

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

CLIMET INSTRUMENTS COMPANY 1320 West Colton Avenue Redlands, CA 92374

Jeff Johnson Phone: 909 792 2788

CALIBRATION

Valid To: October 31, 2024 Certificate Number: 5008.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations^{1, 5}:

I. Fluid Quantities

Parameter/Equipment	Range	CMC ^{2, 4} (±)	Comments
Flow Calibration ³ – Microbial Sampler	(1 to 100) L/min	0.6 %	Comparison against a calibrated reference flowmeter

II. Optical Quantities

Parameter/Equipment	Range	CMC ^{2, 4} (±)	Comments
Climet Aerosol Particle Counter ³ – Particle Detection	(0.3 to 25) µm, External PHA 150 mV 200 mV 230 mV 270 mV 700 mV	1.4 % 1.1 % 0.9 % 0.8 % 0.3 %	ISO 21501-4, comparison is against standard particles

Parameter/Equipment	Range	CMC ^{2, 4} (±)	Comments
Climet Aerosol Particle Counter ³ – (cont)			ISO 21501-4
Particle Detection	(0.3 to 25) µm, Internal PHA 400 mV 300 mV 200 mV 160 mV 120 mV 100 mV	0.43 % 0.57 % 0.85 % 1.1 % 1.4 % 1.7 %	Comparison is against standard particles
50 % Count Efficiency 100 % Count Efficiency	(0.3 to 0.5) μm (0.5 to 0.8) μm	0.8 %	Comparison against a primary standard condensation particle counter (CPC)
Resolution	(0.3 to 0.6) μm	0.9 %	Test with three distributions to challenge level of resolution
Climet Reference Counter –			
Particle Detection	(0.269 to 0.56) µm, 300 mV 400 mV 460 mV 1160 mV	0.6 % 0.5 % 0.4 % 0.2 %	Comparison is against standard particles
100% Count Efficiency	(0.3 to 0.8) μm	1.2 %	Comparison against a primary standard condensation particle counter (CPC)
Resolution	(0.269 to 0.4) μm	0.7 %	Test with three distributions to challenge level of resolution

Satellite Laboratory

CLIMET INSTRUMENTS COMPANY 1932 Arlington Blvd., Suite 6

Charlottesville, VA 22903 Manny Patino Phone: 434-984-5634

I. Fluid Quantities

Parameter/Equipment	Range	CMC ^{2, 4} (±)	Comments
Flow Calibration ³ – Microbial Sampler	(1 to 100) L/min	0.6 %	Comparison against a calibrated reference flowmeter

II. Optical Quantities

Parameter/Equipment	Range	CMC ^{2, 4} (±)	Comments
Climet Aerosol Particle Counter ³ – Particle Detection	(0.3 to 25) µm, External PHA 150 mV 200 mV 230 mV 270 mV 700 mV	1.4 % 1.1 % 0.9 % 0.8 % 0.3 %	ISO 21501-4, comparison is against standard particles

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Parameter/Equipment	Range	CMC ^{2, 4} (±)	Comments
Climet Aerosol Particle Counter ³ – (cont)			ISO 21501-4
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Resolution	(0.3 to 0.6) μm	0.9 %	Test with three distributions to challenge level of resolution
Climet Reference Counter –			
Particle Detection	(0.269 to 0.56) µm 300 mV 400 mV 460 mV 1160 mV	0.6 % 0.5 % 0.4 % 0.2 %	Comparison is against standard particles
100% Count Efficiency	(0.3 to 0.8) μm	1.2 %	Comparison against a primary standard condensation particle counter (CPC)
Resolution	(0.269 to 0.4) μm	0.7 %	Test with three distributions to challenge level of resolution

¹ This laboratory offers commercial and field calibration service.

² Calibration and Measurement Capability Uncertainty (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.

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³ Field calibration service is available for this calibration. Please note the actual measurement uncertainties achievable on a customer's site can normally be expected to be larger than the CMC found on the A2LA Scope. Allowance must be made for aspects such as the environment at the place of calibration and for other possible adverse effects such as those caused by transportation of the calibration equipment. The usual allowance for the actual uncertainty introduced by the item being calibrated, (e.g. resolution) must also be considered and this, on its own, could result in the actual measurement uncertainty achievable on a customer's site being larger than the CMC.

⁴ In the statement of CMC, percentages are percentage of reading, unless otherwise indicated.

⁵ This scope meets A2LA's P112 Flexible Scope Policy.



Accredited Laboratory

A2LA has accredited

CLIMET INSTRUMENTS COMPANY

Redlands, CA

for technical competence in the field of

Calibration

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

General requirements for the competence of testing and calibration laboratories. This laboratory also meets R205 – Specific Requirements: Calibration Laboratory Accreditation Program. 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).



Presented this 6th day of December 2022.

Senior Director, Accreditation Services For the Accreditation Council

Certificate Number 5008.01 Valid to October 31, 2024

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