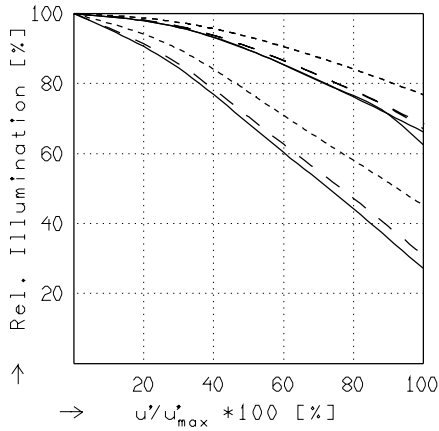
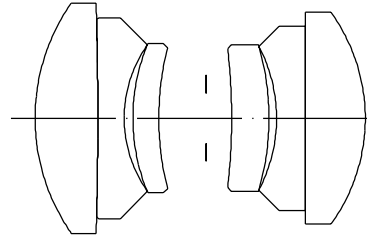


APO-DIGITAR 4.0/80

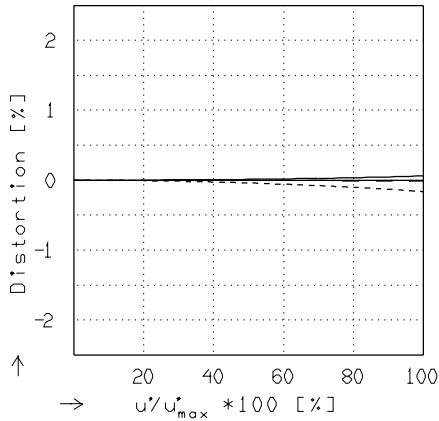
$f' = 80.3 \text{ mm}$ $\beta_p' = 1.027$
 $s_F = -57.9 \text{ mm}$ $s_{EP} = 20.3 \text{ mm}$
 $s_{F'} = 64.7 \text{ mm}$ $s_{A'P} = -17.9 \text{ mm}$
 $HH' = -1.8 \text{ mm}$ $\Sigma d = 36.3 \text{ mm}$



RELATIVE ILLUMINATION

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

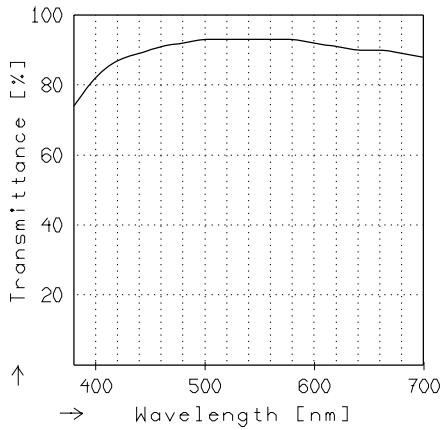
	f / 4.0	f / 8.0	f / 11.0
—	$\beta' = -0.0500$	$u'_{max} = 40.0$	$00' = 1769.$
- -	$\beta' = -0.1000$	$u'_{max} = 40.0$	$00' = 970.$
- · - ·	$\beta' = -0.3333$	$u'_{max} = 39.9$	$00' = 427.$



DISTORTION

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

—	$\beta' = -0.0500$	$u'_{max} = 39.9$	$00' = 1769.$
- -	$\beta' = -0.1000$	$u'_{max} = 39.9$	$00' = 970.$
- · - ·	$\beta' = -0.3333$	$u'_{max} = 39.9$	$00' = 427.$



TRANSMITTANCE

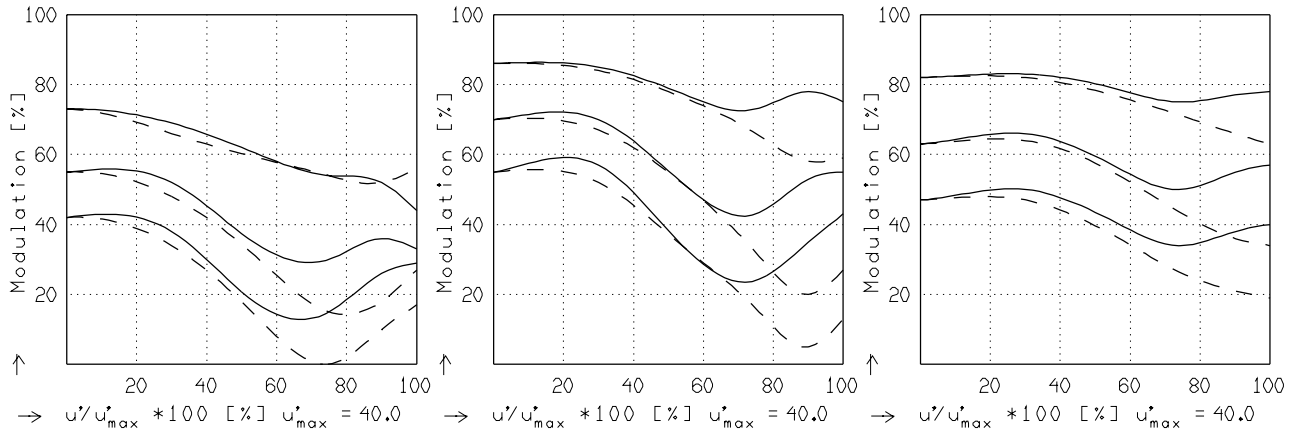
Relative spectral transmittance is shown with reference to wavelength.

APO-DIGITAR 4.0/80

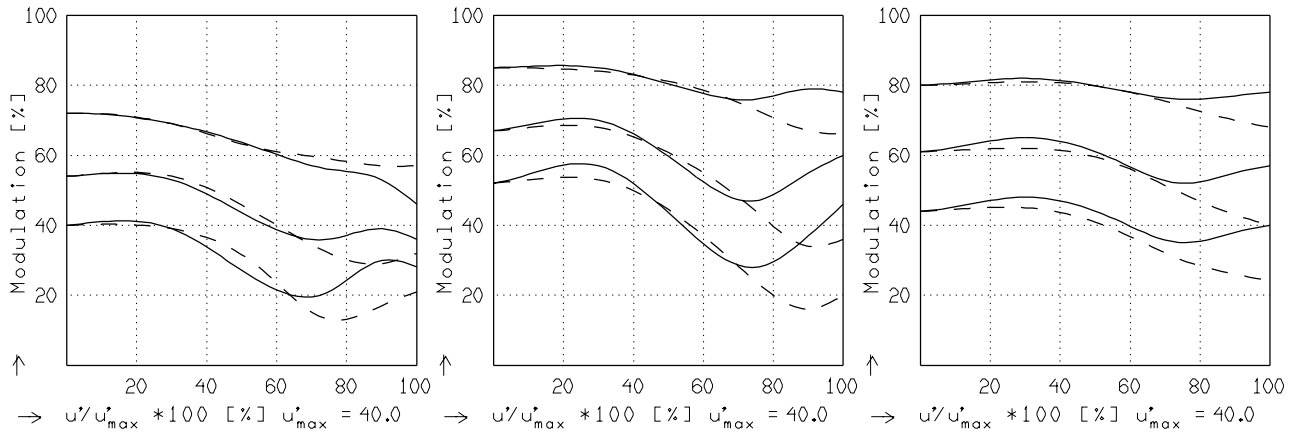
MODULATION with reference to the relative image height

Wavelength λ [nm] : 520 670 620 570 470 420
 Spectral weighting [%] : 19.0 10.0 19.0 19.0 19.0 14.0
 Spatial frequency R [1/mm] : 20 40 60
 Format [mm X mm] : 56.5 X 56.5
 Diagonal $2u'$ [mm] : 80.0

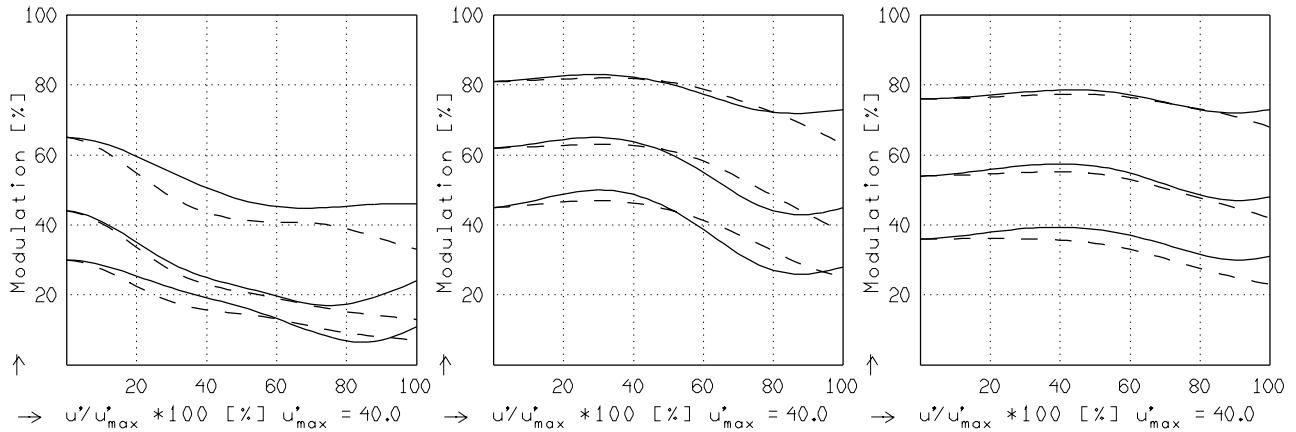
radial —
 tangential - -



$f' = 80.3$ $f / 8.0$ $1/\beta' = -20.00$ $00' = 1769.$ $f' = 80.3$ $f / 11.0$ $1/\beta' = -20.00$ $00' = 1769.$



$f' = 80.3$ $f / 8.0$ $1/\beta' = -10.00$ $00' = 970.$ $f' = 80.3$ $f / 11.0$ $1/\beta' = -10.00$ $00' = 970.$



$f' = 80.3$ $f / 8.0$ $1/\beta' = -3.00$ $00' = 427.$ $f' = 80.3$ $f / 11.0$ $1/\beta' = -3.00$ $00' = 427.$

Focusing : MTF_{max} at $f / 4.0$, $R = 60$ 1/mm, $u'/u'_{max} = 0$