

Report of Test

This report is to certify that the instrument listed below has been calibrated by *Thermo*Probe, Inc. to NIST traceable criteria.

Report No.: **2019-09-17 - 3A-10941**

Model: TL3-A

Serial Number: **3A-10941** Calibration Date: **9/17/2019**

Ambient Temp: $75 \, ^{\circ}F \, +/- \, 2^{\circ}$ Calibrated By: MC

Calibration Data As Found

New Unit or no "As Found" data available

Calibration Data As Left

This device has been adjusted to read as closely as possible to actual temperature.

Tested temperatures and corrections are as follows:

Nominal Value		Actual Test Temp.		Reading of TL		Correction		Tolerance		In Tolerance		rement tainty
° F	° C	° F	°C	° F	°C	° F	°C	° F	° C		° F	°C
32	0	31.997	-0.002	32.00	0.00	0.00	0.00	0.10	0.06	Yes	0.030	0.017
120	49	120.011	48.895	120.01	48.89	0.00	0.00	0.10	0.06	Yes	0.030	0.017
199	93	199.013	92.785	199.02	92.79	-0.01	0.00	0.10	0.06	Yes	0.030	0.017
300	149	300.201	149.001	300.20	149.00	0.00	0.00	0.10	0.06	Yes	0.030	0.017

Callendar Van Dusen Coefficients:

R0: 100.00

A: 3.90800E-03

B: -5.77500E-07

C: -4.18300E-12

Traceability:

This calibration and the following references are traceable to NIST through an unbroken chain of comparisons.

Nomi	nal Temp	Bath	Fluid	Reference	Calibration Date	Next Calibration Due	
(-)20.0° ((-)4.0° F	Fluke 7340	water/glycol	TL2-0357	5/10/2019	5/10/2020	
0.0° C	32.0° F	Fluke 7340	water/glycol	TL2-0358	5/10/2019	5/10/2020	
48.9° C	120.0° F	Polyscience PD15HCAL	distilled water	TL2 - 0359	5/10/2019	5/10/2020	
92.8° C	199.0° F	Fluke 6330	silicon oil	TL2-0360	5/10/2019	5/10/2020	
149.0° C	300.2° F	Fluke 6330	silicon oil	TL2 - 0361	5/10/2019	5/10/2020	

Test Method: The calibration procedures used were *ThermoProbe, Inc. Calibration Procedures* based on ASTM E-644-06. This probe was immersed in a constant temperature bath with a reference thermometer which determined the actual test temperature. The readings were compared and correction factors for the probe were calculated. The As Left readings reflect the TL's readings after calibration.

Uncertainty Statement: Uncertainties were computed using the concepts, methods and techniques of the ISO Guide to the Expression of Uncertainty in Measurement (the GUM). The calculated uncertainty is an expanded uncertainty (k=2). It does not consider errors due to possible damage to the TL from shipping, temperature drift, or thermal hysteresis effect. To maintain the accuracy of the TL, users should take care to protect it during shipping, avoid using it to measure temperatures significantly above the highest calibrated temperature, and have the TL

Calibrator's Signature:	
Test Results Approved by:	

Date: 9/17/2019

The results stated on this report relate only to the items specifically identified. This test report or calibration certificate shall not be reproduced except in full, without written approval of the laboratory.