



LENS OB-SWIR25/1.4 – P/N C0808

General Description

This family of high resolution SWIR lenses image from 0.9 – 2.3 μm making them especially well-suited for PCB inspection, specialty laser applications, surveillance and alignment and tracking. A high F/N and excellent transmission characteristics allow superior imaging in these wavelengths of interest.



Optical and mechanical parameters

Focal length	25 mm	N. of elements	10
Image format (diagonal)	20.5 mm	Dimensions	Dia 80 x 95 mm
F.O.V. (diagonal)	44.6 degrees	Weight	0.7 Kg
Max aperture	F/N = 1.4	Options	
Object format	N.A.	Focus motorized	Upon request
Min working distance	1500 mm	Iris motorized	Upon request
Zoom value	N.A.	Zoom motorized	N.A.
Focus	Manual	Other mount type	Upon request
Iris	Max F/N = 1.4 Min F/N = 22	Customization	Upon request

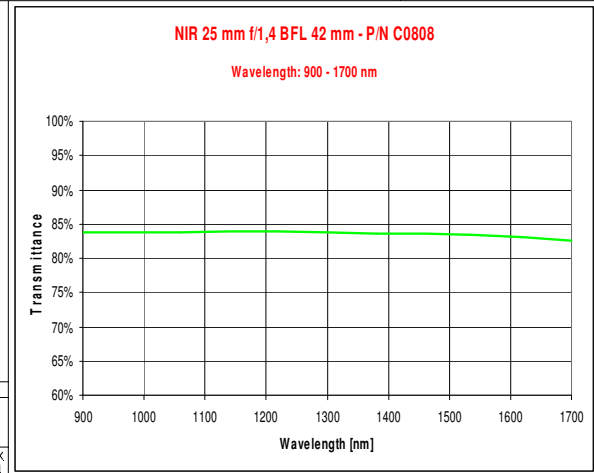
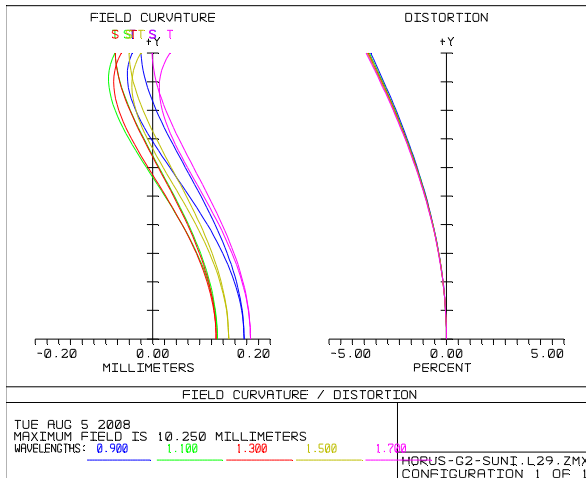
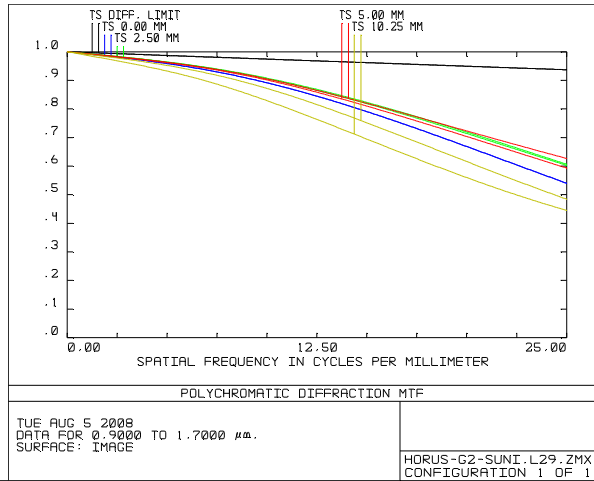
<i>P/N</i>	<i>wavelength range</i>	<i>mount type</i>	<i>note</i>
C0808.001	900-1700 nm	Canon	
C0808.002	900-1700 nm	Nikon	
C0808.003	900-1700 nm	M42 Screw	
C0808.005	1700-2300 nm	Canon	
C0808.006	1700-2300 nm	Nikon	
C0808.007	1700-2300 nm	M42 Screw	
C0808.010	900-2300 nm	Canon	
C0808.011	900-2300 nm	Nikon	
C0808.012	900-2300 nm	M42 Screw	

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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%)



Optical parameters for wavelength range 0.9 – 1.7 μm

Resolution	MTF > 45%@25lp/mm
Distortion	< 3.5%
Average axial chromatic aberration	< 0.0278 mm

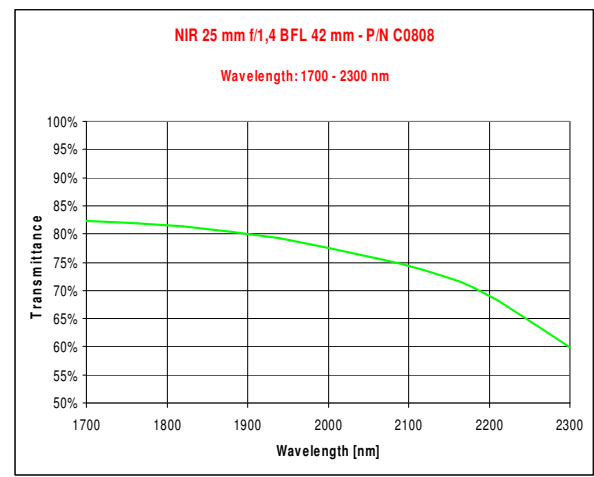
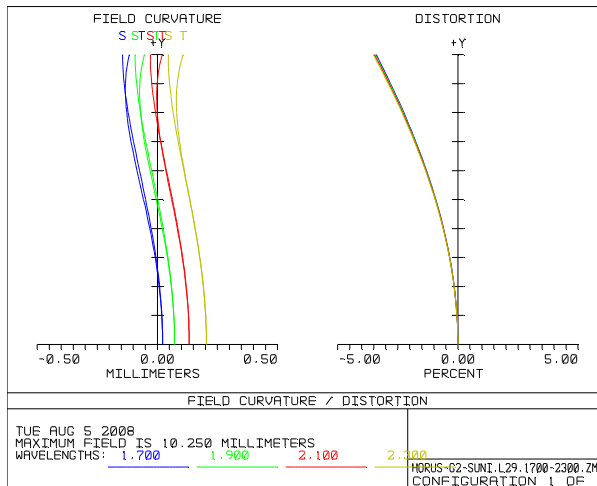
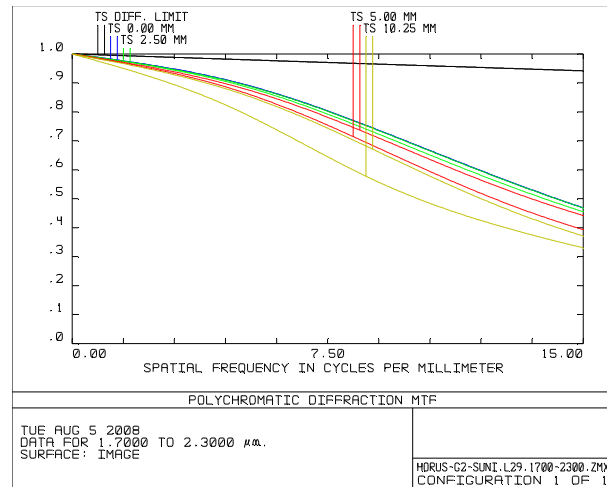
Transmission	> 82%
Antireflection Coating	$R \leq 1\%$
Vignetting	0%

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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%)



Optical parameters for wavelength range 1.7 – 2.3 μm

Resolution	MTF > 35% @ 15lp/mm
Distortion	< 3.5%

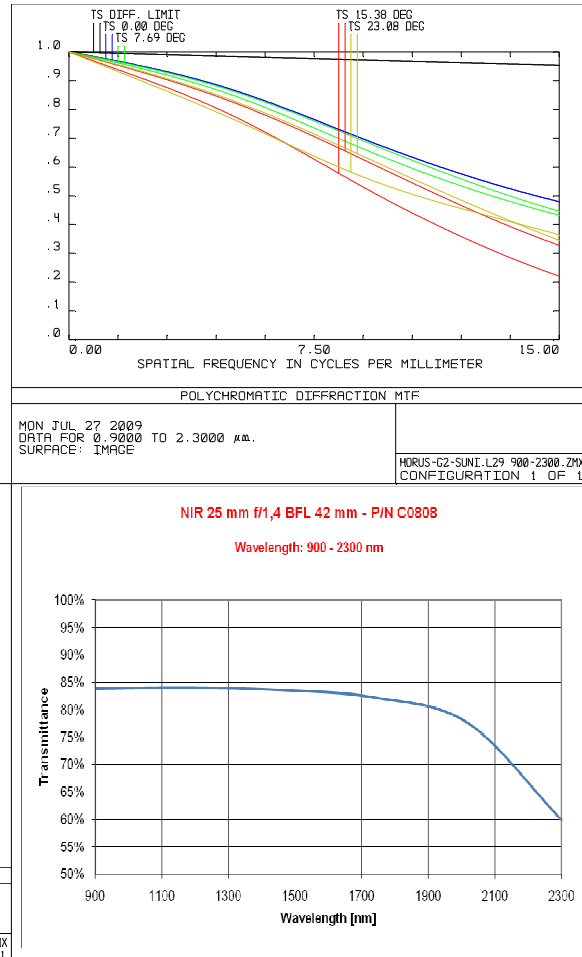
Transmission	> 60%
Antireflection Coating	R < 1%

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MTF, Field Curvature, Distortion and Transmission from 900 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%)



Optical parameters for wavelength range 0.9 – 2.3 μ m

Resolution	MTF > 25% @ 15lp/mm
Distortion	< 3.5%

Transmission	> 60%
Antireflection Coating	$R \leq 1\%$