

## 180mm/F2.0 Motorized Lens for Cooled FPA at 7.7-9.4 micro

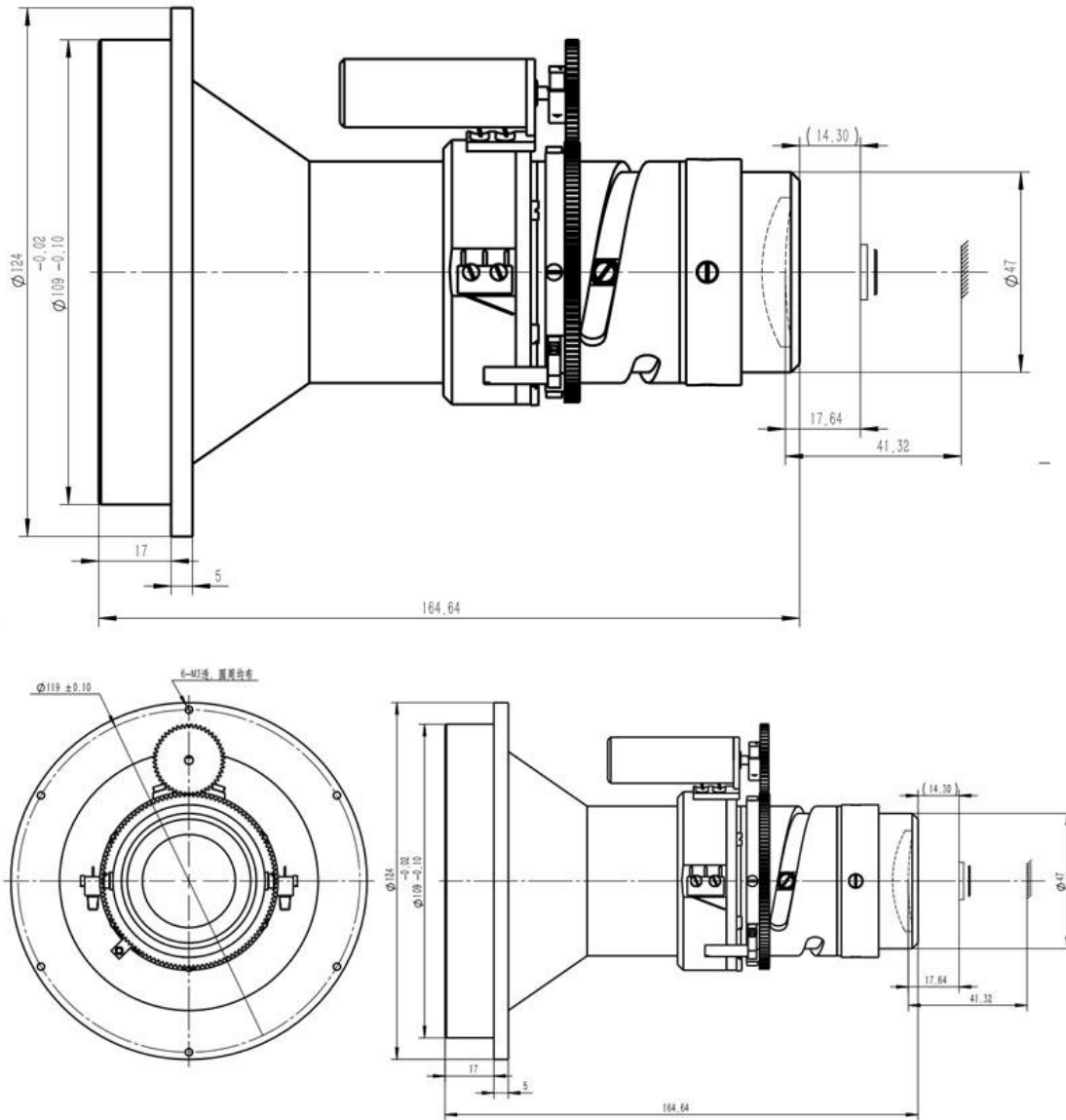
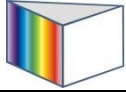
This lens module is motorized focusing mechanism with focal length of 180mm and f number 2.0, it is designed for cooled detector at LWIR wavelength range of 7.7-9.4 micro. it is optimized optically for high transmission, good MTF and low distortion. The sealing of the housing is IP67, it is weight about 1kg. The improvements and changes of the design for this module is available upon customer's special request.

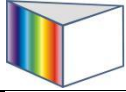


### SPECIFICATIONS

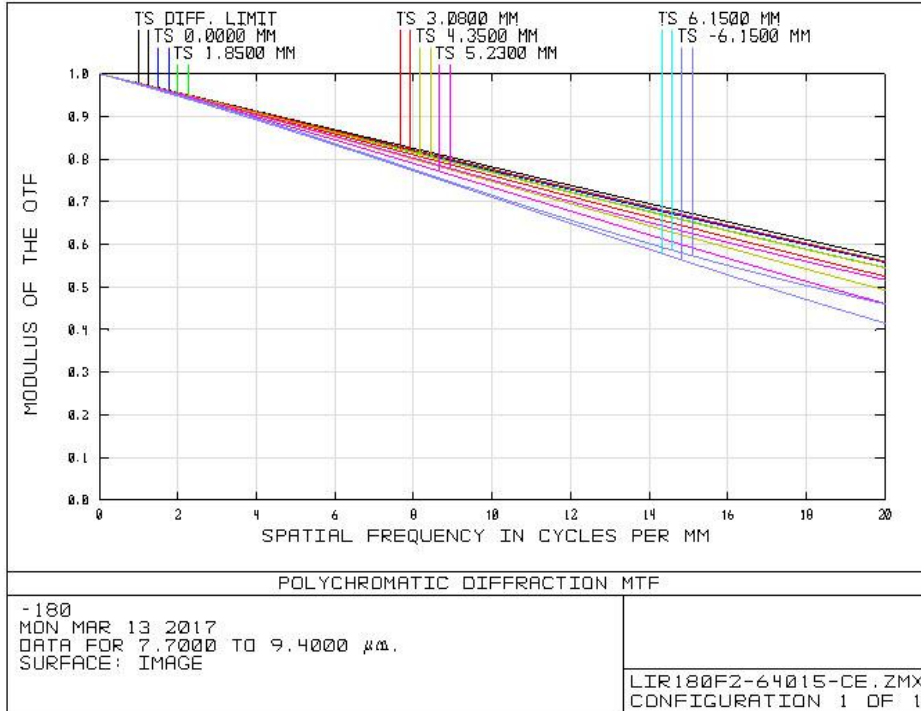
Optical Parameters	
EFL	180mm
f Number (f#)	2.0
Wavelength range	7.7~9.4micro
Detectors	640x512-15um, cooled
FOV	3°x2.4° (3.85°)
External Coating	AR
Average transmission	>83%
Overall optical length	200mm
Flange back distance	41.32mm (1.64mm from the protective windows)
Minium Working Distance	5M
Distortion	Maxium D-FOV distortion <1%

Mechanical Parameters	
Dimension	Dia124mm x 165mm length
Focusing mechanism	motorized, DC motor
Connector	Flange, 6-M3, Dia119mm
Driver voltage	12V DC
Sealing grade	IP67
Housing materials	Aluminium, anodized
Storage temperature	-50℃ ~ +70℃
Working temperature	-40℃ ~ +60℃
Weight	~1kg

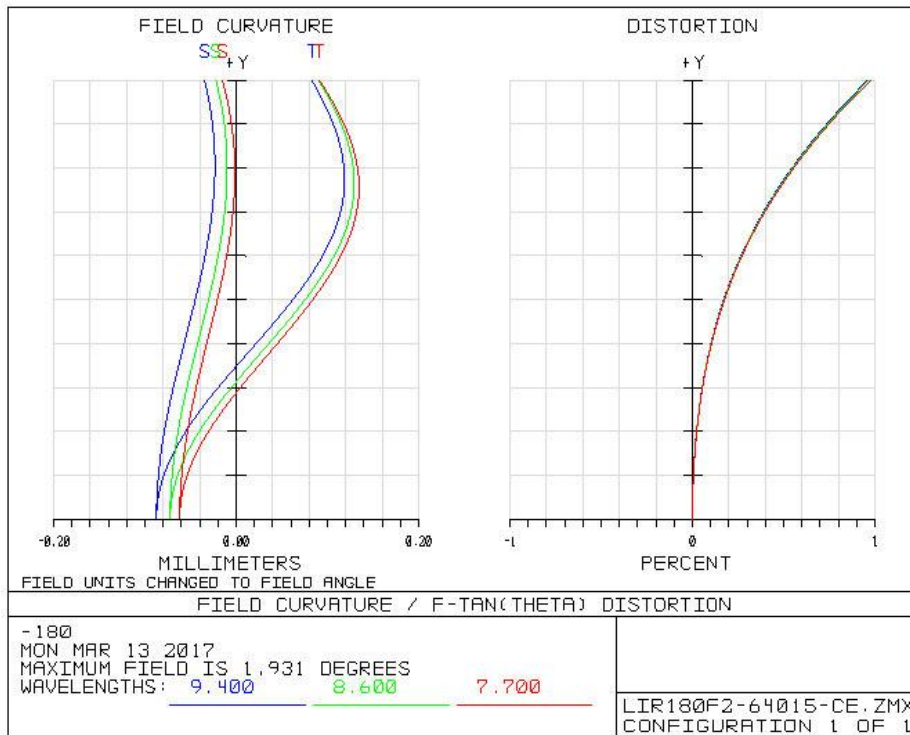


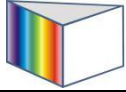


MTF@201p/mm

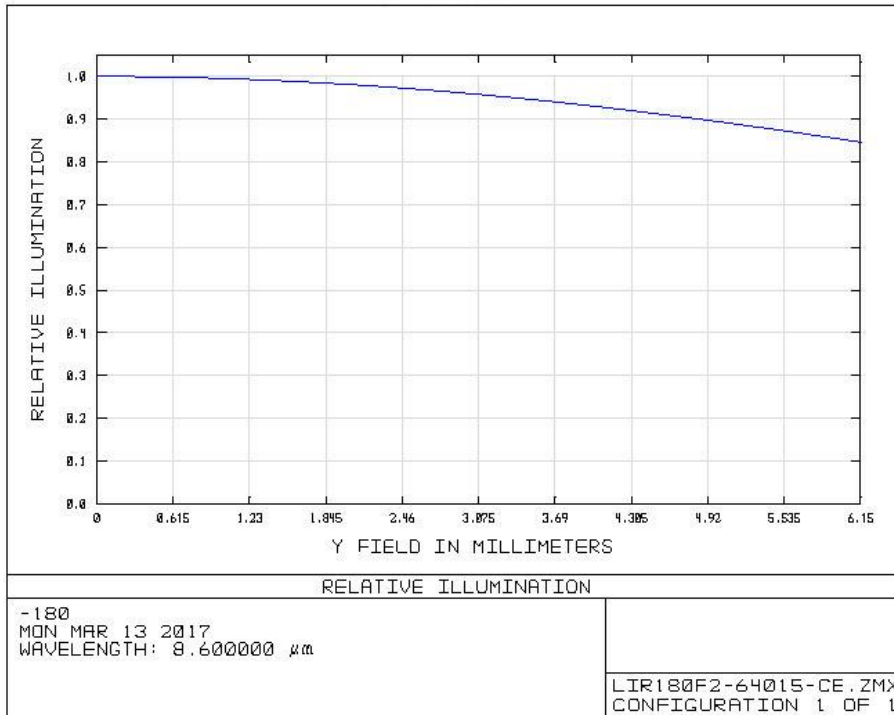


Field curve and distortion





Relative illumination



Vignetting

