
Customer:	Mesa Laboratories, Inc. Lakewood, CO	Certificate Number:	108894
Description:	PRT	Calibration Date:	31 JAN 2017
Model:	5628	Calibration Due:	31 JAN 2018
Serial Number:	3211	Ambient Temperature:	20 to 27°C
Unit ID:	TE10793	Ambient Humidity:	30 to 50%RH
		Barcode:	C005924

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.

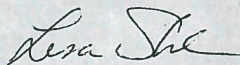
Action Taken:

Calibrated with adjustment.

As Left Condition:

In tolerance.

Performed by:



Digitally signed by Lisa Shah,
Senior Metrologist
Reason: I attest to the
accuracy and integrity of this
document
Date: 2017.01.31 15:29:21
-05'00'

Approved by:



Digitally signed by Sarah
Wilson, Quality Specialist II
Reason: I am approving
this document
Date: 2017.02.01 15:33:38
-05'00'

PRT Loop-Comparison (Rev 0)

Calibration Measurement Results

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

Certificate Number: 108894

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	418.068	418.081	0.013	±0.025	418.068	418.070	0.002	±0.025	0.0079°C
232°C	231.597	231.609	0.012	±0.025	231.598	231.598	0.000	±0.025	0.0062°C
157°C	156.522	156.533	0.011	±0.025	156.531	156.532	0.001	±0.025	0.0049°C
0°C	0.010	0.016	0.006	±0.025	0.010	0.009	-0.001	±0.025	0.0024°C
-39°C	-38.705	-38.701	0.004	±0.025	-38.705	-38.707	-0.002	±0.025	0.0026°C
-196°C	-195.724	-195.722	0.002	±0.025	-195.748	-195.747	0.001	±0.025	0.0027°C

Configuration and Coefficient Details

Thermometer Information		Coefficient	As Found	As Left
Model:	1502A	R0	25.4775	25.4781
Serial Number:	B5C009	A	-7.583748E-06	8.942822E-06
Unit ID:	TE10792	B	-1.648850E-05	-3.452765E-05
Channel:	1	A4	1.799217E-05	8.978441E-06
		B4	-9.825077E-06	-1.503837E-05

Measurement Standards Used

MSI	Description	Serial Number	Calibration Due
7441	Super Thermometer	A09098	25 AUG 2017
8742	Resistor, Standard	1102435	29 NOV 2017
8517	SPRT	1620305	01 MAR 2017
8772	SPRT	0543	18 APR 2017
8785	Water Triple-Point Cell	D-Q1101	NA
8327	RadioLogger	0215-00845	30 APR 2017

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 ~