

CAMERA CALIBRATION CERTIFICATE

CAMERA TYPE : RC10
LENS TYPE : 15/4 UAG
LENS NO. : 13003

CALIBRATION DATE : 14.12.82

WILD HEERBRUGG LTD

CAMERA CALIBRATION

CAMERA: RC10 LENS: 15/4 UAG NO.: 13003 CALIBRATION DATE: 14.12.82

APERTURE : F / 4
 FILTER ON GONIOMETER : VIS (400 - 700 NM)
 FILTER ON CAMERA : --
 CALIBRATED FOCAL LENGTH : 153.18 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	1.0	0.1	0.6	0.1	0.4
20	1.0	-0.2	0.6	-0.1	0.3
30	-0.2	-0.6	-0.2	-0.9	-0.4
40	-0.9	-1.5	-1.2	-2.0	-1.4
50	-0.6	-3.1	-1.4	-3.0	-2.0
60	-1.7	-2.6	-1.5	-3.6	-2.3
70	-0.6	-1.8	-1.4	-2.0	-1.4
80	0.2	-0.5	-0.1	-0.9	-0.3
90	2.1	0.8	0.8	0.3	1.0
100	2.6	1.4	2.4	1.4	1.9
110	2.8	2.1	2.7	2.6	2.5
120	2.6	1.8	1.9	2.1	2.1
130	1.2	0.9	1.3	1.6	1.2
140	-2.0	-0.5	-1.3	0.0	-0.9
148	-4.2	-2.7	-3.2	-1.5	-2.9

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 STUDIOAL LIQUID 1:15 6 MIN

ANGLE: (DEGREES)	0	5	10	15	20	25	30	35	40	45
RAD.	67	75	74	91	70	68	73	77	65	38
TANG.	67	66	65	62	59	69	71	63	55	38

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

Sig.

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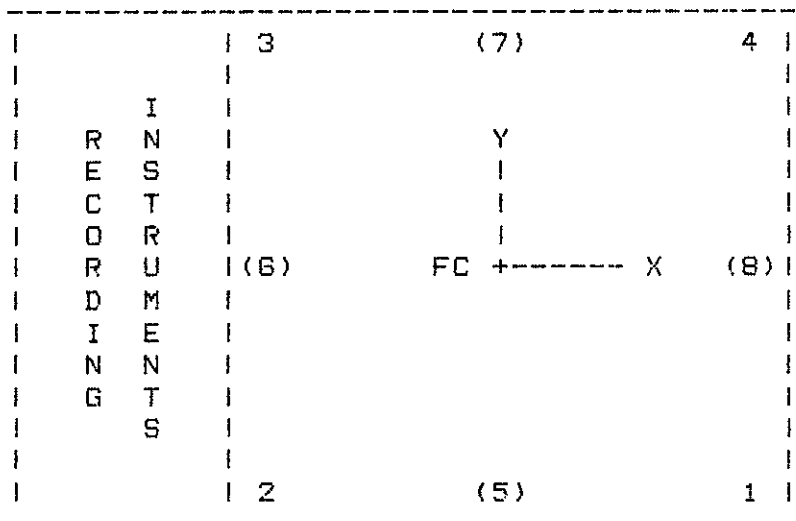
PRINCIPAL POINT OF AUTOCOLLIMATION (PPA) AND
PRINCIPAL POINT OF SYMMETRY (PPS)

REFERRED TO FC, SEE DIAGRAM

	X (MM)	Y (MM)
PPA	-0.001	0.005
S	0.001	-0.003

FIDUCIAL MARKS, REFERRED TO FC

	X (MM)	Y (MM)		X (MM)	Y (MM)
1	105.999	-105.997	5	0.002	-109.998
2	-106.003	-106.000	6	-109.995	0.003
3	-106.001	105.999	7	0.002	109.997
4	106.000	105.996	8	109.990	0.005

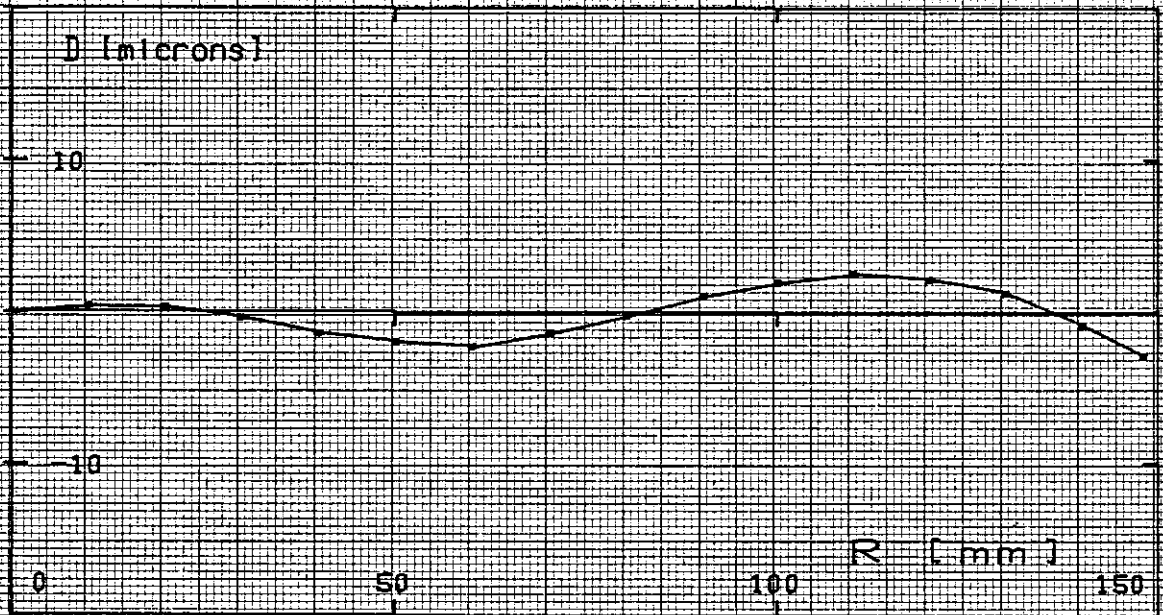


AS SEEN ON FOCAL PLANE FRAME

RC10 1574 UAG NO. 13003

14.12.82

APERTURE : F / 4
FILTER ON GONIOMETER : VIS (400 - 200 nm)
FILTER ON CAMERA : -
C.F.L. : 153.18 mm



MEAN RADIAL DISTORTION CURVE



RADIAL DISTORTION FOR SEMI-DIAGONALS REFERRED TO PPS