



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005
& ANSI/NCSL Z540-1-1994 & ANSI/NCSLI Z540.3-2006

CALIBRATE, INC.
610 Jones Ferry Road Suite 210
Carrboro, NC 27510
George Emerson Phone: 919 240 4089

CALIBRATION

Valid To: March 31, 2018

Certificate Number: 2161.01

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

I. Mechanical

Parameter/Equipment	Range	CMC ^{2,4} (±)	Comments
POVA (Piston Operated Volumetric Apparatus) ³ – Pipettes, Syringes, Burettes, Liquid, Handlers, Dispensers	(0.2 to 2) µL	0.030 µL	Gravimetric record referenced to mass balances and ASTM class 1 mass standards ISO-8655-6
	(2.1 to 10) µL	0.030 µL	
	(10.1 to 20) µL	0.030 µL	
	(20.1 to 100) µL	0.030 µL	
	(101 to 200) µL	0.031 µL	
	(201 to 500) µL	0.032 µL	
	(501 to 1000) µL	0.033 µL	
	(1001 to 2000) µL	0.036 µL	
	(2001 to 5000) µL	0.045 µL	
	(5001 to 10 000) µL	0.061 µL	
	(10 001 to 20 000) µL	0.093 µL	
	(20 001 to 50 000) µL	0.20 µL	
	(50 001 to 100 000) µL	0.40 µL	
	(100 001 to 150 000) µL	0.62 µL	
	(150 001 to 200 000) µL	0.83 µL	

¹ This dedicated field laboratory offers commercial calibration service 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.

³ Field calibration service **only** is available for this calibration and this laboratory meets A2LA *R104 – General Requirements: Accreditation of Field Testing and Field Calibration Laboratories* for these calibrations. Please note the actual measurement uncertainties achievable on a customer's site **shall** 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.

⁴ The contributions from the “best existing device” are not included in the CMC claim.



Accredited Laboratory

A2LA has accredited

CALIBRATE INC.

Carrboro, NC

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/NCSLI Z540-1-1994 and the requirements of ANSI/NCSLI Z540.3-2006 and 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 8 January 2009).



Presented this 20th day of October 2016.

A handwritten signature in blue ink, appearing to read 'John C. Burt', written over a horizontal line.

Senior Director of Quality and Communications
For the Accreditation Council
Certificate Number 2161.01
Valid to March 31, 2018

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