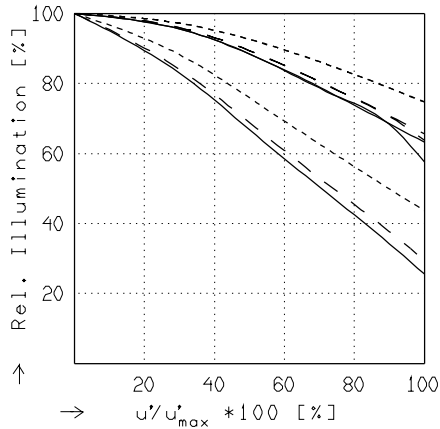
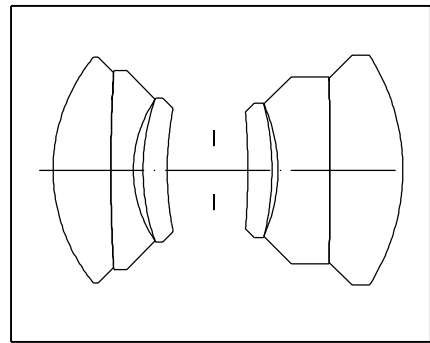


AP0-DIGITAR 4.5/90

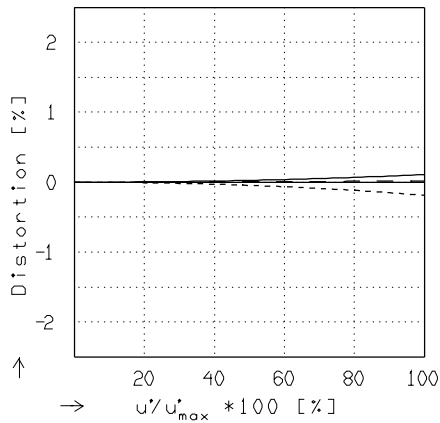
$f' = 89.8 \text{ mm}$ $\beta_p = 1.016$
 $s_F = -66.0 \text{ mm}$ $s_{EP} = 22.4 \text{ mm}$
 $s_{F'} = 66.7 \text{ mm}$ $s_{A'P} = -24.5 \text{ mm}$
 $HH' = -3.5 \text{ mm}$ $\Sigma d = 43.4 \text{ mm}$



RELATIVE ILLUMINATION

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

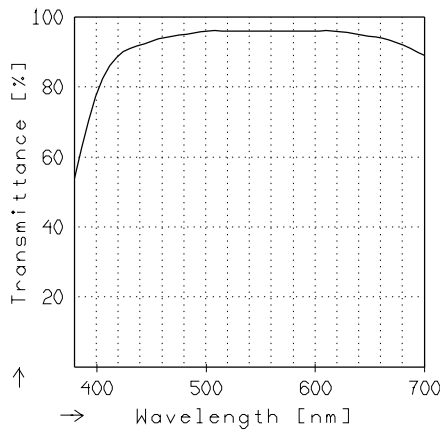
$f / 4.5$	$f / 8.0$	$f / 11.0$
— $\beta' = -0.0500$	$u'_{max} = 46.0$	$00' = 1977.$
- - $\beta' = -0.1000$	$u'_{max} = 46.0$	$00' = 1083.$
- · - $\beta' = -0.3333$	$u'_{max} = 45.9$	$00' = 476.$



DISTORTION

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

— $\beta' = -0.0500$	$u'_{max} = 45.9$	$00' = 1977.$
- - $\beta' = -0.1000$	$u'_{max} = 45.9$	$00' = 1083.$
- · - $\beta' = -0.3333$	$u'_{max} = 45.9$	$00' = 476.$



TRANSMITTANCE

Relative spectral transmittance is shown with reference to wavelength.