

**APPENDIX 2: Data of EMI test**

**Carrier Frequency Separation**

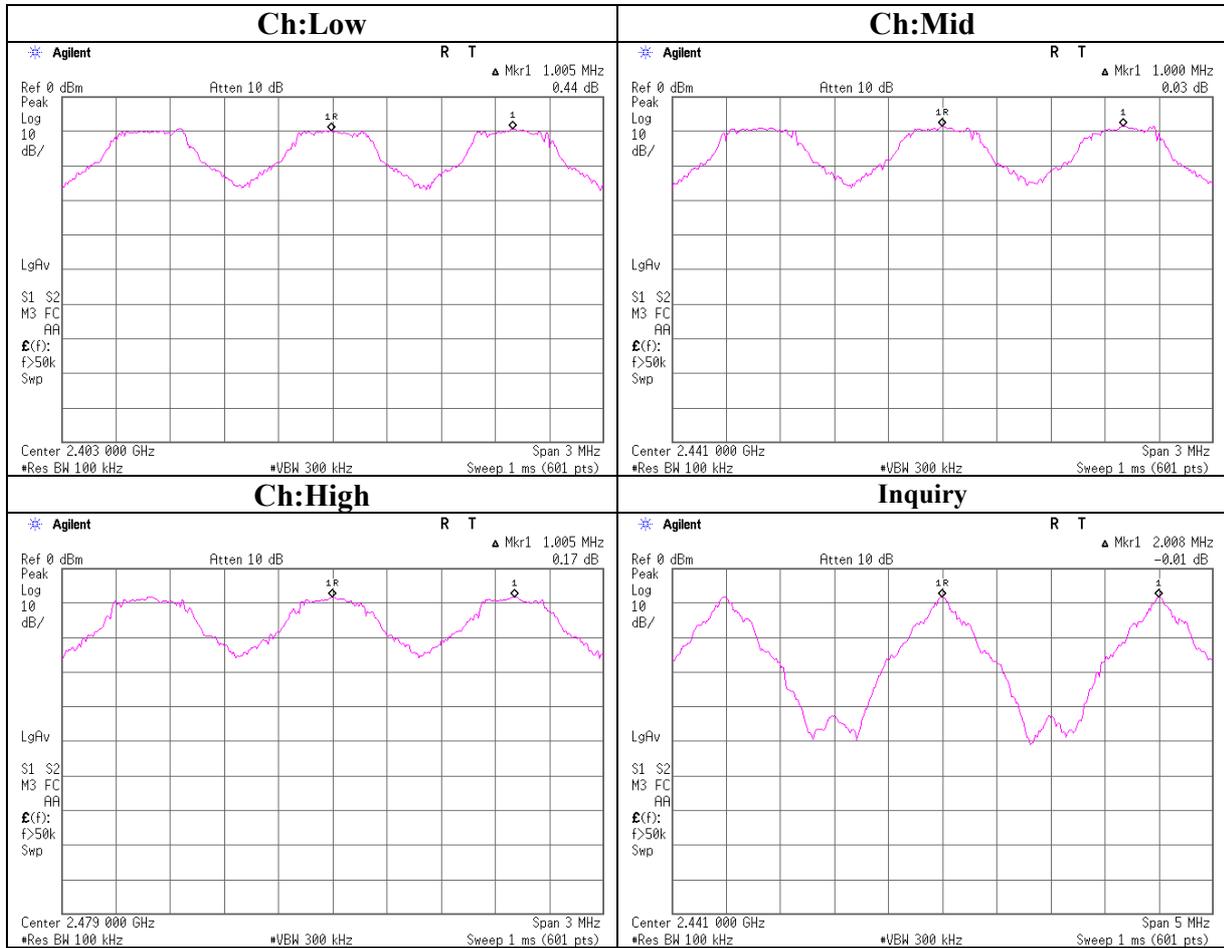
UL Japan, Inc.  
Head Office EMC Lab. No.7 Shielded Room

COMPANY : Sony Computer Entertainment Inc. REGULATION : FCC15.247(a)(1)/RSS-210A8.1(b)  
EQUIPMENT : WIRELESS CONTROLLER TEST DISTANCE : -  
MODEL : CECHZC2U DATE : 03/18/2008  
S/N : 1 TEMPERATURE : 25deg.C  
POWER : DC5V (USB Bus Power) HUMIDITY : 28%  
MODE : Tx(Hopping on)/Inquiry ENGINEER : Takumi Shimada

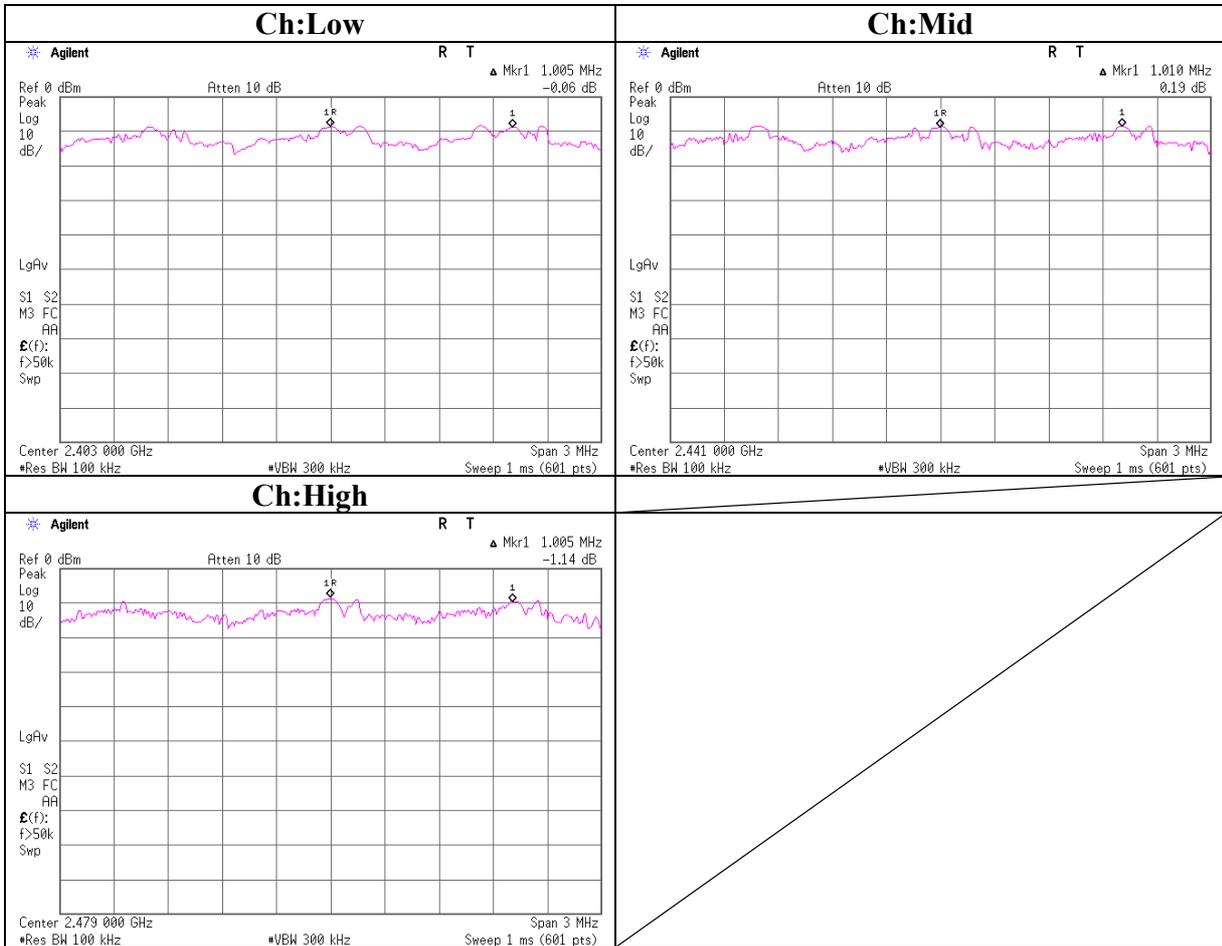
<b>DH5</b>			
Ch	Freq. [MHz]	Channel separation [MHz]	Limit
Low	2402.0	1.005	>two-thirds of the 0.867[MHz] (20dB Bandwidth) or 25[kHz](whichever is greater)
Mid	2441.0	1.000	>two-thirds of the 0.868[MHz] (20dB Bandwidth) or 25[kHz](whichever is greater)
High	2480.0	1.005	>two-thirds of the 0.870[MHz] (20dB Bandwidth) or 25[kHz](whichever is greater)
Inquiry	2441.0	2.008	>two-thirds of the 0.751[MHz] (20dB Bandwidth) or 25[kHz](whichever is greater)

<b>3DH5</b>			
Ch	Freq. [MHz]	Channel separation [MHz]	Limit
Low	2402.0	1.005	>two-thirds of the 1.262[MHz] (20dB Bandwidth) or 25[kHz](whichever is greater)
Mid	2441.0	1.010	>two-thirds of the 1.262[MHz] (20dB Bandwidth) or 25[kHz](whichever is greater)
High	2480.0	1.005	>two-thirds of the 1.263[MHz] (20dB Bandwidth) or 25[kHz](whichever is greater)

### Carrier Frequency Separation



**Carrier Frequency Separation (EDR)**



## 20dB Bandwidth

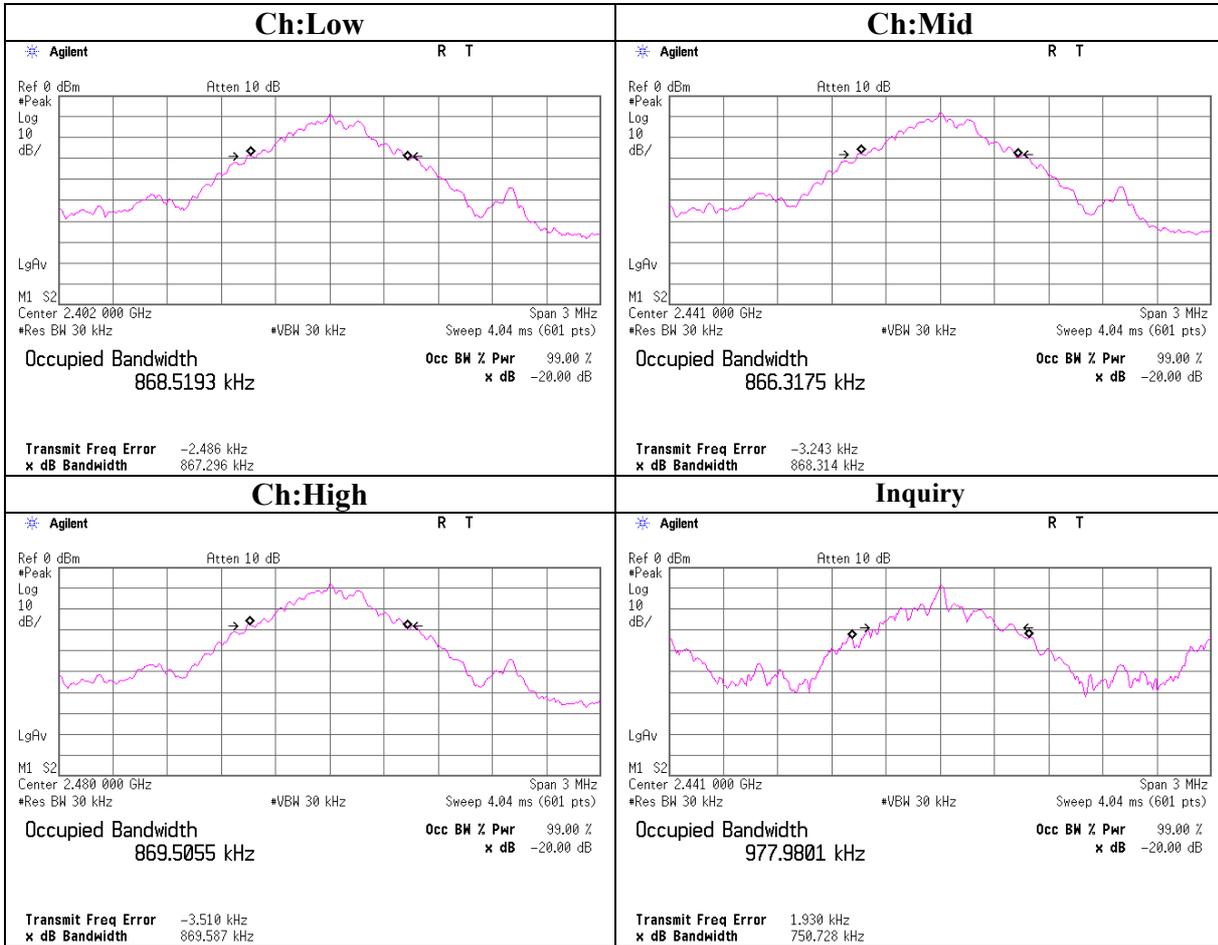
UL Japan, Inc.  
Head Office EMC Lab. No.7 Shielded Room

COMPANY : Sony Computer Entertainment Inc. REGULATION : FCC15.247(a)(1)/RSS-210A8.1(a)  
EQUIPMENT : WIRELESS CONTROLLER TEST DISTANCE : -  
MODEL : CECHZC2U DATE : 03/18/2008  
S/N : 1 TEMPERATURE : 25deg.C  
POWER : DC5V (USB Bus Power) HUMIDITY : 28%  
MODE : Tx (Hopping off) /Inquiry ENGINEER : Takumi Shimada

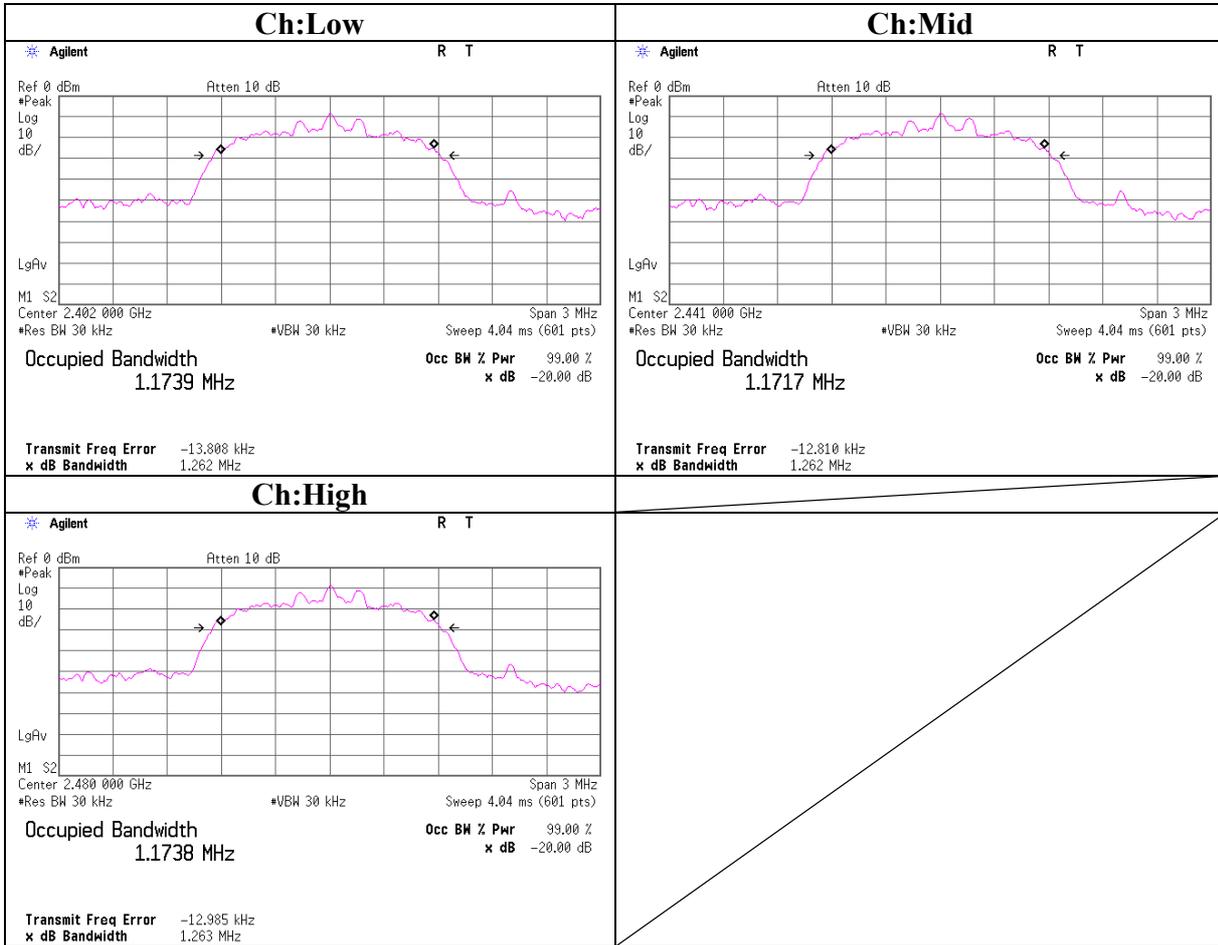
<b>DH5</b>			
Ch	Freq.	20dB Bandwidth	Limit
	[MHz]	[MHz]	[MHz]
Low	2402.0	0.867	-
Mid	2441.0	0.868	-
High	2480.0	0.870	-
Inquiry	2441.0	0.751	-

<b>3DH5</b>			
Ch	Freq.	20dB Bandwidth	Limit
	[MHz]	[MHz]	[MHz]
Low	2402.0	1.262	-
Mid	2441.0	1.262	-
High	2480.0	1.263	-

**20dB Bandwidth**



**20dB Bandwidth (EDR)**



## Number of Hopping Frequency

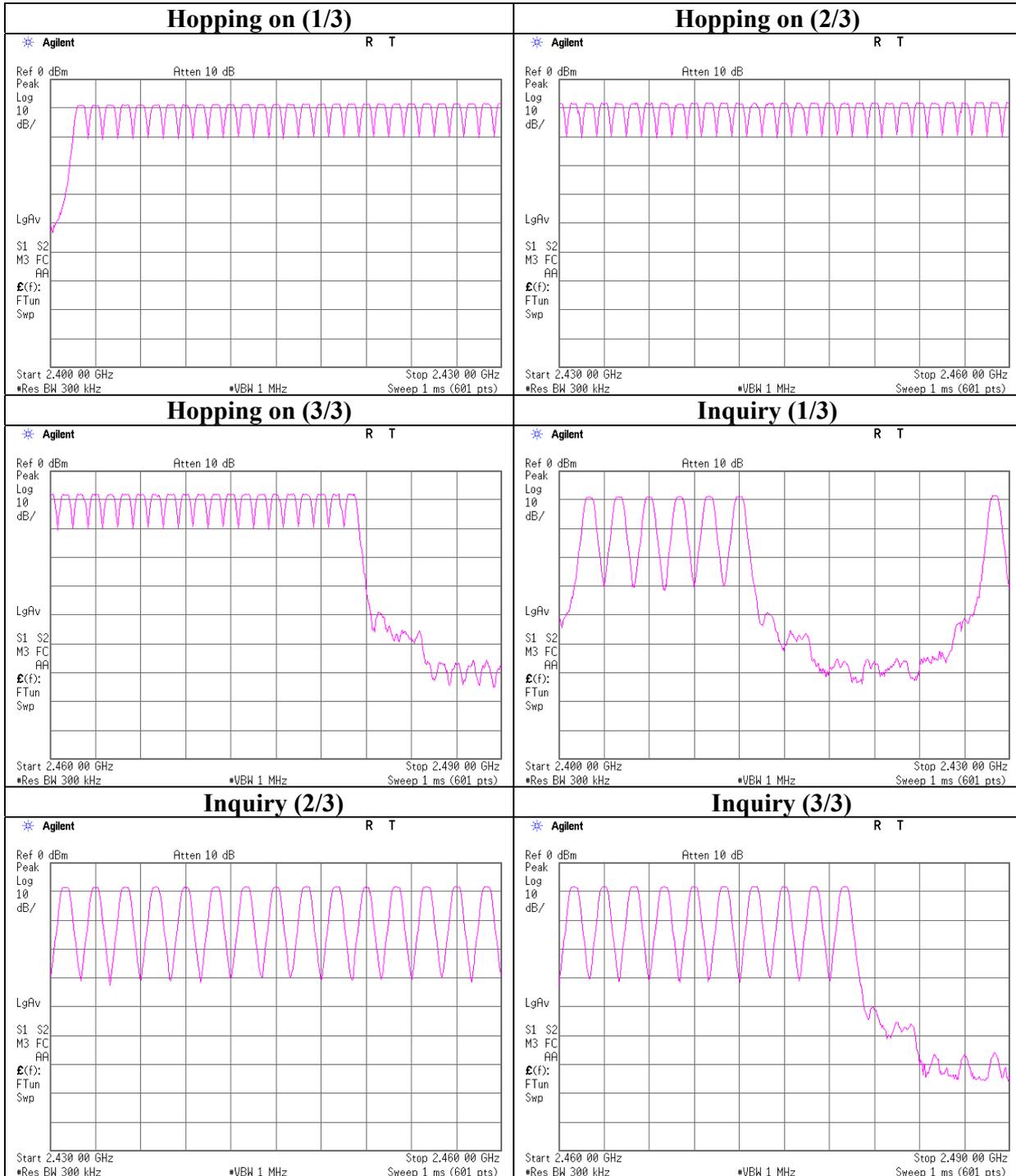
UL Japan, Inc.  
Head Office EMC Lab. No.7 Shielded Room

COMPANY : Sony Computer Entertainment Inc. REGULATION : FCC15.247(a)(1)(iii)/RSS-210A8.1(d)  
EQUIPMENT : WIRELESS CONTROLLER TEST DISTANCE : -  
MODEL : CECHZC2U DATE : 03/18/2008  
S/ N : 1 TEMPERATURE : 25deg.C  
POWER : DC5V (USB Bus Power) HUMIDITY : 28%  
MODE : Tx (Hopping on) /Inquiry ENGINEER : Takumi Shimada

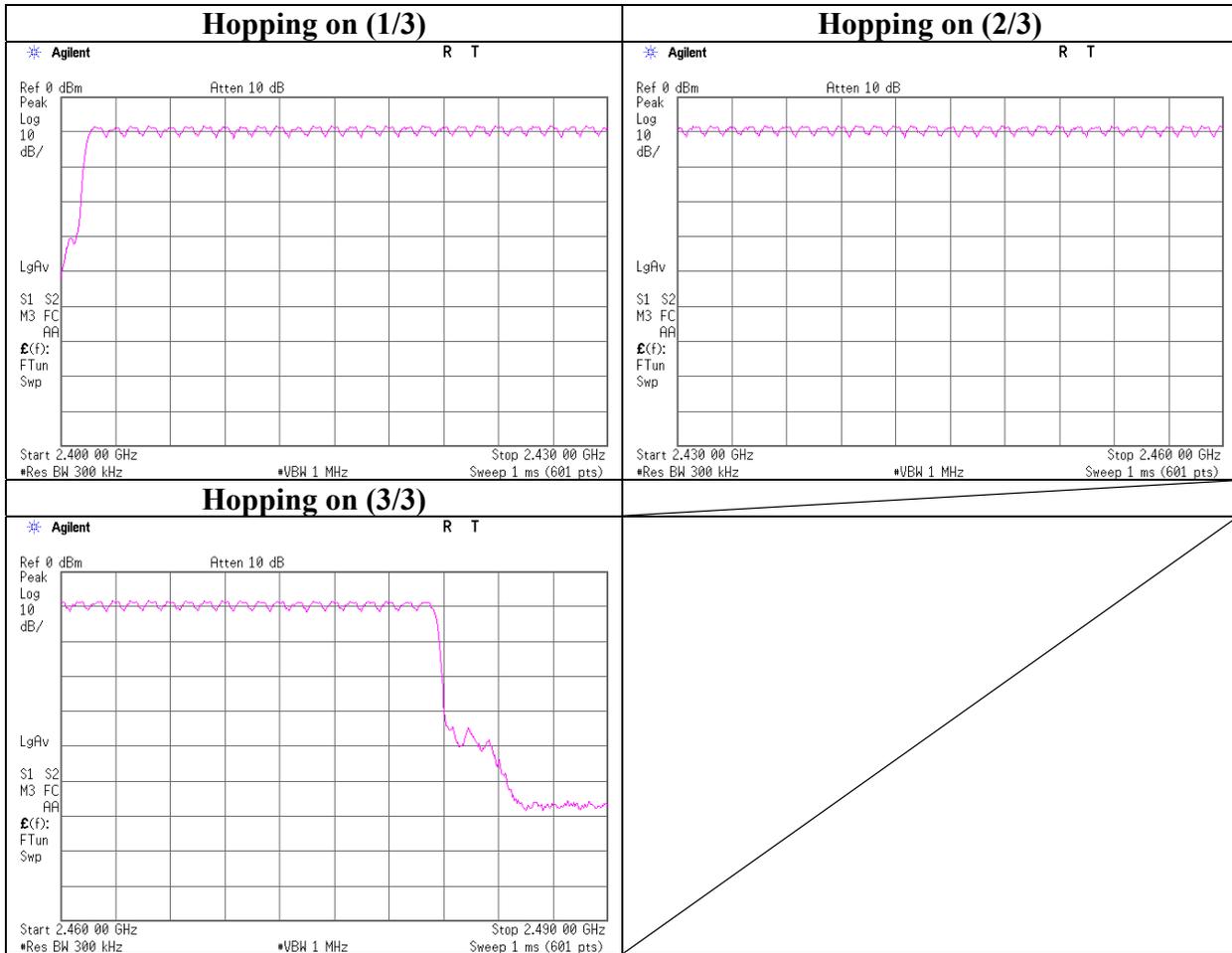
Mode	Number of channel [time]	Limit [time]
DH5	79	$\geq 15$
3DH5	79	$\geq 15$

Mode	Number of channel [time]	Limit [time]
Inquiry	32	$\geq 15$

**Number of Hopping Frequency**



**Number of Hopping Frequency (EDR)**



### Dwell time

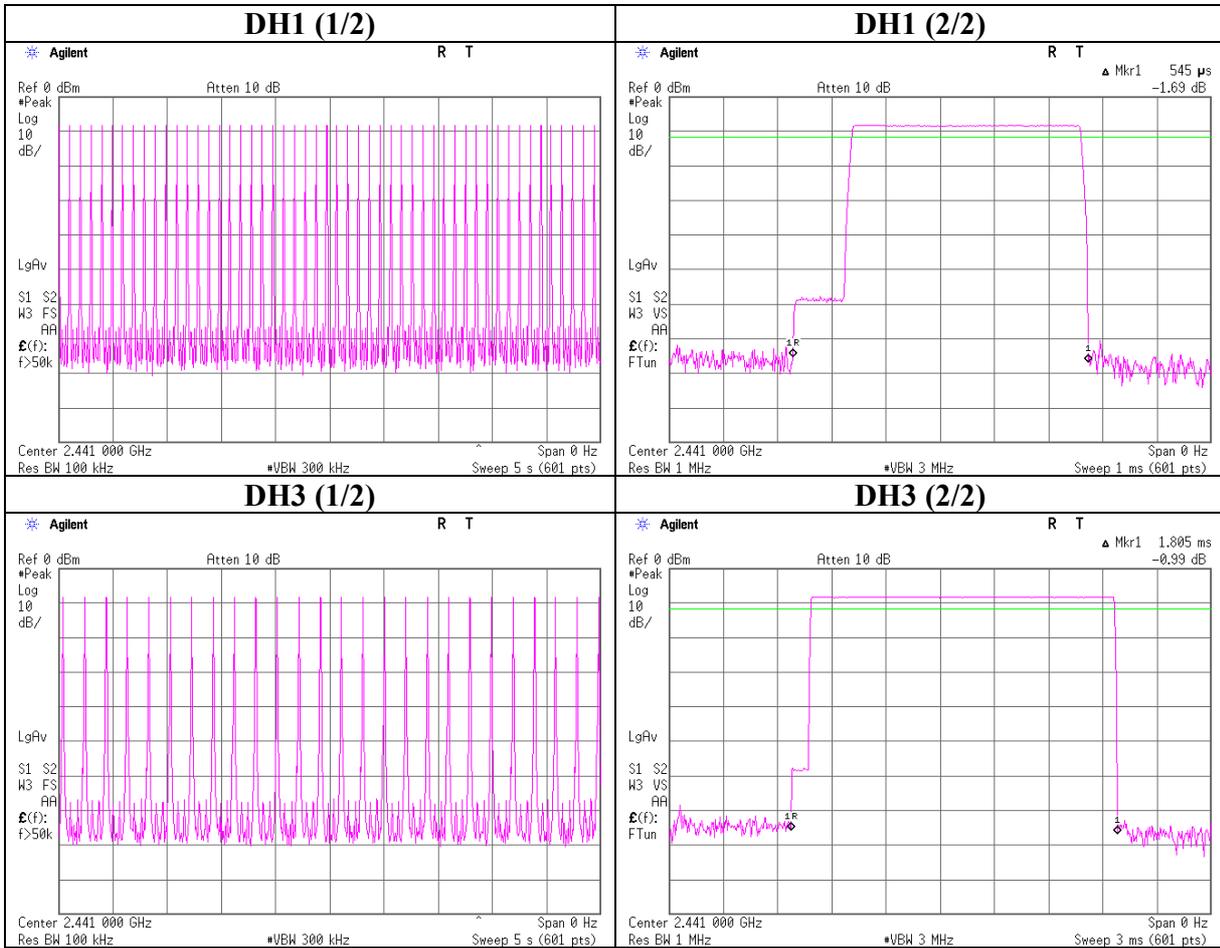
UL Japan, Inc.  
Head Office EMC Lab. No.7 Shielded Room

COMPANY : Sony Computer Entertainment Inc.      REGULATION : FCC15.247(a)(1)(iii)/RSS-210A8.1(d)  
EQUIPMENT : WIRELESS CONTROLLER      TEST DISTANCE : -  
MODEL : CECHZC2U      DATE : 03/18/2008  
S/N : 1      TEMPERATURE : 25deg.C  
POWER : DC5V (USB Bus Power)      HUMIDITY : 28%  
MODE : Tx (Hopping on) /Inquiry      ENGINEER : Takumi Shimada

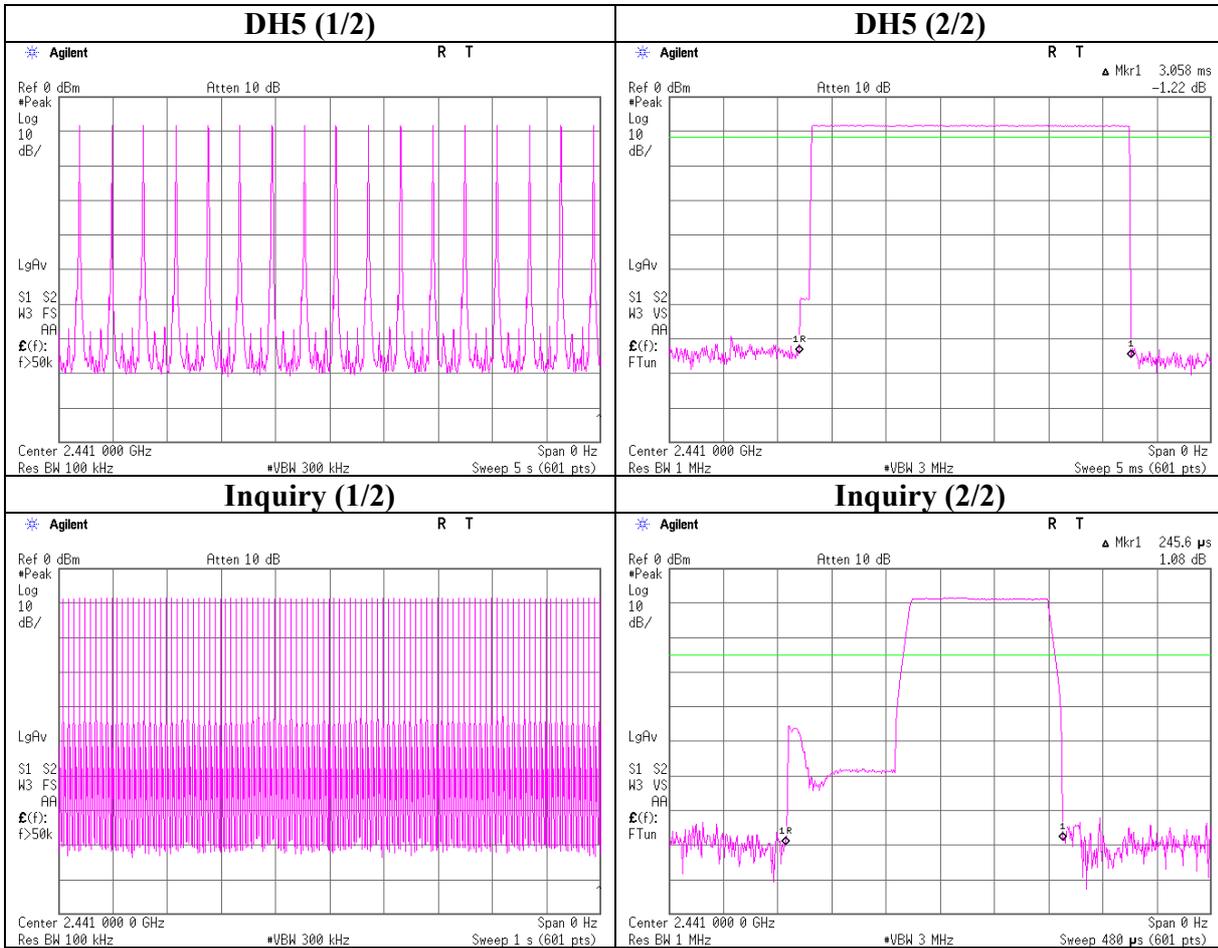
Mode	Number of transmission in a 31.6(79 Hopping x 0.4) / 12.8(32 Hopping x 0.4)second period	Length of transmission time [msec]	Result [msec]	Limit [msec]
DH1	51 times / 5 sec. x 31.6 sec. = 323 times	0.545	176	400
DH3	25 times / 5 sec. x 31.6 sec. = 158 times	1.805	285	400
DH5	17 times / 5 sec. x 31.6 sec. = 108 times	3.058	330	400
Inquiry	100 times / 1 sec. x 12.8 sec. = 1280 times	0.246	314	400

Mode	Number of transmission in a 31.6(79 Hopping x 0.4) / 12.8(32 Hopping x 0.4)second period	Length of transmission time [msec]	Result [msec]	Limit [msec]
3DH1	51 times / 5 sec. x 31.6 sec. = 323 times	0.560	181	400
3DH3	25 times / 5 sec. x 31.6 sec. = 158 times	1.825	288	400
3DH5	17 times / 5 sec. x 31.6 sec. = 108 times	3.108	336	400

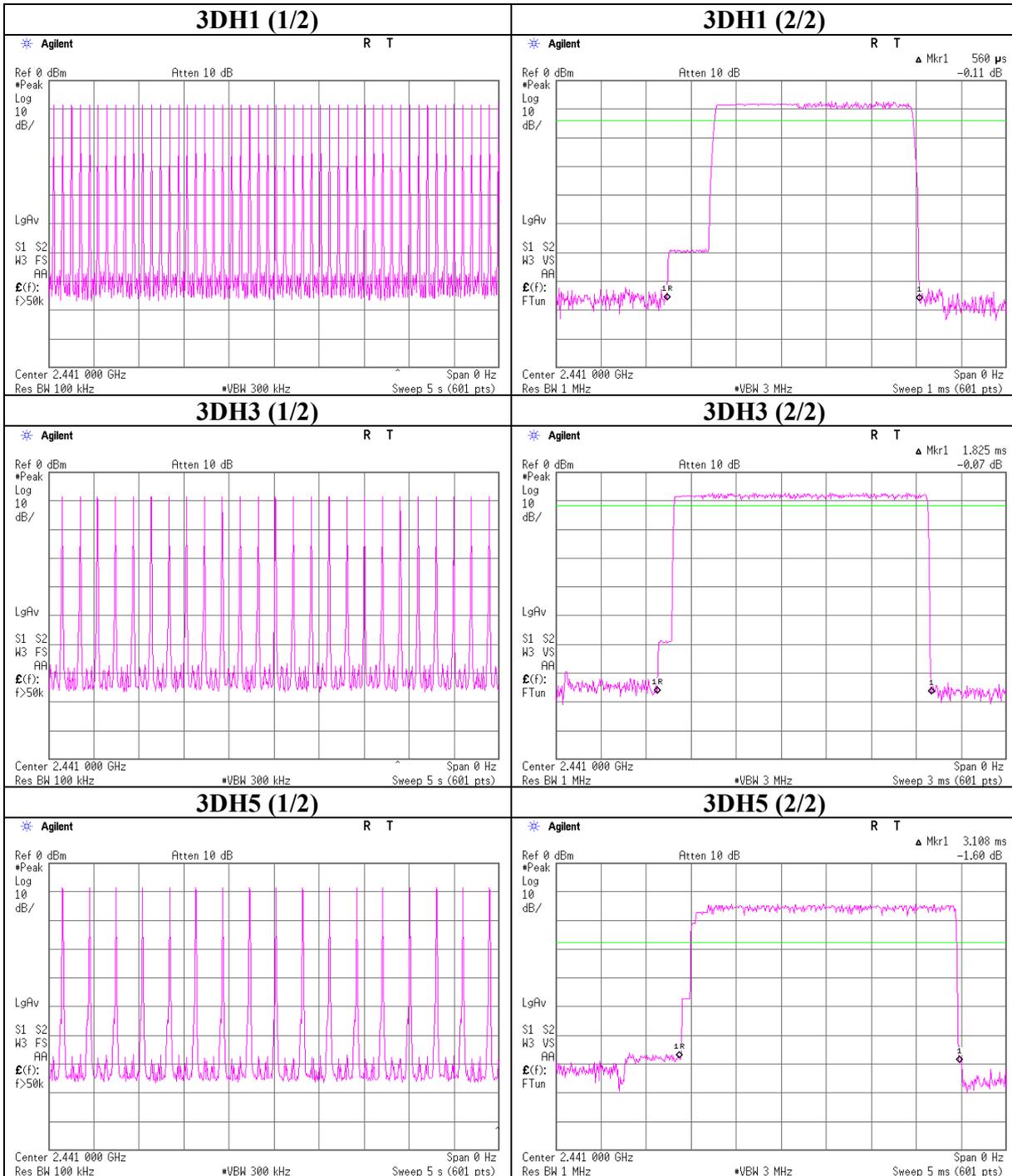
**Dwell time**



**Dwell time**



**Dwell time (EDR)**



### Maximum Peak Output Power

UL Japan, Inc.  
Head Office EMC Lab. No.7 Shielded Room

COMPANY : Sony Computer Entertainment Inc.	REGULATION : FCC15.247(b)(1)/RSS-210 A8.4(2)
EQUIPMENT : WIRELESS CONTROLLER	TEST DISTANCE : -
MODEL : CECHZC2U	DATE : 03/18/2008
S/N : 1	TEMPERATURE : 25deg.C
MODE : Tx(Hopping Off)/Inquiry	HUMIDITY : 28%
	ENGINEER : Takumi Shimada

DH5									
Ch	Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result		Limit		Margin [dB]
					[dBm]	[mW]	[dBm]	[mW]	
Low	2402.0	-9.27	0.50	10.09	1.32	1.36	20.97	125	19.65
Mid	2441.0	-8.48	0.50	10.09	2.11	1.63	20.97	125	18.86
High	2480.0	-8.30	0.50	10.09	2.29	1.69	20.97	125	18.68
Inquiry	2441.0	-8.16	0.50	10.09	2.43	1.75	20.97	125	18.54

2DH5									
Ch	Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result		Limit		Margin [dB]
					[dBm]	[mW]	[dBm]	[mW]	
Low	2402.0	-7.34	0.50	10.09	3.25	2.11	20.97	125	17.72
Mid	2441.0	-7.21	0.50	10.09	3.38	2.18	20.97	125	17.59
High	2480.0	-7.41	0.50	10.09	3.18	2.08	20.97	125	17.79

3DH5									
Ch	Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result		Limit		Margin [dB]
					[dBm]	[mW]	[dBm]	[mW]	
Low	2402.0	-7.25	0.50	10.09	3.34	2.16	20.97	125	17.63
Mid	2441.0	-7.13	0.50	10.09	3.46	2.22	20.97	125	17.51
High	2480.0	-7.29	0.50	10.09	3.30	2.14	20.97	125	17.67

Sample Calculation:

Result = Reading + Cable Loss (supplied by customer)+ Attenuator

\* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

\*Compared to the original test report 28BE0223-HO-01-A, difference in Maximum Peak Output Power is within +/- 0.5dB.

**Radiated Spurious Emission (below 1GHz)**  
**Tx(DH5), Ch. Low**

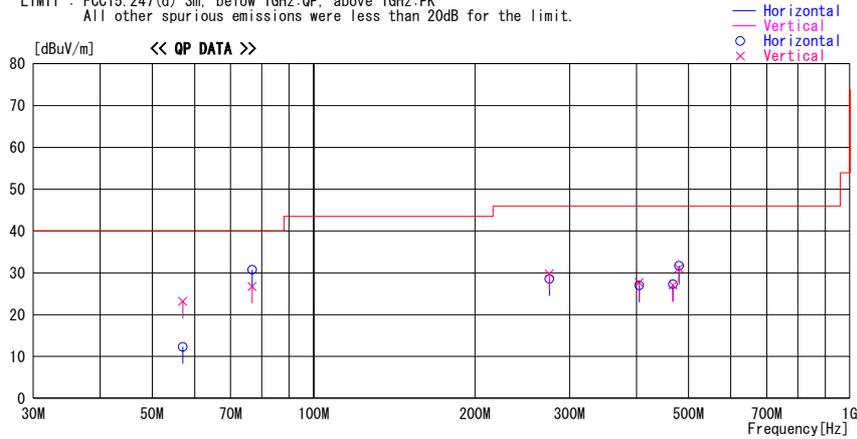
**DATA OF RADIATED EMISSION TEST**

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2008/03/19

Company : Sony Computer Entertainment Inc. Report No. : 28HE0125-HO-01  
Kind of EUT : WIRELESS CONTROLLER Power : AC 120V / 60Hz  
Model No. : CECHZC2U Temp./Humi. : 26deg. C / 43%  
Serial No. : 4 Operator : Shinya Watanabe

Mode / Remarks : BT Tx 2402MHz DH5 Hor:X-axis Ver:Y-axis

LIMIT : FCC15.247(d) 3m. below 1GHz:QP, above 1GHz:PK  
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Loss& Gain [dB]				
57.004	23.9	QP	8.8	-20.4	12.3	Hori.	40.0	27.7
57.004	34.8	QP	8.8	-20.4	23.2	Vert.	40.0	16.9
76.821	44.4	QP	6.4	-20.0	30.8	Hori.	40.0	9.3
76.821	40.3	QP	6.4	-20.0	26.7	Vert.	40.0	13.3
275.317	26.9	QP	18.6	-16.9	28.6	Hori.	46.0	17.5
275.317	28.1	QP	18.6	-16.9	29.8	Vert.	46.0	16.2
404.775	26.8	QP	16.7	-16.5	27.0	Hori.	46.0	19.0
404.775	27.5	QP	16.7	-16.5	27.7	Vert.	46.0	18.3
468.101	25.9	QP	17.7	-16.3	27.3	Hori.	46.0	18.7
468.101	25.7	QP	17.7	-16.3	27.1	Vert.	46.0	19.0
480.114	30.1	QP	17.9	-16.3	31.7	Hori.	46.0	14.3
480.114	29.5	QP	17.9	-16.3	31.1	Vert.	46.0	14.9

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-300MHz:BICONICAL, 300MHz-1000MHz:LOGPERIODIC, 1000MHz--:HORN  
CALCULATION:RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

\*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (below 1GHz)**  
**Tx(DH5), Ch. Mid**

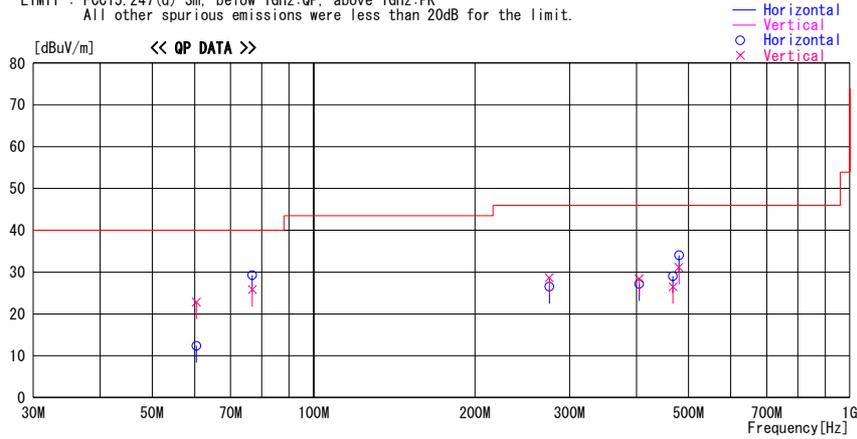
**DATA OF RADIATED EMISSION TEST**

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2008/03/19

Company : Sony Computer Entertainment Inc. Report No. : 28HE0125-HO-01  
Kind of EUT : WIRELESS CONTROLLER Power : AC 120V / 60Hz  
Model No. : CECHZC2U Temp./Humi. : 26deg. C / 43%  
Serial No. : 4 Operator : Shinya Watanabe

Mode / Remarks : BT Tx 2441MHz DH5 Hor:X-axis Ver:Y-axis

LIMIT : FCC15.247(d) 3m. below 1GHz:QP, above 1GHz:PK  
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Loss& Gain [dB]				
60.450	24.6	QP	8.2	-20.4	12.4	Hori.	40.0	27.6
60.450	35.0	QP	8.2	-20.4	22.8	Vert.	40.0	17.2
76.835	42.8	QP	6.4	-20.0	29.2	Hori.	40.0	10.8
76.835	39.4	QP	6.4	-20.0	25.8	Vert.	40.0	14.2
275.317	24.8	QP	18.6	-16.9	26.5	Hori.	46.0	19.5
275.317	27.0	QP	18.6	-16.9	28.7	Vert.	46.0	17.3
404.775	27.0	QP	16.7	-16.5	27.2	Hori.	46.0	18.8
404.775	28.2	QP	16.7	-16.5	28.4	Vert.	46.0	17.6
468.101	27.7	QP	17.7	-16.3	29.1	Hori.	46.0	16.9
468.101	25.1	QP	17.7	-16.3	26.5	Vert.	46.0	19.5
480.089	32.5	QP	17.9	-16.3	34.1	Hori.	46.0	11.9
480.089	29.5	QP	17.9	-16.3	31.1	Vert.	46.0	14.9

CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-: HORN  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (below 1GHz)**  
**Tx(DH5), Ch. High**

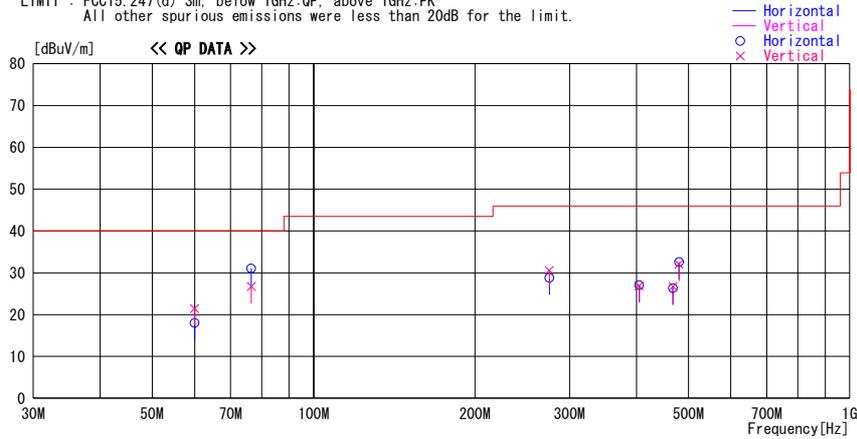
**DATA OF RADIATED EMISSION TEST**

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2008/03/19

Company : Sony Computer Entertainment Inc. Report No. : 28HE0125-HO-01  
Kind of EUT : WIRELESS CONTROLLER Power : AC 120V / 60Hz  
Model No. : CECHZC2U Temp./Humi. : 26deg. C / 43%  
Serial No. : 4 Operator : Shinya Watanabe

Mode / Remarks : BT Tx 2480MHz DH5 Hor:X-axis Ver:Y-axis

LIMIT : FCC15.247(d) 3m. below 1GHz:QP, above 1GHz:PK  
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Loss& Gain [dB]				
60.014	30.2	QP	8.2	-20.4	18.0	Hori.	40.0	22.0
60.014	33.7	QP	8.2	-20.4	21.5	Vert.	40.0	18.6
76.533	44.5	QP	6.5	-20.0	31.0	Hori.	40.0	9.0
76.533	40.2	QP	6.5	-20.0	26.7	Vert.	40.0	13.3
275.319	27.1	QP	18.6	-16.9	28.8	Hori.	46.0	17.2
275.319	28.9	QP	18.6	-16.9	30.6	Vert.	46.0	15.4
404.775	26.9	QP	16.7	-16.5	27.1	Hori.	46.0	18.9
404.775	26.7	QP	16.7	-16.5	26.9	Vert.	46.0	19.1
468.101	24.9	QP	17.7	-16.3	26.3	Hori.	46.0	19.7
468.101	25.3	QP	17.7	-16.3	26.7	Vert.	46.0	19.3
480.085	31.0	QP	17.9	-16.3	32.6	Hori.	46.0	13.4
480.085	30.5	QP	17.9	-16.3	32.1	Vert.	46.0	13.9

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-300MHz:BICONICAL, 300MHz-1000MHz:LOGPERIODIC, 1000MHz--:HORN  
CALCULATION:RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

\*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (below 1GHz)**  
**Tx(3DH5), Ch. Low**

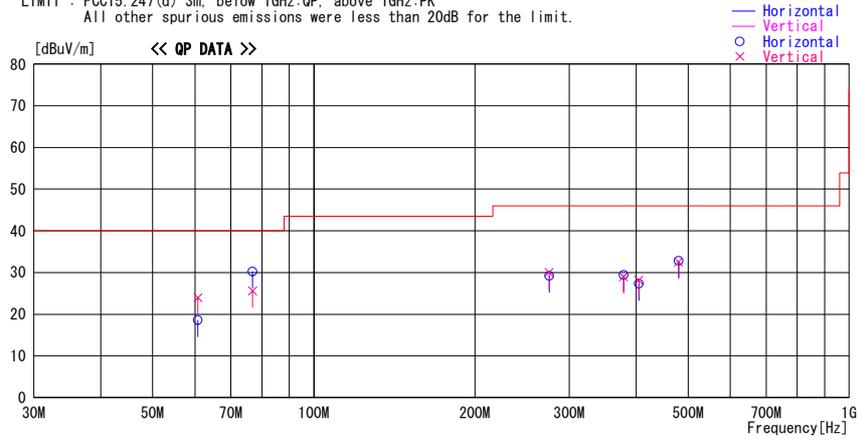
**DATA OF RADIATED EMISSION TEST**

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2008/03/19

Company : Sony Computer Entertainment Inc. Report No. : 28HE0125-HO-01  
Kind of EUT : WIRELESS CONTROLLER Power : AC 120V / 60Hz  
Model No. : CECHZC2U Temp./Humi. : 26deg. C / 51%  
Serial No. : 4 Operator : Motoya Imura

Mode / Remarks : BT Tx 2402MHz 3DH5 Hor:X-axis Ver:Y-axis

LIMIT : FCC15.247(d) 3m. below 1GHz:QP, above 1GHz:PK  
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Loss& Gain [dB]				
60.733	36.3	QP	8.1	-20.4	24.0	Vert.	40.0	16.0
60.728	30.9	QP	8.1	-20.4	18.6	Hori.	40.0	21.4
76.832	39.2	QP	6.4	-20.0	25.6	Vert.	40.0	14.4
76.841	43.8	QP	6.4	-20.0	30.2	Hori.	40.0	9.8
275.320	27.5	QP	18.6	-16.9	29.2	Hori.	46.0	16.8
275.329	28.3	QP	18.6	-16.9	30.0	Vert.	46.0	16.0
378.951	29.9	QP	16.0	-16.5	29.4	Hori.	46.0	16.6
378.951	29.5	QP	16.0	-16.5	29.0	Vert.	46.0	17.0
404.717	27.1	QP	16.7	-16.5	27.3	Hori.	46.0	18.7
404.719	28.0	QP	16.7	-16.5	28.2	Vert.	46.0	17.8
480.082	31.2	QP	17.9	-16.3	32.8	Hori.	46.0	13.2
480.083	30.9	QP	17.9	-16.3	32.5	Vert.	46.0	13.5

CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-: HORN  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (below 1GHz)**  
**Tx(3DH5), Ch. Mid**

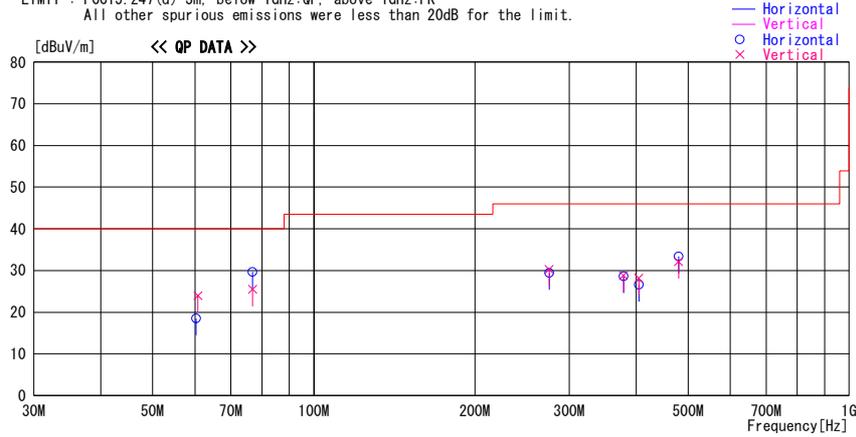
**DATA OF RADIATED EMISSION TEST**

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2008/03/19

Company : Sony Computer Entertainment Inc. Report No. : 28HE0125-HO-01  
Kind of EUT : WIRELESS CONTROLLER Power : AC 120V / 60Hz  
Model No. : CECHZC2U Temp./Humi. : 26deg. C / 51%  
Serial No. : 4 Operator : Motoya Imura

Mode / Remarks : BT Tx 2441MHz 3DH5 Hor:X-axis Ver:Y-axis

LIMIT : FCC15.247(d) 3m, below 1GHz:QP, above 1GHz:PK  
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Loss& Gain [dB]				
60.740	36.3	QP	8.1	-20.4	24.0	Vert.	40.0	16.0
60.283	30.7	QP	8.2	-20.4	18.5	Hori.	40.0	21.5
76.831	39.1	QP	6.4	-20.0	25.5	Vert.	40.0	14.5
76.845	43.3	QP	6.4	-20.0	29.7	Hori.	40.0	10.3
275.319	27.7	QP	18.6	-16.9	29.4	Hori.	46.0	16.6
275.313	28.6	QP	18.6	-16.9	30.3	Vert.	46.0	15.7
378.957	29.1	QP	16.0	-16.5	28.6	Hori.	46.0	17.4
378.955	29.3	QP	16.0	-16.5	28.8	Vert.	46.0	17.2
404.717	26.4	QP	16.7	-16.5	26.6	Hori.	46.0	19.4
404.723	28.0	QP	16.7	-16.5	28.2	Vert.	46.0	17.8
480.087	31.8	QP	17.9	-16.3	33.4	Hori.	46.0	12.6
480.081	30.5	QP	17.9	-16.3	32.1	Vert.	46.0	13.9

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-300MHz:BICONICAL, 300MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN  
CALCULATION:RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

\*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (below 1GHz)**  
**Tx(3DH5), Ch. High**

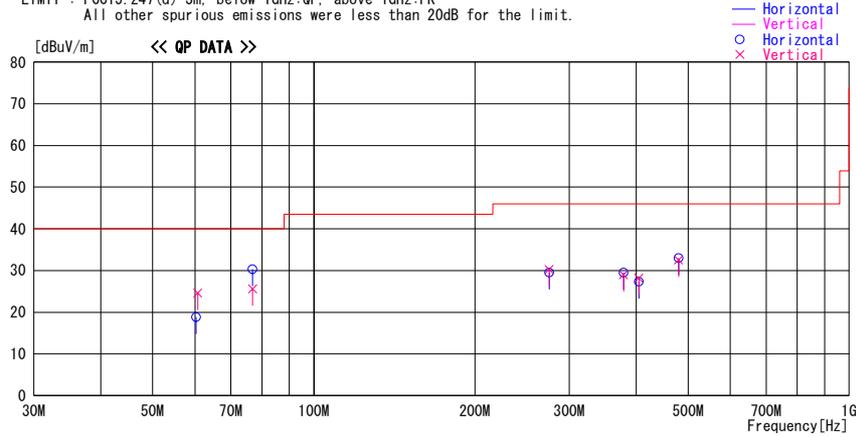
**DATA OF RADIATED EMISSION TEST**

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2008/03/19

Company : Sony Computer Entertainment Inc. Report No. : 28HE0125-HO-01  
Kind of EUT : WIRELESS CONTROLLER Power : AC 120V / 60Hz  
Model No. : CECHZC2U Temp./Humi. : 26deg. C / 51%  
Serial No. : 4 Operator : Motoya Imura

Mode / Remarks : BT Tx 2480MHz 3DH5 Hor:X-axis Ver:Y-axis

LIMIT : FCC15.247(d) 3m. below 1GHz:QP, above 1GHz:PK  
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Loss&Gain [dB]				
60.721	36.9	QP	8.1	-20.4	24.6	Vert.	40.0	15.4
60.292	31.0	QP	8.2	-20.4	18.8	Hori.	40.0	21.2
76.834	39.2	QP	6.4	-20.0	25.6	Vert.	40.0	14.4
76.834	43.9	QP	6.4	-20.0	30.3	Hori.	40.0	9.7
275.319	27.8	QP	18.6	-16.9	29.5	Hori.	46.0	16.5
275.333	28.6	QP	18.6	-16.9	30.3	Vert.	46.0	15.7
378.948	30.0	QP	16.0	-16.5	29.5	Hori.	46.0	16.5
378.942	29.5	QP	16.0	-16.5	29.0	Vert.	46.0	17.0
404.717	27.1	QP	16.7	-16.5	27.3	Hori.	46.0	18.7
404.721	28.0	QP	16.7	-16.5	28.2	Vert.	46.0	17.8
480.076	31.4	QP	17.9	-16.3	33.0	Hori.	46.0	13.0
480.075	30.9	QP	17.9	-16.3	32.5	Vert.	46.0	13.5

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-300MHz:BICONICAL, 300MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN  
CALCULATION:RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

\*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (below 1GHz)**  
**Rx, Ch. Mid**

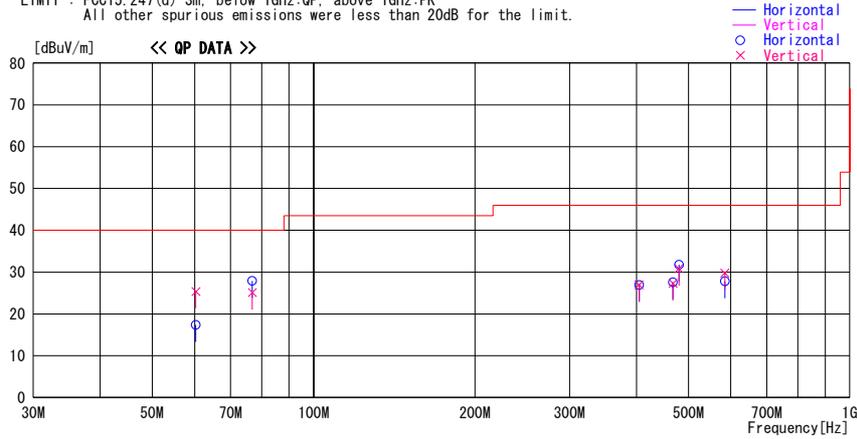
**DATA OF RADIATED EMISSION TEST**

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2008/03/19

Company : Sony Computer Entertainment Inc. Report No. : 28HE0125-HO-01  
Kind of EUT : WIRELESS CONTROLLER Power : AC 120V / 60Hz  
Model No. : CECHZC2U Temp./Humi. : 26deg. C / 43%  
Serial No. : 4 Operator : Shinya Watanabe

Mode / Remarks : BT Rx 2441MHz Hor:X-axis Ver:Y-axis

LIMIT : FCC15.247(d) 3m. below 1GHz:QP, above 1GHz:PK  
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Loss& Gain [dB]				
60.301	29.6	QP	8.2	-20.4	17.4	Hori.	40.0	22.6
60.301	37.6	QP	8.2	-20.4	25.4	Vert.	40.0	14.6
76.837	41.5	QP	6.4	-20.0	27.9	Hori.	40.0	12.1
76.837	38.7	QP	6.4	-20.0	25.1	Vert.	40.0	14.9
404.770	26.7	QP	16.7	-16.5	26.9	Hori.	46.0	19.1
404.770	26.8	QP	16.7	-16.5	27.0	Vert.	46.0	19.0
468.101	26.2	QP	17.7	-16.3	27.6	Hori.	46.0	18.4
468.101	25.9	QP	17.7	-16.3	27.3	Vert.	46.0	18.7
480.090	30.2	QP	17.9	-16.3	31.8	Hori.	46.0	14.2
480.090	29.2	QP	17.9	-16.3	30.8	Vert.	46.0	15.2
584.633	24.5	QP	19.1	-15.8	27.8	Hori.	46.0	18.2
584.633	26.5	QP	19.1	-15.8	29.8	Vert.	46.0	16.2

CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-: HORN  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (above 1GHz)**  
**Tx(DH5), Ch. Low**

UL Japan, Inc.  
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company : Sony Computer Entertainment Inc.      REPORT NO : 28HE0125-HO-01  
Equipment : WIRELESS CONTROLLER      REGULATION : FCC15.247(d)/RSS-210A8.5  
Model : CECHZC2U      TEST DISTANCE : 3/1m  
Sample No. : 4      DATE : 3/18/2008  
Power : DC5V (USB Bus Power)      TEMPERATURE : 25deg.C  
Mode : Bluetooth, Tx 2402MHz(DH5)      HUMIDITY : 40%  
Remarks : Hor X , Ver Y-axis      ENGINEER : Motoya Imura

**PK DETECT** (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	46.2	44.3	27.3	31.5	2.3	0.0	44.3	42.4	73.9	29.6	31.5
2*	2400.0	66.7	64.2	27.3	31.5	3.8	0.0	66.3	63.8	73.9	-	-
3	4804.0	40.5	40.0	31.5	30.8	3.6	0.8	45.6	45.1	73.9	28.3	28.8
4	7206.0	41.5	41.8	35.8	31.3	4.6	0.7	51.3	51.6	73.9	22.6	22.3
5	9608.0	41.3	42.8	38.2	31.9	5.8	1.1	54.5	56.0	73.9	19.4	17.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12010.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
7	14412.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
8	16814.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
9	19216.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
10	21618.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
11	24020.0	44.4	44.5	38.7	30.5	8.1	0.0	51.2	51.3	73.9	22.7	22.6

**AV DETECT** (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	33.3	30.2	27.3	31.5	2.3	0.0	31.4	28.3	53.9	22.5	25.6
2*	2400.0	47.3	46.0	27.3	31.5	3.8	0.0	46.9	45.6	53.9	-	-
3	4804.0	30.8	28.3	31.5	30.8	3.6	0.8	35.9	33.4	53.9	18.0	20.5
4	7206.0	29.3	29.4	35.8	31.3	4.6	0.7	39.1	39.2	53.9	14.8	14.7
5	9608.0	28.9	29.8	38.2	31.9	5.8	1.1	42.1	43.0	53.9	11.8	10.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12010.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
7	14412.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
8	16814.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
9	19216.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
10	21618.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
11	24020.0	31.0	31.1	38.7	30.5	8.1	0.0	37.8	37.9	53.9	16.1	16.0

\*Reference data

**20dBc(Fundamental 2402MHz)** (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	2402.0	102.1	101.7	27.3	31.5	2.3	0.0	100.2	99.8	-	-	-
2	2400.0	56.3	55.2	27.3	31.5	2.3	0.0	54.4	53.3	Funda-20dB	25.8	26.5

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

\*Except for the above table : All other spurious emissions were less than 20dB for the limit.

\*In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.

\*The test result is round off to one or two decimal places, so some differences might be observed.

\*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

**Radiated Spurious Emission (above 1GHz)**  
**Tx(DH5), Ch. Mid**

UL Japan, Inc.  
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company	: Sony Computer Entertainment Inc.	REPORT NO	: 28HE0125-HO-01
Equipment	: WIRELESS CONTROLLER	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: CECHZC2U	TEST DISTANCE	: 3/1m
Sample No.	: 4	DATE	: 3/18/2008
Power	: DC5V (USB Bus Power)	TEMPERATURE	: 25deg.C
Mode	: Bluetooth, Tx 2441MHz(DH5)	HUMIDITY	: 40%
Remarks	: Hor X, Ver Y-axis	ENGINEER	: Motoya Imura

**PK DETECT** (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4882.0	40.6	40.2	31.7	30.7	3.6	0.8	46.0	45.6	73.9	27.9	28.3
2	7323.0	40.9	41.8	35.9	31.3	4.7	0.7	50.9	51.8	73.9	23.0	22.1
3	9764.0	40.8	40.7	38.2	32.1	5.8	1.2	53.9	53.8	73.9	20.0	20.1
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12205.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
5	14646.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
6	17087.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
7	19528.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
8	21969.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
9	24410.0	43.2	43.3	38.8	30.3	8.1	0.0	50.3	50.4	73.9	23.6	23.5

**AV DETECT** (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4882.0	28.5	28.3	31.7	30.7	3.6	0.8	33.9	33.7	53.9	20.0	20.2
2	7323.0	29.1	28.9	35.9	31.3	4.7	0.7	39.1	38.9	53.9	14.8	15.0
3	9764.0	28.6	28.7	38.2	32.1	5.8	1.2	41.7	41.8	53.9	12.2	12.1
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12205.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
5	14646.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
6	17087.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
7	19528.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
8	21969.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
9	24410.0	29.6	29.8	38.8	30.3	8.1	0.0	36.7	36.9	53.9	17.2	17.0

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

- \*Except for the above table : All other spurious emissions were less than 20dB for the limit.
- \*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.
- \*The test result is round off to one or two decimal places, so some differences might be observed.
- \*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

**Radiated Spurious Emission (above 1GHz)**  
**Tx(DH5), Ch. High**

UL Japan, Inc.  
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company	: Sony Computer Entertainment Inc.	REPORT NO	: 28HE0125-HO-01
Equipment	: WIRELESS CONTROLLER	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: CECHZC2U	TEST DISTANCE	: 3/1m
Sample No.	: 4	DATE	: 3/18/2008
Power	: DC5V (USB Bus Power)	TEMPERATURE	: 25deg.C
Mode	: Bluetooth, Tx 2480MHz(DH5)	HUMIDITY	: 40%
Remarks	: Hor X, Ver Y-axis	ENGINEER	: Motoya Imura

**PK DETECT** (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss</b>												
1	2483.5	58.8	58.3	27.4	31.5	2.3	0.0	57.0	56.5	73.9	16.9	17.4
2	4960.0	41.6	42.3	31.8	30.7	3.7	0.8	47.2	47.9	73.9	26.7	26.0
3	7440.0	43.6	43.5	36.1	31.3	4.7	0.7	53.8	53.7	73.9	20.1	20.2
4	9920.0	42.9	42.7	38.2	32.2	5.9	1.2	56.0	55.8	73.9	17.9	18.1
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac</b>												
5	12400.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
6	14880.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
7	17360.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
8	19840.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
9	22320.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
10	24800.0	44.7	44.6	38.9	30.1	8.2	0.0	52.2	52.1	73.9	21.7	21.8

**AV DETECT** (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss</b>												
1	2483.5	43.5	42.7	27.4	31.5	2.3	0.0	41.7	40.9	53.9	12.2	13.0
2	4960.0	28.5	29.8	31.8	30.7	3.7	0.8	34.1	35.4	53.9	19.8	18.5
3	7440.0	28.9	29.0	36.1	31.3	4.7	0.7	39.1	39.2	53.9	14.8	14.7
4	9920.0	28.7	28.9	38.2	32.2	5.9	1.2	41.8	42.0	53.9	12.1	11.9
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac</b>												
5	12400.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
6	14880.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
7	17360.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
8	19840.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
9	22320.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
10	24800.0	31.6	31.6	38.9	30.1	8.2	0.0	39.1	39.1	53.9	14.8	14.8

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

- \*Except for the above table : All other spurious emissions were less than 20dB for the limit.
- \*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.
- \*The test result is round off to one or two decimal places, so some differences might be observed.
- \*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Test report No. : 28HE0125-HO-01-A  
Page : 40 of 55  
Issued date : April 7, 2008  
FCC ID : AK8CECHZC2

**Radiated Spurious Emission (above 1GHz)**  
**Tx(3DH5), Ch. Low**

UL Japan, Inc.  
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company : Sony Computer Entertainment Inc.      REPORT NO : 28HE0125-HO-01  
Equipment : WIRELESS CONTROLLER      REGULATION : FCC15.247(d)/RSS-210A8.5  
Model : CECHZC2U      TEST DISTANCE : 3/1m  
Sample No. : 4      DATE : 3/18/2008  
Power : DC5V (USB Bus Power)      TEMPERATURE : 25deg.C  
Mode : Bluetooth, Tx 2402MHz(3DH5)      HUMIDITY : 40%  
Remarks : Hor X , Ver Y-axis      ENGINEER : Motoya Imura

**PK DETECT (RBW: 1MHz, VBW: 1MHz)**

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	46.6	45.2	27.3	31.5	2.3	0.0	44.7	43.3	73.9	29.2	30.6
2*	2400.0	65.1	64.4	27.3	31.5	3.8	0.0	64.7	64.0	73.9	-	-
3	4804.0	40.8	39.6	31.5	30.8	3.6	0.8	45.9	44.7	73.9	28.0	29.2
4	7206.0	41.4	41.5	35.8	31.3	4.6	0.7	51.2	51.3	73.9	22.7	22.6
5	9608.0	41.2	41.9	38.2	31.9	5.8	1.1	54.4	55.1	73.9	19.5	18.8
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12010.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
7	14412.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
8	16814.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
9	19216.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
10	21618.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
11	24020.0	44.3	44.5	38.7	30.5	8.1	0.0	51.1	51.3	73.9	22.8	22.6

\* Reference data

**AV DETECT (RBW: 1MHz, VBW: 10Hz)**

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	32.6	31.2	27.3	31.5	2.3	0.0	30.7	29.3	53.9	23.2	24.6
2*	2400.0	47.5	46.3	27.3	31.5	3.8	0.0	47.1	45.9	53.9	-	-
3	4804.0	28.9	27.8	31.5	30.8	3.6	0.8	34.0	32.9	53.9	19.9	21.0
4	7206.0	29.3	29.4	35.8	31.3	4.6	0.7	39.1	39.2	53.9	14.8	14.7
5	9608.0	29.0	29.9	38.2	31.9	5.8	1.1	42.2	43.1	53.9	11.7	10.8
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
6	12010.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
7	14412.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
8	16814.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
9	19216.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
10	21618.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
11	24020.0	31.1	31.1	38.7	30.5	8.1	0.0	37.9	37.9	53.9	16.0	16.0

\* Reference data

**20dBc(Fundamental 2402MHz) (RBW: 100kHz, VBW: 300kHz)**

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	2402.0	102.4	102.1	27.3	31.5	2.3	0.0	100.5	100.2	-	-	-
2	2400.0	54.2	55.2	27.3	31.5	2.3	0.0	52.3	53.3	Funda-20dB	28.2	26.9

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

\*Except for the above table : All other spurious emissions were less than 20dB for the limit.

\*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

\*The test result is round off to one or two decimal places, so some differences might be observed.

\*Hi-Pass Filter was not used for factor 0.0dB of the above table.

**UL Japan, Inc.**  
**Head Office EMC Lab.**  
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN  
Telephone : +81 596 24 8116  
Facsimile : +81 596 24 8124

Test report No. : 28HE0125-HO-01-A  
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Issued date : April 7, 2008  
FCC ID : AK8CECHZC2

**Radiated Spurious Emission (above 1GHz)**  
**Tx(3DH5), Ch. Mid**

UL Japan, Inc.  
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company : Sony Computer Entertainment Inc.      REPORT NO : 28HE0125-HO-01  
Equipment : WIRELESS CONTROLLER      REGULATION : FCC15.247(d)/RSS-210A8.5  
Model : CECHZC2U      TEST DISTANCE : 3/1m  
Sample No. : 4      DATE : 3/18/2008  
Power : DC5V (USB Bus Power)      TEMPERATURE : 25deg.C  
Mode : Bluetooth, Tx 2441MHz(3DH5)      HUMIDITY : 40%  
Remarks : Hor X , Ver Y-axis      ENGINEER : Motoya Imura

**PK DETECT** (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss</b>												
1	4882.0	40.3	40.4	31.7	30.7	3.6	0.8	45.7	45.8	73.9	28.2	28.1
2	7323.0	41.1	41.3	35.9	31.3	4.7	0.7	51.1	51.3	73.9	22.8	22.6
3	9764.0	41.0	41.1	38.2	32.1	5.8	1.2	54.1	54.2	73.9	19.8	19.7
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac</b>												
4	12205.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
5	14646.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
6	17087.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
7	19528.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
8	21969.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
9	24410.0	43.2	43.2	38.8	30.3	8.1	0.0	50.3	50.3	73.9	23.6	23.6

**AV DETECT** (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss</b>												
1	4882.0	27.2	27.3	31.7	30.7	3.6	0.8	32.6	32.7	53.9	21.3	21.2
2	7323.0	28.9	28.6	35.9	31.3	4.7	0.7	38.9	38.6	53.9	15.0	15.3
3	9764.0	28.7	28.9	38.2	32.1	5.8	1.2	41.8	42.0	53.9	12.1	11.9
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac</b>												
4	12205.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
5	14646.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
6	17087.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
7	19528.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
8	21969.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
9	24410.0	29.7	29.8	38.8	30.3	8.1	0.0	36.8	36.9	53.9	17.1	17.0

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

\*Except for the above table : All other spurious emissions were less than 20dB for the limit.

\*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

\*The test result is round off to one or two decimal places, so some differences might be observed.

\*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

**UL Japan, Inc.**  
**Head Office EMC Lab.**  
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN  
Telephone : +81 596 24 8116  
Facsimile : +81 596 24 8124

Test report No. : 28HE0125-HO-01-A  
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Issued date : April 7, 2008  
FCC ID : AK8CECHZC2

**Radiated Spurious Emission (above 1GHz)**  
**Tx(3DH5), Ch. High**

UL Japan, Inc.  
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company	: Sony Computer Entertainment Inc.	REPORT NO	: 28HE0125-HO-01
Equipment	: WIRELESS CONTROLLER	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: CECHZC2U	TEST DISTANCE	: 3/1m
Sample No.	: 4	DATE	: 3/18/2008
Power	: DC5V (USB Bus Power)	TEMPERATURE	: 25deg.C
Mode	: Bluetooth, Tx 2480MHz(3DH5)	HUMIDITY	: 40%
Remarks	: Hor X, Ver Y-axis	ENGINEER	: Motoya Imura

**PK DETECT** (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER [dBuV]					HOR [dBuV/m]	VER [dBuV/m]		HOR [dB]	VER [dB]
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss</b>												
1	2483.5	66.6	65.6	27.4	31.5	2.3	0.0	64.8	63.8	73.9	9.1	10.1
2	4960.0	41.8	42.4	31.8	30.7	3.7	0.8	47.4	48.0	73.9	26.5	25.9
3	7440.0	43.5	43.6	36.1	31.3	4.7	0.7	53.7	53.8	73.9	20.2	20.1
4	9920.0	42.8	42.8	38.2	32.2	5.9	1.2	55.9	55.9	73.9	18.0	18.0
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac</b>												
5	12400.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
6	14880.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
7	17360.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
8	19840.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
9	22320.0	N/S	N/S	-	-	-	-	-	-	73.9	-	-
10	24800.0	44.9	44.8	38.9	30.1	8.2	0.0	52.4	52.3	73.9	21.5	21.6

**AV DETECT** (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER [dBuV]					HOR [dBuV/m]	VER [dBuV/m]		HOR [dB]	VER [dB]
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss</b>												
1	2483.5	48.2	48.3	27.4	31.5	2.3	0.0	46.4	46.5	53.9	7.5	7.4
2	4960.0	27.1	29.8	31.8	30.7	3.7	0.8	32.7	35.4	53.9	21.2	18.5
3	7440.0	28.7	29.1	36.1	31.3	4.7	0.7	38.9	39.3	53.9	15.0	14.6
4	9920.0	28.6	28.7	38.2	32.2	5.9	1.2	41.7	41.8	53.9	12.2	12.1
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac</b>												
5	12400.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
6	14880.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
7	17360.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
8	19840.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
9	22320.0	N/S	N/S	-	-	-	-	-	-	53.9	-	-
10	24800.0	31.8	31.9	38.9	30.1	8.2	0.0	39.3	39.4	53.9	14.6	14.5

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

\*Except for the above table : All other spurious emissions were less than 20dB for the limit.

\*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

\*The test result is round off to one or two decimal places, so some differences might be observed.

\*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

**UL Japan, Inc.**

**Head Office EMC Lab.**

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

Test report No. : 28HE0125-HO-01-A  
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FCC ID : AK8CECHZC2

## Radiated Spurious Emission (above 1GHz) Rx, Ch. Mid

UL Japan, Inc.  
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company	: Sony Computer Entertainment Inc.	REPORT NO	: 28HE0125-HO-01
Equipment	: WIRELESS CONTROLLER	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: CECHZC2U	TEST DISTANCE	: 3m
Sample No.	: 4	DATE	: 3/18/2008
Power	: DC5V (USB Bus Power)	TEMPERATURE	: 25deg.C
Mode	: Bluetooth, Rx 2441MHz	HUMIDITY	: 40%
Remarks	: Hor X, Ver Y-axis	ENGINEER	: Motoya Imura

**PK DETECT** (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2439.6	48.5	50.5	27.4	31.5	2.3	0.0	46.7	48.7	73.9	27.2	25.2
2	4882.0	40.2	40.5	31.7	30.7	3.2	0.0	44.4	44.7	73.9	29.5	29.2
3	7323.0	41.6	41.9	35.9	31.3	4.2	0.0	50.4	50.7	73.9	23.5	23.2
4	9764.0	40.6	40.8	38.2	32.1	5.2	0.0	51.9	52.1	73.9	22.0	21.8

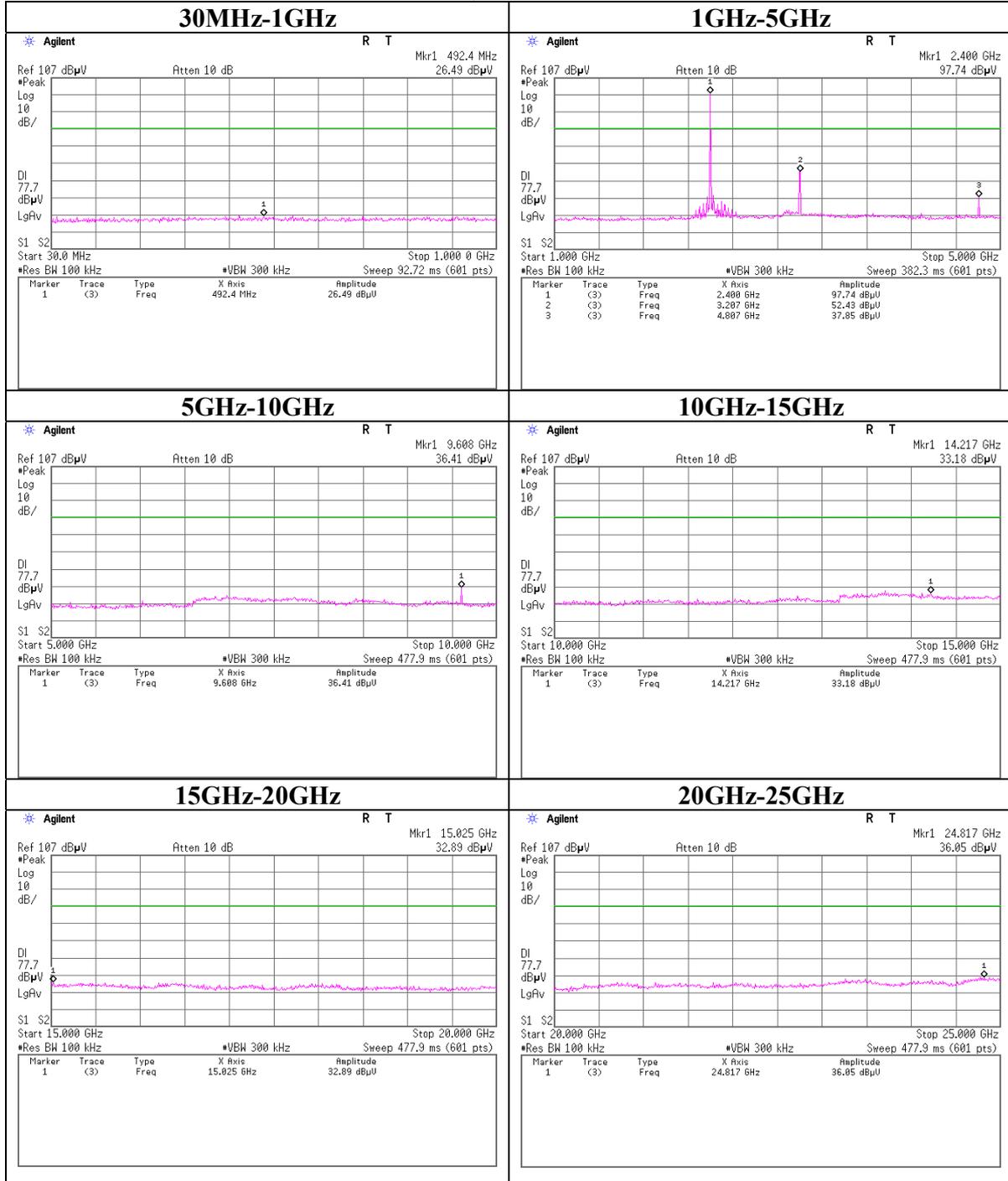
**AV DETECT** (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2439.6	45.7	47.2	27.4	31.5	2.3	0.0	43.9	45.4	53.9	10.0	8.5
2	4882.0	27.3	27.7	31.7	30.7	3.2	0.0	31.5	31.9	53.9	22.4	22.0
3	7323.0	28.7	28.9	35.9	31.3	4.2	0.0	37.5	37.7	53.9	16.4	16.2
4	9764.0	28.2	28.3	38.2	32.1	5.2	0.0	39.5	39.6	53.9	14.4	14.3

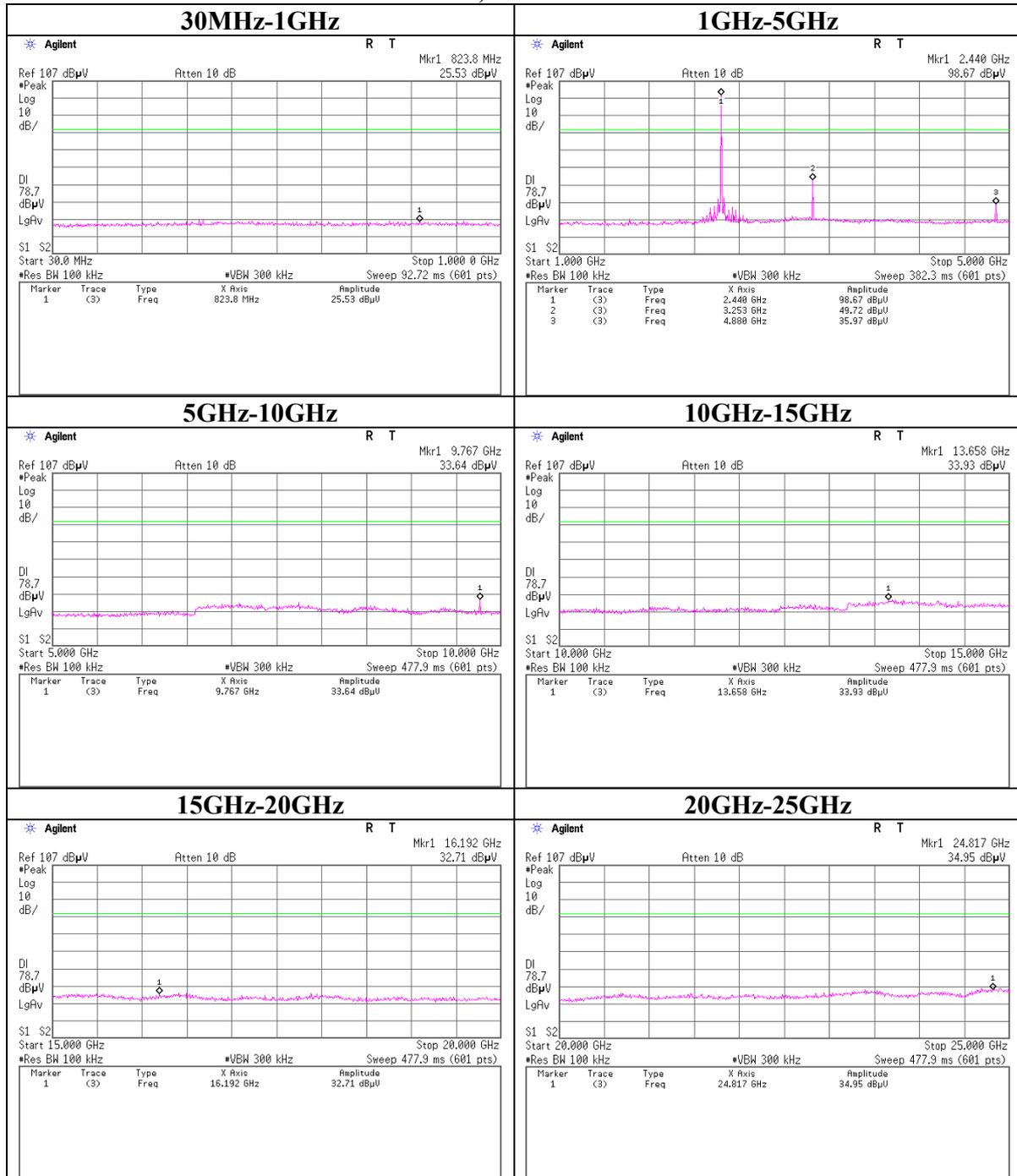
- \*Except for the above table : All other spurious emissions were less than 20dB for the limit.
- \*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.
- \*The test result is round off to one or two decimal places, so some differences might be observed.
- \*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

**UL Japan, Inc.**  
**Head Office EMC Lab.**  
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN  
Telephone : +81 596 24 8116  
Facsimile : +81 596 24 8124

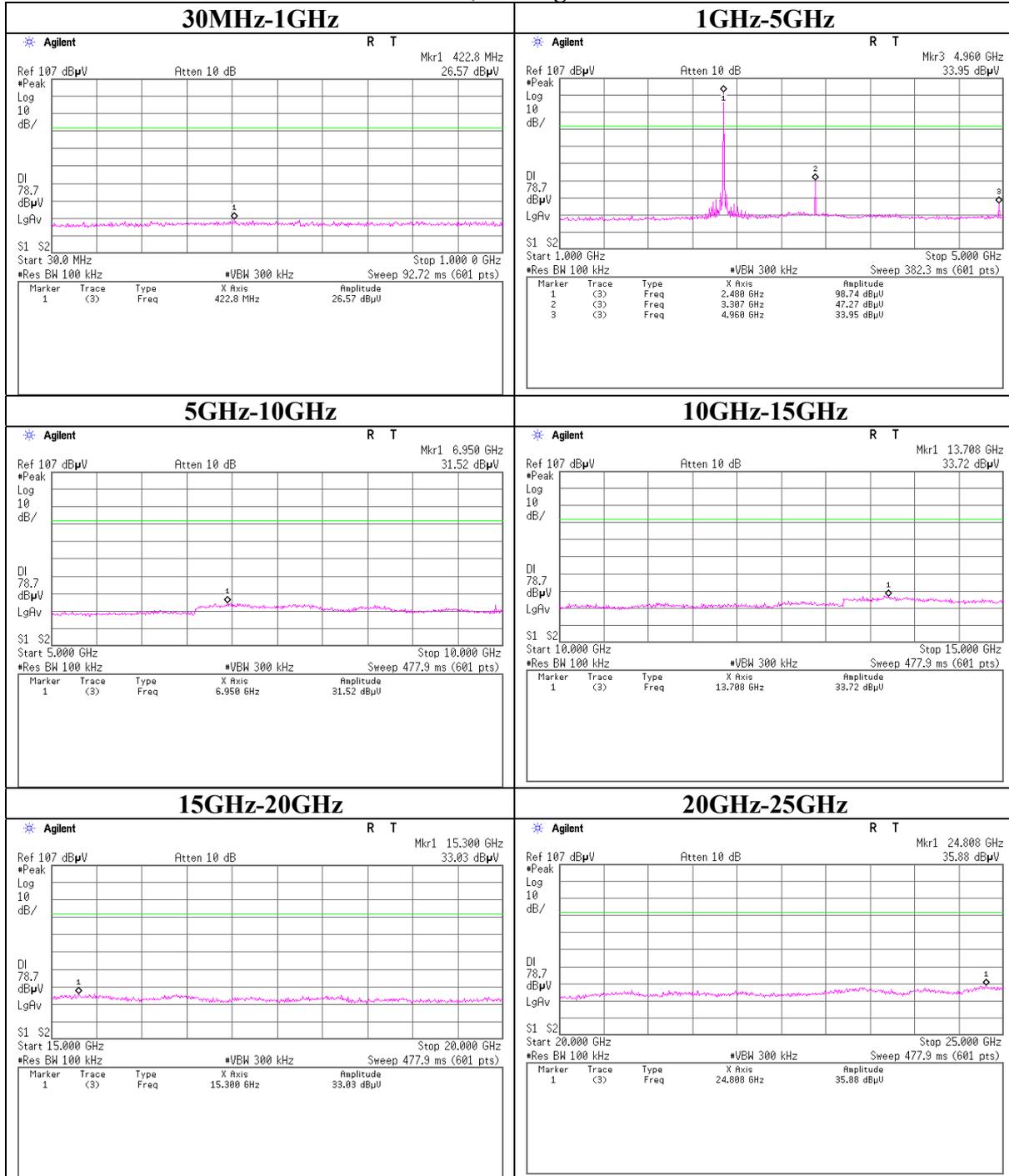
**Conducted Spurious Emission**  
**Tx, Ch:Low**



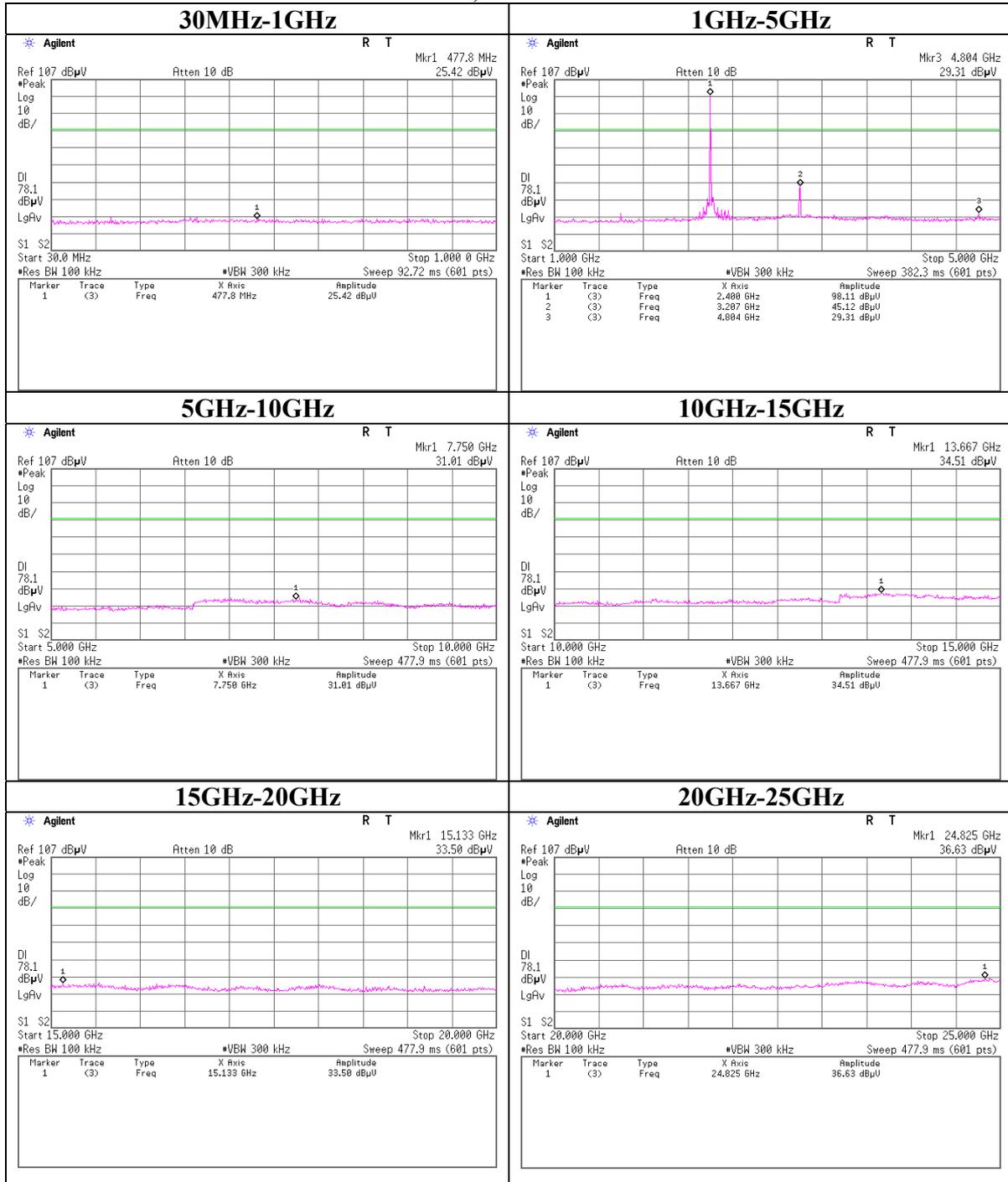
**Conducted Spurious Emission**  
**Tx, Ch:Mid**



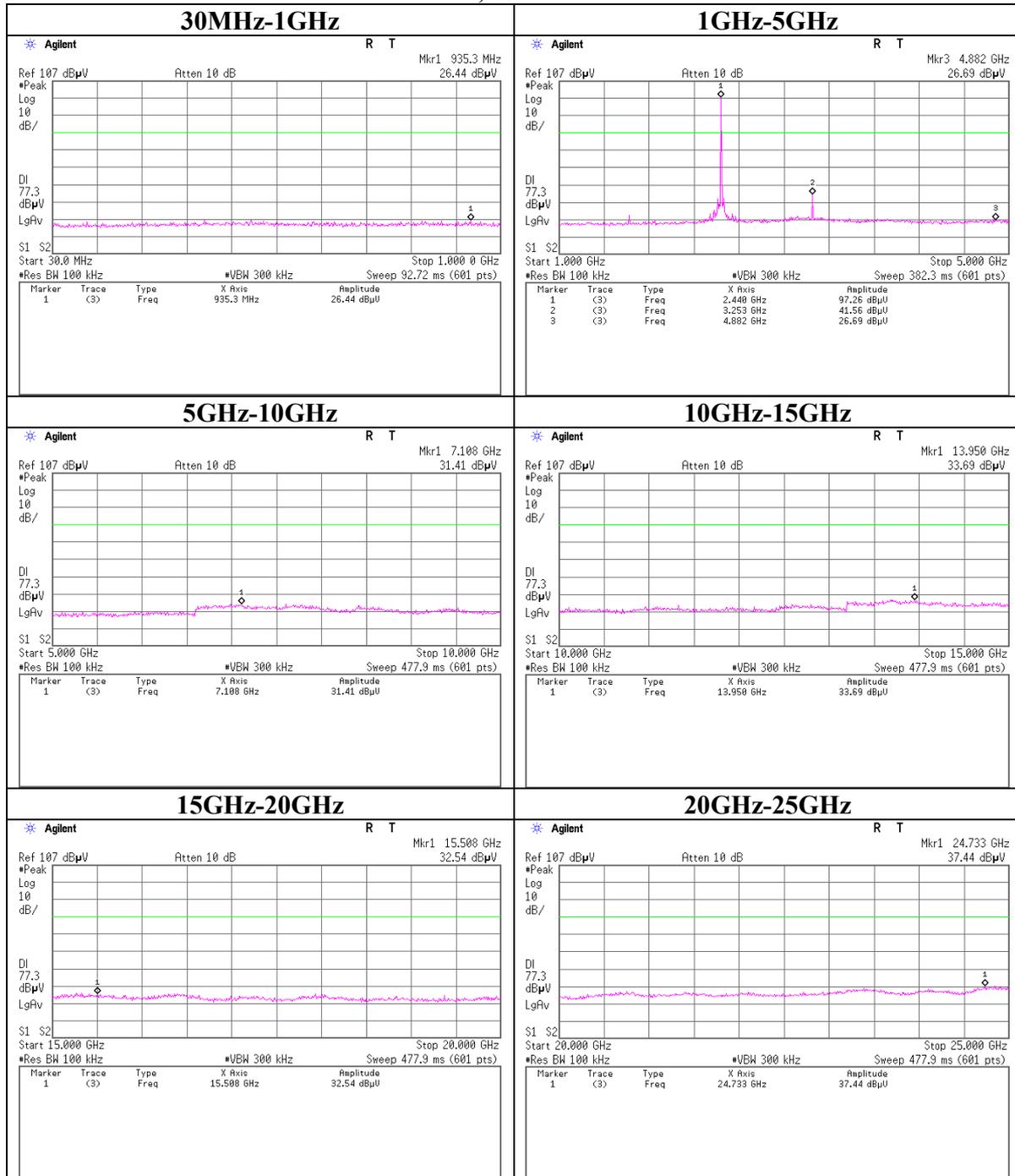
**Conducted Spurious Emission**  
**Tx, Ch:High**



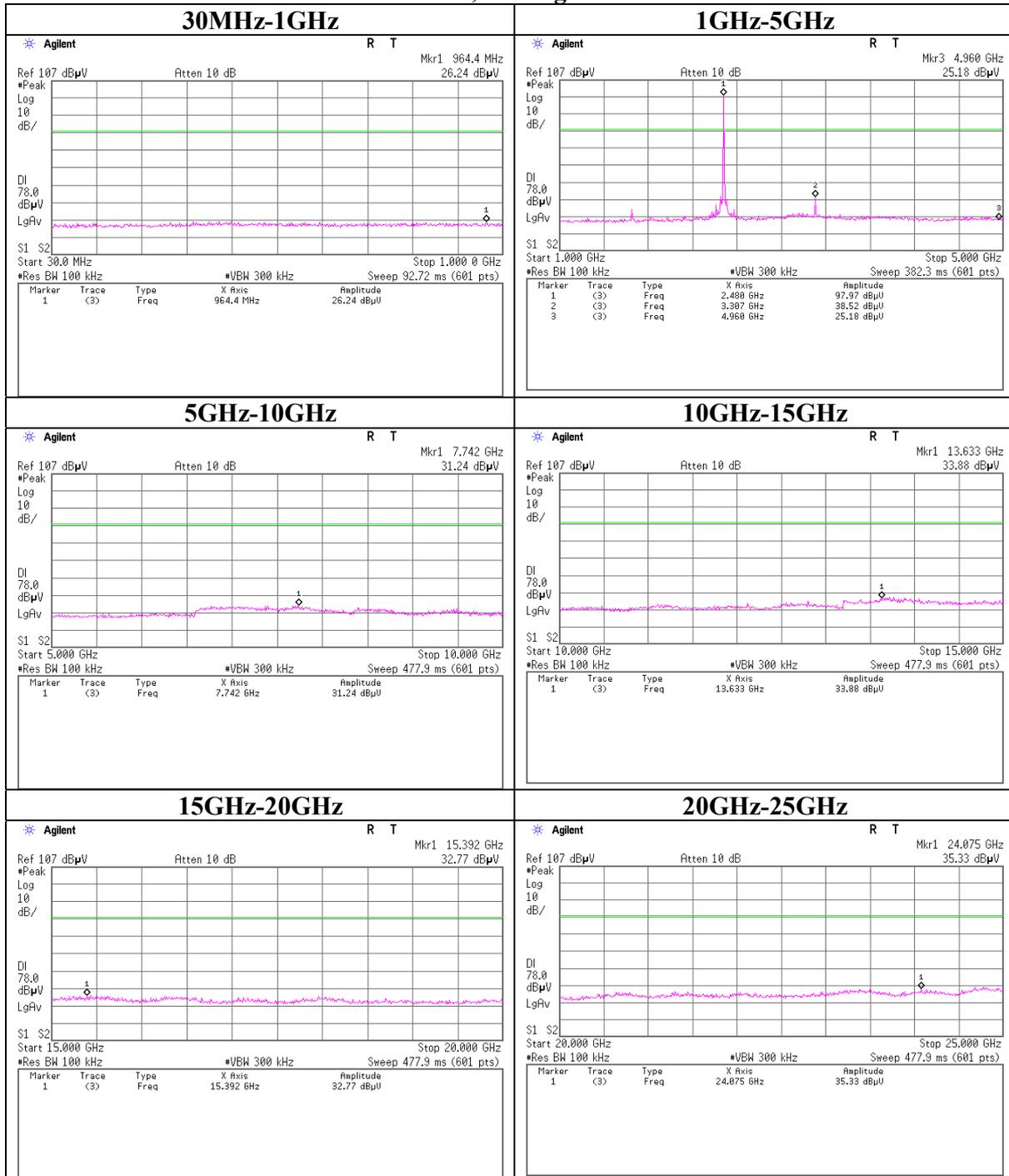
**Conducted Spurious Emission (EDR)**  
**Tx, Ch:Low**



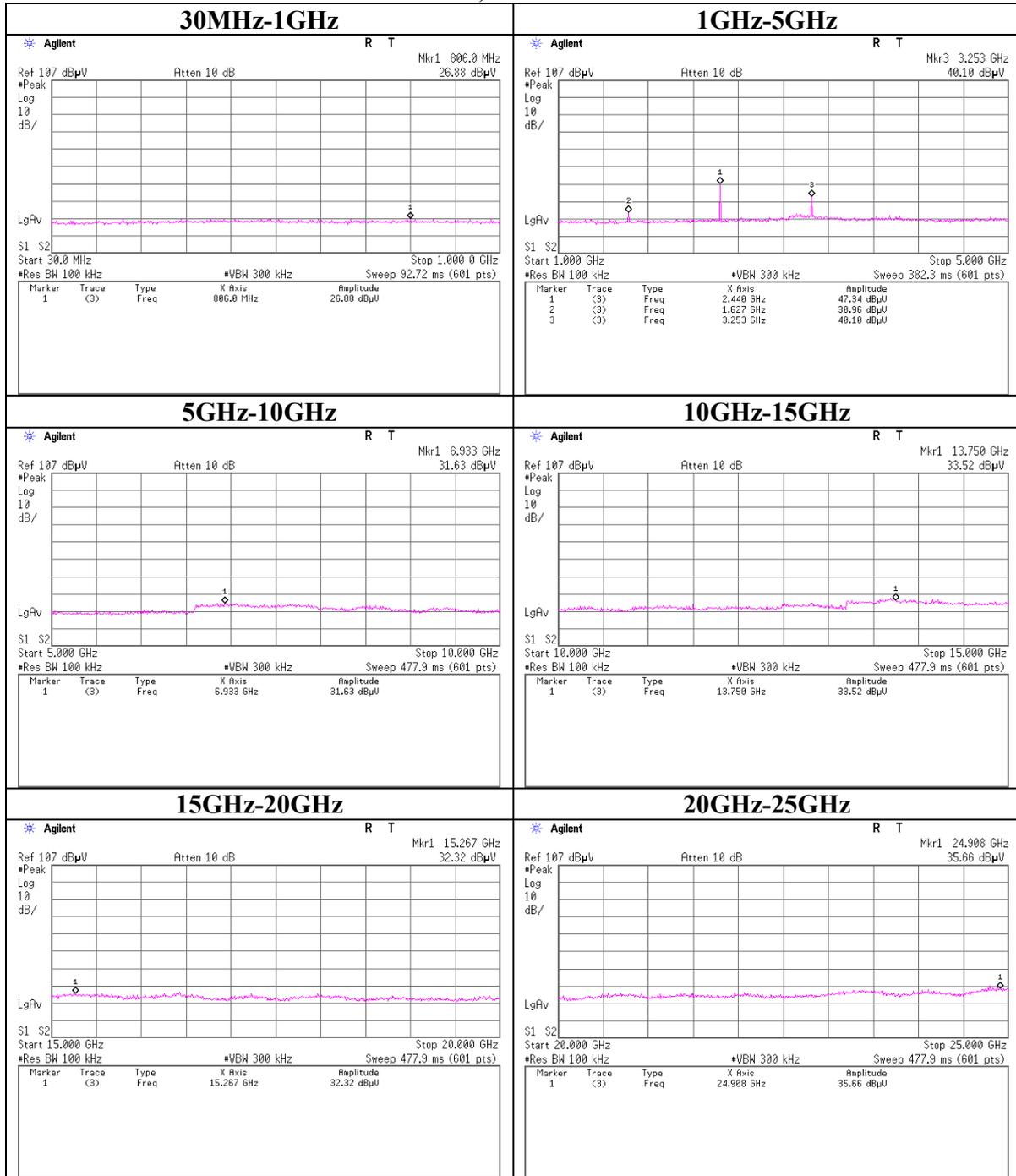
**Conducted Spurious Emission (EDR)**  
**Tx, Ch:Mid**



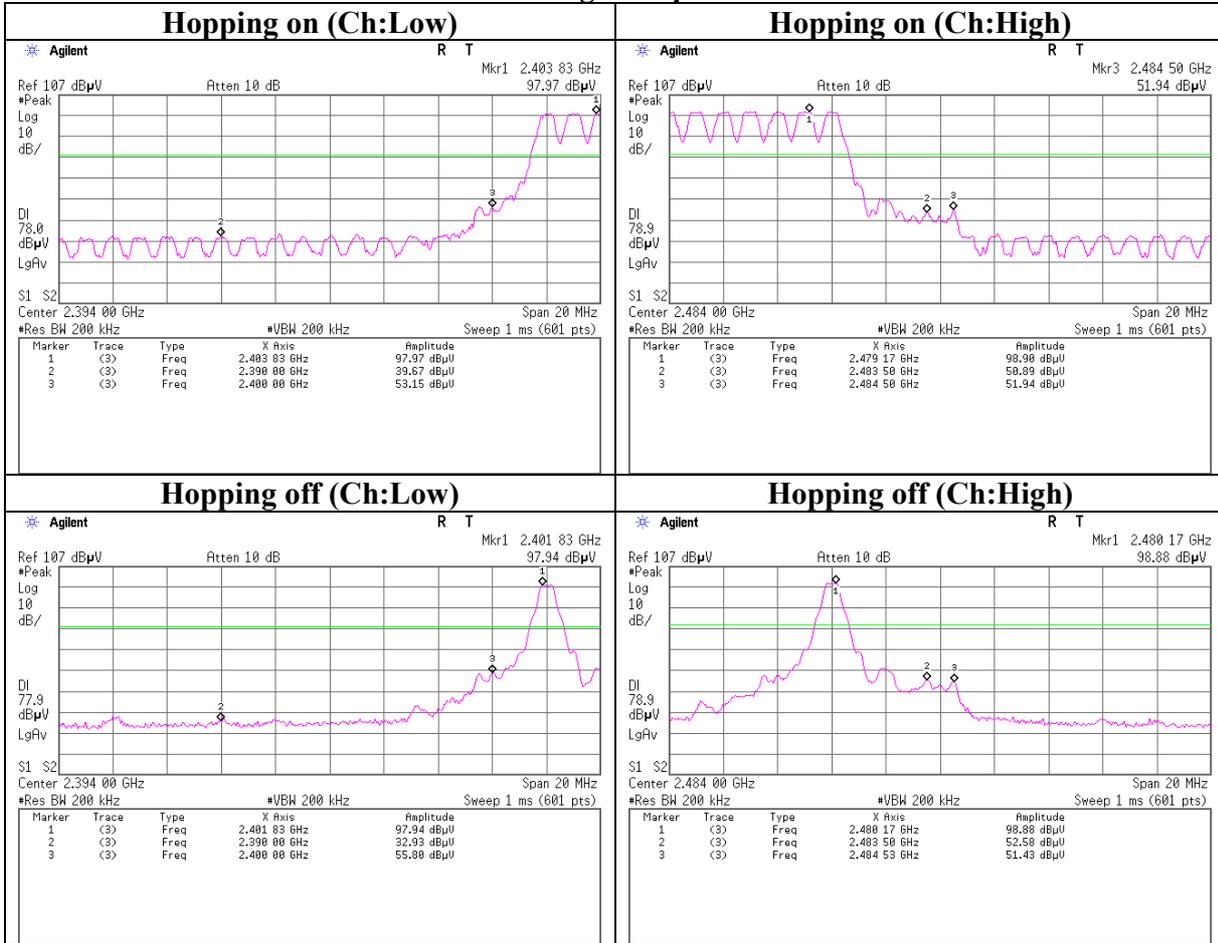
**Conducted Spurious Emission (EDR)**  
**Tx, Ch:High**



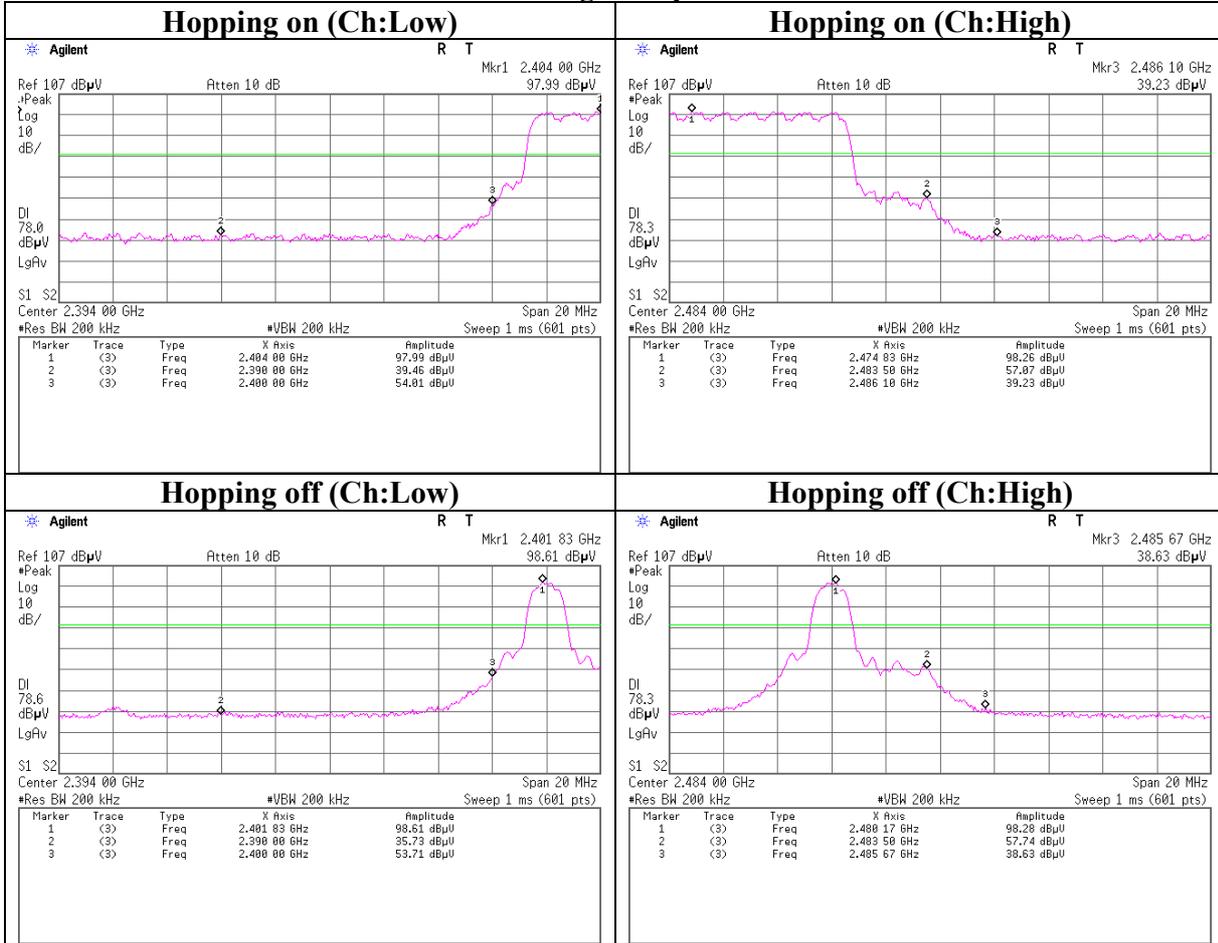
**Conducted Spurious Emission**  
**Rx, Ch:Mid**



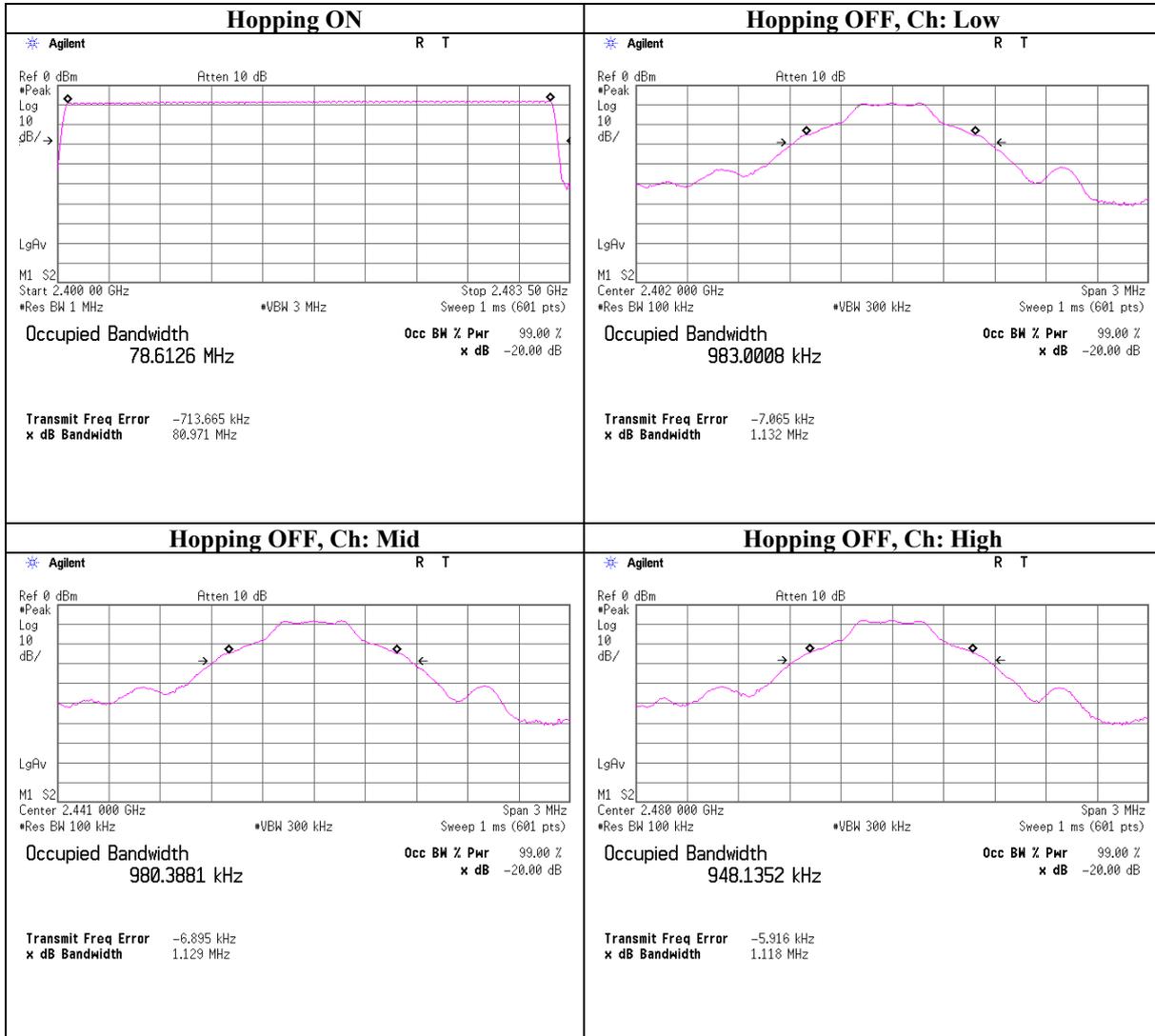
### Conducted Spurious Emission Band Edge compliance



**Conducted Spurious Emission (EDR)**  
**Band Edge compliance**

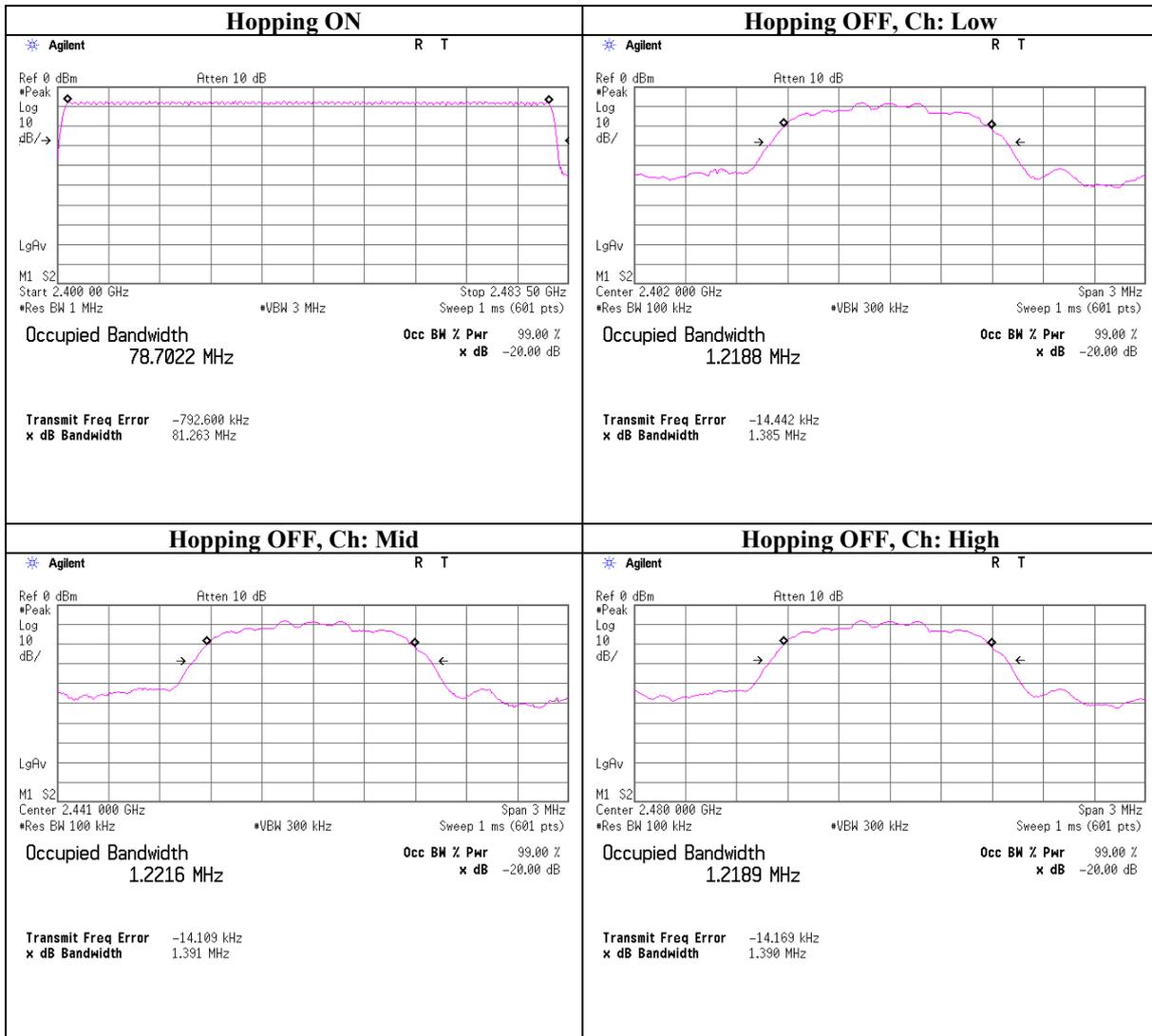


### 99% Occupied Bandwidth



\*Refer to 20dB Bandwidth for 99% Bandwidth inquiry mode

### 99% Occupied Bandwidth(EDR)



\*Refer to 20dB Bandwidth for 99% Bandwidth inquiry mode

### APPENDIX 3:Test instruments

#### EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MSA-10	Spectrum Analyzer	Agilent	E4448A	AT/RE	2008/02/27 * 12
MPM-08	Power Meter	Anritsu	ML2495A	AT	2007/09/12 * 12
MPSE-11	Power sensor	Anritsu	MA2411B	AT	2007/09/12 * 12
MAT-23	Attenuator(10dB) DC-18GHz	Orient Microwave	BX10-0476-00	AT	2008/03/05 * 12
MOS-04	Digital Humidity Indicator	N.T	NT-1800	AT	2007/11/12 * 12
MAEC-03	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE	2007/03/05 * 12
MHA-20	Horn Antenna 1- 18GHz	Schwarzbeck	BBHA9120D	RE	2007/04/14 * 12
MHA-16	Horn Antenna 15- 40GHz	Schwarzbeck	BBHA9170	RE	2007/04/06 * 12
MCC-78	Microwave Cable 1G- 26.5GHz	Suhner	SUCOFLEX104	RE	2007/12/26 * 12
MCC-58	Microwave Cable 1G- 26.5GHz	Suhner	SUCOFLEX104	RE	2008/03/05 * 12
MPA-11	MicroWave System Amplifier	Agilent	83017A	RE	2008/03/13 * 12
MHF-19	High Pass Filter 3.5- 18.0GHz	TOKIMEC	TF323DCA	RE	2007/12/10 * 12
MSTW-14	EMI measurement program	TSJ	TEPTO-DV	RE	-
MOS-13	Thermo-Hygrometer	Custom	CTH-180	RE	2008/01/10 * 12
MAEC-01	Anechoic Chamber	TDK	Semi Anechoic Chamber 10m	RE	2007/11/23 * 12
MBA-01	Biconical Antenna	Schwarzbeck	BBA9106	RE	2007/10/21 * 12
MLA-09	Logperiodic Antenna	Schwarzbeck	USLP9143B	RE	2008/01/12 * 12
MAT-06	Attenuator(6dB)	Weinschel Corp	2	RE	2007/11/14 * 12
MCC-01	Coaxial Cable 0.1- 3000MHz	Suhner/storm/Agilent /TSJ	-	RE	2008/02/29 * 12
MPA-04	Pre Amplifier	Agilent	8447D	RE	2007/07/11 * 12
MTR-01	Test Receiver	Rohde & Schwarz	ESI40	RE	2007/10/19 * 12
MJM-01	Measure	KDS	ES19-55	RE	-
MOS-01	Digital Humidity Indicator	N.T	NT-1800	RE	2007/11/12 * 12

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

All equipment is calibrated with traceable calibrations. Each calibration 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:

RE: Radiated Emission

AT: Antenna Terminal Conducted test

**UL Japan, Inc.**

**Head Office EMC Lab.**

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124