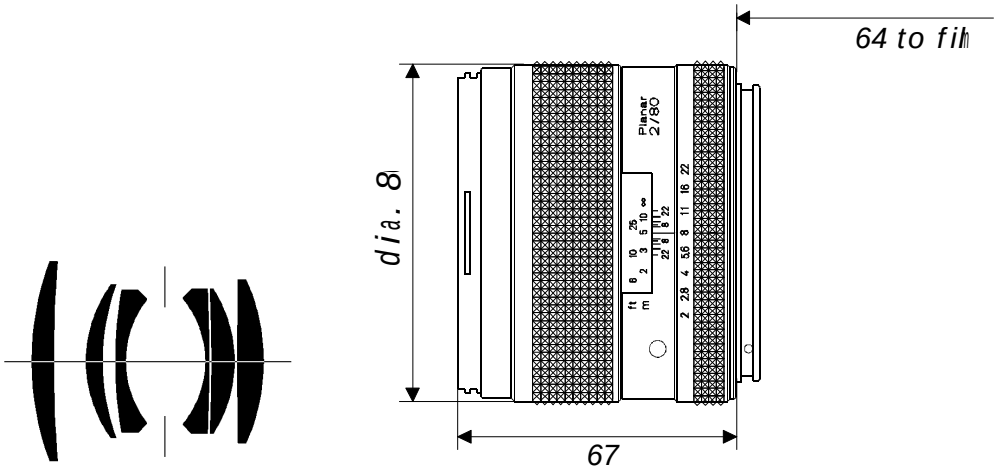
Planar® T***** 2/80



CONTAX® 645

The Carl Zeiss **Planar**® lens is the most successful camera lens design ever created. This nearly symmetrical layout provides the lens designer with numerous means to correct aberrations extraordinarily well, even for wide open apertures. The ideal basis for high-performance lenses with great color correction, high speed, flat image plane (this is where the name comes from) and low distortion. The **Planar**® design is the basis for nearly all professional 'workhorse' lenses on earth and in space today.
At f/2 the **Planar**® T* 2/80 lens is the fastest optic in the Contax® 645 system. There is no faster **Planar**® lens in medium format photography anywhere. Even at full aperture the performance of the **Planar**® T* 2/80 lens is so high that professional quality images are reached. Especially so since the Contax® 645 autofocus provides for quick and accurate focusing, where manual focusing would have been too slow or not accurate enough for f/2. So the **Planar**® T* 2/80 lens is the ideal tool for handheld photography with decent shutter speeds at low light levels, like in people photography indoors, celebrity portraits, wedding coverage and similar demanding tasks.
With its focal length of 80 mm the **Planar**® T* 2/80 lens records an image with a perspective (size relationship between foreground and background) that is pretty much the way we see the scene with our eyes, like a fast 50 mm lens on a 35 mm SLR. So it is suited for almost any task in general photography, which makes it a powerful and versatile standard lens in the Contax® 645 system.
Preferred use: all-purpose, travel, editorial, people, celebrities, candid weddings

Cat. No. of lens:	**10 22 19**
Number of elements:	6
Number of groups:	5
Max. aperture:	1:2
Focal length:	80.0mm
Negative size:	41.5 x 56mm
Angular field 2w:	47°
Mount:	Contax 645 Mount
Filter connection:	screw-in type, thread M72x0.75
Focusing range:	infinity to 0.7m
Aperture scale:	2 - 2.8 - 4 - 5.6 - 8 - 11 - 16 - 22
Weight:	approx. 524 g

Entrance pupil*****:	
Position:	40.1mm behind the first lens vertex
Diameter:	39.9mm
Exit pupil*****:	
Position:	27.8mm in front of the last lens vertex
Diameter:	45.2mm
Position of principal planes:	
H:	47.1mm behind the first lens vertex
H':	20.0mm in front of the last lens vertex
Back focal distance*****:	60.0mm
Distance between first and last lens vertex:	55.0mm

***** at infinity

ZEISS

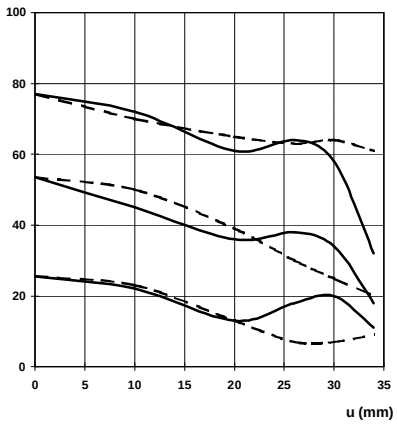
Performance data:
Planar® T* 2/80
Cat. No. 10 22 19

1. MTF Diagrams

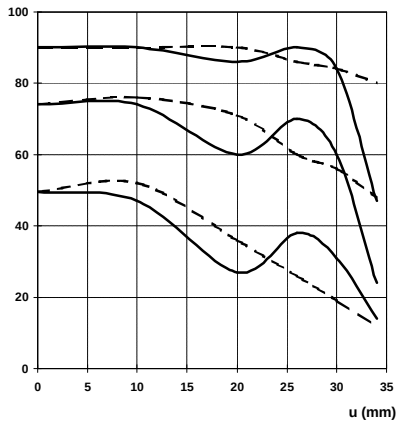
The image height u - calculated from the image center - is entered in mm on the horizontal axis of the graph. The modulation transfer T (MTF = Modulation Transfer Factor) is entered on the vertical axis. Parameters of the graph are the spatial frequencies R in cycles (line pairs) per mm given at the top of this page.
The lowest spatial frequency corresponds to the upper pair of curves, the highest spatial frequency to the lower pair. Above each graph, the f-number k is given for which the measurement was made. "White" light means that the measurement was made with a subject illumination having the approximate spectral distribution of daylight.
Unless otherwise indicated, the performance data refer to large object distances, for which normal photographic lenses are primarily used.

Modulation transfer T as a function of image height u. **Slit orientation:** —— **sag** – – **tan**
White light. Spatial frequencies R = 10, 20 and 40 cycles/mm

f-number k = 2
T (%)



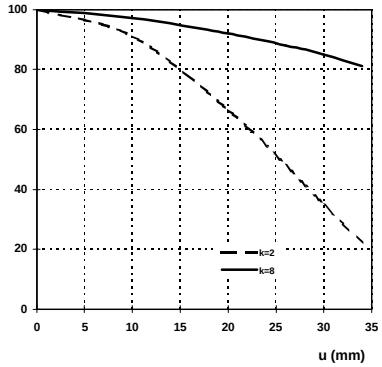
f-number k = 4
T (%)



2. Relative illuminance

In this diagram the horizontal axis gives the image height u in mm and the vertical axis the relative illuminance E, both for full aperture and a moderately stopped-down lens. The values for E are determined taking into account vignetting and natural light decrease.

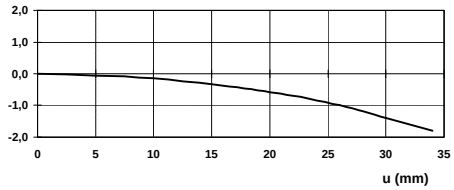
Relative illuminance
E (%)



3. Distortion

Here again the image height u is entered on the horizontal axis in mm. The vertical axis gives the distortion V in % of the relevant image height. A positive value for V means that the actual image point is further from the image center than with perfectly distortion-free imaging (pincushion distortion); a negative V indicates barrel distortion.

Distortion in % of image height u
V



Subject to change.
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Carl Zeiss
Camera Lenses
D-73446 Oberkochen
Telephone ++49-7364-20-6175
Fax ++49-7364-20-4045
eMail: photo@zeiss.de
http://www.zeiss.de/photo