RADIO TEST REPORT

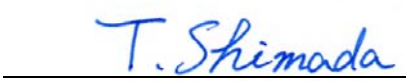
Test Report No. : 10240264H-J

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 (Bluetooth 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.

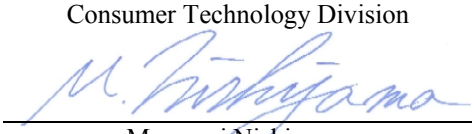
Date of test: March 17 to 27, 2014

Representative test engineer:



Takumi Shimada
Engineer
Consumer Technology Division

Approved by:



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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REVISION HISTORY

Original Test Report No.: 10240264H-J

Revision	Test report No.	Date	Page revised	Contents
- (Original)	10240264H-J	April 23, 2014	-	-

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CONTENTS **PAGE**

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	JAPAN/CHINA
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 (made by Chicony)
Size	290 x 60 x 230 mm
Weight	Approx. 2.1kg

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, π/4DQPSK, 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)

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 **IC:** RSS-Gen 7.2.4	**FCC:** Section 15.207 **IC:** RSS-Gen 7.2.4	**QP** 6.7dB, 0.15001MHz, N **AV** 11.9dB, 0.21451MHz, N, AV	Complied	-
Spurious Emission & Band Edge Compliance	**FCC:** FCC Public Notice DA 00-705 **IC:** RSS-Gen 4.9	**FCC:** Section15.247(d) **IC:** RSS-210 A8.5 RSS-Gen 6 and 7.2.3	3.9dB 607.503MHz, Vertical, QP 607.504MHz, Vertical, QP 607.512MHz, Vertical, QP	Complied	Radiated
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.

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

UL Japan, Inc. Ise HQ EMC Lab. *NVLAP Lab. code: 200572-0
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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.

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

4.1 Operating Mode(s)

Bluetooth (BT): Transmitting (Tx), Payload: PRBS9
Inquiry

Details of Operating Mode(s)

Test Item	Mode	Tested frequency
Conducted Emission, Spurious Emission (Radiated)	Tx (Hopping off) DH5, 3DH5	2402MHz 2441MHz 2480MHz
*As a result of preliminary test, the formal test was performed with the above modes, which had the maximum payload length (except Dwell time test) *2DH mode (2Mb/s EDR: pi/4DQPSK) was excluded by using 3DH mode (3 Mb/s EDR: 8DPSK) as a representative. *EUT has the power settings by the software as follows; Power settings: Same as production model 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.		

*Conducted Emission and Spurious Emission (Radiated) were performed only as the antenna position was changed from the original model.

*Antenna has two kinds of manufacturer's antennas (TE Connectivity and LuxShare-ICT) and the test was performed only with TE Connectivity antenna according to the customer's request, because these have similar antenna characteristics and equal maximum gain.

4.2 Configuration and peripherals

This page has been submitted for a separate exhibit.

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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

SECTION 6: Radiated Spurious Emission

Test Procedure
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	PK
IF Bandwidth	BW 120kHz(T/R)	RBW: 1MHz VBW: 3MHz	RBW: 1MHz VBW: 10Hz *1)	RBW: 100kHz VBW: 300kHz (S/A)
Test Distance	3m	3m (below 10GHz) 1m*2) (above 10GHz)		3m (below 10GHz) 1m*2) (above 10GHz)

*1) Although 00-705 accepts VBW=10Hz for AV measurements, it was confirmed that superfluous smoothing was not performed.
*2) Distance Factor: 20 x log (3.0m/1.0m) = 9.5dB

- 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-25GHz
Test data : APPENDIX
Test result : Pass

APPENDIX 1: Data of EMI test

Conducted Emission

(Power Supply: SONY)

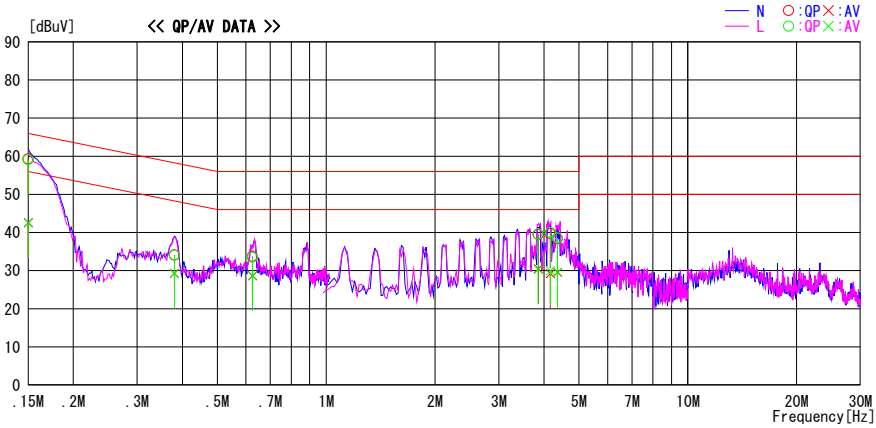
DATA OF CONDUCTED EMISSION TEST

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 : BT Tx DH5 2402MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



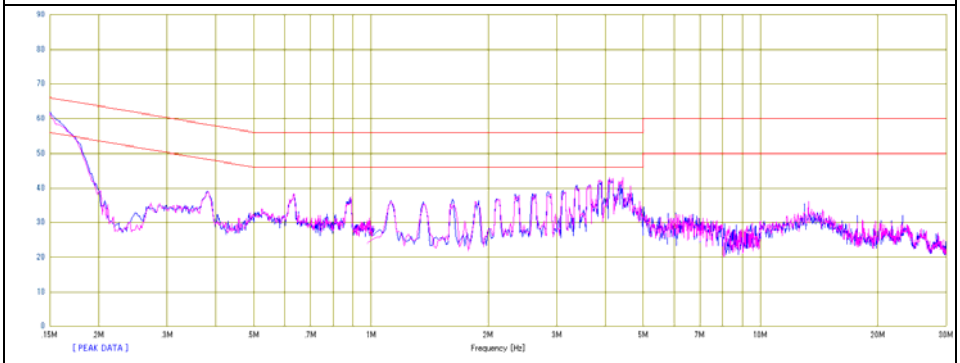
Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.15001	46.2	29.5	13.1	59.3	42.6	66.0	56.0	6.7	13.4	N	
0.38014	21.0	16.2	13.1	34.1	29.3	58.3	48.3	24.2	19.0	N	
0.62588	20.6	15.6	13.1	33.7	28.7	56.0	46.0	22.3	17.3	N	
3.85721	26.1	17.1	13.4	39.5	30.5	56.0	46.0	16.5	15.5	N	
4.16239	26.3	15.8	13.4	39.7	29.2	56.0	46.0	16.3	16.8	N	
4.36058	25.0	16.1	13.4	38.4	29.5	56.0	46.0	17.6	16.5	N	
0.15001	46.0	29.4	13.1	59.1	42.5	66.0	56.0	6.9	13.5	L	
0.38028	20.9	16.1	13.1	34.0	29.2	58.3	48.3	24.3	19.1	L	
0.62524	20.4	15.5	13.1	33.5	28.6	56.0	46.0	22.5	17.4	L	
3.85652	26.2	16.9	13.4	39.6	30.3	56.0	46.0	16.4	15.7	L	
4.16663	26.6	16.6	13.4	40.0	30.0	56.0	46.0	16.0	16.0	L	
4.36032	25.2	16.2	13.4	38.6	29.6	56.0	46.0	17.4	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.

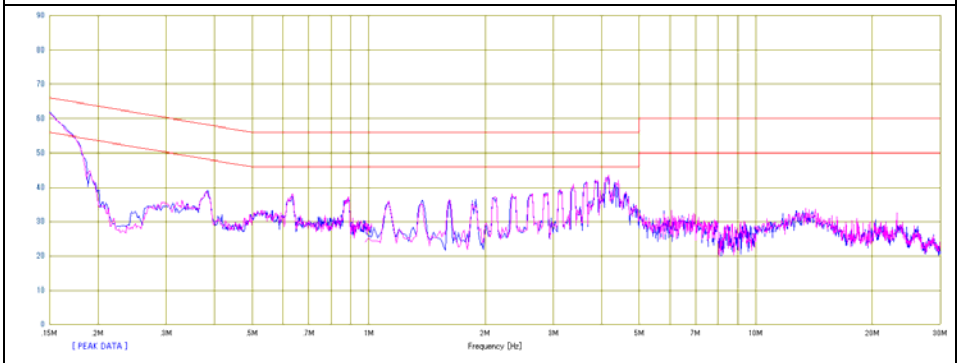
Conducted Emission
(Power Supply: SONY)

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	Tx DH5

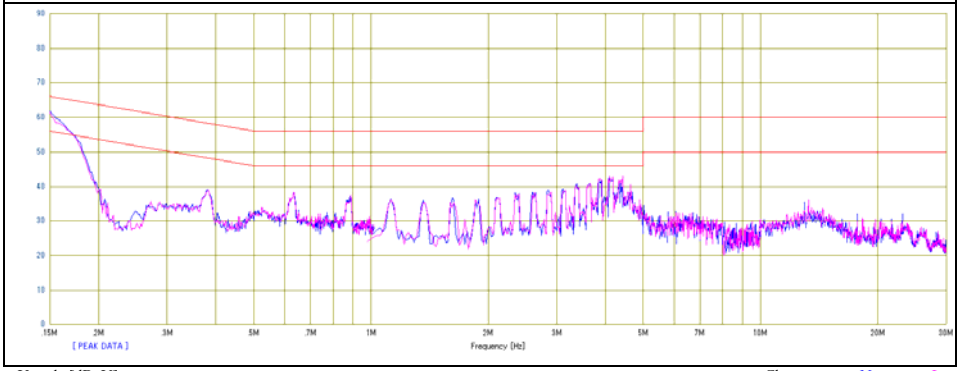
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

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Conducted Emission
(Power Supply: SONY)

DATA OF CONDUCTED EMISSION TEST

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

Report No. : 10240264H
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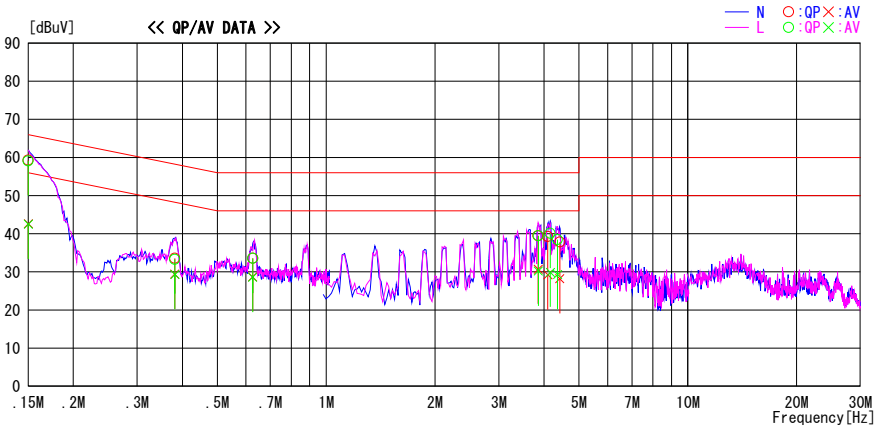
Temp./Humi. : 20deg.C / 53% RH
Engineer : Keisuke Kawamura

Mode / Remarks : BT Tx 3DH5 2402MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



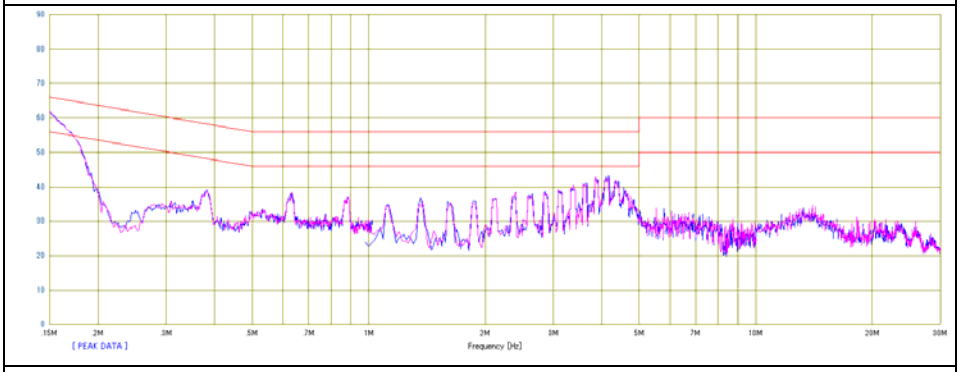
Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.15001	46.2	29.5	13.1	59.3	42.6	66.0	56.0	6.7	13.4	N	
0.38105	20.5	16.3	13.1	33.6	29.4	58.3	48.3	24.7	18.9	N	
0.62596	20.5	15.6	13.1	33.6	28.7	56.0	46.0	22.4	17.3	N	
3.85564	26.1	17.3	13.4	39.5	30.7	56.0	46.0	16.5	15.3	N	
4.10118	25.9	15.8	13.4	39.3	29.2	56.0	46.0	16.7	16.8	N	
4.42293	24.3	14.7	13.5	37.8	28.2	56.0	46.0	18.2	17.8	N	
0.15001	46.0	29.4	13.1	59.1	42.5	66.0	56.0	6.9	13.5	L	
0.38145	20.2	16.2	13.1	33.3	29.3	58.2	48.2	24.9	18.9	L	
0.62659	20.5	15.5	13.1	33.6	28.6	56.0	46.0	22.4	17.4	L	
3.85699	26.1	16.8	13.4	39.5	30.2	56.0	46.0	16.5	15.8	L	
4.16321	26.7	16.5	13.4	40.1	29.9	56.0	46.0	15.9	16.1	L	
4.36146	25.1	15.9	13.4	38.5	29.3	56.0	46.0	17.5	16.7	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.

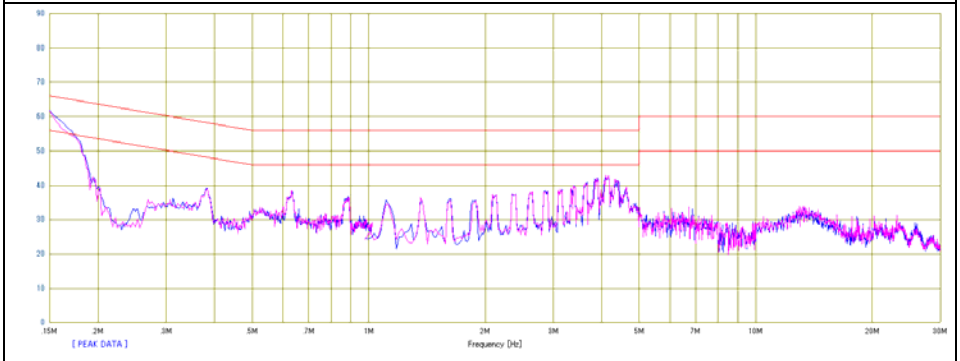
Conducted Emission
(Power Supply: SONY)

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	Tx 3DH5

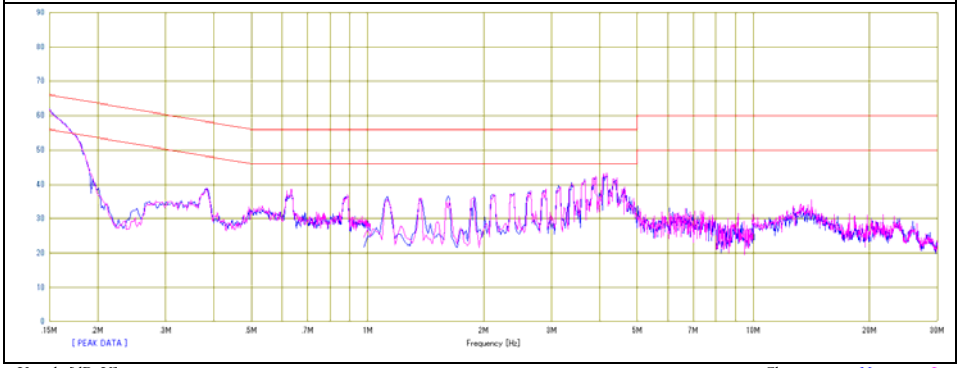
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

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Conducted Emission
(Power Supply: DELTA)

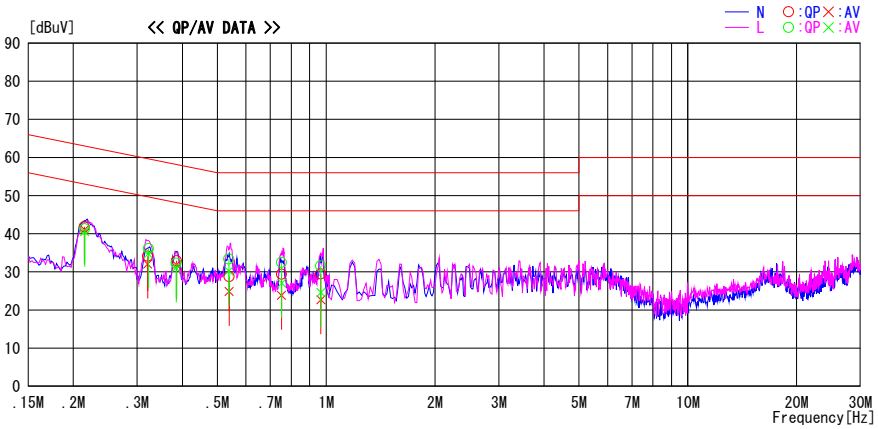
DATA OF CONDUCTED EMISSION TEST

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 : BT Tx DH5 2402MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



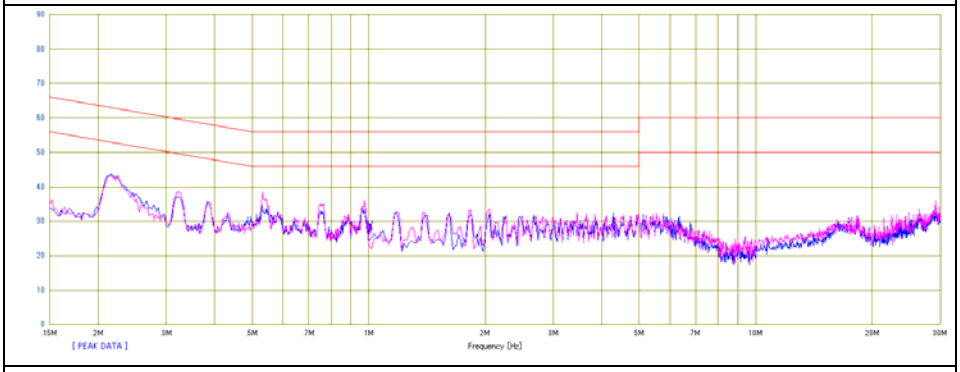
Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.21451	28.7	28.0	13.1	41.8	41.1	63.0	53.0	21.2	11.9	N	
0.32086	21.0	19.0	13.1	34.1	32.1	59.7	49.7	25.6	17.6	N	
0.38537	19.8	18.8	13.1	32.9	31.9	58.2	48.2	25.3	16.3	N	
0.53881	15.6	11.8	13.1	28.7	24.9	56.0	46.0	27.3	21.1	N	
0.75224	16.2	10.7	13.2	29.4	23.9	56.0	46.0	26.6	22.1	N	
0.96596	16.3	9.5	13.2	29.5	22.7	56.0	46.0	26.5	23.3	N	
0.21485	28.2	27.4	13.1	41.3	40.5	63.0	53.0	21.7	12.5	L	
0.32227	23.0	21.7	13.1	36.1	34.8	59.6	49.6	23.5	14.8	L	
0.38459	19.2	18.0	13.1	32.3	31.1	58.2	48.2	25.9	17.1	L	
0.53774	20.3	17.1	13.1	33.4	30.2	56.0	46.0	22.6	15.8	L	
0.75271	19.3	13.9	13.2	32.5	27.1	56.0	46.0	23.5	18.9	L	
0.96596	18.4	11.4	13.2	31.6	24.6	56.0	46.0	24.4	21.4	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.

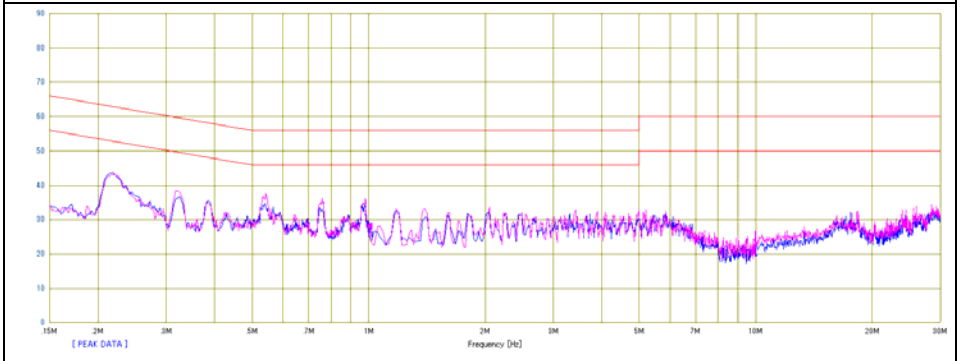
Conducted Emission
(Power Supply: DELTA)

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	Tx DH5

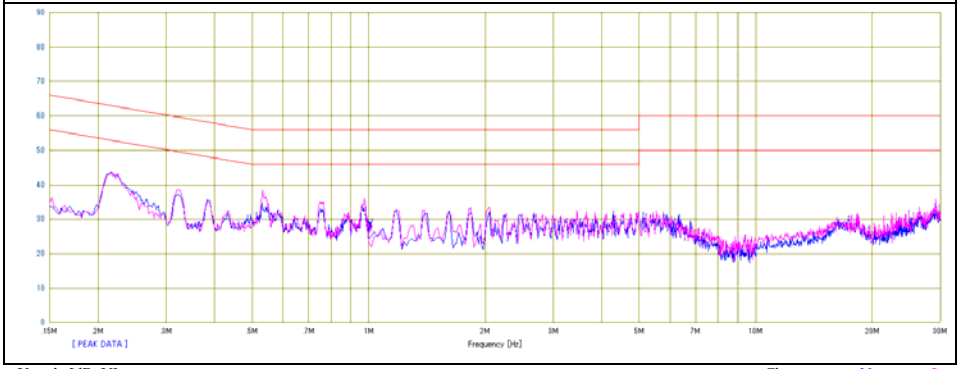
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

Conducted Emission
(Power Supply: DELTA)

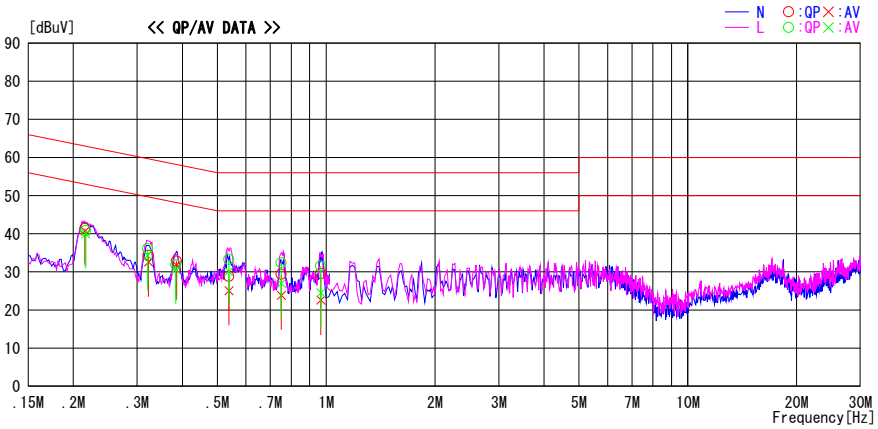
DATA OF CONDUCTED EMISSION TEST

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 : BT Tx 3DH5 2402MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



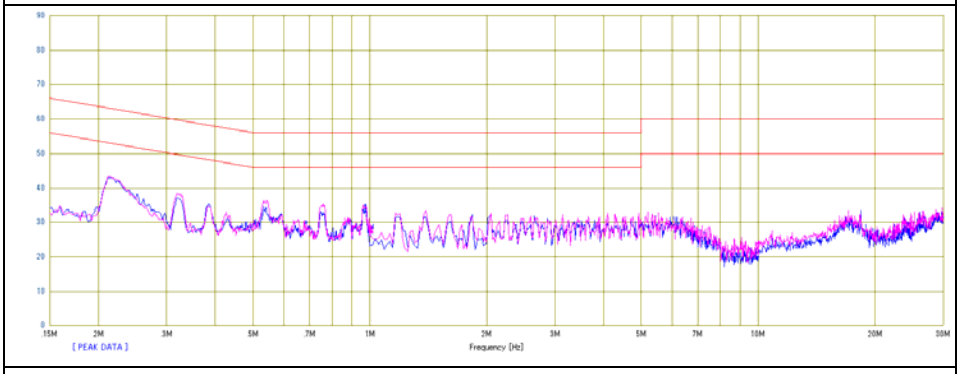
Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.21541	28.3	27.6	13.1	41.4	40.7	63.0	53.0	21.6	12.3	N	
0.32283	21.2	19.5	13.1	34.3	32.6	59.6	49.6	25.3	17.0	N	
0.38537	19.7	18.7	13.1	32.8	31.8	58.2	48.2	25.4	16.4	N	
0.53815	15.7	12.0	13.1	28.8	25.1	56.0	46.0	27.2	20.9	N	
0.75151	16.2	10.7	13.2	29.4	23.9	56.0	46.0	26.6	22.1	N	
0.96650	16.4	9.4	13.2	29.6	22.6	56.0	46.0	26.4	23.4	N	
0.21625	27.7	26.9	13.1	40.8	40.0	63.0	53.0	22.2	13.0	L	
0.32086	23.0	21.2	13.1	36.1	34.3	59.7	49.7	23.6	15.4	L	
0.38363	18.7	17.6	13.1	31.8	30.7	58.2	48.2	26.4	17.5	L	
0.53752	20.2	17.0	13.1	33.3	30.1	56.0	46.0	22.7	15.9	L	
0.75151	19.2	13.8	13.2	32.4	27.0	56.0	46.0	23.6	19.0	L	
0.96650	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.

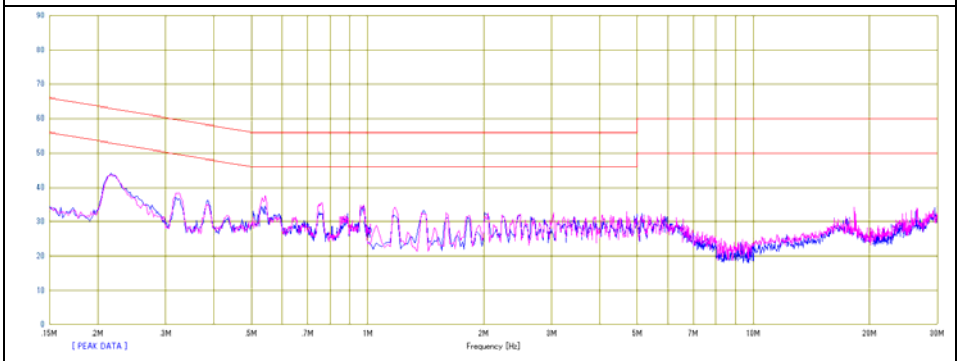
Conducted Emission
(Power Supply: DELTA)

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	Tx 3DH5

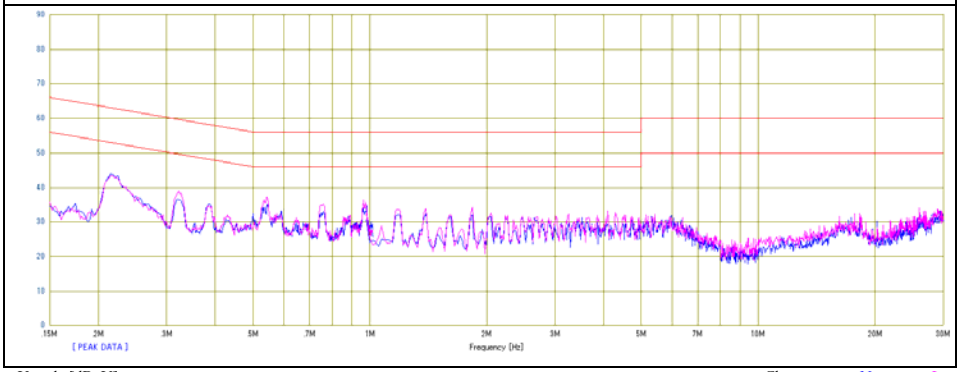
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

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Conducted Emission
(Power Supply: Chicony)

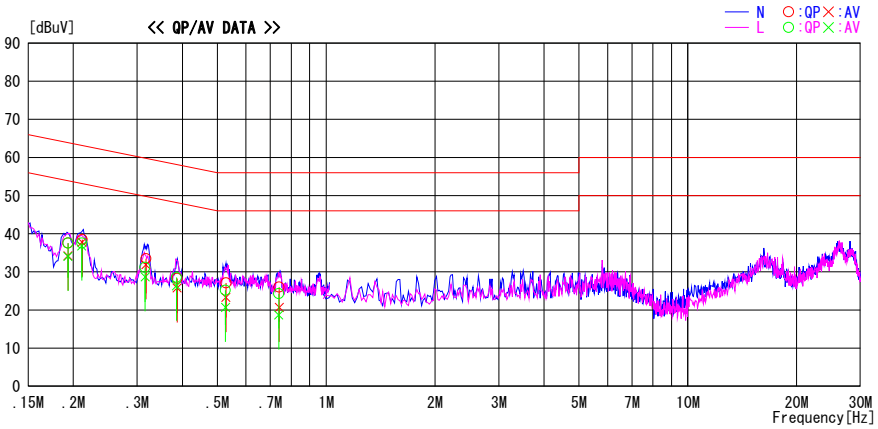
DATA OF CONDUCTED EMISSION TEST

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 : BT Tx DH5 2402MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



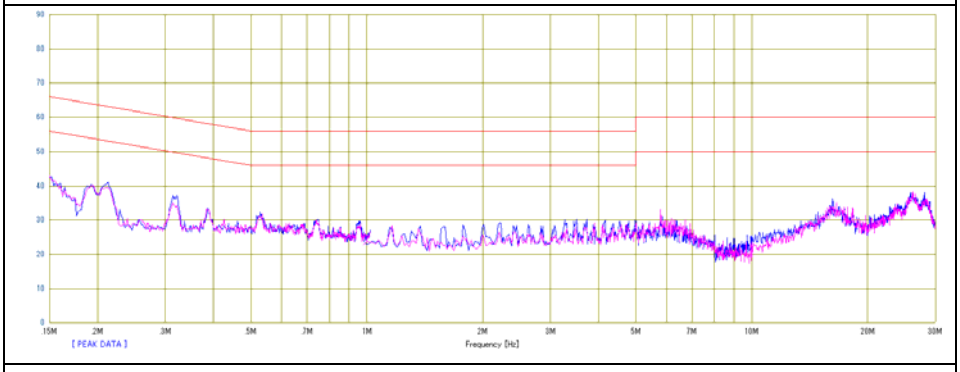
Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.19314	24.5	21.1	13.1	37.6	34.2	63.9	53.9	26.3	19.7	N	
0.21143	25.4	24.7	13.1	38.5	37.8	63.1	53.1	24.6	15.3	N	
0.31738	20.4	18.8	13.1	33.5	31.9	59.8	49.8	26.3	17.9	N	
0.38712	15.2	12.7	13.1	28.3	25.8	58.1	48.1	29.8	22.3	N	
0.52834	14.0	10.2	13.1	27.1	23.3	56.0	46.0	28.9	22.7	N	
0.74139	12.8	7.5	13.2	26.0	20.7	56.0	46.0	30.0	25.3	N	
0.19314	24.5	21.0	13.1	37.6	34.1	63.9	53.9	26.3	19.8	L	
0.21102	24.5	23.7	13.1	37.6	36.8	63.2	53.2	25.6	16.4	L	
0.31578	18.1	15.6	13.1	31.2	28.7	59.8	49.8	28.6	21.1	L	
0.38537	15.5	13.2	13.1	28.6	26.3	58.2	48.2	29.6	21.9	L	
0.52659	12.1	7.6	13.1	25.2	20.7	56.0	46.0	30.8	25.3	L	
0.73918	11.1	5.5	13.2	24.3	18.7	56.0	46.0	31.7	27.3	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.

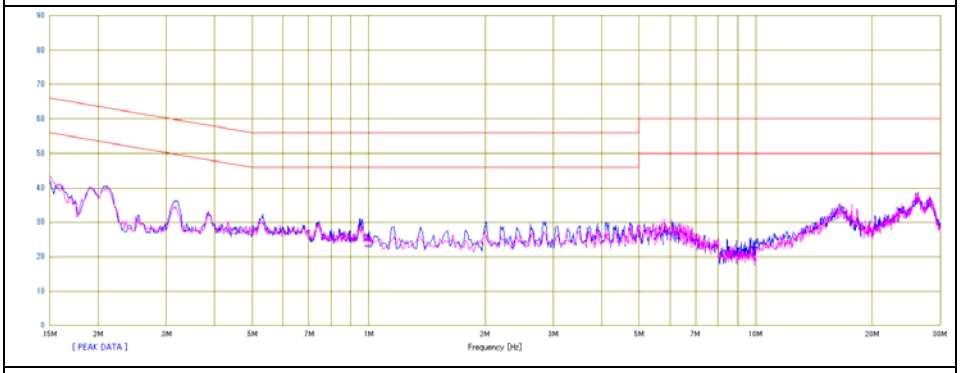
Conducted Emission
(Power Supply: Chicony)

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	Tx DH5

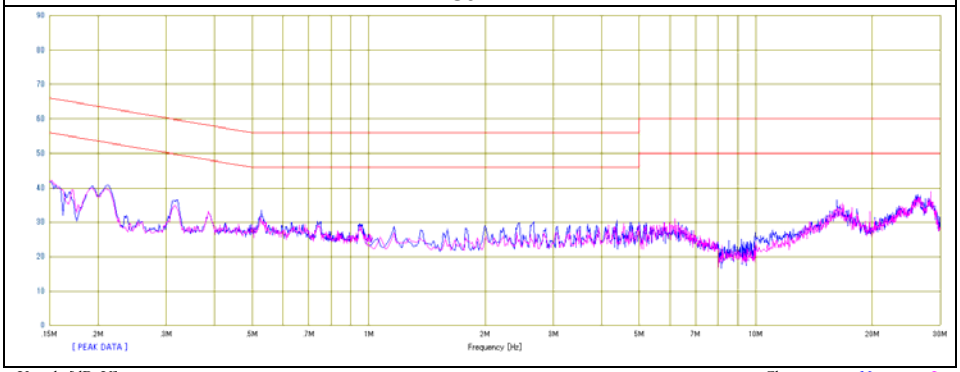
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

Conducted Emission
(Power Supply: Chicony)

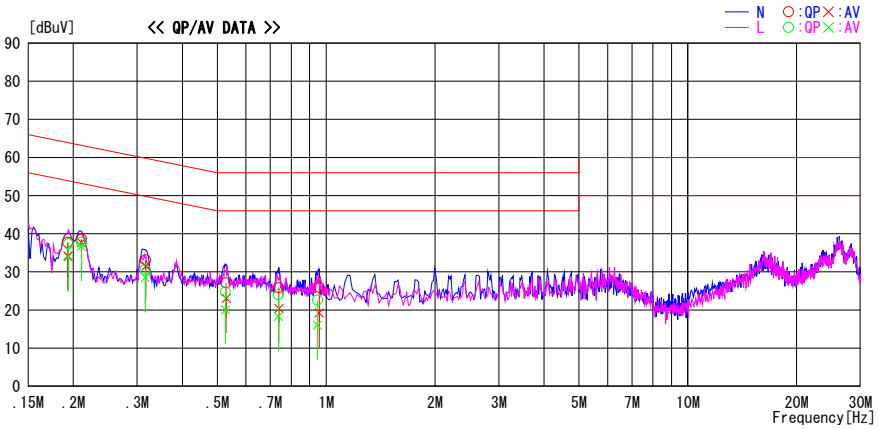
DATA OF CONDUCTED EMISSION TEST

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 : BT Tx 3DH5 2402MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.19295	24.6	21.1	13.1	37.7	34.2	63.9	53.9	26.2	19.7	N	
0.21042	25.5	24.6	13.1	38.6	37.7	63.2	53.2	24.6	15.5	N	
0.31708	20.0	18.4	13.1	33.1	31.5	59.8	49.8	26.7	18.3	N	
0.52885	14.0	10.0	13.1	27.1	23.1	56.0	46.0	28.9	22.9	N	
0.73999	12.6	7.2	13.2	25.8	20.4	56.0	46.0	30.2	25.6	N	
0.95702	12.7	6.0	13.2	25.9	19.2	56.0	46.0	30.1	26.8	N	
0.19359	24.3	20.8	13.1	37.4	33.9	63.9	53.9	26.5	20.0	L	
0.21042	24.6	23.6	13.1	37.7	36.7	63.2	53.2	25.5	16.5	L	
0.31611	17.5	15.4	13.1	30.6	28.5	59.8	49.8	29.2	21.3	L	
0.52659	11.6	7.0	13.1	24.7	20.1	56.0	46.0	31.3	25.9	L	
0.73741	10.8	5.1	13.2	24.0	18.3	56.0	46.0	32.0	27.7	L	
0.94644	9.4	2.9	13.2	22.6	16.1	56.0	46.0	33.4	29.9	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.

UL Japan, Inc.
Ise HQ EMC Lab.
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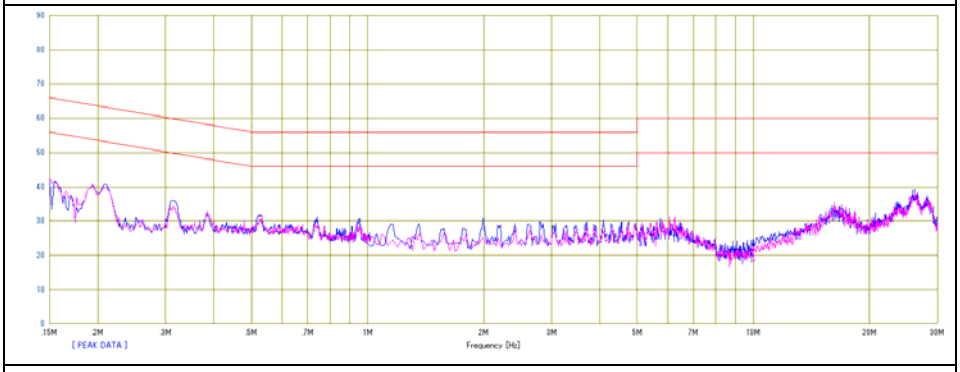
Telephone : +81 596 24 8999
Facsimile : +81 596 24 8124

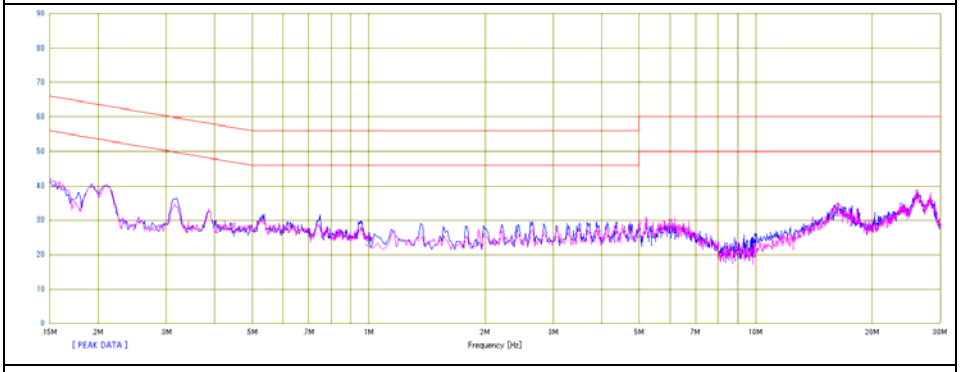
Conducted Emission
(Power Supply: Chicony)

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	Tx 3DH5

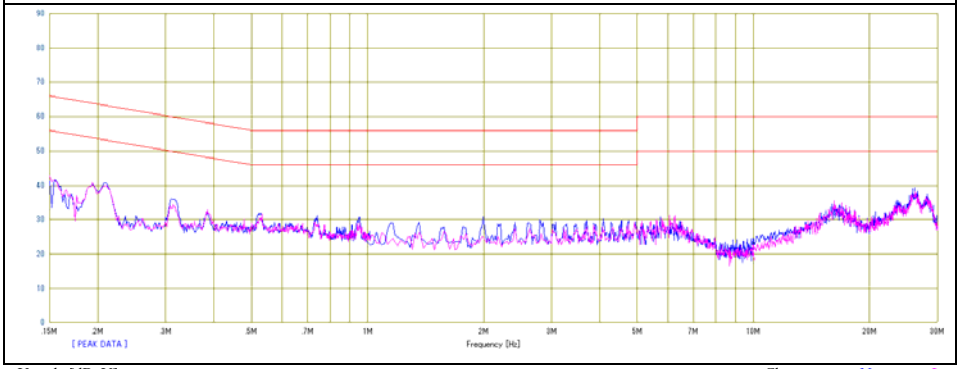
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

Radiated Spurious Emission

(Power Supply : SONY)

Test place	Ise HQ EMC Lab.No.2 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/17/2014	03/18/2014	03/20/2014
Temperature/ Humidity	25 deg. C / 36% RH	23 deg. C / 35% RH	24 deg. C / 36% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, DH5 2402MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	106.723	QP	40.0	11.0	7.5	28.4	30.1	43.5	13.4	
Hori	324.017	QP	36.1	15.0	8.8	27.8	32.1	46.0	13.9	
Hori	576.041	QP	38.2	19.2	9.8	28.8	38.4	46.0	7.6	
Hori	607.503	QP	37.9	19.6	9.9	28.8	38.6	46.0	7.4	
Hori	810.011	QP	34.1	21.8	10.8	28.2	38.5	46.0	7.5	
Hori	901.115	QP	33.0	22.2	11.1	27.9	38.4	46.0	7.6	
Hori	2390.000	PK	47.8	27.0	2.4	34.7	42.5	73.9	31.5	
Hori	4804.000	PK	NS	-	-	-	-	73.9	-	
Hori	7206.000	PK	NS	-	-	-	-	73.9	-	
Hori	9608.000	PK	NS	-	-	-	-	73.9	-	
Hori	2390.000	AV	34.2	27.0	2.4	34.7	28.9	53.9	25.0	
Hori	4804.000	AV	NS	-	-	-	-	53.9	-	
Hori	7206.000	AV	NS	-	-	-	-	53.9	-	
Hori	9608.000	AV	NS	-	-	-	-	53.9	-	
Vert	106.723	QP	43.4	11.0	7.5	28.4	33.5	43.5	10.0	
Vert	323.987	QP	35.1	15.0	8.8	27.8	31.1	46.0	14.9	
Vert	576.013	QP	32.4	19.2	9.8	28.8	32.6	46.0	13.4	
Vert	607.503	QP	41.3	19.6	9.9	28.8	42.0	46.0	4.0	
Vert	810.012	QP	33.2	21.8	10.8	28.2	37.6	46.0	8.4	
Vert	901.121	QP	32.1	22.2	11.1	27.9	37.5	46.0	8.5	
Vert	2390.000	PK	50.2	27.0	2.4	34.7	44.9	73.9	29.0	
Vert	4804.000	PK	NS	-	-	-	-	73.9	-	
Vert	7206.000	PK	NS	-	-	-	-	73.9	-	
Vert	9608.000	PK	NS	-	-	-	-	73.9	-	
Vert	2390.000	AV	34.9	27.0	2.4	34.7	29.6	53.9	24.3	
Vert	4804.000	AV	NS	-	-	-	-	53.9	-	
Vert	7206.000	AV	NS	-	-	-	-	53.9	-	
Vert	9608.000	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	03/17/2014
Temperature/ Humidity	25 deg. C / 36% RH
Engineer	Kazuya Yoshioka
Mode	Tx, DH5 2402MHz

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	2402.000	PK	101.9	27.0	2.4	34.7	96.6	-	-	Carrier
Hori	2397.275	PK	56.5	27.0	2.4	34.7	51.2	76.6	25.4	
Hori	2400.000	PK	48.5	27.0	2.4	34.7	43.2	76.6	33.4	
Vert	2402.000	PK	100.8	27.0	2.4	34.7	95.5	-	-	Carrier
Vert	2397.608	PK	55.1	27.0	2.4	34.7	49.8	75.5	25.7	
Vert	2400.000	PK	47.7	27.0	2.4	34.7	42.4	75.5	33.1	

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

Radiated Spurious Emission

(Power Supply: SONY)

Test place	Ise HQ EMC Lab. No.2 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/17/2014	03/18/2014	03/20/2014
Temperature/ Humidity	25 deg. C / 36% RH	23 deg. C / 35% RH	24 deg. C / 36% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, DH5 2441MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	106.731	QP	39.9	11.0	7.5	28.4	30.0	43.5	13.5	
Hori	324.019	QP	35.8	15.0	8.8	27.8	31.8	46.0	14.2	
Hori	576.021	QP	38.3	19.2	9.8	28.8	38.5	46.0	7.5	
Hori	607.504	QP	38.2	19.6	9.9	28.8	38.9	46.0	7.1	
Hori	810.011	QP	34.5	21.8	10.8	28.2	38.9	46.0	7.1	
Hori	901.115	QP	33.2	22.2	11.1	27.9	38.6	46.0	7.4	
Hori	4882.000	PK	NS	-	-	-	-	73.9	-	
Hori	7323.000	PK	NS	-	-	-	-	73.9	-	
Hori	9764.000	PK	NS	-	-	-	-	73.9	-	
Hori	4882.000	AV	NS	-	-	-	-	53.9	-	
Hori	7323.000	AV	NS	-	-	-	-	53.9	-	
Hori	9764.000	AV	NS	-	-	-	-	53.9	-	
Vert	106.725	QP	43.3	11.0	7.5	28.4	33.4	43.5	10.1	
Vert	323.999	QP	36.2	15.0	8.8	27.8	32.2	46.0	13.8	
Vert	576.021	QP	32.4	19.2	9.8	28.8	32.6	46.0	13.4	
Vert	607.504	QP	41.4	19.6	9.9	28.8	42.1	46.0	3.9	
Vert	810.012	QP	34.2	21.8	10.8	28.2	38.6	46.0	7.4	
Vert	901.122	QP	32.7	22.2	11.1	27.9	38.1	46.0	7.9	
Vert	4882.000	PK	NS	-	-	-	-	73.9	-	
Vert	7323.000	PK	NS	-	-	-	-	73.9	-	
Vert	9764.000	PK	NS	-	-	-	-	73.9	-	
Vert	4882.000	AV	NS	-	-	-	-	53.9	-	
Vert	7323.000	AV	NS	-	-	-	-	53.9	-	
Vert	9764.000	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	03/17/2014	03/18/2014	03/20/2014
Temperature/ Humidity	25 deg. C / 36% RH	23 deg. C / 35% RH	24 deg. C / 36% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, DH5 2480MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	106.730	QP	39.3	11.0	7.5	28.4	29.4	43.5	14.1	
Hori	324.017	QP	35.7	15.0	8.8	27.8	31.7	46.0	14.3	
Hori	576.022	QP	38.3	19.2	9.8	28.8	38.5	46.0	7.5	
Hori	607.503	QP	38.1	19.6	9.9	28.8	38.8	46.0	7.2	
Hori	810.012	QP	34.4	21.8	10.8	28.2	38.8	46.0	7.2	
Hori	901.116	QP	33.3	22.2	11.1	27.9	38.7	46.0	7.3	
Hori	2483.500	PK	47.2	26.9	2.5	34.7	41.9	73.9	32.0	
Hori	2484.437	PK	53.7	26.9	2.5	34.7	48.4	73.9	25.5	
Hori	4960.000	PK	NS	-	-	-	-	73.9	-	
Hori	7440.000	PK	NS	-	-	-	-	73.9	-	
Hori	9920.000	PK	NS	-	-	-	-	73.9	-	
Hori	2483.500	AV	34.2	26.9	2.5	34.7	28.9	53.9	25.0	
Hori	2484.437	AV	49.0	26.9	2.5	34.7	43.7	53.9	10.2	
Hori	4960.000	AV	NS	-	-	-	-	53.9	-	
Hori	7440.000	AV	NS	-	-	-	-	53.9	-	
Hori	9920.000	AV	NS	-	-	-	-	53.9	-	
Vert	106.722	QP	43.7	11.0	7.5	28.4	33.8	43.5	9.7	
Vert	323.998	QP	36.5	15.0	8.8	27.8	32.5	46.0	13.5	
Vert	576.023	QP	32.1	19.2	9.8	28.8	32.3	46.0	13.7	
Vert	607.503	QP	41.4	19.6	9.9	28.8	42.1	46.0	3.9	
Vert	810.013	QP	34.7	21.8	10.8	28.2	39.1	46.0	6.9	
Vert	901.122	QP	32.6	22.2	11.1	27.9	38.0	46.0	8.0	
Vert	2483.500	PK	47.7	26.9	2.5	34.7	42.4	73.9	31.5	
Vert	2484.442	PK	55.3	26.9	2.5	34.7	50.0	73.9	23.9	
Vert	4960.000	PK	NS	-	-	-	-	73.9	-	
Vert	7440.000	PK	NS	-	-	-	-	73.9	-	
Vert	9920.000	PK	NS	-	-	-	-	73.9	-	
Vert	2483.500	AV	34.9	26.9	2.5	34.7	29.6	53.9	24.3	
Vert	2484.442	AV	50.4	26.9	2.5	34.7	45.1	53.9	8.8	
Vert	4960.000	AV	NS	-	-	-	-	53.9	-	
Vert	7440.000	AV	NS	-	-	-	-	53.9	-	
Vert	9920.000	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	03/17/2014	03/18/2014	03/20/2014
Temperature/ Humidity	25 deg. C / 36% RH	23 deg. C / 35% RH	24 deg. C / 36% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, 3DH5 2402MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	106.731	QP	39.4	11.0	7.5	28.4	29.5	43.5	14.0	
Hori	324.011	QP	35.6	15.0	8.8	27.8	31.6	46.0	14.4	
Hori	576.023	QP	38.2	19.2	9.8	28.8	38.4	46.0	7.6	
Hori	607.502	QP	38.3	19.6	9.9	28.8	39.0	46.0	7.0	
Hori	810.015	QP	34.3	21.8	10.8	28.2	38.7	46.0	7.3	
Hori	901.112	QP	33.2	22.2	11.1	27.9	38.6	46.0	7.4	
Hori	2390.000	PK	44.9	27.0	2.4	34.7	39.6	73.9	34.3	
Hori	4804.000	PK	NS	-	-	-	-	73.9	-	
Hori	7206.000	PK	NS	-	-	-	-	73.9	-	
Hori	9608.000	PK	NS	-	-	-	-	73.9	-	
Hori	2390.000	AV	32.7	27.0	2.4	34.7	27.4	53.9	26.5	
Hori	4804.000	AV	NS	-	-	-	-	53.9	-	
Hori	7206.000	AV	NS	-	-	-	-	53.9	-	
Hori	9608.000	AV	NS	-	-	-	-	53.9	-	
Vert	106.721	QP	43.2	11.0	7.5	28.4	33.3	43.5	10.2	
Vert	323.999	QP	36.1	15.0	8.8	27.8	32.1	46.0	13.9	
Vert	576.023	QP	33.1	19.2	9.8	28.8	33.3	46.0	12.7	
Vert	607.502	QP	41.3	19.6	9.9	28.8	42.0	46.0	4.0	
Vert	810.015	QP	34.5	21.8	10.8	28.2	38.9	46.0	7.1	
Vert	901.121	QP	32.2	22.2	11.1	27.9	37.6	46.0	8.4	
Vert	2390.000	PK	49.6	27.0	2.4	34.7	44.3	73.9	29.6	
Vert	4804.000	PK	NS	-	-	-	-	73.9	-	
Vert	7206.000	PK	NS	-	-	-	-	73.9	-	
Vert	9608.000	PK	NS	-	-	-	-	73.9	-	
Vert	2390.000	AV	34.0	27.0	2.4	34.7	28.7	53.9	25.2	
Vert	4804.000	AV	NS	-	-	-	-	53.9	-	
Vert	7206.000	AV	NS	-	-	-	-	53.9	-	
Vert	9608.000	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	03/17/2014
Temperature/ Humidity	25 deg. C / 36% RH
Engineer	Kazuya Yoshioka
Mode	Tx, 3DH5 2402MHz

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	2402.000	PK	97.7	27.0	2.4	34.7	92.4	-	-	Carrier
Hori	2400.000	PK	53.2	27.0	2.4	34.7	47.9	72.4	24.5	
Vert	2402.000	PK	98.9	27.0	2.4	34.7	93.6	-	-	Carrier
Vert	2400.000	PK	52.6	27.0	2.4	34.7	47.3	73.6	26.3	

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

Radiated Spurious Emission

(Power Supply : SONY)

Test place	Ise HQ EMC Lab.No.2 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/17/2014	03/18/2014	03/20/2014
Temperature/ Humidity	25 deg. C / 36% RH	23 deg. C / 35% RH	24 deg. C / 36% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, 3DH5 2441MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	106.730	QP	39.1	11.0	7.5	28.4	29.2	43.5	14.3	
Hori	324.013	QP	37.6	15.0	8.8	27.8	33.6	46.0	12.4	
Hori	576.021	QP	38.1	19.2	9.8	28.8	38.3	46.0	7.7	
Hori	607.512	QP	38.0	19.6	9.9	28.8	38.7	46.0	7.3	
Hori	810.015	QP	34.2	21.8	10.8	28.2	38.6	46.0	7.4	
Hori	901.111	QP	33.1	22.2	11.1	27.9	38.5	46.0	7.5	
Hori	4882.000	PK	NS	-	-	-	-	73.9	-	
Hori	7323.000	PK	NS	-	-	-	-	73.9	-	
Hori	9764.000	PK	NS	-	-	-	-	73.9	-	
Hori	4882.000	AV	NS	-	-	-	-	53.9	-	
Hori	7323.000	AV	NS	-	-	-	-	53.9	-	
Hori	9764.000	AV	NS	-	-	-	-	53.9	-	
Vert	106.721	QP	43.1	11.0	7.5	28.4	33.2	43.5	10.3	
Vert	323.998	QP	36.2	15.0	8.8	27.8	32.2	46.0	13.8	
Vert	576.022	QP	33.4	19.2	9.8	28.8	33.6	46.0	12.4	
Vert	607.512	QP	41.4	19.6	9.9	28.8	42.1	46.0	3.9	
Vert	810.015	QP	34.6	21.8	10.8	28.2	39.0	46.0	7.0	
Vert	901.121	QP	32.3	22.2	11.1	27.9	37.7	46.0	8.3	
Vert	4882.000	PK	NS	-	-	-	-	73.9	-	
Vert	7323.000	PK	NS	-	-	-	-	73.9	-	
Vert	9764.000	PK	NS	-	-	-	-	73.9	-	
Vert	4882.000	AV	NS	-	-	-	-	53.9	-	
Vert	7323.000	AV	NS	-	-	-	-	53.9	-	
Vert	9764.000	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	03/17/2014	03/18/2014	03/20/2014
Temperature/ Humidity	25 deg. C / 36% RH	23 deg. C / 35% RH	24 deg. C / 36% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, 3DH5 2480MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	106.731	QP	39.0	11.0	7.5	28.4	29.1	43.5	14.4	
Hori	324.012	QP	37.4	15.0	8.8	27.8	33.4	46.0	12.6	
Hori	576.022	QP	38.2	19.2	9.8	28.8	38.4	46.0	7.6	
Hori	607.512	QP	38.3	19.6	9.9	28.8	39.0	46.0	7.0	
Hori	810.014	QP	34.2	21.8	10.8	28.2	38.6	46.0	7.4	
Hori	901.131	QP	33.2	22.2	11.1	27.9	38.6	46.0	7.4	
Hori	2483.500	PK	56.8	26.9	2.5	34.7	51.5	73.9	22.4	
Hori	2483.554	PK	56.0	26.9	2.5	34.7	50.7	73.9	23.2	
Hori	4960.000	PK	NS	-	-	-	-	73.9	-	
Hori	7440.000	PK	NS	-	-	-	-	73.9	-	
Hori	9920.000	PK	NS	-	-	-	-	73.9	-	
Hori	2483.500	AV	37.2	26.9	2.5	34.7	31.9	53.9	22.0	
Hori	2483.554	AV	37.7	26.9	2.5	34.7	32.4	53.9	21.5	
Hori	4960.000	AV	NS	-	-	-	-	53.9	-	
Hori	7440.000	AV	NS	-	-	-	-	53.9	-	
Hori	9920.000	AV	NS	-	-	-	-	53.9	-	
Vert	106.721	QP	43.4	11.0	7.5	28.4	33.5	43.5	10.0	
Vert	323.998	QP	36.2	15.0	8.8	27.8	32.2	46.0	13.8	
Vert	576.023	QP	33.3	19.2	9.8	28.8	33.5	46.0	12.5	
Vert	607.512	QP	41.4	19.6	9.9	28.8	42.1	46.0	3.9	
Vert	810.014	QP	34.5	21.8	10.8	28.2	38.9	46.0	7.1	
Vert	901.141	QP	32.1	22.2	11.1	27.9	37.5	46.0	8.5	
Vert	2483.500	PK	57.1	26.9	2.5	34.7	51.8	73.9	22.1	
Vert	2484.486	PK	57.2	26.9	2.5	34.7	51.9	73.9	22.0	
Vert	4960.000	PK	NS	-	-	-	-	73.9	-	
Vert	7440.000	PK	NS	-	-	-	-	73.9	-	
Vert	9920.000	PK	NS	-	-	-	-	73.9	-	
Vert	2483.500	AV	37.7	26.9	2.5	34.7	32.4	53.9	21.5	
Vert	2484.486	AV	47.3	26.9	2.5	34.7	42.0	53.9	11.9	
Vert	4960.000	AV	NS	-	-	-	-	53.9	-	
Vert	7440.000	AV	NS	-	-	-	-	53.9	-	
Vert	9920.000	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 (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, DH5 2402MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	108.768	QP	41.0	11.4	8.2	32.1	28.5	43.5	15.0	
Hori	324.046	QP	39.1	15.1	10.0	31.9	32.3	46.0	13.7	
Hori	576.033	QP	38.4	19.2	11.6	32.0	37.2	46.0	8.8	
Hori	607.223	QP	39.5	19.6	11.8	32.0	38.9	46.0	7.1	
Hori	810.018	QP	35.1	22.0	12.8	31.4	38.5	46.0	7.5	
Hori	901.123	QP	34.2	22.3	13.3	30.9	38.9	46.0	7.1	
Hori	2390.000	PK	45.6	27.0	2.4	34.7	40.3	73.9	33.7	
Hori	4804.000	PK	NS	-	-	-	-	73.9	-	
Hori	7206.000	PK	NS	-	-	-	-	73.9	-	
Hori	9608.000	PK	NS	-	-	-	-	73.9	-	
Hori	2390.000	AV	32.6	27.0	2.4	34.7	27.3	53.9	26.6	
Hori	4804.000	AV	NS	-	-	-	-	53.9	-	
Hori	7206.000	AV	NS	-	-	-	-	53.9	-	
Hori	9608.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.960	QP	40.2	17.6	7.0	32.2	32.6	40.0	7.4	
Vert	108.768	QP	46.9	11.4	8.2	32.1	34.4	43.5	9.1	
Vert	576.034	QP	35.2	19.2	11.6	32.0	34.0	46.0	12.0	
Vert	607.233	QP	41.8	19.6	11.8	32.0	41.2	46.0	4.8	
Vert	810.018	QP	37.0	22.0	12.8	31.4	40.4	46.0	5.6	
Vert	901.123	QP	33.1	22.3	13.3	30.9	37.8	46.0	8.2	
Vert	2390.000	PK	50.0	27.0	2.4	34.7	44.7	73.9	29.2	
Vert	4804.000	PK	NS	-	-	-	-	73.9	-	
Vert	7206.000	PK	NS	-	-	-	-	73.9	-	
Vert	9608.000	PK	NS	-	-	-	-	73.9	-	
Vert	2390.000	AV	34.9	27.0	2.4	34.7	29.6	53.9	24.3	
Vert	4804.000	AV	NS	-	-	-	-	53.9	-	
Vert	7206.000	AV	NS	-	-	-	-	53.9	-	
Vert	9608.000	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	Tx, DH5 2402MHz

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	2402.000	PK	98.1	27.0	2.4	34.7	92.8	-	-	Carrier
Hori	2397.500	PK	52.1	27.0	2.4	34.7	46.8	72.8	26.0	
Hori	2400.000	PK	46.1	27.0	2.4	34.7	40.8	72.8	32.0	
Vert	2402.000	PK	100.1	27.0	2.4	34.7	94.8	-	-	Carrier
Vert	2397.300	PK	54.9	27.0	2.4	34.7	49.6	74.8	25.2	
Vert	2400.000	PK	49.4	27.0	2.4	34.7	44.1	74.8	30.7	

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

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 (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, DH5 2441MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	108.768	QP	41.1	11.4	8.2	32.1	28.6	43.5	14.9	
Hori	324.046	QP	39.2	15.1	10.0	31.9	32.4	46.0	13.6	
Hori	576.033	QP	38.4	19.2	11.6	32.0	37.2	46.0	8.8	
Hori	607.512	QP	39.5	19.6	11.8	32.0	38.9	46.0	7.1	
Hori	810.022	QP	35.2	22.0	12.8	31.4	38.6	46.0	7.4	
Hori	901.123	QP	34.1	22.3	13.3	30.9	38.8	46.0	7.2	
Hori	4882.000	PK	NS	-	-	-	-	73.9	-	
Hori	7323.000	PK	NS	-	-	-	-	73.9	-	
Hori	9764.000	PK	NS	-	-	-	-	73.9	-	
Hori	4882.000	AV	NS	-	-	-	-	53.9	-	
Hori	7323.000	AV	NS	-	-	-	-	53.9	-	
Hori	9764.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.960	QP	40.1	17.6	7.0	32.2	32.5	40.0	7.5	
Vert	108.768	QP	46.8	11.4	8.2	32.1	34.3	43.5	9.2	
Vert	576.034	QP	35.2	19.2	11.6	32.0	34.0	46.0	12.0	
Vert	607.512	QP	41.8	19.6	11.8	32.0	41.2	46.0	4.8	
Vert	810.022	QP	37.0	22.0	12.8	31.4	40.4	46.0	5.6	
Vert	901.123	QP	33.3	22.3	13.3	30.9	38.0	46.0	8.0	
Vert	4882.000	PK	NS	-	-	-	-	73.9	-	
Vert	7323.000	PK	NS	-	-	-	-	73.9	-	
Vert	9764.000	PK	NS	-	-	-	-	73.9	-	
Vert	4882.000	AV	NS	-	-	-	-	53.9	-	
Vert	7323.000	AV	NS	-	-	-	-	53.9	-	
Vert	9764.000	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 (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, DH5 2480MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	108.782	QP	42.5	11.4	8.2	32.1	30.0	43.5	13.5	
Hori	324.100	QP	40.7	15.1	10.0	31.9	33.9	46.0	12.1	
Hori	576.022	QP	38.0	19.2	11.6	32.0	36.8	46.0	9.2	
Hori	607.511	QP	39.1	19.6	11.8	32.0	38.5	46.0	7.5	
Hori	810.022	QP	35.3	22.0	12.8	31.4	38.7	46.0	7.3	
Hori	901.125	QP	34.2	22.3	13.3	30.9	38.9	46.0	7.1	
Hori	2483.500	PK	47.6	26.9	2.5	34.7	42.3	73.9	31.6	
Hori	2484.502	PK	54.8	26.9	2.5	34.7	49.5	73.9	24.4	
Hori	4960.000	PK	NS	-	-	-	-	73.9	-	
Hori	7440.000	PK	NS	-	-	-	-	73.9	-	
Hori	9920.000	PK	NS	-	-	-	-	73.9	-	
Hori	2483.500	AV	34.6	26.9	2.5	34.7	29.3	53.9	24.6	
Hori	2484.502	AV	49.9	26.9	2.5	34.7	44.6	53.9	9.3	
Hori	4960.000	AV	NS	-	-	-	-	53.9	-	
Hori	7440.000	AV	NS	-	-	-	-	53.9	-	
Hori	9920.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.960	QP	40.2	17.6	7.0	32.2	32.6	40.0	7.4	
Vert	108.788	QP	47.1	11.4	8.2	32.1	34.6	43.5	8.9	
Vert	576.023	QP	35.3	19.2	11.6	32.0	34.1	46.0	11.9	
Vert	607.511	QP	41.7	19.6	11.8	32.0	41.1	46.0	4.9	
Vert	810.022	QP	36.8	22.0	12.8	31.4	40.2	46.0	5.8	
Vert	901.126	QP	33.5	22.3	13.3	30.9	38.2	46.0	7.8	
Vert	2483.500	PK	47.7	26.9	2.5	34.7	42.4	73.9	31.5	
Vert	2484.372	PK	54.4	26.9	2.5	34.7	49.1	73.9	24.8	
Vert	4960.000	PK	NS	-	-	-	-	73.9	-	
Vert	7440.000	PK	NS	-	-	-	-	73.9	-	
Vert	9920.000	PK	NS	-	-	-	-	73.9	-	
Vert	2483.500	AV	34.6	26.9	2.5	34.7	29.3	53.9	24.6	
Vert	2484.372	AV	49.4	26.9	2.5	34.7	44.1	53.9	9.8	
Vert	4960.000	AV	NS	-	-	-	-	53.9	-	
Vert	7440.000	AV	NS	-	-	-	-	53.9	-	
Vert	9920.000	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 (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, 3DH5 2402MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	108.782	QP	42.4	11.4	8.2	32.1	29.9	43.5	13.6	
Hori	327.193	QP	38.9	15.2	10.0	31.9	32.2	46.0	13.8	
Hori	576.022	QP	38.2	19.2	11.6	32.0	37.0	46.0	9.0	
Hori	607.519	QP	38.3	19.6	11.8	32.0	37.7	46.0	8.3	
Hori	810.022	QP	35.0	22.0	12.8	31.4	38.4	46.0	7.6	
Hori	901.125	QP	34.4	22.3	13.3	30.9	39.1	46.0	6.9	
Hori	2390.000	PK	45.3	27.0	2.4	34.7	40.0	73.9	33.9	
Hori	4804.000	PK	NS	-	-	-	-	73.9	-	
Hori	7206.000	PK	NS	-	-	-	-	73.9	-	
Hori	9608.000	PK	NS	-	-	-	-	73.9	-	
Hori	2390.000	AV	32.9	27.0	2.4	34.7	27.6	53.9	26.3	
Hori	4804.000	AV	NS	-	-	-	-	53.9	-	
Hori	7206.000	AV	NS	-	-	-	-	53.9	-	
Hori	9608.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.960	QP	40.0	17.6	7.0	32.2	32.4	40.0	7.6	
Vert	108.788	QP	47.2	11.4	8.2	32.1	34.7	43.5	8.8	
Vert	576.023	QP	35.5	19.2	11.6	32.0	34.3	46.0	11.7	
Vert	607.519	QP	41.7	19.6	11.8	32.0	41.1	46.0	4.9	
Vert	810.022	QP	36.4	22.0	12.8	31.4	39.8	46.0	6.2	
Vert	901.126	QP	33.3	22.3	13.3	30.9	38.0	46.0	8.0	
Vert	2390.000	PK	47.3	27.0	2.4	34.7	42.0	73.9	32.0	
Vert	4804.000	PK	NS	-	-	-	-	73.9	-	
Vert	7206.000	PK	NS	-	-	-	-	73.9	-	
Vert	9608.000	PK	NS	-	-	-	-	73.9	-	
Vert	2390.000	AV	33.2	27.0	2.4	34.7	27.9	53.9	26.0	
Vert	4804.000	AV	NS	-	-	-	-	53.9	-	
Vert	7206.000	AV	NS	-	-	-	-	53.9	-	
Vert	9608.000	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	Tx, 3DH5 2402MHz

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	2402.000	PK	100.0	27.0	2.4	34.7	94.7	-	-	Carrier
Hori	2400.000	PK	57.3	27.0	2.4	34.7	52.0	74.7	22.7	
Vert	2402.000	PK	98.0	27.0	2.4	34.7	92.7	-	-	Carrier
Vert	2400.000	PK	55.2	27.0	2.4	34.7	49.9	72.7	22.8	

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

Radiated Spurious Emission
(Power Supply : DELTA)

Test place	Ise HQ EMC Lab. No.2&No.3Semi 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 (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, 3DH5 2441MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	108.782	QP	42.5	11.4	8.2	32.1	30.0	43.5	13.5	
Hori	327.199	QP	39.0	15.2	10.0	31.9	32.3	46.0	13.7	
Hori	576.022	QP	38.3	19.2	11.6	32.0	37.1	46.0	8.9	
Hori	607.521	QP	38.2	19.6	11.8	32.0	37.6	46.0	8.4	
Hori	810.023	QP	34.8	22.0	12.8	31.4	38.2	46.0	7.8	
Hori	901.125	QP	34.3	22.3	13.3	30.9	39.0	46.0	7.0	
Hori	4882.000	PK	NS	-	-	-	-	73.9	-	
Hori	7323.000	PK	NS	-	-	-	-	73.9	-	
Hori	9764.000	PK	NS	-	-	-	-	73.9	-	
Hori	4882.000	AV	NS	-	-	-	-	53.9	-	
Hori	7323.000	AV	NS	-	-	-	-	53.9	-	
Hori	9764.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.960	QP	40.1	17.6	7.0	32.2	32.5	40.0	7.5	
Vert	108.783	QP	47.3	11.4	8.2	32.1	34.8	43.5	8.7	
Vert	576.023	QP	35.7	19.2	11.6	32.0	34.5	46.0	11.5	
Vert	607.521	QP	41.5	19.6	11.8	32.0	40.9	46.0	5.1	
Vert	810.023	QP	36.2	22.0	12.8	31.4	39.6	46.0	6.4	
Vert	901.126	QP	33.5	22.3	13.3	30.9	38.2	46.0	7.8	
Vert	4882.000	PK	NS	-	-	-	-	73.9	-	
Vert	7323.000	PK	NS	-	-	-	-	73.9	-	
Vert	9764.000	PK	NS	-	-	-	-	73.9	-	
Vert	4882.000	AV	NS	-	-	-	-	53.9	-	
Vert	7323.000	AV	NS	-	-	-	-	53.9	-	
Vert	9764.000	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 (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, 3DH5 2480MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	108.779	QP	42.4	11.4	8.2	32.1	29.9	43.5	13.6	
Hori	327.200	QP	39.1	15.2	10.0	31.9	32.4	46.0	13.6	
Hori	576.023	QP	38.2	19.2	11.6	32.0	37.0	46.0	9.0	
Hori	607.522	QP	38.5	19.6	11.8	32.0	37.9	46.0	8.1	
Hori	810.023	QP	34.5	22.0	12.8	31.4	37.9	46.0	8.1	
Hori	901.125	QP	34.1	22.3	13.3	30.9	38.8	46.0	7.2	
Hori	2483.500	PK	56.9	26.9	2.5	34.7	51.6	73.9	22.3	
Hori	2484.388	PK	57.1	26.9	2.5	34.7	51.8	73.9	22.1	
Hori	4960.000	PK	NS	-	-	-	-	73.9	-	
Hori	7440.000	PK	NS	-	-	-	-	73.9	-	
Hori	9920.000	PK	NS	-	-	-	-	73.9	-	
Hori	2483.500	AV	37.7	26.9	2.5	34.7	32.4	53.9	21.5	
Hori	2484.388	AV	47.0	26.9	2.5	34.7	41.7	53.9	12.2	
Hori	4960.000	AV	NS	-	-	-	-	53.9	-	
Hori	7440.000	AV	NS	-	-	-	-	53.9	-	
Hori	9920.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.960	QP	39.9	17.6	7.0	32.2	32.3	40.0	7.7	
Vert	108.780	QP	47.5	11.4	8.2	32.1	35.0	43.5	8.5	
Vert	576.023	QP	35.6	19.2	11.6	32.0	34.4	46.0	11.6	
Vert	607.522	QP	41.6	19.6	11.8	32.0	41.0	46.0	5.0	
Vert	810.024	QP	36.3	22.0	12.8	31.4	39.7	46.0	6.3	
Vert	901.126	QP	33.5	22.3	13.3	30.9	38.2	46.0	7.8	
Vert	2483.500	PK	56.1	26.9	2.5	34.7	50.8	73.9	23.1	
Vert	2484.702	PK	56.6	26.9	2.5	34.7	51.3	73.9	22.6	
Vert	4960.000	PK	NS	-	-	-	-	73.9	-	
Vert	7440.000	PK	NS	-	-	-	-	73.9	-	
Vert	9920.000	PK	NS	-	-	-	-	73.9	-	
Vert	2483.500	AV	37.0	26.9	2.5	34.7	31.7	53.9	22.2	
Vert	2484.702	AV	45.8	26.9	2.5	34.7	40.5	53.9	13.4	
Vert	4960.000	AV	NS	-	-	-	-	53.9	-	
Vert	7440.000	AV	NS	-	-	-	-	53.9	-	
Vert	9920.000	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 (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, DH5 2402MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	39.605	QP	28.7	14.7	6.8	28.6	21.6	40.0	18.4	
Hori	108.204	QP	39.4	11.3	7.5	28.4	29.8	43.5	13.7	
Hori	171.212	QP	34.1	15.7	8.0	28.0	29.8	43.5	13.7	
Hori	324.500	QP	36.8	15.0	8.8	27.8	32.8	46.0	13.2	
Hori	608.000	QP	36.8	19.6	9.9	28.8	37.5	46.0	8.5	
Hori	809.837	QP	30.9	21.8	10.8	28.2	35.3	46.0	10.7	
Hori	2390.000	PK	45.1	27.0	2.4	34.7	39.8	73.9	34.1	
Hori	4804.000	PK	NS	-	-	-	-	73.9	-	
Hori	7206.000	PK	NS	-	-	-	-	73.9	-	
Hori	9608.000	PK	NS	-	-	-	-	73.9	-	
Hori	2390.000	AV	33.8	27.0	2.4	34.7	28.5	53.9	25.5	
Hori	4804.000	AV	NS	-	-	-	-	53.9	-	
Hori	7206.000	AV	NS	-	-	-	-	53.9	-	
Hori	9608.000	AV	NS	-	-	-	-	53.9	-	
Vert	39.605	QP	39.1	14.7	6.8	28.6	32.0	40.0	8.0	
Vert	106.721	QP	44.9	11.0	7.5	28.4	35.0	43.5	8.5	
Vert	171.212	QP	34.1	15.7	8.0	28.0	29.8	43.5	13.7	
Vert	324.833	QP	34.5	15.0	8.8	27.8	30.5	46.0	15.5	
Vert	608.000	QP	36.9	19.6	9.9	28.8	37.6	46.0	8.4	
Vert	809.837	QP	35.0	21.8	10.8	28.2	39.4	46.0	6.6	
Vert	2390.000	PK	47.2	27.0	2.4	34.7	41.9	73.9	32.0	
Vert	4804.000	PK	NS	-	-	-	-	73.9	-	
Vert	7206.000	PK	NS	-	-	-	-	73.9	-	
Vert	9608.000	PK	NS	-	-	-	-	73.9	-	
Vert	2390.000	AV	33.9	27.0	2.4	34.7	28.6	53.9	25.3	
Vert	4804.000	AV	NS	-	-	-	-	53.9	-	
Vert	7206.000	AV	NS	-	-	-	-	53.9	-	
Vert	9608.000	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	Tx, DH5 2402MHz

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	2402.000	PK	102.0	27.0	2.4	34.7	96.7	-	-	Carrier
Hori	2397.475	PK	56.1	27.0	2.4	34.7	50.8	76.7	25.9	
Hori	2400.000	PK	50.4	27.0	2.4	34.7	45.1	76.7	31.6	
Vert	2402.000	PK	100.2	27.0	2.4	34.7	94.9	-	-	Carrier
Vert	2399.536	PK	53.2	27.0	2.4	34.7	47.9	74.9	27.0	
Vert	2400.000	PK	48.6	27.0	2.4	34.7	43.3	74.9	31.6	

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

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 (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, DH5 2441MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	39.507	QP	29.3	14.7	6.8	28.6	22.2	40.0	17.8	
Hori	108.434	QP	39.1	11.3	7.5	28.4	29.5	43.5	14.0	
Hori	170.712	QP	34.3	15.7	8.0	28.0	30.0	43.5	13.5	
Hori	324.511	QP	35.4	15.0	8.8	27.8	31.4	46.0	14.6	
Hori	608.131	QP	36.8	19.6	9.9	28.8	37.5	46.0	8.5	
Hori	809.821	QP	30.7	21.8	10.8	28.2	35.1	46.0	10.9	
Hori	4882.000	PK	NS	-	-	-	-	73.9	-	
Hori	7323.000	PK	NS	-	-	-	-	73.9	-	
Hori	9764.000	PK	NS	-	-	-	-	73.9	-	
Hori	4882.000	AV	NS	-	-	-	-	53.9	-	
Hori	7323.000	AV	NS	-	-	-	-	53.9	-	
Hori	9764.000	AV	NS	-	-	-	-	53.9	-	
Vert	39.611	QP	38.3	14.7	6.8	28.6	31.2	40.0	8.8	
Vert	106.712	QP	45.1	11.0	7.5	28.4	35.2	43.5	8.3	
Vert	171.221	QP	34.5	15.7	8.0	28.0	30.2	43.5	13.3	
Vert	325.833	QP	34.7	15.0	8.8	27.8	30.7	46.0	15.3	
Vert	608.114	QP	37.1	19.6	9.9	28.8	37.8	46.0	8.2	
Vert	809.678	QP	35.1	21.8	10.8	28.2	39.5	46.0	6.5	
Vert	4882.000	PK	NS	-	-	-	-	73.9	-	
Vert	7323.000	PK	NS	-	-	-	-	73.9	-	
Vert	9764.000	PK	NS	-	-	-	-	73.9	-	
Vert	4882.000	AV	NS	-	-	-	-	53.9	-	
Vert	7323.000	AV	NS	-	-	-	-	53.9	-	
Vert	9764.000	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 (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, DH5 2480MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	40.221	QP	29.9	14.5	6.8	28.6	22.6	40.0	17.4	
Hori	108.331	QP	40.1	11.3	7.5	28.4	30.5	43.5	13.0	
Hori	170.713	QP	34.5	15.7	8.0	28.0	30.2	43.5	13.3	
Hori	324.513	QP	35.6	15.0	8.8	27.8	31.6	46.0	14.4	
Hori	608.132	QP	36.9	19.6	9.9	28.8	37.6	46.0	8.4	
Hori	809.822	QP	31.0	21.8	10.8	28.2	35.4	46.0	10.6	
Hori	2483.500	PK	47.6	26.9	2.5	34.7	42.3	73.9	31.6	
Hori	2484.534	PK	55.5	26.9	2.5	34.7	50.2	73.9	23.7	
Hori	4960.000	PK	NS	-	-	-	-	73.9	-	
Hori	7440.000	PK	NS	-	-	-	-	73.9	-	
Hori	9920.000	PK	NS	-	-	-	-	73.9	-	
Hori	2483.500	AV	34.9	26.9	2.5	34.7	29.6	53.9	24.3	
Hori	2484.534	AV	50.5	26.9	2.5	34.7	45.2	53.9	8.7	
Hori	4960.000	AV	NS	-	-	-	-	53.9	-	
Hori	7440.000	AV	NS	-	-	-	-	53.9	-	
Hori	9920.000	AV	NS	-	-	-	-	53.9	-	
Vert	37.611	QP	38.1	15.4	6.8	28.6	31.7	40.0	8.3	
Vert	106.712	QP	46.2	11.0	7.5	28.4	36.3	43.5	7.2	
Vert	171.121	QP	34.2	15.7	8.0	28.0	29.9	43.5	13.6	
Vert	325.833	QP	36.2	15.0	8.8	27.8	32.2	46.0	13.8	
Vert	608.109	QP	37.3	19.6	9.9	28.8	38.0	46.0	8.0	
Vert	810.027	QP	35.1	21.8	10.8	28.2	39.5	46.0	6.5	
Vert	2483.500	PK	47.7	26.9	2.5	34.7	42.4	73.9	31.6	
Vert	2484.546	PK	55.6	26.9	2.5	34.7	50.3	73.9	23.6	
Vert	4960.000	PK	NS	-	-	-	-	73.9	-	
Vert	7440.000	PK	NS	-	-	-	-	73.9	-	
Vert	9920.000	PK	NS	-	-	-	-	73.9	-	
Vert	2483.500	AV	35.0	26.9	2.5	34.7	29.7	53.9	24.2	
Vert	2484.546	AV	50.7	26.9	2.5	34.7	45.4	53.9	8.5	
Vert	4960.000	AV	NS	-	-	-	-	53.9	-	
Vert	7440.000	AV	NS	-	-	-	-	53.9	-	
Vert	9920.000	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 (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, 3DH5 2402MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	40.891	QP	29.8	14.2	6.9	28.6	22.3	40.0	17.7	
Hori	108.332	QP	40.0	11.3	7.5	28.4	30.4	43.5	13.1	
Hori	170.710	QP	35.1	15.7	8.0	28.0	30.8	43.5	12.7	
Hori	324.211	QP	35.3	15.0	8.8	27.8	31.3	46.0	14.7	
Hori	608.122	QP	36.8	19.6	9.9	28.8	37.5	46.0	8.5	
Hori	809.822	QP	30.8	21.8	10.8	28.2	35.2	46.0	10.8	
Hori	2390.000	PK	45.2	27.0	2.4	34.7	39.9	73.9	34.0	
Hori	4804.000	PK	NS	-	-	-	-	73.9	-	
Hori	7206.000	PK	NS	-	-	-	-	73.9	-	
Hori	9608.000	PK	NS	-	-	-	-	73.9	-	
Hori	2390.000	AV	33.1	27.0	2.4	34.7	27.8	53.9	26.1	
Hori	4804.000	AV	NS	-	-	-	-	53.9	-	
Hori	7206.000	AV	NS	-	-	-	-	53.9	-	
Hori	9608.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.166	QP	36.8	17.9	6.7	28.7	32.7	40.0	7.3	
Vert	106.712	QP	46.0	11.0	7.5	28.4	36.1	43.5	7.4	
Vert	171.113	QP	33.8	15.7	8.0	28.0	29.5	43.5	14.0	
Vert	325.052	QP	35.8	15.0	8.8	27.8	31.8	46.0	14.2	
Vert	608.111	QP	37.4	19.6	9.9	28.8	38.1	46.0	7.9	
Vert	810.023	QP	35.1	21.8	10.8	28.2	39.5	46.0	6.5	
Vert	2390.000	PK	46.5	27.0	2.4	34.7	41.2	73.9	32.7	
Vert	4804.000	PK	NS	-	-	-	-	73.9	-	
Vert	7206.000	PK	NS	-	-	-	-	73.9	-	
Vert	9608.000	PK	NS	-	-	-	-	73.9	-	
Vert	2390.000	AV	33.1	27.0	2.4	34.7	27.8	53.9	26.1	
Vert	4804.000	AV	NS	-	-	-	-	53.9	-	
Vert	7206.000	AV	NS	-	-	-	-	53.9	-	
Vert	9608.000	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	Tx, 3DH5 2402MHz

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	2402.000	PK	99.3	27.0	2.4	34.7	94.0	-	-	Carrier
Hori	2400.000	PK	56.8	27.0	2.4	34.7	51.5	74.0	22.5	
Vert	2402.000	PK	98.0	27.0	2.4	34.7	92.7	-	-	Carrier
Vert	2400.000	PK	55.8	27.0	2.4	34.7	50.5	72.7	22.2	

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

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 (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, 3DH5 2441MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	40.892	QP	29.6	14.2	6.9	28.6	22.1	40.0	17.9	
Hori	109.112	QP	41.1	11.4	7.5	28.4	31.6	43.5	11.9	
Hori	170.591	QP	35.2	15.7	8.0	28.0	30.9	43.5	12.6	
Hori	324.189	QP	35.1	15.0	8.8	27.8	31.1	46.0	14.9	
Hori	608.132	QP	36.3	19.6	9.9	28.8	37.0	46.0	9.0	
Hori	809.819	QP	30.6	21.8	10.8	28.2	35.0	46.0	11.0	
Hori	4882.000	PK	NS	-	-	-	-	73.9	-	
Hori	7323.000	PK	NS	-	-	-	-	73.9	-	
Hori	9764.000	PK	NS	-	-	-	-	73.9	-	
Hori	4882.000	AV	NS	-	-	-	-	53.9	-	
Hori	7323.000	AV	NS	-	-	-	-	53.9	-	
Hori	9764.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.210	QP	36.5	17.9	6.7	28.7	32.4	40.0	7.6	
Vert	106.721	QP	46.1	11.0	7.5	28.4	36.2	43.5	7.3	
Vert	171.131	QP	34.3	15.7	8.0	28.0	30.0	43.5	13.5	
Vert	325.024	QP	35.9	15.0	8.8	27.8	31.9	46.0	14.1	
Vert	608.122	QP	37.3	19.6	9.9	28.8	38.0	46.0	8.0	
Vert	810.021	QP	35.3	21.8	10.8	28.2	39.7	46.0	6.3	
Vert	4882.000	PK	NS	-	-	-	-	73.9	-	
Vert	7323.000	PK	NS	-	-	-	-	73.9	-	
Vert	9764.000	PK	NS	-	-	-	-	73.9	-	
Vert	4882.000	AV	NS	-	-	-	-	53.9	-	
Vert	7323.000	AV	NS	-	-	-	-	53.9	-	
Vert	9764.000	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 (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, 3DH5 2480MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	40.881	QP	29.2	14.3	6.9	28.6	21.8	40.0	18.2	
Hori	107.010	QP	40.2	11.1	7.5	28.4	30.4	43.5	13.1	
Hori	170.941	QP	35.0	15.7	8.0	28.0	30.7	43.5	12.8	
Hori	324.171	QP	35.1	15.0	8.8	27.8	31.1	46.0	14.9	
Hori	608.014	QP	36.4	19.6	9.9	28.8	37.1	46.0	8.9	
Hori	809.818	QP	31.1	21.8	10.8	28.2	35.5	46.0	10.5	
Hori	2483.500	PK	56.0	26.9	2.5	34.7	50.7	73.9	23.2	
Hori	2484.560	PK	57.0	26.9	2.5	34.7	51.7	73.9	22.2	
Hori	4960.000	PK	NS	-	-	-	-	73.9	-	
Hori	7440.000	PK	NS	-	-	-	-	73.9	-	
Hori	9920.000	PK	NS	-	-	-	-	73.9	-	
Hori	2483.500	AV	36.8	26.9	2.5	34.7	31.5	53.9	22.4	
Hori	2484.560	AV	46.6	26.9	2.5	34.7	41.3	53.9	12.6	
Hori	4960.000	AV	NS	-	-	-	-	53.9	-	
Hori	7440.000	AV	NS	-	-	-	-	53.9	-	
Hori	9920.000	AV	NS	-	-	-	-	53.9	-	
Vert	39.070	QP	38.2	14.9	6.8	28.6	31.3	40.0	8.7	
Vert	106.720	QP	46.0	11.0	7.5	28.4	36.1	43.5	7.4	
Vert	171.122	QP	34.1	15.7	8.0	28.0	29.8	43.5	13.7	
Vert	325.024	QP	35.5	15.0	8.8	27.8	31.5	46.0	14.5	
Vert	608.122	QP	37.6	19.6	9.9	28.8	38.3	46.0	7.7	
Vert	810.001	QP	35.3	21.8	10.8	28.2	39.7	46.0	6.3	
Vert	2483.500	PK	56.7	26.9	2.5	34.7	51.4	73.9	22.5	
Vert	2484.573	PK	58.1	26.9	2.5	34.7	52.8	73.9	21.1	
Vert	4960.000	PK	NS	-	-	-	-	73.9	-	
Vert	7440.000	PK	NS	-	-	-	-	73.9	-	
Vert	9920.000	PK	NS	-	-	-	-	73.9	-	
Vert	2483.500	AV	37.3	26.9	2.5	34.7	32.0	53.9	21.9	
Vert	2484.573	AV	46.9	26.9	2.5	34.7	41.6	53.9	12.3	
Vert	4960.000	AV	NS	-	-	-	-	53.9	-	
Vert	7440.000	AV	NS	-	-	-	-	53.9	-	
Vert	9920.000	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

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-28	Terminator	TME	CT-01	-	CE	2013/11/26 * 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

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