



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Weiss Industrial
300 Mount Lebanon Blvd., Ste. 2202
Pittsburgh, PA 15234

Fulfills the requirements of

ISO/IEC 17025:2017

and national standard

ANSI/NCSL Z540-1-1994 (R2002)

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.

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: 27 March 2022

Certificate Number: L2383



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
AND ANSI/NCSL Z540-1-1994 (R2002)**

Weiss Industrial
300 Mount Lebanon Blvd., Ste. 2202
Pittsburgh, PA 15234
James Garver 412-344-1500

CALIBRATION

Valid to: **March 27, 2022**

Certificate Number: **L2383**

Electrical – DC/Low Frequency

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
DC Current, Measure ¹	(0 to 50) mA	0.01% of reading + 1µA	Fluke 7526A Multi-Function Calibrator
DC Current, Generate ¹	(0 to 100) mA	0.005% of reading + 1µA	
Ohms, Measure ¹	(0 to 400) Ω	0.006% of reading + 0.004 Ω	Fluke 7526A Multi-Function Calibrator
	(0 to 4) kΩ	0.003% of reading + 0.04 Ω	
Ohms, Source ¹	(5 to 400) Ω	0.015 Ω	
	(5 to 4 000) Ω	0.030 Ω	
Electrical Calibration of Resistance Temperature Detector (RTD) Indicating Devices - Measure ¹	(-200 °C to -80) °C	0.013 °C	Fluke 7526A Multi-Function Calibrator
	(-80 °C to 100) °C	0.020 °C	
	(100 °C to 300) °C	0.024 °C	
	(300 °C to 400) °C	0.026 °C	
	(400 °C to 630) °C	0.033 °C	
Electrical Calibration of Resistance Temperature Detector (RTD) Indicating Devices - Source ¹	(630 °C to 800) °C	0.038 °C	Fluke 7526A Multi-Function Calibrator
	(-200 to 800) °C	0.05 °C	
DC Voltage Measure ¹	(-10 to 75) mV	0.43 µV	Fluke 7526A Multi-Function Calibrator
	(0 to 10) V	0.7 mV	
	(0 to 100) V	7 mV	



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Electrical – DC/Low Frequency

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
DC Voltage, Source ¹	(0 to 100) mV (0 to 1) V (0 to 10) V (0 to 100) V	0.6 μ V 0.04 mV 0.4 mV 4 mV	Fluke 7526A Multi-Function Calibrator
Electrical Calibration of Thermocouple Indicating Devices - Source / Measure ¹	Type B (600 to 800) °C (800 to 1 550) °C (1 550 to 1 820) °C Type C (0 to 1 000) °C (1 000 to 1 800) °C (1 800 to 2 000) °C (2 000 to 2 316) °C Type E (-250 to -200) °C (-200 to -100) °C (-100 to 0) °C (0 to 650) °C (600 to 1 000) °C Type J (-210 to -100) °C (-100 to 800) °C (800 to 1 200) °C Type K (-250 to -200) °C (-200 to -100) °C (-100 to 500) °C (500 to 800) °C (800 to 1 372) °C Type N (-250 to -200) °C (-200 to -100) °C (-100 to 0) °C (0 to 100) °C (100 to 800) °C (800 to 1 300) °C	0.37 °C 0.31 °C 0.26 °C 0.23 °C 0.28 °C 0.31 °C 0.39 °C 0.27 °C 0.16 °C 0.13 °C 0.13 °C 0.14 °C 0.17 °C 0.14 °C 0.14 °C 0.19 °C 0.19 °C 0.15 °C 0.15 °C 0.17 °C 0.74 °C 0.26 °C 0.17 °C 0.16 °C 0.16 °C 0.17 °C	Fluke 7526A Multi-Function Calibrator

Electrical – DC/Low Frequency

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Electrical Calibration of Thermocouple Indicating Devices - Source / Measure ¹	Type R		Fluke 7526A Multi-Function Calibrator
	(-50 to -25) °C	0.67 °C	
	(-25 to 0) °C	0.6 °C	
	(0 to 100) °C	0.55 °C	
	(100 to 400) °C	0.48 °C	
	(400 to 600) °C	0.45 °C	
	(600 to 1 000) °C	0.44 °C	
	(1 000 to 1 600) °C	0.43 °C	
	(1 600 to 1 767) °C	0.45 °C	
	Type S		
	(-50 to -25) °C	0.64 °C	
	(-25 to 0) °C	0.57 °C	
	(0 to 100) °C	0.54 °C	
	(100 to 400) °C	0.48 °C	
	(400 to 600) °C	0.45 °C	
	(600 to 1 000) °C	0.44 °C	
	(1 000 to 1 600) °C	0.44 °C	
	(1 600 to 1 767) °C	0.46 °C	
Type T			
(-250 to -200) °C	0.37 °C		
(-200 to -100) °C	0.21 °C		
(-100 to 0) °C	0.15 °C		
(0 to 200) °C	0.14 °C		
(200 to 400) °C	0.14 °C		

Thermodynamic

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Infrared Pyrometers ¹	(93.3 to 1 204.4) °C	2.7 °C	Blackbody Sources – Comparison Method
	(>1 204.4 to 1 482.2) °C	3.6 °C	
	(648.9 to 871.1) °C	4.4 °C	Blackbody Sources – Radiometric Method $\epsilon = 0.99, \lambda = 1 \mu\text{m}$
	(>871.1 to 1 315.5) °C	6.5 °C	
	(>1 315.5 to 1 482.2) °C	7.4 °C	
Infrared Blackbodies ¹	(93.3 to 1 204.4) °C	2.7 °C	Fluke 7526A Multi-Function Calibrator and Reference thermocouple – Comparison Method
	(>1 204.4 to 1 482.2) °C	3.6 °C	

Thermodynamic

Parameter / Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method and/or Equipment
Infrared Blackbodies ¹	(648.9 to 871.1) °C (>871.1 to 1 315.5) °C (>1 315.5 to 1 537.8) °C	4.4 °C 6.5 °C 7.4 °C	Cyclops 100L-2F IR Thermometer – Radiometric Method $\epsilon = 0.1$ to 0.99 $\lambda = 1 \mu\text{m}$

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. L2383.



R. Douglas Leonard Jr., VP, PILR SBU

