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Type of Laboratory	Testing Laboratory
Name of Laboratory	Labotech International Co., Ltd.
Address	1-16, Fukazu-cho, Nishinomiya-shi, Hyogo, 663-8203 Japan

1) Premises on which testing activities are performed

Name of Premises	Kishu Lab.	
Address of Premises	Postal code	640-8452
	Address	579-1, Umehara, Wakayama-shi, Wakayama, Japan
Testing service at permanent facilities or on site testing service	<input checked="" type="checkbox"/> Testing service at permanent facilities <input type="checkbox"/> On site testing service	

Scope of Accreditation

FIELD	M21 Electrical Testing
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CODE OF CLASSIFICATION, NAME	TEST METHOD STANDARD
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.1 Continuous disturbance tests	CISPR 11 (except 10, Annex H), EN 55011 (except 10, Annex H) CISPR 22 (except 7), EN 55022 (except 7) CISPR 32 (except Table A.6, Table A.7, Table A.13) EN 55032 (except Table A.6, Table A.7, Table A.13) IEC 61000-6-3, EN 61000-6-3 IEC 61000-6-4, EN 61000-6-4 IEC 60945, EN 60945, JIS F 0812, EN 301 843-1 IEC 60601-1-2, EN 60601-1-2, JIS T 0601-1-2 IEC 61326-1, EN 61326-1, JIS C 1806-1 IEC 61326-2-6, EN 61326-2-6 IEC 62236-3-2 (except Table 1, 1.2), EN 50121-3-2 (except Table 1, 1.2) VCCI Technical requirements ANSI C63.4 : 2014 MP-5 (February 1986) FCC Part 15 Subpart B, FCC Part 18 RSS-Gen CISPR 14-1 (except Table 4 Loop antenna system) EN 55014-1 (except Table 4 Loop antenna system) EN 301 489-1, EN 301 489-17
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.3 Discontinuous disturbance tests	CISPR 14-1 (except Table 4 Loop antenna system) EN 55014-1 (except Table 4 Loop antenna system) IEC 61000-6-3, EN 61000-6-3 IEC 61000-6-4, EN 61000-6-4 ANSI C63.4 : 2014



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CODE OF CLASSIFICATION, NAME	TEST METHOD STANDARD
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.4 Conducted emission tests at telecommunication ports	CISPR 22 (except 7), EN 55022 (except 7) CISPR 32 (except Table A.6, Table A.7, Table A.13) EN 55032 (except Table A.6, Table A.7, Table A.13) IEC 61000-6-3, EN 61000-6-3 IEC 61000-6-4, EN 61000-6-4 EN 301 489-1, EN 301 489-17 VCCI Technical requirements
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.5 Magnetic/Electric field test(up to 30MHz)	CISPR 11 (except 10, Annex H) EN 55011 (except 10, Annex H) IEC 60945, EN 60945, JIS F 0812 IEC 60601-1-2, EN 60601-1-2, JIS T 0601-1-2 MP-5 (February 1986) RSS-Gen FCC Part 18 CISPR 14-1 (except Table 4 Loop antenna system) EN 55014-1 (except Table 4 Loop antenna system) EN 302 248
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.6 Electric field test(30MHz to 1GHz)	CISPR 11(except 10, Annex H), EN 55011 (except 10, Annex H), CISPR 22 (except 7), EN 55022 (except 7) CISPR 32 (except Table A.6, Table A.7, Table A.13) EN 55032 (except Table A.6, Table A.7, Table A.13) IEC 61000-6-3, EN 61000-6-3 IEC 61000-6-4, EN 61000-6-4 IEC 60945, EN 60945, JIS F 0812 EN 301 843-1 IEC 60601-1-2, EN 60601-1-2, JIS T 0601-1-2 IEC 61326-1, EN 61326-1, JIS C 1806-1 IEC 61326-2-6, EN 61326-2-6 IEC 62236-3-2 (except 1.2 of Table 1), EN 50121-3-2 (except 1.2 of Table 1) VCCI Technical requirements ANSI C63.4 : 2014 MP-5 (February 1986) FCC Part 15 Subpart B, FCC Part 18 RSS-Gen CISPR 14-1, EN 55014-1 EN 302 248 EN 301 489-1, EN 301 489-17



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CODE OF CLASSIFICATION, NAME	TEST METHOD STANDARD
-M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.7 Electric field test(1GHz and over)	CISPR 11(except 10, Annex H), EN 55011 (except 10, Annex H), CISPR 22 (except 7), EN 55022 (except 7) CISPR 32 (except Table A.6, Table A.7, Table A.13) EN 55032 (except Table A.6, Table A.7, Table A.13) IEC 60945, EN 60945, JIS F 0812 EN 301 843-1 IEC 60601-1-2, EN 60601-1-2, JIS T 0601-1-2 IEC 62236-3-2 (except 1.2 of Table 1), EN 50121-3-2 (except 1.2 of Table 1) VCCI Technical requirements ANSI C63.4 : 2014 MP-5 (February 1986) FCC Part 15 Subpart B, FCC Part 18 RSS-Gen IEC 61000-6-3, EN 61000-6-3 IEC 61000-6-4, EN 61000-6-4 CISPR 14-1 (except Table 4 Loop antenna system) EN 55014-1 (except Table 4 Loop antenna system) EN 302 248 EN 301 489-1, EN 301 489-17
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.9 Disturbance power tests	CISPR 14-1 (except Table 4 Loop antenna system) EN 55014-1 (except Table 4 Loop antenna system)
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.10 Harmonic current emission tests	IEC 61000-3-2, EN 61000-3-2, JIS C 61000-3-2 IEC 61000-6-3, EN 61000-6-3 IEC 60601-1-2, EN 60601-1-2, JIS T 0601-1-2 IEC 61326-1, EN 61326-1, JIS C 1806-1 EN 301 489-1, EN 301 489-17
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.12 Voltage fluctuation and flicker tests	IEC 61000-3-3, EN 61000-3-3 IEC 61000-6-3, EN 61000-6-3 IEC 60601-1-2, EN 60601-1-2, JIS T 0601-1-2 IEC 61326-1, EN 61326-1 EN 301 489-1, EN 301 489-17



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CODE OF CLASSIFICATION, NAME	TEST METHOD STANDARD
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.14 Electrostatic discharge immunity tests	IEC 61000-4-2, EN 61000-4-2 IEC 61000-6-1, EN 61000-6-1 IEC 61000-6-2, EN 61000-6-2 IEC 60945, EN 60945, JIS F 0812 EN 301 843-1 IEC 60601-1-2, EN 60601-1-2, JIS T 0601-1-2 IEC 61326-1, EN 61326-1, JIS C 1806-1 IEC 61326-2-6, EN 61326-2-6 IEC 62236-3-2, EN 50121-3-2 CISPR 14-2, EN 55014-2 CISPR 35, EN 55035, EN 301 489-1, EN 301 489-17
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.15 RF radiated electromagnetic field immunity tests	IEC 61000-4-3, EN 61000-4-3 IEC 61000-6-1, EN 61000-6-1 IEC 61000-6-2, EN 61000-6-2 IEC 60945, EN 60945, JIS F 0812 EN 301 843-1 IEC 61326-1, EN 61326-1, JIS C 1806-1 IEC 61326-2-6, EN 61326-2-6 CISPR 14-2, EN 55014-2 CISPR 35, EN 55035 EN 301 489-1, EN 301 489-17
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.16 Electrical fast transient/burst immunity tests	IEC 61000-4-4, EN 61000-4-4 IEC 61000-6-1, EN 61000-6-1 IEC 61000-6-2, EN 61000-6-2 IEC 60945, EN 60945, JIS F 0812 EN 301 843-1 IEC 60601-1-2, EN 60601-1-2, JIS T 0601-1-2 IEC 61326-1, EN 61326-1, JIS C 1806-1 IEC 61326-2-6, EN 61326-2-6 IEC 62236-3-2, EN 50121-3-2 CISPR 14-2, EN 55014-2 CISPR 35, EN 55035 EN 301 489-1, EN 301 489-17
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.17 Surge immunity tests	IEC 61000-4-5, EN 61000-4-5 IEC 61000-6-1, EN 61000-6-1 IEC 61000-6-2, EN 61000-6-2 IEC 60945, EN 60945, JIS F 0812 EN 301 843-1 IEC 60601-1-2, EN 60601-1-2, JIS T 0601-1-2 IEC 61326-1, EN 61326-1, JIS C 1806-1 IEC 61326-2-6, EN 61326-2-6



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CODE OF CLASSIFICATION, NAME	TEST METHOD STANDARD
	IEC 62236-3-2, EN 50121-3-2 CISPR 14-2, EN 55014-2 CISPR 35, EN 55035 EN 301 489-1, EN 301 489-17
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.18 RF conducted immunity tests	IEC 61000-4-6, EN 61000-4-6 IEC 61000-6-1, EN 61000-6-1 IEC 61000-6-2, EN 61000-6-2 IEC 60945, EN 60945, JIS F 0812 EN 301 843-1 IEC 60601-1-2 (expect BCI method), EN 60601-1-2 (expect BCI method), JIS T 0601-1-2 (expect BCI method) IEC 61326-1, EN 61326-1, JIS C 1806-1 IEC 61326-2-6, EN 61326-2-6 IEC 62236-3-2, EN 50121-3-2 CISPR 14-2, EN 55014-2 CISPR 35, EN 55035 EN 301 489-1, EN 301 489-17
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.19 Power frequency magnetic field immunity tests	IEC 61000-4-8, EN 61000-4-8 IEC 61000-6-1, EN 61000-6-1 IEC 61000-6-2, EN 61000-6-2 IEC 60601-1-2, EN 60601-1-2, JIS T 0601-1-2 IEC 61326-1, EN 61326-1, JIS C 1806-1 IEC 61326-2-6, EN 61326-2-6 CISPR 35, EN 55035
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.20 A.C. power supply fluctuation immunity tests	IEC 61000-4-11, EN 61000-4-11 IEC 61000-6-1 (up to 16 A), EN 61000-6-1 (up to 16 A) IEC 61000-6-2, EN 61000-6-2 IEC 60945, EN 60945, JIS F 0812 EN 301 843-1 IEC 60601-1-2, EN 60601-1-2, JIS T 0601-1-2 IEC 61326-1, EN 61326-1, JIS C 1806-1 IEC 61326-2-6, EN 61326-2-6 CISPR 14-2, EN 55014-2 CISPR 35, EN 55035 EN 301 489-1, EN 301 489-17
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.23 Test for immunity to conducted, disturbance in the frequency range 0Hz to 150kHz	IEC 60945:1996 10.2, EN 60945:1997 10.2



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CODE OF CLASSIFICATION, NAME	TEST METHOD STANDARD
M21 Electrical testing M21.4 Electromagnetic compatibility testing M21.4.25 Voltage dips, short interruptions and voltage variations on d.c. input power port immunity tests	IEC 60945 10.8, EN 60945 10.8, JIS F 0812 10.8



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CODE OF CLASSIFICATION, NAME	TEST METHOD STANDARD
M21 Electrical testing M21.5 Environmental testing M21.5.18 Vibration tests(sinusoidal)	IEC 60068-2-6 (7, 9, and 11 are limited to visual check by viewing and operation check by electricity. Horizontal: Frequency range 2Hz to 800Hz, Acceleration range $\leq 100\text{m/s}^2$ Displacement range $\leq 50\text{mm}$ p-p, Vertical: Frequency range 2Hz to 2000Hz, Acceleration range $\leq 100\text{m/s}^2$ Displacement range $\leq 50\text{mm}$ p-p), EN 60068-2-6 (7, 9 and 11 are limited to visual check by viewing and operation check by electricity. Horizontal: Frequency range 2Hz to 800Hz, Acceleration range $\leq 100\text{m/s}^2$ Displacement range $\leq 50\text{mm}$ p-p, Vertical: Frequency range 2Hz to 2000Hz, Acceleration range $\leq 100\text{m/s}^2$ Displacement range $\leq 50\text{mm}$ p-p), JIS C 60068-2-6 (7, 9, and 11 are limited to visual check by viewing and operation check by electricity. Horizontal: Frequency range 2Hz to 800Hz, Acceleration range $\leq 100\text{m/s}^2$ Displacement range $\leq 50\text{mm}$ p-p, Vertical: Frequency range 2Hz to 2000Hz, Acceleration range $\leq 100\text{m/s}^2$ Displacement range $\leq 50\text{mm}$ p-p), IEC 60945, EN 60945, JIS F 0812
M21 Electrical testing M21.5 Environmental testing M21.5.1 Cold tests	IEC 60068-2-1 (6.8, 6.10, and 6.13 are limited to visual check by viewing and operation check by electricity. Test Ab Temperature range $-40\text{ }^\circ\text{C}$ to $+5\text{ }^\circ\text{C}$), EN 60068-2-1 (6.8, 6.10, and 6.13 are limited to visual check by viewing and operation check by electricity. Test Ab Temperature range $-40\text{ }^\circ\text{C}$ to $+5\text{ }^\circ\text{C}$), JIS C 60068-2-1 (6.8, 6.10, and 6.13 are limited to visual check by viewing and operation check by electricity. Test Ab Temperature range $-40\text{ }^\circ\text{C}$ to $+5\text{ }^\circ\text{C}$), IEC 60945, EN 60945, JIS F 0812
M21 Electrical testing M21.5 Environmental testing M21.5.2 Dry heat tests	IEC 60068-2-2 (6.7, 6.9, and 6.13 are limited to visual check by viewing and operation check by electricity. Test Bb Temperature range $\leq 100\text{ }^\circ\text{C}$), EN 60068-2-2 (6.7, 6.9, and 6.13 are limited to visual check by viewing and operation check by electricity. Test Bb Temperature range $\leq 100\text{ }^\circ\text{C}$), JIS C 60068-2-2 (6.7, 6.9, and 6.13 are limited to visual check by viewing and operation check by electricity. Test Bb Temperature range $\leq 100\text{ }^\circ\text{C}$), IEC 60945, EN 60945, JIS F 0812



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CODE OF CLASSIFICATION, NAME	TEST METHOD STANDARD
M21 Electrical testing M21.5 Environmental testing M21.5.6 Damp Heat tests, cyclic (12+12-Hour cycle)	IEC 60068-2-30 (6, 8, 10 are limited to visual check by viewing and operation check by electricity.), EN 60068-2-30 (6, 8, 10 are limited to visual check by viewing and operation check by electricity.), JIS C 60068-2-30 (6, 8, 10 are limited to visual check by viewing and operation check by electricity.), IEC 60945, EN 60945, JIS F 0812
M21 Electrical testing M21.27 Radio Transmitter tests M21.27.1 Frequency	FCC Part 2.1055, 25.202, 74.861, 80.209, 80.213, 87.133, 90.213, 90.215, 101.107 ANSI/TIA-603-E RSS-Gen, RSS-170, RSS-181, RSS-182, RSS-238 EN 302 248, EN 303 135
M21 Electrical testing M21.27 Radio Transmitter tests M21.27.2 Occupied frequency bandwidth	FCC Part 2.1049, 74.861, 80.209, 80.211, 87.135, 87.137, 87.139, 90.209, 90.210, 101.109 RSS-Gen, RSS-182
M21 Electrical testing M21.27 Radio Transmitter tests M21.27.3 Spurious emission intensity	FCC Part 2.1051, 2.1053, 2.1057, 25.204, 74.861, 80.211, 80.217, 80.273, 87.139, 90.210, 101.111 ANSI/TIA-603-E RSS-Gen, RSS-170, RSS-181, RSS-182, RSS-238 EN 302 248, EN 303 135 IEC 62388 Annex B, ITU-R M.1177
M21 Electrical testing M21.27 Radio Transmitter tests M21.27.4 Antenna power	FCC Part 2.1046, 25.204, 25.216, 74.861, 80.215, 80.855, 80.873, 80.909, 80.911, 80.959, 87.131, 90.205, 90.215, 90.217, 101.113 ANSI/TIA-603-E RSS-Gen, RSS-170, RSS-181, RSS-182, RSS-238 EN 302 248, EN 303 135
M21 Electrical testing M21.27 Radio Transmitter tests M21.27.8 Carrier-wave power	FCC Part 2.1046, 30.202, 80.215, 87.131, 95.3167 ANSI/TIA-603-E RSS-Gen, RSS-170, RSS-181, RSS-182, RSS-238 EN 302 248
M21 Electrical testing M21.27 Radio Transmitter tests M21.27.11 Transmission rise time and transmission fall time	FCC Part 2.1047, 80.213, 87.141, 90.207 RSS-238



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CODE OF CLASSIFICATION, NAME	TEST METHOD STANDARD
M21 Electrical testing M21.27 Radio Transmitter tests M21.27.12 Adjacent channel leakage power or out-band leakage power	FCC Part 2.1051, 2.1053, 2.1057, 80.211, 80.273, 87.139, 90.210 ANSI/TIA-603-E RSS-Gen, RSS-181, RSS-182, RSS-238 EN 302 248, EN 303 135 IEC 62388 Annex B, ITU-R M.1177
M21 Electrical testing M21.28 Radio Receiver tests M21.28.1 Limit of radio waves which are secondarily emitted	FCC Section 2.1051, 2.1053, 2.1057, 80.217, 90.210 ANSI/TIA-603-E RSS-Gen, RSS-170, RSS-181, RSS-182
M21 Electrical testing M21.28 Radio Receiver tests M21.28.5 Spurious response	EN 303 135
M21 Electrical testing M21.41 Accreditation Scope of EMC laboratory for FCC M21.41.1 Unintentional Radiators (FCC Part 15, Subpart B)	ANSI C63.4-2014 (Measurement frequency : up to 40 GHz)
M21 Electrical testing M21.41 Accreditation Scope of EMC laboratory for FCC M21.41.2 Industrial, Scientific, and Medical Equipment (FCC Part 18) • Consumer ISM equipment	FCC MP-5 (February 1986) (Measurement frequency : up to 40 GHz)
M21 Electrical testing M21.41 Accreditation Scope of EMC laboratory for FCC M21.41.13 Maritime and Aviation Radio Services (FCC Licensed Radio Service Equipment) • Part 80 • Part 87	• ANSI/TIA-603-E-2016; [1] or • ANSI C63.26-2015 (Measurement frequency : up to 40 GHz)



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CODE OF CLASSIFICATION, NAME	TEST METHOD STANDARD
M21 Electrical testing M21.41 Accreditation Scope of EMC laboratory for FCC M21.41.14 Microwave and Millimeter Bands Radio Services (FCC Licensed Radio Service Equipment) <ul style="list-style-type: none">• Part 25• Part 30• Part 74• Part 90 (above 3 GHz)• Part 95 (above 3 GHz)• Part 97 (above 3 GHz)• Part 101	•ANSI/TIA-603-E-2016; [1] or •ANSI/TIA-102.CAAA-E-2016; [1] or •ANSI C63.26-2015 (Measurement frequency : up to 40 GHz)