



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

AA ELECTRO MAGNETIC TEST LABORATORY

Plot174, Udyog Vihar, Phase 4

Sector 18, Gurugram

Gurgaon, India 122015

Authorized Representative: Dr. Lenin Raja Email: dr.lenin@aaemtlabs.com

ELECTRICAL

Valid To: March 31, 2022

Certificate Number: 5593.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following electrical tests:

Test Technology

Test Method(s)¹

Emissions – Unintentional Radiators

Radiated & Conducted
(3m semi-anechoic chamber,
up to 40 GHz)

47 CFR FCC Part 15, Subpart B (using ANSI C63.4:2014);
47 CFR FCC Part 18 (using MP-5:1986);
ICES-003; VCCI-CISPR 32:2016 (up to 6 GHz); CISPR 11;
EN 55011; AS/NZS CISPR 11; CISPR 13; EN 55013;
AS/NZS CISPR 13; CISPR 14-1; EN 55014-1; AS/NZS
CISPR 14.1; CISPR 15; EN 55015;
AS/NZS CISPR 15; CISPR 22; EN 55022;
AS/NZS CISPR 22; CISPR 25; CISPR 32; EN 55032;
AS/NZS CISPR 32; CNS 13438 (up to 6 GHz)

Harmonic Current

AS/NZS 61000.3.2; EN 61000-3-2;
IEC 61000-3-2

Voltage Changes,
Voltage Fluctuations, and Flicker

AS/NZS 61000.3.3; EN 61000-3-3; IEC 61000-3-3;

Emissions – Intentional Radiators

Radiated & Conducted
(3m semi-anechoic chamber,
up to 40 GHz)

47 CFR FCC Part 15 Subparts C, E, G
(using ANSI C63.10:2013); Parts 22 (cellular), 24, 25
(below 3 GHz), and 27 (using ANSI C63.26:2015)

RSS GEN, RSS 132, RSS 133, RSS 139, RSS 210, RSS 247,
RSS 310

ETSI EN 300 328; ETSI EN 301 893;
ETSI EN 302 502; ETSI EN 300 220;
ETSI EN 300 330; ETSI EN 300 440

Test Technology**Test Method(s)¹*****Mobile (Cellular) Communication***

3GPP TS 24.008 for GSM/UMTS/LT 2015;
3GPP TS 36.5.21; ETSI EN 301 908-13;
3GPP TS 51010-1; EN 301 511; 3GPP TS 34.121-1;
EN 301 908-2-2

Telecom

ITU-T K21, 22, 44, 47; ETSI EN 300 489

Generic Standards, Product Family Standards and Industry Specific Standards

IEC 61000-6-1; EN 61000-6-1; GB 17799.1;
IEC 61000-6-2; EN 61000-6-2; GB 17799.2;
IEC 61000-6-3; EN 61000-6-3; GB 17799.3;
IEC 61000-6-4; EN 61000-6-4; GB 17799.4;
CISPR 24; EN 55024; IEC 61547;
CISPR 14-2; EN 55014-2; CISPR 20; EN 55020;
EN 50083-2; CISPR 35; EN 55035; IEC 62040-2;
IEC 60601-1-2; EN 61326-1; EN 301 489-1;
ETSI EN 301 489-3; ETSI EN 301 489-17

Immunity

Electrostatic Discharge (ESD)

IEC 61000-4-2; EN 61000-4-2; AS/NZS 61000.4.2

Radiated Immunity
(up to 6GHz, 10V/m)

IEC 61000-4-3; EN 61000-4-3;
AS/NZS 61000.4.3

Electrical Fast Transient

IEC 61000-4-4; EN 61000-4-4;
AS/NZS 61000.4.4

Surge

IEC 61000-4-5; EN 61000-4-5;
AS/NZS 61000.4.5

Conducted Immunity

IEC 61000-4-6; EN 61000-4-6;
AS/NZS 61000.4.6

Magnetic Field Immunity

IEC 61000-4-8; EN 61000-4-8; AS/NZS 61000.4.8

Pulse Magnetic Field Immunity

IEC 61000-4-9; EN 61000-4-9; AS/NZS 61000.4.9

Voltage Dips and Short Interrupts
(up to 16A – A/C)

IEC 61000-4-11; EN 61000-4-11;
AS/NZS 61000.4.11

Voltage Dips and Short Interrupts
(up to 16A – D/C)

IEC 61000-4-29; EN 61000-4-29;
AS/NZS 61000.4.29

Safety

Information technology equipment –
Safety – Part 1: General requirements

IEC 60950-1

<u>Test Technology</u>	<u>Test Method(s)¹</u>
<i>Safety (cont.)</i> Audio/video, information and communication technology equipment Part 1: Safety requirements	IEC 62368
Uninterruptible power systems (UPS) - Part 1	IEC 62040-1
Audio, video and similar electronic apparatus – Safety requirements	IEC 60065

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 measurement method, per part C., Section 1 of A2LA R101 - *General Requirements- Accreditation of ISO-IEC 17025 Laboratories.*

Testing Activities Performed in Support of FCC Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1²

<u>Rule Subpart/Technology</u>	<u>Test Method</u>	<u>Maximum Frequency (MHz)</u>
<u>Unintentional Radiators</u> Part 15B	ANSI C63.4:2014	40000
<u>Industrial, Scientific, and Medical Equipment</u> Part 18	FCC MP-5:1986	40000
<u>Intentional Radiators</u> Part 15C	ANSI C63.10:2013	40000
<u>U-NII without DFS Intentional Radiators</u> Part 15E	ANSI C63.10:2013	40000
<u>BPL Intentional Radiators</u> Part 15G	ANSI C63.10:2013	40000
<u>Commercial Mobile Services (FCC Licensed Radio Service Equipment)</u> Parts 22 (cellular), 24, 25 (below 3 GHz), and 27	ANSI C63.26:2015	40000

² 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

AA ELECTRO MAGNETIC TEST LABORATORY

Gurgaon, India

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 9th day of April 2020.

A handwritten signature in blue ink.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 5593.01
Valid to March 31, 2022

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