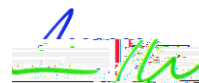




SCOPE OF ACCREDITATION TO ISO/IEC 17025:20

ELEMENT MATERIALS TECHNOLOGY MINNEAPOLIS – BROOKLYN PARK
9349 W. Broadway Ave.
Brooklyn Park, MN 55445
Ms. Renee Walker Phone: 503 844 4066
Renee.walker@element.com

ELECTRICAL



Test Technology:

Test Method(s)^{1,2, 3.}

Europe

EN 55011(2009) + A1(2010);
EN 55011:2016 +A1:2017 +A2:2021;
EN 55011:2016 +A1:2017 +A11:2020 +A2:2021;
EN 55012;
EN 55013 (2001) + A1(2003) +A2(2006) + (2013);
BS EN 55013 (2013) +A1(2016);
EN 550141 (2006) + A1(2009) +A2(2011)
EN 550141:2017+A11:2020;
EN/IEC 550141:2021;
EN 55015 (2006) + A2(2009) + (2013); EN/IEC 55015:2020;
EN 551034 (2009) + A1(2012);
EN 55022 (1998) +A1(2000) +A2(2003) +(2006) +A1(2007) +
(2010);
EN 550322015+AC2016-07+A11:2020+A1:2020
EN 55032:2015 +A1:2019

Australia / New Zealand

AS/NZS CISPR 32 (2013) + (2015);
AS/NZS CISPR 32:2015 AMD 1:2020;
AS/NZS CISPR 22 (2009) +A1(2010) + (2006);
AS CISPR 11 (2017); AS/NZS CISPR 11 (2011);
AS CISPR 11 (2017);
AS/NZS CISPR 11 (2011)
AS/NZS CISPR 12 (2013)

Israel

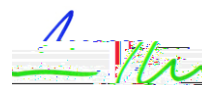
SI 961 Part 32 (2016); SI 961 Part 24; SI 961 part 6.2

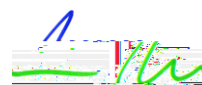
Japan

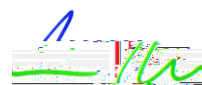
VCCI-CISPR 32 (2016); VCCI V-3 (2015.4) VCCI V-3:2016

Korea

KS C 9811; KS C 9814;







Test Technology:

Test Method(s)^{1,2,3}:

MEAS
(excluding Flammability Test,
Ionizing Radiation, UVRadiation,
Microwave Radiation, Ultrasonic
Pressure and IP Testing)

IEC 610101; EN 610101; UL 610101;
CAN/CSA-C22.2 No. 610101;
IEC 610102-101; EN 610102-101;
UL 610102-101; CAN/CSA-C22.2 No. 610102-101;
IEC 610102-010; EN 610102-010; UL 610102-010;
CAN/CSA-C22.2 No. 610102-010;
IEC 610102-030; EN 610102-030; UL 610102-030;
CAN/CSA-C22.2 No. 610102-030; IEC 610102-040;
EN 610102-040; UL 610102-040;
CAN/CSA-C22.2 No. 610102-040

HOUS
(excluding Transient Over
Voltages, Resistance to Rusting,
Radiation and similar Hazards,
Software Evaluation, UVC
Radiation Effect on Non-Metallic
Materials)

IEC 603351; EN 603351; IEC 603352-45 Ed. 3.2 (2012);
UL 603351; CAN/CSA-C22.2 No. 603351

ITAV
(excluding Cathode Ray Tube,
Flammable Liquids, Ionizing
Radiation, Effect of UVRadiation)

C

Test Technology:

Test Method(s)^{1,2,3}:

Europe
(excluding Protocol Testing)

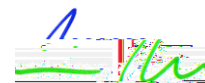
ETSI EN 300 220 V3.1.1 (201702);
ETSI EN 300 220 V2.3.1 (201002);
ETSI EN 300 220 V2.4.1 (201205);
ETSI EN 300 220 V3.1.1 (201702);
ETSI EN 300 220 V3.2.1 (201806);
ETSI EN 300 220-1 V2.1.1 (201612);
ETSI EN 300 220-2 V1.1.1 (201702);
ETSI EN 300 220 V1.1.1 (201702);
ETSI EN 300 328 V2.1.1 (20161);
ETSI EN 300 328 V2.2.2 (20107);
ETSI EN 300 328 V1.9.1 (20102);
ETSI EN 300 328 V1.7.1 (20069);
ETSI EN 300 328 V1.8.1 (20106);
ETSI EN 300 330 V2.1.1 (20107);
ETSI EN 300 422 V2.1.1 (201609);
ETSI EN 300 422 V2.1.2 (201701);
ETSI EN 300 422 V2.1.1 (201702);
ETSI EN 300 422 V2.1.1 (201702);
ETSI EN 300 422 V2.1.1 (201705);
ETSI EN 300 440 V2.1.1 (20107);
ETSI EN 300 440 V2.2.1 (20107);
ETSI EN 301 166 V2.1.1 (20161);
ETSI EN 301 357 V2.1.1 (20106);
ETSI EN 301 502 V12.5.2 (20107);
ETSI EN 301 511 V12.5.1 (20107);
ETSI EN 301 511 V12.1.1 (20106);
ETSI EN 301 839 V2.1.1 (20104);
ETSI EN 301 893 V2.1.1 (20105);
ETSI EN 301 908 V6.2.1 (201304);
ETSI EN 301 908 V15.1.1 (202109);
ETSI EN 301 908 V15.2.1:202301;
ETSI EN 301 908 V11.1.2 (201708);
ETSI EN 301 908 V11.1.1 (20107);
ETSI EN 301 908 V11.1.3 (201704);
ETSI EN 301 908-1 V11.1.2 (201701);
ETSI EN 301 908-3 V11.1.1 (20107);
ETSI EN 301 908-3 V11.1.2 (201707);
ETSI EN 301 908-3 V13.2.1 (202202);
ETSI EN 301 908-4 V11.1.2 (201704);
ETSI EN 301 908-4 V13.1.1 (201909);
ETSI EN 301 908-4 V15.1.1 (202109);
ETSI EN 301 908-5 V11.1.2 (201701);
ETSI EN 301 908-5 V15.1.1 (202101);
ETSI EN 302 195 V2.1.1 (20106);
ETSI EN 302 208 V3.1.1 (20161);
ETSI EN 302 208 V3.3.1 (202005);
ETSI EN 302 537 V2.1.1 (20169);
ETSI EN 303 413 V1.1.1 (20106);
ETSI EN 303 413 V1.2.1 (202104);

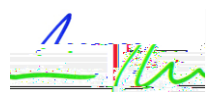
Test Technology:

Test Method(s)^{1,2,3}:

Europe
(excluding Protocol Testing
(cont.)

ETSI EN 303 417 V1.1.1 (20109);
ETSI EN 301 489 V2.1.1 (201702);
ETSI EN 301 489 V2.2.3 (201911);
ETSI EN 301 489 V2.1.1 (201903);
ETSI EN 301 489 V1.6.1 (201308);
ETSI EN 301 489 V2.3.2(202301);
ETSI EN 301 489 V2.1.1 (201611);
ETSI EN 301 489 V2.1.1 (201611);
ETSI EN 301 489 V2.2.1(201904);
ETSI EN 301 489 V1.2.1 (200208);
ETSI EN 301 489 V1.4.1 (200711);
ETSI EN 301 489 V2.1.1(201904);
ETSI EN 301 489 V3.1.1 (201702);
ETSI EN 301 489 V3.2.4 (202009);
ETSI EN 301 489 V2.2.1 (201209);
ETSI EN 301 489 V2.1.1 (201904);
ETSI EN 301 489 V2.2.1 (202209);
ETSI EN 301 489 V1.5.1 (201111);
ETSI EN 301 489 V1.5.1 (201010);
ETSI EN 301 489 V2.1.1 (201612);
ETSI EN 301 489 V2.2.1 (201904);
ETSI EN 301 489 V2.1.1 (201612);
ETSI EN 301 489 V2.2.1 (201904);
ETSI EN 301 489 V2.1.1 (201611);
ETSI EN 301 489 V2.2.1 (201904);
ETSI EN 301 489 V2.1.1 (201904);
ETSI EN 301 489 V.2.1 (201612);
ETSI EN 301 489 V2.1.1 (201702);
ETSI EN 301 489 V1.2.1 (201303);
ETSI EN 301 489 V2.3.1 (202103)
ETSI EN 301 489 V2.1.1 (201904);
ETSI EN 301 489 V1.2.1 (202111);
ETSI EN 303 454 V1.1.1 (20181)



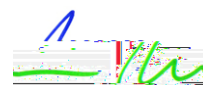


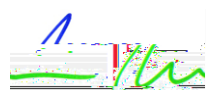
Test Technology:

Vietnam(cont.)

Test Method(s)^{1,2, 3.}

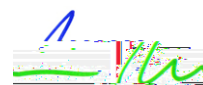
QCVN 75 (2013):BTTTT; QCVN 76(2013):BTTTT;
QCVN 88 (2015):BTTTT; QCVN 91 (2015):BTTTT;
QCVN 94 (2015):BTTTT; QCVN 95 (2015):BTTTT;
QCVN 96 (2015):BTTTT; QCVN 99 (2015):BTTTT;
QCVN 103 (2016):BTTTT; QCVN 110 (2017):BTTTT;
QCVN 111 (2017):BTTTT; QCVN 112 (2017):BTTTT;
QCVN 117



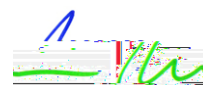


Testing Activities Performed in Support of FCC Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1

Rule Subpart/Technology	Test Method(s)	Maximum Frequency (MHz)
<u>Citizens Broadband Radio Services</u> <u>(FCC Licensed Radio Service Equipment)</u> Part 96	ANSI/TIA-603-E; TIA-102.CAAA-E; ANSI C63.26:2015	220000
<u>Maritime and Aviation Radio Services</u>		



⁵These 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; a list of approved laboratories can be found at FDA.gov.





Accredited Laboratory

A2LA has accredited

ELEMENT MATERIALS TECHNOLOGY MINNEAPOLIS – BROOKLYN PARK

Brooklyn Park, MN

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 laboratory also meets the A2LA – R256 – Specific Requirements – FDA ASCA Program. 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 18th day of September 2023.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 3310.05
Valid to June 30, 2025

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