

Title: Calibration Of Rhopoint Milliohmmeter Model M210

Scope

Work Instruction for the internal calibration of Rhopoint Millio OHM Meter Model M210. To be used in the absence of a manufacturers calibration instruction.

Preparation

Calibration must be carried out using Category A Master instruments as required.

Equipment required;-

- 1.1 Tinsley Type 4738 Standard Resistance Box (0.01 ohm; 0.1 ohm; 1 ohm)
- 1.2 Decade Resistance Box Model 802

Method

- 2.1 All calibration results must be entered on the results sheets (see appendix A).
- 2.2 Note the lab temp / relative humidity and enter on calibration results sheet.
- 2.3 Carry out tests 1 to 3 using item 1.1.
- 2.4 Carry out tests 4 to 9 using item 1.2.
- 2.5 Complete the results sheet header and enter Pass / Fail.

- All records must be kept for audit purposes

References

Appendix A Calibration Results for Rhopoint Digital Millio OHM Meter

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Appendix A

Calibration Results for Rhopoint Digital Millio OHM Meter

Model Serial No

Date Result

Lab Temp / RH Operator

User Location Certificate No

Accuracies quoted are from the manufacturer's specification or relevant British Standard.

UUT accuracy: 0.1% Range + 0.0001 ohm

Test No	Resistor Value (ohms)	UUT Reading (ohms)	Allowed Limits	Result
1	0.01		0.007 to 0.013	Pass / Fail
2	0.1		0.097 to 0.103	Pass / Fail
3	1		0.997 to 1.003	Pass / Fail
4	5.02		5.00 to 5.04	Pass / Fail
5	10.02		10.00 to 10.04	Pass / Fail
6	15.02		15.00 to 15.04	Pass / Fail
7	50		49.8 to 50.2	Pass / Fail
8	100		99.8 to 100.2	Pass / Fail
9	150		149.8 to 150.2	Pass / Fail

The UUT was calibrated using the following equipment:

1. Standard Resistance Box S/N
2. Decade Resistance Box S/N

The uncertainty of measurement is estimated not to exceed:

Resistance: $\pm 0.034\%$ (0.01 ohm to 1 ohm)
 $\pm 0.035\% + 2 \text{ mohm}$ (5 ohm to 150 ohm)

The uncertainty limits quoted refer to the applied values only and do not relate to the stability of the UUT.