

Calibration Certificate Do Not Destroy

Calibration Certificate Attached: 1909702

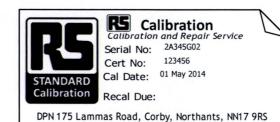
OD ref: 1247411209

RS Pro Steel Rule 150mm / 6in

first

IMPORTANT INFORMATION

Simply detach the label in the top right hand corner of the new front sheet and apply to your instrument as required.



For Re-Calibration of your unit please email: calibration.uk@rs-components.com or call us on 01536 405545 to arrange free collection. Please quote serial number when returning.



Issued by: RS Components Ltd

Date Issued:

11 Mar 2025

Certificate No. 1909702





0310

R5 Calibration

Calibration and Repair Service

DPN 175, Lammas Rd, Weldon Industrial Est Corby, Northants, NN17 9RS

Tel: 01536 405545 Fax: 01536 401590 Page 1 of 4 Pages

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Paul Frost

Client

TOTAL LABORATORY SERVICES LTD

BLANDFORD FORUM

DORSET DT11 8ST

Instrument

RS Pro Steel Rule 150mm / 6in

Serial No.

1218201/192

Client Reference

N/A

Procedure ID.

D05_1200_# Rev. P 8

Date of Calibration

11 Mar 2025

Remarks

This certificate reports recorded values for the instrument 'As Received'.

Uncertainties

The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor k = 2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

For certificate statements of conformity see Appendix SCQAR 533 The following calibration results relate only to the items defined above.

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service.

It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes

UKAS Accredited Calibration Laboratory No. 0310

Certificate No. 1909702

Page 2 of 4 Pages

R5 Calibration

Calibration and Repair Service

Environment

Prior to calibration the rule was held within a temperature controlled environment for a period of not less than 4 hours.

The ambient temperature and relative humidity throughout the calibration were (20 \pm 2) °C and (40 \pm 35) %RH respectively.

Method

The scale identified below was calibrated by measuring from the edge of the rule to the first position. This first position was then used as a datum from which all other positions on that scale are referenced. Measurements were made using a horizontal length measuring machine and the results recorded in the tables below.

The calibration was performed in accordance with 73-362 / EEC Class 1.

Major Position mm 0 - 10	Nominal Length mm	Measured Length mm 9.914	Measured Deviation mm	Major Position Limits mm	Measurement Uncertainties
Position mm 0 - 10	Length mm 10	Length mm	Deviation mm	Position Limits	1 2524
0 - 10	10			mm	
		9.914		111111	mm
	20		-0.086	± 0.200	± 0.009
10 - 30	20	19.999	-0.001	± 0.200	± 0.009
10 - 31	21	21.010	0.010	± 0.200	± 0.009
10 - 59	49	49.002	0.002	± 0.200	± 0.009
10 - 60	50	50.001	0.001	± 0.200	± 0.009
10 - 90	80	79.990	-0.010	± 0.200	± 0.009
10 - 91	81	80.980	-0.020	± 0.200	± 0.009
10 - 119	109	108.977	-0.023	± 0.200	± 0.010
10 - 120	110	109.979	-0.021	± 0.200	± 0.010
10 - 150	140	139.972	-0.028	± 0.200	± 0.010
				Adjacent	
Adjacent Position	Nominal	Measured	Measured Deviation	Position Limits	Measurement Uncertainties
	Length	Length			
mm 30 - 31	mm 1	mm	mm	mm	mm
59 - 60	· ·	1.011	0.011	± 0.100	± 0.009
90 - 91	1	0.999	-0.001	± 0.100	± 0.009
	1	0.990	-0.010	± 0.100	± 0.009
119 - 120	1	1.002	0.002	± 0.100	± 0.009

Side One

Maximum deviation found between any two major positions	
in the above table from 10mm to the maximium length.	0.038 mm
Major position limit	± 0.200 mm
Measurement Uncertainty	± 0.010 mm
Maximum deviation found between any adjacent postions.	0.011 mm
Adjacent position limit	± 0.100 mm
Measurement Uncertainty	± 0.009 mm

UKAS Accredited Calibration Laboratory No. 0310

R5 Calibration

Calibration and Repair Service

Certificate No. 1909702

Page 3 of 4 Pages

		Side	Two		la ado sa c
Top Scale					
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Major	Nominal	Measured	Measured	Position	Measurement
Position	Length	Length	Deviation	Limits	Uncertainties
inches	inches	inches	inches	inches	inches
0 - 0.5	0.50000	0.4985	-0.00150	± 0.008	± 0.0004
0.5 - 1.5	1.00000	1.0000	0.00000	± 0.008	± 0.0004
0.5 - 1.52	1.02000	1.0198	-0.00020	± 0.008	± 0.0004
0.5 - 2.99	2.49000	2.4893	-0.00070	± 0.008	± 0.0004
0.5 - 3.0	2.50000	2.4993	-0.00070	± 0.008	± 0.0004
0.5 - 4.5	4.00000	3.9989	-0.00110	± 0.008	± 0.0004
0.5 - 4.6	4.10000	4.0990	-0.00100	± 0.008	± 0.0004
0.5 - 5.9	5.40000	5.3990	-0.00100	± 0.008	± 0.0005
0.5 - 6.0	5.50000	5.4987	-0.00130	± 0.008	± 0.0005
				Adjacent	
Adjacent	Nominal	Measured	Measured	Position	Measurement
Position	Length	Length	Deviation	Limits	Uncertainties
inches	inches	inches	inches	inches	inches
1.5 - 1.52	0.02000	0.01980	-0.00020	± 0.004	± 0.0004
2.99 - 3	0.01000	0.01000	0.00000	± 0.004	± 0.0004
4.5 - 4.6	0.10000	0.10010	0.00010	± 0.004	± 0.0004
5.9 - 6	0.10000	0.09970	-0.00030	± 0.004	± 0.0004

Side Two

Side Two	
Maximum deviation found between any two major positions	
in the above table from 0.5 inches to the maximum length.	0.001 3 inch
Major position limit	± 0.008 inch
Measurement Uncertainty	± 0.000 4 inch
Maximum deviation found between any adjacent postions.	-0.000 3 inch
Adjacent position limit	± 0.004 inch
Measurement Uncertainty	± 0.000 4 inch

	Measured	Limit	Measurement
	Value	Limit	Uncertainty
Squareness of datum end to side faces.	0.008 mm	N/A	± 0.005 mm

Squareness of datum end to side faces.

No limits available, measured values reported only.

CALIBRATED BY:- PKF

UKAS Accredited Calibration Laboratory No. 0310

R5 Calibration

Calibration and Repair Service

Certificate No. 1909702

Page 4 of 4 Pages

Reported values not annotated.

The instrument passed the stated specification, due allowance having been made for the uncertainty of measurement which carries no implication regarding the long term stability of the instrument.

END OF CALIBRATION

Appendix SCQAR533 Certificate Statements of conformity

RS Components is standardising how it reports conformity across all disciplines in line with requirements within ISO/IEC: 17025:2017.

Where the laboratory reports a statement of conformity to a specification, guidance has been drawn on reporting structure and decision rules from ILAC document series **ILAC-G8:09/2019**.

Unless otherwise instructed by you the Customer, acceptance limits applied are derived from the manufacturers specification or applicable standard (e.g. DIN, EEC, BS etc.) or where applicable: SCQAR532_RS Standard Limits for Calipers, available on request.

The statements found on this certificate produced by RS Components Laboratory are as follow:

1) Reported values with No Annotation:

The instrument **passed** the stated specification, even with allowance having been made for the uncertainty of measurement, which carries no implication regarding the long-term stability of the instrument.

2) Reported values annotated with "#"

The measured result is a **conditional pass** to the limit but by a margin less than the measurement uncertainty, it is therefore not possible to state compliance based on the stated level of confidence.

3) Reported values annotated with "##"

The measured result is a **conditional fail** to the limit but by a margin less than the measurement uncertainty, it is therefore not possible to state compliance based on the stated level of confidence.

4) Reported values annotated with "###"

The measured result **failed** the stated specification, even with allowance having been made for the measurement uncertainty.

