

HASSELBLAD HC 3.5/35

GENERAL LENS DATA:

Focal length	35.8 mm
Aperture range	3.5 - 32
Angle of view diag/hor/vert	89°/78°/63°
Length/diameter	124 mm/100 mm
Weight	975 g
Filter diameter	95 mm

CLOSE FOCUS RANGE DATA:

Minimum distance object to film	0.50 m
Maximum image scale	1:9.6
Corresponding area of coverage	54 x 40 cm
Corresponding exposure reduction	0 f-stop

COMPATIBILITY

The HC3,5/35 mm lens is not compatible with the converter 1.7x.



LENS DESIGN

11 elements in 10 groups

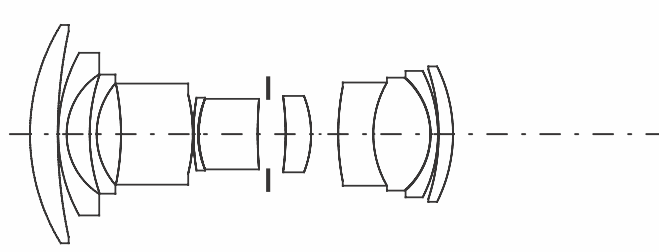
FOCUS TYPE

Rear focusing

ENTRANCE PUPIL POSITION

152 mm in front of the film plane
(at infinite focus setting)

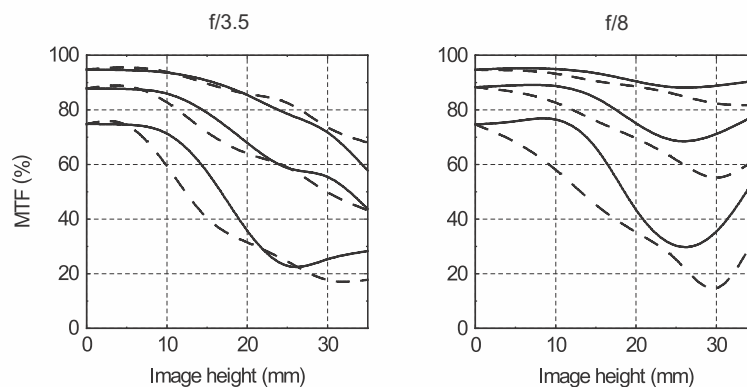
The entrance pupil position is the correct position of the axis of rotation when making a panorama image by combining individual images of a scene.



MTF

Modulation Transfer as a function of image height at infinite focus setting.

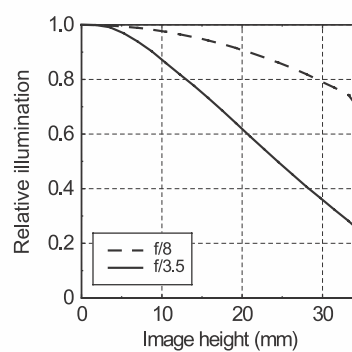
Sagittal slit orientation drawn with continuous line and tangential with dashed. White light. Spatial frequencies 10, 20 and 40 lp/mm



HASSELBLAD HC 3.5/35

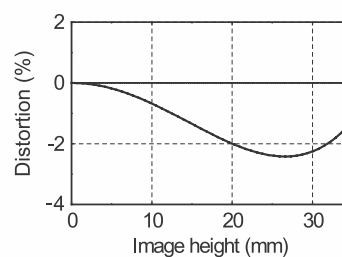
RELATIVE ILLUMINATION

Infinity setting



DISTORTION

Infinity setting



HASSELBLAD HC 3.5/50

GENERAL LENS DATA:

Focal length	50.3 mm
Aperture range	3.5 - 32
Angle of view diag/hor/vert	70°/59°/46°
Length/diameter	116 mm/85 mm
Weight	975 g
Filter diameter	77 mm

CLOSE FOCUS RANGE DATA:

Minimum distance object to film	0.6 m
Maximum image scale	1:8.9
Corresponding area of coverage	50 x 37 cm
Corresponding exposure reduction	0 f-stop



LENS DESIGN

10 elements in 9 groups

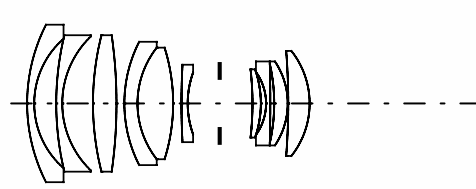
FOCUS TYPE

Rear focusing

ENTRANCE PUPIL POSITION

137 mm in front of the film plane
(at infinite focus setting)

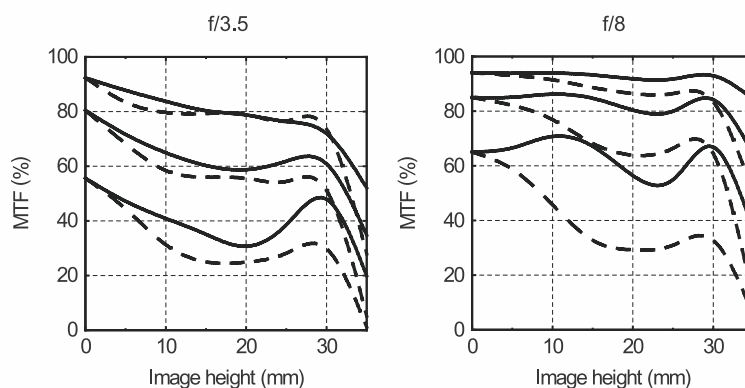
The entrance pupil position is the correct position of the axis of rotation when making a panorama image by combining individual images of a scene.



MTF

Modulation Transfer as a function of image height at infinite focus setting.

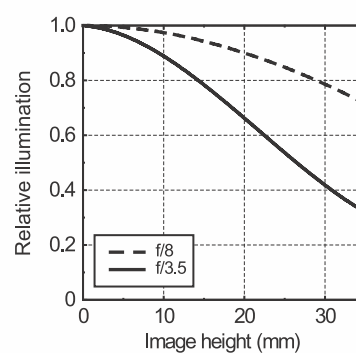
Sagittal slit orientation drawn with continuous line and tangential with dashed. White light. Spatial frequencies 10, 20 and 40 lp/mm



HASSELBLAD HC 3.5/50

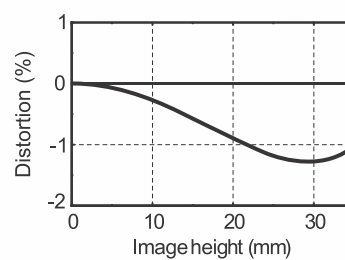
RELATIVE ILLUMINATION

Infinity setting



DISTORTION

Infinity setting



HASSELBLAD HC 3.5-4.5/50-110

GENERAL LENS DATA:

Focal length	51.5 (108.3) mm
Aperture range	3.5 (4.5) - 32
Angle of view diag/hor/vert	69°/58°/46° (35°/29°/22°)
Length/diameter	152 mm/103 mm
Weight	1650 g
Filter diameter	95 mm

CLOSE FOCUS RANGE DATA:

Minimum distance object to film	0.70 m
Maximum image scale	1:10.8 (1:5.2)
Corresponding area of coverage	60 x 45 (29 x 21) cm
Corresponding exposure reduction	0 f-stop



COMPATIBILITY

The HC3,5-4,5/50-110 mm lens is not compatible with the converter 1.7x.

LENS DESIGN

14 elements in 9 groups

FOCUS TYPE

Front focusing

ENTRANCE PUPIL POSITION

50 mm setting: 164 mm

80 mm setting: 161 mm

110 mm setting: 173 mm

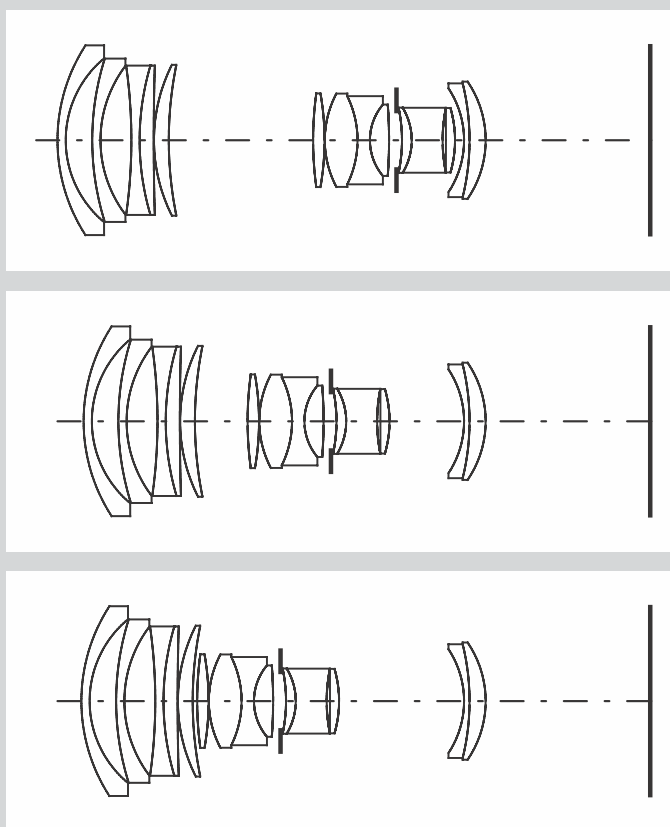
In front of the film plane
(at infinite focus setting)

The entrance pupil position is the correct position of the axis of rotation when making a panorama image by combining individual images of a scene.

50 mm

80 mm

110 mm



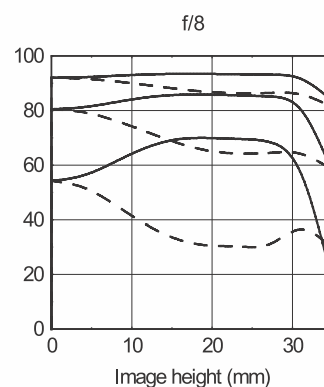
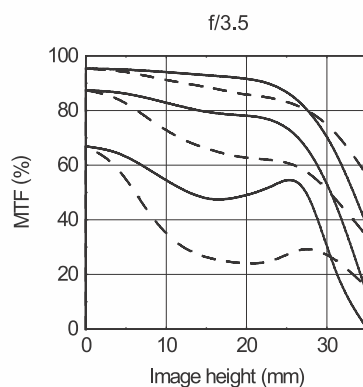
HASSELBLAD HC 3.5-4.5/50-110

MTF

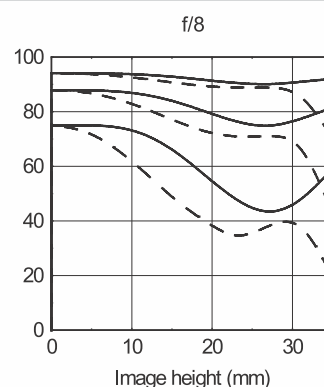
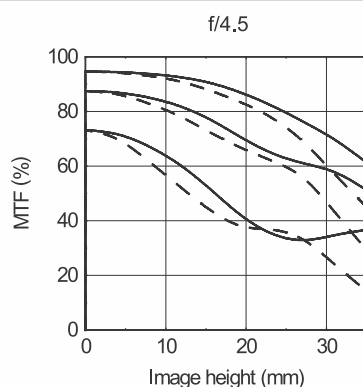
Modulation Transfer as a function of image height at infinite focus setting.

Sagittal slit orientation drawn with continuous line and tangential with dashed. White light. Spatial frequencies 10, 20 and 40 lp/mm

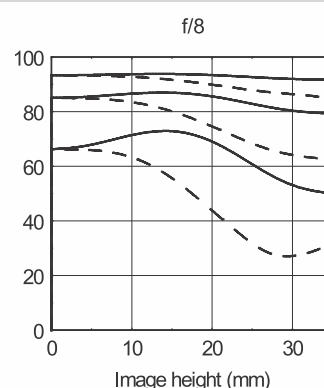
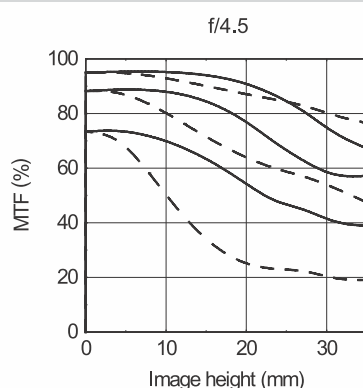
50 mm



80 mm



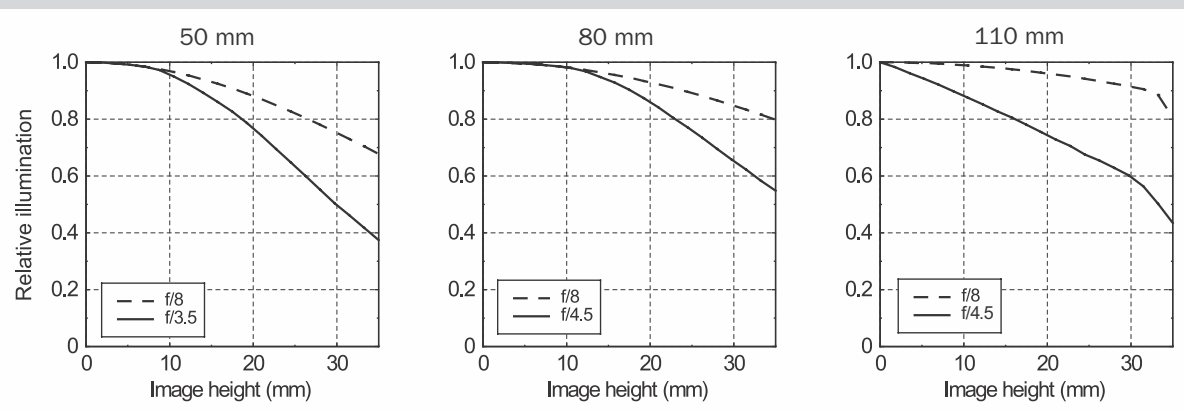
110 mm



HASSELBLAD HC 3.5-4.5/50-110

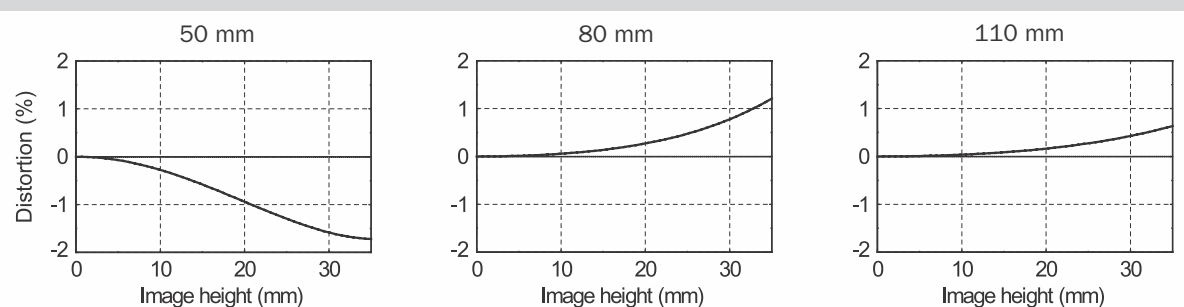
RELATIVE ILLUMINATION

Infinity setting



DISTORTION

Infinity setting



HASSELBLAD HC 2.8/80

GENERAL LENS DATA:

Focal length	82.3 mm
Aperture range	2.8 - 32
Angle of view diag/hor/vert	46°/38°/29°
Length/diameter	70 mm/84 mm
Weight	475 g
Filter diameter	67 mm



CLOSE FOCUS RANGE DATA:

Minimum distance object to film	0.70 m
Maximum image scale	1:6.5
Corresponding area of coverage	36 x 27 cm
Corresponding exposure reduction	0.3 f-stop

LENS DESIGN

6 elements in 6 groups

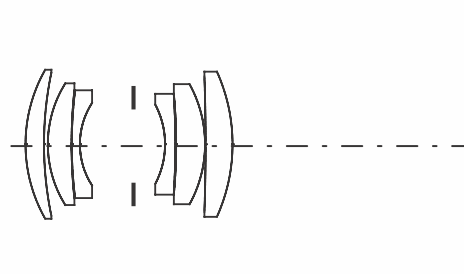
FOCUS TYPE

Full focusing

ENTRANCE PUPIL POSITION

79 mm in front of the film plane
(at infinite focus setting)

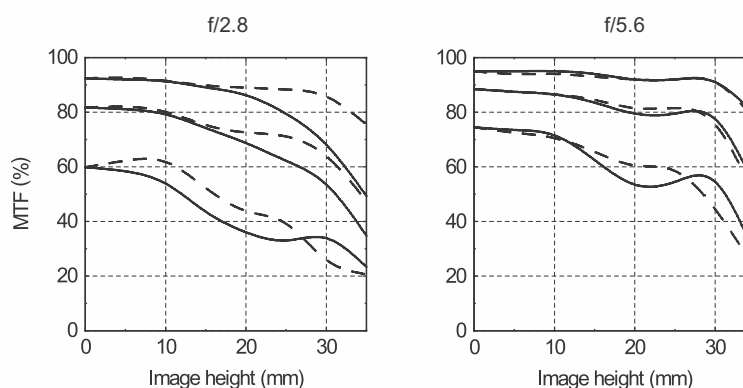
The entrance pupil position is the correct position of the axis of rotation when making a panorama image by combining individual images of a scene.



MTF

Modulation Transfer as a function of image height at infinite focus setting.

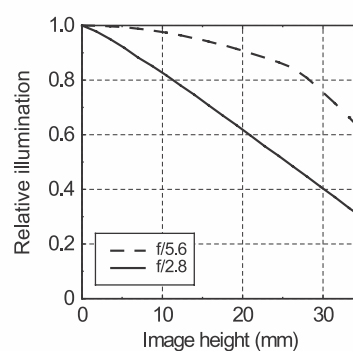
Sagittal slit orientation drawn with continuous line and tangential with dashed. White light. Spatial frequencies 10, 20 and 40 lp/mm



HASSELBLAD HC 2.8/80

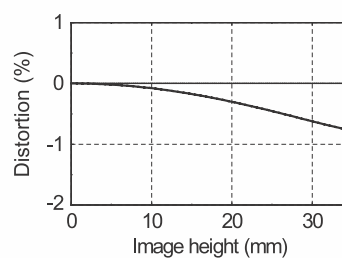
RELATIVE ILLUMINATION

Infinity setting



DISTORTION

Infinity setting



HASSELBLAD HC 2.2/100

GENERAL LENS DATA:

Focal length	100.0 mm
Aperture range	2.2 - 32
Angle of view diag/hor/vert	38°/31°/24°
Length/diameter	80.5 mm/87.5 mm
Weight	780 g
Filter diameter	77 mm



CLOSE FOCUS RANGE DATA:

Minimum distance object to film	0.90 m
Maximum image scale	1:7.2
Corresponding area of coverage	39 x 29 cm
Corresponding exposure reduction	0.4 f-stop

LENS DESIGN

6 elements in 5 groups

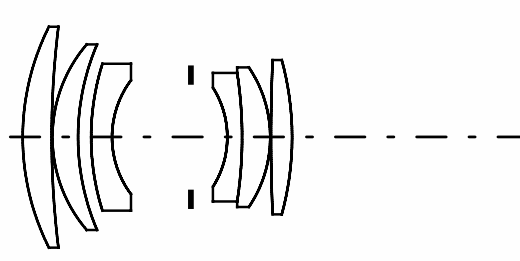
FOCUS TYPE

Full focusing

ENTRANCE PUPIL POSITION

68 mm in front of the film plane
(at infinite focus setting)

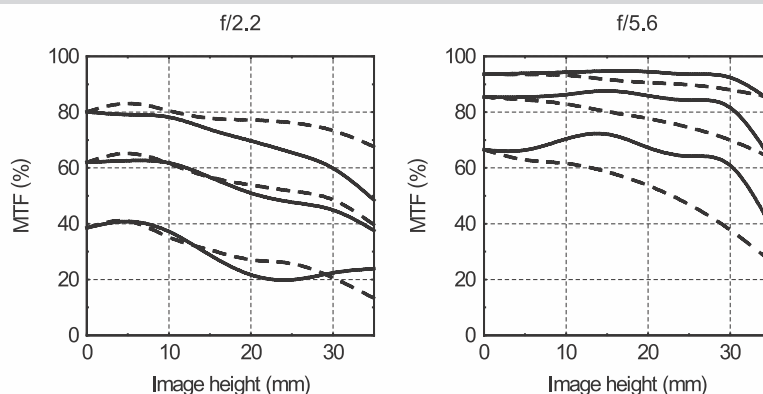
The entrance pupil position is the correct position of the axis of rotation when making a panorama image by combining individual images of a scene.



MTF

Modulation Transfer as a function of image height at infinite focus setting.

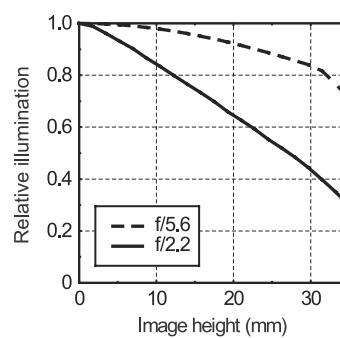
Sagittal slit orientation drawn with continuous line and tangential with dashed. White light. Spatial frequencies 10, 20 and 40 lp/mm



HASSELBLAD HC 2.2/100

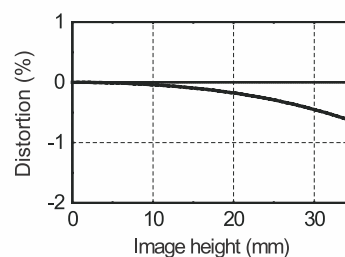
RELATIVE ILLUMINATION

Infinity setting



DISTORTION

Infinity setting



HASSELBLAD HC Macro 4/120

GENERAL LENS DATA:

Focal length	118.7 mm
Aperture range	4 - 45
Angle of view diag/hor/vert	33°/26°/21°
Length/diameter	166 mm/96 mm
Weight	1410 g
Filter diameter	67 mm

CLOSE FOCUS RANGE DATA:

Minimum distance object to film	0.39 m
Maximum image scale	1:1
Corresponding area of coverage	56 x 41.5 mm
Corresponding exposure reduction	1.3 f-stop

COMPATIBILITY

When the HC Macro 120 is used together with the H1,7X converter, the autofocus function of the camera is disabled.



LENS DESIGN

9 elements in 9 groups

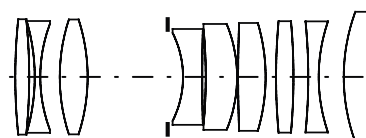
FOCUS TYPE

Front focusing

ENTRANCE PUPIL POSITION

148 mm in front of the film plane
(at infinite focus setting)

The entrance pupil position is the correct position of the axis of rotation when making a panorama image by combining individual images of a scene.

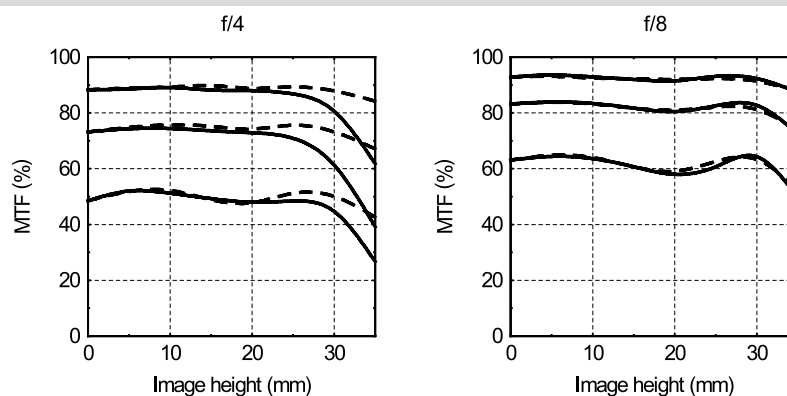


MTF

@ infinity setting

Modulation Transfer as a function of image height at infinite focus setting.

Sagittal slit orientation drawn with continuous line and tangential with dashed. White light. Spatial frequencies 10, 20 and 40 lp/mm



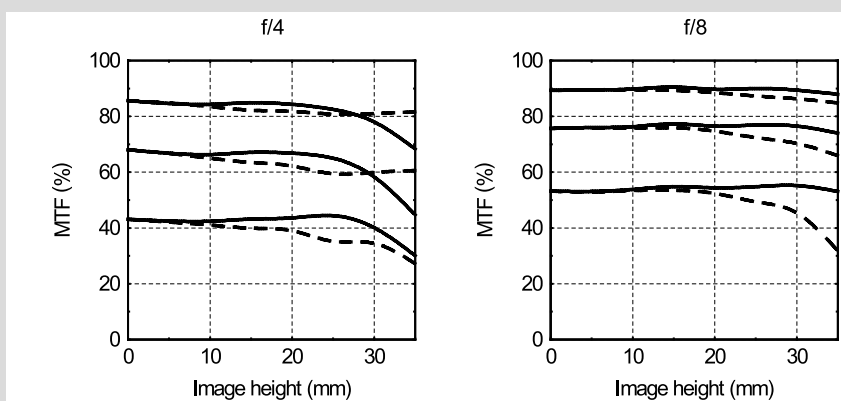
HASSELBLAD HC Macro 4/120

MTF

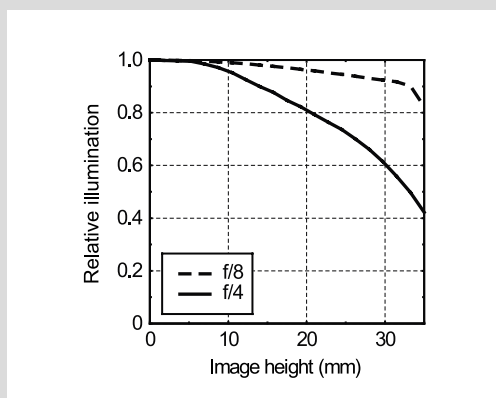
@ image scale 1:2

Modulation Transfer as a function of image height at infinite focus setting.

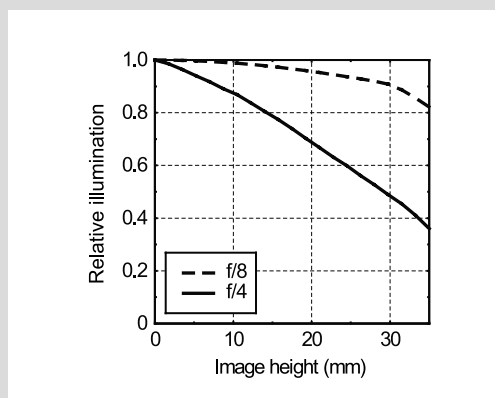
Sagittal slit orientation drawn with continuous line and tangential with dashed. White light. Spatial frequencies 10, 20 and 40 lp/mm



RELATIVE ILLUMINATION

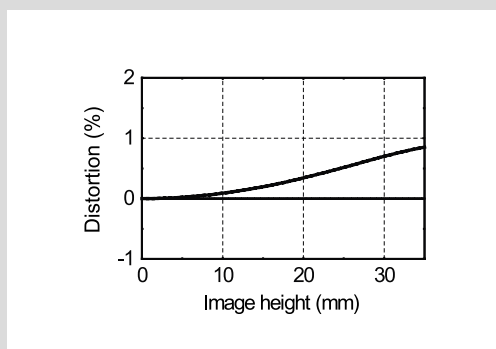


1:2

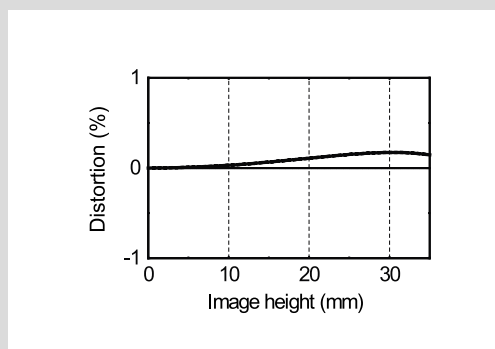


Infinity setting

DISTORTION



1:2



Infinity setting

HASSELBLAD HC 3.2/150N

GENERAL LENS DATA:

Focal length	150.2 mm
Aperture range	3.2 - 45
Angle of view diag/hor/vert	26°/21°/16°
Length/diameter	124 mm/86 mm
Weight	970 g
Filter diameter	77 mm

CLOSE FOCUS RANGE DATA:

Minimum distance object to film	1.30 m
Maximum image scale	1:6.8
Corresponding area of coverage	38 x 28 cm
Corresponding exposure reduction	0 f-stop



LENS DESIGN

9 elements in 8 groups

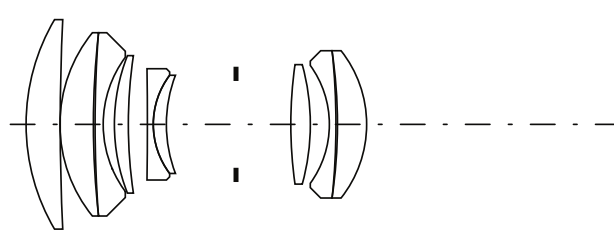
FOCUS TYPE

Internal focusing

ENTRANCE PUPIL POSITION

68 mm in front of the film plane
(at infinite focus setting)

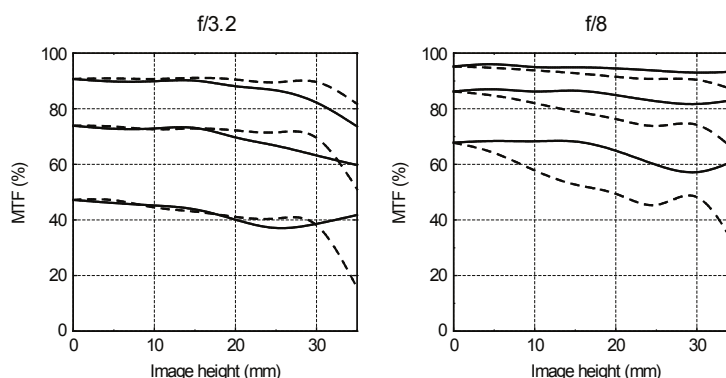
The entrance pupil position is the correct position of the axis of rotation when making a panorama image by combining individual images of a scene.



MTF

Modulation Transfer as a function of image height at infinite focus setting.

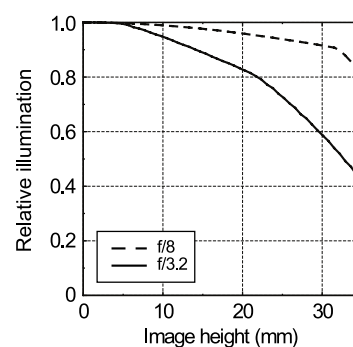
Sagittal slit orientation drawn with continuous line and tangential with dashed. White light. Spatial frequencies 10, 20 and 40 lp/mm



HASSELBLAD HC 3.2/150N

RELATIVE ILLUMINATION

Infinity setting



DISTORTION

2 meters and infinity setting

