



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

COMPLIANCE WORLDWIDE, INC.¹
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ELECTRICAL

Valid to: September 30, 2020

Certificate Number: 1673.01

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

<u>Test Technology</u>	<u>Test Method(s)</u>
Unintentional Emissions Radiated & Conducted	
U.S. (FCC)	
Unintentional Radiators	47 CFR, FCC Part 15, Subpart B (using ANSI C63.4:2014)
Industrial, Scientific, and Medical (Consumer ISM)	47 CFR, FCC Part 18 (using MP-5:1986)
Canada (ISED)	ICES-001 issue 4; ICES-003 issue 6; ICES-005 issue 4
EU / International	EN 55011; EN 55013; EN 55014-1; EN 55015; EN 55022; EN 55032; CISPR 11; CISPR 13 (<i>only below 1 GHz</i>); CISPR 14-1; CISPR 15; CISPR 22; CISPR 32; AS/NZS CISPR 11; AS/NZS CISPR 13; AS/NZS CISPR 14.1; AS/NZS CISPR 15; AS/NZS CISPR 22; AS/NZS CISPR 32
Japan	VCCI-CISPR 32:2016; J55013 (H22); J55014-1 (H20); J55015 (H20); J55022 (H22)
Korea	KN 11; KN 13; KN 14-1; KN 15; KN 22; KN 32
Taiwan	CNS 13438 (<i>up to 6 GHz</i>)
Current Harmonics and Flicker (International)	IEC 61000-3-2; EN 61000-3-2; KN 61000-3-2; IEC 61000-3-3; EN 61000-3-3; JIS C 61000-3-2; KN 61000-3-3

Test Technology

Test Method(s)

**Intentional Emissions
Unlicensed Transmitters**

U.S. (FCC)

Intentional Radiators 47 CFR, FCC Part 15C (using ANSI C63.10-2013)
Ultra-Wideband (UWB) 47 CFR, FCC Part 15F (using ANSI C63.10-2013)

Canada (ISED)

RSS-GEN; RSS-210; RSS-220; RSS-310

EU / International

ETSI EN 300 220-1; ETSI EN 300 220-2; ETSI EN 300 328;
ETSI EN 300 330; ETSI EN 300 440; ETSI EN 300 440-1;
ETSI EN 300 440-2; ETSI EN 302 065-1; ETSI EN 302 065-2;
ETSI EN 302 066-1; ETSI EN 302 066-2; ETSI EN 302 208;
ETSI EN 302 858-1; ETSI EN 302 858-2; ETSI EN 301 489-1;
ETSI EN 301 489-3; ETSI EN 301 489-6; ETSI EN 301 489-9;
ETSI EN 301 489-17; ETSI EN 301 489-19; ETSI EN 301 489-33;
ETSI EN 301 489-34; ETSI EN 301 489-50;
AS/NZS 4268:2017 Short Range Devices

Korea

KN 301 489-01; KN 301 489-03; KN 301 489-06;
KN 301 489-17; KN 301 489-33; KN 301 489-34

**Intentional Emissions
Licensed Transmitters**

U.S. (FCC)

Signal Boosters 47 CFR, FCC Part 20.21 (using ANSI C63.26:2015 and
FCC Guidance KDB Publication 935210 D03, D04 and D05)
General Mobile Services 47 CFR, FCC Part 22 Non-Cellular, 24, 25, 27, 90 (below 3 GHz),
95, 97 (below 3 GHz), and 101 (below 3 GHz),
(using ANSI C63.26:2015)

Canada (ISED)

(Signal Boosters only)

RSS-GEN; RSS-132; RSS-133; RSS-139

Immunity

Electrostatic Discharge (ESD) IEC/EN 61000-4-2; KN 61000-4-2
Radiated Immunity (Up to 6 GHz) IEC/EN 61000-4-3; KN 61000-4-3
Electrical Fast Transient/Burst IEC/EN 61000-4-4; KN 61000-4-4
Surge Immunity IEC/EN 61000-4-5; KN 61000-4-5
Conducted Immunity (Excluding EM clamp coupling) IEC/EN 61000-4-6; KN 61000-4-6



Test Technology**Test Method(s)**

Power Frequency
Magnetic
Field Immunity

IEC/EN 61000-4-8; KN 61000-4-8

Voltage Dips, Short
Interruptions, and Line
Voltage Variations

IEC/EN 61000-4-11; IEC/EN 61000-4-34; KN 61000-4-11

Multimedia equipment –
Immunity

CISPR35 / EN 55035; KN 35

Medical Equipment –
Immunity

IEC/EN 60601-1-2; KN 60601-1-2

Telecommunications

Voice Frequency

AS/CA S004:2015 - Voice Frequency Performance Requirements for Customer Equipment; AS/ACIF S040:2015 - Requirements for Customer Equipment for Use with the Standard Telephone Service - Features for Special Needs of Persons with Disabilities; ANSI TIA 470B; ETSI TBR 38; FCC Part 68 using IEEE 269-1992 (TSB 31-D Section 14); IC CS-03 Part V, Issue 9, Amendment 1, 2009

T1/DS1

TIA-968-B; TIA-968-B-1,2,3 (using TSB-31-D); IC CS-03 Part II, Issue 9, Amendment 1, 2012; ID 0002; TNA 117:1992

Analog Interfaces

TIA-968-B; TIA-968-B-1,2,3 (using TSB-31-D); IC CS-03, Part I, Issue 9, Amendment 5, 2016; AS/CA S002:2015 - Analogue Interworking and Non- Interference Requirements for Customer Equipment for Connection to the Public Switched Telephone Network; AS/CA S003:2015 - Customer Access Equipment for Connection to a Telecommunications Network; AS/ACIF S040:2015 - Requirements for Customer Equipment for Use with the Standard Telephone Service - Features for Special Needs of Persons with Disabilities; JATE Blue Book; ETSI TBR 21 (ETSI EG 201 121, ETSI TR 103 000-3, ETSI ES 203 021-1, -2, -3); PSTN01; PTC 200; PTC 203; PTC 220; MIC Notice 2004-15; FCC Part 68, using IEEE 269-1992 (TSB 31-D Section 14); DPT-TE-001; TE-009

Network (ISDN)

TIA 968-B; TIA-968-B-1,2,3 (using TSB-31-D); IC CS-03, Part VI, Issue 9, Amendment 1, 2012; ETSI TBR 3; ETSI TBR 4; AS/ACIF S031:2015 - Requirements for ISDN Basic Access Interface; AS/ACIF S038:2015 - Requirements for ISDN Primary Rate Access Interface; IS 6100; JATE Green Book

Test Technology

Test Method(s)

Digital Lease Line

TIA 968-B; TIA-968-B-1,2,3 (using TSB-31-D);
IC CS-03, Part VII, Issue 9, Amendment 4, 2012;
AS/ACIF S016:2015 - Requirements for Customer Equipment
Connected to Hierarchical Digital Interfaces; ETSI TBR 12;
ETSI TBR 13; ETSI TBR 24; ETSI TBR 25; TNA 115;
MIC Notice 2004-15

Digital Subscriber Loop
(DSL)

TIA 968-B; TIA-968-B-1, 2, 3 (using TSB-31-D);
IC CS-03, Part VIII, Issue 9, Amendment 5, 2016;
AS/CA S041.1:2015 - Requirements for DSL Customer Equipment for
Connection to the Public Switched Telephone Network Part 1: General;
AS/CA S041.2:2015 - Requirements for DSL Customer Equipment for
Connection to the Public Switched Telephone Network Part 2: Modems
for Use in Connection with all DSL Services;
AS/CA S041.3:2015 - Requirements for DSL Customer Equipment for
Connection to the Public Switched Telephone Network Part 3: Filters for
Use in Connection with all ADSL Services;
AS/CA S043.1:2015 - Requirements for Customer Equipment for
Connection to a Metallic Local Loop Interface of a Telecommunications
Network Part 1: General;
AS/CA S043.2:2015 - Requirements for Customer Equipment for
Connection to a Metallic Local Loop Interface of a Telecommunications
Network Part 2: Broadband;
AS/CA S043.3:2015 - Requirements for Customer Equipment for
Connection to a Metallic Local Loop Interface of a Telecommunications
Network Part 3: DC, low frequency AC and voiceband;
ADSL01; PTC 270; VDSL01

Serial Interfaces

ETSI TBR 1; ETSI TBR 2; ETSI EN 301 401

**Product Family / Product
Specific Standards
(Generic)**

AS/NZS 61000.6.3; AS/NZS 61000.6.4; AS/NZS 62040.2;
CISPR 14-2; CISPR 20; CISPR 24; EN 50091-2; EN 55014-2;
EN 55020; EN 55024; EN 50130-4; EN 55103-1; EN 55103-2;
EN 55014-2; IEC/EN 60945 (Clauses 9 & 10); IEC/EN 61000-6-1;
IEC/EN 61000-6-2; IEC/EN 61000-6-3; IEC/EN 61000-6-4;
IEC/EN 61326-1; IEC/EN 61326-2-6; IEC/EN 61547;
ETSI EN 300 386; EN 50491-5-2; EN 50491-5-3; EN 63044-5-2;
EN 63044-5-3;
KN 14-2; KN 20; KN 24; KN 61000-6-1; KN 61000-6-2;
KN 61000-6-3; EN 63044-5-2; KN 61000-6-4; KN 61547; KN 60945

On the following products or types of products:

Industrial, Scientific, and Medical (ISM) Equipment; In-Vitro Diagnostic (IVD) Equipment; Information
Technology Equipment (ITE); Multimedia Equipment (MME); Medical Electrical Equipment (ME);
Telecommunications Terminal Equipment (TTE); Lighting Equipment; Household Appliances; Security
Equipment; Intentional Radiators including Bluetooth, RFID, GPR and UWB and other Electronic and
Electrical Equipment

¹When the date, revision or edition of a test method standard is not identified on the scope of accreditation, the laboratory is expected to be using the current version within one year of the date of publication, per part C., Section 1 of A2LA R101 - *General Requirements- Accreditation of ISO-IEC 17025 Laboratories*.

Testing Activities Performed in Support of FCC Declaration of Conformity and Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1²:

Rule Subpart/Technology	Test Method	Maximum Frequency
<u>Unintentional Radiators</u> Part 15B	ANSI C63.4:2014	40000 MHz
<u>Industrial, Scientific, and Medical Equipment</u> Part 18	FCC MP-5 (February 1986)	320000 MHz
<u>Intentional Radiators</u> Part 15C	ANSI C63.10:2013	40000 MHz
<u>UWB Intentional Radiators</u> Part 15F	ANSI C63.10:2013	40000 MHz
<u>Commercial Mobile Services (FCC Licensed Radio Service Equipment)</u> Parts 22 (cellular), 24, 25 (below 3 GHz) and 27	ANSI C63.26:2015	40000 MHz
<u>General Mobile Radio Services (FCC Licensed Radio Service Equipment)</u> Parts 22 (non-cellular), 90 (below 3 GHz), 95, 97 (below 3 GHz), and 101 (below 3 GHz)	ANSI C63.26:2015; KDB Publication 971168	40000 MHz
<u>Signal Boosters</u> Part 20 (Wideband Consumer Signal Boosters, Provider-specific Signal Boosters, and Industrial Signal Boosters)	ANSI C63.26-2015; KDB Publication 935210 D03, D04, D05	40000 MHz

²Accreditation does not imply acceptance to the FCC equipment authorization program. Please see the FCC website (<https://apps.fcc.gov/oetcf/eas/>) for a listing of FCC approved laboratories.



Accredited Laboratory

A2LA has accredited

COMPLIANCE WORLDWIDE, INC.

Sandown, NH

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *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 April 2017).



Presented this 24th day of December 2018.

A blue ink signature of the Senior Director of Accreditation Services.

Senior Director, Accreditation Services
For the Accreditation Council
Certificate Number 1673.01
Valid to September 30, 2020

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