LEICA **SUMMICRON-M** 28 f/2 ASPH.

Technical Data.

Lens	Leica Summicron-M 28 f/2 ASPH.
Order Number	11618
View angle (diagonal/horizontal/vertical) Full-frame (24 x 36 mm)	74°/65°/46°
Lens system Number of lenses/assemblies Number of aspherical surfaces Position of the entrance pupil before the bayonet Focus range	9/6 1 12.7 mm Live View: 0.4 m to ∞, rangefinder: 0.7 m to ∞
Focusing Scale Smallest object field Largest scale	Combined scale meter (m)/foot (ft) Full-frame: 272 x 408 mm 1:11.3
Aperture Setting/Function Smallest aperture Number of diaphragm blades	Click-stop diaphragm with half-increment lock settings 16 10
Bayonet	Leica M bayonet with 6-bit encoding
Filter thread	E46
Lens hood	Extendable
Dimensions Length Diameter	Approx. 55 mm Approx. 58 mm
Weight	Approx. 275 g

![Leica logo] LEICA **SUMMICRON-M** 28 f/2 ASPH.

TECHNICAL DRAWING

LENS CUT
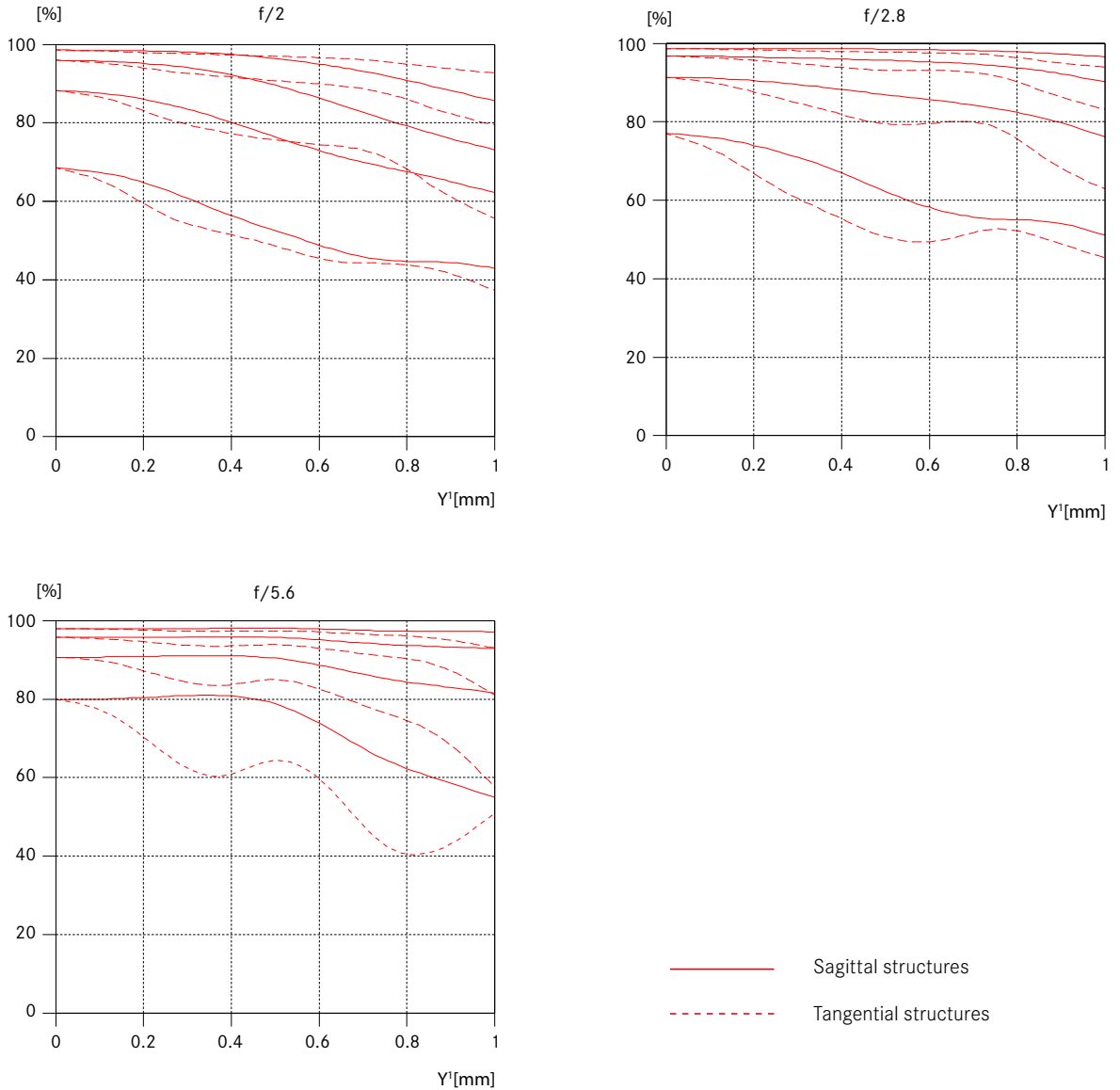

Figure 1:1
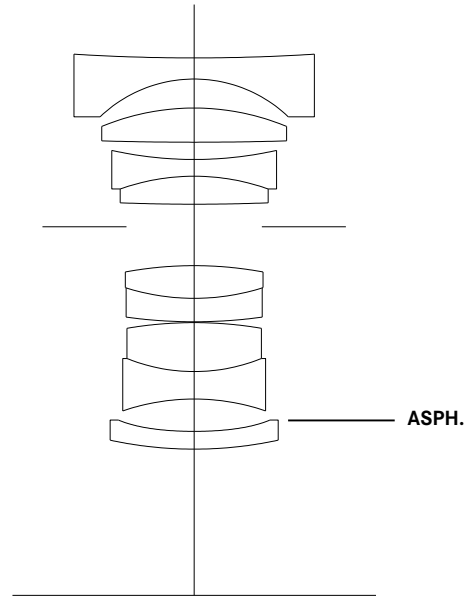
ASPH.

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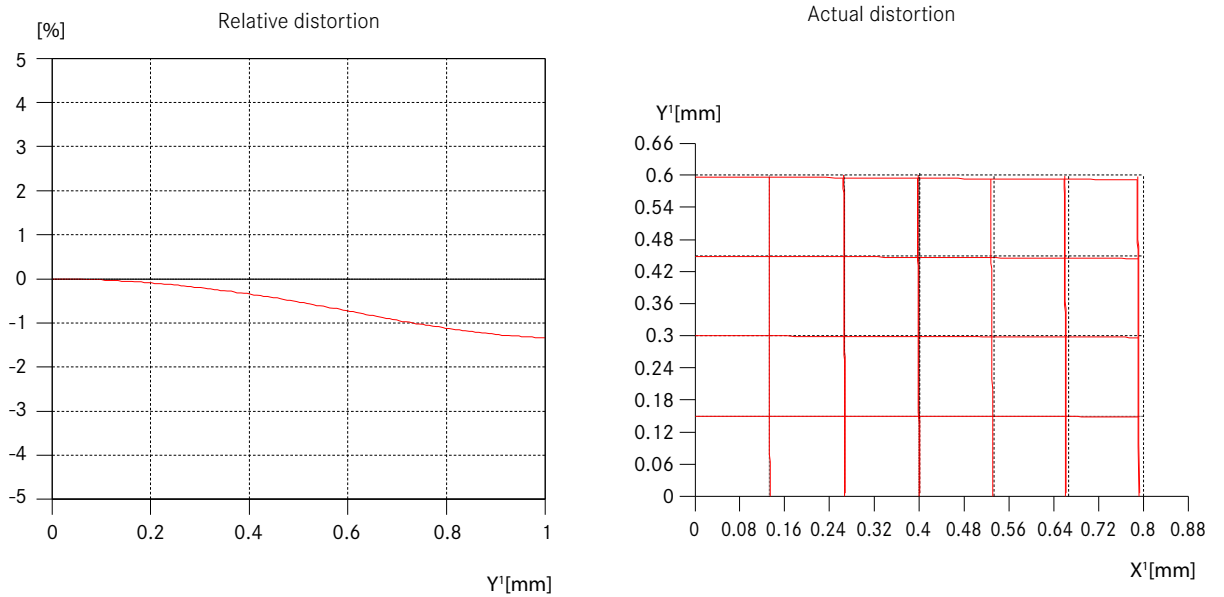
MTF DIAGRAMS

MTF CURVES

The MTF is shown in each case for the max. aperture as well as for 2.8 and 5.6 for long focus distances (infinity). The contrast is plotted in percentages for 5, 10, 20, 40 Lp/mm over the height of the format for tangential (dashed line) and sagittal structures (continuous line) for white light. The plots for 5 and 10 Lp/mm offer an impression of the contrast behavior for coarser object structures, while the 20 and 40 Lp/mm plots document the resolution capability for fine and finest object structures.
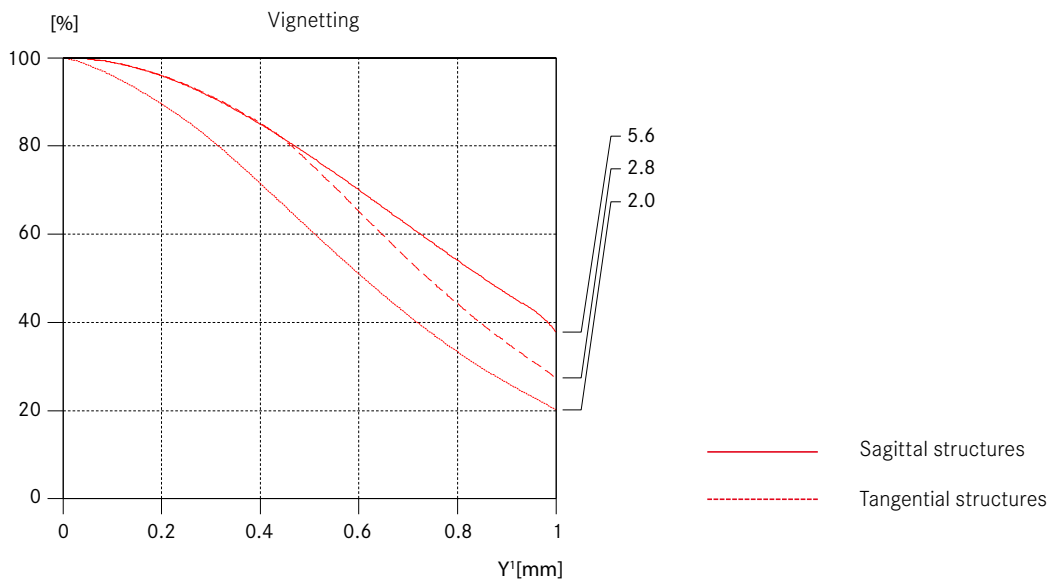
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DISTORTION

Relative distortion

Actual distortion

VIGNETTING

Vignetting

5.6
2.8
2.0

———— Sagittal structures

------------ Tangential structures

DISTORTION

Distortion is the deviation of the actual image height from the ideal image height, whereby the ideal image height is calculated from the object height and the reproduction scale. Relative distortion states the percentage deviation of the actual to the ideal image height. The image height of 21.6 mm is the radial distance between one corner of the image field and the middle of the image field (image format 24 mm x 36 mm). The graph of the effective distortion illustrates the actual line and the curvature of horizontal and vertical lines in the image horizon.

VIGNETTING

Vignetting is a continuous decrease of image brightness (irradiance) towards the edges of the image (shading compensation, darkening of the image corners). The graph shows the diminishing brightness in percent applied over the image height.
100% means no vignetting.