

VEO_CS SAPPHIRE 1.67 × / F3.2

For TDI Line Scan

Key Features

- Optimized for 62.5 mm line scan sensors
- High resolution over the entire field
- Resolves 3.25 μm in object space
- With beam splitter for axial in-line illumination
- Low chromatic focal shift
- No relative illumination loss at the edge
- Best azimuth marking

Applications

- FPD (OLED / LCD) inspection
- PCB inspection
- High resolution defect detection
- Quality assurance systems

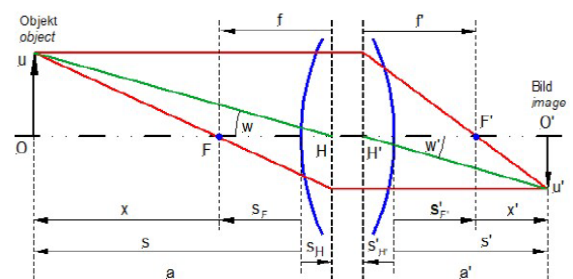


Performance

Parameter	Specification	Remarks
Magnification range	1.67(1.57...1.77)	
F/# range	F/3.2 ... F/5.6	Optimum F/3.2
Numerical aperture	0.103	
Max. sensor size [mm]	62.5	
Infinite F/#	F/3.2	
Focal length [mm]	88	
Depth of field [μm]	57.8	@ P. CoC 10 μm
Distortion	< 0.05%	
Wavelength [nm]	400~1000	Visible ... NIR
Working distance [mm]	63.4(64.4...65.4)	B/S ... Object
Beam splitter size	25 × 25 × 80	
Total length [mm]	374.9 ± 2	from Object to Sensor
Interface	V70 mount	0.75 pitch
Iris	Changeable	
Relative illumination	Less than 5%	
Weight [g]	935	

Optical Parameters

Contents	Parameter	Value
Chief Ray Angle (Max.) in object plane	CRA	7.3°
Effective focal length	f'eff [mm]	87.80
Front focal length	SF [mm]	-11.85
Back focal length	S'F' [mm]	57.25
Principal plane distance	HH' [mm]	0.16
Pupil magnification	$\beta'P$	1.10
Entrance pupil position	SEP [mm]	68.13
Exit pupil position	S'AP [mm]	-39.13
Vertex width	Σd [mm]	106.65



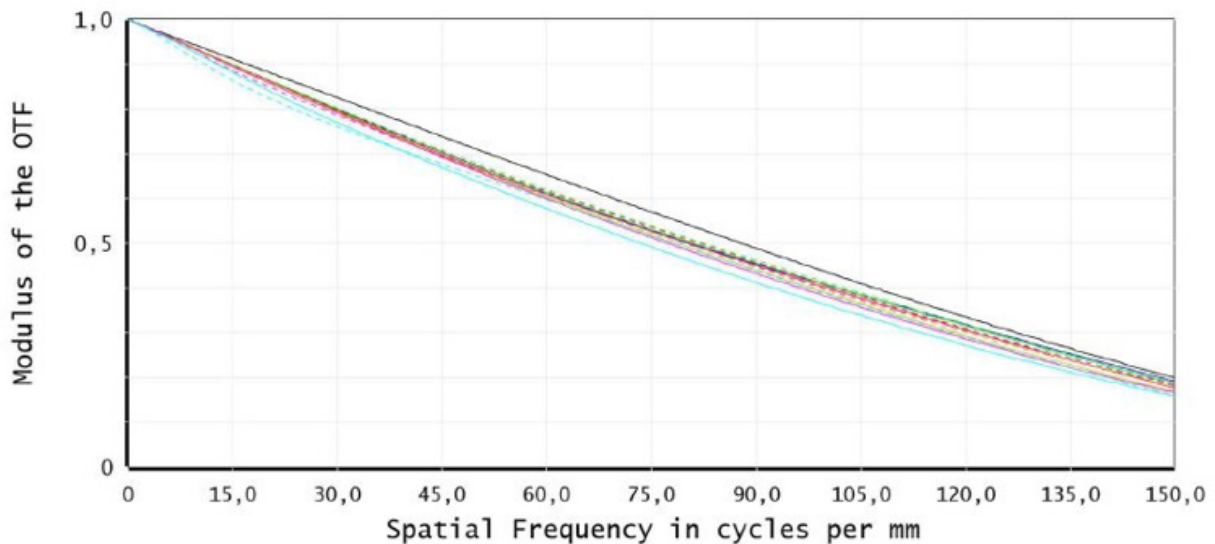
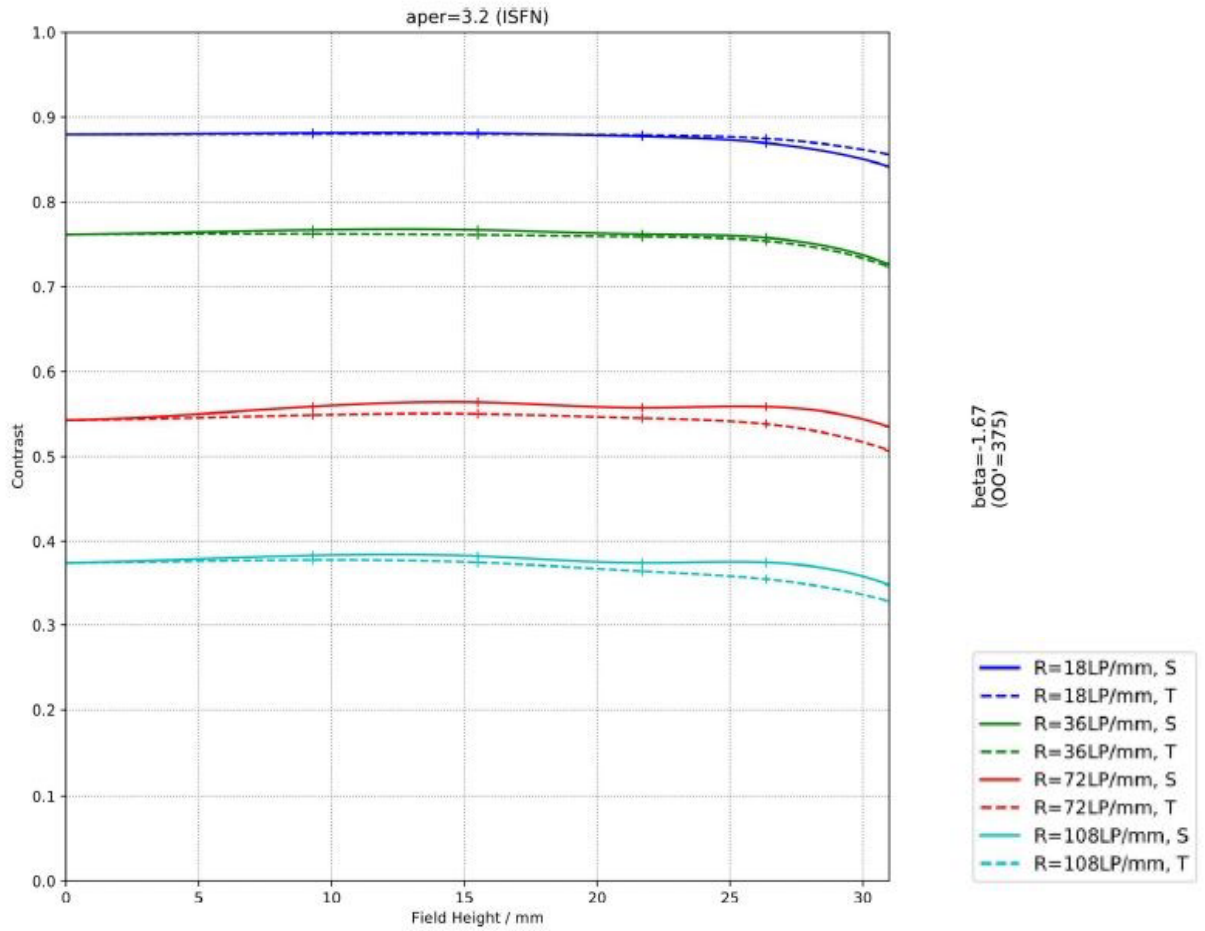
VIEWWORKS

www.viewworks.com

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MTF



— Diff. Limit-Tangential	--- Diff. Limit-Sagittal	— 0,00 mm-Tangential	--- 0,00 mm-Sagittal
— 9,30 mm-Tangential	--- 9,30 mm-Sagittal	— 15,50 mm-Tangential	--- 15,50 mm-Sagittal
— 21,70 mm-Tangential	--- 21,70 mm-Sagittal	— 26,40 mm-Tangential	--- 26,40 mm-Sagittal
— 31,00 mm-Tangential	--- 31,00 mm-Sagittal		

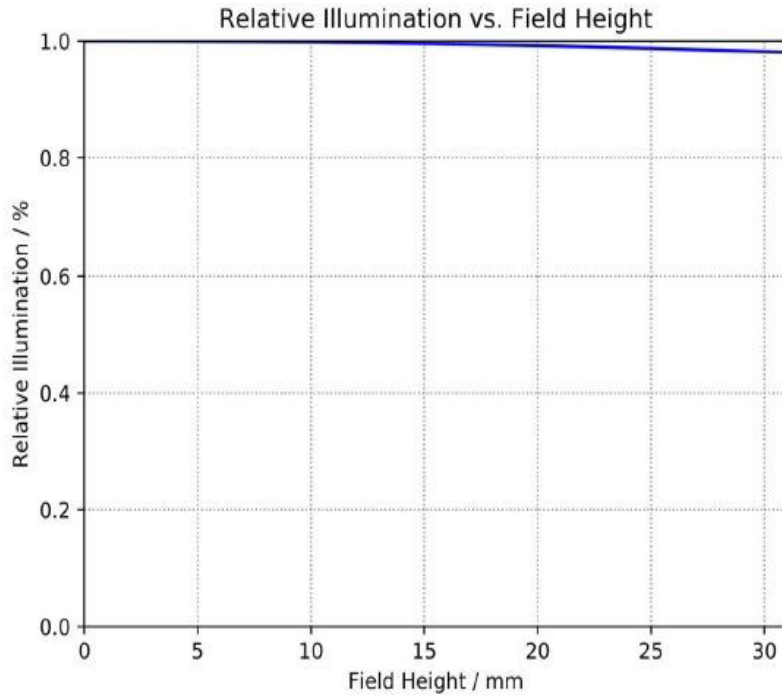
Polychromatic Diffraction MTF

Data for 0.4360 to 0.6450 μm

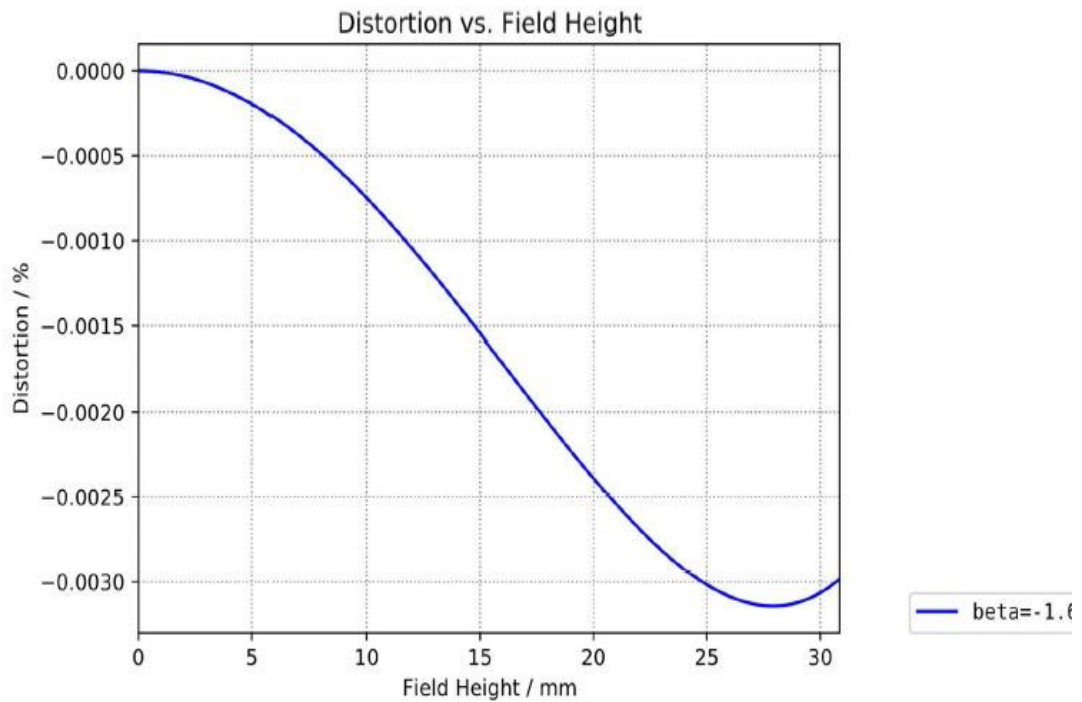
Surface: Image (image level)

Legend items refer to Field positions

Relative Illumination



Distortion



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Dimensions

Unit: mm

