



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY TEMPE

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ELECTRICAL

Valid To: April 30, 2024

Certificate Number: 0214.11

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following automotive, telecommunications, and aerospace testing:

Tests:

Test Specifications/ Methods ¹:

Electrostatic Discharge ²
(Up to 25kV)

MIL-STD-1576 Base (Method 2205);
MIL-STD-461 F, G (CS118);
RTCA/DO-160 D, E, F, G (Section 25);
SAE J1113-13;
SAE/USCAR Initiator Requirements
(Para. 3.2.1.8.1 & 3.2.1.8.2), June 2005

Dielectric Withstand Voltage ²
(Up to 50kV AC, 60kV DC)

MIL-STD-202 E, F, G (Method 301);
MIL-STD-1344A (through Notice 6), (Method 3001);
MIL-DTL-38999 J, K, L (Amendment 1), (Method 4.5.10);
MIL-PRF-49142 Base A, B (Amendment 1), (Method 4.6.11)

Resistance

MIL-STD-202 E, F, G (Method 303);
MIL-STD-1576 Base (Method 2201);
MIL-HDBK-1512 Base (Method 201);
MIL-DTL-38999 J, K, L (Amendment 1), (Method 4.5.13);
SAE/USCAR Initiator Requirements
(Para. 4.7.2.1 – 4.7.2.3), June 2005

Insulation Resistance

MIL-STD-202 E, F, G (Method 302);
MIL-STD-1344A (through Notice 6), (Method 3003);
MIL-STD-1576 Base (Method 2117);
MIL-DTL-38999 J, K, L (Amendment 1), (Method 4.5.9)

Current

SAE/USCAR Initiator Requirements
(Para. 4.7.3.11 & 4.7.3.12), June 2005

Tests:

Immunity to Electromagnetic
Disturbances

Test Specifications/ Methods ¹:

MIL-STD-462/461 A, B, C (CS01);
MIL-STD-462/461 A, B, C (CS02);
MIL-STD-462/461 C (CS10);
MIL-STD-462/461 C (CS11);
MIL-STD-462/461 A, B, C (RS01);
MIL-STD-462/461 A, B, C (RS03);
MIL-STD-462/461D (CS101);
MIL-STD-462/461D (CS114);
MIL-STD-462/461D (CS115);
MIL-STD-462/461D (CS116);
MIL-STD-462/461D (RS101);
MIL-STD-462/461D (RS103);
MIL-STD-461 E, F, G (CS101);
MIL-STD-461 E, F, G (CS114);
MIL-STD-461 E, F, G (CS115);
MIL-STD-461 E, F, G (CS116);
MIL-STD-461 E, F, G (RS101);
MIL-STD-461 E, F, G (RS103);
28400NDS04, 3 (03 Mar. 2003);
28400NDS05, 7 (25 Jun. 2002)

Magnetic Effects

RTCA/DO-160 B, C, D, E, F, G (Section 15)

Aerospace

RTCA/DO-160 B, C, D, E, F, G (Section 16);
RTCA/DO-160 B, C, D, E, F, G (Section 17);
RTCA/DO-160 B, C, D, E, F, G (Section 18);
RTCA/DO-160 B, C, D, E, F, G (Section 19);
RTCA/DO-160 B, C, D, E, F, G (Section 20);
RTCA/DO-160 B, C, D, E, F, G (Section 21);
RTCA/DO-160 B, C, D, E, F, G (Section 22)

RF Emissions

MIL-STD-462/461 A, B, C (CE01);
MIL-STD-462/461 A, B, C (CE02);
MIL-STD-462/461 A, B, C (RE01);
MIL-STD-462/461 A, B, C (RE03);
MIL-STD-462/461D (CE101);
MIL-STD-462/461D (CE114);
MIL-STD-462/461D (CE115);
MIL-STD-462/461D (CE116);
MIL-STD-462/461D (RE101);
MIL-STD-462/461D (RE103);
MIL-STD-461 E, F, G (CE101);
MIL-STD-461 E, F, G (CE102);
MIL-STD-461 E, F, G (CE106);
MIL-STD-461 E, F, G (RE101);
MIL-STD-461 E, F, G (RE102);
MIL-STD-461 E, F, G (RE103)

Tests:**Test Specifications/ Methods ¹:**

Aircraft Electric Power Characteristics

MIL-STD-704 A, B, C, D, E, F;
MIL-HDBK-704-1 through -8

Transient Pulse

SAE/USCAR-28 (Section 4.7.3.13), (June 2005)

EMI-Large Signal Analysis

SAE/USCAR-28 (Section 3.2.1.9), Appendix G (June 2005)

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.

² Also using customer specific test methods utilizing any combination of test equipment parameters listed above.





Accredited Laboratory

A2LA has accredited

ELEMENT MATERIALS TECHNOLOGY TEMPE

Tempe, AZ

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 14th day of June 2022.

A blue ink signature of the Vice President of Accreditation services.

Vice President, Accreditation services
For the Accreditation Council
Certificate Number 0214.11
Valid to April 30, 2024
Revised March 20, 2024

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