



World Class Accreditation

The American Association for Laboratory Accreditation

Accredited Laboratory

A2LA has accredited

CLEVELAND ELECTRIC LABORATORIES

Tempe, AZ

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 ANSI/NCSL 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 10th day of September 2009.



A handwritten signature in black ink, appearing to read "Peter Abayasinghe".

President & CEO
For the Accreditation Council
Certificate Number 1658.02
Valid to September 30, 2011

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

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

CLEVELAND ELECTRIC LABORATORIES
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CALIBRATION

Valid To: September 30, 2011

Certificate Number: 1658.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations¹:

I. Thermodynamics

Parameter/Equipment	Range	CMC ² (±)	Comments
Test and Calibration of Thermocouples			
32 °F to 2000 °F			
Type J	32 °F to 2000 °F	0.53 °F	ASTM E220, Keithley 3706 multimeter/scanner, type "S" platinum standard TC
Type K	32 °F to 2000 °F	0.57 °F	
Type N	32 °F to 2000 °F	0.58 °F	
>2000 °F			
Type J	2000 °F to 2190 °F	3.1 °F	ASTM E220, Keithley 3706 multimeter/scanner, type "S" platinum standard TC
Type K	2000 °F to 2500 °F	3.1 °F	
Type N	2000 °F to 2370 °F	3.1 °F	

¹ This laboratory offers commercial calibration service.

² Calibration and Measurement Capability (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. CMC's 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.

Peter Yeager