SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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ELECTRICAL

Valid To: June 30, 2025 Cer

In recognition of the successful completion of the A2LA evaluation process (including an assessment of the organization's compliance with A2LA's FDA ASCA Accreditation Program requirements) accreditation is granted to this laboratory to perform the following EMC, Radio, and Telecommunication tests in IT/Multimedia Equipment, Audio Equipment, Industrial Equipment, Radio Equipment, and Cellular Devices, Military/Aerospace, Aircraft Components and Automotive Components

| Test Technology | Test Method(s)[1, 2, 3]: |
|---|---|
| Emissions<br>Conducted and Radiated<br>U.S. / Canada | CFR 47, FCC Part 15, Subpart B (using ANSI C63.4-2014);<br>CFR 47, FCC Part 18 (using FCC MP-5:1986);<br>ICES-001 (Issue 5, July 2020)<br>ICES-002 (Issue 7, September 2020); |

| Test Technology | Test Method(s) [1, 2, 3]: |
|---|---|
| Europe | EN 55011 (2009) +A1(2010);<br>EN 55011:2016 +A1:2017 +A2:2021;<br>EN 55013 (2001) +A1(2003) +A2(2006) +(2013);<br>BS EN 55013 (2013) +A1(2016);<br>EN 55014-1 (2006) + A1(2009) +A2(2011);<br>EN 55014-1:2017+A11:2020;<br>EN 55014-1:2021;<br>EN 55015 (2006) + A2(2009) + (2013); EN 55015:2020;<br>EN 55103-1 (2009) + A1(2012);<br>EN 55022 (1998) +A1(2000) +A2(2003) +(2006) +A1(2007) +(2010);<br>EN 55032 (2015) +AC(2016) +(2020);<br>EN 55032:2015 +A1:2019<br>EN 55032:2015 +AC:2016-07+A11:2020+A1:2020;<br>BS EN 55013 (2013) +A1(2016);<br>EN 55011:2016 +A1:2017 +A2:2021<br>EN/IEC 55014-1:2021; EN/IEC 55015:2020 |
| Australia / New Zealand | AS/NZS CISPR 32 (2013) + (2015);<br>AS/NZS CISPR 32:2015 AMD 1:2020;<br>AS/NZS CISPR 22 (2009) +A1(2010) + (2006);<br>AS CISPR 11 (2017); AS/NZS CISPR 11 (2011)<br>AS/NZS CISPR 12 (2013) |
| Israel | SI 961 Part 32 (2016); SI 961 Part 24 |
| Japan | VCCI-CISPR 32 (2016); VCCI V-3 (2015.4);<br>VCCI V-3:2016 |
| Korea | KS C 9811; KS C 9814-1;<br>KS C 9610-6-3; KS C 9610-6-4;<br>KS C 9832; KS C 9816-2-1;<br>KS C 9816-2-2; KS C 9816-2-3 |
| South Africa | SANS 211 Ed. 4.1 (2010); SANS 213 Ed. 4 (2011);<br>SANS 214-1 Ed. 3.1 + CISPR A2 (2009);<br>SANS 215 Ed. 4.2 (2009); SANS 222 Ed. 6 (2009);<br>SANS 2332 Ed. 1 (2017) |
| Vietnam | QCVN 118 (2018/BTTTT; TCVN 7189:2009 (CISPR 22:2006) |
| Taiwan | CNS 13439 (2004); CNS 13439 (2006)<br>CNS 15936:2016 |
| Harmonic Current Emissions | IEC 61000-3-2; EN 61000-3-2;<br>KS C 9610-3-2; SANS 61000-3-2 Ed. 3.2 (2009);<br>IEC 61000-3-11 (2017) |

| Test Technology | Test Method(s) [1, 2, 3]: |
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| Voltage Fluctuations and Flicker | |

| Test Technology | Test Method(s) [1, 2, 3]: |
|---|---|
| Conducted Common Mode Disturbances | IEC 61000-4-16; EN 61000-4-16; IEC 61000-4-16 Ed. 2.0 (2015); BS EN 61000-4-16 (2016); SANS 61000-4-16, Ed. 1.2 (2011) |
| DC Ripple Input Power | IEC 61000-4-17; EN 61000-4-17; EN 61000-4-17:1999+A2:2009; IEC 61000-4-17 Ed. 1.2 (2009) |
| Variation of Power Frequency | IEC 61000-4-28; EN 61000-4-28; IEC 61000-4-28 (1999) +A1 (2001) +A2 (2009); SANS 61000-4-28 Ed. 2.1 (2009) |
| Voltage Dips, Short Interruptions and Voltage Variations on D.C. Input Power Port | IEC 61000-4-29; EN 61000-4-29; IEC 61000-4-29 (2000); SANS 61000-4-29 Ed. 1 (2005) |
| Radiated Fields in Close Proximity | IEC 61000-4-39; EN 61000-4-39; IEC 61000-4-39 (2017) |
| Generic / Product Family / Product Specific Standards | IEC 61000-6-1 (2016); IEC 61000-6-1, Ed. 2 (2005-03); EN 61000-6-1 (2007); KS C 9610-6-1; EN 61000-6-2 (2016); EN 61000- |

| Test Technology | Test Method(s) [1, 2, 3]: |
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| Test Technology | Test Method(s) [1, 2, 3]: |
|---|---|
| Automotive EMC (cont.) | ISO 16750-1; ISO 16750-2 (excluding clauses 4.11, 4.12); EN 50498; EN 13309; ISO 13766-1; ISO 13766-2; UN ECE R10; EN ISO 14982 |
| Radio | |
| US (FCC) | 47 CFR FCC Part 15, Subpart C (using ANSI C63.10:2013); 47 CFR FCC Part 15, Subpart D (using ANSI C63.17:2013); 47 CFR FCC Part 15, Subpart E (using ANSI C63.10:2013 and FCC KDB Publication 905462 D02 (v02)); 47 CFR FCC Part 15, Subpart F/G/H (using ANSI C63.10:2013); 47 CFR FCC Parts 20, 22, 24, 25, 27, 73, 74, 80, 87, 90, 95, 96, 97, r6.10.9 |

| Test Technology | Test Method(s) [1, 2, 3]: |
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| Europe | |

| Test Technology | Test Method(s) [1, 2, 3]: |
|---|---|
| Europe<br>(excluding Protocol Testing)<br>(cont.) | ETSI EN 301 489-50 V2.1.1 (2017-02);<br>ETSI EN 301 489-50 V1.2.1 (2013-03);<br>ETSI EN 301 489-50 V2.3.1 (2021-03);<br>ETSI EN 301 489-51 V2.1.1 (2019-04);<br>ETSI EN 301 489-52 V1.2.1 (2021-11);<br>ETSI EN 303 454 V1.1.1 (2018-11) |
| Hong Kong | HKCA 1002, Issue 6 (January 2008);<br>HKCA 1007, Issue 5 (March 2012);<br>HKCA 1008, Issue 4 (November 2013);<br>HKCA 1010, Issue 1 (June 2003);<br>HKCA 1015, Issue 4 (February 2003);<br>HKCA 1020, Issue 7 (November 2011);<br>HKCA 1033, Issue 7 (March 2012);<br>HKCA 1034, Issue 3 (October 2009);<br>HKCA 1035, Issue 7 (May 2016);<br>HKCA 1039, Issue 6 (June 2015);<br>HKCA 1039, Issue 6 (June 2015);<br>HKCA 1039, Issue 5 (June 2013);<br>HKCA 1041, Issue 1 (February 2003);<br>HKCA 1042, Issue 2 (February 2003);<br>HKCA 1043, Issue 4 (June 2008);<br>HKCA 1044, Issue 1 (February 2003);<br>HKCA 1046, Issue 3 (September 2008);<br>HKCA 1048, Issue 2, (June 2008);<br>HKCA 1049, Issue 1 (April 2005);<br>HKCA 1050, Issue 1 (January 2006);<br>HKCA 1052, Issue 4 (June 2022) |
| Korea | KS X 3123;KS X 3124; KS X 3125;<br>KS X 3126; KS X 3134;<br>RRA Public Notification 2018-18, (Dec 7, 2018);<br>Equipment to be Subject of Test Procedure for Electromagnetic<br>- DD- PEqu1 1.674 6 (i)6.2 (f)>>BDC -3.9 (i42 (c |

| Test Technology | Test Method(s) [1, 2, 3]: |
|---|---|
| Korea(cont.) | RRA Public Notification 2012-21 (Nov. 06, 2012);<br>RRA Announce 2013-3, (July 26, 2013), Korean only;<br>RRA Notice 2014-2, K only (Feb. 04, 2014);<br>RRA Announce 2014-40 (Dec. 23, 2014);<br>RRA Announce 2015-31 (Sep. 30, 2015), Korean only;<br>RRA Announce 2015-35 (Jan. 05, 2016);<br>RRA Notice 2017-7, Korean only (Aug. 04, 2017);<br>RRA Public Notification 2015-23 (Nov. 18, 2015);<br>RRA Public Notification 2017-8 (Aug. 28, 2017);<br>RRA Public Notification 2011-24 (Dec. 23, 2011);<br>RRA Announce 2012-21, Korean only (Jun. 28, 2012);<br>RRA 2013-3 and 2013-24, (June 17, 2013), Korean only;<br>RRA 2014-8 and RRA 2014-37 (June 23, 2014);<br>RRA Public Notification 2015-27 (Dec. 03, 2015);<br>RRA Announce 2015-10 (Dec. 03, 2015);<br>RRA Public Notification 2016-26 (Dec. 19, 2016);<br>RRA Announce 2016-79 (Dec. 19, 2016);<br>RRA Public Notification 2017-19 (Dec. 28, 2017);<br>RRA Announce 2017-71 (Dec. 28, 2017);<br>Technical Requirements for Measurement of Electromagnetic Field Strength (RRA Public Notification 2022-12, Nov 29, 2021) |
| Australia / New Zealand | AS/NZS 4268 (2017); AS/NZS 4268 (2012) + A1 (2014); AS/NZS 4268:2017 + A1:2020;<br>Radiocommunications Equipment (General) Rules 2021 – Schedule 4 EME standard using measurement method AS/NZS 2772.2;<br>Radiocommunications Equipment (General) Rules 2021 – Schedule 5, Part 15, Short Range Equipment Standard using test method AS/NZS 4268;<br>AS/NZS 2772.2:2016/Amdt 1:2018 |
| Taiwan | LP0002 (2020); IS2019 (2020); RTTE01 (2020) |
| Singapore | IDA TS CMT Issue 1 (June 2011);<br>IDA TS LMR Issue 1 Rev 5 (June 2014);<br>IDA TS LMR Issue 1 Rev 4 (June 2011);<br>IDA TS SRD Issue 1 Rev 6 (May 2011);<br>IDA TS SRD Issue 1 Rev 7 (April 2013);<br>IDA TS UWB Issue 1 Rev 1 (May 2011);<br>IDA TS WBA Issue 1 Rev 1 (May 2011);<br>IDA TS WBA Issue 1 Rev 2 (November 2012);<br>IMDA TS CMT (July 2017);<br>IMDA TS CMT (September 2020);<br>IMDA TS LMR Issue 1 (October 2016);<br>IMDA TS SRD Issue 1 (August 2021);<br>IMDA TS UWB Issue 1 (October 2016);<br>IMDA TS WBA Issue 1 (October 2016);<br>IS 20190 (September 1998);<br>IMDA TS CMT Issue 1 Rev 2 (September 2020) |

| Test Technology | Test Method(s) [1, 2, 3]: |
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| Vietnam | [redacted] 386 (V)4.6 1 |

[5] These methods have been assessed by A2LA according to A2LA's FDA ASCA Program requirements. Accreditation by A2LA does not imply FDA ASCA accreditation. All ASCA accreditation decisions for testing laboratory applications are made solely by the FDA, and a list of approved laboratories can be found at FDA.gov.

# Accredited Laboratory

A2LA has accredited

## ELEMENT MATERIALS TECHNOLOGY PORTLAND – EVERGREEN INC.

Hillsboro, OR

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

(refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

For the tests to which this accreditation applies, please refer to the laboratory's