



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY ATLANTA-GAINESVILLE, LLC
2350 Centennial Drive
Gainesville, GA 30504
Laura Harrod Phone: 404-954-2054

ELECTRICAL

Valid To: November 30, 2027

Certificate Number: 6836.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory at the location listed above, ***as well as, the satellite location listed below***, to perform the following tests on lithium primary batteries, lithium secondary batteries, nickel secondary batteries, and alkaline primary batteries:

Test:

Charge and Discharge, Capacity or
Endurance Cycling, Storage, Duty Cycle
and Float

Test Method(s) ¹:

UN Manual of Tests-UN 38.3;
IEC 62281, 62133-1, 62133-2, 61960-3, 60086-2;
UL 1642;
UL/CSA 62133-1, 62133-2;
RTCA DO-293, 311, 347;
ANSI C18.1M, Part 1;
Soteria Life After Damage Test Specification

External Short Circuit of Batteries and Cells,
Incorrect Installation

UN Manual of Tests-UN 38.3;
IEC 62281, 62133-1, 62133-2;
UL 1642, 2054;
RTCA DO-293, 311

Overcharge/Abnormal Charge

UN Manual of Tests-UN 38.3;
IEC 62281, 62133-1, 62133-2;
UL 62133-2, 2054, 1642;
RTCA DO-293, 311, 347

Forced Discharge

IEC 62133-1, 62133-2;
UL 62133-2

Insulation and Wiring (Dielectric Strength)

IEC 62133-1, 62133-2;
UL 62133-2;
RTCA DO-293, 311, 347;
EN 60950-1

Battery Internal Resistance

IEC 61960-3

<u>Test:</u>	<u>Test Method(s)^{1:}</u>
Deep Discharge (Over discharge)	RTCA DO-293, 311, 347
Thermal Runaway Containment (Explosion Containment)	RTCA DO-311, 347
Limited Power Source	UL 2054; EN 60950-1
Batteries (Cell, Pack, Embedded Pack)	IEEE 1725
Batteries (Button or Coin Cell)	UL 4200a

ELEMENT MATERIALS TECHNOLOGY ATLANTA – GAINESVILLE LLC
10 Avenue E
Hopkinton, MA 01748

<u>Test:</u>	<u>Test Method(s)^{1:}</u>
Capacity/Static Capacity	United States Advanced Battery Consortium Battery Test Manual for 48 Volt Mild Hybrid Electric Vehicles – clause 3.2; United States Advanced Battery Consortium Battery Test Manual for Electric Vehicles – clause 3.2
Hybrid Pulse Power Characterization Test (HPPC)	United States Advanced Battery Consortium Battery Test Manual for 48 Volt Mild Hybrid Electric Vehicles; United States Advanced Battery Consortium Battery Test Manual for Electric Vehicles
Calendar Life	United States Advance Battery Consortium Battery Test Manual for 48 Volt Mild Hybrid Electric Vehicles; United States Advanced Battery Consortium Battery Test Manual for Electric Vehicles
Cycle Life	United States Advance Battery Consortium Battery Test Manual for 48 Volt Mild Hybrid Electric Vehicles – clause 3.10
Thermal Performance	United States Advance Battery Consortium Battery Test Manual for 48 Volt Mild Hybrid Electric Vehicles – clause 3.7; United States Advanced Battery Consortium Battery Test Manual for Electric Vehicles - clause 3.7

¹ When the date, edition, version, etc. is not identified in the scope of accreditation, laboratories may use the version that immediately precedes the current version for a period of one year from the date of publication of the standard test method, per Annex A, Part C of A2LA R101 - *General Requirements: Accreditation of Conformity Assessment Bodies*.



Accredited Laboratory

A2LA has accredited

ELEMENT MATERIALS TECHNOLOGY ATLANTA- GAINESVILLE, LLC

Gainesville, GA

for technical competence in the field of

Electrical Testing

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 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 8th day of December 2025.

A blue ink signature of the name "Mr. Trace McInturff" on a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 6836.01
Valid to November 30, 2027

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