

VEO_CS DIAMOND 3.33 × / F2.3

For TDI Line Scan

Key Features

- Optimized for 62.5 mm line scan sensors
- High resolution over the entire field
- Resolves 2.1 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

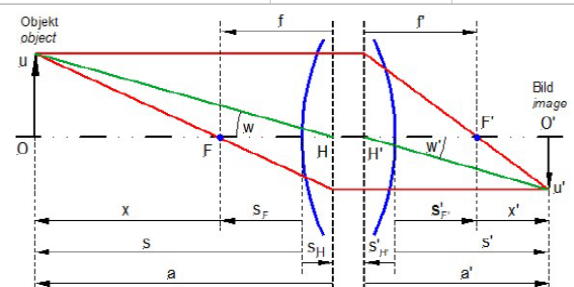


Performance

Parameter	Specification	Remarks
Magnification range	3.33 (3.2 ... 3.4)	
F/# range	F/2.3 ... F/4.0	Optimum F/2.3
Numerical aperture	0.157	
Max. sensor size [mm]	62.5	
Infinite F/#	F/2.3	
Focal length [mm]	116	
Depth of field [μm]	18.4	@ P. CoC 10 μm
Distortion	< 0.05%	
Wavelength [nm]	400 ... 1000	Visible ... NIR
Working distance [mm]	55.5(56.5...54.5)	B/S ... Object
Beam splitter size	25 × 25 × 80	
Total length [mm]	653.8 ± 2	from Object to Sensor
Interface	V70 mount	0.75 pitch
Iris	Changeable	
Relative illumination	Less than 5%	
Weight [g]	2260	

Optical Parameters

Contents	Parameter	Value
Chief Ray Angle (Max.) in object plane	CRA	3.5°
Effective focal length	f'eff [mm]	116.14
Front focal length	SF [mm]	-21.64
Back focal length	S'F' [mm]	33.40
Principal plane distance	HH' [mm]	-0.42
Pupil magnification	$\beta'P$	0.97
Entrance pupil position	SEP [mm]	98.21
Exit pupil position	S'AP [mm]	-79.13
Vertex width	Σd [mm]	176.80



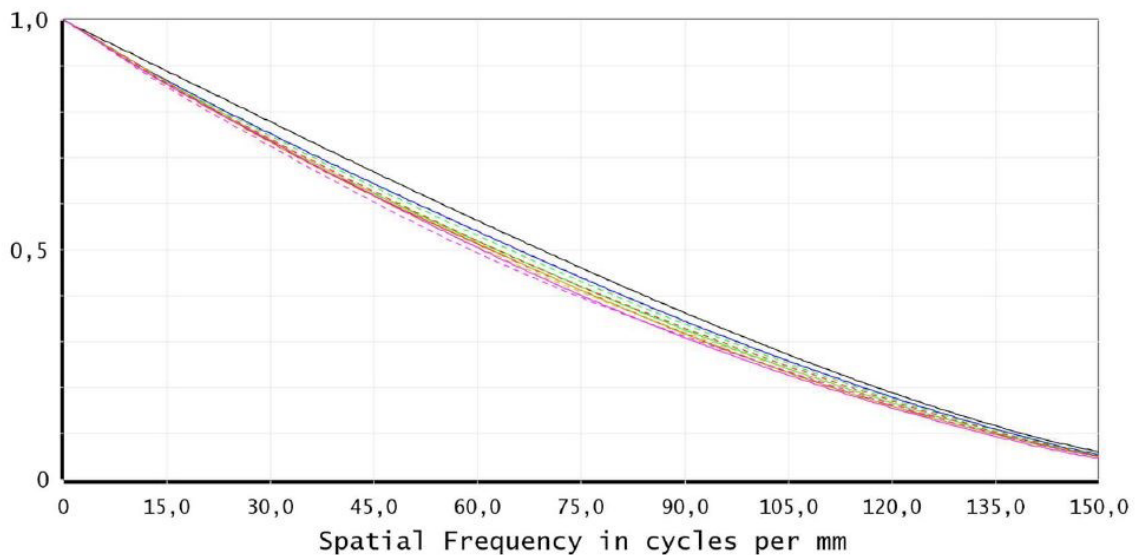
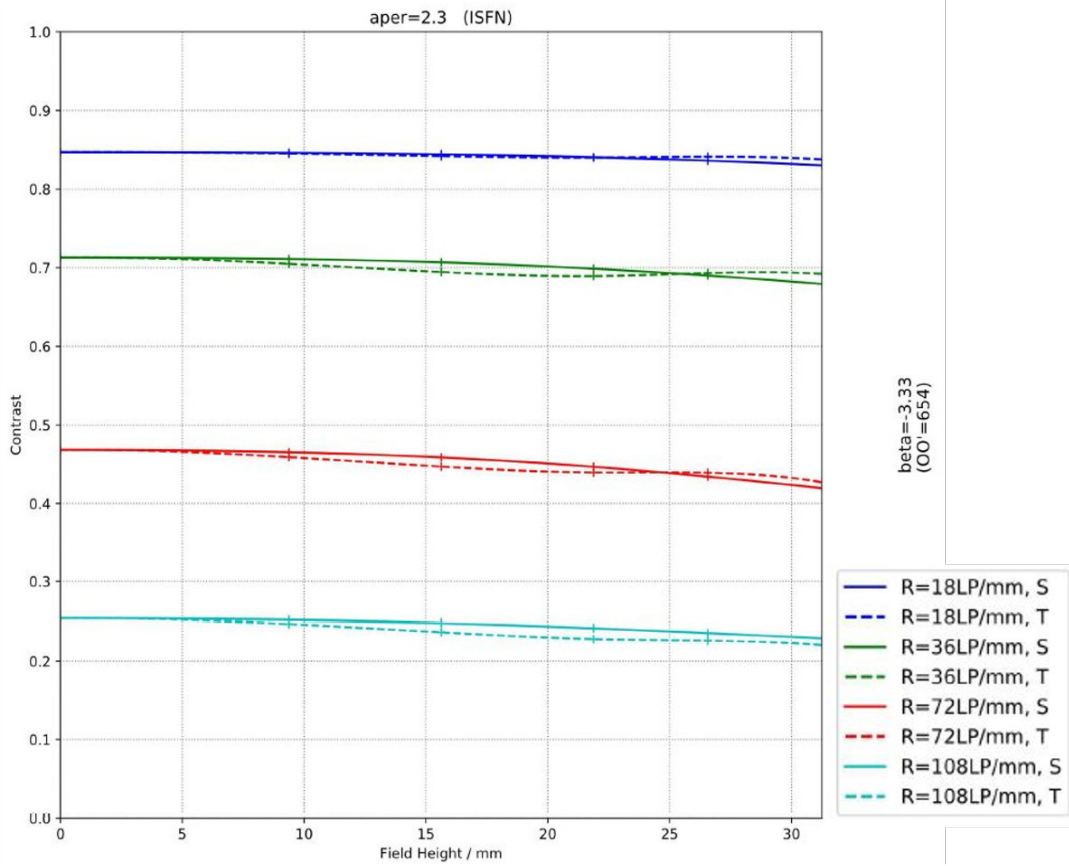
VIEWWORKS

vision.viewworks.com

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MTF



— Diff. Limit-Tangential	--- Diff. Limit-Sagittal	— 0,00 mm-Tangential	--- 0,00 mm-Sagittal
— 15,60 mm-Tangential	--- 15,60 mm-Sagittal	— 22,10 mm-Tangential	--- 22,10 mm-Sagittal
— 27,10 mm-Tangential	--- 27,10 mm-Sagittal	— 31,25 mm-Tangential	--- 31,25 mm-Sagittal

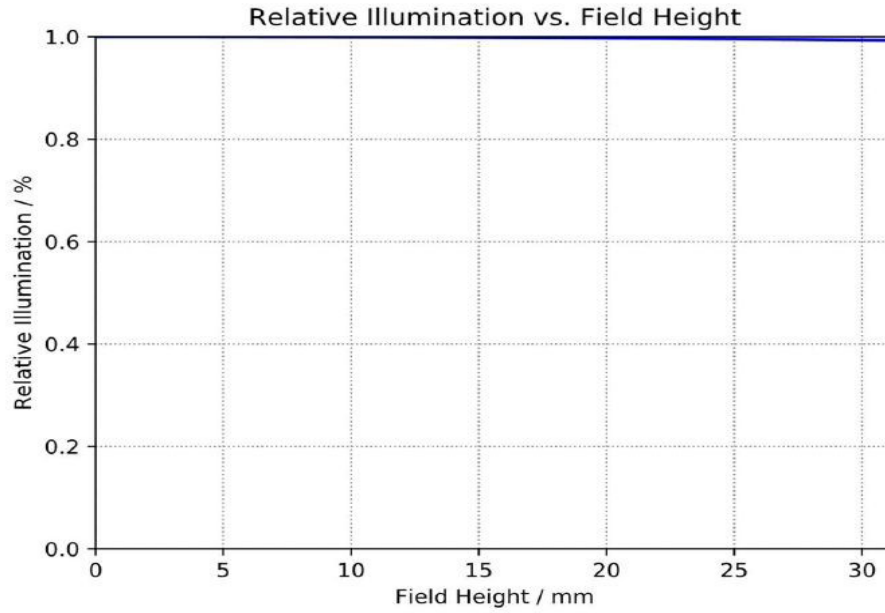
Polychromatic Diffraction MTF

Data for 0.4360 to 0.6450 μm

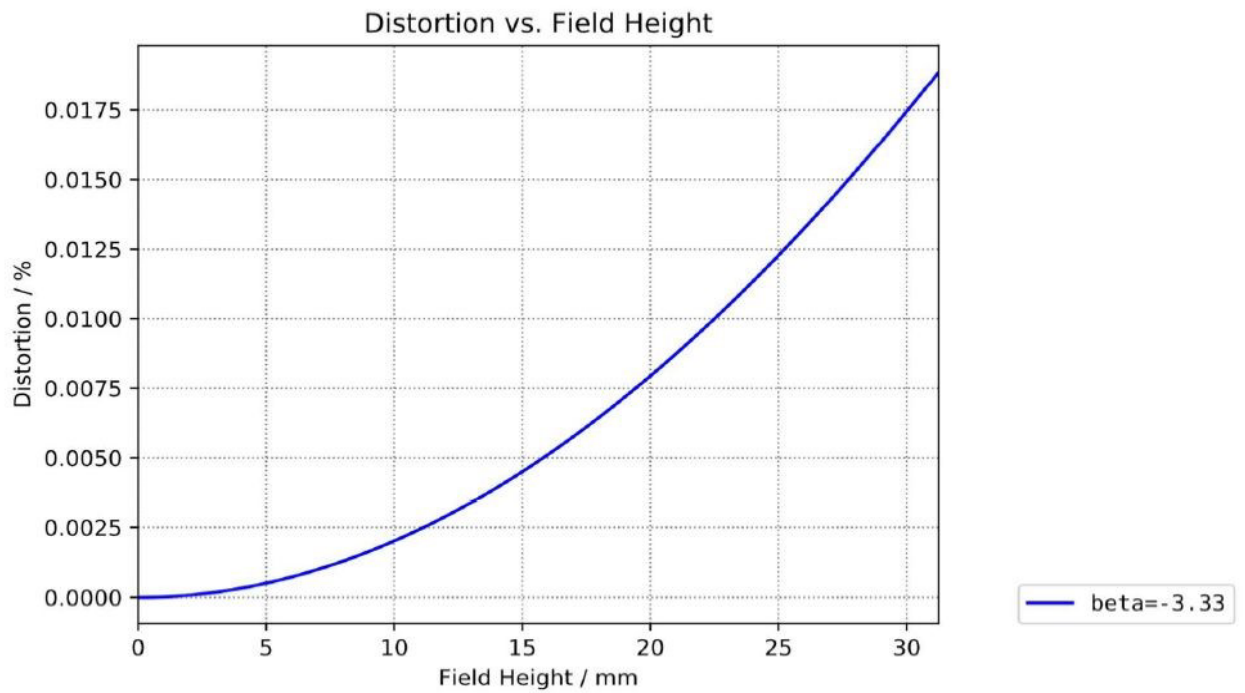
Surface: Image (image level)

Legend items refer to Field positions

Relative Illumination



Distortion



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Dimensions

Unit: mm

