

Scope of Accreditation

(Measurement Method)

Accreditation Number: VLAC-051

Expiration Date: October 7, 2025

[Name of Laboratory]

Japan Automobile Research Institute

[Test site name]

Robot Safety Test Center

[Test site Address]

2-8-5 Gakuenminami, Tsukuba, Ibaraki 305-0822, Japan

[Measurement Methods]

Emission test

Radiated disturbance: Enclosure Port

Disturbance electric field test

[Test condition] On the reference ground plane, Measurement distance: 3 m / 10 m
Measurement Frequency Range: 9 kHz - 1 GHz

[Test condition] Quasi Free Space, Measurement Frequency Range: 1 GHz - 17 GHz

Disturbance magnetic field strength measurement

[Test condition] Loop Antenna

Conducted disturbance Measurement: AC mains port / DC power line port

Voltage Measurement [Test condition] AMN

Conducted disturbance Measurement: Telecommunication port

Voltage Measurement [Test condition] AAN

Current Measurement [Test condition] Current probe

Immunity test

Electro static discharge test

Contact discharge, Air discharge, Indirect discharge

Radiated electromagnetic field strength

Measurement Frequency Range: 26 MHz - 6 GHz

Electrical fast transient/burst (EFT/B)

Mains port, Telecommunication/Signal port

Surge

Mains port, Telecommunication/Signal port

RF conducted interference

Mains port measurement frequency range: 150 kHz - 230 MHz

Telecommunication/Signal port measurement frequency range: 150 kHz - 230 MHz

Radiated magnetic field

Interruptions and Voltage variations

Harmonic current

Harmonic current test

Voltage changes, Voltage fluctuations and Flicker test

Telecommunication equipment performance 2

Magnetic field strength

[Test condition] Magnetic field probe

Electric field strength

[Test condition] Electric field probe

Voluntary EMC Laboratory Accreditation Center Inc.

Scope of Accreditation

(Test standards)

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2-8-5 Gakuenminami, Tsukuba, Ibaraki 305-0822, Japan

[Test standards]

Emission test

VCCI Technical Requirements: VCCI-CISPR 32^{*1 *2}

Technical requirements under the Electrical Appliances and Materials safety Act appendix 10 Chapter 2, Chapter 4 and Chapter 9

CISPR 11:2015, EN 55011:2016, AS CISPR 11:2017

CISPR 12:2007, EN 55012:2007, AS/NZS CISPR 12:2013

CISPR 14-1:2020, EN 55014-1:2017

CISPR 32:2015^{*1 *2}, EN 55032:2015^{*1 *2}, AS/NZS CISPR 32:2015^{*1 *2}

IEC 61000-6-3:2020, EN IEC 61000-6-3:2021, AS/NZS 61000.6.3:2021

IEC 61000-6-4:2018, EN IEC 61000-6-4:2019, AS/NZS 61000.6.4:2020

^{*1} Except for measurement in a FAR ^{*2} Except for broadcast radio receivers

The following groups of test standards are included in Emission tests, Immunity tests and Harmonic Test in Public Low Voltage Systems. [Note.1]

IEC 61326-1:2020, EN IEC 61326-1:2021

IEC 60601-1-2:2014, EN 60601-1-2:2015, JIS T 0601-1-2:2023^{*3}

JIS B 8445:2016, ISO 13482:2014

^{*3} Except for Radiated fields in close proximity

Immunity test

[Including the test standards listed in Note 1.]

IEC 61000-4-2:2008/ -4-3:2020 /-4-4:2012 /-4-5:2014+A1:2017 /-4-6:2013 /-4-8:2009 /-4-11:2020

CISPR 14-2:2020, EN IEC 55014-2:2021

CISPR 35:2016, EN 55035:2017

IEC 61000-6-1:2016, EN IEC 61000-6-1:2019, AS/NZS 61000.6.1:2006, JIS C 61000-6-1:2019

IEC 61000-6-2:2016, EN 61000-6-2:2019, AS/NZS 61000.6.2:2022, JIS C 61000-6-2:2019

Harmonic Test in Public Low Voltage Systems

[Including the test standards listed in Note 1.]

IEC 61000-3-2:2018, EN IEC 61000-3-2:2019+A1:2021, AS/NZS 61000.3.2:2013

JIS C 61000-3-2:2019

IEC 61000-3-3:2013, EN 61000-3-3:2013, AS/NZS 61000.3.3:2023

IEC 61000-6-3:2020, EN IEC 61000-6-3:2021

Telecommunication equipment performance 2

IEC 62311:2019, EN IEC 62311:2020

IEC 62233:2005, EN 62233:2008

Voluntary EMC Laboratory Accreditation Center Inc.

The laboratory is only accredited for testing activities outlined within the test methods listed above. If test standards do not include the edition, it means the latest one at the date of renewal (10.8, 2023).