



As Found/As Left Certificate of Calibration

Company: Mesa Laboratories, Inc. Calibration Certificate #: 21-4904
 Location: Lakewood, CO Calibration Date: 12 SEP 2014
 Thermometer Model: 1502A PRT Model: 5628 Calibration Due: 12 SEP 2015
 Thermometer/SN: A1C638 Thermometer/ID: TE10246 Thermometer Physical Condition: Good
 PRT/SN: 0258 PRT/ID: TE10348 PRT Physical Condition: Good
 Calibration Procedure: PRT Calibration Rev: 3 Ambient Temperature: 24°C Relative Humidity: 34%

Comments: None

The procedure is based on the information contained in NIST Technical Note 1265, "Guidelines for Realizing the International Temperature Scale of 1990 (ITS-90)" section 4.6. In accordance with the ITS-90, comparison standards were used to calibrate the PRT at subranges 4, 5, 8, 9, 10 and 11, from the Triple Point of Argon to the Freeze Point of Zinc.

As Found/As Left

Point °C	Tolerance °C	Standard °C	UUT °C	Difference °C	Measurement Uncertainty
232	±0.025	232.023	232.021	-0.002	5.9mK
157	±0.025	156.591	156.592	0.001	5.9mK
0	±0.025	0.010	0.010	0.000	1.1mK
-39	±0.025	-38.770	-38.769	0.001	4.1mK
-196	±0.025	-195.700	-195.698	0.002	6.1mK

Standard	SN	MSI	Calibration Due
Super Thermometer II	A17148	5739	28 MAR 2015
Standard Resistor	B3-0522447	3068	31 OCT 2014
SPRT	0546	4815	29 NOV 2014
SPRT	0832	8247	31 JAN 2015

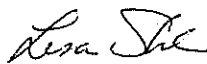
Coefficients for Current Calibration

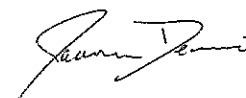
Type	Reading
R0	25.4267
A	-7.125590E-05
B	-1.644172E-05
A4	-1.100691E-05
B4	2.399613E-05

As Found in Tolerance

As Left in Tolerance

Calibration of this instrument is accredited to ISO/IEC 17025:2005 and is traceable, through NIST or other National Standards Institutes, to the International System of Units (SI). The reported uncertainty is expanded using a coverage factor of k=2 for a level of confidence of approximately 95%, assuming a normal distribution. The results relate only to the item calibrated. If this Certificate of Calibration is reproduced, it must be duplicated in full, unless permission for the publication of an approved abstract is obtained in writing from Masy Systems. This certificate of calibration shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the Federal Government. Certificates of Calibration without signatures are not valid.


 Digitally signed by Lisa Shah,
 Metrology Specialist
 Reason: I am the author of this document
 Date: 2014.09.17 07:24:36 -04'00'


 Digitally signed by Jaelyn Derrico, Quality Assistant
 Reason: I am approving this document
 Date: 2014.09.17 08:18:07 -04'00'

Performed by: _____

Approved by: _____