

APPLICATION FOR CERTIFICATION
On Behalf of

E-Core Technology (China) Co., Ltd.

PS2 2.4G RF Wireless Controller

Model Number: HP5415 (Controller)

Prepared for : E-Core Technology (China) Co., Ltd.
3rd Building, Wei Dong Long Industry, He Ping East Road,
Long Hua Town, Shenzhen City, Guang Dong, China

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-F05016
Date of Test : Feb.17~18, 2005
Date of Report : Feb.19, 2005

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APPENDIX I (13 pages)

TEST REPORT DECLARATION

Applicant : E-Core Technology (China) Co., Ltd.
 Manufacturer : E-Core Technology (China) Co., Ltd.
 EUT Description : PS2 2.4G RF Wireless Controller
 (A) MODEL NO. : HP5415 (Controller)
 (B) SERIAL NO. : F2005021901
 (C) POWER SUPPLY : DC 4.5V

Test Procedure Used:
 FCC Rules and Regulations Part 15 Subpart C Apr, 2004.

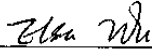
The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C limits both radiated and conducted emissions.

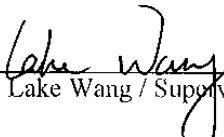
The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

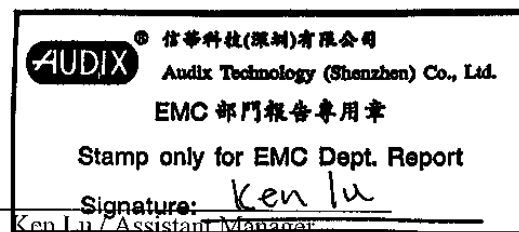
This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

This report must not be used by the applicant to claim product endorsement by NVLAP or any agency of the U.S. Government.

Date of Test : Feb.17~18, 2005

Prepared by : 
 Elsa Wu / Assistant

Reviewer : 
 Lake Wang / Supervisor



Approved & Authorized Signer :
 Name of the Representative of the Responsible Party : _____

Signature : _____

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	PS2 2.4G RF Wireless Controller
Model Number	:	HP5415 (Controller) This report is about transmitter FCC ID and the Receiver FCC DOC report please refer to AUDIX Number ACS-F05017
Applicant	:	E-Core Technology (China) Co., Ltd. 3 rd Building, Wei Dong Long Industry, He Ping East Road, Long Hua Town, Shenzhen City, Guang Dong, China
Manufacturer	:	E-Core Technology (China) Co., Ltd. 3 rd Building, Wei Dong Long Industry, He Ping East Road, Long Hua Town, Shenzhen City, Guang Dong, China
Power Cord	:	Unshielded, Detachable, 1.7m
Date of Test	:	Feb.17~18, 2005

1.2. Test Facility

Site Description

- 3m Anechoic Chamber : Certificated by FCC, USA
Registration Number: 90454
Aug. 15, 2003
- 3m & 10m Anechoic Chamber : Certificated by FCC, USA
Registration Number: 794232
Mar. 15, 2004
- EMC Lab. : Certificated by DATech, German
Registration Number: DAT-P-091/99-01
Feb. 02, 2004
- Certificated by NVLAP, USA
NVLAP Code: 200372-0
Mar. 31, 2004
- Certificated by Nemko, Norway
Aut. No.: ELA135
April. 22, 2004
- Certificated by Industry Canada
Registration Number: IC 5183
Jul. 28, 2004
- Name of Firm : Audix Technology (Shenzhen) Co., Ltd.
- Site Location : No. 6, Ke Feng Rd., 52 Block,
Shenzhen Science & Industrial Park,
Nantou, Shenzhen, Guangdong, China

1.3. Measurement Uncertainty

No.	Item	Uncertainty	Remark
1.	Uncertainty for Conducted Emission Test	1.22dB	
2.	Uncertainty for Radiated Emission Test	3.14dB	3m Chamber
3.	Uncertainty for Radiated Emission Test	3.18dB	10m Chamber
4.	Uncertainty for Power Clamp Test	1.38dB	

2. POWER LINE CONDUCTED EMISSION TEST

According to Paragraph (f) of FCC Part 15 section 15.107, 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.

3. RADIATED EMISSION TEST

3.1. Test Equipment

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

3.1.1. For Anechoic Chamber

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Spectrum	HP	85422E	3625A00181	May 24, 04	1 Year
2.	Test Receiver	Rohde & Schwarz	ESVS20	830350/005	May 24, 04	1 Year
3.	Amplifier	HP	8447D	2944A07794	Sep.16, 04	1/2 Year
4.	Bilog Antenna	Schaffner	CBL6111C	2598	Jan. 13, 04	1 Year
5.	PC	N/A	586ATX3	N/A	N/A	N/A
6.	Printer	HP	Laserjet6P	SGCF019673	N/A	N/A
7.	RF Cable	MIYAZAKI	5D-2W	3# Chamber No.1	Jan.30, 05	1/2 Year
8.	RF Cable	MIYAZAKI	5D-2W	3# Chamber No.2	Jan.30, 05	1/2 Year
9.	RF Cable	FUJIKURA	RG-55/U	3# Chamber No.3	Jan.30, 05	1/2 Year
10.	RF Cable	FUJIKURA	RG-55/U	3# Chamber No.4	Jan.30, 05	1/2 Year
11.	Coaxial Switch	Anritsu	MP59B	M73989	Nov.26, 04	1/2 Year
12.	Spectrum	Agilent	E4407B	MY41440292	May 24, 04	1 Year
13.	Amp	HP	8449B	3008A00863	May 24, 04	1 Year
14.	Antenna	EMCO	3115	9607-4877	Jun. 15, 04	1.5 Year

3.2. Block Diagram of Test Setup

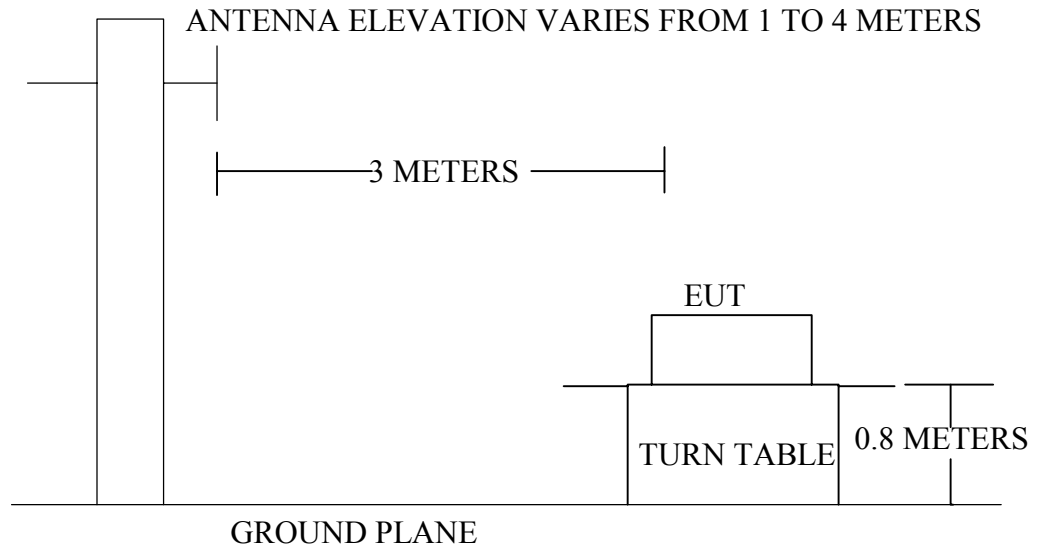
3.2.1. Block diagram of connection between the EUT and simulators

EUT

(EUT: PS2 2.4G RF Wireless Controller)

3.2.2. In Anechoic Chamber

ANTENNA TOWER



3.3. Radiated Emission Limit

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu\text{V/m}$	$\text{dB}(\mu\text{V})/\text{m}$
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 1000	3	Local Oscillator: 114.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 94.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average) 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 $(\text{dB})\mu\text{V} = 20 \log \text{Emission level } \mu\text{V/m}$
 - (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.

3.4.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.

3.4.1.PS2 2.4G RF Wireless Controller (EUT)

Model Number : HP5415 (Controller)
Serial Number : F2005021901
Manufacturer : E-Core Technology (China) Co., Ltd.

3.4.2.Support Equipment : As Tested Supporting System Detail, in Section 1.2.

3.5.Operating Condition of EUT

1. Setup the EUT as shown in Section 3.2..
2. Let the EUT work in test mode (Tx CH1/Tx CH2) and test it.

3.6.Test Procedure

According to paragraph of FCC Part15 Section 15.109.

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. Power on the EUT and let it work normally, we use a keyboard test soft ware, let EUT working in test mode, then test it. 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 are set on test.

The bandwidth of the EMI test receiver (R&S ESVS20) is set at 120KHz.

The frequency range from 30MHz to 24.44GHz is checked.

The test mode (Tx CH1/Tx CH2) is tested in Anechoic Chamber, and all the scanning waveforms are attached in Appendix I.

3.7.Radiated Emission Test Result

PASS.

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

Date of Test :	Feb.18, 2005	Temperature :	24°C
EUT :	PS2 2.4G RF Wireless Controller	Humidity :	56%
Model No. :	HP5415 (Controller)	Test Mode :	Tx CH1
Test Engineer:	Seco	Test Standard :	FCC Part15B 15.109

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dB	Limits dBμV/m
31.940	19.81	1.03	2.46	23.29	-16.71	40.00
164.830	10.94	2.88	1.63	15.45	-28.05	43.50
172.590	10.25	2.94	3.89	17.08	-26.42	43.50
363.680	15.58	4.42	2.19	22.19	-23.81	46.00
562.530	19.55	5.61	2.08	27.24	-18.76	46.00
688.630	20.17	6.29	2.72	29.18	-16.82	46.00

- Remark: 1. All readings are Quasi-Peak values.
 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
 3. The worst emission was detected at 31.940MHz with corrected signal level of 23.29dBμV/m (Limit is 40.00dBμV/m) when the antenna was at horizontal polarization and at 1.3m high and the turn table was at 180° .
 4. 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

Reviewer:

Cahe Wang

Date of Test :	Feb.18, 2005	Temperature :	24°C
EUT :	PS2 2.4G RF Wireless Controller	Humidity :	56%
Model No. :	HP5415 (Controller)	Test Mode :	Tx CH1
Test Engineer:	Seco	Test Standard :	FCC Part15B 15.109

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dB	Limits dBμV/m
42.610	8.92	1.37	9.35	19.64	-20.36	40.00
60.070	6.92	1.62	6.13	14.68	-25.32	40.00
127.970	11.08	2.52	1.44	15.04	-28.46	43.50
273.470	12.45	3.74	1.14	17.33	-28.67	46.00
343.310	13.98	4.24	1.63	19.85	-26.15	46.00
581.930	19.24	5.81	1.68	26.73	-19.27	46.00

- Remark: 1. All readings are Quasi-Peak values.
 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
 3. The worst emission was detected at 581.930MHz with corrected signal level of 26.73dBμV/m (Limit is 46.00dBμV/m) when the antenna was at vertical polarization and at 1.10m high and the turn table was at 0° .
 4. 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

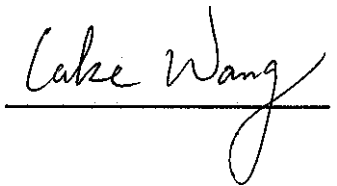
Reviewer: Cake Wang

Date of Test :	Feb.18, 2005	Temperature :	24°C
EUT :	PS2 2.4G RF Wireless Controller	Humidity :	56%
Model No. :	HP5415 (Controller)	Test Mode :	Tx CH2
Test Engineer:	Seco	Test Standard :	FCC Part15B 15.109

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dB	Limits dBμV/m
33.880	18.88	1.24	2.82	22.94	-17.06	40.00
47.460	10.27	1.42	4.62	16.30	-23.70	40.00
70.740	6.56	1.82	6.63	15.01	-24.99	40.00
149.310	11.90	2.70	2.73	17.33	-26.17	43.50
339.430	15.37	4.30	2.18	21.85	-24.15	46.00
471.350	17.07	5.13	2.02	24.21	-21.79	46.00

- Remark: 1. All readings are Quasi-Peak values.
 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
 3. The worst emission was detected at 33.880MHz with corrected signal level of 22.94dBμV/m (Limit is 40.00dBμV/m) when the antenna was at horizontal polarization and at 1.30m high and the turn table was at 180° .
 4. 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

Reviewer:

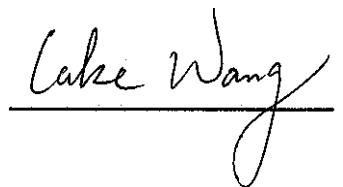


Date of Test :	Feb.18, 2005	Temperature :	24°C
EUT :	PS2 2.4G RF Wireless Controller	Humidity :	56%
Model No. :	HP5415 (Controller)	Test Mode :	Tx CH2
Test Engineer:	Seco	Test Standard :	FCC Part15B 15.109

Frequency	Antenna	Cable	Meter Reading	Emission Level	Over	Limits
MHz	Factor	Loss	Vertical	Vertical	Limits	
	dB/m	dB	dBμV	dBμV/m	dB	dBμV/m
44.550	8.29	1.45	8.77	18.51	-21.49	40.00
60.070	6.92	1.62	5.63	14.18	-25.82	40.00
127.970	11.08	2.52	1.94	15.54	-27.96	43.50
281.230	12.50	3.80	1.85	18.15	-27.85	46.00
423.820	16.32	4.86	1.73	22.92	-23.08	46.00
570.290	19.42	5.74	2.53	27.69	-18.32	46.00

- Remark: 1. All readings are Quasi-Peak values.
 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
 3. The worst emission was detected at 570.290MHz with corrected signal level of 27.69dBμV/m (Limit is 46.00dBμV/m) when the antenna was at vertical polarization and at 1.20m high and the turn table was at 0° .
 4. 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

Reviewer:



Date of Test :	Feb.17, 2005	Temperature :	23°C
EUT :	PS2 2.4G RF Wireless Controller	Humidity :	56%
Model No. :	HP5415 (Controller)	Test Mode :	Tx CH1
Test Engineer:	Seco	Test Standard :	FCC Part15C 15.249

Frequency MHz	Probe Factor dB	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dBμV/m	Limits dBμV/m	Remark
2464.800	29.15	3.80	31.75	64.70	-29.30	94.00	Peak
4944.000	34.25	4.91	28.35	67.51	-6.49	74.00	Peak
2464.800	29.15	3.80	24.75	57.70	-36.30	94.00	Average
4944.000	34.25	4.91	7.35	46.51	-7.49	54.00	Average

Remark: 1. All readings are Peak and Average values.

2. Emission Level = Antenna Factor + Cable Loss + Meter Reading

Frequency MHz	Probe Factor dB	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dBμV/m	Limits dBμV/m	Remark
2464.800	29.15	3.80	30.10	63.05	-30.95	94.00	Peak
4944.000	34.25	4.91	22.00	61.16	-12.84	74.00	Peak
2464.800	29.15	3.80	25.10	58.05	-35.95	94.00	Average
4944.000	34.25	4.91	6.00	45.16	-8.84	54.00	Average

Remark: 1. All readings are Peak and Average values.

2. Emission Level = Antenna Factor + Cable Loss + Meter Reading

Reviewer: Chen Wang

Date of Test :	Feb.18, 2005	Temperature :	23°C
EUT :	PS2 2.4G RF Wireless Controller	Humidity :	56%
Model No. :	HP5415 (Controller)	Test Mode :	Tx CH2
Test Engineer:	Seco	Test Standard :	FCC Part15C 15.249

Frequency MHz	Probe Factor dB	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dBμV/m	Limits dBμV/m	Remark
2472.400	29.19	3.91	29.35	62.45	-31.55	94.00	Peak
4944.000	34.25	4.91	25.27	64.43	-9.57	74.00	Peak
2472.400	29.19	3.91	18.35	51.45	-42.55	94.00	Average
4944.000	34.25	4.91	8.27	47.43	-6.57	54.00	Average

Remark: 1. All readings are Peak and Average values.

2. Emission Level = Antenna Factor + Cable Loss + Meter Reading

Frequency MHz	Probe Factor dB	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dBμV/m	Limits dBμV/m	Remark
2472.400	29.19	3.91	28.81	61.91	-32.09	94.00	Peak
4944.000	34.25	4.91	28.04	67.20	-6.80	74.00	Peak
2472.400	29.19	3.91	22.81	55.91	-38.09	94.00	Average
4944.000	34.25	4.91	7.04	46.20	-7.80	54.00	Average

Remark: 1. All readings are Peak and Average values.

2. Emission Level = Antenna Factor + Cable Loss + Meter Reading

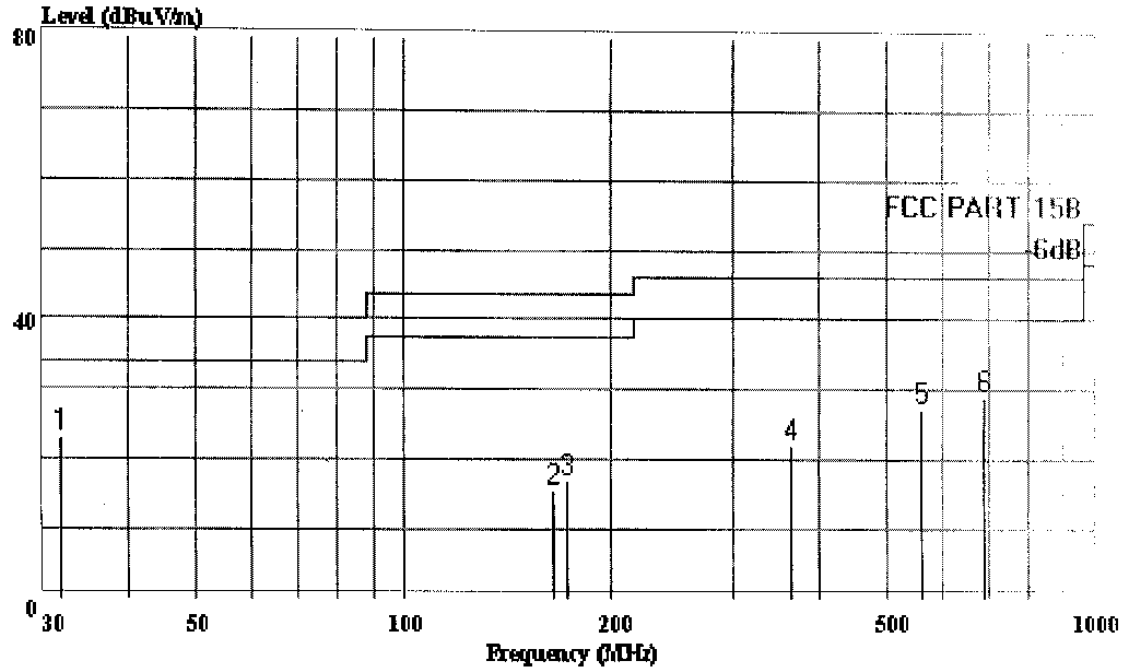
Reviewer:

Chae Wang



Shenzhen Science & Ind. Park
Tel: 0755-26639495~7
Fax: 0755-26632877

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AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR HORIZONTAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V(Battery)
Test Mode: TX Channel 1
Engineer : Seco
Memo : Temp:24'C Humi:56%
: 130cm 180deg

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1	31.940	23.29	-16.71	40.00	2.46	19.81	1.03
2	164.830	15.45	-28.05	43.50	1.63	10.94	2.88
3	172.590	17.08	-26.42	43.50	3.89	10.25	2.94
4	363.680	22.19	-23.81	46.00	2.19	15.58	4.42
5	562.530	27.24	-18.76	46.00	2.08	19.55	5.61
6	688.630	29.18	-16.82	46.00	2.72	20.17	6.29



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

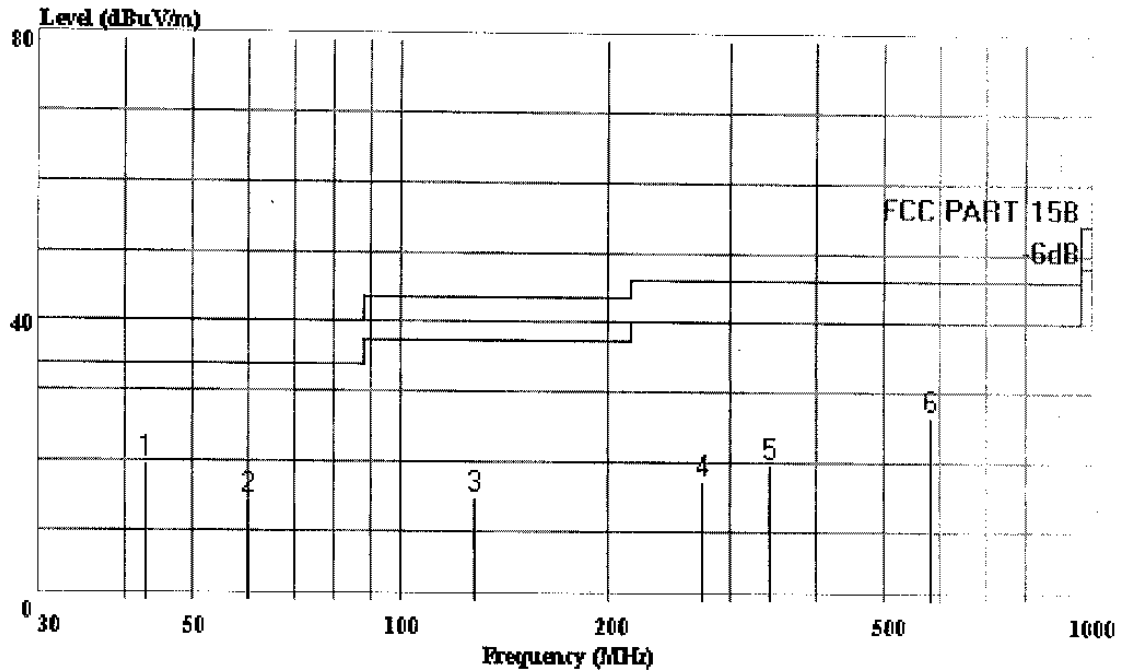
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 62 File#: E-core.emi

Date: 2005-02-18 Time: 21:24:45



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR VERTICAL

EUT : PS2 2.4G RF wireless controller

M/N : HP5415 (controller)

Power : DC4.5V (Battery)

Test Mode: TX Channel 1

Engineer : Seco

Memo : Temp:24'C Humi:56%

: 110cm 0deg

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1	42.610	19.64	-20.36	40.00	9.35	8.92	1.37
2	60.070	14.68	-25.32	40.00	6.13	6.92	1.62
3	127.970	15.04	-28.46	43.50	1.44	11.08	2.52
4	273.470	17.33	-28.67	46.00	1.14	12.45	3.74
5	343.310	19.85	-26.15	46.00	1.63	13.98	4.24
6	581.930	26.73	-19.27	46.00	1.68	19.24	5.81



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

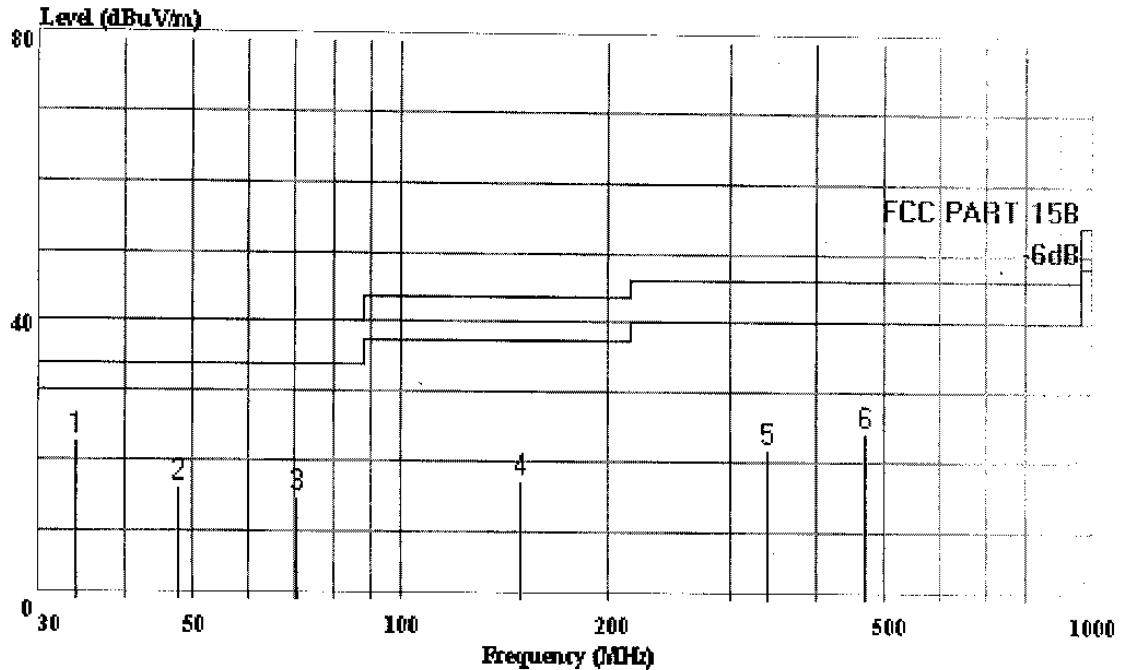
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 64 File#: E-core.emi

Date: 2005-02-18 Time: 21:25:28



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR HORIZONTAL

EUT : PS2 2.4G RF wireless controller

M/N : HP5415 (controller)

Power : DC4.5V(Battery)

Test Mode: TX Channel 2

Engineer : Seco

Memo : Temp:24'C Humi:56%

: 130cm 180deg

Page: 1

	Freq	Level	Over Limit	Limit	Read	Probe	Cable
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	Loss
1	33.880	22.94	-17.06	40.00	2.82	18.88	1.24
2	47.460	16.30	-23.70	40.00	4.62	10.27	1.42
3	70.740	15.01	-24.99	40.00	6.63	6.56	1.82
4	149.310	17.33	-26.17	43.50	2.73	11.90	2.70
5	339.430	21.85	-24.15	46.00	2.18	15.37	4.30
6	471.350	24.21	-21.79	46.00	2.02	17.07	5.13



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

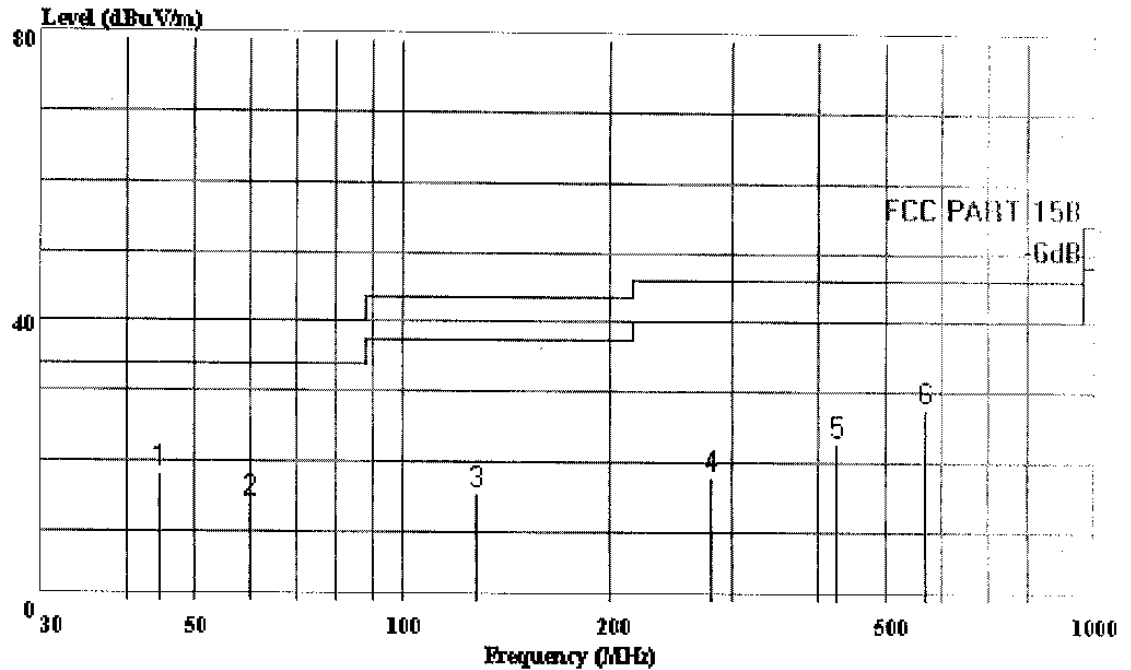
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 63 File#: E-core.emi

Date: 2005-02-18 Time: 21:25:05



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Tr

Condition: FCC PART 15B 3m 2598FACTOR VERTICAL

EUT : PS2 2.4G RF wireless controller

M/N : HP5415 (controller)

Power : DC4.5V(Battery)

Test Mode: TX Channel 2

Engineer : Seco

Memo : Temp:24'C Humi:56%

: 120cm 0deg

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1	44.550	18.51	-21.49	40.00	8.77	8.29	1.45
2	60.070	14.18	-25.82	40.00	5.63	6.92	1.62
3	127.970	15.54	-27.96	43.50	1.94	11.08	2.52
4	281.230	18.15	-27.85	46.00	1.85	12.50	3.80
5	423.820	22.92	-23.08	46.00	1.73	16.32	4.86
6	570.290	27.69	-18.32	46.00	2.53	19.42	5.74

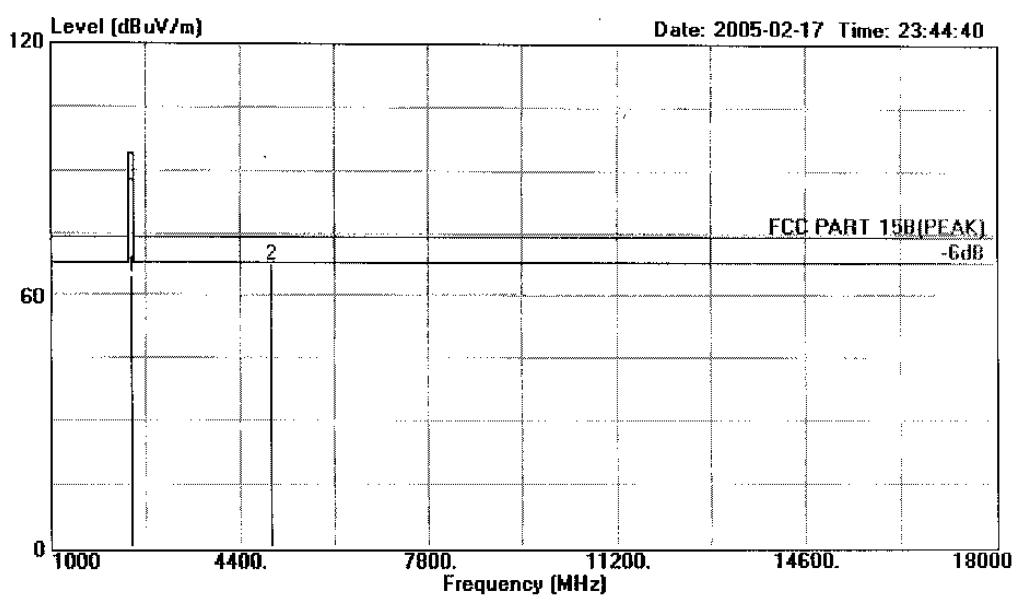


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Shenzhen Science & Industry Park
Nantou, Shenzhen, Guangdong, China
Tel: +86-755-26639496 Fax: +86-755-26632877

Data#: 141 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR HORIZONTAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V (Battery)
Test Mode : TX Channel 1
Test Engineer : Seco
Memo : Temp:23'C Humi:56%

			Over	Limit	Read	Cable	Probe	
	Freq	Level	Limit	Line	Level	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2464.800	64.70	-29.30	94.00	31.75	3.80	29.15	Peak
2	4944.000	67.51	-6.49	74.00	28.35	4.91	34.25	Peak

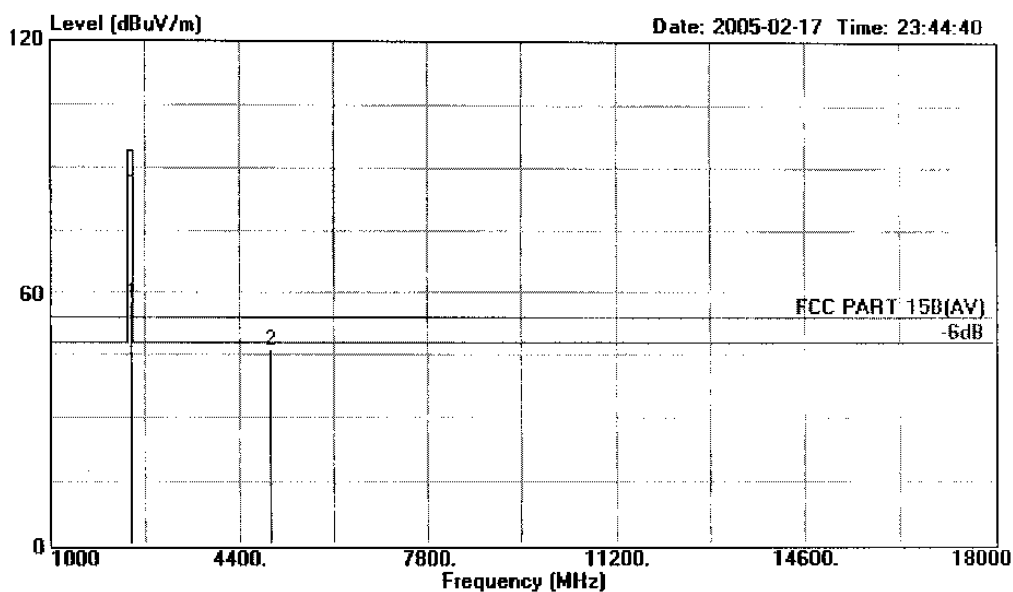


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Nantou, Shenzhen, Guangdong, China
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Data#: 143 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(AV) 3m 3115 FACTOR HORIZONTAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V(Battery)
Test Mode : TX Channel 1
Test Engineer : Seco
Memo : Temp:23'C Humi:56%

			Over	Limit	Read	Cable	Probe	
	Freq	Level	Limit	Line	Level	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2464.800	57.70	-36.30	94.00	24.75	3.80	29.15	Average
2	4944.000	46.51	-7.49	54.00	7.35	4.91	34.25	Average

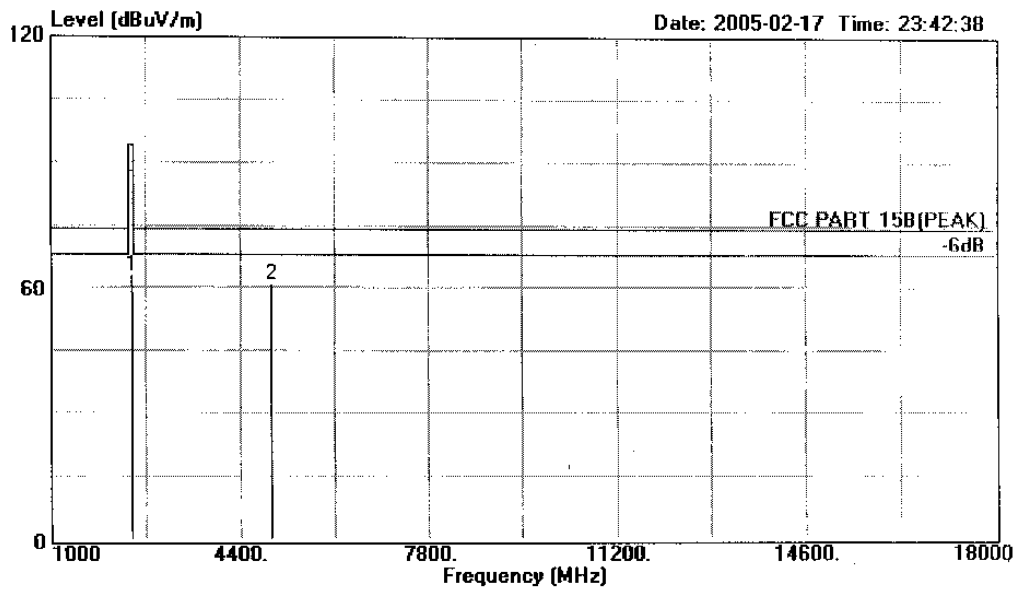


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Tel: +86-755-26639496 Fax: +86-755-26632877

Data#: 140 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR VERTICAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V(Battery)
Test Mode : TX Channel 1
Test Engineer : Seco
Memo : Temp:23'C Humi:56%

			Over	Limit	Read	Cable	Probe	
	Freq	Level	Limit	Line	Level	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2464.800	63.05	-30.95	94.00	30.10	3.80	29.15	Peak
2	4944.000	61.16	-12.84	74.00	22.00	4.91	34.25	Peak

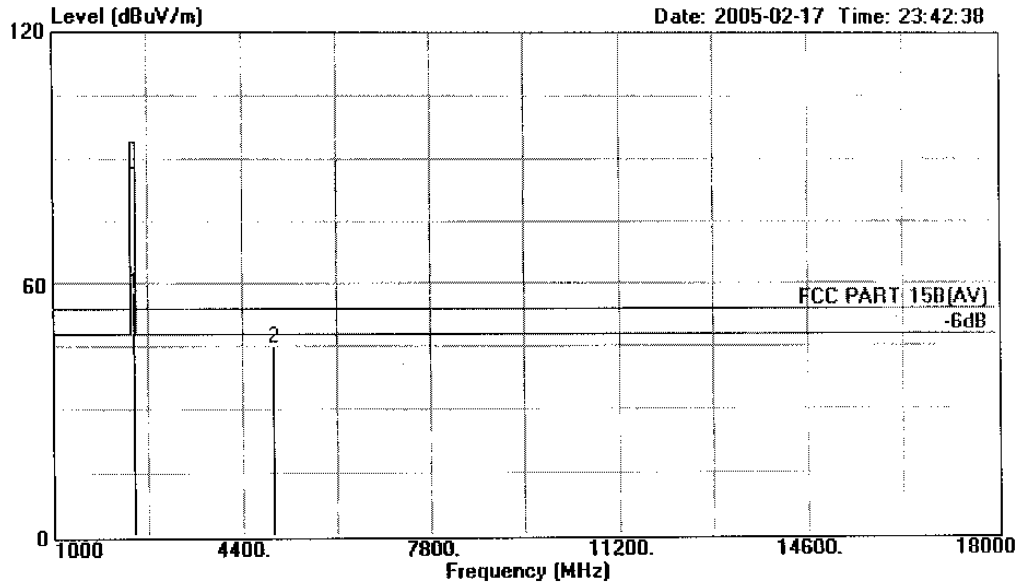


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Nantou, Shenzhen, Guangdong, China
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Data#: 142 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(AV) 3m 3115 FACTOR VERTICAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V (Battery)
Test Mode : TX Channel 1
Test Engineer : Seco
Memo : Temp:23'C Humi:56%

	Freq	Level	Over Limit	Limit Line	Read Level	Cable Loss	Probe Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2464.800	58.05	-35.95	94.00	25.10	3.80	29.15	Average
2	4944.000	45.16	-8.84	54.00	6.00	4.91	34.25	Average

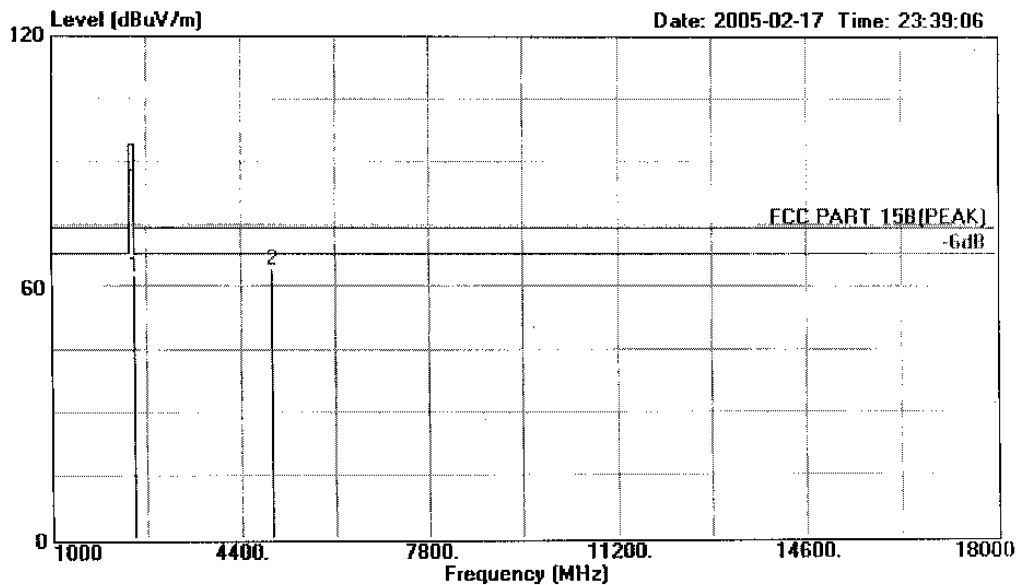


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Nantou, Shenzhen, Guangdong, China
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Data#: 136 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR HORIZONTAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V(Battery)
Test Mode : TX Channel 2
Test Engineer : Seco
Memo : Temp:23'C Humi:56%

			Over	Limit	Read	Cable	Probe	
Freq	Level	Limit	Line	Level	Loss	Factor	Remark	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB		
1	2472.400	62.45	-31.55	94.00	29.35	3.91	29.19	Peak
2	4944.000	64.43	-9.57	74.00	25.27	4.91	34.25	Peak

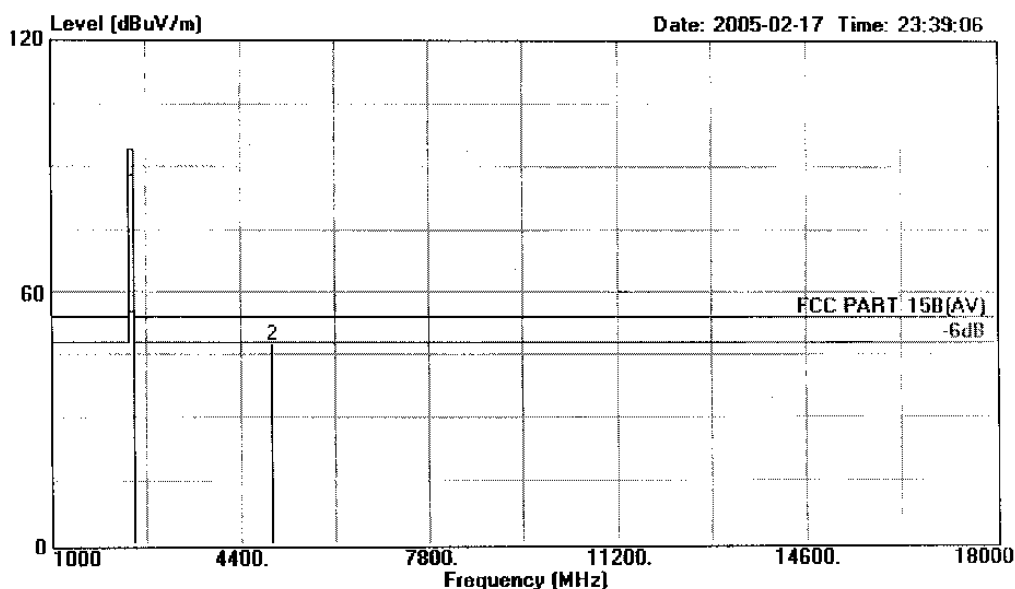


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Data#: 138 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(AV) 3m 311S FACTOR HORIZONTAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V(Battery)
Test Mode : TX Channel 2
Test Engineer : Seco
Memo : Temp:23'C Humi:56%

			Over	Limit	Read	Cable	Probe	
	Freq	Level	Limit	Line	Level	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2472.400	51.45	-42.55	94.00	18.35	3.91	29.19	Average
2	4944.000	47.43	-6.57	54.00	8.27	4.91	34.25	Average

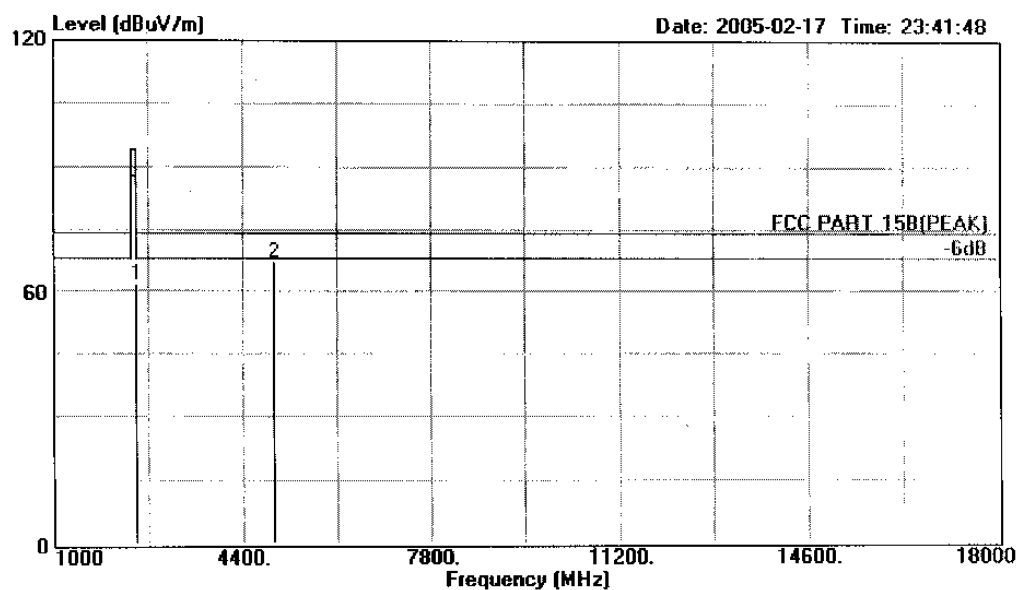


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Data#: 137 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR VERTICAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V(Battery)
Test Mode : TX Channel 2
Test Engineer : Seco
Memo : Temp:23'C Humi:56%

			Over	Limit	Read	Cable	Probe	
	Freq	Level	Limit	Line	Level	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2472.400	61.91	-32.09	94.00	28.81	3.91	29.19	Peak
2	4944.000	67.20	-6.80	74.00	28.04	4.91	34.25	Peak

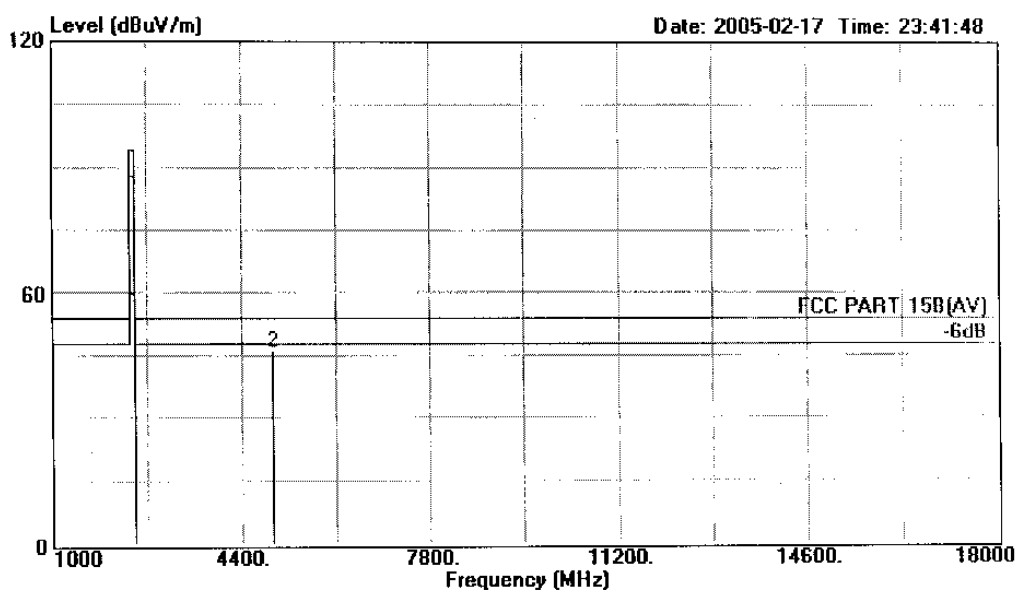


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Data#: 139 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(AV) 3m 3115 FACTOR VERTICAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V(Battery)
Test Mode : TX Channel 2
Test Engineer : Seco
Memo : Temp:23'C Humi:56%

			Over	Limit	Read	Cable	Probe	
	Freq	Level	Limit	Line	Level	Loss	Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2472.400	55.91	-38.09	94.00	22.81	3.91	29.19	Average
2	4944.000	46.20	-7.80	54.00	7.04	4.91	34.25	Average

4. BAND EDGES MEASUREMENT

4.1. Test Equipment

The following test equipment were used during the Emission Bandwidth Test :

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4407B	MY41440292	May 24, 04	1 Year
2.	Amp	HP	8449B	3008A00863	May 24, 04	1 Year
3.	Antenna	EMCO	3115	9607-4877	Jun. 15, 04	1.5 Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May 24, 04	1 Year

4.2. Block Diagram of Test Setup



(EUT: PS2 2.4G RF Wireless Controller)

4.3. Test Standard

The test completeness FCC 15C (249).

4.4. Bandwidth Limit

200KHz wide centered on the operation frequency.

4.5. Test Procedure

PASS.

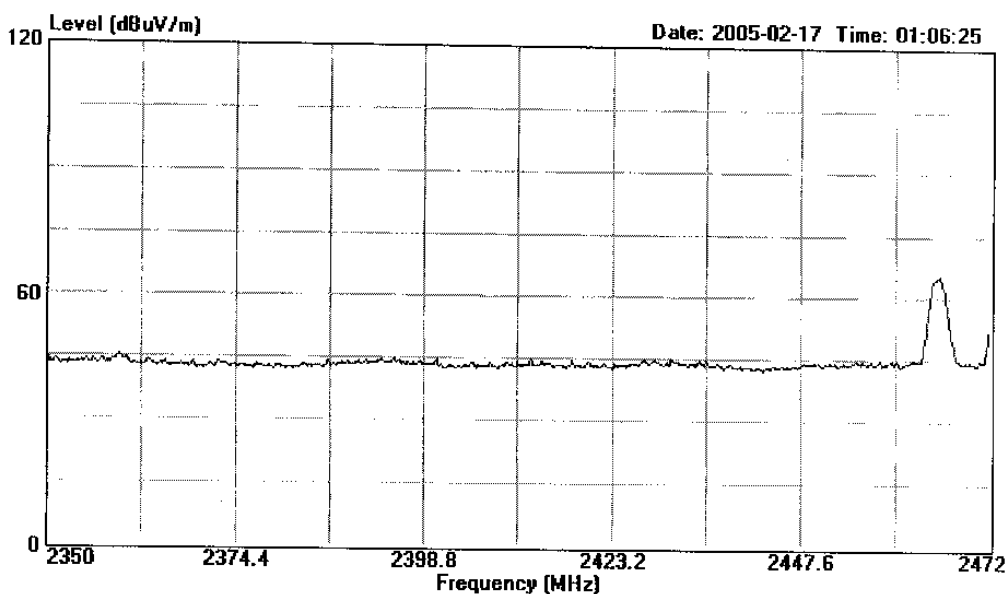
The testing data was attached in the next pages.

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Data#: 130 File#: C:\EMI TEST DATA\E\E-core.emi



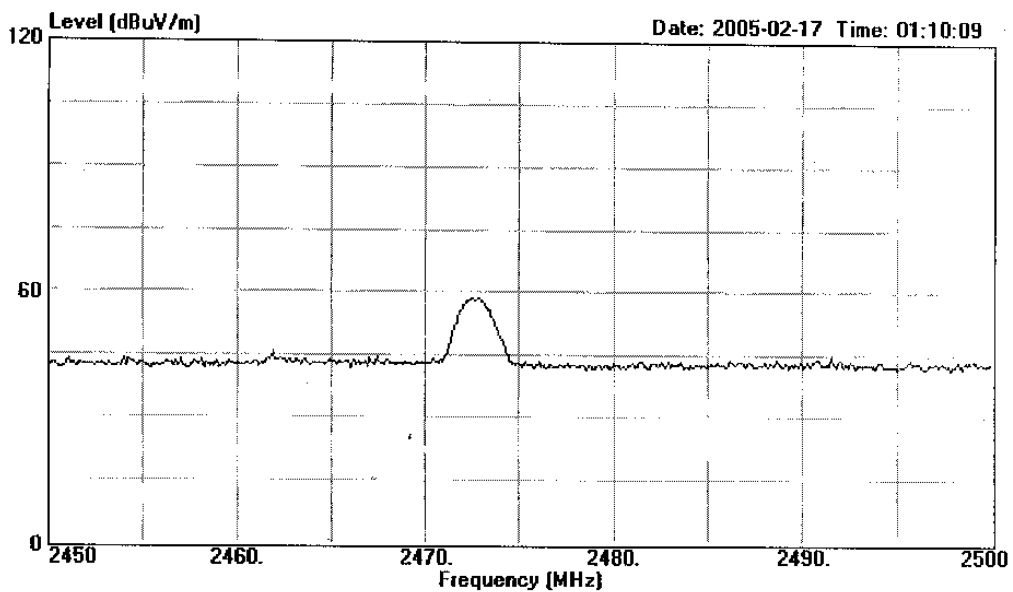
Site : 1# Chamber
Condition : 3m 3115 FACTOR HORIZONTAL
EUT : PS2 2.4G RF wireless controller
M/N : HPS415 (controller)
Power : DC4.5V (Battery)
Test Mode : TX Channel 1
Test Engineer : Seco
Memo : Temp:23°C Humi:56%

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Data#: 131 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : 3m 3115 FACTOR HORIZONTAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V (Battery)
Test Mode : TX Channel 2
Test Engineer : Seco
Memo : Temp:23'C Humi:56%

5. DEVIATION TO TEST SPECIFICATIONS

(None.)

APPENDIX I



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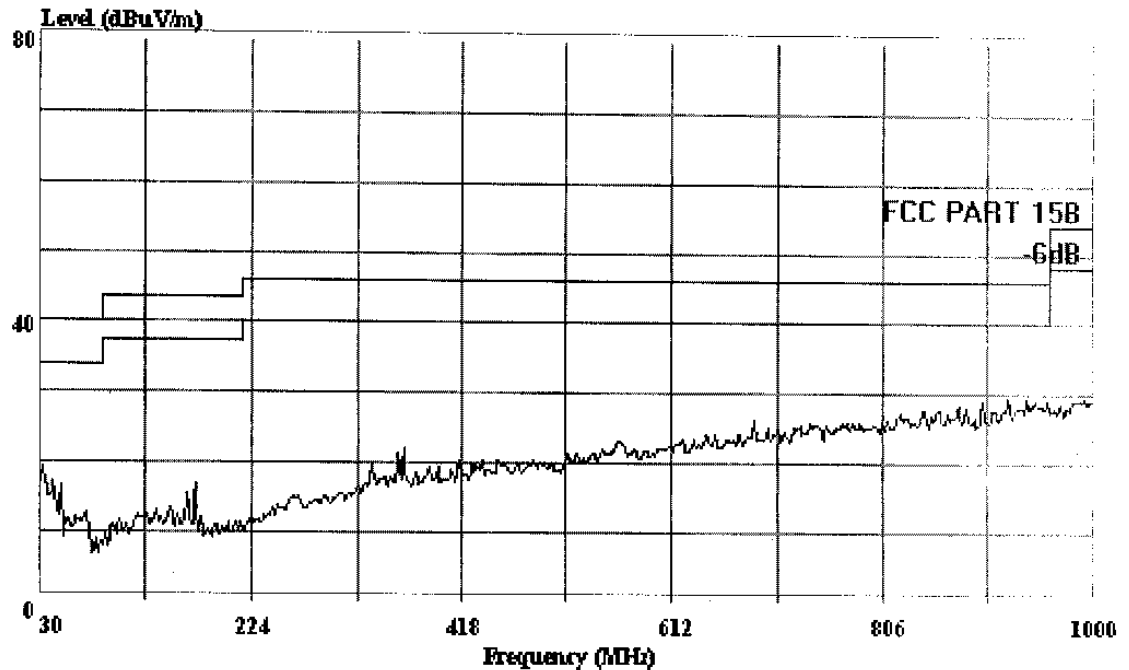
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 53 File#: E-core.emi

Date: 2005-02-18 Time: 21:19:49



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR HORIZONTAL

EUT : PS2 2.4G RF wireless controller

M/N : HP5415 (controller)

Power : DC4.5V (Battery)

Test Mode: TX Channel 1

Engineer : Seco

Memo : Temp:24'C Humi:56%

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AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

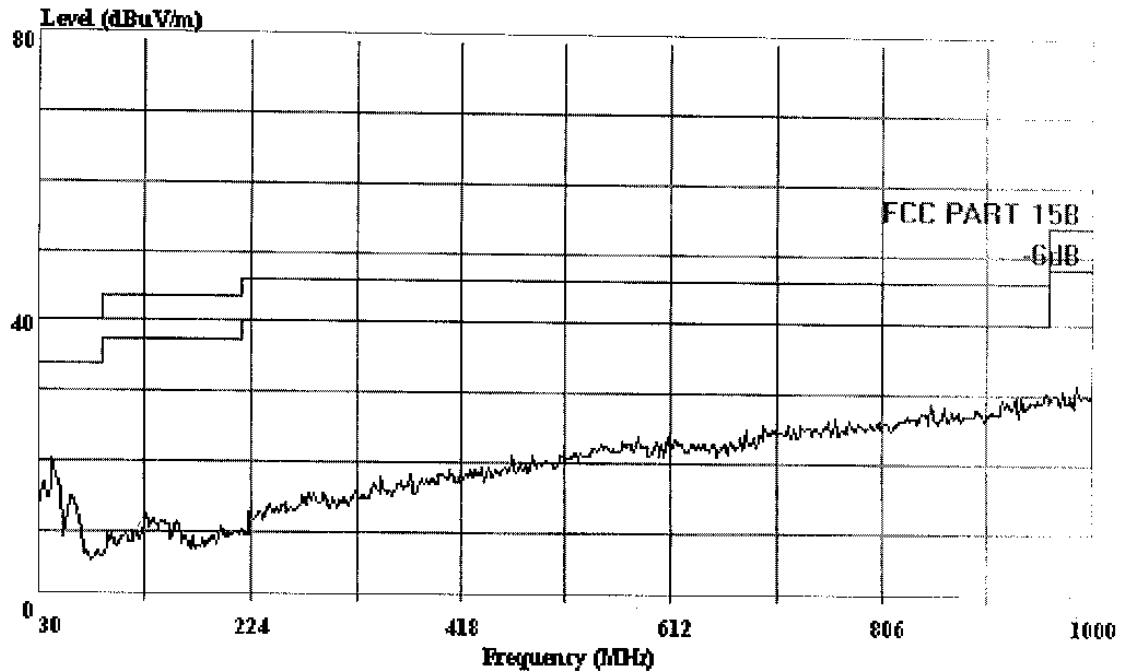
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 54 File#: E-core.emi

Date: 2005-02-18 Time: 21:20:24



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR VERTICAL

EUT : PS2 2.4G RF wireless controller

M/N : HP5415 (controller)

Power : DC4.5V(Battery)

Test Mode: TX Chennel 1

Engineer : Seco

Memo : Temp:24'C Humi:56%



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Shenzhen Science & Ind. Park

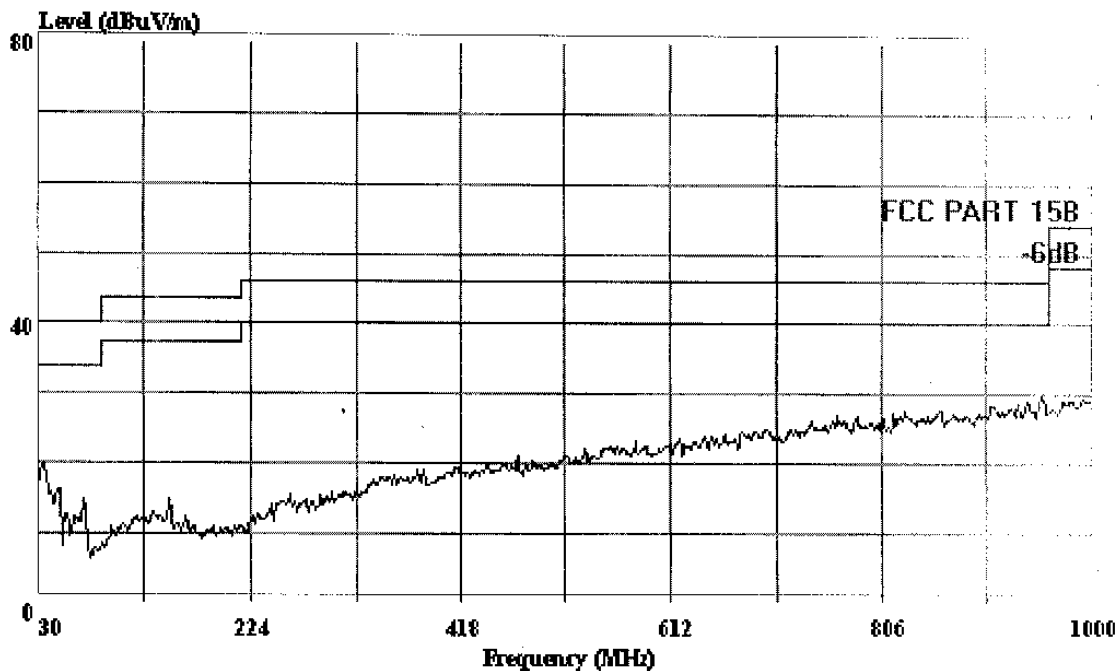
Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 56

File#: E-core.emi

Date: 2005-02-18 Time: 21:21:33



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR HORIZONTAL

EUT : PS2 2.4G RF wireless controller

M/N : HP5415 (controller)

Power : DC4.5V(Battery)

Test Mode: TX Chennel 2

Engineer : Seco

Memo : Temp:24'C Humi:56%



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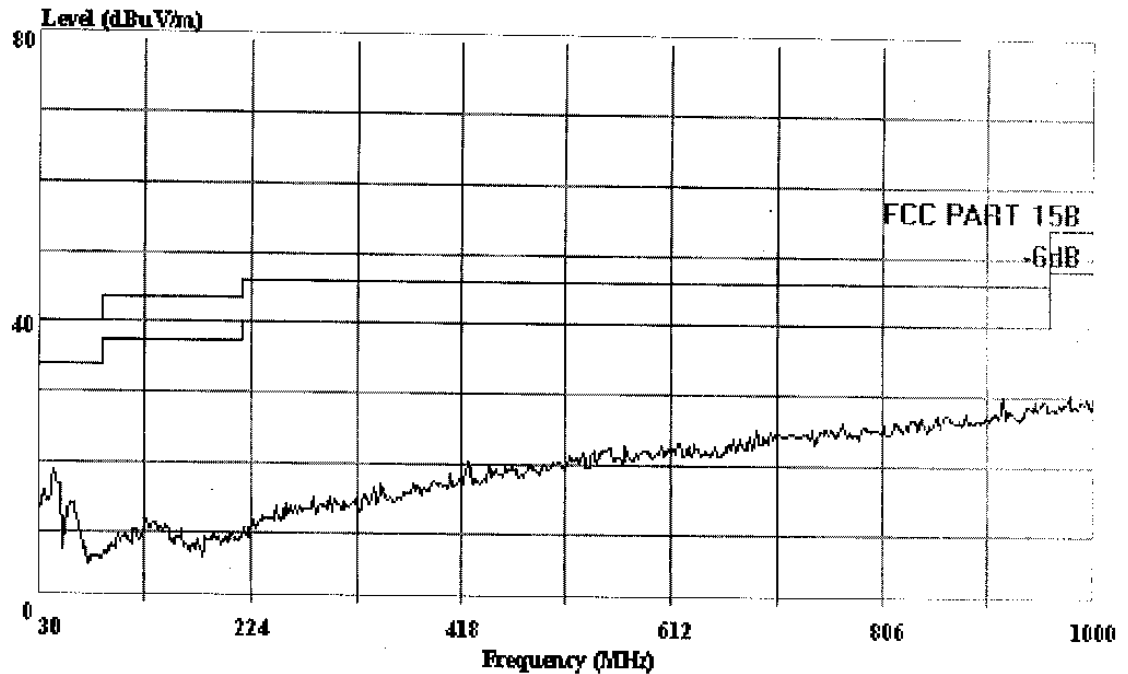
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 55 File#: E-core.emi

Date: 2005-02-18 Time: 21:20:56



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR VERTICAL

EUT : PS2 2.4G RF wireless controller

M/N : HP5415 (controller)

Power : DC4.5V(Battery)

Test Mode: TX Chennel 2

Engineer : Seco

Memo : Temp:24'C Humi:56%

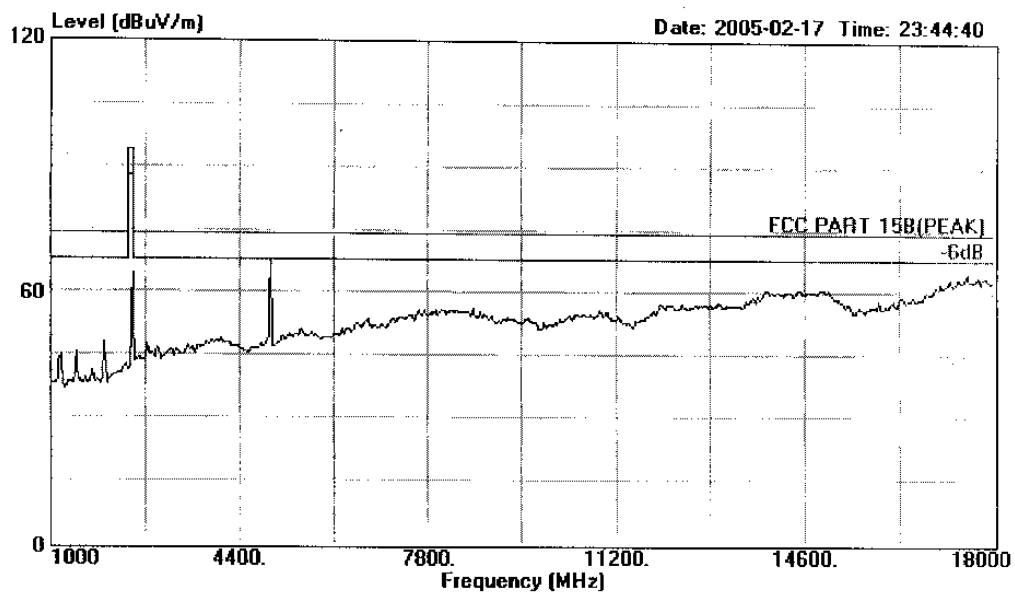


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Data#: 135 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR HORIZONTAL
EUT : PS2 2.4G RF wireless controller
M/N : HPS415 (controller)
Power : DC4.5V(Battery)
Test Mode : TX Channel.1
Test Engineer : Seco
Memo : Temp:23'C Humi:56%

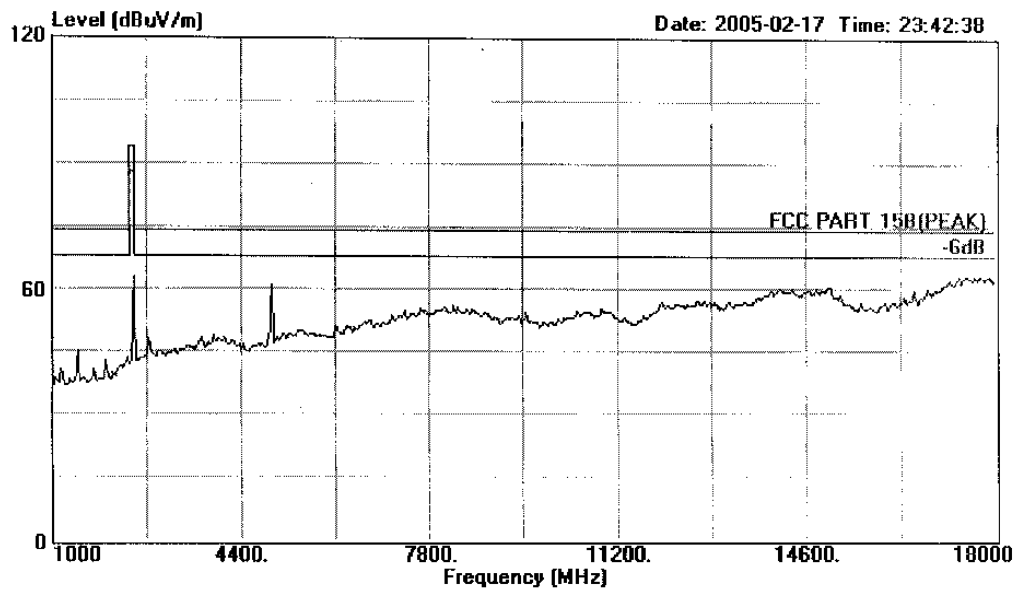


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Data#: 134 File#: C:\EMI TEST DATA\E\E-core.emi



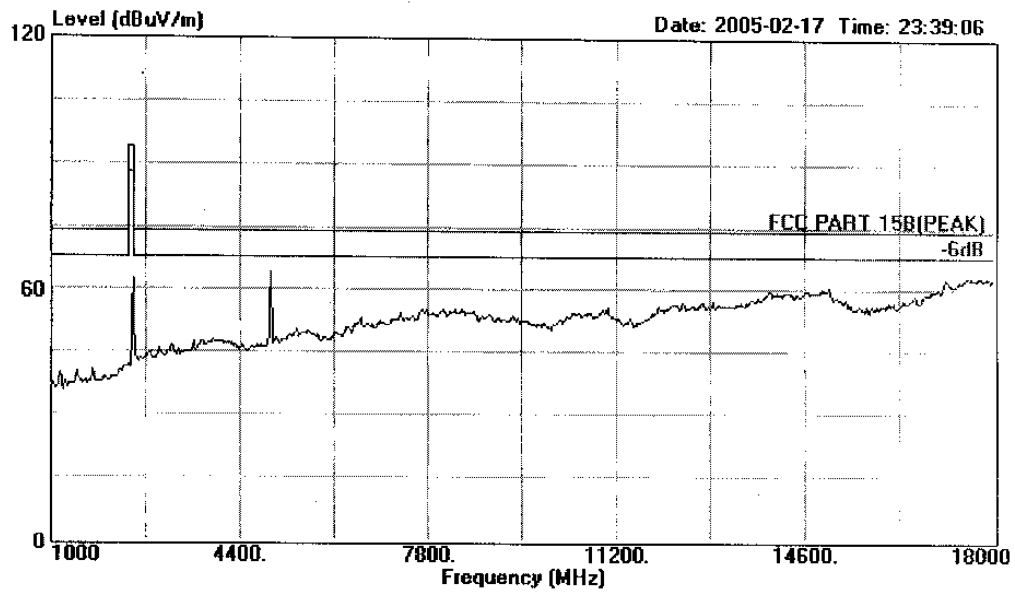
Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR VERTICAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V(Battery)
Test Mode : TX Channel 1
Test Engineer : Seco
Memo : Temp:23'C Humi:56%

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Shenzhen Science & Industry Park
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Data#: 132 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR HORIZONTAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V(Battery)
Test Mode : TX Channel 2
Test Engineer : Seco
Memo : Temp:23'C Humi:56%

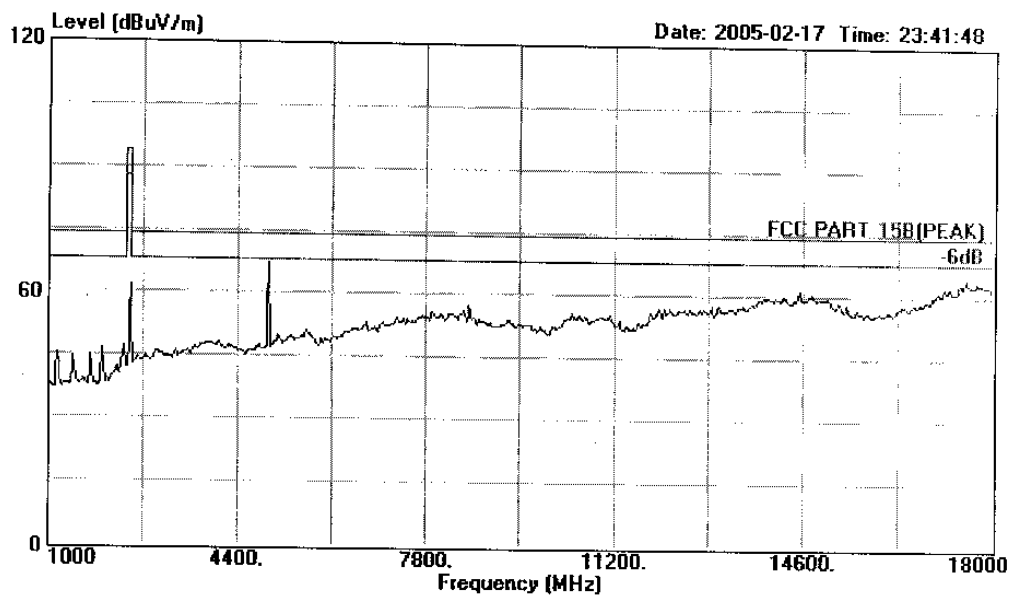


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Data#: 133 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR VERTICAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V(Battery)
Test Mode : TX Channel 2
Test Engineer : Seco
Memo : Temp:23'C Humi:56%

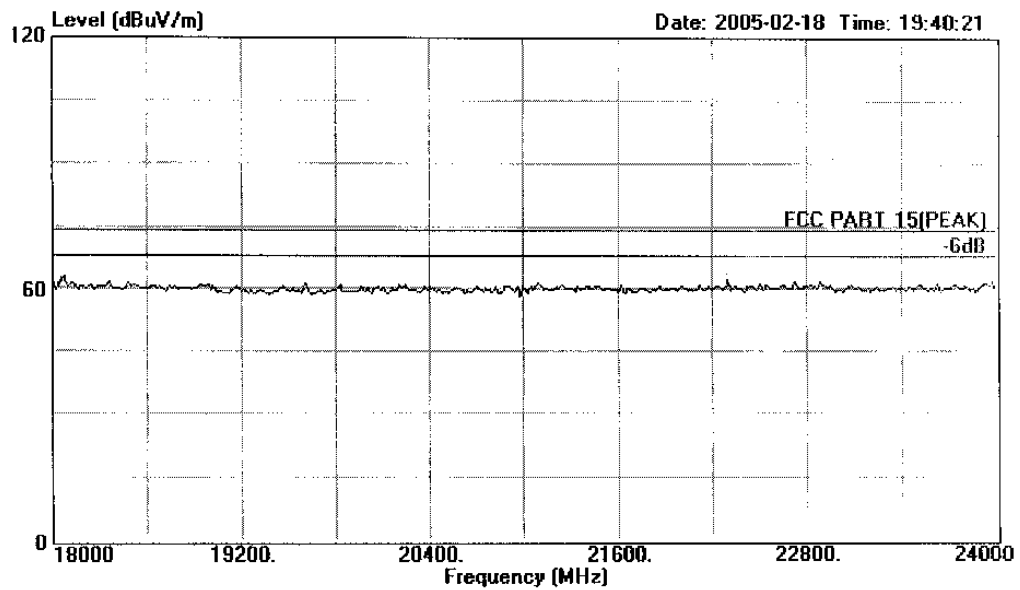


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Data#: 144 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15(PEAK) 3m 3115FACTOR HORIZONTAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V (Battery)
Test Mode : TX Channel 1
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

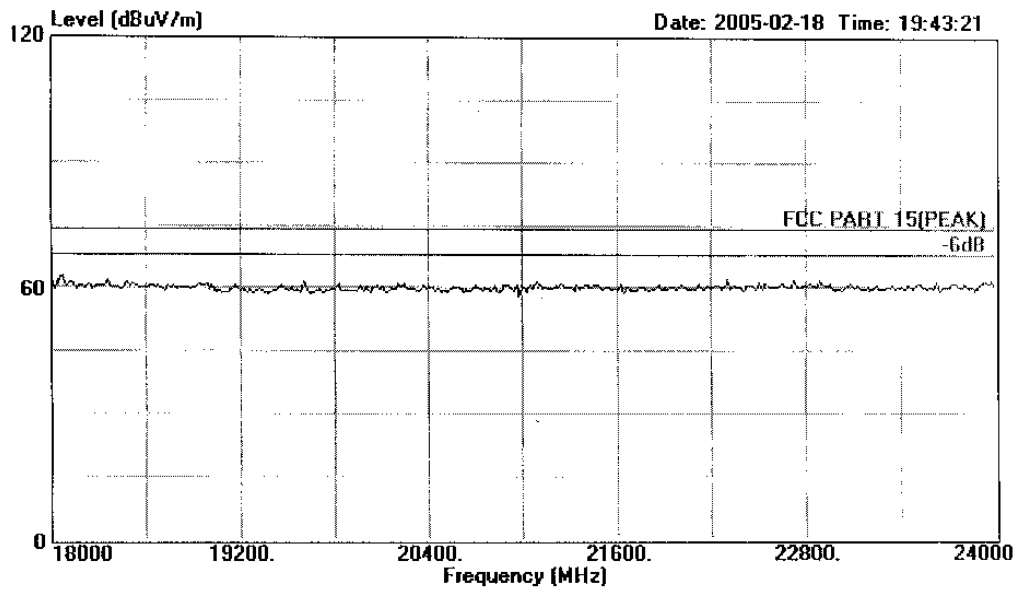


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Data#: 145 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15(PEAK) 3m 3115FACTOR VERTICAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V (Battery)
Test Mode : TX Channel 1
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

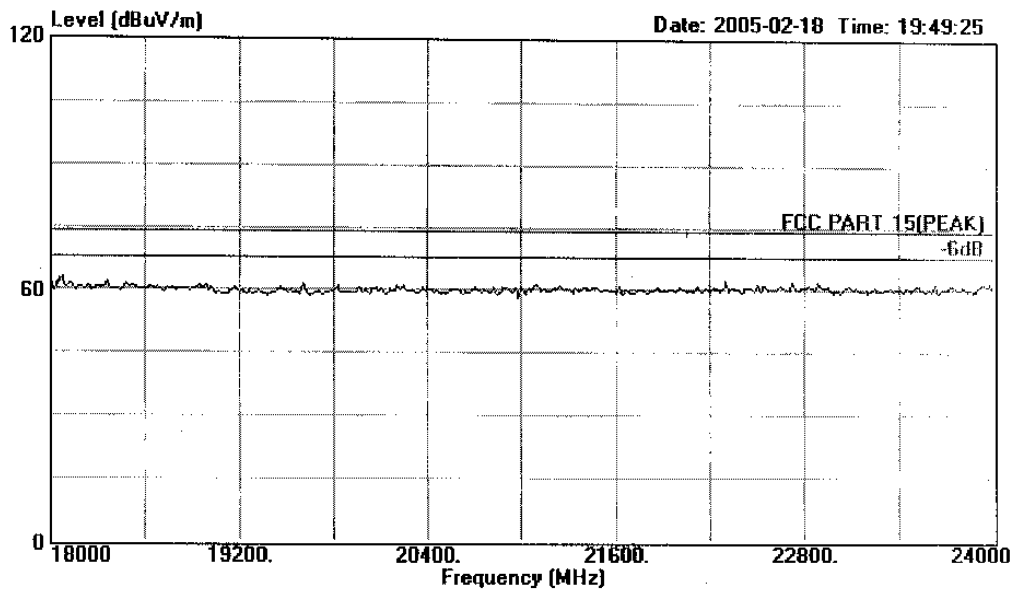


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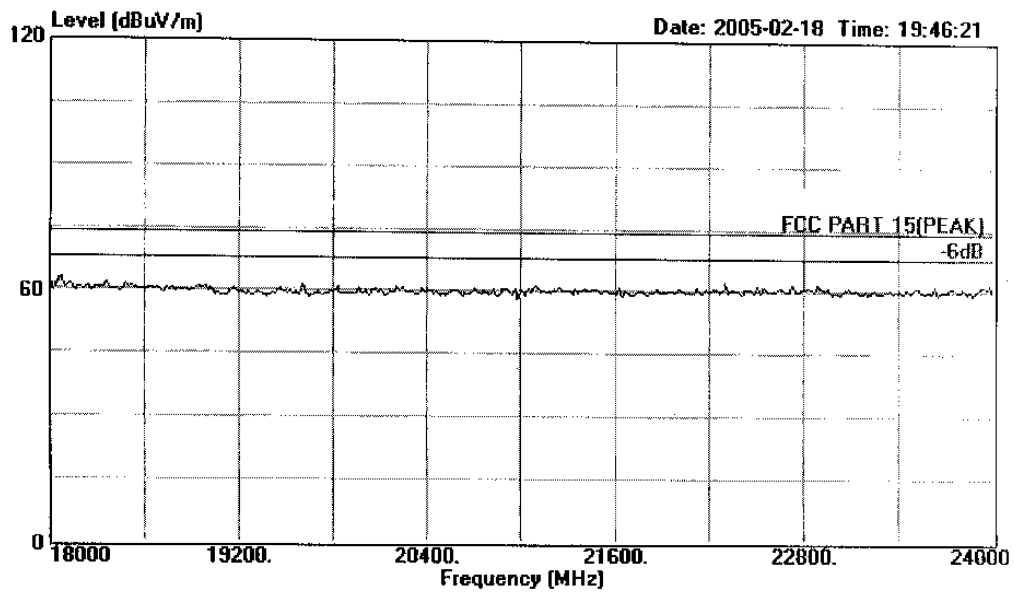
Site : 1# Chamber
Condition : FCC PART 15(PEAK) 3m 3115FACTOR HORIZONTAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V(Battery)
Test Mode : TX Channel 2
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

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AUDIX Technology (Shenzhen) Co., Ltd.

No. 6, Ke Feng Road, Block 52,
Shenzhen Science & Industry Park
Nantou, Shenzhen, Guangdong, China
Tel: +86-755-26639496 Fax: +86-755-26632877

Data#: 146 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15(PEAK) 3m 3115FACTOR VERTICAL
EUT : PS2 2.4G RF wireless controller
M/N : HP5415 (controller)
Power : DC4.5V(Battery)
Test Mode : TX Channel 2
Test Engineer : Seco
Memo : Temp:24'C Humi:54%