

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017 & ANSI/NCSL Z540-1-1994

C & C TECHNOLOGIES, INC. 2455 Reliance Ave. Apex, NC 27539 Russ Mann Phone: 919 362 1116

CALIBRATION

Valid To: August 31, 2025

Certificate Number: 1345.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations^{1, 4}:

I. Mechanical

Parameter/Equipment	Range	$CMC^{2}(\pm)$	Comments
Tachometer ³	(90 to 999) rpm (1000 to 9999) rpm (10 000 to 50 000) rpm (50 000 to 99 999) rpm	1.3 rpm 13 rpm 35 rpm 120 rpm	Using Extech 461825 photo tachometer
Pressure – Pressure Gages (Pneumatic)	(5 to 100) psig	0.7 psi	Using Ashcroft grade 3A pressure test gauge

II. Thermodynamics

Parameter/Equipment	Range	$CMC^{2}(\pm)$	Comments
Relative Humidity ³ , Fixed Points – Humidity Meters, Probes & Thermo-Hygrometers	11 % RH 33 % RH 75 % RH 97 % RH	1.6 % RH 1.6 % RH 2.0 % RH 2.6 % RH	Using Vaisala humidity salts

(A2LA Cert. No. 1345.01) 12/7/2023

Page 1 of 2

Parameter/Equipment	Range	$CMC^{2}(\pm)$	Comments
Relative Humidity ³ - Humidity Meters, Probes, Thermo-Hygrometers, Data Logger	(11 to 33) % RH (33 to 75) % RH (75 to 97) % RH	2.8 % RH 3.1 % RH 4.4 % RH	Using humidity meters & environment chamber
Relative Humidity ³ – Environment Chamber Controllers & Probes	(11 to 33) % RH (33 to 75) % RH (75 to 97) % RH	2.8 % RH 3.1 % RH 4.4 % RH	Using humidity meters
Temperature ³ – Digital Thermometers, Mechanical Thermometer, probes.	(-70 to 300) °C	0.3 °C	Using Agilent 34970A w/ RTD & dry block
Temperature ³ – Environment Chamber Controllers & Probes	(-70 to 300) °C	0.3 °C	Using Agilent 34970A w/ RTD

III. Time & Frequency

Parameter/Equipment	Range	$\mathrm{CMC}^{2}\left(\pm\right)$	Comments
Stopwatches	5 s to 24 h	0.5 s	Direct comparison with NIST traceable audio time signals.

¹ This 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 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 This scope meets A2LA's *P112 Flexible Scope Policy*.

(A2LA Cert. No. 1345.01) 12/7/2023





Accredited Laboratory

A2LA has accredited

C & C TECHNOLOGIES, INC.

Apex, NC

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 the requirements of ANSI/NCSL Z540-1-1994 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 April 2017).



Presented this 7th day of December 2023.

Mr. Trace McInturff, Vice President, Accreditation Services For the Accreditation Council Certificate Number 1345.01 Valid to August 31, 2025