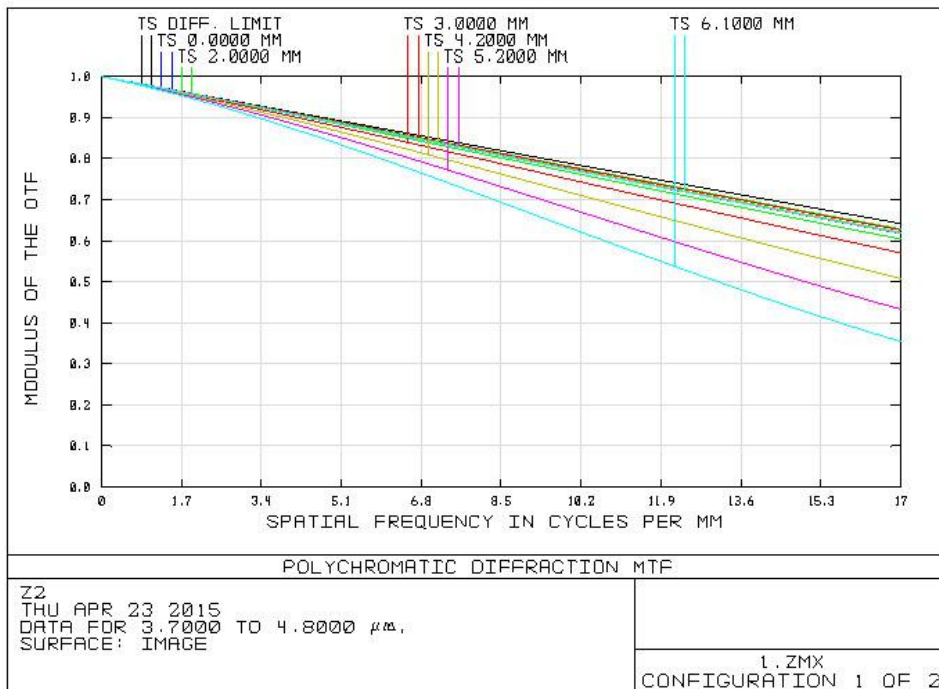


## SPECIFICATIONS

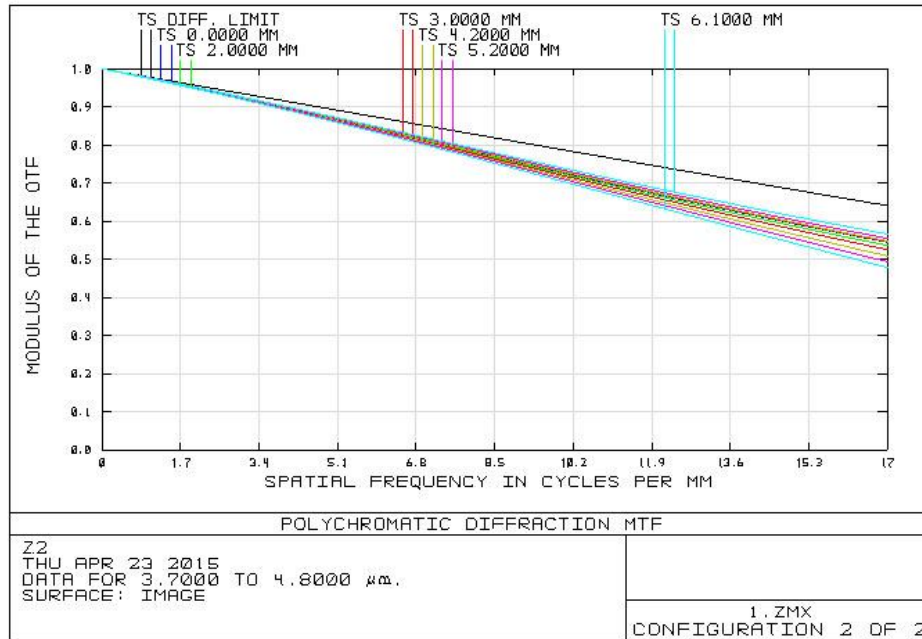
Optical Parameters	
EFL	40mm(WFOV)/240mm(NFOV)
f Number (f#)	4.0
Wavelength range	3.7~4.8micro
Detectors	320x256-30micro, cooled
FOV	13.69°x10.97°/2.29°x1.83°
External Coating	DLC + AR
Average transmission	>76%
Working temperature	-40°C ~ +60°C
BFL	31.63mm (include Cooled Detector)
Maximum Diameter	63mm
Overall Optical Length	<180mm
Distortion	<2.5% <1%



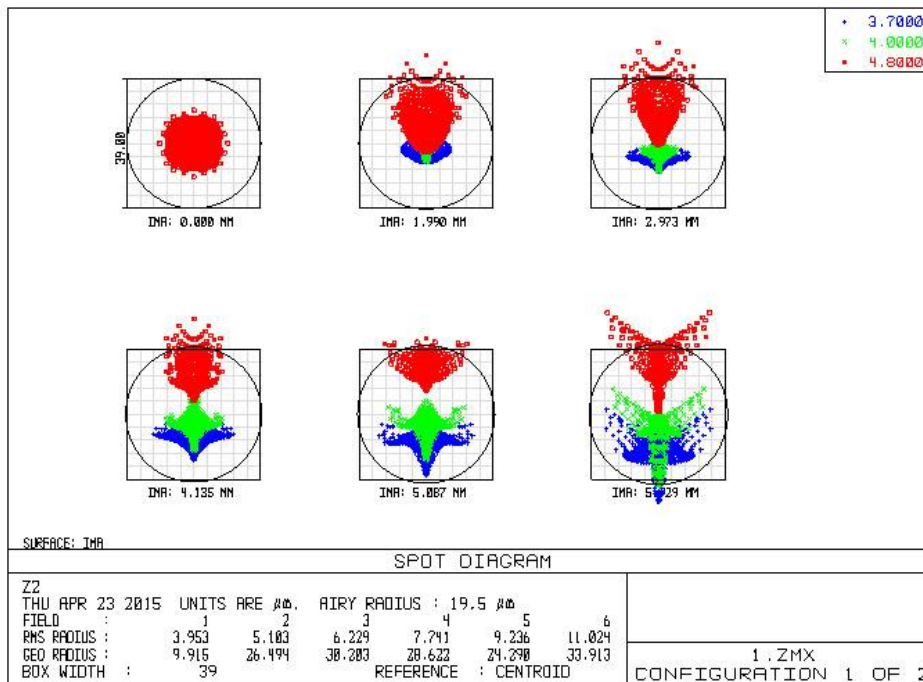
MTF (WFOV@17lp/mm)

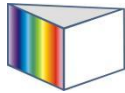


MTF (NFOV@17lp/mm)

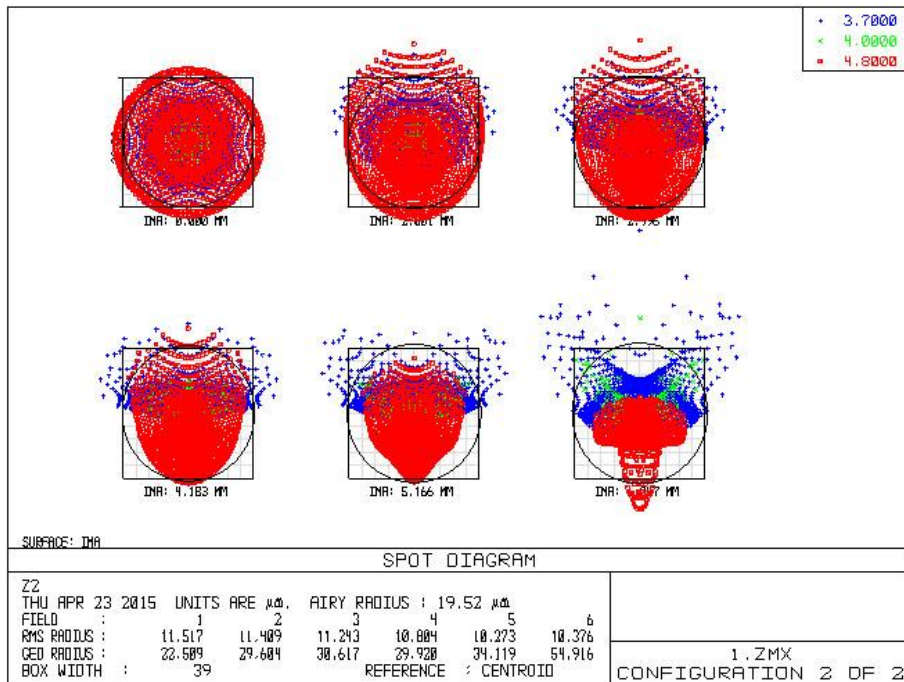


Spot diagram (WFOV)

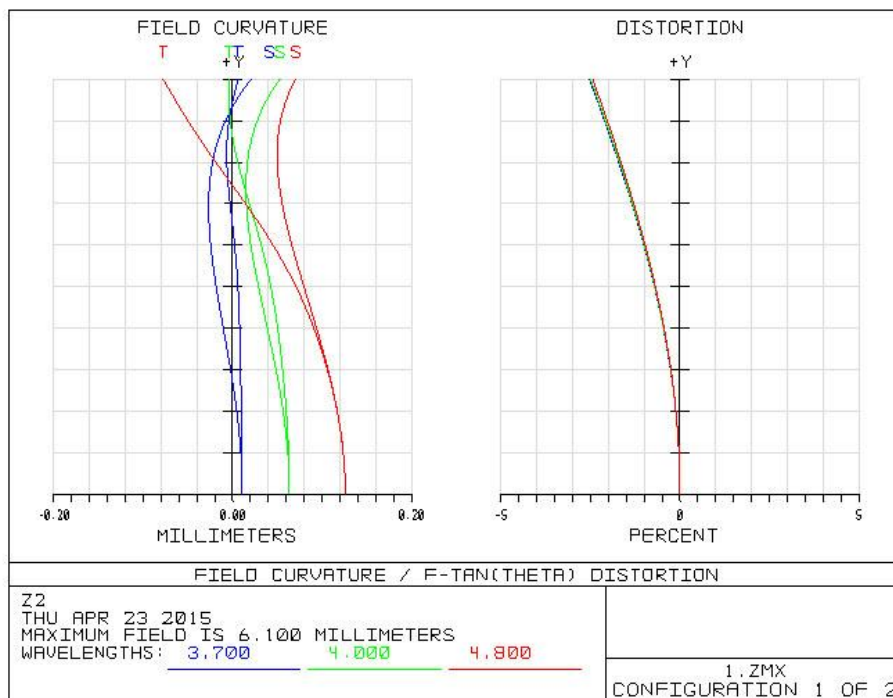


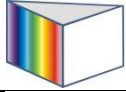


Spot diagram (NFOV)

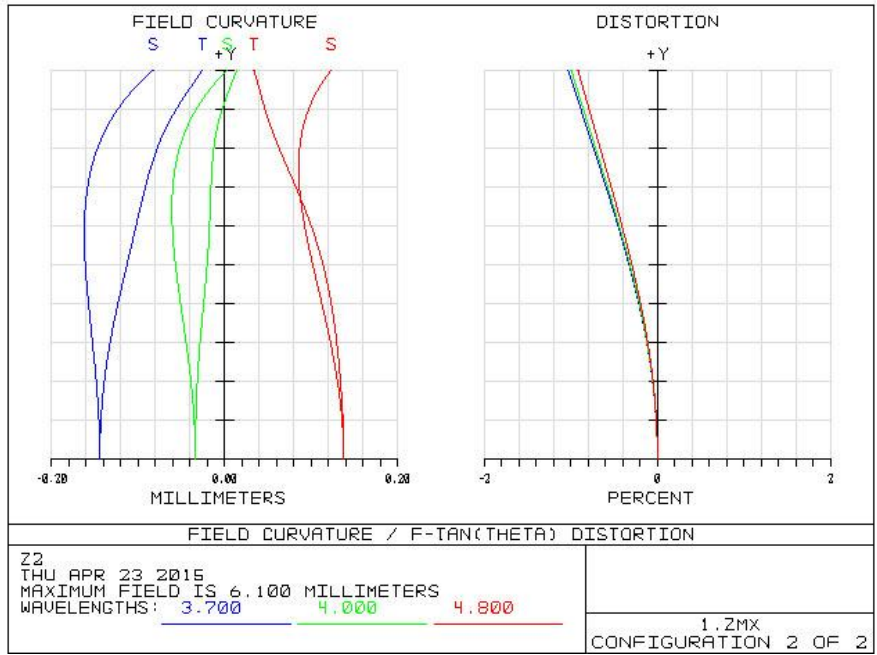


Field curvature and distortion(WFOV)

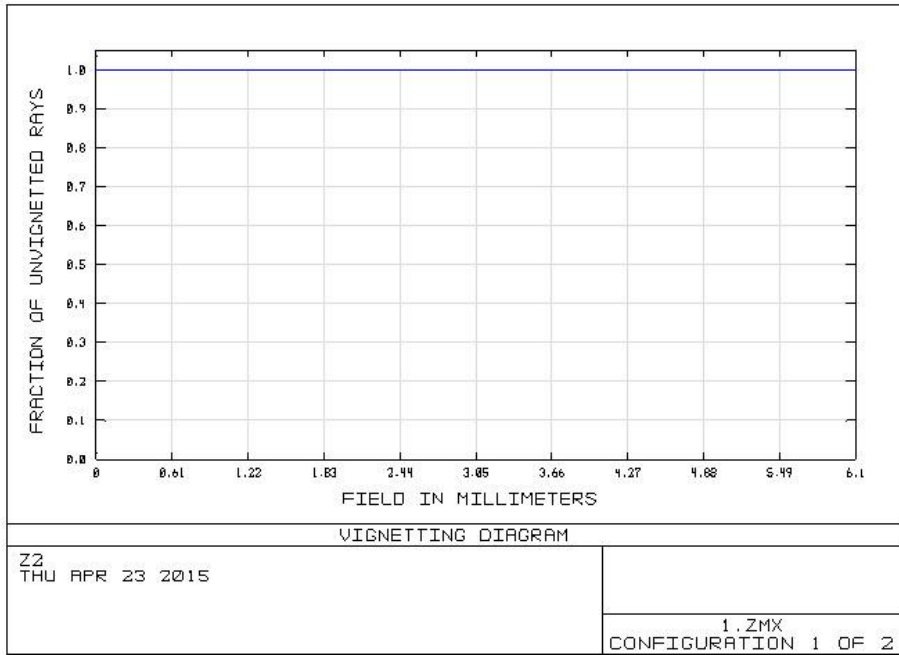


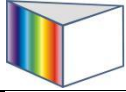


Field curvature and distortion (NFOV)



Vignetting (WFOV)





### Vignetting (NFOV)

