



Test report No. : 10130122S
Page : 1 of 22
Issued date : December 6, 2013
Revised date : December 9, 2013
FCC ID : 2AADJFFS-W

EMI TEST REPORT

Test Report No.: 10130122S

Applicant : Sony Engineering Corporation
Type of Equipment : RF glow-wristband receiver
Model No. : FFS-W
FCC ID : 2AADJFFS-W
Test regulation : FCC Part15 Subpart B: 2013
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 limits of the above regulation.
4. The test results in this test 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 any agency of the Federal Government.
6. The opinions and the interpretations to the result of the description in this report are outside scopes where UL Japan has been accredited.

Date of test:

November 28, 2013

Representative test engineer:

Akio Hayashi

Engineer of WiSE Japan,
UL Verification Service

Approved by :

Toyokazu Imamura
Leader of WiSE Japan,
UL Verification Service



- ☐ The testing in which "Non-accreditation" is displayed is outside the accreditation scopes in UL Japan.
☒ There is no testing item of "Non-accreditation".

UL Japan, Inc.

Shonan EMC Lab.

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13-EM-F0429

REVISION HISTORY

Original Test Report No.: 10130122S

[illegible]

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SECTION 3: Test specification, procedures & results

3.1 Test specification

Test specification : FCC Part 15 Subpart B: 2013,
final revised on September 30, 2013 and effective October 30, 2013
Title : FCC 47CFR Part 15 Radio Frequency Device
Subpart B Unintentional Radiators

3.2 Procedures & Results

Item	Test Procedure	Limits	Deviation	Worst margin	Result
Conducted emission	ANSI C63.4: 2009 7. AC powerline conducted emission measurements	FCC 15.107 (a)	N/A *1)	N/A	N/A
Radiated emission	ANSI C63.4: 2009 8. Radiated emission measurements	FCC 15.109 (a)	N/A	19.5dB Freq.: 390.004MHz Polarization: Vertical Detection: Quasi-Peak Mode: Receiving Hopping	Complied
Antenna power conduction for receivers	ANSI C63.4: 2009 12.2.5 Antenna-conducted power measurements	FCC 15.111 (a)	N/A *2)	N/A	N/A

*1) The test is not applicable since the EUT does not have AC Mains ports.

*2) The test is not applicable since the EUT does not have antenna ports.

Note: UL Japan's EMI Work Procedures No.13-EM-W0420

3.3 Additions to standards

No addition, deviation or exclusion has been made from standards.

3.4 Confirmation

UL Japan, Inc. hereby confirms the E.U.T., in the configuration tested, complies with the specifications FCC Part 15 Subpart B: 2013.

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3.5 Uncertainty

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

Item	Frequency range	No.1 SAC ^{*1} /SR ^{*2} (±)	No.2 SAC/SR (±)	No.3 SAC/SR (±)
Radiated emission (Measurement distance: 3m)	30MHz-300MHz	4.8 dB	5.0 dB	4.8 dB
	300MHz-1GHz	5.0 dB	5.0 dB	4.8 dB
	1GHz-18GHz	4.9 dB	4.9 dB	4.9 dB

*1: SAC=Semi-Anechoic Chamber

*2: SR= Shielded Room is applied besides radiated emission

Radiated emission

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

3.6 Test location

UL Japan, Inc. Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone number : +81 463 50 6400

Facsimile number : +81 463 50 6401

JAB Accreditation No. : RTL02610

	FCC Registration No.	IC Registration No.	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Maximum measurement distance
<input type="checkbox"/> No.1 Semi-anechoic chamber	697847	2973D-1	20.6 x 11.3 x 7.65	20.6 x 11.3	10m
<input type="checkbox"/> No.2 Semi-anechoic chamber	697847	2973D-2	20.6 x 11.3 x 7.65	20.6 x 11.3	10m
<input checked="" type="checkbox"/> No.3 Semi-anechoic chamber	697847	2973D-3	12.7 x 7.7 x 5.35	12.7 x 7.7	5m
<input type="checkbox"/> No.4 Semi-anechoic chamber	-	-	8.1 x 5.1 x 3.55	8.1 x 5.1	-
<input type="checkbox"/> No.1 shielded room	-	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
<input type="checkbox"/> No.2 shielded room	-	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
<input type="checkbox"/> No.3 shielded room	-	-	6.3 x 4.7 x 2.7	6.3 x 4.7	-
<input type="checkbox"/> No.4 shielded room	-	-	4.4 x 4.7 x 2.7	4.4 x 4.7	-
<input type="checkbox"/> No.5 shielded room	-	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-
<input type="checkbox"/> No.6 shielded room	-	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-

3.7 Test Setup, Data of EMI & Test instruments

Refer to Appendix 1 to 3.

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

4.1 Operating mode

The EUT exercise program used during testing was designed to exercise the various system components in a manner similar to typical use.

Test sequence is used : 1) Receiving 902.2MHz
2) Receiving 914.2MHz
3) Receiving 926.7MHz
4) Receiving Hopping
Software : N/A

Justification: The system was configured in typical fashion (as a customer would normally use it) for testing.

4.2 Configuration and peripherals

This clause has been submitted for separate exhibit. Refer to APPENDIX 4.

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SECTION 5: Radiated emission

5.1 Operating environment

The test was carried out in No.3 semi-anechoic chamber.

Temperature : See test data
Humidity : See test data

5.2 Test configuration

EUT was placed on a polyethylene platform of nominal size, 0.5m by 0.5m, raised 0.8m above the conducting ground plane. Photographs of the set up are shown in Appendix 1.

5.3 Test conditions

Frequency range : 30MHz - 5GHz
Test distance : 3m
EUT position : Table top

5.4 Test procedure

The Radiated Electric Field Strength intensity has been measured on an anechoic chamber with a ground plane and at a distance of 3m. Measurements were performed with quasi-peak, peak and average detector. The measuring antenna height was varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity. The measurements were performed for both vertical and horizontal antenna polarization. The radiated emission measurements were made with the following detector function of the test receiver.

Frequency	:	30-1000MHz	1-5GHz
Detector Type	:	Quasi-Peak	Peak * Average
IF Bandwidth	:	120kHz	RBW:1MHz/VBW:3MHz RBW:1MHz/VBW:10Hz

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

The noise levels were confirmed at each position of X, Y and Z axes of EUT to see the position of maximum noise, and the test was made at the position that has the maximum noise.
Worst position: Refer to the data.

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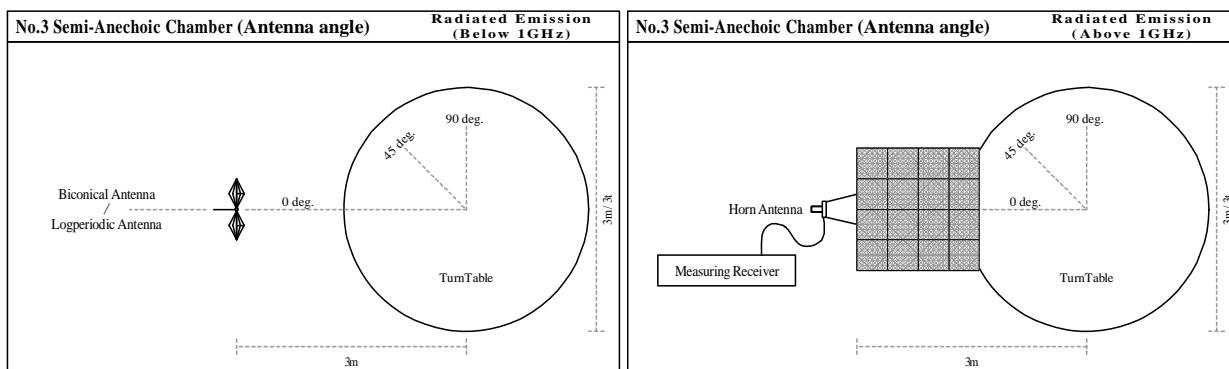


Figure 1. Antenna angle

5.5 Results

Summary of the test results : Pass
Refer to APPENDIX 2

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Contents of appendixes

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Radiated emission

APPENDIX 2: Test instruments

Test instruments

APPENDIX 3: Photographs of test setup

Radiated emission

APPENDIX 4: Configuration and peripherals

Configuration and peripherals

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DATA OF RADIATED EMISSION TEST

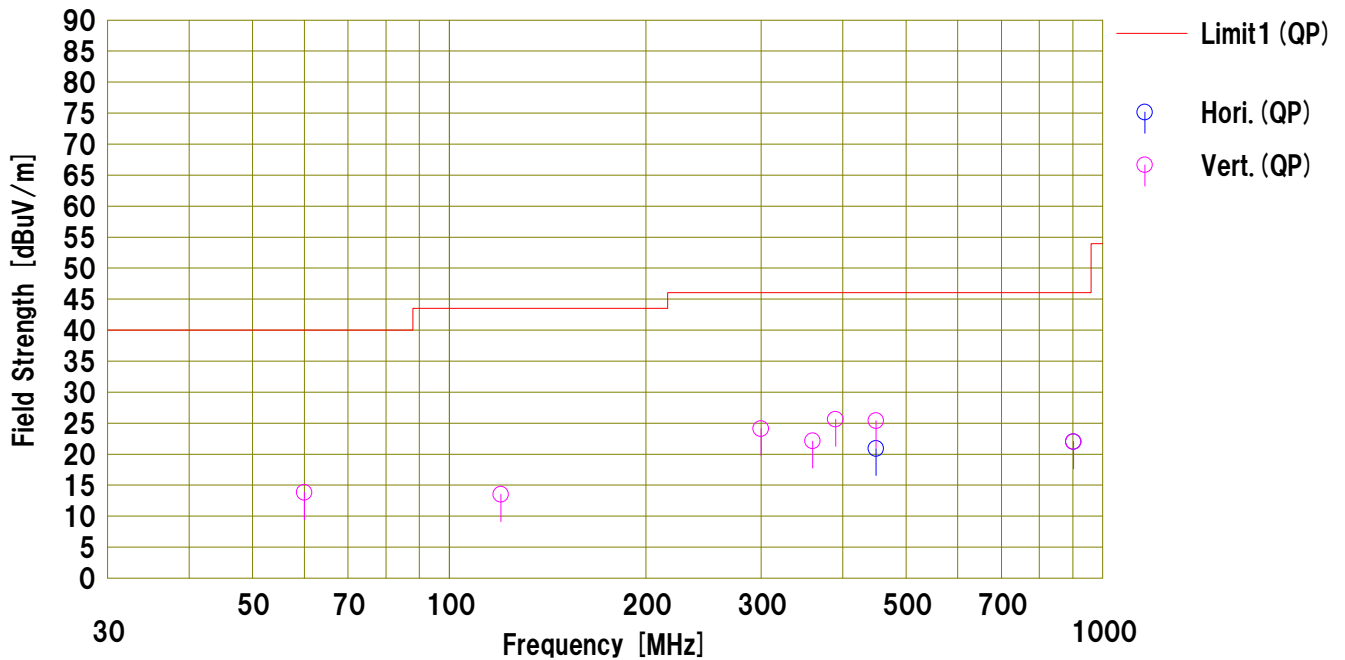
UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2013/11/28

Company : Sony Engineering Corporation
 Kind of EUT : RF glow-wristband receiver
 Model No. : FFS-W
 Serial No. : No.1
 Remarks : Horizontal:Y-axis, Vertical:Z-axis

Mode : Receiving 902.2MHz
 Order No. : 10130122S
 Power : DC 1.5V
 Temp./Humi. : 23deg.C. / 34%RH

Limit1 : FCC 15B Class B (3m)

Engineer : Akio Hayashi



No.	Freq. [MHz]	Reading <QP> [dBuV]	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	S.Fac [dB]	Result <QP> [dBuV/m]	Limit <QP> [dBuV/m]	Margin <QP> [dB]	Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[H/V]	[cm]	[deg]		
1	450.002	26.7	16.8	9.3	31.9	0.0	20.9	46.0	25.1	Hori.	388	354	LP	
2	902.200	20.6	21.6	10.8	31.0	0.0	22.0	46.0	24.0	Hori.	100	0	LP	
3	59.992	31.4	8.1	6.9	32.2	-0.4	13.8	40.0	26.2	Vert.	100	359	BC	
4	120.005	25.3	13.1	7.4	32.1	-0.2	13.5	43.5	30.0	Vert.	145	359	BC	
5	300.001	33.8	13.8	8.5	32.0	0.0	24.1	46.0	21.9	Vert.	100	339	LP	
6	360.002	29.8	15.3	8.9	31.9	0.0	22.1	46.0	23.9	Vert.	100	341	LP	
7	390.033	32.5	16.1	9.0	32.0	0.0	25.6	46.0	20.4	Vert.	100	267	LP	
8	450.002	31.2	16.8	9.3	31.9	0.0	25.4	46.0	20.6	Vert.	100	246	LP	
9	902.200	20.6	21.6	10.8	31.0	0.0	22.0	46.0	24.0	Vert.	100	0	LP	

DATA OF RADIATED EMISSION TEST

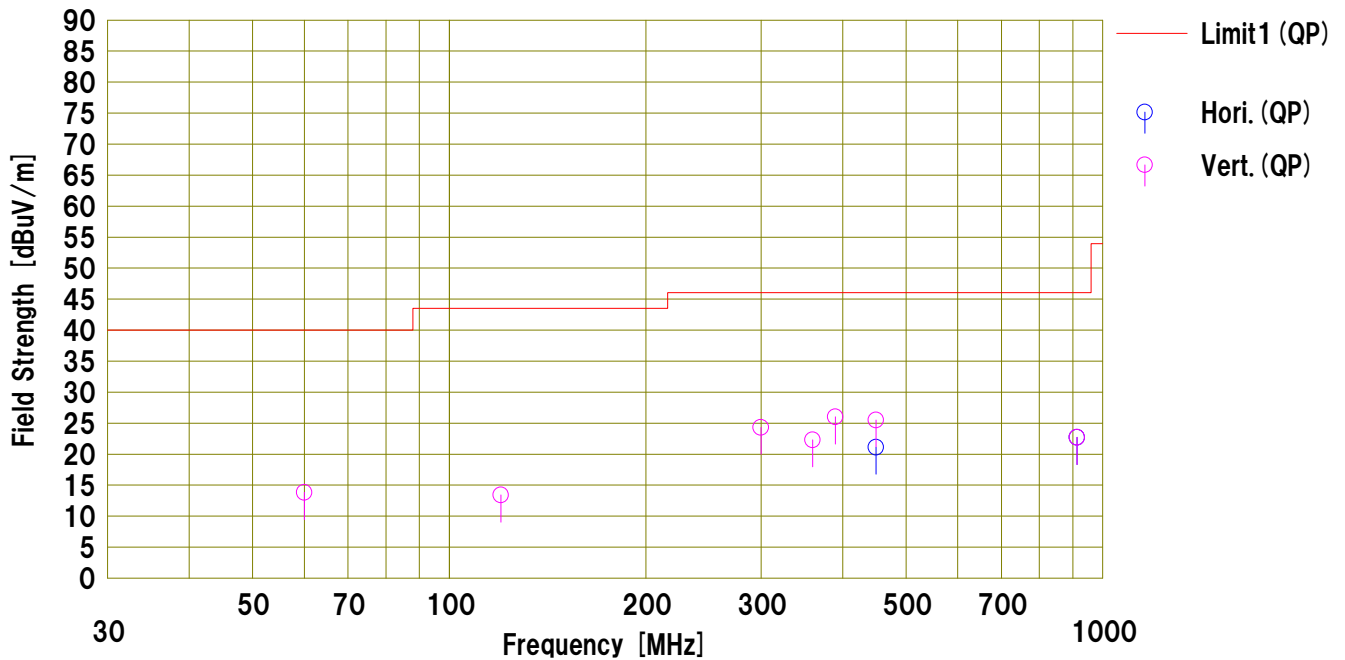
UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2013/11/28

Company : Sony Engineering Corporation
Kind of EUT : RF glow-wristband receiver
Model No. : FFS-W
Serial No. : No.2
Remarks : Horizontal:Y-axis, Vertical:Z-axis

Mode : Receiving 914.2MHz
Order No. : 10130122S
Power : DC 1.5V
Temp./Humi. : 23deg.C. / 34%RH

Limit1 : FCC 15B Class B (3m)

Engineer : Akio Hayashi



No.	Freq.	Reading <QP>	Ant.Fac	Loss	Gain	S.Fac	Result <QP>	Limit <QP>	Margin <QP>	Pola.	Height	Angle	Ant. Type	Comment
	[MHz]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[H/V]	[cm]	[deg]		
1	450.002	26.9	16.8	9.3	31.9	0.0	21.1	46.0	24.9	Hori.	326	359	LP	
2	914.200	21.0	21.7	10.9	30.9	0.0	22.7	46.0	23.3	Hori.	100	0	LP	
3	60.006	31.4	8.1	6.9	32.2	-0.4	13.8	40.0	26.2	Vert.	100	186	BC	
4	119.999	25.2	13.1	7.4	32.1	-0.2	13.4	43.5	30.1	Vert.	100	357	BC	
5	300.002	34.0	13.8	8.5	32.0	0.0	24.3	46.0	21.7	Vert.	100	354	LP	
6	360.003	30.0	15.3	8.9	31.9	0.0	22.3	46.0	23.7	Vert.	100	137	LP	
7	390.000	32.9	16.1	9.0	32.0	0.0	26.0	46.0	20.0	Vert.	100	28	LP	
8	450.000	31.3	16.8	9.3	31.9	0.0	25.5	46.0	20.5	Vert.	100	243	LP	
9	914.200	21.0	21.7	10.9	30.9	0.0	22.7	46.0	23.3	Vert.	100	0	LP	

Calculation: Result [dBuV/m] = Reading [dBuV] + Ant.Fac [dB/m] + Loss (Cable+ATT) [dB] - Gain (AMP) [dB] + S.Fac (ΔAF) [dB]
Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna SHA**: Horn

DATA OF RADIATED EMISSION TEST

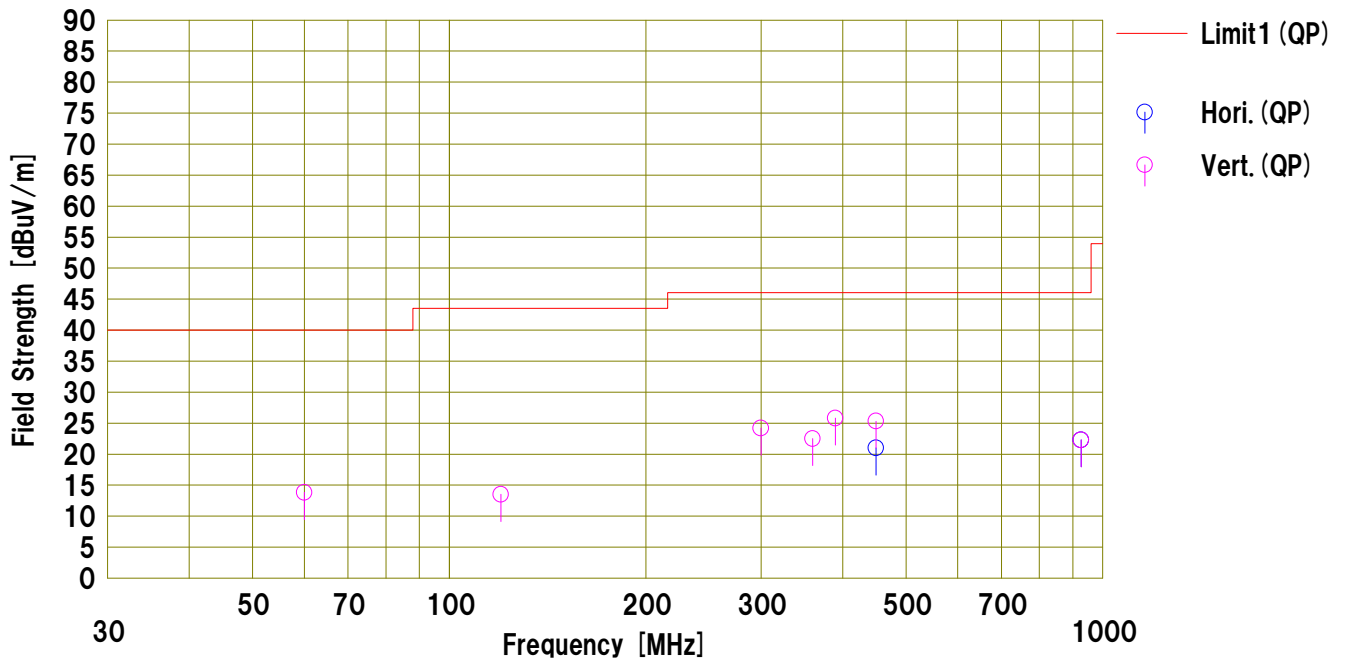
UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2013/11/28

Company : Sony Engineering Corporation
Kind of EUT : RF glow-wristband receiver
Model No. : FFS-W
Serial No. : No.3
Remarks : Horizontal:Y-axis, Vertical:Z-axis

Mode : Receiving 926.7MHz
Order No. : 10130122S
Power : DC 1.5V
Temp./Humi. : 23deg.C. / 34%RH

Limit1 : FCC 15B Class B (3m)

Engineer : Akio Hayashi



No.	Freq.	Reading <QP>	Ant.Fac	Loss	Gain	S.Fac	Result <QP>	Limit <QP>	Margin <QP>	Pola.	Height	Angle	Ant. Type	Comment
	[MHz]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[H/V]	[cm]	[deg]		
1	450.001	26.8	16.8	9.3	31.9	0.0	21.0	46.0	25.0	Hori.	338	315	LP	
2	926.700	20.4	21.8	10.9	30.8	0.0	22.3	46.0	23.7	Hori.	100	0	LP	
3	59.999	31.4	8.1	6.9	32.2	-0.4	13.8	40.0	26.2	Vert.	100	359	BC	
4	119.999	25.3	13.1	7.4	32.1	-0.2	13.5	43.5	30.0	Vert.	100	1	BC	
5	300.000	33.9	13.8	8.5	32.0	0.0	24.2	46.0	21.8	Vert.	100	112	LP	
6	359.999	30.2	15.3	8.9	31.9	0.0	22.5	46.0	23.5	Vert.	125	115	LP	
7	390.000	32.7	16.1	9.0	32.0	0.0	25.8	46.0	20.2	Vert.	100	15	LP	
8	450.000	31.1	16.8	9.3	31.9	0.0	25.3	46.0	20.7	Vert.	100	354	LP	
9	926.700	20.4	21.8	10.9	30.8	0.0	22.3	46.0	23.7	Vert.	100	0	LP	

Calculation: Result [dBuV/m] = Reading [dBuV] + Ant.Fac [dB/m] + Loss (Cable+ATT) [dB] - Gain (AMP) [dB] + S.Fac (ΔAF) [dB]
Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna SHA**: Horn

DATA OF RADIATED EMISSION TEST

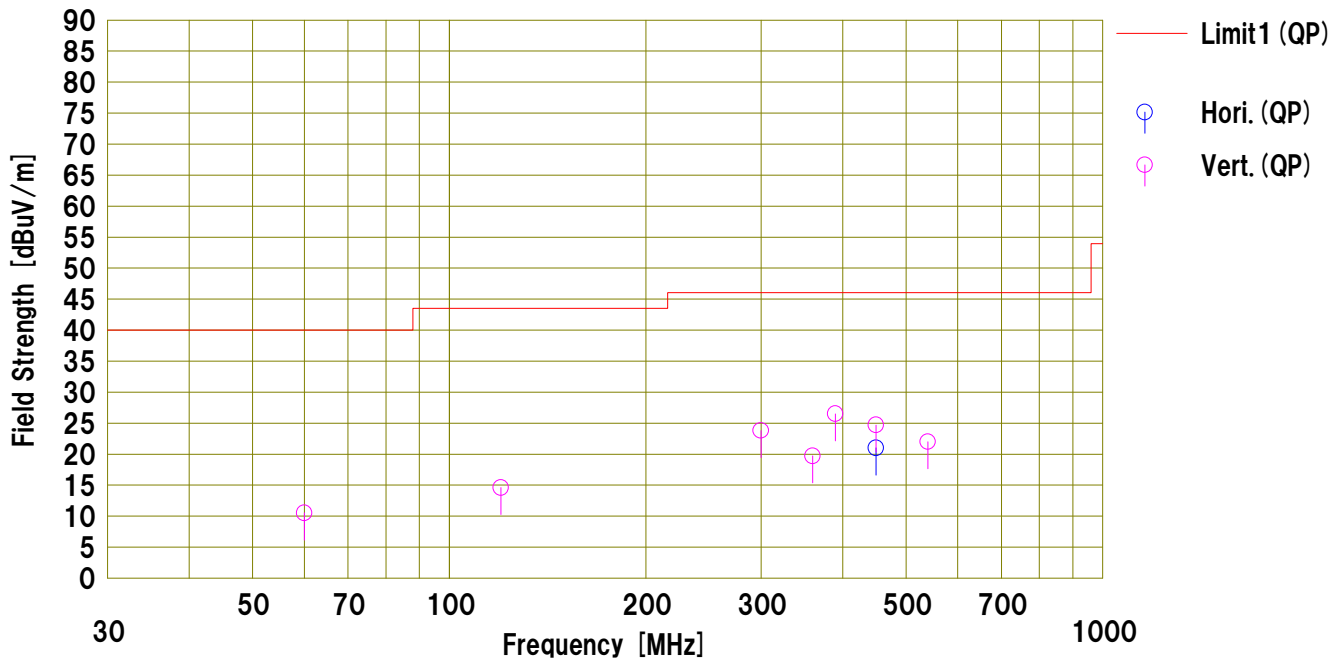
UL Japan, Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2013/11/28

Company : Sony Engineering Corporation
Kind of EUT : RF glow-wristband receiver
Model No. : FFS-W
Serial No. : No.4
Remarks : Horizontal:Y-axis, Vertical:Z-axis

Mode : Receiving Hopping
Order No. : 10130122S
Power : DC 1.5V
Temp./Humi. : 23deg.C. / 34%RH

Limit1 : FCC 15B Class B (3m)

Engineer : Akio Hayashi



No.	Freq. [MHz]	Reading <QP>	Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	S.Fac [dB]	Result <QP>	Limit <QP>	Margin <QP>	Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		[dBuV]					[dBuV/m]	[dBuV/m]	[dB]					
1	450.001	26.8	16.8	9.3	31.9	0.0	21.0	46.0	25.0	Hori.	338	315	LP	
2	59.998	28.1	8.1	6.9	32.2	-0.4	10.5	40.0	29.5	Vert.	100	359	BC	
3	120.000	26.4	13.1	7.4	32.1	-0.2	14.6	43.5	28.9	Vert.	100	245	BC	
4	300.001	33.5	13.8	8.5	32.0	0.0	23.8	46.0	22.2	Vert.	100	359	LP	
5	360.002	27.4	15.3	8.9	31.9	0.0	19.7	46.0	26.3	Vert.	222	0	LP	
6	390.004	33.4	16.1	9.0	32.0	0.0	26.5	46.0	19.5	Vert.	100	6	LP	
7	449.997	30.5	16.8	9.3	31.9	0.0	24.7	46.0	21.3	Vert.	100	45	LP	
8	540.000	26.6	17.8	9.6	32.0	0.0	22.0	46.0	24.0	Vert.	100	356	LP	

Calculation: Result [dBuV/m] = Reading [dBuV] + Ant.Fac [dB/m] + Loss (Cable+ATT) [dB] - Gain (AMP) [dB] + S.Fac (ΔAF) [dB]
Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna SHA**: Horn

DATA OF RADIATED EMISSION TEST

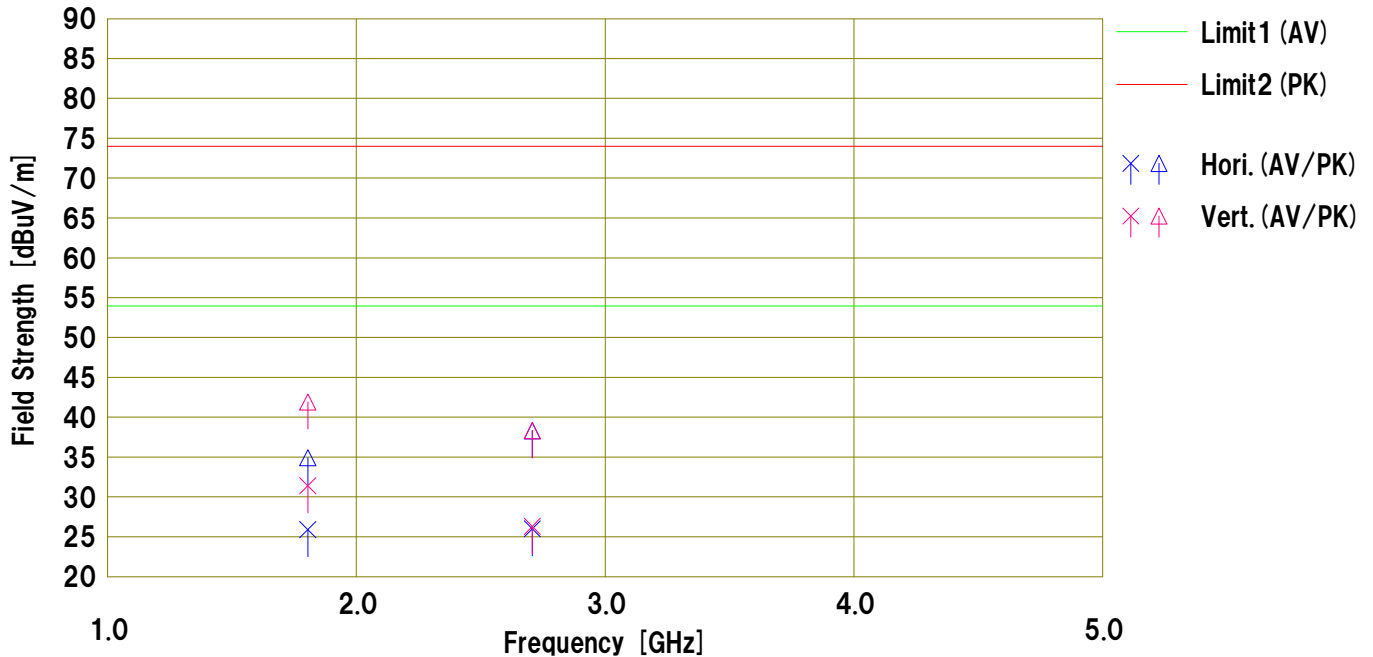
UL Japan,Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2013/11/28

Company : Sony Engineering Corporation
Kind of EUT : RF glow-wristband receiver
Model No. : FFS-W
Serial No. : No.1
Remarks : Horizontal:Z-axis, Vertical:X-axis

Mode : Receiving 902.2MHz
Order No. : 10130122S
Power : DC 1.5V
Temp./Humi. : 26deg.C. / 35%RH

Limit1 : FCC 15B Class B (3m) AV
Limit2 : FCC 15B Class B (3m) Peak

Engineer : Akio Hayashi



No.	Freq.	Reading		Ant.Fac	Loss	Gain	Result		Limit		Margin		Pola.	Height	Angle	Ant. Type	Comment
		<AV>	<PK>				<AV>	<PK>	<AV>	<PK>	<AV>	<PK>					
	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[H/V]	[cm]	[deg]		
1	1804.400	36.1	45.1	26.2	4.7	41.1	25.9	34.9	53.9	73.9	28.0	39.0	Hori.	143	169	SHA03	
2	2706.600	34.0	46.3	27.4	5.9	41.3	26.0	38.3	53.9	73.9	27.9	35.6	Hori.	100	223	SHA03	
3	1804.400	41.6	52.1	26.2	4.7	41.1	31.4	41.9	53.9	73.9	22.5	32.0	Vert.	149	205	SHA03	
4	2706.600	34.3	46.3	27.4	5.9	41.3	26.3	38.3	53.9	73.9	27.6	35.6	Vert.	105	359	SHA03	

Calculation: Result [dBuV/m] = Reading [dBuV] + Ant.Fac [dB/m] + Loss (Cable+Highpass Filter) [dB] - Gain (AMP) [dB]
Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna SHA*: Horn

DATA OF RADIATED EMISSION TEST

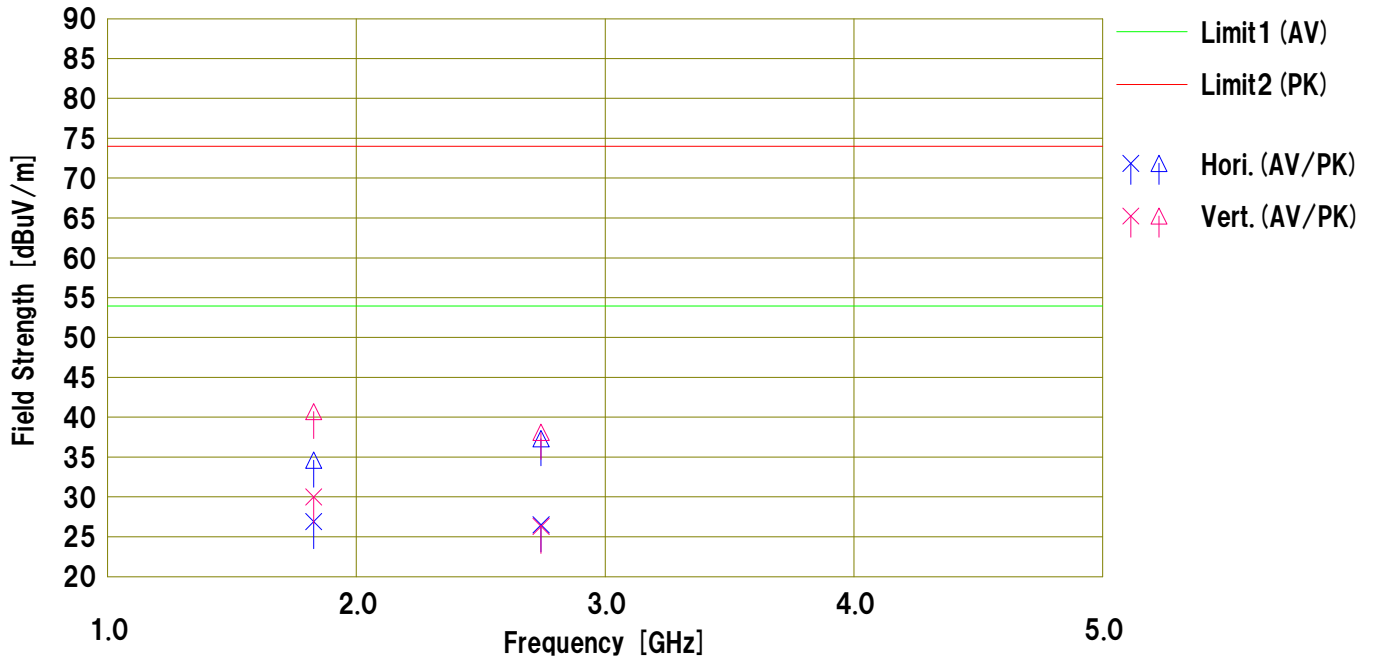
UL Japan,Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2013/11/28

Company : Sony Engineering Corporation
Kind of EUT : RF glow-wristband receiver
Model No. : FFS-W
Serial No. : No.2
Remarks : Horizontal:Z-axis, Vertical:X-axis

Mode : Receiving 914.2MHz
Order No. : 10130122S
Power : DC 1.5V
Temp./Humi. : 26deg.C. / 35%RH

Limit1 : FCC 15B Class B (3m) AV
Limit2 : FCC 15B Class B (3m) Peak

Engineer : Akio Hayashi



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV> [dBuV]	<PK> [dBuV]				<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dB]	<PK> [dB]					
1	1828.400	37.1	44.8	26.3	4.7	41.2	26.9	34.6	53.9	73.9	27.0	39.3	Hori.	148	105	SHA03	
2	2742.600	34.4	45.2	27.5	5.9	41.3	26.5	37.3	53.9	73.9	27.4	36.6	Hori.	100	308	SHA03	
3	1828.400	40.2	50.9	26.3	4.7	41.2	30.0	40.7	53.9	73.9	23.9	33.2	Vert.	145	240	SHA03	
4	2742.600	34.2	46.0	27.5	5.9	41.3	26.3	38.1	53.9	73.9	27.6	35.8	Vert.	100	288	SHA03	

DATA OF RADIATED EMISSION TEST

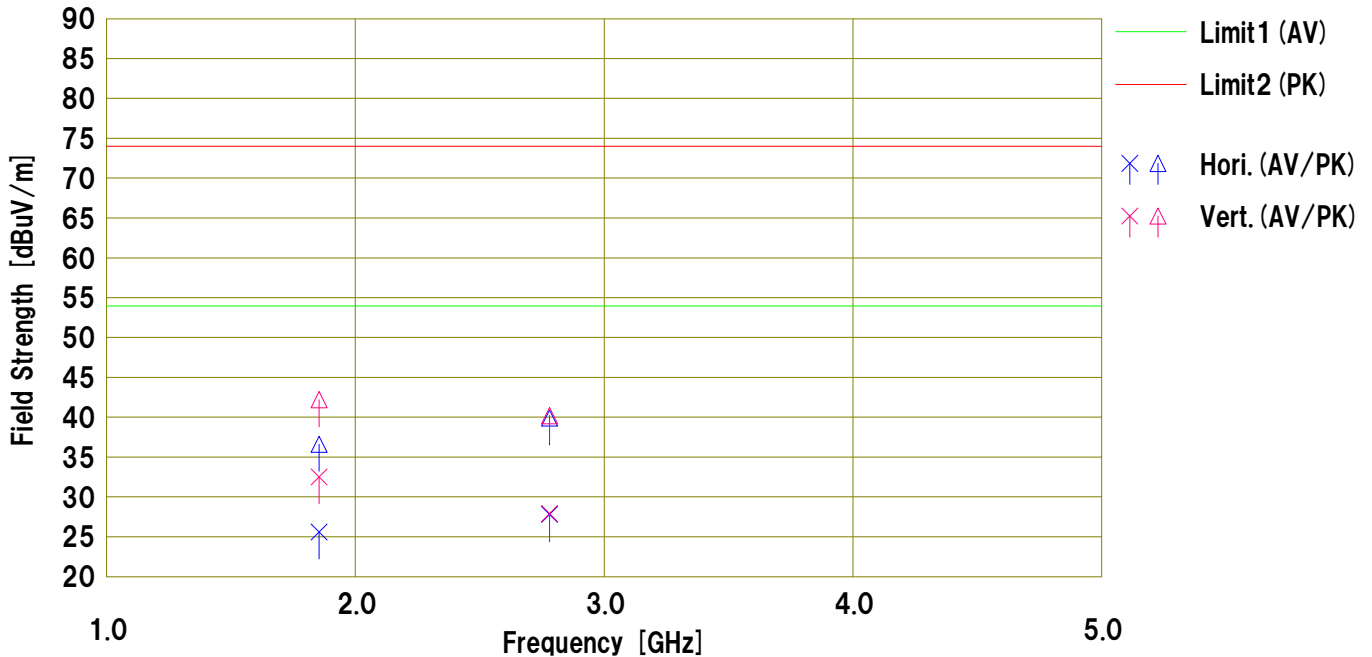
UL Japan,Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2013/11/28

Company : Sony Engineering Corporation
Kind of EUT : RF glow-wristband receiver
Model No. : FFS-W
Serial No. : No.3
Remarks : Horizontal:Z-axis, Vertical:X-axis

Mode : Receiving 926.7MHz
Order No. : 1030122S
Power : DC 1.5V
Temp./Humi. : 26deg.C. / 35%RH

Limit1 : FCC 15B Class B (3m) AV
Limit2 : FCC 15B Class B (3m) Peak

Engineer : Akio Hayashi



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV> [dBuV]	<PK> [dBuV]				<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dB]	<PK> [dB]					
1	1853.400	35.8	46.8	26.3	4.7	41.2	25.6	36.6	53.9	73.9	28.3	37.3	Hori.	100	0	SHA03	
2	2780.100	35.5	47.6	27.6	6.0	41.3	27.8	39.9	53.9	73.9	26.1	34.0	Hori.	170	359	SHA03	
3	1853.400	42.7	52.4	26.3	4.7	41.2	32.5	42.2	53.9	73.9	21.4	31.7	Vert.	144	258	SHA03	
4	2780.100	35.6	47.9	27.6	6.0	41.3	27.9	40.2	53.9	73.9	26.0	33.7	Vert.	156	0	SHA03	

DATA OF RADIATED EMISSION TEST

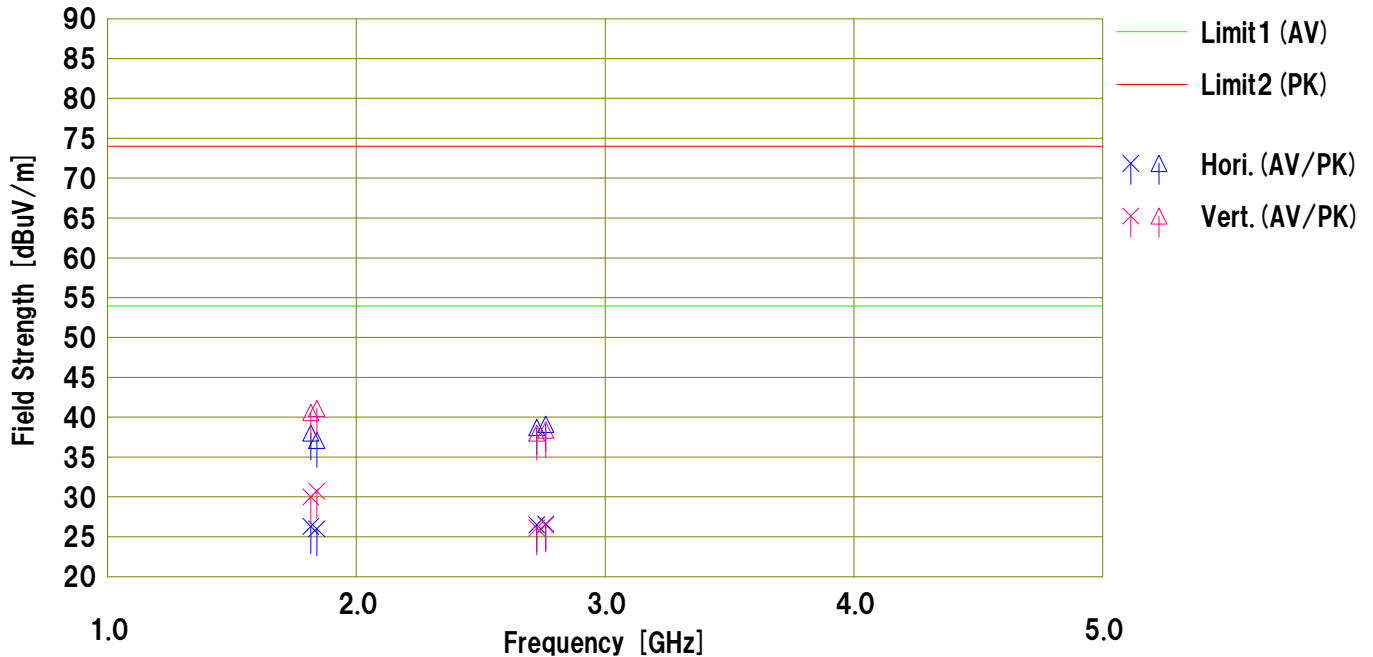
UL Japan,Inc. Shonan EMC Lab. No.3 Semi-Anechoic Chamber
Date : 2013/11/28

Company : Sony Engineering Corporation
Kind of EUT : RF glow-wristband receiver
Model No. : FFS-W
Serial No. : No.4
Remarks : Horizontal:Z-axis, Vertical:X-axis

Mode : Receiving Hopping
Order No. : 1030122S
Power : DC 1.5V
Temp./Humi. : 26deg.C. / 35%RH

Limit1 : FCC 15B Class B (3m) AV
Limit2 : FCC 15B Class B (3m) Peak

Engineer : Akio Hayashi



No.	Freq. [MHz]	Reading		Ant.Fac [dB/m]	Loss [dB]	Gain [dB]	Result		Limit		Margin		Pola. [H/V]	Height [cm]	Angle [deg]	Ant. Type	Comment
		<AV> [dBuV]	<PK> [dBuV]				<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dBuV/m]	<PK> [dBuV/m]	<AV> [dB]	<PK> [dB]					
1	1816.400	36.4	48.1	26.3	4.7	41.1	26.3	38.0	53.9	73.9	27.6	35.9	Hori.	143	169	SHA03	
2	1840.400	36.2	47.3	26.3	4.7	41.2	26.0	37.1	53.9	73.9	27.9	36.8	Hori.	164	0	SHA03	
3	2724.600	34.4	46.6	27.5	5.9	41.3	26.5	38.7	53.9	73.9	27.4	35.2	Hori.	100	223	SHA03	
4	2760.600	34.3	46.8	27.6	6.0	41.3	26.6	39.1	53.9	73.9	27.3	34.8	Hori.	142	6	SHA03	
5	1816.400	40.1	50.7	26.3	4.7	41.1	30.0	40.6	53.9	73.9	23.9	33.3	Vert.	149	205	SHA03	
6	1840.400	40.9	51.3	26.3	4.7	41.2	30.7	41.1	53.9	73.9	23.2	32.8	Vert.	151	194	SHA03	
7	2724.600	34.0	45.9	27.5	5.9	41.3	26.1	38.0	53.9	73.9	27.8	35.9	Vert.	131	118	SHA03	
8	2760.600	34.2	46.1	27.6	6.0	41.3	26.5	38.4	53.9	73.9	27.4	35.5	Vert.	105	359	SHA03	

Calculation: Result [dBuV/m] = Reading [dBuV] + Ant.Fac [dB/m] + Loss (Cable+Highpass Filter) [dB] - Gain (AMP) [dB]
Ant.Type=BC:Biconical Antenna LP:Logperiodic Antenna SHA*: Horn

APPENDIX 2

Test Instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
SAF-03	Pre Amplifier	SONOMA	310N	290213	RE	2013/02/12 * 12
SAT6-06	Attenuator	JFW	50HF-006N	-	RE	2013/02/12 * 12
SBA-03	Biconical Antenna	Schwarzbeck	BBA9106	91032666	RE	2013/10/26 * 12
SCC-C1/C2/C3/C4/C5/C10/SRSE-03	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906	-/0901-271 (RF Selector)	RE	2013/04/03 * 12
SLA-03	Logperiodic Antenna	Schwarzbeck	UHALP9108A	UHALP 9108-A 0901	RE	2013/10/26 * 12
SOS-05	Humidity Indicator	A&D	AD-5681	4062518	RE	2013/02/27 * 12
STR-06	Test Receiver	Rohde & Schwarz	ESCI	101259	RE	2013/02/27 * 12
SJM-11	Measure	PROMART	SEN1935	-	RE	-
SAEC-03(NSA)	Semi-Anechoic Chamber	TDK	SAEC-03(NSA)	3	RE	2013/07/09 * 12
COTS-SEMI-1	EMI Software	TSJ	TEPTO-DV(RE,CE,RFI,MF)	-	RE	-
SAF-06	Pre Amplifier	TOYO Corporation	TPA0118-36	1440491	RE	2013/07/22 * 12
SCC-G03	Coaxial Cable	Suhner	SUCOFLEX 104A	46499/4A	RE	2013/04/11 * 12
SCC-G23	Coaxial Cable	Suhner	SUCOFLEX 104	297342/4	RE	2013/05/22 * 12
SHA-03	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-739	RE	2013/08/19 * 12
KSA-08	Spectrum Analyzer	Agilent	E4446A	MY46180525	RE	2013/03/04 * 12
SFL-01	Highpass Filter	MICRO-TRONICS	HPM50115	001	RE	2013/11/22 * 12

The expiration date of the calibration is the end of the expired month .
 As for some calibrations performed after the tested dates , those test equipment have been controlled by means of an unbroken chains of calibrations .

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

Test Item :

RE: Radiated emission