



Aerofilms

CALIBRATION NO: AF/WILLIAMSON F49 2003/2

DATE: 3.12.93

Aerofilms Limited

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CAMERA CALIBRATION CERTIFICATE

F49 LENS CONE

NO. F49 2003

TYPE: WILLIAMSON 12"
WITH YELLOW FILTER



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CALIBRATION No. AF/WILLIAMSON F49 2003/2

DATE OF CALIBRATION

3.12.93

LENS TYPE : WILLIAMSON 12"

Serial No. : 2003

FILTER TYPE : YELLOW FILTER FITTED

Serial No. : -

ORIGIN OF MEASUREMENTS \odot : The point of Symmetry

SIGN CONVENTION : Distortion is positive if away from origin

CALIBRATED AT A TEMPERATURE OF 20°C

CALIBRATION PERFORMED BY : D T PHILPOT

MEASUREMENTS

CALIBRATED PRINCIPAL DISTANCE : 306.449 mm

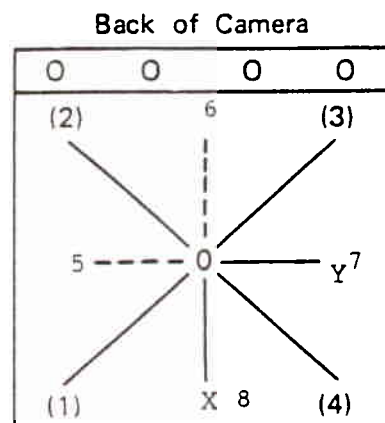
COORDINATES OF POINT OF SYMMETRY

x = +0.067 y = -0.131

COORDINATES OF PRINCIPAL POINT OF AUTOGOLLIMATION

x = -0.036 y = +0.046

RADIAL DISTORTION IN MILLIMETRES :



Radius (mm)	20	40	60	80	100	120	140
Semi diagonal (1)	+0.002	+0.003	+0.010	+0.009	+0.010	+0.002	-0.011
Semi diagonal (2)	+0.000	+0.003	+0.007	+0.008	+0.005	+0.001	-0.015
Semi diagonal (3)	+0.004	+0.008	+0.011	+0.014	+0.012	-0.008	-0.011
Semi diagonal (4)	+0.002	+0.006	+0.011	+0.008	+0.003	-0.005	-0.015
Mean	+0.001	+0.005	+0.010	+0.010	+0.007	-0.003	-0.013

BEFORE CALIBRATION THE OPTICAL UNIT WAS CHECKED AND FOUND TO BE IN A SERVICEABLE CONDITION.

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CAMERA CALIBRATION



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LENS : WILLIAMSON F49 NO. : 2003

CALIBRATION DATE 3.12.93

FIDUCIAL COORDS

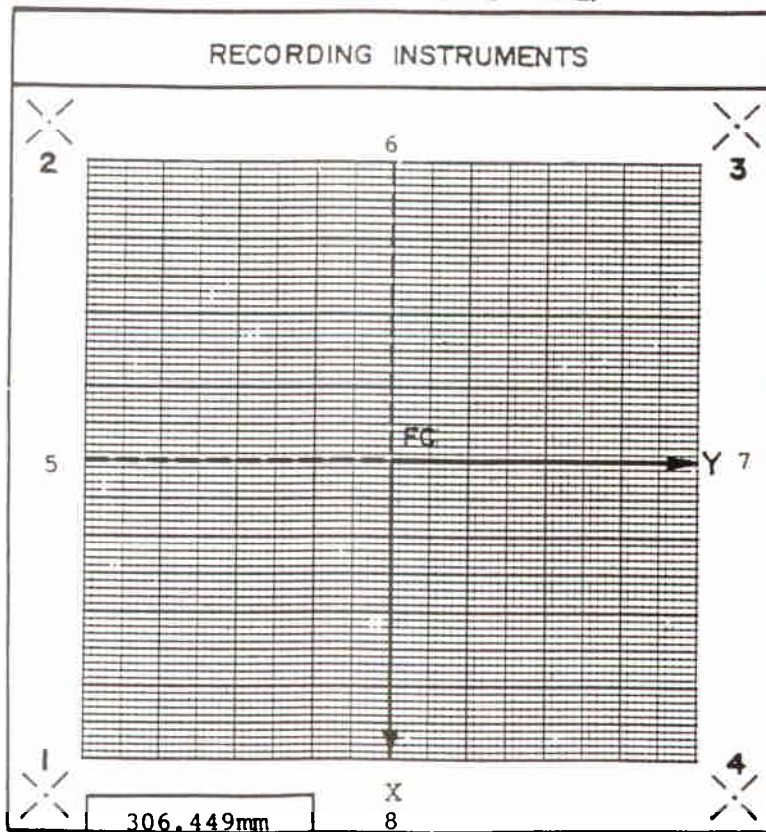
POINT	X MM	Y MM
FC	0.000	0.000
S	+0.067	-0.131
PPA	-0.036	+0.046

FIDUCIAL MARKS REFERED TO F.C.

S : POINT OF BEST SYMMETRY

PPA : PRINCIPAL POINT OF AUTOCOLLIMATION

(SEEN ON IMAGE PLANE FRAME)



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CALIBRATION RESULTS F49 EIGHT FIDUCIALS

CAMERA F49 2003

DATE 26 NOVEMBER 1993

CENTRE OF GRAVITY X= 110.0025 Y= 110.0017

FIDUCIAL COORDINATES (SIDES)

X5= -0.0135	X6= -110.000	X7= 0.0135	X8= 110.0025
Y5= -110.015	Y6= -0.00975	Y7= 110.0162	Y8= -0.00075

DISTANCES 5-7= 220.0320 6-8= 220.0030

FIDUCIAL COORDINATES (CORNERS)

X1= 109.9945	X2= -110.014	X3= -109.990	X4= 110.0085
Y1= -109.992	Y2= -110.011	Y3= 110.0052	Y4= 110.0092

DISTANCES (DIAG) 1-3= 311.1149 2-4= 311.1580

DISTANCES (SIDE) 1-2= 220.009 3-4= 219.999
2-3= 220.017 4-1= 220.002



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RESOLUTION

LENS TYPE: WILLIAMSON F49

SERIAL No.: 2003

FOCAL LENGTH: 306.449mm

APERTURE

FILM TYPE: NO RESOLUTION FIGURES AVAILABLE

HIGH CONTRAST TEST CHART

DEGREES OFF AXIS	RESOLUTION	
	Radial	Tangential
0		
5		
10		
15		
20		
25		
30		
35		
40		
45		
50		
55		
60		



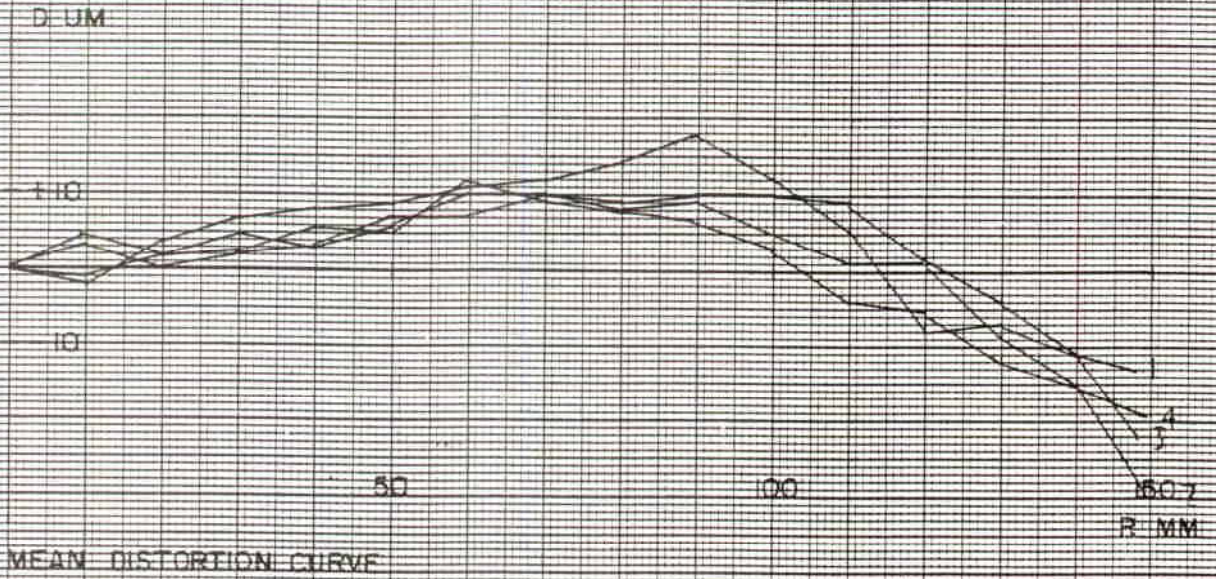
Measured by:

Approved by:

C.F.L. 306.499mm

FILTER ON CAMERA YELLOW FILTER FITTED

APERTURE F5.6



AF/WILLIAMSON F49 2003/2

2.12.93

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Aeromattis