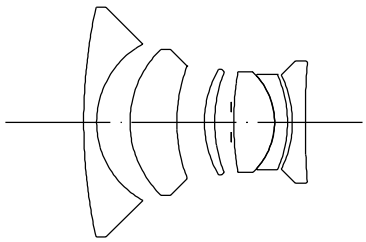
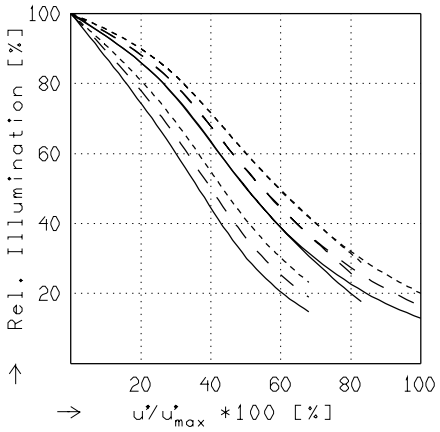
SUPER-SYMMAR XL 4.5/80 ASPH.

f' =	81.0 mm	β'_P =	1.013
s_F =	-59.9 mm	s_{EP} =	20.0 mm
$s'_{F'}$ =	72.9 mm	s'_{AP} =	-9.1 mm
HH' =	13.9 mm	Σd =	43.0 mm

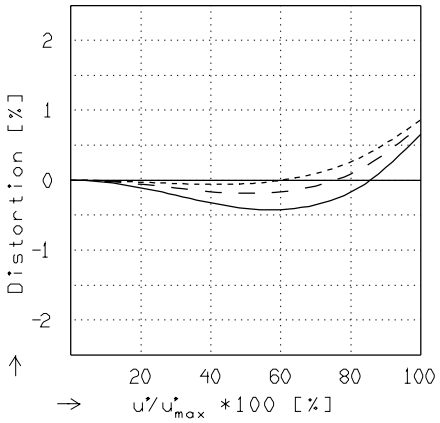




RELATIVE ILLUMINATION

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

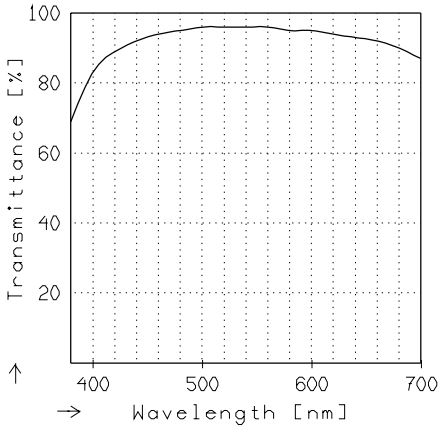
	f / 4.5	f / 8.0	f / 22.0
——	β' = 0.0000	u'_{max} = 106.7	OO' = ∞
— —	β' = -0.1000	u'_{max} = 106.8	OO' = 994.
-----	β' = -0.2000	u'_{max} = 106.9	OO' = 597.



DISTORTION

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

——	β' = 0.0000	u'_{max} = 106.7	OO' = ∞
— —	β' = -0.1000	u'_{max} = 106.8	OO' = 994.
-----	β' = -0.2000	u'_{max} = 106.9	OO' = 597.



TRANSMITTANCE

Relative spectral transmittance is shown with reference to wavelength.

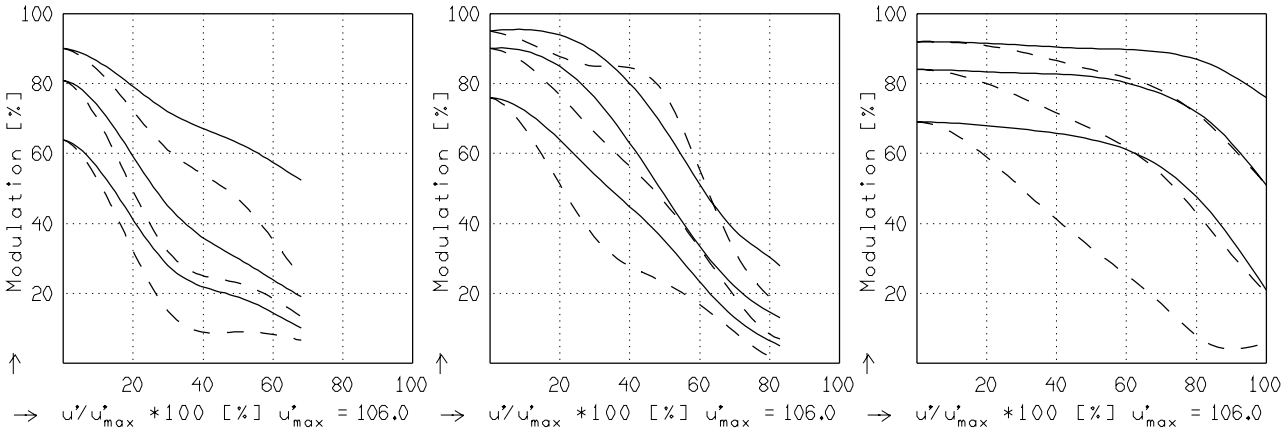
Jos. Schneider Optische Werke GmbH
Ringstrasse 132 55543 Bad Kreuznach Germany

SUPER-SYMMAR XL 4.5/80 ASPH.

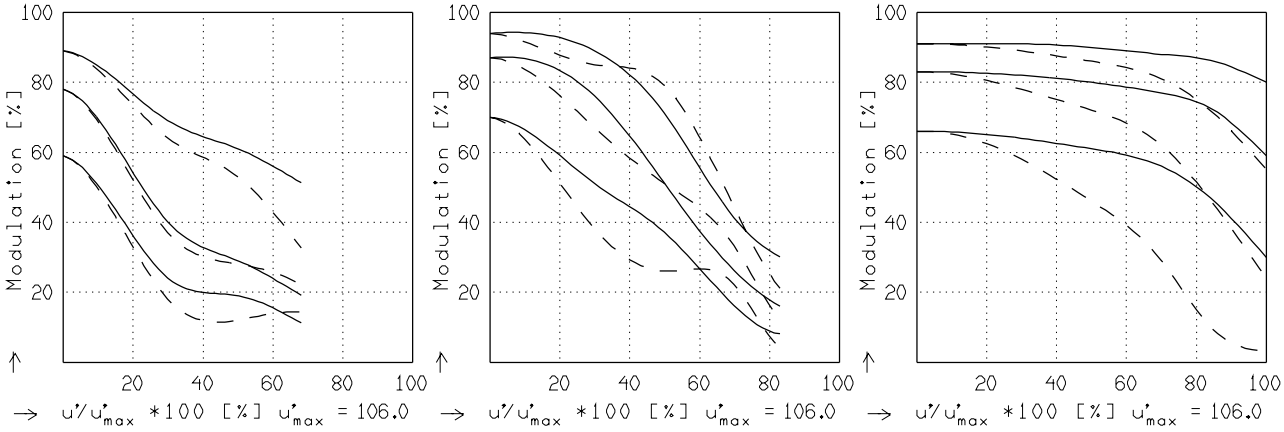
MODULATION with reference to the relative image height

Wavelength λ [nm] :	546	644	588	480	436	405
Spectral weighting [%] :	24.6	18.6	22.1	12.4	15.2	7.1
Spatial frequency R [1/mm] :	5	10	20			
Format [mm X mm] :	90.0 X120.0					
Diagonal 2u' [mm] :	212.0					

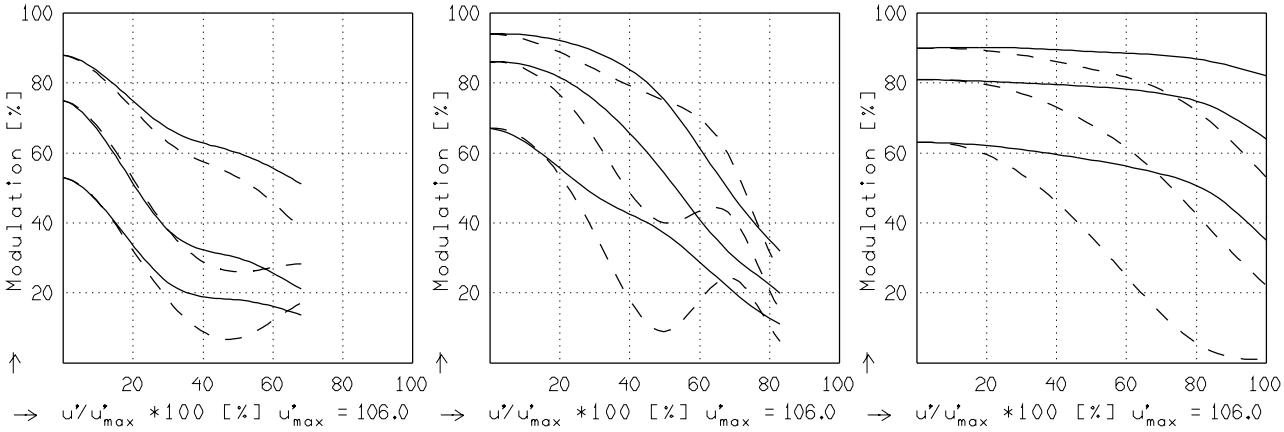
radial ——
tangential — —



f' = 81.0 f/ 4.5 1/ß' = ∞ OO' = ∞ | f' = 81.0 f/ 8.0 1/ß' = ∞ OO' = ∞ | f' = 81.0 f/ 22.0 1/ß' = ∞ OO' = ∞



f' = 81.0 f/ 4.5 1/ß' = -10.00 OO' = 994. | f' = 81.0 f/ 8.0 1/ß' = -10.00 OO' = 994. | f' = 81.0 f/ 22.0 1/ß' = -10.00 OO' = 994.



f' = 81.0 f/ 4.5 1/ß' = -5.00 OO' = 597. | f' = 81.0 f/ 8.0 1/ß' = -5.00 OO' = 597. | f' = 81.0 f/ 22.0 1/ß' = -5.00 OO' = 597.

Focusing : MTF_{max} at f / 5.6 , R = 20 1/mm, u'/u'_{max} = 0

46945 80600 Printed in the Federal Republic of Germany