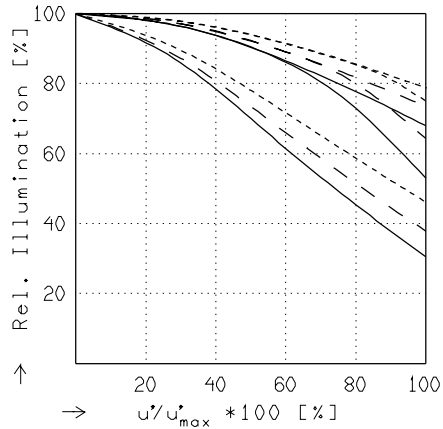
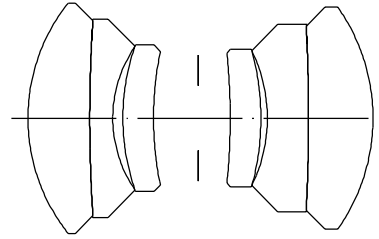


APO-COMPONON 4/45

$$\begin{aligned}
 f' &= 46.5 \text{ mm} & \beta_p &= 1.026 \\
 s_F &= -33.1 \text{ mm} & s_{EP} &= 12.3 \text{ mm} \\
 s_{F'} &= 35.7 \text{ mm} & s_{AP} &= -12.1 \text{ mm} \\
 HH' &= -1.8 \text{ mm} & \Sigma d &= 22.5 \text{ mm}
 \end{aligned}$$

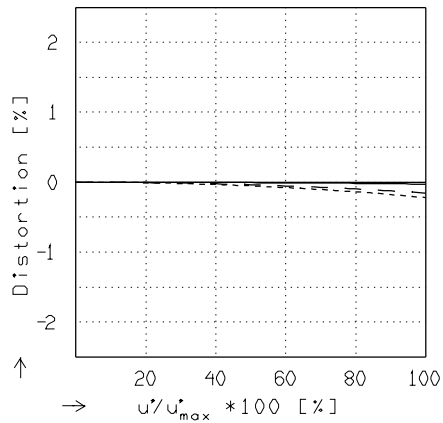


RELATIVE ILLUMINATION

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

$$\begin{array}{ccc}
 f / 4.0 & f / 5.6 & f / 8.0
 \end{array}$$

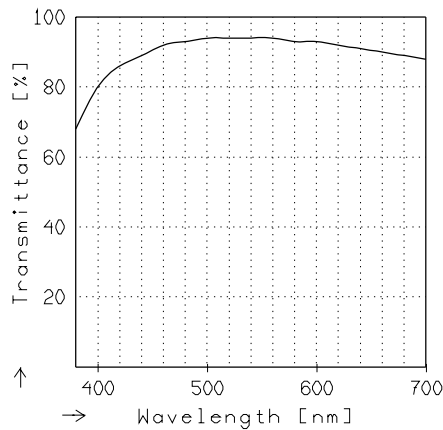
$$\begin{array}{lll}
 \text{—} & \beta' = -0.0400 & u'_{\max} = 21.6 \quad \text{OO}' = 1256. \\
 \text{- -} & \beta' = -0.1667 & u'_{\max} = 21.6 \quad \text{OO}' = 378. \\
 \text{- · -} & \beta' = -0.3333 & u'_{\max} = 21.6 \quad \text{OO}' = 246.
 \end{array}$$



DISTORTION

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

$$\begin{array}{lll}
 \text{—} & \beta' = -0.0400 & u'_{\max} = 21.6 \quad \text{OO}' = 1256. \\
 \text{- -} & \beta' = -0.1667 & u'_{\max} = 21.6 \quad \text{OO}' = 378. \\
 \text{- · -} & \beta' = -0.3333 & u'_{\max} = 21.6 \quad \text{OO}' = 246.
 \end{array}$$



TRANSMITTANCE

Relative spectral transmittance is shown with reference to wavelength.