

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY BALTIMORE 5 North Park Drive Hunt Valley, MD 21030 Mrs. Sarah D. Brammer Phone: 410 584 9099

ELECTRICAL

Valid To: December 31, 2026

Certificate Number: 214.36

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on the following products: <u>Aerospace, Automotive, Avionics,</u> <u>Consumer Products, Electronics, Industrial, Medical, Military Telecommunication and Textiles</u>.

Test Technology:

Arc Resistance

Dielectric Constant/Loss Tangent/ Permittivity Dissipation Factor

<u>Range</u>: 100Hz to 100KHz 1 MHz to 1.0 GHz

Resistivity/Volume and Surface Resistance

Q Factor/Q Resonance

Dielectric Strength/Dielectric Breakdown/ Electrical Strength

<u>Range</u>: AC to 50kV DC to 60kV

Electromigration (ECM) Insulation Resistance (IR) Moisture and Insulation Resistance (MIR) Surface Insulation Resistance (SIR)

<u>Range</u>: $10^5 \Omega$ to $10^{12} \Omega$

<u>Test Method(s)</u>¹:

ASTM D495; IPC-TM-650 (Section 2.5.1)

ASTM D150; ASTM D2520; IPC-TM-650 (Methods 2.5.5.1, 2.5.5.2, and 2.5.5.3); MIL-STD-883, Method 5011

ASTM D257; IPC-TM-650 (Methods 2.5.17.1); MIL-STD-883, Method 5011; IEC 60093

IPC-TM-650 (Method 2.5.28); MIL-I-46058

ASTM D149; IPC-TM-650 (Methods 2.5.6, 2.5.6.1, 2.5.6.2, and 2.5.6.3); IEC 62631

IPC-TM-650 (Sections 2.6.3, 2.6.3.1, 2.6.3.2, 2.6.3.3, 2.6.3.7, 2.6.14, 2.6.14.1); MIL-STD-202, Methods 106 and 302

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Test Technology:

Test Method(s)¹:

Dielectric Withstanding Voltage (DWV)/ AC Withstanding Voltage DC Withstanding Voltage	MIL-STD-202, Method 301; IPC-TM-650 (Method 2.5.7)
Event Detection	IPC-9701 (Paragraph 4.3)
<u>Range</u> : $>300\Omega$ for >200 nanoseconds	
Shelf Life of Conformal Coating	MIL-I-46058; IPC-CC-830

Supporting the following documents: IPC-4101, IPC-SM-840, IPC-CC-830, IPC-6012, IPC-6013, IPC-6018, IPC-J-STD-004, MIL-A-28870, MIL-I-46058, MIL-P-50884, MIL-PRF-31032, MIL-PRF-55110

Facility studies performed according to IPC-QL-653 "Certification of Facilities that Inspect/Test Printed Boards, Components and Materials."

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.*

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Accredited Laboratory

A2LA has accredited

ELEMENT MATERIALS TECHNOLOGY BALTIMORE

Hunt Valley, MD

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 26th day of February 2025.

Mr. Trace McInturff, Vice President, Accreditation Services For the Accreditation Council Certificate Number 214.36 Valid to December 31, 2026