



RADIO TEST REPORT

Test Report No. : 10240264H-I

Applicant : Sony Computer Entertainment Inc.
Type of Equipment : Computer Entertainment System
Model No. : CECH-4301x
FCC ID : AK8CBEH19S1
Test regulation : FCC Part 15 Subpart C: 2014 (WLAN Part)
Class II Permissive Change
*Conducted emission and Radiated spurious emission tests only
Test Result : Complied

1. This test report shall not be reproduced in full or partial, without the written approval of UL Japan, Inc.
2. The results in this report apply only to the sample tested.
3. This sample tested is in compliance with the above regulation.
4. The test results in this report are traceable to the national or international standards.
5. This test report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Date of test: March 17 to 27, 2014

Representative test engineer:

T. Shimada

Takumi Shimada
Engineer
Consumer Technology Division

Approved by:

M. Nishiyama

Masanori Nishiyama
Manager
Consumer Technology Division



NVLAP LAB CODE: 200572-0

This laboratory is accredited by the NVLAP LAB CODE 200572-0, U.S.A. The tests reported herein have been performed in accordance with its terms of accreditation.
*As for the range of Accreditation in NVLAP, you may refer to the WEB address,
<http://www.ul.com/japan/jpn/pages/services/emc/about/mark1/index.jsp#nvlap>

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13-EM-F0429

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SECTION 1: Customer information

Company Name	Sony Computer Entertainment Inc.
Brand Name	SONY
Address	1-7-1 Konan, Minato-ku, Tokyo, 108-0075 Japan
Telephone Number	+81-3-6748-6333
Facsimile Number	+81-3-6748-6383
Contact Person	Kiyoto Sasaki

SECTION 2: Equipment under test (E.U.T.)

2.1 Identification of E.U.T.

Type of Equipment	Computer Entertainment System
Model No	CECH-4301x
Serial No	0260015 (Power Supply: SONY) 0260017 (Power Supply: DELTA) 0260020 (Power Supply: Chicony)
Country of Manufacture	CHINA/JAPAN
Receipt Date of Sample	March 10, 2014
Condition of EUT	Production prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Modification of EUT	No modification by the test lab.

2.2 Product Description

Model: CECH-4301x, referred to as the EUT in this report, is a Computer Entertainment System. The EUT contains a Bluetooth and IEEE802.11b/g WLAN module. WLAN antennas do not transmit simultaneously. Bluetooth antenna also does not transmit simultaneously with WLAN antennas.

Details of model name CECH-4301x:
“x” will be replaced by an alphabet denoting the different capacity of storage.
The difference of the capacity of storage does not influence on radio specification.

Product Specification

Maximum clock frequency in the system	3.2GHz
Operating Temperature	5-35 deg. C
Power Supply	AC100-240V, 50Hz/60Hz
Size	290 x 60 x 230 mm
Weight	Approx. 2.1kg

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Radio Specification

WLAN (IEEE802.11b/g)

Equipment Type	Transceiver	
Frequency of Operation	2412-2462MHz	
Type of Modulation	DSSS, OFDM	
Bandwidth & Channel spacing	20MHz & 5MHz	
Method of frequency generation	Synthesizer	
Power Supply (inner)	DC3.3V/1.8V	
Antenna Type	Antenna 0: IFA	Antenna 1: IFA
Antenna Gain	Antenna 0: 1.5 dBi (max)	Antenna 1: 3.0 dBi (max)

Bluetooth (BDR/EDR)

Equipment Type	Transceiver	
Frequency of Operation	2402-2480MHz	
Type of Modulation	FHSS (GFSK, $\pi/4$ DQPSK, 8DPSK)	
Bandwidth & Channel spacing	1MHz & 1MHz	
Method of frequency generation	Synthesizer	
Power Supply (inner)	DC3.3V/1.8V	
Antenna Type	PIFA	
Antenna Gain	4.5dBi (peak)	

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SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification : FCC Part 15 Subpart C: 2014, final revised on March 6, 2014 and effective April 7, 2014

Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators
Section 15.207 Conducted limits
Section 15.247 Operation within the bands 902-928MHz,
2400-2483.5MHz, and 5725-5850MHz
*Conducted emission and Radiated spurious emission tests only

*The revision on March 6, 2014 does not affect the test specification applied to the EUT.

*The EUT complies with FCC Part 15 Subpart B: 2014, final revised on March 6, 2014 and effective April 7, 2014.

3.2 Procedures and results

Item	Test Procedure	Specification	Worst margin	Results	Remarks
Conducted Emission	FCC: ANSI C63.4:2003 7. AC powerline Conducted Emission measurements	FCC: Section 15.207	QP 6.8dB, 0.15001MHz, N	Complied	-
	IC: RSS-Gen 7.2.4	IC: RSS-Gen 7.2.4	AV 11.8dB, 0.21451MHz, N		
Spurious Emission Restricted Band Edges	FCC: "Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247(issued on April 9, 2013)"	FCC: Section15.247(d)	3.6dB 607.514MHz, Vertical, QP	Complied	Radiated
	IC: RSS-Gen 4.9	IC: RSS-210 A8.5 RSS-Gen 7.2.3			

Note: UL Japan, Inc.'s EMI Work Procedures No. 13-EM-W0420 and 13-EM-W0422.

* In case any questions arise about test procedure, ANSI C63.4: 2003 is also referred.

FCC 15.31 (e)

This EUT provides stable voltage (DC3.3/1.8V) constantly to RF Part regardless of input voltage. Therefore, this EUT complies with the requirement.

FCC Part 15.203 Antenna requirement

It is impossible for end users to replace the antenna, because the antenna is mounted inside of the EUT. Therefore, the equipment complies with the antenna requirement of Section 15.203.

3.3 Addition to standard

No addition, exclusion nor deviation has been made from the standard.

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3.4 Uncertainty

EMI

The following uncertainties have been calculated to provide a confidence level of 95% using a coverage factor k=2.

Test room (semi-anechoic chamber)	Conducted emission (+dB)
	150kHz-30MHz
No.1	3.5dB
No.2	3.5dB
No.3	3.6dB
No.4	3.5dB

Test room (semi-anechoic chamber)	Radiated emission						
	(3m*)(+dB)				(1m*)(+dB)		(0.5m*)(+dB)
	9kHz -30MHz	30MHz -300MHz	300MHz -1GHz	1GHz -10GHz	10GHz -18GHz	18GHz -26.5GHz	26.5GHz -40GHz
No.1	4.0dB	5.1dB	5.0dB	5.1dB	6.0dB	4.9dB	4.3dB
No.2	3.9dB	5.2dB	5.0dB	4.9dB	5.9dB	4.7dB	4.2dB
No.3	4.3dB	5.1dB	5.2dB	5.2dB	6.0dB	4.8dB	4.2dB
No.4	4.6dB	5.2dB	5.0dB	5.2dB	6.0dB	5.7dB	4.2dB

*3m/1m/0.5m = Measurement distance

Conducted Emission test

The data listed in this test report has enough margin, more than the site margin.

Radiated emission test(3m)

The data listed in this report meets the limits unless the uncertainty is taken into consideration.

3.5 Test Location

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	FCC Registration Number	IC Registration Number	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms
No.1 semi-anechoic chamber	313583	2973C-1	19.2 x 11.2 x 7.7m	7.0 x 6.0m	No.1 Power source room
No.2 semi-anechoic chamber	655103	2973C-2	7.5 x 5.8 x 5.2m	4.0 x 4.0m	-
No.3 semi-anechoic chamber	148738	2973C-3	12.0 x 8.5 x 5.9m	6.8 x 5.75m	No.3 Preparation room
No.3 shielded room	-	-	4.0 x 6.0 x 2.7m	N/A	-
No.4 semi-anechoic chamber	134570	2973C-4	12.0 x 8.5 x 5.9m	6.8 x 5.75m	No.4 Preparation room
No.4 shielded room	-	-	4.0 x 6.0 x 2.7m	N/A	-
No.5 semi-anechoic chamber	-	-	6.0 x 6.0 x 3.9m	6.0 x 6.0m	-
No.6 shielded room	-	-	4.0 x 4.5 x 2.7m	4.0 x 4.5 m	-
No.6 measurement room	-	-	4.75 x 5.4 x 3.0m	4.75 x 4.15 m	-
No.7 shielded room	-	-	4.7 x 7.5 x 2.7m	4.7 x 7.5m	-
No.8 measurement room	-	-	3.1 x 5.0 x 2.7m	N/A	-
No.9 measurement room	-	-	8.0 x 4.6 x 2.8m	2.4 x 2.4m	-
No.11 measurement room	-	-	6.2 x 4.7 x 3.0m	4.8 x 4.6m	-

* Size of vertical conducting plane (for Conducted Emission test) : 2.0 x 2.0m for No.1, No.2, No.3, and No.4 semi-anechoic chambers and No.3 and No.4 shielded rooms.

3.6 Data of EMI, Test instruments, and Test set up

Refer to APPENDIX.

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SECTION 4: Operation of E.U.T. during testing

4.1 Operating Mode(s)

Mode	Remarks*
IEEE 802.11b (11b)	2Mbps, PN9
IEEE 802.11g (11g)	24Mbps, PN9
*Transmitting duty was 100% on all tests. *The worst condition was determined based on the test result of Maximum Peak Output Power (Mid Channel)	
*Power of the EUT was set by the software as follows; Power settings: 12 (dBm) Software/Version: LABTOOL_LV2DIAG_20111206 *This setting of software is the worst case. Any conditions under the normal use do not exceed the condition of setting. In addition, end users cannot change the settings of the output power of the product.	

Test Item	Operating Mode	Tested antenna	Tested frequency
Conducted Emission Spurious Emission(Radiated)	11b Tx 11g Tx	Antenna 1	2412MHz 2437MHz 2462MHz

*Conducted Emission and Spurious Emission (Radiated) were performed only with Antenna 1 as it was only changed from the original one.

*The transmitting data shall be scrambled with the following scramblers and it was transmitted continuously.

[11b]

2Mbps: IEEE Std 802.11b(1999) Section 18.2.4

[11g]

24Mbps: IEEE Std 802.11a(1999) Section 17.3.5.4

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4.2 Configuration and peripherals

This page has been submitted for a separate exhibit.

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This page has been submitted for a separate exhibit.

SECTION 5: Conducted Emission

Test Procedure and conditions

EUT was placed on a urethane platform of nominal size, 1.0m by 1.5m, raised 0.8m above the conducting ground plane.

The rear of tabletop was located 40cm to the vertical conducting plane. The rear of EUT, including peripherals aligned and flushed with rear of tabletop. All other surfaces of tabletop were at least 80cm from any other grounded conducting surface. EUT was located 80cm from a Line Impedance Stabilization Network (LISN)/ Artificial mains Network (AMN) and excess AC cable was bundled in center.

For the tests on EUT with other peripherals (as a whole system)

I/O cables that were connected to the peripherals were bundled in center. They were folded back and forth forming a bundle 30cm to 40cm long and were hanged at a 40cm height to the ground plane. All unused 50ohm connectors of the LISN(AMN) were resistivity terminated in 50ohm when not connected to the measuring equipment.

The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT in a Semi Anechoic Chamber.

The EUT was connected to a LISN (AMN).

An overview sweep with peak detection has been performed.

The test results and limit are rounded off to one decimal place, so some differences might be observed.

Detector	: QP and CISPR AV
Measurement range	: 0.15-30MHz
Test data	: APPENDIX
Test result	: Pass

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SECTION 6: Radiated Spurious Emission

Test Procedure

It was measured based on "11.0 Emissions in non-restricted frequency bands" of "Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 (Issued on April 9, 2013)".

EUT was placed on a urethane platform of nominal size, 1.0m by 1.5m, raised 0.8m above the conducting ground plane.

The Radiated Electric Field Strength has been measured in a Semi Anechoic Chamber with a ground plane.

The height of the measuring antenna varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field strength.

The measurements were performed for both vertical and horizontal antenna polarization with the Test Receiver, or the Spectrum Analyzer.

The measurements were made with the following detector function of the test receiver and the Spectrum analyzer (in linear mode).

The test was made with the detector (RBW/VBW) in the following table.

When using Spectrum analyzer, the test was made with adjusting span to zero by using peak hold.

Test Antennas are used as below;

Frequency	Below 30MHz	30MHz to 300MHz	300MHz to 1GHz	Above 1GHz
Antenna Type	Loop	Biconical	Logperiodic	Horn

In any 100kHz bandwidth outside the restricted band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator confirmed 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on a radiated measurement.

20dBc was applied to the frequency over the limit of FCC 15.209 / Table 5 of RSS-Gen 7.2.5(IC) and outside the restricted band of FCC15.205 / Table 3 of RSS-Gen 7.2.2 (IC).

Frequency	Below 1GHz	Above 1GHz		20dBc
Instrument used	Test Receiver	Spectrum Analyzer		Spectrum Analyzer
Detector	QP	PK	AV *1)	PK
IF Bandwidth	BW 120kHz(T/R)	RBW: 1MHz VBW: 3MHz	Average Power Method: <u>WLAN: 12.2.5.1</u> RBW: 1MHz VBW: 3MHz Detector: Power Averaging (RMS) Trace: Free Run	RBW: 100kHz VBW: 300kHz (S/A)
Test Distance	3m	3m (below 10GHz) 1m *2) (above 10GHz)		3m (below 10GHz) 1m *2) (above 10GHz)

*1) Average Power Measurement was performed based on 6.0 & 12.2.5 of "Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 (Issued on April 9, 2013)"

*2) Distance Factor: $20 \times \log(3.0\text{m}/1.0\text{m}) = 9.5\text{dB}$

- The carrier level and noise levels were confirmed at each position of X and Y axes of EUT to see the position of maximum noise, and the test was made at the position that has the maximum noise.

The test results and limit are rounded off to one decimal place, so some differences might be observed.

Measurement range : 30M-26.5GHz
Test data : APPENDIX
Test result : Pass

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APPENDIX 1: Data of EMI test

Conducted Emission
(Power Supply: SONY)

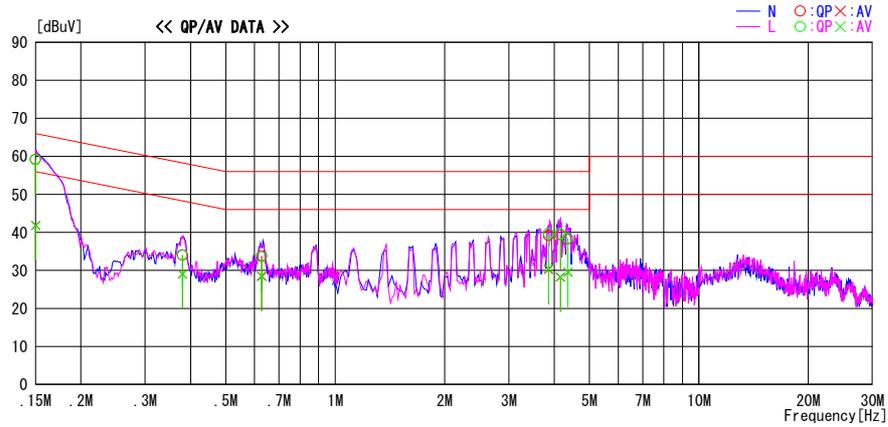
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2014/03/26

Report No. : 10240264H
Power : AC 120V / 60Hz
Temp./Humi. : 20deg. C / 53% RH
Engineer : Keisuke Kawamura

Mode / Remarks : WLAN Tx 11b 2Mbps 2412MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency [MHz]	Reading Level		Corr. Factor	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15001	46.1	28.8	13.1	59.2	41.9	66.0	56.0	6.8	14.1	N	
0.38014	20.9	16.0	13.1	34.0	29.1	58.3	48.3	24.3	19.2	N	
0.62825	20.7	15.3	13.1	33.8	28.4	56.0	46.0	22.2	17.6	N	
3.85781	25.8	16.8	13.4	39.2	30.2	56.0	46.0	16.8	15.8	N	
4.16086	26.0	14.8	13.4	39.4	28.2	56.0	46.0	16.6	17.8	N	
4.36081	24.9	16.1	13.4	38.3	29.5	56.0	46.0	17.7	16.5	N	
0.15001	46.0	28.7	13.1	59.1	41.8	66.0	56.0	6.9	14.2	L	
0.37972	21.0	15.9	13.1	34.1	29.0	58.3	48.3	24.2	19.3	L	
0.62592	20.5	15.4	13.1	33.6	28.5	56.0	46.0	22.4	17.5	L	
3.85661	26.3	17.1	13.4	39.7	30.5	56.0	46.0	16.3	15.5	L	
4.16086	26.2	14.9	13.4	39.6	28.3	56.0	46.0	16.4	17.7	L	
4.36081	25.1	16.2	13.4	38.5	29.6	56.0	46.0	17.5	16.4	L	

CHART: WITH FACTOR, Peak hold data. CALCULATION: RESULT=READING+C.F.(LISN LOSS + ATT LOSS + CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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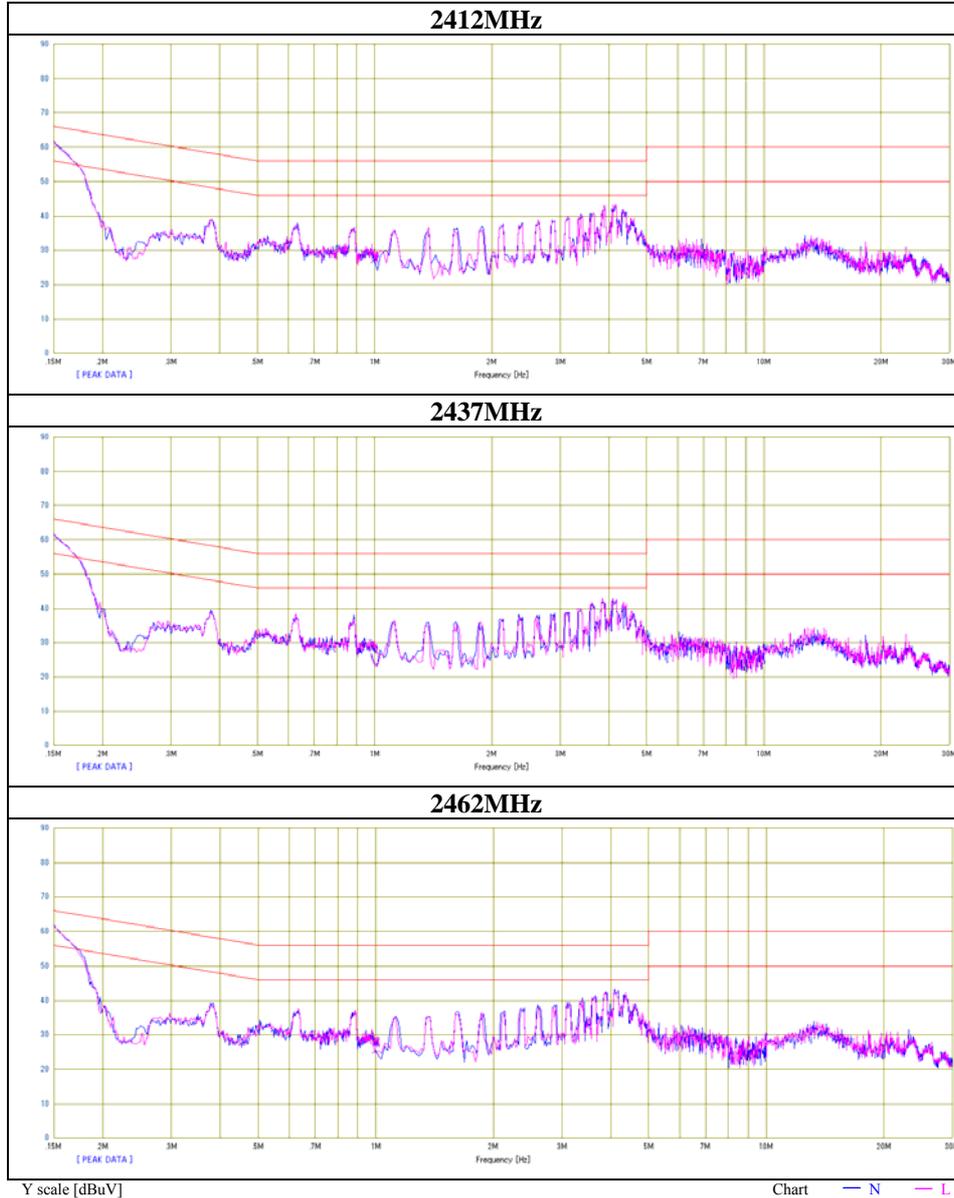
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Conducted Emission
(Power Supply: SONY)

Test place	Ise HQ EMC Lab. No.1 Semi Anechoic Chamber
Report No.	10240264H
Date	03/26/2014
Temperature/ Humidity	20 deg. C / 53% RH
Engineer	Keisuke Kawamura
Mode	11b Tx Antenna 1



Conducted Emission
(Power Supply: SONY)

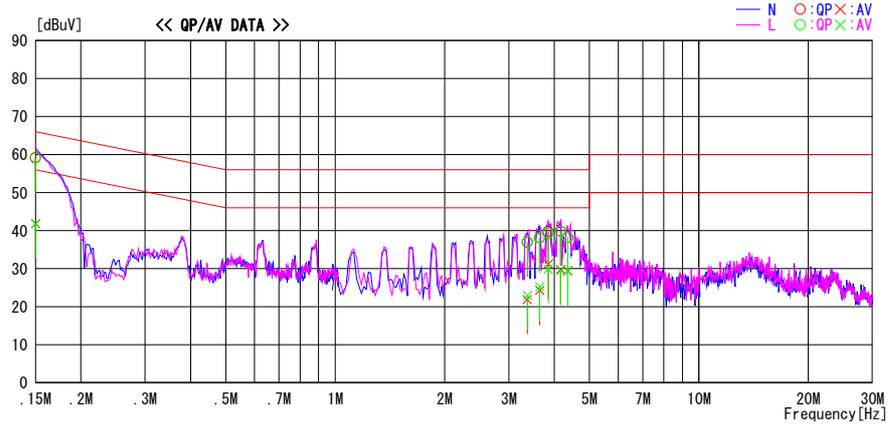
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2014/03/26

Report No. : 10240264H
Power : AC 120V / 60Hz
Temp./Humi. : 20deg. C / 53% RH
Engineer : Keisuke Kawamura

Mode / Remarks : WLAN Tx 11g 24Mbps 2412MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15001	46.1	28.8	13.1	59.2	41.9	66.0	56.0	6.8	14.1	N	
3.37287	23.5	8.5	13.4	36.9	21.9	56.0	46.0	19.1	24.1	N	
3.64884	24.7	10.9	13.4	38.1	24.3	56.0	46.0	17.9	21.7	N	
3.85512	26.3	17.8	13.4	39.7	31.2	56.0	46.0	16.3	14.8	N	
4.16549	26.5	16.4	13.4	39.9	29.8	56.0	46.0	16.1	16.2	N	
4.36081	24.8	16.0	13.4	38.2	29.4	56.0	46.0	17.8	16.6	N	
0.15001	45.9	28.7	13.1	59.0	41.8	66.0	56.0	7.0	14.2	L	
3.37927	23.6	9.6	13.4	37.0	23.0	56.0	46.0	19.0	23.0	L	
3.64655	24.7	11.8	13.4	38.1	25.2	56.0	46.0	17.9	20.8	L	
3.85186	25.9	16.5	13.4	39.3	29.9	56.0	46.0	16.7	16.1	L	
4.16301	26.4	16.1	13.4	39.8	29.5	56.0	46.0	16.2	16.5	L	
4.36069	24.8	16.1	13.4	38.2	29.5	56.0	46.0	17.8	16.5	L	

CHART: WITH FACTOR, Peak hold data. CALCULATION: RESULT=READING+C.F (LISN LOSS + ATT LOSS + CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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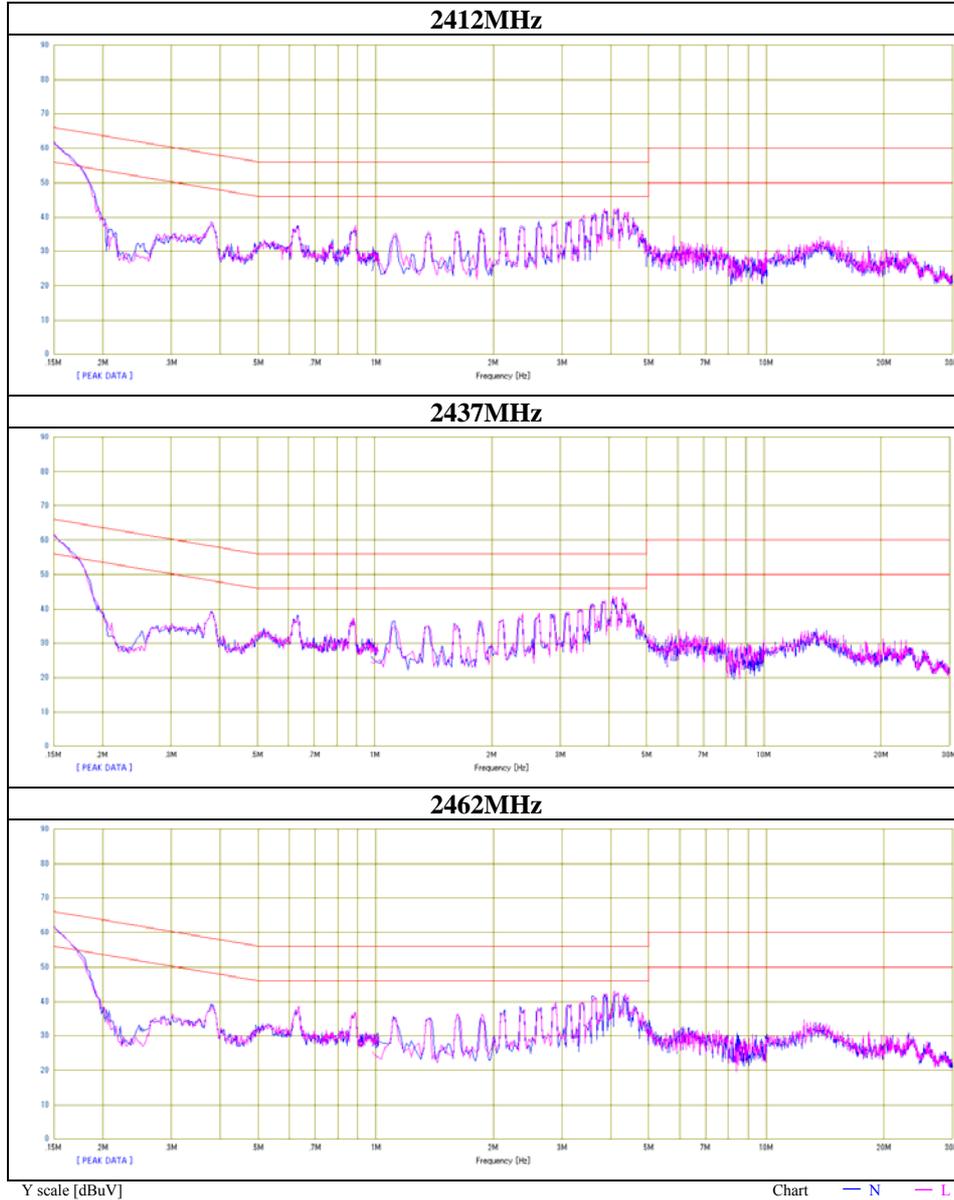
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Conducted Emission
(Power Supply: SONY)

Test place	Ise HQ EMC Lab. No.1 Semi Anechoic Chamber
Report No.	10240264H
Date	03/26/2014
Temperature/ Humidity	20 deg. C / 53% RH
Engineer	Keisuke Kawamura
Mode	11g Tx Antenna 1



Conducted Emission
(Power Supply: DELTA)

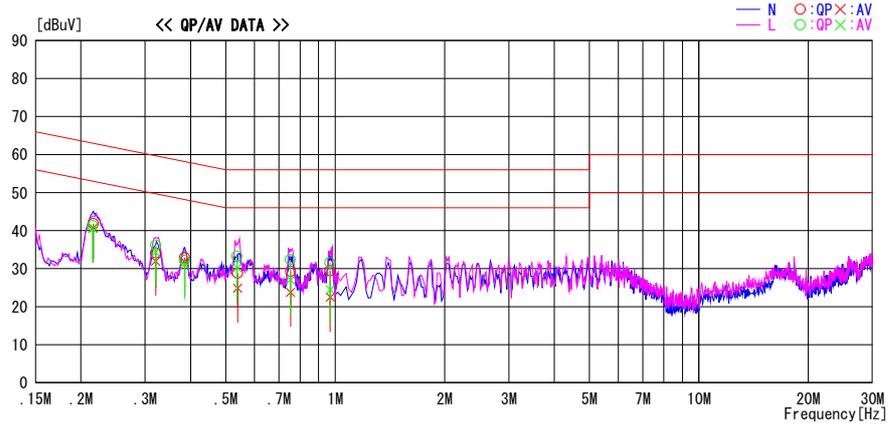
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Engineer : Keisuke Kawamura

Mode / Remarks : WLAN Tx 11b 2Mbps 2412MHz

LIMIT : FCC15.207 QP
FCC15.207 AV

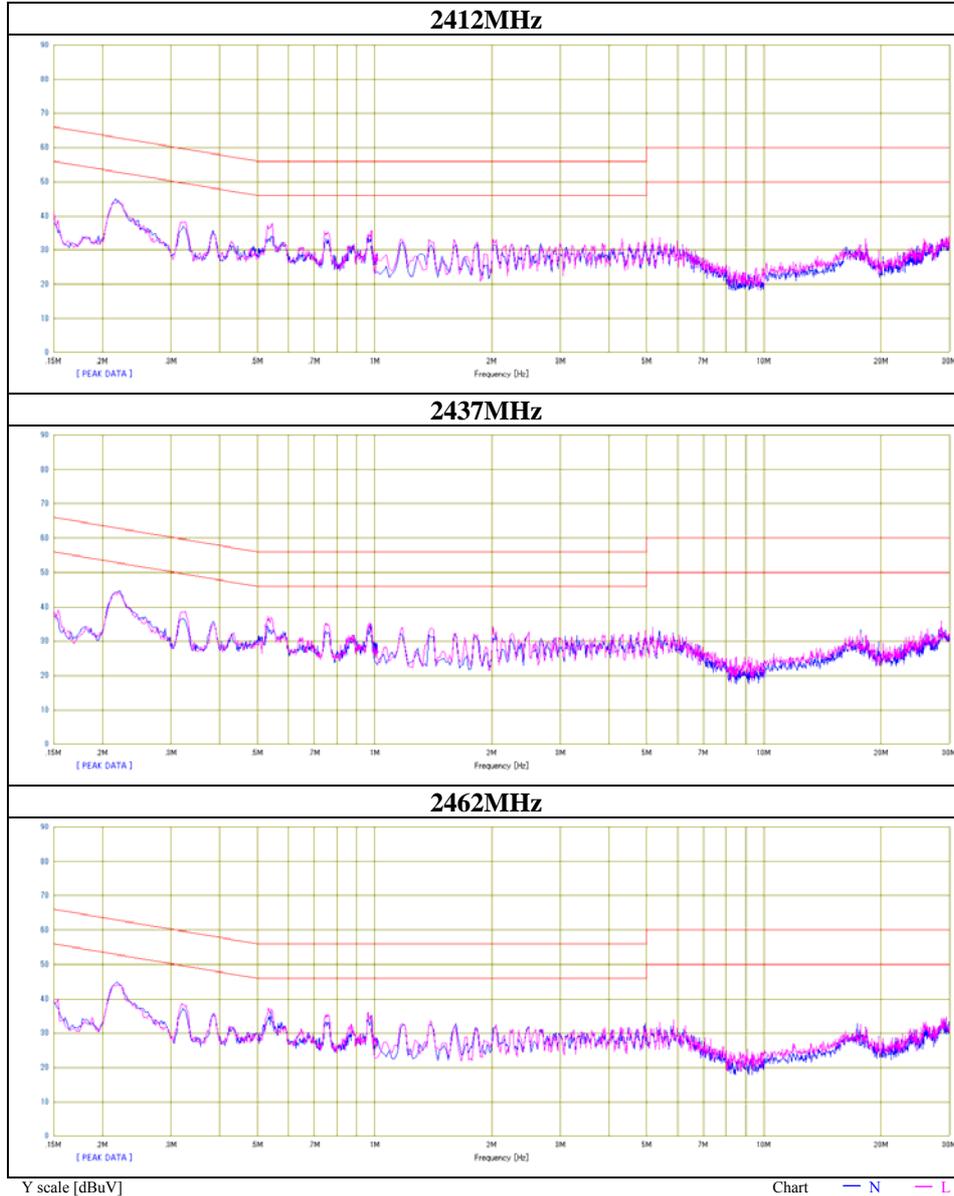


Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.21625	28.7	27.6	13.1	41.8	40.7	63.0	53.0	21.2	12.3	N	
0.32086	21.0	18.9	13.1	34.1	32.0	59.7	49.7	25.6	17.7	N	
0.38537	19.8	18.8	13.1	32.9	31.9	58.2	48.2	25.3	16.3	N	
0.53896	15.7	11.8	13.1	28.8	24.9	56.0	46.0	27.2	21.1	N	
0.75354	16.1	10.6	13.2	29.3	23.8	56.0	46.0	26.7	22.2	N	
0.96796	16.3	9.3	13.2	29.5	22.5	56.0	46.0	26.5	23.5	N	
0.21517	28.2	27.5	13.1	41.3	40.6	63.0	53.0	21.7	12.4	L	
0.32086	23.1	21.2	13.1	36.2	34.3	59.7	49.7	23.5	15.4	L	
0.38537	19.1	18.0	13.1	32.2	31.1	58.2	48.2	26.0	17.1	L	
0.53734	20.2	17.1	13.1	33.3	30.2	56.0	46.0	22.7	15.8	L	
0.75325	19.2	13.9	13.2	32.4	27.1	56.0	46.0	23.6	18.9	L	
0.96796	18.4	11.3	13.2	31.6	24.5	56.0	46.0	24.4	21.5	L	

CHART: WITH FACTOR, Peak hold data. CALCULATION: RESULT=READING+C. F(LISN LOSS + ATT LOSS + CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission
(Power Supply: DELTA)

Test place	Ise HQ EMC Lab. No.1 Semi Anechoic Chamber
Report No.	10240264H
Date	03/26/2014
Temperature/ Humidity	20 deg. C / 53% RH
Engineer	Keisuke Kawamura
Mode	11b Tx Antenna 1



Conducted Emission
(Power Supply: DELTA)

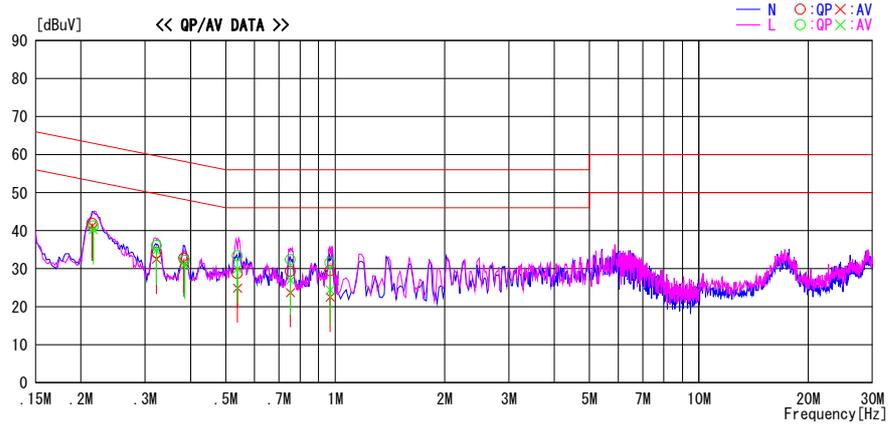
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2014/03/26

Report No. : 10240264H
Power : AC 120V / 60Hz
Temp./Humi. : 20deg. C / 53% RH
Engineer : Keisuke Kawamura

Mode / Remarks : WLAN Tx 11g 24Mbps 2412MHz

LIMIT : FCC15.207 QP
FCC15.207 AV

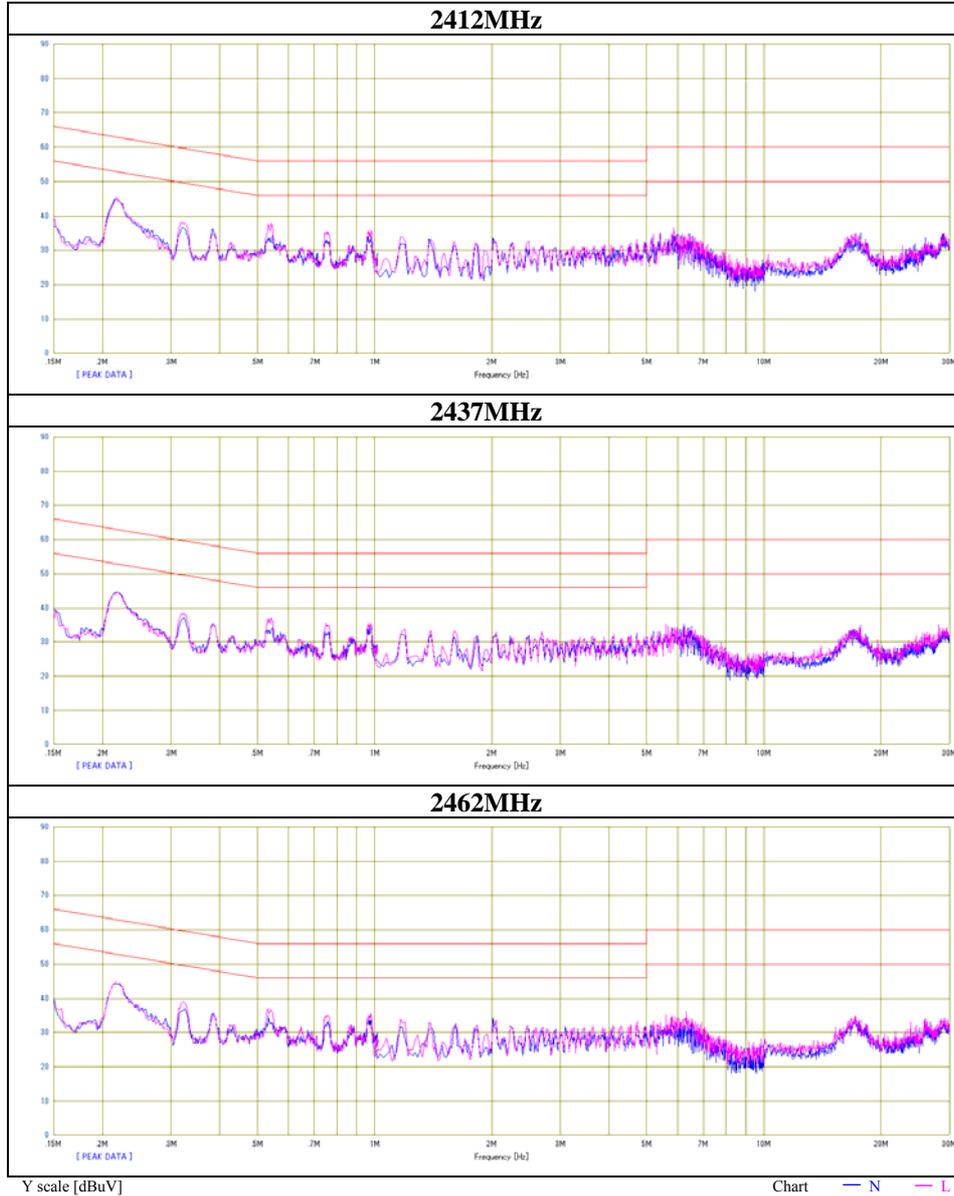


Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.21451	28.8	28.1	13.1	41.9	41.2	63.0	53.0	21.1	11.8	N	
0.32282	21.1	19.4	13.1	34.2	32.5	59.6	49.6	25.4	17.1	N	
0.38363	19.6	18.6	13.1	32.7	31.7	58.2	48.2	25.5	16.5	N	
0.53865	15.6	11.8	13.1	28.7	24.9	56.0	46.0	27.3	21.1	N	
0.75278	16.1	10.5	13.2	29.3	23.7	56.0	46.0	26.7	22.3	N	
0.96821	16.3	9.3	13.2	29.5	22.5	56.0	46.0	26.5	23.5	N	
0.21625	28.1	27.1	13.1	41.2	40.2	63.0	53.0	21.8	12.8	L	
0.32247	23.0	21.7	13.1	36.1	34.8	59.6	49.6	23.5	14.8	L	
0.38535	19.1	18.0	13.1	32.2	31.1	58.2	48.2	26.0	17.1	L	
0.53856	20.3	16.9	13.1	33.4	30.0	56.0	46.0	22.6	16.0	L	
0.75268	19.2	13.8	13.2	32.4	27.0	56.0	46.0	23.6	19.0	L	
0.96821	18.4	11.2	13.2	31.6	24.4	56.0	46.0	24.4	21.6	L	

CHART: WITH FACTOR, Peak hold data. CALCULATION: RESULT=READING+C.F (LISN LOSS + ATT LOSS + CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission
(Power Supply: DELTA)

Test place	Ise HQ EMC Lab. No.1 Semi Anechoic Chamber
Report No.	10240264H
Date	03/26/2014
Temperature/ Humidity	20 deg. C / 53% RH
Engineer	Keisuke Kawamura
Mode	11g Tx Antenna 1



Conducted Emission
(Power Supply: Chicony)

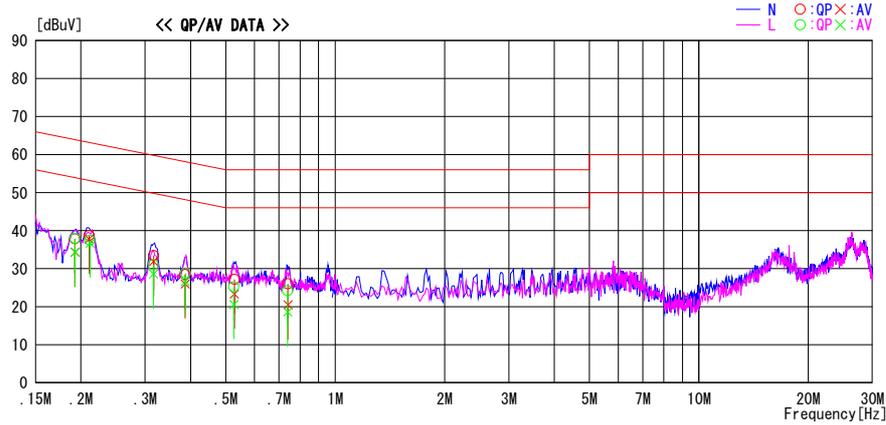
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2014/03/27

Report No. : 10240264H
Power : AC 120V / 60Hz
Temp./Humi. : 20deg. C / 53% RH
Engineer : Keisuke Kawamura

Mode / Remarks : WLAN Tx 11b 2Mbps 2412MHz

LIMIT : FCC15.207 QP
FCC15.207 AV

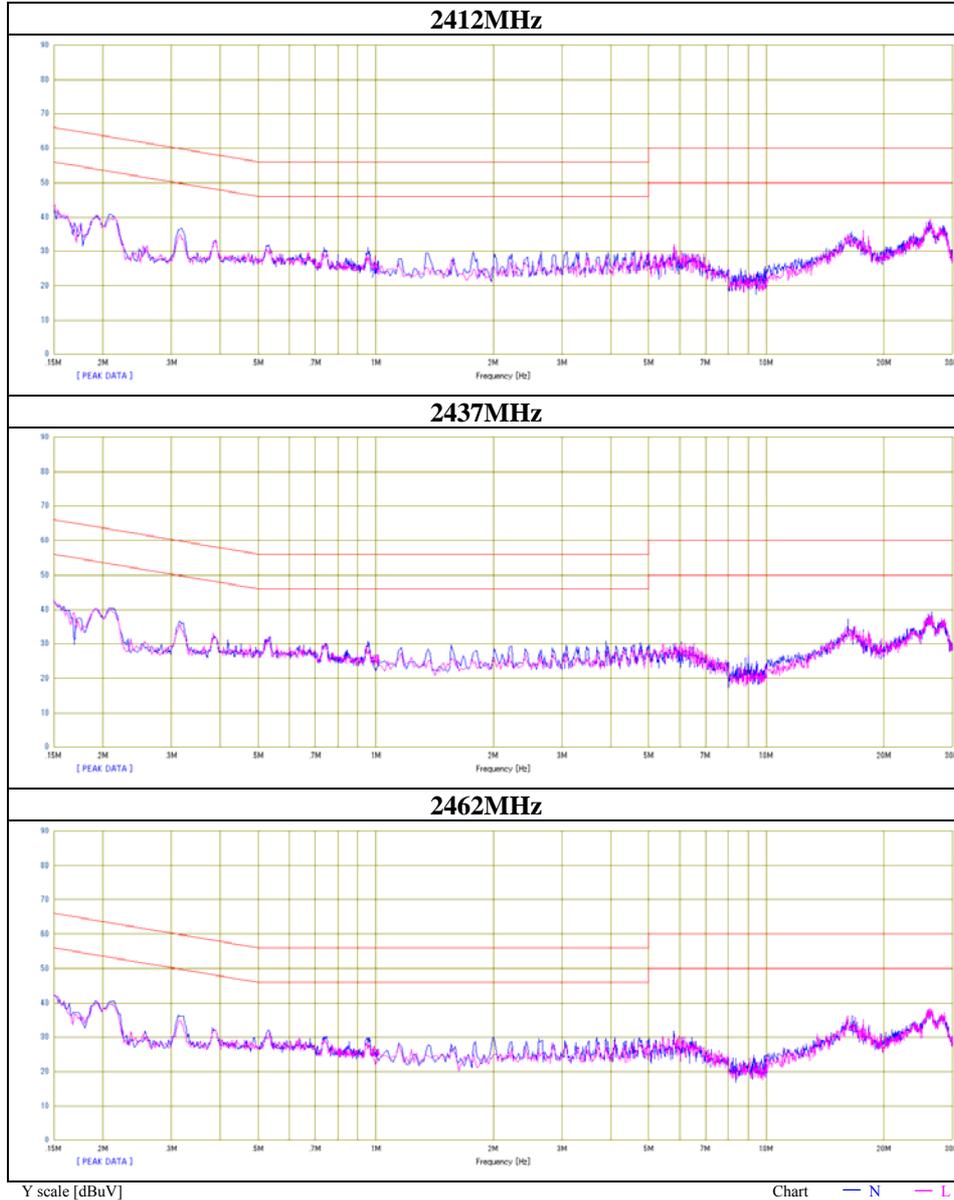


Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.19243	24.7	21.2	13.1	37.8	34.3	63.9	53.9	26.1	19.6	N	
0.21063	25.6	24.7	13.1	38.7	37.8	63.2	53.2	24.5	15.4	N	
0.31678	20.4	18.8	13.1	33.5	31.9	59.8	49.8	26.3	17.9	N	
0.38673	15.4	12.9	13.1	28.5	26.0	58.1	48.1	29.6	22.1	N	
0.52834	14.1	10.2	13.1	27.2	23.3	56.0	46.0	28.8	22.7	N	
0.74118	12.8	7.3	13.2	26.0	20.5	56.0	46.0	30.0	25.5	N	
0.19243	24.8	21.2	13.1	37.9	34.3	63.9	53.9	26.0	19.6	L	
0.21171	24.4	23.6	13.1	37.5	36.7	63.1	53.1	25.6	16.4	L	
0.31622	17.9	15.5	13.1	31.0	28.6	59.8	49.8	28.8	21.2	L	
0.38711	15.7	13.5	13.1	28.8	26.6	58.1	48.1	29.3	21.5	L	
0.52659	12.1	7.5	13.1	25.2	20.6	56.0	46.0	30.8	25.4	L	
0.73999	11.0	5.4	13.2	24.2	18.6	56.0	46.0	31.8	27.4	L	

CHART: WITH FACTOR, Peak hold data. CALCULATION: RESULT=READING+C. F (LISN LOSS + ATT LOSS + CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission
(Power Supply: Chicony)

Test place	Ise HQ EMC Lab. No.1 Semi Anechoic Chamber
Report No.	10240264H
Date	03/26/2014
Temperature/ Humidity	20 deg. C / 53% RH
Engineer	Keisuke Kawamura
Mode	11b Tx Antenna 1



Conducted Emission
(Power Supply: Chicony)

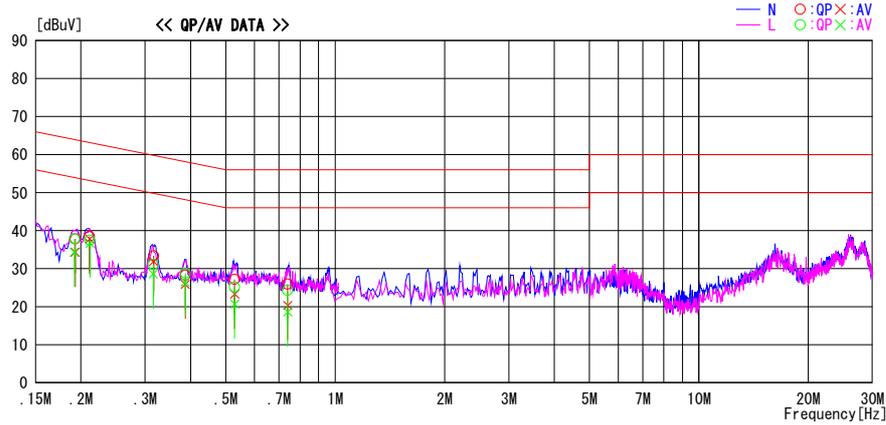
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2014/03/27

Report No. : 10240264H
Power : AC 120V / 60Hz
Temp./Humi. : 20deg. C / 53% RH
Engineer : Keisuke Kawamura

Mode / Remarks : WLAN Tx 11g 24Mbps 2412MHz

LIMIT : FCC15.207 QP
FCC15.207 AV

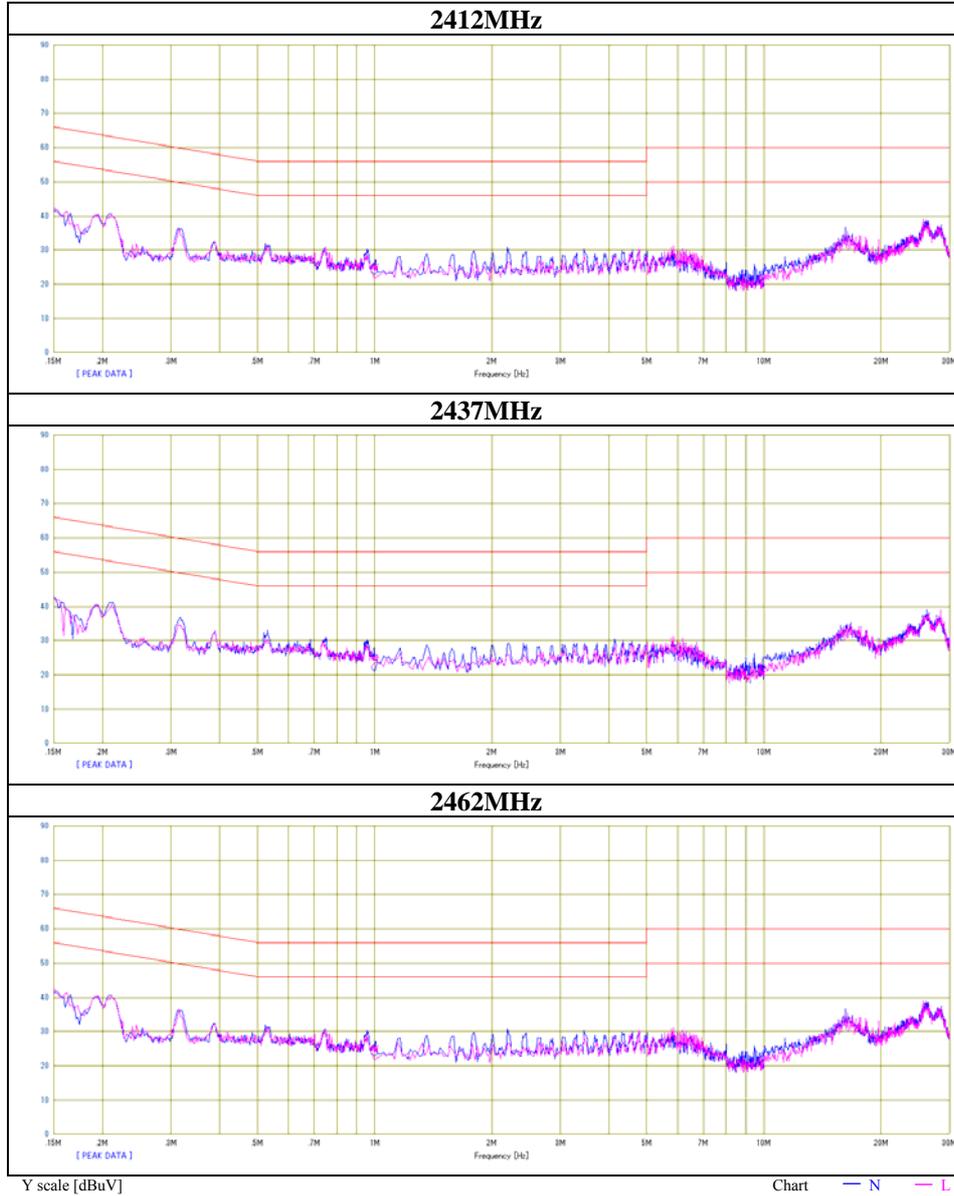


Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.19271	24.7	21.2	13.1	37.8	34.3	63.9	53.9	26.1	19.6	N	
0.21121	25.4	24.7	13.1	38.5	37.8	63.2	53.2	24.7	15.4	N	
0.31669	20.3	18.8	13.1	33.4	31.9	59.8	49.8	26.4	17.9	N	
0.38712	15.2	12.8	13.1	28.3	25.9	58.1	48.1	29.8	22.2	N	
0.52918	14.1	10.2	13.1	27.2	23.3	56.0	46.0	28.8	22.7	N	
0.73978	12.7	7.1	13.2	25.9	20.3	56.0	46.0	30.1	25.7	N	
0.19193	24.7	21.2	13.1	37.8	34.3	64.0	54.0	26.2	19.7	L	
0.21159	24.4	23.6	13.1	37.5	36.7	63.1	53.1	25.6	16.4	L	
0.31597	18.0	15.5	13.1	31.1	28.6	59.8	49.8	28.7	21.2	L	
0.38718	15.7	13.4	13.1	28.8	26.5	58.1	48.1	29.3	21.6	L	
0.52894	12.1	7.6	13.1	25.2	20.7	56.0	46.0	30.8	25.3	L	
0.73978	11.1	5.4	13.2	24.3	18.6	56.0	46.0	31.7	27.4	L	

CHART: WITH FACTOR, Peak hold data. CALCULATION: RESULT=READING+C. F (LISN LOSS + ATT LOSS + CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission
(Power Supply: Chicony)

Test place	Ise HQ EMC Lab. No.1 Semi Anechoic Chamber
Report No.	10240264H
Date	03/26/2014
Temperature/ Humidity	20 deg. C / 53% RH
Engineer	Keisuke Kawamura
Mode	11g Tx Antenna 1



Radiated Spurious Emission
(Power Supply: SONY)

Test place Ise HQ EMC Lab. No.2 Semi Anechoic Chamber
Report No. 10240264H
Date 03/18/2014 03/18/2014 03/20/2014
Temperature/ Humidity 23 deg. C / 35% RH 23 deg. C / 35% RH 24 deg. C / 36% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11b Tx 2412MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	106.732	QP	39.2	11.0	7.5	28.4	29.3	43.5	14.2	
Hori	324.020	QP	37.5	15.0	8.8	27.8	33.5	46.0	12.5	
Hori	576.018	QP	38.2	19.2	9.8	28.8	38.4	46.0	7.6	
Hori	607.514	QP	38.4	19.6	9.9	28.8	39.1	46.0	6.9	
Hori	810.019	QP	34.2	21.8	10.8	28.2	38.6	46.0	7.4	
Hori	901.121	QP	33.3	22.2	11.1	27.9	38.7	46.0	7.3	
Hori	2390.000	PK	50.4	27.0	2.4	34.7	45.1	73.9	28.8	
Hori	4824.000	PK	44.2	31.9	4.4	33.9	46.6	73.9	27.3	
Hori	7236.000	PK	NS	-	-	-	-	73.9	-	
Hori	9648.000	PK	NS	-	-	-	-	73.9	-	
Hori	2390.000	AV	41.9	27.0	2.4	34.7	36.6	53.9	17.3	
Hori	4824.000	AV	38.8	31.9	4.4	33.9	41.2	53.9	12.7	
Hori	7236.000	AV	NS	-	-	-	-	53.9	-	
Hori	9648.000	AV	NS	-	-	-	-	53.9	-	
Vert	106.724	QP	43.9	11.0	7.5	28.4	34.0	43.5	9.5	
Vert	323.979	QP	36.1	15.0	8.8	27.8	32.1	46.0	13.9	
Vert	576.011	QP	33.3	19.2	9.8	28.8	33.5	46.0	12.5	
Vert	607.514	QP	41.7	19.6	9.9	28.8	42.4	46.0	3.6	
Vert	810.017	QP	34.6	21.8	10.8	28.2	39.0	46.0	7.0	
Vert	901.120	QP	32.1	22.2	11.1	27.9	37.5	46.0	8.5	
Vert	2390.000	PK	52.8	27.0	2.4	34.7	47.5	73.9	26.4	
Vert	4824.000	PK	44.7	31.9	4.4	33.9	47.1	73.9	26.8	
Vert	7236.000	PK	NS	-	-	-	-	73.9	-	
Vert	9648.000	PK	NS	-	-	-	-	73.9	-	
Vert	2390.000	AV	43.1	27.0	2.4	34.7	37.8	53.9	16.1	
Vert	4824.000	AV	38.7	31.9	4.4	33.9	41.1	53.9	12.8	
Vert	7236.000	AV	NS	-	-	-	-	53.9	-	
Vert	9648.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
20dBc Data Sheet
(Power Supply: SONY)

Test place : Ise HQ EMC Lab. No.2 Semi Anechoic Chamber
Report No. : 10240264H
Date : 03/18/2014
Temperature/ Humidity : 23 deg. C / 35% RH
Engineer : Kazuya Yoshioka
Mode : 11b Tx 2412MHz Antenna 1

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result dBuV/m	Limit dBuV/m	Margin [dB]	Remark
Hori	2412.000	PK	96.5	27.0	2.4	34.7	91.2	-	-	Carrier
Hori	2400.000	PK	48.4	27.0	2.4	34.7	43.1	71.2	28.1	
Vert	2412.000	PK	99.9	27.0	2.4	34.7	94.6	-	-	Carrier
Vert	2400.000	PK	52.7	27.0	2.4	34.7	47.4	74.6	27.2	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

Radiated Spurious Emission
(Power Supply: SONY)

Test place Ise HQ EMC Lab. No.2 Semi Anechoic Chamber
Report No. 10240264H
Date 03/18/2014 03/18/2014 03/20/2014
Temperature/ Humidity 23 deg. C / 35% RH 23 deg. C / 35% RH 24 deg. C / 36% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11b Tx 2437MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	106.742	QP	39.1	11.0	7.5	28.4	29.2	43.5	14.3	
Hori	324.025	QP	37.3	15.0	8.8	27.8	33.3	46.0	12.7	
Hori	576.019	QP	38.2	19.2	9.8	28.8	38.4	46.0	7.6	
Hori	607.514	QP	38.4	19.6	9.9	28.8	39.1	46.0	6.9	
Hori	810.019	QP	34.1	21.8	10.8	28.2	38.5	46.0	7.5	
Hori	901.121	QP	33.2	22.2	11.1	27.9	38.6	46.0	7.4	
Hori	4874.000	PK	43.9	32.0	4.4	33.9	46.4	73.9	27.5	
Hori	7311.000	PK	NS	-	-	-	-	73.9	-	
Hori	9748.000	PK	NS	-	-	-	-	73.9	-	
Hori	4874.000	AV	37.2	32.0	4.4	33.9	39.7	53.9	14.2	
Hori	7311.000	AV	NS	-	-	-	-	53.9	-	
Hori	9748.000	AV	NS	-	-	-	-	53.9	-	
Vert	106.734	QP	43.6	11.0	7.5	28.4	33.7	43.5	9.8	
Vert	323.999	QP	35.0	15.0	8.8	27.8	31.0	46.0	15.0	
Vert	576.026	QP	33.1	19.2	9.8	28.8	33.3	46.0	12.7	
Vert	607.523	QP	41.5	19.6	9.9	28.8	42.2	46.0	3.8	
Vert	810.027	QP	34.4	21.8	10.8	28.2	38.8	46.0	7.2	
Vert	901.121	QP	32.2	22.2	11.1	27.9	37.6	46.0	8.4	
Vert	4874.000	PK	43.8	32.0	4.4	33.9	46.3	73.9	27.6	
Vert	7311.000	PK	NS	-	-	-	-	73.9	-	
Vert	9748.000	PK	NS	-	-	-	-	73.9	-	
Vert	4874.000	AV	36.6	32.0	4.4	33.9	39.1	53.9	14.8	
Vert	7311.000	AV	NS	-	-	-	-	53.9	-	
Vert	9748.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply: SONY)

Test place Ise HQ EMC Lab.No.2 Semi Anechoic Chamber
Report No. 10240264H
Date 03/18/2014 03/18/2014 03/20/2014
Temperature/ Humidity 23 deg. C / 35% RH 23 deg. C / 35% RH 24 deg. C / 36% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11b Tx 2462MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	106.721	QP	39.1	11.0	7.5	28.4	29.2	43.5	14.3	
Hori	324.015	QP	37.2	15.0	8.8	27.8	33.2	46.0	12.8	
Hori	576.022	QP	38.1	19.2	9.8	28.8	38.3	46.0	7.7	
Hori	607.532	QP	38.5	19.6	9.9	28.8	39.2	46.0	6.8	
Hori	810.024	QP	34.0	21.8	10.8	28.2	38.4	46.0	7.6	
Hori	901.131	QP	33.4	22.2	11.1	27.9	38.8	46.0	7.2	
Hori	2483.500	PK	48.1	26.9	2.5	34.7	42.8	73.9	31.2	
Hori	4924.000	PK	43.1	32.1	4.4	33.9	45.7	73.9	28.2	
Hori	7386.000	PK	NS	-	-	-	-	73.9	-	
Hori	9848.000	PK	NS	-	-	-	-	73.9	-	
Hori	2483.500	AV	39.6	26.9	2.5	34.7	34.3	53.9	19.6	
Hori	4924.000	AV	35.2	32.1	4.4	33.9	37.8	53.9	16.1	
Hori	7386.000	AV	NS	-	-	-	-	53.9	-	
Hori	9848.000	AV	NS	-	-	-	-	53.9	-	
Vert	106.722	QP	43.7	11.0	7.5	28.4	33.8	43.5	9.7	
Vert	323.995	QP	34.9	15.0	8.8	27.8	30.9	46.0	15.1	
Vert	576.023	QP	33.2	19.2	9.8	28.8	33.4	46.0	12.6	
Vert	607.531	QP	41.5	19.6	9.9	28.8	42.2	46.0	3.8	
Vert	810.025	QP	34.5	21.8	10.8	28.2	38.9	46.0	7.1	
Vert	901.132	QP	32.1	22.2	11.1	27.9	37.5	46.0	8.5	
Vert	2483.500	PK	53.5	26.9	2.5	34.7	48.2	73.9	25.7	
Vert	4924.000	PK	43.5	32.1	4.4	33.9	46.1	73.9	27.8	
Vert	7386.000	PK	NS	-	-	-	-	73.9	-	
Vert	9848.000	PK	NS	-	-	-	-	73.9	-	
Vert	2483.500	AV	45.0	26.9	2.5	34.7	39.7	53.9	14.2	
Vert	4924.000	AV	37.4	32.1	4.4	33.9	40.0	53.9	14.0	
Vert	7386.000	AV	NS	-	-	-	-	53.9	-	
Vert	9848.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply: SONY)

Test place Ise HQ EMC Lab. No.2 Semi Anechoic Chamber
Report No. 10240264H
Date 03/18/2014 03/18/2014 03/20/2014
Temperature/ Humidity 23 deg. C / 35% RH 23 deg. C / 35% RH 24 deg. C / 36% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11g Tx 2412MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	106.722	QP	39.2	11.0	7.5	28.4	29.3	43.5	14.2	
Hori	324.021	QP	37.1	15.0	8.8	27.8	33.1	46.0	12.9	
Hori	576.020	QP	38.1	19.2	9.8	28.8	38.3	46.0	7.7	
Hori	607.531	QP	38.4	19.6	9.9	28.8	39.1	46.0	6.9	
Hori	810.024	QP	34.1	21.8	10.8	28.2	38.5	46.0	7.5	
Hori	901.131	QP	33.1	22.2	11.1	27.9	38.5	46.0	7.5	
Hori	2390.000	PK	55.5	27.0	2.4	34.7	50.2	73.9	23.7	
Hori	4824.000	PK	NS	-	-	-	-	73.9	-	
Hori	7236.000	PK	NS	-	-	-	-	73.9	-	
Hori	9648.000	PK	NS	-	-	-	-	73.9	-	
Hori	2390.000	AV	44.6	27.0	2.4	34.7	39.3	53.9	14.6	
Hori	4824.000	AV	NS	-	-	-	-	53.9	-	
Hori	7236.000	AV	NS	-	-	-	-	53.9	-	
Hori	9648.000	AV	NS	-	-	-	-	53.9	-	
Vert	106.733	QP	43.6	11.0	7.5	28.4	33.7	43.5	9.8	
Vert	323.996	QP	35.2	15.0	8.8	27.8	31.2	46.0	14.8	
Vert	576.022	QP	33.4	19.2	9.8	28.8	33.6	46.0	12.4	
Vert	607.531	QP	41.6	19.6	9.9	28.8	42.3	46.0	3.7	
Vert	810.026	QP	34.2	21.8	10.8	28.2	38.6	46.0	7.4	
Vert	901.131	QP	33.1	22.2	11.1	27.9	38.5	46.0	7.5	
Vert	2390.000	PK	55.1	27.0	2.4	34.7	49.8	73.9	24.1	
Vert	4824.000	PK	NS	-	-	-	-	73.9	-	
Vert	7236.000	PK	NS	-	-	-	-	73.9	-	
Vert	9648.000	PK	NS	-	-	-	-	73.9	-	
Vert	2390.000	AV	46.1	27.0	2.4	34.7	40.8	53.9	13.1	
Vert	4824.000	AV	NS	-	-	-	-	53.9	-	
Vert	7236.000	AV	NS	-	-	-	-	53.9	-	
Vert	9648.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
20dBc Data Sheet
(Power Supply: SONY)

Test place : Ise HQ EMC Lab. No.2 Semi Anechoic Chamber
Report No. : 10240264H
Date : 03/18/2014
Temperature/ Humidity : 23 deg. C / 35% RH
Engineer : Kazuya Yoshioka
Mode : 11g Tx 2412MHz Antenna 1

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2412.000	PK	92.3	27.0	2.4	34.7	87.0	-	-	Carrier
Hori	2400.000	PK	61.5	27.0	2.4	34.7	56.2	67.0	10.8	
Vert	2412.000	PK	95.7	27.0	2.4	34.7	90.4	-	-	Carrier
Vert	2400.000	PK	64.2	27.0	2.4	34.7	58.9	70.4	11.5	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

Radiated Spurious Emission
(Power Supply: SONY)

Test place Ise HQ EMC Lab. No.2 Semi Anechoic Chamber
Report No. 10240264H
Date 03/18/2014 03/18/2014 03/20/2014
Temperature/ Humidity 23 deg. C / 35% RH 23 deg. C / 35% RH 24 deg. C / 36% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11g Tx 2437MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	106.711	QP	39.5	11.0	7.5	28.4	29.6	43.5	13.9	
Hori	324.011	QP	36.9	15.0	8.8	27.8	32.9	46.0	13.1	
Hori	576.020	QP	37.9	19.2	9.8	28.8	38.1	46.0	7.9	
Hori	607.525	QP	37.8	19.6	9.9	28.8	38.5	46.0	7.5	
Hori	810.011	QP	33.9	21.8	10.8	28.2	38.3	46.0	7.7	
Hori	901.112	QP	32.9	22.2	11.1	27.9	38.3	46.0	7.7	
Hori	4874.000	PK	NS	-	-	-	-	73.9	-	
Hori	7311.000	PK	NS	-	-	-	-	73.9	-	
Hori	9748.000	PK	NS	-	-	-	-	73.9	-	
Hori	4874.000	AV	NS	-	-	-	-	53.9	-	
Hori	7311.000	AV	NS	-	-	-	-	53.9	-	
Hori	9748.000	AV	NS	-	-	-	-	53.9	-	
Vert	106.721	QP	43.7	11.0	7.5	28.4	33.8	43.5	9.7	
Vert	323.989	QP	35.0	15.0	8.8	27.8	31.0	46.0	15.0	
Vert	576.022	QP	32.9	19.2	9.8	28.8	33.1	46.0	12.9	
Vert	607.524	QP	41.1	19.6	9.9	28.8	41.8	46.0	4.2	
Vert	810.012	QP	33.0	21.8	10.8	28.2	37.4	46.0	8.6	
Vert	901.121	QP	32.7	22.2	11.1	27.9	38.1	46.0	7.9	
Vert	4874.000	PK	NS	-	-	-	-	73.9	-	
Vert	7311.000	PK	NS	-	-	-	-	73.9	-	
Vert	9748.000	PK	NS	-	-	-	-	73.9	-	
Vert	4874.000	AV	NS	-	-	-	-	53.9	-	
Vert	7311.000	AV	NS	-	-	-	-	53.9	-	
Vert	9748.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply: SONY)

Test place Ise HQ EMC Lab.No.2 Semi Anechoic Chamber
Report No. 10240264H
Date 03/18/2014 03/18/2014 03/20/2014
Temperature/ Humidity 23 deg. C / 35% RH 23 deg. C / 35% RH 24 deg. C / 36% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11g Tx 2462MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	106.733	QP	39.6	11.0	7.5	28.4	29.7	43.5	13.8	
Hori	324.021	QP	36.3	15.0	8.8	27.8	32.3	46.0	13.7	
Hori	576.042	QP	38.1	19.2	9.8	28.8	38.3	46.0	7.7	
Hori	607.503	QP	38.1	19.6	9.9	28.8	38.8	46.0	7.2	
Hori	810.011	QP	34.0	21.8	10.8	28.2	38.4	46.0	7.6	
Hori	901.119	QP	32.9	22.2	11.1	27.9	38.3	46.0	7.7	
Hori	2483.500	PK	51.1	26.9	2.5	34.7	45.8	73.9	28.1	
Hori	4924.000	PK	NS	-	-	-	-	73.9	-	
Hori	7386.000	PK	NS	-	-	-	-	73.9	-	
Hori	9848.000	PK	NS	-	-	-	-	73.9	-	
Hori	2483.500	AV	42.7	26.9	2.5	34.7	37.4	53.9	16.5	
Hori	4924.000	AV	NS	-	-	-	-	53.9	-	
Hori	7386.000	AV	NS	-	-	-	-	53.9	-	
Hori	9848.000	AV	NS	-	-	-	-	53.9	-	
Vert	106.724	QP	43.6	11.0	7.5	28.4	33.7	43.5	9.8	
Vert	323.977	QP	35.0	15.0	8.8	27.8	31.0	46.0	15.0	
Vert	576.013	QP	32.8	19.2	9.8	28.8	33.0	46.0	13.0	
Vert	607.503	QP	41.2	19.6	9.9	28.8	41.9	46.0	4.1	
Vert	810.012	QP	33.1	21.8	10.8	28.2	37.5	46.0	8.5	
Vert	901.121	QP	32.2	22.2	11.1	27.9	37.6	46.0	8.4	
Vert	2483.500	PK	57.6	26.9	2.5	34.7	52.3	73.9	21.6	
Vert	4924.000	PK	NS	-	-	-	-	73.9	-	
Vert	7386.000	PK	NS	-	-	-	-	73.9	-	
Vert	9848.000	PK	NS	-	-	-	-	73.9	-	
Vert	2483.500	AV	47.9	26.9	2.5	34.7	42.6	53.9	11.4	
Vert	4924.000	AV	NS	-	-	-	-	53.9	-	
Vert	7386.000	AV	NS	-	-	-	-	53.9	-	
Vert	9848.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply: DELTA)

Test place Ise HQ EMC Lab.No.2&No.3 Semi Anechoic Chamber
Report No. 10240264H
Date 03/17/2014 03/18/2014 03/24/2014
Temperature/ Humidity 25 deg. C / 36% RH 23 deg. C / 35% RH 21 deg. C / 35% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11b Tx 2412MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	108.785	QP	42.7	11.4	8.2	32.1	30.2	43.5	13.3	
Hori	324.001	QP	38.9	15.1	10.0	31.9	32.1	46.0	13.9	
Hori	576.006	QP	38.9	19.2	11.6	32.0	37.7	46.0	8.3	
Hori	607.522	QP	38.8	19.6	11.8	32.0	38.2	46.0	7.8	
Hori	810.027	QP	35.5	22.0	12.8	31.4	38.9	46.0	7.1	
Hori	901.098	QP	34.5	22.3	13.3	30.9	39.2	46.0	6.8	
Hori	2390.000	PK	50.6	27.0	2.4	34.7	45.3	73.9	28.6	
Hori	4824.000	PK	45.2	31.9	4.4	33.9	47.6	73.9	26.3	
Hori	7236.000	PK	NS	-	-	-	-	73.9	-	
Hori	9648.000	PK	NS	-	-	-	-	73.9	-	
Hori	2390.000	AV	41.9	27.0	2.4	34.7	36.6	53.9	17.3	
Hori	4824.000	AV	38.0	31.9	4.4	33.9	40.4	53.9	13.5	
Hori	7236.000	AV	NS	-	-	-	-	53.9	-	
Hori	9648.000	AV	NS	-	-	-	-	53.9	-	
Vert	32.496	QP	41.4	17.3	7.0	32.2	33.5	40.0	6.5	
Vert	108.779	QP	47.2	11.4	8.2	32.1	34.7	43.5	8.8	
Vert	576.002	QP	35.1	19.2	11.6	32.0	33.9	46.0	12.1	
Vert	607.519	QP	42.2	19.6	11.8	32.0	41.6	46.0	4.4	
Vert	810.030	QP	37.3	22.0	12.8	31.4	40.7	46.0	5.3	
Vert	901.117	QP	33.4	22.3	13.3	30.9	38.1	46.0	7.9	
Vert	2390.000	PK	53.7	27.0	2.4	34.7	48.4	73.9	25.5	
Vert	4824.000	PK	45.5	31.9	4.4	33.9	47.9	73.9	26.0	
Vert	7236.000	PK	NS	-	-	-	-	73.9	-	
Vert	9648.000	PK	NS	-	-	-	-	73.9	-	
Vert	2390.000	AV	43.9	27.0	2.4	34.7	38.6	53.9	15.3	
Vert	4824.000	AV	38.9	31.9	4.4	33.9	41.3	53.9	12.6	
Vert	7236.000	AV	NS	-	-	-	-	53.9	-	
Vert	9648.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
20dBc Data Sheet
(Power Supply: DELTA)

Test place : Ise HQ EMC Lab. No.2 Semi Anechoic Chamber
Report No. : 10240264H
Date : 03/17/2014
Temperature/ Humidity : 25 deg. C / 36% RH
Engineer : Kazuya Yoshioka
Mode : 11b Tx 2412MHz Antenna 1

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result dBuV/m	Limit dBuV/m	Margin [dB]	Remark
Hori	2412.000	PK	97.4	27.0	2.4	34.7	92.1	-	-	Carrier
Hori	2400.000	PK	47.6	27.0	2.4	34.7	42.3	72.1	29.8	
Vert	2412.000	PK	99.4	27.0	2.4	34.7	94.1	-	-	Carrier
Vert	2400.000	PK	49.4	27.0	2.4	34.7	44.1	74.1	30.0	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

Radiated Spurious Emission
(Power Supply: DELTA)

Test place Ise HQ EMC Lab.No.2&No.3 Semi Anechoic Chamber
Report No. 10240264H
Date 03/17/2014 03/18/2014 03/24/2014
Temperature/ Humidity 25 deg. C / 36% RH 23 deg. C / 35% RH 21 deg. C / 35% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11b Tx 2437MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	108.813	QP	42.6	11.4	8.2	32.1	30.1	43.5	13.4	
Hori	324.021	QP	39.0	15.1	10.0	31.9	32.2	46.0	13.8	
Hori	576.004	QP	39.0	19.2	11.6	32.0	37.8	46.0	8.2	
Hori	607.521	QP	38.9	19.6	11.8	32.0	38.3	46.0	7.7	
Hori	810.030	QP	35.4	22.0	12.8	31.4	38.8	46.0	7.2	
Hori	901.101	QP	34.4	22.3	13.3	30.9	39.1	46.0	6.9	
Hori	4874.000	PK	43.3	32.0	4.4	33.9	45.8	73.9	28.1	
Hori	7311.000	PK	NS	-	-	-	-	73.9	-	
Hori	9748.000	PK	NS	-	-	-	-	73.9	-	
Hori	4874.000	AV	35.4	32.0	4.4	33.9	37.9	53.9	16.0	
Hori	7311.000	AV	NS	-	-	-	-	53.9	-	
Hori	9748.000	AV	NS	-	-	-	-	53.9	-	
Vert	32.470	QP	41.3	17.3	7.0	32.2	33.4	40.0	6.6	
Vert	108.799	QP	47.5	11.4	8.2	32.1	35.0	43.5	8.5	
Vert	576.003	QP	34.9	19.2	11.6	32.0	33.7	46.0	12.3	
Vert	607.520	QP	42.1	19.6	11.8	32.0	41.5	46.0	4.5	
Vert	810.030	QP	37.4	22.0	12.8	31.4	40.8	46.0	5.2	
Vert	901.115	QP	33.4	22.3	13.3	30.9	38.1	46.0	7.9	
Vert	4874.000	PK	44.0	32.0	4.4	33.9	46.5	73.9	27.4	
Vert	7311.000	PK	NS	-	-	-	-	73.9	-	
Vert	9748.000	PK	NS	-	-	-	-	73.9	-	
Vert	4874.000	AV	36.9	32.0	4.4	33.9	39.4	53.9	14.5	
Vert	7311.000	AV	NS	-	-	-	-	53.9	-	
Vert	9748.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply: DELTA)

Test place Ise HQ EMC Lab.No.2&No.3 Semi Anechoic Chamber
Report No. 10240264H
Date 03/17/2014 03/18/2014 03/24/2014
Temperature/ Humidity 25 deg. C / 36% RH 23 deg. C / 35% RH 21 deg. C / 35% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11b Tx 2462MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	108.822	QP	42.4	11.4	8.2	32.1	29.9	43.5	13.6	
Hori	324.030	QP	39.3	15.1	10.0	31.9	32.5	46.0	13.5	
Hori	576.002	QP	39.2	19.2	11.6	32.0	38.0	46.0	8.0	
Hori	607.520	QP	38.8	19.6	11.8	32.0	38.2	46.0	7.8	
Hori	810.031	QP	35.2	22.0	12.8	31.4	38.6	46.0	7.4	
Hori	901.107	QP	34.2	22.3	13.3	30.9	38.9	46.0	7.1	
Hori	2483.500	PK	48.7	26.9	2.5	34.7	43.4	73.9	30.5	
Hori	4924.000	PK	43.0	32.1	4.4	33.9	45.6	73.9	28.3	
Hori	7386.000	PK	NS	-	-	-	-	73.9	-	
Hori	9848.000	PK	NS	-	-	-	-	73.9	-	
Hori	2483.500	AV	39.1	26.9	2.5	34.7	33.8	53.9	20.1	
Hori	4924.000	AV	35.5	32.1	4.4	33.9	38.1	53.9	15.9	
Hori	7386.000	AV	NS	-	-	-	-	53.9	-	
Hori	9848.000	AV	NS	-	-	-	-	53.9	-	
Vert	32.062	QP	41.0	17.5	7.0	32.2	33.3	40.0	6.7	
Vert	108.797	QP	47.6	11.4	8.2	32.1	35.1	43.5	8.4	
Vert	576.002	QP	35.2	19.2	11.6	32.0	34.0	46.0	12.0	
Vert	607.520	QP	42.2	19.6	11.8	32.0	41.6	46.0	4.4	
Vert	810.030	QP	37.3	22.0	12.8	31.4	40.7	46.0	5.3	
Vert	901.114	QP	32.3	22.3	13.3	30.9	37.0	46.0	9.0	
Vert	2483.500	PK	53.5	26.9	2.5	34.7	48.2	73.9	25.7	
Vert	4924.000	PK	43.1	32.1	4.4	33.9	45.7	73.9	28.2	
Vert	7386.000	PK	NS	-	-	-	-	73.9	-	
Vert	9848.000	PK	NS	-	-	-	-	73.9	-	
Vert	2483.500	AV	45.6	26.9	2.5	34.7	40.3	53.9	13.7	
Vert	4924.000	AV	36.2	32.1	4.4	33.9	38.8	53.9	15.2	
Vert	7386.000	AV	NS	-	-	-	-	53.9	-	
Vert	9848.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply: DELTA)

Test place Ise HQ EMC Lab.No.2&No.3 Semi Anechoic Chamber
Report No. 10240264H
Date 03/17/2014 03/18/2014 03/24/2014
Temperature/ Humidity 25 deg. C / 36% RH 23 deg. C / 35% RH 21 deg. C / 35% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11g Tx 2412MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	108.764	QP	42.9	11.4	8.2	32.1	30.4	43.5	13.1	
Hori	324.005	QP	39.2	15.1	10.0	31.9	32.4	46.0	13.6	
Hori	576.006	QP	38.8	19.2	11.6	32.0	37.6	46.0	8.4	
Hori	607.524	QP	39.0	19.6	11.8	32.0	38.4	46.0	7.6	
Hori	810.022	QP	35.6	22.0	12.8	31.4	39.0	46.0	7.0	
Hori	901.102	QP	34.5	22.3	13.3	30.9	39.2	46.0	6.8	
Hori	2390.000	PK	57.2	27.0	2.4	34.7	51.9	73.9	22.0	
Hori	4824.000	PK	NS	-	-	-	-	73.9	-	
Hori	7236.000	PK	NS	-	-	-	-	73.9	-	
Hori	9648.000	PK	NS	-	-	-	-	73.9	-	
Hori	2390.000	AV	47.6	27.0	2.4	34.7	42.3	53.9	11.6	
Hori	4824.000	AV	NS	-	-	-	-	53.9	-	
Hori	7236.000	AV	NS	-	-	-	-	53.9	-	
Hori	9648.000	AV	NS	-	-	-	-	53.9	-	
Vert	32.012	QP	41.1	17.5	7.0	32.2	33.4	40.0	6.6	
Vert	108.766	QP	47.4	11.4	8.2	32.1	34.9	43.5	8.6	
Vert	576.002	QP	35.3	19.2	11.6	32.0	34.1	46.0	11.9	
Vert	607.525	QP	42.0	19.6	11.8	32.0	41.4	46.0	4.6	
Vert	810.024	QP	37.2	22.0	12.8	31.4	40.6	46.0	5.4	
Vert	901.113	QP	33.2	22.3	13.3	30.9	37.9	46.0	8.1	
Vert	2390.000	PK	59.6	27.0	2.4	34.7	54.3	73.9	19.6	
Vert	4824.000	PK	NS	-	-	-	-	73.9	-	
Vert	7236.000	PK	NS	-	-	-	-	73.9	-	
Vert	9648.000	PK	NS	-	-	-	-	73.9	-	
Vert	2390.000	AV	50.3	27.0	2.4	34.7	45.0	53.9	9.0	
Vert	4824.000	AV	NS	-	-	-	-	53.9	-	
Vert	7236.000	AV	NS	-	-	-	-	53.9	-	
Vert	9648.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
20dBc Data Sheet
(Power Supply: DELTA)

Test place : Ise HQ EMC Lab. No.2 Semi Anechoic Chamber
Report No. : 10240264H
Date : 03/17/2014
Temperature/ Humidity : 25 deg. C / 36% RH
Engineer : Kazuya Yoshioka
Mode : 11g Tx 2412MHz Antenna 1

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2412.000	PK	94.2	27.0	2.4	34.7	88.9	-	-	Carrier
Hori	2400.000	PK	61.9	27.0	2.4	34.7	56.6	68.9	12.3	
Vert	2412.000	PK	96.0	27.0	2.4	34.7	90.7	-	-	Carrier
Vert	2400.000	PK	64.5	27.0	2.4	34.7	59.2	70.7	11.5	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

Radiated Spurious Emission
(Power Supply: DELTA)

Test place Ise HQ EMC Lab.No.2&No.3 Semi Anechoic Chamber
Report No. 10240264H
Date 03/17/2014 03/18/2014 03/24/2014
Temperature/ Humidity 25 deg. C / 36% RH 23 deg. C / 35% RH 21 deg. C / 35% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11g Tx 2437MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	108.698	QP	42.6	11.4	8.2	32.1	30.1	43.5	13.4	
Hori	324.012	QP	39.5	15.1	10.0	31.9	32.7	46.0	13.3	
Hori	576.021	QP	38.6	19.2	11.6	32.0	37.4	46.0	8.6	
Hori	607.527	QP	39.2	19.6	11.8	32.0	38.6	46.0	7.4	
Hori	810.021	QP	35.0	22.0	12.8	31.4	38.4	46.0	7.6	
Hori	901.123	QP	34.3	22.3	13.3	30.9	39.0	46.0	7.0	
Hori	4874.000	PK	NS	-	-	-	-	73.9	-	
Hori	7311.000	PK	NS	-	-	-	-	73.9	-	
Hori	9748.000	PK	NS	-	-	-	-	73.9	-	
Hori	4874.000	AV	NS	-	-	-	-	53.9	-	
Hori	7311.000	AV	NS	-	-	-	-	53.9	-	
Hori	9748.000	AV	NS	-	-	-	-	53.9	-	
Vert	32.025	QP	41.2	17.5	7.0	32.2	33.5	40.0	6.5	
Vert	108.661	QP	47.6	11.4	8.2	32.1	35.1	43.5	8.4	
Vert	576.023	QP	35.1	19.2	11.6	32.0	33.9	46.0	12.1	
Vert	607.523	QP	42.1	19.6	11.8	32.0	41.5	46.0	4.5	
Vert	810.024	QP	37.3	22.0	12.8	31.4	40.7	46.0	5.3	
Vert	901.134	QP	33.3	22.3	13.3	30.9	38.0	46.0	8.0	
Vert	4874.000	PK	NS	-	-	-	-	73.9	-	
Vert	7311.000	PK	NS	-	-	-	-	73.9	-	
Vert	9748.000	PK	NS	-	-	-	-	73.9	-	
Vert	4874.000	AV	NS	-	-	-	-	53.9	-	
Vert	7311.000	AV	NS	-	-	-	-	53.9	-	
Vert	9748.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply: DELTA)

Test place Ise HQ EMC Lab.No.2&No.3 Semi Anechoic Chamber
Report No. 10240264H
Date 03/17/2014 03/18/2014 03/24/2014
Temperature/ Humidity 25 deg. C / 36% RH 23 deg. C / 35% RH 21 deg. C / 35% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11g Tx 2462MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	108.655	QP	41.9	11.4	8.2	32.1	29.4	43.5	14.1	
Hori	324.046	QP	39.2	15.1	10.0	31.9	32.4	46.0	13.6	
Hori	576.021	QP	38.3	19.2	11.6	32.0	37.1	46.0	8.9	
Hori	607.244	QP	39.4	19.6	11.8	32.0	38.8	46.0	7.2	
Hori	810.018	QP	35.2	22.0	12.8	31.4	38.6	46.0	7.4	
Hori	901.123	QP	34.2	22.3	13.3	30.9	38.9	46.0	7.1	
Hori	2483.500	PK	51.6	26.9	2.5	34.7	46.3	73.9	27.6	
Hori	4924.000	PK	NS	-	-	-	-	73.9	-	
Hori	7386.000	PK	NS	-	-	-	-	73.9	-	
Hori	9848.000	PK	NS	-	-	-	-	73.9	-	
Hori	2483.500	AV	42.2	26.9	2.5	34.7	36.9	53.9	17.0	
Hori	4924.000	AV	NS	-	-	-	-	53.9	-	
Hori	7386.000	AV	NS	-	-	-	-	53.9	-	
Hori	9848.000	AV	NS	-	-	-	-	53.9	-	
Vert	32.034	QP	40.9	17.5	7.0	32.2	33.2	40.0	6.8	
Vert	108.651	QP	47.7	11.4	8.2	32.1	35.2	43.5	8.3	
Vert	576.023	QP	35.0	19.2	11.6	32.0	33.8	46.0	12.2	
Vert	607.230	QP	41.9	19.6	11.8	32.0	41.3	46.0	4.7	
Vert	810.019	QP	37.1	22.0	12.8	31.4	40.5	46.0	5.5	
Vert	901.122	QP	33.0	22.3	13.3	30.9	37.7	46.0	8.3	
Vert	2483.500	PK	57.4	26.9	2.5	34.7	52.1	73.9	21.9	
Vert	4924.000	PK	NS	-	-	-	-	73.9	-	
Vert	7386.000	PK	NS	-	-	-	-	73.9	-	
Vert	9848.000	PK	NS	-	-	-	-	73.9	-	
Vert	2483.500	AV	48.0	26.9	2.5	34.7	42.7	53.9	11.2	
Vert	4924.000	AV	NS	-	-	-	-	53.9	-	
Vert	7386.000	AV	NS	-	-	-	-	53.9	-	
Vert	9848.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply: Chicony)

Test place Ise HQ EMC Lab.No.2 Semi Anechoic Chamber
Report No. 10240264H
Date 03/17/2014 03/18/2014 03/22/2014
Temperature/ Humidity 23 deg. C / 35% RH 23 deg. C / 35% RH 22 deg. C / 34% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11b Tx 2412MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	39.498	QP	30.8	14.7	6.8	28.6	23.7	40.0	16.3	
Hori	107.031	QP	40.0	11.1	7.5	28.4	30.2	43.5	13.3	
Hori	170.939	QP	34.2	15.7	8.0	28.0	29.9	43.5	13.6	
Hori	324.169	QP	35.9	15.0	8.8	27.8	31.9	46.0	14.1	
Hori	608.012	QP	36.5	19.6	9.9	28.8	37.2	46.0	8.8	
Hori	809.811	QP	30.6	21.8	10.8	28.2	35.0	46.0	11.0	
Hori	2390.000	PK	49.8	27.0	2.4	34.7	44.5	73.9	29.4	
Hori	4824.000	PK	45.2	31.9	4.4	33.9	47.6	73.9	26.3	
Hori	7236.000	PK	NS	-	-	-	-	73.9	-	
Hori	9648.000	PK	NS	-	-	-	-	73.9	-	
Hori	2390.000	AV	42.4	27.0	2.4	34.7	37.1	53.9	16.8	
Hori	4824.000	AV	37.6	31.9	4.4	33.9	40.0	53.9	13.9	
Hori	7236.000	AV	NS	-	-	-	-	53.9	-	
Hori	9648.000	AV	NS	-	-	-	-	53.9	-	
Vert	39.067	QP	38.1	14.9	6.8	28.6	31.2	40.0	8.8	
Vert	106.722	QP	44.7	11.0	7.5	28.4	34.8	43.5	8.7	
Vert	171.131	QP	33.5	15.7	8.0	28.0	29.2	43.5	14.3	
Vert	325.012	QP	35.9	15.0	8.8	27.8	31.9	46.0	14.1	
Vert	608.113	QP	37.2	19.6	9.9	28.8	37.9	46.0	8.1	
Vert	810.003	QP	35.3	21.8	10.8	28.2	39.7	46.0	6.3	
Vert	2390.000	PK	53.5	27.0	2.4	34.7	48.2	73.9	25.7	
Vert	4824.000	PK	44.0	31.9	4.4	33.9	46.4	73.9	27.5	
Vert	7236.000	PK	NS	-	-	-	-	73.9	-	
Vert	9648.000	PK	NS	-	-	-	-	73.9	-	
Vert	2390.000	AV	45.3	27.0	2.4	34.7	40.0	53.9	13.9	
Vert	4824.000	AV	37.0	31.9	4.4	33.9	39.4	53.9	14.5	
Vert	7236.000	AV	NS	-	-	-	-	53.9	-	
Vert	9648.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
20dBc Data Sheet
(Power Supply: Chicony)

Test place : Ise HQ EMC Lab. No.2 Semi Anechoic Chamber
Report No. : 10240264H
Date : 03/17/2014
Temperature/ Humidity : 23 deg. C / 35% RH
Engineer : Kazuya Yoshioka
Mode : 11b Tx 2412MHz Antenna 1

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result dBuV/m	Limit dBuV/m	Margin [dB]	Remark
Hori	2412.000	PK	96.0	27.0	2.4	34.7	90.7	-	-	Carrier
Hori	2400.000	PK	48.8	27.0	2.4	34.7	43.5	70.7	27.2	
Vert	2412.000	PK	99.8	27.0	2.4	34.7	94.5	-	-	Carrier
Vert	2400.000	PK	55.2	27.0	2.4	34.7	49.9	74.5	24.6	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

Radiated Spurious Emission
(Power Supply: Chicony)

Test place Ise HQ EMC Lab.No.2 Semi Anechoic Chamber
Report No. 10240264H
Date 03/17/2014 03/18/2014 03/22/2014
Temperature/ Humidity 23 deg. C / 35% RH 23 deg. C / 35% RH 22 deg. C / 34% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11b Tx 2437MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	39.495	QP	30.9	14.7	6.8	28.6	23.8	40.0	16.2	
Hori	107.033	QP	41.1	11.1	7.5	28.4	31.3	43.5	12.2	
Hori	170.933	QP	34.1	15.7	8.0	28.0	29.8	43.5	13.7	
Hori	324.157	QP	35.8	15.0	8.8	27.8	31.8	46.0	14.2	
Hori	608.016	QP	36.2	19.6	9.9	28.8	36.9	46.0	9.1	
Hori	809.819	QP	30.2	21.8	10.8	28.2	34.6	46.0	11.4	
Hori	4874.000	PK	42.9	32.0	4.4	33.9	45.4	73.9	28.5	
Hori	7311.000	PK	NS	-	-	-	-	73.9	-	
Hori	9748.000	PK	NS	-	-	-	-	73.9	-	
Hori	4874.000	AV	35.5	32.0	4.4	33.9	38.0	53.9	15.9	
Hori	7311.000	AV	NS	-	-	-	-	53.9	-	
Hori	9748.000	AV	NS	-	-	-	-	53.9	-	
Vert	38.124	QP	38.0	15.2	6.8	28.6	31.4	40.0	8.6	
Vert	106.724	QP	44.8	11.0	7.5	28.4	34.9	43.5	8.6	
Vert	171.133	QP	32.1	15.7	8.0	28.0	27.8	43.5	15.7	
Vert	325.014	QP	35.9	15.0	8.8	27.8	31.9	46.0	14.1	
Vert	608.121	QP	37.0	19.6	9.9	28.8	37.7	46.0	8.3	
Vert	810.010	QP	35.0	21.8	10.8	28.2	39.4	46.0	6.6	
Vert	4874.000	PK	43.9	32.0	4.4	33.9	46.4	73.9	27.5	
Vert	7311.000	PK	NS	-	-	-	-	73.9	-	
Vert	9748.000	PK	NS	-	-	-	-	73.9	-	
Vert	4874.000	AV	37.4	32.0	4.4	33.9	39.9	53.9	14.0	
Vert	7311.000	AV	NS	-	-	-	-	53.9	-	
Vert	9748.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply: Chicony)

Test place Ise HQ EMC Lab.No.2 Semi Anechoic Chamber
Report No. 10240264H
Date 03/17/2014 03/18/2014 03/22/2014
Temperature/ Humidity 23 deg. C / 35% RH 23 deg. C / 35% RH 22 deg. C / 34% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11b Tx 2462MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	39.494	QP	29.8	14.7	6.8	28.6	22.7	40.0	17.3	
Hori	107.031	QP	40.1	11.1	7.5	28.4	30.3	43.5	13.2	
Hori	170.921	QP	34.1	15.7	8.0	28.0	29.8	43.5	13.7	
Hori	324.148	QP	35.2	15.0	8.8	27.8	31.2	46.0	14.8	
Hori	608.013	QP	35.3	19.6	9.9	28.8	36.0	46.0	10.0	
Hori	809.801	QP	30.1	21.8	10.8	28.2	34.5	46.0	11.5	
Hori	2483.500	PK	48.4	26.9	2.5	34.7	43.1	73.9	30.8	
Hori	4924.000	PK	43.1	32.1	4.4	33.9	45.7	73.9	28.2	
Hori	7386.000	PK	NS	-	-	-	-	73.9	-	
Hori	9848.000	PK	NS	-	-	-	-	73.9	-	
Hori	2483.500	AV	40.6	26.9	2.5	34.7	35.3	53.9	18.6	
Hori	4924.000	AV	35.6	32.1	4.4	33.9	38.2	53.9	15.7	
Hori	7386.000	AV	NS	-	-	-	-	53.9	-	
Hori	9848.000	AV	NS	-	-	-	-	53.9	-	
Vert	39.070	QP	37.4	14.9	6.8	28.6	30.5	40.0	9.5	
Vert	106.721	QP	44.7	11.0	7.5	28.4	34.8	43.5	8.7	
Vert	171.167	QP	32.3	15.7	8.0	28.0	28.0	43.5	15.5	
Vert	325.013	QP	36.2	15.0	8.8	27.8	32.2	46.0	13.8	
Vert	608.099	QP	37.2	19.6	9.9	28.8	37.9	46.0	8.1	
Vert	810.011	QP	35.3	21.8	10.8	28.2	39.7	46.0	6.3	
Vert	2483.500	PK	53.5	26.9	2.5	34.7	48.2	73.9	25.7	
Vert	4924.000	PK	44.5	32.1	4.4	33.9	47.1	73.9	26.8	
Vert	7386.000	PK	NS	-	-	-	-	73.9	-	
Vert	9848.000	PK	NS	-	-	-	-	73.9	-	
Vert	2483.500	AV	45.6	26.9	2.5	34.7	40.3	53.9	13.6	
Vert	4924.000	AV	37.3	32.1	4.4	33.9	39.9	53.9	14.0	
Vert	7386.000	AV	NS	-	-	-	-	53.9	-	
Vert	9848.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply: Chicony)

Test place Ise HQ EMC Lab.No.2 Semi Anechoic Chamber
Report No. 10240264H
Date 03/17/2014 03/18/2014 03/22/2014
Temperature/ Humidity 23 deg. C / 35% RH 23 deg. C / 35% RH 22 deg. C / 34% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11g Tx 2412MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	39.493	QP	29.8	14.7	6.8	28.6	22.7	40.0	17.3	
Hori	107.029	QP	39.8	11.1	7.5	28.4	30.0	43.5	13.5	
Hori	170.891	QP	34.0	15.7	8.0	28.0	29.7	43.5	13.8	
Hori	324.152	QP	35.4	15.0	8.8	27.8	31.4	46.0	14.6	
Hori	608.014	QP	35.1	19.6	9.9	28.8	35.8	46.0	10.2	
Hori	809.821	QP	30.3	21.8	10.8	28.2	34.7	46.0	11.3	
Hori	2390.000	PK	54.4	27.0	2.4	34.7	49.1	73.9	24.8	
Hori	4824.000	PK	NS	-	-	-	-	73.9	-	
Hori	7236.000	PK	NS	-	-	-	-	73.9	-	
Hori	9648.000	PK	NS	-	-	-	-	73.9	-	
Hori	2390.000	AV	45.3	27.0	2.4	34.7	40.0	53.9	13.9	
Hori	4824.000	AV	NS	-	-	-	-	53.9	-	
Hori	7236.000	AV	NS	-	-	-	-	53.9	-	
Hori	9648.000	AV	NS	-	-	-	-	53.9	-	
Vert	37.609	QP	38.0	15.4	6.8	28.6	31.6	40.0	8.4	
Vert	106.731	QP	44.8	11.0	7.5	28.4	34.9	43.5	8.6	
Vert	171.171	QP	32.9	15.7	8.0	28.0	28.6	43.5	14.9	
Vert	325.011	QP	37.1	15.0	8.8	27.8	33.1	46.0	12.9	
Vert	608.004	QP	37.2	19.6	9.9	28.8	37.9	46.0	8.1	
Vert	810.009	QP	35.1	21.8	10.8	28.2	39.5	46.0	6.5	
Vert	2390.000	PK	58.1	27.0	2.4	34.7	52.8	73.9	21.1	
Vert	4824.000	PK	NS	-	-	-	-	73.9	-	
Vert	7236.000	PK	NS	-	-	-	-	73.9	-	
Vert	9648.000	PK	NS	-	-	-	-	73.9	-	
Vert	2390.000	AV	48.6	27.0	2.4	34.7	43.3	53.9	10.6	
Vert	4824.000	AV	NS	-	-	-	-	53.9	-	
Vert	7236.000	AV	NS	-	-	-	-	53.9	-	
Vert	9648.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
20dBc Data Sheet
(Power Supply: Chicony)

Test place : Ise HQ EMC Lab. No.2 Semi Anechoic Chamber
Report No. : 10240264H
Date : 03/17/2014
Temperature/ Humidity : 23 deg. C / 35% RH
Engineer : Kazuya Yoshioka
Mode : 11g Tx 2412MHz Antenna 1

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2412.000	PK	94.6	27.0	2.4	34.7	89.3	-	-	Carrier
Hori	2400.000	PK	60.2	27.0	2.4	34.7	54.9	69.3	14.4	
Vert	2412.000	PK	97.7	27.0	2.4	34.7	92.4	-	-	Carrier
Vert	2400.000	PK	64.1	27.0	2.4	34.7	58.8	72.4	13.6	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

Radiated Spurious Emission
(Power Supply: Chicony)

Test place Ise HQ EMC Lab. No.2 Semi Anechoic Chamber
Report No. 10240264H
Date 03/17/2014 03/18/2014 03/22/2014
Temperature/ Humidity 23 deg. C / 35% RH 23 deg. C / 35% RH 22 deg. C / 34% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11g Tx 2437MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	40.254	QP	29.6	14.5	6.8	28.6	22.3	40.0	17.7	
Hori	109.070	QP	39.7	11.4	7.5	28.4	30.2	43.5	13.3	
Hori	170.890	QP	34.2	15.7	8.0	28.0	29.9	43.5	13.6	
Hori	324.150	QP	35.0	15.0	8.8	27.8	31.0	46.0	15.0	
Hori	608.012	QP	34.7	19.6	9.9	28.8	35.4	46.0	10.6	
Hori	809.818	QP	30.8	21.8	10.8	28.2	35.2	46.0	10.8	
Hori	4874.000	PK	NS	-	-	-	-	73.9	-	
Hori	7311.000	PK	NS	-	-	-	-	73.9	-	
Hori	9748.000	PK	NS	-	-	-	-	73.9	-	
Hori	4874.000	AV	NS	-	-	-	-	53.9	-	
Hori	7311.000	AV	NS	-	-	-	-	53.9	-	
Hori	9748.000	AV	NS	-	-	-	-	53.9	-	
Vert	37.610	QP	37.7	15.4	6.8	28.6	31.3	40.0	8.7	
Vert	106.731	QP	44.4	11.0	7.5	28.4	34.5	43.5	9.0	
Vert	171.171	QP	33.7	15.7	8.0	28.0	29.4	43.5	14.1	
Vert	324.998	QP	37.8	15.0	8.8	27.8	33.8	46.0	12.2	
Vert	607.997	QP	37.1	19.6	9.9	28.8	37.8	46.0	8.2	
Vert	810.014	QP	35.0	21.8	10.8	28.2	39.4	46.0	6.6	
Vert	4874.000	PK	NS	-	-	-	-	73.9	-	
Vert	7311.000	PK	NS	-	-	-	-	73.9	-	
Vert	9748.000	PK	NS	-	-	-	-	73.9	-	
Vert	4874.000	AV	NS	-	-	-	-	53.9	-	
Vert	7311.000	AV	NS	-	-	-	-	53.9	-	
Vert	9748.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply: Chicony)

Test place Ise HQ EMC Lab.No.2 Semi Anechoic Chamber
Report No. 10240264H
Date 03/17/2014 03/18/2014 03/22/2014
Temperature/ Humidity 23 deg. C / 35% RH 23 deg. C / 35% RH 22 deg. C / 34% RH
Engineer Kazuya Yoshioka Kazuya Yoshioka Takumi Shimada
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11g Tx 2462MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	30.494	QP	29.8	18.2	6.7	28.7	26.0	40.0	14.0	
Hori	108.787	QP	39.4	11.3	7.5	28.4	29.8	43.5	13.7	
Hori	170.890	QP	34.1	15.7	8.0	28.0	29.8	43.5	13.7	
Hori	324.153	QP	36.1	15.0	8.8	27.8	32.1	46.0	13.9	
Hori	608.111	QP	34.9	19.6	9.9	28.8	35.6	46.0	10.4	
Hori	809.811	QP	30.7	21.8	10.8	28.2	35.1	46.0	10.9	
Hori	2483.500	PK	54.0	26.9	2.5	34.7	48.7	73.9	25.2	
Hori	4924.000	PK	NS	-	-	-	-	73.9	-	
Hori	7386.000	PK	NS	-	-	-	-	73.9	-	
Hori	9848.000	PK	NS	-	-	-	-	73.9	-	
Hori	2483.500	AV	43.6	26.9	2.5	34.7	38.3	53.9	15.7	
Hori	4924.000	AV	NS	-	-	-	-	53.9	-	
Hori	7386.000	AV	NS	-	-	-	-	53.9	-	
Hori	9848.000	AV	NS	-	-	-	-	53.9	-	
Vert	39.390	QP	38.3	14.8	6.8	28.6	31.3	40.0	8.7	
Vert	107.134	QP	45.4	11.1	7.5	28.4	35.6	43.5	7.9	
Vert	171.172	QP	32.9	15.7	8.0	28.0	28.6	43.5	14.9	
Vert	324.967	QP	35.8	15.0	8.8	27.8	31.8	46.0	14.2	
Vert	607.987	QP	36.7	19.6	9.9	28.8	37.4	46.0	8.6	
Vert	810.003	QP	34.9	21.8	10.8	28.2	39.3	46.0	6.7	
Vert	2483.500	PK	59.0	26.9	2.5	34.7	53.7	73.9	20.2	
Vert	4924.000	PK	NS	-	-	-	-	73.9	-	
Vert	7386.000	PK	NS	-	-	-	-	73.9	-	
Vert	9848.000	PK	NS	-	-	-	-	73.9	-	
Vert	2483.500	AV	49.5	26.9	2.5	34.7	44.2	53.9	9.7	
Vert	4924.000	AV	NS	-	-	-	-	53.9	-	
Vert	7386.000	AV	NS	-	-	-	-	53.9	-	
Vert	9848.000	AV	NS	-	-	-	-	53.9	-	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

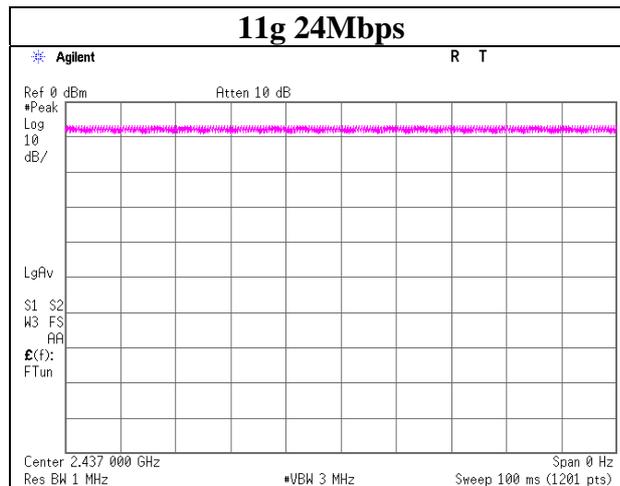
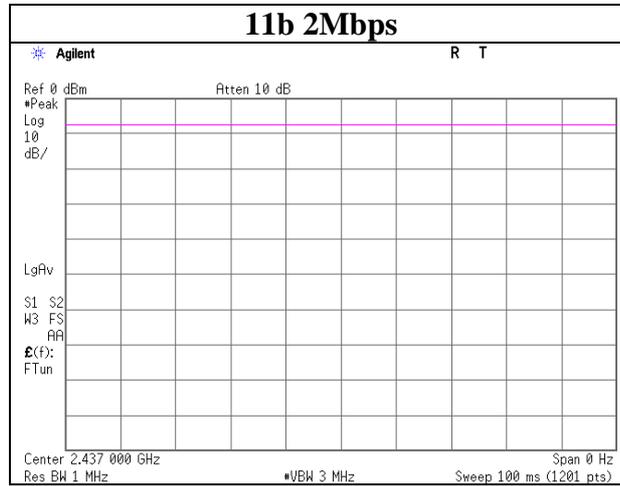
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Burst rate confirmation

Test place Ise HQ EMC Lab. No.2Semi Anechoic Chamber
Report No. 10240264H
Date 03/17/2014
Temperature/ Humidity 23 deg. C / 35% RH
Engineer Kazuya Yoshioka
Mode 11b Tx, 11g Tx



APPENDIX 2: Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MAEC-02	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-06902	RE	2013/06/30 * 12
MOS-22	Thermo-Hygrometer	Custom	CTH-201	0003	RE	2014/02/20 * 12
MJM-14	Measure	KOMELON	KMC-36	-	RE	-
COTS-MEMI	EMI measurement program	TSJ	TEPTO-DV	-	RE/CE	-
MSA-13	Spectrum Analyzer	Agilent	E4440A	MY46185823	RE	2013/06/14 * 12
MHA-06	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	254	RE	2014/02/21 * 12
MCC-166	Microwave Cable	Junkosha	MWX221	1303S120(1m) / 1311S167(5m)	RE	2013/11/27 * 12
MPA-10	Pre Amplifier	Agilent	8449B	3008A02142	RE	2014/01/21 * 12
MHF-06	High Pass Filter 3.5-24GHz	TOKIMEC	TF323DCA	601	RE	2013/05/30 * 12
MHA-16	Horn Antenna 15-40GHz	Schwarzbeck	BBHA9170	BBHA9170306	RE	2013/05/17 * 12
MTR-03	Test Receiver	Rohde & Schwarz	ESCI	100300	RE	2013/06/11 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	VHA91032008	RE	2013/10/13 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	201	RE	2013/10/13 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	-	RE	2014/02/20 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	BK7970	RE	2013/11/26 * 12
MPA-09	Pre Amplifier	Agilent	8447D	2944A10845	RE	2013/09/12 * 12
MAEC-03	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	RE	2014/02/27 * 12
MOS-13	Thermo-Hygrometer	Custom	CTH-180	1301	RE	2014/02/20 * 12
MJM-16	Measure	KOMELON	KMC-36	-	RE	-
MRENT-114	Spectrum Analyzer	Agilent	E4440A	MY46187105	RE	2013/11/11 * 12
MTR-08	Test Receiver	Rohde & Schwarz	ESCI	100767	RE	2013/08/20 * 12
MBA-03	Biconical Antenna	Schwarzbeck	BBA9106	1915	RE	2013/10/13 * 12
MLA-03	Logperiodic Antenna	Schwarzbeck	USLP9143	174	RE	2013/10/13 * 12
MCC-51	Coaxial cable	UL Japan	-	-	RE	2013/07/23 * 12
MAT-70	Attenuator(6dB)	Agilent	8491A-006	MY52460153	RE	2013/04/05 * 12
MPA-13	Pre Amplifier	SONOMA INSTRUMENT	310	260834	RE	2014/03/14 * 12
MAEC-01	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 10m	DA-06881	CE	2013/08/01 * 12
MOS-27	Thermo-Hygrometer	CUSTOM	CTH-201	A08Q26	CE	2014/02/20 * 12
MJM-21	Measure	KOMELON	KMC-36	-	CE	-
MTR-09	EMI Test Receiver	Rohde & Schwarz	ESU26	100412	CE	2013/06/07 * 12
MLS-02	LISN(AMN)	Schwarzbeck	NSLK8127	8127383	CE(AE)	2013/07/11 * 12
MLS-03	LISN(AMN)	Schwarzbeck	NSLK8127	8127384	CE(EUT)	2014/03/10 * 12
MTA-30	Terminator	TME	CT-01	-	CE	2014/01/20 * 12
MCC-59	Coaxial cable	Suhner	-	-	CE	2013/07/22 * 12
MAT-64	Attenuator(13dB)	JFW Industries, Inc.	50FP-013H2 N	-	CE	2014/01/29 * 12

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The expiration date of the calibration is the end of the expired month.

All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.

As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

**Test Item: CE: Conducted Emission
RE: Radiated Emission**

UL Japan, Inc.

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