

VEO_CS DIAMOND 2.5 × / F2.9

For TDI Line Scan

Key Features

- Optimized for 62.5 mm line scan sensors
- High resolution over the entire field
- Resolves 2.77 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

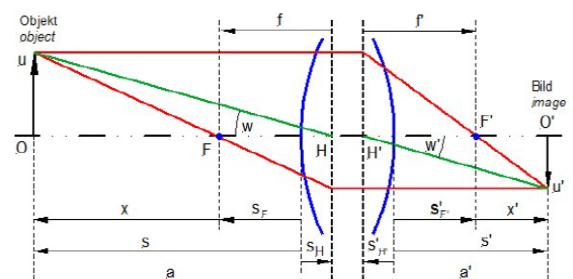


Performance

Parameter	Specification	Remarks
Magnification range	2.5 (2.4 ... 2.6)	
F/# range	F/2.9 ... F/5.6	Optimum F/2.9
Numerical aperture	0.121	
Max. sensor size [mm]	62.5	
Infinite F/#	F/2.9	
Focal length [mm]	105	
Depth of field [μm]	32.48	@ P. CoC 10 μm
Distortion	< 0.05%	
Wavelength [nm]	400 ... 1000	Visible ... NIR
Working distance [mm]	64.6(65.6...63.6)	B/S ... Object
Beam splitter size	25 × 25 × 80	
Total length [mm]	529.1 ± 2	from Object to Sensor
Interface	V70 mount	0.75 pitch
Iris	Changeable	
Relative illumination	Less than 5%	
Weight [g]	1350	

Optical Parameters

Contents	Parameter	Value
Chief Ray Angle (Max.) in object plane	CRA	4.8°
Effective focal length	f'eff [mm]	105.12
Front focal length	SF [mm]	-23.56
Back focal length	S'F' [mm]	58.27
Principal plane distance	HH' [mm]	13.75
Pupil magnification	$\beta'P$	1.04
Entrance pupil position	SEP [mm]	77.80
Exit pupil position	S'AP [mm]	-50.76
Vertex width	Σd [mm]	142.17



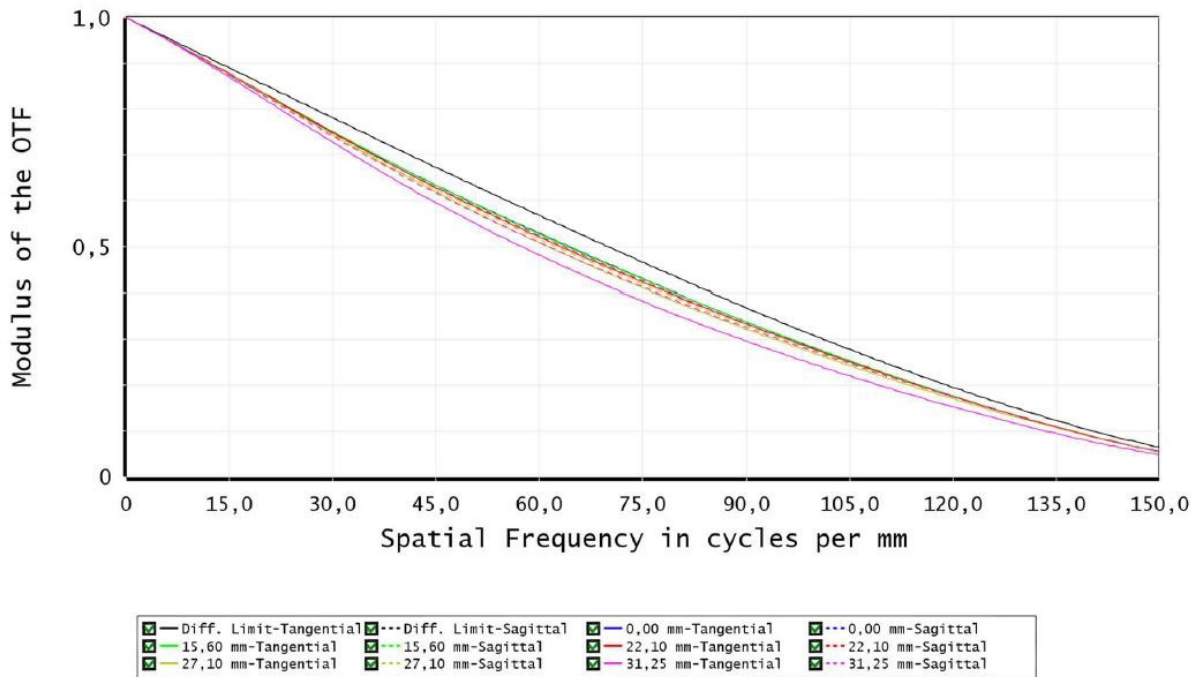
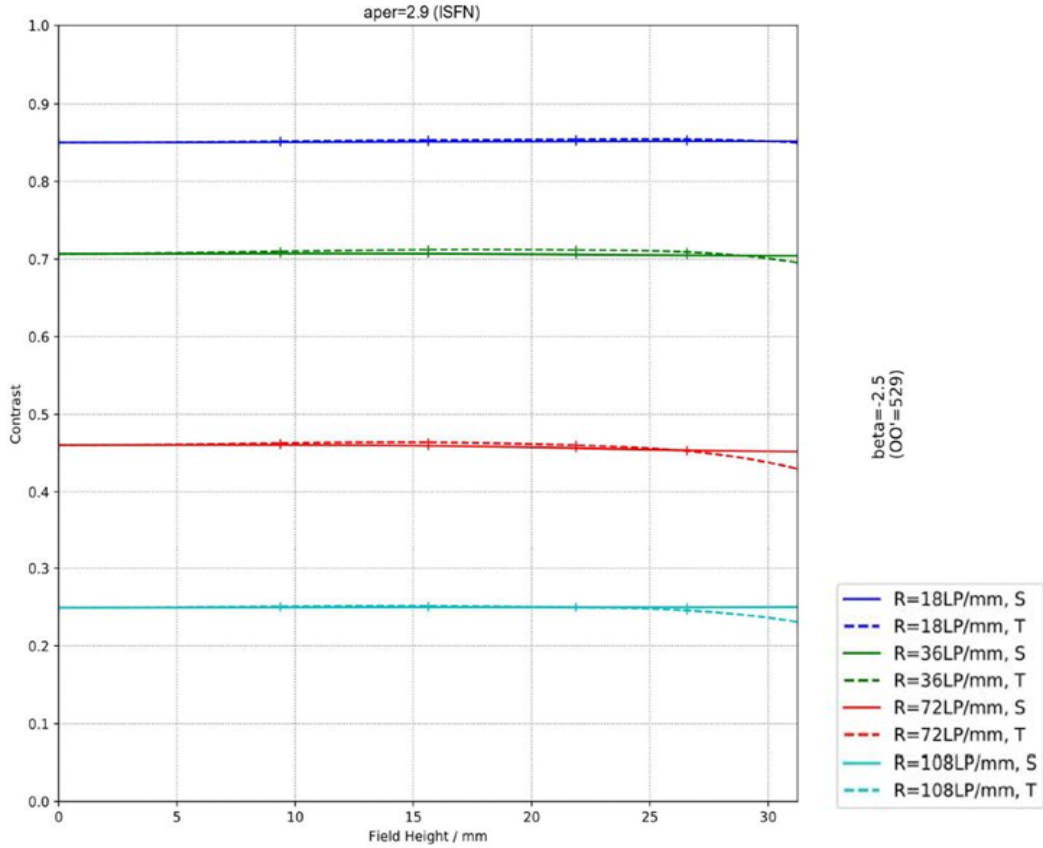
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MTF



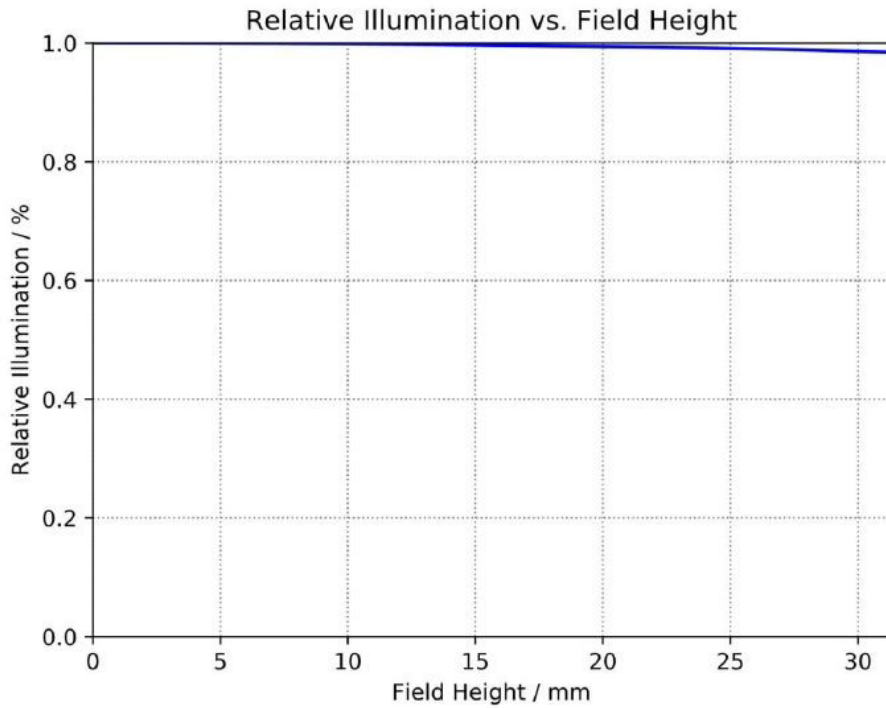
Polychromatic Diffraction MTF

Data for 0.4360 to 0.6450 μm

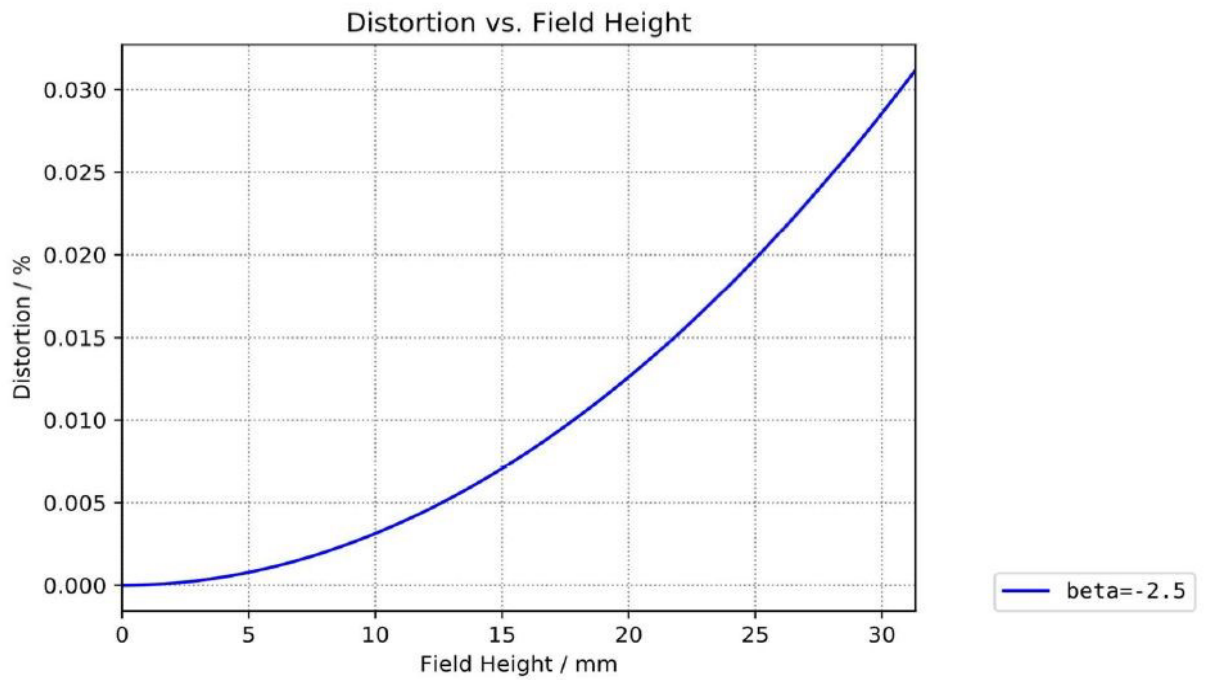
Surface: Image (image level)

Legend items refer to Field positions

Relative Illumination



Distortion



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Dimensions

Unit: mm

