



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, 2025

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:

<u>Test:</u>	<u>Test Method(s)¹:</u>
Charge and Discharge, Capacity or Endurance Cycling, Storage, Duty Cycle and Float	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

Test:

Test Method(s)¹:

Battery Internal Resistance

IEC 61960-3

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

ENERGY ASSURANCE, LLC
10 Avenue E
Hopkinton, MA 01748

Test:

Test Method(s)¹:

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 measurement method, per part C., Section 1 of A2LA *R101 - General Requirements- Accreditation of ISO-IEC 17025 Laboratories*.





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 29th day of November 2023.

A blue ink signature of Trace McInturff, written in a cursive style.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 6836.01
Valid to November 30, 2025

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