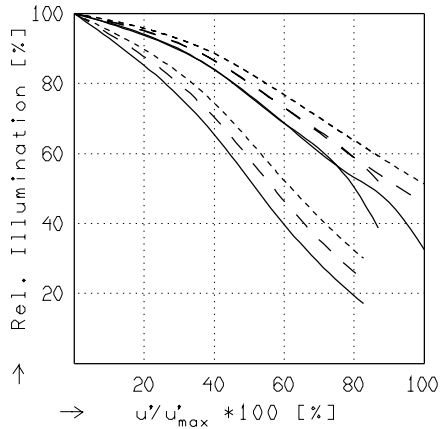
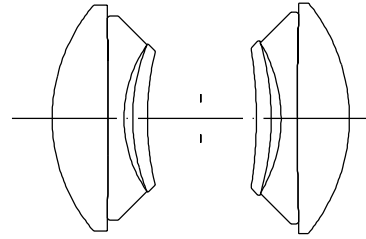


# APO-SYMMAR 5.6/210

$f' = 209.6 \text{ mm}$      $\beta_p = 0.996$   
 $s_F = -172.1 \text{ mm}$      $s_{EP} = 38.3 \text{ mm}$   
 $s_{F'} = 170.9 \text{ mm}$      $s_{A'P} = -37.9 \text{ mm}$   
 $HH' = -5.8 \text{ mm}$      $\Sigma d = 70.4 \text{ mm}$

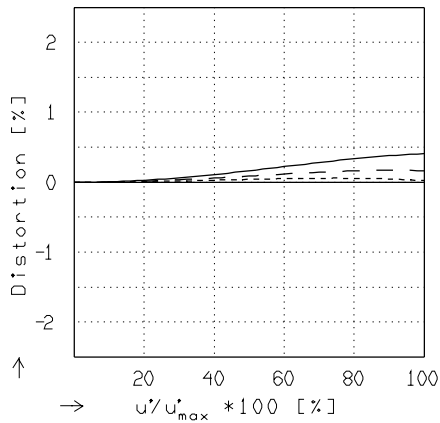


## RELATIVE ILLUMINATION

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

$f / 5.6$      $f / 11.0$      $f / 22.0$

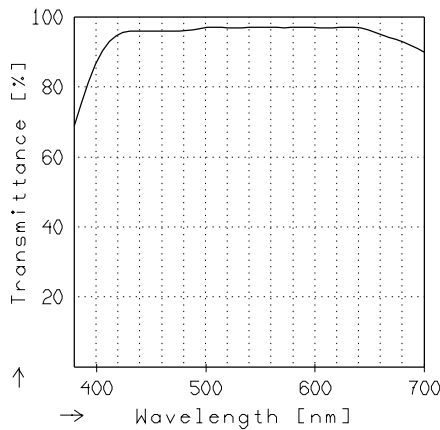
—  $\beta' = 0.0000$      $u'_{max} = 153.1$      $00' = \infty$   
 - -  $\beta' = -0.1000$      $u'_{max} = 152.8$      $00' = 2530.$   
 - · -  $\beta' = -0.2000$      $u'_{max} = 152.5$      $00' = 1503.$



## DISTORTION

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

—  $\beta' = 0.0000$      $u'_{max} = 153.1$      $00' = \infty$   
 - -  $\beta' = -0.1000$      $u'_{max} = 152.8$      $00' = 2530.$   
 - · -  $\beta' = -0.2000$      $u'_{max} = 152.5$      $00' = 1503.$



## TRANSMITTANCE

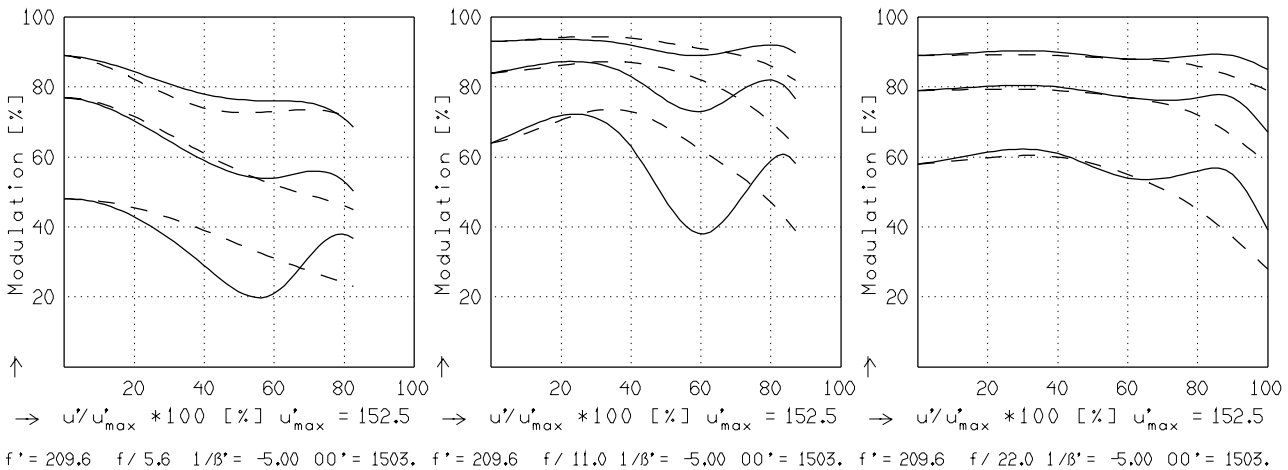
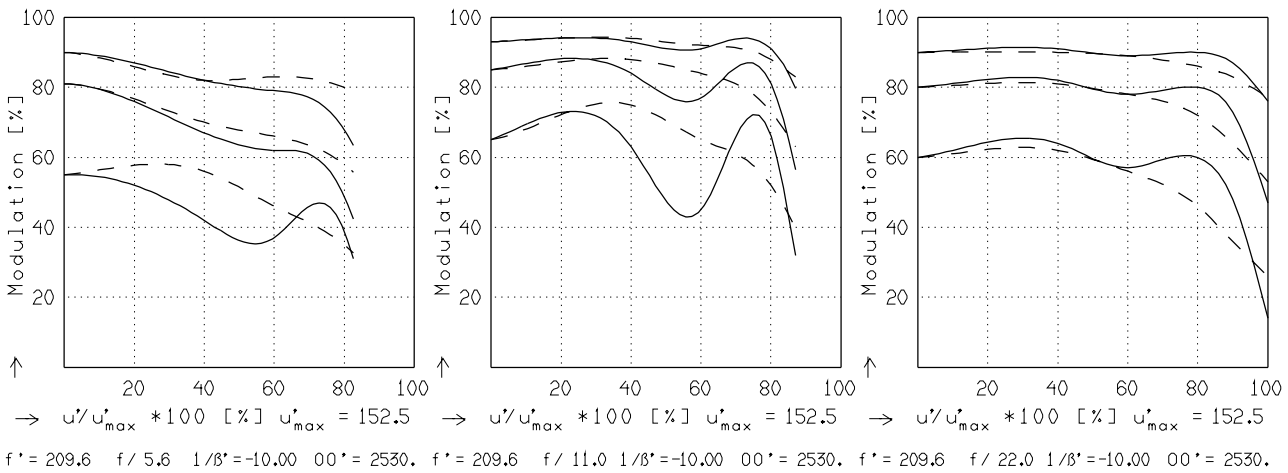
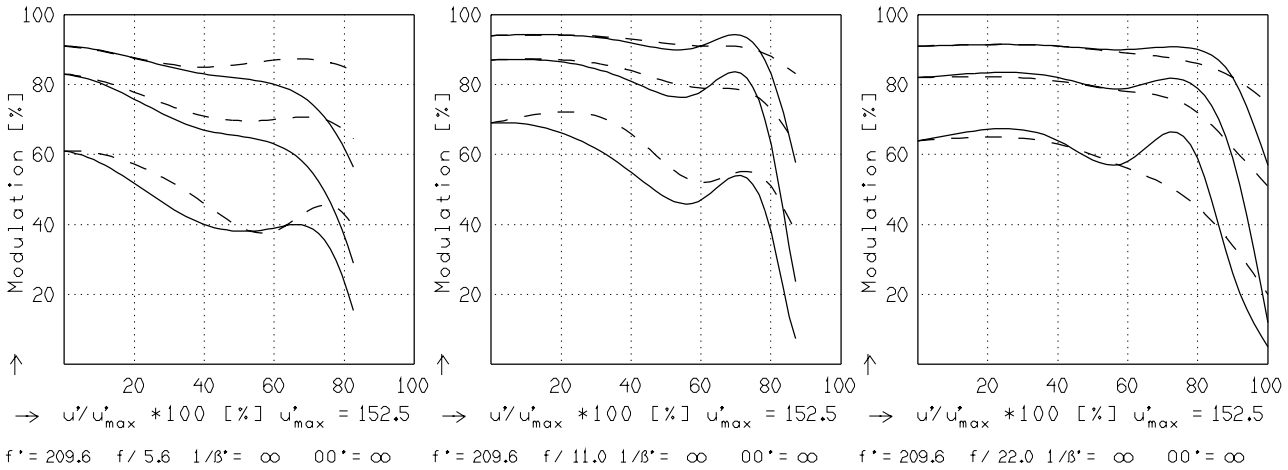
Relative spectral transmittance is shown with reference to wavelength.

**APO-SYMMAR 5.6/210**

**MODULATION** with reference to the relative image height

Wavelength $\lambda$	[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			
Image- $\emptyset$ f / 5.6	[mm] :	252.2					
Image- $\emptyset$ f / 22.0	[mm] :	305.0					

radial —  
tangential - -



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

