



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT U.S. SPACE & DEFENSE
5325 Old Winter Garden Rd.
Orlando, FL 32811-1520

Andrew Kirkwood (Climatic/Dynamic Test Operations) Phone: 407 293 5844
Andrew.Kirkwood@elementdefense.com <http://www.elementdefense.com>

Thomas Duffany (Hydraulic Test Operations) Phone: 407 293 5844
Thomas.Duffany@elementdefense.com <http://www.elementdefense.com>

MECHANICAL

Valid To: September 30, 2025

Certificate Number: 0214.46

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform testing for the following industries: aerospace; defense; telecommunications; electrical; electronics; automotive; information processing; scientific instruments and commercial.

Test Type(s):

Test Method(s):

Temperature /Altitude

MIL-STD-810E/F/G/H, Method 500, Procedures I and II;
RTCA/DO-160E/F/G, Section 4.6.1

Rapid Decompression

MIL-STD-810E/F/G/H, Method 500, Procedure III;
RTCA/DO-160E/F/G, Section 4.6.2

Explosive Decompression

MIL-STD-810E/F/G/H, Method 500, Procedure IV

Overpressure

RTCA/DO-160E/F/G/H, Section 4.6.3

High Temperature (Dry Heat)

MIL-STD-810E/F/G/H, Method 501;
RTCA/DO-160E/F/G, Sections 4.5.3, 4.5.4, and 4.5.5

Low Temperature

MIL-STD-810E/F/G/H, Method 502;
RTCA/DO-160E/F/G, Sections 4.5.1 and 4.5.2

Temperature (Thermal) Shock

MIL-STD-810E/F/G/H, Method 503;
MIL-STD-202G/H, Method 107

Temperature Variation

RTCA/DO-160E/F/G/H, Section 5

Test Type(s):

Test Method(s):

Fluids Resistance

MIL-STD-810E/F/G/H, Method 504, Contamination;
RTCA/DO-160E/F/G, Section 11, Susceptibility

Solar Radiation (Sunshine)

MIL-STD-810E/F/G/H, Method 505, Procedure I,
Heat Effects (*excluding Reflectance Check*)

Blowing Rain

MIL-STD-810E/F/G/H, Method 506, Procedure I

Drip

MIL-STD-810E/F/G/H, Method 506, Procedure III;
RTCA/DO-160E/F/G, Section 10, Paragraph 10.3.2

Humidity (Damp Heat)

MIL-STD-810E/F/G/H, Method 507;
RTCA/DO-160E/F/G/H, Section 6;
MIL-STD-202G/H, Method 106

Salt Fog (Corrosion / Salt Mist)

MIL-STD-810E/F/G/H, Method 509;
RTCA/DO-160E/F/G, Section 14;
ASTM B117

Blowing Dust

MIL-STD-810E/F/G/H, Method 510, Procedure I;
RTCA/DO-160E/F/G, Section 12.4 (Category D)

Blowing Sand

MIL-STD-810E/F/G/H, Method 510, Procedure II

Explosive Atmosphere

MIL-STD-810E/F/G/H, Method 511, Procedure I;
RTCA/DO-160E/F/G, Section 9.6.2
(Category E) Non-Ignition;
RTCA/DO-160E/F/G, Section 9.6.3
(Category H) Surface Temp

Immersion

MIL-STD-810E/F/G/H, Method 512

Acceleration

MIL-STD-810E/F/G/H, Method 513;
RTCA/DO-160E/F/G, Section 7 (Sustained);
MIL-STD-202G/H, Method 212

Sine and/or Random Vibration

MIL-STD-810E/F/G/H, Method 514;
RTCA/DO-160E/F/G, Section 8

Loose Cargo Vibration

MIL-STD-810E/F/G/H, Method 514, Procedure II



Test Type(s):

Classical / SRS Mechanical Shock
Free-fall: 12 foot drop machine

Packed / Unpacked Drop

Temp / Humidity / Altitude

Icing / Freezing Rain

Spray Proof (Rain and Spray)

Hydraulic Endurance

Impulse (Hydraulic Cycling)

Test Method(s):

MIL-STD-810E/F/G/H, Method 516,
Procedures I, II, III, and V;
MIL-STD-202G/H, Method 213;
RTCA/DO-160E/F/G, Section 7 (Impulse)

MIL-STD-810E/F/G/H, Method 516, Procedures IV and VI

MIL-STD-810E/F/G/H, Method 520

MIL-STD-810E/F/G/H, Method 521;
MIL-STD-810E/F/G/H, Method 524;
RTCA/DO-160E/F/G, Section 24 (Category A);
RTCA/DO-160E/F/G, Section 24 (Category B);
RTCA/DO-160E/F/G, Section 24 (Category C)

RTCA/DO-160E/F/G, Section 10

SAE ARP4378B;
SAE ARP4946A

SAE ARP1383B/C





Accredited Laboratory

A2LA has accredited

ELEMENT U.S. SPACE & DEFENSE

Orlando, FL

for technical competence in the field of

Mechanical 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 January 2024.

A blue ink signature of Mr. Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 214.46
Valid to September 30, 2025
Revised May 1, 2024

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