

Issue Date : April 10, 2003
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***EMC* EMISSION - TEST REPORT**

JQA APPLICATION No. : KL80020654

Name of Product : VHF/UHF Transceiver

Model/Type No. : IC-208H

FCC ID : AFJ 263300

Applicant : ICOM Incorporated

Address : 1-1-32, Kamiminami, Hirano-ku, Osaka, 547-0003, Japan

Manufacturer : ICOM Incorporated

Address : 1-1-32, Kamiminami, Hirano-ku, Osaka, 547-0003, Japan

Receive date of EUT : March 13, 2003

Final Judgement : Passed

TEST RESULTS IN THIS REPORT are obtained in use of equipment that is traceable to National Institute of Advanced Industrial Science and Technology(AIST) under METI Japan and Communications Research Lab.(CRL) under MPHPT Japan.

THE TEST RESULTS only responds to the test sample. This test report shall not be reproduced except in full.

Authorized by:



Takashi Yamanaka, Director
JQA KITA-KANSAI Testing Center

DIRECTORY

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TEST REGULATION

FCC Rules and Regulations Part 15 Subpart A and B (March 13, 2003)

- ☐ - Class A Digital Device
- ☐ - Class B Digital Device
- ☒ - Scanning Receiver

Test procedure:

The tests were performed according to the procedures in ANSI C63.4-1992.

GENERAL INFORMATION

Test facility:

- 1) Test Facility located at Kita-Kansai : 1st Open Site (3 m Site)
Test Facility located at Kameoka : 1st Open Site (3, 10 and 30 m, on common plane)
: 2nd Open Site (3 and 10 m, on common plane)

FCC filing No. : 31040/SIT 1300F2

- 2) KITA-KANSAI TESTING CENTER is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance established in Title 15, Part 285 Code of Federal Regulations.
NVLAP Lab Code: 200191-0

Description of the Equipment Under Test (EUT):

- 1) Name : VHF/UHF Transceiver
- 2) Model/Type No. : IC-208H
- 3) Product Type : Pre-Production (S/N: 0000010)
- 4) Category : Scanning Receiver
- 5) EUT Authorization : ☐ - Verification ☒ - Certification ☐ - D.o.C.
- 6) Highest frequency used/generated : 19.6608 MHz
- 7) Highest local frequency : 1032.14 MHz
- 8) Power Rating : DC 13.8V

Definitions for symbols used in this test report:

- ☒ - Black box indicates that the listed condition, standard or equipment is applicable for this Report.
- ☐ - Blank box indicates that the listed condition, standard or equipment is not applicable for this Report.

TEST CONDITIONS

AC Powerline Conducted Emission Measurement

was performed in the following test site.

Test location:

KITA-KANSAI Testing Center

7-7, Ishimaru, 1-Chome, Mino-Shi, Osaka, 562-0027, Japan

○ - Shielded room

KAMEOKA EMC Branch

9-1, Ozaki, Inukanno, Nishibetsuin-Cho, Kameoka-Shi, Kyoto, 621-0126, Japan

○ - Shielded room

○ - On metal plane of open site

Used test instruments and sites:

Model No.	Device ID	Last Cal. Date	Cal. Interval
○ - ESCS 30	A - 1		
○ - ESH 2	A - 2		
○ - ESH 2	A - 3		
○ - KNW-407	D - 6		
○ - KNW-408	D - 11		
○ - KNW-242	D - 7		
○ - ESH3-Z5	D - 12		
○ - KNW-341C	D - 13		
○ - KNW-408	D - 14		
○ - KNW-244C	D - 77		
○ - KNW-408	D - 78		
○ - ESH2-Z5	D - 10		
○ - ESH2-Z3	D - 17		
○ - 65 BNC-50-0-1	H - 26		
○ - 65 BNC-50-0-1	H - 27		
○ - Cable	H - 7		
○ - Cable	H - 8		

Environmental conditions:

Temperature: _____ °C Humidity: _____ %

Electromagnetic Field Radiated Emission Measurement

was performed in horizontal and vertical polarization, in the frequency range of 30 MHz - 1000 MHz, in the following test site.

Test location:

KITA-KANSAI Testing Center

7-7, Ishimaru, 1-Chome, Mino-Shi, Osaka, 562-0027, Japan

● - 1st open test site (3 meters)

KAMEOKA EMC Branch

9-1, Ozaki, Inukanno, Nishibetsuin-Cho, Kameoka-Shi, Kyoto, 621-0126, Japan

○ - 1st open test site ○ - 3 m ○ - 10 m ○ - 30 m

○ - 2nd open test site ○ - 3 m ○ - 10 m

Validation of Site Attenuation:

1) Last Confirmed Date : October 4, 2002

2) Interval : 1 Year

Used test instruments:

Model No.	Device ID	Last Cal. Date	Cal. Interval
○ - ESV/ESV-Z3	A - 7 / A - 17		
○ - ESV/ESV-Z3	A - 6 / A - 18		
○ - ESV/ESV-Z3	A - 4 / A - 20		
○ - ESV/ESV-Z3	A - 8 / A - 19		
● - ESVS 10	A - 5	August, 2002	1 Year
○ - ESCS 30	A - 1		
○ - KBA-511A	C - 11		
○ - KBA-611	C - 21		
● - VHA9103/BBA9106	C - 43	August, 2002	1 Year
● - UHALP9107	C - 42	August, 2002	1 Year
○ - VHA9103/FBAB9177	C - 25		
○ - UHALP9108-A1	C - 28		
● - Cable	H - 5	November, 2002	1 Year

Environmental conditions:

Temperature: 19 °C Humidity: 62 %

Electromagnetic Field Radiated Emission Measurement

was performed in horizontal and vertical polarization, in the frequency range of 1 GHz - 2.1GHz, in the following test site.

Test location:

KITA-KANSAI Testing Center

7-7, Ishimaru, 1-Chome, Mino-Shi, Osaka, 562-0027, Japan

● - 1st open test site (3 meters)

KAMEOKA EMC Branch

9-1, Ozaki, Inukanno, Nishibetsuin-Cho, Kameoka-Shi, Kyoto, 621-0126, Japan

○ - 1st open test site ○ - 3 m ○ - 10 m ○ - 30 m

○ - 2nd open test site ○ - 3 m ○ - 10 m

Used test instruments:

Model No.	Device ID	Last Cal. Date	Cal. Interval
● - ESCS 30	A - 1	August, 2002	1 Year
○ - ESCS 30	A - 9		
○ - 8566B	A - 13		
○ - 8593A	A - 15		
○ - ESV	A - 6		
● - 4T-10	D - 73	May, 2002	1 Year
● - 4T-10	D - 74	May, 2002	1 Year
● - WJ-6611-513	A - 23	May, 2002	1 Year
○ - WJ-6882-824	A - 21		
○ - DBL-0618N515	A - 33		
● - 91888-2	C - 41 - 1	May, 2002	1 Year
○ - 91889-2	C - 41 - 2		
○ - 94613-1	C - 41 - 3		
○ - 91891-2	C - 41 - 4		
○ - 94614-1	C - 41 - 5		
○ - 3160-09	C - 48		
○ - 355C	D - 22		
○ - 355D	D - 23		
○ - MZ5010C	D - 81		
● - Cable	C - 40 - 11	May, 2002	1 Year
● - Cable	C - 40 - 12	May, 2002	1 Year

Environmental conditions:

Temperature: 22 °C Humidity: 48 %

Antenna-Conducted Power Measurement

was performed in the frequency range of 30 MHz - 2.1GHz, in the following test site.

Test location:

KITA-KANSAI Testing Center

7-7, Ishimaru, 1-Chome, Mino-Shi, Osaka, 562-0027, Japan

● - Shielded room

○ - Anechoic chamber

KAMEOKA EMC Branch

9-1, Ozaki, Inukanno, Nishibetsuin-Cho, Kameoka-Shi, Kyoto, 621-0126, Japan

○ - Shielded room

Used test instruments:

Model No.	Device ID	Last Cal. Date	Cal. Interval
● - ESCS 30	A - 1	August, 2002	1 Year
○ - ESCS 30	A - 9		
○ - 8566B	A - 13		
○ - 8593A	A - 15		
○ - ESV	A - 6		
○ - LSG-221	B - 15	June, 2002	1 Year
○ - 216/1	B - 16		
○ - MP614A	D - 56		
○ - 12B50/75	D - 55		
○ - 12N50/75B	D - 72		
● - 2-10	D - 40	June, 2002	1 Year
○ - 1506A	D - 21		
● - Cable	C - 40 - 9		

Environmental conditions:

Temperature: 22 °C Humidity: 56 %

38dB Rejection Test (§15.121(b))

was performed in the following test site.

Test location:

KITA-KANSAI Testing Center

7-7, Ishimaru, 1-Chome, Mino-Shi, Osaka, 562-0027, Japan

● - Shielded room

○ - Anechoic chamber

KAMEOKA EMC Branch

9-1, Ozaki, Inukanno, Nishibetsuin-Cho, Kameoka-Shi, Kyoto, 621-0126, Japan

○ - Shielded room

Used test instruments:

Model No.	Device ID	Last Cal. Date	Cal. Interval
○ - MG3681A	B - 3		
● - 6062A	B - 55	May, 2002	1 Year
● - E-2001B	N47099003	October, 2002	1 Year

Environmental conditions:

Temperature: 26 °C Humidity: 54 %

CONFIGURATION OF EUT

The Equipment Under Test (EUT) consists of:

Description	Applicant (Manufacturer)	Model No. (Serial No.)	FCC ID
VHF/UHF Transceiver	ICOM Incorporated (ICOM Incorporated)	IC-208H (0000010)	AFJ 263300

The measurement was carried out with the following equipment connected:

Description	Grantee/Distributor	Model No. (Serial No.)	FCC ID
DC Power Supply	ICOM Incorporated	IC-5P (1793)	N/A
External Speaker	ICOM Incorporated	SP-12 (--)	N/A
Microphone	ICOM Incorporated	HM-133 (--)	N/A

Type of Interface Cable(s) and the AC Power Cord used with the EUT:

	Description	Port	Shielded Cable	Shell Material	Ferrite Core	Cable Length
1	Main Unit	--	YES	--	YES (1)	3.5 m
	Front Controller	--		--		
2	Main Unit	MICROPHONE	YES	Metal	NO	0.5 m
	Microphone	--		--		
3	Main Unit	ANT	--	--	--	-- m
	50Ω termination	--		--		
4	Main Unit	DATA	NO	--	NO	4.0 m
	No termination	--		--		
5	Main Unit	SP	NO	--	NO	2.2 m
	External Speaker	--		--		
6	Main Unit	DC13.8V	NO	--	NO	3.2 m
	DC Power Supply	--		--		
7	AC Power Cord(DC Power Supply) 1φ 2-pin plug	--	NO	--	NO	1.5 m
8	DC Power Supply	GND	NO	--	NO	1.4 m
	--	--		--		

Operation - mode of the EUT:

1) Relation between receiving frequency, local frequency and Intermediate Frequency

No.	Receiving Frequency [MHz]	1st LO Equation	1st Local Frequency [MHz]	2nd Local Frequency [MHz]
1	118.000 - 173.995	F+IF	164.050 - 220.045	45.600
2	230.000 - 289.995	F-IF	183.950 - 243.945	45.600
3	290.000 - 399.995	F+IF	336.050 - 446.045	45.600
4	400.000 - 549.995	F-IF	353.950 - 503.945	45.600
※5	810.000 - 916.100	F-IF	763.950 - 870.050	45.600
6	916.110 - 941.090	F+IF	962.160 - 987.140	45.600
7	941.100 - 961.100	F-IF	895.050 - 915.050	45.600
8	961.110 - 986.090	F+IF	1007.160 - 1032.140	45.600
9	986.100 - 999.990	F-IF	940.050 - 953.940	45.600

※ : Cellular Blocked Frequency Range : 824.000 MHz - 849.000 MHz, 869.000 MHz - 894.000 MHz

2) Respective Intermediate Frequencies

1st IF : 46.050 MHz

2nd IF : 450 kHz

3) Type of Antenna Terminal : N-Type 50 Ω (Unbalanced)

4) Receiving mode : AM, FM

Test system:

The port of the EUT are shown as follows:

Main Unit : MICROPHONE CONNECTOR[MIC]
ANTENNA CONNECTOR[ANT]
DATA SOCKET[DATA]
EXTERNAL SPEAKER JACK[SP]
POWER RECEPTACLE[DC13.8V]

Special accessories:

The controller cable between the Main Unit and the Front Controller is an exclusive use of the EUT as the special accessory of which is defined §15.27 in FCC rule.

The cable is to be marketed together with the EUT.

The used (generated) frequencies in the EUT:

MAIN CPU : 19.6608 MHz
FRONT CPU : 4.9100 MHz
PLL IC : 15.200 MHz

EUT Modification

- - No modifications were conducted by JQA to achieve compliance to applied levels.
- - To achieve compliance to applied levels, the following change(s) were made by JQA during the compliance test.

— The modification(s) will be implemented in all production models of this equipment. —

Applicant	:	N/A	Date	:	N/A
Typed Name	:	N/A	Position	:	N/A

Responsible Party

— Responsible Party of Test Item(Product) —

Responsible party :

Contact Person :

Signatory

Deviation from Standard

- - No deviations from the standard described in page 3.
- - The following deviations were employed from the standard described in page 3.

TEST RESULTS

AC Powerline Conducted Emission 150 kHz - 30 MHz

The requirements are	○ - Passed	○ - Not Passed
Min. limit margin	_____ dB at _____ MHz	
Max. limit exceeding	_____ dB at _____ MHz	
Uncertainty of measurement results	_____ dB(2 σ)	_____ dB(2 σ)

Remarks: Not Applicable

Electromagnetic Field Radiated Emission 30 MHz - 2.1GHz

The requirements are	● - Passed	○ - Not Passed
Min. limit margin	<u>13.2</u> dB at <u>2064.28</u> MHz	
Max. limit exceeding	_____ dB at _____ MHz	
Uncertainty of measurement results(30MHz - 1GHz)	<u>+4.1</u> dB(2 σ)	<u>- 4.2</u> dB(2 σ)
Uncertainty of measurement results(1GHz - 2.11GHz)	<u>+3.1</u> dB(2 σ)	<u>- 3.2</u> dB(2 σ)

Remarks: _____

Antenna-Conducted Power 30 MHz - 2.1GHz

The requirements are	● - Passed	○ - Not Passed
Min. limit margin	<u>16.0</u> dB at <u>1548.21</u> MHz and at <u>2064.28</u> MHz	
Max. limit exceeding	_____ dB at _____ MHz	
Uncertainty of measurement results	<u>+ 2.3</u> dB(2 σ)	<u>- 2.3</u> dB(2 σ)

Remarks: _____

● - Passed

○ - **Not Passed**

More than 20.0 dB at 933.300 MHz

_____ dB at _____ MHz

 dB(2σ) dB(2σ)

Remarks: _____

SUMMARY

GENERAL REMARKS :

The EUT was tested according to the requirements of FCC Rules and Regulations Part 15 Subpart A and B (March 13, 2003) under the test configuration, as shown in page 16.

The conclusion for the test items of which are required by the applied regulation is indicated under the final judgement.

FINAL JUDGEMENT :

The "as received" sample;

- - fulfill the test requirements of the regulation mentioned on page 3.
- - fulfill the test requirements of the regulation mentioned on page 3, but with certain qualifications.
- - doesn't fulfill the test regulation mentioned on page 3.

Begin of testing : April 2, 2003

End of testing : April 7, 2003

- JAPAN QUALITY ASSURANCE ORGANIZATION -

Approved by :



Akio Hosoda
Manager
EMC Div.
JQA KITA-KANSAI Testing Center

Issued by :



Shigeru Kinoshita
Deputy Manager
EMC Div.
JQA KITA-KANSAI Testing Center

Electromagnetic Field Radiated Emission Measurement Scanning Receiver

(Frequency <1GHz) Test Date: April 4, 2003
Temp.: 19 °C ; Humi.: 62 %
(Frequency >1GHz) Test Date: April 7, 2003
Temp.: 22 °C ; Humi.: 48 %

Band 1

Tuning Range : 118.0000 MHz - 173.9950 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV/m)]	Results [dB(μV/m)]		Margin [dB]	Remarks (Note 2)
				Hori.	Vert.		Hori.	Vert.		
118.0000	164.0500	15.4	1.8	< 0.0	0.0	43.5	< 17.2	17.2	+26.3	A
	328.1000	16.8	2.6	< -5.0	< -5.0	46.0	< 14.4	< 14.4	> +31.6	A
	492.1500	19.2	3.3	< -5.0	< -5.0	46.0	< 17.5	< 17.5	> +28.5	A
	656.2000	22.1	3.8	< -5.0	< -5.0	46.0	< 20.9	< 20.9	> +25.1	A
	820.2500	23.0	4.5	< -5.0	< -5.0	46.0	< 22.5	< 22.5	> +23.5	A
	984.3000	25.5	5.0	< -5.0	< -5.0	54.0	< 25.5	< 25.5	> +28.5	A
	1148.3500	21.1	-26.6	< 32.0	< 32.0	54.0	< 26.5	< 26.5	> +27.5	C
	1312.4000	21.3	-25.6	< 32.0	< 32.0	54.0	< 27.7	< 27.7	> +26.3	C
	1476.4500	21.1	-25.5	< 32.0	< 32.0	54.0	< 27.6	< 27.6	> +26.4	C
	1640.5000	20.5	-27.2	< 32.0	< 32.0	54.0	< 25.3	< 25.3	> +28.7	C
146.0000	1804.5500	21.4	-29.0	< 32.0	< 32.0	54.0	< 24.4	< 24.4	> +29.6	C
	1968.6000	21.4	-28.0	< 32.0	< 32.0	54.0	< 25.4	< 25.4	> +28.6	C
	192.0500	16.4	1.9	< 0.0	< 0.0	43.5	< 18.3	< 18.3	> +25.2	A
	384.1000	17.3	2.9	< -5.0	< -5.0	46.0	< 15.2	< 15.2	> +30.8	A
	576.1500	21.2	3.5	< -5.0	< -5.0	46.0	< 19.7	< 19.7	> +26.3	A
	768.2000	22.7	4.3	< -5.0	< -5.0	46.0	< 22.0	< 22.0	> +24.0	A
	960.2500	25.1	5.0	< -5.0	< -5.0	54.0	< 25.1	< 25.1	> +28.9	A
	1152.3000	21.1	-26.6	< 32.0	< 32.0	54.0	< 26.5	< 26.5	> +27.5	C
	1344.3500	21.4	-25.3	< 32.0	< 32.0	54.0	< 28.1	< 28.1	> +25.9	C
	1536.4000	20.8	-26.1	< 32.0	< 32.0	54.0	< 26.7	< 26.7	> +27.3	C
173.9950	1728.4500	21.0	-28.2	< 32.0	< 32.0	54.0	< 24.8	< 24.8	> +29.2	C
	1920.5000	21.4	-28.3	< 32.0	< 32.0	54.0	< 25.1	< 25.1	> +28.9	C
	220.0450	16.8	2.1	< 0.0	< 0.0	46.0	< 18.9	< 18.9	> +27.1	A
	440.0900	18.2	3.1	< -5.0	< -5.0	46.0	< 16.3	< 16.3	> +29.7	A
	660.1350	22.1	3.9	< -5.0	< -5.0	46.0	< 21.0	< 21.0	> +25.0	A
	880.1800	23.8	4.7	< -5.0	< -5.0	46.0	< 23.5	< 23.5	> +22.5	A
	1100.2250	21.0	-26.6	< 32.0	< 32.0	54.0	< 26.4	< 26.4	> +27.6	C
	1320.2700	21.3	-25.5	< 32.0	< 32.0	54.0	< 27.8	< 27.8	> +26.2	C
	1540.3150	20.8	-26.2	< 32.0	< 32.0	54.0	< 26.6	< 26.6	> +27.4	C
	1760.3600	21.2	-28.6	33.0	33.0	54.0	25.6	25.6	+28.4	C
	1980.4050	21.4	-27.9	< 32.0	< 32.0	54.0	< 25.5	< 25.5	> +28.5	C

Band 2

Tuning Range : 230.0000 MHz - 289.9950 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV/m)]	Results [dB(μV/m)]		Margin [dB]	Remarks (Note 2)
				Hori.	Vert.		Hori.	Vert.		
230.0000	183.9500	16.2	1.9	< 0.0	< 0.0	43.5	< 18.1	< 18.1	> +25.4	A
	367.9000	17.1	2.8	< -5.0	< -5.0	46.0	< 14.9	< 14.9	> +31.1	A
	551.8500	20.6	3.4	< -5.0	< -5.0	46.0	< 19.0	< 19.0	> +27.0	A
	735.8000	22.5	4.2	< -5.0	< -5.0	46.0	< 21.7	< 21.7	> +24.3	A
	919.7500	24.4	4.8	< -5.0	< -5.0	46.0	< 24.2	< 24.2	> +21.8	A
	1103.7000	21.1	-26.6	< 32.0	< 32.0	54.0	< 26.5	< 26.5	> +27.5	C
	1287.6500	21.2	-25.8	< 32.0	< 32.0	54.0	< 27.4	< 27.4	> +26.6	C
	1471.6000	21.2	-25.5	< 32.0	< 32.0	54.0	< 27.7	< 27.7	> +26.3	C
	1655.5500	20.5	-27.4	< 32.0	< 32.0	54.0	< 25.1	< 25.1	> +28.9	C
	1839.5000	21.5	-28.8	< 32.0	< 32.0	54.0	< 24.7	< 24.7	> +29.3	C
	2023.4500	21.1	-21.5	< 32.0	< 32.0	54.0	< 31.6	< 31.6	> +22.4	C
260.0000	213.9500	16.7	2.1	< 0.0	< 0.0	43.5	< 18.8	< 18.8	> +24.7	A
	427.9000	18.0	3.1	< -5.0	< -5.0	46.0	< 16.1	< 16.1	> +29.9	A
	641.8500	22.0	3.8	< -5.0	< -5.0	46.0	< 20.8	< 20.8	> +25.2	A
	855.8000	23.5	4.6	< -5.0	< -5.0	46.0	< 23.1	< 23.1	> +22.9	A
	1069.7500	21.0	-26.6	< 32.0	< 32.0	54.0	< 26.4	< 26.4	> +27.6	C
	1283.7000	21.2	-25.9	< 32.0	< 32.0	54.0	< 27.3	< 27.3	> +26.7	C
	1497.6500	21.0	-25.7	< 32.0	35.0	54.0	< 27.3	30.3	+23.7	C
	1711.6000	20.9	-28.0	33.0	< 32.0	54.0	25.9	< 24.9	+28.1	C
	1925.5500	21.4	-28.3	33.0	33.0	54.0	26.1	26.1	+27.9	C
289.9950	243.9450	17.0	2.2	< 0.0	< 0.0	46.0	< 19.2	< 19.2	> +26.8	A
	487.8900	19.2	3.3	< -5.0	< -5.0	46.0	< 17.5	< 17.5	> +28.5	A
	731.8350	22.5	4.2	< -5.0	< -5.0	46.0	< 21.7	< 21.7	> +24.3	A
	975.7800	25.4	5.0	< -5.0	< -5.0	54.0	< 25.4	< 25.4	> +28.6	A
	1219.7250	21.1	-26.4	< 32.0	< 32.0	54.0	< 26.7	< 26.7	> +27.3	C
	1463.6700	21.2	-25.4	< 32.0	< 32.0	54.0	< 27.8	< 27.8	> +26.2	C
	1707.6150	20.9	-28.0	35.0	33.0	54.0	27.9	25.9	+26.1	C
	1951.5600	21.4	-28.1	34.0	34.0	54.0	27.3	27.3	+26.7	C

Band 3

Tuning Range : 290.0000 MHz - 399.9950 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV/m)]	Results [dB(μV/m)]		Margin [dB]	Remarks (Note 2)
				Hori.	Vert.		Hori.	Vert.		
290.0000	336.0500	16.8	2.7	6.0	6.0	46.0	25.5	25.5	+20.5	A
	672.1000	22.2	3.9	< -5.0	< -5.0	46.0	< 21.1	< 21.1	> +24.9	A
	1008.1500	21.1	-26.6	< 32.0	< 32.0	54.0	< 26.5	< 26.5	> +27.5	C
	1344.2000	21.4	-25.3	33.0	33.0	54.0	29.1	29.1	+24.9	C
	1680.2500	20.7	-27.7	< 32.0	< 32.0	54.0	< 25.0	< 25.0	> +29.0	C
	2016.3000	21.1	-21.5	32.0	< 32.0	54.0	31.6	< 31.6	+22.4	C
345.0000	391.0500	17.3	2.9	-1.0	< -5.0	46.0	19.2	< 15.2	+26.8	A
	782.1000	22.7	4.4	< -5.0	< -5.0	46.0	< 22.1	< 22.1	> +23.9	A
	1173.1500	21.2	-26.6	36.0	< 32.0	54.0	30.6	< 26.6	+23.4	C
	1564.2000	20.7	-26.4	36.0	< 32.0	54.0	30.3	< 26.3	+23.7	C
	1955.2500	21.4	-28.1	35.0	36.0	54.0	28.3	29.3	+24.7	C
399.9950	446.0450	18.3	3.2	0.0	< -5.0	46.0	21.5	< 16.5	+24.5	A
	892.0900	23.9	4.7	< -5.0	< -5.0	46.0	< 23.6	< 23.6	> +22.4	A
	1338.1350	21.4	-25.4	< -5.0	< -5.0	54.0	< -9.0	< -9.0	> +63.0	C
	1784.1800	21.3	-28.8	48.0	44.0	54.0	40.5	36.5	+13.5	C

Band 4

Tuning Range : 400.0000 MHz - 549.9950 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV/m)]	Results [dB(μV/m)]		Margin [dB]	Remarks (Note 2)
				Hori.	Vert.		Hori.	Vert.		
400.0000	353.9500	17.0	2.7	4.0	2.0	46.0	23.7	21.7	+22.3	A
	707.9000	22.4	4.1	< -5.0	< -5.0	46.0	< 21.5	< 21.5	> +24.5	A
	1061.8500	21.0	-26.6	< 32.0	< 32.0	54.0	< 26.4	< 26.4	> +27.6	C
	1415.8000	21.5	-24.9	37.0	33.0	54.0	33.6	29.6	+20.4	C
	1769.7500	21.3	-28.7	36.0	35.0	54.0	28.6	27.6	+25.4	C
475.0000	428.9500	18.0	3.1	2.0	< 0.0	46.0	23.1	< 21.1	+22.9	A
	857.9000	23.5	4.6	< -5.0	< -5.0	46.0	< 23.1	< 23.1	> +22.9	A
	1286.8500	21.2	-25.8	33.0	33.0	54.0	28.4	28.4	+25.6	C
	1715.8000	20.9	-28.1	37.0	33.0	54.0	29.8	25.8	+24.2	C
549.9950	503.9450	19.5	3.4	6.0	0.0	46.0	28.9	22.9	+17.1	A
	1007.8900	21.1	-26.6	< 32.0	< 32.0	54.0	< 26.5	< 26.5	> +27.5	C
	1511.8350	20.9	-25.9	40.0	34.0	54.0	35.0	29.0	+19.0	C
	2015.7800	21.1	-21.5	36.0	37.0	54.0	35.6	36.6	+17.4	C

Band 5

Tuning Range : 810.0000 MHz - 916.1000 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV/m)]	Results [dB(μV/m)]		Margin [dB]	Remarks (Note 2)
				Hori.	Vert.		Hori.	Vert.		
810.0000	381.9750	17.2	2.9	< -5.0	< -5.0	46.0	< 15.1	< 15.1	> +30.9	A
	763.9500	22.7	4.3	< -5.0	< -5.0	46.0	< 22.0	< 22.0	> +24.0	A
	1145.9250	21.1	-26.6	< 32.0	< 32.0	54.0	< 26.5	< 26.5	> +27.5	C
	1527.9000	20.8	-26.0	< 32.0	< 32.0	54.0	< 26.8	< 26.8	> +27.2	C
	1909.8750	21.4	-28.4	36.0	35.0	54.0	29.0	28.0	+25.0	C
863.0000	408.4750	17.6	3.0	< -5.0	< -5.0	46.0	< 15.6	< 15.6	> +30.4	A
	816.9500	23.0	4.5	< -5.0	< -5.0	46.0	< 22.5	< 22.5	> +23.5	A
	1225.4250	21.1	-26.4	33.0	< 32.0	54.0	27.7	< 26.7	+26.3	C
	1633.9000	20.5	-27.1	35.0	33.0	54.0	28.4	26.4	+25.6	C
	2042.3750	21.2	-21.5	34.0	33.0	54.0	33.7	32.7	+20.3	C
916.1000	435.0250	18.1	3.1	< -5.0	< -5.0	46.0	< 16.2	< 16.2	> +29.8	A
	870.0500	23.6	4.7	< -5.0	< -5.0	46.0	< 23.3	< 23.3	> +22.7	A
	1305.0750	21.2	-25.7	< 32.0	< 32.0	54.0	< 27.5	< 27.5	> +26.5	C
	1740.1000	21.1	-28.3	35.0	34.0	54.0	27.8	26.8	+26.2	C

Band 6

Tuning Range : 916.1100 MHz - 941.0900 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV/m)]	Results [dB(μV/m)]		Margin [dB]	Remarks (Note 2)
				Hori.	Vert.		Hori.	Vert.		
916.1100	481.0800	19.0	3.3	< -5.0	< -5.0	46.0	< 17.3	< 17.3	> +28.7	A
	962.1600	25.1	5.0	< -5.0	< -5.0	54.0	< 25.1	< 25.1	> +28.9	A
	1443.2400	21.4	-25.2	< 32.0	< 32.0	54.0	< 28.2	< 28.2	> +25.8	C
	1924.3200	21.4	-28.3	38.0	37.0	54.0	31.1	30.1	+22.9	C
928.5000	487.2750	19.1	3.3	< -5.0	< -5.0	46.0	< 17.4	< 17.4	> +28.6	A
	974.5500	25.3	5.0	< -5.0	< -5.0	54.0	< 25.3	< 25.3	> +28.7	A
	1461.8250	21.3	-25.4	33.0	< 32.0	54.0	28.9	< 27.9	+25.1	C
	1949.1000	21.4	-28.1	38.0	38.0	54.0	31.3	31.3	+22.7	C
941.0900	493.5700	19.3	3.3	< -5.0	< -5.0	46.0	< 17.6	< 17.6	> +28.4	A
	987.1400	25.6	5.1	< -5.0	< -5.0	54.0	< 25.7	< 25.7	> +28.3	A
	1480.7100	21.1	-25.6	33.0	< 32.0	54.0	28.5	< 27.5	+25.5	C
	1974.2800	21.4	-28.0	37.0	37.0	54.0	30.4	30.4	+23.6	C

Band 7

Tuning Range : 941.1000 MHz - 961.1000 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV/m)]	Results [dB(μV/m)]		Margin [dB]	Remarks (Note 2)
				Hori.	Vert.		Hori.	Vert.		
941.1000	447.5250	18.4	3.2	< -5.0	< -5.0	46.0	< 16.6	< 16.6	> +29.4	A
	895.0500	23.9	4.7	< -5.0	< -5.0	46.0	< 23.6	< 23.6	> +22.4	A
	1342.5750	21.4	-25.3	< 32.0	< 32.0	54.0	< 28.1	< 28.1	> +25.9	C
	1790.1000	21.4	-28.9	33.0	< 32.0	54.0	25.5	< 24.5	+28.5	C
951.0000	452.4750	18.4	3.2	< -5.0	< -5.0	46.0	< 16.6	< 16.6	> +29.4	A
	904.9500	24.1	4.8	< -5.0	< -5.0	46.0	< 23.9	< 23.9	> +22.1	A
	1357.4250	21.4	-25.2	33.0	< 32.0	54.0	29.2	< 28.2	+24.8	C
	1809.9000	21.4	-29.0	33.0	33.0	54.0	25.4	25.4	+28.6	C
961.1000	457.5250	18.6	3.2	< -5.0	< -5.0	46.0	< 16.8	< 16.8	> +29.2	A
	915.0500	24.3	4.8	< -5.0	< -5.0	46.0	< 24.1	< 24.1	> +21.9	A
	1372.5750	21.5	-25.0	34.0	33.0	54.0	30.5	29.5	+23.5	C
	1830.1000	21.4	-28.8	33.0	33.0	54.0	25.6	25.6	+28.4	C

Band 8

Tuning Range : 961.1100 MHz - 986.0900 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV/m)]	Results [dB(μV/m)]		Margin [dB]	Remarks (Note 2)
				Hori.	Vert.		Hori.	Vert.		
961.1100	503.5800	19.5	3.4	< -5.0	< -5.0	46.0	< 17.9	< 17.9	> +28.1	A
	1007.1600	21.1	-26.6	32.0	< 32.0	54.0	26.5	< 26.5	+27.5	C
	1510.7400	20.9	-25.9	38.0	33.0	54.0	33.0	28.0	+21.0	C
	2014.3200	21.1	-21.5	36.0	34.0	54.0	35.6	33.6	+18.4	C
973.5000	509.7750	19.6	3.4	< -5.0	< -5.0	46.0	< 18.0	< 18.0	> +28.0	A
	1019.5500	21.1	-26.6	32.0	< 32.0	54.0	26.5	< 26.5	+27.5	C
	1529.3250	20.8	-26.0	42.0	36.0	54.0	36.8	30.8	+17.2	C
	2039.1000	21.2	-21.5	37.0	36.0	54.0	36.7	35.7	+17.3	C
986.0900	516.0700	19.8	3.4	< -5.0	< -5.0	46.0	< 18.2	< 18.2	> +27.8	A
	1032.1400	21.0	-26.6	32.0	< 32.0	54.0	26.4	< 26.4	+27.6	C
	1548.2100	20.7	-26.2	45.0	40.0	54.0	39.5	34.5	+14.5	C
	2064.2800	21.3	-21.5	38.0	41.0	54.0	37.8	40.8	+13.2	C

Band 9

Tuning Range : 986.1000 MHz - 999.9900 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV/m)]	Results [dB(μV/m)]		Margin [dB]	Remarks (Note 2)
				Hori.	Vert.		Hori.	Vert.		
986.1000	470.0250	18.8	3.2	< -5.0	< -5.0	46.0	< 17.0	< 17.0	> +29.0	A
	940.0500	24.7	4.9	-3.0	< -5.0	46.0	26.6	< 24.6	+19.4	A
	1410.0750	21.5	-24.9	33.0	< 32.0	54.0	29.6	< 28.6	+24.4	C
	1880.1000	21.4	-28.5	36.0	34.0	54.0	28.9	26.9	+25.1	C
993.0000	473.4750	18.9	3.2	< -5.0	< -5.0	46.0	< 17.1	< 17.1	> +28.9	A
	946.9500	24.8	5.0	< -5.0	< -5.0	46.0	< 24.8	< 24.8	> +21.2	A
	1420.4250	21.5	-25.0	33.0	< 32.0	54.0	29.5	< 28.5	+24.5	C
	1893.9000	21.4	-28.5	36.0	34.0	54.0	28.9	26.9	+25.1	C
999.9900	476.9700	18.9	3.3	< -5.0	< -5.0	46.0	< 17.2	< 17.2	> +28.8	A
	953.9400	25.0	4.9	-2.0	< -5.0	46.0	27.9	< 24.9	+18.1	A
	1430.9100	21.4	-25.1	< 32.0	< 32.0	54.0	< 28.3	< 28.3	> +25.7	C
	1907.8800	21.4	-28.4	37.0	34.0	54.0	30.0	27.0	+24.0	C

Other Disturbance

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Antenna Factor [dB(1/m)]	Corr. Factor [dB]	Meter Readings [dB(μV)]		Limits [dB(μV/m)]	Results [dB(μV/m)]		Margin [dB]	Remarks (Note 2)
				Hori.	Vert.		Hori.	Vert.		
475.0000	30.0	18.5	0.7	< 0.0	< 0.0	40.0	< 19.2	< 19.2	> +20.8	A
	100.0	10.1	1.4	< 0.0	< 0.0	43.5	< 11.5	< 11.5	> +32.0	A
	200.0	16.6	2.0	< 0.0	< 0.0	43.5	< 18.6	< 18.6	> +24.9	A
	300.0	16.5	2.5	< -5.0	< -5.0	46.0	< 14.0	< 14.0	> +32.0	A
	500.0	19.4	3.3	< -5.0	< -5.0	46.0	< 17.7	< 17.7	> +28.3	A
	1000.0	25.8	5.1	< -5.0	< -5.0	54.0	< 25.9	< 25.9	> +28.1	A
	1500.0	20.9	-25.8	< 32.0	< 32.0	54.0	< 27.1	< 27.1	> +26.9	C
	2100.0	21.5	-21.5	< 32.0	< 32.0	54.0	< 32.0	< 32.0	> +22.0	C

Sample of calculated result at 2064.28 MHz, as the Minimum Margin point:

Antenna Factor	=	21.3 dB(1/m)
Corr. Factor	=	-21.5 dB
+) Meter Reading	=	41.0 dB(μV)
Result	=	40.8 dB(μV/m)

Minimum Margin : 54.0 - 40.8 = 13.2(dB)

The point shown on "___" is the Minimum Margin Point.

Note 1:

- 1)The highest frequency generated or used in the EUT :19.6608 MHz
- 2)The highest local frequency generated in the EUT : 1032.140 MHz
- 3)The upper frequency of measurement range : 2100 MHz
- 4)Corr. Factor [dB] (below 1 GHz) = Cable Loss [dB]
Corr. Factor (dB) (above 1 GHz) = Cable Loss(dB) + Pad Attenuator(dB) - Amp. Gain(dB)

Remarks:

Note 2	Detector Function	IF Bandwidth
A	CISPR QP	120 kHz
B	Peak	1 MHz
C	Average	1 MHz

Tester : Yuzo Tanaka

Antenna-Conducted Power Measurement Scanning Receiver

Test Date: April 4, 2003
 Temp.: 22 °C ; Humi.: 56 %

Band 1							
Tuning range: 118.0000 MHz - 173.9950 MHz							
Frequency to which tuned [MHz]	Measured Frequency [MHz]	Attenuation Pad Loss [dB]	Meter Readings [dB(μV)]	Limits at 50Ω [dB(μV)]	Results [dB(μV)]	Margin [dB]	Remarks (Note 2)
118.0000	164.0500	10.0	12.0	50.0	22.0	+28.0	A
	328.1000	10.0	12.0	50.0	22.0	+28.0	A
	492.1500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	656.2000	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	820.2500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	984.3000	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1148.3500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1312.4000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1476.4500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1640.5000	10.0	15.0	50.0	25.0	+25.0	B
	1804.5500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1968.6000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
146.0000	192.0500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	384.1000	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	576.1500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	768.2000	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	960.2500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1152.3000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1344.3500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1536.4000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1728.4500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1920.5000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
173.9950	220.0450	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	440.0900	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	660.1350	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	880.1800	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1100.2250	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1320.2700	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1540.3150	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1760.3600	10.0	10.0	50.0	20.0	+30.0	B

Band 2

Tuning range: 230.0000 MHz - 289.9950 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Attenuation Pad Loss [dB]	Meter Readings [dB(μV)]	Limits at 50Ω [dB(μV)]	Results [dB(μV)]	Margin [dB]	Remarks (Note 2)
230.0000	183.9500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	367.9000	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	551.8500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	735.8000	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	919.7500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1103.7000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1287.6500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1471.6000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1655.5500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1839.5000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	2023.4500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
260.0000	213.9500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	427.9000	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	641.8500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	855.8000	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1069.7500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1283.7000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1497.6500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1711.6000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1925.5500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
289.9950	243.9450	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	487.8900	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	731.8350	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	975.7800	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1219.7250	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1463.6700	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1707.6150	10.0	14.0	50.0	24.0	+26.0	B
	1951.5600	10.0	< 10.0	50.0	< 20.0	> +30.0	B

Band 3

Tuning range: 290.0000 MHz - 399.9950 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Attenuation Pad Loss [dB]	Meter Readings [dB(μV)]	Limits at 50Ω [dB(μV)]	Results [dB(μV)]	Margin [dB]	Remarks (Note 2)
290.0000	336.0500	10.0	16.0	50.0	26.0	+24.0	A
	672.1000	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1008.1500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1344.2000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1680.2500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	2016.3000	10.0	17.0	50.0	27.0	+23.0	B
345.0000	391.0500	10.0	15.0	50.0	25.0	+25.0	A
	782.1000	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1173.1500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1564.2000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1955.2500	10.0	18.0	50.0	28.0	+22.0	B
399.9950	446.0450	10.0	15.0	50.0	25.0	+25.0	A
	892.0900	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1338.1350	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1784.1800	10.0	14.0	50.0	24.0	+26.0	B

Band 4

Tuning range: 400.0000 MHz - 549.9950 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Attenuation Pad Loss [dB]	Meter Readings [dB(μ V)]	Limits at 50 Ω [dB(μ V)]	Results [dB(μ V)]	Margin [dB]	Remarks (Note 2)
400.0000	353.9500	10.0	15.0	50.0	25.0	+25.0	A
	707.9000	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1061.8500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1415.8000	10.0	10.0	50.0	20.0	+30.0	B
	1769.7500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
475.0000	428.9500	10.0	13.0	50.0	23.0	+27.0	A
	857.9000	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1286.8500	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1715.8000	10.0	12.0	50.0	22.0	+28.0	B
549.9950	503.9450	10.0	23.0	50.0	33.0	+17.0	A
	1007.8900	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1511.8350	10.0	19.0	50.0	29.0	+21.0	B
	2015.7800	10.0	18.0	50.0	28.0	+22.0	B

Band 5

Tuning range: 810.0000 MHz - 916.10000 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Attenuation Pad Loss [dB]	Meter Readings [dB(μV)]	Limits at 50Ω [dB(μV)]	Results [dB(μV)]	Margin [dB]	Remarks (Note 2)
810.0000	381.9750	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	763.9500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1145.9250	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1527.9000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1909.8750	10.0	< 10.0	50.0	< 20.0	> +30.0	B
863.0000	408.4750	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	816.9500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1225.4250	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1633.9000	10.0	15.0	50.0	25.0	+25.0	B
	2042.3750	10.0	23.0	50.0	33.0	+17.0	B
916.1000	435.0250	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	870.0500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1305.0750	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1740.1000	10.0	< 10.0	50.0	< 20.0	> +30.0	B

Band 6

Tuning range: 916.1100 MHz - 941.0900 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Attenuation Pad Loss [dB]	Meter Readings [dB(μV)]	Limits at 50Ω [dB(μV)]	Results [dB(μV)]	Margin [dB]	Remarks (Note 2)
916.1100	481.0800	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	962.1600	10.0	12.0	50.0	22.0	+28.0	A
	1443.2400	10.0	18.0	50.0	28.0	+22.0	B
	1924.3200	10.0	10.0	50.0	20.0	+30.0	B
928.5000	487.2750	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	974.5500	10.0	14.0	50.0	24.0	+26.0	A
	1461.8250	10.0	15.0	50.0	25.0	+25.0	B
	1949.1000	10.0	15.0	50.0	25.0	+25.0	B
941.0900	493.5700	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	987.1400	10.0	14.0	50.0	24.0	+26.0	A
	1480.7100	10.0	15.0	50.0	25.0	+25.0	B
	1974.2800	10.0	17.0	50.0	27.0	+23.0	B

Band 7

Tuning range: 941.1000 MHz - 961.10000 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Attenuation Pad Loss [dB]	Meter Readings [dB(μV)]	Limits at 50Ω [dB(μV)]	Results [dB(μV)]	Margin [dB]	Remarks (Note 2)
941.1000	447.5250	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	895.0500	10.0	11.0	50.0	21.0	+29.0	A
	1342.5750	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1790.1000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
951.0000	452.4750	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	904.9500	10.0	11.0	50.0	21.0	+29.0	A
	1357.4250	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	1809.9000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
961.1000	457.5250	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	915.0500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1372.5750	10.0	12.0	50.0	22.0	+28.0	B
	1830.1000	10.0	< 10.0	50.0	< 20.0	> +30.0	B

Band 8

Tuning range: 961.1100 MHz - 986.0900 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Attenuation Pad Loss [dB]	Meter Readings [dB(μV)]	Limits at 50Ω [dB(μV)]	Results [dB(μV)]	Margin [dB]	Remarks (Note 2)
961.1100	503.5800	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1007.1600	10.0	14.0	50.0	24.0	+26.0	B
	1510.7400	10.0	20.0	50.0	30.0	+20.0	B
	2014.3200	10.0	21.0	50.0	31.0	+19.0	B
973.5000	509.7750	10.0	10.0	50.0	20.0	+30.0	A
	1019.5500	10.0	15.0	50.0	25.0	+25.0	B
	1529.3250	10.0	21.0	50.0	31.0	+19.0	B
	2039.1000	10.0	23.0	50.0	33.0	+17.0	B
986.0900	516.0700	10.0	13.0	50.0	23.0	+27.0	A
	1032.1400	10.0	14.0	50.0	24.0	+26.0	B
	1548.2100	10.0	24.0	50.0	34.0	+16.0	B
	2064.2800	10.0	24.0	50.0	34.0	+16.0	B

Band 9

Tuning range: 986.1000 MHz - 999.9900 MHz

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Attenuation Pad Loss [dB]	Meter Readings [dB(μ V)]	Limits at 50 Ω [dB(μ V)]	Results [dB(μ V)]	Margin [dB]	Remarks (Note 2)
986.1000	470.0250	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	940.0500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1410.0750	10.0	14.0	50.0	24.0	+26.0	B
	1880.1000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
993.0000	473.4750	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	946.9500	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1420.4250	10.0	16.0	50.0	26.0	+24.0	B
	1893.9000	10.0	< 10.0	50.0	< 20.0	> +30.0	B
990.9900	472.4700	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	944.9400	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1417.4100	10.0	18.0	50.0	28.0	+22.0	B
	1889.8800	10.0	< 10.0	50.0	< 20.0	> +30.0	B

Other Disturbance

Frequency to which tuned [MHz]	Measured Frequency [MHz]	Attenuation Pad Loss [dB]	Meter Readings [dB(μV)]	Limits at 50Ω [dB(μV)]	Results [dB(μV)]	Margin [dB]	Remarks (Note 2)
475.000000	30.0	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	39.3	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	50.0	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	100.0	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	300.0	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	500.0	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1000.0	10.0	< 10.0	50.0	< 20.0	> +30.0	A
	1500.0	10.0	< 10.0	50.0	< 20.0	> +30.0	B
	2100.0	10.0	< 10.0	50.0	< 20.0	> +30.0	B

Sample of calculated result at 1548.210 MHz , as the Minimum Margin point:

Attenuation Pad Loss	=	10.0 dB
+) Meter Reading	=	24.0 dB(μV)
Result	=	34.0 dB(μV)

Minimum Margin : 50.0 - 34.0 = 16.0(dB)

The point shown on "___" is the Minimum Margin Point.

Conversion of applied limits (refer to §15.111(a))

$$50.0 \text{ [dB(μV)]} = 20\log\{\sqrt{2[\text{nW}] \times 10^{-9} \times 50[\Omega]} \times 10^6\}$$

Note 1:

- 1)The highest frequency generated or used in the EUT :19.6608 MHz
- 2)The highest local frequency generated in the EUT : 1032.140 MHz
- 3)The upper frequency of measurement range : 2100 MHz

Remarks:

Note 2	Detector Function	IF Bandwidth
A	CISPR QP	120 kHz
B	Peak	1 MHz
C	Average	1 MHz

Tester Signature : Shigeru Kinoshita

38dB Rejection Test for Base Band Scanning Receiver

Test Date: April 2, 2003
 Temp.: 26 °C ; Humi.: 54 %

Injected Frequency [MHz]	Detected Frequency [MHz]	12dB SINAD Level at Injected Frequency [dBm]	12dB SINAD Level at Detected Frequency [dBm]	Rejection [dB]	Limits [dB]	Margin [dB]
824.040	446.970	-28.2	<-110	>81.8	38.0	>43.8
824.040	470.010	-35.7	<-110	>74.3	38.0	>36.3
824.040	933.300	-52.0	<-110	>58.0	38.0	>20.0
836.505	No Point Detected	N/A	N/A	N/A	38.0	N/A
848.970	No Point Detected	N/A	N/A	N/A	38.0	N/A
869.040	No Point Detected	N/A	N/A	N/A	38.0	N/A
881.505	No Point Detected	N/A	N/A	N/A	38.0	N/A

Sample of calculated result at 933.300 MHz, as the Minimum Margin point:

$$\begin{array}{rcl}
 12\text{dB SINAD Level at Injected Frequency} & = & -52.0 \text{ dBm} \\
 -) 12\text{dB SINAD Level at Detected Frequency} & = & <-110.0 \text{ dBm} \\
 \hline
 \text{Rejection} & = & >58.0 \text{ dB}
 \end{array}$$

Minimum Margin : $-38.0 - (<-58.0) = >20.0$

The point shown on "____" is the Minimum Margin Point.

Tester : Shigeru Kinoshita