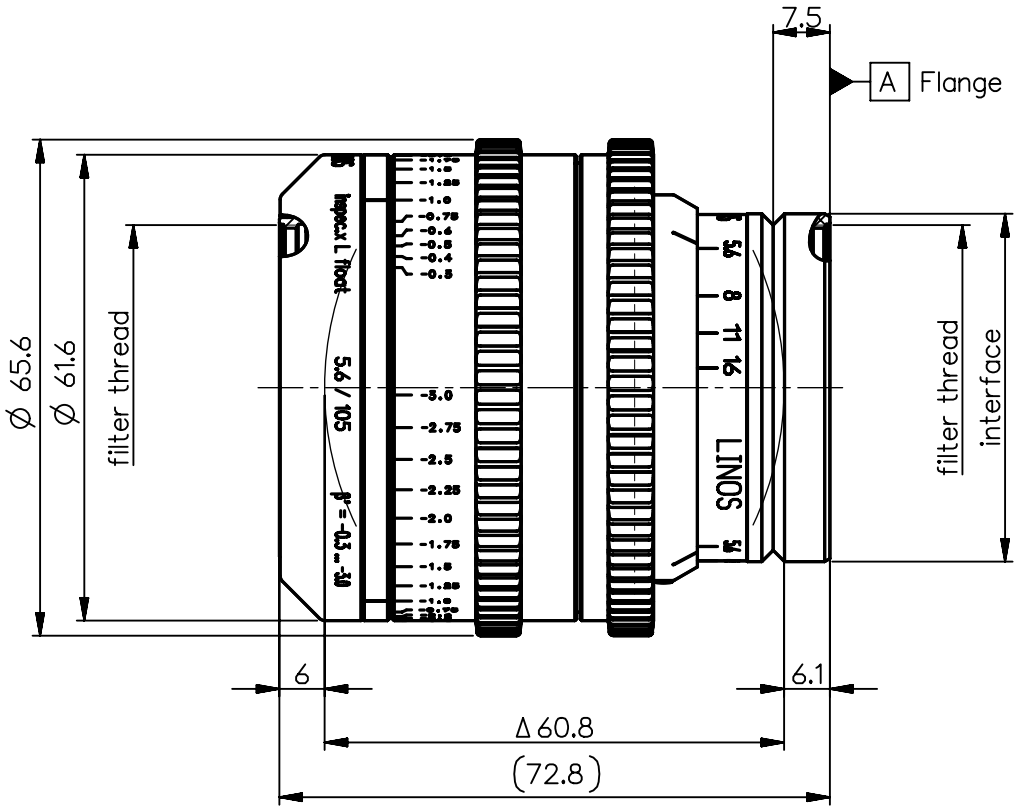
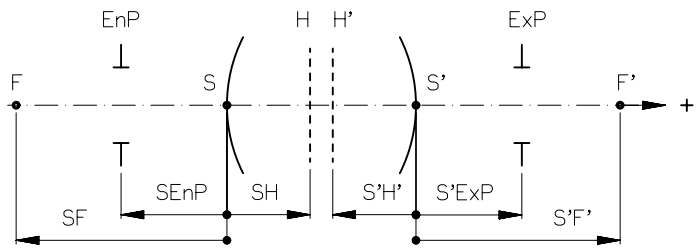
order number	lens name
0703-114-000-20	inspec.x L float 5.6/105



Specification	
image circle max. (mm)	82
focal length f' (mm)	105.5
magnification β' [range]	−1 [−0.3 ... −3]
spectral range λ (nm)	400 – 750

schematic diagram *) in air



ON	7608-9091
working distance (mm)	99.6 – 417.5
interface	V-groove (Ø46 h7)
filter thread	M43x0.75 / M43x0.75
weight (g)	440
design includes CCD cover glass:	yes 0.76mm D263

		f-stop	Ø EnP	Ø ExP
SF (mm)	-71.1			
S'F' (mm) *)	70.5	5.6	18.2	19.5
HH' (mm) *)	-7.8	8	12.7	13.7
SH (mm)	34.4	11	9.3	9.9
S'H' (mm) *)	-35.0	16	6.4	6.8
SEnP (mm)	27.1			
S'ExP (mm) *)	-42.8			

NX

PROTECTIVE NOTE "DIN ISO 16016" TO BE OBSERVED

DIN A 4

EU-D	AL-T1A	US-D	US-ML	not export controlled
			PDM Status Freigabe	–

REV	ECC	DATE	APPROVED
c	14-0184	13.10.14	Schiffe
d	15-0640	31.07.15	Boll

GENERAL TOLERANCE OF DIMENSION, FORM, POS.

SURF. TREATMT

BASIC TOLERANCING PRINCIPLE

FIRST ISSUE	DATE	NAME
	22.09.14	Schifferer
CHKD	22.09.14	Stauder

SCALE 1:1

MATERIAL

TITLE

inspec.x L float 5.6/105

DRAWING NO. 0703-114-100-00-0001d

SHEET 1 OF 2

REPLACES

ALL DIMENSIONS ARE IN MM AND INCLUDE SURFACE TREATMENT

QIOPTIQ

β'	angle	working distance	Flange – Image
-0.3	22.60°	417.5	96.1
-0.5	16.14°	276.5	117.6
-0.75	8.08°	205.9	144.2
-1.0	0.00°	170.6	170.7
-2.0	32.28°	117.4	276.1
-3.0	64.56°	99.6	381.1

Working and flange focal distances for different magnifications

Parameters – DIN 58 405	
Number of teeth N	80
Module m	0.8
pitch circle d	64.0
angle of pressure	20°
reference profile	DIN 867

Parameters of the gear wheels

NX

Schutzvermerk "DIN ISO 16016" beachten

DIN A 4

EU-D	AL-T1A	US-D	US-ML	not export controlled
			PDM-Status Freigabe	–

Rev.	Aenderung	Datum	Freigabe
c	14-0184	23.09.14	Schiffe
d	15-0640	31.07.15	Boll

zul. Abweichung für Mass, Form & Lage

Oberfläche

Maßstab

Werkstoff

Tolerierung

Erster-stellung	Datum	Name
	23.09.14	Schifferer
Prüfung	23.09.14	Stauder

Benennung

inspec.x L float 5.6/105

Alle Maße in mm, inclusive Oberflächenbehandlung

QIOPTIQ

Zeichnungsnummer

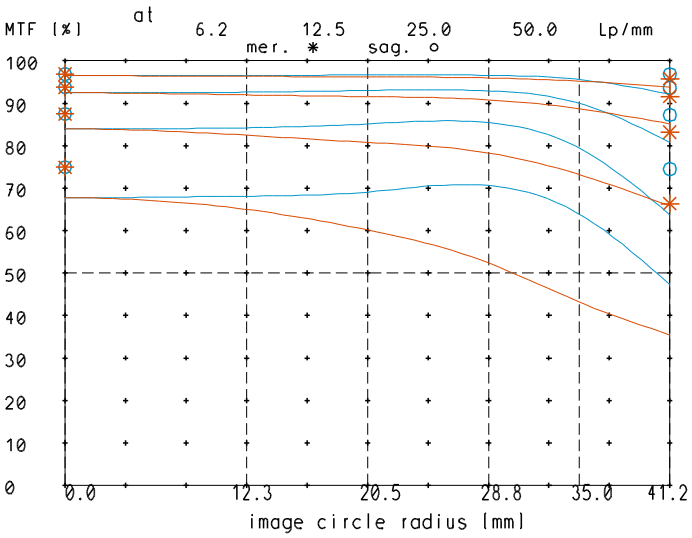
0703-114-100-00-0002d

Blatt 2 von 2

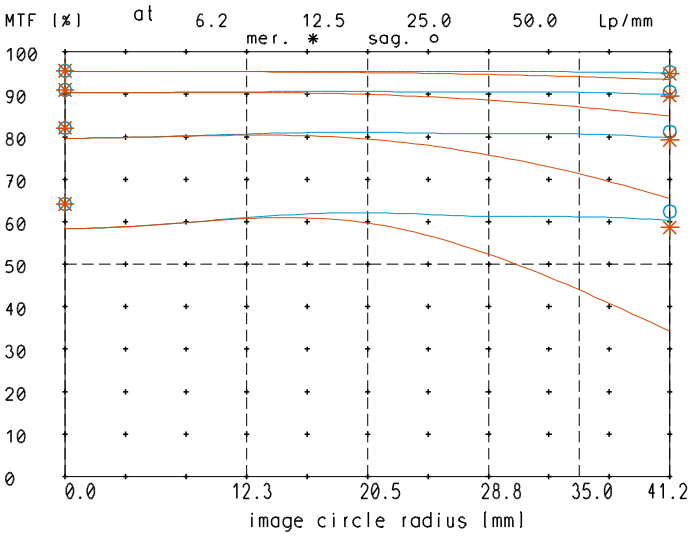
Ersatz für

inspec.x_L_5.6/105_float

MTF at ratio -0.3 f/ 5.6



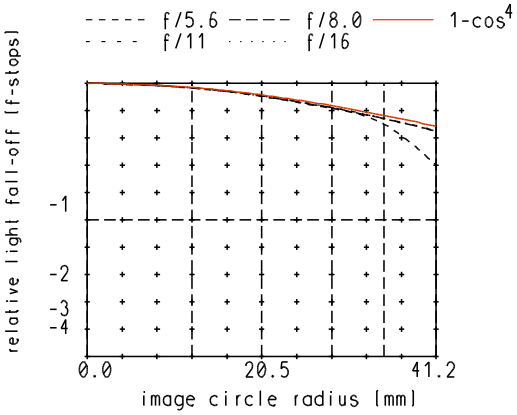
MTF at ratio -0.3 f/ 8.0



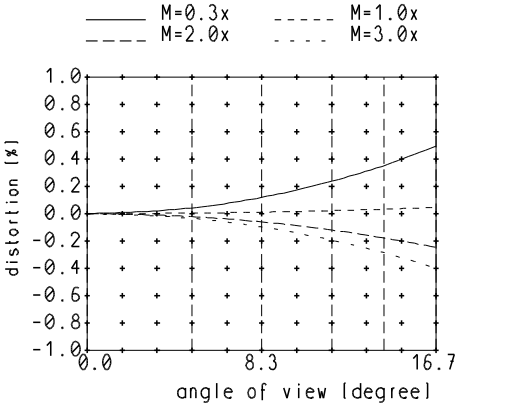
sagittal, o Diffraction limited value
meridional * Diffraction limited value

Named frequencies (line pairs/mm) in modular transfer function (MTF) as well as diagrams of relative light fall-off, distortion and longitudinal color aberration refer to film plane.

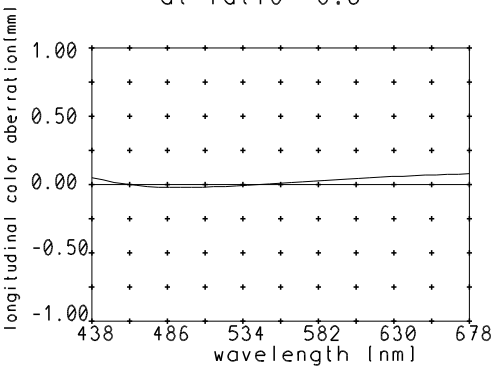
relative light fall-off at ratio -0.3



Distortion at ratio 0.3x to 3.0x

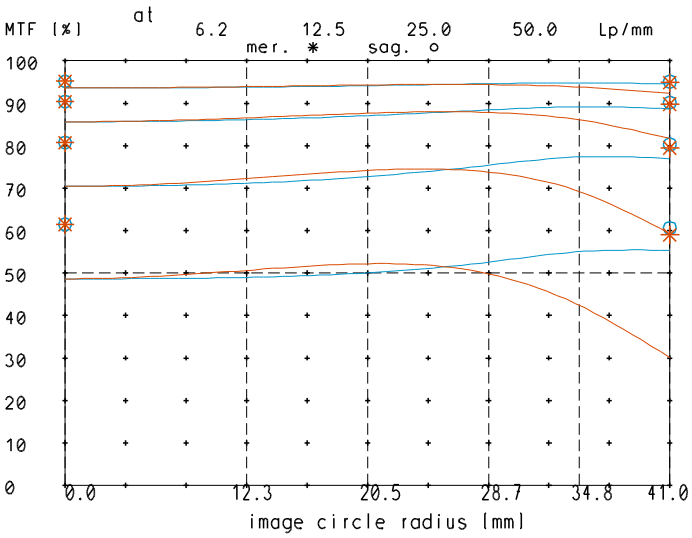


Longitudinal color aberration at ratio -0.3

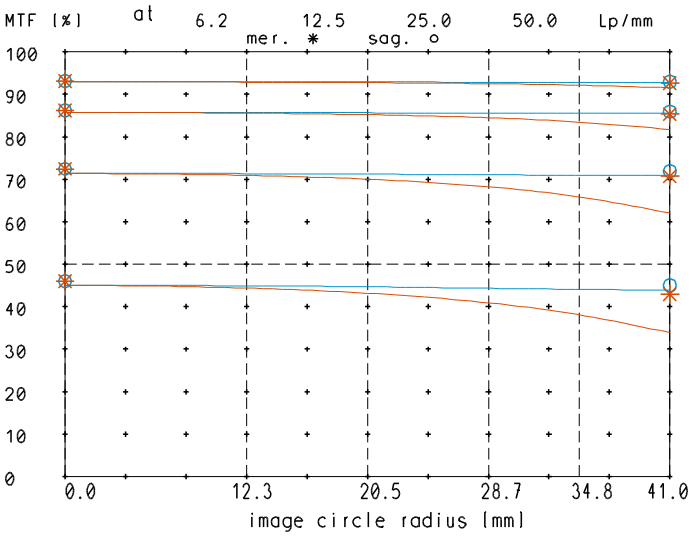


inspec.x_L_5.6/105_float

MTF at ratio -1.0 f/ 5.6



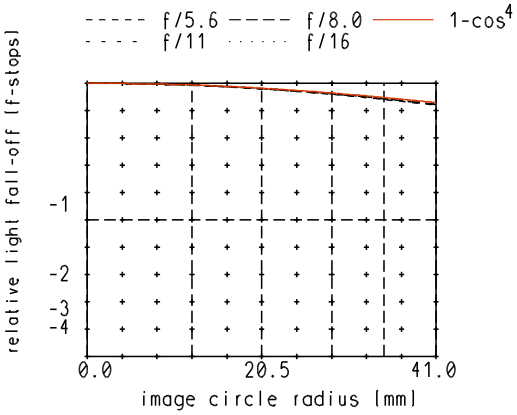
MTF at ratio -1.0 f/ 8.0



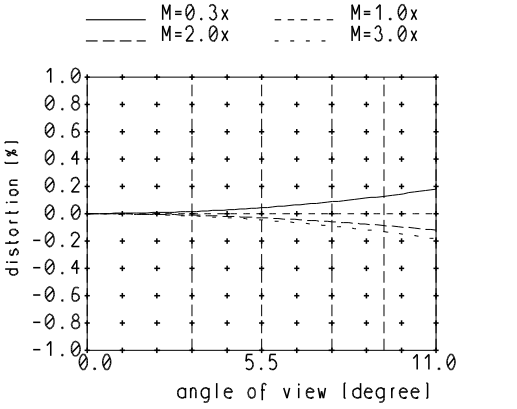
sagittal, o Diffraction limited value
meridional * Diffraction limited value

Named frequencies (line pairs/mm) in modular transfer function (MTF) as well as diagrams of relative light fall-off, distortion and longitudinal color aberration refer to film plane.

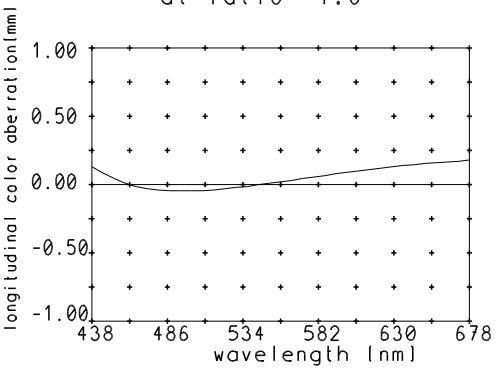
relative light fall-off at ratio -1.0



Distortion at ratio 0.3x to 3.0x

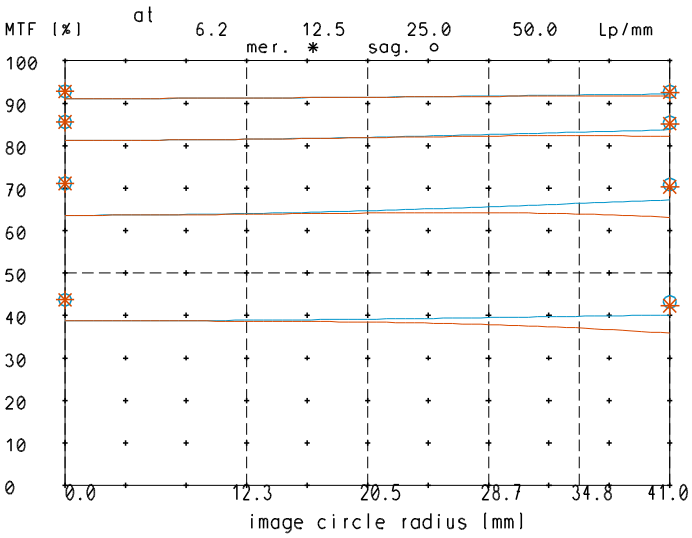


Longitudinal color aberration at ratio -1.0

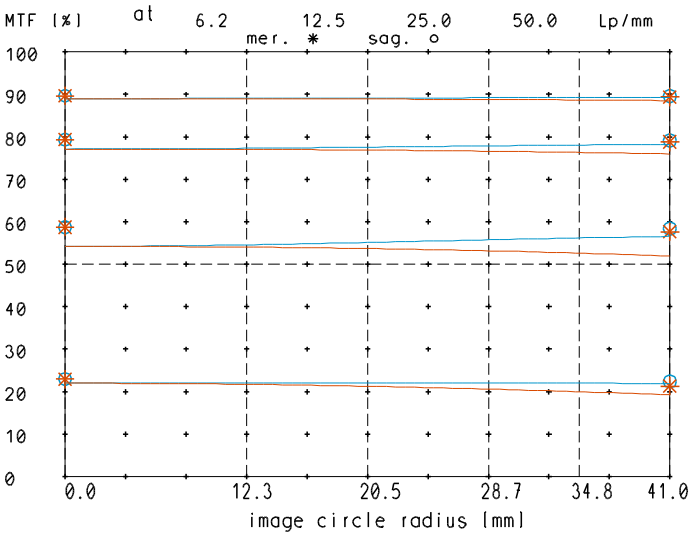


inspec.x_L_5.6/105_float

MTF at ratio -2.0 f/ 5.6



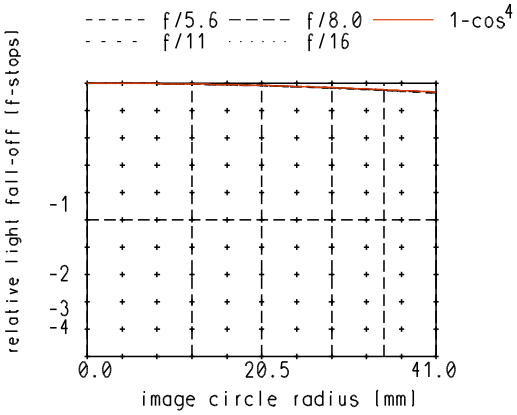
MTF at ratio -2.0 f/ 8.0



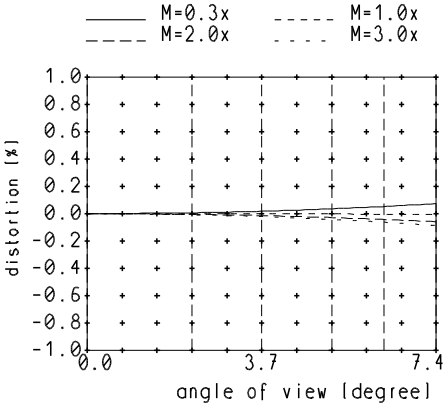
sagittal, o Diffraction limited value
meridional * Diffraction limited value

Named frequencies (line pairs/mm) in modular transfer function (MTF) as well as diagrams of relative light fall-off, distortion and longitudinal color aberration refer to film plane.

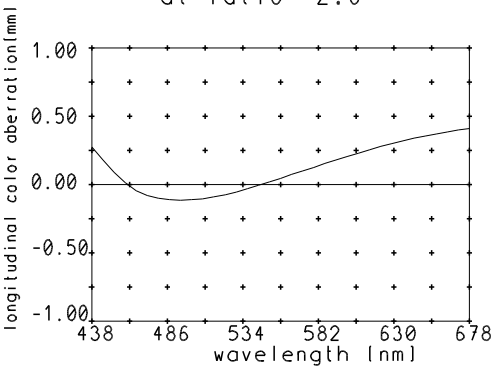
relative light fall-off at ratio -2.0



Distortion at ratio 0.3x to 3.0x

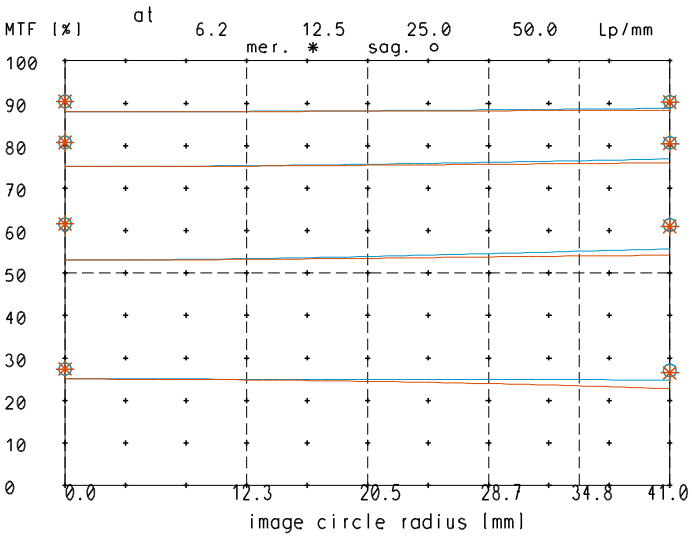


Longitudinal color aberration at ratio -2.0

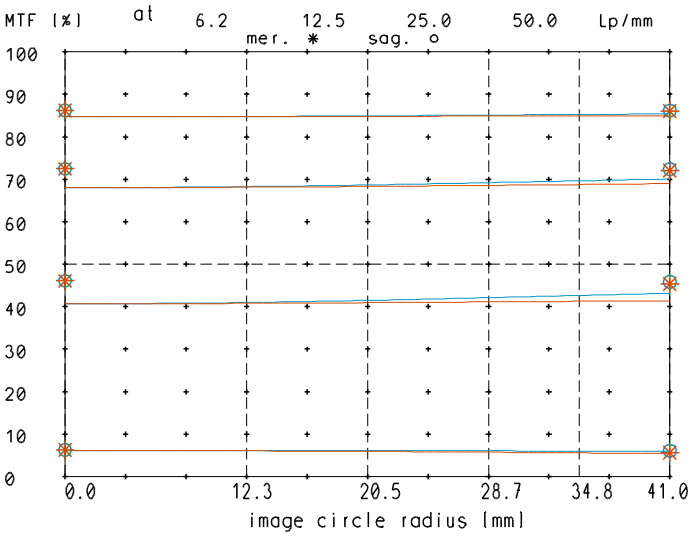


inspec.x_L_5.6/105_float

MTF at ratio -3.0 f/ 5.6



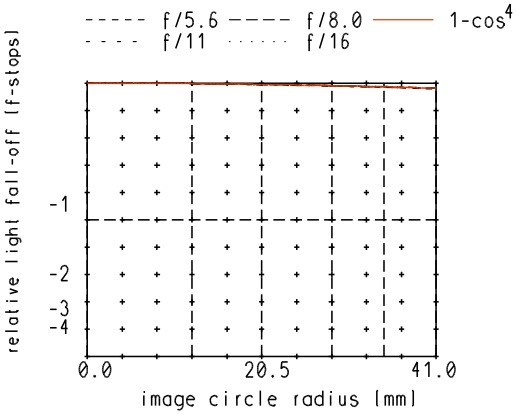
MTF at ratio -3.0 f/ 8.0



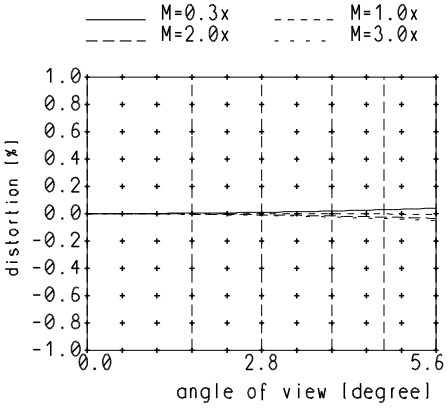
sagittal, o Diffraction limited value
meridional * Diffraction limited value

Named frequencies (line pairs/mm) in modular transfer function (MTF) as well as diagrams of relative light fall-off, distortion and longitudinal color aberration refer to film plane.

relative light fall-off at ratio -3.0



Distortion at ratio 0.3x to 3.0x



Longitudinal color aberration at ratio -3.0