



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

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ELECTRICAL

Valid To: February 28, 2012

Certificate Number: 2674.01

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

Test

Test Method

Emissions

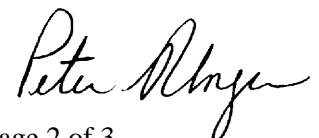
Radiated Emissions

47 CFR FCC Part 15.109, 209, 225, 231, 247, 249 using ANSI C63.4-2003;
47 CFR FCC Part 18 using MP-5;
EN 55011; CISPR 11; AS/NZS CISPR 11;
EN 55012; CISPR 12; AS/NZS CISPR 12;
EN 55014-1; CISPR 14-1; AS/NZS CISPR 14-1;
EN 55022; CISPR 22; AS/NZS CISPR 22;
EN 61000-6-3; IEC 61000-6-3;
EN 61000-6-4; IEC 61000-6-4;
AS/NZS 4268+A1/A2; AS/NZS 4251-1; AS/NZS 4251-2;
MIL-STD 461(E) and (F) (*Methods: RE101, RE102, RE103*);
RTCA/DO160 Section 21

Conducted Emissions

47 CFR FCC Part 15.107, 207 using ANSI C63.4-2003;
47 CFR FCC Part 18 using MP-5;
EN 55011; CISPR 11; AS/NZS CISPR 11;
EN 55012; CISPR 12; AS/NZS CISPR 12;
EN 55014-1; CISPR 14-1; AS/NZS CISPR 14-1;
EN 55022; CISPR 22; AS/NZS CISPR 22;
AS/NZS 4268 +A1/A2; AS/NZS 4251-1; AS/NZS 4251-2;
AS/NZS 4250-1; AS/NZS 4250-2;

<u>Test</u>	<u>Test Method</u>
Conducted Emissions (Cont'd)	MIL-STD 461(E) and (F) (<i>Methods: CE101, CE102, CE106</i>); RTCA/DO160 Section 21
Harmonics	EN 61000-3-2; IEC 61000-3-2; AS/NZS 61000-3-2
Flicker	EN 61000-3-3; IEC 61000-3-3; AS/NZS 61000-3-3
<i>Immunity</i>	
Electrostatic Discharge (ESD)	EN 61000-4-2; IEC 61000-4-2; AS/NZS 61000-4-2; RTCA/DO160 Section 25
Electrical Fast Transient/Burst	EN 61000-4-4; IEC 61000-4-4; AS/NZS 61000-4-4
Surge Immunity	EN 61000-4-5; IEC 61000-4-5; AS/NZS 61000-4-5
Radiated	EN 61000-4-3; IEC 61000-4-3; AS/NZS 61000-4-3; MIL-STD 461(E) and (F) (<i>Methods: RS101, RS103</i>); RTCA/DO160 Section 20
Conducted	EN 61000-4-6; IEC 61000-4-6; AS/NZS 61000-4-6; MIL-STD 461(E) and (F) (<i>Methods: CS101, CS103, CS104, CS105, CS106 (Rev F only), CS109, CS114 (10 kHz to 200 MHz), CS115, CS116</i>) ; RTCA/DO160 Section 20
Power Frequency Magnetic Field	EN 61000-4-8; IEC 61000-4-8; AS/NZS 61000-4-8; RTCA/DO160 Section 15
Pulsed Magnetic Field	EN 61000-4-9; IEC 61000-4-9
Voltage Dips/Interrupts and Variations	EN 61000-11; IEC 6100-11; AS/NZS 61000-4-11; RTCA/DO160 Section 17
Power Input	RTCA/DO160 Section 16
Audio Frequency Conducted Susceptibility Power Inputs	RTCA/DO160 Section 18
Induced Signal Susceptibility	RTCA/DO160 Section 19
Lightning Inducted Transient	RTCA/DO160 Section 22
<i>Generic and Product Family Standards</i>	EN 61000-6-1; IEC 61000-6-1; AS/NZS 61000-6-1; EN 61000-6-2; IEC 61000-6-2; AS/NZS 61000-6-2; CISPR 14-2; EN 55014-2; AS/NZS CISPR 14-2; CISPR 24; EN 55024; AS/NZS CISPR 24; BS EN 60601-1-2; IEC 60601-1-2; BS EN 60947-1; IEC 60947-1; BS EN 60439-1; IEC 60439-1; BS EN 61326; IEC 61326;



Test

Test Method

Generic and Product Family Standards (Cont'd)

BS EN 50130-4; BS EN 50131-1;
EN 61800-3; IEC 61800-3 (*limited to 75A, 1000V*);
BS EN ISO 14892, ISO 14892 (*using component methods except ISO-7637, ISO-11452-3*)

Radio

European Union

ETSI EN 300 220-1 V2.1.1; ETSI EN 300 220-2 V2.1.1;
ETSI EN 300 220-3 V1.1.1; ETSI EN 300 328 V1.7.1;
ETSI EN 300 328-1 V1.3.1; ETSI EN 300 328-2 V1.2.1;
ETSI EN 300 330 V1.2.1; ETSI EN 300 330-1 V1.5.1;
ETSI EN 300 330-2 V1.3.1; ETSI EN 300 440-1 V1.3.1;
ETSI EN 300 440-2 V1.1.2; ETSI EN 301 489-1 V1.7.1;
ETSI EN 301 489-3 V1.4.1; ETSI EN 301 489-17 V1.3.1;

Canada

RSS-119; RSS-210; RSS-243;
ICES-001; ICES-002; ICES-003

Telecommunications

47 CFR FCC Parts 2, 90, 95.628

Field Testing

RF Radiated Immunity*

RTCA/DO160D Section 20;
RTCA/DO160E Section 20;
RTCA/DO160F Section 20

* - Field Testing is available for this test as this laboratory meets A2LA R104 – “*General Requirements: Accreditation of Field Testing and Field Calibration Laboratories.*”



The American Association for Laboratory Accreditation

World Class Accreditation

Accredited Laboratory

A2LA has accredited

INGENIUM TESTING, LLC

Rockford, IL

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 5th day of May 2010.



A handwritten signature in black ink, reading "Peter Abney", written over a horizontal line.

President & CEO
For the Accreditation Council
Certificate Number 2674.01
Valid to February 28, 2012

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