SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Element Materials Technology San Jose, CA
(formerly PCTEST)
382 Piercy Road
San Jose, CA 95138
Zach Keyser Email: zach.keyser@element.com
Nima Molaei Phone: 410 290 6652

ELECTRICAL

Valid to: February 29, 2028 Certificate Number: 2041.02

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 EMC, SAR, HAC, RF, Conformance, Protocol, and OTA testing of wireless devices:

Test Technology:	**Test Method(s) [1]:**
OTA	CTIA 01.20 Test Methodology, SISO, Anechoic Chamber [2]; CTIA 1.22 Test Methodology, Millimeter Wave; CTIA 01.40 Test Methodology, MIMO, Static Channel Model, Multi-Probe Anechoic Chamber; CTIA 1.51 Location Based Technology; VZW NR FR2 OTA Performance Test Plan; VZW OTA Radiated Performance for CDMA & LTE Multimode Devices; VZW 5G NR FR1 RF OTA Test Plan, VZW Location Determination Test Plan; VZW LTE LBS Performance Test Plan; VZW LTE Over the Air Radiated Performance Test Plan; T-Mobile Network Certification TRD 30-998; AT&T 13340 OTA; AT&T Device Architecture IoT; USCC LTE Over The Air Radiated Test Plan; CTIA Test Plan for RF Performance Evaluation of Wi-Fi Mobile Converged Devices; GSMA TS.24 Operator Acceptance Values for Device Antenna Performance; 3GPP TS 34.114 Technical Specification UE/MS OTA Antenna Performance; 3GPP TS 37.544 Technical Specification UTRA & E-UTRA UE OTA Antenna Performance; QCVN 117:2023/BTTTT; 3GPP TS 38.521 NR UE Conformance Specification; Radio Transmission and Reception; QCVN 117:2023/BTTTT

Uncontrolled If Printed

Test Technology:	**Test Method(s) [1]:**
Mobile Communications/ Conformance (conducted measurements only)	
2G/GSM/GERAN	ETSI TS 151 010-2; 3GPP TS 51.010-2; ETSI TS 151 010-4; 3GPP TS 51.010-4; ETSI TS 151 010-5; 3GPP TS 51.010-5; ETSI EN 301 511; GFC-CC
3G/WCDMA/UTRA	3GPP TS 31.121; 3GPP TS 31.124; 3GPP TS 34.121-1; 3GPP TS 34.121-2; 3GPP TS 34.123-1; 3GPP TS 34.123-2; 3GPP TS 34.123-3; ETSI TS 102 230; GCF-CC; ETSI EN 301-908-2
4G/LTE/E-UTRA	3GPP TS 36.521-1; 3GPP TS 36.521-2; 3GPP TS 36.521-3; 3GPP TS 36.523-1; 3GPP TS 36.523-2; GCF-CC; ETSI EN 301-908-13
5G/NR	3GPP TS 38.521-1; 3GPP TS 38.521-2; 3GPP TS 38.521-3; 3GPP TS 38.521-4; 3GPP TS 38.523-1; 3GPP TS 523-2; 3GPP TS 38.533; 3GPP TS 38.508-2; GCF-CC
IMS	3GPP TS 34.229-1; 3GPP TS 34.229-2; 3GPP TS 34.229-5
Bluetooth	RF:1; RF-PHY1; RF-PHY2

Uncontrolled When Printed

Test Technology:	**Test Method(s):**
Emissions	
Radiated and Conducted (3m semi-anechoic chambers)	CFR 47 FCC Part 15, Subpart B (using ANSI C63.4:2014); CFR 47 FCC Part 18 (using MP-5:1986); IEC/CISPR 11; EN 55011; KS C 9811; CISPR 14-1 (excluding click and power disturbance); IEC/EN 55014-1; KS C 9814-1; CISPR 15; IEC/EN 55015; IEC/CISPR 22; IEC/EN 55022; IEC/EN 55032; CISPR 32; EN 55103-1; KS C 9832; AS/NZS CISPR 11; AS/NZS CISPR 32; ICES-001; ICES-003; ICES-005; VCCI V-3; VCCI-CISPR 32 (up to 6 GHz); CNS 13803; CNS 13783-1; CNS 13438; CNS 15936 (up to 6 GHz); TCVN 7189 (2009); 3GPP TS 36.124; 3GPP TS 51.010-1, Section 12 (Conducted and Radiated Spurious Emissions); 3GPP TS 38.124; ETSI TS 136 124 LTE; ETSI TS 151 010-1; ETSI TS 138.124 5G; ETSI TS 134.124 3G; Digital Cellular Telecommunications System (Phase 2+) (GSM)
Generic or Product Specific EMC Standards	EN/IEC 61000-6-3; EN/IEC 61000-6-4; KS C 9610-6-3; KS C 9610-6-4; IEC/EN 61204-3
Generic or Product Specific EMC Standards (Emissions Only, Excluding Harmonics, Flicker and Immunity)	EN 62233; EN/IEC 61800-3; KS C 9800-3; EN 50121-1; EN 50121-3-2; EN/IEC 50155; EN 50270; EN 50293; EN/IEC 55014-2; IEC/CISPR 14-2; IEC/EN 61326-1; IEC/EN 61326-2-1; IEC/EN 61326-3-1; IEC/EN 61326-3-2; IEC/EN 60601-1-2; KS C IEC 60601-1-2; TCVN 7317:2003; TCVN 7189:2009; TCVN 7317:2003
EMC for Radio Equipment and Services (Emissions Only, Excluding Harmonics, Flicker and Immunity)	ETSI EN 301 489-1; ETSI EN 301 489-3; ETSI EN 301 489-4; ETSI EN 301 489-5; ETSI EN 301 489-6; ETSI EN 301 489-7; ETSI EN 301 489-8; ETSI EN 301 489-9; ETSI EN 301 489-10; ETSI EN 301 489-12; ETSI EN 301 489-15; ETSI EN 301 489-16; ETSI EN 301 489-17; ETSI EN 301 489-18; ETSI EN 301 489-19; ETSI EN 301 489-20; ETSI EN 301 489-23; ETSI EN 301 489-24; ETSI EN 301 489-25; ETSI EN 301 489-26; ETSI EN 301 489-31; ETSI EN 301 489-33; ETSI EN 301 489-50; ETSI EN 301 489-52; ETSI EN 300 386; KS X 3124; KS X 3125; KN 301 489-07; KS X 3126; KS X 3129

Test Technology:	**Test Method(s):**
Radio	
US/FCC	47 CFR, FCC Parts 15B/C/D/E/F/G/H (using ANSI C63.4:2014, ANSI C63.10:2020; ANSI C63.17:2013 and/or FCC KDB 905462 D02 (v02), April 8, 2016); 47 CFR Parts 11, 20, 21, 22, 24, 25, 27, 30, 73, 74, 80, 87, 90, 95, 96, 97, and 101 (using ANSI/TIA-603-D, ANSI/TIA-603-E, TIA-102.CAAA-E, ANSI C63.26:2015); ANSI C63.30:2021
Canada/ISED	RSS-111; RSS-112; RSS-117; RSS-119; RSS-123; RSS-125; RSS-127; RSS-130; RSS-131; RSS-132; RSS-133; 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-193; RSS-194; RSS-195; RSS-196; RSS-197; RSS-198; RSS-199; RSS-210; RSS-211; RSS-213; RSS-215; RSS-216; RSS-220; RSS-222; RSS-236; RSS-238; RSS-243; RSS-244; RSS-246; RSS-247; RSS-248; RSS-251; RSS-252; RSS-287; RSS-288; RSS-310; RSS-GEN
EU	EN 301 126-1; EN 301 390; EN 301 751; EN 302 217-2-2; EN 302 217-2; EN 302 217-3; EN 302 326-2; EN 300 224; EN 300 224-2; EN 300 341; EN 300 113; EN 301 166; EN 300 390; EN 300 471-1; EN 300 471-2; EN 300 330; EN 300 220-2; EN 300 220-3-1; EN 300 220-3-2; EN 300 220-4; EN 300 440; EN 300 440-2; EN 300 440-4; EN 300 328; EN 302 536-2; EN 302 571; EN 303 687; EN 305 550-1; EN 305 550-2; EN 301 893; EN 302 502; EN 301 441; EN 301 559; EN 301 598; EN 302 544-1; EN 302 544-2; EN 301 091-1; EN 301 091-2; EN 302 208; EN 302 264; EN 302 291-1; EN 302 291-2; EN 303 204; EN 302 065-1; EN 302 065-2; EN 302 065-3; EN 302 065-4; EN 303 413; EN 303 417; EN 303 396; EN 302 567; EN 300 433; EN 301 502; EN 301 511; EN 301 908-1; EN 301 908-2; EN 301 908-3; EN 301 908-10; EN 301 908-11; EN 301 908-12; EN 301 908-13; EN 301 908-14; EN 301 908-15; EN 301 908-16; EN 301 908-17; EN 301 908-18; EN 301 908-19; EN 301 908-20; EN 301 908-21; EN 301 908-22; EN 301 908-25
Korea	Ordinance of MSIT No. 86, Jan 4, 2022; MSIT Public Notification 2025-14, March 27, 2025; RRA Public Notification 2023-22, Dec 8, 2023; RRA Public Notification 2025-5, May 26, 2025; RRA Public Notification 2022-28, Dec 30, 2022; RRA Public Notification 2023-11, Jun 30, 2023; RRA Public Notification 2023-13, June 30, 2023; RRA Announcement 2025-50, July 11, 2025 RRA Public Notification 2025-4, May 7, 2025; KS X 3123; KS X 3142; KS X 3270; KS X 3271

Uncontrolled if printed

Test Technology:	**Test Method(s):**
Hong Kong	HKCA 1035; HKCA 1039; HKCA 1042; HKCA 1043; HKCA 1049; HKCA 1056; HKCA 1057; HKCA 1061; HKCA 1080; HKCA 1081
Singapore	IMDA TS WBA; IMDA TS SRD; IMDA TS LMR; IMDA TS CMT; IMDA TS UWB
Taiwan	DGT C-IS2031-0 (2020); DGT C-IS2034-0 (2020); IS2019:2020; PLMN01 (2020); PLMN08 (2020); DGT LP0002 (2024); RTTE01 (2020); CNS 13438; CNS 15936 (2016) (up to 6 GHz)
Australia	AS/NZS 4268:2017
Vietnam	QCVN 16:2018/BTTTT; QCVN 18:2022/BTTTT; QCVN 41: 2016/BTTTT; QCVN 42:2011/BTTTT; QCVN 43:2011/BTTTT; QCVN 44:2018/BTTTT; QCVN 54:2020/BTTTT; QCVN 55:2023/BTTTT; QCVN 65: 2021/BTTTT; QCVN 66: 2018/BTTTT; QCVN 53: 2017/BTTTT; QCVN 73:2013/BTTTT; QCVN 74: 2020/BTTTT; QCVN 94:2015/BTTTT; QCVN 96:2015/BTTTT
Japan	(Specified Radio Equipment Article 38-2-2, paragraph 1), Item 1 of Radio Law; (Specified Radio Equipment Article 38-2-2, paragraph 1), Item 2 of Radio Law; (Specified Radio Equipment Article 38-2-2, paragraph 1), Item 3 of Radio Law; ARIB Standard STD-T29; STD-T57; STD-T66; STD-T70; STD-T71; STD-T81; STD-T90; STD-T91; STD-T106; STD-T107; STD-T108
Mexico	IFT-014-2018 (Part 1); IFT-014-2018 (Part 2); IFT-008-2015; NOM-208-SCFI-2016; NOM-EM-016-SCFI-2015; IFT-016-2024; IFT-017-2023
RF Exposure / SAR (Specific Absorption Rate)	IEEE 1528-2013; EN IEC/IEEE 62209-1528:2020; RSS-102; RSS-102.SAR.MEAS; RSS-102.NS.MEAS; RSS-102.IPD.MEAS; IEEE C95.3-2021; EN 50566-2017/A1:2023; EN 50360-2017; EN 62209-1:2016; EN 62209-3: 2019; EN 62209-2:2010/A1:2019; IEC 62209-1 2nd Edition 2016; IEC 62209-2:2010; FCC KDB 447498 D01; FCC KDB 616217 D04; FCC KDB 643646 D01; FCC KDB 865664 D01 and D02

Uncontrolled When Printed

Test Technology:	Test Method(s):
RF Exposure / SAR (Specific Absorption Rate) (continued)	FCC KDB 941225 D01, D05, D05A, D06, and D07; IEC 62209-3:2019; IEC PAS 63083-2017; EN 50401:2017; IEEE/IEC 63184-2025; EN 50385:2017; EN 62232:2022; IEC 62232:2022; IEC 62311:2019; EN 62311:2020; IEC TR 62630:2010; IEC 62209-2 AMD 1; EN 62479:2010; IEC 62479:2010; EN 50663:2017; EN IEC/IEEE 62209-1528; EN 63195-1:2023; EN 50665:2017; IEC 63446:2022; IEC/IEEE 63195-1:2022; AS/NZS 2772.2:2016; Australian Communications Authority Radio Communications (Electromagnetic Radiation – Human Exposure) Standard 2014; ARPANSA RPS S-1(Rev.1):2021; Australia Radiocommunications Equipment (General) Rules 2021; ANSI/IEEE C95.1-2005; ANSI/IEEE C95.1-1992; ANSI/IEEE C95.3-2002; ANSI/IEEE C95.3.1:2010; IEEE C95.3-2021; ANSI/IEEE C95.1:2019; ICNIRP (100KHz-300GHz):2020; IEC TR 63170:2018; RRA Public Notification 2018-18, December 7, 2018; ARIB STD-T56; KS C 3370-1; KS C 3370-2
Hearing Aid Compatibility	ANSI C63.19:2019; CTIA Test Plan for Hearing Aid Compatibility v.3.1.1 (2017); RSS-HAC; ANSI/TIA-5050-2018
CBRS/WInnforum	CBRSA-TS-9001 CBRS Alliance OnGo Certification Test Plan; WINNF-TS-0122 WInnforum CBRS CBSD Test Specification

[1] When the date, edition, version, etc. is not identified in the scope of accreditation, laboratories 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 Annex A, Part C of A2LA's *R101 - General Requirements: Accreditation of Conformity Assessment Bodies.*

[2] CTIA 01.01 Test Scope Requirements and Applicability is used in support of the CTIA Test Plan for Wireless Device Over-the-Air Performance and should not be considered its own test method.

Uncontrolled When Printed

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:

Rule Subpart/Technology	**Test Method**	**Maximum Frequency (MHz)**
Unintentional Radiators		
Part 15B	ANSI C63.4:2014	40000
Industrial, Scientific, and Medical Equipment		
Part 18	FCC MP-5 (February 1986)	330000
Intentional Radiators		
Part 15C	ANSI C63.10:2020	330000
Unlicensed Personal Communication Systems Devices		
Part 15D	ANSI C63.17:2013	40000
U-NII without DFS Intentional Radiators		
Part 15E	ANSI C63.10:2020	40000
U-NII with DFS Intentional Radiators		
Part 15E	FCC KDB 905462 D02 (v02), April 8, 2016	40000
UWB Intentional Radiators		
Part 15F	ANSI C63.10:2020	40000
BPL Intentional Radiators		
Part 15G	ANSI C63.10:2020	40000
White Space Device Intentional Radiators		
Part 15H	ANSI C63.10:2020	40000
Commercial Mobile Services (FCC Licensed Radio Service Equipment)		
Parts 22 (cellular), 24, 25 (below 3 GHz), and 27	ANSI/TIA-603-E; TIA-102.CAAA-E or ANSI C63.26:2015	330000
General Mobile Radio Services (FCC Licensed Radio Service Equipment)		
Parts 22 (non-cellular), 90 (below 3GHz), 95, 97, and 101 (below 3GHz)	ANSI/TIA-603-E; TIA-102.CAAA-E or ANSI C63.26:2015	330000
Citizens Broadband Radio Services (FCC Licensed Radio Service Equipment)		
Part 96	ANSI/TIA-603-E; TIA-102.CAAA-E or ANSI C63.26:2015	330000

Uncontrolled If Printed

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:		
Rule Subpart/Technology	**Test Method**	**Maximum Frequency (MHz)**
Maritime and Aviation Radio Services		
Parts 80 and 87	ANSI/TIA-603-E; ANSI C63.26:2015	330000
Microwave and Millimeter Bands Radio Services		
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 or ANSI C63.26:2015	330000
Broadcast Radio Services		
Parts 73 and 74 (below 3 GHz)	ANSI/TIA-603-E; TIA-102.CAAA-E or ANSI C63.26:2015	330000
RF Exposure		
Devices Subject to SAR Requirements	IEEE Std 1528:2013	6000
Hearing Aid Compatibility		
Part 20 (HAC for Commercial Mobile Services)	ANSI C63.19:2019	6000
Signal Boosters		
Part 20 (Wideband Consumer Signal Boosters, Provider-specific signal boosters, and Industrial Signal Boosters), Section 90.219	ANSI C63.26:2015	330000
Note: 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.		

Uncontrolled If Printed

Accredited Laboratory

A2LA has accredited

ELEMENT MATERIALS TECHNOLOGY SAN JOSE, CA

San Jose, CA

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 February 2026.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2041.02
Valid to May 31, 2028

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

Uncontrolled if printed