

APPLICATION FOR CERTIFICATION
On Behalf of

Harmonix Music Systems, Inc.

PS3 Guitar Controller

Model Number: #822151 Rock band wireless guitar for PS3

Prepared for : Harmonix Music Systems, Inc.
625 Massachusetts Ave 2nd Floor Cambridge, MA 02139
United States

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
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Report Number : ACS-F07408
Date of Test : Aug.06~10, 2007
Date of Report : Sep.07, 2007

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TEST REPORT CERTIFICATION

Applicant : Harmonix Music Systems, Inc.
 Manufacturer : Dong Guan Contel Electronics Co., Ltd.
 EUT Description : PS3 Guitar Controller
 (A) MODEL NO. : #822151 Rock band wireless guitar for PS3
 (B) SERIAL NO. : N/A
 (C) POWER SUPPLY : DC 4.5V

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.06~10, 2007

Prepared by :

YoYo Wang

YoYo Wang / Assistant

Reviewer :

Iceman Hu

Iceman Hu / Supervisor

AUDIX® 信華科技(深圳)有限公司
 Audix Technology (Shenzhen) Co., Ltd.
 EMC 部門報告專用章

Stamp only for EMC Dept. Report

Signature: Ken Lu 9/13/07

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 Guitar Controller
Model Number	:	#822151 Rock band wireless guitar for PS3
Operation frequency	:	2408MHz~2474MHz
Modulation	:	GFSK
Power	:	DC 4.5V
Applicant	:	Harmonix Music Systems, Inc. 625 Massachusetts Ave 2nd Floor Cambridge, MA 02139 United States
Manufacturer	:	Dong Guan Contel Electronics Co., Ltd. 2 nd Industrial Park, DiChong District, GaoBu Town, Dong Guan City, Guang Dong Province, China
Date of Test	:	Aug.06~10, 2007

2.2. 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

2.3. 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	Mar.12, 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

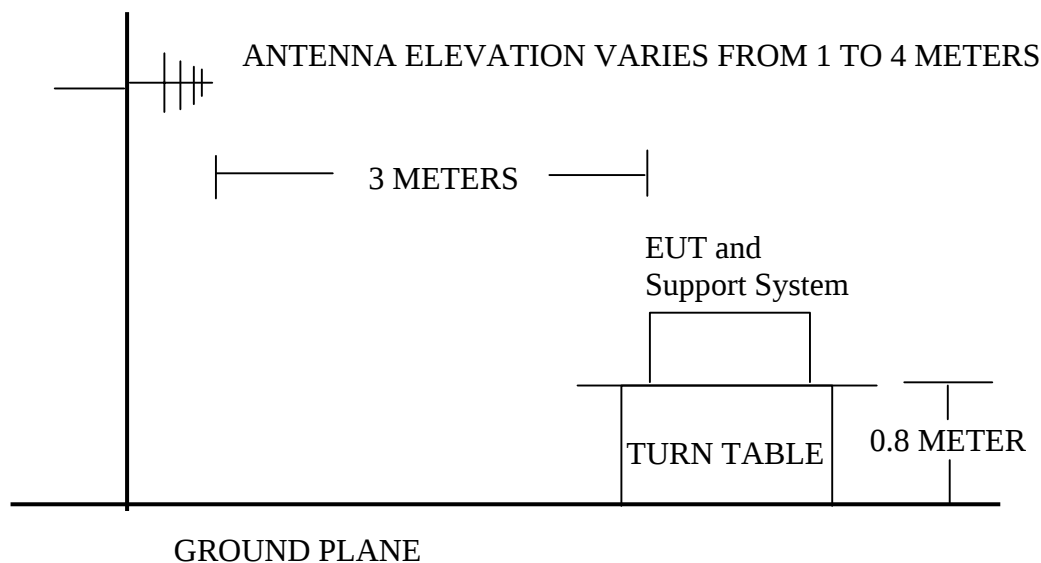
4.2.1. Block Diagram of connection between EUT and simulators



(EUT: PS3 Guitar Controller)

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 Guitar Controller (EUT)

Model Number : #822151 Rock band wireless guitar for PS3
Serial Number : N/A

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 3MHz 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.

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

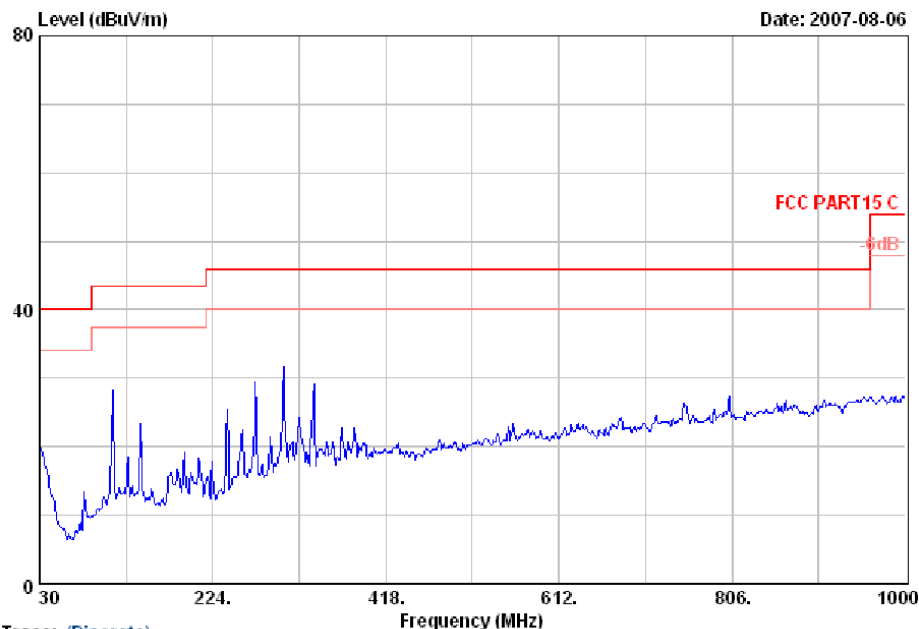
All the emissions except fundamental from 18GHz~24GHz are at least 20dB below the limit, and do not record.



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Data: 2 File: D:\2007 Report Data\C\CONTEL\ACS7Q1060.EMI (12)

Date: 2007-08-06

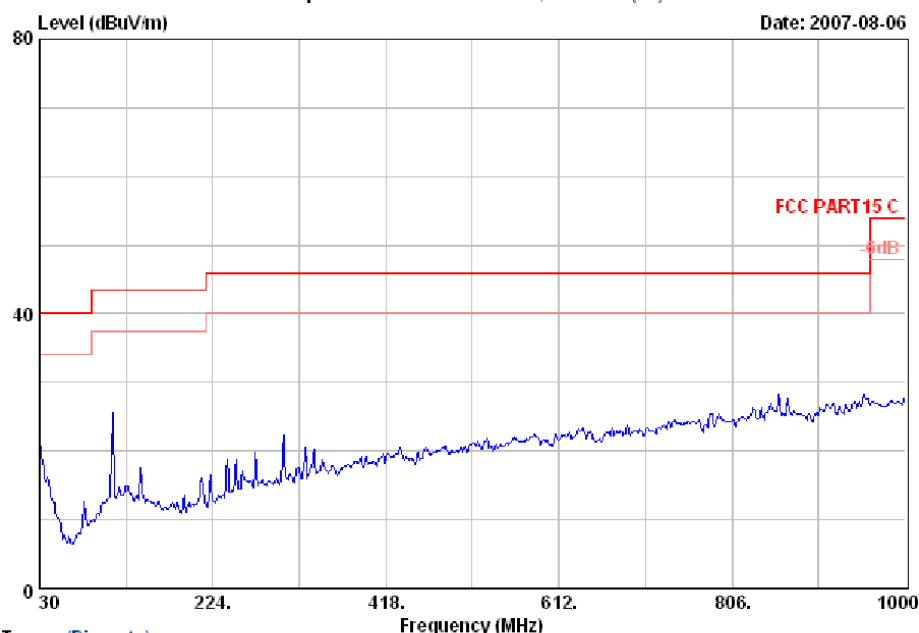


Trace: (Discrete)

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 : Skyel
 EUT : PS3 Guitar Controller
 Power Rating : DC 4.5V
 Test mode : CH1:2408MHz
 M/N : #822151 Rock band wireless guitar for PS3

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Date: 2007-08-06



Trace: (Discrete)

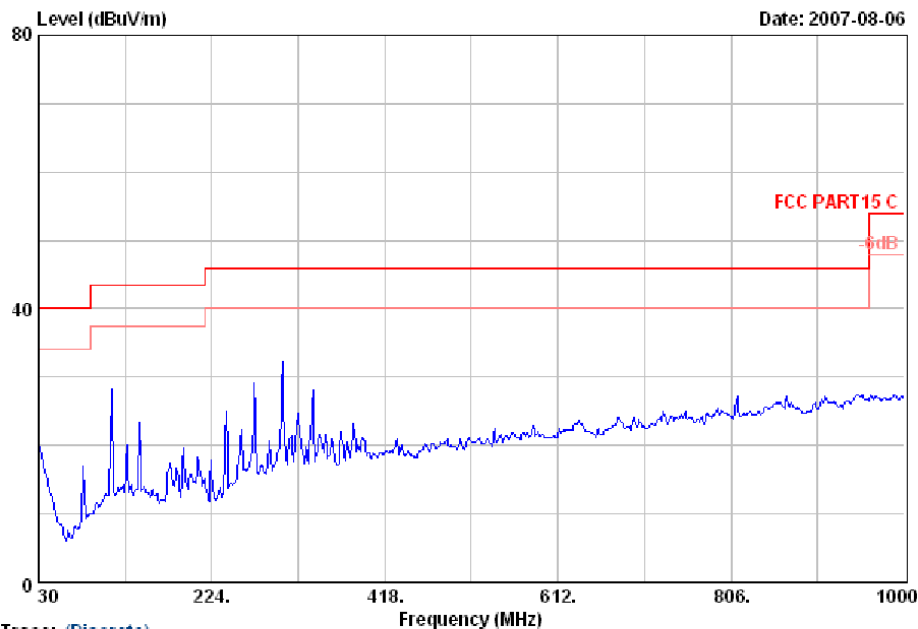
Site no. : 3# Chamber Radiation Data no. : 1
 Dis. / Ant. : 3m 2598 Ant. pol. : VERTICAL
 Limit : FCC PART15 C
 Env. / Ins. : 24°C/56% ESVS20 Engineer : Skyel
 EUT : PS3 Guitar Controller
 Power Rating : DC 4.5V
 Test mode : CH1:2408MHz
 M/N : #822151 Rock band wireless guitar for PS3



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Data: 3 File: D:\2007 Report Data\C\CONTEL\ACS7Q1060.EMI (12)

Date: 2007-03-06

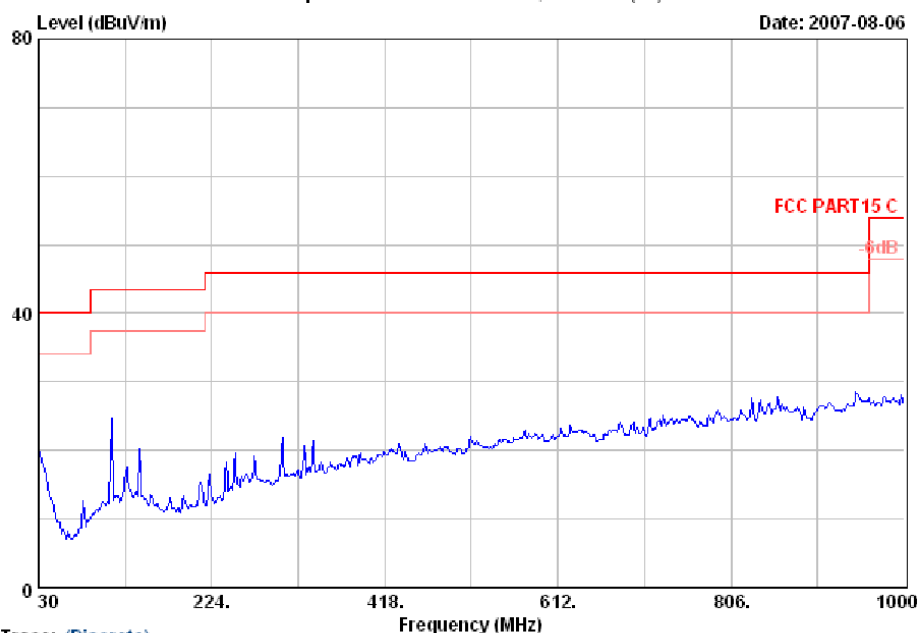


Trace: (Discrete)

Site no. : 3# Chamber Radiation Data no. : 3
Dis. / Ant. : 3m 2598 Ant. pol. : HORIZONTAL
Limit : FCC PART15 C
Env. / Ins. : 24°C/56% ESVS20 Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test mode : CH2:2440MHz
M/N : #822151 Rock band wireless guitar for PS3

Data: 4 File: D:\2007 Report Data\C\CONTEL\ACS7Q1060.EMI (12)

Date: 2007-03-06



Trace: (Discrete)

Site no. : 3# Chamber Radiation Data no. : 4
Dis. / Ant. : 3m 2598 Ant. pol. : VERTICAL
Limit : FCC PART15 C
Env. / Ins. : 24°C/56% ESVS20 Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test mode : CH2:2440MHz
M/N : #822151 Rock band wireless guitar for PS3

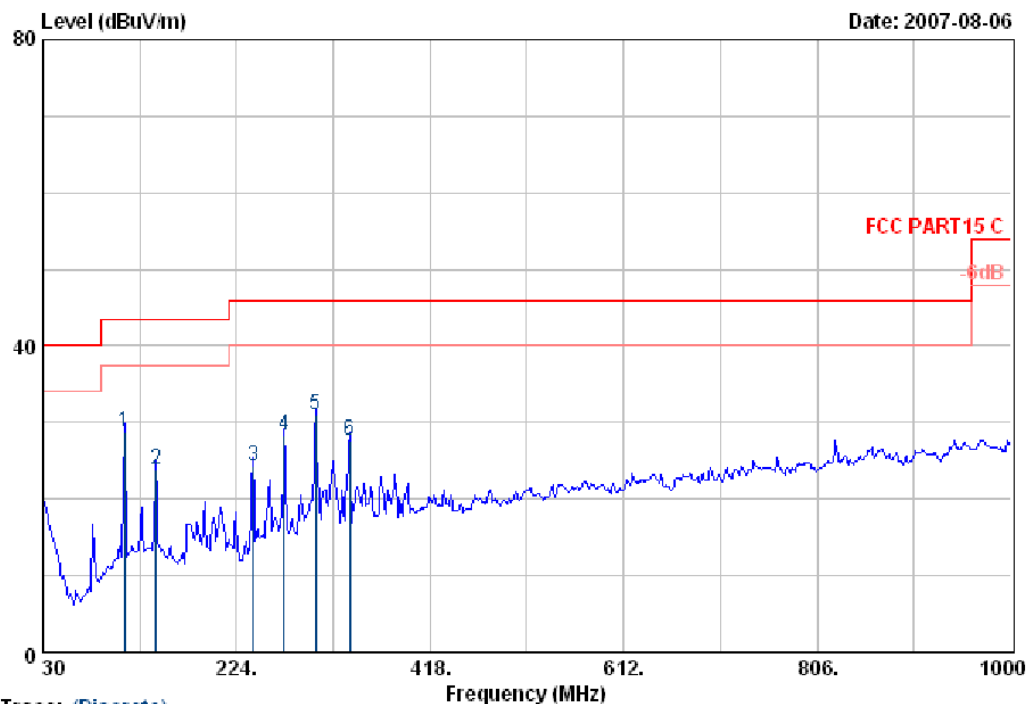


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Data: 6

File: D:\2007 Report Data\C\CONTEL\ACS7Q1060.EMI (12)

Date: 2007-03-06



Trace: (Discrete)

Site no. : 3# Chamber Radiation Data no. : 6
 Dis. / Ant. : 3m 2598 Ant. pol. : HORIZONTAL
 Limit : FCC PART15 C
 Env. / Ins. : 24°C/56% ESVS20 Engineer : SkyLe
 EUT : PS3 Guitar Controller
 Power Rating : DC 4.5V
 Test mode : CH3:2474MHz
 M/N : #822151 Rock band wireless guitar for PS3

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	111.48	11.43	1.10	16.29	28.82	43.50	14.68	QP
2	143.49	11.93	1.16	10.85	23.94	43.50	19.56	QP
3	240.49	11.88	1.46	11.00	24.34	46.00	21.66	QP
4	271.53	13.43	1.53	13.31	28.27	46.00	17.73	QP
5	303.54	13.87	1.67	15.43	30.97	46.00	15.03	QP
6	337.49	14.70	1.74	11.25	27.69	46.00	18.31	QP

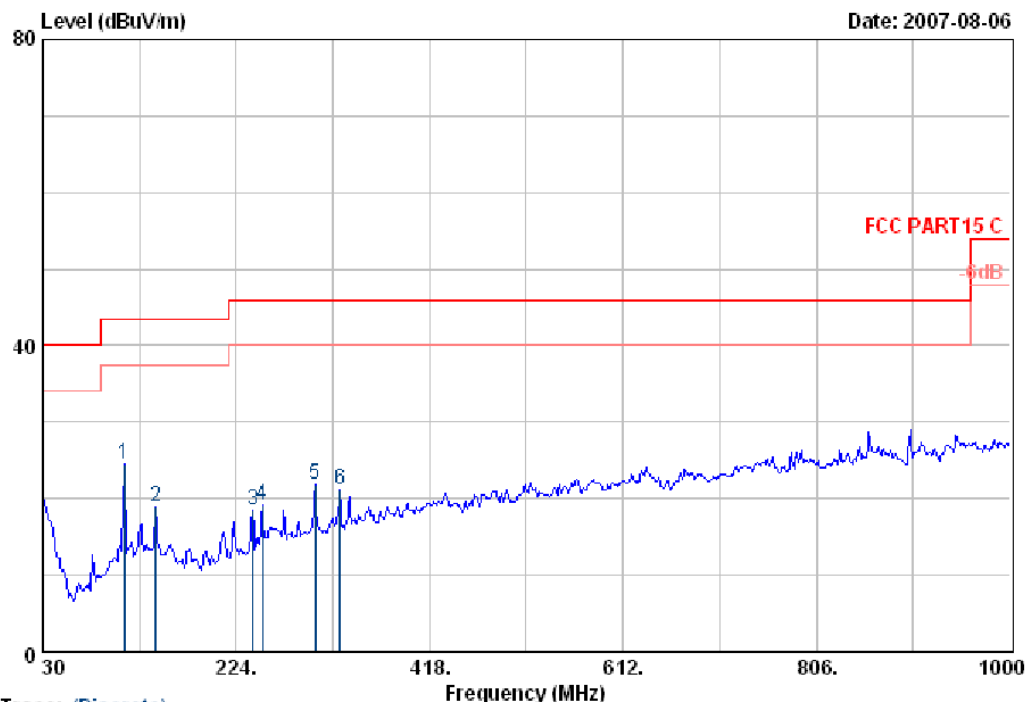
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



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Data: 5 File: D:\2007 Report Data\C\CONTEL\ACS7Q1060.EMI (12)

Date: 2007-08-06



Trace: (Discrete)

Site no. : 3# Chamber Radiation Data no. : 5
Dis. / Ant. : 3m 2598 Ant. pol. : VERTICAL
Limit : FCC PART15 C
Env. / Ins. : 24*C/56% ESWS20 Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test mode : CH3:2474MHz
M/N : #822151 Rock band wireless guitar for PS3

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	111.48	11.43	1.10	12.05	24.58	43.50	18.92	QP
2	143.49	11.93	1.16	5.94	19.03	43.50	24.47	QP
3	240.49	11.88	1.46	5.13	18.47	46.00	27.53	QP
4	250.19	12.70	1.51	4.94	19.15	46.00	26.85	QP
5	303.54	13.87	1.67	6.30	21.84	46.00	24.16	QP
6	327.79	14.46	1.69	5.10	21.25	46.00	24.75	QP

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

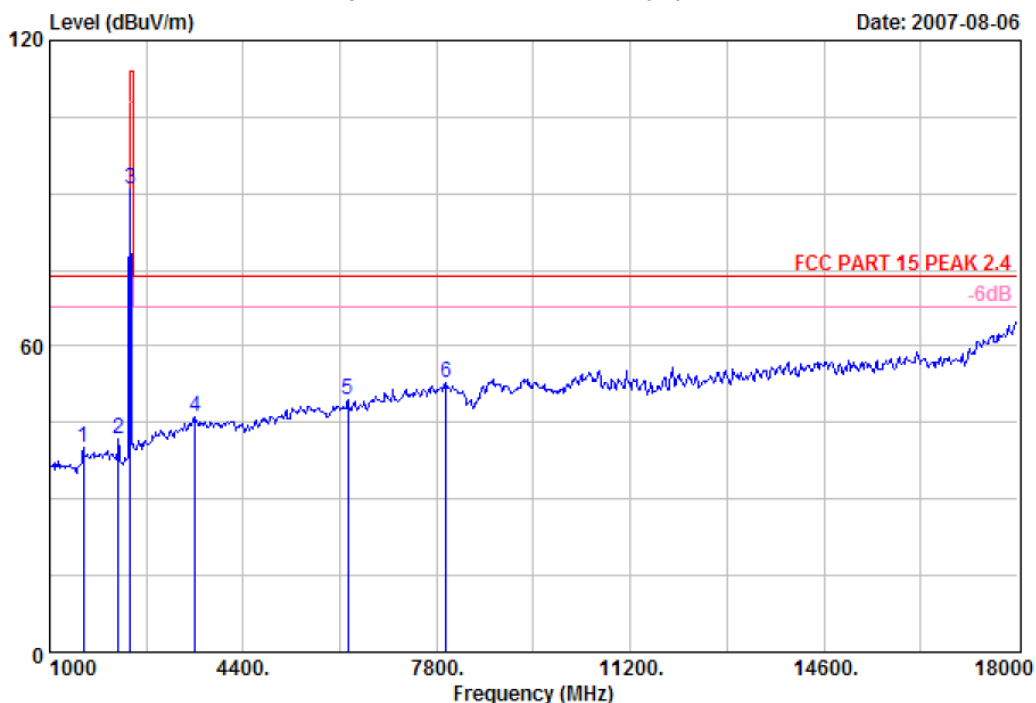


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Data: 41

File: D:\2007 Report\C\Contel\ACS7Q1060.EMI (58)

Date: 2007-08-06



Site no. : Data no. : 41
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH1:2408MHz
M/N : #822151 Rock band wireless guitar for PS3

	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	1595.00	25.91	4.82	35.66	45.19	40.26	74.00	33.74	Peak
2	2207.00	28.54	5.91	35.24	42.70	41.91	74.00	32.09	Peak
3	2411.00	29.03	6.20	35.18	90.83	90.88	114.00	23.12	Peak
4	3550.00	32.52	8.16	34.83	40.20	46.05	74.00	27.95	Peak
5	6236.00	35.94	10.27	34.24	37.56	49.53	74.00	24.47	Peak
6	7970.00	37.99	11.79	34.59	37.73	52.92	74.00	21.08	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.

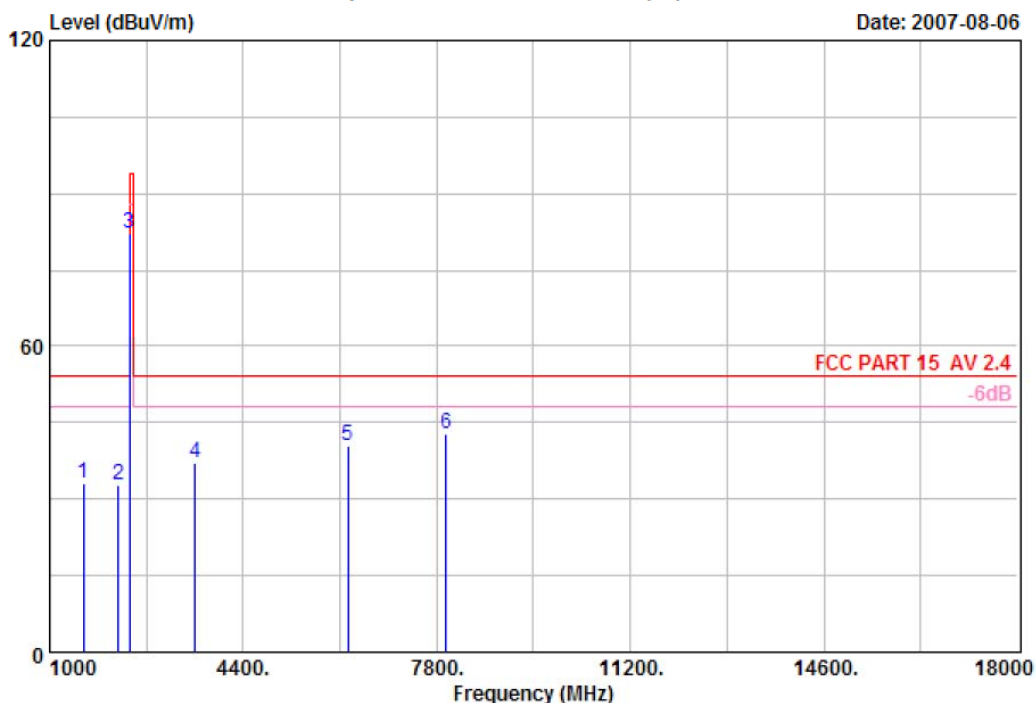


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Data: 42

File: D:\2007 Report\C\Contel\ACS7Q1060.EMI (58)

Date: 2007-08-06



Site no. : Data no. : 42
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 AV 2.4
 Env. / Ins. : 23°C/54% Engineer : Skyle
 EUT : PS3 Guitar Controller
 Power Rating : DC 4.5V
 Test Mode : TX CH1:2408MHz
 M/N : #822151 Rock band wireless guitar for PS3

	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	1595.00	25.91	4.82	35.66	38.19	33.26	54.00	20.74	Average
2	2207.00	28.54	5.91	35.24	33.70	32.91	54.00	21.09	Average
3	2408.00	29.03	6.20	35.18	82.26	82.31	94.00	11.69	Average
4	3550.00	32.52	8.16	34.83	31.20	37.05	54.00	16.95	Average
5	6236.00	35.94	10.27	34.24	28.56	40.53	54.00	13.47	Average
6	7970.00	37.99	11.79	34.59	27.73	42.92	54.00	11.08	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.

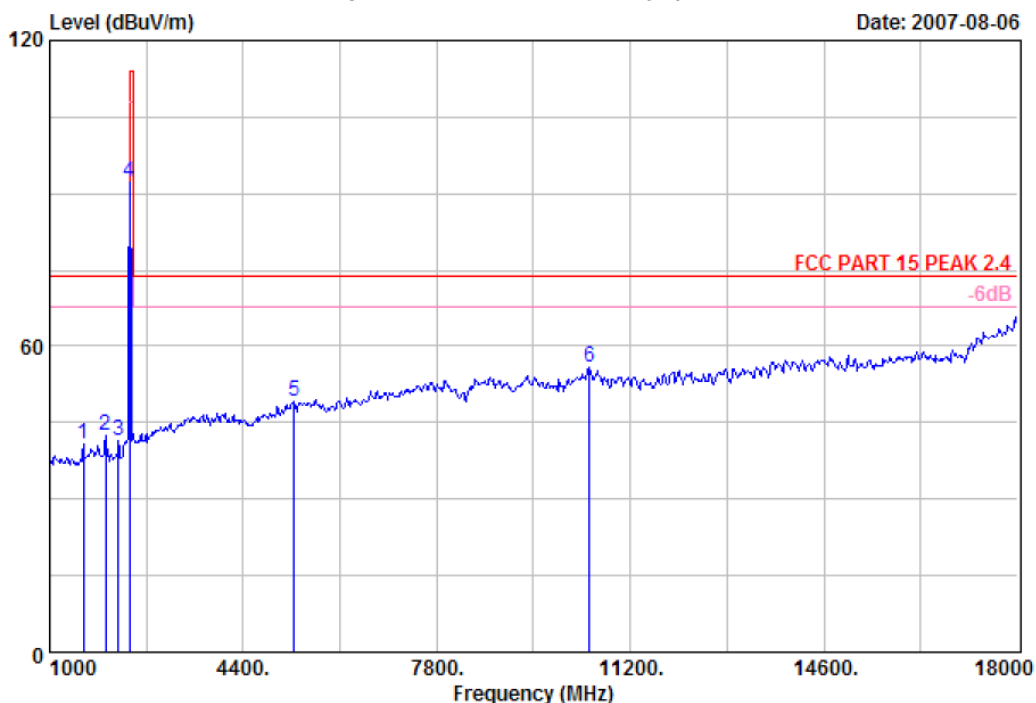


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Postcode:518057

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Date: 2007-08-06



Site no. : Data no. : 39
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH1:2408MHz
M/N : #822151 Rock band wireless guitar for PS3

	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	1595.00	25.91	4.82	35.66	45.67	40.74	74.00	33.26	Peak
2	1986.00	27.97	5.59	35.32	44.17	42.41	74.00	31.59	Peak
3	2207.00	28.54	5.91	35.24	42.14	41.35	74.00	32.65	Peak
4	2408.00	29.03	6.20	35.18	92.14	92.19	114.00	21.81	Peak
5	5301.00	35.83	9.76	34.38	37.87	49.08	74.00	24.92	Peak
6	10486.00	39.06	11.96	36.25	41.09	55.86	74.00	18.14	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.

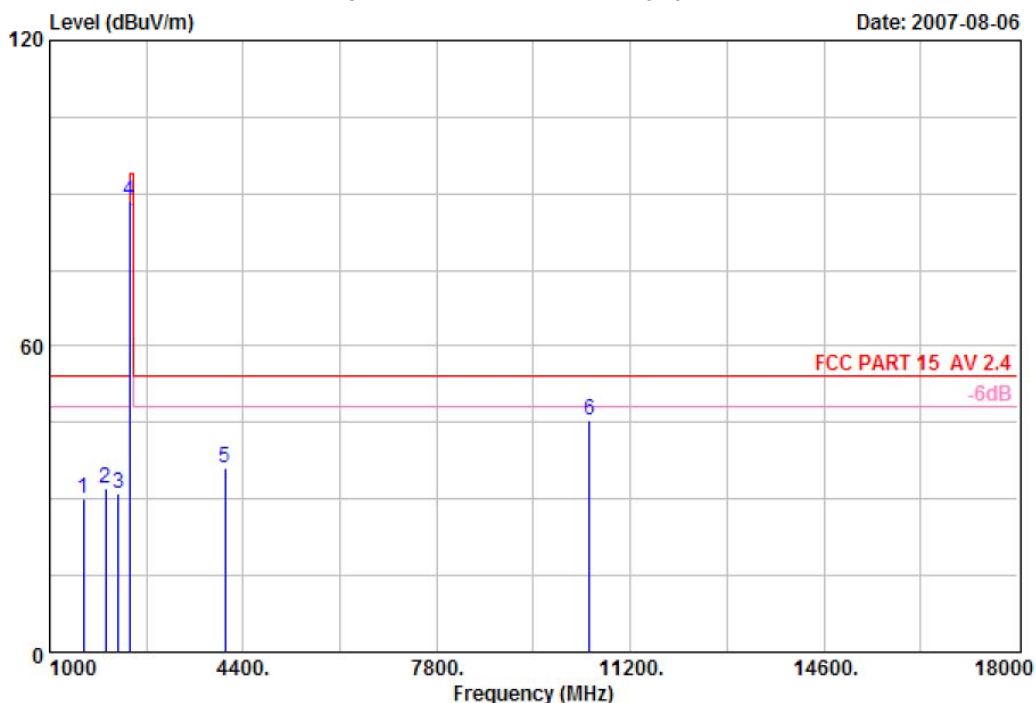


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Postcode:518057

Data: 40

File: D:\2007 Report\C\Contel\ACS7Q1060.EMI (58)

Date: 2007-08-06



Site no. : Data no. : 40
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
Limit : FCC PART 15 AV 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH1:2408MHz
M/N : #822151 Rock band wireless guitar for PS3

	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	1595.00	25.91	4.82	35.66	35.17	30.24	54.00	23.76	Average
2	1986.00	27.97	5.59	35.32	34.00	32.24	54.00	21.76	Average
3	2207.00	28.54	5.91	35.24	31.84	31.05	54.00	22.95	Average
4	2408.00	29.03	6.20	35.18	88.60	88.65	94.00	5.35	Average
5	4077.00	33.69	8.69	34.68	28.41	36.11	54.00	17.89	Average
6	10486.00	39.06	11.96	36.25	30.61	45.38	54.00	8.62	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.

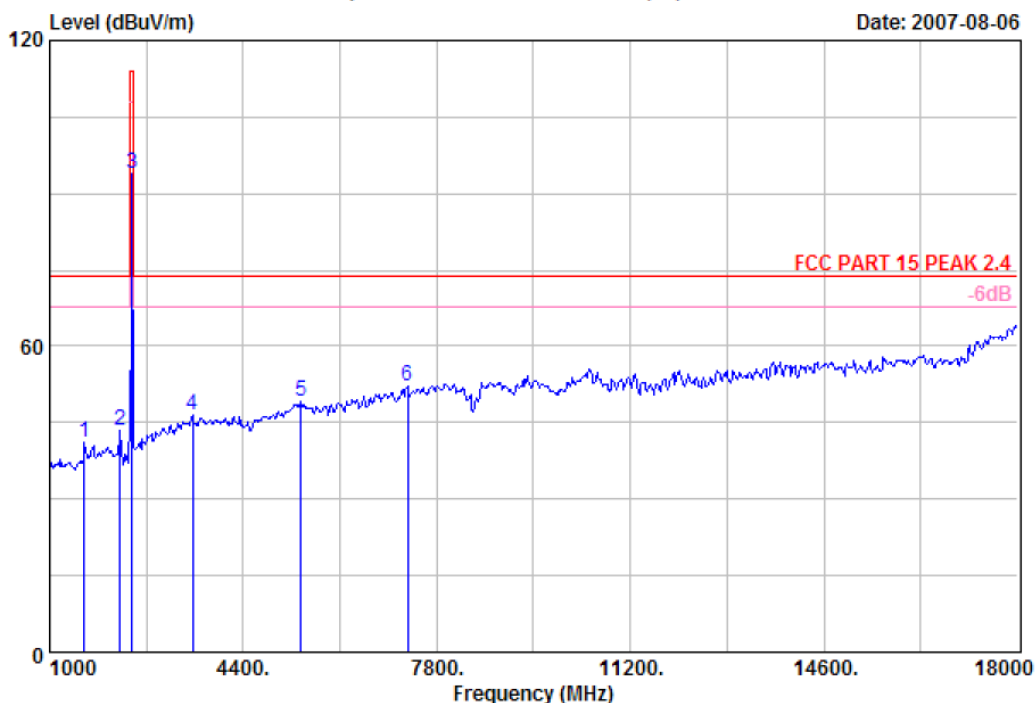


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Postcode:518057

Data: 43

File: D:\2007 Report\C\Contel\ACS7Q1060.EMI (58)

Date: 2007-08-06



Site no. : Data no. : 43
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH2:2440MHz
M/N : #822151 Rock band wireless guitar for PS3

	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	1612.00	26.00	4.86	35.66	46.07	41.27	74.00	32.73	Peak
2	2241.00	28.62	5.96	35.22	43.99	43.35	74.00	30.65	Peak
3	2445.00	29.11	6.25	35.17	93.63	93.82	114.00	20.18	Peak
4	3516.00	32.42	8.12	34.84	40.60	46.30	74.00	27.70	Peak
5	5420.00	36.35	9.69	34.34	37.50	49.20	74.00	24.80	Peak
6	7290.00	37.47	10.81	34.46	38.29	52.11	74.00	21.89	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.

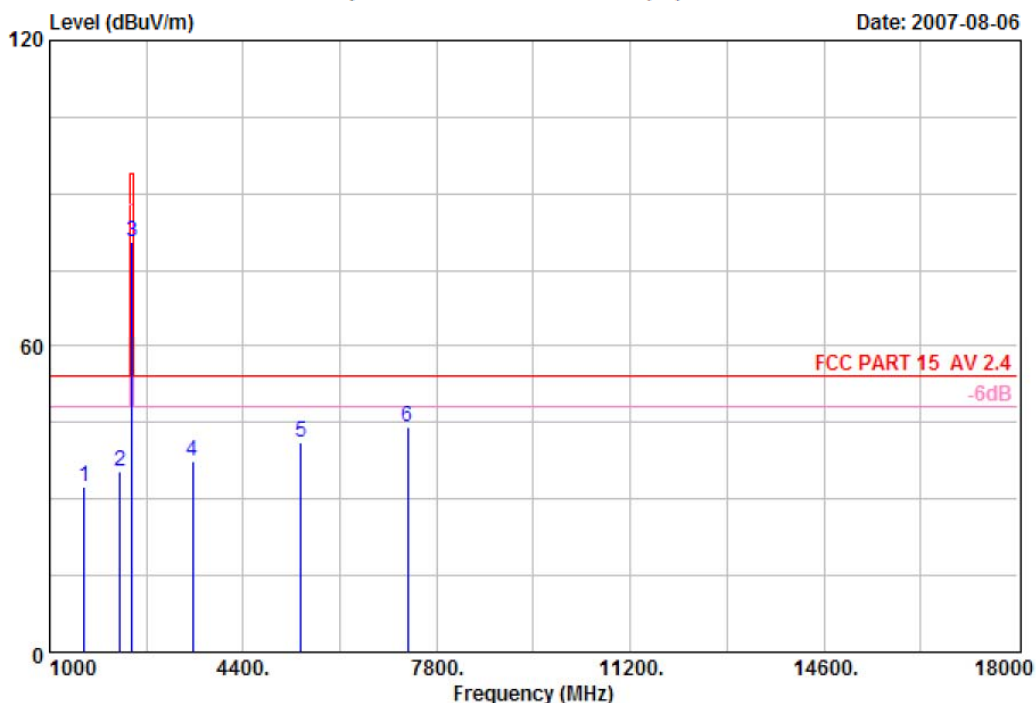


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Data: 44

File: D:\2007 Report\C\Contel\ACS7Q1060.EMI (58)

Date: 2007-08-06



Site no. : Data no. : 44
 Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
 Limit : FCC PART 15 AV 2.4
 Env. / Ins. : 23°C/54% Engineer : Skyle
 EUT : PS3 Guitar Controller
 Power Rating : DC 4.5V
 Test Mode : TX CH2:2440MHz
 M/N : #822151 Rock band wireless guitar for PS3

	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	1612.00	26.00	4.86	35.66	37.07	32.27	54.00	21.73	Average
2	2241.00	28.62	5.96	35.22	35.99	35.35	54.00	18.65	Average
3	2440.00	29.11	6.25	35.17	80.35	80.54	94.00	13.46	Average
4	3516.00	32.42	8.12	34.84	31.60	37.30	54.00	16.70	Average
5	5420.00	36.35	9.69	34.34	29.50	41.20	54.00	12.80	Average
6	7290.00	37.47	10.81	34.46	30.29	44.11	54.00	9.89	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.

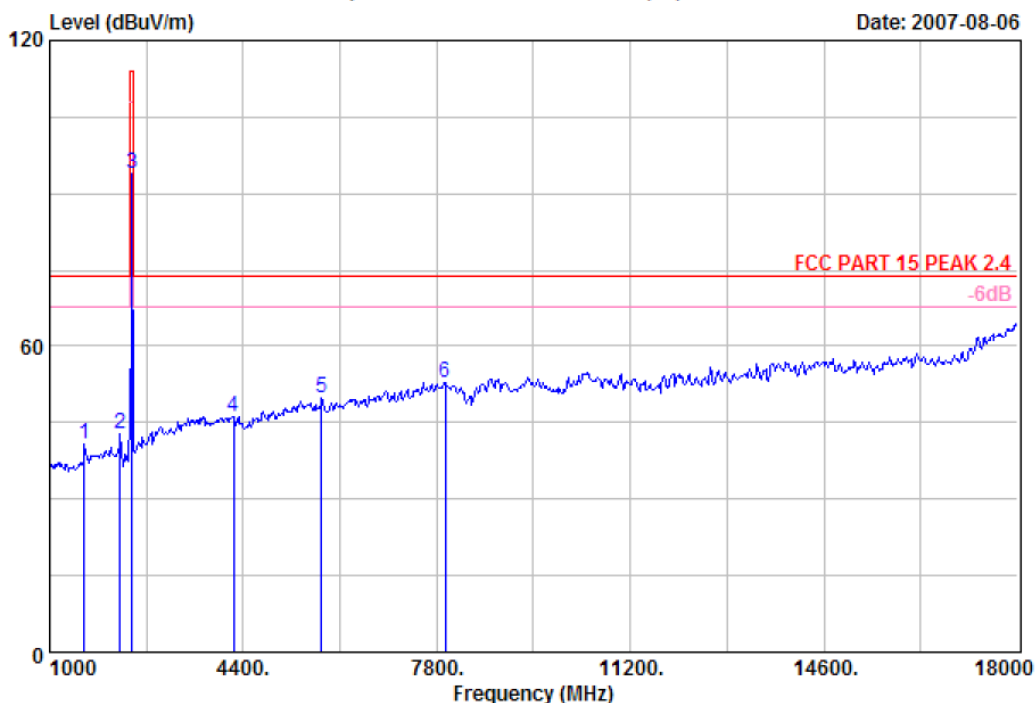


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Data: 45

File: D:\2007 Report\C\Contel\ACS7Q1060.EMI (58)

Date: 2007-08-06



Site no. : Data no. : 45
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH2:2440MHz
M/N : #822151 Rock band wireless guitar for PS3

	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	1612.00	26.00	4.86	35.66	45.58	40.78	74.00	33.22	Peak
2	2241.00	28.62	5.96	35.22	43.52	42.88	74.00	31.12	Peak
3	2445.00	29.11	6.25	35.17	93.85	94.04	114.00	19.96	Peak
4	4230.00	33.51	8.77	34.64	38.61	46.25	74.00	27.75	Peak
5	5777.00	36.09	9.82	34.26	38.29	49.94	74.00	24.06	Peak
6	7953.00	37.98	11.79	34.59	37.76	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.

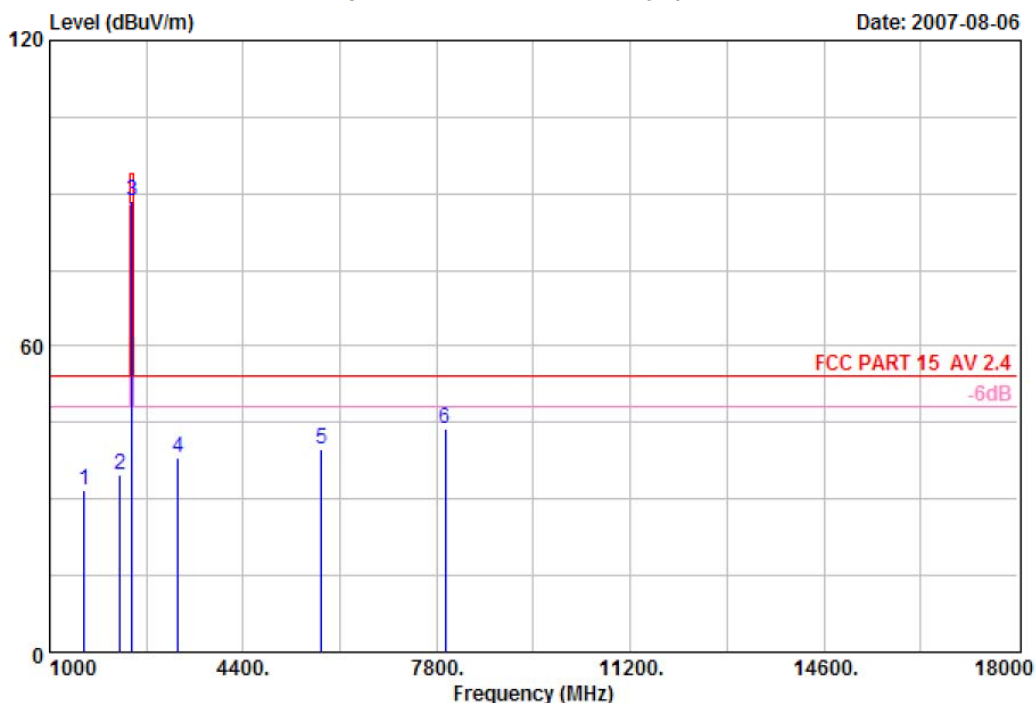


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Data: 46

File: D:\2007 Report\C\Contel\ACS7Q1060.EMI (58)

Date: 2007-08-06



Site no. : Data no. : 46
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
Limit : FCC PART 15 AV 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH2:2440MHz
M/N : #822151 Rock band wireless guitar for PS3

	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	1612.00	26.00	4.86	35.66	36.58	31.78	54.00	22.22	Average
2	2241.00	28.62	5.96	35.22	35.52	34.88	54.00	19.12	Average
3	2440.00	29.11	6.25	35.17	88.52	88.71	94.00	5.29	Average
4	3261.00	31.71	7.69	34.92	33.65	38.13	54.00	15.87	Average
5	5777.00	36.09	9.82	34.26	28.29	39.94	54.00	14.06	Average
6	7953.00	37.98	11.79	34.59	28.76	43.94	54.00	10.06	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.

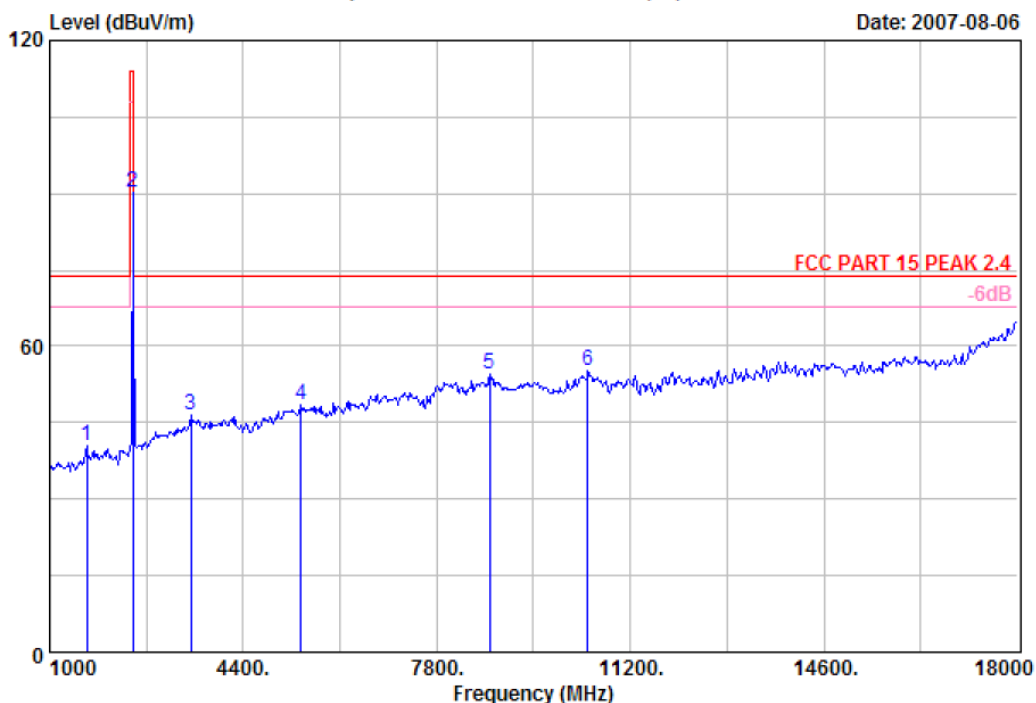


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Data: 49

File: D:\2007 Report\C\Contel\ACS7Q1060.EMI (58)

Date: 2007-08-06



Site no. : Data no. : 49
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH3:2474MHz
M/N : #822151 Rock band wireless guitar for PS3

	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	1646.00	26.18	4.93	35.61	44.94	40.44	74.00	33.56	Peak
2	2462.00	29.15	6.28	35.17	90.09	90.35	114.00	23.65	Peak
3	3482.00	32.32	8.07	34.86	40.88	46.41	74.00	27.59	Peak
4	5420.00	36.35	9.69	34.34	36.79	48.49	74.00	25.51	Peak
5	8735.00	38.67	11.17	35.18	39.89	54.55	74.00	19.45	Peak
6	10452.00	38.97	11.93	36.25	40.48	55.13	74.00	18.87	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.

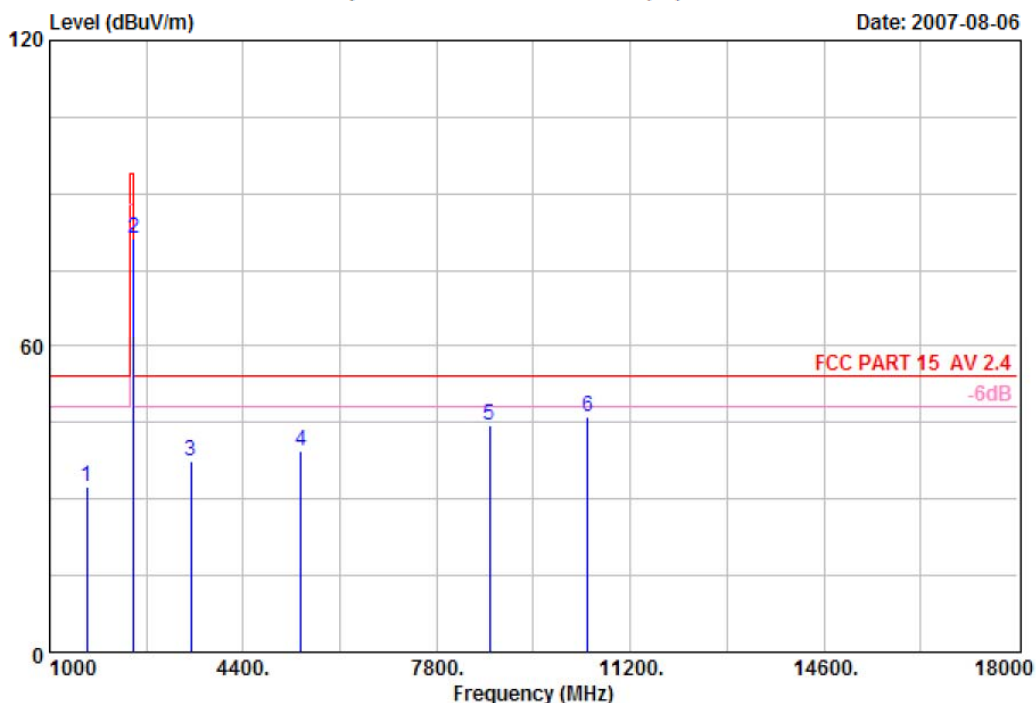


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Data: 50

File: D:\2007 Report\C\Contel\ACS7Q1060.EMI (58)

Date: 2007-08-06



Site no. : Data no. : 50
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
Limit : FCC PART 15 AV 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH3:2474MHz
M/N : #822151 Rock band wireless guitar for PS3

	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	1646.00	26.18	4.93	35.61	36.94	32.44	54.00	21.56	Average
2	2474.00	29.19	6.30	35.16	80.97	81.30	94.00	12.70	Average
3	3482.00	32.32	8.07	34.86	31.88	37.41	54.00	16.59	Average
4	5420.00	36.35	9.69	34.34	27.79	39.49	54.00	14.51	Average
5	8735.00	38.67	11.17	35.18	29.89	44.55	54.00	9.45	Average
6	10452.00	38.97	11.93	36.25	31.48	46.13	54.00	7.87	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.

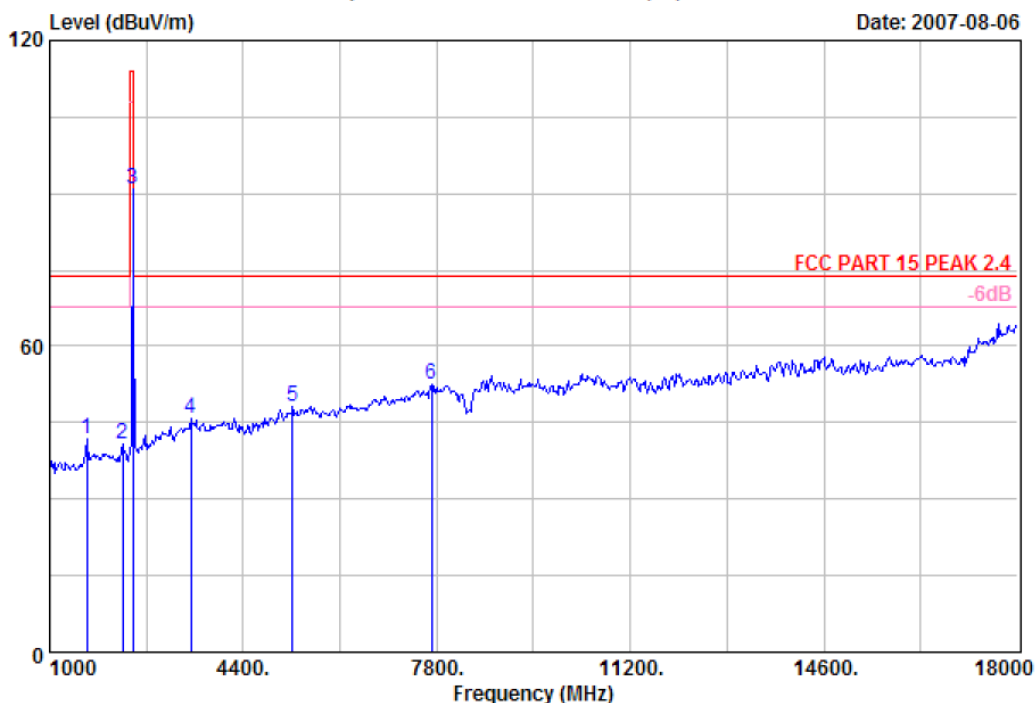


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Data: 47

File: D:\2007 Report\C\Contel\ACS7Q1060.EMI (58)

Date: 2007-08-06



Site no. : Data no. : 47
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH3:2474MHz
M/N : #822151 Rock band wireless guitar for PS3

	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	1646.00	26.18	4.93	35.61	46.24	41.74	74.00	32.26	Peak
2	2275.00	28.71	6.01	35.22	41.31	40.81	74.00	33.19	Peak
3	2462.00	29.15	6.28	35.17	90.79	91.05	114.00	22.95	Peak
4	3482.00	32.32	8.07	34.86	40.24	45.77	74.00	28.23	Peak
5	5267.00	35.68	9.78	34.38	37.18	48.26	74.00	25.74	Peak
6	7715.00	37.89	11.33	34.54	37.70	52.38	74.00	21.62	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.

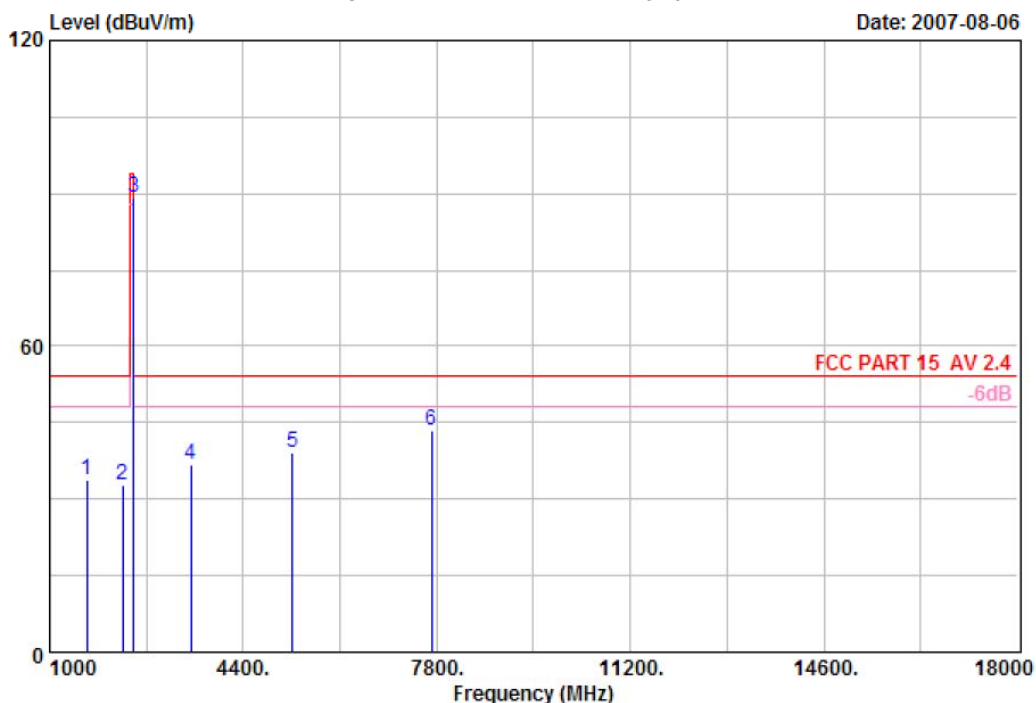


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Data: 48

File: D:\2007 Report\C\Contel\ACS7Q1060.EMI (58)

Date: 2007-08-06



Site no. : Data no. : 48
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
Limit : FCC PART 15 AV 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH3:2474MHz
M/N : #822151 Rock band wireless guitar for PS3

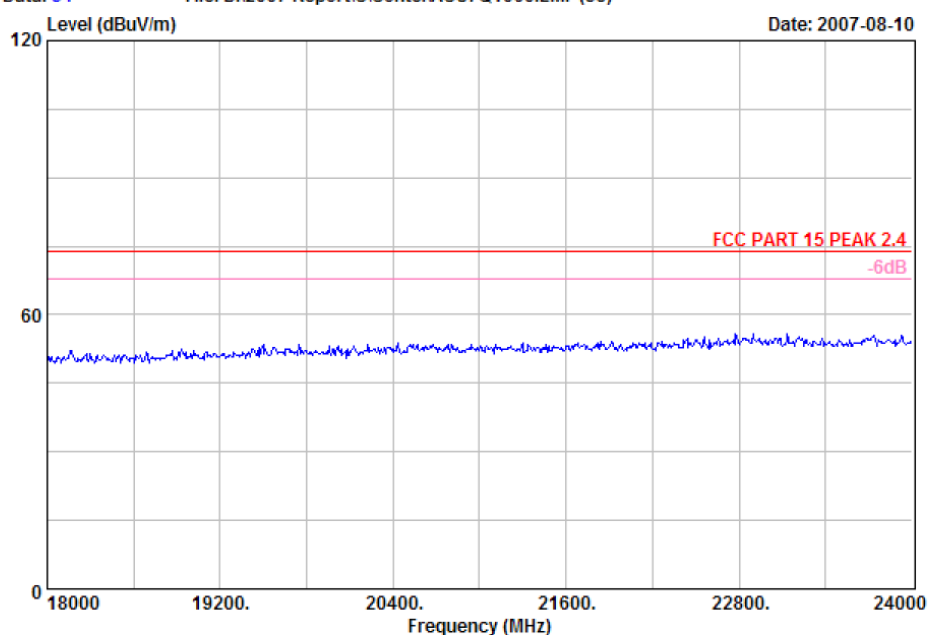
	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Emission		Limits (dBuV/m)	Margin (dB)	Remark
					Reading (dBuV)	Level (dBuV/m)			
1	1646.00	26.18	4.93	35.61	38.24	33.74	54.00	20.26	Average
2	2275.00	28.71	6.01	35.22	33.31	32.81	54.00	21.19	Average
3	2474.00	29.19	6.30	35.16	88.76	89.09	94.00	4.91	Average
4	3482.00	32.32	8.07	34.86	31.24	36.77	54.00	17.23	Average
5	5267.00	35.68	9.78	34.38	28.18	39.26	54.00	14.74	Average
6	7715.00	37.89	11.33	34.54	28.70	43.38	54.00	10.62	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.



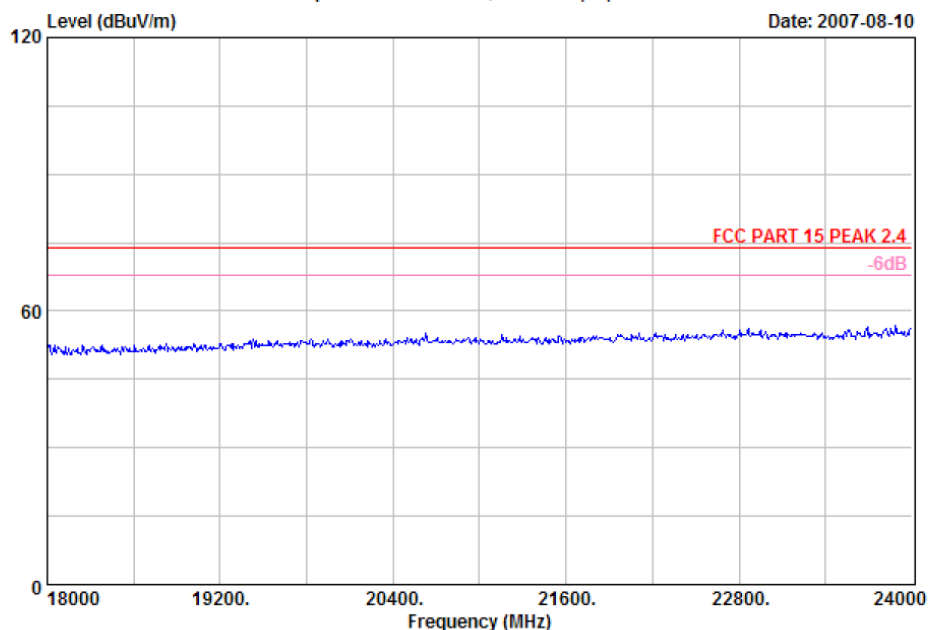
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Data: 54 File: D:\2007 Report\CI\Contel\ACS7Q1060.EMI (58)



Site no. : Data no. : 54
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH1:2408MHz
M/N : #822151 Rock band wireless guitar for PS3

Data: 53 File: D:\2007 Report\CI\Contel\ACS7Q1060.EMI (58)

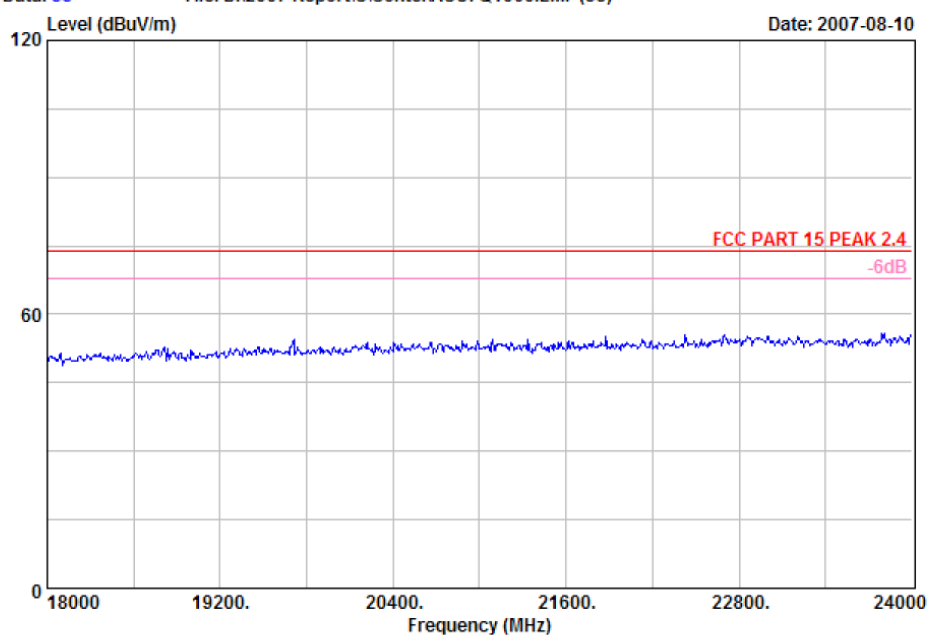


Site no. : Data no. : 53
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH1:2408MHz
M/N : #822151 Rock band wireless guitar for PS3



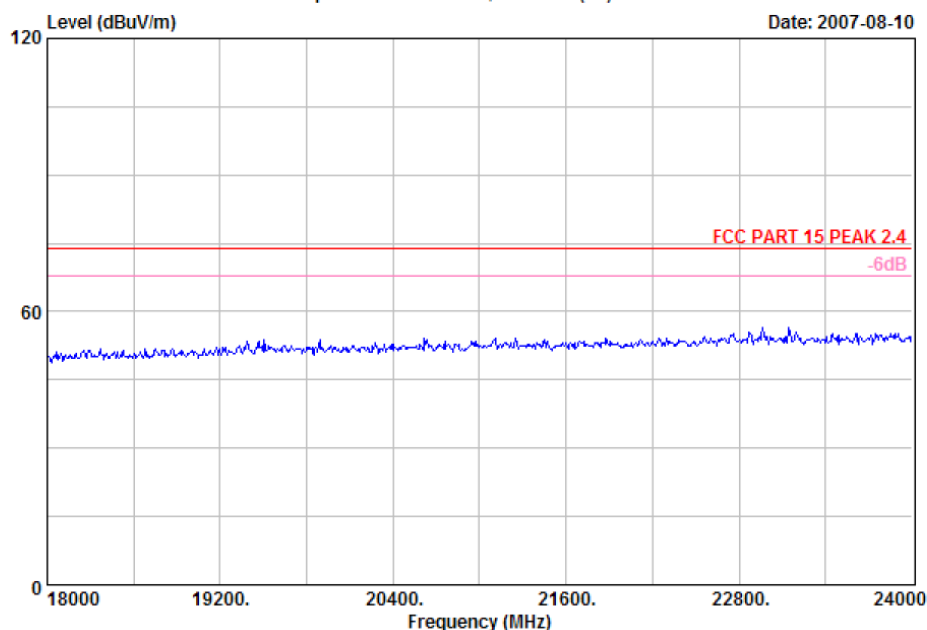
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Fax:+86-755-26632877
Postcode:518057

Data: 55 File: D:\2007 Report\CI\Contel\ACS7Q1060.EMI (58)



Site no. : Data no. : 55
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH2:2440MHz
M/N : #822151 Rock band wireless guitar for PS3

Data: 56 File: D:\2007 Report\CI\Contel\ACS7Q1060.EMI (58)

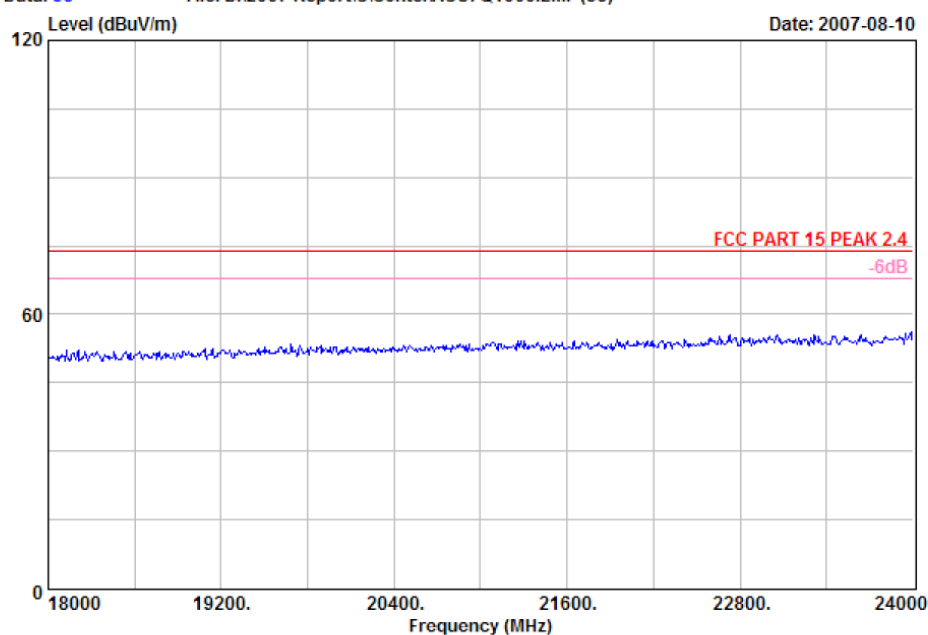


Site no. : Data no. : 56
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH2:2440MHz
M/N : #822151 Rock band wireless guitar for PS3



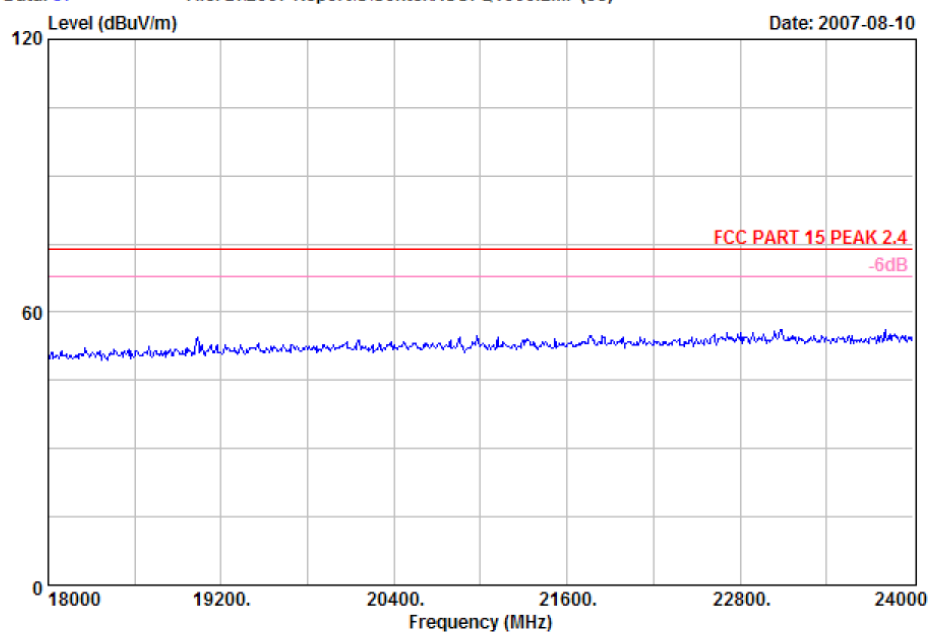
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Postcode:518057

Data: 58 File: D:\2007 Report\CI\Contel\ACS7Q1060.EMI (58)



Site no. : Data no. : 58
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH3:2474MHz
M/N : #822151 Rock band wireless guitar for PS3

Data: 57 File: D:\2007 Report\CI\Contel\ACS7Q1060.EMI (58)



Site no. : Data no. : 57
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : VERTICAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH3:2474MHz
M/N : #822151 Rock band wireless guitar for PS3

5. BAND EDGE COMPLIANCE TEST

5.1. 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

5.2. Test Information

EUT:	PS3 Guitar Controller
M/N:	#822151 Rock band wireless guitar for PS3
Test Date:	Aug.10, 2007
Ambient Temperature:	23°C
Relative Humidity:	54%
Test standard:	FCC PART 15C: 15.249
Test mode:	Transmitting
Test Frequency:	CH1: 2408MHz CH3: 2474MHz
Test By:	Skyle

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

5.3. Test Results

Pass

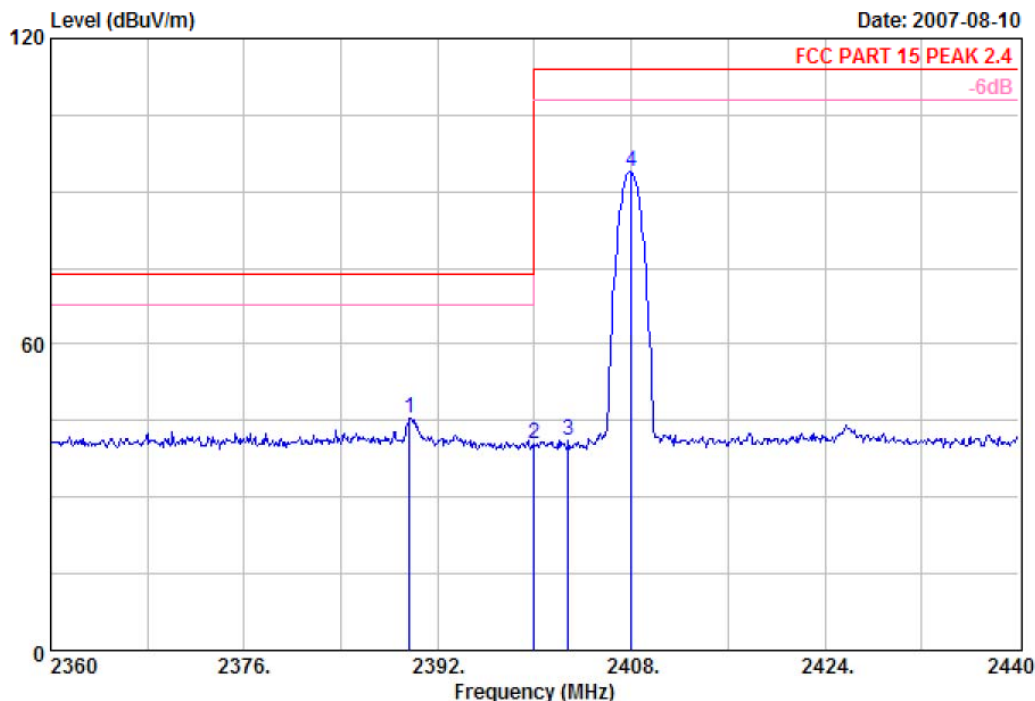


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Postcode:518057

Data: 52

File: D:\2007 Report\CI\Contel\ACS7Q1060.EMI (58)

Date: 2007-08-10



Site no. : Data no. : 52
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH1:2408MHz
M/N : #822151 Rock band wireless guitar for PS3

	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	2389.68	28.99	6.17	35.18	45.52	45.50	74.00	28.50	Peak
2	2400.00	28.99	6.20	35.18	40.44	40.45	74.00	33.55	Peak
3	2402.80	29.03	6.20	35.18	41.19	41.24	114.00	72.76	Peak
4	2408.00	29.03	6.20	35.18	93.79	93.84	114.00	20.16	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.

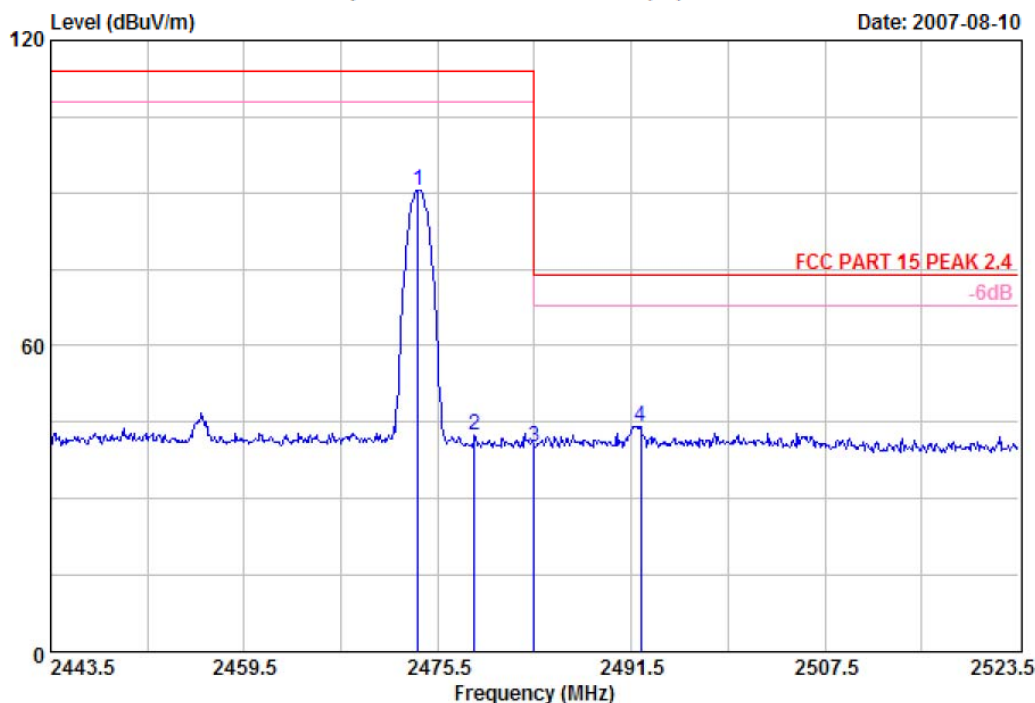


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Data: 51

File: D:\2007 Report\CI\Contel\ACS7Q1060.EMI (58)

Date: 2007-08-10



Site no. : Data no. : 51
Dis. / Ant. : 3m 3115 FACTOR Ant. pol. : HORIZONTAL
Limit : FCC PART 15 PEAK 2.4
Env. / Ins. : 23°C/54% Engineer : Skyle
EUT : PS3 Guitar Controller
Power Rating : DC 4.5V
Test Mode : TX CH3:2474MHz
M/N : #822151 Rock band wireless guitar for PS3

	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	2473.90	29.19	6.30	35.16	90.27	90.60	114.00	23.40	Peak
2	2478.54	29.19	6.30	35.16	42.18	42.51	114.00	71.49	Peak
3	2483.50	29.19	6.30	35.16	39.78	40.11	74.00	33.89	Peak
4	2492.30	29.23	6.33	35.15	43.85	44.26	74.00	29.74	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.

6. 20DB BANDWIDTH TEST

6.1. Test Equipment

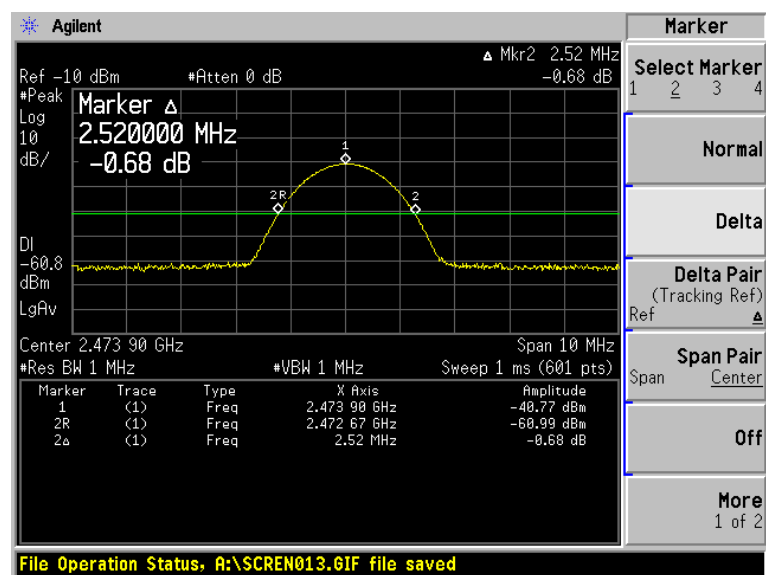
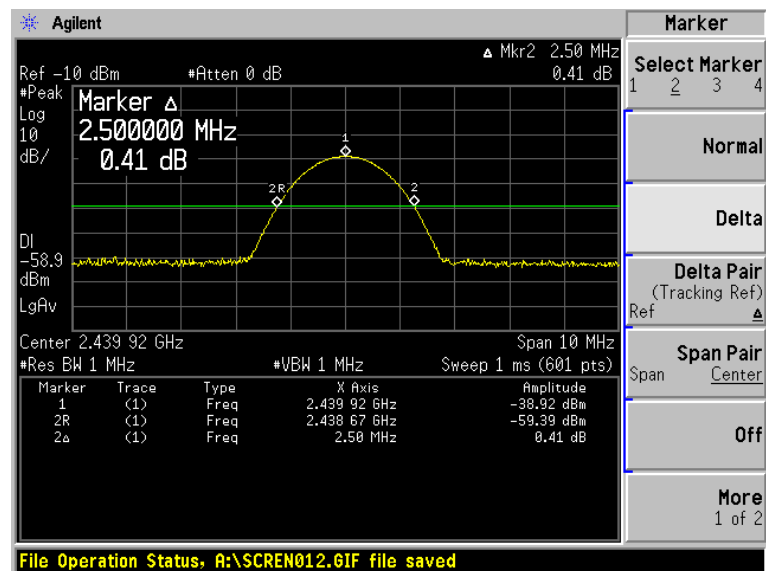
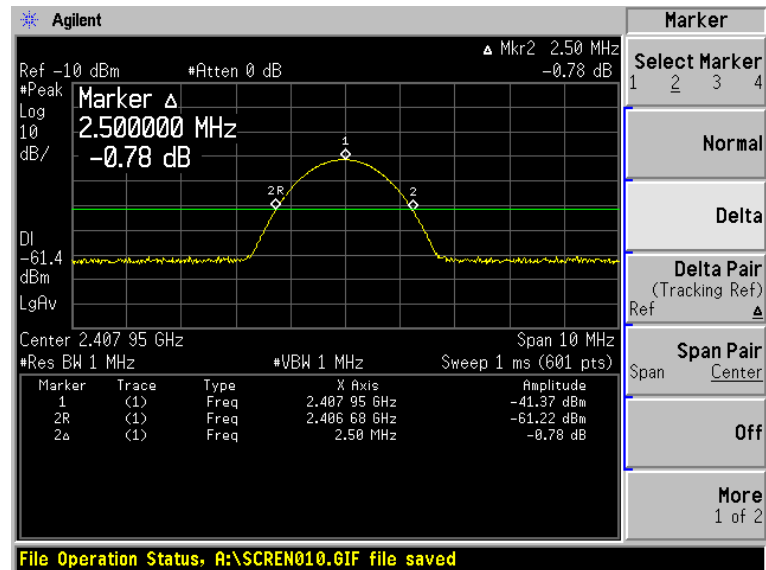
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4407B	MY41440292	May 11, 07	1 Year
2.	Amp	HP	8449B	3008A00863	May 11, 07	1 Year
3.	Antenna	EMCO	3115	9607-4877	Jan. 23, 07	1.5 Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May 11, 07	1 Year

6.2. Test Information

EUT:	PS3 Guitar Controller
M/N:	#822151 Rock band wireless guitar for PS3
Test Date:	Aug.10, 2007
Ambient Temperature:	23°C
Relative Humidity:	54%
Test standard:	FCC PART 15C: 15.215
Test mode:	Transmitting
Test Frequency:	CH1: 2408MHz CH2: 2440MHz CH3: 2474MHz
Test By:	Skyle

6.3. Test Results

Pass



7. DEVIATION TO TEST SPECIFICATIONS

[NONE]