AKKREDITOITU TESTAUSLABORATORIO

ACCREDITED TESTING LABORATORY

FINAS
Finnish Accreditation Service
T287 (EN ISO/IEC 17025)

VERKOTAN OY

VERKOTAN LTD.

Tunnus ***Code***	**Laboratorio** ***Laboratory***	**Osoite** ***Address***	**www** ***www***
T287	**Verkotan Oy**	**Elektroniikkatie 17** **90590 OULU** **Konekuja 8** **90620 OULU**	**www.verkotan.com**
	Verkotan Ltd.	***Elektroniikkatie 17*** ***FI-90590 OULU*** ***FINLAND*** ***Konekuja 8*** ***FI- 90620 OULU*** ***FINLAND***	***www.verkotan.com***

Testausalat ***Fields of testing***
EMC/RF ***EMC/RF***

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
EMC/RF, RF, Elektroniikkatie ***EMC/RF, RF, Elektroniikkatie***		
Langattomasti kommunikoivat laitteet *Wireless devices*	*User Equipment (UE) / Mobile Station (MS) Over-The-Air (OTA) antenna performance; Conformance testing*	*3GPP TS 34.114*
Langattomasti kommunikoivat laitteet *Wireless devices*	*Measurements of User Equipment (UE) radio performances for LTE/UMTS terminals; Total Radiated Power (TRP) and Total Radiated Sensitivity (TRS) test methodology*	*3GPP TR 37.902*
Langattomasti kommunikoivat laitteet *Wireless devices*	*Measurements of radio performances for UMTS terminals in speech mode*	*3GPP TR 25.914*
Langattomasti kommunikoivat laitteet *Wireless devices*	*3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Universal Terrestrial Radio Access (UTRA) and Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) Over The Air (OTA) performance; Conformance testing*	*3GPP TS 37.544,* *6. Transmitter performance* *7. Receiver performance*
Langattomasti kommunikoivat laitteet *Wireless devices*	*IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 2: CDMA Direct Spread (UTRA FDD) User Equipment (UE)*	*EN 301 908-2,* *4.2.14 Receiver total radiated sensitivity (TRS)* *4.2.15 Total radiated power (TRP)*
Langattomasti kommunikoivat laitteet *Wireless devices*	*IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 13: Evolved Universal Terrestrial Radio Access (E-UTRA) User Equipment (UE)*	*ETSI EN 301 908-13* *4.2.13 Receiver total radiated sensitivity (TRS)* *4.2.13 Total radiated power (TRP)*
Langattomasti kommunikoivat laitteet *Wireless devices*	*IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 23: Active Antenna System (AAS) Base Station (BS)*	*ETSI EN 301 908-23* *4.3.17 Radiated transmit power* *4.3.24 OTA sensitivity*

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
Langattomasti kommunikoivat laitteet *Wireless devices*	*Harmonised Standard for access to radio spectrum; Part 24: New Radio (NR) Base Stations (BS)*	*ETSI EN 301 908-24* *4.3.16 Radiated Transmit Power* *4.3.24 OTA sensitivity*
Tukiasema ja oheislaitteet *Basestation and ancillary equipment*	*3rd Generation Partnership Project;* *Technical Specification Group Radio Access Network;* *Active Antenna System (AAS) Base Station (BS) conformance testing* *Part 2: Radiated conformance testing*	*3GPP TS 37.145-2,* *6.2 Radiated transmit power;* *7.2 OTA sensitivity*
Tukiasema ja oheislaitteet *Base station and ancillary equipment*	*3rd Generation Partnership Project;* *Technical Specification Group Radio Access Network;* *NR;* *Base Station (BS) conformance testing - Part 2: Radiated conformance testing*	*3GPP TS 38.141-2,* *6.2 Radiated transmit power;* *7.2 OTA sensitivity*
Radiolaitteet *Radio devices*	*Satellite Earth Stations and Systems (SES); Global Navigation Satellite System (GNSS) receivers; Radio equipment operating in the 1 164 MHz to 1 300 MHz and 1 559 MHz to 1 610 MHz frequency bands; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU*	*EN 303 413,* *excluding radiated spurious emissions test*
Langattomasti kommunikoivat laitteet *Wireless devices*	*Guidelines for Limiting Exposure to Time-Varying Electric, Magnetic, and electromagnetic Fields (up to 300 GHz)*	*ICNIRP*

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
Langattomasti kommunikoivat laitteet *Wireless devices*	*Product standard to demonstrate the compliance of wireless communication devices, with the basic restrictions and exposure limit values related to human exposure to electromagnetic fields in the frequency range from 300 MHz to 6 GHz: devices used next to the ear*	*EN 50360+A1*
Radiolaitteet *Radio devices*	*Product standard to demonstrate the compliance of base station equipment with radiofrequency electromagnetic field exposure limits (110 MHz - 100GHz), when placed on the market*	*EN 50385*
Radiolaitteet *Radio devices*	*Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz)*	*EN 50663*
Langattomasti kommunikoivat laitteet *Wireless devices*	*Generic standard for assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)*	*EN 50665*
Langattomasti kommunikoivat laitteet *Wireless devices*	*Product standard to demonstrate the compliance of wireless communication devices with the basic restrictions and exposure limit values related to human exposure to electromagnetic fields in the frequency range from 30 MHz to 6 GHz: hand-held and body mounted devices in close proximity to the human body*	*EN 50566*

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
Langattomasti kommunikoivat laitteet *Wireless devices*	*Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Part 1: Devices used next to the ear (frequency range of 300 MHz to 6 GHz)*	*IEC/EN 62209-1*
Langattomasti kommunikoivat laitteet *Wireless devices*	*Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation and procedures - Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 300 MHz to 6 GHz)*	*IEC/EN 62209-2*
Langattomasti kommunikoivat laitteet *Wireless devices*	*IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques*	*IEEE 1528-2013*
Langattomasti kommunikoivat laitteet *Wireless devices*	*Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices –* *Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)*	*IEC/EN/IEEE 62209-1528*

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
Radiolaitteet *Radio devices*	*Determination of RF field strength, power density and SAR in the vicinity of radiocommunication base stations for the purpose of evaluating human exposure*	*IEC/EN 62232*
Langattomasti kommunikoivat laitteet *Wireless devices*	*Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz - 300 GHz)*	*IEC/EN 62311*
Langattomasti kommunikoivat laitteet *Wireless devices*	*Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)*	*IEC/EN 62479*
Langattomasti kommunikoivat laitteet *Wireless devices*	*Measurement Procedure for Assessing Nerve Stimulation (NS) Compliance in Accordance with RSS-102*	*RSS-102.NS.MEAS*
Langattomasti kommunikoivat laitteet *Wireless devices*	*RSS-102 - Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)*	*RSS-102.SAR.MEAS* *RSS-102.NS.MEAS*
Langattomasti kommunikoivat laitteet *Wireless devices*	*IEEE Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz*	*ANSI/IEEE C95.1*
Langattomasti kommunikoivat laitteet *Wireless devices*	*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 GHz*	*ANSI/IEEE C95.3*

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
Langattomasti kommunikoivat laitteet *Wireless devices*	*EU Council Recommendation of 12 July 1999 in the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)*	*1999/519/EC*
Radiolaitteet *Radio devices*	*Radiofrequency radiation exposure evaluation: Mobile devices.*	*47 CFR § 2.1091*
Langattomasti kommunikoivat laitteet *Wireless devices*	*Radiofrequency Radiation Exposure Evaluation: Portable Devices*	*47CFR §2.1093*
Langattomasti kommunikoivat laitteet *Wireless devices*	*RF Exposure*	*FCC Published RF Exposure KDB Procedures*
EMC/RF, EMC, Konekuja ***EMC/RF, EMC, Konekuja***		
Langattomasti kommunikoivat laitteet *Wireless devices*	*Wireless power transmission systems, using technologies other than radio frequency beam in 19-21 kHz, 59-61 kHz, 79-90 kHz, 100-300 kHz, 6765-6795 kHz ranges: Essential requirements*	*EN 303 417*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test*	*EN 61000-4-2*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Part 4-3: Testing and measurement techniques – Radiated, radio-frequency electromagnetic field immunity test*	*EN 61000-4-3*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test*	*EN 61000-4-4*

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Part 4-5: Testing and measurement techniques - Surge immunity test*	*EN 61000-4-5*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields*	*EN 61000-4-6*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test*	*EN 61000-4-8*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Part 4-9: Testing and measurement techniques - Impulse magnetic field immunity test*	*EN 61000-4-9*
Yleiset laitteet *General devices*	*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*	*EN 61000-4-11*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Specification for radio disturbance and immunity measuring apparatus and methods* *Part 2-1: Methods of measurement of disturbances and immunity - Conducted disturbance measurements*	*CISPR 16-2-1*

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Specification for radio disturbance and immunity measuring apparatus and methods* *Part 2-1: Methods of measurement of disturbances and immunity - Conducted disturbance measurements*	*EN 55016-2-1*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Specification for radio disturbance and immunity measuring apparatus and methods* *Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements*	*CISPR 16-2-3*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Specification for radio disturbance and immunity measuring apparatus and methods* *Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements*	*EN 55016-2-3*
220–240 VAC/ 50 Hz powered equipment	*Electromagnetic compatibility (EMC)* *Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)*	*EN 61000-3-2*

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
220–240 VAC/ 50 Hz powered equipment	*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*	*EN 61000-3-3*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Part 6-1: Generic standards - Immunity standard for residential, commercial and light-industrial environments*	*EN 61000-6-1*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Part 6-2: Generic standards - Immunity standard for industrial environments*	*EN 61000-6-2*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Part 6-3: Generic standards - Emission standard for equipment in residential environments*	*EN 61000-6-3*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Part 6-4: Generic standards - Emission standard for industrial environments*	*EN 61000-6-4*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Part 6-8: Generic standards - Emission standard for professional equipment in commercial and light-industrial locations*	*EN 61000-6-8*

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement*	*CISPR 11*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement*	*EN 55011*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *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 equirements* *of article 3.2 of the Directive 2014/53/EU*	*EN 300 330* *Limitation to spurious emissions*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Specification for radio disturbance and immunity measuring apparatus and methods* *Part 1-4: Radio disturbance and immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements*	*CISPR 16-1-4*

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Specification for radio disturbance and immunity measuring apparatus and methods* *Part 1-4: Radio disturbance and immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements*	*EN 55016-1-4*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Requirements for household appliances, electric tools and similar apparatus* *Part 1: Emission*	*CISPR 14-1*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Requirements for household appliances, electric tools and similar apparatus* *Part 1: Emission*	*EN 55014-1*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Requirements for household appliances, electric tools and similar apparatus* *Part 2: Immunity - Product family standard*	*CISPR 14-2*
Yleiset laitteet *General devices*	*Electromagnetic compatibility (EMC)* *Requirements for household appliances, electric tools and similar apparatus* *Part 2: Immunity - Product family standard*	*EN 55014-2*

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
Sähköinen valaistus ja samankaltaiset laitteet *Electrical lighting and similar equipment*	*Electromagnetic compatibility (EMC)* *Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment* *Emission requirements*	*CISPR 15*
Sähköinen valaistus ja samankaltaiset laitteet *Electrical lighting and similar equipment*	*Electromagnetic compatibility (EMC)* *Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment* *Emission requirements*	*EN 55015*
Tietotekniikan laitteet *Information technology equipment*	*Electromagnetic compatibility (EMC)* *Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement*	*CISPR 22 (2008)*
Tietotekniikan laitteet *Information technology equipment*	*Electromagnetic compatibility (EMC)* *Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement*	*EN 55022*
Multimedialaitteet *Multimedia equipment*	*Electromagnetic compatibility (EMC)* *Electromagnetic compatibility of multimedia equipment - Emission requirements*	*CISPR 32*
Multimedialaitteet *Multimedia equipment*	*Electromagnetic compatibility (EMC)* *Electromagnetic compatibility of multimedia equipment - Emission Requirements*	*EN 55032*
Multimedialaitteet *Multimedia equipment*	*Electromagnetic compatibility (EMC)* *Electromagnetic compatibility of multimedia equipment - Immunity requirements*	*CISPR 35*

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
Multimedialaitteet *Multimedia equipment*	*Electromagnetic compatibility (EMC)* *Electromagnetic compatibility of multimedia equipment - Immunity requirements*	*EN 55035*
Sähköinen valaistus ja samankaltaiset laitteet *Electrical lighting and similar equipment*	*Electromagnetic compatibility (EMC)* *Equipment for general lighting purposes - EMC immunity requirements*	*EN 61547*
Rakennuslaitteistot. mekatroniset sylinterit *Building hardware. mechatronic cylinders*	*Electromagnetic compatibility (EMC)* *Building hardware - Mechatronic cylinders - Requirements and test methods*	*EN 15684* *4.2.6 ESD*
Rakennuslaitteistot. mekatroniset sylinterit *Building hardware. mechatronic cylinders*	*Electromagnetic compatibility (EMC)* *Building hardware - Mechatronic door furniture - Requirements and test methods*	*EN 16867* *4.2.10 ESD requirements* *4.2.12 Voltage drop protection*
Lyhyen kantaman laitteet *Short range devices (SRD)*	*Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz;*	*EN 300 220* *Limited to unwanted spurious emissions*
Laajakaistaiset lähetysjärjestelmät *Wideband transmission systems*	*Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz band; Harmonised Standard for access to radio spectrum*	*EN 300 328* *Limited to radiated spurious emissions*
Lyhyen kantaman laitteet *Short range devices (SRD)*	*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*	*EN 300 440* *4.3.5 Spurious radiations*

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
Langattomasti kommunikoivat laitteet *Wireless devices*	*ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard for ElectroMagnetic Compatibility*	*EN 301 489-1*
Lyhyen kantaman laitteet *Short range devices (SRD)*	*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; Harmonised Standard for ElectroMagnetic Compatibility*	*EN 301 489-3*
Laajakaistaiset tiedonsiirtojärjestelmät *Broadband data transmission systems*	*ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband Data Transmission Systems; Harmonised Standard for ElectroMagnetic Compatibility*	*EN 301 489-17*
ROMES ja GNSS *ROMES and GNSS*	*ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 19: Specific conditions for Receive Only Mobile Earth Stations (ROMES) operating in the 1,5 GHz band providing data communications and GNSS receivers operating in the RNSS band (ROGNSS) providing positioning, navigation, and timing data; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU*	*EN 301 489-19*

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
Tukiasemat / apulaitteet *BS / ancillary equipment*	*ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 50: Specific conditions for Cellular Communication Base Station (BS), repeater and ancillary equipment; Harmonised Standard for ElectroMagnetic Compatibility*	*EN 301 489-50*
Matkapuhelinlaitteet, apulaitteet *Cellular devices, ancillary equipment*	*ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 52: Specific conditions for Cellular Communication User Equipment (UE) radio and ancillary equipment; Harmonised Standard for ElectroMagnetic Compatibility*	*EN 301 489-52* *Limitation: EMC room measurement length 3m*
Matkapuhelinlaitteet *Cellular devices*	*Global System for Mobile communications (GSM); Mobile Stations (MS) equipment; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU*	*EN 301 511* *Spurious emissions, clauses 5.2.16 and 5.2.17*
Langattomasti kommunikoivat laitteet *Wireless devices*	*5 GHz RLAN; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU*	*EN 301 893* *Limited to radiated spurious emissions*
Matkapuhelinlaitteet *Cellular devices*	IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Part 1: Introduction and common requirements	*ETSI EN 301 908-1* *Limited to radiated spurious emissions*
Matkapuhelinlaitteet *Cellular devices*	*IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 13: Evolved Universal Terrestrial Radio Access (E-UTRA) User Equipment (UE)*	*ETSI EN 301 908-13* *Limited to radiated spurious emissions*

PÄTEVYYSALUE ***SCOPE OF ACCREDITATION***		
Testattava materiaali / tuote ***Material / product tested***	**Testattava komponentti / parametri /ominaisuus** ***Component / parameter / characteristic tested***	**Testausmenetelmä / standardi / tekniikka** ***Test method / standard specification / techniques***
Tukiasemat *BS*	*IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 14: Evolved Universal Terrestrial Radio Access (E-UTRA) Base Stations (BS)*	*EN 301 908-14* *Limited to radiated spurious emissions*
GNSS *GNSS*	*Satellite Earth Stations and Systems (SES); Global Navigation Satellite System (GNSS) receivers; Radio equipment operating in the 1 164 MHz to 1 300 MHz and 1 559 MHz to 1 610 MHz frequency bands; Harmonised Standard for access to radio spectrum*	*EN 303 413* *5.5 Receiver spurious emissions*
Yleiset laitteet *General devices*	*American National Standard For Methods Of Measurement Of Radio-Noise Emissions From Low-Voltage Electrical And Electronic Equipment In The Range Of 9 kHz To 40 GHz*	*ANSI C63.4-2014* *Radio-Noise Emissions*
Yleiset laitteet *General devices*	*Code of Federal Regulations, Part 15 - Radio Frequency Devices; Subpart B - Unintentional Radiators*	*CFR 47 FCC Part 15, Subpart B*
Ulkoiset virtalähteet *External power supplies*	*Innovation, Science and Economic Development Canada, Spectrum Management and Telecommunications, Interference-Causing Equipment Standard, Information Technology Equipment (including Digital Apparatus)*	*ICES-003*
Kun standardista ei ole mainittu vuosilukua, niin akkreditointi koskee standardin viimeisintä versiota sekä kaikkia aiemmin julkaistuja versioita. Tarkka lista standardeista on saatavilla laboratoriosta. *When the approval year of the standard is not specified accreditation covers the latest version of the method and also previously published versions. Detailed list of standards is available from the laboratory.*		