SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

QAI LABORATORIES LTD. [1]
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ELECTRICAL

Valid To: October 31, 2024 Certificate Number: 3657.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory at the location listed above, ***as well as the satellite laboratory location listed below***, to perform the following tests:

Test Technology:	**Test Method(s)[2, 3]:**
Australia/New Zealand	
Emissions[4]	AS CISPR 11:2017; AS/NZS CISPR 15; AS/NZS CISPR 15 (2011); AS/NZS CISPR 32; AS/NZS 61000.6.3; AS/NZS CISPR 14-1; AS/NZS CISPR 14-1 (2013); AS/NZS 61000.6.4; AS/NZS 61000.6.4 (2012)
Harmonics[4]	AS/NZS 61000.3.2
Flicker[4]	AS/NZS 61000.3.3
Generic, Product Family and Industry Standards[4]	AS/NZS 61000-6-1; AS/NZS 61000-6-2; AS/NZS CISPR 14-1; AS/NZS CISPR 14-2
Automotive	AS/NZS CISPR 12; AS/NZS CISPR 12:2013; AS/NZS CISPR 25; AS/NZS CISPR 25 (2010)
Radio Communications	AS/NZS 4268:2017; AS/NZS 4280.1:2017; AS/NZS 4280.2:2017; AS/NZS 4281:2007; AS/NZS 4295:2015; AS/NZS 4768.1 to .3; AS/NZS 4769.1 & .2; AS/NZS 4330:2006; AS/NZS 4770:2000; AS/NZS ETSI EN 301 025: 2018; AS/NZS ETSI EN 301 178: 2018; AS/NZS ETSI EN 302 885: 2018; AS/NZS 4355;

Test Technology:	**Test Method(s)[2, 3]:**
Radio Communications (cont.)	AS/NZS 4365; AS/NZS 4583; AS/NZS 4771; AS/CA S042.1; AS/CA S042.3; AS/CA S042.4
RF Exposure[4]	ARPANSA RPS S-1; AS/NZS 2772.1; AS/NZS 2772.2; ARPANSA RPS3
Canada	
Emissions[4]	ANSI C63.4; ANSI C63.4-2014; CEI/IEC CAN/CSA-CISPR 32; CAN/CSA C108.6-M91; ICES-001; ICES-003; ICES-004; ICES-005; ICES-006; ICES-008;
Automotive	ICES-002; CAN/CSA CISPR 12; CAN/CSA-CEI/IEC CISPR 12; CAN/CSA-CEI/IEC CISPR 281.2-12
Radio Testing	RSS-GEN; RSS-102 measure (NS & RF Exposure); RSS-111; RSS-112; RSS-117; RSS-119; RSS-123; RSS-125; RSS-127; RSS-130; RSS-131; RSS-132; RSS-133; RSS-197; RSS-199; RSS-210; RSS-211; RSS-213; RSS-215; RSS-216; RSS-220; RSS-222; RSS-236; RSS-134; RSS-135; RSS-137; RSS-139; RSS-140; RSS-141; RSS-142; RSS-170; RSS-181; RSS-182; RSS-191; RSS-192; RSS-194; RSS-195; RSS-196; RSS-238; RSS-243; RSS-244; RSS-246; RSS-247; RSS-251; RSS-252; RSS-287; RSS-288; RSS-310; SRSP-325.25; SRSP-338.6; ICES-GEN; BETS-1; BETS-4 (EMC only); BETS-5 (EMC only); BETS-6; BETS-7 (EMC only); BETS-8; BETS-9 (EMC only)
RF Exposure[4]	Health Code 6
European Union	
Emissions[4]	EN 55011; EN 55013; EN 55014-1; EN 55015; EN 55032; EN 61000-6-3; EN 61000-6-4

Test Technology:	**Test Method(s)[2, 3]:**
Harmonics[4]	EN 61000-3-2
Flicker[4]	EN 61000-3-3
Generic, Product Family and Industry Standards[4]	EN 61000-6-1; EN 61000-6-2; EN 61000-3-11; EN 61000-3-12; EN 61000-2-4; EN 61547; EN 50121-1; EN 50121-2; EN 50121-3-2; EN 50121-4; EN 50121-5; EN 50130-4; EN 55014-2; EN 55020; EN 55035; EN 50083-2; EN 50155; EN 50131-2-2; EN 50131-5-3; EN 62040-2; EN 50293; EN 61000-2-2; EN 60974-1; EN 12184; EN 13309; EN 61439-1; EN 61800-3; EN 61000-6-5 EN 50065-1; EN 61204-3; EN 61557-12; EN 62135-2; EN 617; EN 618; EN 619; EN 620; EN 12015; EN 12016; EN 50065-2-2; EN 50065-2-3; EN 50370-1; EN 50370-2; EN 50470-1; EN 50491-5-1; EN 50491-5-2; EN 50491-5-3; EN 55103-2; EN 60945; EN 50512; EN 55103-1; EN 60870-2-1; EN 61058-1; EN 60947-1
Electrostatic Discharge[4]	EN 61000-4-2
Radiated Immunity	EN 61000-4-3
Electrical Fast Transient [4]	EN 61000-4-4
Surge[4]	EN 61000-4-5
Conducted Immunity[4]	EN 61000-4-6
Magnetic Field Immunity[4]	EN 61000-4-8
Pulse Magnetic Field	EN 61000-4-9
Damped Oscillatory Magnetic Field	EN 61000-4-10
Dips, Short Interrupts, Voltage Variations[4]	EN 61000-4-11
Ring Wave[4]	EN 61000-4-12
Harmonics and Interharmonics[4]	EN 61000-4-13
Common Mode Disturbance[4]	EN 61000-4-16
Automotive	EN 55012; EN 55025; EN 50498; EN 12895; EN 14010; EN 50065-2-1; EN 50121-3-1
Medical and Laboratory[4]	EN 60601-1-2; EN 61326-1; EN 61326-2-1; EN 61326-2-2; EN 61326-2-3; EN 61326-2-4; EN 61326-2-5; EN 61326-2-6
Radio Communications	ETSI TS 102 883; ETSI EN 103 361; ETSI EN 300 065; ETSI EN 300 086; ETSI EN 300 113; ETSI EN 300 197; ETSI EN 300 198; ETSI EN 300 220-1; ETSI EN 300 220-2; ETSI EN 300 220- 3; ETSI EN 300 220-4; ETSI EN 300 220-3-1;

Test Technology:	**Test Method(s)[2, 3]:**
Radio Communications (cont.)	ETSI EN 300 220-3-2; ETSI EN 300 224; ETSI EN 300 341; ETSI EN 300 296; ETSI EN 300 328; ETSI EN 300 330; ETSI EN 300 373-1; ETSI EN 300 373-2; ETSI EN 300 373-3; ETSI EN 300 386; ETSI EN 300 390; ETSI EN 300 433; ETSI EN 300 422-1&2; ETSI EN 300 440; ETSI EN 300 487; ETSI EN 300 674-2-1; ETSI EN 300 674-2-2; ETSI EN 300 683; ETSI EN 301 178; ETSI TR 103 524; ETSI EN 301 360; ETSI EN 301 426; ETSI EN 301 427; ETSI EN 301 428; ETSI EN 301 430; ETSI EN 301 459; ETSI EN 301 489-1 to 26; ETSI 301 489-27 to 34; ETSI EN 301 489-50; ETSI EN 301 489-52; ETSI EN 301 502; ETSI EN 301 511; ETSI EN 301 526; ETSI EN 301 783; ETSI EN 301 841-3; ETSI EN 301 842-5; ETSI EN 301 843-1, 2, 4 to 7; ETSI EN 301 893; ETSI EN 301 908-1 to 22; ETSI EN 301 929; ETSI EN 302 017; ETSI EN 302 018; ETSI EN 302 054; ETSI EN 302 065-1 to 5; ETSI EN 302 066; ETSI EN 302 208; ETSI EN 302 248; ETSI EN 302 296; ETSI EN 302 454; ETSI EN 302 502; ETSI EN 302 567; ETSI EN 302 571; ETSI EN 302 608; ETSI EN 302 609; ETSI EN 302 858; ETSI EN 303 098-2; ETSI EN 303 132; ETSI EN 303 135; ETSI EN 303 204; ETSI EN 303 276; ETSI EN 303 339; ETSI EN 303 402; ETSI EN 303 406; ETSI EN 303 413; ETSI EN 303 417; ETSI EN 303 609; ETSI EN 303 883; 3GPP TS 37.113; C-IS2031-0 (IS2031-0); C-IS2034-1 (IS2034-1); ETSI EN 301-489-51
RF Exposure[4]	EN 62233; EN 50364; EN 62311; EN 62479; EN 62493; EN 50360 (MPE Cal only); EN 50385; EN 50401; DNVGL-CG-0339 (EMC Only)
Hong Kong	HKCA 1002; HKTA 1003; HKTA 1004; HKTA 1005; HKTA 1006; HKCA 1007; HKCA 1008; HKTA 1010; HKCA 1015; HKTA 1016; HKTA 1019; HKCA 1020; HKCA 1022; HKTA 1026; HKCA1033; HKCA 1034; HKCA 1035; HKTA 1036; HKTA 1037; HKTA 1039; HKCA 1041; HKCA 1042; HKCA 1043; HKCA 1044;

Test Technology:	**Test Method(s)[2, 3]:**
Hong Kong (cont.)	HKTA 1045; HKCA 1046; HKTA 1047; HKCA 1048; HKTA 1049; HKTA 1050; HKTA 1051; HKCA 1052; HKCA 1053; HKCA 1054; HKTA 1056; HKTA 1057; HKTA 1061; HKCA 1064; HKCA 1065; HKCA 1066; HKCA 1067; HKCA 1068; HKCA 1069; HKCA 1070; HKCA 1071; HKCA 1072; HKCA 1073; HKCA 1074; HKCA 1075; HKCA 1076; HKCA 1077; HKCA 1078; HKCA 1080; HKTA 1260; HKTA 1263; HKTA 1266; HKTA 1277; HKTA 1283
International	
Emissions[4]	CISPR 11; CISPR 13; CISPR 14-1; CISPR 15; CISPR 32; IEC 61000-6-3; IEC 61000-6-4
Harmonics[4]	IEC 61000-3-2; IEC 61000-3-12
Flicker[4]	IEC 61000-3-3; IEC 61000-3-11
Generic, Product Family and Industry Standards	CISPR 14-2; CISPR 20; CISPR 32; CISPR 35; IEC 60255-22-2; IEC 60255-22-3; IEC 60255-22-4; IEC 60255-22-5; IEC 61000-6-1; IEC 61000-6-2; IEC C37.90.1; IEC 61000-3-2; IEC 61000-3-3; IEC 61000-3-11; IEC 61000-3-12; IEC 61000-4-2; IEC 61000-4-3; IEC 61000-4-4; IEC 61000-4-5; IEC 61000-4-6; IEC 61000-4-8; IEC 61000-4-9; IEC 61000-4-10; IEC 61000-4-11; IEC 61000-4-12; IEC 61000-4-13; IEC 61000-4-16; IEC 61000-4-18; IEC 61000-2-4; IEC 61547; IEC 62040-2; IEC 60533; IEC 61000-2-2; IEC 12184; IEC 62236-3; IEC 62236-4; IEC 62236-5; IEC 62236-3-2; IEC 62443; IEC 61000-6-5; IEC 61204-3; IEC 61557-12; IEC 62135-2; IEC 61058-1; IEC 60945; IEC 60947-1; IEC 60870-2-1; IEC 60255-22-4; IEC C37.90.1
Electrostatic Discharge[4]	IEC 61000-4-2; IEEE C37.90.2; IEC 60255-22-2
Radiated Immunity	IEC 61000-4-3; IEC 60255-22-3
Electrical Fast Transient[4]	IEC 61000-4-4; IEC 60255-22-4
Surge[4]	IEC 61000-4-5; IEC C37.90.1; IEC 60255-22-5; IEEE C62.45; IEEE C37.90.1; IEEE C62.41.1; IEEE C62.41.2
Conducted Immunity[4]	IEC 61000-4-6; IEC 61000-4-16; IEC 61000-2-4
Magnetic Field Immunity	IEC 61000-4-8
Pulse Magnetic Field	IEC 61000-4-9
Damped Oscillatory Magnetic Field	IEC 61000-4-10
Dips, Short Interrupts, Voltage Variations[4]	IEC 61000-4-11

Test Technology:	**Test Method(s)[2, 3]:**
Ring Wave[4]	IEC 61000-4-12
Harmonics & Inter-harmonics[4]	IEC 61000-4-13
Common Mode Disturbance[4]	IEC 61000-4-16
Automotive, Railway & Earth Moving Automotive, Railway & Earth Moving (cont.)	CISPR 12; CISPR 25; IEC 61851-21-2; ISO 10605; ISO 11451-1; ISO 11451-2; ISO 11451-3; ISO 11451-4; ISO 11452-1; ISO 11452-2; ISO 11452-4; ISO 11452-7; ISO 11452-8; ISO 11452-9; ISO 7637-1; ISO 7637-2; ISO 7637-3; ISO 7637-4; ISO 7637-5; ISO 16750-2; IEC 62236-1; IEC 62236-2; IEC 61800-3; SAE J1113-1; SAE J1113-4; SAE J1113-11; SAE J1113-12; SAE J1113-13; SAE J1113-21; SAE J1113-26; SAE J1113-41; SAE J1113-42; UNECE R10; VW TL 81000 (Excluding RI); UL 2231-2 Ed. 2- Clause 24; ABYC S-31; ISO 13766; ISO 13766-1; ISO 13766-2; ISO 14982
Medical& Laboratory Equipment (EMC Only)[4]	IEC 60601-1-2; IEC 61326-1; IEC 61326-2-1; IEC 61326-2-2; IEC 61326-2-3; IEC 61326-2-4; IEC 61326-2-5; IEC 61326-2-6; ISO 10651; ISO 18562-1; ISO 10993-1; ISO 80601-2-12; ISO/TR 13154
IEEE & ANSI	ANSI/IEEE C37.90; ANSI C12.1; ANSI C12.20; ANSI C136.2
Lloyd's Register	Lloyd's Register Type Approval System Test Specification Number1 (Sections 8, 9, and 21-30) ABS-Rules for Building and Classing – Steel Vessels (Sections 11 to 18); ABS-Rules for Building and Classing – Steel Vessels – Part 4 – Chapter 9 – Section 8 – Table 1 (No.1)
RF Exposure[4]	IEC 62233; ANSI/IEEE C95.1; IEEE C95.3; IEEE C95.3.1; IEEE C95.6; IEEE C95.7
Japan	
Emissions[4]	VCCI V-3 (up to 6 GHz); VCCI V-32-1; VCCI-CISPR 32:2016 (up to 6 GHz)
Harmonics[4]	JIS C 61000-3-2
Generic, Product Family and Industry Standards	JEITA IT-3001; JIS T 0601-1-2; JIS C 1806-1
Electrostatic Discharge (ESD)[4]	JIS C 61000-4-2
Radiated Immunity	JIS C 61000-4-3
Electrical fast Transient	JIS C 61000-4-4; JIS C 1000-4-4
Surge	JIS C 61000-4-5; JIS C 1000-4-5
Conducted Immunity	JIS C 61000-4-6; JIS C 1000-4-6
Magnetic Field;	JIS C 61000-4-8; JIS C 1000-4-8
Pulse Magnetic Field	JIS C 1000-4-9

Test Technology:	**Test Method(s)[2, 3]:**
Dips, Short Interrupts, Voltage Variations[4]	JIS C 1000-4-11
Radio Communications	MIC Article 2-1 Japan- Public Notice of MIC No.88 (2004) Annex 43; Article 2 Paragraph 1 item (6); Article 2 Paragraph 1 item (6)-2; Article 2 Paragraph 1 item (6)-2-2; Article 2 Paragraph 1 item (6)-3; Article 2 Paragraph 1 item (8); Article 2 Paragraph 1 item (11)-6-2; Article 2 Paragraph 1 item (11)-6-4; Article 2 Paragraph 1 item (11)-7; Article 2 Paragraph 1 item (11)-9; Article 2 Paragraph 1 item (11)-10-2; Article 2 Paragraph 1 item (11)-19; Article 2 Paragraph 1 item (11)-20; Article 2 Paragraph 1 item (11)-20-2; Article 2 Paragraph 1 item (11)-20-3; Article 2 Paragraph 1 item (11)-21; Article 2 Paragraph 1 item (11)-21-2; Article 2 Paragraph 1 item (11)-22; Article 2 Paragraph 1 item (11)-23; Article 2 Paragraph 1 item (11)-24; Article 2 Paragraph 1 item (11)-29; Article 2 Paragraph 1 item (11)-30; Article 2 Paragraph 1 item (11)-31; Article 2 Paragraph 1 item (11)-32; Article 2 Paragraph 1 item (19); Article 2 Paragraph 1 item (19)-2; Article 2 Paragraph 1 item (19)-2-2; Article 2 Paragraph 1 item (19)-2-3; Article 2 Paragraph 1 item (19)-3; Article 2 Paragraph 1 item (19)-3-2; Article 2 Paragraph 1 item (19)-3-3; Article 2 Paragraph 1 item (19)-4-2; Article 2 Paragraph 1 item (19)-4-3; Article 2 Paragraph 1 item (19)-5; Article 2 Paragraph 1 item (19)-6; Article 2 Paragraph 1 item (19)-7; Article 2 Paragraph 1 item (19)-8;

Test Technology:	**Test Method(s)[2, 3]:**
Radio Communications (Cont.)	ARIB Standard STD-T57; ARIB Standard STD-T66; Article 2 Paragraph 1 item (19)-9; Article 2 Paragraph 1 item (19)-10; Article 2 Paragraph 1 item (19)-11; Article 2 Paragraph 1 item (53); Article 2 Paragraph 1 item (54); Article 2 Paragraph 1 item (54)-2; Article 2 Paragraph 1 item (54)-3; Article 2 Paragraph 1 item (54)-4 ARIB Standard STD-T67; ARIB Standard STD-T70; ARIB Standard STD-T81; ARIB Standard STD-T82
Israel	
Generic, Product Family and Industry Standard [4]	SI 961 Part 32; SI 961 Part 6.2
Korea	
Emissions[4]	KN 13; KS C 9815; KS C 9832; KS C 9811; KS C 9610-6-3; KS C 9610-6-4; KS C 9814-1
Harmonics[4]	KS C 9610-3-2; KS C 9610-3-12
Flicker[4]	KS C 9610-3-3; KS C 9610-3-11
Generic, Product Family and Industry Standards	KS C 9547; KS C 9610-6-1; KS C 9610-6-2; KS C 9610-6-3; KS C 9610-6-4; KS C 9814-2; KS C 9835; KS C 9974-10; KS C 9610-2-2; KS C IEC 60601-1-2
Electrostatic Discharge[4]	KS C 9610-4-2
Radiated Immunity	KS C 9610-4-3
Electrical fast Transient[4]	KS C 9610-4-4
Surge[4]	KS C 9610-4-5
Conducted Immunity[4]	KS C 9610-4-6
Magnetic Field	KS C 9610-4-8
Pulse Magnetic Field	KS C 9610-4-9
Dips, Short Interrupts, Voltage Variations[4]	KS C 9610-4-11
Radio Communications	Regulations on Radio Equipment (Ordinance of MSIT No. 86, Jan 4, 2022); Unlicensed Radio Equipment Established Without Notice (MSIT Public Notification 2022-75, Dec 30th, 2022);

Test Technology:	**Test Method(s)[2, 3]:**
Radio Communications (Cont.)	Technical Requirements for Radio Equipment for Maritime Services (RRA Public Notification 2021-20, Nov 17, 2021); Technical Requirements for Radio Equipment for Aeronautical Services (RRA Public Notification 2023-8, Apr 19th, 2023); Technical Requirements for Radio Equipment for Telecommunication Services (RRA Public Notification 2022-15, Jul 29, 2022); Technical Requirements of the Other Service Radio Equipment for Simple radio station, Space station and Earth station (RRA Public Notification 2023-5, Apr 3th, 2023); Technical Requirements of Radio Wave Application (RRA Public Notification 2022-28, Dec 30th, 2022).Korea only; Measurements of the High-frequency Output of Radio Wave Application Equipment and Antenna Power Calculation Methods (RRA Public Notification 2016-2, Apr 4, 2016) Korean only; KS X 3123; KS X 3124; KS X 3125; KS X 3126; KS X 3127; KS X 3128; KS X 3130; KS X 3131; KS X 3132; KS X 3134; KS X 3136; KS X 3137; KS X 3138; KS X 3139; KS X 3140; KS X 3270; KS X 3271
RF Exposure	Technical Requirements for Measurement of Electromagnetic Field Strength (RRA Public Notification 2021-22, Nov 29th, 2021)
Singapore	
Generic, Product Family and Industry Standards	IMDA TS EMC
Radio Communications	IMDA TS SRD; IMDA TS AR; IMDA TS WBA; IMDA TS LMR; IMDA TS RPG; IMDA TS CBS; IMDA TS UWB; IMDA TS GMPCS; IMDA TS CMT; IMDA TS WSD; IMDA TS IOT; IMDA TS DSRC; IMDA TS DVB -T2 IRD
South Africa	
Emissions	SANS 211; SANS 222; SANS 215; SANS 2200; SANS 2332
Generic, Product Family and Industry Standards	SANS 224; SANS 213; SANS 2335; SANS 14-2; SANS 61547; SANS 60439-1; SANS 60439-2; SANS 61204-3; SANS 61326; SANS 61800-3; SANS 620404-2
Automotive	SANS 212
Vietnam	
Emissions	TCVN 7189:2009
Generic, Product Family and Industry Standards	QCVN 118:2018/BTTTT; TCVN 7317:2003; QCVN 101:2016/BTTTT; QCVN 112:2017/BTTTT; QCVN 114:2017/BTTTT

Test Technology:	**Test Method(s)[2, 3]:**
Radio Communications	QCVN 11:2010/BTTTT; QCVN 12:2015/BTTTT; QCVN 13:2010/BTTTT; QCVN 14:2010/BTTTT; QCVN 15:2015/BTTTT; QCVN 16:2010/BTTTT; QCVN 18:2014/BTTTT; QCVN 47:2015/BTTTT; QCVN 54:2011/BTTTT; QCVN 55:2011/BTTTT; QCVN 65:2011/BTTTT; QCVN 73:2013/BTTTT; QCVN 74/2013/BTTTT; QCVN 75:2013/BTTTT; QCVN 76:2013/BTTTT; QCVN 95:2015/BTTTT; QCVN 96:2015/BTTTT; QCVN 99:2015/BTTTT; TCVN 7189 (2009); TCVN 7317 (2003)
Taiwan/Chinese Taipei	
Emissions	GB 4343.1; CNS 13803; CNS 13438 (up to 6 GHz); CNS 13783-1; CNS 15936 (2026); IP0001; LP0002
Harmonics	GB 17625.1
Flicker	GB 17625.2
Generic, Product Family and Industry Standards	CNS 14115; CNS 13783-2; CNS 13438 (up to 6 GHz); CNS 13306 CNS 14674-1 to -3; CNS 14676-1 to -10; CNS 14934-2 & -3; GB 9706.9
Radio Equipment	RTTE01; IS2034-1
RF Exposure	CNS 14958-1; CNS 14959
USA	
Emissions[4]	47 CFR PART 15B (using ANSI C63.4 :2014); 47 CFR PART 18 (using FCC MP-5 :1986); ANSI C63.4
Intentional Radiators (Excluding SAR)	47 CFR Part 15 C/D/E/F/G/H (using ANSI C63.10:2013, ANSI C63.17:2013, and/or FCC KDB 905462 D02 (v02)); 47 CFR Parts 30, 22 (cellular), 24, 25, and 27, 30, 73, 74, 80, 87 90, 95, 96, and 97 101(using ANSI/TIA 603-E, TIA-102.CAAA-E and/or ANSI C63.26:2015)
NEBS	GR-1089
Medical and Laboratory[4]	UL 1069 – Clauses 29 & 31; UL 2560 – Clauses 29 & 31; AIM 7351731 Section 20 Radiated (*20V/m from 10 kHz to 80MHz and 200 V/m from 80MHz to 18 GHz at 1m*) (No reverb capability)
Avionic EMC Testing	RTCA/DO 160 C (Section 15 to 20); RTCA/DO 160 D/E/F/G (Section 15 to 22 & 25); SAE AS 6023

Test Technology:	**Test Method(s)[2, 3]:**
Military EMC Testing	MIL-STD 1275 B/C/D/E; MIL-STD-188-125-1; MIL-STD-704A; MIL-STD-704F; 28 VDC Power Test Methods specified in MIL-HDBK-704-1 (dated 9 April 2004) and MIL-HDBK-704-8 (dated 9 April 2004) Single Phase 115 VAC 60 Hz Power Test Methods specified in MIL-HDBK-704-1 (dated 9 April 2004) and MIL-HDBK-704-6 (09 April 2004) MIL-STD-1399/300B; MIL-STD 461(A/B/C) and 462 (CE01, CE02, CE03, CE04, CE05, CE06, CE07, RE01, RE02, RE03, CS01, CS02, CS03, CS04, CS05, CS06, CS07, CS09, CS10, CS11, CS12, RS01, RS03 Section 20 Radiated (*20V/m from 10 kHz to 80MHz and 200 V/m from 80MHz to 18 GHz at 1m*) (No reverb capability); MIL-STD 461D and 462D (CE101, CE102, CE106, RE101, RE102, RE103, RS101, RS103 (*20 V/m from 10 kHz to 80MHz and 200 V/m from 80MHz to 18 GHz at 1m*) (No reverb capability), CS101, CS103, CS104, CS105, CS109, CS114 *(maximum of Curve 4 from 10 kHz to 400 MHz)*, CS115, CS116); MIL-STD 461E (CE101, CE102, CE106, RE101, RE102, RE103, CS101, CS103, CS104, CS105, CS109, CS114 *(maximum of Curve 4 from 10 kHz to 400 MHz)*, CS115, CS116, RS101, RS103 (*20V/m from 10 kHz to 80MHz and 200V/m from 80MHz to 18GHz at 1m)*; MIL-STD 461F (CE101, CE102, CE106, RE101, RE102, RE103, RS101, RS103 (*20V/m from 10 kHz to 80MHz and 200V/m from 80MHz to 18GHz at 1m)*, CS101, CS103, CS104, CS105, CS106, CS109, CS114 (*maximum of Curve 4 from 10 kHz to 400 MHz*), CS115, CS116); MIL-STD 461G (CE101, CE102, CE106, RE101, RE102, RE103, CS101, CS103, CS104, CS105, CS109, CS114 (*maximum of Curve 4 from 10 kHz to 400 MHz*), CS115, CS116, CS117, CS118, RS101, RS103 (*20V/m from 10 kHz to 80MHz and 200V/m from 80MHz to 18GHz at 1m)*; DEF STAN 59-411 Part 3 Section 3 Issue 1 Amdt 1 (dated 16 May 2003) Tests, per the following DEF STAN 59-411 Part 3 Section 3 Amdt 1 Test Methods (DCE01.B, DCE02.A/B, CE03.B, DRE01.A/B, DRE02.A/B, DRE03.A/B, DRS01.A/B, DRS02.A/B, DRS03.B, DCS01.B, DCS02.A/B, DCS03.B, DCS04.B, DCS05.B, DCS06.B, DCS08.B, DCS09.B, DCS10.A/B, DCS12.B)

[1]*This accreditation covers testing performed at the main laboratory listed above, and the satellite laboratory listed below*:

Test Technology:	**Test Method(s) [2,3]:**
Radiated and Conducted Emissions (10m OATS, *Up to 1 GHz*)	47 CFR FCC Part 18 (using FCC OST/MP-5:1986); 47 CFR FCC Part 15, Subpart B (using ANSI C63.4:2014); FCC MP-5:1986; CISPR 11; EN 55011; AS CISPR 11:2017; CISPR 12; EN 55012; AS/NZS CISPR 12; AS/NZS CISPR 12 (2013); VCCI-CISPR 32; VCCI-32-1; CISPR 32; EN 55032; AS/NZS CISPR 32; KS C 9832; ICES-001; ICES-003; ICES-005; ICES-006

[2]The laboratory is only accredited for testing activities outlined within the test methods listed above. Reference to any other activity within these standards, such as risk management or risk assessment, does not fall within the laboratory's accredited capabilities.

[3]When the date, revision or edition of a test method standard is not identified on the scope of accreditation, the laboratory may use the version that immediately precedes the current version for a period of one year from the date of publication of the standard test method, per part C., Section 1 of A2LA *R101 - General Requirements - Accreditation of ISO-IEC 17025 Laboratories*.

[4]This laboratory performs field testing activities for these tests.

Testing Activities Performed in Support of FCC Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1 [5]:		
Rule Subpart/Technology	**Test Method(s)**	**Maximum Frequency (MHz)**
Unintentional Radiators (FCC Part 15B)	ANSI C63.4-2014	40000
Industrial, Scientific, and Medical Equipment (FCC Part 18)	FCC MP-5 (February 1986)	67000
Intentional Radiators (FCC Part 15C)	ANSI C63.10-2013	67000
Unlicensed Personal Communication Systems Devices (FCC Part 15D)	ANSI C63.17-2013	67000
U-NII without DFS Intentional Radiators (FCC Part 15E)	ANSI C63.10-2013	67000
U-NII with DFS Intentional Radiators (FCC Part 15E)	FCC KDB 905462 D02 (v02)	67000
UWB Intentional Radiators	ANSI C63.10-2013	67000

Testing Activities Performed in Support of FCC Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1 [5]:		
Rule Subpart/Technology	**Test Method(s)**	**Maximum Frequency (MHz)**
(FCC Part 15F)		
BPL Intentional Radiators (FCC Part 15G)	ANSI C63.10-2013	40000
White Space Device Intentional Radiators (FCC Part 15H)	ANSI C63.10-2013	67000
Commercial Mobile Services (FCC Licensed Radio Service Equipment) Part 22 (cellular), Part 24, Part 25 (below 3 GHz) and Part 27	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26-2015	67000
General Mobile Radio Services (FCC Licensed Radio Service Equipment) Part 22 (non-cellular), Part 90 (below 3 GHz), Part 95 (below 3 GHz), Part 97 (below 3 GHz), and Part 101 (below 3 GHz)	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26-2015	67000
Citizens Broadband Radio Services (FCC Licensed Radio Service Equipment) Part 96	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26-2015	67000
Maritime and Avionics Radio Services (FCC Licensed Radio Service Equipment) Part 80 and Part 87	ANSI/TIA-603-E; ANSI C63.26-2015	67000
Microwave and Millimeter Bands Radio Services (FCC Licensed Radio Service Equipment) Parts 25, 30, 74, 90 (above 3 GHz), 95 (above 3 GHz), 97 (above 3 GHz), and 101	ANSI/TIA-603-E TIA-102.CAAA-E ANSI C63.26-2015	67000
Broadcast Radio Services (FCC Licensed Radio Service Equipment) Part 73 and Part 74 (below 3 GHz)	ANSI/TIA-603-E TIA-102.CAAA-E ANSI C63.26-2015	67000
Signal Boosters (Part 20) (Wideband Consumer Signal Boosters, Provider-specific Signal Boosters, and Industrial Signal Boosters), Section 90.219	ANSI C63.26-2015	67000

[5] Accreditation 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

QAI LABORATORIES LTD.

Burnaby, British Columbia, Canada

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 11th day of April 2023.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 3657.02
Valid to October 31, 2024

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