



# CERTIFICATE OF ACCREDITATION

## The ANSI National Accreditation Board

Hereby attests that

**Accurate Infrared Controls**  
**5915 N. Austin Avenue**  
**Chicago, IL 60646**

Fulfills the requirements of

**ISO/IEC 17025:2017**

In the field of

**CALIBRATION**

This certificate is valid only when accompanied by a current scope of accreditation document.  
The current scope of accreditation can be verified at [www.anab.org](http://www.anab.org).

A handwritten signature in black ink, appearing to read 'R. Douglas Leonard Jr.', is positioned above a horizontal line.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 24 August 2024

Certificate Number: L2329



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.  
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 April 2017).

## SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

### Accurate Infrared Controls

5915 N. Austin Avenue  
Chicago, IL 60646  
William Garcia 773-412-1200

### CALIBRATION

Valid to: **August 24, 2024**

Certificate Number: **L2329**

#### Electrical – DC/Low Frequency

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Electrical Simulation of Infrared Instrumentation <sup>1</sup>	(0 to 24) mA	0.031 mA	Datel / Reed Calibrator & 3 ½ DMM
Electrical Simulation of Infrared Instrumentation <sup>1</sup>	(0 to 10) V	0.021 V	Datel / Reed Calibrator & 3 ½ DMM

#### Thermodynamic

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Infrared Instrumentation	(100 to 200) °F (201 to 1 800) °F	3.4 °F 3.9 °F	Type S Thermocouple & Blackbody Cavities with Fluke 54 II – Contact Thermometry
Infrared Instrumentation	1 200 °F (1 200 to 2 200) °F (2 201 to 2 500) °F	2.4 °F 2.9 °F 4.4 °F	Type R Thermocouple & Blackbody Cavities with Fluke 54 II – Contact Thermometry
Infrared Instrumentation	(1 200 to 1 300) °F (1 301 to 1 780) °F (1 790 to 2 200) °F (2 201 to 2 400) °F (2 401 to 2 550) °F	4.1 °F 4.6 °F 6.3 °F 6.8 °F 7.4 °F	Modline 5 – Radiation Thermometry $\lambda = (0.75 \text{ to } 1.1) \mu\text{m}$ $\epsilon = (0.1 \text{ to } 1.0)$
Infrared Thermometers	212 °F (213 to 392) °F (393 to 572) °F (573 to 752) °F (753 to 932) °F	4.2 °F 6 °F 8.1 °F 11 °F 13 °F	Blackbody Cavity $\lambda = (8 \text{ to } 14) \mu\text{m}$ $\epsilon = (0.9 \text{ to } 1.0)$

**Thermodynamic**

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Infrared Thermometers	(933 to 1 120) °F (1 121 to 1 300) °F (1 301 to 1 500) °F (1 501 to 1 780) °F (1 781 to 2 000) °F (2 001 to 2 200) °F	16 °F 19 °F 22 °F 27 °F 31 °F 34 °F	Blackbody Cavity $\lambda = (8 \text{ to } 14) \mu\text{m}$ $\epsilon = (0.9 \text{ to } 1.0)$
Blackbody Cavities	(100 to 1 780) °F	3.5 °F	Type S Thermocouple with Fluke 54 II – Contact Thermometry
	(1 200 to 2 200) °F (2 201 to 2 500) °F	3.5 °F 4.4 °F	Type R Thermocouple with Fluke 54 II – Contact Thermometry
Blackbody Cavities	(1 200 to 1 900) °F (1 901 to 2 200) °F (2 201 to 2 550) °F	4.6 °F 6.8 °F 7.4 °F	Modline 5 – Radiation Thermometry $\lambda = 0.75 \text{ to } 1.1 \mu\text{m}$ $\epsilon = 0.1 \text{ to } 1.0$
Ovens & Chambers	(100 to 1 800) °F	3.5 °F	Type S Secondary Standard TC with Fluke 54 II – Contact Thermometry
	(1 700 to 2 200) °F (2 201 to 2 500) °F	3.5 °F 4.4 °F	Type R Thermocouple with Fluke 54 II – Contact Thermometry

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ( $k=2$ ), corresponding to a confidence level of approximately 95%.

Notes:

1. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope
2. This scope is formatted as part of a single document including Certificate of Accreditation No. L2329.



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