VEO_CS SAPPHIRE 1.67× / F3.2

For TDI Line Scan

Key Features

- Optimized for 62.5 ㎜ line scan sensors
- High resolution over the entire field
- Resolves 3.25 ㎛ 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

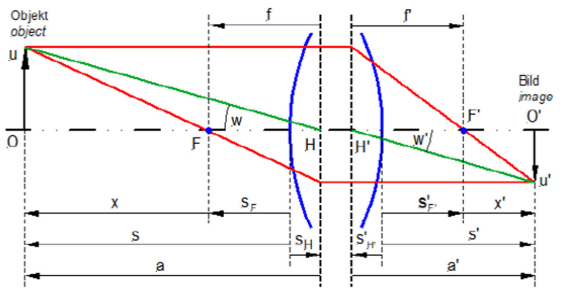
- FPD (OLED / LCD) inspection
- PCB inspection
- High resolution defect detection
- Quality assurance systems

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	0.09	
Max. sensor size [㎜]	62.5	
Infinite F/#	F/3.2	
Focal length [㎜]	88	
Depth of field [㎛]	57.8	@ P. CoC 10um
Distortion	< 0.05%	
Wavelength [㎚]	400~1000	Visible ... NIR
Working distance [㎜]	63.4(64.4...65.4)	B/S ... Object
Beam splitter size	25 × 25 × 80	
Total length [㎜]	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 [㎜]	87.80
Front focal length	SF [㎜]	-11.85
Back focal length	S'F' [㎜]	57.25
Principal plane distance	HH' [㎜]	0.16
Pupil magnification	β'P	1.10
Entrance pupil position	SEP [㎜]	68.13
Exit pupil position	S'AP [㎜]	-39.13
Vertex width	Σd [㎜]	106.65



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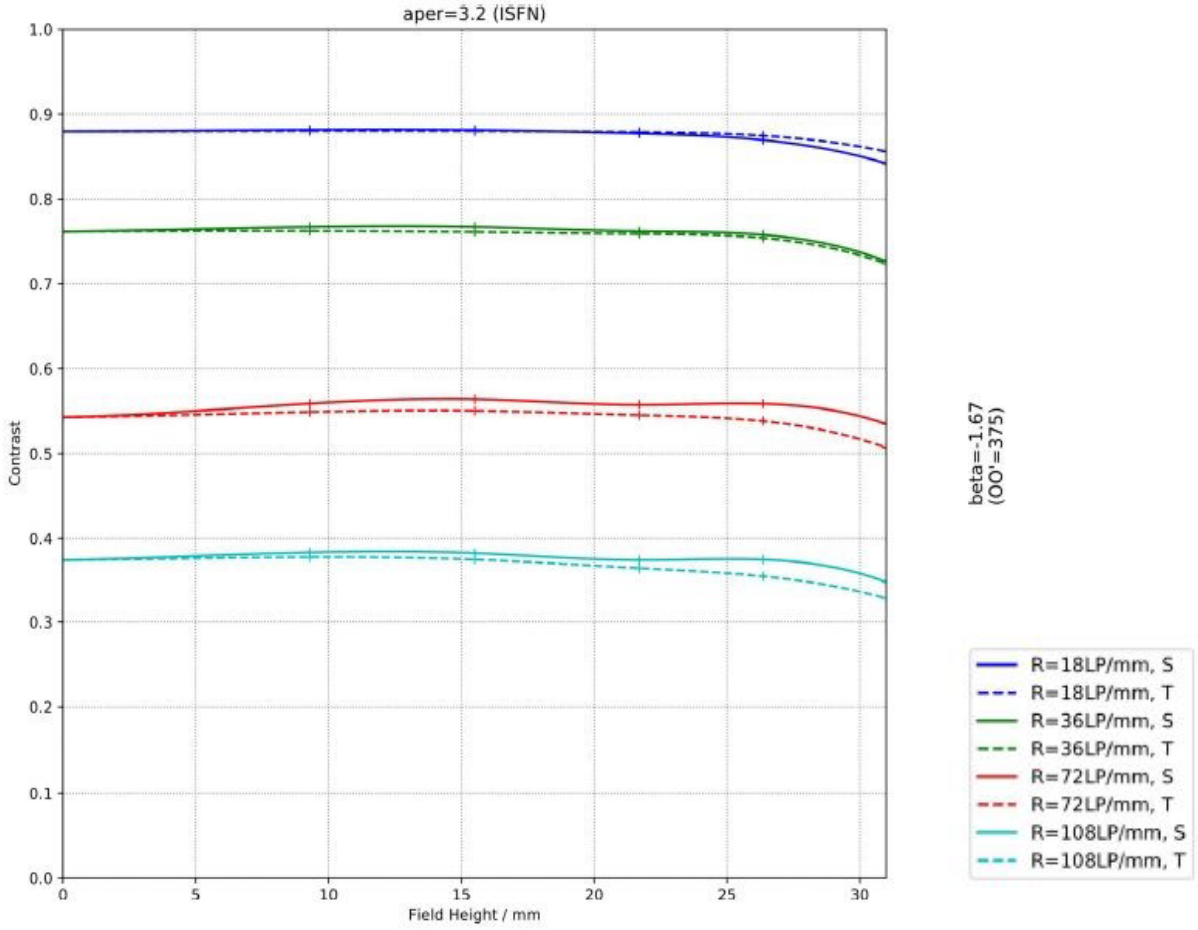
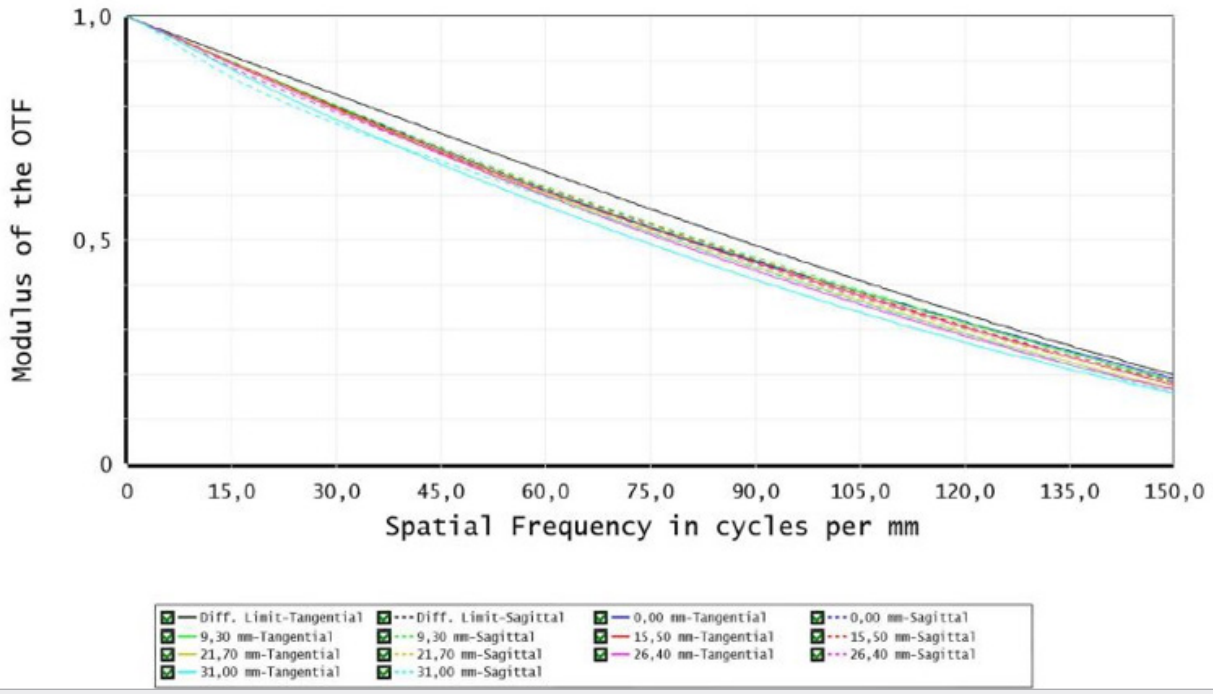
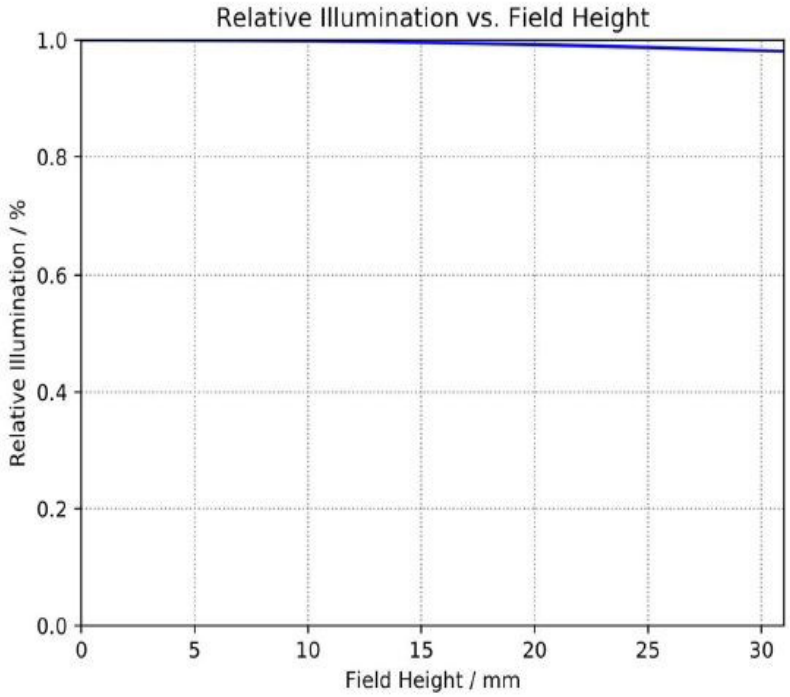
MTF



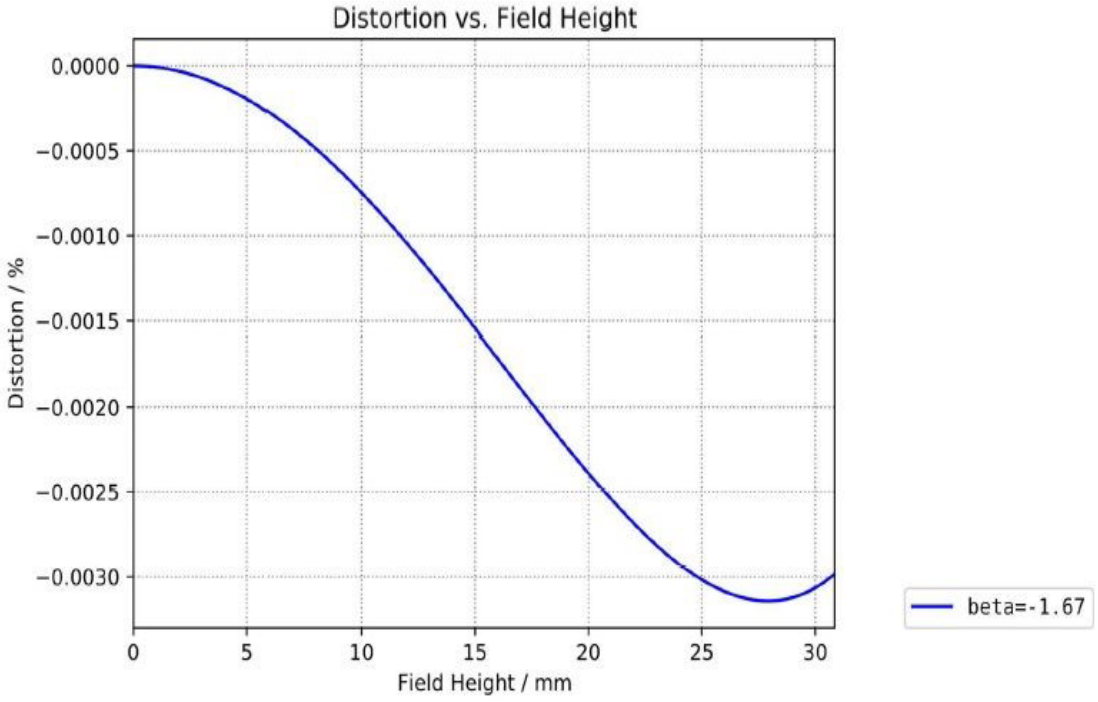


Polychromatic Diffraction MTF
Data for 0.4360 to 0.6450 µm
Surface: Image (image level)
Legend items refer to Field positions

Relative Illumination

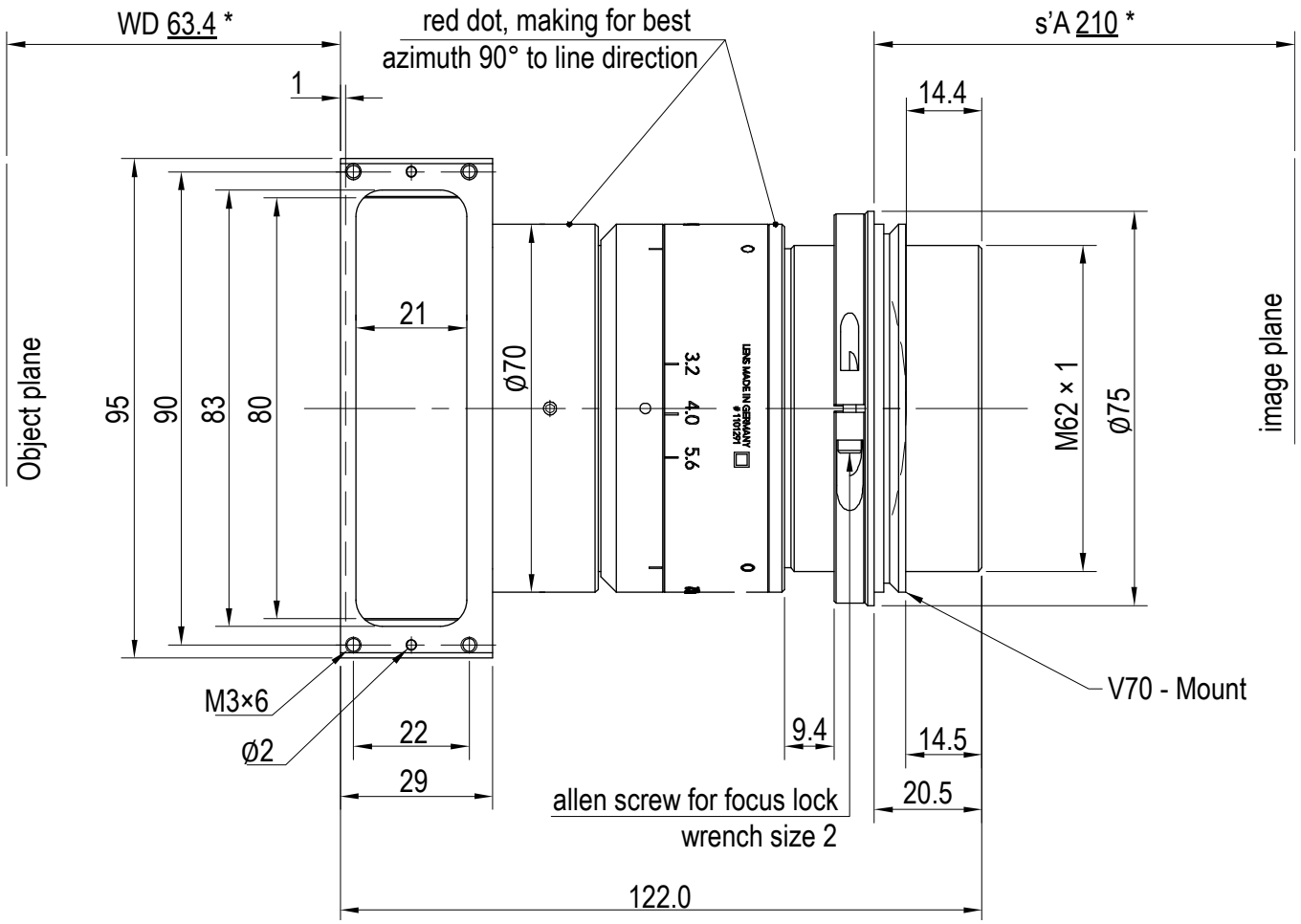


Distortion



Dimensions

Unit: mm



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