

Infrared optics | **Short wave**

SW 03520

35 mm Short wave infrared lens

Optical specifications

Focal length	mm	35,00
F-Number		2,0
Wavelength	micron	0,9 - 1,7
Average transmission	%	90,0
Circular FOV (1)	deg	33,4
Working Distance	mm	350/∞
Image Diagonal	mm	21,0
Distortion (2)	%	-0,50
CTF @ 30 lp/mm (3)	%	39,09
Image Side N.A.		0,243
Back Focal Length	mm	12,2

Mechanical specifications

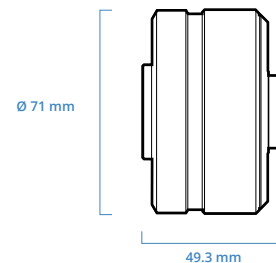
Mount Type (4)	C Custom
Focus Type	Manual
Locking Screw	Yes



1. Based on the listed image diagonal
2. Maximum value at central wavelength
3. Mean value at all the different fields
4. Any custom mount is available at no additional cost.
C = Standard C-mount type
5. Given with no mount attached. See layout drawings

Dimensions

Length	mm	49,3
Diameter	mm	71
Weight (5)	g	340

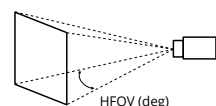


	HFOV (deg)	number of pixels				
		160x120	320x240	384x288	640x480	1024x768
pixel pitch (µm)	50	13,0	25,7			
	38	9,9	19,7			
	30	7,8	15,6			
	28	7,3	14,5			
	25	6,5	13,0	15,6	25,7	
	17	4,4	8,9		17,6	

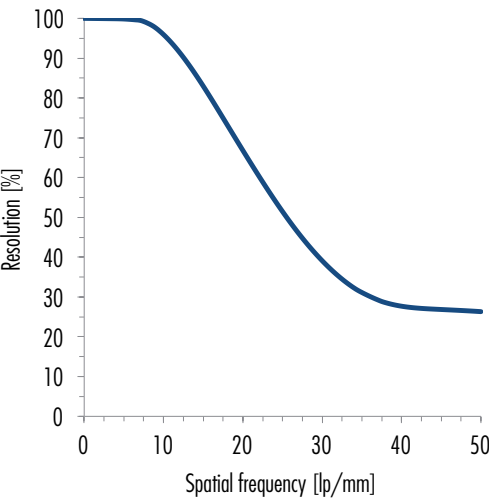
Horizontal fields of view (HFOV), in degrees, for several common detectors.
Actual FOV's may vary $\pm 5\%$ from the nominal value.

Legend

- No detector of such form
 - Not optimized for this detector.
- Vignetting may occur at image corners

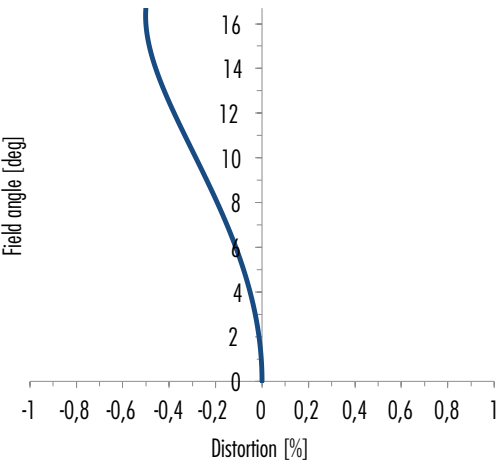


CTF SW03520



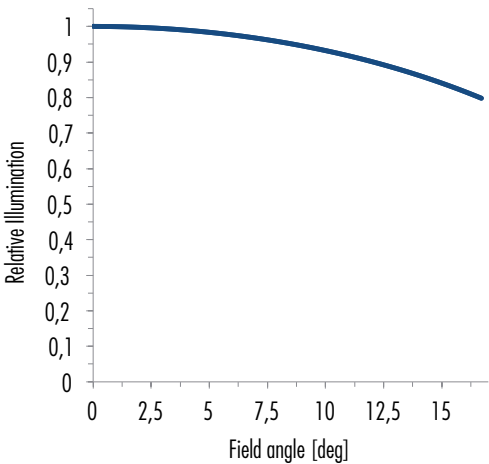
Contrast Transfer Function (CTF) is reported as the mean value at all different fields

Distortion SW03520



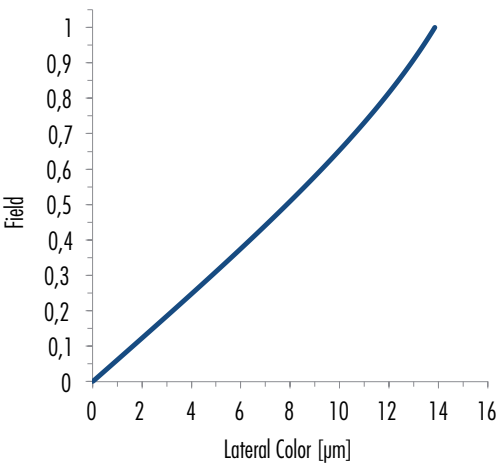
Distortion is shown at central wavelength

Relative Illumination SW03520



Relative Illumination is shown at central wavelength

Lateral Color SW03520



Short wavelength = 0.9 μm, Long wavelength = 1.7 μm

