Scope of Accreditation

（Measurement Method）

Accreditation Number : VLAC-051
Expiration Date : October 7, 2023

〔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 : 3m/10m
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, Large 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] ISN

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, 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）

Accreditation Number : VLAC-051
Expiration Date : October 7, 2023

〔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

〔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, EN 55011, AS CISPR 11, CISPR 12, EN 55012, AS/NZS CISPR 12
CISPR 14-1, EN 55014-1, AS/NZS CISPR 22
CISPR 32[*1] [*2], EN 55032[*1] [*2], AS/NZS CISPR 32[*1] [*2]
IEC 61000-6-3, EN 61000-6-3, AS/NZS 61000.6.3
IEC 61000-6-4, EN 61000-6-4, AS/NZS 61000.6.4
IEC 61326-1, EN 61326-1, IEC 60601-1-2, EN 60601-1-2, JIS T 0601-1-2
JIS B 8445, ISO 13482

[*1] Except for measurement in a FAR, [*2] Except for broadcast radio receivers

Immunity test

IEC 61000-4-2/-4-3/-4-4/-4-5/-4-6/-4-8/-4-11
CISPR 14-2, EN 55014-2, CISPR 24, EN 55024, CISPR 35, EN 55035
IEC 61000-6-1, EN 61000-6-1, AS/NZS 61000.6.1, JIS C 61000-6-1
IEC 61000-6-2, EN 61000-6-2, AS/NZS 61000.6.2, JIS C 61000-6-2
IEC 61326-1, EN 61326-1, IEC 60601-1-2, EN 60601-1-2, JIS T 0601-1-2
JIS B 8445, ISO 13482

Harmonic Test in Public Low Voltage Systems

IEC 61000-3-2, EN 61000-3-2, AS/NZS 61000.3.2, JIS C 61000-3-2
IEC 61000-3-3, EN 61000-3-3, AS/NZS 61000.3.3
IEC 61000-6-3, EN 61000-6-3,
IEC 61326-1, EN 61326-1, IEC 60601-1-2, EN 60601-1-2, JIS T 0601-1-2
JIS B 8445, ISO 13482

Telecommunication equipment performance 2

IEC 62311, EN 62311, IEC 62233, EN 62233

Voluntary EMC Laboratory Accreditation Center Inc.