



# CERTIFICATE OF ACCREDITATION

## ANSI-ASQ National Accreditation Board

500 Montgomery Street, Suite 625, Alexandria, VA 22314, 877-344-3044

This is to certify that

**Caley & Whitmore Corporation**  
**500 West Cummings Park, Suite 4850**  
**Woburn, MA 01801**

has been assessed by ANAB  
and meets the requirements of international standard

## ISO/IEC 17025:2005

while demonstrating technical competence in the field of

## CALIBRATION

Refer to the accompanying Scope of Accreditation for information regarding the types of calibrations to which this accreditation applies.

L2150

Certificate Number

  
ANAB Approval

Certificate Valid: 10/16/2017-06/03/2019  
Version No. 001 Issued: 10/16/2017



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. 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 17025:2005**

**Caley & Whitmore Corporation**

500 West Cummings Park, Suite 4850

Woburn, MA 01801

William Mueller 617-623-7430

**CALIBRATION**

Valid to: **June 3, 2019**

Certificate Number: **L2150**

**Electrical – DC/Low Frequency**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Thermocouple Millivolt Simulation,	Type K		Thermocouple Calibrator
	(-230 to -100) °C	0.74 °C	
	(-100 to 1 050) °C	0.33 °C	
	(1 050 to 1 371) °C	0.42 °C	
	Type T		
	(-260 to -200) °C	1.2 °C	
	(-200 to -50) °C	0.64 °C	
	(-50 to 0) °C	0.32 °C	
	(0 to 400) °C	0.25 °C	
	Type J		
(-210 to -180) °C	0.41 °C		
(-180 to -50) °C	0.32 °C		
(-50 to 500) °C	0.25 °C		
(500 to 1 200) °C	0.32 °C		

**Mass**

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Analytical Balances (0.01 mg resolution) (0.1 mg resolutions)	(0 to 30) g	0.09 mg	ASTM Class 1 Weights
	(0 to 200) g	0.46 mg	
Balances (1 mg resolution) (10 mg resolution) (100 mg resolution)	(0 to 1) kg	3.6 mg	ASTM Class 1 Weights
	(0 to 5) kg	23 mg	
	(0 to 10) kg	217 mg	



Mass

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Scales (1 g resolution)	(0 to 30 kg)	2.2 g	ASTM Class 1 Weights

Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Chambers, Freezers, Incubators, and Ovens	(-25 to 300) °C	0.29 °C	RTD Probe with Indicator
	(-25 to 150) °C	0.98 °C	Fluke 51/52 with Thermocouple Probes
Digital Thermometers with Probes, Bi-Metal Thermometers, Thermocouple Probes, Liquid in Glass Partial / Total immersion only	(-25 to 300) °C	0.29 °C	RTD Probe with Indicator and Baths

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. L2150.

  
Vice President

