

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Compatible Electronics, Inc.

20621 Pascal Way

Lake Forest/Silverado, CA 92630

Ruby Hall

Phone: 805-480-4044

Email: ruby@compatible-electronics.com

<http://www.celectronics.com>

**ELECTROMAGNETIC COMPATIBILITY &
TELECOMMUNICATIONS**

NVLAP LAB CODE 200527-0

Emissions

Designation

Description

EN 55011 (2007) + A2 (2007)

Industrial, scientific and medical (ISM) radio-frequency equipment - Electromagnetic disturbance characteristics - Limits and methods of measurement

EN 55011 (2009) + A1 (2010)

Industrial, scientific and medical (ISM) radio-frequency equipment - Electromagnetic disturbance characteristics - Limits and methods of measurement

EN 55013 (2001) + A1 (2003) + A2 (2006)

Sound and television broadcast receivers and associated equipment - Radio disturbance characteristics - Limits and methods of measurement

EN 55015 (2013)

Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment

EN 55032 (2015)+A11(2020)

Electromagnetic compatibility of multimedia equipment - Emission Requirements

EN 55032 (2012-05)

Electromagnetic compatibility of multimedia equipment. Emission requirements

EN 61000-3-2 (2014)

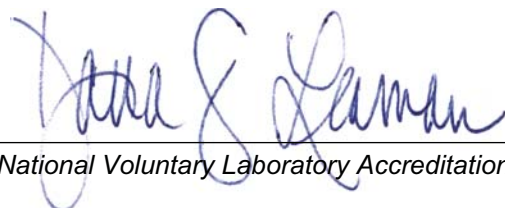
Electromagnetic compatibility (EMC). Limits. Limits for harmonic current emissions (equipment input current = 16 A per phase)

KS C 9610-3-2:2020

Electromagnetic compatibility (EMC) — Part 3-2: Limits — Limits for harmonic current emissions(equipment input current \leq 16 A per phase)

EN 61000-3-2 (2006) + A1 (2009) + A2 (2009)

Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current \leq 16 A per phase)



For the National Voluntary Laboratory Accreditation Program

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200527-0

KS C 9610-3-3:2020	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection
IEC/EN 61000-3-3 (1995) + A1 (2001) + A2 (2005)	Conducted Emissions, Voltage Flicker
EN 61000-3-3, Ed. 2.0 (2008-09)	EMC- Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low- voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection
EN 61000-3-3 (2013)	EMC- Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low- voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection
IEC 61000-3-3 Ed. 2.0 (2008)	EMC- Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection
EN 61000-6-3 (2007)	Electromagnetic compatibility (EMC) - Part 6-3: Generic standard - Emission standard for residential, commercial and light industrial environments
IEC 61000-6-4 (2006-07)	Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments
IEC 61000-6-4 (2006) +A1 (2010)	Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments
EN 61000-6-4 (2007) + A1 (2011)	Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments
IEC 61326-1 (2005-12)	Electrical equipment for measurement, control and laboratory use - EMC requirements
IEC 61326-2-1 (2005)	EMC requirements. Particular requirements. Test configurations, operational conditions and performance criteria for EMC unprotected applications
IEC 61326-2-2 (2005)	EMC requirements. Particular requirements. Test configurations, operational conditions and performance criteria for portable test, measuring and monitoring equipment used in low-voltage distribution systems
EN 61326-2-3 (2013)	Electrical equipment for measurement, control and laboratory use. EMC requirements - Part 2-3: Particular requirements -Test configuration, operational conditions and performance criteria for transducers with integrated or remote signal conditioning
IEC 61326-2-3 (2006)	EMC requirements - Part 2-3: Particular requirements - Test configuration, operational conditions and performance criteria for transducers with integrated or remote signal conditioning
CNS 13438 (2006) (up to 6GHz)	Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment
CNS 15936 (2016)	Electromagnetic compatibility of multimedia equipment - Emission requirements

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200527-0

ANSI C63.10 (2013)	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
AS CISPR 11 (2017)	Industrial, scientific and medical equipment—Radio-frequency disturbance characteristics—Limits and methods of measurement (CISPR 11:2015 +AMD1:2016 (ED.6.1) MOD)
IEC/CISPR 11 + A1 (1997), EN 55011 (1998), AS/NZS CISPR 11 (2002), and CNS 13803 (1997)	Limits and Methods of Measurement of Electromagnetic Disturbance Characteristics of Industrial, Scientific, and Medical Radio-Frequency Equipment
AS/NZS CISPR 11 (2011)	Industrial, scientific and medical (ISM) radio frequency equipment - Electromagnetic disturbance characteristics - Limits and methods of measurement
IEC/CISPR 11 Ed. 5.1 (2010)	Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement
AS/NZS CISPR 32 (2015)	Electromagnetic compatibility of multimedia equipment - Emission requirements
KS C 9832:2019	Electromagnetic compatibility of multimedia equipment - Emission requirements (MOD CISPR 32:2015)
AS/NZS CISPR 32:2015+A1:2020	Electromagnetic compatibility of multimedia equipment - Emission requirements
CISPR 32, Ed. 1 (2012-01)	Electromagnetic compatibility of multimedia equipment - Emission requirements
ANSI C63.4 (2014)	Unintentional Radiators in 47 CFR FCC Part 15, Subpart B
ANSI C63.10 (2013)	Intentional Radiators in 47 CFR FCC Part 15, Subpart C
DA 00-705 - March 30, 2000 and KDB Pub. No. 558074	47 CFR FCC Part 15, Subpart C: Intentional Radiators - (Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems - and - New Guidance on Measurements for Digital Transmission Systems in Section 15.247)
KDB Pub. No. 200443 Millimeter Wave Test Procedures	47 CFR FCC Part 15, Subpart C: Intentional Radiators
SS - MP with FCC Method - 15 CFR Part 15, Subpart C	Intentional Radiators
ANSI C63.17 (2013)	Unlicensed Personal Communications Service Devices in 47 CFR FCC Part 15, Subpart D
ANSI C63.17(1998) and ANSI C63.4 (2003)	Unlicensed Personal Communications Service Devices in 47 CFR FCC Part 15, Subpart D
ANSI C63.10 (2013)	Unlicensed National Information Infrastructure Devices without DFS Intentional Radiators in 47 CFR FCC Part 15, Subpart E
UNII - MP	Unlicensed National Information Infrastructure Devices in 47 CFR FCC Part 15, Subpart E

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200527-0

ANSI C63.10 (2013)	Ultra-Wideband Operation Intentional Radiators in 47 CFR FCC Part 15, Subpart F
ANSI C63.10 (2013)	Access Broadband Over Power Line (Access BPL) Intentional Radiators in 47 CFR FCC Part 15, Subpart G
ANSI C63.10 (2013)	White Space Device Intentional Radiators in 47 CFR FCC Part 15, Subpart H
FCC OST/MP-5 (1986)	FCC Methods of Measurement of Radio Noise Emissions for ISM Equipment (cited in 47 CFR FCC Part 18 - Industrial, Scientific, and Medical Equipment)
ICES-001	Industrial, Scientific and Medical (ISM) Radio Frequency Generators
ICES-003 Issue 6 (2016)	Information Technology Equipment (ITE) - Limits and methods of measurement
ICES-003 Issue 7 (October 2020)	Information Technology Equipment (Including Digital Apparatus)
ICES-005 Issue 5 (Dec 2018)	Lighting Equipment
KCC Notice 2008-39	Korea Technical Requirements Electromagnetic Interference (EMI)
KN 32:2015 (Annex 11)	Test Methods of radio disturbance for multimedia equipment
KN 32:2013 (Annex 16)	Test Methods of radio disturbance for multimedia equipment
QCVN 118 (2018): BTTTT	National technical regulation on Electromagnetic compatibility of multimedia equipment - Emission requirements
RRA Announce 2009-9, Dec 21, 2009	Conformity Assessment Procedure for Electromagnetic Interference, K only
RRA Announce 2010-05, K only (December 24, 2010)	Conformity Assessment Procedure for Electromagnetic Interference (K only)
RRA Public Notification 2011-05 (Jan. 19, 2011)	Technical requirements for Electromagnetic Interference; Korea only
RRA Public Notification 2011-18 (July 05, 2011)	Technical Requirements for Electromagnetic Interference; Korea only
RRA Public Notification 2011-24 (Dec. 23, 2011)	Technical Requirements for Electromagnetic Interference; Korea only
RRA 2012-13 and RRA 2012-21, June 28, 2012, K only	Technical Requirements and Test Methods for Electromagnetic Interference; K only (See specific Annexes listed on scope)
RRA 2013-3 and 2013-24, June 17, 2013, Korean only	Technical Requirements and Test Methods for Electromagnetic Interference; K only (See specific Annexes listed on scope)
RRA 2014-8 and RRA 2014-37 (June 23, 2014)	Technical Requirements and Test Methods for Electromagnetic Interference; K only (See specific Annexes listed on scope)

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200527-0

VCCI-CISPR 32 (2016)	Agreement of VCCI Council - Technical Requirements: VCCI-CISPR 32:2016 (up to 6 GHz)
Agreement of VCCI V-3 (2014.04)	Agreement of VCCI Council - Technical Requirements: V-3/2014.04 (including radiated disturbance above 1 GHz)
Agreement of VCCI V-3 (2015.04)	Agreement of VCCI Council - Technical Requirements: V-3/2015.04 (including radiated disturbance above 1 GHz)
Agreement of VCCI V-3 (2011.04)	Agreement of VCCI Council - Technical Requirements: V-3/2011.04 (including radiated disturbance above 1 GHz)
Agreement of VCCI V-3 (2012.04)	Agreement of VCCI Council - Technical Requirements: V-3/2012.04 (including radiated disturbance above 1 GHz)
Agreement of VCCI V-3 (2013.04)	Agreement of VCCI Council - Technical Requirements: V-3/2013.04 (including radiated disturbance above 1 GHz)

Immunity

Designation

EN 50130-4 (1995) + A1(1998) & A2(2003)

EN 50130-4 (2011)

EN 55024 (2010)

EN 55035 (2017)

EN 55035 (2017) +A11 (2020)

KS C 9610-4-2:2017

IEC 61000-4-2, Ed. 1.2 (2001); EN 61000-4-2

IEC 61000-4-2, Ed. 2.0 (2008-12)

KS C 9610-4-3:2017

IEC/EN 61000-4-3, Ed. 2.1 (2002), A1 (2002); EN 61000-4-3

Description

Alarm systems - Part 4. Electromagnetic compatibility - Product family standard: Immunity requirements for components of fire, intruder and social alarm systems

Alarm systems. Electromagnetic compatibility. Product family standard. Immunity requirements for components of fire, intruder, hold up, CCTV, access control and social alarm systems

Information technology equipment. Immunity characteristics. Limits and methods of measurement

Electromagnetic Compatibility Of Multimedia Equipment - Immunity Requirements (Cispr 35:2016, Modified)

Electromagnetic Compatibility Of Multimedia Equipment - Immunity Requirements

Electromagnetic compatibility (EMC) — Part 4—2: Testing and measurement techniques — Electrostatic discharge immunity test

Electrostatic Discharge Immunity Test

Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test

Electromagnetic compatibility (EMC) — Part 4-3: Testing and measurement techniques — Radiated, radio-frequency, electromagnetic field (MOD IEC 61000-4-3:2010)

Radiated, radio-frequency, electromagnetic field immunity test

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200527-0

IEC 61000-4-3, Ed. 3.0 (2006-02)	Electromagnetic compatibility (EMC) - Part 4-3: Testing measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test
IEC 61000-4-3 Ed. 3.2 (2010-04)	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test
KS C 9610-4-4:2020	Electromagnetic compatibility (EMC) — Part 4-4: Testing and measurement techniques — Electrical fast transient, burst immunity test
IEC 61000-4-4(1995), A1(2000), A2(2001); EN 61000-4-4	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical Fast Transient/Burst Immunity Test
IEC 61000-4-4, Ed. 2.0 (2004-07)	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test
IEC 61000-4-4, Ed. 3.0 (2012-04)	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test
IEC 61000-4-5 Ed. 3.0 (May 2014)	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test
KS C 9610-4-5:2020	Electromagnetic compatibility (EMC) — Part 4-5: Testing and measurement techniques — Surge immunity test
IEC 61000-4-5 Ed. 3.1 (2017)	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test
IEC 61000-4-5, Ed. 1.1 (2001-04); EN 61000-4-5	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test
BS EN 61000-4-5 (2006)	Electromagnetic compatibility (EMC). Testing and measurement techniques. Surge immunity test
KS C 9610-4-6:2020	Electromagnetic compatibility (EMC) — Part 4-6: Testing and measurement techniques — Immunity to conducted disturbances, induced by radio-frequency fields (MOD IEC 61000-4-6:2013)
IEC 61000-4-6, Ed. 2.2 (2006-05)	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields
IEC 61000-4-6 Ed. 3.0 (2008)	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields
IEC 61000-4-6 Ed. 4.0 (2013)	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields
KS C 9610-4-8:2017	Electromagnetic compatibility (EMC) — Part 4—8: Testing and measurement techniques — Power frequency magnetic field immunity test
IEC 61000-4-8, Ed. 1.1 (2001); EN 61000-4-8	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200527-0

IEC 61000-4-8 (2009)	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test
IEC 61000-4-9 (2016)	Electromagnetic compatibility (EMC) - Part 4-9: Testing and measurement techniques - Impulse magnetic field immunity test
IEC 61000-4-11, Edition 3.0 (2020)	Electromagnetic Compatibility (EMC) – Part 4-11: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current up to 16 A per phase
KS C 9610-4-11:2020	Electromagnetic compatibility (EMC) — Part 4-11: Testing and measurement techniques — Voltage dips, short interruptions and voltage variations immunity tests
IEC 61000-4-11, Ed. 2 (2004-03) & EN 61000-4-11	Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests
IEC 61000-4-12 (2017)	Electromagnetic Compatibility (EMC) - Part 4-12: Testing and measurement techniques - Ring wave immunity test
IEC 61000-4-13 Ed. 1.2 (2015-12):2002+AMD1:2009 +AMD2:2015 CSV	Electromagnetic compatibility (EMC) - Part 4-13: Testing and measurement techniques - Harmonics and interharmonics including mains signalling at a.c. power port, low frequency immunity tests
EN 61000-6-1 (2007)	Electromagnetic compatibility (EMC) - Part 6 - 1: Generic standards - Immunity for residential, commercial and light-industrial environments
EN 61000-6-2 (2005)	Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity for industrial environments
EN 61326-1(2006)	Electrical equipment for measurement, control and laboratory use - EMC requirements
EN 61326-1 (2013)	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements
IEC 61326-2-6, Ed. 1.0 (2005-12)	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-6: Particular requirements - In vitro diagnostic (IVD) medical equipment
TCVN 7317:2003 (CISPR 24:1997)	ElectroMagnetic Compatibility (EMC) - Telecommunications Terminal Equipment - Electromagnetic immunity Requirements
CISPR 24 (2010) + A1 (2015)	Information technology equipment - Immunity characteristics - Limits and methods of measurement
CISPR 35 (2016)	Electromagnetic compatibility of multimedia equipment - Immunity requirements
KS C 9835:2019	Electromagnetic compatibility of multimedia equipment - Immunity requirements (MOD CISPR 35:2016)
KN 35:2015 (Annex 11-2)	Testing method of electromagnetic wave endurance of multimedia device
KN 35:2015 (Annex 15)	Electromagnetic compatibility of multimedia equipment - Immunity Requirements

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200527-0

Korea RRL Notice No. 31 (2004)	Conformity Assessment Procedures for Electromagnetic Susceptibility using KN 61000-4-2, KN 61000-4-3, KN 61000-4-4, KN 61000-4-5, KN 61000-4-8, KN 61000-4-11, KN 20, KN 41, and KN 50.
Korea RRL Notice 70 (2004)	Technical Requirements for Electromagnetic Susceptibility using KN 61000-4-2, KN 61000-4-3, KN61000-4-4, KN 61000-4-5, KN 61000-4-6, KN 61000-4-8, KN 20, KN 41, and KN 51
RRA Public Notification 2011-06 (Jan. 19, 2011)	Technical Requirements for Electromagnetic Susceptibility; Korea only
RRA Public Notification 2011-17 (July 05, 2011)	Technical Requirements for Electromagnetic Susceptibility; Korea only
RRA Public Notification 2011-25 (Dec. 23, 2011)	Technical Requirements for Electromagnetic Susceptibility; Korea only
RRA 2012-14 and RRA 2012-22 (June 28, 2012) K only	Technical Requirements and Test Methods for Electromagnetic Susceptibility; K only (See specific Annexes listed on scope)
RRA 2013-04 and RRA 2013-25, June 17, 2013, Korean only	Technical Requirements and Test Methods for Electromagnetic Susceptibility; Korean only (See specific Annexes listed on scope)
RRA 2014-09 and RRA 2014-38 (June 23, 2014) K only	Technical Requirements and Test Methods for Electromagnetic Susceptibility; Korean only (See specific annexes listed on scope)

Product Safety

Designation

Description

EN 60204-1:2006	Safety of machinery. Electrical equipment of machines. General requirements
IEC 60204-1 ed5.0	Safety of machinery - Electrical equipment of machines - Part 1: General requirements
IEC 60335-1 Ed. 5.0 (2010) + A1 (2013)	Household and similar electrical appliances - Safety - Part 1: General requirements
SNZ/AS/NZS 60335.1:2022	Household and similar electrical appliances - Safety - Part 1: General requirements (IEC 60335-1 Ed 6, MOD)
DS/EN 60335-1:2012/A15:2021	Household and similar electrical appliances - Safety - Part 1: General requirements - Amendment 15
IEC 60335-1 Ed. 6.0 (2020-09)	Household and similar electrical appliances - Safety - Part 1: General requirements
EN 60335-1 (2012) + A14 (2019)	Household and similar electrical appliances - Safety - Part 1: General requirements
EN 60335-1 (2012) + A2 (2019)	Household and similar electrical appliances - Safety - Part 1: General requirements
EN 60335-1 (2012) + A1 (2019)	Household and similar electrical appliances - Safety - Part 1: General requirements
EN 60335-1 (2012) + A13 (2017)	Household and similar electrical appliances - Safety - Part 1: General requirements

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200527-0

EN 60335-1 (2012) + AC (2014)	Household and similar electrical appliances - Safety - Part 1: General requirements
IEC 60335-1 (2010) + A1 (2013) + A2 (2016)	Household and similar electrical appliances - Safety - Part 1: General requirements
EN 60335-1 (2012) + A11 (2014)	Household and similar electrical appliances. Safety. General requirements
EN 60335-1 (2002)	Household and similar electrical appliances - Safety - Part 1: General Requirements
EN 60335-1 (2012)	Household and similar electrical appliances - Safety - Part 1: General requirements
EN 60335-2-29 (2004)	Household and similar electrical appliances - Safety - Part 2-29: Particular requirements for battery chargers
EN 60335-2-82 (2003) +A1 (2008)	Household and similar electrical appliances - Safety - Part 2-82: Particular requirements for amusement machines and personal service machines
AS/NZS 60335.2.82:2018+A1:2021	Household and similar electrical appliances - Safety - Part 2.82: Particular requirements for amusement machines and personal service machines (IEC 60335-2-82 Ed 3.1, IDT)
EN 60335-2-82 (2003) +A2 (2020)	Household and similar electrical appliances - Safety - Part 2-82: Particular requirements for amusement machines and personal service machines (IEC 60335-2-82:2002/A2:2015)
AS/NZS 60335.2.82:2015	Household and similar electrical appliances - Safety - Part 2.82: Particular requirements for amusement machines and personal service machines (IEC 60335-2-82 Ed 2.2, IDT)
IEC 60335-2-82, Ed 3.0+A1 (2020-06)	Household and similar electrical appliances - Safety - Part 2-82: Particular requirements for amusement machines and personal service machines
IEC 60335-2-82, Ed 3.0 (2017)	Household and similar electrical appliances - Safety - Part 2-82: Particular requirements for amusement machines and personal service machines
EN 60335-2-82 (2003)	Specification for safety of household and similar electrical appliances. Particular requirements. Particular requirements for amusement machines and personal service machines
EN 60601-1 (2006) + A12 (2014)	Medical electrical equipment. Part 1-General requirements for basic safety and essential performance
ANSI/AAMI ES60601-1:2005/A2:2021	Medical electrical equipment -- Part 1: General requirements for basic safety and essential performance -- Amendment 2
IEC 60601-1:2005/A2:2020	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance
DS/EN 60601-1 (2006) + AC (2014)	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance
DS/EN 60601-1 (2006) +AC:2013	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200527-0

DS / EN 60601-1 (2006) + Corr.2 (2008)	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance
DS / EN 60601-1 (2006) + Corr.1 (2008)	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance
EN 60601-1 (2006) + A1 (2013)	Medical Electrical Equipment - Part 1: General Requirements For Basic Safety And Essential Performance
IEC 60601-1 (2005) +A1 (2012-07)	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance
IEC 60601-1, 3rd Ed. (2005)	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance
EN 60601-1:2006	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance
BS EN 60601-1-1 (2001)	Medical electrical equipment. General requirements for safety. Collateral standard. Safety requirements for medical electrical systems
IEC 60601-1-1 (2000-12), 2nd edition	Medical electrical equipment - Part 1-1: General requirements for safety - Collateral standard: Safety requirements for medical electrical systems
IEC 60601-1-2, Ed. 4, (2014-02)	Medical electrical equipment-Part 1-2: General requirements for basic safety and essential performance-Collateral Standard: Electromagnetic disturbances-Requirements and tests
IEC 60601-1-2, Ed. 4.1 (2020-09)	CSV Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Electromagnetic disturbances
IEC 60601-1-2, Ed. 4.0 (2014) + A1 (2020)	Medical electrical equipment - Part 1-2: General requirements for safety - Collateral standard: Electromagnetic compatibility - Requirements and tests
EN 60601-1-2 (2015)	Medical electrical equipment. General requirements for basic safety and essential performance. Collateral Standard. Electromagnetic disturbances. Requirements and tests
IEC 60601-1-2, Ed. 1 (1993); Ed. 2 (2001-09); JIS T0601-1-2 (2002.7)	Medical electrical equipment - Part 1 and Part 1-2: General requirements for safety: Collateral standard: EMC - Requirements and tests
IEC 60601-1-2, Ed 2.1 (2004-11) & EN 60601-1-2 (2002)	Medical electrical equipment - Part 1-2: General requirements for safety - Collateral standard: Electromagnetic compatibility - Requirements and tests
EN 60601-1-2 (2007)	Medical electrical equipment - Part 1-2: General requirements for safety - Collateral standard: EMC - Requirements and tests
EN 60601-1-2 (2001) + A1(2006)	Medical electrical equipment - Part 1-2: General requirements for safety - Collateral standard: EMC - Requirements and tests
EN 60601-1-4:1996 + A1:1999	Medical electrical equipment - Part 1-4: General requirements for safety - Collateral standard: Programmable electrical medical systems
IEC 60601-1-6 Ed. 3.0 (2006) +A1 (2013)	Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200527-0

IEC 60601-1-6, Ed. 3.1 (2013-10)	Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability
IEC 60601-1-6, Ed. 3.0 (2010)	Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability
EN 60601-1-6/AC (2012)	Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability
EN 60601-1-6:2010	Medical electrical equipment. General requirements for basic safety and essential performance. Collateral standard. Usability
IEC 60601-1-6:2010	Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability
IEC 60601-1-6 Ed. 2.0 (2006)	Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability
EN 60601-1-6:2007	Medical electrical equipment. General requirements for basic safety and essential performance. Collateral Standard. Usability
IEC 60601-1-8 Ed. 2.1 (2012-11)	Medical electrical equipment - Part 1-8: General requirements for basic safety and essential performance - Collateral Standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems
IEC 60601-1-8 Ed. 2.0 (2006)	Medical electrical equipment - Part 1-8: General requirements for basic safety and essential performance - Collateral Standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems
EN 60601-1-8:2004 + A1:2006	Medical electrical equipment - Part 1-8: General requirements for safety - Collateral standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems
IEC 60601-1-11, ed. 2.0 (2015)	Medical electrical equipment - Part 1-11: General requirements for basic safety and essential performance -- Collateral standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment
EN 60601-1-11(2015)	Medical electrical equipment - Part 1-11: General requirements for basic safety and essential performance -- Collateral standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment
IEC 60601-2-2 Ed. 5.0 (2009)	Medical electrical equipment - Part 2-2: Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories
IEC 60601-2-4:2005; EN 60601-2-4:2003	Particular requirements for the safety of cardiac defibrillators
EN 60601-2-4 (2003), Clause 202	Medical electrical equipment. Particular requirements for safety. Particular requirements for the safety of cardiac defibrillators
EN 60601-2-12:2006	Medical electrical equipment. Particular requirements for the safety of lung ventilators. Critical care ventilators

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200527-0

IEC 60601-2-24, Ed. 1 (1998)	Medical electrical equipment - Part 2-24: Particular requirements for the safety of infusion pumps and controllers
EN 60601-2-24 (1998)	Medical electronic equipment Part 2-24: Particular requirements for the safety of infusion pumps and controllers
IEC 60601-2-35 Ed. 1 (1996)	Medical electrical equipment - Part 2: Particular requirements for the safety of blankets, pads and mattresses, intended for heating in medical use
EN 60601-2-35:1996	Medical electrical equipment - Part 2: Particular requirements for the safety of blankets, pads and mattresses, intended for heating in medical use
EN 60730-1:2011	Automatic electrical controls for household and similar use - Part 1: General requirements
EN 60950-1 (2006) + A11 (2009) + A1 (2010) + A12 (2011) + A2 (2013)	Information technology equipment- Safety- Part 1: General requirements
AS/NZS 60950.1 (2015)	Information technology equipment - Safety - General requirements (IEC 60950-1, Ed. 2.2 (2013), MOD)
CSA C22.2 NO 60950-1-07	Information Technology Equipment Safety Part 1: General Requirements
IEC 61010-1 ED. 3.1 b:2017	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements
IEC 61010-1 Ed. 3.0+A1 (2016-12)	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements
EN 61010-1:2010+A1:2019 +AC:2019-04	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements (IEC 61010-1:2010/A1:2016/COR1:2019)
EN 61010-1:2010+A1:2019	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements (IEC 61010-1:2010/A1:2016 , modified)
IEC 61010-1:2010+A1:2016	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements
EN 61010-1 (2010)	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements
IEC 61010-2-010 (2014)	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-010: Particular requirements for laboratory equipment for the heating of materials
EN IEC 61010-2-010 (2020)	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-010: Particular requirements for laboratory equipment for the heating of materials (IEC 61010-2-010:2019)
IEC 61010-2-010 Ed. 4 (2019)	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-010: Particular requirements for laboratory equipment for the heating of materials

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200527-0

IEC 61010-2-030 ed1.0 (2010)	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-030: Particular requirements for testing and measuring circuits
IEC 61010-2-051 Ed. 2.0 (2005)	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-051: Particular ... laboratory equipment for mixing and stirring
IEC 61851-1 Ed. 2.0 (2010)	Electric vehicle conductive charging system - Part 1: General requirements
EN 61851-1:2001	Electric vehicle conductive charging system. General requirements
EN 61851-21 (2002)	Electric vehicle conductive charging system - Part 21: Electric vehicle requirements for conductive connection to an a.c./d.c. supply
EN 61851-22 (2002)	Electric vehicle conductive charging system - Part 22: A.C. electric vehicle charging station
IEC 61851-22 Ed. 1.0 (2001)	Electric vehicle conductive charging system - Part 22: AC electric vehicle charging station
AS/NZS 62368.1 (2018)	Audio/video, information and communication technology equipment Safety requirements (IEC 62368-1:2014 (ED. 2.0) MOD)
IEC 62368-1 ed2.0 (2014)	Audio/video, information and communication technology equipment - Part 1: Safety requirements
BS EN 62368-1 (2014)	Audio/video, information and communication technology equipment. Safety requirements
IEC 62368-1, Ed. 3.0 (2018)	Audio/video, information and communication technology equipment - Part 1: Safety requirements
EN 62368-1 (2014) + AC (2015)	Audio/video, information and communication technology equipment. Safety requirements
EN 62368-1 (2014)	Audio/video, information and communication technology equipment. Safety requirements
TCVN 7326-1:2003 (IEC 60950-1:2001)	Information technology equipment - Safety - Part 1: General requirements
AC/ACIF S001 (2001)	Safety Requirements for Customer Equipment
AS/NZS 4117 (1999)	Surge protective devices for telecommunications applications
CSA C22.2 NO. 68-09	Motor-Operated Appliances (Household and Commercial)
CSA C22.2 No. 1010.1	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements
EN 957-1:2005	Stationary Training Equipment - Part 1: General Safety Requirements and Test Methods
EN 957-5:2009	Stationary training equipment. Stationary exercise bicycles and upper body crank training equipment, additional specific safety requirements and test methods

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200527-0

EN 957-6:2010	Stationary training equipment. Treadmills, additional specific safety requirements and test methods
EN 957-8:1998	Stationary training equipment. Steppers, stairclimbers and climbers. Additional specific safety requirements and test methods
EN 957-9:2003	Stationary training equipment. Elliptical trainers, additional specific safety requirements and test methods
EN 957-10:2005	Stationary training equipment. Exercise bicycles with a fixed wheel or without freewheel, additional specific safety requirements and test methods
UL 1647	Motor-operated massage and exercise machines

Product Safety - FDA Pilot Accreditation Scheme for Conformity Assessment (ASCA)

Designation

ANSI AAMI ES60601-1 (2005)/
(R2012) + A1(2012) C1(2009)/
(R2012) and A2 (2010)/(R2012)
(Cons. Text) (Incl. AMD2:2021)
(FDA#19-46)

IEC 60601-1-2, Ed. 4.1 (2020-09)
(FDA#19-36)

IEC 60601-1-6, Ed. 3.1 (2013-10)
(FDA#5-89)

IEC 60601-1-6, Ed. 3.2 (2020-07)
(FDA#5-132)

IEC 60601-1-8, Ed. 2.1 (2012-11)
(FDA#5-76)

IEC 60601-1-8, Ed. 2.2 (2020-07)
(FDA#5-131)

IEC 60601-1-11, Ed. 2.0 (2015-01)
(FDA#19-14)

IEC 60601-1-11, Ed. 2.1 (2020-07)
(FDA#19-38)

Description

Medical electrical equipment - Part 1: General requirements for basic safety and essential performance (IEC 60601-1:2005, MOD) (Including Amendment 2 (2021))

CSV Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Electromagnetic disturbances - (Accreditation excludes Figure 3, "nursing homes" as an example of the HOME HEALTHCARE ENVIRONMENT, Subclause 8.9, Table 8 on Page 39: The citation of Note k) under "Conducted disturbances induced by RF fields" (4th Row))

Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability

CSV Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability

Medical electrical equipment - Part 1-8: General requirements for basic safety and essential performance - Collateral Standard: General requirements tests and guidance for alarm systems in medical electrical equipment and medical electrical systems.

CSV Medical electrical equipment - Part 1-8: General requirements for basic safety and essential performance - Collateral Standard: General requirements tests and guidance for alarm systems in medical electrical equipment and medical electrical systems.

Medical electrical equipment - Part 1-11: General requirements for basic safety and essential performance - Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment

CSV Medical electrical equipment - Part 1-11: General requirements for basic safety and essential performance - Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment (Accreditation excludes "Note 2 to entry" in Sub-clause 3.1 (Home Healthcare Environment))

**ELECTROMAGNETIC COMPATIBILITY &
TELECOMMUNICATIONS**

NVLAP LAB CODE 200527-0

IEC 61010-1, Ed. 3.1 (2017-01)
(FDA#19-34)

Safety requirements for electrical equipment for measurement control and laboratory use -
Part 1: General requirements

Radio

Designation

Description

ETSI EN 300 220-1 V2.4.1
(2012-05)

(ERM); Short Range Devices (SRD); Radio equipment to be used in the 25 MHz to 1 000 MHz frequency range with power levels ranging up to 500 mW; Part 1: Technical characteristics and test methods

ETSI EN 300 220-2 V2.4.1
(2012-05)

(ERM); Short Range Devices (SRD); Radio equipment to be used in the 25 MHz to 1 000 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

ETSI EN 300 330 V2.1.1 (2017-02)

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; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU

ETSI EN 300 440 V2.1.1 (2017-03)

Short Range Devices (SRD); Radio equipment to be used in the 1 GHz to 40 GHz frequency range; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU

ETSI EN 300 440-1 V1.6.1
(2010-08)

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 1: Technical characteristics and test methods

ETSI EN 300 440-2 v1.4.1
(2010-08)

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

ETSI EN 301 357-1 V1.4.1
(2008-11)

ERM; Cordless Audio Devices in the Range 25 MHz to 2,000 MHz; Part 1: Technical Characteristics and Test Methods

ETSI EN 301 357-2 v1.4.1
(2007-12)

ERM; Cordless Audio Devices in the Range 25 MHz to 2,000 MHz. Part 2: Harmonized EN covering essential requirements of 3.2 of the R&TTE Directive

ETSI EN 301 489-1 V1.9.2
(2011-09)

Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements

ETSI EN 301 489-3 V1.6.1
(2013-08)

Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz

ETSI EN 301 489-9 v1.4.1
(2007-11)

ERM; EMC standard for radio equipment and services; Part 9: Specific conditions for wireless microphones, similar Radio Frequency (RF) audio link equipment, cordless audio and in-ear monitoring devices

AS/NZS 4268 (2012) + A1 (2013)

Radio equipment and systems - Short range devices - Limits and methods of measurement

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200527-0

AS/NZS 4268 (2017)	Radio equipment and systems-Short range devices-Limits and methods of measurement
ACMA Radiocommunications (Short Range Devices) Standard 2014	For technical performance matters using AS/NZS 4268
ACMA Radiocommunications (Short Range Devices) Standard 2004	For technical performance matters using AS/NZS 4268.
AS/NZS 4268 (2008)	Radio equipment and systems - Short range devices - Limits and methods of measurement
AS/NZS 4771 (2000) + Amendment No. 1	Technical characteristics and test conditions for data transmission equipment operating in the 900 MHz, 2.4 GHz and 5.8 GHz bands and using spread spectrum modulation techniques
KCC Public Notification 2009-27, Nov 5, 2009	Technical Requirements for the Human Protection against Electromagnetic Waves, K only
NOM-121-SCT1-2009	Radio-Telecommunications-radio systems using spread spectrum technology - equipment radio frequency hopping and digital modulation operating in the bands 902-928 MHz, 2400-2483.5 MHz, & 5725-5850 MHz
QCVN 54 (2020): BTTTT	Radio equipments operating in the 2.4 GHz band and using spread spectrum modulation techniques - Technical requirements
QCVN 54 (2011): BTTTT	Radio equipments operating in the 2.4 GHz band and using spread spectrum modulation techniques - Technical requirements
QCVN 55 (2011): BTTTT	Short Range Devices - Radio equipment in the frequency range 9 kHz to 25 MHz
QCVN 96 (2015): BTTTT	Technical regulation on electromagnetic compatibility for Short Range Devices (SRD) operating on frequencies between 9 kHz and 40 GHz
RSS-102 Measurement, Issue 5 (March 2015) + A1 (February 2021)	Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands) - RF Exposure (MEAS)
RSS-210, Issue 9 (August 2016) + A1 (November 2017)	Licence-Exempt Radio Apparatus: Category I Equipment
RSS-210, Issue 10 (December 2019) + A1 (April 2020)	Licence-Exempt Radio Apparatus: Category I Equipment
RSS-210, Issue 10 (December 2019)	Licence-Exempt Radio Apparatus: Category I Equipment
RSS-247, Issue 2 (February 2017)	Digital Transmission Systems (DTSS), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices <i>No DFS Testing</i>

ELECTROMAGNETIC COMPATIBILITY & TELECOMMUNICATIONS

NVLAP LAB CODE 200527-0

RSS-247, Issue 3 (August 2023)	Digital Transmission Systems (DTSS), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices <i>No DFS Testing</i>
RSS-248, Issue 1 (November 2021)	Radio Local Area Network (RLAN) Devices Operating in the 5925-7125 MHz Band
RSS-248, Issue 2 (December 2022)	Radio Local Area Network (RLAN) Devices Operating in the 5925-7125 MHz Band
RSS-310, Issue 4 (July 2015)	Licence-Exempt Radio Apparatus: Category II Equipment
RSS-Gen, Issue 5 (April 2018)	General Requirements for Compliance of Radio Apparatus
RSS-Gen, Issue 5 + Amendment 1 (March 2019)	General Requirements for Compliance of Radio Apparatus
RSS-Gen, Issue 5 + Amendment 2 (February 2021)	General Requirements for Compliance of Radio Apparatus

RF Exposure

Designation

IEEE C95.3-2021

Description

IEEE Recommended Practice for Measurements and Computations of Electric, Magnetic, and Electromagnetic Fields with Respect to Human Exposure to Such Fields, 0 Hz to 300 kHz

Telecommunications

Designation

ETSI EN 300 386 V1.6.1 (2012-09)

Description

Electromagnetic compatibility and Radio spectrum Matters (ERM); Telecommunication network equipment; ElectroMagnetic Compatibility (EMC) requirements