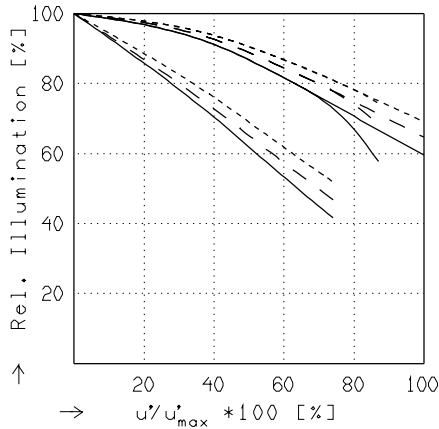
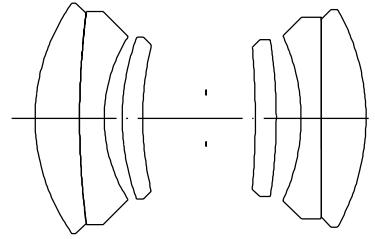


APO-SYMMAR 8.4/480

$f' = 470.4 \text{ mm}$ $\beta_p = 0.984$
 $s_F = -408.1 \text{ mm}$ $s_{EP} = 69.9 \text{ mm}$
 $s_{F'} = 400.8 \text{ mm}$ $s_{A'P} = -62.1 \text{ mm}$
 $HH' = -5.5 \text{ mm}$ $\Sigma d = 126.4 \text{ mm}$

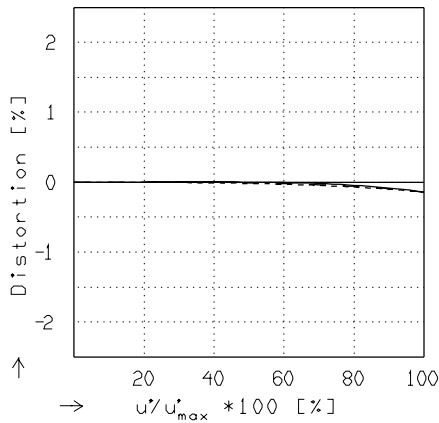


RELATIVE ILLUMINATION

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

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

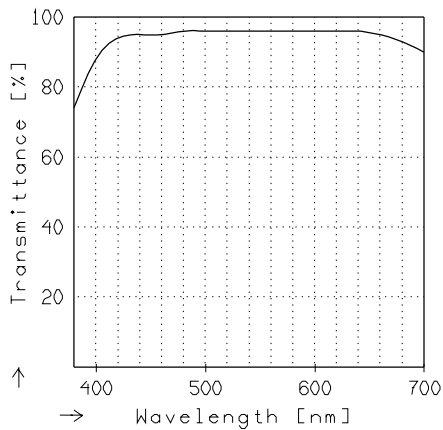
— $\beta' = 0.0000$ $u'_{max} = 249.6$ $00' = \infty$
 - - $\beta' = -0.1000$ $u'_{max} = 249.6$ $00' = 5686.$
 - · - $\beta' = -0.2000$ $u'_{max} = 249.6$ $00' = 3381.$



DISTORTION

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

— $\beta' = 0.0000$ $u'_{max} = 249.6$ $00' = \infty$
 - - $\beta' = -0.1000$ $u'_{max} = 249.6$ $00' = 5686.$
 - · - $\beta' = -0.2000$ $u'_{max} = 249.6$ $00' = 3381.$



TRANSMITTANCE

Relative spectral transmittance is shown with reference to wavelength.