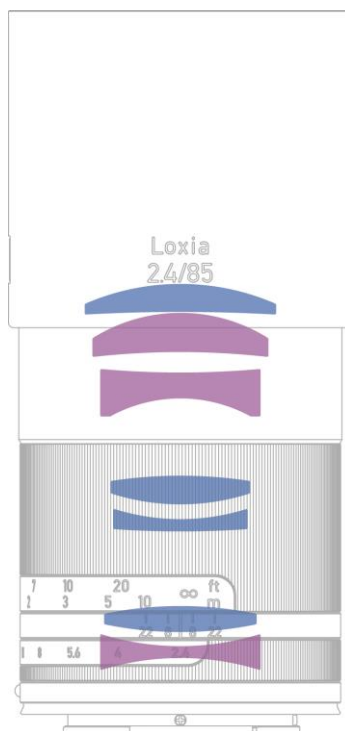




# ZEISS Loxia 2.4/85

## Technische Daten/Technical Specifications



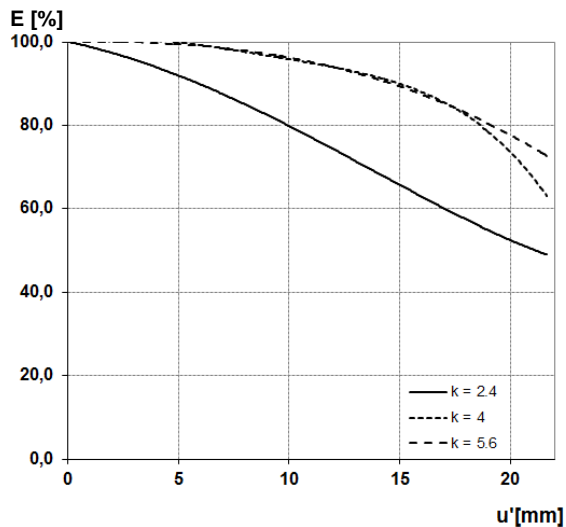
|   |  |
|---|--|
| <b>Brennweite/Focal length</b>                                | 85 mm                                  |
| <b>Blendenbereich/Aperture range</b>                          | f/2.4 – f/22                           |
| <b>Linsen / Gruppen/Lens elements / Groups</b>                | 7 / 7                                  |
| <b>Fokussierbereich/Focusing range</b>                        | 0,8 m (31.49'') - ∞                    |
| <b>Arbeitsabstand/Free working distance</b>                   | 0,685 m (26.97'') - ∞                  |
| <b>Bildfeld*/Angular field* (diag. / horiz. / vert.)</b>      | 28,63° / 24,05° / 16,23°               |
| <b>Bildkreisdurchmesser/Diameter of image field</b>           | 43 mm (1.69'')                         |
| <b>Anlagemaß/Flange focal distance</b>                        | 18 mm (0.71'')                         |
| <b>Objektfeld bei Naheinstellung*</b>                         | 257,9 mm x 172,6 mm (10.15'' x 6.80'') |
| <b>Coverage at close range (MOD)*</b>                         |  |
| <b>Abbildungsmaßstab bei Naheinstellung</b>                   | 1 : 7.2                                |
| <b>Image ratio at MOD</b>                                     |  |
| <b>Filterdurchmesser/Filter thread</b>                        | M52 x 0.75                             |
| <b>Lage der Eintrittspupille (vor der Bildebene)</b>          | 58,7 mm (2.31'')                       |
| <b>Entrance pupil position (in front of image plane)</b>      |  |
| <b>Drehwinkel des Fokussierings (inf –OD)</b>                 | 220 °                                  |
| <b>Rotation angle of focusing ring (inf –OD)</b>              |  |
| <b>Durchmesserax./Diameterax.</b>                             | 62,5 mm (2.44'')                       |
| <b>Durchmesser des Fokussierings</b>                          | 62,0 mm (2.44'')                       |
| <b>Diameter of focusing ring</b>                              |  |
| <b>Länge (ohne Objektivdeckel)/Length (without lens caps)</b> | 94.8 mm (3.73'')                       |
| <b>Länge (mit Objektivdeckeln)/Length (with lens caps)</b>    | 108 mm (4.25'')                        |
| <b>Gewicht/Weight</b>   | 594 g (1.31 lbz)                       |

\* bezugnehmend auf das 24x36mm Format/referring to 36m format



# ZEISS Loxia 2.4/85

## Relative Beleuchtungsstärke/Relative Illuminance



Die relative Beleuchtungsstärke zeigt die Abnahme der Bildhelligkeit von der Mitte des Bildes zu den Ecken. Angabe in Prozent.

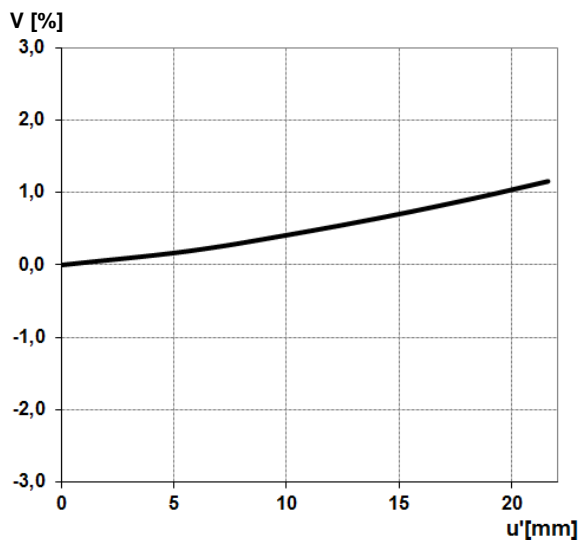
The relative illumination shows in percent the decrease in image brightness from the image center to edge.

— Blendenzahl:  $k = 2,4$  / f-number = 2.4

--- Blendenzahl:  $k = 4,0$  / f-number = 4.0

... Blendenzahl:  $k = 5,6$  / f-number = 5.6

## Relative Verzeichnung/Relative Distortion



Die Relative Verzeichnung zeigt die Abweichung der aktuellen von der idealen Bildhöhe.

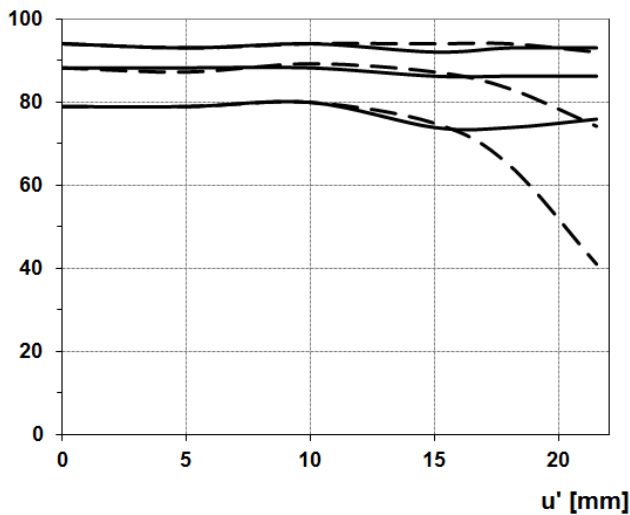
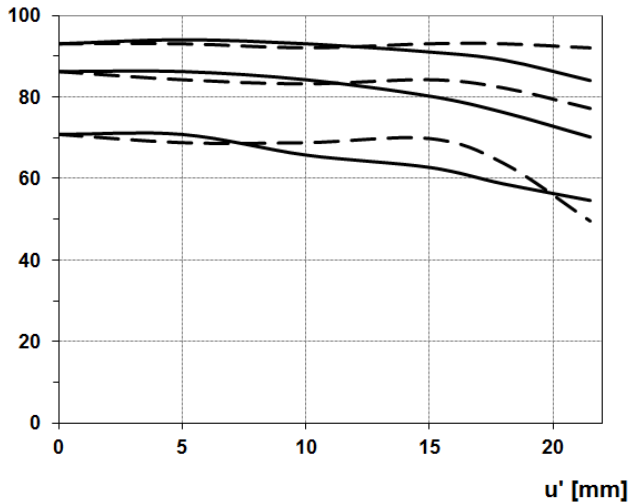
The relative distortion shows in percent the deviation of the actual from the ideal image height.

Angaben für unendlich.  
Data for infinity.



# ZEISS Loxia 2.4/85

## MTF Charts



Modulationsübertragung MTF als Funktion der Bildhöhe ( $u'$ ) und Spalorientierung. Weißes Licht. Ortsfrequenzen  $R=10, 20$  und  $40$  Perioden/mm. // Modulation transfer MTF as a function of the image height ( $u'$ ) and slit orientation. White light. Spatial frequencies  $R=10, 20$  and  $40$  cycles/mm.



# ZEISS Loxia 2.4/85

## Schärfentiefe/Depth of Field (DOF)\*

| Engraved Distance | f/2.4 |       | f/2.8 |       | f/4   |       | f/5.6 |       | f/8  |      | f/11 |      | f/16 |      | f/22 |      |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
|                   | From  | to    | From  | To    | from  | To    | From  | To    | From | To   | From | To   | From | To   | from | To   |
| Meter             |       |       |       |       |       |       |       |       |      |      |      |      |      |      |      |      |
| INF               | 100   | INF   | 85    | INF   | 60    | INF   | 43    | INF   | 30   | INF  | 22   | INF  | 15.2 | INF  | 11.1 | INF  |
| 10m               | 9.12  | 11.1  | 9.0   | 11.3  | 8.62  | 11.9  | 8.17  | 12.9  | 7.58 | 14.8 | 6.96 | 18.0 | 6.12 | 28   | 5.35 | 96   |
| 5m                | 4.78  | 5.24  | 4.74  | 5.29  | 4.64  | 5.42  | 4.51  | 5.61  | 4.33 | 5.92 | 4.13 | 6.37 | 3.83 | 7.28 | 3.52 | 8.81 |
| 3m                | 2.92  | 3.08  | 2.91  | 3.1   | 2.87  | 3.14  | 2.83  | 3.20  | 2.76 | 3.29 | 2.68 | 3.42 | 2.55 | 3.65 | 2.42 | 3.98 |
| 2m                | 1.97  | 2.03  | 1.96  | 2.04  | 1.95  | 2.06  | 1.93  | 2.08  | 1.90 | 2.12 | 1.86 | 2.17 | 1.80 | 2.25 | 1.74 | 2.37 |
| 1.5m              | 1.48  | 1.52  | 1.48  | 1.52  | 1.47  | 1.53  | 1.46  | 1.54  | 1.44 | 1.56 | 1.43 | 1.59 | 1.39 | 1.63 | 1.36 | 1.68 |
| 1.2m              | 1.19  | 1.21  | 1.19  | 1.21  | 1.18  | 1.22  | 1.18  | 1.23  | 1.17 | 1.24 | 1.16 | 1.25 | 1.14 | 1.27 | 1.11 | 1.31 |
| 1m                | 0.99  | 1.01  | 0.99  | 1.01  | 0.99  | 1.01  | 0.985 | 1.02  | 0.98 | 1.02 | 0.97 | 1.03 | 0.96 | 1.05 | 0.94 | 1.07 |
| 0.9m              | 0.895 | 0.905 | 0.89  | 0.906 | 0.89  | 0.91  | 0.89  | 0.91  | 0.88 | 0.92 | 0.88 | 0.92 | 0.87 | 0.94 | 0.86 | 0.95 |
| 0.8m              | 0.796 | 0.804 | 0.796 | 0.804 | 0.794 | 0.806 | 0.791 | 0.809 | 0.79 | 0.81 | 0.78 | 0.82 | 0.78 | 0.83 | 0.77 | 0.84 |

\* Schärfentiefetabelle für das 24x36mm Format, Zerstreuungskreis 0.033mm (D/1500), gerundet auf 0.01m //  
Depth-of-field table for sensor format 24x36mm, circle of confusion 0.033mm (D/1500), rounded to 0.01m