

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY FREMONT NEWARK
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Fremont, CA 94538
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Email: zach.keyser@element.com

ELECTRICAL

Valid to: September 30, 2025

Certificate Number: 214.26

In recognition of the successful completion of the A2LA evaluation process accreditation is granted to this laboratory listed above, *as well as the 2 satellite laboratories listed below*, to perform the following electromagnetic compatibility, NEBS, radio, wireless, telecom and energy producing/measuring devices, and product safety tests:

Test:

Test Method(s):

Emissions

Radiated & Conducted
(3, 5 & 10 meter Semi-anechoic chambers)

Code of Federal Regulation (CFR) 47, FCC Part 15B (using ANSI C63.4:2014);
FCC Part 18 (using FCC MP-5:1986);
EN 55011; KS C 9811; CISPR 11;
AS/NZS CISPR 11; BS EN 55011;
ICES-001; KS C 9832 (excluding Annex H);
EN 55032 (excluding Annex H);
CISPR 32 (excluding Annex H);
AS/NZS CISPR 32 (excluding Annex H);
BS EN 55032 (excluding Annex H);
ICES-003; CNS 13438 (up to 6 GHz);
CNS 15936:2016 (excluding Annex H);
VCCI-CISPR 32:2016 (excluding Annex H);
ICES-005; ICES-006;
SI 961 Part 32; IFT-008-2015;
QCVN 118:2018/BTTT

Current Harmonics

EN IEC 61000-3-2; IEC 61000-3-2;
KS C 9610-3-2; AS/NZS 61000-3-2; BS EN 61000-3-3

Voltage Fluctuations

EN 61000-3-3; IEC 61000-3-3;
KS C 9610-3-3; AS/NZS 61000-3-3; BS EN 61000-3-3

Immunity

Electrostatic Discharge (ESD)

EN 61000-4-2; IEC 61000-4-2; KS C 9610-4-2

Radiated Immunity

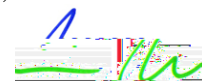
EN 61000-4-3; IEC 61000-4-3; KS C 9610-4-3

Electrical Fast Transient/Burst

EN 61000-4-4; IEC 61000-4-4; KS C 9610-4-4

Surge Immunity

EN 61000-4-5; IEC 61000-4-5; KS C 9610



Test:

Test Method(s):

Immunity (continued)

Conducted Immunity

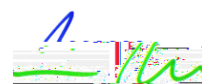
EN 61000-4-6; IEC 61000-4-6; KS C 9610-4-6

Power Frequency Magnetic Field
Immunity

EN 61000-4-8; IEC 61000-4-8; KS C 9610-4-8

Pulse Magnetic Field Immunity

EN 61000-4-9; IEC 61000-4-9



Test:

Test Method(s):

Automotive EMC (cont.)

ESD

ISO 10605 (*excluding clause 10 vehicle test method*);
ISO 13766-1;
ISO 13766-2;
ISO 14982

Conducted Transient Immunity
Broadband & Narrowband
Emissions

ISO 7637-2; ISO 7637-3; ISO 13766-1; ISO 13766-2;
ISO 14982

Wireless (Excluding HAC & SAR)

ANSI/TIA 603-E; EN 300-113; EN 300 220-1; EN 300 220-2;
EN 300 220-3; EN 300 220-4; EN 300 328; EN 300 330;
EN 300 440; EN 300 761-1; EN 300 761-2; EN 301-357;
EN 301 839; EN 301 893; EN 301 489-1 to -6; EN 301 489-9;
EN 301 489-12; EN 301 489-13; EN 301 489-15;
EN 301 489-17; EN 301 489-19; EN 301 489-20;
EN 301 489-22; EN 301 489-27 to -29; EN 301 489-31;
EN 301 489-33 to -35; EN 301 489-50, EN 301 489-51;
EN 301 489-52; EN 301 489-53; EN 301 511; EN 301 908-1;
EN 301 908-5; EN 303 413; ETSI ES 201 468; ES 203 021;
BS 301 489-1; BS EN 301 489-34; KS X 3124; KS X 3125;
KN 301 489-7; KS X 3126; KN 301 489-24; KS X 3134;
EN 302 208; EN 302 291; EN 302 502;
AS/NZS 4268; NOM-121-SCTI-2009;
LP0002 Low-power Radio-frequency Devices Technical
Regulations Issue July, 2020;
QCVN 18:2014/BTTTT;
QCVN 47:2015/BTTTT; QCVN 55:2023/BTTTT;
QCVN 73:2013/BTTTT; QCVN 74:2020/BTTTT;
QCVN 88:2015/BTTTT; QCVN 94:2015/BTTTT;
QCVN 95:2015/BTTTT; QCVN 96:2015/BTTTT;
QCVN 54:2020/BTTTT; QCVN 65:2021/BTTTT;
TCN 68.242:2006; ANATEL Resolution 506

Industry Canada Radio Standards
Specifications (RSS) in Category I
Equipment Standards List (*Excluding
HAC & SAR*)

RSS-GEN; RSS-102 measurement (RF Exp);
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-192; RSS-194; RSS-195; RSS-196; RSS-197;
RSS-198; RSS-199; RSS-210; RSS-215; RSS-216; RSS-236;
RSS-243; RSS-244; RSS-246; RSS-247; RSS-248; RSS-310

Intentional and Unintentional
Radiators to FCC Regulations,
up to 200 GHz (*Excluding HAC &
SAR*)

47 CFR (FCC Rules) Parts 2 and 11;
47 CFR (FCC Rules) Part 15B (using ANSI C63.4:2014);
47 CFR (FCC Rules) Part 15C (using ANSI C63.10:2013);
47 CFR (FCC Rules) Part 15D (using ANSI C63.17:2013);
47 CFR (FCC Rules) Part 15E (using ANSI C63.10:2013);
FCC KDB 789033, FCC KDB 905462 D01 (v01));
47 CFR (FCC Rules) Part 15F (using ANSI C63.10:2013)

324 N. Mary Avenue
Sunnyvale, CA 94086

Test:

Test Method(s):

Emissions

Radiated and Conducted
(5 meter Semi-anechoic chambers)

Code of Federal Regulation (CFR) 47, FCC Part 15B
(using ANSI C63.4:2014);
EN 55011; BS EN 55011; KS C 9811; CISPR 11;
AS/NZS CISPR 11;
ICES-001; ICES-003; ICES-005; ICES-006;
VCCI V-3 (up to 6 GHz); VCCI-CISPR 32;
QCVN 118:2018/BTTTT;
CNS 15936 (2016) (Excluding Annex H);
EN 55032 (excluding Annex H); CISPR 32 (excluding Annex H);
AS/NZS CISPR 32(excluding Annex H);
BS EN 55032 (excluding Annex H);
KS C 9832 (Excluding Radiated Emissions below 1 GHz) (6/20/2018) re'w'at2

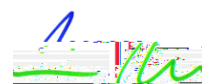
Current Harmonics

EN IEC 61000-3-2; IEC 61 482 (2) (7) (cs) TJETQqe0 0oS94 re'



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 ¹:

Rule Subpart/Technology	Test Method	Maximum Frequency (MHz)
<u>U-NII without DFS Intentional Radiators</u> Part 15E	ANSI C63.10:2013	40000
<u>U-NII with DFS Intentional Radiators</u> Part 15E	FCC KDB 905462 D02 (v02)	40000
<u>UWB Intentional Radiators</u> Part 15F	ANSI C63.10:2013	200000
<u>BPL Intentional Radiators</u> Part 15G	ANSI C63.10:2013	200000
<u>White Space Device Intentional Radiators</u> Part 15H	ANSI C63.10:2013	200000
<u>Commercial Mobile Services (FCC Licensed Radio Service Equipment)</u> Parts 22 (cellular), 24, 25 (below 3 GHz), and 27	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26:2015	40000
<u>General Mobile Radio Services (FCC Licensed Radio Service Equipment)</u> Parts 22 (non-cellular), 90 (below 3 GHz), and 91 (below 3 GHz)	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26:2015	40000



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 ¹:

Rule Subpart/Technology	Test Method	Maximum Frequency (MHz)
<u>Signal Boosters (Part 20)</u> Wideband Consumer Signal Boosters Provider-specific Signal Boosters Industrial Signal Boosters Signal Boosters (Section 90.219)	ANSI C63.26:2015	200000

1





Accredited Laboratory

A2LA has accredited

ELEMENT MATERIALS TECHNOLOGY FREMONT NEWARK

Fremont, 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 January 2024.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 214.26
Valid to September 30, 2025

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