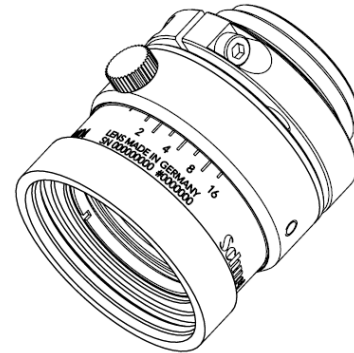# Xenon-TOPAZ
XN 2,0/25-0901

Xenon-TOPAZ 2,0/25-0901

In accordance with the sensitivity of modern 1.1" CCD and CMOS sensors, the Xenon-TOPAZ lenses are designed for sensors up to 12 megapixel, corrected and broadband-coated for the spectral range of 400 – 1000 nm (VIS + NIR).

Even under production and / or extreme environmental conditions, the robust mechanical design with lockable focus and iris setting mechanism guarantees reliable continuous use in which the set optical parameters remain in place.

The lens is optimized for infinity making it perfectly suited for applications with long working distance like traffic or surveillance.

Xenon-TOPAZ 2,0/25-0901

Key Features

- High-resolution optics for up to 12 megapixel sensors
- Highest optical imaging performance even with smallest pixel sizes
- Broadband coating (400 - 1000 nm)
- Compact and low weight
- Vibration insensitivity for stable imaging performance
- Focus and iris setting lockable

Applications

- Traffic
- High-End Surveillance
- Robot Vision
- 3D measurement
- Machine Vision and other imaging applications
- Food processing

Technical Specifications	Xenon-TOPAZ 2,0/25-0901
F# range	2.0 – 16
Focal length	24.2 mm
Image circle	17.6 mm
Transmission	400 - 1000 nm
Interface	C-Mount
Weight	tbd.
Filter thread	M30.5 x 0.5
Code no.	1081347

Contact

Pyramid Imaging
945 E. 11th Ave.
Tampa, FL 33605
sales@pyramidimaging.com
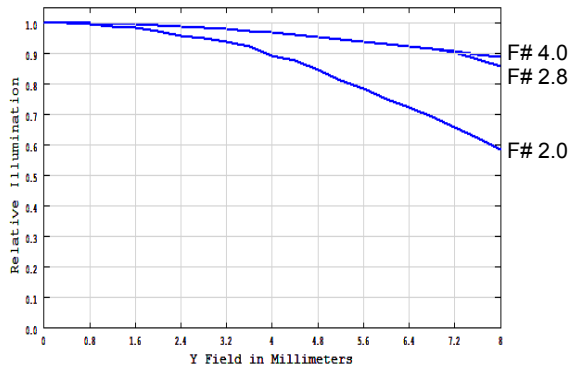Tel: +1 (813) 984-0125
Fax: +1 (867) 874-9521
https://pyramidimaging.com

Xenon-TOPAZ 2.0/25-0002
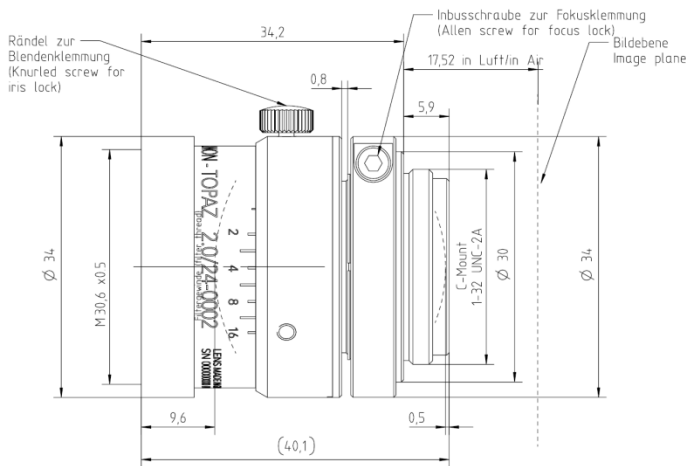
Xenon-TOPAZ 2,0/25   (λ = 555 nm)

f' = 24.2 mm β'_P = 1.27

$\varnothing_{EP}$ = 11.7 mm s_{EP} = 14.78 mm

s'_F = 12.1 mm s'_{AP} = -18.74 mm

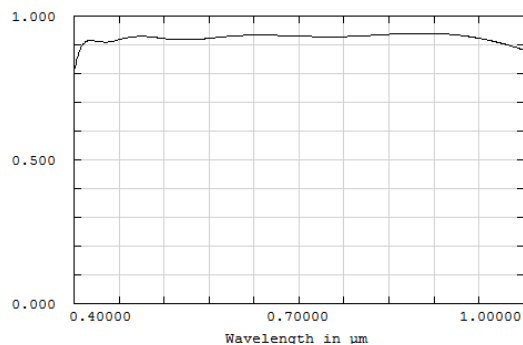HH' = -2.0 mm $\square d$ = 30.14 mm

Relative Illumination

The relative illumination is shown for the given F-Numbers over the field of the sensor and referenced to the center of the sensor.
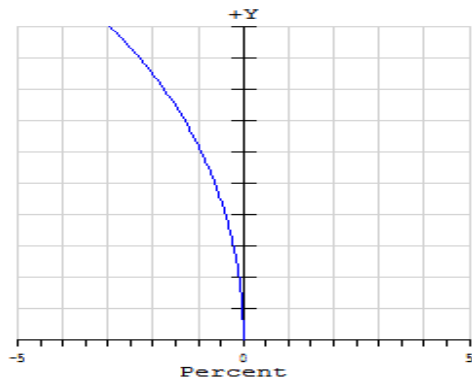
Distortion

Distortion is shown for the given magnification of ß' = 0.
Positive values indicate pincushion distortion and negative values barrel distortion.

Transmittance

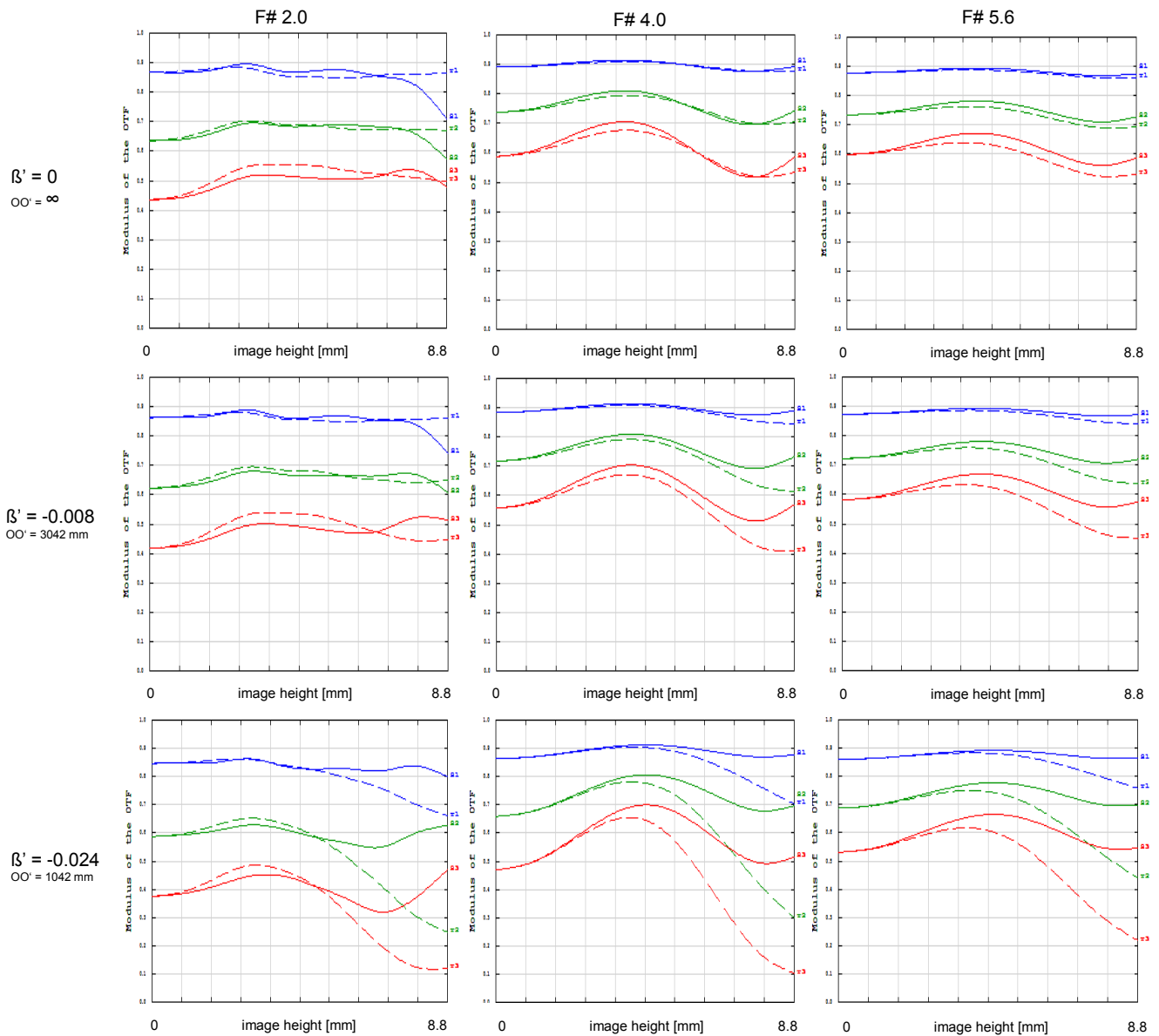Relative spectral transmittance is shown with reference to wavelength.

Pyramid Imaging

Xenon-TOPAZ 2,0/25-0002

MTF with reference to image height for visible spectrum

Wavelength λ	[nm]:	425	475	525	575	625	675
Spectral weighting	[%]:	7.3	17.3	21.7	23.2	18.9	11.6
Spatial frequency R	[1/mm]:	25	50	75			
Image circle	[mm]:	17.6					

radial — — — — —
tangential — — — — —

F# 2.0   F# 4.0   F# 5.6

ß' = 0, OO' = ∞
ß' = -0.008, OO' = 3042 mm
ß' = -0.024, OO' = 1042 mm

MTF with reference to image height for NIR spectrum

Wavelength λ	[nm]:	810	830	850	870	890
Spectral weighting	[%]:	0.5	0.9	1.0	0.9	0.5
Spatial frequency R	[1/mm]:	25	50	75		
Image circle	[mm]:	17.6				

radial — — — — —
tangential — — — — —