

3 Mega Pixel lens

Xenoplan 1.9/35

In accordance with the sensitivity of modern 2 / 3" CCD and CMOS sensors, the 3 megapixel lenses are corrected and broadband-coated for the spectral range of 400 – 1000 nm (VIS + NIR). 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.



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Key Features

- High-resolution optics
- 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

- Machine Vision and other imaging applications
- 3D measurement
- Traffic
- Medical
- Robot vision
- Food processing

Technical Specifications

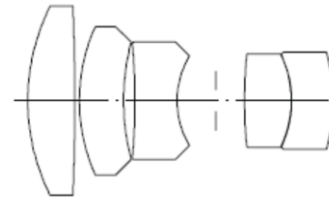
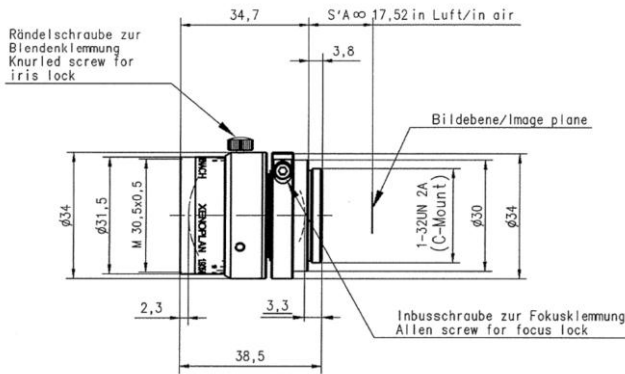
F-number	1.9
Focal length	34.9 mm
Image circle	11 mm
Transmission	400 - 1000 nm
Interface	C-Mount
Weight	92 gr.
Filter Thread	M30.5 x 0.5
Order No.	1001960

Contact

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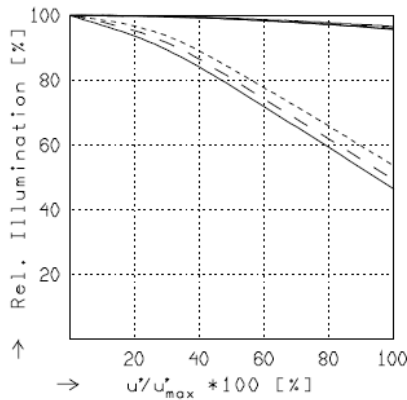
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XENOPLAN 1.9/35MM

$f' = 34,9$ mm	$\beta_p' = 0,879$
$s_F = -6,5$ mm	$s_{EP} = 33,3$ mm
$s_{F'} = 17,0$ mm	$s_{AP} = -13,7$ mm
$HH' = -13,8$ mm	$\Sigma d = 32,6$ mm

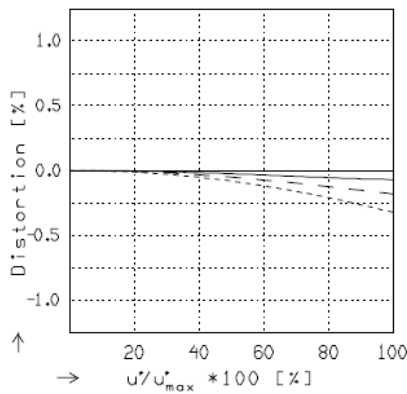


RELATIVE ILLUMINATION

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

$f / 2.0$ $f / 4.0$ $f / 8.0$

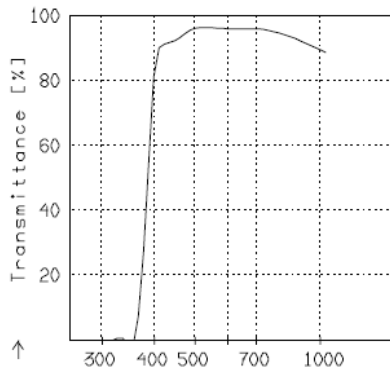
— $\beta' = -0,0200$	$u'_{max} = 5,5$	$00' = 1803.$
- - $\beta' = -0,0500$	$u'_{max} = 5,5$	$00' = 756.$
--- $\beta' = -0,1000$	$u'_{max} = 5,5$	$00' = 409.$



DISTORTION

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

— $\beta' = -0,0200$	$u'_{max} = 5,5$	$00' = 1803.$
- - $\beta' = -0,0500$	$u'_{max} = 5,5$	$00' = 756.$
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TRANSMITTANCE

Relative spectral transmittance is shown with reference to wavelength.

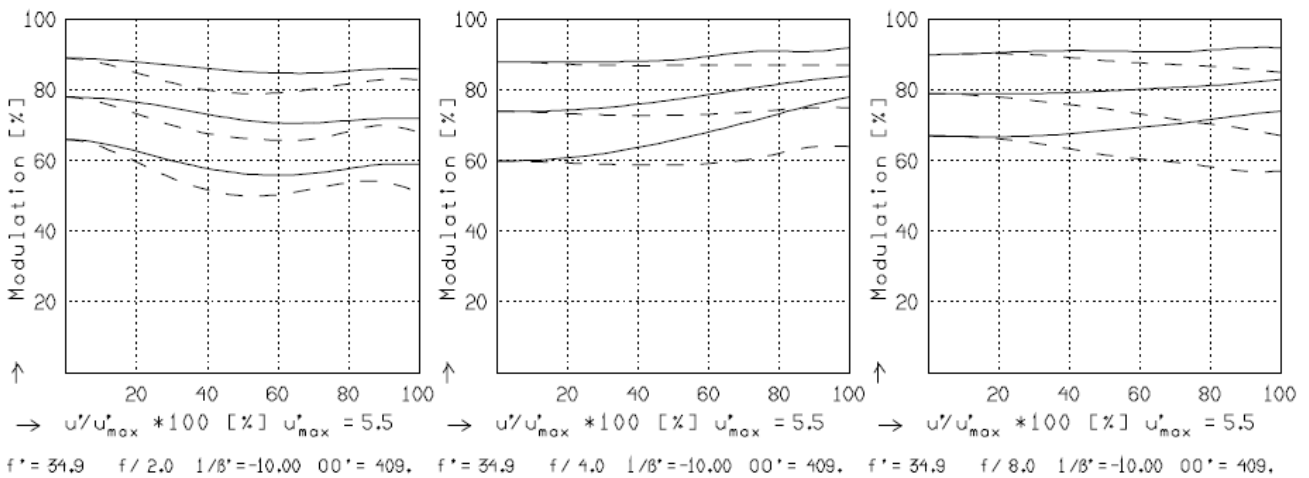
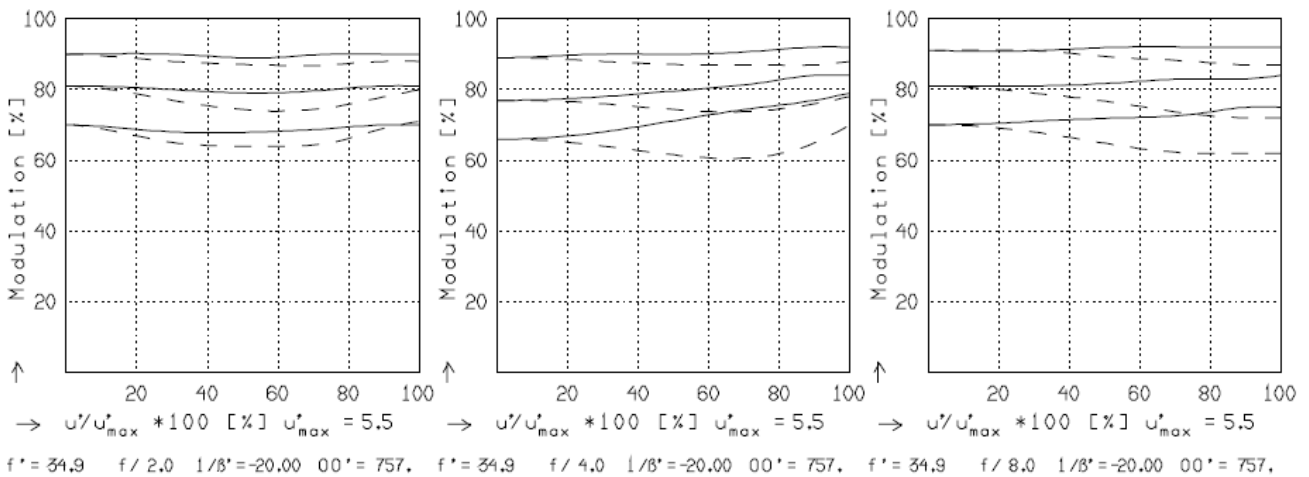
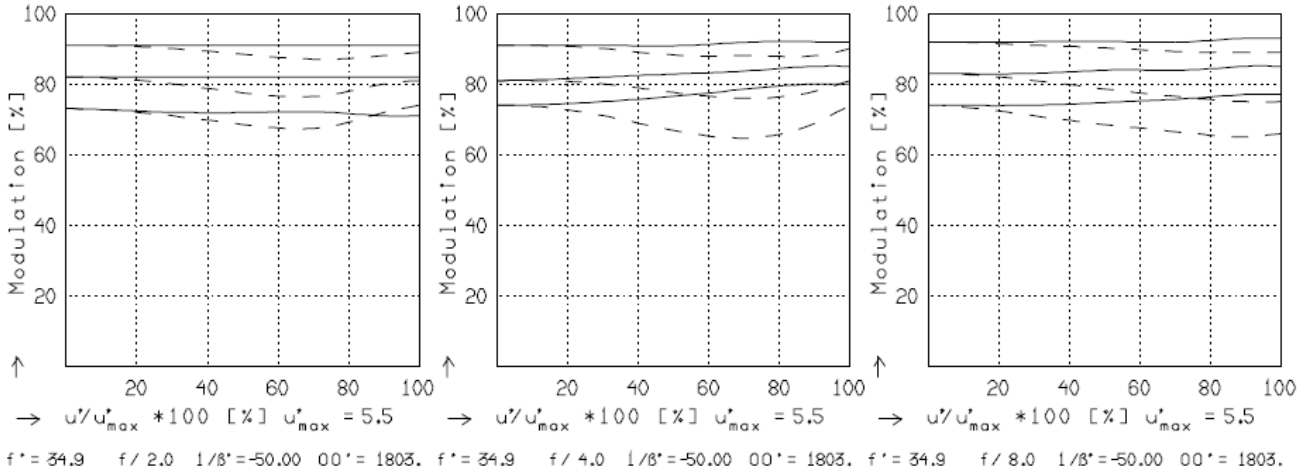
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MODULATION with reference to the relative image height

Wavelength λ	[nm] :	555	655	605	505	455	405
Spectral weighting	[%] :	19.6	23.7	22.2	15.7	12.1	6.7
Spatial frequency R	[1/mm] :	10	20	30			
Format	[mm X mm] :	6.6	X	8.8			
Diagonal $2u'$	[mm] :	11.0					

radial —
tangential - -



Focusing : MTF_{max} at $f / 1.9$, $R = 30$ $1/mm$, $u'/u'_{max} = 0$

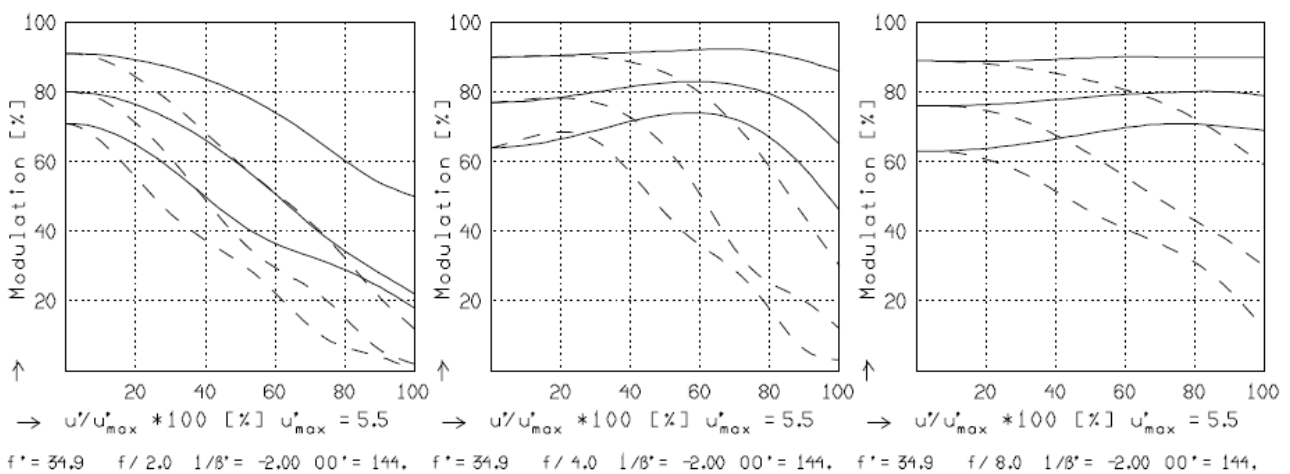
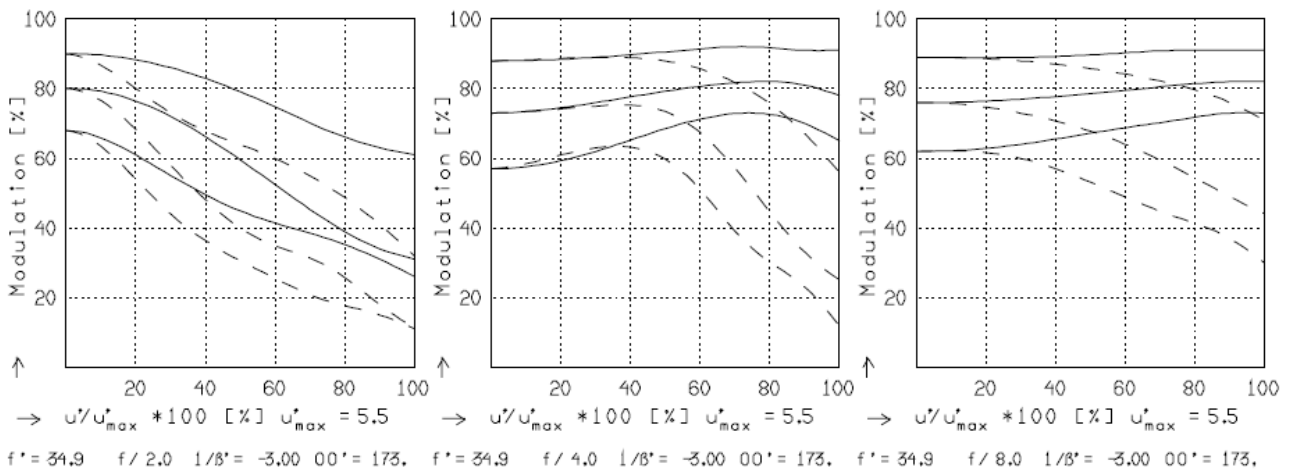
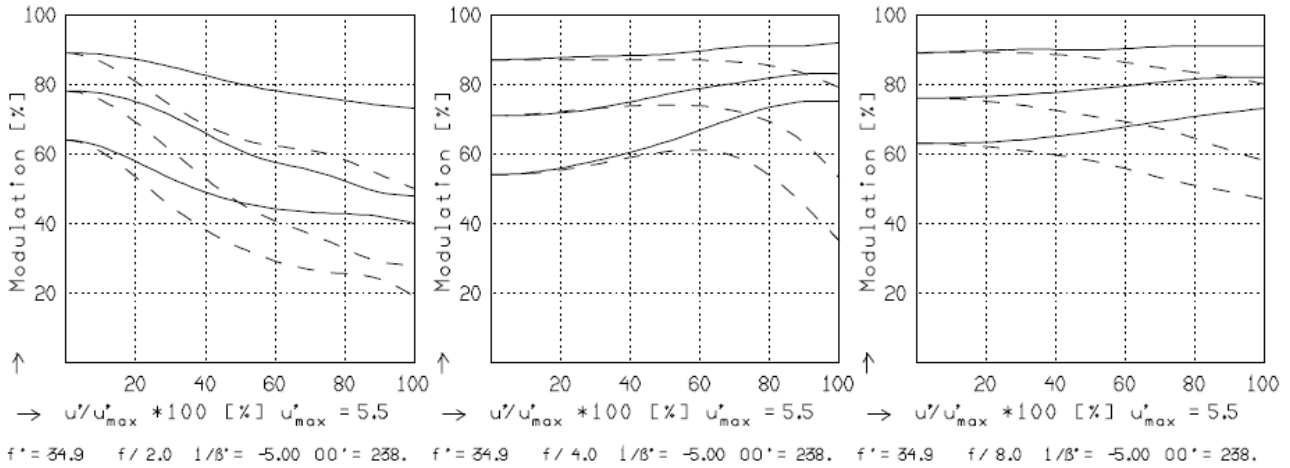
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