

APPLICATION FOR CERTIFICATION

On Behalf of

RedOctane, Inc.

PS3/Les Paul Wireless

Model Number: 95121.805

Prepared for : RedOctane, Inc.
955 Benecia Avenue Sunnyvale, CA 94085, United States

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

Tel: (0755) 26639496

Report Number : ACS-F07432
Date of Test : Aug.31~Sep.14, 2007
Date of Report : Sep.25, 2007

TABLE OF CONTENTS

Description	Page
Test Report Declaration	
1. SUMMARY OF STANDARDS AND RESULTS	1-1
1.1. Description of Standards and Results.....	1-1
2. GENERAL INFORMATION.....	2-1
2.1. Description of Device (EUT).....	2-1
2.2. Tested Supporting System Details	2-1
2.3. Test Facility.....	2-2
2.4. Measurement Uncertainty	2-2
3. POWER LINE CONDUCTED EMISSION TEST.....	3-1
4. RADIATED EMISSION TEST	4-1
4.1. Test Equipment	4-1
4.2. Block Diagram of Test Setup.....	4-1
4.3. Radiated Emission Limit Standard: FCC 15.249	4-2
4.4. EUT Configuration on Test.....	4-2
4.5. Operating Condition of EUT.....	4-3
4.6. Test Procedure.....	4-3
4.7. Radiated Emission Test Results	4-4
5. PULSE DESENSITIZATION CORRECTION FACTOR.....	5-1
6. BAND EDGE COMPLIANCE TEST.....	6-1
6.1. Test Equipment	6-1
6.2. Test Information	6-1
6.3. Test Results	6-1
7. 20DB BANDWIDTH TEST	7-1
7.1. Test Equipment	7-1
7.2. Test Information	7-1
7.3. Test Results	7-1
8. DEVIATION TO TEST SPECIFICATIONS	8-1
9. PHOTOGRAPH.....	9-1
9.1. Photos of Radiated Emission Test (In Anechoic Chamber).....	9-1

TEST REPORT CERTIFICATION

Applicant : RedOctane, Inc.
 Manufacturer : Berway Technology Ltd.
 EUT Description : PS3/Les Paul Wireless
 (A) MODEL NO. : 95121.805
 (B) SERIAL NO. : N/A
 (C) POWER SUPPLY : DC 3V

Test Procedure Used:

FCC Rules and Regulations Part 15 Subpart C 2007

The device described above is tested by Audix Technology (Shenzhen) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C limits for radiated and conducted emissions. 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 tests. Also, this report shows that EUT is technically compliant with FCC requirements.

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.

Date of Test : Aug.31~Sep.14, 2007

Prepared by : YoYo Wang
YoYo Wang / Assistant

Reviewer : Iceman Hu
Iceman Hu / Supervisor



Approved & Authorized Signer : Ken Lu / Deputy 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.

EMISSION		
Description of Test Item	Standard	Results
Power Line Conducted Emission Test	FCC Part 15C: 15.209 ANSI C63.4-2003	N/A
Radiated Emission Test	FCC Part 15C: 15.249 ANSI C63.4-2003	PASS
Band Edge Compliance Test	FCC Part 15: 15.249	PASS
20dB Bandwidth Test	FCC Part 15: 15.215	PASS
N/A is an abbreviation for Not Applicable.		

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

Product name : PS3/Les Paul Wireless

Model Number : 95121.805

Operation frequency : 2410MHz~2470MHz

Modulation : MSK

Power : DC 3V

Applicant : RedOctane, Inc.
955 Benecia Avenue Sunnyvale, CA 94085, United States

Manufacturer : Berway Technology Ltd.
Unit 1801-02, 18/F., No.88 Kwai Cheong Road, Kwai Chung, N.T., H.K.

Receiver : Manufacture: Berway, M/N: 95121.806

Date of Test : Aug.31~Sep.14, 2007

Date of Receipt : Aug.30, 2007

Sample Type : Series production

2.2. Tested Supporting System Details

2.2.1. TV

EMC CODE : ACS-EMC-TV01T

M/N : 1419A

Manufacturer : TCL

Power cord : Unshielded, Undetachabled, 1.8m

FCC ID : By Verification

2.2.2. PS3

M/N : CECHC04

Manufacturer : SONY

2.3. Test Facility

Site Description

- 3m Anechoic Chamber : Jun. 13, 2006 File on Federal Communication Commission
Registration Number: 90454
- 3m & 10m Anechoic Chamber : Jan.31, 2007 File on Federal Communication Commission
Registration Number: 794232
- EMC Lab. : Accredited by DATech, German
Registration Number: DAT-P-091/99-01
Feb. 02, 2004
- Accredited by NVLAP, USA
NVLAP Code: 200372-0
Apr.01, 2006

2.4. Measurement Uncertainty

No.	Item	Uncertainty
1.	Uncertainty for Conducted Emission Test	1.22dB
2.	Uncertainty for Radiated Emission Test<1GHz	4.62dB
3.	Uncertainty for Radiated Emission Test>1GHz	4.79dB
4.	Uncertainty for Frequency measure	0.42×10^{-6}

3. POWER LINE CONDUCTED EMISSION TEST

According to Paragraph (f) of FCC Part 15 section 15.209, Tests to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines.

4. RADIATED EMISSION TEST

4.1. Test Equipment

The following test equipments are used during the radiated emission test :

4.1.1. For Anechoic Chamber

Frequency rang: 30~1000MHz

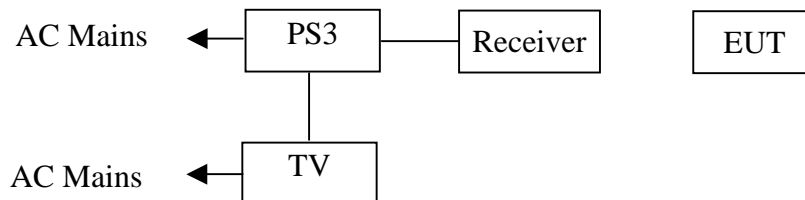
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Spectrum	Agilent	E7403A	MY42000106	May 11, 07	1 Year
2.	Test Receiver	Rohde & Schwarz	ESVS20	830350/005	May 11, 07	1 Year
3.	Amplifier	HP	8447D	2944A07794	Sep.11, 07	1/2 Year
4.	Bilog Antenna	Schaffner	CBL6111C	2598	Feb.22, 07	1 Year
5.	RF Cable	MIYAZAKI	5D-2W	3# Chamber No.1	July. 16, 07	1/2 Year
6.	RF Cable	MIYAZAKI	5D-2W	3# Chamber No.2	July. 16, 07	1/2 Year
7.	RF Cable	FUJIKURAw	RG-55/U	3# Chamber No.3	July. 16, 07	1/2 Year
8.	RF Cable	FUJIKURA	RG-55/U	3# Chamber No.4	July. 16, 07	1/2 Year
9.	Coaxial Switch	Anritsu	MP59B	M73989	July. 16, 07	1/2 Year

Frequency rang: above 1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4407B	MY41440292	May 11, 07	1 Year
2.	Amp	HP	8449B	3008A00863	May 11, 07	1 Year
3.	Antenna	EMCO	3115	9607-4877	Jan. 23, 07	1.5 Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May 11, 07	1 Year
5.	Antenna	ETS	3116	00060088	May. 28, 07	1 Year

4.2. Block Diagram of Test Setup

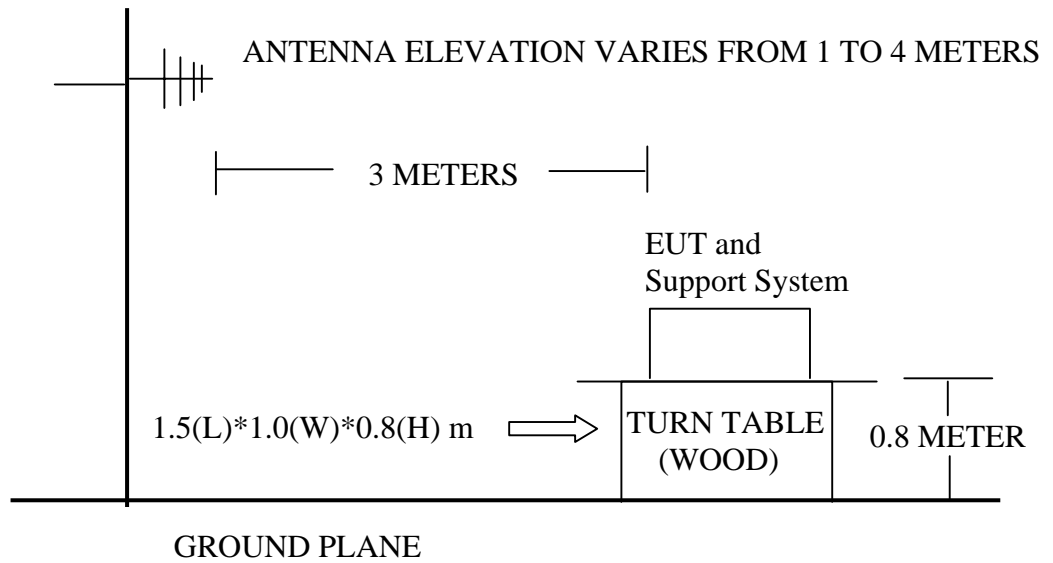
4.2.1. Block Diagram of connection between EUT and simulators



(EUT: PS3/Les Paul Wireless)

4.2.2. Anechoic Chamber Setup Diagram

ANTENNA TOWER



4.3. Radiated Emission Limit Standard: FCC 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
Local Oscillator:	3	114.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 94.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	
Above 1000	3	Other: 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.

4.4. 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. PS3/Les Paul Wireless (EUT)

Model Number : 95121.805
 Serial Number : N/A

4.4.2. Support Equipment: As Tested Supporting System Detail, in Section 2.2.

4.5. Operating Condition of EUT

4.5.1. Setup the EUT as shown in Section 4.2..

4.5.2. Let the EUT work in test modes (TX Mode) and test it.

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 C63.4-2003 on radiated emission Test.

The bandwidth of the EMI test receiver (R&S ESVS20) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the VBW is set at 1MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW 10Hz VBW for average emission above 1GHz

The frequency range from 30MHz to 1000MHz and above 1GHz. are checked.

The test modes (TX Mode) is tested in Anechoic Chamber and all the scanning waveforms are reported on Section 4.7.

(Note: This test was performed with EUT in X, Y, Z position and the worse case was found when EUT in X position

For intentional radiators, measurements of the variation of the output power or the radiated fundamental frequency emission, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage and for this EUT, we tested the fundamental emission with supply voltage at 2.55V and 3.45V, but the worst case emission was found with normal power supply 3V and reported.)

4.7. Radiated Emission Test Results

PASS.

The frequency range from 30MHz to 1000MHz and above 1GHz. is investigated. Please see the following pages.

All measurements for radiated emissions within the restricted bands were performed using a Quasi-Peak detector with 120kHz RBW below 1GHz and a Peak and Average detector with 1MHz RBW above 1GHz,

All measurements for radiated emissions within the restricted bands were performed using a Quasi-Peak detector with 300kHz VBW below 1GHz and a Peak detector with 1MHz VBW above 1GHz, A average detector with 10Hz VBW above 1GHz

All the emissions except fundamental from 18GHz~25GHz are at least 20dB below the limit, and do not record.

EUT: PS3/Les Paul Wireless Model No. : 95121.805

Test Date: Aug.31~Sep.14, 2007 Temperature: 23°C Humidity: 54%

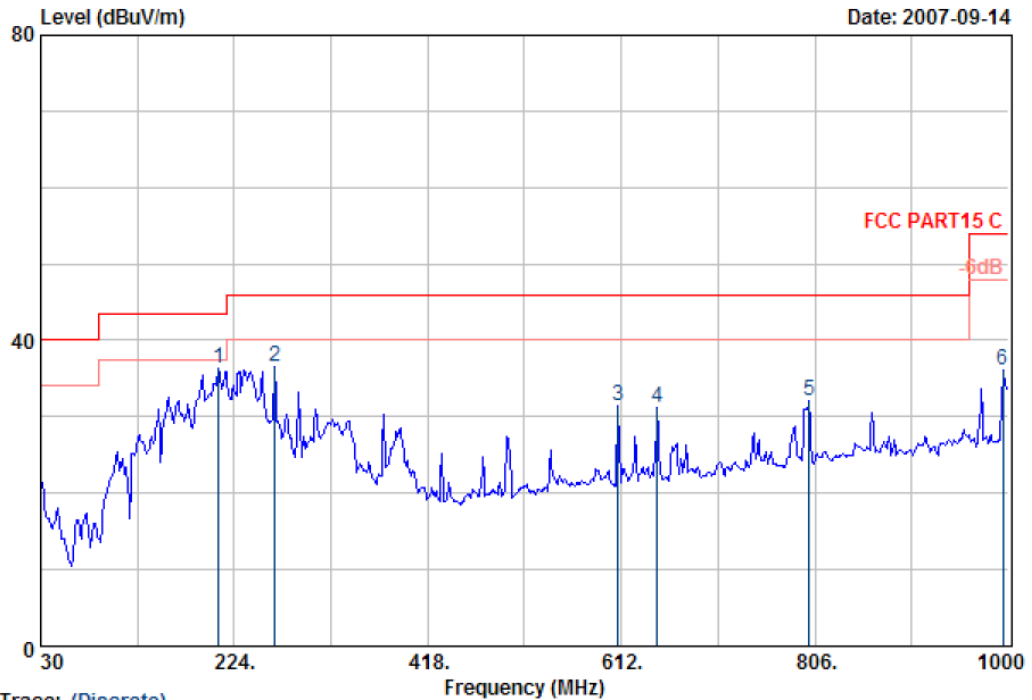
The details of test modes are as follows :

Test Mode	Frequency (MHz)	Test Mode	Reference Test Data No.	
			Horizontal	Vertical
1.	30~1000	Tx Mode	#2	#1
2.	1000~18000	Tx CH Low: 2410MHz	#3, #4	#1, #2
3.		Tx CH Middle: 2440MHz	#5, #6	#7, #8
4.		Tx CH High: 2470MHz	#11, #12	#9, #10
5.	18000~25000	Tx CH Low: 2410MHz	#14	#13
6.		Tx CH Middle: 2440MHz	#15	#16
7.		Tx CH High: 2470MHz	#18	#17



No.6 Ke Feng Road,B1;ck 52,
 ShenZhen Science & Industry Park
 Noutou, ShenZhen, GuangDong, China
 Tel:+86-755-26639495-7
 Fax:+86-755-26632877
 Postcode:518057

Data: 2 File: D:\2007 Report\Red\Octane\3m data\ACS7QH149.EMI (4)



Trace: (Discrete)

Site no. : 3# Chamber Radiation Data no. : 2
 Dis. / Ant. : 3m 2598 Ant. pol. : HORIZONTAL
 Limit : FCC PART15 C
 Env. / Ins. : 24°C/56% ESVS20 Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx Mode

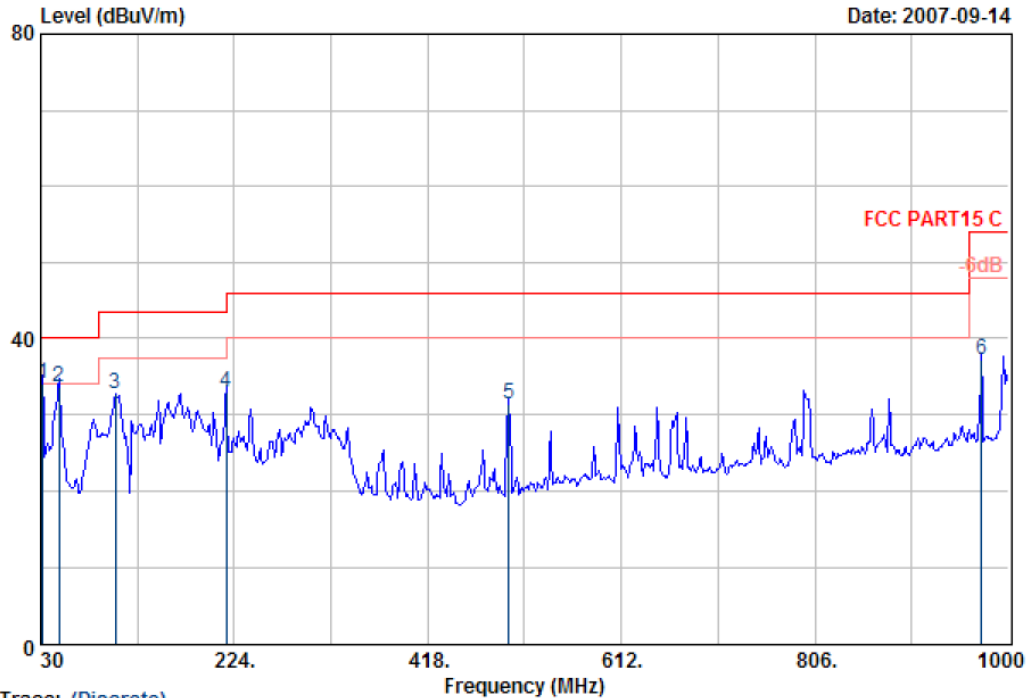
	Ant.	Cable	Emission					
Freq. (MHz)	Factor (dB/m)	Loss (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark	
1	208.48	10.37	1.39	24.58	36.34	43.50	7.16	QP
2	264.74	14.10	1.57	20.98	36.65	46.00	9.35	QP
3	609.09	19.88	2.04	9.60	31.52	46.00	14.48	QP
4	647.89	20.24	2.20	8.86	31.30	46.00	14.70	QP
5	800.18	21.80	2.61	7.60	32.01	46.00	13.99	QP
6	994.18	24.12	2.77	9.22	36.11	54.00	17.89	QP

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



No.6 Ke Feng Road,B1;ck 52,
 ShenZhen Science & Industry Park
 Noutou, ShenZhen, GuangDong, China
 Tel:+86-755-26639495-7
 Fax:+86-755-26632877
 Postcode:518057

Data: 1 File: D:\2007 Report\Red\Octane\3m data\ACS7QH149.EMI (4)



Trace: (Discrete)
 Site no. : 3# Chamber Radiation Data no. : 1
 Dis. / Ant. : 3m 2598 Ant. pol. : VERTICAL
 Limit : FCC PART15 C
 Env. / Ins. : 24°C/56% ESVS20 Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx Mode

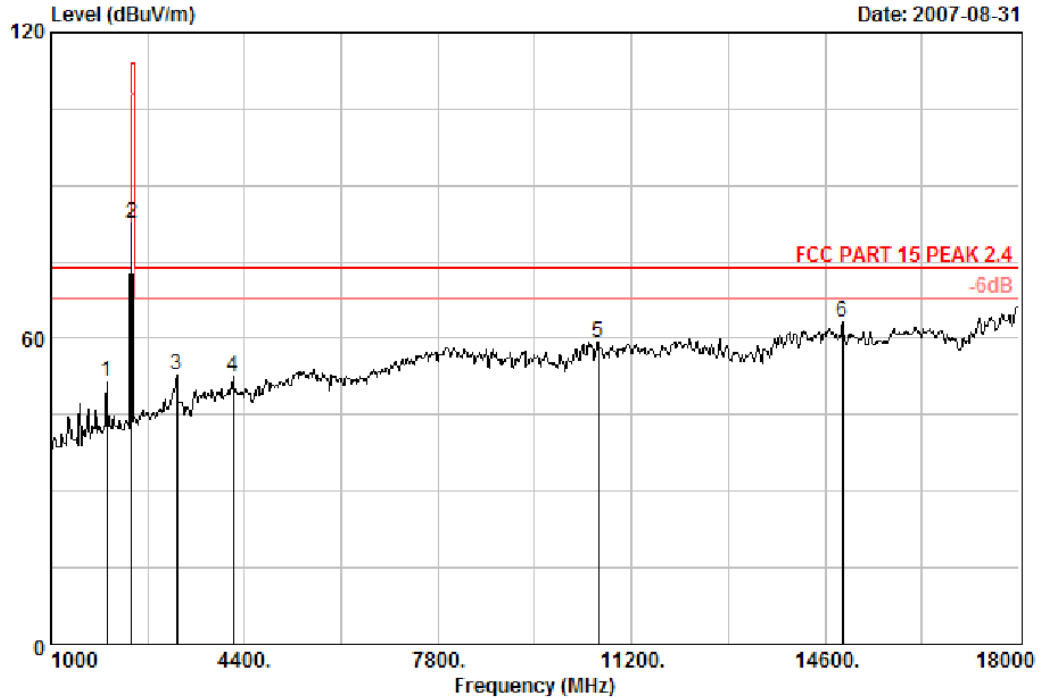
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.94	18.64	0.70	14.85	34.19	40.00	5.81	QP
2	48.43	9.73	0.85	23.16	33.74	40.00	6.26	QP
3	104.69	11.10	1.11	20.47	32.68	43.50	10.82	QP
4	216.24	10.06	1.39	21.48	32.93	46.00	13.07	QP
5	499.48	18.10	2.02	11.24	31.36	46.00	14.64	QP
6	972.84	24.00	2.87	10.30	37.17	54.00	16.83	QP

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



No.6 Ke Feng Road,B1:ck 52,
ShenZhen Science & Industry Park
Noutou, ShenZhen, Guangdong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

Data: 3 File: D:\2007 Report\Red\Octane\ACS7QH149.EMI (36)



Site no. : RF Chamber Data no. : 3
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 PEAK 2.4
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH Low
 Memo : X position

Freq. (MHz)	Ant. Factor (dB/m)	Cable Amp		Emission			Limits (dBuV/m)	Margin (dB)	Remark
		Loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Level (dBuV/m)			
1	27.97	6.34	35.32	52.39	51.38	74.00	22.62	Peak	
2	29.03	5.70	35.18	82.88	82.43	114.00	31.57	Peak	
3	31.57	7.35	34.94	48.68	52.66	74.00	21.34	Peak	
4	33.55	8.50	34.65	44.93	52.33	74.00	21.67	Peak	
5	39.08	13.16	36.26	43.24	59.22	74.00	14.78	Peak	
6	41.04	14.65	35.25	42.58	63.02	74.00	10.98	Peak	

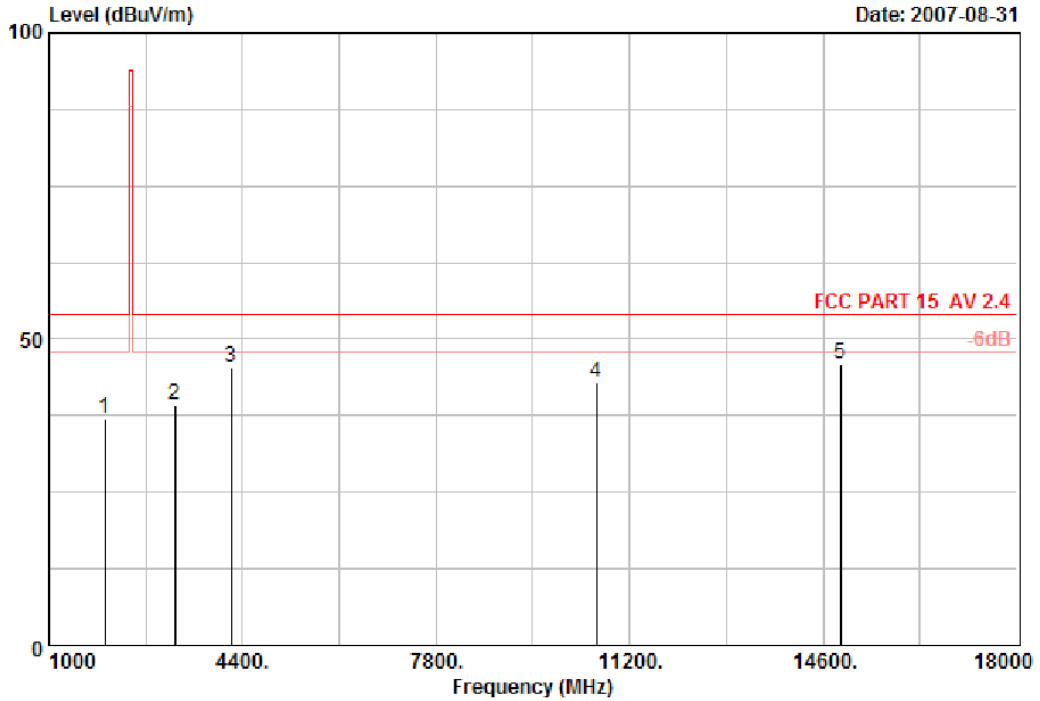
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



No.6 Ke Feng Road,B1:ck 52,
ShenZhen Science & Industry Park
Noutou, ShenZhen, GuangDong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

Data: 4 File: D:\2007 Report\Red\Octane\ACS7QH149.EMI (36)

Date: 2007-08-31



Site no. : RF Chamber Data no. : 4
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 AV 2.4
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH Low
 Memo : X position

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	27.97	6.34	35.32	38.14	37.13	54.00	16.87	Average
2	31.57	7.35	34.94	35.18	39.16	54.00	14.84	Average
3	33.55	8.50	34.65	37.93	45.33	54.00	8.67	Average
4	39.08	13.16	36.26	26.96	42.94	54.00	11.06	Average
5	41.04	14.65	35.25	25.58	46.02	54.00	7.98	Average

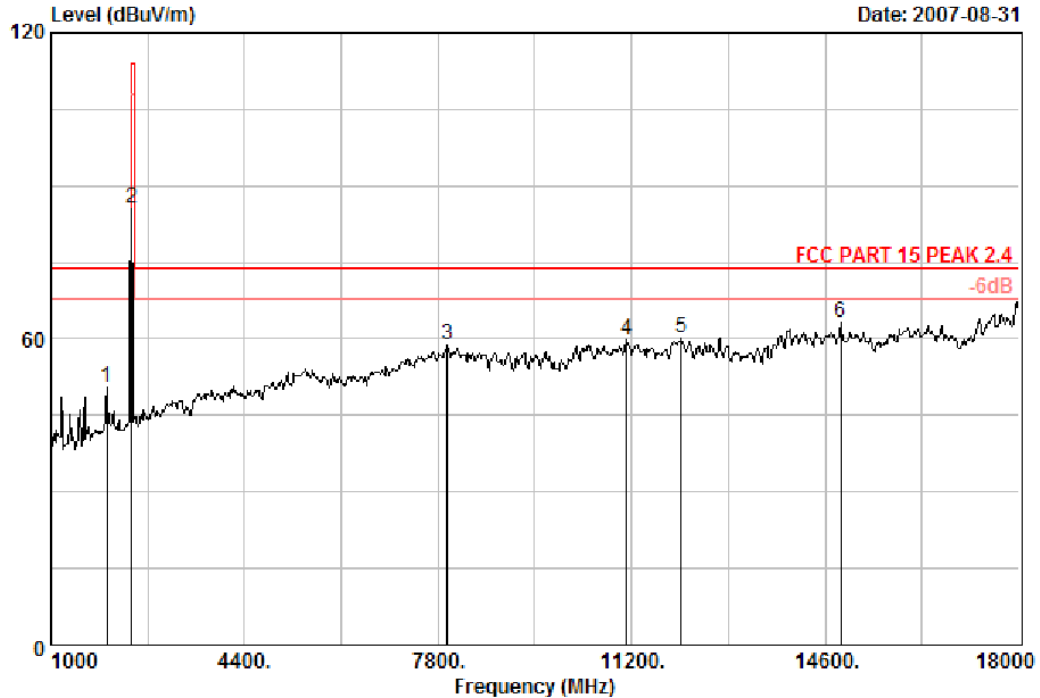
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

Fundamental Emission Average Result					
Freq(MHz)	Peak Level (dBμV/m)	PDCF(dBμV/m) (see Section 5)	Average Level (dBμV/m)	Limit(dBμV/m) (average)	Conclusion
2410	82.43	-16.89	65.54	94	PASS



No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Noutou, ShenZhen, GuangDong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

Data: 1 File: D:\2007 Report\Red\Octane\ACS7QH149.EMI (36)



Site no. : RF Chamber Data no. : 1
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
 Limit : FCC PART 15 PEAK 2.4
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH Low
 Memo : X position

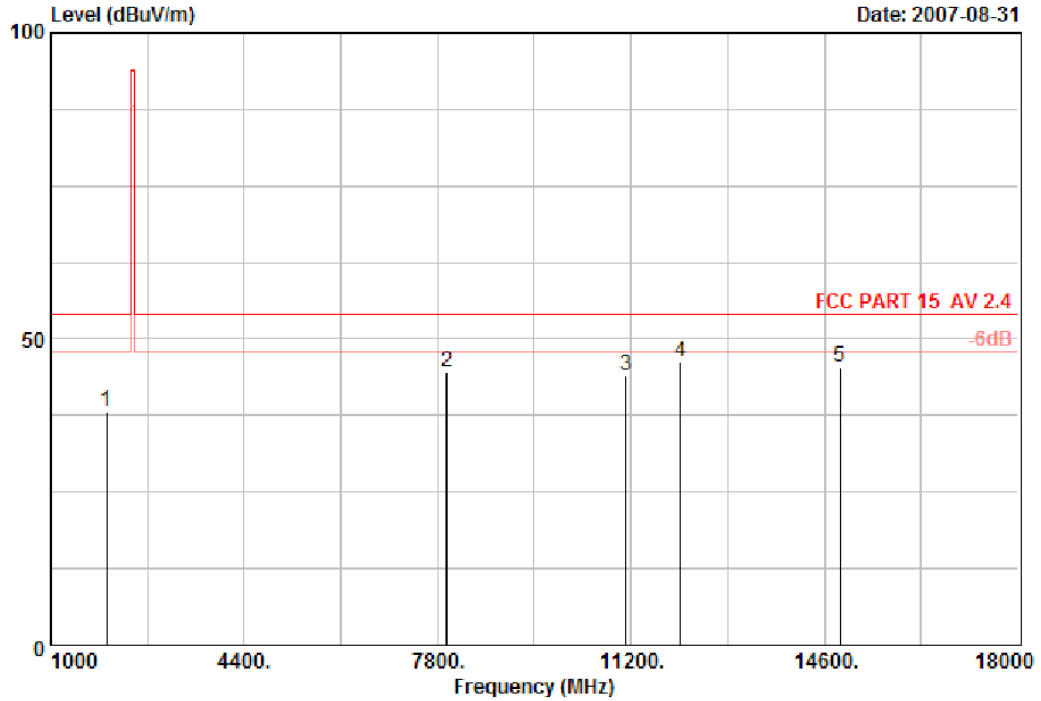
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission		Limits (dBuV/m)	Margin (dB)	Remark
					Reading (dBuV)	Level (dBuV/m)			
1	1986.00	27.97	6.34	35.32	51.61	50.60	74.00	23.40	Peak
2	2410.00	29.03	5.70	35.18	86.12	85.67	114.00	28.33	Peak
3	7970.00	37.99	12.50	34.59	42.98	58.88	74.00	15.12	Peak
4	11115.00	38.99	13.98	36.31	43.10	59.76	74.00	14.24	Peak
5	12067.00	39.54	13.60	36.37	43.40	60.17	74.00	13.83	Peak
6	14872.00	41.15	14.58	35.26	42.85	63.32	74.00	10.68	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.



No.6 Ke Feng Road,B1:ck 52,
ShenZhen Science & Industry Park
Noutou, ShenZhen, GuangDong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

Data: 2 File: D:\2007 Report\RedOCTane\ACS7QH149.EMI (36)



Site no. : RF Chamber Data no. : 2
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
 Limit : FCC PART 15 AV 2.4
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PSS/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH Low
 Memo : X position

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1986.00	27.97	6.34	35.32	39.26	38.25	54.00	15.75	Average
2	7970.00	37.99	12.50	34.59	28.58	44.48	54.00	9.52	Average
3	11115.00	38.99	13.98	36.31	27.28	43.94	54.00	10.06	Average
4	12067.00	39.54	13.60	36.37	29.40	46.17	54.00	7.83	Average
5	14872.00	41.15	14.58	35.26	24.85	45.32	54.00	8.68	Average

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.

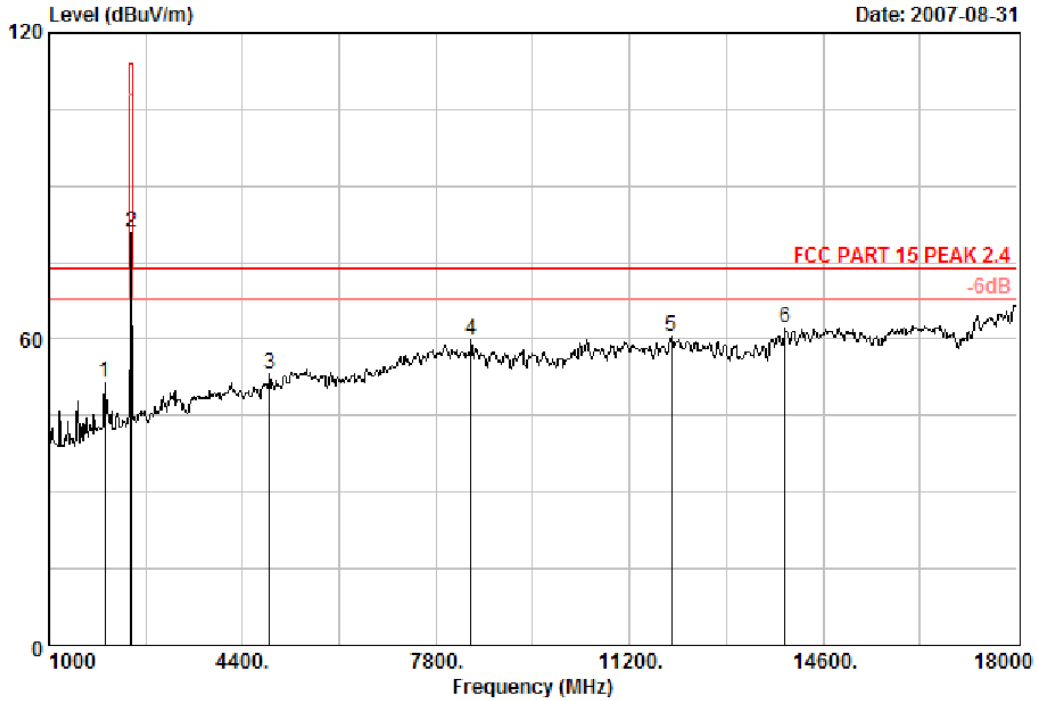
Fundamental Emission Average Result					
Freq(MHz)	Peak Level (dBμV/m)	PDCF(dBμV/m) (see Section 5)	Average Level (dBμV/m)	Limit(dBμV/m) (average)	Conclusion
2410	85.67	-16.89	68.78	94	PASS



No.6 Ke Feng Road,B1:ck 52,
ShenZhen Science & Industry Park
Noutou, ShenZhen, GuangDong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

Data: 5 File: D:\2007 Report\Red\Octane\ACS7QH149.EMI (36)

Date: 2007-08-31



Site no. : RF Chamber Data no. : 5
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 PEAK 2.4
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH Middle
 Memo : X position

Freq. (MHz)	Ant. Factor (dB/m)	Cable Amp		Emission			Margin (dB)	Remark
		Loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)		
1	27.97	6.34	35.32	52.58	51.57	74.00	22.43	Peak
2	29.11	5.81	35.17	80.99	80.74	114.00	33.26	Peak
3	34.16	9.17	34.48	44.39	53.24	74.00	20.76	Peak
4	38.50	11.99	34.92	44.12	59.69	74.00	14.31	Peak
5	39.49	13.56	36.39	43.77	60.43	74.00	13.57	Peak
6	41.82	14.62	35.73	41.38	62.09	74.00	11.91	Peak

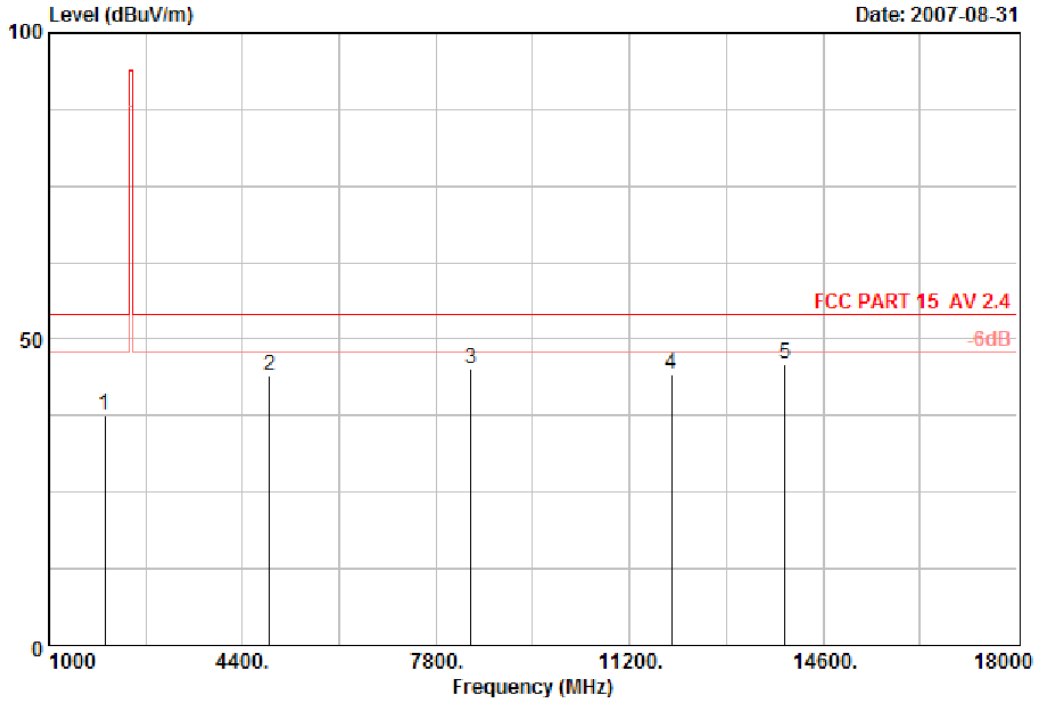
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



No.6 Ke Feng Road,B1:ck 52,
ShenZhen Science & Industry Park
Noutou, ShenZhen, GuangDong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

Data: 6 File: D:\2007 Report\RI\RedO\Tane\ACS7QH149.EMI (36)

Date: 2007-08-31



Site no. : RF Chamber Data no. : 6
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 AV 2.4
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH Middle
 Memo : X position

	Ant. Factor	Cable Loss	Amp Factor	Reading	Emission Level	Limits	Margin	Remark
Freq. (MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1 1986.00	27.97	6.34	35.32	38.58	37.57	54.00	16.43	Average
2 4876.00	34.16	9.17	34.48	35.13	43.98	54.00	10.02	Average
3 8412.00	38.50	11.99	34.92	29.69	45.26	54.00	8.74	Average
4 11931.00	39.49	13.56	36.39	27.65	44.31	54.00	9.69	Average
5 13937.00	41.82	14.62	35.73	25.30	46.01	54.00	7.99	Average

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.

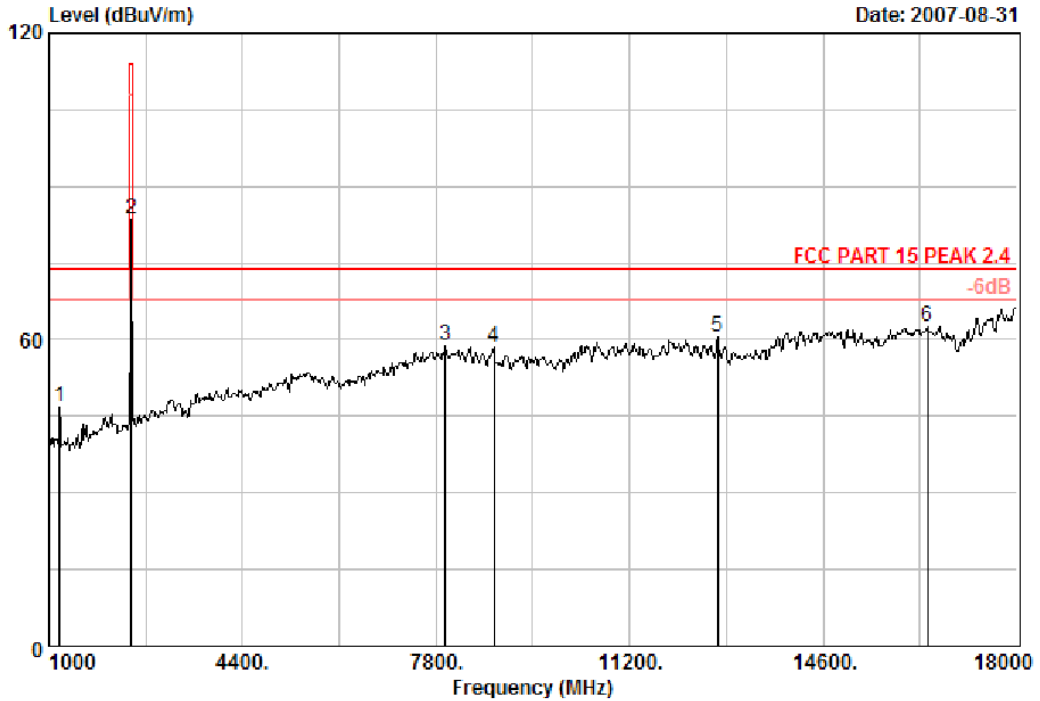
Fundamental Emission Average Result					
Freq(MHz)	Peak Level (dBμV/m)	PDCF(dBμV/m) (see Section 5)	Average Level (dBμV/m)	Limit(dBμV/m) (average)	Conclusion
2440	80.74	-16.89	63.85	94	PASS



No.6 Ke Feng Road,B1:ck 52,
ShenZhen Science & Industry Park
Noutou, ShenZhen, GuangDong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

Data: 7 File: D:\2007 Report\Red\Octane\ACS7QH149.EMI (36)

Date: 2007-08-31



Site no. : RF Chamber Data no. : 7
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
 Limit : FCC PART 15 PEAK 2.4
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH Middle
 Memo : X position

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission			Remark
						Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	
1	1187.00	24.77	4.69	36.04	53.44	46.86	74.00	27.14	Peak
2	2440.00	29.11	5.81	35.17	83.84	83.59	114.00	30.41	Peak
3	7970.00	37.99	12.50	34.59	42.80	58.70	74.00	15.30	Peak
4	8820.00	38.69	11.04	35.26	43.89	58.36	74.00	15.64	Peak
5	12747.00	39.54	13.59	36.14	43.37	60.36	74.00	13.64	Peak
6	16436.00	39.55	15.87	34.76	41.96	62.62	74.00	11.38	Peak

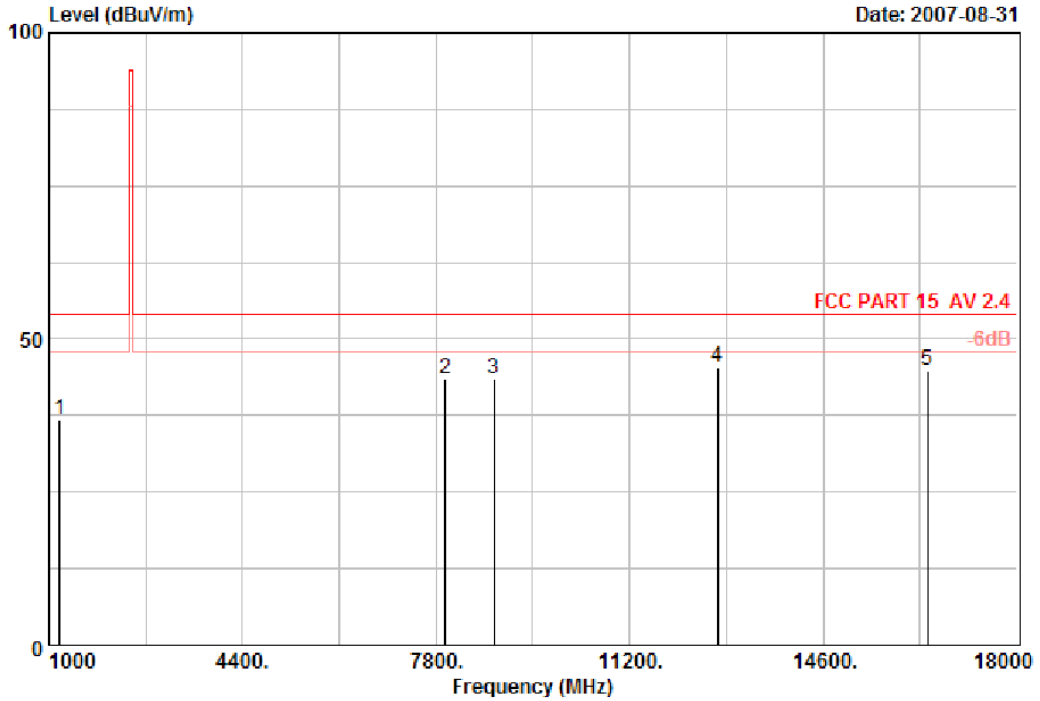
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



No.6 Ke Feng Road,B1:ck 52,
ShenZhen Science & Industry Park
Noutou, ShenZhen, GuangDong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

Data: 8 File: D:\2007 Report\RI\Red\Octane\ACS7QH149.EMI (36)

Date: 2007-08-31



Site no. : RF Chamber Data no. : 8
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
 Limit : FCC PART 15 AV 2.4
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH Middle
 Memo : X position

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1187.00	24.77	4.69	36.04	43.44	36.86	54.00	17.14	Average
2	7970.00	37.99	12.50	34.59	27.66	43.56	54.00	10.44	Average
3	8820.00	38.69	11.04	35.26	28.89	43.36	54.00	10.64	Average
4	12747.00	39.54	13.59	36.14	28.29	45.28	54.00	8.72	Average
5	16436.00	39.55	15.87	34.76	24.29	44.95	54.00	9.05	Average

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.

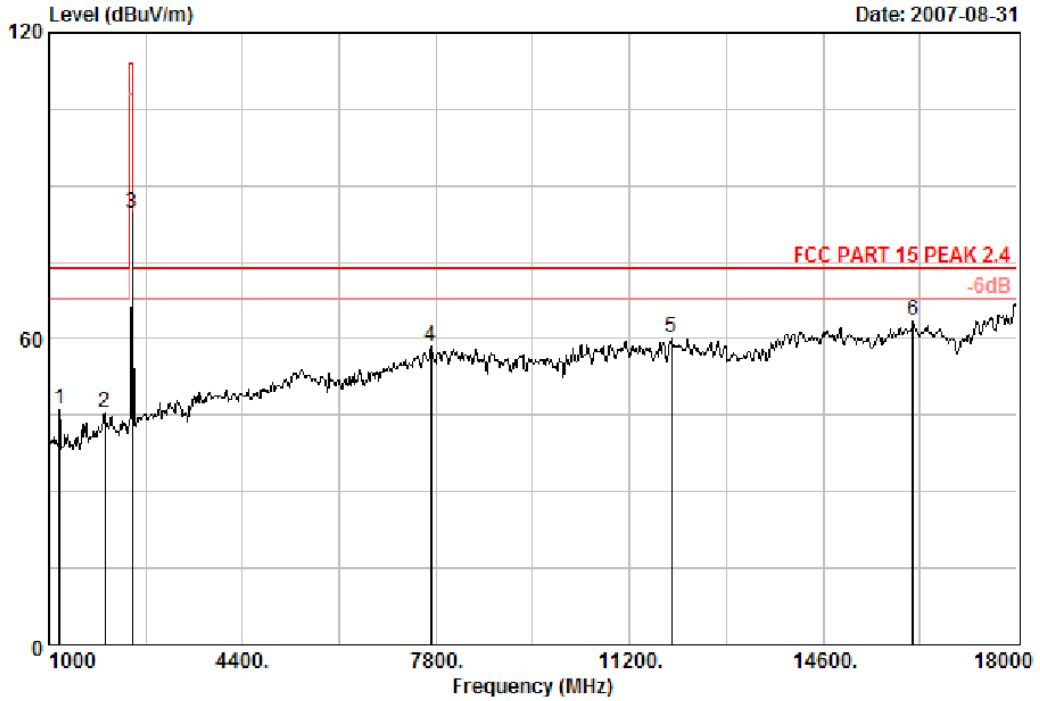
Fundamental Emission Average Result					
Freq(MHz)	Peak Level (dBμV/m)	PDCF(dBμV/m) (see Section 5)	Average Level (dBμV/m)	Limit(dBμV/m) (average)	Conclusion
2440	83.59	-16.89	66.70	94	PASS



No.6 Ke Feng Road,B1:ck 52,
 ShenZhen Science & Industry Park
 Noutou, ShenZhen, GuangDong, China
 Tel:+86-755-26639495-7
 Fax:+86-755-26632877
 Postcode:518057

Data: 11 File: D:\2007 Report\Red\Octane\ACS7QH149.EMI (36)

Date: 2007-08-31



Site no. : RF Chamber Data no. : 11
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 PEAK 2.4
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH High
 Memo : X position

Freq. (MHz)	Ant. Factor (dB/m)	Cable Amp		Emission			Margin (dB)	Remark
		Loss (dB)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)		
1	24.77	4.69	36.04	52.83	46.25	74.00	27.75	Peak
2	27.97	6.34	35.32	46.46	45.45	74.00	28.55	Peak
3	29.15	5.87	35.17	84.79	84.64	114.00	29.36	Peak
4	37.89	12.02	34.54	42.97	58.34	74.00	15.66	Peak
5	39.49	13.56	36.39	43.47	60.13	74.00	13.87	Peak
6	39.25	15.71	34.73	43.16	63.39	74.00	10.61	Peak

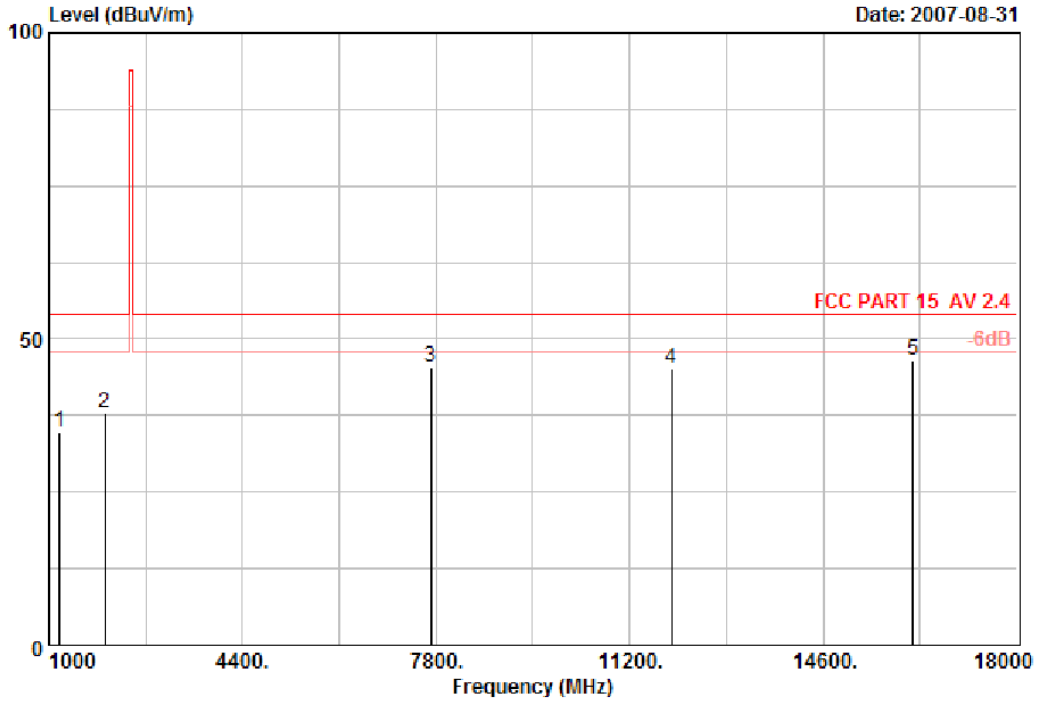
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



No.6 Ke Feng Road,B1:ck 52,
ShenZhen Science & Industry Park
Noutou, ShenZhen, GuangDong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

Data: 12 File: D:\2007 Report\RedOctane\ACS7QH149.EMI (36)

Date: 2007-08-31



Site no. : RF Chamber Data no. : 12
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 AV 2.4
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH High
 Memo : X position

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1187.00	24.77	4.69	36.04	41.28	34.70	54.00	19.30	Average
2	1986.00	27.97	6.34	35.32	38.94	37.93	54.00	16.07	Average
3	7715.00	37.89	12.02	34.54	30.06	45.43	54.00	8.57	Average
4	11931.00	39.49	13.56	36.39	28.45	45.11	54.00	8.89	Average
5	16181.00	39.25	15.71	34.73	26.16	46.39	54.00	7.61	Average

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.

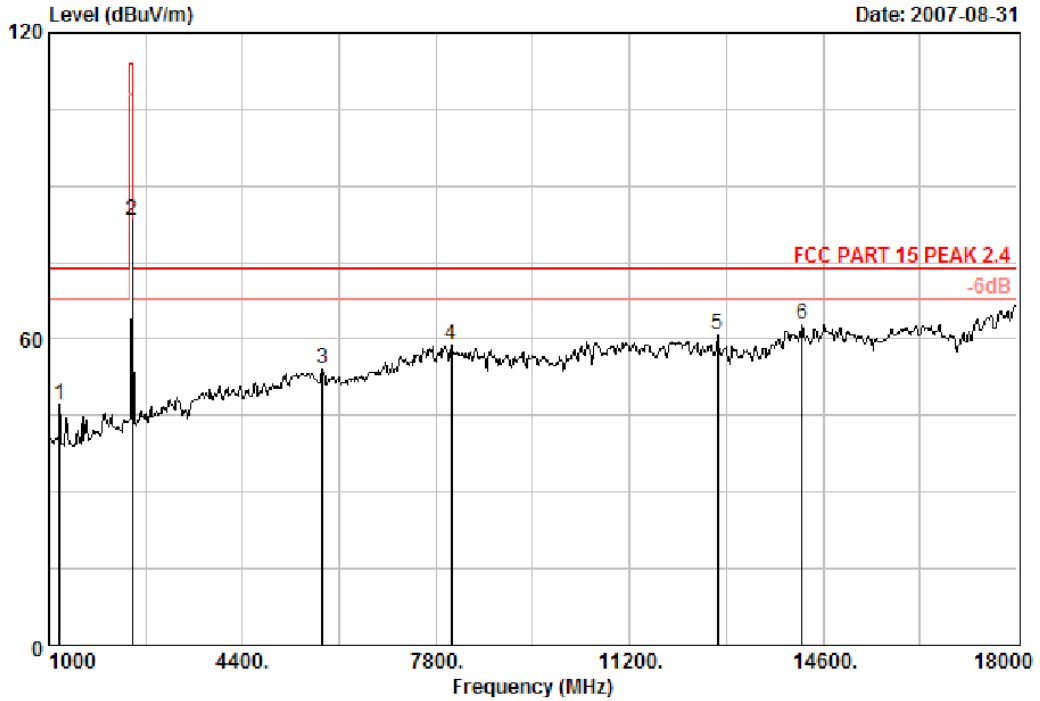
Fundamental Emission Average Result					
Freq(MHz)	Peak Level (dBμV/m)	PDCF(dBμV/m) (see Section 5)	Average Level (dBμV/m)	Limit(dBμV/m) (average)	Conclusion
2470	84.64	-16.89	67.75	94	PASS



No.6 Ke Feng Road,B1:ck 52,
 ShenZhen Science & Industry Park
 Noutou, ShenZhen, GuangDong, China
 Tel:+86-755-26639495-7
 Fax:+86-755-26632877
 Postcode:518057

Data: 9 File: D:\2007 Report\RedOctane\ACS7QH149.EMI (36)

Date: 2007-08-31



Site no. : RF Chamber Data no. : 9
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
 Limit : FCC PART 15 PEAK 2.4
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH High
 Memo : X position

Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission		Limits (dBuV/m)	Margin (dB)	Remark
				Reading (dBuV)	Level (dBuV/m)			
1	24.77	4.69	36.04	53.59	47.01	74.00	26.99	Peak
2	29.15	5.87	35.17	83.40	83.25	114.00	30.75	Peak
3	36.01	9.39	34.25	43.03	54.18	74.00	19.82	Peak
4	38.08	12.74	34.66	42.75	58.91	74.00	15.09	Peak
5	39.54	13.59	36.14	43.78	60.77	74.00	13.23	Peak
6	42.08	14.35	35.59	41.84	62.68	74.00	11.32	Peak

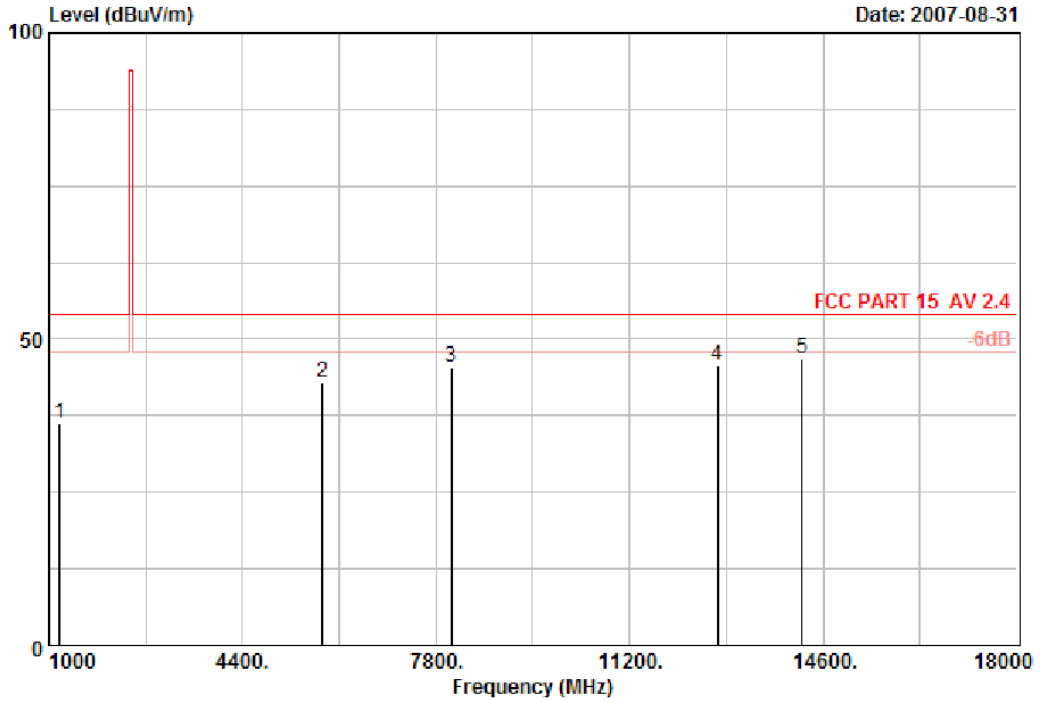
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



No.6 Ke Feng Road,B1:ck 52,
ShenZhen Science & Industry Park
Noutou, ShenZhen, GuangDong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

Data: 10 File: D:\2007 Report\Red\Octane\ACS7QH149.EMI (36)

Date: 2007-08-31



Site no. : RF Chamber Data no. : 10
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
 Limit : FCC PART 15 AV 2.4
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH High
 Memo : X position

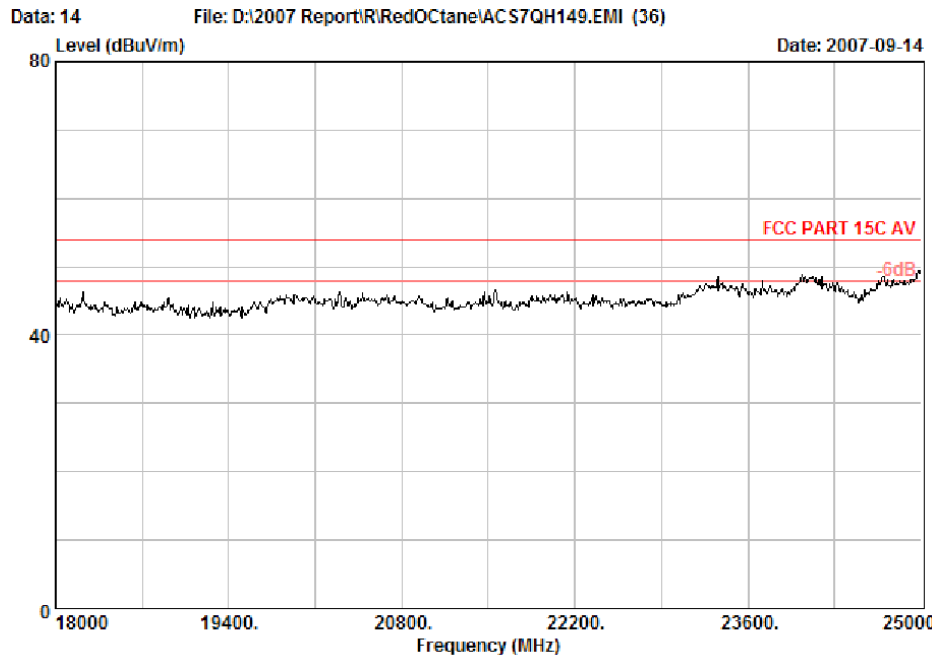
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	1187.00	24.77	4.69	36.04	42.85	36.27	54.00	17.73	Average
2	5811.00	36.01	9.39	34.25	31.83	42.98	54.00	11.02	Average
3	8072.00	38.08	12.74	34.66	29.17	45.33	54.00	8.67	Average
4	12747.00	39.54	13.59	36.14	28.78	45.77	54.00	8.23	Average
5	14226.00	42.08	14.35	35.59	25.84	46.68	54.00	7.32	Average

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.

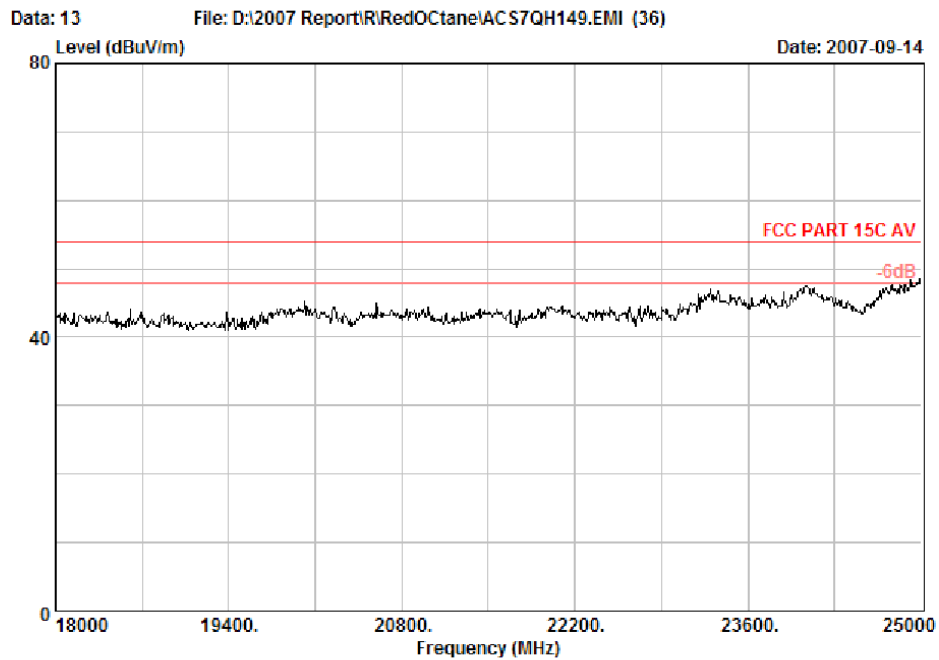
Fundamental Emission Average Result					
Freq(MHz)	Peak Level (dBμV/m)	PDCF(dBμV/m) (see Section 5)	Average Level (dBμV/m)	Limit(dBμV/m) (average)	Conclusion
2470	83.25	-16.89	66.36	94	PASS



No.6 Ke Feng Road,Block 52,
Shenzhen Science & Industry Park
Noutou, Shenzhen, Guangdong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



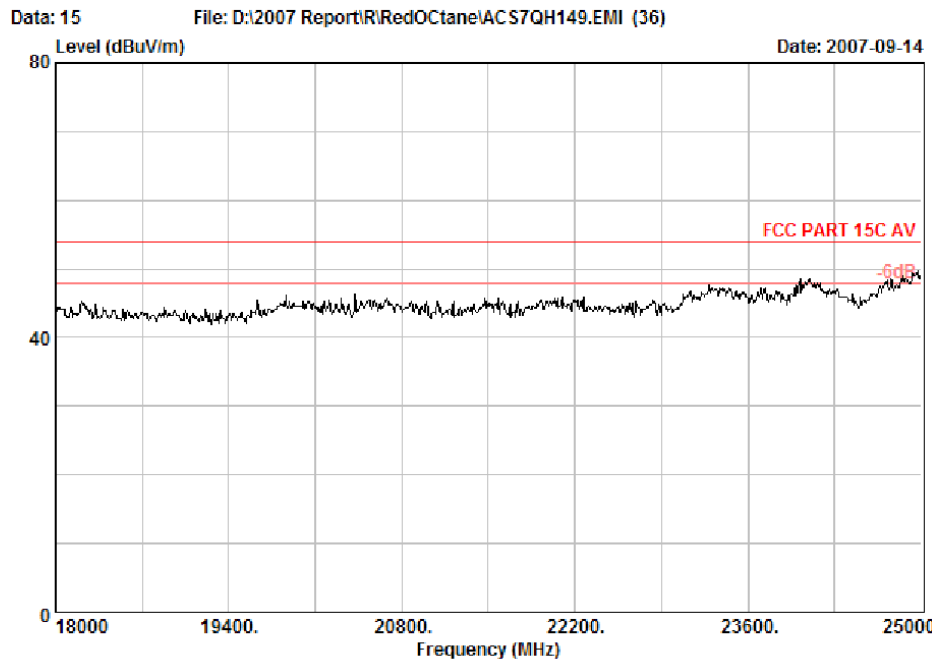
Site no. : RF Chamber Data no. : 14
 Dis. / Ant. : 3m Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH Low
 Memo : X position



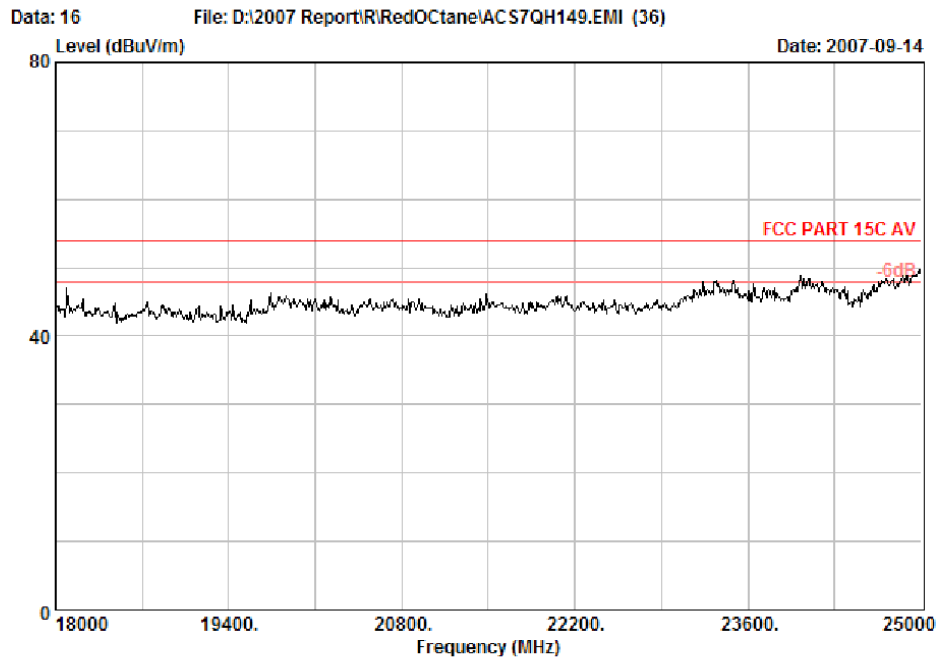
Site no. : RF Chamber Data no. : 13
 Dis. / Ant. : 3m Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH Low
 Memo : X position



No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Noutou, ShenZhen, GuangDong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057



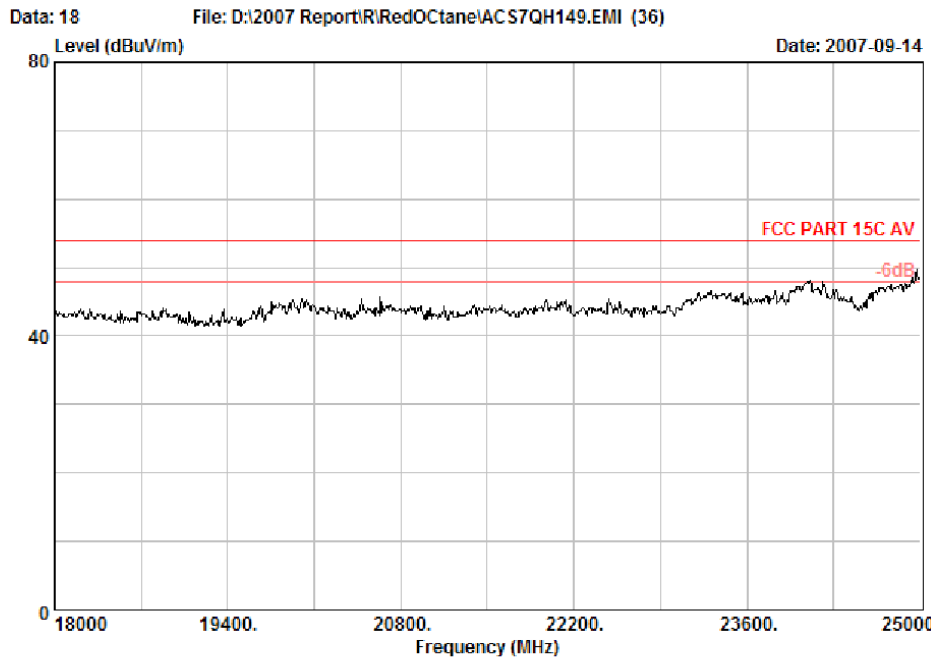
Site no. : RF Chamber Data no. : 15
 Dis. / Ant. : 3m Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PSS/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH Middle
 Memo : X position



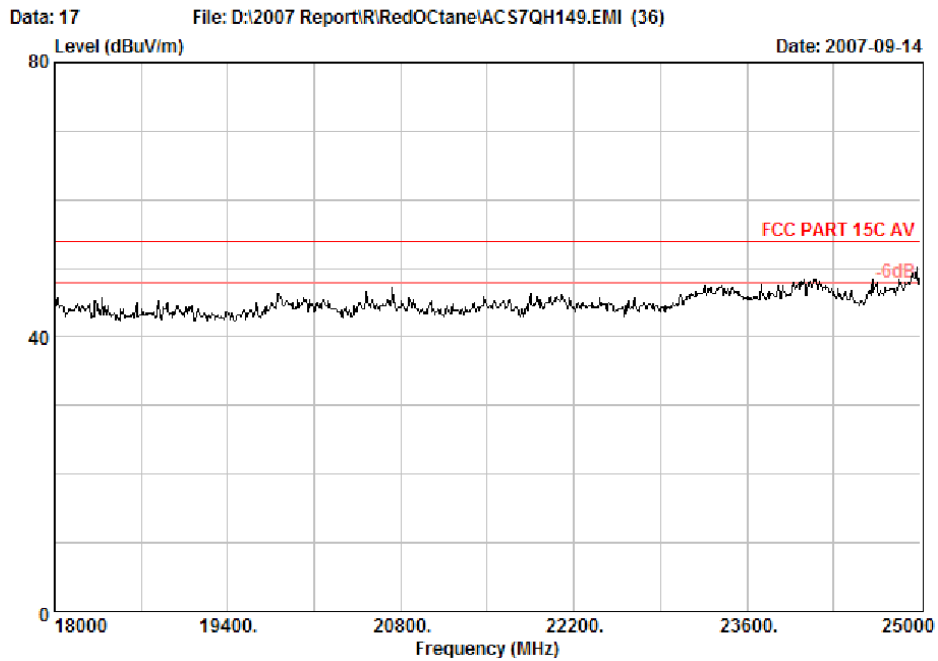
Site no. : RF Chamber Data no. : 16
 Dis. / Ant. : 3m Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PSS/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH Middle
 Memo : X position



No.6 Ke Feng Road,Block 52,
ShenZhen Science & Industry Park
Noutou, ShenZhen, GuangDong, China
Tel:+86-755-26639495-7
Fax:+86-755-26632877
Postcode:518057

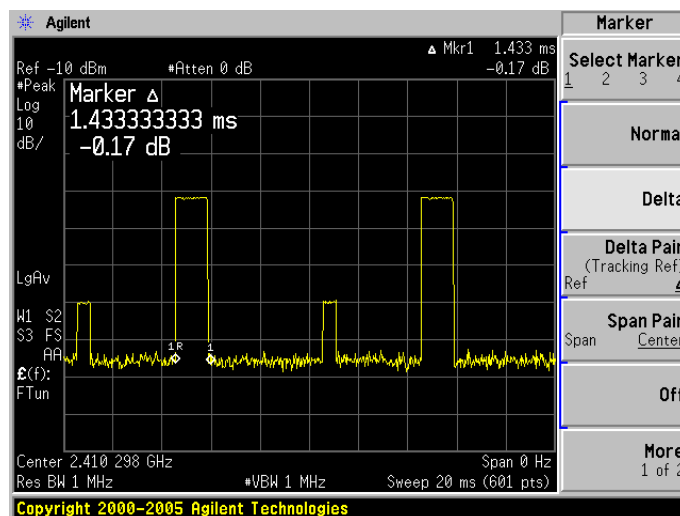
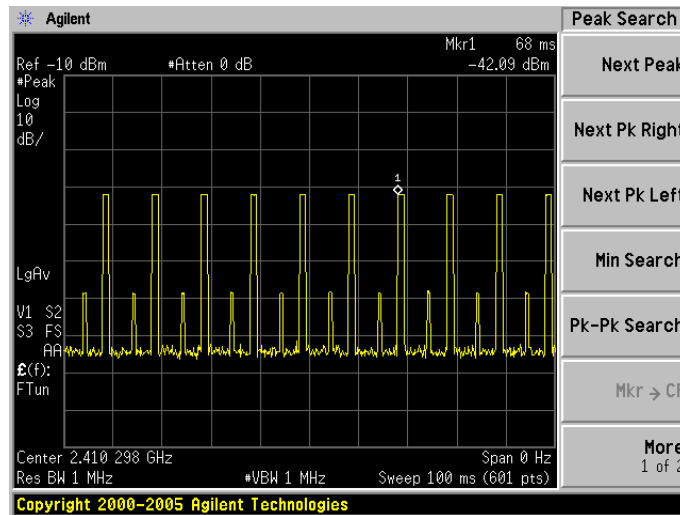
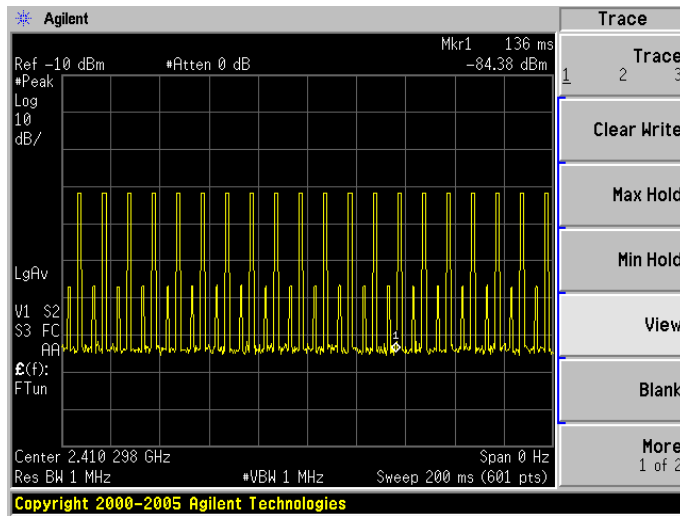


Site no. : RF Chamber Data no. : 18
 Dis. / Ant. : 3m Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH High
 Memo : X position



Site no. : RF Chamber Data no. : 17
 Dis. / Ant. : 3m Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Jamy
 EUT : PS3/Les Paul Wireless M/N:95121.805
 Power Rating : Battery 3V
 Test Mode : Tx CH High
 Memo : X position

5. PULSE DESENSITIZATION CORRECTION FACTOR



$T_{\text{ontime}}(\text{assumed worse case}) = 10 * 1.43\text{ms} = 14.3\text{ms}$
 $\text{Duty cycle} = T_{\text{ontime}} / T_{\text{period}} = 14.3\text{ms} / 100\text{ms} = 0.143$
 $\text{PDCF} = 20 * \log(\text{Duty cycle}) = 20 * \log(0.143) = -16.89$

6. BAND EDGE COMPLIANCE TEST

6.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4407B	MY41440292	May 11, 07	1 Year
2.	Amp	HP	8449B	3008A00863	May 11, 07	1 Year
3.	Antenna	EMCO	3115	9607-4877	Jan. 23, 07	1.5 Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May 11, 07	1 Year

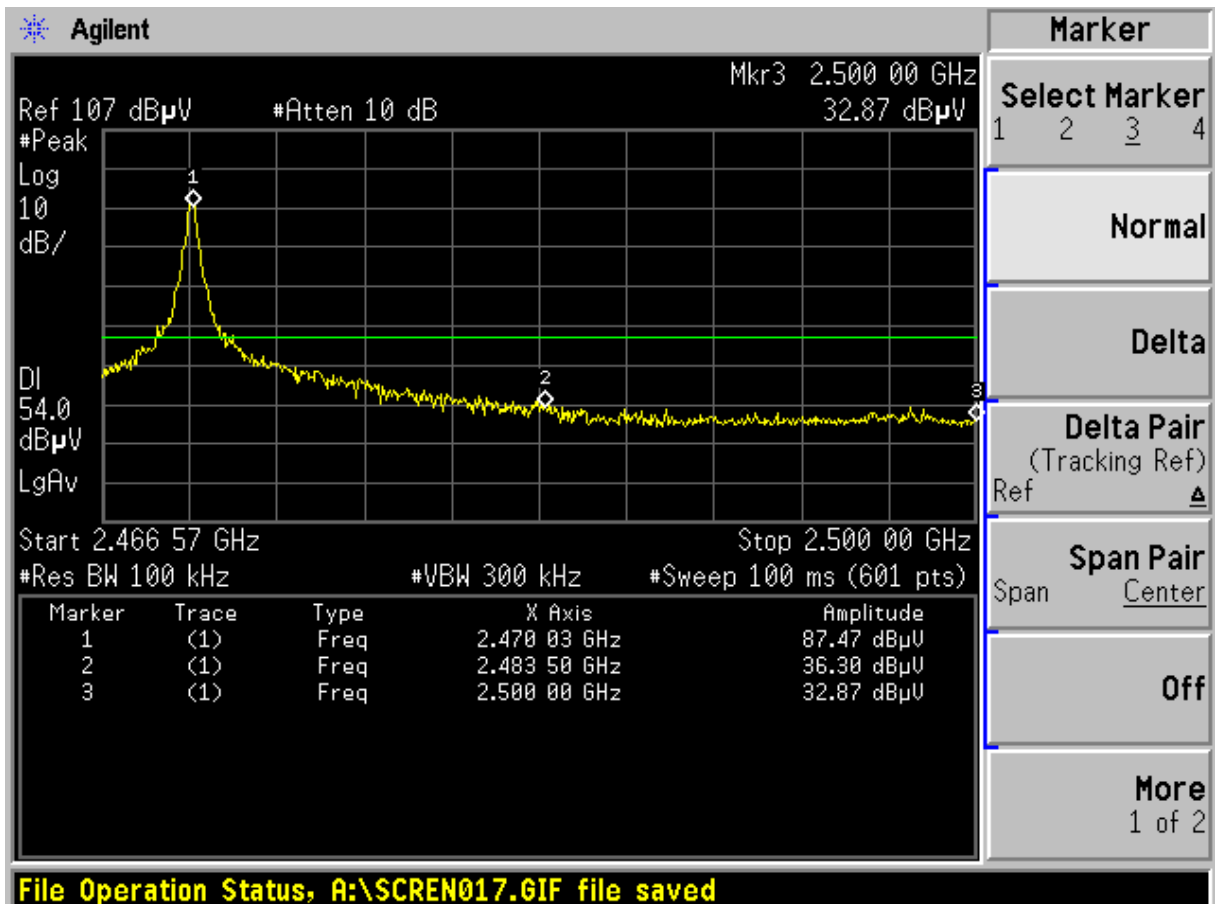
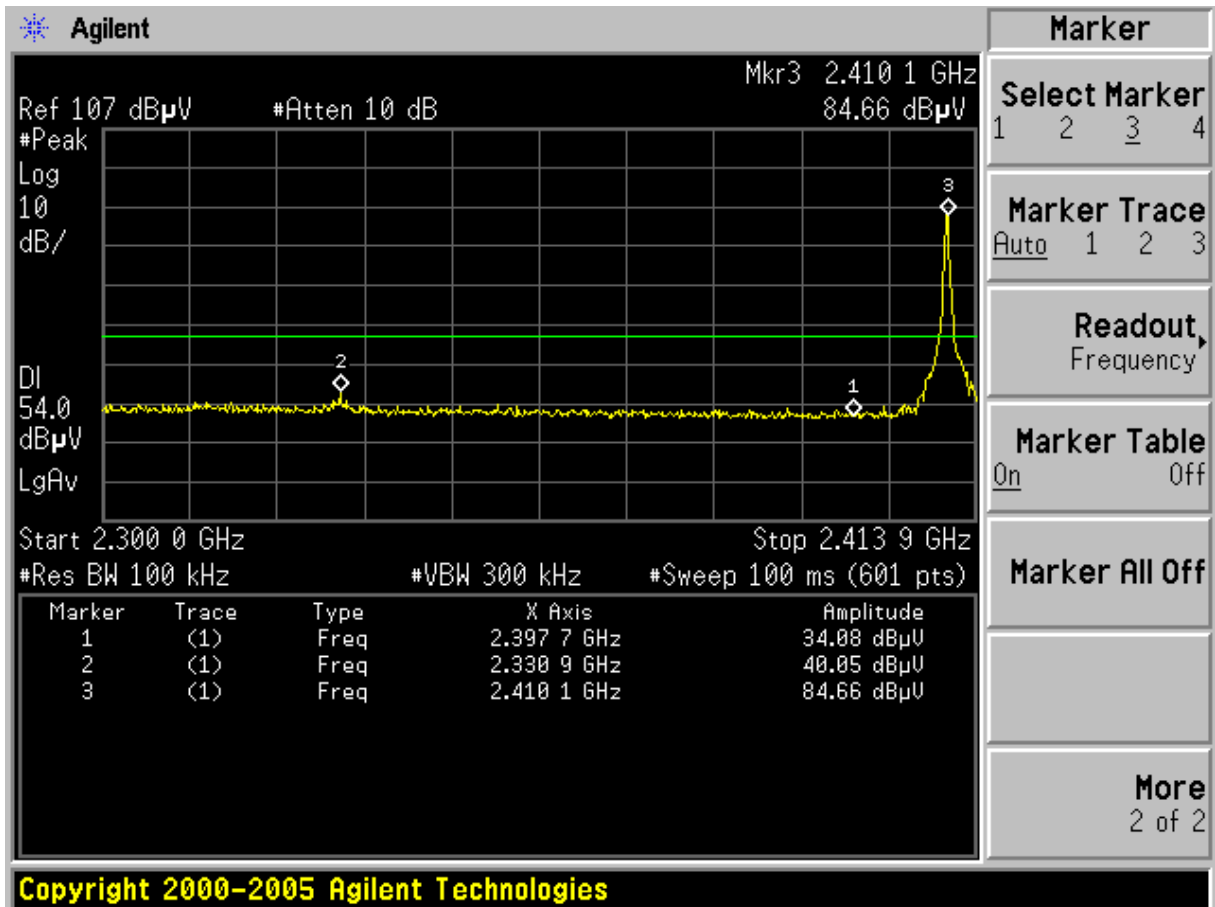
6.2. Test Information

EUT:	PS3/Les Paul Wireless
M/N:	95121.805
Test Date:	Sep.14, 2007
Ambient Temperature:	23°C
Relative Humidity:	54%
Test standard:	FCC PART 15C: 15.249
Test mode:	Transmitting
Test Frequency:	Low: 2410MHz High: 2470MHz
Test By:	Jamy

NOTE: This test was performed with antenna in horizontal and the maximum value would obtained in the position.

6.3. Test Results

Pass (The EUT was tested and all the test results are listed in next page.)



7. 20DB BANDWIDTH TEST

7.1. Test Equipment

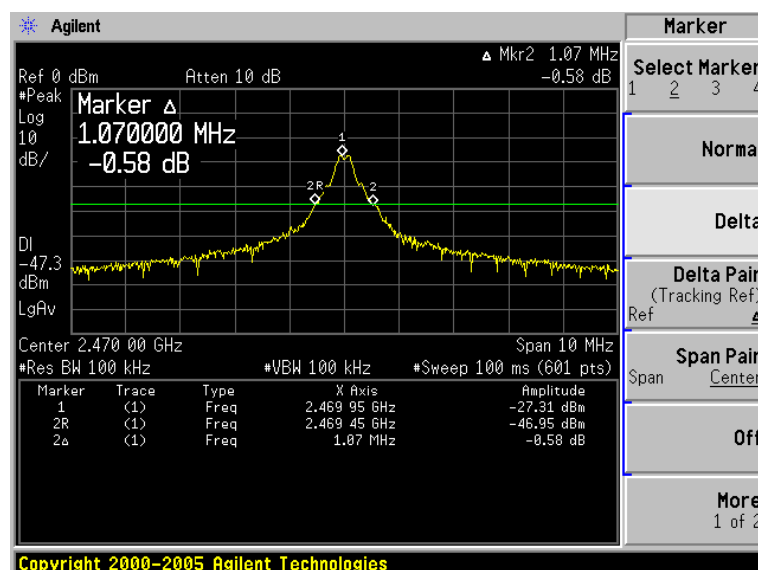
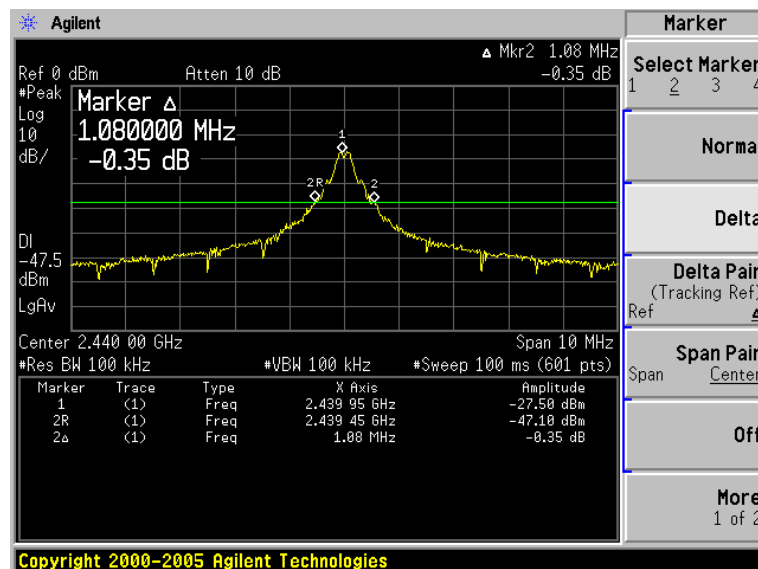
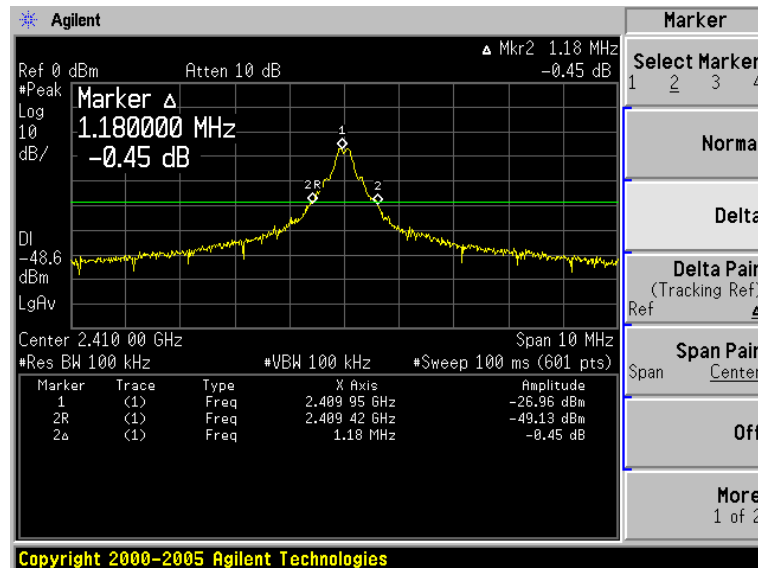
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4407B	MY41440292	May 11, 07	1 Year
2.	Amp	HP	8449B	3008A00863	May 11, 07	1 Year
3.	Antenna	EMCO	3115	9607-4877	Jan. 23, 07	1.5 Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May 11, 07	1 Year

7.2. Test Information

EUT:	PS3/Les Paul Wireless
M/N:	95121.805
Test Date:	Sep.14, 2007
Ambient Temperature:	23°C
Relative Humidity:	54%
Test standard:	FCC PART 15C: 15.215
Test mode:	Transmitting
Test Frequency:	Low: 2410MHz Mid: 2440MHz High: 2470MHz
Test By:	Jamy

7.3. Test Results

Pass (The EUT was tested and all the test results are listed in next page.)



8. DEVIATION TO TEST SPECIFICATIONS

[NONE]

9. PHOTOGRAPH

9.1. Photos of Radiated Emission Test (In Anechoic Chamber)

30~1000MHz



above 1000MHz

