



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

ALPINE ELECTRONICS RESEARCH OF AMERICA, INC.
EMC Laboratory
27101 Hills Tech Ct.
Farmington Hills, MI. 48331
Mr. Jeffrey S. Markham Phone: 248 699 9261
Email: jmarkham@alpine-usa.com

ELECTRICAL (EMC)

Valid To: November 30, 2013

Certificate Number: 2632.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following automotive electromagnetic compatibility tests:

Test Technology

Test Method(s)

Electrostatic Discharge (ESD)
Test Set-up / Location Designation:
Electrical Stress Lab

ISO 10605 (2001, 2008);
CS-11979 (2010) Sections 7.1 and 7.2;
CS-11809 (2009) Sections 10.1 and 10.2;
ES-XW7T-1A278-AC (CI 280);
GMW 3097 (2006) Section 3.6;
SAE J551-15 (2002-07);
SAE J1113-13 (2002-08)

Conducted Emission (CEV/CEI)
Voltage and Current Methods
Test Set-up / Location Designation:
Shielded Room #1 & Semi-Anechoic Chamber

CISPR 25 (2002, 2008) Sections 6.2 and 6.3;
CS-11979 (2010) Sections 5.1 and 5.2;
CS-11890 (2009) Sections 5.1 and 5.2;
ES-XW7T-1A278-AC (CE 420);
GMW 3097 (2006) Section 3.3.2

Radiated Emissions (RE)
Test Set-up / Location Designation:
Semi-Anechoic Chamber

CISPR 25 (2002, 2008) Section 6.4;
CS-11979 (2010) Section 5.3;
CS-11890 (2009) Section 5.3;
ES-XW7T-1A278-AC (RE 310);
GMW 3097 (2006) Section 3.3.2

Bulk Current Injection (BCI)
Substitution Method
Test Set-up / Location Designation:
Shield Room #1

ISO 11452-4 (2005);
CS-11979 (2010) Section 6.1;
CS-11809 (2009) Section 6.1;
ES-XW7T-1A278-AC (RI 112);
GMW 3097 (2006) Section 3.4.1

Radiated Immunity (RI)
Absorber Lined Shielded Enclosure (ALSE)
(Substitution Method –
With and without Ground Plane)
200 MHz to 8 GHz, up to 150 V/m
Test Set-up / Location Designation:
Semi-Anechoic Chamber

ISO 11452-2 (2004);
ES-XW7T-1A278-AC (RI 114);
CS-11979 (2010) Section 6.2;
CS-11809 (2009) Section 6.2;
GMW 3097 (2006) Section 3.3.1;
SAE J1113-21 (2005-10)

Radiated Immunity (RI)
Absorber Lined Shielded Enclosure (ALSE)
Radar Pulse Only (up to 300 V/m)
Test Set-up / Location Designation:
Semi-Anechoic Chamber

ISO 11452-2 (2004);
ES-XW7T-1A278-AC (RI 114);
GMW 3097 (2006) Section 3.4.2

Conducted Transient Immunity (Supply Lines)
Test Set-up / Location Designation:
Transient Test Area

ISO 7637-2 (2004);
SAE J1113-11 (2007-06)

Conducted Transient Immunity (Other)
Test Set-up / Location Designation:
Transient Test Area

ISO 7637-3 (1995, 2007)

Conducted Transient Emissions (Supply Lines)
Test Set-up / Location Designation:
Transient Test Area

ISO 7637-2 (2004)

Radiated Emissions
Test Set-up / Location Designation:
Semi-Anechoic Chamber

Code of Federal Regulations (CFR) 47, FCC Part
15 (Subpart B and C) using ANSI C63.4:2003
(3m Distance, Tabletop Equipment Only,
Up to 1 GHz)

Conducted Emissions
Test Set-up / Location Designation:
Semi-Anechoic Chamber

Code of Federal Regulations (CFR) 47, FCC Part
15 (Subpart B and C) using ANSI C63.4:2003
(Up to 16A)





The American Association for Laboratory Accreditation

World Class Accreditation

Accredited Laboratory

A2LA has accredited

ALPINE ELECTRONICS RESEARCH OF AMERICA, INC.

Farmington Hills, MI

for technical competence in the field of

Electrical 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 21st day of November 2011.



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

President & CEO

For the Accreditation Council

Certificate Number 2632.01

Valid to November 30, 2013

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