



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

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ELECTRICAL (EMC)

Valid to: January 31, 2013

Certificate Number: 0803.05

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following Emissions, Immunity, Wireless and Military tests for electrical equipment:

The following test sites are accredited for the test descriptions as indicated below:

Site C1	EMC Emissions (EU Only) Testing EMC Immunity (Susceptibility) Testing, and Military / Automotive / Aerospace Emissions and Immunity Testing
Site C2	EMC Emissions (EU Only) Testing and EMC Immunity (Susceptibility) Testing
Site C3	EMC Emissions and Transmitter Characteristics Testing Military / Automotive / Aerospace Emissions Testing
Site M1	Military / Automotive / Aerospace Emissions and Immunity Testing
Site M3	Military / Automotive / Aerospace Emissions and Immunity Testing

The following test standards are accredited to the indicated test site(s):

AUSTRALIA / NEW ZEALAND

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
AS/NZS 4245.1	C1, C2 & C3	Information Technology - Telecommunications and Information Exchange between Systems - Open Systems Interconnection - Transport Protocol Identification Mechanism
AS/NZS 4251.1	C3	Electromagnetic Compatibility (EMC) - Generic Emission Standard - Residential, Commercial and Light Industry
AS/NZS 4251.2	C3	Electromagnetic Compatibility (EMC) - Generic Emission Standard - Industrial Environments
AS/NZS 61000-6-1	C1 & C2	Electromagnetic Compatibility (EMC) - Generic Standards. Immunity for Residential, Commercial and Light-Industrial Environments
AS/NZS 61000-6-2	C1 & C2	Electromagnetic Compatibility (EMC) - Part 6-2 Generic Standards Immunity for Industrial Environments
AS/NZS 61000-6-3	C3	Electromagnetic Compatibility (EMC) Part 6-3 Emission Standard for Residential, Commercial and Light-Industrial Environments
AS/NZS 61000-6-4	C3	Electromagnetic Compatibility (EMC) Part 6-4 Emission Standard for Industrial Environments

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
AS/NZS 4268	C3	Radio Equipment and Systems - Short Range Devices - Limits and Methods of Measurement
AS/NZS 4448	C3	Limits and Methods of Measurement of Radio Disturbance Characteristics for the Protection of Receivers used on Board Vehicles
AS/NZS CISPR 11	C3	Industrial, Scientific and Medical (ISM) Radio-Frequency Equipment - Electromagnetic Disturbance Characteristics - Limits and Methods of Measurement
AS/NZS CISPR 14.1 (excluding clicks)	C3	Electromagnetic Compatibility (EMC) - Requirements for Household Appliances, Electric Tools and Similar Apparatus – Emission
AS/NZS CISPR 14.2	C1 & C2	Electromagnetic Compatibility (EMC) - Requirements for Household Appliances, Electric Tools and Similar Apparatus - Immunity - Product Family Standard
AS/NZS CISPR 22	C3	Information Technology Equipment - Radio Disturbance Characteristics - Limits and Methods of Measurement

TELCORDIA / BELLCORE

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
GR-499-CORE	C1, C2 & C3	Transport Systems Generic Requirements (TSGR) Common Requirements [Sections 14.1, 14.2, 4.3]
GR-1089-CORE	C1, C2 & C3	Electromagnetic Compatibility (EMC) and Electrical Safety Generic Criteria for Network Telecommunication Equipment [Sections 2, 3 & 4] [excluding Section 4.7, First and Second Level AC Power Fault Tests]

CANADA

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
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*** Indicates on-site test services available for indicated standards⁴**

BETS-1*	C3	Technical Standards and Requirements for Low Power Announce Transmitters in the Frequency Bands 525-1,705 KHz and 88-107.5 MHz
BETS-4*	C3	Technical Standards and Requirements for Television Broadcasting Transmitters
BETS-5*	C3	Technical Standards and Requirements for AM Broadcasting Transmitters
BETS-6*	C3	Technical Standards and Requirements for FM Broadcasting Transmitters
BETS-7	C3	Technical Standards and Requirements for Radio Apparatus Capable of Receiving Broadcasting
BETS-8*	C3	Technical Standards and Requirements for FM Transmitters Operating in Small Remote Communities
BETS-9	C3	Technical Standards and Requirements for Television Transmitters Operating in Small Remote Communities
ICES 001	C3	Industrial, Scientific and Medical (ISM) Radio Frequency Generators
ICES 003	C3	Digital Apparatus
ICES 004	C3	Alternating Current High Voltage Power Systems

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<u>STANDARD</u>	<u>CAPABLE</u> <u>SITE(S)</u>
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Radio Frequency Lighting Devices
AC Wire Carrier Current Devices (Unintentional Radiators)
Evaluation Procedure for Mobile and Portable Radio Transmitters With Respect to Health Canada's Safety Code 6 for Exposure of Humans to Radio Frequency Fields
Broadband Public Safety Equipment Operating in the Band 4940-4990 MHz
Land Mobile and Fixed Equipment Operating in the Band 1670-1675 MHz
Land and Coast Station Transmitters using A1, A2, A3, A2H, or A3H Emissions Operating in the 200 to 535 KHz Band
Land and Subscriber Stations: Voice, Data and Tone Modulated, Angle Modulation Radiotelephone Transmitters and Receivers Operating in the Cellular Mobile Bands 824 to 849 MHz and 869 to 894 MHz
Land Mobile and Fixed Radio Transmitters and Receivers, 27.41 to 960 MHz
Low Power Licensed Radiocommunication Devices
Land Mobile and Fixed Radio Transmitters and Receivers, 1.705 to 50.0 MHz, Primarily Amplitude Modulated
Air-Ground Equipment Operating in the Bands 849-851 MHz and 894 to 896 MHz
800 MHz Dual-Mode CDMA Cellular Telephones
Zone Enhancers for the Land Mobile Service
800 MHz Cellular Telephones Employing New Technologies
2 GHz Personal Communication Services
900 MHz Narrowband Personal Communications Services
Digital Scanner Receivers
Land and Mobile Station Radiotelephone Transmitters and Receivers Operating in the 26.960 to 27.410 MHz General Radio Service Band
Location and Monitoring Service (902 to 928 MHz)
Commercial Shipborne Radar in the 2900 to 3100 MHz, 5470 to 5650 MHz and 9225 to 9500 MHz Bands
Advanced Wireless Services Equipment Operating in the Bands 1710 to 1755 MHz and 2110 to 2155 MHz
Aeronautical Radiocommunication Equipment in the Frequency Band 117.975 to 137 MHz
Narrowband Multipoint Communication Systems in the 1427 - 1430 MHz and 1493.5 to 1496.5 MHz Bands
Satellite Mobile Earth Stations
Coast and Ship Station Single Sideband Radiotelephone Transmitters and Receivers Operating in the 1605 to 28 000 KHz Band
Maritime Radio Transmitters and Receivers in the Band 156 to 162.5 MHz
Global Maritime Distress and Safety System (GMDSS)

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<u>STANDARD</u>	<u>CAPABLE</u> <u>SITE(S)</u>
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RSS-191	C3	Local Multipoint Communication Systems in the 28 GHz Band; Point-to-Point and Point-to-Multipoint Broadband Communication Systems in the 24 GHz and 38 GHz Bands
RSS-192	C3	Fixed Wireless Access Equipment Operating in the Band 3450 to 3650 MHz
RSS-194	C3	Fixed Wireless Access Equipment Operating in the Band 953-960 MHz
RSS-195	C3	Wireless Communications Service Equipment Operating in the Bands 2305 to 2320 MHz and 2345 to 2360 MHz
RSS-196	C3	Point-to-Multipoint Broadband Equipment Operating in the Bands 512 to 608 MHz and 614 to 698 MHz for Rural Remote Broadband Systems (RRBS) (TV Channels 21 to 51)
RSS-197	C3	Wireless Broadband Access Equipment Operating in the Band 3650 to 3700 MHz
RSS-199	C3	Broadband Radio Service (BRS) Equipment Operating in the Band 2500 to 2690 MHz
RSS-210	C3	Low Power License-exempt Radiocommunication Devices (All Frequency Bands)
RSS-213	C3	2 GHz License - Exempt Personal Communications Service Devices (PCS)
RSS-215	C3	Analogue Scanner Receivers
RSS-220	C3	Devices Using Ultra-Wideband (UWB) Technology
RSS-243	C3	Active Medical Implant Communications System Devices in the 402 to 405 MHz Band
RSS-287	C3	Emergency Position Indicating Radio Beacons (EPIRB), Emergency Locator Transmitters (ELT), Personal Locator Beacons (PLB), and Maritime Survivor Locator Devices (MSLD)
RSS-310	C3	Low-power Licence-exempt Radiocommunication Devices (All Frequency Bands) Category II Equipment
RSS-GEN	C3	General Requirements and Information for the Certification of Radiocommunication Equipment

EUROPEAN UNION

<u>STANDARD</u>	<u>CAPABLE</u> <u>SITE(S)</u>
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DESCRIPTION OF STANDARD

EMC Directive 2004/108/EC Standards

* Indicates on-site test services available for indicated standards⁴

EN 12015	C1, C2 & C3	Electromagnetic Compatibility - Product Family Standard For Lifts, Escalators And Passenger Conveyors - Emission
EN 12016	C1 & C2	Electromagnetic Compatibility - Product Family Standard For Lifts, Escalators And Passenger Conveyors - Immunity
EN 300 386	C1, C2 & C3	Electromagnetic compatibility and radio spectrum matters (ERM); Telecommunication network equipment; Electromagnetic compatibility (EMC) requirements

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EUROPEAN UNION (CONTINUED)

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
EN 50065-1	C1, C2 & C3	Specification for signaling on low-voltage electrical installations in the frequency range 3 KHz to 148.5 KHz - Part 1 General requirements, frequency bands and electromagnetic disturbances
EN 50065-2-1, 2, 3	C1, C2 & C3	Specification for signaling on low-voltage electrical installations in the frequency range 3 KHz to 148.5 KHz - Part 2 Immunity requirements for mains communications equipment and systems operating in the range of frequencies 95 kHz to 148.5 kHz
EN 50083-2	C1, C2 & C3	Cable networks for television signals, sound signals and interactive services - Part 2 Electromagnetic compatibility for equipment
EN 50121-1	C1, C2 & C3	Railway applications - Electromagnetic compatibility - Part 1 General
EN 50121-3-2	C1, C2 & C3	Railway applications - Electromagnetic compatibility - Part 3-2 Rolling stock - Apparatus
EN 50121-4	C1, C2 & C3	Railway applications - Electromagnetic compatibility - Part 4 Emission and immunity of the signalling and telecommunications apparatus
EN 50130-4	C1, C2 & C3	Alarm systems - Part 4 Electromagnetic compatibility - Product family standard: immunity requirements for components of fire, intruder and social alarm systems
EN 50270	C1, C2 & C3	Electromagnetic compatibility - Electrical apparatus for the detection and measurement of combustible gases, toxic gases or oxygen
EN 50370-1	C3	Electromagnetic compatibility (EMC) - Product family standard for machine tools - Part 1 Emissions.
EN 50370-2	C1 & C2	Electromagnetic Compatibility (EMC) - Product family standard for machine tools - Part 2 Immunity
EN 55011	C1, C2 & C3	Industrial, scientific and medical (ISM) radio-frequency equipment - Radio disturbance characteristics - Limits and methods of measurement
EN 55013	C1, C2 & C3	Sound and television broadcast receivers and associated equipment - Radio disturbance characteristics - Limits and methods of measurement
EN 55014-1 (excluding clicks)	C1, C2 & C3	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1 Emission
EN 55014-2	C1 & C2	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 2 Immunity - Product family standard
EN 55015	C1, C2 & C3	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
EN 55020 (excluding section 5.8)	C1 & C2	Sound and television broadcast receivers and associated equipment - Immunity characteristics - Limits and methods of measurement
EN 55022*	C3	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement
EN 55022 (2006)*	C3	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement [omits amendment(s)]

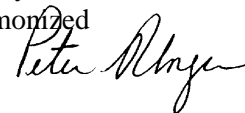


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EUROPEAN UNION (CONTINUED)**STANDARD****CAPABLE
SITE(S)****DESCRIPTION OF STANDARD****R&TTE Directive 99/5/EC Standards
(excluding article 3.1a, safety provisions)***** Indicates on-site test services available for indicated standards⁴**

EN 300 086-2	C1, C2 & C3	Electromagnetic compatibility (EMC) and Radio spectrum Matters (ERM) - Land Mobile Service - Radio equipment with an internal or external RF connector intended primarily for analogue speech - Part 2 Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive
EN 300 113-2	C1, C2 & C3	Electromagnetic compatibility (EMC) and Radio spectrum Matters (ERM) - Land mobile service - Radio equipment intended for the transmission of data (and/or speech) using constant or non-constant envelope modulation and having an antenna connector - Part 2 Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive
EN 300 162-2	C1, C2 & C3	Electromagnetic compatibility (EMC) and Radio spectrum Matters (ERM); Radiotelephone transmitters and receivers for the maritime mobile service operating in VHF bands; Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive
EN 300 162-3	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Radiotelephone transmitters and receivers for the maritime mobile service operating in VHF bands - Part 3 Harmonized EN covering essential requirements of article 3.3 (e) of the R&TTE Directive
EN 300 219-2	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Land Mobile Service; Radio equipment transmitting signals to initiate a specific response in the receiver - Part 2 Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive
EN 300 220-2	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Short Range Devices (SRD) - Radio equipment to be used in the 25 MHz to 1000 MHz frequency range with power levels ranging up to 500 mW, Part 2 Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive
EN 300 224-2	C1,C2 &C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - On-site paging service - Part 2 Harmonized EN under article 3.2 of the R&TTE Directive
EN 300 328	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Wideband Transmission systems - Data transmission equipment operating in the 2.4 GHz ISM band and using spread spectrum modulation techniques - Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive
EN 300 330-2	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Short Range Devices (SRD) - Radio equipment in the frequency range 9 KHz to 25 MHz and inductive loop systems in the frequency range 9 KHz to 30 MHz - Part 2 Harmonized EN under article 3.2 of the R&TTE Directive



EUROPEAN UNION (CONTINUED)

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
EN 300 422-2	C1,C2 &C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Wireless microphones in the 25 MHz to 3 GHz frequency range - Part 2 Harmonized EN under article 3.2 of the R&TTE Directive
EN 300 433-2	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Land Mobile Service - Double Side Band (DSB) and/or Single Side Band (SSB) amplitude modulated citizen's band radio equipment - Part 2 Harmonized EN covering essential requirements under article 3.2 of R&TTE Directive
EN 300 440-2	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Short range devices - Radio equipment to be used in the 1 GHz to 40 GHz frequency range - Part 2 Harmonized EN under article 3.2 of the R&TTE Directive
EN 300 454-2	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Wide band audio links - Part 2 Harmonized EN under article 3.2 of the R&TTE Directive
EN 301 357-2	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Cordless audio devices in the range 25 MHz to 2 000 MHz - Consumer radio microphones and in-ear monitoring systems operating in the CEPT harmonized band 863 MHz to 865 MHz - Part 2 Harmonized EN under article 3.2 of the R&TTE Directive
EN 301 489-1	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - ElectroMagnetic Compatibility (EMC) standard for radio equipment and services - Part 1 Common technical requirements
EN 301 489-2 thru 32	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - ElectroMagnetic Compatibility (EMC) standard for radio equipment and services Parts 2-32, specific conditions
EN 301 502	C1, C2 & C3	Harmonized EN for Global System for Mobile communications (GSM) - Base Station and Repeater equipment covering essential requirements under article 3.2 of the R&TTE directive
EN 301 753	C1, C2 & C3	Fixed Radio Systems - Multipoint equipment and antennas - Generic harmonized standard for multipoint digital fixed radio systems and antennas covering the essential requirements under article 3.2 of the Directive 1999/5/EC
EN 301 840-2	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Digital wireless microphones operating in the CEPT harmonized band 1785 MHz to 1800 MHz - Part 2 Harmonized EN under article 3.2 of the R&TTE Directive
EN 301 893	C1, C2 & C3	Broadband Radio Access Networks (BRAN) - 5 GHz high performance RLAN - Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive
EN 301 908-1 thru 12	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Base Stations (BS), Repeaters and User Equipment (UE) for IMT-2000 Third-Generation cellular networks



EUROPEAN UNION (CONTINUED)

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
EN 302 064-2	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Wireless Video Links (WVL) operating in the 1.3 GHz to 50 GHz frequency band - Part 2 Harmonized EN under article 3.2 of the R&TTE Directive
EN 302 065	C1 & C2	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Ultra WideBand (UWB) technologies for communication purposes - Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive
EN 302 208-2	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Radio Frequency Identification Equipment operating in the band 865 MHz to 868 MHz with power levels up to 2 W - Part 2 Harmonized EN under article 3.2 of the R&TTE Directive
EN 302 291-2	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Short Range Devices (SRD) - Close Range Inductive Data Communication equipment operating at 13.56 MHz - Part 2 Harmonised EN under article 3.2 of the R&TTE Directive
EN 302 500-2	C1, C2 & C3	Electromagnetic compatibility and Radio spectrum Matters (ERM) - Short Range Devices (SRD) using Ultra WideBand (UWB) technology - Location tracking equipment operating in the frequency range from 6 GHz to 8.5 GHz - Part 2 Harmonized EN covering essential requirements of Article 3.2 of the R&TTE Directive
EN 302 502	C1, C2 & C3	Broadband Radio Access Networks (BRAN) – 5.8 GHz fixed broadband data transmitting systems - Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive
EN 55022*	C3	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement
EN 55022 (2006)*	C3	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement [excluding amendment A1]
EN 61000-3-2	C1, C2 & C3	Electromagnetic compatibility (EMC) - Part 3 Limits - Section 2 Limits for harmonic current emissions (<i>equipment input current less than/equal to 16 A per phase</i>)
EN 61000-3-3	C1, C2 & C3	Electromagnetic compatibility (EMC) - Part 3 Limits - Section 3 Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current less than or equal to 16 A
EN 61000-6-1	C1 & C2	Electromagnetic compatibility (EMC) generic standards. Immunity for residential, commercial and light-industrial environments
EN 61000-6-2	C1 & C2	Electromagnetic compatibility (EMC) - Part 6-2 Generic standards immunity for industrial environments
EN 61000-6-3	C1, C2 & C3	Electromagnetic compatibility (EMC) Part 6-3 Emission standard for residential, commercial and light-industrial environments
EN 61000-6-4	C1, C2 & C3	Electromagnetic compatibility (EMC) Part 6-4 Emission standard for industrial environments



EUROPEAN UNION (CONTINUED)

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
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Medical Directive 93/42/EEC Standards

EN 60601-1-2	C1, C2 & C3	Medical electrical equipment - Part 1-2 General requirements for safety - Collateral standard - Electromagnetic compatibility - Requirements and tests
EN 60601-2-2	C1, C2 & C3	Medical electrical equipment – Part 2-2 Particular requirements for the safety of high frequency surgical equipment
EN 60601-2-4	C1, C2 & C3	Medical electrical equipment - Part 2-4 Particular requirements for the safety of cardiac defibrillators [<i>EMC sections only</i>]
EN 60601-2-10	C1, C2 & C3	Medical electrical equipment - Part 2.10 Particular requirements for the safety of nerve and muscle stimulators [<i>EMC sections only</i>]
EN 60601-2-12	C1, C2 & C3	Medical electrical equipment - Part 2-12 Particular requirements for the safety of lung ventilators - Critical care ventilators [<i>EMC sections only</i>]

EUROPEAN UNION (CONTINUED)

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
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EN 60601-2-22	C1, C2 & C3	Medical electrical equipment - Part 2 Particular requirements for the safety of diagnostic and therapeutic laser equipment [<i>EMC sections only</i>]
EN 60601-2-24	C1, C2 & C3	Medical electrical equipment - Part 2-24 Particular requirements for the safety of infusion pumps and controllers [<i>EMC sections only</i>]
EN 60601-2-34	C1, C2 & C3	Medical electrical equipment - Part 2-34 Particular requirements for the safety, including essential performance, of invasive blood pressure monitoring equipment [<i>EMC sections only</i>]
EN 60601-2-37	C1, C2 & C3	Medical electrical equipment - Part 2-37 Particular requirements for the safety of ultrasonic medical diagnostic and monitoring equipment [<i>EMC sections only</i>]
EN 61326-2-6	C1, C2 & C3	Particular requirements – in vitro diagnostic medical equipment

Other Standards

EN 12184	C1, C2 & C3	Electrically Powered Wheelchairs, Scooters And Their Chargers - Requirements And Test Methods [<i>Section 9.8 Only</i>]
ENV 50204	C1 & C2	Radiated electromagnetic field from digital radio telephones - Immunity test (900 MHz and 1890 MHz Keyed Carrier)
EN 61000-4-2*	C1 & C2	Electromagnetic compatibility (EMC) - Part 4-2 Testing and measurement techniques - Electrostatic discharge immunity test
EN 61000-4-3	C1 & C2	Electromagnetic compatibility (EMC) - Part 4-3 Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test
EN 61000-4-4*	C1 & C2	Electromagnetic compatibility (EMC) - Part 4-4 Testing and measurement techniques - Electrical fast transient/burst immunity test
EN 61000-4-5*	C1 & C2	Electromagnetic compatibility (EMC) - Part 4-5 Testing and measurement techniques - Surge immunity test



EUROPEAN UNION (CONTINUED)

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
EN 61000-4-6*	C1 & C2	Electromagnetic compatibility (EMC) - Part 4-6 Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields
EN 61000-4-8*	C1 & C2	Electromagnetic compatibility (EMC) - Part 4 Testing and measurement techniques - Section 8 Power frequency magnetic field immunity test basic EMC publication
EN 61000-4-11*	C1 & C2	Electromagnetic compatibility (EMC) - Part 4 Testing and measuring techniques - Section 11 Voltage dips, short interruptions and voltage variations immunity tests

Directives – Old Approach

75/322/EEC - 2000/2/EC 2006/96/EC	M1 & C3	On the suppression of radio interference produced by agricultural or forestry tractors (electromagnetic compatibility)
72/245/EEC - 2009/19/EC	M1 & C3	On the approximation of the laws of the Member States relating to the suppression of radio interference produced by spark-ignition engines fitted to motor vehicles
97/24/EC - 2009/108/EC Chapter	M1 & C3	On certain components & characteristics of 2 or 3 wheel motor vehicles

IDA SINGAPORE

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
IDA TS CT-CTS	C3	Technical specification for cordless telephone and cordless telecommunication systems [<i>excluding dect and phs</i>]
IDA TS SRD	C3	Technical specification for short range devices
IDA TS AR	C3	Technical specification for amateur radio equipment
IDA TS 3G-BS	C3	Technical specification for imt-2000 third generation (3g) cellular base station and repeater system
IDA TS WBA	C3	Technical specification for wireless broadband access (WBA) equipment
IDA TS LMR	C3	Technical specification for land mobile radio equipment
IDA TS RPG	C3	Technical specification for radio pagers (for public paging service)
IDA TS UWB	C1, C2 & C3	Technical Specification for Ultra Wideband (UWB) Devices
IDA TS EMC	C1, C2 & C3	EMC requirements for telecommunication equipment
IDA TS GMPCS	C3	Technical specification for Global Mobile Personal Communication by Satellite (GMPCS) Terminals
IDA TS GSM-MT	C3	Technical specification for GSM Mobile Terminals
IDA TS GSM-BS	C3	Technical specification for GSM base station and repeater equipment
IDA TS 3G-MT	C3	Technical specification for IMT-2000 third generation (3G) cellular mobile terminals



**INTERNATIONAL
STANDARD**

**CAPABLE
SITE(S)**

DESCRIPTION OF STANDARD

*** Indicates on-site test services available for indicated standards⁴**

CISPR 11	C3	Industrial, scientific and medical (ISM) radio-frequency equipment - Electromagnetic disturbance characteristics - Limits and methods of measurement
CISPR 13	C3	Sound and television broadcast receivers and associated equipment - Radio disturbance characteristics - Limits and methods of measurement
CISPR 14-1 (excluding clicks)	C3	Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1 Emission
CISPR 14-2	C1 & C2	Electromagnetic compatibility - Requirements for household appliances, electric tools, and similar apparatus - Part 2 Immunity - Product Family Standard
CISPR 15	C3	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
CISPR 20 (excluding section 5.8)	C1, C2 & C3	Sound and television broadcast receivers and associated equipment - Immunity characteristics - Limits and methods of measurement
CISPR 22*	C3	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement
CISPR 22 (2006)*	C3	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement
CISPR 22 (1997)	C3	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement
CISPR 24	C1 & C2	Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement
CISPR 25 (excluding sections 5 and 6.5)	C1, C2 & C3	Radio disturbance characteristics for the protection of receivers used on board vehicles, boats, and on devices - Limits and methods of measurement
IEC 60601-1-2	C1, C2 & C3	Medical electrical equipment - Part 1 General requirements for safety; 2 Collateral standard - Electromagnetic compatibility - Requirements and tests
IEC 60601-2-2	C1, C2 & C3	Medical electrical equipment - Part 2-2 Particular requirements for the safety of high frequency surgical equipment
IEC 60601-2-47	C1, C2 & C3	Medical electrical equipment - Part 2-47 Particular requirements for the safety, including essential performance, of ambulatory electrocardiographic systems.
IEC 60533	C1, C2 & C3	Electromagnetic compatibility of electrical and electronic installations in ships
IEC 60945	C1, C2 & C3	Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results
IEC 61000-4-2*	C1 & C2	Electromagnetic compatibility (EMC) - Part 4-2 Testing and measurement techniques - Electrostatic discharge immunity test
IEC 61000-4-3	C1 & C2	Electromagnetic compatibility (EMC) - Part 4-3 Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test
IEC 61000-4-4*	C1 & C2	Electromagnetic compatibility (EMC) - Part 4-4 Testing and measurement techniques - Electrical fast transient/burst immunity test

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INTERNATIONAL (CONTINUED)

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
IEC 61000-4-5*	C1 & C2	Electromagnetic compatibility (EMC) - Part 4-5 Testing and measurement techniques - Surge immunity test
IEC 61000-4-6*	C1 & C2	Electromagnetic compatibility (EMC) - Part 4-6 Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields
IEC 61000-4-8*	C1 & C2	Electromagnetic compatibility (EMC) - Part 4 Testing and measurement techniques - Section 8 Power frequency magnetic field immunity test basic EMC publication
IEC 61000-4-11*	C1 & C2	Electromagnetic compatibility (EMC) - Part 4 Testing and measuring techniques - Section 11 Voltage dips, short interruptions and voltage variations immunity tests
IEC 61131-2	C1, C2 & C3	Programmable controllers Part 2 Equipment requirements and tests [<i>EMC sections only</i>]
IEC 61326-1	C1, C2 & C3	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1 General requirements
IEC 61326-2-1 thru 5	C1, C2 & C3	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-1 Particular requirements - Test configurations, operational conditions and performance criteria
IEC 61326-2-6	C1, C2 & C3	Particular requirements – in vitro diagnostic medical equipment
IEC 61326-3-1	C1, C2 & C3	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 3-1 Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) - General industrial applications
IEC 61326-3-2	C1, C2 & C3	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 3-2 Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) - Industrial applications with specified electromagnetic environment
IEC 62061	C1, C2 & C3	Safety of machinery – functional safety of safety related electrical, electronic & programmable control systems (note: only capable of performing EMC testing for section 6.4.3, ref Annex E)

ISO

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
7637-2	M1 & C3	Road vehicles - Electrical disturbances from conduction and coupling - Part 2 Electrical transient conduction along supply lines only
7637-3 (excluding section 3.4.2)	M1 & C3	Road vehicles - Electrical disturbances from conduction and coupling - Part 2 Vehicles with nominal 12 V or 24 V supply voltage - Electrical transient transmission by capacitive and inductive coupling via lines other than supply lines



ISO (CONTINUED)

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
11452-2	M1 & C3	Road vehicles - Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 2 Absorber-lined shielded enclosure
11452-3	M1 & C3	Road vehicles - Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 3 Transverse electromagnetic (TEM) cell
11452-4	M1 & C3	Road vehicles - Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 4 Bulk current injection (BCI)
11452-8	M1 & C3	Road vehicles - Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 8 Immunity to magnetic fields
13766	M1 & C3	Earth-moving machinery - Electromagnetic compatibility
14982	M1 & C3	Agricultural and forestry machinery - Electromagnetic compatibility - Test methods and acceptance criteria

JAPAN

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
VCCI V-1	C3	Agreement of voluntary control council for interference by information technology equipment
VCCI V-2	C3	Rules for Voluntary control measures
VCCI V-3 (up to 6 GHz)	C3	Technical Requirements

KOREA

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
RRA Public Notification 2012-9	C3	Notice on Conformity Assessment of Broadcasting and Communications Equipment
RRA Public Notification 2012-7	C3	Notice on Designation and Management of Testing Laboratories for Broadcasting and Communications Equipment
KCC Public Notification 2012-12	C1, C2 & C3	Regulations on Radio Equipment
KCC Public Notification 2012-7	C3	Unlicensed Radio Equipment Established Without Notice
RRA Public Notification 2010-46	C3	Technical Requirements for Measurement of Electromagnetic Field Strength
RRA Announce 2011-32	C3	Conformity Assessment Procedure of Radio Equipment
RRA Public Notification 2012-13	C3	Technical Requirements for Electromagnetic Interference
RRA Public Notification 2012-14	C1 & C2	Technical Requirements for Electromagnetic Susceptibility
RRA Announce 2012-21	C3	Conformity Assessment Procedure for Electromagnetic Interference
RRA Announce 2012-22	C1 & C2	Conformity Assessment Procedure for Electromagnetic Susceptibility



KOREA (CONTINUED)

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
RRA Public Notification 2012-94	C3	Notice on Conformity Assessment of Broadcasting and Communications Equipment
RRA Public Notification 2012-7	C3	Notice on Designation and Management of Testing Laboratories for Broadcasting and Communications Equipment
KN 11	C3	CISPR 11 (2009+A1)
KN 13	C3	CISPR 13 (2009)
KN 14-1 (<i>excluding clicks</i>)	C3	CISPR 14-1 (2005+A1+A2)
KN 14-2	C1 & C2	CISPR 14-2 (1997+A1+A2)
KN 15	C3	CISPR 15 (2005+A1+A2)
KN 16-1-1	C1, C2 & C3	CISPR 16-1-1 (2010+A1)
KN 16-1-2	C1, C2 & C3	CISPR 16-1-2 (2003+A1+A2)
KN 16-1-3	C1, C2 & C3	CISPR 16-1-3 (2004)
KN 16-1-4	C1, C2 & C3	CISPR 16-1-4 (2010+A1)
KN 16-1-5	C1, C2 & C3	CISPR 16-1-5 (2003+A1)
KN 16-2-1	C1, C2 & C3	CISPR 16-2-1 (2008+A1)
KN 16-2-2	C1, C2 & C3	CISPR 16-2-2 (2010)
KN 16-2-3	C1, C2 & C3	CISPR 16-2-3 (2010+A1)
KN 16-2-4	C1, C2 & C3	CISPR 16-2-4 (2003)
KN 20 (<i>excluding section 5.8</i>)	C1 & C2	CISPR 20 (2006)
KN 22 (2008-5)	C3	CISPR 22 (2005-4) – [Note: 5 meter or less test distance – <i>excluding testing under 1 GHz</i>]
KN 24	C1 & C2	CISPR 24 (2010)
KN 41	C1, C2 & C3	EC directive 95/54 (1995-5)
KN 50*	C3	IEC 62236-1-5 (2008)
KN 51*	C1 & C2	IEC 62236-1-5 (2008)
KN 60*	C3	Conformity assessment procedure for interference of power-line communication equipment
KN 61000-4-2	C1 & C2	IEC 61000-4-2 (2001)
KN 61000-4-3	C1 & C2	IEC 61000-4-3 (2006+A1+A2)
KN 61000-4-4	C1 & C2	IEC 61000-4-4 (2004+A1)
KN 61000-4-5	C1 & C2	IEC 61000-4-5 (2005)
KN 61000-4-6	C1 & C2	IEC 61000-4-6 (2003+A1+A2)
KN 61000-4-8	C1 & C2	IEC 61000-4-8 (1993+A1)
KN 61000-4-11	C1 & C2	IEC 61000-4-11 (2004)
KN 60601-1-2	C1, C2 & C3	IEC 60601-1-2 (2001+A1)
KN 301 489-1	C1, C2 & C3	EN 301 489-1 V1.5.1 (2004-11)
KN 301 489-02	C1, C2 & C3	EN 301 489-02 v1.3.1
KN 301 489-03	C1, C2 & C3	EN 301 489-03 v1.4.1
KN 301 489-05	C1, C2 & C3	EN 301 489-05 v1.3.1
KN 301 489-06	C1, C2 & C3	EN 301 489-06 v1.3.1
KN 301 489-7	C1, C2 & C3	EN 301 489-7 V1.2.1 (2002-8)
KN 301 489-09	C1, C2 & C3	EN 301 489-09 v1.4.1
KN 301 489-13	C1, C2 & C3	EN 301 489-13 v1.2.1
KN 301 489-15	C1, C2 & C3	EN 301 489-15 v1.2.1
KN 301 489-17	C1, C2 & C3	EN 301 489-17 V1.2.1 (2002-8)
KN 301 489-18	C1, C2 & C3	EN 301 489-18 v1.3.1



KOREA (CONTINUED)

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
KN 301 489-20	C1, C2 & C3	EN 301 489-20 v1.2.1
KN 301 489-24	C1, C2 & C3	EN 301 489-24 V1.3.1 (2005-11)
KN 301 489-26	C1, C2 & C3	EN 301 489-26 v2.3.2
KN 301 489-27	C1, C2 & C3	EN 301 489-27 v1.1.1
KN 301 489-32	C1, C2 & C3	EN 301 489-32 v1.1.1

SAE

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
J1752-2	C1, C3, M1 & M3	Measurement of radiated emissions from integrated circuits - surface scan method (loop probe method) (10 MHz to 3 GHz)
J551-1	C1 & C3	Performance levels and methods of measurement of electromagnetic compatibility of vehicles, boats (up to 15 m), and machines (16.6 Hz to 18 GHz)
J551-2	C1 & C3	Test limits and methods of measurement of radio disturbance characteristics of vehicles, motorboats, and spark-ignited engine- driven devices
J551-4	C1 & C3	Test limits and methods of measurement of radio disturbance characteristics of vehicles and devices, broadband and narrowband, 150 KHz to 1000 MHz
J551-5	C1 & C3	Performance levels and methods of measurement of magnetic and electric field strength from electric vehicles, broadband, 9 KHz to 30 MHz
J551-11	C1, M1& M3	Vehicle electromagnetic immunity - off-vehicle source
J551-12	C1, M1& M3	Vehicle electromagnetic immunity - on-board transmitter simulation
J551-13	C1, M1& M3	(R) vehicle electromagnetic immunity - bulk current injection
J551-15	C1, M1& M3	Performance level and methods of measurement of electromagnetic compatibility of vehicles, boats (up to 15 m), and machines 50 Hz to 15 GHz; Part 15 vehicle electromagnetic immunity - electrostatic discharge (ESD)
J551-17	C1, M1& M3	(R) vehicle electromagnetic immunity - power line magnetic fields
J1113-2	M1 & C3	Electromagnetic compatibility measurement procedures and limits for vehicle components (except aircraft)--conducted immunity, 15 Hz to 250 kHz--all leads
J1113-4	C3	Immunity to radiated electromagnetic fields – Bulk current injection (BCI) method
J1113-11	C1, M1& M2	Immunity to conducted transients on power leads
J1113-12	C3	Electrical interference by conduction and coupling – capacitive and inductive coupling via lines other than supply lines
J1113-13	C3	Electromagnetic compatibility measurement procedure for vehicle components – Part 13 immunity to electrostatic discharge
J1113-21	C1, M1& M2	Electrical interference by conduction and coupling - coupling clamp and chattering relay
J1113-22	C1, M1& M2	Electromagnetic compatibility measurement procedure for vehicle components - Part 22 - Immunity to radiated magnetic fields

SAE (CONTINUED)

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
J1113-41	C1, M1& M2	Limits and methods of measurement of radio disturbance characteristics of components and modules for the protection of receivers used on board vehicles
J1455	C1, M1& M2	Joint SAE/TMC recommended environmental practices for electronic equipment design (heavy-duty trucks) [Sections: 4.11.1.1, 4.11.1.2, 4.11.2.2.1, 4.11.2.2.3, 4.11.2.2.4.1, 4.11.2.2.5, 4.11.3 (<i>except 1113-23</i>)]
J1752-3	C1, C2 & C3, M1 & M2	(R) measurement of radiated emissions from integrated circuits - tem/wideband tem (GTEM) cell method; tem cell (150 KHz to 1 GHz), wideband tem cell (150 KHz to 8GHz) [<i>up to 1.2GHz</i>]

TAIWAN

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
CNS 13306	C1, C2 & C3	Specification for radio disturbance and immunity measuring apparatus and methods Part 1 Radio disturbance and immunity measuring apparatus.
CNS 13438 (1 to 6 GHz)	C3	Limits and methods of measurement of radio interference characteristics of information technology equipment (ITE) – [<i>Note: 5 meter or less test distance – excluding testing under 1 GHz</i>]
CNS 13439	C3	Limits and methods of measurement of radio interference characteristics of sound and television broadcast receiver and associated equipment.
CNS 13803	C3	Limits and methods of measurement of electromagnetic disturbance characteristics of industrial, scientific and medical (ISM) radio-frequency equipment.

UNITED STATES

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
47 CFR PART 11	C3	Emergency alert system (EAS)
47 CFR PART 15 (excluding DFS testing)	C3	Radio frequency devices
47 CFR PART 18	C3	Industrial, scientific and medical equipment
47 CFR PART 22	C3	Public mobile services
47 CFR PART 24	C3	Personal communications services
47 CFR PART 25	C3	Satellite communications
47 CFR PART 27	C3	Miscellaneous wireless communication services
47 CFR PART 73	C3	Radio broadcast services
47 CFR PART 74	C3	Experimental radio, auxiliary, and special broadcast and other program distributional services
47 CFR PART 80	C3	Stations in the maritime services
47 CFR PART 87	C3	Aviation services
47 CFR PART 90	C3	Private land mobile radio services
47 CFR PART 95	C3	Personal radio services
47 CFR PART 97	C3	Amateur radio services
47 CFR PART 101	C3	Fixed microwave services



UNITED STATES (CONTINUED)

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
ANSI RESNA WC VOL.2	C1, C2 & C3	Electrically powered wheelchairs, scooters and their chargers - Requirements and test methods [section 21 only]
DO 160A/B/C/D/ E/F/G	C1, C3, M1 & M3	Environmental conditions and test procedures of airborne equipment [sections: 15-22 & 25]
MIL-STD-461A/B/C, MIL-STD-462A/B/C	C1, C3, M1 & M3	Electromagnetic emission and susceptibility requirements for the control of electromagnetic interference [Emissions tests sections: CE01-07, RE01-03]
MIL-STD-461A/B/C, MIL-STD-462A/B/C	C1, M1& M3	Electromagnetic emission and susceptibility requirements for the control of electromagnetic interference [Susceptibility tests CS01-12, RS01-03, RS06]
MIL-STD-461D/E/F	C1, C3, M1 & M3	Electromagnetic emission and susceptibility requirements for the control of electromagnetic interference [Emissions tests sections: CE101, 102 & CE106, RE101-103]
MIL-STD-461D/E/F	C1, M1& M3	Electromagnetic emission and susceptibility requirements for the control of electromagnetic interference [Susceptibility tests CS101, CS103, CS104, CS105, CS109, CS114, CS115, CS116, RS101, RS103]
FCC – Unlicensed Radio A1 to A4	C3	A1: 47 CFR Parts 11 (Emergency Alert System (EAS)), 15 (Radio Frequency Devices) and 18 (Industrial, Scientific, and Medical Equipment); FCC OST/MP-5 (1986); ANSI C63.4 (2003 and 2009); ANSI C63.10 (2009) A2: 47 CFR Part 15 (Radio Frequency Devices); ANSI C63.4 (2003 and 2009); ANSI C63.10 (2009) A3: 47 CFR Part 15 (Radio Frequency Devices); ANSI C63.17:2006; ANSI C63.10 (2009); IEEE Std 1528:2003; Std IEEE 1528A:2005 A4: 47 CFR Part 15 (Radio Frequency Devices); ANSI C63.10 (2009); IEEE Std 1528:2003; Std IEEE 1528A:2005
FCC – Licensed Radio B1 to B4	C3	B1: 47 CFR Parts 2 (Frequency Allocations and Radio Treaty Matters; General Rules and Regulations), 22 (Public Mobile Services), 24 (Personal Communications Services), 25 (Satellite Communications), and 27 (Miscellaneous Wireless Communications Services); ANSI/TIA-603-C (2004), Land Mobile FM or PM Communications Equipment Measurement and Performance Standard; IEEE Std 1528:2003; Std IEEE 1528A:2005



UNITED STATES (CONTINUED)

<u>STANDARD</u>	<u>CAPABLE SITE(S)</u>	<u>DESCRIPTION OF STANDARD</u>
FCC – Licensed Radio B1 to B4	C3	<p>B2: 47 CFR Parts 2 (Frequency Allocations and Radio Treaty Matters; General Rules and Regulations), 22 (Public Mobile Services), 74 (Experimental Radio Auxiliary, Special Broadcast and Other Program Distributional Services), 90 (Private Land Mobile Radio Services), 95 (Personal Radio Services), and 97 (Amateur Radio Services); ANSI/TIA-603-C (2004), Land Mobile FM or PM Communications Equipment Measurement and Performance Standard</p> <p>B3: 47 CFR Parts 2 (Frequency Allocations and Radio Treaty Matters; General Rules and Regulations); 80 (Stations in the Maritime Services), 87 (Aviation Services); ANSI/TIA-603-C (2004), Land Mobile FM or PM Communications Equipment Measurement and Performance Standard</p> <p>B4: 47 CFR Parts 2 (Frequency Allocations and Radio Treaty Matters; General Rules and Regulations); 27 (Broadband Radio Services (BRS) and Educational Broadband Services (EBS)), 74 (Experimental Radio Auxiliary, Special Broadcast and Other Program Distributional Services), and 101 (Fixed Microwave Services); ANSI/TIA-603-C (2004), Land Mobile FM or PM Communications Equipment Measurement and Performance Standard</p>

For the FCC tests noted directly above, the laboratory is accredited in accordance with the test methods listed, as required per FCC TCB PROGRAM ROLES AND RESPONSIBILITIES dated January 6, 2011, Section 12 Scope of Accreditation for TCB Laboratory:

The testing laboratory portion of the TCB shall be accredited to ISO/IEC 17025 with a scope of accreditation covering the regulations and measurement procedures listed in Table 2¹². It should be noted that further guidance on the measurement techniques to be used for a given regulation may be found in the associated report and order, FCC public notice, FCC bulletin or interpretation found on the FCC KDB.

Notes:

1. Limitations for listed standards are indicated by square brackets.
2. Scope excludes protocol sections of applicable standards.
3. Scope includes references to basic standards or test methods specified within the governing standard; consequently, the basic standard references need not be identified on this scope document.
4. This laboratory meets A2LA R104 – *General Requirements: Accreditation of Field Testing and Field Calibration Laboratories* for these tests or calibrations.





The American Association for Laboratory Accreditation

Accredited Laboratory

A2LA has accredited

CKC LABORATORIES, INC.

Bothell, WA

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 9th day of May 2011.



A handwritten signature in black ink, appearing to read "Peter Meyer", written over a horizontal line.

President & CEO
For the Accreditation Council
Certificate Number 0803.05
Valid to January 31, 2013

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