

1737

Report Number: 91897

Calibration Date: 09/03/2020

Submitted By: Illiana Instrumentation Service Schererville, IN 46375
PO Number: 4123

SO Number: 1356802

Type T Thermocouple
T28U-018-00-4

Tolerance: ASTM E230/E230M-17 Standard Tolerance

Item	Serial / Reference	Target (°F)	Actual (°F)	Reading (°F)	Reading (mV)	Correction (°F)	Tolerance (± °F)	U _c (k = 2) (± °F)	TUR N:1	Acceptance (± °F)	Status (in/out)
1	E19603	-112	-111.5	-112.6	-2.796	1.1	2.2	0.54	4	2.2	in
		0	-0.1	-0.6	-0.686	0.5	1.8	0.54	3	1.8	in
		70	69.9	69.9	0.832	0.0	1.8	0.54	3	1.8	in
2	E19604	-112	-111.5	-112.6	-2.796	1.1	2.2	0.54	4	2.2	in
		0	-0.1	-0.6	-0.686	0.5	1.8	0.54	3	1.8	in
		70	69.9	69.9	0.832	0.0	1.8	0.54	3	1.8	in
3	E19605	-112	-111.5	-112.4	-2.795	0.9	2.2	0.54	4	2.2	in
		0	-0.1	-0.5	-0.685	0.4	1.8	0.54	3	1.8	in
		70	69.9	69.9	0.833	0.0	1.8	0.54	3	1.8	in
4	E19606	-112	-111.5	-112.6	-2.797	1.1	2.2	0.54	4	2.2	in
		0	-0.1	-0.6	-0.687	0.5	1.8	0.54	3	1.8	in
		70	69.9	69.9	0.832	0.0	1.8	0.54	3	1.8	in
5	E19607	-112	-111.7	-112.8	-2.799	1.1	2.2	0.54	4	2.2	in
		0	-0.1	-0.6	-0.686	0.5	1.8	0.54	3	1.8	in
		70	69.9	69.9	0.831	0.0	1.8	0.54	3	1.8	in
6	E19608	-112	-111.7	-112.8	-2.800	1.1	2.2	0.54	4	2.2	in
		0	-0.1	-0.6	-0.686	0.5	1.8	0.54	3	1.8	in
		70	69.9	69.9	0.831	0.0	1.8	0.54	3	1.8	in
7	E19609	-112	-111.7	-112.6	-2.798	0.9	2.2	0.54	4	2.2	in
		0	-0.1	-0.5	-0.685	0.4	1.8	0.54	3	1.8	in
		70	69.9	69.9	0.833	0.0	1.8	0.54	3	1.8	in
8	E1960A	-112	-111.7	-112.8	-2.800	1.1	2.2	0.54	4	2.2	in
		0	-0.1	-0.6	-0.686	0.5	1.8	0.54	3	1.8	in
		70	69.9	69.9	0.832	0.0	1.8	0.54	3	1.8	in

Remarks:

The correction must be added algebraically to the UUT reading to obtain the correct value.

Equipment and Standards Used

ID Number	Manufacturer	Model	Description	Calibration Due
03-2787	Agilent	3458A	8 1/2 Digit Digital Multimeter	10/24/2020
03-3729	Hart Scientific	5626	SSPRT Working Standard	10/24/2020

Environmental Conditions at time of Calibration: Temperature: 23 °C [73 °F] Relative Humidity: 37%

Procedure Used: WI-525-36 Rev 4 which is based on ASTM E220-19

DUT Condition: New Calibration

Calibration performed by: Lindi Bunn, Metrology Technician

The temperatures written in this report are those defined by the International Temperature Scale of 1990 (ITS-90).

The combined standard uncertainty includes the standard uncertainty reported for the standard, and the measurement process. The combined standard uncertainty is multiplied by a coverage factor of 2 to give an expanded uncertainty, which defines an interval having a level of confidence of approximately 95 percent. The expanded uncertainty presented in this report is consistent with the JCGM100:2008 Guide to the Expression of Uncertainty in Measurement. The expanded uncertainty is not to be confused with a tolerance limit for the user during application.

The DUT Acceptance tolerance = the DUT manufacturer's tolerance with no further consideration of the level of risk based on the customer option to prescribe the decision rule of simple acceptance. Refer to NCSLI Z540.3 or Pyromation SD-525-15 for additional information

For purposes of determining conformance with these specifications, an observed value or a calculated value shall be rounded in accordance with the rounding method of ASTM Practice E29-19. The standards of Pyromation Laboratory are traceable to the International System of Units (SI) through NIST or other National Metrology Institute, and are part of a comprehensive measurement assurance program for ensuring continued accuracy and measurement traceability within the level of uncertainty reported by this laboratory. The laboratory report number identified above is the unique report number to be used in referencing measurement traceability for the items identified in this report only.

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