

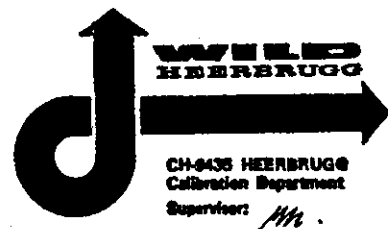
4.6.87

CAMERA CALIBRATION CERTIFICATE

CAMERA TYPE : RC20
LENS TYPE : Z1 NAGIIA-F
LENS NO. : 7176

CALIBRATION DATE : 04.06.87

WILD HEERBRUGG LTD



CAMERA CALIBRATION

CAMERA: RC20 LENS: 21 NAGIIA-F NO.: 7176 CALIBRATION DATE: 04.06.87

APERTURE : F / 4.0
 FILTER ON GONIOMETER : 450 NM
 FILTER ON CAMERA : --
 PRINCIPAL DISTANCE FOR FOCUSING DISTANCE 900 M : 214.74 MM

RADIAL DISTORTION (MICROMETERS)

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

DIUS MM	SEMI - DIAGONALS				MEAN
	1	3	2	4	
10	1.3	1.1	0.9	1.0	1.0
20	1.7	0.9	2.1	1.5	1.5
30	2.7	1.8	2.9	2.2	2.4
40	3.9	3.2	3.7	3.2	3.5
50	4.6	2.9	4.1	3.7	3.8
60	3.2	2.9	3.7	3.0	3.2
70	2.5	1.3	1.5	2.0	1.8
80	-0.5	-0.1	0.0	0.2	-0.1
90	-1.4	-1.4	-1.4	-0.8	-1.2
100	-2.8	-3.1	-2.0	-1.9	-2.4
110	-2.3	-3.2	-1.6	-2.3	-2.3
120	-2.4	-2.7	-1.6	-2.1	-2.2
130	-2.4	-1.9	-1.4	-1.2	-1.7
140	-1.4	-0.1	0.0	0.4	-0.2
148	0.8	0.8	2.1	2.0	1.4

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 : KODAK HC110 PREPARATION 2 SOLUTION C

ANGLE: (DEGREES)	0	5	10	15	20	25	30	35
RAD.	75	84	74	82	56	48	46	49
TANG.	75	75	65	63	53	55	50	45

AWAR (AREA WEIGHTED AVERAGE RESOLUTION) IN LP/MM : 57

M.

CAMERA CALIBRATION

AMERA: RC20 LENS: 21 NAGIIA-F NO.: 7176 CALIBRATION DATE: 04.06.87

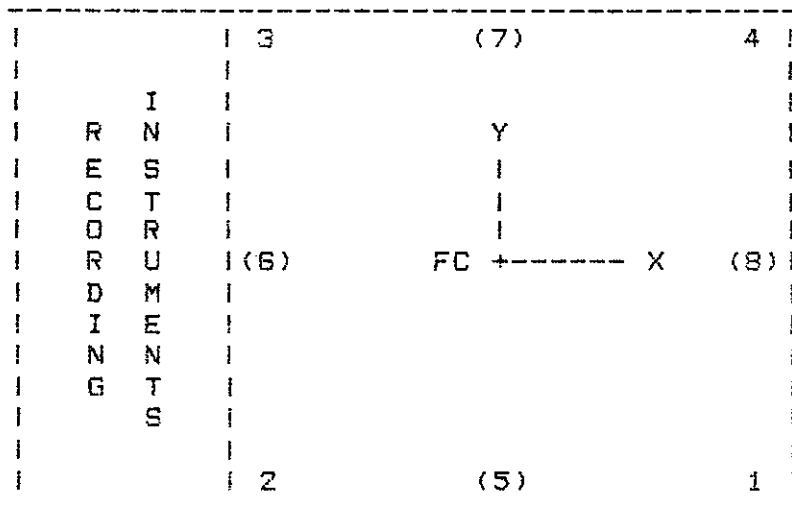
PRINCIPAL POINT OF AUTOCOLLIMATION (PPA) AND
 PRINCIPAL POINT OF SYMMETRY (PPS)

 REFERRED TO FC, SEE DIAGRAM

	X (MM)	Y (MM)
PPA	-0.011	0.001
	-0.013	-0.018

 REFERENCE MARKS, REFERRED TO FC

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

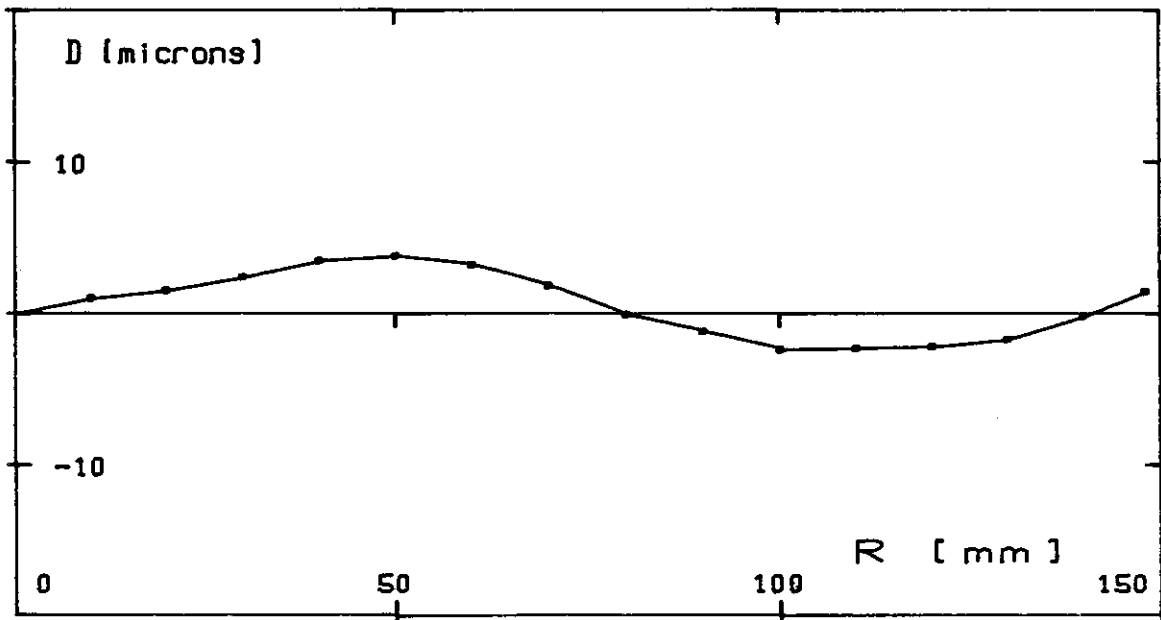


AS SEEN ON FOCAL PLANE FRAME

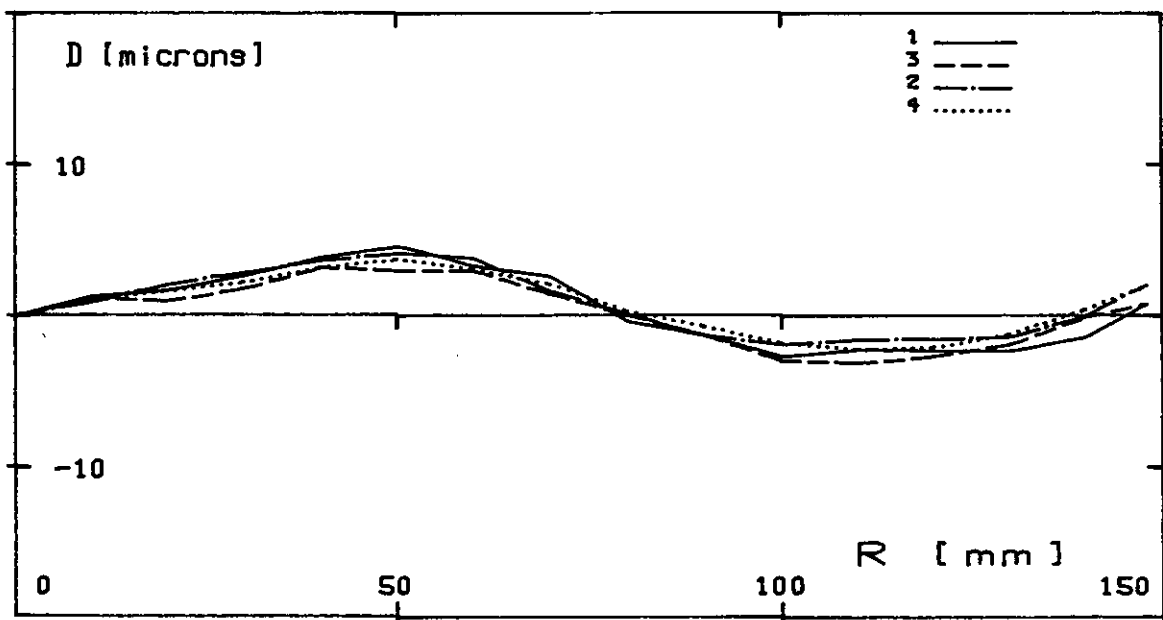
RC20 21 NAGIIA-F NO. 7176

04.06.87

APERTURE : F / 4.0
FILTER ON GONIOMETER : 450 NM
FILTER ON CAMERA : --
P.D. (900 m) : 214.74 MM



MEAN RADIAL DISTORTION CURVE



RADIAL DISTORTION FOR SEMI-DIAGONALS REFERRED TO PPS

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