CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Washington Laboratories, Ltd.
4840 Winchester Blvd., Suites 5 and 6
Frederick, Maryland 21703

Fulfills the requirements of

ISO/IEC 17025:2017

and

US Federal Communication Commission (FCC) EMC and Telecommunications (EC&T) Testing Designation Program
and the
Recognition of Telecommunications Testing - Innovation, Science, and Economic Development (ISED) Canada

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 30 June 2022
Certificate Number: AT-1448

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

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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TESTING

Valid to: **June 30, 2022** Certificate Number: **AT-1448**

Testing performed in support of FCC approval procedures for Certification

Type of Device Examples	Scope of Accreditation	Supporting FCC Guidance	Comments
Unintentional Radiators (FCC Part 15, Subpart B)	ANSI C63.4-2014	-	220 GHz
Industrial, Scientific, and Medical Equipment (FCC Part 18) Consumer ISM equipment	FCC MP-5, (February 1986)	-	125 GHz
Intentional Radiators (FCC Part 15, Subpart C)	ANSI C63.10-2013	-	220 GHz
UPCS (FCC Part 15, Subpart D) Unlicensed Personal Communication Systems devices	ANSI C63.17-2013	-	40 GHz
U-NII without DFS Intentional Radiators (FCC Part 15, Subpart E) Unlicensed National Information Infrastructure Devices (U-NII without DFS)	ANSI C63.10-2013	KDB Publication 789033	50 GHz
UWB Intentional Radiators (FCC Part 15, Subpart F) Ultra-wideband Operation	ANSI C63.10-2013	-	220 GHz
BPL Intentional Radiators (FCC Part 15, Subpart G) Access Broadband Over Power Line (Access BPL)	ANSI C63.10-2013	-	40 GHz
White Space Device Intentional Radiators (FCC Part 15, Subpart H) White Space Devices	ANSI C63.10-2013	-	40 GHz

Testing performed in support of FCC approval procedures for Certification

Type of Device Examples	Scope of Accreditation	Supporting FCC Guidance	Comments
Commercial Mobile Services (FCC Licensed Radio Service Equipment) Part 22 (cellular) Part 24 Part 25 (below 3 GHz) Part 27	ANSI/TIA-603-E or TIA-102.CAAA-E-2016 or ANSI C63.26-2015	KDB Publication 971168	220 GHz
General Mobile Radio Services (FCC Licensed Radio Service Equipment) [1] Part 22 (non-cellular) Part 90 (below 3 GHz) Part 95 (below 3 GHz) Part 97 (below 3 GHz) Part 101 (below 3 GHz)	ANSI/TIA-603-E or TIA-102.CAAA-E-2016 or ANSI C63.26-2015	-	220 GHz
Citizens Broadband Radio Services (FCC Licensed Radio Service Equipment) Part 96	ANSI/TIA-603-E or TIA-102.CAAA-E-2016 or ANSI C63.26-2015	KDB Publication 971168 KDB Publication 940660	40 GHz
Maritime and Aviation Radio Services (FCC Licensed Radio Service Equipment) Part 80 Part 87	ANSI/TIA-603-E or ANSI C63-26-2015	-	220 GHz
Microwave and Millimeter Bands Radio Services (FCC Licensed Radio Service Equipment) Part 25 Part 30 Part 74 Part 90 (above 3 GHz) Part 95 (above 3 GHz) Part 97 (above 3 GHz) Part 101	ANSI/TIA-603-E or TIA-102.CAAA-E-2016 or ANSI C63.26-2015	KDB Publication 653005	220 GHz
Broadcast Radio Services (FCC Licensed Radio Service Equipment) Part 73 Part 74 (below 3 GHz)	ANSI/TIA-603-E or TIA-102.CAAA-E-2016 or ANSI C63.26-2015	-	220 GHz
RF Exposure Devices subject to SAR requirements	IEEE Std 1528™-2013	KDB Publication 865664 KDB Publication 447498	40 GHz

Testing performed in support of FCC approval procedures for Certification

Type of Device Examples	Scope of Accreditation	Supporting FCC Guidance	Comments
Signal Boosters (Part 20) Wideband Consumer signal boosters Provider-specific signal boosters Industrial signal boosters Signal Boosters (Section 90.219)	ANSI C63.26-2015	KDB Publication 935210 D03, D04, and D05 [1]	40 GHz

Electromagnetic Compatibility

Field of Test	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used
Emissions Standards	Radiated and Conducted Emissions (40 Hz to 30 GHz)	FCC Part 15 B/C/D/E using, ANSI C63.4 (2009), ANSI C63.4 (2014) & ANSI C63.17 (2013); ANSI C63.10 (2014); FCC Part 18 using FCC OST/MP-05 (1986); FCC Report and Order ET Docket 98-153(FCC 02-48); Procedures IDB 20040420-001; Procedures in IDB 20021108-001 with FCC Method 47 CFR Part 15, Subpart F: DA 00-705 (March 30, 2000) and KDB Pub. No.558074, KDB Pub. No. 200433; DA 02-2138; CISPR 16-1-4 2007 +A1 2007; CISPR 16-1-4:2010 ; CISPR 22 (1997) +A1, (2000) + A2, (2002), CISPR 22 (2005); CISPR 22 (2008) ; EN 55022 (1998) +A1, (2000) + A2, (2003), EN 55022 (2006), +A1 (2007); EN 55022:2010 ; EN 55022:2010 + AC:2011 ; EN55032:2015; AS/NZS CISPR 22; CAN/CSA-CEI/IEC CISPR 22; CISPR 32:2015; CNS 13438(up to 6GHz); KN 32 with (RRA Public Notification 2019-4; CISPR 11 (1997)+A1, (1999)+A2, (2002); CISPR 11: 2004-06;CISPR 11:2009/A1:2010; EN 55011 (1998)+A1, (1999)+A2, (2002); EN 55011:2009 / A1:2010; EN 55011:2016 AS/NZS CISPR 11; CNS 13803 KN 11 with RRA Public Notification 2019-4 Technical Requirements for Electromagnetic Compatibility RRA Public Notification 2018-19, Oct 19, 2018; Test Methods for Electromagnetic Compatibility RRA Announce 2018-128, Dec 24, 2018; RRA Public Notification 2019-3
Emissions Standards	Harmonics Emissions	IEC 61000-3-2 (2000) +A1, (2001) +A2, (2004), IEC 61000-3-2 (2005); IEC 61000-3-2 Ed 4.0: 2014; EN 61000-3-2 (2000) +A2, (2005), + A1:2008; EN 61000-3-2:2006 + A1:2009 + A2:2009; EN 61000-3-2 (2014); AS/NZS 61000-3-2; KN 61000-3-2

Electromagnetic Compatibility

Field of Test	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used
Emissions Standards	Flicker Emissions	IEC 61000-3-3 (1994)+A1, (2001)+A2, (2005), 2008, 2013; EN 61000-3-3 (1995)+A1, (2001)+A2, (2005), 2008, 2013; AS/NZS 61000-3-3; KN 61000-3-3
Emissions Standards	Product Specific Emissions	IEC 61000-6-3; EN 61000-6-3; AS/NZS 61000.6.3; IEC 61000-6-4; EN 61000-6-4; AS/NZS 61000.6.4;CISPR 14-1 (2000) +A1, (2001) +A2, (2002), (excluding measurement of clicks); CISPR 14-1: 2005-11(excluding measurement of clicks); EN 55014-1 (2000)+A1, (2001)+A2, (2002), (excluding measurement of clicks); AS/NZS CISPR 14-1 (excluding measurement of clicks); KN 14-1; KN61000-6-3; KN61000-6-4; RRA Public Notification 2018-19, Oct 19, 2018; RRA Announce 2018-128, Dec 24, 2018 CNS 13783-1 (2001)+A12004, (excluding measurement of clicks); CISPR 25 Ed. 3.0 (2008-03), sections 6.2, 6.3 and 6.4 only CISPR 25: (2016), sections 6.3, 6.4 and 6.5 only
Immunity Standards	ESD Immunity Testing	IEC 61000-4-2 (1995)+A1, (1997)+A2, (1998); IEC 61000-4-2, Ed. 2.0 (2008-12) EN 61000-4-2 (1995)+A1,(1999)+A2, (2001), 2009; KN 61000-4-2 with (RRA Announce 2018-128, Dec 24, 2018)
Immunity Standards	RF Immunity Radiated Immunity (Up to 6.0 GHz, 20 V/m)	IEC 61000-4-3 (1995), A1(1998), A2(2000); IEC 61000-4-3 (2002)+A1, (2002); IEC 61000-4-3 (2006); IEC 61000-4-3, Ed. 3.0 (2006-02) + A1 (2007) + A2 (2010); EN 61000-4-3 (1996), A1(1998), A2 (2001); EN 61000-4-3 (2002)+A1, (2003); EN 61000-4-3 (2006) +A1 (2008) + A2 (2010) KN 61000-4-3 with (RRA Announce RRA Announce 2018-128, Dec 24,2018)
Immunity Standards	EFT	IEC 61000-4-4 (1995) +A1, (2000)+A2, (2001); IEC 61000-4-4 (2004); IEC 61000-4-4, Ed. 2.0 + A1 (2010); IEC 61000-4-4 Ed. 2.1 (2011); IEC 61000-4-4 Ed.3.0 (2012) EN 61000-4-4 (1995) +A1, (2001)+A2, (2002); EN 61000-4-4 (2004) +A1:2010; EN 61000-4-4:2012; KN 61000-4-4 with (RRA Announce 2018-128, Dec 24, 2018)
Immunity Standards	Surge	IEC 61000-4-5 (1995)+A1, (2000), IEC 61000-4-5 (2005);+ Corr 1 (2009); IEC 61000-4-5; Ed 3.0 (2014) EN 61000-4-5 (1995)+A1, (2001), EN 61000-4-5 (2006) EN 61000-4-5 (2014) KN 61000-4-5 with (RRA Announce 2018-128, Dec 24,2018)

Electromagnetic Compatibility

Field of Test	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used
Immunity Standards	Conducted Immunity	IEC 61000-4-6 (1996) +A1, (2001), IEC 61000-4-6 (2003) +A1, (2004) +A2, (2006); IEC 61000-4-6 Ed. 3.0 (2008); IEC 61000-4-6 Ed. 4.0 (2013) EN 61000-4-6 (1996) +A1, (2001), EN 61000-4-6 (2007); EN 61000-4-6 (2009) ; EN 61000-4-6 (2014) KN 61000-4-6 with (RRA Announce 2018-128, Dec 24,2018)
Immunity Standards	Low Frequency Magnetic Immunity	IEC 61000-4-8 (1993)+A1, (2000); IEC 61000-4-8 (2009) EN 61000-4-8 (1994)+A1, (2001); EN 61000-4-8:2010 KN 61000-4-8 with(RRA Announce 2014-38 June 23, 2014)
Immunity Standards	Pulse Magnetic	IEC 61000-4-9 (1993)+A1, (2000); IEC 61000-4-9, Ed 1.1 (2001-03); IEC 61000-4-9, Ed 2.0 (2016) EN 610000-4-9 (1993)+A1, (2001); EN 610000-4-9: (2016); KN 61000-4-9 with(RRA Announce RRA Announce 2018-128, Dec 24,2018)
Immunity Standards	Damped Oscillatory Magnetic	IEC 61000-4-10 (1993)+A1, (2000); IEC 61000-4-10, Ed 1.1 (2001-03); IEC 61000-4-10, Ed 2.0 (2016) EN 61000-4-10 (1993)+A1, (2001); EN 61000-4-10: (2017)
Immunity Standards	Power Dips and Interrupts	IEC 61000-4-11 (1993)+A1, (2000); (2004); IEC 61000-4-11: (2004), +A1(2017) EN 61000-4-11 (1993)+A1, (2001); (2004) KN 61000-4-11with (RRA Announce 2018-128, Dec 24,2018)
Immunity Standards	Ring Wave Immunity	IEC 61000-4-12 (1995) +A1, (2000), IEC 61000-4-12 (2006); EN 61000-4-12 (1995) +A1, (2001), EN 61000-4-12 (2006)
Immunity Standards	Harmonics and Inter-harmonics	IEC 61000-4-13 Ed. 1.1 (2002) + A1 (2009); IEC 61000-4-13 Ed. 1.2 (2015) EN 61000-4-13 (2002) +A1 (2009) +A2(2016)
Immunity Standards	Immunity, Common Mode Disturbances	IEC 61000-4-16, Edition 1.1 (2002-07), IEC 61000-4-16, ed. 1.2 (2011-05), IEC 61000-4-16, Ed 2.0 (2015); EN 61000-4-16 (2016)
Immunity Standards	Immunity, Ripple on D.C. input power	IEC 61000-4-17:1999+A1:2001+A2:2008; EN 61000-4-17:1999, +A2(2009)
Immunity Standards	Damped oscillatory wave immunity test	IEC 61000-4-18 ed1.0 (2006);IEC 61000-4-18 Ed1.1 (2011); EN 61000-4-18 (2007)
Immunity Standards	Immunity, Power Frequency Variation I<16A	IEC 61000-4-28:1999, +A1(2001), +A2(2009) EN 61000-4-28: (2000), +A2(2009)

Electromagnetic Compatibility

Field of Test	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used
Immunity Standards	Immunity, Voltage dips, short interruptions and voltage variations on d.c. input power port	IEC 61000-4-29:2000 EN 61000-4-29:2001
Immunity Standards	Product Specific Immunity	CISPR 24 (1997)+A1, (2001)+A2, (2002); CISPR 24 ed2.0 (2010-08) EN55024 (2010)+A1, (2015); IEC/EN 55025:2017; EN 55035:2017; CISPR 35:2016 AS/NZS CISPR 24:2002 +A1 (2009); KN 35 with RRA Public Notification 2018-19, Oct 19, 2018; RRA Announce 2018-128, Dec 24,2018 EN 61000-6-1; EN 61000-6-2; AS/NZS 4254.1; EN 55103-2; EN 50130-4; ISO 7637-2 KN 61000-6-1; KN 61000-6-2 with (RRA Announce 2018-128, Dec 24,2018)
Immunity Standards	Combined Emissions / Immunity Generic / Specific Standards	IEC 60601-1-2; EN 60601-1-2; KN 60601-1-2 with (RRA Public Notification 2015-27, Dec 3, 2015); RRA Announce 2015-110, Dec 3, 2015; IEC 61326; EN 61326 IEC 60533
Emissions & Immunity Guidance Documents	Combined Emissions / Immunity Generic Reference	Regulatory Guide 1.180 EPRI 102323 Rev 2, EPRI 102323 Rev 3, EPRI 102323 Rev 4; Technical Requirements for Telecommunications Terminal Equipment (RRA Public Notification 2019-4, Feb 25, 2019); Technical Requirements for Electromagnetic Compatibility (RRA Public Notification 2018-19, Oct 19, 2018); Test Methods for Electromagnetic Compatibility (RRA Announce 2018-128, Dec 24, 2018);
Electromagnetic Compatibility Directive (2014/30/EU)	167/2013 Annex XV (Agricultural and Forestry vehicles)	EN 61326-3-1 Ed. 2.0 b:2017, EN/ISO 13309, ISO 11454-1/2 ISO/TR 10605 Annex XV (17.2.2015)

Product Safety

Field of Test	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used
Product Safety	Measurement Control and Lab Use	IEC 61010-1 (2001); IEC61010-1:2010 EN 61010-1 (2001); EN61010-1:2010 UL61010-1 (2008); UL61010-1 (2012); CAN/CSAC22.2 No.61010-1 (2004); CAN/CSA C22.2 No. 61010-1-2012

Product Safety

Field of Test	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used
Product Safety	ITE	IEC 60950-1 (2005); IEC60950-1:2005+A1:2009+A2 :2013; IEC 60950 Ed 2 (2005) +A1+A2+A3+A4+A11; IEC 60950 Ed 2.2 (2013);EN 60950-1 (2006); EN60950-1:2006 + A11:2009; EN60950-1:2006 + A1:2010; EN 60950-1:2006+A11:2009+A1:2010+A12:2011 AS/NZS 60950-1 (2003); AS/NZS 60950.1 (2003) + A1 (2006) + A2 (2008) + A3 (2008) AS/NZS 60950.1 :2011; AS/NZS 60950.1: 2015; ANSI/UL 60950-1 (2007); ANSI/UL 60950-1 (2003) and CAN/CSA 22.2 No. 60950-1 CAN/CSA C22.2 60950-1-07 (2007) CAN/CSA C22.2 No. 60950-1-07 + A11:2009 + A1:2009 + A12:2011; CAN/CSA C22.2 60950-1-07 (R2012) EN 62368-1:2014/AC:2015; IEC 62368-1 Ed2-2014; IEC 62368-1 Ed3-2018; CSA/UL 62368-1:2014
Product Safety	Medical Equipment	IEC 60601-1:1988+ A1:1991 + A2:1995; IEC60601-1:2005+A1:2012 IEC 60601-1-11:2010; IEC 60601-1-11:2015 IEC 60601-2-10:1987 +A1:2001; IEC 60601-2-10: Ed 2.1: 2016 IEC 60601-2-40:1998 EN 60601-1: 1990 +A1:1993 + A2:1995; EN60601-1:2006+A1:2013; EN 60601-1-11:2010 ; EN 60601-1-11:2015; EN 60601-2-10 :2000 + A1:2001 ; EN 60601-2-10: 2015; EN 60601-2-40 :1998; UL60601-1 (2006); AAMI ES60601-1:2010
Product Safety	Machinery	IEC 60204-1:2005 +A1:2008 ; IEC 60204-1Ed 5.1: 2009; EN60204-1:2006 + A1:2009
Product Safety	Transmitters	EN 60215:1989 + A2:1994; IEC 60215:1987 + A2:1993; IEC 60215 Ed 4.0: 2016
Product Safety	Household & Similar Electronics	EN 60335-1:2002 +A14:2010; EN 60335-1 (2012) +A11: 2014 IEC 60335-1:2001 +A2:2006; IEC 60335-1 Ed. 5.0 (2010); IEC 60335-1 Ed. 5.2 (2016); UL60335-1 (2006); UL60335-1 (2011); EN 60335-2-2:2010; IEC 60335-2-2:2009; IEC 60335-2-2 2012-11; IEC 60335-2-2 Ed 6.2: 2016 EN 60335-2-75:2004/A12:2010; IEC 60335-2-75:2012-12; IEC 60335-2-75 Ed 3.1: 2015; EN 60335-2-82:2003/A1:2008; IEC 60335-2-82:2002 + A1:2008; IEC 60335-2-82 Ed 2.2: 2015
Product Safety	Audio, Video and Similar Electronic App.	EN60065:2002 +A2:2010 IEC60065:2001 +A2:2010; IEC 60065 Ed 8.0: 2014; UL60065 (2004); UL 60065: 2015

Product Safety

Field of Test	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used
Product Safety	General (Enclosures)	IEC 60529 Ed 2.2: 2013 Section 13.2 & Subsections 14.2.1, 14.2.2, 14.2.7, 14.2.8 UL94 Ed 6.0: 2013; EN 60529: 1992 +A2: 2013 Section 13.2 & Subsections 14.2.1, 14.2.2, 14.2.7, 14.2.8

Radio

Field of Test	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used
Radio Testing	Australia/New Zealand	AS/NZS 4268, AS/NZS 4295, AS/NZS 4365
Radio Testing	Europe	ETSI EN 300 220-1; ETSI EN 300 328; ETSI EN 300 330-2; ETSI EN 300 390-2;ETSI EN 300 440-2; ETSI EN 301 489-1; ETSI EN 301 489-3; ETSI EN 301 489-4; ETSI EN 301 489-5; ETSI EN 301 489-7; ETSI EN 301 489-8; ETSI EN 301 489-12; ETSI EN 301 489-15; ETSI EN 301 489-17; ETSI EN 300 826; ETSI EN 302 208-1; ETSI EN 302 326-1; ETSI EN 301-489-20; ETSI EN 301 428; ETSI EN 301 441; ETSI EN 301 442; ETSI EN 301-443; ETSI EN 301 459; ETSI EN 301 893; ETSI EN 302 208-2; ETSI EN 300-219-2;ETSI EN 300-219-1; ETSI EN 301 681; ETSI EN 301 426 (sections 4.2.1 and 4.2.2 only); ETSI EN 301 721 (sections 4.2.1, 4.2.2, 4.2.3 and 4.2.4)
Radio Testing	Singapore	IDA TS: EMC, IDA TS GMPCS ITU-R M.1343-1
Radio Testing	USA	TIA/EIA 603-E using 47 CFR Parts 2, (cellular and non-cellular), 4, 25, 26, 27, 74, 80, 87, 90, 95, 97 and 101, ANSI C63.26 (2015)

Radio

Field of Test	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used
Radio Testing	Korea	KN 301- 489-01; KN 301- 489-07; KN 301- 489-17, KN 301- 489-52; Technical Requirements on Radio Equipment (MSIP Public Notification 2016-47, Apr 22, 2016); Unlicensed Radio Equipment Established Without Notice(MSIT Public Notification 2019-74, Aug 30, 2019); Technical Requirements for Radio Equipment for Telecommunication Services (RRA Public Notification 2019-9, Jun 3, 2019); Technical Requirements of other Radio services for Simple Radio station, Space Station and Earth Station (RRA Public Notification 2018-26, Nov 13, 2018); Technical Requirements of Radio Wave Application(RRA Public Notification 2016-20, Sep 27, 2016) Technical Requirements for the Human Protection against Electromagnetic Waves (MSIT Public Notification 2019-4, Jan 16, 2019); Technical Requirements for Measurement of Electromagnetic Field Strength (RRA Public Notification 2019-3, March 4, 2019), Assessment Procedure of Radio Equipment KS X 3123 (RRA Announce 2018-19, Oct 19, 2018) Technical Requirements for Electromagnetic Compatibility (RRA Public Notification 2018-19, Oct 19, 2018); with RRA Announce 2018-128, Dec 24, 2018; Test Technical Requirements for Telecommunications Terminal Equipment (RRA Public Notification 2019-9, Jun 3, 2019)

Radio

Field of Test	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used
Radio Testing	Canada	RSS-Gen Issue 5, 4-2018; RSS GEN Issue 5, 3-2019 RSS-102 (RF Exposure excluding SAR) Issue 5, 3-2015; RSS-111 Issue 5, 9-2014; RSS-112 Issue 1, 2-2008 RSS-117 Issue 3, 1-2016; RSS-119 Issue 12, 5-2015 RSS-123 Issue 4, 8-2019; RSS-125 Issue 3, 6-2020; RSS-127 Issue 1, 8-2009; RSS-130 Issue 2, 2-2019 RSS-131 Issue 3, 5-2017; RSS-132 Issue 3, 1-2013 RSS-133 Issue 6, 1-2018; RSS-134 Issue 2, 2-2016 RSS-135 Issue 2, 6-2009; RSS-137 Issue 2, 2-2009 RSS-139 Issue 3, 7-2015; RSS-141 Issue 2, 6-2010 RSS-142 Issue 5, 4-2013; RSS-170 Issue 3, 7-2015 RSS-181 Issue 2, 8-2019; RSS-182 Issue 5, 1-2012 RSS-191 Issue 3, 4-2008; RSS-192 Issue 4, 5-2020 RSS-194 Issue 1, 10-2007; RSS-195 Issue 2, 4-2014 RSS-210 Issue 10, 12-2019; RSS-211 Issue 1, 3-2015 RSS-215 Issue 2, 6-2009, RSS-216 Issue 2, 1-2016; RSS-220 Issue 1, Amendment 1 7-2018; RSS-236 Issue 1, 9-2012; RSS-238 Issue 1, 7-2013; RSS-243 Issue 3, 2-2010; RSS-244 Issue 1, 6-2013; RSS-247 (Excluding DFS) Issue 2, 2-2017; RSS-251 Issue 2, 7-2018; RSS-287 Issue 2, 4-2014 RSS-288 Issue 1, 1-2012; RSS-310 Issue 5, 1-2020
Military EMC	Conducted Emissions	MIL-STD-461E, F, G: Methods CE101, CE102, CE106; MIL-STD-462D: Methods CE101, CE102, CE106; MIL-STD-462: Methods CE01, CE02, CE03, CE06
Military EMC	Radiated Emissions	MIL-STD-461E, F, G: Methods RE101, RE102 and RE103; MIL-STD-462D: Methods RE101, RE102 and RE 103; MIL-STD-462: Methods RE01, RE02 and RE03
Military EMC	Conducted Susceptibility	MIL-STD-461E, F, G: Methods CS101, CS 103; CS 104; CS 105,CS109, CS114, CS115, CS116; MIL-STD-462D: Methods CS101, CS103, CS114, CS115, CS116;CS118; MIL-STD-462: Methods, CS01, CS02, CS03, CS04, CS05, CS06, CS08
Military EMC	Radiated Susceptibility	MIL-STD-461E, F, G: Methods RS101, RS103; MIL-STD-461/462D: Methods RS101, RS103
Military EMC	Vehicle Power	MIL-STD-1275 (A, B, C, D, E)

Radio

Field of Test	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used
Military EMC	Aircraft Power	MIL-STD-704 (A, B, C, D, F, G)
Military EMC	Ship Power	MIL-STD-1399 S300 (A, B); MIL-STD-1399 S390
Military EMC	Magnetics (Shipboard)	DOD-STD-1399 S-070
Airborne Equipment	Magnetic Effect	RTCA DO-160E, F, G: Section 15
Airborne Equipment	Power Input	RTCA DO-160E, F, G: Section 16
Airborne Equipment	Voltage Spikes	RTCA DO-160E, F, G: Section 17
Airborne Equipment	Audio Frequency Conducted Susceptibility	RTCA DO-160E, F, G: Section 18
Airborne Equipment	Induced Signal Susceptibility	RTCA DO-160E, F, G: Section 19
Airborne Equipment	Conducted Susceptibility and Radiated Susceptibility	RTCA DO-160E, F, G: Section 20.4 Section 20.5
Airborne Equipment	Conducted and Radiated Emissions	RTCA DO-160E, F, G: Section 21.4 Section 21.5
Airborne Equipment	Lighting Induced Transient Susceptibility	RTCA DO-160E, F, G: Section 22
Airborne Equipment	ESD	RTCA DO-160E, F, G: Section 25
The Radio Equipment Directive (RED) 2014/53/EU	Private/Professional Mobile Radio Transmission Systems	IMT Cellular Network; Essential requirements of article 3.2, Part 1: EN 301-908- v.11.1.1, EN 301-360 V2.1.1 (2016) EN 301-358 V1.1.1 (2001), EN 303-213-6-1 V2.1.1

Environmental

Field of Test	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used
Environmental	Humidity	MIL-STD-810, Method 507.4; 507.5; 507.6
Environmental	Salt Fog	MIL-STD-810: Method 509
Environmental	Immersion	MIL-STD-810, Method 512.4; 512.5; 512.6
Environmental	Vibration	MIL-STD-810: Method 514.5, 514.6; 514.7
Environmental	Shock	MIL-STD-810: Method 516.5; 516.6; 516.7

Environmental

Field of Test	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used
Environmental	Temperature and Altitude	RTCA DO-160E, F, G: Section 4
Environmental	Temperature Variation	RTCA DO-160E, F, G: Section 5
Environmental	Humidity	RTCA DO-160E, F, G: Section 6
Environmental	Operational Shocks and Crash Safety	RTCA DO-160E, F, G: Section 7
Environmental	Vibration	RTCA DO-160E, F, G: Section 8
Environmental	Waterproofness	RTCA DO-160E, F, G: Section 10
Environmental	Fluids Susceptibility	RTCA DO-160E, F, G: Section 11
Environmental	Salt Fog	RTCA DO-160E, F, G: Section 14
Environmental	Flammability	RTCA DO-160E, F, G: Section 26
Environmental	Cold	IEC60068-2-1
Environmental	Dry Heat	IEC60068-2-2
Environmental	Steady State Damp Heat	IEC60068-2-3
Environmental	Sinusoidal Vibration	IEC60068-2-6
Environmental	Salt Mist	IEC60068-2-11
Environmental	Low Air Pressure	IEC60068-2-13
Environmental	Change of Temperature	IEC60068-2-14
Environmental	Shock	IEC60068-2-27
Environmental	Bump	IEC60068-2-29
Environmental	Cyclic Damp Heat	IEC60068-2-30
Environmental	Drop and Topple	IEC60068-2-31
Environmental	Free Fall	IEC60068-2-32
Environmental	Cyclic Composite Temperature and Humidity	IEC60068-2-38
Environmental	Combined Cold / Low Air Pressure	IEC60068-2-40

Environmental

Field of Test	Specific Tests or Properties Measured	Specification, Standard Method, or Technique Used
Environmental	Combined Dry Heat / Low Air Pressure	IEC60068-2-41
Environmental	Immersion in Cleaning Solvents	IEC60068-2-45
Environmental	Combined Cold / Vibration	IEC60068-2-50
Environmental	Combined Dry Heat / Vibration	IEC60068-2-51
Environmental	Cyclic Salt Mist	IEC60068-2-52
Environmental	Test Cb: Damp Heat Steady State	IEC60068-2-56
Environmental	Test Fh: Broadband Random Vibration	IEC60068-2-64
Environmental	Test Xc: Fluid Contamination	IEC60068-2-74
Environmental	Test Cab: Damp heat, steady state	IEC60068-2-78

Note:

1. For Signal Boosters (Part 20) accreditation is required for Commercial Mobile Services (FCC Licensed Radio Services Equipment) and for Signal Booster (Section 90.219) accreditation is required for General Mobile Radio Services (FCC Licensed Radio Service Equipment).
2. This scope of accreditation covers Customer Site Testing.
3. This scope is formatted as part of a single document including Certificate of Accreditation No. AT-1448

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