SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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MECHANICAL

Valid To: March 31, 2024 Certificate Number: 0214.10

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]:**
Vibration (Sine, Random and Combined) [2] (5 to 3000) Hz 1" stroke 24,000 lbs. Force to 100 g's	MIL-STD-750 C, D, E, F (Methods 2046, 2056, 2057); MIL-STD-167A (Method I); MIL-STD-810 Base, A, B, C, D, E, F, G, H (Methods 514, 519, 526); MIL-STD-202 E, F, G (Methods 201, 203, 204, 214); MIL-STD-1344A (through Notice 6), (Method 2005); MIL-STD-1576 Base (Method 3113); MIL-STD-1540 B, C, D; RTCA/DO-160 B, C, D, E, F, G (Section 8); SAE/USCAR 24 (Inflator Requirements), June 2004; SAE/ USCAR 28 (Initiator Requirements), June 2005
Vibration Shock [2] (5 to 3000) Hz 1" stroke 24,000 lbs. Force to 100 g's	MIL-STD-202 E, F, G (Method 213); MIL-STD-810 Base, A, B, C, D, E, F, G, H, (Method 516); MIL-STD-1344A (through Notice 6), (Method 2004); RTCA/DO-160 B, C, D, E, F, G (Section 7); SAE/USCAR 24 (Inflator Requirements), June 2004; SAE/ USCAR 28 (Initiator Requirements), June 2005
Mechanical (Drop) Shock [2] (12, 20 & 40) ft. drop towers	MIL-STD-810 Base, A, B, C, D, E, F, G, H, (Method 516); MIL-STD-202 E, F, G (Method 213); MIL-STD-1344A (through Notice 6) (Method 2004); MIL-STD-1576 Base (Method 3114); SAE/USCAR 24 (Inflator Requirements), June 2004
(Beam) Shock [2] Air Cannon, Beam	MIL-STD-1576 Base (Method 3114)

Tests:	**Test Specifications/Methods [1]:**
Acceleration [2] r = 12”; RPM=2000 r = 34”; PM=400 r = 56”; RPM=150	MIL-STD-810 Base, A, B, C, D, E, F, G, H, (Method 513); MIL-STD-202 E, F, G (Method 212); MIL-STD-1344A (through Notice 6), (Method 2011); RTCA/DO-160 B, C, D, E, F, G (Section 7); SAE/USCAR 28 (Initiator Requirements), June 2005
Environmental	
Temperature Altitude [2] (0 to 100,000) Feet (-72 to 150) °C	MIL-STD-810 Base, A, B, C, D, E, F, G, H (Method 500); MIL-STD-202 E, F, G (Method 105); RTCA/DO-160 B, C, D, E, F, G (Section 4); SAE/USCAR 28 (Initiator Requirements), June 2005
High Temperature [2] 200 °C chamber	MIL-STD-810 Base, A, B, C, D, E, F, G, H (Method 501); MIL-STD-202 E, F, G (Method 108); SAE/USCAR 24 (Inflator Requirements), June 2004; SAE/ USCAR 28 (Initiator Requirements), June 2005
Low Temperature [2] (To -176 °C)	MIL-STD-810 Base, A, B, C, D, E, F, G, H (Method 502)
Temperature Shock [2] (-176 to 200) °C	MIL-STD-810 Base, A, B, C, D, E, F, G, H (Method 503); MIL-STD-202 E, F, G (Method 107); SAE/USCAR 24 (Inflator Requirements), June 2004; SAE/ USCAR 28 (Initiator Requirements), June 2005
Thermal Vacuum [2] 1x 10-5 torr (or better) (-150 to 175) °C	SCGPS56054
Temperature/Humidity [2] (5 to 95) %RH	RTCA/DO-160 B, C, D, E, F, G (Section 6); MIL-STD-810 Base, A, B, C, D, E, F, G, H (Method 507); MIL-STD-202 E, F, G (Method 103); MIL-STD-1344A (through Notice 6), (Method 1002); SAE/USCAR 24 (Inflator Requirements), June 2004; SAE/ USCAR 28 (Initiator Requirements), June 2005
Temperature Cycling [2] (-176 to 200) °C	MIL-STD-810 Base, A, B, C, D, E, F, G, H (Method 520); MIL-STD-1344A (through Notice 6), (Method 1003); RTCA/DO-160 B, C, D, E, F, G (Section 5)
Explosive Atmosphere	MIL-STD-810 Base, A, B, C, D, E, F, G, H, Method 511); RTCA/DO-160 B, C, D, E, F, G (Section 9)

Tests:	**Test Specifications/Methods [1]:**
Rapid Decompression	MIL-STD-810 Base, A, B, C, D, E, F, G, H, (Method 500); RTCA/DO-160 B, C, D, E, F, G (Section 4)
Immersion	MIL-STD-810 Base, A, B, C, D, E, F, G (Method 512); MIL-STD-202 E, F, G (Method 104); MIL-STD-1344A (through Notice 6), (Method 1016)
Fluid Susceptibility	MIL-STD-810 F, G, H, Method 504); RTCA/DO-160 B, C, D, E, F, G (Section 11)
Solar Radiation/Sunshine	MIL-STD-810 Base, A, B, C, D, E, F, G, H, (Method 505)
Salt Fog/Spray	MIL-STD-810 Base, A, B, C, D, E, F, G, H, (Method 509); MIL-STD-1344A (through Notice 6), (Method 1001); RTCA/DO-160 B, C, D, E, F, G (Section 14); SAE/USCAR 24 (Inflator Requirements), June 2004; SAE/ USCAR 28 (Initiator Requirements), June 2005; MIL-STD-202 E, F, G (Method 101); ASTM B117-73, -94, -97, -02, -03, -07, -09, -11, -16, -18, -19
Rain/Drip/Blowing Rain [2] (Up to 40mph)	RTCA/DO-160 B, C, D, E, F, G (Section 10); MIL-STD-810 Base, A, B, C, D, E, F, G, H, (Method 506)
Freezing Rain	RTCA/DO-160 B, C, D, E, F, G (Section 24); MIL-STD-810 Base, A, B, C, D, E, F, G, H, (Method 521)
Combined Environments (Temperature, Humidity, Altitude)	RTCA/DO-160 B, C, D, E, F, G, H, (Section 4); MIL-STD-810 Base, A, B, C, D, E, F, G (Method 520); SAE/USCAR 24 (Inflator Requirements), June 2004; SAE/ USCAR 28 (Initiator Requirements), June 2005
Sand and Dust	MIL-STD-810 Base, A, B, C, D, E, F, G, H Method 510); RTCA/DO-160 B, C, D, E, F, G (Section 12); MIL-STD-202 E, F, G (Method 110); SAE J1211 (Section 4.5), Nov. 78 (*dust only*); SAE J1455 (Section 4.7), Aug. 94 (*dust only*)
Dust Ingress	IEC 60529, ISO 20653 IP5X, IP6X
Water Ingress	IEC 60529, ISO 20653 IPX3, IPX4, IPX5, IPX6, IPX7, IPX8

[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

NTS LABS, LLC TEMPE

Tempe, AZ

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 14th day of June 2022.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0214.10
Valid to March 31, 2024
Revised October 11, 2022

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