



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005  
& ANSI/NCSL Z540-1-1994

WEED INSTRUMENT CO., INC d.b.a  
 ULTRA ELECTRONICS, NUCLEAR SENSORS & PROCESS INSTRUMENTATION  
 707 Jeffrey Way  
 Round Rock, TX 78680  
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CALIBRATION

Valid To: December 31, 2017

Certificate Number: 2931.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations<sup>1</sup>:

I. Thermodynamics

Parameter/Equipment	Range	CMC <sup>2</sup> (±)	Comments
Temperature, RTD's – Measuring Equipment	-196 °C (Liquid Nitrogen) (-80 to 0) °C 0 °C (Ice Point) (0 to 300) °C (300 to 400) °C (400 to 550) °C (550 to 660) °C	0.20 °C 0.10 °C 0.014 °C 0.028 °C 0.029 °C 0.039 °C 0.13 °C	SPRT
Temperature, Thermocouple – Measuring Equipment			Type S or R secondary standard thermocouple and ISO-CAL 9000+ calibrator
Type B Thermocouple	(538 to 1093) °C (1093 to 1482) °C	0.9 °C 2.0 °C	
Type C Thermocouple	(0 to 538) °C (538 to 1093) °C (1093 to 1482) °C	0.7 °C 0.9 °C 2.0 °C	

Parameter/Equipment	Range	CMC <sup>2</sup> (±)	Comments
Temperature, Thermocouple – Measuring Equipment (cont)			RTD and Martel 3001 calibrator
Type E Thermocouple	-79 °C 0 °C  (38 to 538) °C (538 to 871) °C	0.3 °C 0.2 °C  0.7 °C 0.9 °C	Type S or R secondary standard thermocouple and ISO-CAL 9000+ calibrator
Type J Thermocouple	-79 °C 0 °C  (38 to 538) °C (538 to 871) °C	0.3 °C 0.2 °C  0.7 °C 0.9 °C	
Type K Thermocouple	-79 °C 0 °C (38 to 538) °C (538 to 1093) °C (1093 to 1260) °C	0.3 °C 0.2 °C 0.7 °C 1.0 °C 1.5 °C	
Type N Thermocouple	-79 °C 0 °C (38 to 538) °C (538 to 1093) °C (1093 to 1260) °C	0.3 °C 0.2 °C 0.7 °C 1.0 °C 1.5 °C	
Type R Thermocouple	(0 to 538) °C (538 to 1 093) °C (1093 to 1482) °C	0.7 °C 0.9 °C 2.0 °C	
Type S Thermocouple	(0 to 538) °C (538 to 1 093) °C (1 093 to 1 482) °C	0.7 °C 0.9 °C 2.0 °C	
Type T Thermocouple	-79 °C 0 °C (38 to 400) °C	0.3 °C 0.2 °C 0.7 °C	
Secondary Standard Type R Thermocouple	(0 to 538) °C (538 to 1093) °C (1093 to 1482) °C	0.5 °C 0.6 °C 1.8 °C	Type R primary standard thermocouple and ISO- CAL 9000+ calibrator
Secondary Standard Type S Thermocouple	(0 to 538) °C (538 to 1093) °C (1093 to 1482) °C	0.5 °C 0.6 °C 1.8 °C	

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<sup>1</sup>This laboratory offers commercial calibration service.

<sup>2</sup>Calibration and Measurement Capability Uncertainties (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of  $k = 2$ . The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.



## Accredited Laboratory

A2LA has accredited

**WEED INSTRUMENT CO., INC. d.b.a**  
**Ultra Electronics, Nuclear Sensors & Process Instrumentation**  
*Round Rock, TX*

for technical competence in the field of

### Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the requirements of Z540-1-1994 and any additional program requirements in the field of calibration. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).

Presented this 7<sup>th</sup> day of January 2016.



A handwritten signature in black ink, appearing to read "Joe C. Burnett".

Senior Director of Quality and Communication  
For the Accreditation Council  
Certificate Number 2931.01  
Valid to December 31, 2017

*For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.*