



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

TUV SUD AMERICA – PLYMOUTH
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ELECTRICAL (AEMCLAP/EMC)

Valid to: June 30, 2012

Certificate Number: 0265.05

In recognition of the successful completion of the A2LA and the Automotive EMC Laboratory Accreditation Program (AEMCLAP) evaluation process, accreditation is granted to this laboratory to perform the following automotive electromagnetic compatibility tests:

TEST TECHNOLOGY

TEST METHOD(S)

AEMCLRP⁽¹⁾ (Rev. 4) Recognized Tests and Addendum May 25, 2007

Electrostatic Discharges (ESD)

Appendix D

(Ford, GM)

Test Set-up/Location Designation:

ESD Room

ISO 10605 (2001);

Ford ES-XW7T-1A278-AC (CI 280);

GMW 3097 (2006) Section 3.6

Conducted Emissions

Appendix F

(Ford, GM)

Test Set-up/Location Designation:

SAC & CISPR chambers

CISPR 25 (2002) Section 6.2;

Ford ES-XW7T-1A278-AC (CE 420);

GMW 3097 (2006) Section 3.3.2

RF Radiated Emissions

(up to 2500 MHz with current M&TE)

Appendix G

(Ford, GM)

Test Set-up/Location Designation:

SAC and CISPR chambers

CISPR 25 (2002) Section 6.4;

Ford ES-XW7T-1A278-AC (RE 310);

GMW 3097 (2006) Section 3.3.1

TEST TECHNOLOGY

TEST METHOD(S)

AEMCLRP⁽¹⁾ (Rev. 4) Recognized Tests and Addendum May 25, 2007

Bulk Current Injection (BCI)

Substitution Method

Appendix I

(Ford, GM)

Test Set-up/Location Designation:

BCI & SAC chambers

ISO 11452-4 (2005);

Ford ES-XW7T-1A278-AC (RI 112);

GMW 3097 (2006) Section 3.4.1

Absorber-Lined Shielded Enclosure (ALSE)

Appendix K

(Up to 2000 MHz and 200 V/m with current M&TE)

(Ford, GM)

Test Set-up/Location Designation:

SAC chamber

ISO 11452-2 (2004);

Ford ES-XW7T-1A278-AC (RI 114);

GMW 3097 (2006) Section 3.4.2

Reverberation Radiated Immunity

Mode Tuned

Appendix L

(Ford, GM)

Test Set-up/Location Designation:

Reverb chamber

IEC 61000-4-21 (2003);

Ford ES-XW7T-1A278-AC (RI 114) ;

GMW 3097 (2006) Section 3.4.3

Absorber-Lined Shielded Enclosure (ALSE)

Radar Pulse only

(Up to 300 V/m)

Appendix M

(Ford, GM)

Test Set-up/Location Designation:

SAC chamber

ISO 11452-2 (2004);

Ford ES-XW7T-1A278-AC (RI-114);

GMW 3097 (2006) Section 3.4.2

Other NON-AEMCLRP EMC/EMI Tests

TEST TECHNOLOGY

Radiated Immunity
(up to 4 GHz)

TEST METHOD(S)

2004/104/EC Annex IX(BCI);
2004/104/EC Annex IX(Absorption Chamber);
95/54/EC Annex IX Section 8 (Absorption Chamber);
95/54/EC Annex IX Section 10 (BCI);
97/24/EC Chapter 8 Annex VII Section 9 (BCI);
97/24/EC Chapter 8 Annex VII Section 11 (Absorption Chamber);
ISO 11452-2 (2004) (Absorption Chamber);
ISO 11452-4 (2005) (BCI);
ECE Regulation 10.02 Annex 9 Section 8 (Free Field);
ECE Regulation 10.02 Annex 9 Section 10 (BCI);
ECE Regulation 10.03 Annex 9 Section 4.1 (Free Field);
ECE Regulation 10.03 Annex 9 Section 4.3 (BCI);
SAE J1113-28 (2004) (Reverberation Method);
SAE J1113-21 (2005) (Free Field);
SAE J1113-4 (2004) (BCI) – *Excluding Current Monitoring Probe Method*
ISO 13766 (1999) Para 6.6 (Radiated Field);
ISO 13766 (1999) Para 6.6 (BCI);
ISO 13766 (2006) Para 5.8 (Radiated Field);
ISO 13766 (2006) Para 5.8 (BCI);
ISO 14982 (1998) Para 6.6 (Free Field);
ISO 14982 (1998) Para 6.6 (BCI);
EN 13309 (2000) Para 4.7 (Free Field);
EN 13309 (2000) Para 4.7 (BCI)
EMC-CS-2009 (BCI and ALSE immunity)
2004/104/EC Annex VII (Broadband);
2004/104/EC Annex VII (Narrowband);
95/54/EC Annex VII (Broadband);
95/54/EC Annex VIII (Narrowband);
97/24/EC Chapter 8 Annex V (Broadband);
97/24/EC Chapter 8 Annex VI (Narrowband);
ISO 13766 (1999, 2006) Annex D (Broadband);
ISO 13766 (1999, 2006) Annex E (Narrowband);
ISO 14982(1998) Annex D (Broadband);
ISO 14982 (1998) Annex E (Narrowband);
EN 13309 (2000) Annex D (Broadband);
EN 13309 (2000) Annex E (Narrowband);
ECE Regulation 10.02 Annex 7 (Broadband);
ECE Regulation 10.02 Annex 8 (Narrowband);
ECE Regulation 10.03 Annex 7 (Broadband);
ECE Regulation 10.03 Annex 8 (Narrowband)

TEST TECHNOLOGY

TEST METHOD(S)

Radiated Emission
(up to 2.5 GHz)

SAE J1113-41 (2000) Section 7;
CISPR 25 (2002, 2008) Section 6.4;
EMC-CS-2009

Electrostatic Discharge (ESD)

ISO 10605 (2001) Section 5 (ESD);
SAE J1113-13 (2004) (ESD);
ISO 13766 (2006) Para 5.9 (ESD);
ISO 14982 (1998) Para 6.7 (ESD);
EN 13309 (2000) Para 4.8 (ESD) ;
EMC-CS-2009

RF Conducted Emissions

SAE J1113-41 (2000) Section 5;
CISPR 25 (2002, 2008) Sections 6.2 and 6.3;
EMC-CS-2009

Conducted and Transient Immunity

SAE J1113-11 (2000) (Power Supply Transients);
ISO 7637-2 (2004) (Supply Lines);
ISO 13766 (1999) Para 6.8 (Power Supply Transients);
ISO 13766 (2006) Para 5.10 (Power Supply Transients);
ISO 14982 (1998) Para 6.8 (Power Supply Transients);
EN 13309 (2001) Para 4.9 (Power Supply Transients);
SAE J1113-12 (2000) (Capacitive & Inductive
Transients);
ISO 7637-3 (1995) (Capacitive & Inductive Transients);
ISO 7637-3 (2007) (Other than Supply Lines);
Ford ES-XW7T-1A278-AC (CI-230) including
temperature conditioning

Mode tune test

EMC-CS-2009

Radar Pulse test

EMC-CS-2009

Toyota TSC 7006G (Rev 4)

Section 4.4.2 Broadband Antenna Nearby Test;

Toyota TSC 7026G (Rev 2)

Narrowband RF Emissions

Toyota TSC 7508G (Rev 4)

Section 7.3 Radiated Noise above 30 MHz

Nissan 28401NDSO2 (Rev 4)

EQ/MC 02 Conducted Current Emissions;
EQ/MC 03 Radio Frequency Conducted Emissions
(excluding RF Voltage probe method);
EQ/MR 01 Radio Frequency Radiated Emissions;
EQ/MR 02 Magnetic Field Radiated Emissions

TEST TECHNOLOGY

Transient Emissions

TEST METHOD(S)

SAE J1113-42 (2000);
ISO 7637-2 (2004)

¹ A2LA provides Accreditation for the Automotive EMC Laboratory Recognition Program (AEMCLRP) which is designated as the Automotive EMC Laboratory Accreditation Program (AEMCLAP). Chrysler, Ford Motor Company (Ford) and General Motors Corporation (GM) provide overall recognition as part of the AEMCLRP document (Fourth Edition, 01/27/06 and the Addendum May 25, 2007). This document is available on the A2LA web site (www.a2la.org). Accreditation to the A2LA AEMCLAP requirements does not ensure recognition by the aforementioned organizations. Confirmation of recognition can be obtained from these organizations directly.



The American Association for Laboratory Accreditation

World Class Accreditation

Accredited Laboratory

A2LA has accredited

TUV SUD AMERICA - PLYMOUTH

Plymouth, 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 3rd day of August 2010.





Peter Mlynar

President & CEO
For the Accreditation Council
Certificate Number 0265.05
Valid to June 30, 2012

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