



FCC ID: XLU83973791

AUDIX Technology (Shenzhen) Co., Ltd.

FCC PART 15C TEST REPORT FOR CERTIFICATION

On Behalf of

Activision Publishing, Inc
USB Wireless Receiver for Wii & USB Wireless Receiver for PS3

Trade Name : Activision.

Model Number: 83973791/84148791

FCC ID: XLU83973791

Prepared for : Activision Publishing, Inc
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Date of Report : Jul.20, 2011

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TEST REPORT CERTIFICATION

Applicant : Activision Publishing, Inc
Manufacturer : Activision Publishing, Inc.
EUT Description : USB Wireless Receiver for Wii & USB Wireless Receiver for PS3
FCC ID : XLU83973791

(A) Trade Name : Activision.
(B) MODEL NO. : 83973791/84148791
(C) SERIAL NO. : N/A
(D) POWER SUPPLY : DC 5V From Wii Input AC 230V/50Hz
DC 5V From PS3 Input AC 230V/50Hz
(E) TEST VOLTAGE : DC 5V From Wii Input AC 230V/50Hz
DC 5V From PS3 Input AC 230V/50Hz

Tested for comply with:
FCC Rules and Regulations Part 15 Subpart C:2008

Test procedure used:
ANSI C63.10:2009

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart C requirements.

The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. This report contains data that are not covered by the NVLAP accreditation. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : May.26~Jul.15, 2011 Report of date: Jul.20, 2011

Prepared by : Cerry He
Cerry He / Assistant

Reviewer by : [Signature]
Ken Lu / Senior Assistant



信華科技(深圳)有限公司 / Senior Assistant
Audix Technology (Shenzhen) Co., Ltd.

EMC 部門報告專用章

Stamp only for EMC Dept. Report

Signature: [Signature]

Approved & Authorized Signer : _____

Ken Lu / Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

Description of Test Item	Standard	Results
Power Line Conducted Emission Test	FCC Part 15C: 15.207 ANSI C63.10-2009	N/A
Radiated Emission Test	FCC Part 15C: 15.209 FCC Part 15C: 15.249 ANSI C63.10-2009	PASS
Band Edge Compliance Test	FCC Part 15: 15.249 ANSI C63.10-2009	PASS
20dB Bandwidth Test	FCC Part 15: 15.215 ANSI C63.10-2009	PASS

N/A is an abbreviation for Not Applicable.

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

Product Name	:	USB Wireless Receiver for Wii & USB Wireless Receiver for PS3
Trade Name	:	Activision.
Model Number	:	83973791/84148791 83973791/84148791 are all the same except the external label.
FCC ID	:	XLU83973791
Operation Frequency	:	2427.75MHz~2479.75MHz RF ID 13.56MHz
Modulation	:	GFSK
Antenna	:	Integrated PCB antenna, 0dBi gain
Applicant	:	Activision Publishing, Inc 3100 Ocean Park Boulevard., Santa Monica, CA90405, USA
Manufacturer	:	Sunlight Technology Electronic Manufacturing Co; Ltd. New Asia Industrial City, Lin Village, Tangxia Town, Dongguan City, China
Date of Test	:	May.26~Jul.15, 2011
Date of Receipt	:	Apr.12, 2011
Sample Type	:	Prototype production

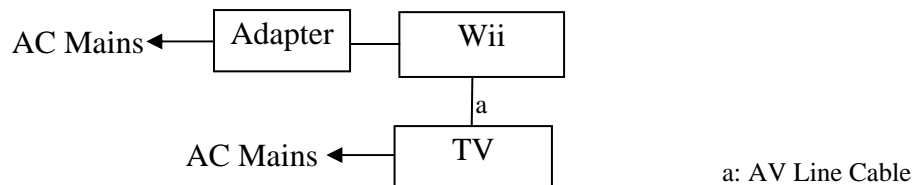
Note: This Report is only for frequency band 2427.75~2478.75MHz for RF ID13.56MHz are reported in other report.

2.2. Tested Supporting System Details

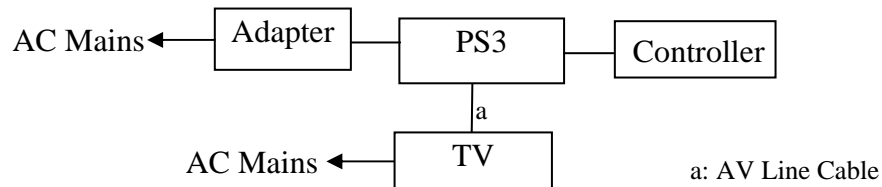
No.	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type
1.	Play station 3	N/A	Sony	SCE-DECHA OOA	N/A	<input type="checkbox"/> FCC DoC <input type="checkbox"/> BSMI ID
2.	Controller	Manufacturer: SONY M/N: CECHZCIU				
3	Wii	Manufacturer: SANSHI Electronics co Ltd. M/N: RVT-002				
4	TV	Manufacturer: TCL M/N: 22HR5434				

2.3. Block diagram of connection between the EUT and simulators

USB Wireless Receiver for Nintendo Wii



USB Wireless Receiver for PS3



(EUT: USB Wireless Receiver for Wii & USB Wireless Receiver for PS3)

2.4. Test Facility

Site Description

Name of Firm : Audix Technology (Shenzhen) Co., Ltd.
No. 6, Ke Feng Rd., 52 Block, Shenzhen
Science & Industrial Park, Nantou,
Shenzhen, Guangdong, China

3m Anechoic Chamber : Certificated by FCC, USA
Registration Number: 90454
Valid Date: Mar.31, 2012

3m & 10m Anechoic Chamber : Certificated by FCC, USA
Registration Number: 794232
Valid Date: Dec.30, 2012

EMC Lab. : Certificated by Industry Canada
Registration Number: IC 5183A-1
Valid Date: Jul. 02, 2011

: Accredited by DATech, German
Registration Number: DAT-P-091/99-01
Valid Date: Feb. 01, 2014

Accredited by NVLAP, USA
NVLAP Code: 200372-0
Valid Date: Mar.31, 2012

2.5. Measurement Uncertainty (95% confidence levels, k=2)

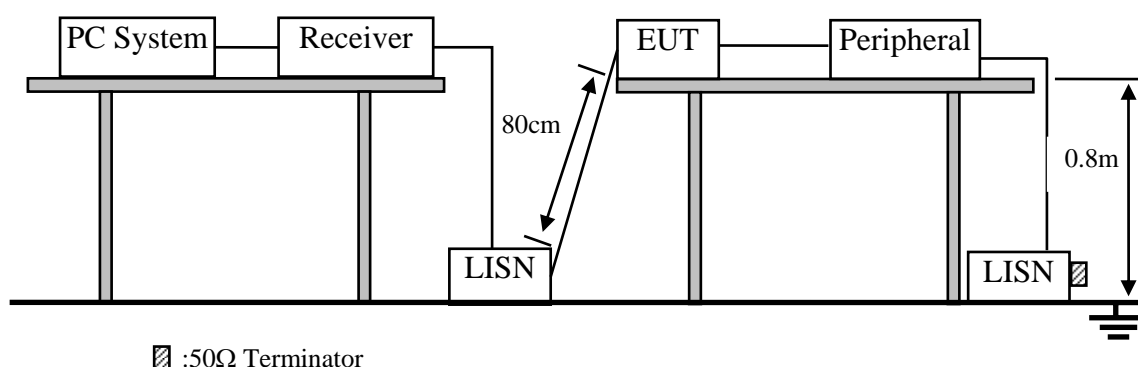
Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.2 dB
Uncertainty for Radiation Emission test in 3m chamber	3.6 dB(30~200MHz, Polarize: H)
	3.7 dB(30~200MHz, Polarize: V)
	4.0 dB(200M~1GHz, Polarize: H)
	3.7 dB(200M~1GHz, Polarize: V)
Uncertainty for Radiated Spurious Emission test in RF chamber	3.57dB
Uncertainty for Conduction Spurious emission test	2.00 dB
Uncertainty for Output power test	0.73 dB
Uncertainty for Power density test	2.00 dB
Uncertainty for Frequency range test	7×10^{-8}
Uncertainty for Bandwidth test	83 kHz
Uncertainty for DC power test	0.038 %
Uncertainty for test site temperature and humidity	0.6°C
	3%

3. POWER LINE CONDUCTED EMISSION TEST

3.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Nov.05, 10	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Nov.05, 10	1 Year
3.	L.I.S.N.#3	Kyoritsu	KNW-242C	8-1920-1	May 08, 11	1 Year
4.	Terminator	Hubersuhner	50Ω	No. 1	May 08, 11	1 Year
5.	RF Cable	Fujikura	3D-2W	LISN Cable 1#	May 08, 11	1 Year
6.	Coaxial Switch	Anritsu	MP59B	M55367	May 08, 11	1 Year
7.	Passive Probe	Rohde & Schwarz	ESH2-Z3	299.7810.52	May 08, 11	1 Year
8.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May 08, 11	1 Year

3.2. Block Diagram of Test Setup



3.3. Power Line Conducted Emission Test Limits

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1. USB Wireless Receiver for Wii & USB Wireless Receiver for PS3 (EUT)

Model Number : 83973791/84148791

Serial Number : N/A

3.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.3.

3.5. Operating Condition of EUT

3.5.1. Setup the EUT as shown in Section 3.2.

3.5.2. Turned on the power of all equipment.

3.5.3. Let the EUT worked in test mode (Tx Mode) and tested it.

3.6. Test Procedure

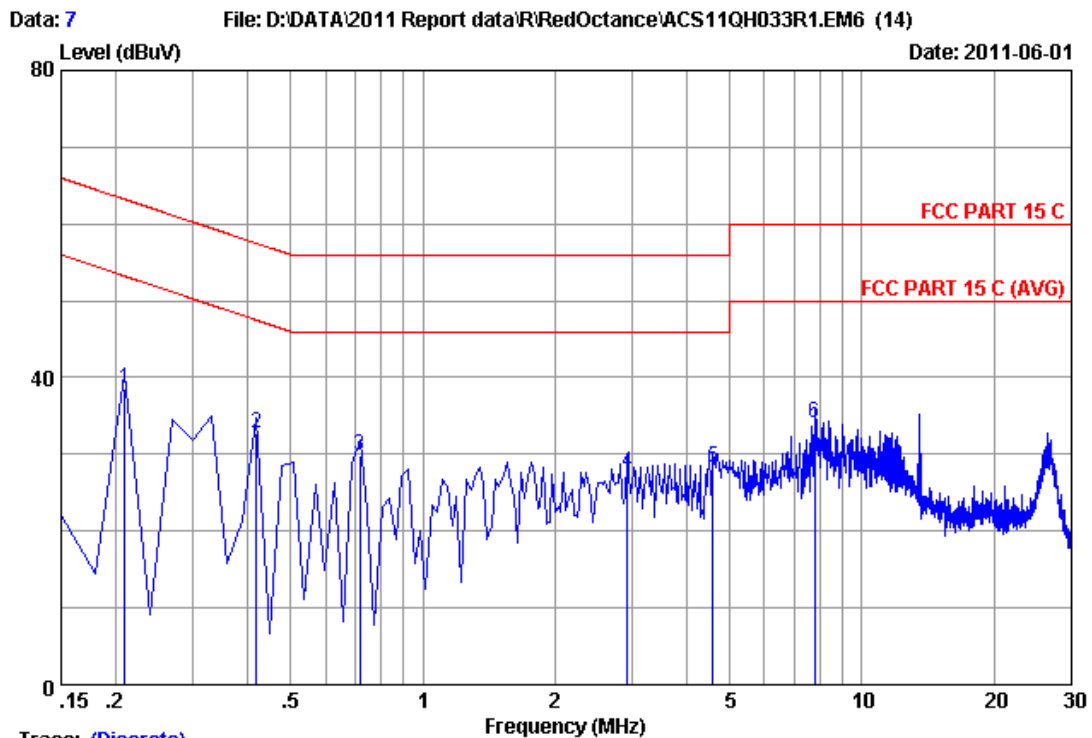
The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2009 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESHS10) is set at 10kHz.

The frequency range from 150kHz to 30MHz is checked.

3.7. Power Line Conducted Emission Test Results

PASS. (All emissions not reported below are too low against the prescribed limits.)



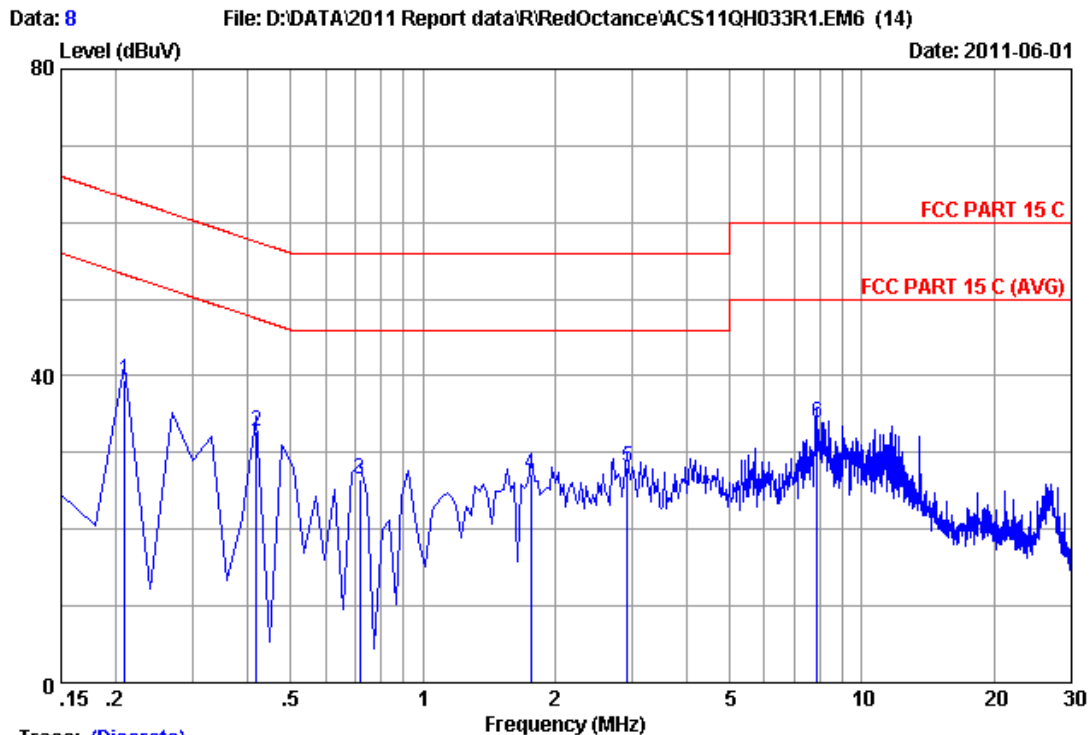
Trace: (Discrete)

Site no :1#conduction Data No :7
 Dis./Ant. :** 2011 ESH2-Z5 LINE
 Limit :FCC PART 15 C
 Env./Ins. :29.5°C/55% Engineer :Leo-Li
 EUT :USB Wireless Receiver for PS3
 Power Rating :DC 5V From PS3 Input AC 120V/60Hz
 Test Mode :Tx Mode
 M/N:84148791

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.20970	0.17	9.98	28.41	38.56	63.22	24.66	QP
2	0.41865	0.19	9.98	22.58	32.75	57.47	24.72	QP
3	0.71715	0.19	9.97	19.71	29.87	56.00	26.13	QP
4	2.926	0.33	9.95	17.45	27.73	56.00	28.27	QP
5	4.568	0.36	9.93	17.94	28.23	56.00	27.77	QP
6	7.792	0.52	9.91	23.70	34.13	60.00	25.87	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.

2.If the average limit is met when using a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



Trace: (Discrete)

Site no :1#conduction Data No :8
 Dis./Ant. :** 2011 ESH2-Z5 NEUTRAL
 Limit :FCC PART 15 C
 Env./Ins. :29.5°C/55% Engineer :Leo-Li
 EUT :USB Wireless Receiver for PS3
 Power Rating :DC 5V From PS3 Input AC 120V/60Hz
 Test Mode :Tx Mode
 M/N:84148791

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.20970	0.21	9.98	29.15	39.34	63.22	23.88	QP
2	0.41865	0.22	9.98	22.64	32.84	57.47	24.63	QP
3	0.71715	0.23	9.97	16.28	26.48	56.00	29.52	QP
4	1.762	0.26	9.96	16.89	27.11	56.00	28.89	QP
5	2.926	0.29	9.95	17.95	28.19	56.00	27.81	QP
6	7.911	0.41	9.91	23.62	33.94	60.00	26.06	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.

2.If the average limit is met when using a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

4. RADIATED EMISSION TEST

4.1. Test Equipment

Frequency rang: 30~1000MHz

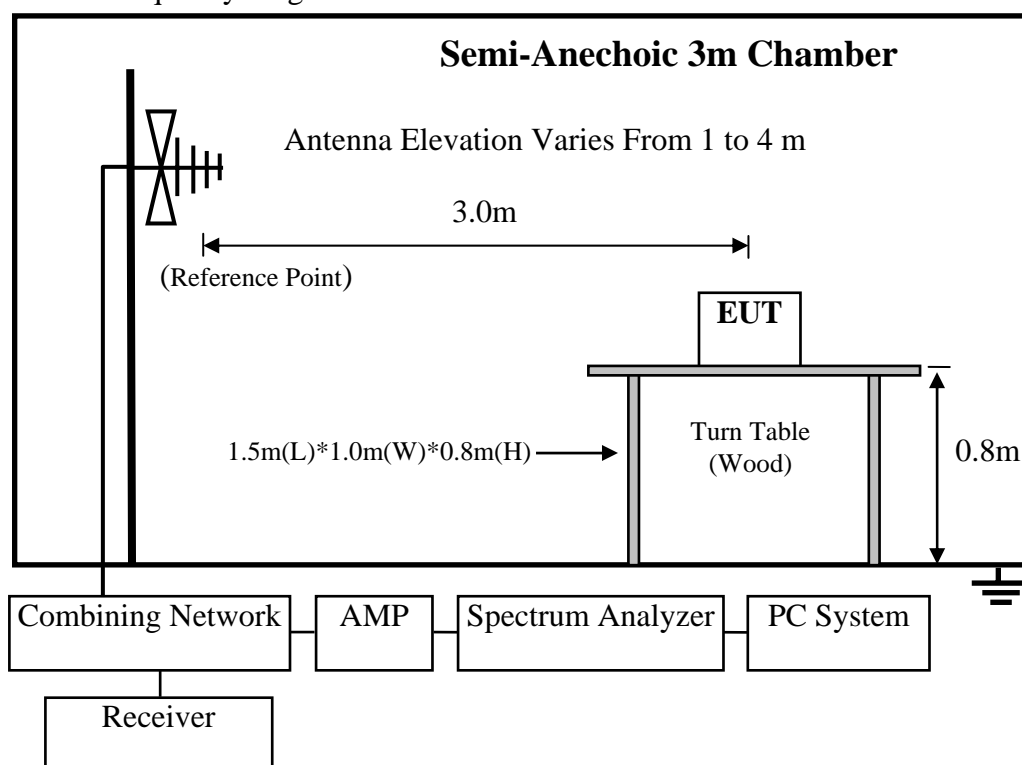
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Dec.06,10	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 11	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 11	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 11	1 Year
5	Bilog Antenna	Schaffner	CBL6111C	2598	Oct. 26, 10	1 Year
6	RF Cable	MIYAZAKI	8D-FB	3# Chamber No.1	May.08, 11	1 Year
7	Coaxial Switch	Anritsu	MP59B	M73989	May.08, 11	1 Year

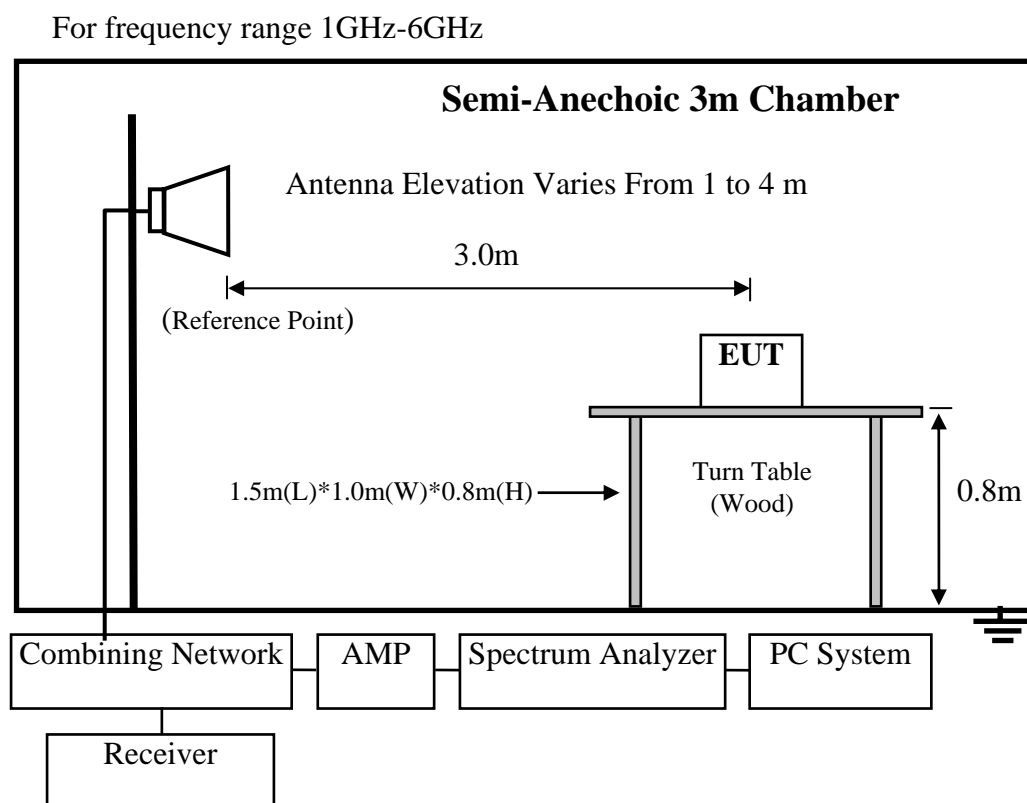
Frequency rang: above 1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4407B	MY41440292	May.08, 11	1 Year
2	Horn Antenna	EMCO	3115	9607-4877	May.08, 11	1.5 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 11	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX102	28622/2	May.08, 11	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	29091/2	May.08, 11	1 Year

4.2. Block Diagram of Test Setup

For frequency range 30MHz-1000MHz





4.3. Radiated Emission Limit Standard: FCC 15.209 and 15.249

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu\text{V}/\text{m}$	$\text{dB}(\mu\text{V})/\text{m}$
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000MHz	3	74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	
Field Strength of Fundamental emission for 2.4GHz-2.4835GHz	3	94.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average) 114.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak)	
Field Strength of Harmonics	3	74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

Remark : (1) Emission level $\text{dB}\mu\text{V} = 20 \log$ Emission level $\mu\text{V}/\text{m}$

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.
- (4) The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

4.4. EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.4.1. USB Wireless Receiver for Wii & USB Wireless Receiver for PS3 (EUT)

Model Number : 83973791/84148791

Serial Number : N/A

4.4.2. Support Equipment : As Tested Supporting System Detail, in Section 2.4

4.5. Operating Condition of EUT

4.5.1. Setup the EUT and simulator as shown as Section 4.2.

4.5.2. Turned on the power of all equipment.

4.5.3. Let EUT work in test mode.

4.6. Test Procedure

The EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.10-2009 on radiated emission Test.

This test was performed with EUT in X, Y, Z position, and the worse case was found when EUT in X position as the test photo indicated.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's RBW is set at 1MHz and VBW is set at 3MHz for peak emissions measurement above 1GHz

This device is pulse modulated, a duty cycle factor was used to calculate average level based measured peak level.

The frequency range from 30MHz to 10th harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25 GHz, So the radiated emissions from 18GHz to 25GHz were not record.

4.7. Radiated Emission Test Results

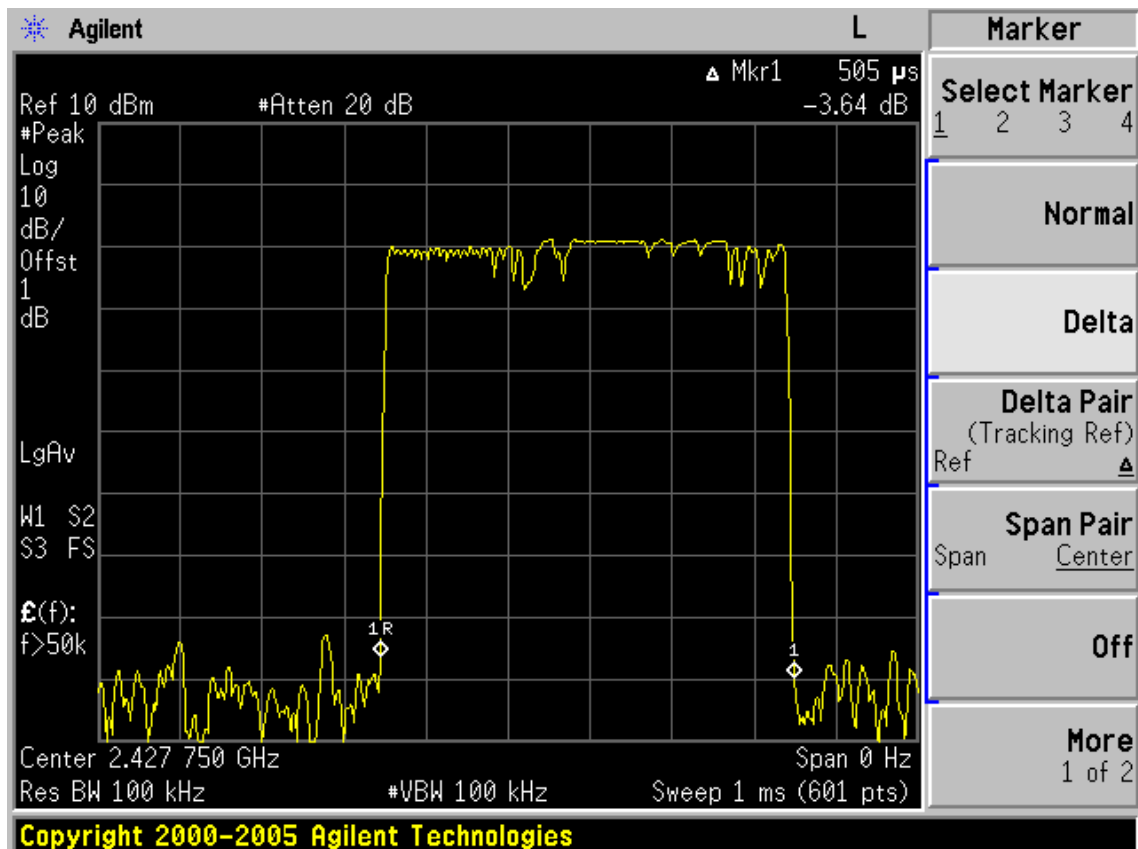
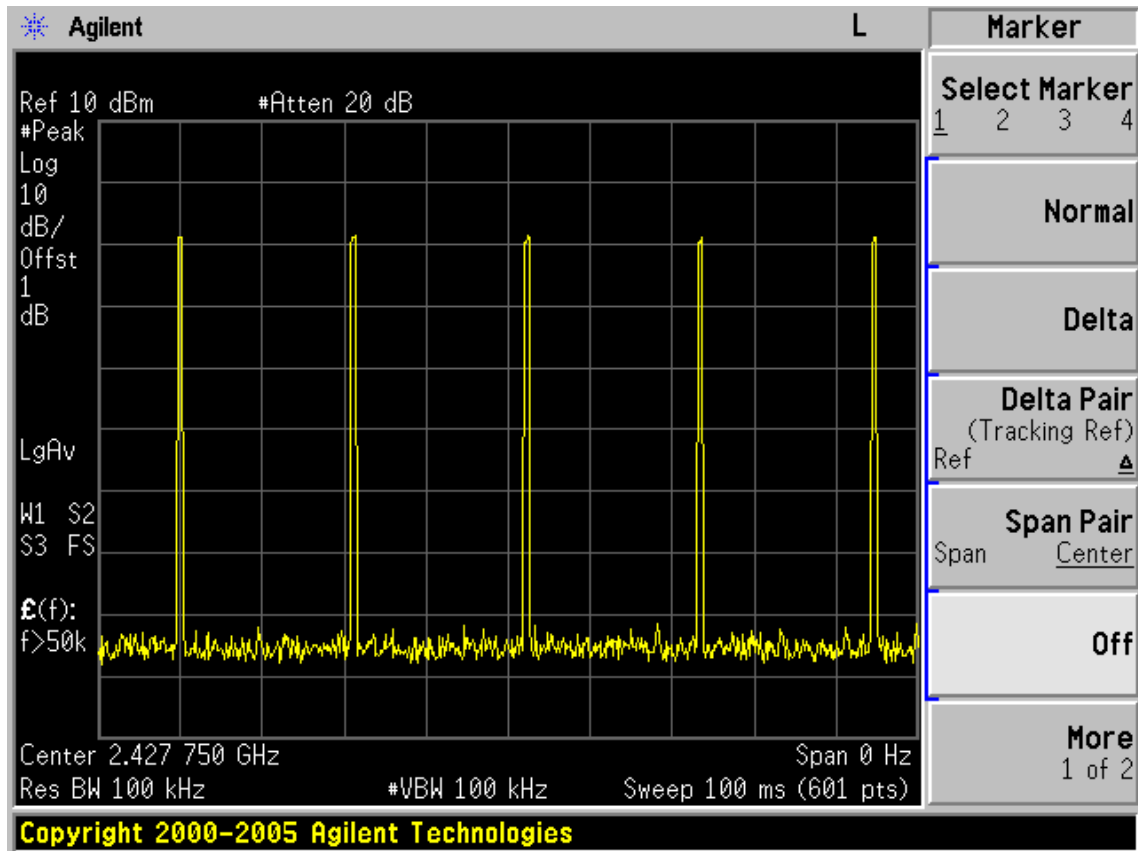
PASS.

All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

Note: The duty cycle factor for calculate average level is 31.95dB, and average limit is 20dB below peak limit, so if peak measured level comply with peak limit, the average level was deemed to comply with average limit.

Duty cycle=0.505ms*5times/100ms*10070=2.53%

Duty cycle factor=20 log(1/duty cycle)=31.95

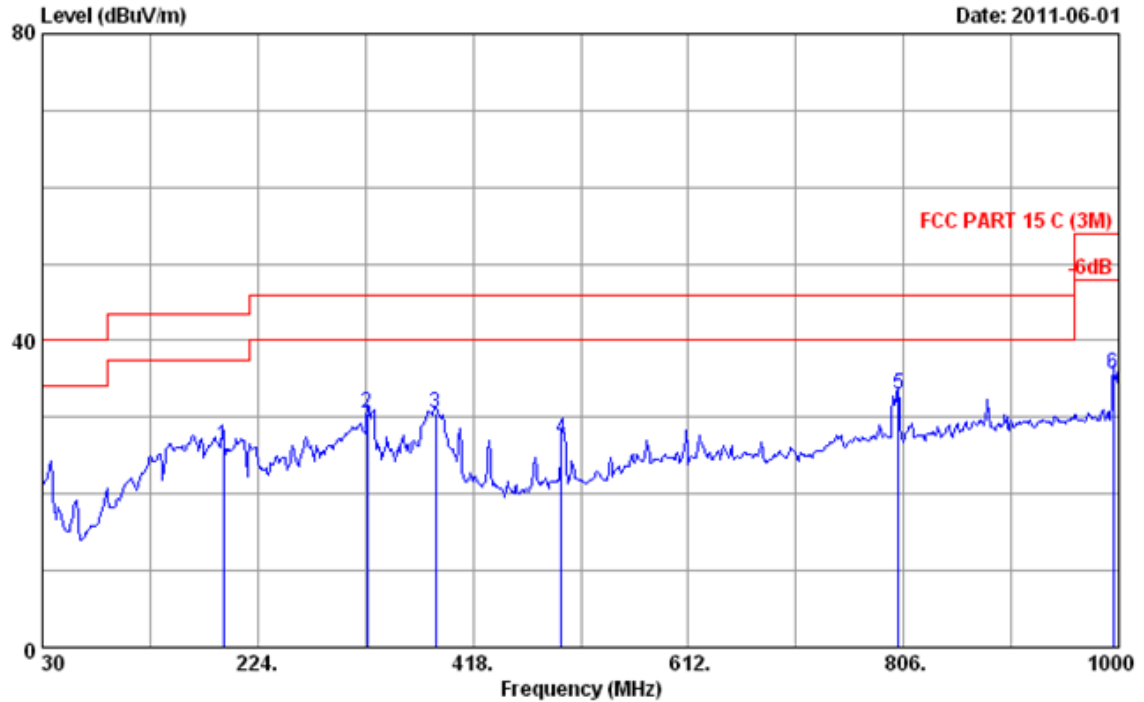


Frequency: 30MHz~1GHz

Data: 5

File: E:\2011 Report data\R\RedOnce\ACS11QH033R1.EM6 (8)

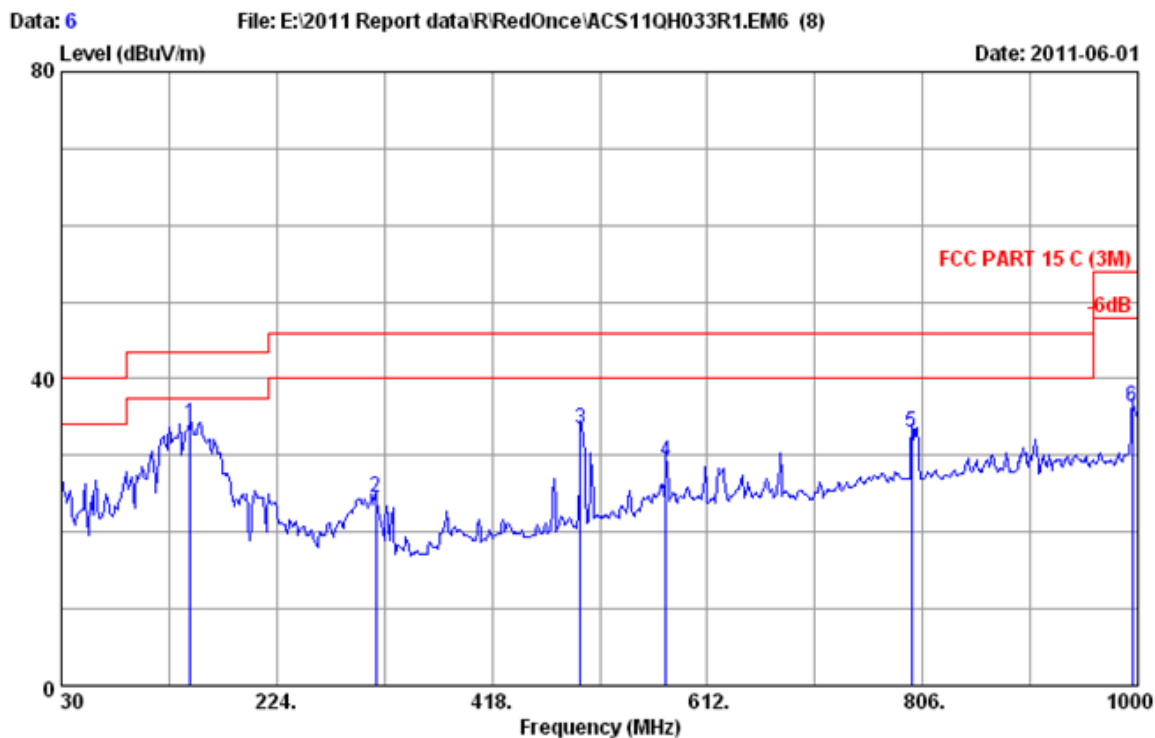
Date: 2011-06-01



Site no. : 3m Chamber Data no. : 5
Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : HORIZONTAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : USB Wireless Receiver for PS3
Power rating : DC 5V From PS3 Input AC 120V/60Hz
Test Mode : Tx Mode
M/N:84148791

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	192.960	9.58	1.64	15.06	26.28	43.50	17.22	QP
2	322.940	14.26	2.58	13.76	30.60	46.00	15.40	QP
3	384.050	15.94	2.84	11.68	30.46	46.00	15.54	QP
4	497.540	18.27	3.53	5.49	27.29	46.00	18.71	QP
5	801.150	22.00	4.90	5.99	32.89	46.00	13.11	QP
6	995.150	24.05	5.56	6.08	35.69	54.00	18.31	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

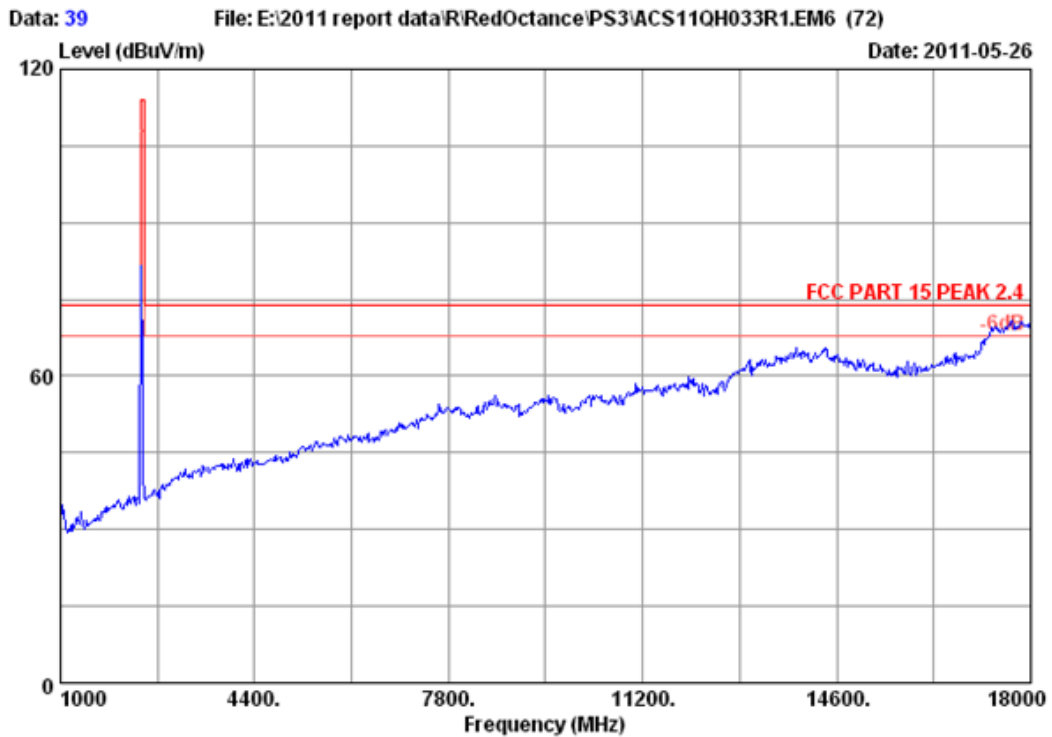


Site no. : 3m Chamber Data no. : 6
Dis. / Ant. : 3m 2010 CBL6111C Ant. pol. : VERTICAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 24°C/56% Engineer : Leo-Li
EUT : USB Wireless Receiver for PS3
Power rating : DC 5V From PS3 Input AC 120V/60Hz
Test Mode : Tx Mode
M/N:84148791

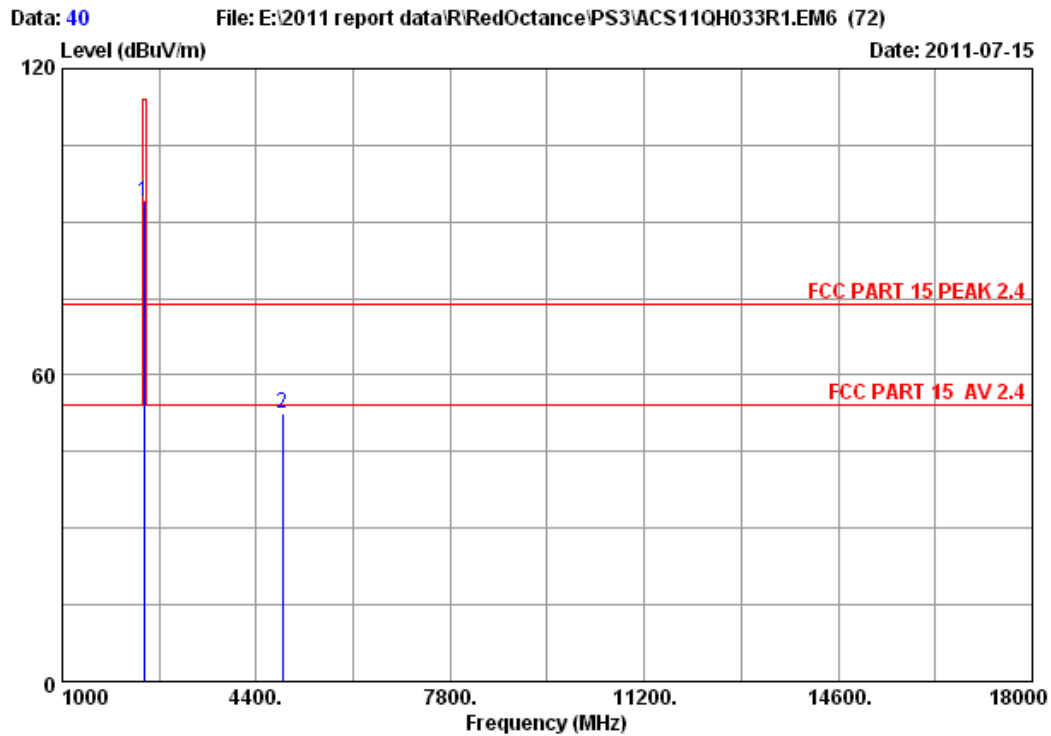
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	146.400	11.84	1.14	21.10	34.08	43.50	9.42	QP
2	313.240	14.06	2.54	7.81	24.41	46.00	21.59	QP
3	497.540	18.27	3.53	11.67	33.47	46.00	12.53	QP
4	575.140	19.65	3.98	5.61	29.24	46.00	16.76	QP
5	796.300	22.04	4.88	6.17	33.09	46.00	12.91	QP
6	995.150	24.05	5.56	6.79	36.40	54.00	17.60	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency: 1GHz~18GHz



Site no.	: 3m Chamber	Data no. :	39
Dis. / Ant.	: 3m 3115(0911)	Ant. pol. :	HORIZONTAL
Limit	: FCC PART 15 PEAK 2.4		
Env. / Ins.	: 23°C/54%	Engineer :	Leo-Li
EUT	: Wireless Receive for Wii/PS3		
Power	: DC 5V From Wii		
Test mode	: Tx 2427.75MHz		
M/N	: 83973790/84148790		

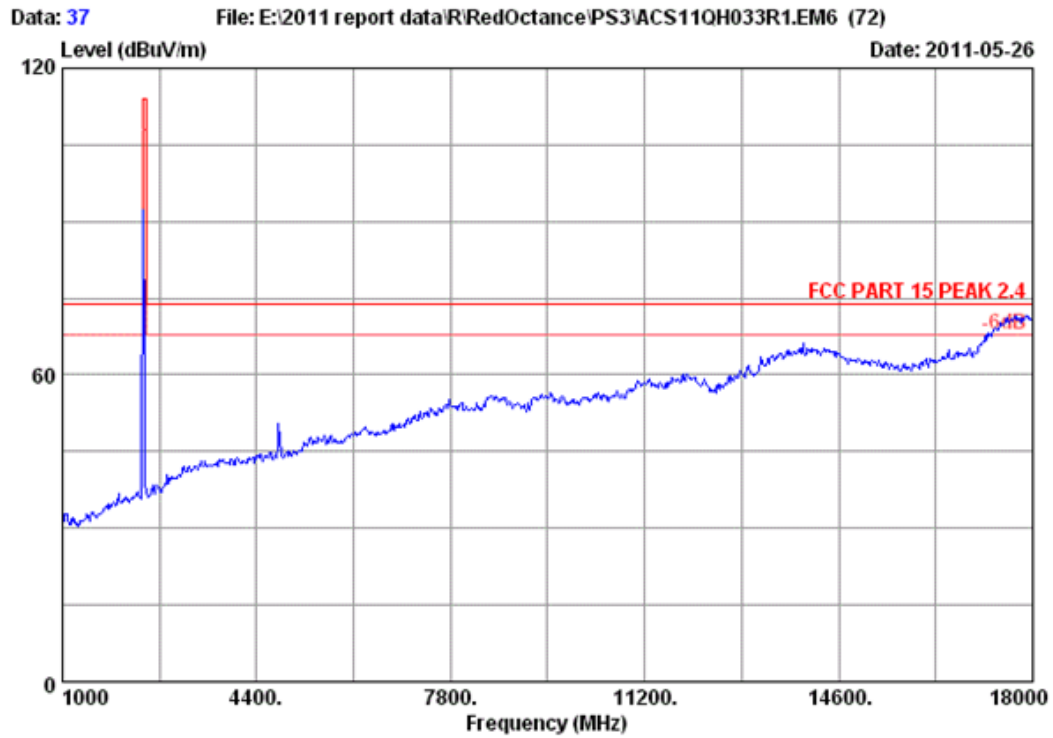


Site no. : 3m Chamber Data no. : 40
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 PEAK 2.4
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless Receive for Wii/PS3
 Power : DC 5V From Wii
 Test mode : Tx 2427.75MHz
 M/N : 83973790/84148790

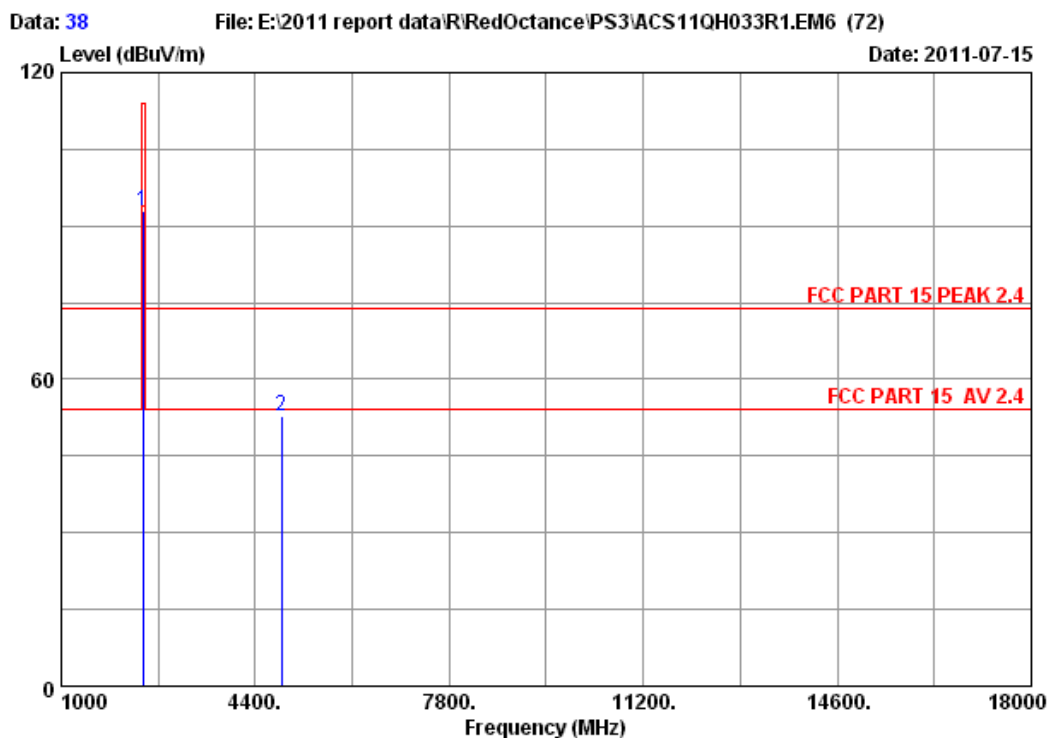
	Ant.	Cable	Amp.		Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
1 2427.750	29.46	7.46	36.61	93.57	93.88	114.00	20.12	Peak	
2 4855.500	34.38	10.67	35.05	42.37	52.37	74.00	21.63	Peak	

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: 3m Chamber	Data no. :	37
Dis. / Ant.	: 3m 3115(0911)	Ant. pol. :	VERTICAL
Limit	: FCC PART 15 PEAK 2.4		
Env. / Ins.	: 23°C/54%	Engineer	: Leo-Li
EUT	: Wireless Receive for Wii/PS3		
Power	: DC 5V From Wii		
Test mode	: Tx 2427.75MHz		
M/N	: 83973790/84148790		

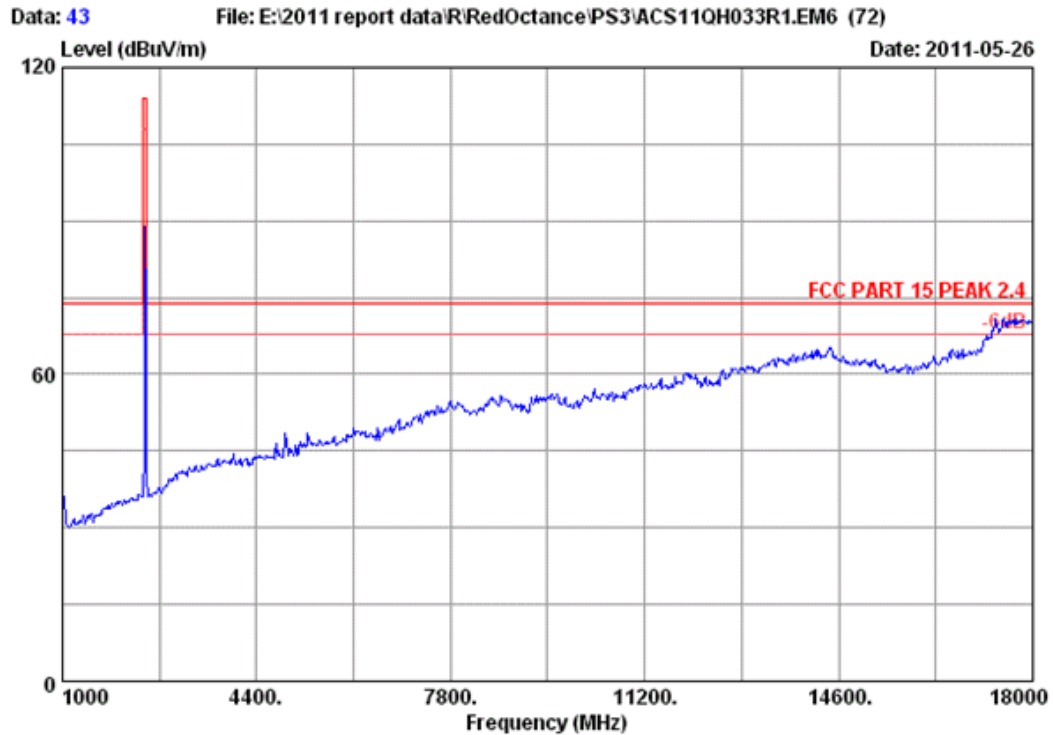


Site no. : 3m Chamber Data no. : 38
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15 PEAK 2.4
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless Receive for Wii/PS3
 Power : DC 5V From Wii
 Test mode : Tx 2427.75MHz
 M/N : 83973790/84148790

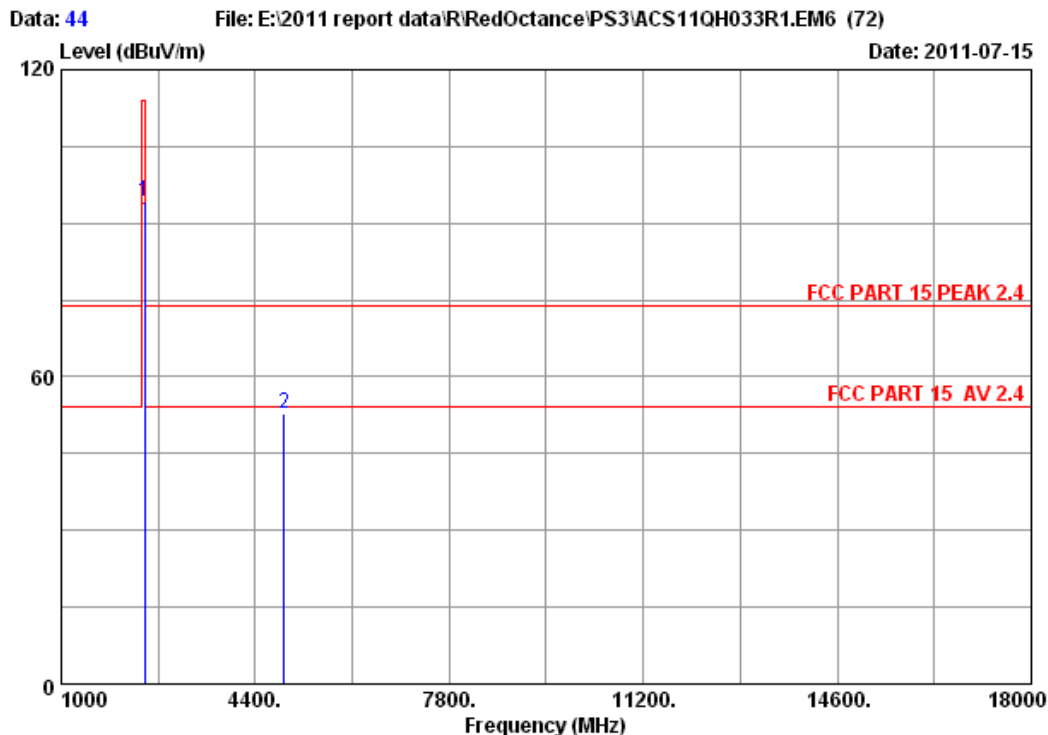
	Freq.	Ant.	Cable	Amp.		Emission			
	(MHz)	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2427.750	29.46	7.46	36.61	92.61	92.92	114.00	21.08	Peak
2	4855.500	34.38	10.67	35.05	42.67	52.67	74.00	21.33	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: 3m Chamber	Data no. :	43
Dis. / Ant.	: 3m 3115(0911)	Ant. pol. :	HORIZONTAL
Limit	: FCC PART 15 PEAK 2.4		
Env. / Ins.	: 23°C/54%	Engineer :	Leo-Li
EUT	: Wireless Receive for Wii/PS3		
Power	: DC 5V From Wii		
Test mode	: Tx 2454.5625MHz		
M/N	: 83973790/84148790		



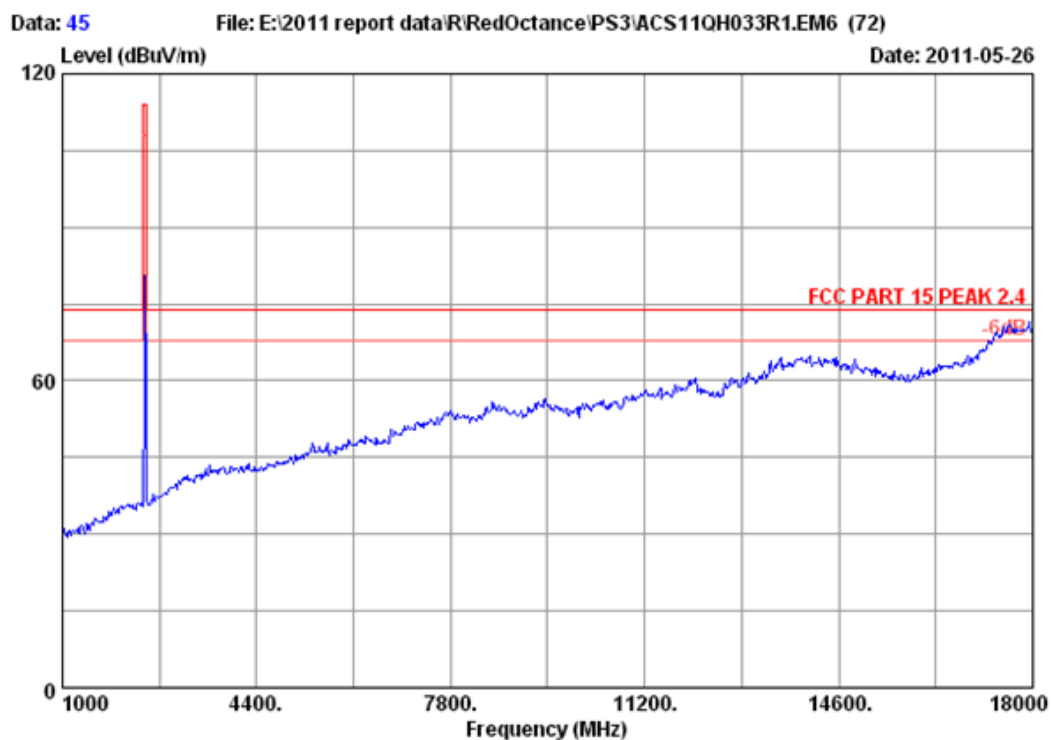
Site no. : 3m Chamber Data no. : 44
Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : Wireless Receive for Wii/PS3
Power : DC 5V From Wii
Test mode : Tx 2454.5625MHz
M/N : 83973790/84148790

	Ant.	Cable	Amp.		Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
1 2454.563	29.48	7.50	36.61	93.80	94.17	114.00	19.83	Peak	
2 4909.000	34.46	10.74	35.00	42.74	52.94	74.00	21.06	Peak	

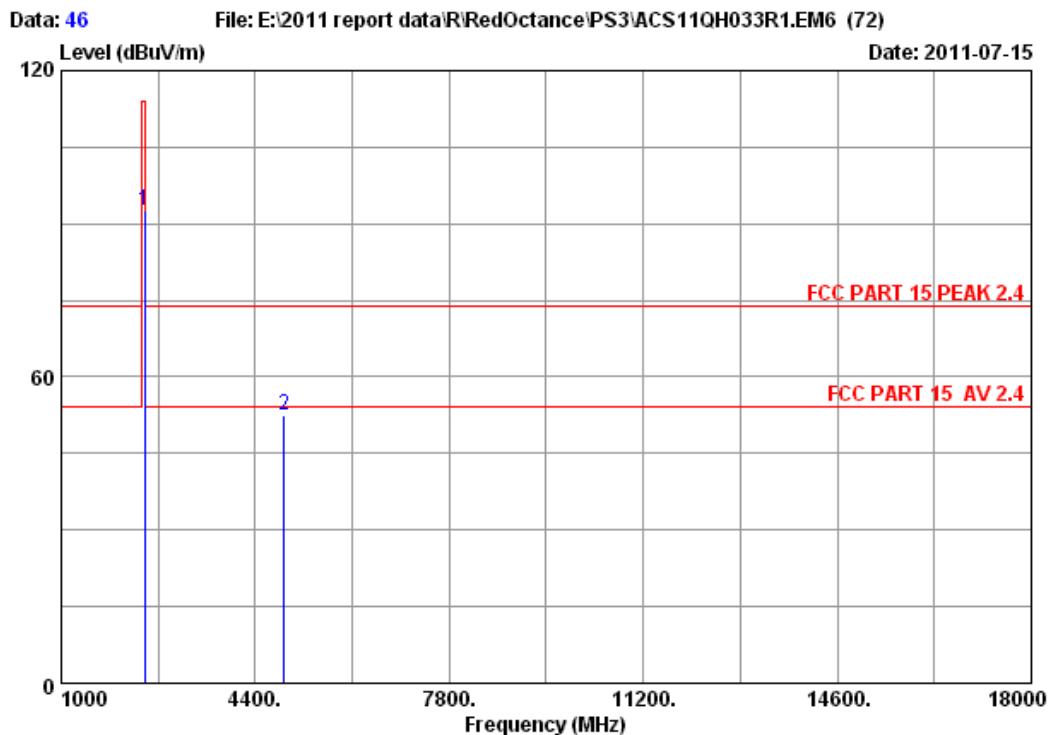
Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	Peak level (dBuV/m)	Duty cycle factor	AV level (dBuV/m)	Limit(dBuV/m)	Conclusion
2454.563	94.17	31.95	62.22	94	Pass



Site no.	: 3m Chamber	Data no. :	45
Dis. / Ant.	: 3m 3115(0911)	Ant. pol. :	VERTICAL
Limit	: FCC PART 15 PEAK 2.4		
Env. / Ins.	: 23°C/54%	Engineer :	Leo-Li
EUT	: Wireless Receive for Wii/PS3		
Power	: DC 5V From Wii		
Test mode	: Tx 2454.5625MHz		
M/N	: 83973790/84148790		

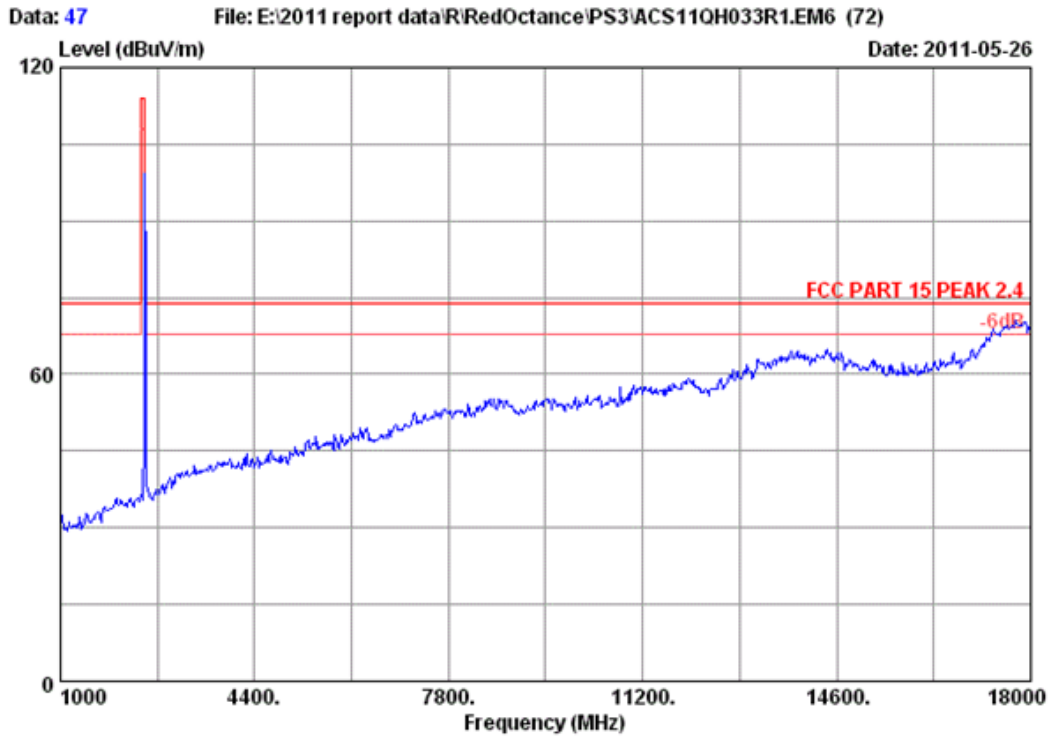


Site no. : 3m Chamber Data no. : 46
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15 PEAK 2.4
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless Receive for Wii/PS3
 Power : DC 5V From Wii
 Test mode : Tx 2454.5625MHz
 M/N : 83973790/84148790

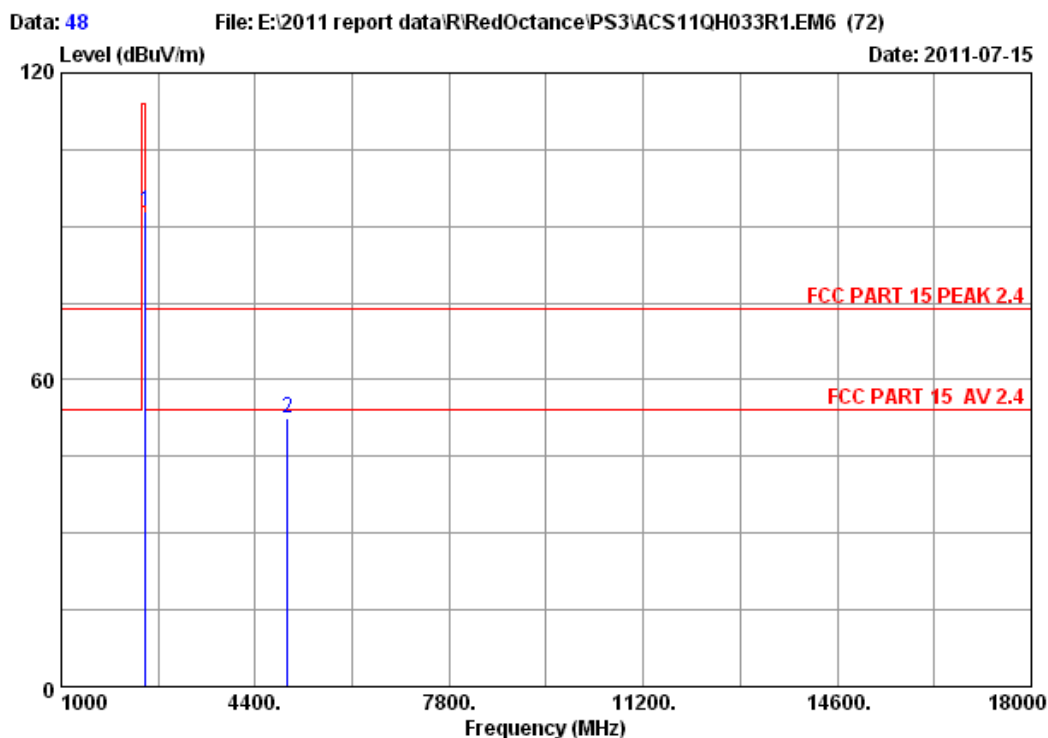
		Ant.	Cable	Amp.		Emission			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2454.563	29.48	7.50	36.61	92.35	92.72	114.00	21.28	Peak
2	4909.000	34.46	10.74	35.00	42.37	52.57	74.00	21.43	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: 3m Chamber	Data no. :	47
Dis. / Ant.	: 3m 3115(0911)	Ant. pol. :	HORIZONTAL
Limit	: FCC PART 15 PEAK 2.4		
Env. / Ins.	: 23°C/54%	Engineer :	Leo-Li
EUT	: Wireless Receive for Wii/PS3		
Power	: DC 5V From Wii		
Test mode	: Tx 2479.75MHz		
M/N	: 83973790/84148790		

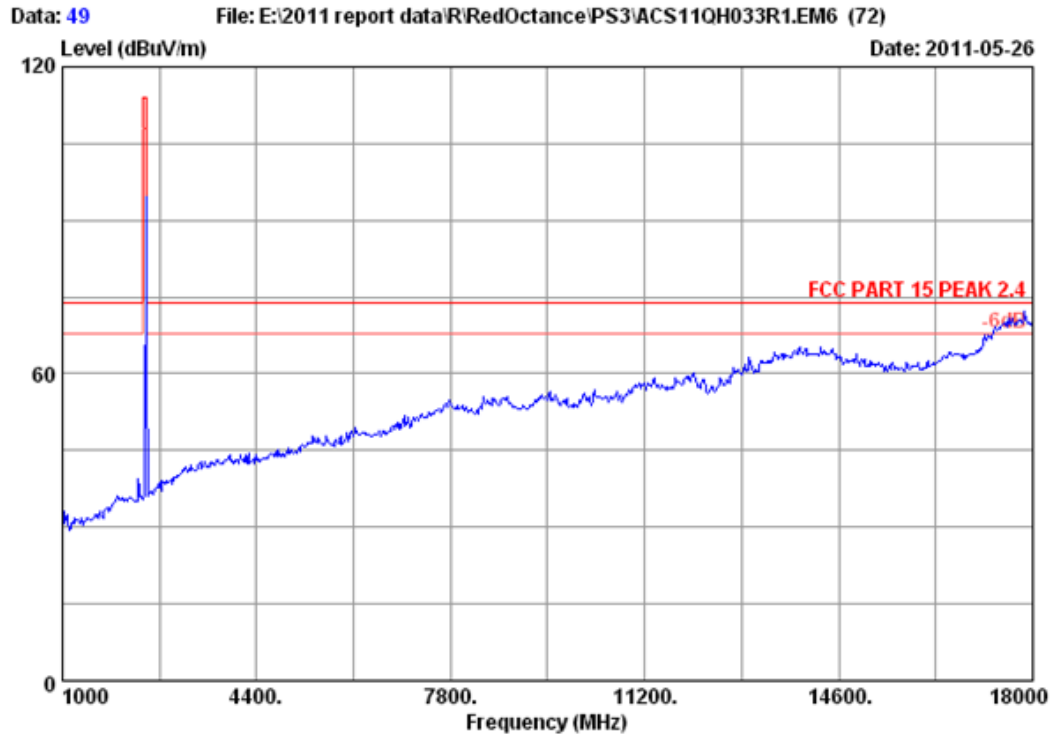


Site no. : 3m Chamber Data no. : 48
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 PEAK 2.4
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless Receive for Wii/PS3
 Power : DC 5V From Wii
 Test mode : Tx 2479.75MHz
 M/N : 83973790/84148790

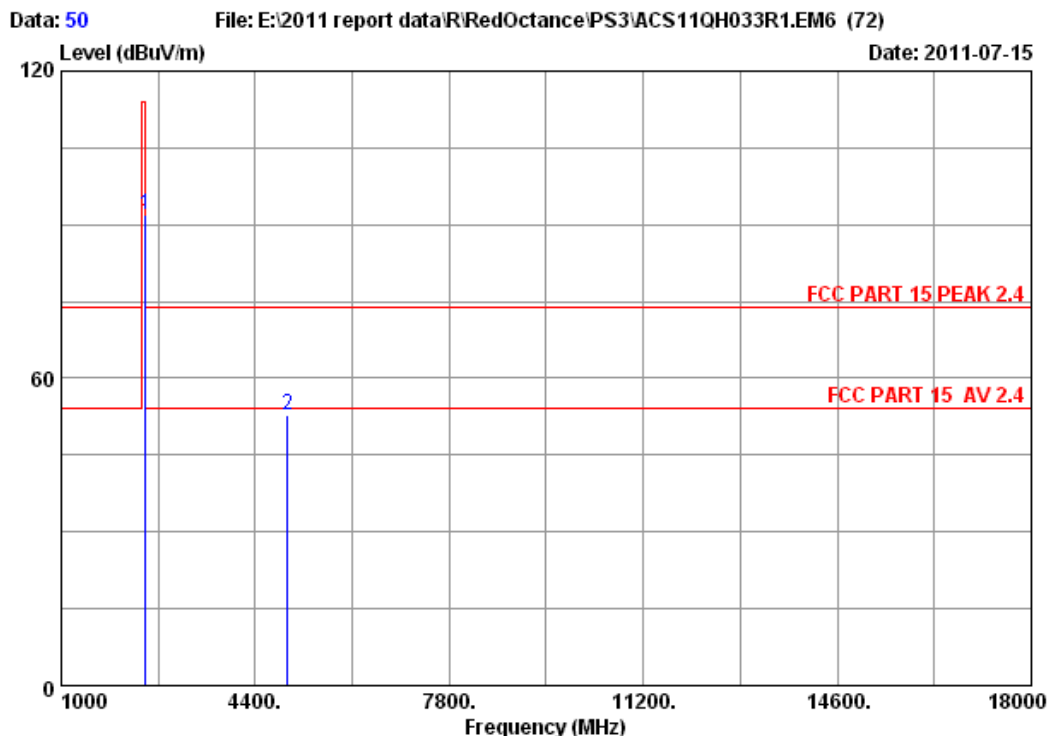
	Ant.	Cable	Amp.			Emission			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2479.750	29.49	7.58	36.60	92.39	92.86	114.00	21.14	Peak
2	4959.500	34.54	10.80	34.95	42.15	52.54	74.00	21.46	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no.	: 3m Chamber	Data no. :	49
Dis. / Ant.	: 3m 3115(0911)	Ant. pol. :	VERTICAL
Limit	: FCC PART 15 PEAK 2.4		
Env. / Ins.	: 23°C/54%	Engineer :	Leo-Li
EUT	: Wireless Receive for Wii/PS3		
Power	: DC 5V From Wii		
Test mode	: Tx 2479.75MHz		
M/N	: 83973790/84148790		



Site no. : 3m Chamber Data no. : 50
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15 PEAK 2.4
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless Receive for Wii/PS3
 Power : DC 5V From Wii
 Test mode : Tx 2479.75MHz
 M/N : 83973790/84148790

	Ant.	Cable	Amp.			Emission			
	Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2479.750	29.49	7.58	36.60	91.61	92.08	114.00	21.92	Peak
2	4959.500	34.54	10.80	34.95	42.58	52.97	74.00	21.03	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

5. BAND EDGE COMPLIANCE TEST

5.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,11	1 Year
2.	Horn Antenna	EMCO	3115	9607-4877	May 08, 11	1.5 Year
3.	Amplifier	Agilent	8449B	3008A02495	May.08, 11	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08,11	1 Year
5.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1 Year
6.	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,11	1 Year

5.2. Limit

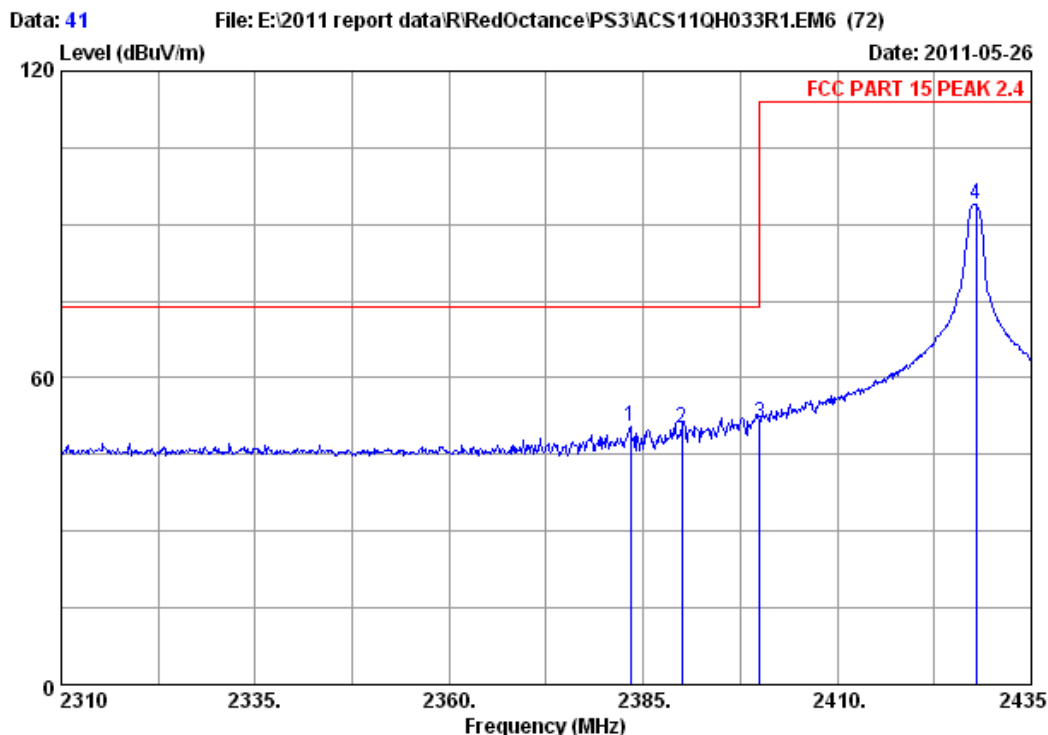
All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

5.3. Test Produce

1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upperband-edges of the emission:
 - (a) PEAK: RBW=1MHz ;VBW=3MHz, PK detector, Sweep=AUTO
 - (b) This device is pulse modulated, a duty cycle factor was used to calculate average level based measured peak level.

5.4. Test Results

Pass (The testing data was attached in the next pages.)

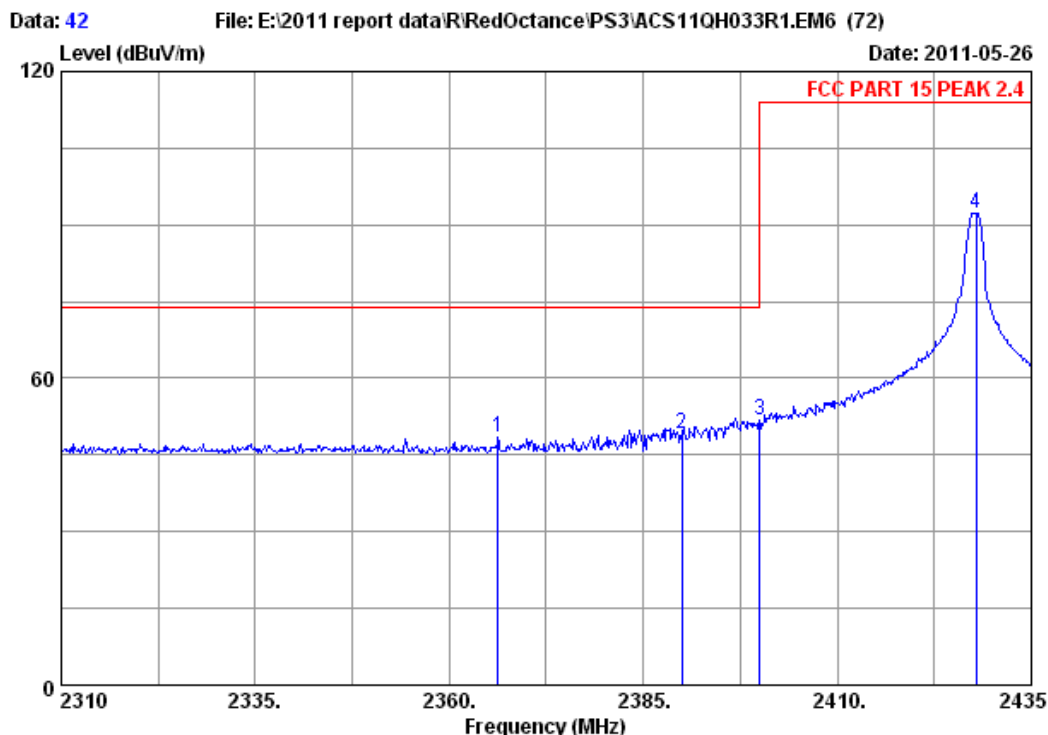


Site no. : 3m Chamber Data no. : 41
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 PEAK 2.4
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless Receive for Wii/PS3
 Power : DC 5V From Wii
 Test mode : Tx 2427.75MHz
 M/N : 83973790/84148790

	Ant.	Cable	Amp.		Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
(MHz)	(dB/m)	(dB)	(dB)	(dBUV)	(dBUV/m)	(dBUV/m)	(dB)		
1 2383.375	29.43	7.39	36.62	50.32	50.52	74.00	23.48	Peak	
2 2390.000	29.44	7.39	36.62	49.78	49.99	74.00	24.01	Peak	
3 2400.000	29.44	7.43	36.62	50.90	51.15	74.00	22.85	Peak	
4 2427.875	29.46	7.46	36.61	93.47	93.78	114.00	20.22	Peak	

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



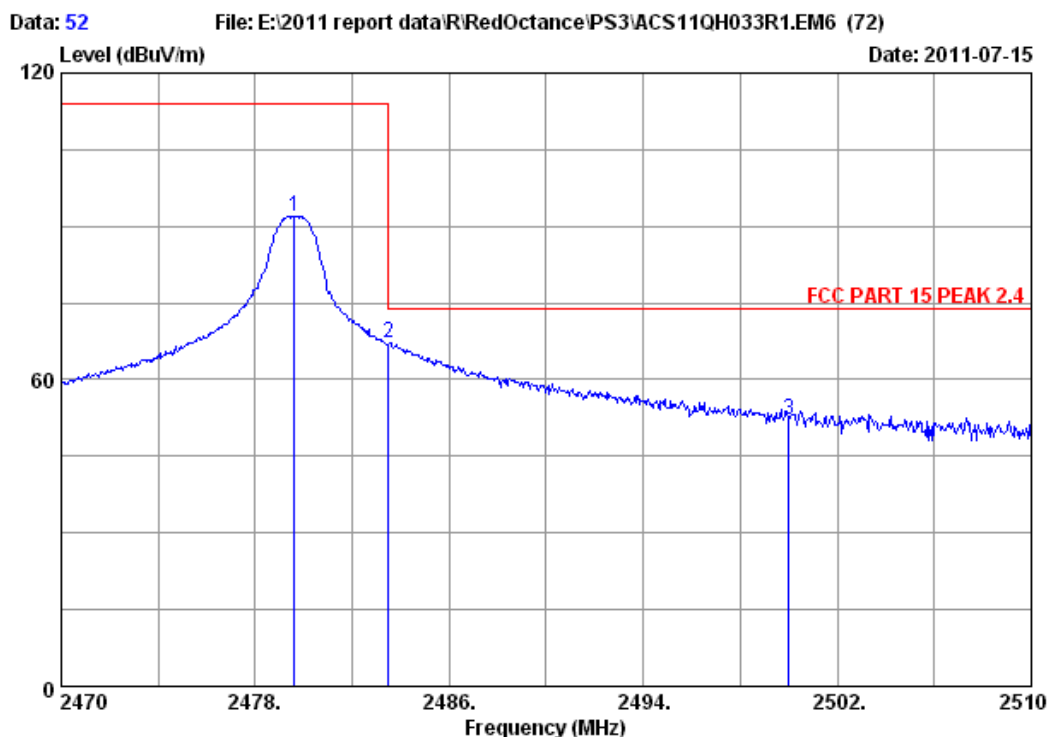
Site no. : 3m Chamber Data no. : 42
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15 PEAK 2.4
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless Receive for Wii/PS3
 Power : DC 5V From Wii
 Test mode : Tx 2427.75MHz
 M/N : 83973790/84148790

	Ant. Freq. (MHz)	Cable Factor (dB/m)	Amp. loss (dB)	Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2366.250	29.42	7.35	36.62	48.40	48.55	74.00	25.45	Peak
2	2390.000	29.44	7.39	36.62	48.98	49.19	74.00	24.81	Peak
3	2400.000	29.44	7.43	36.62	51.65	51.90	74.00	22.10	Peak
4	2427.875	29.46	7.46	36.61	92.09	92.40	114.00	21.60	Peak

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	Peak level (dBuV/m)	Duty cycle factor	AV level (dBuV/m)	Limit(dBuV/m)	Conclusion
2454.563	92.40	31.95	60.45	94	Pass



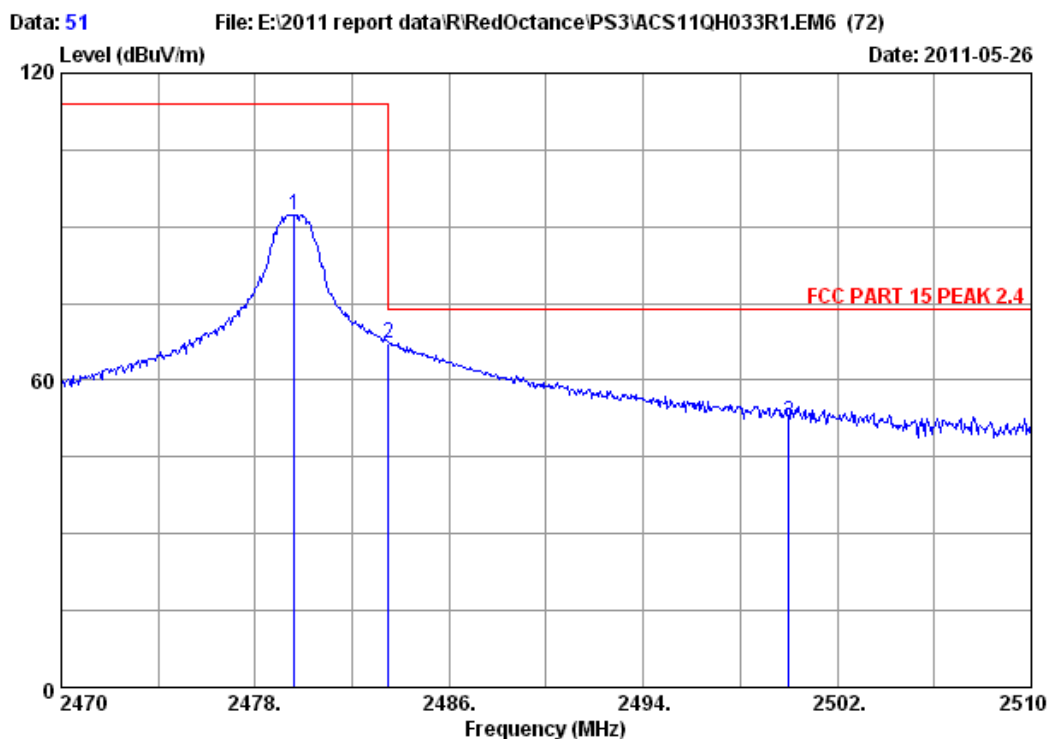
Site no. : 3m Chamber Data no. : 52
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 PEAK 2.4
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless Receive for Wii/PS3
 Power : DC 5V From Wii
 Test mode : Tx 2479.75MHz
 M/N : 83973790/84148790

	Ant.	Cable	Amp.		Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
1 2479.600	29.49	7.58	36.60	91.47	91.94	114.00	22.06	Peak	
2 2483.500	29.49	7.58	36.60	66.69	67.16	74.00	6.84	Peak	
3 2500.000	29.50	7.62	36.60	51.66	52.18	74.00	21.82	Peak	

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	Peak level (dBuV/m)	Duty cycle factor	AV level (dBuV/m)	Limit(dBuV/m)	Conclusion
2483.5	67.16	31.95	35.21	54	Pass



Site no. : 3m Chamber Data no. : 51
 Dis. / Ant. : 3m 3115(0911) Ant. pol. : VERTICAL
 Limit : FCC PART 15 PEAK 2.4
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless Receive for Wii/PS3
 Power : DC 5V From Wii
 Test mode : Tx 2479.75MHz
 M/N : 83973790/84148790

	Ant.	Cable	Amp.		Emission				
Freq.	Factor	loss	Factor	Reading	Level	Limits	Margin	Remark	
(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		
1 2479.600	29.49	7.58	36.60	91.82	92.29	114.00	21.71	Peak	
2 2483.500	29.49	7.58	36.60	66.66	67.13	74.00	6.87	Peak	
3 2500.000	29.50	7.62	36.60	51.28	51.80	74.00	22.20	Peak	

Remarks:

- Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
- The emission levels that are 20dB below the official limit are not reported.

Frequency (MHz)	Peak level (dBuV/m)	Duty cycle factor	AV level (dBuV/m)	Limit(dBuV/m)	Conclusion
2483.5	67.13	31.95	35.18	54	Pass

6. 20 DB BANDWIDTH TEST

6.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,11	1 Year

6.2. Limit

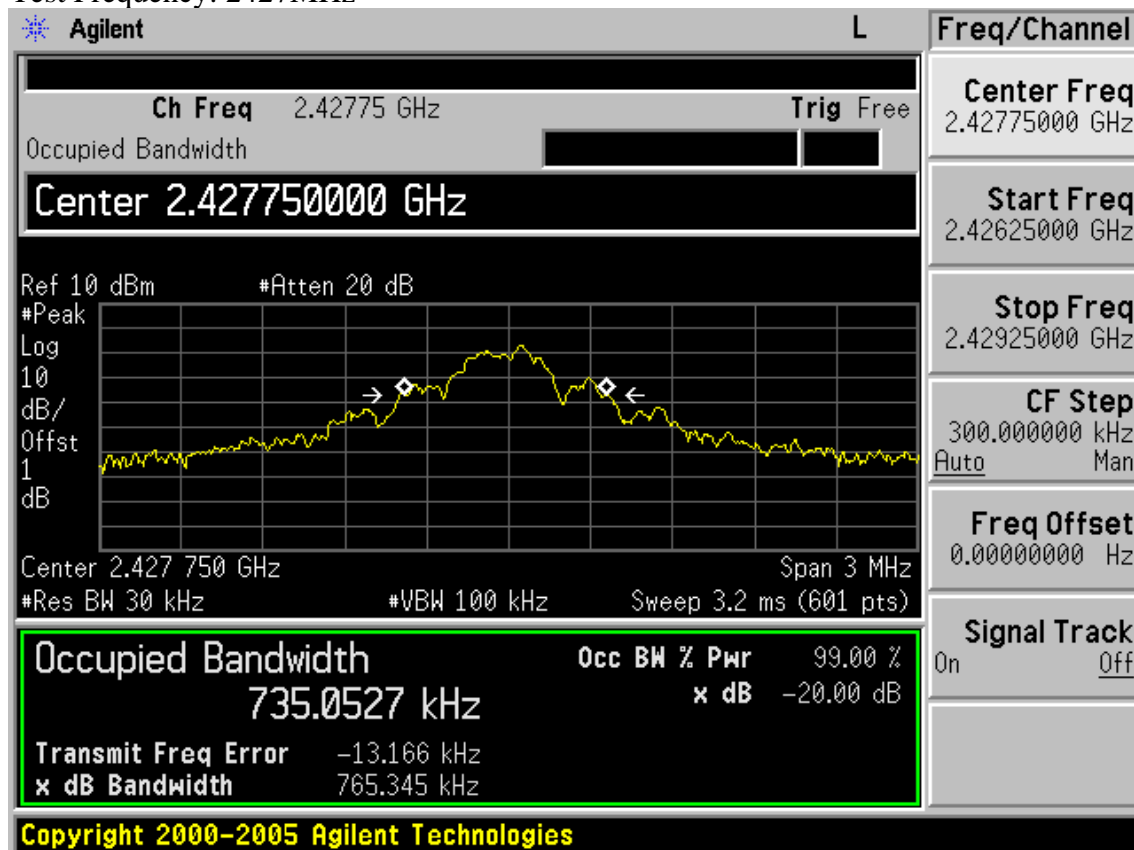
Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

6.3. Test Results

EUT: USB Wireless Receiver for Wii/ PS 3		
M/N: 83973791/84148791		
Test date:2011-05-29	Pressure: 101.5 kpa	Humidity: 54 %
Tested by: Leo-Li	Test site: RF site	Temperature : 23.9°C

Frequency	20dB bandwidth (KHz)	Limit (KHz)
2427.75MHz	765.345	>500
2454.5625MHz	767.670	>500
2479.75MHz	712.933	>500
Conclusion : PASS		

Test Frequency: 2427MHz



Test Frequency: 2454MHz



Test Frequency: 2479MHz

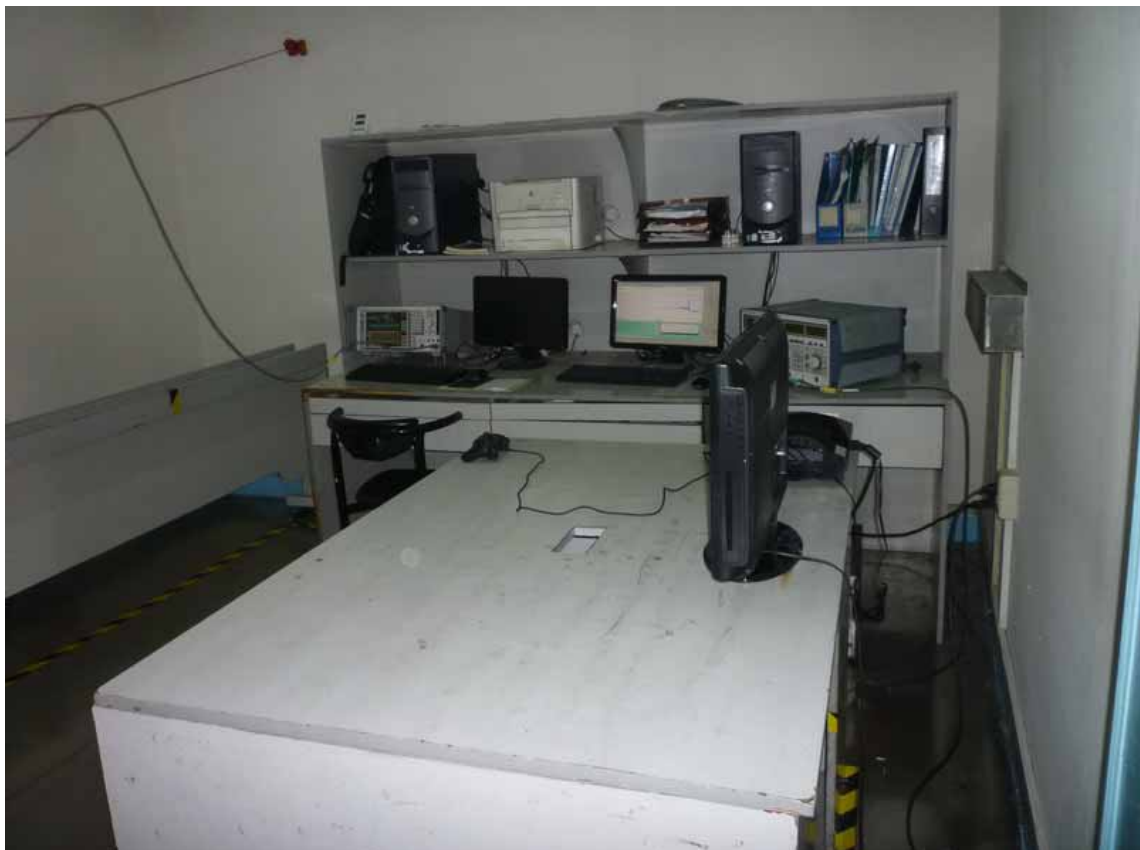


7. PHOTOGRAPH OF TEST

7.1. Photos of Power Line Conducted Emission Test USB Wireless Receiver for Wii



USB Wireless Receiver for PS3



7.2. Photos of Radiated Emission Test

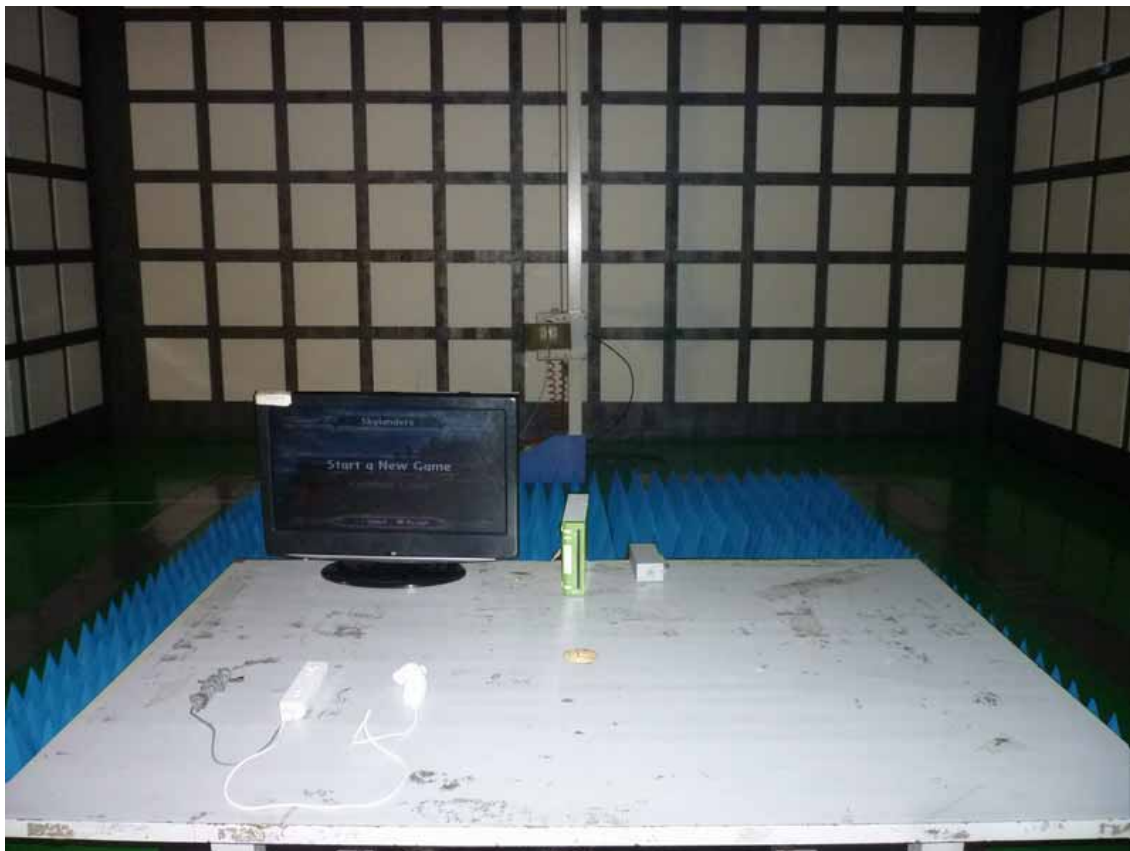
USB Wireless Receiver for Wii



USB Wireless Receiver for PS3



(Above 1000MHz)
USB Wireless Receiver for Wii



USB Wireless Receiver for PS3



8. PHOTOS OF THE EUT

Figure 1
(Dongle) General Appearance of the EUT



Figure 2
General Appearance of the EUT



Figure 3
Inside of the EUT



Figure 4
Inside of the EUT

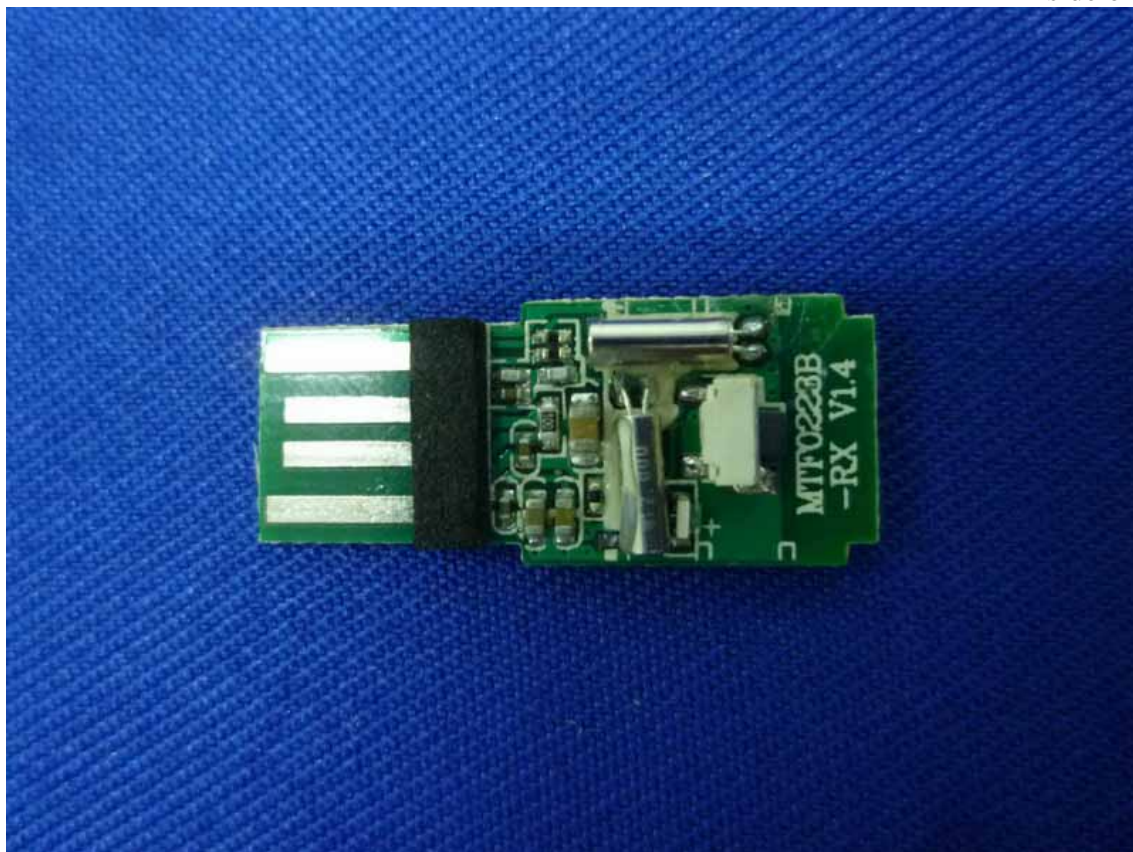


Figure 5
Components Side of the PCB

