Xenon-RUBY Lens

Xenon-RUBY 2.2/25

The Xenon-Ruby lens is optimized in accordance with the sensitivity of modern image sensors up to 1 / 1.8“ (9mm). This lens is the perfect trade-off between price and performance: By having a practice-oriented speed of 2.2, a very high optical performance is achieved.
Even under production and / or extreme 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.

Xenon-RUBY 2.2/25

Key Features

- Robust mechanics for rough industrial environment
- Compact design and low weight
- Focus and iris setting lockable
- High resolution optics
- Transmission 400 - 1000 nm (VIS - NIR)
- Designed for Sensors up to 1 / 1.8” (9mm)

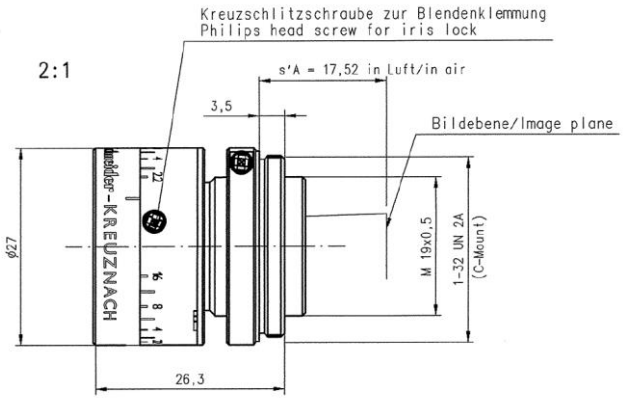
Applications

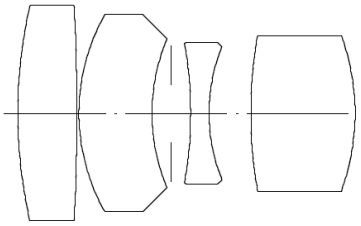
- Traffic
- Security/Surveillance
- Machine vision and other imaging applications
- Quality control
- Surface inspection
- 2D / 3D Measurement

Technical Specifications

F-stop range	2.2 - 16
Focal length	25.2 mm
Image circle	9 mm
Transmission	400 - 1000 nm
Interface	C-Mount
Filter Thread	M25.5 x 0.5
Weight	29 gr.

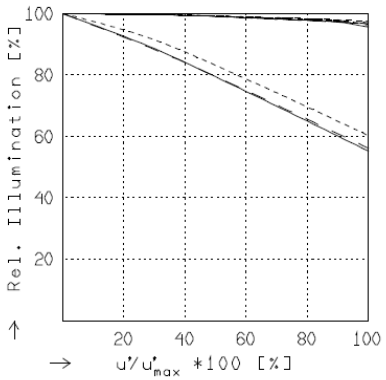
Xenon-RUBY 2.2/25





XR 2.2/25

f'	=	25.2 mm	ß'p	=	1.162
s_F	=	-14.5 mm	s_{EP}	=	7.2 mm
$s'_{F'}$	=	16.6 mm	s'_{AP}	=	-12.7 mm
HH'	=	-2.0 mm	Σ d	=	17.4 mm

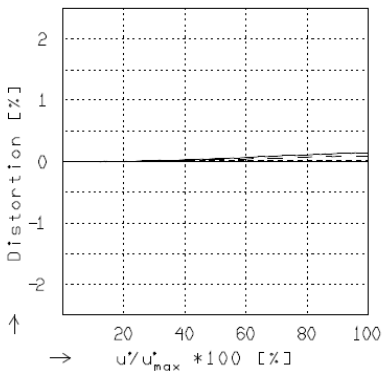


RELATIVE ILLUMINATION

The relativ illumination is shown for the given focal distances or magnifications.

f / 2.3 f / 4.0 f / 5.6

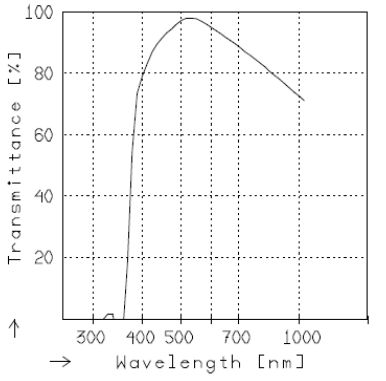
—— ß' = -0.0200 u'_{max} = 4.5 OO' = 1310.
— — ß' = -0.0500 u'_{max} = 4.5 OO' = 554.
----- ß' = -0.1000 u'_{max} = 4.5 OO' = 303.



DISTORTION

Distortion is shown for the given focal distances or magnifications. Positive values indicate pincushion distortion and negative values barrel distortion.

—— ß' = -0.0200 u'_{max} = 4.5 OO' = 1310.
— — ß' = -0.0500 u'_{max} = 4.5 OO' = 554.
----- ß' = -0.1000 u'_{max} = 4.5 OO' = 303.



TRANSMITTANCE

Relative spectral transmittance is shown with reference to wavelength.

Xenon-RUBY 2.2/25

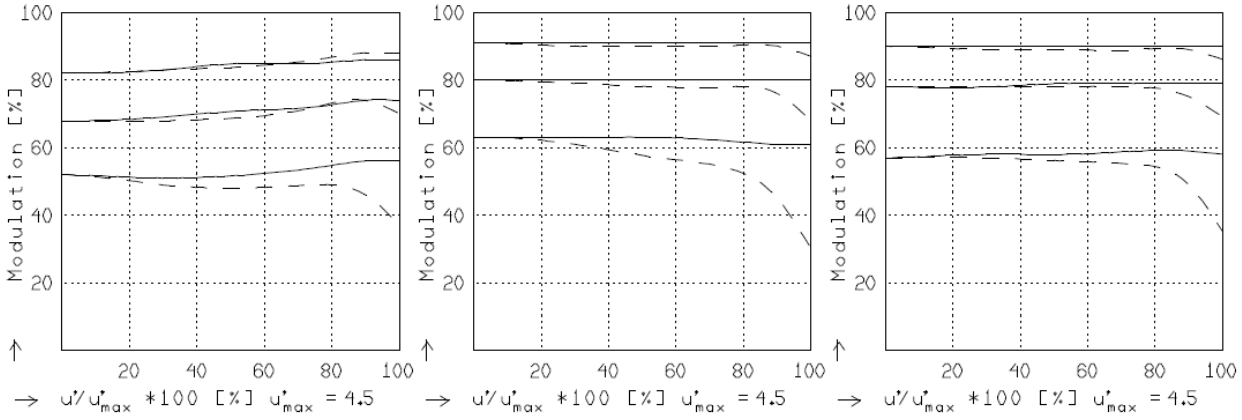
XENAR 2.2/25

MODULATION with reference to the relative image height

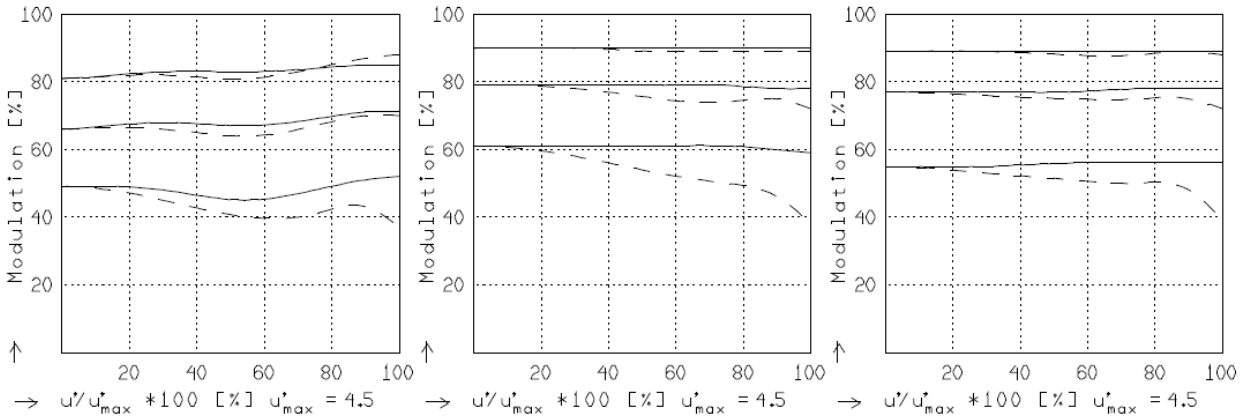
Wavelength	λ	[nm] :	555	655	605	505	455	405
Spectral weighting		[%] :	19.8	23.7	22.2	15.7	12.1	6.7
Spatial frequency R		[1/mm] :	20	40	80			
Format		[mm X mm] :	0.0		9.0			
Diagonal 2u'		[mm] :	9.0					

radial ——

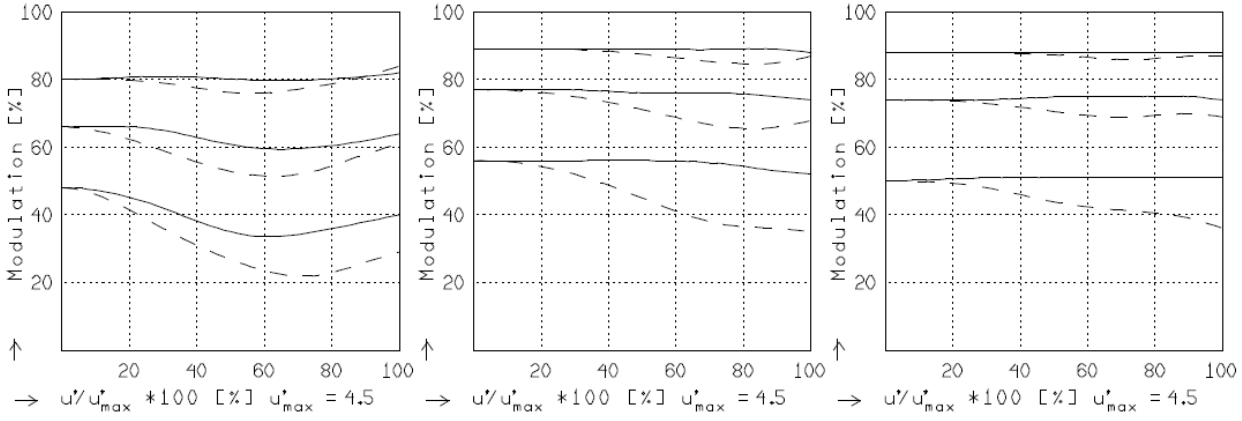
tangential — —



f'= 25.2 f/ 2.3 1/ß'=-50.00 OO'= 1310. f'= 25.2 f/ 4.0 1/ß'=-50.00 OO'= 1310. f'= 25.2 f/ 5.6 1/ß'=-50.00 OO'= 1310.



f'= 25.2 f/ 2.3 1/ß'=-20.00 OO'= 554. f'= 25.2 f/ 4.0 1/ß'=-20.00 OO'= 554. f'= 25.2 f/ 5.6 1/ß'=-20.00 OO'= 554.



f'= 25.2 f/ 2.3 1/ß'=-10.00 OO'= 303. f'= 25.2 f/ 4.0 1/ß'=-10.00 OO'= 303. f'= 25.2 f/ 5.6 1/ß'=-10.00 OO'= 303.

Focusing : MTF_{max} at f / 2.2 . R = 80 1/mm. u'/u'_{max} = 0