

LENS OB-SWIR16/1.7 – P/N C1015

General Description

This family of high resolution SWIR lenses image from 0.9 – 2.3 μm making them especially well-suited for PCB inspection, special 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	16 mm	N. of elements	10
Image format (diagonal)	20.5 mm	Dimensions	Dia 64 x 65 mm
F.O.V. (diagonal)	65.29 degrees	Weight	300 gr
Max aperture	F/N = 1.7	Options	
Object format	N.A.	Motorized focus	Upon request
Min working distance	2 m	Motorized iris	Upon request
Zoom value	N.A.	Motorized zoom	N.A.
Focus	Manual	Other mount type	Upon request
Iris	Max F/N = 1.7 Min F/N = 11	Customization	Upon request

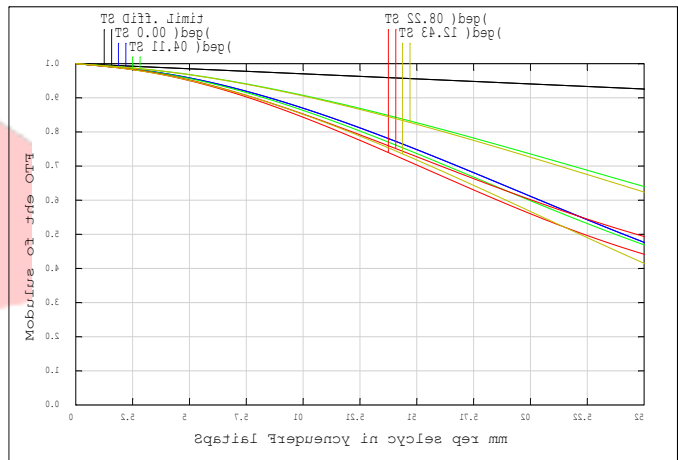
11

P/N	wavelength range	mount type	note
C1015.001	900-1700 nm	C-Mount	With iris diaphragm
C1015.005	1700-2300 nm		
C1015.010	900-2300 nm		
C1015.002	900-1700 nm	C-Mount	Without iris diaphragm
C1015.006	1700-2300 nm		
C1015.011	900-2300 nm		

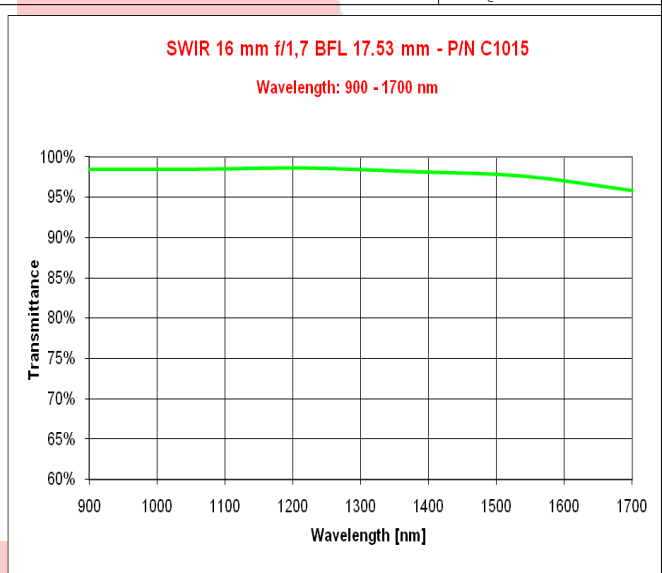
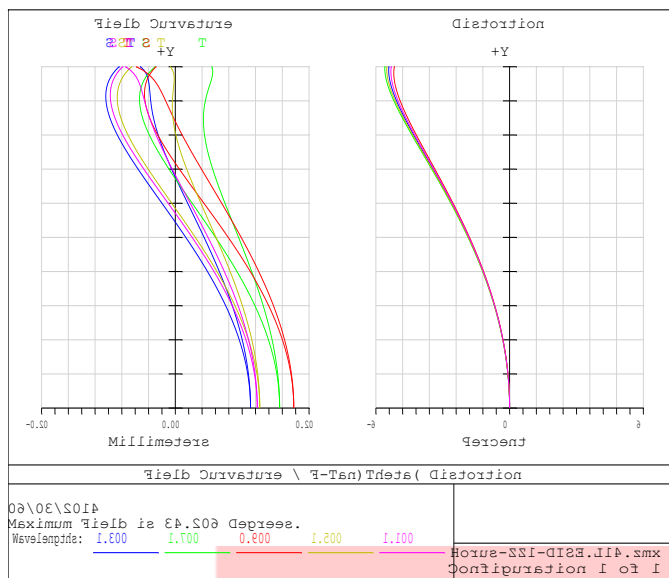
Specification are subject to change without notice

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 from the center (0%) to the corner (100%).



FTM notcarfid cismorhlop
 4102\30\60
 mm 0007.1 of 0009.0 rot atq
 exam: ecarig
 xms .411.E51D-1E-5uror
 I fo I noitarqifnoq



Optical parameters for wavelength range 0.9 – 1.7 μm

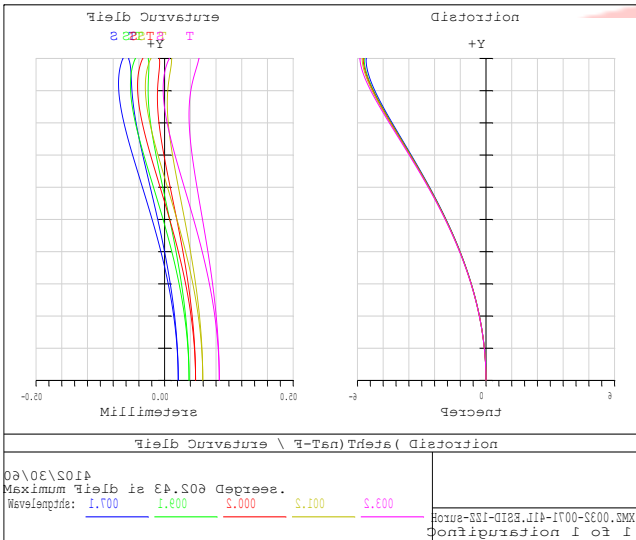
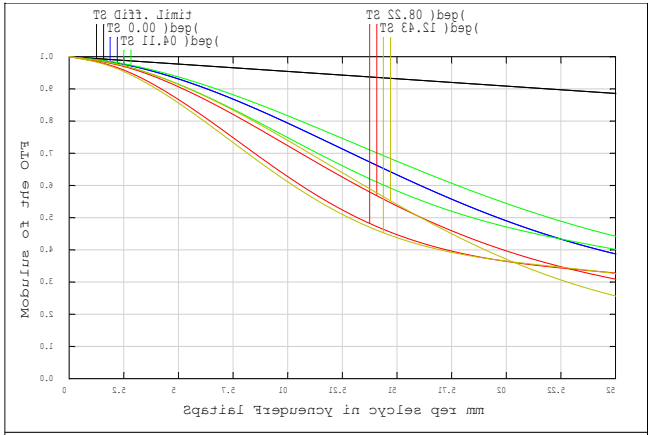
Resolution	MTF > 40% @25lp/mm
Distortion	< 6%
Average axial chromatic aberration	0.027mm

Glass transmission without coating	> 95%
Antireflection Coating	$R \leq 1\%$
Vignetting	<15%

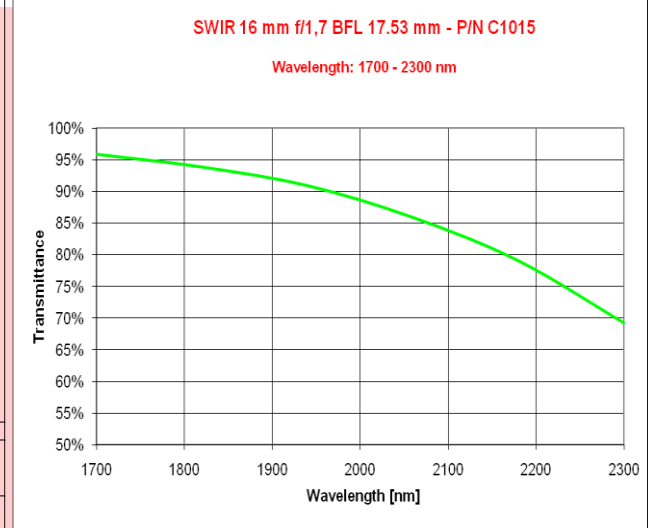
Specification are subject to change without notice

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 from the center (0%) to the corner (100%).



FTM noitarctid cimsrohcjof
 03\30\04
 Data for 1.0000 to 2.0000 μm.
 Results: Image



Optical parameters for wavelength range 1.7 – 2.3 μm

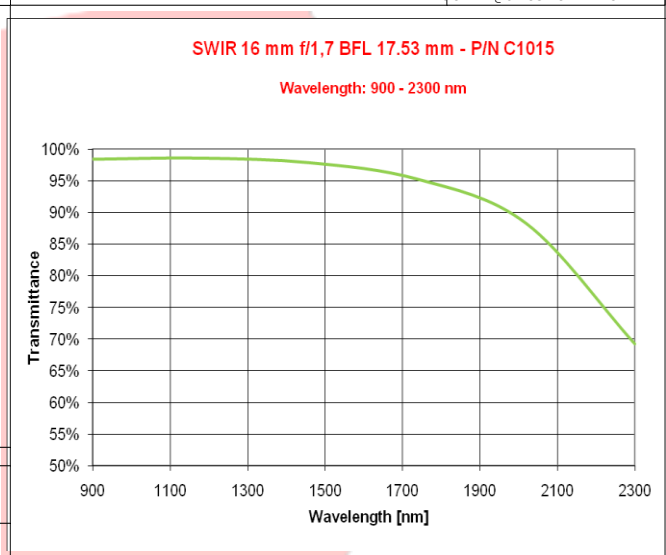
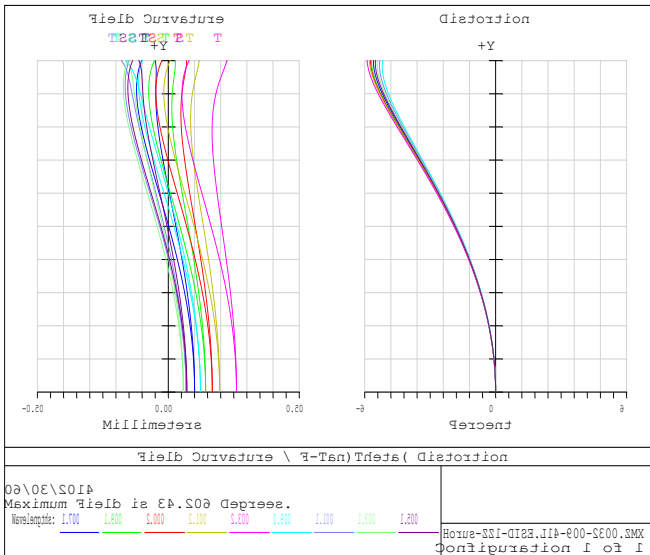
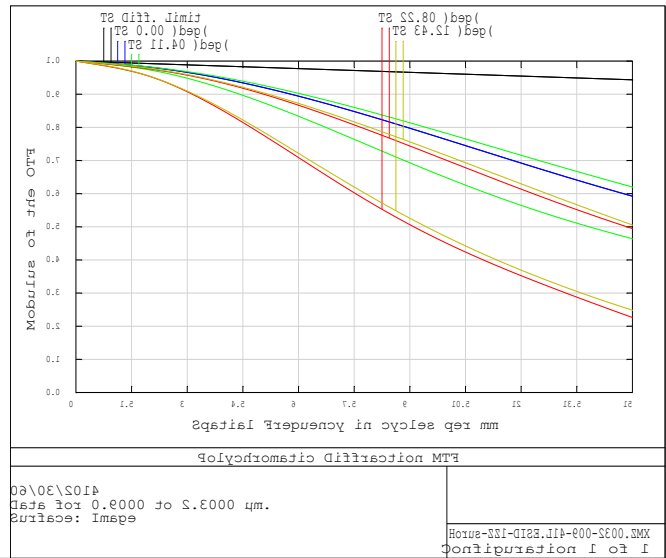
Resolution	MTF > 30% @25lp/mm
Distortion	< 6%

Glass transmission without coating	> 68%
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 from the center (0%) to the corner (100%).

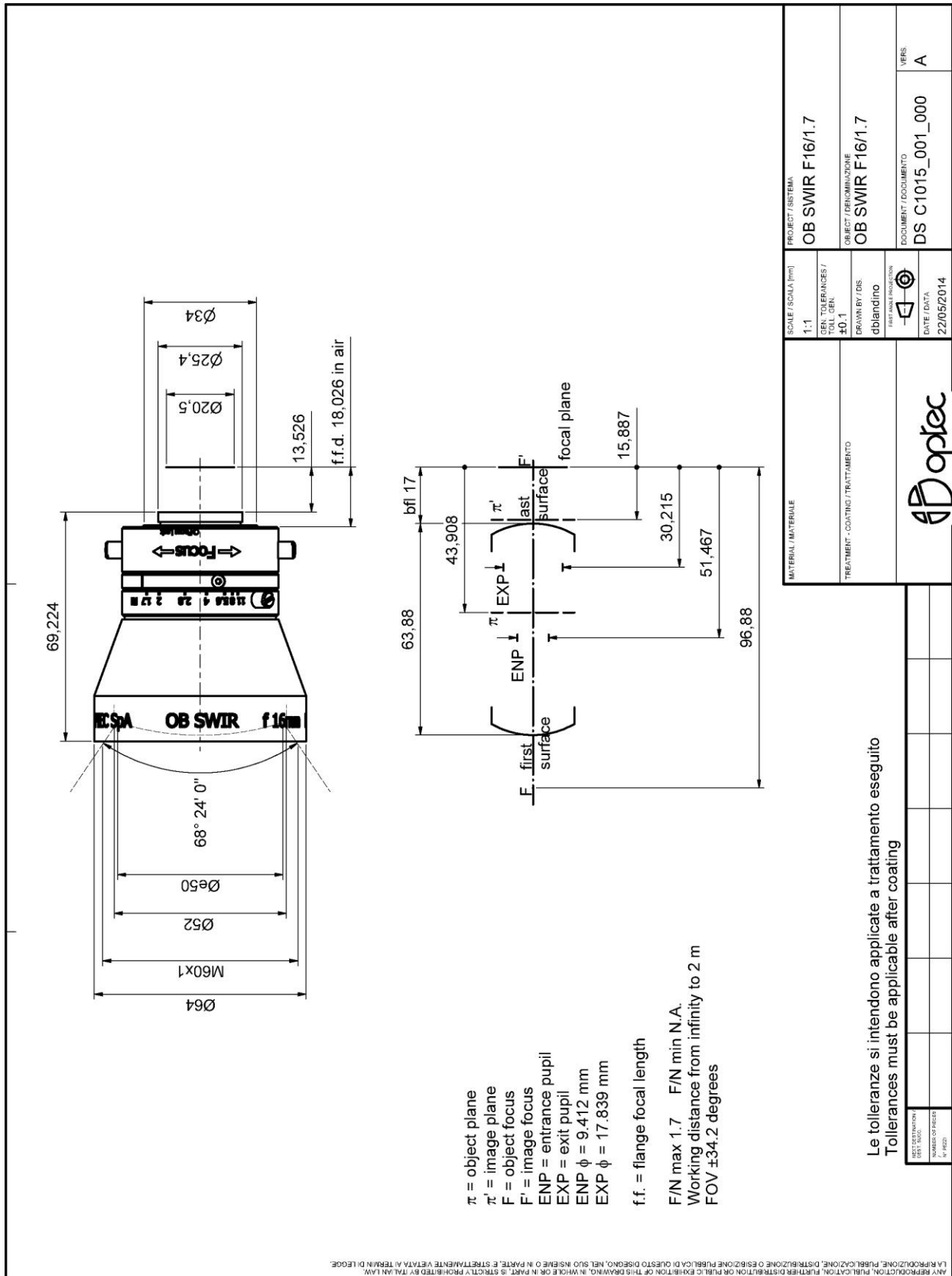


Optical parameters for wavelength range 0.9 – 2.3 μm

Resolution	MTF > 20% @ 15lp/mm
Distortion	< 6%

Glass transmission without coating	> 68%
Antireflection Coating	R ≤ 1%

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