



World Class Accreditation

The American Association for Laboratory Accreditation

Accredited Laboratory

A2LA has accredited

ELITE ELECTRONIC ENGINEERING INC.

Downers Grove, IL

for technical competence in the field of

Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *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 8 January 2009*).

Presented this 29th day of December 2009.



A handwritten signature in black ink, reading "Peter Abney".

President & CEO
For the Accreditation Council
Certificate Number 1786.02
Valid to June 30, 2011

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



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

ELITE ELECTRONIC ENGINEERING, INC.

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MECHANICAL

Valid to: June 30, 2011

Certificate Number: 1786.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory for the following tests:

<u>Test:</u>	<u>Test Method(s):</u>
Humidity (5 to 100)% (5 to 100)°C	MIL-STD-810(E/F/G) Meth 507, 520; MIL-STD-202(F/G), Meth 103B, 106; IEC 60068-3-4; SAE J1211 Sec. 4.2, SAE J1455 Sec. 4.2; RTCA-DO-160(D/E/F) - Sec. 6.0; EIA-364, 31B; GMW3172 Sec 5.6; IACS-E10 Test 6; IEC 60068-2-30; ISTA 2A 2008
Temperature Cycling, Temperature Steady State, Temperature Life (-100 to 350)°C @ 60°C/min	MIL-STD-810(E/F/G) Meth 501, 502, 520; MIL-STD-202 (F/G), Meth 180; IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-30, IEC 60068-2-38, IEC 60068-2-28; SAE J994 Sec. 4, SAE J1211 Sec. 4.1, SAE J1455 Sec. 4.1; RTCA DO-160(D/E/F)- Sec. 5; US CAR-2 Sec. 6.6.2, 6.6.3; GMW3172 Sec 5.5; IACS-E10 Tests 5, 11; ISTA 2A 2008
Thermal Shock (-100 to 225)°C <15sec transitions	MIL-STD-810(E/F/G) Meth 503; MIL-STD-202(F/G), Meth 107G; IEC 60068-3-4; SAE J1455 Sec. 4.1; US CAR-2 Sec. 6.6.1; EIA-364, 32C; GMW3172 Sec 5.5.5
Altitude (-1.5k to 100k)ft	MIL-STD-810(E/F/G) Meth 500, 520; MIL-STD-202(F/G), Meth 105C; IEC 60068-3-4; SAE J1211 Sec. 4.6, SAE J1455 Sec. 4.8; RTCA-DO-160(D/E/F)- Sec. 4.0; EIA-364, 20B
Immersion	MIL-STD-810(E/F/G) Meth 512; MIL-STD-202(F/G), Meth 104; IEC 60068-3-4; SAE J1211 Sec. 4.4, SAE J1455 Sec. 4; USCAR-2 Sec. 6.6.7; IEC 529, IEC 60529; GMW3127 Sec. 5.8

<u>Test:</u>	<u>Test Method(s):</u>
Ice & Freezing Rain	MIL-STD-810(E/F/G) Meth 521; RTCA-DO-160(D/E/F)- Sec. 24
Rain, Drip, and Water Spray	MIL-STD-810(E/F/G) Meth 506.4; SAE J1211 Sec. 4.5, SAE J1455 Sec. 4.5; RTCA-DO-160(D/E/F)- Sec. 10; IEC 529, IEC 60529; NEMA 250; ISO 20653
Dust Blowing and Settling	MIL-STD-810(E/F/G) Meth 510; MIL-STD-202(F/G), Meth 110A; IEC 529, IEC 60529; SAE J1211 Sec. 4.5, SAE J1455 Sec. 4.7; RTCA-DO-160(D/E/F)- Sec. 12; NEMA 250; GMW3127 Sec. 5.8.1; ISO 20653
Salt Spray (Corrosion)	ASTM B117; ASTM G85; MIL-STD-810(E/F/G) Meth 509; MIL-STD-202(F/G), Meth 101D; SAE J1211 Sec. 4.3, SAE J1455 Sec. 4.3; RTCA-DO-160(D/E/F)- Sec. 14; US CAR-2 Sec. 6.6.4; GMW3172 Sec. 5.7 Proc. 1; IACS-E10 Test 12; IEC 60068-2-52
Fungus	MIL-STD-810(E/F/G) Meth 508; SAE J1455 Sec. 4.6; RTCA-DO-160(D/E/F)- Sec. 13
Explosive Atmosphere	MIL-STD-810(E/F/G) Meth 511; MIL-STD-202(F/G), Meth 109B; RTCA-DO-160(D/E/F)- Sec. 9
Fluids Susceptibility	MIL-STD-810(E/F/G) Meth 504, 518, MIL-STD-202(F/G) Meth 215J; SAE J1211 Sec. 4.4, SAE J1455 Sec. 4.4; RTCA-DO-160(D/E/F)- Sec. 11; US CAR-2 Sec. 6.6.5, 6.6.6
Solar Radiation	MIL-STD-810(E,F,G), Method 505
Flammability	MIL-STD-202(F/G), Meth 111A; FMVSS 302
Vibration 20k force pound 2" stroke (3 -3k) Hz	MIL-STD-810(E/F/G) Meth 514, 520; MIL-STD-202(F/G), Meth 201A, 204D; IEC 60068-2-6; SAE J1211 Sec. 4.7, SAE J1455 Sec. 4.9; RTCA-DO-160(D/E/F)- Sec. 8; US CAR Sec. 6.4.4; EIA-364, 28B; GMW3172 Sec. 5.4.1, Sect 9.3.12; ICAS-E10 Test 7; ISTA2A 2008
Mechanical Shock	MIL-STD-801(E/F/G) Meth 516; MIL-STD-202(F/G) Meth 213; RTCA-DO-160(D/E/F) Sect 7; EIA-364-27; GMW3172 Sect 9.3; IEC 60068-2-31,; SAE J1455 Sect 3.2.1.f. ; ISTA 2A 2008
Acceleration	MIL-STD-810(E/F/G) Meth 521; MIL-STD-202(F/G) Meth 212A; EIA-364, 38B

Test:

Connector and Cable
Testing
0.05 to 20k lbs
20"/min

Transportation Vibration

Test Method(s):

GMW 3172 Sec 9.3.6 through 9.3.10; MIL-STD-810(E/F/G) Meth 521;
EIA-364, 38B

ISTA 1A 2001, 1B 2001, 1D 2001, 2A 2008;
MIL-STD-810G, Method 514