



LENS OB-SWIR35/1.4 – P/N C0809

General Description

The new range for imaging inspection is the Short Wave Infrared Region, starting from 0.9 μm to 3 μm . This lens wants to cover the first range from 0.9 μm to 2.3 μm with a very high quality image. The high F/N and a very good transmission obtained using special optical glasses, are the main characteristics of this lens. The good transmission in the visible range is also helpful for alignment and tracking application.



Optical and mechanical parameters

Focal length	35 mm
Image format (diagonal)	20.5 mm
F.O.V. (diagonal)	32.6 degrees
Max aperture	F/N = 1.4
Object format	N.A.
Min working distance	1500 mm
Zoom value	N.A.
Focus	Manual
Iris	Max F/N = 1.4 Min F/N = 8

N. of elements	9
Dimensions	N.A.
Weight	N.A.
<i>Options</i>	
Focus motorized	Upon request
Iris motorized	Upon request
Zoom motorized	N.A.
Other mount type	Upon request
Customization	Upon request

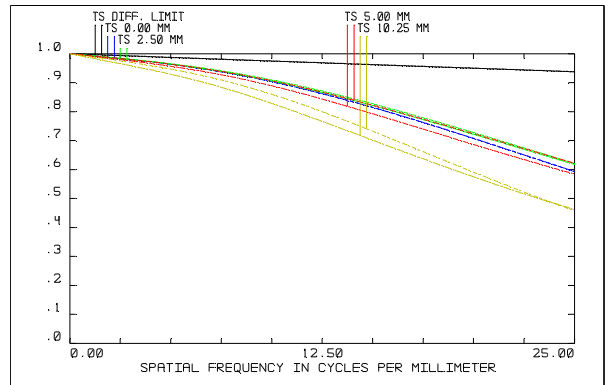
<i>P/N</i>	<i>wavelength range</i>	<i>mount type</i>	<i>note</i>
C0809.001	900-1700 nm	Canon	
C0809.002	900-1700 nm	Nikon	
C0809.003	900-1700 nm	M42 Screw	
C0809.005	1700-2300 nm	Canon	
C0809.006	1700-2300 nm	Nikon	
C0809.007	1700-2300 nm	M42 Screw	
C0809.010	900-2300 nm	Canon	
C0809.011	900-2300 nm	Nikon	
C0809.012	900-2300 nm	M42 Screw	

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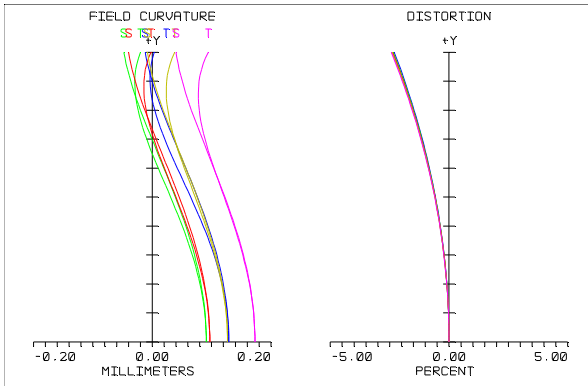
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MTF, Field Curvature, Distortion and Transmission from 900 to 1700 nm

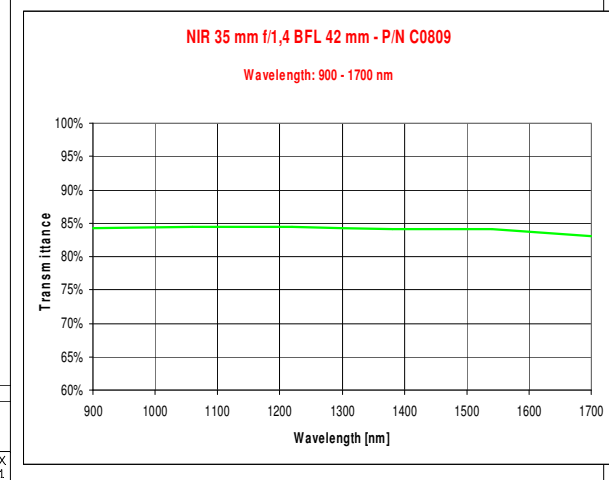
The calculated MTF values are displayed below and are verified at the maximum F/N and the best focus plane. The colored lines represent the F.O.V. starting in the center (0%) to the corner (100%).



POLYCHROMATIC DIFFRACTION MTF
WED AUG 6 2008
DATA FOR: 0.9000 TO 1.7000 μ m.
SURFACE: IMAGE
HORUS- H1-SUNI.L26.ZMX
CONFIGURATION 1 OF 1



FIELD CURVATURE / DISTORTION
WED AUG 6 2008
MAXIMUM FIELD IS 10.250 MILLIMETERS
WAVELENGTHS: 0.900 1.100 1.300 1.500 1.700
HORUS- H1-SUNI.L26.ZMX
CONFIGURATION 1 OF 1



Optical parameters for wavelength range 0.9 – 1.7 μ m

Resolution	MTF > 45% @ 25lp/mm
Distortion	< 2.5%
Average axial chromatic aberration	< 0.0285 mm

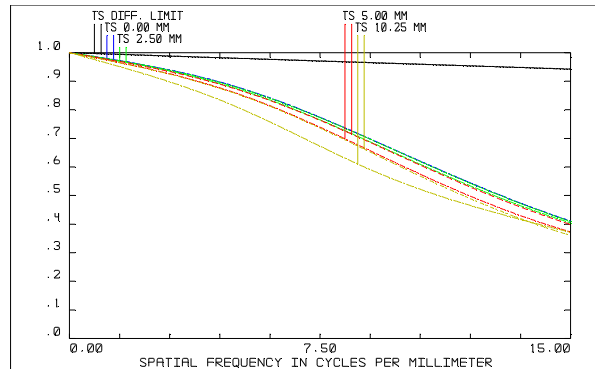
Transmission	> 83%
Antireflection Coating	R < 1%
Vignetting	0%

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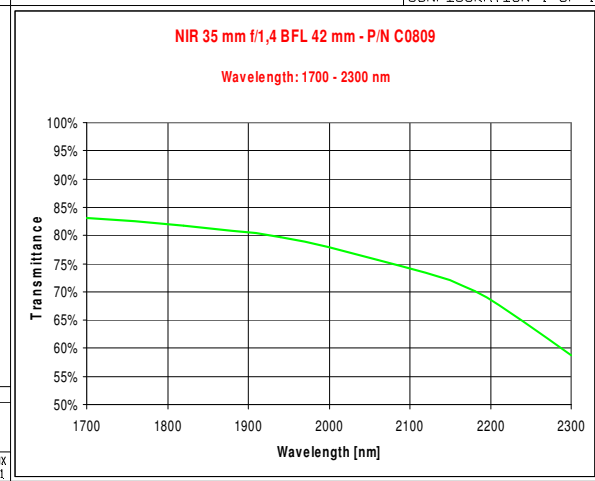
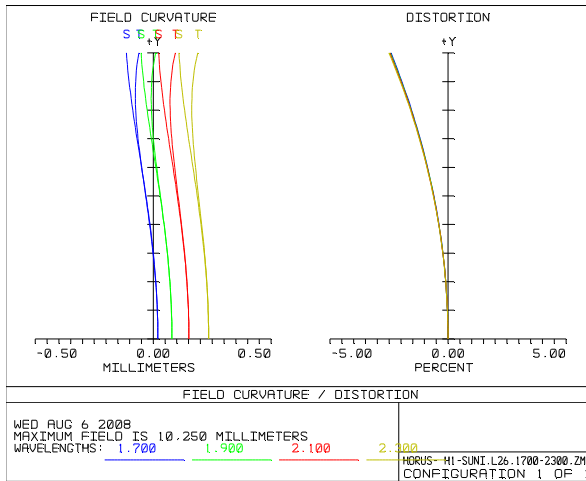
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MTF, Field Curvature, Distortion and Transmission from 1700 to 2300 nm

The calculated MTF values are displayed Below and are verified at the maximum F/N and the best focus plane. The colored lines represent the F.O.V. starting in the center (0%) to the corner (100%)



POLYCHROMATIC DIFFRACTION MTF
WED AUG 6 2008
DATA FOR 1.7000 TO 2.3000 μm.
SURFACE: IMAGE
HORUS- HI-SUNI.L26.1700-2300.ZMX
CONFIGURATION 1 OF 1



Optical parameters for wavelength range 1.7 – 2.3 μm

Resolution	MTF > 40%@15lp/mm
Distortion	< 2.5%

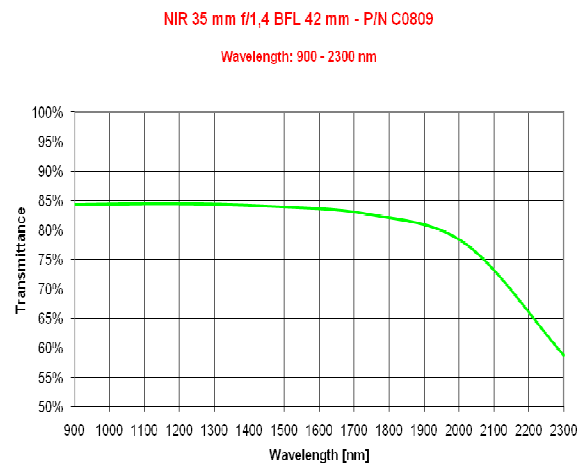
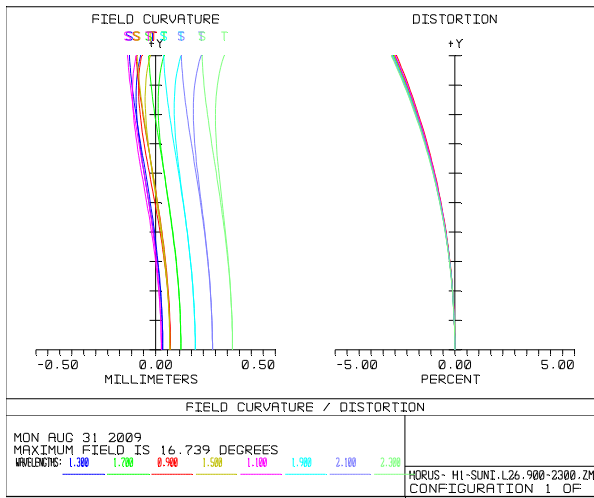
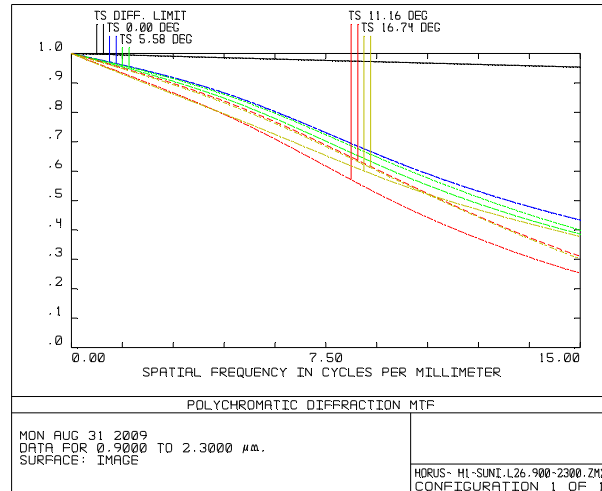
Transmission	> 58%
Antireflection Coating	R < 1%

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MTF, Field Curvature, Distortion and Transmission from 900 to 2300 nm

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Optical parameters for wavelength range 0.9 – 2.3 μm

Resolution	MTF > 25% @ 15lp/mm
Distortion	< 2.5%

Transmission	> 58%
Antireflection Coating	R < 1%