

CAMERA CALIBRATION CERTIFICATE

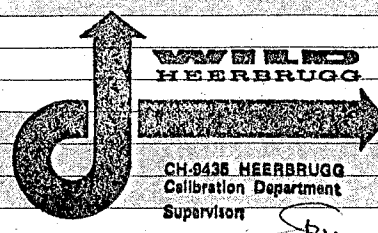
CAMERA TYPE : RC10

LENS TYPE : 15/4 UAG

LENS NO. : 13018

CALIBRATION DATE : 26.01.84

WILD HEERBRUGG LTD



CAMERA CALIBRATION

CAMERA: RC10 LENS: 15/4 UAG NO.: 13018 CALIBRATION DATE: 26.01.84

APERTURE : F / 4.0
FILTER ON GONIOMETER : VIS (400 - 700 NM)
FILTER ON CAMERA : --
CALIBRATED FOCAL LENGTH : 153.37 MM

RADIAL DISTORTION (MICROMETERS)

REFERRED TO PRINCIPAL POINT OF SYMMETRY (PPS)
(POSITIVE VALUES DENOTE IMAGE DISPLACEMENT AWAY FROM CENTER)

RADIUS MM	SEMI - DIAGONALS				MEAN
	1	3	2	4	
10	1.4	0.0	0.6	0.3	0.5
20	1.7	0.2	1.2	0.7	0.9
30	1.1	0.8	1.1	0.7	0.9
40	1.1	0.6	1.0	0.6	0.8
50	1.3	0.4	1.0	0.5	0.8
60	0.4	0.4	1.1	0.2	0.5
70	0.5	0.6	0.5	0.6	0.5
80	0.2	1.0	0.4	1.0	0.6
90	1.2	1.2	0.8	1.2	1.1
100	0.7	1.1	1.3	1.2	1.0
110	0.8	1.0	0.9	1.5	1.0
120	0.1	-0.1	-0.2	0.5	0.0
130	-1.3	-1.3	-0.6	-0.3	-0.8
140	-2.6	-2.3	-1.5	-1.7	-2.0
148	-2.4	-2.9	-1.0	-1.9	-2.0

PHOTOGRAPHIC RESOLUTION (LINE PAIRS PER MILLIMETER)

INTERNATIONAL 3-LINE TEST-CHART, CONTRAST (LOG) : 2.0

APERTURE : 4.0
FILTER : 450 NM
FILM : AGFAPAN 25 PROFESSIONAL (ASA SPEED: 25)
DEVELOPER : AGFA-GEVAERT STUDIOLAN LIQUID 1:15 6 MIN

ANGLE:	0	5	10	15	20	25	30	35	40	45
(DEGREES)										
RAD.	67	67	83	81	79	76	73	77	57	38
TANG.	67	67	65	62	59	69	63	71	55	33

AWAR (AREA WEIGHTED AVERAGE RESOLUTION) IN LP/MM : 68

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PRINCIPAL POINT OF AUTOCOLLIMATION (PPA) AND
PRINCIPAL POINT OF SYMMETRY (PPS)-----
REFERRED TO FC, SEE DIAGRAM

	X (MM)	Y (MM)
PPA	0.004	0.004
SP	0.000	0.001

FIDUCIAL MARKS, REFERRED TO FC

	X (MM)	Y (MM)
1	105.999	-105.998
2	-106.000	-105.999
3	-106.003	106.002
4	106.001	106.000

			3	(7)	4	
	I					
	R N			Y		
	E S					
	C T					
	O R					
	R U		(6)	FC +----- X	(8)	
	D M					
	I E					
	N N					
	G T					
	S					
			2	(5)	1	

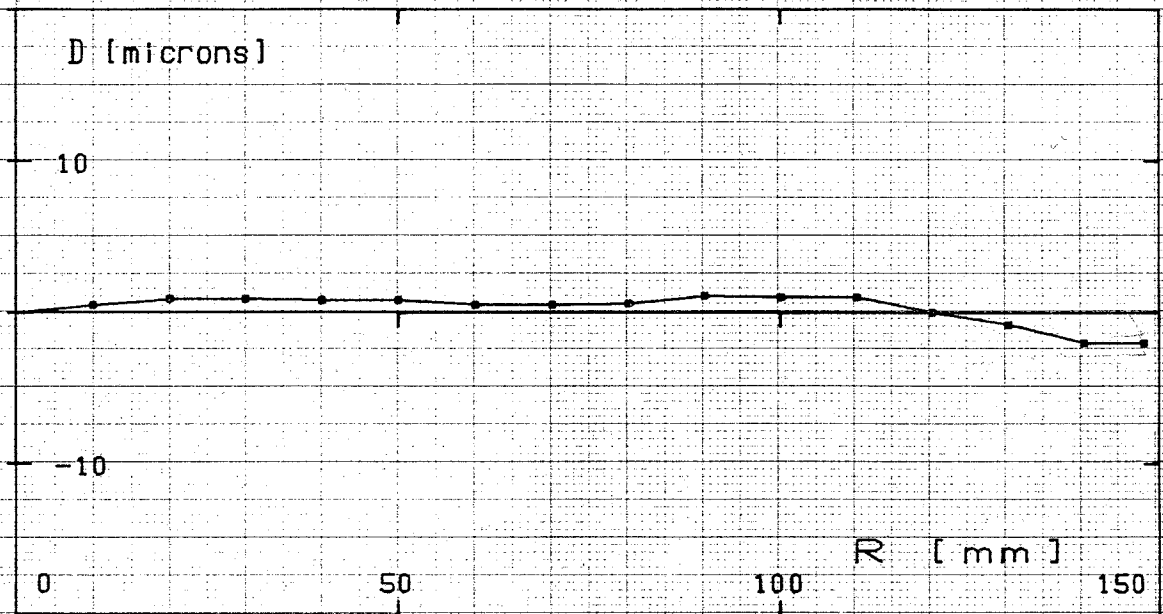
AS SEEN ON FOCAL PLANE FRAME

5.

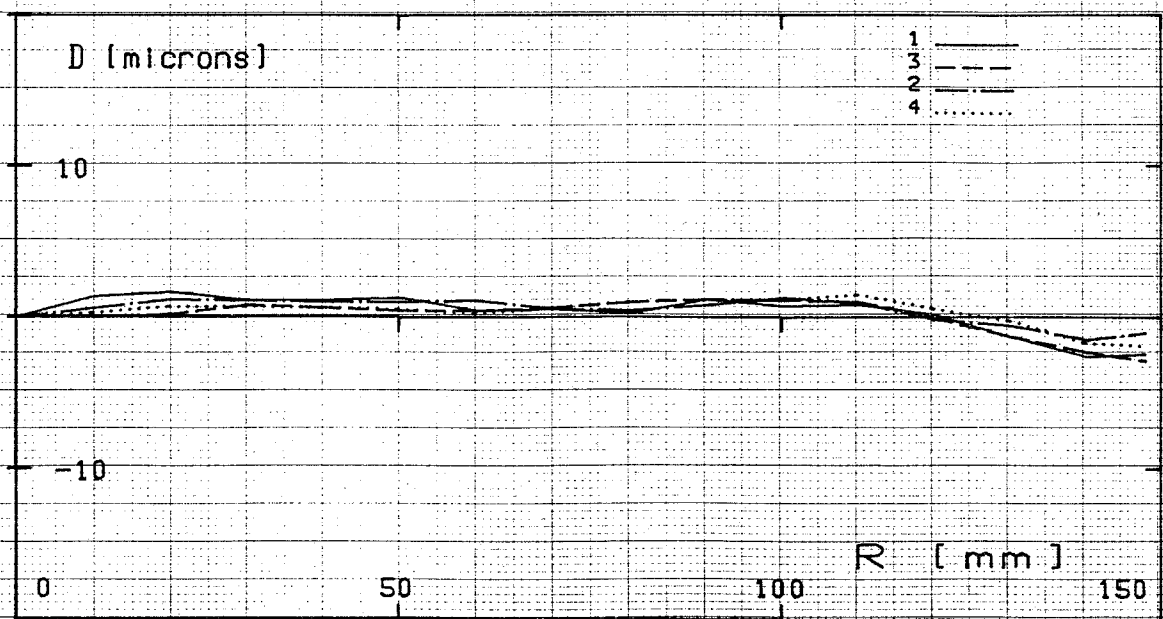
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 FILTER ON GONIOMETER : VIS (400 - 700 NM)
 FILTER ON CAMERA : --
 C.F.L. : 153.37 MM



MEAN RADIAL DISTORTION CURVE



RADIAL DISTORTION FOR SEMI-DIAGONALS REFERRED TO PPS