

CAMERA CALIBRATION CERTIFICATE

CAMERA TYPE : RC10


LENS TYPE : 21 NAG II

LENS NO. : 7172

CALIBRATION DATE : 28.11.89

WILD LEITZ LTD

Wild Leitz Ltd
CH-9435 Heerbrugg

Calibration Department
Supervisor:  310

 **WILD LEITZ**

CAMERA CALIBRATION

CAMERA: RC10 LENS: 21 NAG II NO.: 7172 CALIBRATION DATE: 28.11.89

APERTURE : F / 4.0
 FILTER ON GONIOMETER : --
 FILTER ON CAMERA : 450 NM
 PRINCIPAL DISTANCE FOR FOCUSSING DISTANCE 900 M : 213.91 MM

RADIAL DISTORTION (MICROMETERS)

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

RADIUS	SEMI - DIAGONALS				MEAN
MM	1	3	2	4	
10	0.8	0.1	0.9	0.1	0.4
20	1.5	0.7	1.5	1.0	1.1
30	1.3	2.3	2.1	2.0	1.9
40	1.6	3.4	2.3	2.9	2.5
50	2.0	3.4	2.3	2.8	2.6
60	1.1	4.0	2.1	2.6	2.4
70	-0.1	2.6	0.4	1.7	1.1
80	-2.0	1.7	-1.0	0.8	-0.1
90	-2.0	1.0	-1.9	0.2	-0.6
100	-2.6	0.0	-2.0	-0.7	-1.3
110	-1.7	-1.3	-0.9	-1.1	-1.2
120	-0.8	-1.6	-1.4	-1.2	-1.2
130	-0.1	-1.6	-0.4	-0.6	-0.6
140	0.0	-1.6	0.1	-0.9	-0.6
148	0.7	-2.3	0.8	-1.1	-0.4

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:	0	5	10	15	20	25	30	35
(DEGREES)								
RAD.	85	84	83	82	40	43	37	49
TANG.	85	84	65	56	53	55	50	45

AWAR (AREA WEIGHTED AVERAGE RESOLUTION) IN LP/MM : 53



CAMERA CALIBRATION

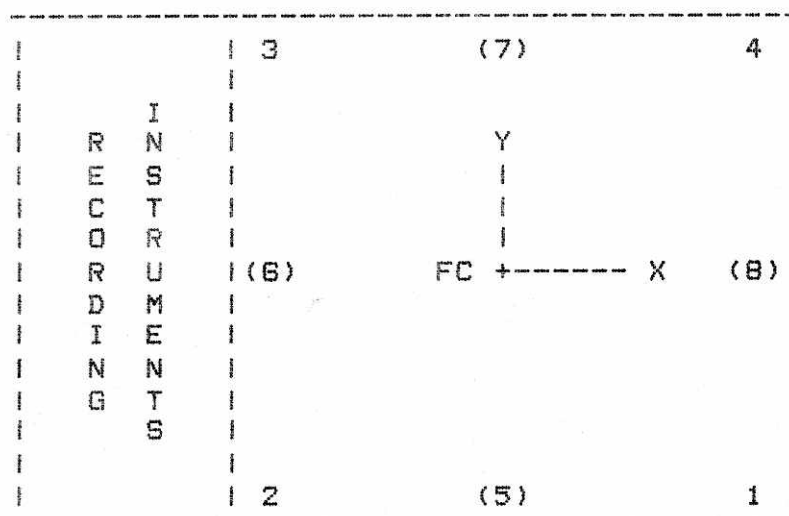
CAMERA: RC10 LENS: 21 NAG II NO.: 7172 CALIBRATION DATE: 28.11.89

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

	X (MM)	Y (MM)
PPA	0.000	0.000
S	0.004	0.004

FIDUCIAL MARKS, REFERRED TO FC

	X (MM)	Y (MM)
1	106.004	-106.004
2	-106.004	-106.004
3	-106.006	106.006
4	106.002	106.002

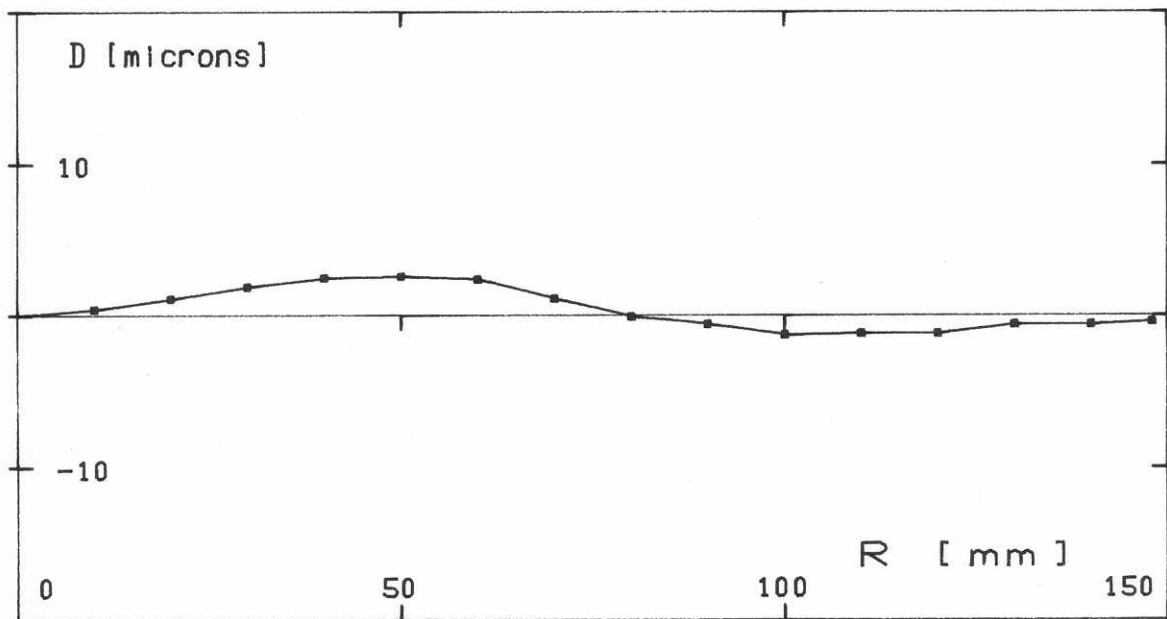


AS SEEN ON FOCAL PLANE FRAME

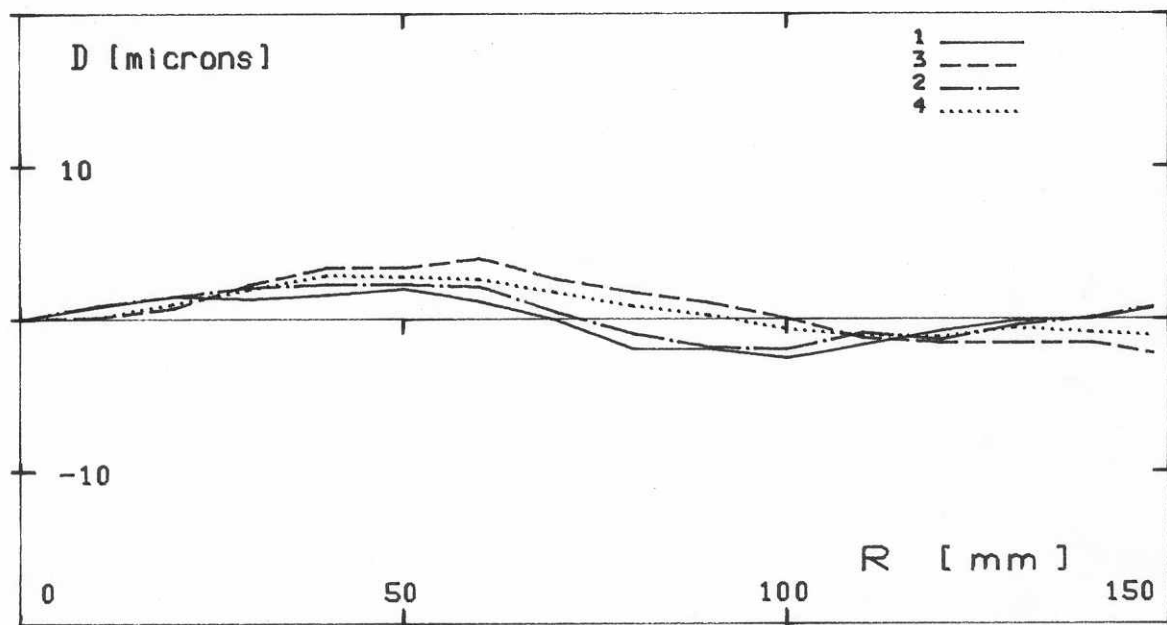
RC10 21 NAG II NO. 7172

28.11.89

APERTURE : F / 4.0
 FILTER ON GONIOMETER : --
 FILTER ON CAMERA : 450 NM
 P.D. (900 m) : 213.91 MM



MEAN RADIAL DISTORTION CURVE



RADIAL DISTORTION FOR SEMI-DIAGONALS
 REFERRED TO PPS