RADIO TEST REPORT

Test Report No. : 10240264H-B-R1

Applicant	:	**Sony Computer Entertainment Inc.**
Type of Equipment	:	**Computer Entertainment System**
Model No.	:	**CECH-4301x**
FCC ID	:	**AK8CBEH19Z1**
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.
6. This report is a revised version of 10240264H-B. 10240264H-B is replaced with this report.

Date of test: March 13 to 26, 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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Ise HQ EMC Lab.
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REVISION HISTORY

Original Test Report No.: 10240264H-B

Revision	Test report No.	Date	Page revised	Contents
- (Original)	10240264H-B	April 18, 2014	-	-
1	10240264H-B-R1	April 22, 2014	6	Correction of worst margin of Conducted Emission test.

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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	0260009 (Power Supply: SONY) 0260011 (Power Supply: DELTA) 0260013 (Power Supply: Chicony)
Rating	AC120V / 60Hz
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 Bluetooth (Ver. 2.0+EDR) module and IEEE802.11b/g WLAN module. Those modules do not transmit simultaneously.

The clock frequencies used in the EUT: Max clock frequency is 3.2GHz.

Bluetooth (Ver. 2.0+EDR)

Equipment Type	Transceiver
Frequency of Operation	2402-2480MHz
Type of Modulation	FHSS (GFSK, π/4-DQPSK, 8DPSK)
Bandwidth & Channel spacing	1MHz & 1MHz
Power Supply (inner)	DC3.3V/1.8V
Antenna Type	PIFA
Antenna Gain	4.5 dBi (max)
Antenna Connector Type	U.FL

IEEE802.11b/g WLAN

Equipment Type	Transceiver	
Frequency of Operation	2412-2462MHz	
Type of Modulation	DSSS/OFDM	
Bandwidth & Channel spacing	20MHz & 5MHz	
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)
Antenna Connector Type	Antenna 0: N/A	Antenna 1: N/A

List of Model No.:

Model No.	Product Name	Note
CECH-4301x*1	Computer Entertainment System	Tested model
DECH-4300AA	Debugging Station	*2

Note:
*1: "x" will be replaced by an alphabet denoting the different hard disk specification.
*2: The difference between DECH-4300AA and CECH-4301x is software only.
The differences among the above two models do not influence on radio specification.

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** 7.0dB, 0.15001MHz, N **AV** 9.0dB (3.84277MHz, N) (3.84237MHz, L)	Complied	-
	IC: RSS-Gen 7.2.4	**IC:** RSS-Gen 7.2.4			
Spurious Emission Restricted Band Edges	**FCC:** "Guidance on Measurement of Digital Transmission Systems Operating under Section15.247"	**FCC:** Section15.247(d)	3.8dB 607.517MHz, 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.

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
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8999 Facsimile : +81 596 24 8124

	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 only performed as the antenna position and the antenna gain were 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

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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 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, 1.5m by 1.0m, 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*1) (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

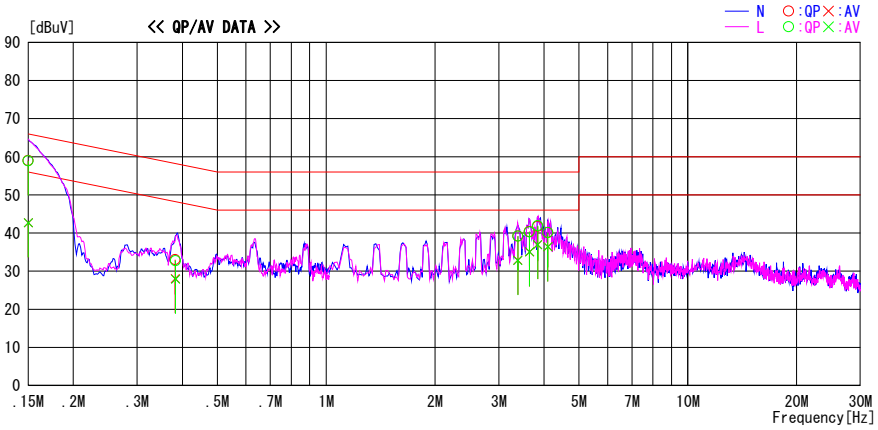
UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2014/03/25

Report No. : 10240264H

Temp./Humi. : 23deg.C / 40% 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	45.8	29.5	13.2	59.0	42.7	66.0	56.0	7.0	13.3	N	
0.38261	19.7	14.8	13.3	33.0	28.1	58.2	48.2	25.2	20.1	N	
3.38635	25.6	19.3	13.6	39.2	32.9	56.0	46.0	16.8	13.1	N	
3.64634	26.8	21.5	13.6	40.4	35.1	56.0	46.0	15.6	10.9	N	
3.84277	28.1	23.4	13.6	41.7	37.0	56.0	46.0	14.3	9.0	N	
4.10136	26.4	22.7	13.7	40.1	36.4	56.0	46.0	15.9	9.6	N	
0.15001	45.7	29.5	13.2	58.9	42.7	66.0	56.0	7.1	13.3	L	
0.38311	19.4	14.6	13.3	32.7	27.9	58.2	48.2	25.5	20.3	L	
3.38695	25.6	19.2	13.6	39.2	32.8	56.0	46.0	16.8	13.2	L	
3.64674	26.7	21.5	13.6	40.3	35.1	56.0	46.0	15.7	10.9	L	
3.84237	28.3	23.4	13.6	41.9	37.0	56.0	46.0	14.1	9.0	L	
4.10136	26.4	22.7	13.7	40.1	36.4	56.0	46.0	15.9	9.6	L	

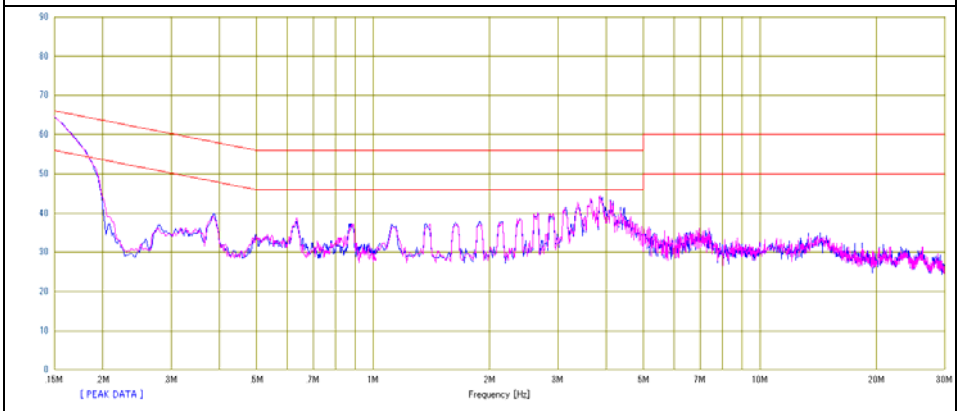
CHART:WITH FACTOR,Peak hold data. CALCULATION:RESULT=READING+C.F(LISN LOSS + ATT LOSS + CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

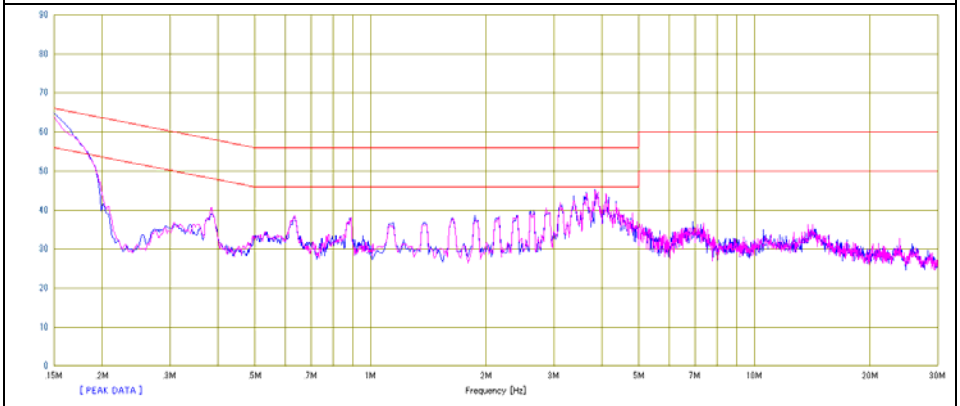
(Power Supply: SONY)

Test place	Ise HQ EMC Lab. No.3 Semi Anechoic Chamber
Report No.	10240264H
Date	03/25/2014
Temperature/ Humidity	23 deg. C / 40% RH
Engineer	Keisuke Kawamura
Mode	Tx DH5

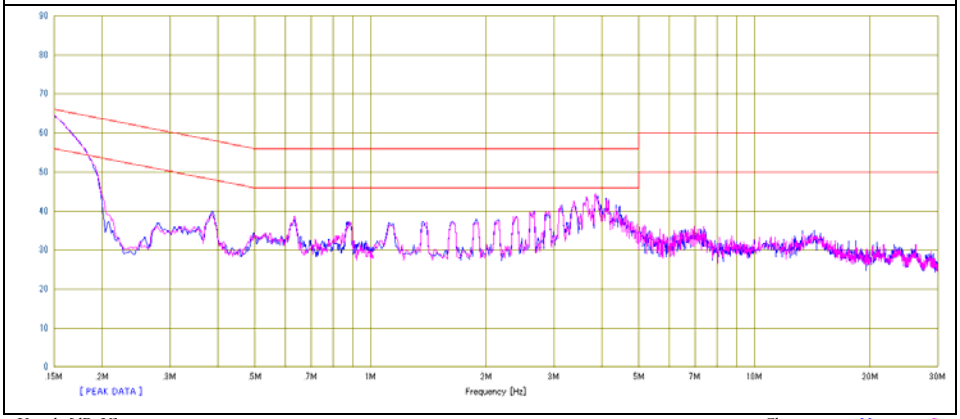
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

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Conducted Emission
(Power Supply: SONY)

DATA OF CONDUCTED EMISSION TEST

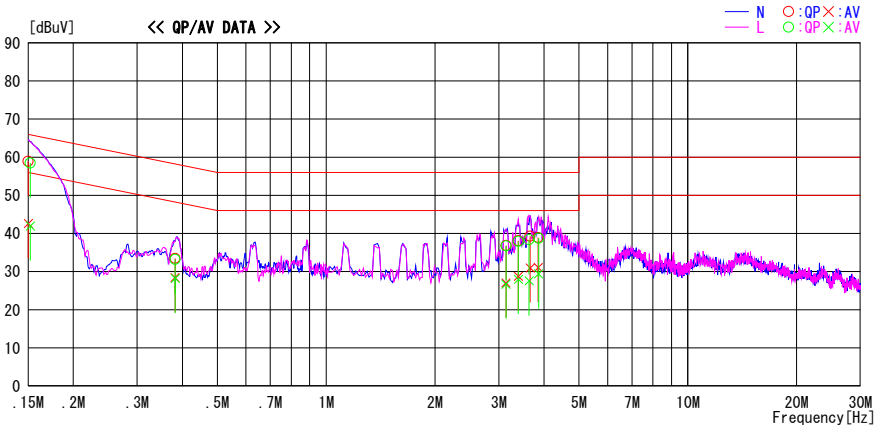
UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2014/03/25

Report No. : 10240264H

Temp./Humi. : 23deg.C / 40% 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	45.7	29.4	13.2	58.9	42.6	66.0	56.0	7.1	13.4	N	
0.38195	20.2	15.1	13.3	33.5	28.4	58.2	48.2	24.7	19.8	N	
3.14169	23.2	13.5	13.6	36.8	27.1	56.0	46.0	19.2	18.9	N	
3.39867	24.5	15.2	13.6	38.1	28.8	56.0	46.0	17.9	17.2	N	
3.66397	25.7	17.4	13.6	39.3	31.0	56.0	46.0	16.7	15.0	N	
3.85249	25.2	17.4	13.7	38.9	31.1	56.0	46.0	17.1	14.9	N	
0.15212	45.3	28.8	13.2	58.5	42.0	65.9	55.9	7.4	13.9	L	
0.38255	19.9	14.9	13.3	33.2	28.2	58.2	48.2	25.0	20.0	L	
3.14169	23.1	13.1	13.6	36.7	26.7	56.0	46.0	19.3	19.3	L	
3.39867	24.3	14.4	13.6	37.9	28.0	56.0	46.0	18.1	18.0	L	
3.64054	24.8	14.0	13.6	38.4	27.6	56.0	46.0	17.6	18.4	L	
3.86729	25.0	15.7	13.7	38.7	29.4	56.0	46.0	17.3	16.6	L	

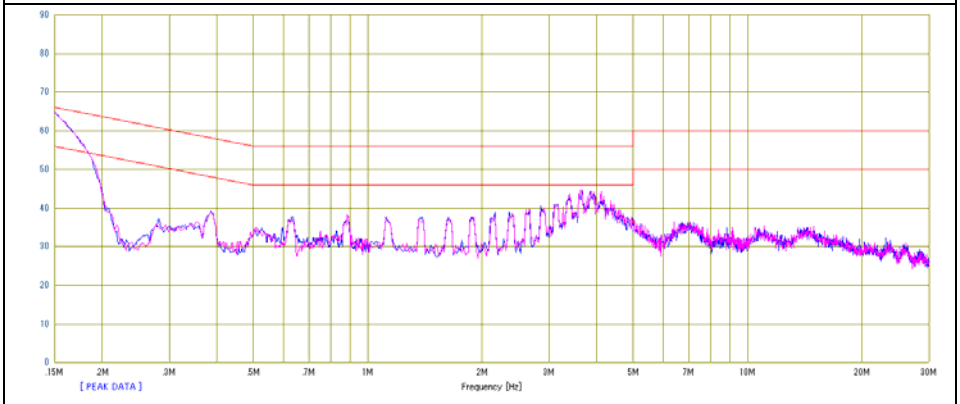
CHART:WITH FACTOR,Peak hold data. CALCULATION:RESULT=READING+C.F(LISN LOSS + ATT LOSS + CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

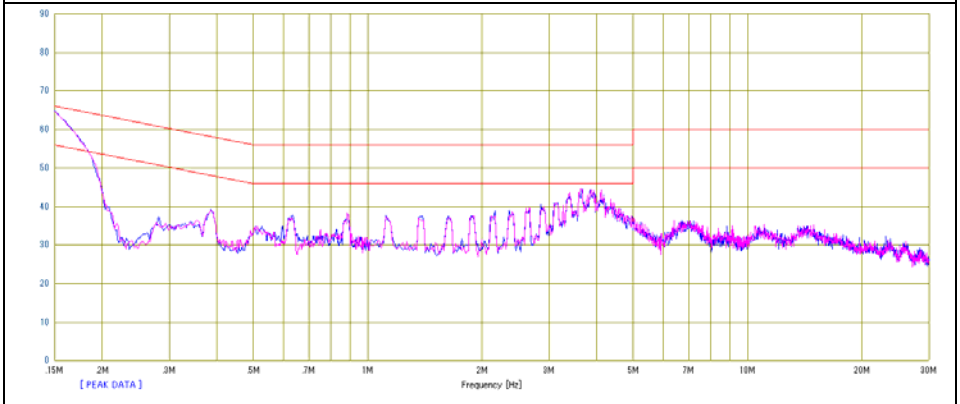
(Power Supply: SONY)

Test place	Ise HQ EMC Lab. No.3 Semi Anechoic Chamber
Report No.	10240264H
Date	03/25/2014
Temperature/ Humidity	23 deg. C / 40% RH
Engineer	Keisuke Kawamura
Mode	Tx 3DH5

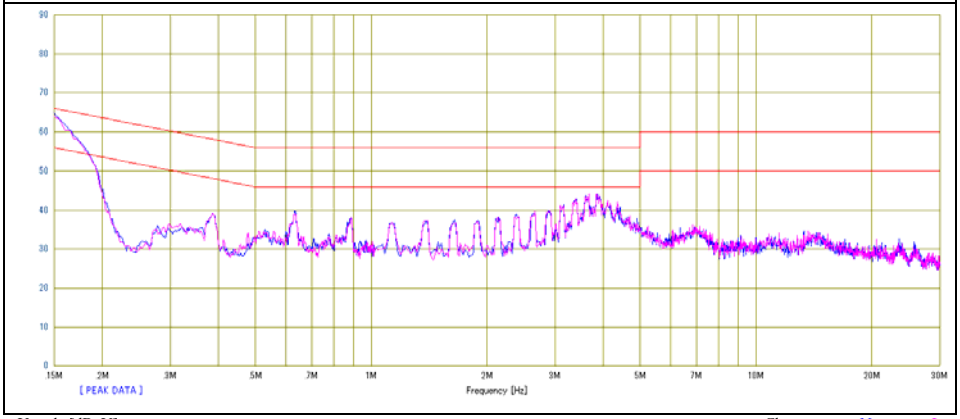
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

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Conducted Emission
(Power Supply: DELTA)

DATA OF CONDUCTED EMISSION TEST

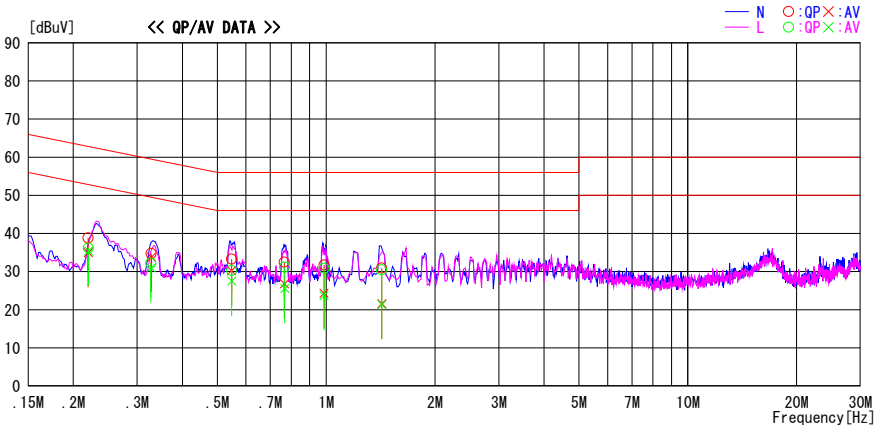
UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2014/03/26

Report No. : 10240264H

Temp./Humi. : 23deg.C / 40% RH
Engineer : Keisuke Kawamura

Mode / Remarks : BT Tx DH5 2402MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



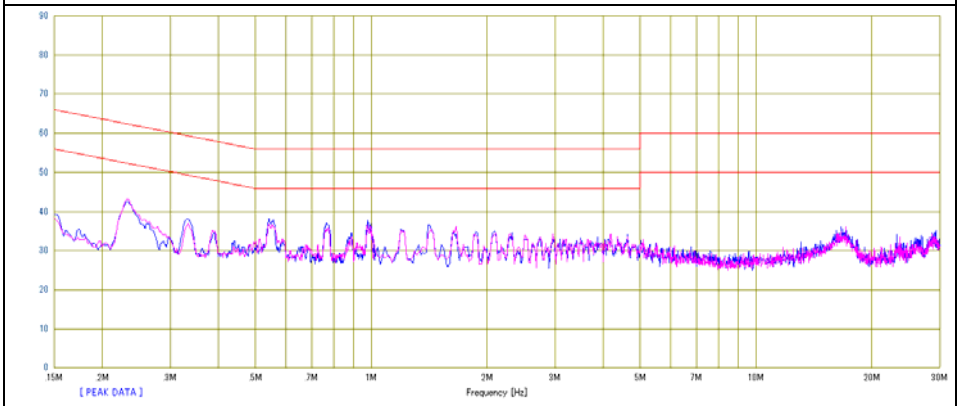
Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.21981	25.5	21.7	13.3	38.8	35.0	62.8	52.8	24.0	17.8	N	
0.32825	21.4	20.5	13.3	34.7	33.8	59.5	49.5	24.8	15.7	N	
0.54731	20.0	16.9	13.3	33.3	30.2	56.0	46.0	22.7	15.8	N	
0.76625	19.2	13.5	13.3	32.5	26.8	56.0	46.0	23.5	19.2	N	
0.98681	18.4	11.0	13.3	31.7	24.3	56.0	46.0	24.3	21.7	N	
1.42531	17.5	8.2	13.4	30.9	21.6	56.0	46.0	25.1	24.4	N	
0.22025	22.9	22.1	13.3	36.2	35.4	62.8	52.8	26.6	17.4	L	
0.32775	18.9	17.7	13.3	32.2	31.0	59.5	49.5	27.3	18.5	L	
0.54791	17.0	14.2	13.3	30.3	27.5	56.0	46.0	25.7	18.5	L	
0.76805	17.9	12.3	13.3	31.2	25.6	56.0	46.0	24.8	20.4	L	
0.98641	17.5	10.4	13.3	30.8	23.7	56.0	46.0	25.2	22.3	L	
1.42531	17.1	7.9	13.4	30.5	21.3	56.0	46.0	25.5	24.7	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.

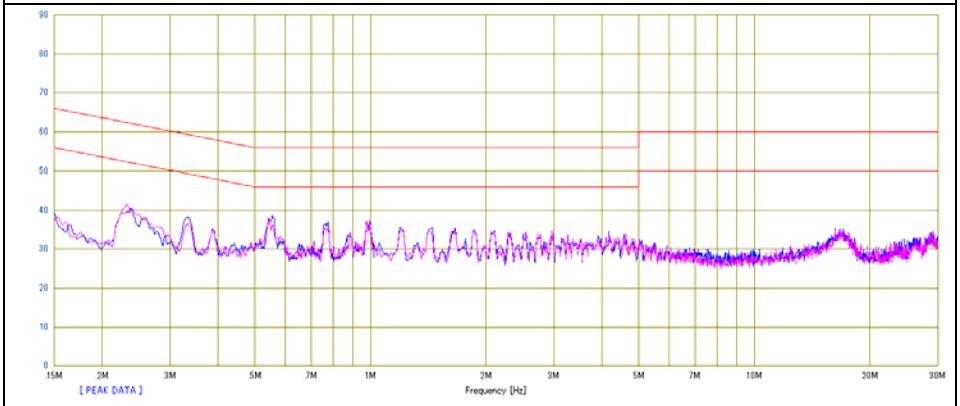
Conducted Emission
(Power Supply: DELTA)

Test place	Ise HQ EMC Lab. No.3 Semi Anechoic Chamber
Report No.	10240264H
Date	03/25/2014
Temperature/ Humidity	23 deg. C / 40% RH
Engineer	Keisuke Kawamura
Mode	Tx DH5

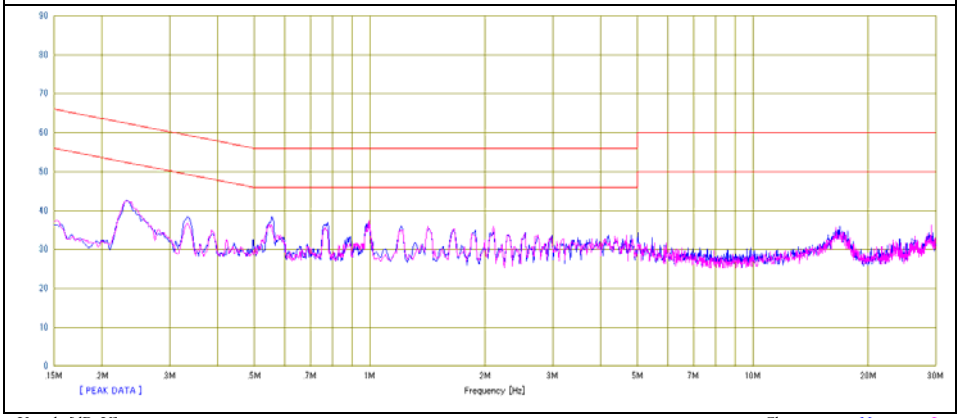
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

Conducted Emission
(Power Supply: DELTA)

DATA OF CONDUCTED EMISSION TEST

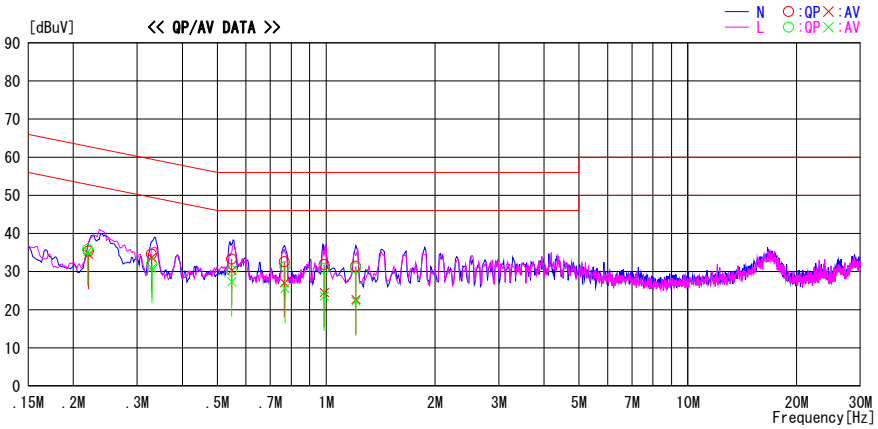
UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2014/03/26

Report No. : 10240264H

Temp./Humi. : 23deg.C / 40% RH
Engineer : Keisuke Kawamura

Mode / Remarks : BT Tx 3DH5 2402MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



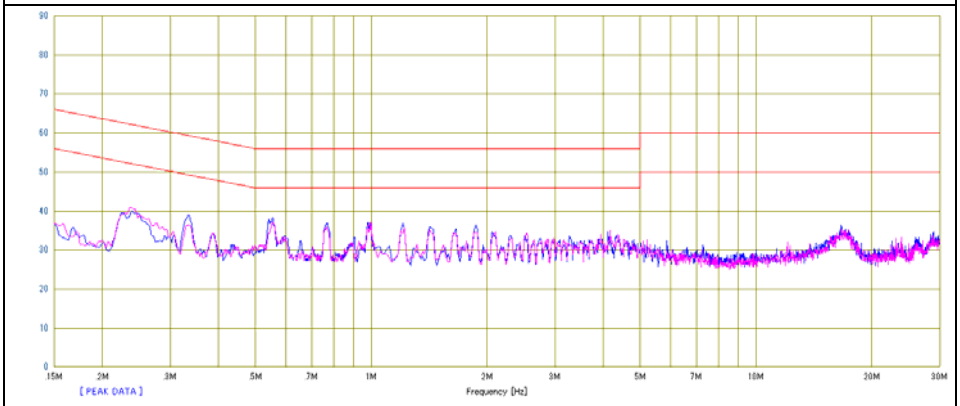
Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.22025	22.1	21.2	13.3	35.4	34.5	62.8	52.8	27.4	18.3	N	
0.32921	21.3	20.4	13.3	34.6	33.7	59.5	49.5	24.9	15.8	N	
0.54791	20.0	17.0	13.3	33.3	30.3	56.0	46.0	22.7	15.7	N	
0.76625	19.3	13.8	13.3	32.6	27.1	56.0	46.0	23.4	18.9	N	
0.98785	18.5	11.2	13.3	31.8	24.5	56.0	46.0	24.2	21.5	N	
1.20807	18.0	9.3	13.4	31.4	22.7	56.0	46.0	24.6	23.3	N	
0.21932	22.5	22.0	13.3	35.8	35.3	62.8	52.8	27.0	17.5	L	
0.32961	18.7	17.6	13.3	32.0	30.9	59.5	49.5	27.5	18.6	L	
0.54785	16.9	14.0	13.3	30.2	27.3	56.0	46.0	25.8	18.7	L	
0.76861	18.0	12.3	13.3	31.3	25.6	56.0	46.0	24.7	20.4	L	
0.98755	17.5	10.3	13.3	30.8	23.6	56.0	46.0	25.2	22.4	L	
1.20807	17.5	8.8	13.4	30.9	22.2	56.0	46.0	25.1	23.8	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.

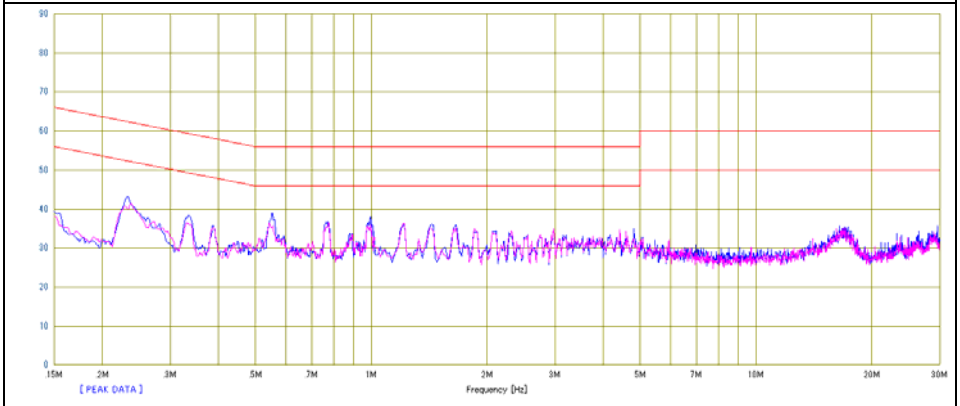
Conducted Emission
(Power Supply: DELTA)

Test place	Ise HQ EMC Lab. No.3 Semi Anechoic Chamber
Report No.	10240264H
Date	03/25/2014
Temperature/ Humidity	23 deg. C / 40% RH
Engineer	Keisuke Kawamura
Mode	Tx 3DH5

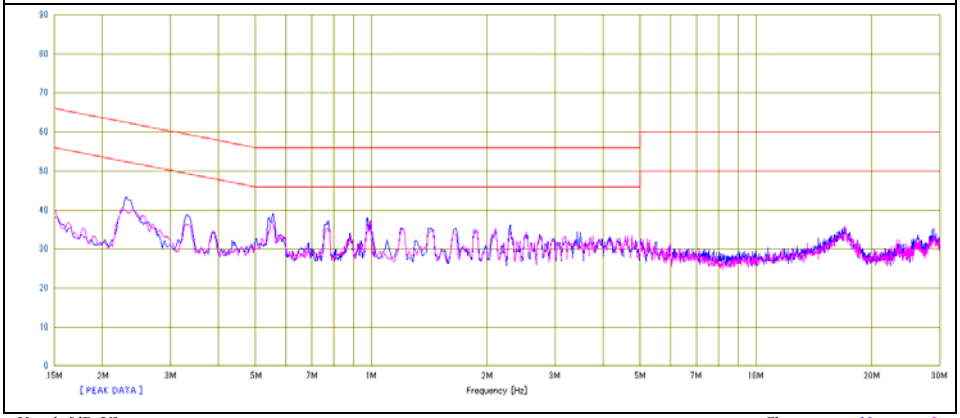
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

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Conducted Emission

(Power Supply: Chicony)

DATA OF CONDUCTED EMISSION TEST

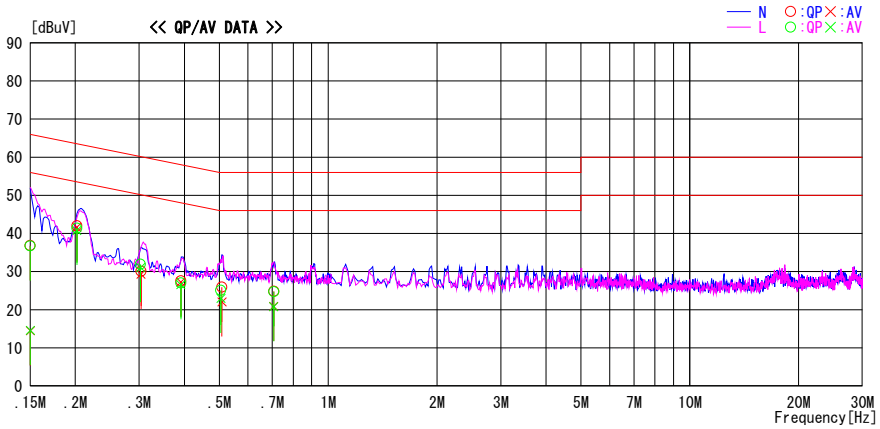
UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2014/03/25

Report No. : 10240264H

Temp./Humi. : 23deg.C / 40% 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	23.6	1.3	13.2	36.8	14.5	66.0	56.0	29.2	41.5	N	
0.20185	28.7	28.3	13.3	42.0	41.6	63.5	53.5	21.5	11.9	N	
0.30371	16.8	16.0	13.3	30.1	29.3	60.1	50.1	30.0	20.8	N	
0.39125	14.3	13.9	13.3	27.6	27.2	58.0	48.0	30.4	20.8	N	
0.50815	12.6	8.8	13.3	25.9	22.1	56.0	46.0	30.1	23.9	N	
0.70715	11.5	7.6	13.3	24.8	20.9	56.0	46.0	31.2	25.1	N	
0.15001	23.5	1.4	13.2	36.7	14.6	66.0	56.0	29.3	41.4	L	
0.20181	28.1	27.5	13.3	41.4	40.8	63.5	53.5	22.1	12.7	L	
0.30255	18.6	17.8	13.3	31.9	31.1	60.2	50.2	28.3	19.1	L	
0.39121	13.7	13.3	13.3	27.0	26.6	58.0	48.0	31.0	21.4	L	
0.50525	11.8	9.7	13.3	25.1	23.0	56.0	46.0	30.9	23.0	L	
0.70715	11.4	7.5	13.3	24.7	20.8	56.0	46.0	31.3	25.2	L	

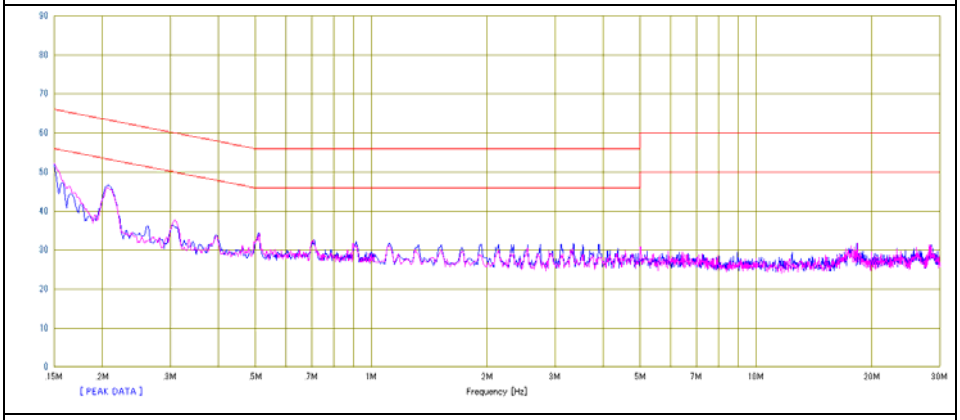
CHART:WITH FACTOR,Peak hold data. CALCULATION:RESULT=READING+C.F(LISN LOSS + ATT LOSS + CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

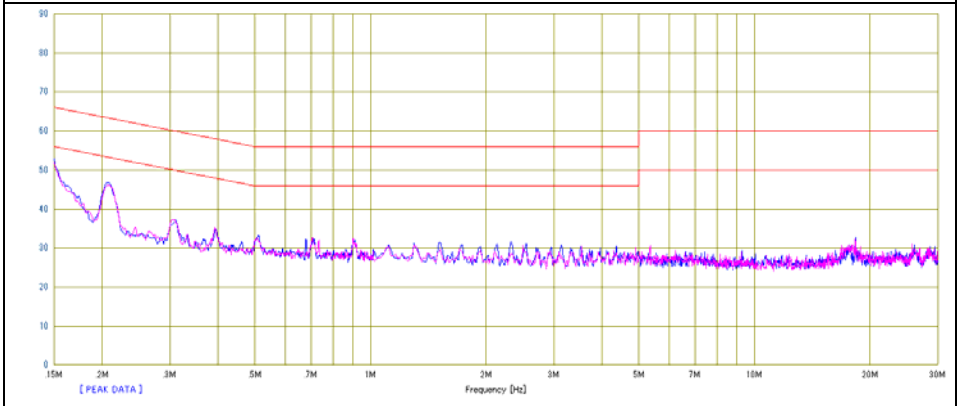
(Power Supply: Chicony)

Test place	Ise HQ EMC Lab. No.3 Semi Anechoic Chamber
Report No.	10240264H
Date	03/25/2014
Temperature/ Humidity	23 deg. C / 40% RH
Engineer	Keisuke Kawamura
Mode	Tx DH5

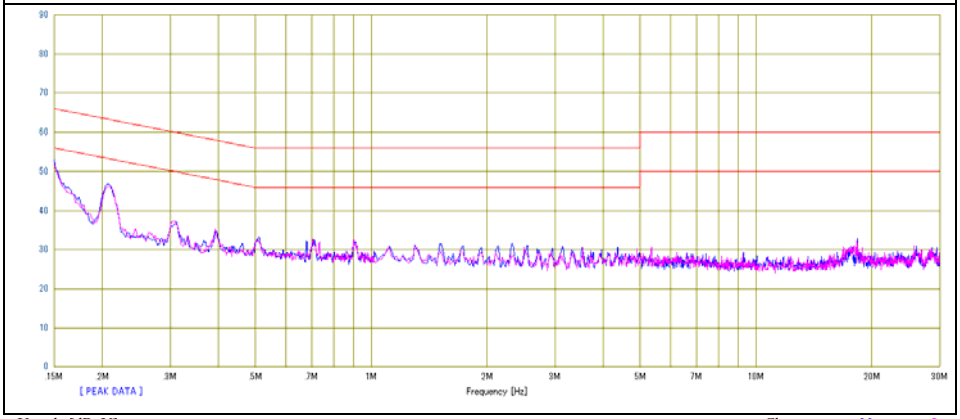
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

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Conducted Emission

(Power Supply: Chicony)

DATA OF CONDUCTED EMISSION TEST

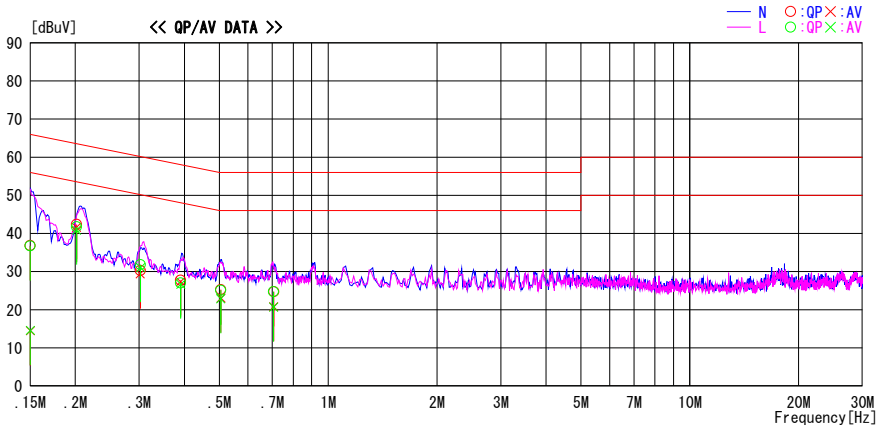
UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2014/03/26

Report No. : 10240264H

Temp./Humi. : 23deg.C / 40% 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	23.6	1.3	13.2	36.8	14.5	66.0	56.0	29.2	41.5	N	
0.20145	29.1	28.3	13.3	42.4	41.6	63.6	53.6	21.2	12.0	N	
0.30225	17.0	16.1	13.3	30.3	29.4	60.2	50.2	29.9	20.8	N	
0.39061	14.4	14.0	13.3	27.7	27.3	58.1	48.1	30.4	20.8	N	
0.50485	12.0	9.8	13.3	25.3	23.1	56.0	46.0	30.7	22.9	N	
0.70705	11.4	7.5	13.3	24.7	20.8	56.0	46.0	31.3	25.2	N	
0.15001	23.5	1.4	13.2	36.7	14.6	66.0	56.0	29.3	41.4	L	
0.20155	28.4	27.6	13.3	41.7	40.9	63.5	53.5	21.8	12.6	L	
0.30255	18.5	17.8	13.3	31.8	31.1	60.2	50.2	28.4	19.1	L	
0.39101	13.7	13.4	13.3	27.0	26.7	58.0	48.0	31.0	21.3	L	
0.50465	11.8	9.6	13.3	25.1	22.9	56.0	46.0	30.9	23.1	L	
0.70655	11.4	7.4	13.3	24.7	20.7	56.0	46.0	31.3	25.3	L	

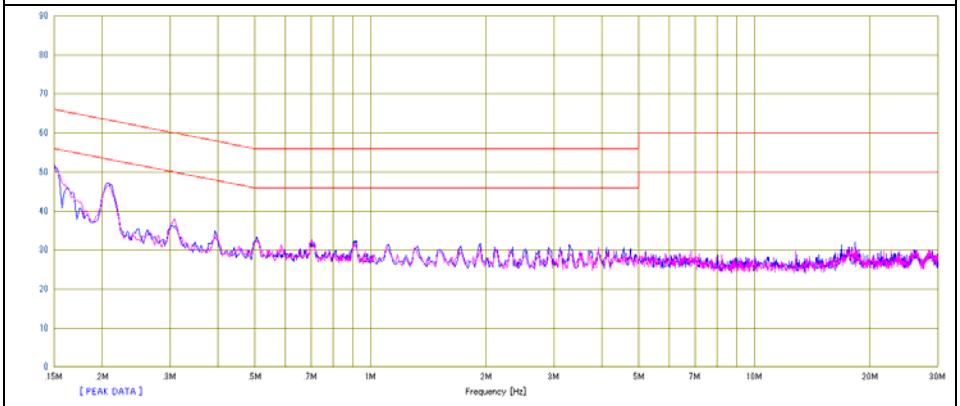
CHART:WITH FACTOR,Peak hold data. CALCULATION:RESULT=READING+C.F(LISN LOSS + ATT LOSS + CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

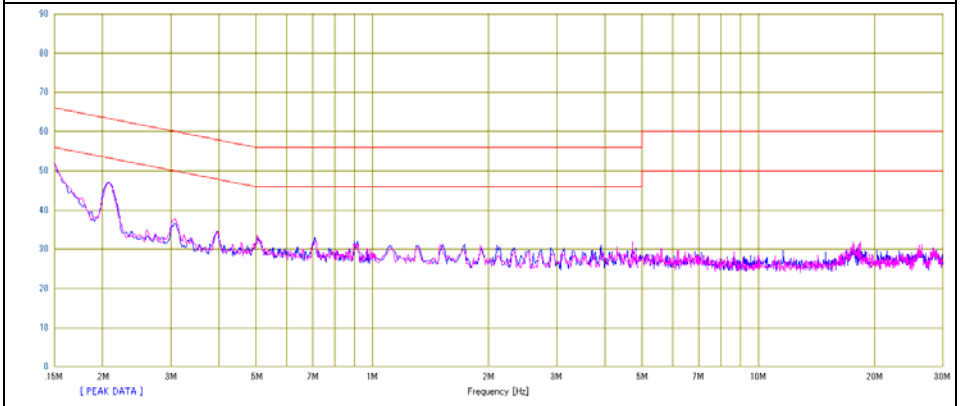
(Power Supply: Chicony)

Test place	Ise HQ EMC Lab. No.3 Semi Anechoic Chamber
Report No.	10240264H
Date	03/25/2014
Temperature/ Humidity	23 deg. C / 40% RH
Engineer	Keisuke Kawamura
Mode	Tx 3DH5

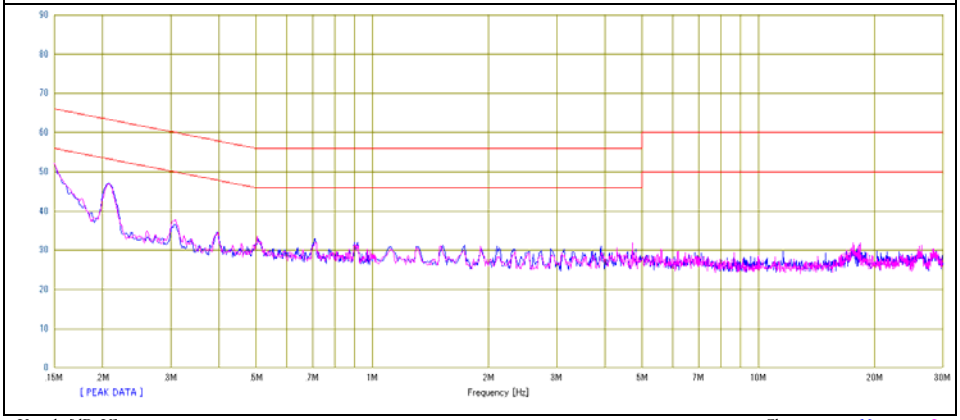
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

Radiated Spurious Emission

(Power Supply: SONY)

Test place	Ise HQ EMC Lab. No.3&No.2 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/13/2014	03/18/2014	03/25/2014
Temperature/ Humidity	24 deg. C / 33% RH	23 deg. C / 35% RH	23 deg. C / 40% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Kazuya Yoshioka (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	106.734	QP	42.8	11.1	8.1	32.1	29.9	43.5	13.6	
Hori	323.981	QP	44.0	15.1	10.0	31.9	37.2	46.0	8.8	
Hori	576.002	QP	38.4	19.2	11.6	32.0	37.2	46.0	8.8	
Hori	607.528	QP	38.6	19.6	11.8	32.0	38.0	46.0	8.0	
Hori	810.019	QP	32.8	22.0	12.8	31.4	36.2	46.0	9.8	
Hori	901.176	QP	34.3	22.3	13.3	30.9	39.0	46.0	7.0	
Hori	2390.000	PK	41.3	28.2	3.1	32.4	40.2	73.9	33.8	
Hori	4804.000	PK	41.6	30.5	5.3	31.4	46.0	73.9	27.9	
Hori	7206.000	PK	NS	-	-	-	-	73.9	-	
Hori	9608.000	PK	NS	-	-	-	-	73.9	-	
Hori	2390.000	AV	30.0	28.2	3.1	32.4	28.9	53.9	25.0	
Hori	4804.000	AV	31.3	30.5	5.3	31.4	35.7	53.9	18.2	
Hori	7206.000	AV	NS	-	-	-	-	53.9	-	
Hori	9608.000	AV	NS	-	-	-	-	53.9	-	
Vert	106.741	QP	46.9	11.1	8.1	32.1	34.0	43.5	9.5	
Vert	323.962	QP	39.9	15.1	10.0	31.9	33.1	46.0	12.9	
Vert	576.003	QP	33.4	19.2	11.6	32.0	32.2	46.0	13.8	
Vert	607.527	QP	42.1	19.6	11.8	32.0	41.5	46.0	4.5	
Vert	810.030	QP	36.6	22.0	12.8	31.4	40.0	46.0	6.0	
Vert	901.182	QP	32.9	22.3	13.3	30.9	37.6	46.0	8.4	
Vert	2390.000	PK	43.8	28.2	3.1	32.4	42.7	73.9	31.2	
Vert	4804.000	PK	42.7	30.5	5.3	31.4	47.1	73.9	26.8	
Vert	7206.000	PK	NS	-	-	-	-	73.9	-	
Vert	9608.000	PK	NS	-	-	-	-	73.9	-	
Vert	2390.000	AV	30.8	28.2	3.1	32.4	29.7	53.9	24.2	
Vert	4804.000	AV	33.6	30.5	5.3	31.4	38.0	53.9	15.9	
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.3 Semi Anechoic Chamber
Report No.	10240264H
Date	03/13/2014
Temperature/ Humidity	24 deg. C / 33% 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	96.6	28.2	3.1	32.4	95.5	-	-	Carrier
Hori	2399.745	PK	44.6	28.2	3.1	32.4	43.5	75.5	32.0	
Hori	2400.000	PK	41.6	28.2	3.1	32.4	40.5	75.5	35.0	
Vert	2402.000	PK	96.2	28.2	3.1	32.4	95.1	-	-	Carrier
Vert	2399.592	PK	44.0	28.2	3.1	32.4	42.9	75.1	32.2	
Vert	2400.000	PK	41.1	28.2	3.1	32.4	40.0	75.1	35.1	

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.3&No.2 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/13/2014	03/18/2014	03/25/2014
Temperature/ Humidity	24 deg. C / 33% RH	23 deg. C / 35% RH	23 deg. C / 40% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Kazuya Yoshioka (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	106.748	QP	42.4	11.1	8.1	32.1	29.5	43.5	14.0	
Hori	323.977	QP	43.8	15.1	10.0	31.9	37.0	46.0	9.0	
Hori	576.001	QP	38.4	19.2	11.6	32.0	37.2	46.0	8.8	
Hori	607.526	QP	38.6	19.6	11.8	32.0	38.0	46.0	8.0	
Hori	810.022	QP	33.3	22.0	12.8	31.4	36.7	46.0	9.3	
Hori	901.173	QP	34.2	22.3	13.3	30.9	38.9	46.0	7.1	
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	106.739	QP	46.6	11.1	8.1	32.1	33.7	43.5	9.8	
Vert	323.971	QP	40.7	15.1	10.0	31.9	33.9	46.0	12.1	
Vert	576.002	QP	33.1	19.2	11.6	32.0	31.9	46.0	14.1	
Vert	607.517	QP	42.2	19.6	11.8	32.0	41.6	46.0	4.4	
Vert	810.024	QP	36.6	22.0	12.8	31.4	40.0	46.0	6.0	
Vert	901.171	QP	32.8	22.3	13.3	30.9	37.5	46.0	8.5	
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: SONY)

Test place	Ise HQ EMC Lab. No.3&No.2 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/13/2014	03/18/2014	03/25/2014
Temperature/ Humidity	24 deg. C / 33% RH	23 deg. C / 35% RH	23 deg. C / 40% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Kazuya Yoshioka (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	106.747	QP	42.8	11.1	8.1	32.1	29.9	43.5	13.6	
Hori	323.988	QP	44.1	15.1	10.0	31.9	37.3	46.0	8.7	
Hori	576.005	QP	38.6	19.2	11.6	32.0	37.4	46.0	8.6	
Hori	607.522	QP	38.7	19.6	11.8	32.0	38.1	46.0	7.9	
Hori	810.023	QP	33.3	22.0	12.8	31.4	36.7	46.0	9.3	
Hori	901.179	QP	33.9	22.3	13.3	30.9	38.6	46.0	7.4	
Hori	2483.500	PK	42.7	28.4	3.1	32.3	41.9	73.9	32.0	
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	30.6	28.4	3.1	32.3	29.8	53.9	24.1	
Hori	4960.000	AV	NS	-	-	-	-	53.9	-	
Hori	7440.000	AV	NS	-	-	-	-	53.9	-	
Hori	9920.000	AV	NS	-	-	-	-	53.9	-	
Vert	106.743	QP	46.9	11.1	8.1	32.1	34.0	43.5	9.5	
Vert	323.977	QP	41.0	15.1	10.0	31.9	34.2	46.0	11.8	
Vert	576.001	QP	33.4	19.2	11.6	32.0	32.2	46.0	13.8	
Vert	607.513	QP	42.3	19.6	11.8	32.0	41.7	46.0	4.3	
Vert	810.027	QP	36.6	22.0	12.8	31.4	40.0	46.0	6.0	
Vert	901.190	QP	33.1	22.3	13.3	30.9	37.8	46.0	8.2	
Vert	2483.500	PK	44.4	28.4	3.1	32.3	43.6	73.9	30.3	
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	30.6	28.4	3.1	32.3	29.8	53.9	24.1	
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.3&No.2 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/13/2014	03/18/2014	03/25/2014
Temperature/ Humidity	24 deg. C / 33% RH	23 deg. C / 35% RH	23 deg. C / 40% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Keisuke Kawamura (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	106.734	QP	43.3	11.1	8.1	32.1	30.4	43.5	13.1	
Hori	323.981	QP	44.8	15.1	10.0	31.9	38.0	46.0	8.0	
Hori	576.002	QP	39.4	19.2	11.6	32.0	38.2	46.0	7.8	
Hori	607.517	QP	38.2	19.6	11.8	32.0	37.6	46.0	8.4	
Hori	810.019	QP	33.2	22.0	12.8	31.4	36.6	46.0	9.4	
Hori	901.182	QP	34.5	22.3	13.3	30.9	39.2	46.0	6.8	
Hori	2390.000	PK	41.3	28.2	3.1	32.4	40.2	73.9	33.8	
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	29.5	28.2	3.1	32.4	28.4	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	106.741	QP	47.5	11.1	8.1	32.1	34.6	43.5	8.9	
Vert	323.995	QP	41.7	15.1	10.0	31.9	34.9	46.0	11.1	
Vert	576.003	QP	34.0	19.2	11.6	32.0	32.8	46.0	13.2	
Vert	607.515	QP	42.7	19.6	11.8	32.0	42.1	46.0	3.9	
Vert	810.024	QP	37.1	22.0	12.8	31.4	40.5	46.0	5.5	
Vert	901.182	QP	33.3	22.3	13.3	30.9	38.0	46.0	8.0	
Vert	2390.000	PK	44.4	28.2	3.1	32.4	43.3	73.9	30.6	
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	30.5	28.2	3.1	32.4	29.4	53.9	24.5	
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.3 Semi Anechoic Chamber
Report No.	10240264H
Date	03/13/2014
Temperature/ Humidity	24 deg. C / 33% 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	92.1	28.2	3.1	32.4	91.0	-	-	Carrier
Hori	2400.000	PK	45.5	28.2	3.1	32.4	44.4	71.0	26.6	
Vert	2402.000	PK	94.0	28.2	3.1	32.4	92.9	-	-	Carrier
Vert	2400.000	PK	48.5	28.2	3.1	32.4	47.4	72.9	25.5	

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.3&No.2Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/13/2014	03/18/2014	03/25/2014
Temperature/ Humidity	24 deg. C / 33% RH	23 deg. C / 35% RH	23 deg. C / 40% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Keisuke Kawamura (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	106.752	QP	43.1	11.1	8.1	32.1	30.2	43.5	13.3	
Hori	323.999	QP	44.7	15.1	10.0	31.9	37.9	46.0	8.1	
Hori	576.002	QP	39.4	19.2	11.6	32.0	38.2	46.0	7.8	
Hori	607.517	QP	38.3	19.6	11.8	32.0	37.7	46.0	8.3	
Hori	810.019	QP	33.4	22.0	12.8	31.4	36.8	46.0	9.2	
Hori	901.182	QP	35.0	22.3	13.3	30.9	39.7	46.0	6.3	
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	106.752	QP	47.0	11.1	8.1	32.1	34.1	43.5	9.4	
Vert	323.995	QP	41.7	15.1	10.0	31.9	34.9	46.0	11.1	
Vert	576.003	QP	33.9	19.2	11.6	32.0	32.7	46.0	13.3	
Vert	607.517	QP	42.7	19.6	11.8	32.0	42.1	46.0	3.9	
Vert	810.024	QP	37.0	22.0	12.8	31.4	40.4	46.0	5.6	
Vert	901.182	QP	33.2	22.3	13.3	30.9	37.9	46.0	8.1	
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.3&No.2 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/13/2014	03/18/2014	03/25/2014
Temperature/ Humidity	24 deg. C / 33% RH	23 deg. C / 35% RH	23 deg. C / 40% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Keisuke Kawamura (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	106.752	QP	43.0	11.1	8.1	32.1	30.1	43.5	13.4	
Hori	323.999	QP	44.7	15.1	10.0	31.9	37.9	46.0	8.1	
Hori	576.002	QP	39.4	19.2	11.6	32.0	38.2	46.0	7.8	
Hori	607.517	QP	38.2	19.6	11.8	32.0	37.6	46.0	8.4	
Hori	810.019	QP	33.2	22.0	12.8	31.4	36.6	46.0	9.4	
Hori	901.171	QP	35.3	22.3	13.3	30.9	40.0	46.0	6.0	
Hori	2483.500	PK	53.4	28.4	3.1	32.3	52.6	73.9	21.3	
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	32.2	28.4	3.1	32.3	31.4	53.9	22.6	
Hori	4960.000	AV	NS	-	-	-	-	53.9	-	
Hori	7440.000	AV	NS	-	-	-	-	53.9	-	
Hori	9920.000	AV	NS	-	-	-	-	53.9	-	
Vert	106.752	QP	47.1	11.1	8.1	32.1	34.2	43.5	9.3	
Vert	323.995	QP	41.3	15.1	10.0	31.9	34.5	46.0	11.5	
Vert	576.003	QP	34.2	19.2	11.6	32.0	33.0	46.0	13.0	
Vert	607.517	QP	42.7	19.6	11.8	32.0	42.1	46.0	3.9	
Vert	810.024	QP	37.3	22.0	12.8	31.4	40.7	46.0	5.3	
Vert	901.182	QP	33.4	22.3	13.3	30.9	38.1	46.0	7.9	
Vert	2483.500	PK	53.9	28.4	3.1	32.3	53.1	73.9	20.8	
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	32.6	28.4	3.1	32.3	31.8	53.9	22.1	
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.3&No.2 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/13/2014	03/18/2014	03/24/2014
Temperature/ Humidity	24 deg. C / 33% RH	23 deg. C / 35% RH	21 deg. C / 35% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Keisuke Kawamura (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	108.791	QP	44.9	11.4	8.2	32.1	32.4	43.5	11.1	
Hori	327.184	QP	39.0	15.2	10.0	31.9	32.3	46.0	13.7	
Hori	576.006	QP	39.2	19.2	11.6	32.0	38.0	46.0	8.0	
Hori	607.524	QP	37.9	19.6	11.8	32.0	37.3	46.0	8.7	
Hori	810.023	QP	34.5	22.0	12.8	31.4	37.9	46.0	8.1	
Hori	901.153	QP	34.7	22.3	13.3	30.9	39.4	46.0	6.6	
Hori	2390.000	PK	42.0	28.2	3.1	32.4	40.9	73.9	33.0	
Hori	4804.000	PK	41.3	30.5	5.3	31.4	45.7	73.9	28.2	
Hori	7206.000	PK	NS	-	-	-	-	73.9	-	
Hori	9608.000	PK	NS	-	-	-	-	73.9	-	
Hori	2390.000	AV	29.6	28.2	3.1	32.4	28.5	53.9	25.4	
Hori	4804.000	AV	30.4	30.5	5.3	31.4	34.8	53.9	19.2	
Hori	7206.000	AV	NS	-	-	-	-	53.9	-	
Hori	9608.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.681	QP	39.2	17.7	7.0	32.2	31.7	40.0	8.3	
Vert	108.797	QP	46.7	11.4	8.2	32.1	34.2	43.5	9.3	
Vert	575.998	QP	34.4	19.2	11.6	32.0	33.2	46.0	12.8	
Vert	607.517	QP	42.2	19.6	11.8	32.0	41.6	46.0	4.4	
Vert	810.019	QP	36.8	22.0	12.8	31.4	40.2	46.0	5.8	
Vert	901.154	QP	33.2	22.3	13.3	30.9	37.9	46.0	8.1	
Vert	2390.000	PK	43.7	28.2	3.1	32.4	42.6	73.9	31.3	
Vert	4804.000	PK	42.0	30.5	5.3	31.4	46.4	73.9	27.5	
Vert	7206.000	PK	NS	-	-	-	-	73.9	-	
Vert	9608.000	PK	NS	-	-	-	-	73.9	-	
Vert	2390.000	AV	30.9	28.2	3.1	32.4	29.8	53.9	24.1	
Vert	4804.000	AV	32.4	30.5	5.3	31.4	36.8	53.9	17.1	
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.3 Semi Anechoic Chamber
Report No.	10240264H
Date	03/13/2014
Temperature/ Humidity	24 deg. C / 33% 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	93.9	28.2	3.1	32.4	92.8	-	-	Carrier
Hori	2399.696	PK	42.9	28.2	3.1	32.4	41.8	72.8	31.0	
Hori	2400.000	PK	41.2	28.2	3.1	32.4	40.1	72.8	32.7	
Vert	2402.000	PK	95.9	28.2	3.1	32.4	94.8	-	-	Carrier
Vert	2399.542	PK	42.9	28.2	3.1	32.4	41.8	74.8	33.0	
Vert	2400.000	PK	42.2	28.2	3.1	32.4	41.1	74.8	33.7	

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.3&No.2 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/13/2014	03/18/2014	03/24/2014
Temperature/ Humidity	24 deg. C / 33% RH	23 deg. C / 35% RH	21 deg. C / 35% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Keisuke Kawamura (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	108.791	QP	42.0	11.4	8.2	32.1	29.5	43.5	14.0	
Hori	327.184	QP	39.1	15.2	10.0	31.9	32.4	46.0	13.6	
Hori	575.998	QP	39.1	19.2	11.6	32.0	37.9	46.0	8.1	
Hori	607.524	QP	37.8	19.6	11.8	32.0	37.2	46.0	8.8	
Hori	810.023	QP	34.3	22.0	12.8	31.4	37.7	46.0	8.3	
Hori	901.153	QP	35.1	22.3	13.3	30.9	39.8	46.0	6.2	
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	31.681	QP	39.1	17.7	7.0	32.2	31.6	40.0	8.4	
Vert	108.797	QP	46.7	11.4	8.2	32.1	34.2	43.5	9.3	
Vert	575.998	QP	34.4	19.2	11.6	32.0	33.2	46.0	12.8	
Vert	607.517	QP	42.2	19.6	11.8	32.0	41.6	46.0	4.4	
Vert	810.019	QP	36.9	22.0	12.8	31.4	40.3	46.0	5.7	
Vert	901.166	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.3&No.2 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/13/2014	03/18/2014	03/24/2014
Temperature/ Humidity	24 deg. C / 33% RH	23 deg. C / 35% RH	21 deg. C / 35% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Keisuke Kawamura (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	108.791	QP	41.9	11.4	8.2	32.1	29.4	43.5	14.1	
Hori	327.184	QP	39.1	15.2	10.0	31.9	32.4	46.0	13.6	
Hori	575.998	QP	38.9	19.2	11.6	32.0	37.7	46.0	8.3	
Hori	607.524	QP	37.8	19.6	11.8	32.0	37.2	46.0	8.8	
Hori	810.023	QP	34.2	22.0	12.8	31.4	37.6	46.0	8.4	
Hori	901.177	QP	34.9	22.3	13.3	30.9	39.6	46.0	6.4	
Hori	2483.500	PK	44.5	28.4	3.1	32.3	43.7	73.9	30.2	
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	30.4	28.4	3.1	32.3	29.6	53.9	24.3	
Hori	4960.000	AV	NS	-	-	-	-	53.9	-	
Hori	7440.000	AV	NS	-	-	-	-	53.9	-	
Hori	9920.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.681	QP	39.1	17.7	7.0	32.2	31.6	40.0	8.4	
Vert	108.797	QP	46.7	11.4	8.2	32.1	34.2	43.5	9.3	
Vert	576.004	QP	34.4	19.2	11.6	32.0	33.2	46.0	12.8	
Vert	607.517	QP	42.2	19.6	11.8	32.0	41.6	46.0	4.4	
Vert	810.026	QP	36.7	22.0	12.8	31.4	40.1	46.0	5.9	
Vert	901.179	QP	33.3	22.3	13.3	30.9	38.0	46.0	8.0	
Vert	2483.500	PK	43.3	28.4	3.1	32.3	42.5	73.9	31.4	
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	30.4	28.4	3.1	32.3	29.6	53.9	24.3	
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

Radiated Spurious Emission
(Power Supply: DELTA)

Test place	Ise HQ EMC Lab. No.3&No.2 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/14/2014	03/18/2014	03/24/2014
Temperature/ Humidity	23 deg. C / 32% RH	23 deg. C / 35% RH	21 deg. C / 35% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Keisuke Kawamura (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	108.791	QP	41.9	11.4	8.2	32.1	29.4	43.5	14.1	
Hori	327.195	QP	39.1	15.2	10.0	31.9	32.4	46.0	13.6	
Hori	576.005	QP	38.1	19.2	11.6	32.0	36.9	46.0	9.1	
Hori	607.521	QP	37.9	19.6	11.8	32.0	37.3	46.0	8.7	
Hori	810.023	QP	34.2	22.0	12.8	31.4	37.6	46.0	8.4	
Hori	901.166	QP	35.2	22.3	13.3	30.9	39.9	46.0	6.1	
Hori	2390.000	PK	43.4	28.2	3.1	32.4	42.3	73.9	31.6	
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	29.9	28.2	3.1	32.4	28.8	53.9	25.2	
Hori	4804.000	AV	NS	-	-	-	-	53.9	-	
Hori	7206.000	AV	NS	-	-	-	-	53.9	-	
Hori	9608.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.681	QP	39.0	17.7	7.0	32.2	31.5	40.0	8.5	
Vert	108.797	QP	46.8	11.4	8.2	32.1	34.3	43.5	9.2	
Vert	576.004	QP	34.4	19.2	11.6	32.0	33.2	46.0	12.8	
Vert	607.517	QP	42.4	19.6	11.8	32.0	41.8	46.0	4.2	
Vert	810.026	QP	36.8	22.0	12.8	31.4	40.2	46.0	5.8	
Vert	901.166	QP	33.5	22.3	13.3	30.9	38.2	46.0	7.8	
Vert	2390.000	PK	46.1	28.2	3.1	32.4	45.0	73.9	28.9	
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	31.2	28.2	3.1	32.4	30.1	53.9	23.8	
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.3 Semi Anechoic Chamber
Report No.	10240264H
Date	03/14/2014
Temperature/ Humidity	23 deg. C / 32% 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	93.1	28.2	3.1	32.4	92.0	-	-	Carrier
Hori	2400.000	PK	49.7	28.2	3.1	32.4	48.6	72.0	23.4	
Vert	2402.000	PK	94.2	28.2	3.1	32.4	93.1	-	-	Carrier
Vert	2400.000	PK	50.7	28.2	3.1	32.4	49.6	73.1	23.5	

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.3&No.2Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/14/2014	03/18/2014	03/24/2014
Temperature/ Humidity	23 deg. C / 32% RH	23 deg. C / 35% RH	21 deg. C / 35% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Keisuke Kawamura (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	108.791	QP	42.0	11.4	8.2	32.1	29.5	43.5	14.0	
Hori	327.184	QP	39.2	15.2	10.0	31.9	32.5	46.0	13.5	
Hori	576.005	QP	38.6	19.2	11.6	32.0	37.4	46.0	8.6	
Hori	607.524	QP	37.9	19.6	11.8	32.0	37.3	46.0	8.7	
Hori	810.023	QP	33.9	22.0	12.8	31.4	37.3	46.0	8.7	
Hori	901.166	QP	35.0	22.3	13.3	30.9	39.7	46.0	6.3	
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	31.681	QP	39.0	17.7	7.0	32.2	31.5	40.0	8.5	
Vert	108.797	QP	46.8	11.4	8.2	32.1	34.3	43.5	9.2	
Vert	576.004	QP	34.5	19.2	11.6	32.0	33.3	46.0	12.7	
Vert	607.517	QP	42.2	19.6	11.8	32.0	41.6	46.0	4.4	
Vert	810.026	QP	36.8	22.0	12.8	31.4	40.2	46.0	5.8	
Vert	901.166	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.3&No.2 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/14/2014	03/18/2014	03/24/2014
Temperature/ Humidity	23 deg. C / 32% RH	23 deg. C / 35% RH	21 deg. C / 35% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Keisuke Kawamura (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	108.791	QP	42.0	11.4	8.2	32.1	29.5	43.5	14.0	
Hori	327.184	QP	39.0	15.2	10.0	31.9	32.3	46.0	13.7	
Hori	576.005	QP	38.7	19.2	11.6	32.0	37.5	46.0	8.5	
Hori	607.524	QP	37.8	19.6	11.8	32.0	37.2	46.0	8.8	
Hori	810.023	QP	33.7	22.0	12.8	31.4	37.1	46.0	8.9	
Hori	901.177	QP	35.0	22.3	13.3	30.9	39.7	46.0	6.3	
Hori	2483.500	PK	53.8	28.4	3.1	32.3	53.0	73.9	20.9	
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	32.4	28.4	3.1	32.3	31.6	53.9	22.3	
Hori	4960.000	AV	NS	-	-	-	-	53.9	-	
Hori	7440.000	AV	NS	-	-	-	-	53.9	-	
Hori	9920.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.681	QP	39.2	17.7	7.0	32.2	31.7	40.0	8.3	
Vert	108.797	QP	46.7	11.4	8.2	32.1	34.2	43.5	9.3	
Vert	576.004	QP	34.5	19.2	11.6	32.0	33.3	46.0	12.7	
Vert	607.517	QP	42.3	19.6	11.8	32.0	41.7	46.0	4.3	
Vert	810.026	QP	36.8	22.0	12.8	31.4	40.2	46.0	5.8	
Vert	901.179	QP	33.1	22.3	13.3	30.9	37.8	46.0	8.2	
Vert	2483.500	PK	53.8	28.4	3.1	32.3	53.0	73.9	20.9	
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	32.4	28.4	3.1	32.3	31.6	53.9	22.4	
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&No.3 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/17/2014	03/18/2014	03/24/2014
Temperature/ Humidity	23 deg. C / 35% RH	23 deg. C / 35% RH	21 deg. C / 35% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Keisuke Kawamura (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	108.791	QP	41.1	11.4	8.2	32.1	28.6	43.5	14.9	
Hori	323.995	QP	39.8	15.1	10.0	31.9	33.0	46.0	13.0	
Hori	576.005	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	34.2	22.0	12.8	31.4	37.6	46.0	8.4	
Hori	901.169	QP	35.2	22.3	13.3	30.9	39.9	46.0	6.1	
Hori	2390.000	PK	45.7	27.0	2.4	34.7	40.4	73.9	33.5	
Hori	4804.000	PK	44.0	31.8	4.4	33.9	46.3	73.9	27.6	
Hori	7206.000	PK	NS	-	-	-	-	73.9	-	
Hori	9608.000	PK	NS	-	-	-	-	73.9	-	
Hori	2390.000	AV	33.0	27.0	2.4	34.7	27.7	53.9	26.2	
Hori	4804.000	AV	35.1	31.8	4.4	33.9	37.4	53.9	16.6	
Hori	7206.000	AV	NS	-	-	-	-	53.9	-	
Hori	9608.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.681	QP	37.8	17.7	7.0	32.2	30.3	40.0	9.7	
Vert	106.755	QP	46.9	11.1	8.1	32.1	34.0	43.5	9.5	
Vert	576.004	QP	34.7	19.2	11.6	32.0	33.5	46.0	12.5	
Vert	607.517	QP	42.8	19.6	11.8	32.0	42.2	46.0	3.8	
Vert	810.026	QP	36.9	22.0	12.8	31.4	40.3	46.0	5.7	
Vert	901.169	QP	33.2	22.3	13.3	30.9	37.9	46.0	8.1	
Vert	2390.000	PK	48.1	27.0	2.4	34.7	42.8	73.9	31.1	
Vert	4804.000	PK	43.7	31.8	4.4	33.9	46.0	73.9	27.9	
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	35.2	31.8	4.4	33.9	37.5	53.9	16.4	
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	99.1	27.0	2.4	34.7	93.8	-	-	Carrier
Hori	2399.570	PK	46.7	27.0	2.4	34.7	41.4	73.8	32.4	
Hori	2400.000	PK	44.3	27.0	2.4	34.7	39.0	73.8	34.8	
Vert	2402.000	PK	101.2	27.0	2.4	34.7	95.9	-	-	Carrier
Vert	2399.775	PK	49.2	27.0	2.4	34.7	43.9	75.9	32.0	
Vert	2400.000	PK	46.3	27.0	2.4	34.7	41.0	75.9	34.9	

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&No.3 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/17/2014	03/18/2014	03/24/2014
Temperature/ Humidity	23 deg. C / 35% RH	23 deg. C / 35% RH	21 deg. C / 35% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Keisuke Kawamura (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	108.791	QP	41.2	11.4	8.2	32.1	28.7	43.5	14.8	
Hori	323.995	QP	39.8	15.1	10.0	31.9	33.0	46.0	13.0	
Hori	576.005	QP	38.1	19.2	11.6	32.0	36.9	46.0	9.1	
Hori	607.521	QP	38.3	19.6	11.8	32.0	37.7	46.0	8.3	
Hori	810.023	QP	34.5	22.0	12.8	31.4	37.9	46.0	8.1	
Hori	901.158	QP	34.6	22.3	13.3	30.9	39.3	46.0	6.7	
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	31.681	QP	37.8	17.7	7.0	32.2	30.3	40.0	9.7	
Vert	106.755	QP	46.8	11.1	8.1	32.1	33.9	43.5	9.6	
Vert	576.004	QP	34.7	19.2	11.6	32.0	33.5	46.0	12.5	
Vert	607.517	QP	42.6	19.6	11.8	32.0	42.0	46.0	4.0	
Vert	810.026	QP	37.0	22.0	12.8	31.4	40.4	46.0	5.6	
Vert	901.158	QP	33.4	22.3	13.3	30.9	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: Chicony)

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	23 deg. C / 35% RH	23 deg. C / 35% RH	21 deg. C / 35% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Keisuke Kawamura (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	108.791	QP	41.0	11.4	8.2	32.1	28.5	43.5	15.0	
Hori	323.995	QP	39.9	15.1	10.0	31.9	33.1	46.0	12.9	
Hori	576.005	QP	38.4	19.2	11.6	32.0	37.2	46.0	8.8	
Hori	607.521	QP	38.2	19.6	11.8	32.0	37.6	46.0	8.4	
Hori	810.023	QP	34.2	22.0	12.8	31.4	37.6	46.0	8.4	
Hori	901.158	QP	34.8	22.3	13.3	30.9	39.5	46.0	6.5	
Hori	2483.500	PK	45.6	26.9	2.5	34.7	40.3	73.9	33.6	
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	33.4	26.9	2.5	34.7	28.1	53.9	25.9	
Hori	4960.000	AV	NS	-	-	-	-	53.9	-	
Hori	7440.000	AV	NS	-	-	-	-	53.9	-	
Hori	9920.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.681	QP	37.8	17.7	7.0	32.2	30.3	40.0	9.7	
Vert	106.755	QP	46.9	11.1	8.1	32.1	34.0	43.5	9.5	
Vert	576.004	QP	34.7	19.2	11.6	32.0	33.5	46.0	12.5	
Vert	607.517	QP	42.6	19.6	11.8	32.0	42.0	46.0	4.0	
Vert	810.026	QP	37.0	22.0	12.8	31.4	40.4	46.0	5.6	
Vert	901.158	QP	33.5	22.3	13.3	30.9	38.2	46.0	7.8	
Vert	2483.500	PK	46.0	26.9	2.5	34.7	40.7	73.9	33.2	
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	33.8	26.9	2.5	34.7	28.5	53.9	25.4	
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&No.3 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/17/2014	03/18/2014	03/24/2014
Temperature/ Humidity	23 deg. C / 35% RH	23 deg. C / 35% RH	21 deg. C / 35% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Keisuke Kawamura (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	108.791	QP	41.0	11.4	8.2	32.1	28.5	43.5	15.0	
Hori	327.195	QP	37.7	15.2	10.0	31.9	31.0	46.0	15.0	
Hori	576.005	QP	37.5	19.2	11.6	32.0	36.3	46.0	9.7	
Hori	607.521	QP	38.3	19.6	11.8	32.0	37.7	46.0	8.3	
Hori	810.023	QP	34.0	22.0	12.8	31.4	37.4	46.0	8.6	
Hori	901.171	QP	34.8	22.3	13.3	30.9	39.5	46.0	6.5	
Hori	2390.000	PK	44.8	28.2	3.1	32.4	43.7	73.9	30.2	
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	28.2	3.1	32.4	31.5	53.9	22.4	
Hori	4804.000	AV	NS	-	-	-	-	53.9	-	
Hori	7206.000	AV	NS	-	-	-	-	53.9	-	
Hori	9608.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.681	QP	37.9	17.7	7.0	32.2	30.4	40.0	9.6	
Vert	106.755	QP	46.9	11.1	8.1	32.1	34.0	43.5	9.5	
Vert	576.004	QP	34.5	19.2	11.6	32.0	33.3	46.0	12.7	
Vert	607.517	QP	42.4	19.6	11.8	32.0	41.8	46.0	4.2	
Vert	810.026	QP	37.0	22.0	12.8	31.4	40.4	46.0	5.6	
Vert	901.171	QP	33.5	22.3	13.3	30.9	38.2	46.0	7.8	
Vert	2390.000	PK	48.0	28.2	3.1	32.4	46.9	73.9	27.0	
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	34.1	28.2	3.1	32.4	33.0	53.9	20.9	
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	97.5	28.2	3.1	32.4	96.4	-	-	Carrier
Hori	2400.000	PK	51.6	28.2	3.1	32.4	50.5	76.4	25.9	
Vert	2402.000	PK	99.2	28.2	3.1	32.4	98.1	-	-	Carrier
Vert	2400.000	PK	52.6	28.2	3.1	32.4	51.5	78.1	26.6	

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 &No.3Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/17/2014	03/18/2014	03/24/2014
Temperature/ Humidity	23 deg. C / 35% RH	23 deg. C / 35% RH	21 deg. C / 35% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Keisuke Kawamura (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	108.791	QP	41.0	11.4	8.2	32.1	28.5	43.5	15.0	
Hori	327.195	QP	38.3	15.2	10.0	31.9	31.6	46.0	14.4	
Hori	576.005	QP	38.1	19.2	11.6	32.0	36.9	46.0	9.1	
Hori	607.521	QP	38.3	19.6	11.8	32.0	37.7	46.0	8.3	
Hori	810.023	QP	34.1	22.0	12.8	31.4	37.5	46.0	8.5	
Hori	901.158	QP	34.7	22.3	13.3	30.9	39.4	46.0	6.6	
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	31.681	QP	37.8	17.7	7.0	32.2	30.3	40.0	9.7	
Vert	106.755	QP	46.7	11.1	8.1	32.1	33.8	43.5	9.7	
Vert	576.004	QP	34.8	19.2	11.6	32.0	33.6	46.0	12.4	
Vert	607.517	QP	42.6	19.6	11.8	32.0	42.0	46.0	4.0	
Vert	810.026	QP	36.9	22.0	12.8	31.4	40.3	46.0	5.7	
Vert	901.158	QP	33.2	22.3	13.3	30.9	37.9	46.0	8.1	
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&No.3 Semi Anechoic Chamber		
Report No.	10240264H		
Date	03/17/2014	03/18/2014	03/24/2014
Temperature/ Humidity	23 deg. C / 35% RH	23 deg. C / 35% RH	21 deg. C / 35% RH
Engineer	Kazuya Yoshioka (1-10GHz)	Kazuya Yoshioka (10-26.5GHz)	Keisuke Kawamura (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	108.791	QP	41.1	11.4	8.2	32.1	28.6	43.5	14.9	
Hori	323.995	QP	40.0	15.1	10.0	31.9	33.2	46.0	12.8	
Hori	576.005	QP	38.4	19.2	11.6	32.0	37.2	46.0	8.8	
Hori	607.521	QP	38.3	19.6	11.8	32.0	37.7	46.0	8.3	
Hori	810.023	QP	34.1	22.0	12.8	31.4	37.5	46.0	8.5	
Hori	901.176	QP	34.4	22.3	13.3	30.9	39.1	46.0	6.9	
Hori	2483.500	PK	56.9	26.9	2.5	34.7	51.6	73.9	22.3	
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	34.8	26.9	2.5	34.7	29.5	53.9	24.4	
Hori	4960.000	AV	NS	-	-	-	-	53.9	-	
Hori	7440.000	AV	NS	-	-	-	-	53.9	-	
Hori	9920.000	AV	NS	-	-	-	-	53.9	-	
Vert	31.681	QP	37.8	17.7	7.0	32.2	30.3	40.0	9.7	
Vert	106.755	QP	46.9	11.1	8.1	32.1	34.0	43.5	9.5	
Vert	576.004	QP	34.9	19.2	11.6	32.0	33.7	46.0	12.3	
Vert	607.517	QP	42.6	19.6	11.8	32.0	42.0	46.0	4.0	
Vert	810.026	QP	36.9	22.0	12.8	31.4	40.3	46.0	5.7	
Vert	901.176	QP	33.5	22.3	13.3	30.9	38.2	46.0	7.8	
Vert	2483.500	PK	57.3	26.9	2.5	34.7	52.0	73.9	21.9	
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	35.3	26.9	2.5	34.7	30.0	53.9	23.9	
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

APPENDIX 2: Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MAEC-03	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	RE/CE	2014/02/27 * 12
MOS-13	Thermo-Hygrometer	Custom	CTH-180	1301	RE/CE	2014/02/20 * 12
MJM-16	Measure	KOMELON	KMC-36	-	RE/CE	-
COTS-MEMI	EMI measurement program	TSJ	TEPTO-DV	-	RE/CE	-
MHA-20	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	258	RE	2013/05/17 * 12
MCC-133	Microwave Cable	HUBER+SUHNER	SUCOFLEX104	336164/4(1m) / 340640(5m)	RE	2013/09/27 * 12
MPA-11	MicroWave System Amplifier	Agilent	83017A	MY39500779	RE	2014/03/24 * 12
MHF-25	High Pass Filter 3.5-18.0GHz	UL Japan	HPF SELECTOR	001	RE	2013/09/01 * 12
MRENT-114	Spectrum Analyzer	Agilent	E4440A	MY46187105	RE/CE	2013/11/11 * 12
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	-
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-08	Test Receiver	Rohde & Schwarz	ESCI	100767	RE/CE	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
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	8127363	CE(AE)	2014/01/27 * 12
MLS-07	LISN(AMN)	Schwarzbeck	NSLK8127	8127364	CE(EUT)	2014/01/27 * 12
MTA-31	Terminator	TME	CT-01	-	CE	2014/01/20 * 12
MCC-112	Coaxial cable	Fujikura/Suhner/TSJ	5D-2W(10m)/SFM141(3m)/sucoform141-PE(1m)/421-010(1.5m)/RFM-E321(Switcher)	-/00640	CE	2013/07/23 * 12
MAT-66	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

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