

CAMERA CALIBRATION CERTIFICATE

CAMERA TYPE : RC20
LENS TYPE : 15/4 UAGA-F
LENS NO. : 13084

CALIBRATION DATE : 06.03.87

WILD HEERBRUGG LTD



CAMERA CALIBRATION

CAMERA: RC20 LENS: 15/4 UAGA-F NO.: 13084 CALIBRATION DATE: 06.03.87

APERTURE : F / 4.0
 FILTER ON GONIOMETER : VIS (400 - 700 NM)
 FILTER ON CAMERA : --
 CALIBRATED FOCAL LENGTH : 153.01 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	0.4	0.1	0.5	0.2	0.3
20	0.8	0.0	1.0	0.3	0.3
30	0.3	0.2	0.9	0.3	0.4
40	0.4	0.5	0.8	0.4	0.5
50	0.4	-0.3	0.7	0.0	0.2
60	-0.4	-0.1	0.9	-0.2	0.0
70	-0.4	0.5	0.0	0.5	0.1
80	-0.2	1.2	0.3	0.8	0.3
90	0.8	1.3	0.3	0.8	0.8
100	0.6	1.4	1.0	1.1	1.0
110	0.7	1.0	0.8	1.2	0.9
120	1.0	0.7	-0.3	0.4	0.4
130	0.2	-0.2	-0.9	-0.4	-0.3
140	-0.8	-0.8	-1.5	-1.7	-1.2
148	-1.2	-2.4	-1.6	-3.0	-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 : KODAK HC110 PREPARATION 2 SOLUTION C

ANGLE: (DEGREES)	0	5	10	15	20	25	30	35	40	45
RAD.	85	87	83	81	79	61	62	77	57	35
TANG.	85	74	73	70	74	69	71	57	48	33

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

CAMERA CALIBRATION

CAMERA: RC20 LENS: 15/4 UAGA-F NO.: 13084 CALIBRATION DATE: 06.03.87

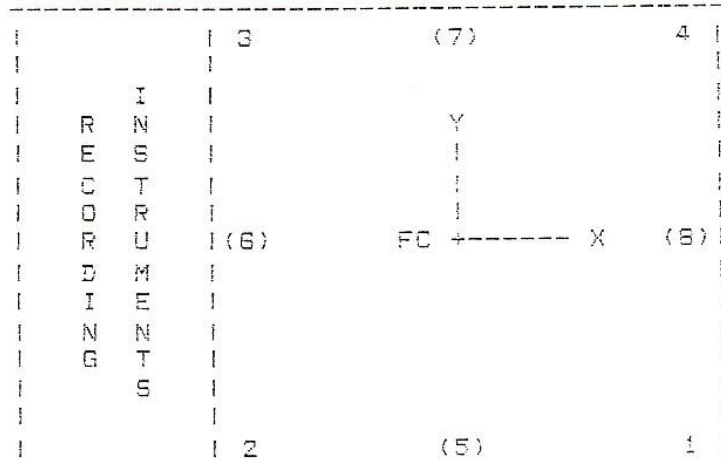
PRINCIPAL POINT OF AUTOCOLLIMATION (PPA) AND
PRINCIPAL POINT OF SYMMETRY (PPS)

REFERRED TO FC, SEE DIAGRAM

	X (MM)	Y (MM)
PPA	0.012	0.003
S	0.005	-0.003

FIDUCIAL MARKS, REFERRED TO FC

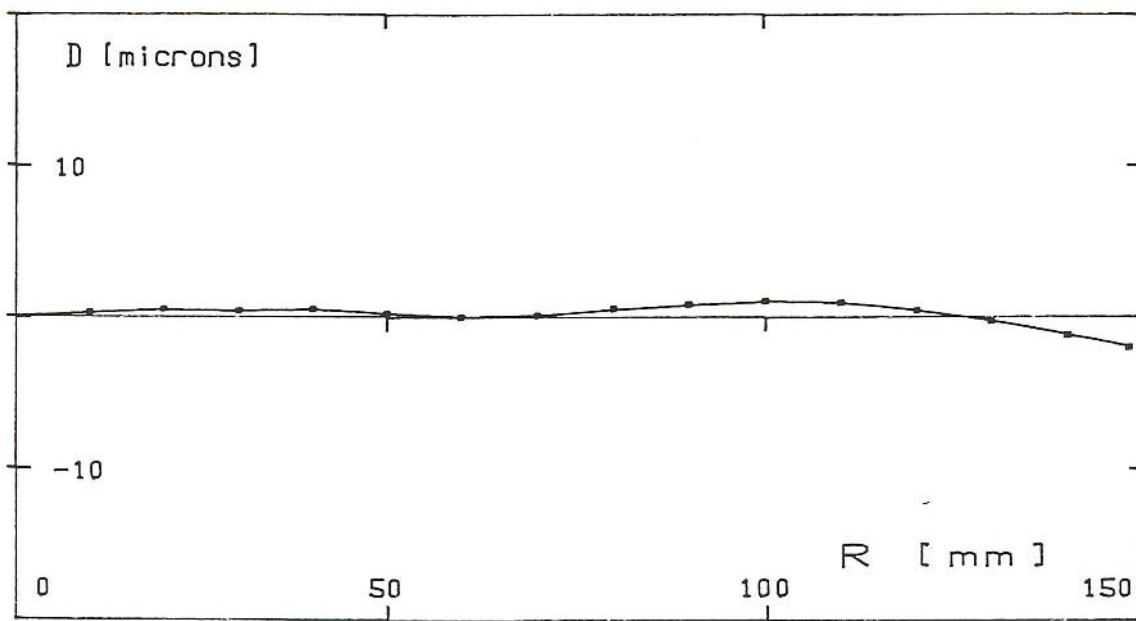
	X (MM)	Y (MM)
1	105.999	-105.996
2	-106.001	-105.998
3	-106.004	105.001
4	106.002	105.999



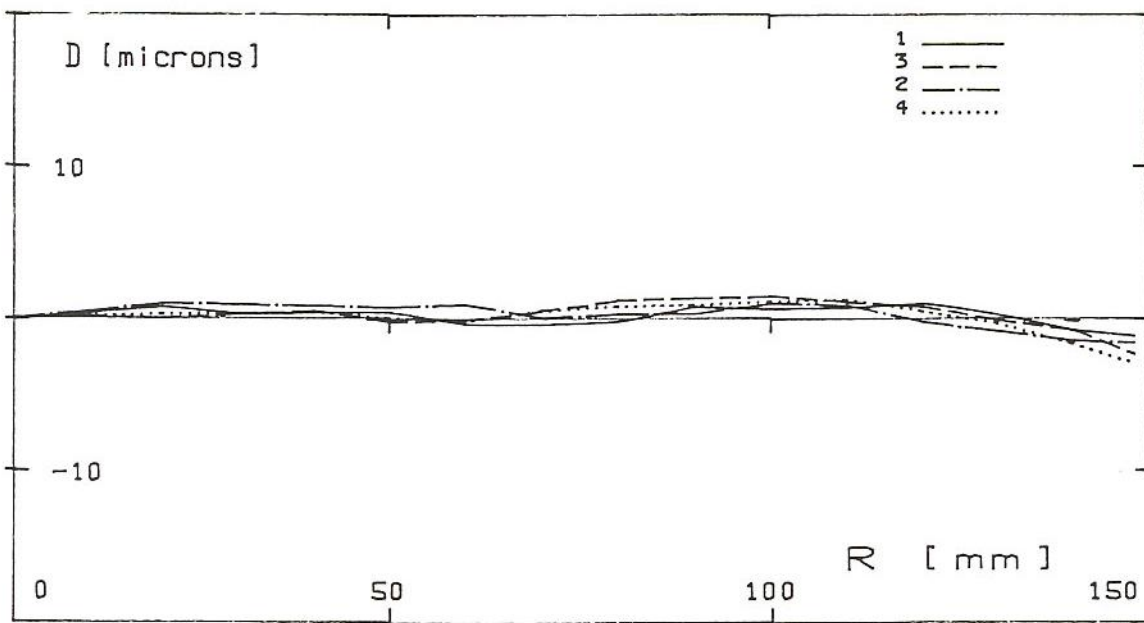
AS SEEN ON FOCAL PLANE FRAME

RC20 15/4 UAGA-F NO. 13084 06.03.87

APERTURE : F / 4.0
FILTER ON GONIOMETER : VIS (400 - 700 NM)
FILTER ON CAMERA : --
C.F.L : 153.01 MM



MEAN RADIAL DISTORTION CURVE



RADIAL DISTORTION FOR SEMI-DIAGONALS
REFERRED TO PPS