

Details regarding VLAC-001(Branch #1) Site

Accreditation No.	VLAC-001-1
Laboratory Name	Japan Quality Assurance Organization
Site Name	Safety & EMC Center
Address	1-21-25 Kinuta Setagaya-ku Tokyo
Responsible Person	Eiichi Saegusa
TEL	03-3416-0193
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- SCOPE OF ACCREDITATION -

【Measurement Method】

Emission Test

Radiated disturbance: Enclosure Port

Radiated field strength measurement (CISPR 16-2-3, ANSI C63.4:2003)

[Test Condition] * On the ground reference plane, Measurement distance: 3m, 10m
Frequency Range (30MHz ~ 40GHz)

[Test Facilities] Anechoic Chamber Room A, Anechoic Chamber Room B

[Test Condition] Quasi Free Space, Frequency Range (1GHz ~ 6GHz)

[Test Facilities] Anechoic Chamber Room A, Anechoic Chamber Room B

Radiated magnetic field strength measurement (CISPR16-2-3)

[Test Facilities] Anechoic Chamber Room A, Anechoic Chamber Room B

Disturbance power measurement (CISPR16-2-2)

[Test Facilities] Anechoic Chamber Room A, Anechoic Chamber Room B

Conducted disturbance measurement: AC mains port

Disturbance voltage measurement (CISPR 16-2-1, ANSI C63.4:2003)

[Test Condition] AMN, High-impedance Probe (CISPR 16-1-2)

[Test Facilities] Anechoic Chamber Room A, Shielded Room A, Shielded Room C

Conducted disturbance measurement: Telecommunications port

Disturbance voltage measurement (CISPR 22 Clause 9.6 and Annex C)

[Test Condition] AAN (CISPR 16-1-2)

Disturbance current measurement (CISPR 22 Clause 9.6 and Annex C)

[Test Condition] Current probe (CISPR 16-1-2)

[Test Facilities] Anechoic Chamber Room A, Shielded Room A, Shielded Room C

Conducted disturbance measurement: DC mains port

Disturbance voltage measurement (CISPR 16-2-1, ANSI C63.4:2003)

[Test Condition] High-impedance Probe (CISPR 16-1-2)

[Test Facilities] Anechoic Chamber Room A, Shielded Room A, Shielded Room C

Conducted disturbance measurement: PLT port

Disturbance current measurement

[Test Condition] Current Probe (CISPR 16-1-2)

[Test Facilities] Anechoic Chamber Room A, Shielded Room A, Shielded Room C

Immunity Test

ESD (IEC61000-4-2),

Radiated electromagnetic field (IEC61000-4-3),

EFT/B (IEC61000-4-4): AC mains port/Telecommunications port,

Surge (IEC61000-4-5): AC mains port,

RF conducted (IEC61000-4-6): AC mains port/Telecommunications port,

Power frequency magnetic field (IEC61000-4-8),

Interruptions and voltage variations/dip (IEC61000-4-11)

[Test Facilities] Anechoic Chamber Room A (All Immunity tests above) ,

Shielded Room A, Shielded Room C (Except Radiated field immunity test)

Immunity Test for Broadcast Receiver

Antenna Input immunity (CISPR20), RF Induced voltage immunity (CISPR20)

[Test Facilities] Shielded Room D

RF Radiated immunity (CISPR20)

[Test Facilities] Anechoic Chamber Room A

【Measurement Method】

Harmonic Test in Public Low Voltage Systems

Harmonic current (IEC61000-3-2), Voltage fluctuations and flicker (IEC61000-3-3)
〔 Test Facilities 〕 Office floor of No.2 Building

Telecommunications Equipment Performance Test 1

Transmission Power (Antenna terminal, Radiated), Spurious (Antenna terminal, Radiated)
Signal Characteristics (Frequency Stability, Modulation characteristics, OBW, Signal spectrum)
Others (FCC Part15 Subpart C, E, Tests based on EN Standards and Canada Standards)
〔 Test Facilities 〕 Shielded Room A and Room E (Related to Antenna terminal tests)
Anechoic Chamber Room A, Anechoic Chamber Room B (Related to Radiated tests)

Telecommunications Equipment Performance Test 2

Magnetic Field Measurement
〔 Test Facilities 〕 Anechoic Chamber Room A, Anechoic Chamber Room B

【Measurement Standards】

Emission Test

V-3 : VCCI Technical Requirement
FCC 47CFR/Part15 Subpart B (Broadcast receiver, other receivers, including MP-2) &
Subpart C/ANSI C63.4 (2003)
CISPR11, CISPR13, CISPR14-1, CISPR22, EN55011, EN55013, EN55014-1, EN55022, EN55103-1
Technical requirement of Electrical Appliances and Material Safety Act for the disturbance noise level:
Clause 1 of Ministerial Ordinance (Chapter 2 to 9)
J55001, J55013, J55014-1, J55022
Enforcement rule of Radio Law : Article 46.2 Clause 1 Section 5 (Broadband Power Line Communications Equipment)
/ Notification No.520
Article 46.7 (Microwave Oven or IH Cooking Heater) / attached Table No.8
AS/NZS CISPR11, AS/NZS CISPR13, AS/NZS CISPR14.1, AS/NZS CISPR22
ICES-001, ICES-003, CNS13438, CNS13439, CNS13783-1, K00013, K00014-1, K00022, KN22
GB13837, GB4343.1, GB9254, GOST R51318.13, GOST R51318.14.1, GOST R51318.22
IEC61000-6-3, IEC61000-6-4, EN61000-6-3, EN61000-6-4
IEC60601-1-2(Particular requirement IEC60601-2 series), EN60601-1-2((Particular requirement EN60601-2 series)
JIS T0601-1-2(Particular requirement JIS T0601-2 series)
IEC61326-1(Particular requirement IEC61326-2 series), EN61326-1(Particular requirement EN61326-2 series),
JIS C1806-1
IEC60533, IEC60945, Nippon Kaiji Kyokai Technical rule of Materials and Equipment for Marine Use:
Article 7 Chapter 1 (Rules for the Automatic and Remote control)

Immunity Test

CISPR14-2, CISPR20, CISPR24, EN55014-2, EN55020, EN55024, EN55103-2
IEC61000-6-1, IEC61000-6-2, EN61000-6-1, EN61000-6-2, EN60601-1-2, IEC61547, EN50130-4
IEC60601-1-2(Particular requirement IEC60601-2 series), EN60601-1-2((Particular requirement EN60601-2 series)
JIS T0601-1-2(Particular requirement JIS T0601-2 series)
IEC61326-1(Particular requirement IEC61326-2 series), EN61326-1(Particular requirement EN61326-2 series),
JIS C1806-1, JIS C61000-6-1, JIS C61000-6-2
AS/NZS CISPR14.2, AS/NZS CISPR20, AS/NZS CISPR24, AS/NZS 61000.6.1, AS/NZS 61000.6.2
K00014-2, K00020, K00024, KN24, GB4343.2, GOST R51318.24

Harmonic Test in Public Low Voltage Systems

IEC61000-3-2, JIS C61000-3-2, EN61000-3-2, IEC61000-3-3, EN61000-3-3
AS/NZS 61000.3.2, AS/NZS 61000.3.3, AS/NZS 61000.6.3, AS/NZS 61000.6.4
IEC61000-6-3, IEC61000-6-4, EN61000-6-3, EN61000-6-4, GB17625.1, GOST R51317.3.2, GOST R51317.3.3
IEC60601-1-2(Particular requirement IEC60601-2 series), EN60601-1-2((Particular requirement EN60601-2 series)
JIS T0601-1-2(Particular requirement JIS T0601-2 series)
IEC61326-1(Particular requirement IEC61326-2 series), EN61326-1(Particular requirement EN61326-2 series),
JIS C1806-1

Telecommunications Equipment Performance Test 1

FCC 47CFR/Part15 Subpart C, E/Part27/Part74, IC RSS-Gen/-132/-210
EN300 328, EN301 489-1/-3/-9, EN301 489-17, EN301 893, EN300 330-1, EN300 330-2, EN300 422-1/-2
EN300 220-1/-2, EN300 440-1/-2

Telecommunications Equipment Performance Test 2

IEC62233, EN50366, IEC62311, EN62311