
Customer:	Mesa Laboratories, Inc. Lakewood, CO	Certificate Number:	105719
Description:	PRT	Calibration Date:	30 JUN 2016
Model:	5682	Calibration Due:	30 JUN 2017
Serial Number:	1885	Ambient Temperature:	20 to 27°C
Unit ID:	TE10413	Ambient Humidity:	30 to 50%RH
		Barcode:	C006675

Calibration of this instrument is accredited to ISO/IEC 17025:2005 and is traceable to the International System of Units through NIST or other National Measurement Institutes. The reported expanded uncertainty used a coverage factor of $k=2$ for a level of confidence equal to approximately 95%. The results stated 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 BioServices.

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.

This Certificate of Calibration is not valid unless appropriately signed.

As Found Condition:

In tolerance.

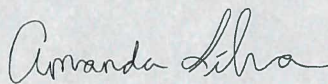
Action Taken:

Calibrated.

As Left Condition:

In tolerance.

Performed by:



Digitally signed by Amanda
Silva, Calibration Technician
Reason: I am the author of
this document
Date: 2016.06.30 07:08:51
-04'00'

Approved by:



Digitally signed by Sarah
Wilson, Quality Specialist
II
Reason: I am approving
this document
Date: 2016.06.30
12:29:50 -04'00'

PRT Loop-Comparison (Rev 0)

Calibration Measurement Results

Work Instruction: Thermometer PRT Loop Calibration (Rev 0)
 Comments: None.

Certificate Number: 105719

Measurement Results

* Asterisk denotes an Out of Tolerance measurement.

Nominal	As Found Measurement Results				As Left Measurement Results				Expanded Uncertainty
	Standard	UUT	Error	MPE (Tolerance)	Standard	UUT	Error	MPE (Tolerance)	
420°C	419.029	419.054	0.025	±0.025	419.028	419.035	0.007	±0.025	0.0060°C
232°C	231.595	231.612	0.017	±0.025	231.595	231.597	0.002	±0.025	0.0045°C
157°C	156.511	156.527	0.016	±0.025	156.514	156.515	0.001	±0.025	0.0039°C
0°C	0.010	0.018	0.008	±0.025	0.010	0.010	0.000	±0.025	0.0017°C
-39°C	-38.715	-38.710	0.005	±0.025	-38.715	-38.715	0.000	±0.025	0.0016°C
-196°C	-195.749	-195.750	-0.001	±0.025	-195.769	-195.769	0.000	±0.025	0.0027°C

Configuration and Coefficient Details

Thermometer Information		Coefficient	As Found	As Left
Model:	1502A	R0	25.4475	25.4484
Serial Number:	A93248	A8	1.516280E-06	3.090148E-05
Unit ID:	TE10412	B8	4.112330E-05	-1.484416E-05
Channel:	1	C7	-2.216840E-05	0.000000E+00
		A4	2.152813E-05	8.844817E-05
		B4	-2.016358E-05	1.407561E-05

Measurement Standards Used

MSI	Description	Serial Number	Calibration Due
7441	Super Thermometer	A09098	09 SEP 2016
3582	Resistor, Standard	1100706	15 FEB 2017
1999	SPRT	1119	16 NOV 2016
4816	SPRT	0548	25 AUG 2016
8786	Water Triple-Point Cell	C-G2040	NA

This calibration 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. The comparison standards used were calibrated in accordance with ITS-90 and are traceable to SI.

~ End of Report ~