

APPLICATION FOR CERTIFICATION
On Behalf of

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

xbox 2.4G RF wireless controller (transmit + receiver)

Model Number: HP8131A (receiver)

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.
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Report Number : ACS-F04332
Date of Test : Oct.21~22, 2004
Date of Report : Oct.26, 2004

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APPENDIX I (19 pages)

TEST REPORT DECLARATION

Applicant : E-Core Technology (China) Co., Ltd.
 Manufacturer : E-Core Technology (China) Co., Ltd.
 EUT Description : xbox 2.4G RF wireless controller (transmit + receiver)
 (A) MODEL NO. : HP8131A (receiver)
 (B) SERIAL NO. : F2004102601
 (C) POWER SUPPLY : DC 6V With xbox AC Input 120V/60Hz

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 : Oct.21~22, 2004

Prepared by :

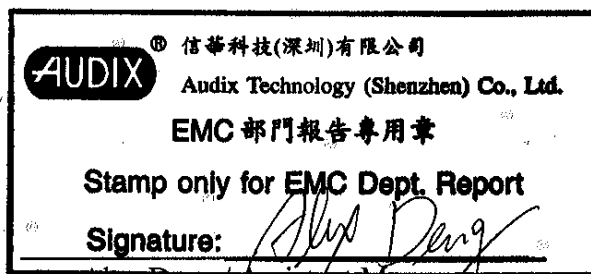
Elsa Wu

Elsa Wu / Assistant

Reviewer :

Lake Wang

Lake Wang / Supervisor



Approved & Authorized Signer :

Alex Deng / Assistant Manager

Name of the Representative of the Responsible Party :

Signature :

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	xbox 2.4G RF wireless controller (transmit + receiver)
Model Number	:	HP8131A (receiver)
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
Date of Test	:	Oct.21~22, 2004

1.2. Tested Supporting System Details

1.2.1.xbox

Manufacturer	:	Microsoft Corporation
Model Number	:	X01263-001

1.3. 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

1.4. 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 15.249, 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

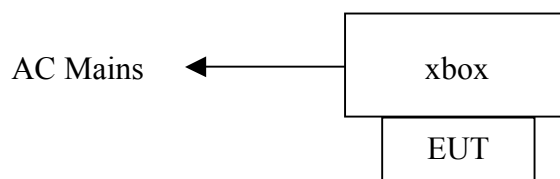
The following test equipments are used during the radiated emission test:

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	ESVS10	834468/011	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	July 31, 04	1/2 Year
8.	RF Cable	MIYAZAKI	5D-2W	3# Chamber No.2	July 31, 04	1/2 Year
9.	RF Cable	FUJIKURA	RG-55/U	3# Chamber No.3	July 31, 04	1/2 Year
10.	RF Cable	FUJIKURA	RG-55/U	3# Chamber No.4	July 31, 04	1/2 Year
11.	Coaxial Switch	Anritsu	MP59B	M73989	May. 27, 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

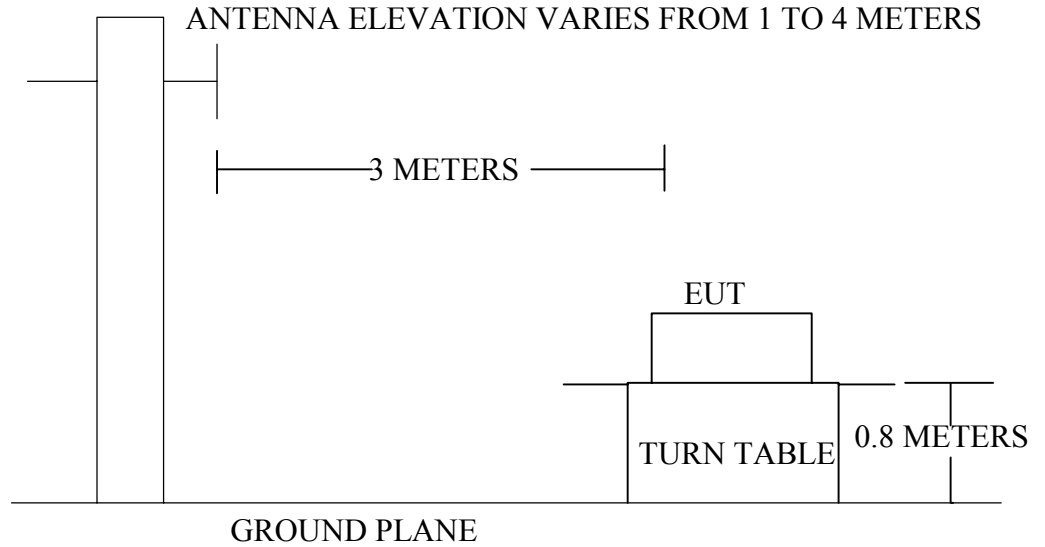
3.2.1. Block diagram of connection between the EUT and simulators



(EUT: xbox 2.4G RF wireless controller (transmit + receiver))

3.2.2. In Anechoic Chamber

ANTENNA TOWER



3.3. Radiated Emission Limit

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu\text{V}/\text{m}$	$\text{dB}(\mu\text{V})/\text{m}$
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 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 $\text{dB}\mu\text{V} = 20 \log$ 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.

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.xbox 2.4G RF wireless controller (transmit + receiver) (EUT)

Model Number : HP8131A (receiver)
Serial Number : F2004102601
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

3.5.1.Setup the EUT as shown in Section 3.2..

3.5.2.Let the EUT work in test mode (Channel 1/Channel 40/Channel 79) and test it.

3.6.Test Procedure

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 (Channel 1/Channel 40/Channel 79) 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 :	Oct.22, 2004	Temperature :	24°C
EUT :	xbox 2.4G RF wireless controller (transmit + receiver)	Humidity :	54%
Model No. :	HP8131A (receiver)	Test Mode :	Channel 1
Test Engineer:	Seco		

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dB	Limits dBμV/m
37.760	16.50	1.20	6.10	23.80	-16.20	40.00
148.340	12.16	2.50	6.33	20.99	-22.51	43.50
240.490	11.24	3.32	20.58	35.14	-10.86	46.00
299.660	13.30	3.83	12.86	30.00	-16.00	46.00
444.190	16.73	4.99	14.65	36.36	-9.64	46.00
463.590	16.87	5.32	11.72	33.91	-12.09	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 444.190MHz with corrected signal level of 36.36dBμV/m (Limit is 46.00dBμV/m) when the antenna was at horizontal polarization and at 1.9m 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:

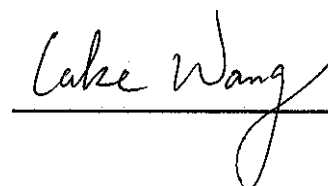
Cake Wang

Date of Test :	Oct.22, 2004	Temperature :	24°C
EUT :	xbox 2.4G RF wireless controller (transmit + receiver)	Humidity :	54%
Model No. :	HP8131A (receiver)	Test Mode :	Channel 1
Test Engineer:	Seco		

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dB	Limits dBμV/m
32.910	13.71	1.07	18.57	33.34	-6.66	40.00
120.210	10.04	2.18	17.66	29.88	-13.62	43.50
240.490	11.67	3.32	13.70	28.69	-17.31	46.00
298.690	12.89	3.81	14.73	31.43	-14.57	46.00
444.190	16.11	5.05	13.35	34.51	-11.49	46.00
712.880	21.16	6.62	11.06	38.84	-7.16	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 32.910MHz with corrected signal level of 33.34dBμV/m (Limit is 40.00dBμV/m) when the antenna was at vertical polarization and at 1.1m 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 :	Oct.22, 2004	Temperature :	24°C
EUT :	xbox 2.4G RF wireless controller (transmit + receiver)	Humidity :	54%
Model No. :	HP8131A (receiver)	Test Mode :	Channel 40
Test Engineer:	Seco		

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dB	Limits dBμV/m
35.820	18.38	1.16	11.73	31.27	-8.73	40.00
121.180	12.33	2.14	17.64	32.11	-11.39	43.50
240.490	11.24	3.32	13.52	28.08	-17.92	46.00
270.560	12.97	3.50	13.01	29.49	-16.51	46.00
355.920	15.47	4.22	11.44	31.13	-14.87	46.00
711.910	20.42	6.59	8.21	35.21	-10.79	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 35.820MHz with corrected signal level of 31.27dBμV/m (Limit is 40.00dBμV/m) when the antenna was at horizontal polarization and at 1.8m 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.

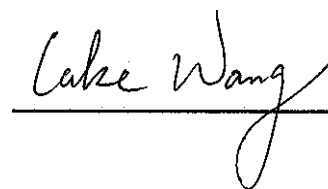
Reviewer: Cake Wang

Date of Test :	Oct.22, 2004	Temperature :	24°C
EUT :	xbox 2.4G RF wireless controller (transmit + receiver)	Humidity :	54%
Model No. :	HP8131A (receiver)	Test Mode :	Channel 40
Test Engineer:	Seco		

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dB	Limits dBμV/m
45.520	8.28	1.31	24.05	33.64	-6.36	40.00
103.720	9.42	2.07	11.19	22.68	-20.82	43.50
240.490	11.67	3.32	14.61	29.60	-16.40	46.00
270.560	12.49	3.50	12.95	28.94	-17.06	46.00
300.630	12.93	3.86	14.32	31.11	-14.89	46.00
444.190	16.11	5.05	13.77	34.93	-11.07	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 45.520MHz with corrected signal level of 33.64dBμV/m (Limit is 40.00dBμV/m) when the antenna was at vertical polarization and at 1.3m 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 :	Oct.22, 2004	Temperature :	24°C
EUT :	xbox 2.4G RF wireless controller (transmit + receiver)	Humidity :	54%
Model No. :	HP8131A (receiver)	Test Mode :	Channel 79
Test Engineer:	Seco		

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dB	Limits dBμV/m
30.000	19.65	1.05	10.47	31.17	-8.83	40.00
45.520	11.27	1.31	17.44	30.02	-9.98	40.00
121.180	12.33	2.14	17.64	32.11	-11.39	43.50
356.890	15.48	4.21	12.46	32.15	-13.85	46.00
444.190	16.66	5.05	14.39	36.10	-9.90	46.00
712.880	20.38	6.62	9.60	36.60	-9.40	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 30.000MHz with corrected signal level of 31.17dBμV/m (Limit is 40.00dBμV/m) when the antenna was at horizontal polarization and at 1.6m 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.

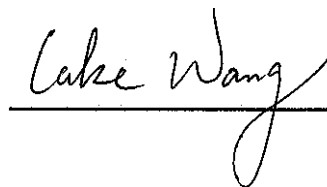
Reviewer: Cake Wang

Date of Test :	Oct.22, 2004	Temperature :	24°C
EUT :	xbox 2.4G RF wireless controller (transmit + receiver)	Humidity :	54%
Model No. :	HP8131A (receiver)	Test Mode :	Channel 79
Test Engineer:	Seco		

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dB	Limits dBμV/m
36.790	10.90	1.20	24.80	36.90	-3.10	40.00
121.180	9.99	2.14	17.64	29.77	-13.73	43.50
240.490	11.67	3.32	13.67	28.66	-17.34	46.00
269.590	12.50	3.46	13.19	29.15	-16.85	46.00
444.190	16.11	5.05	14.39	35.55	-10.45	46.00
712.880	21.16	6.62	9.60	37.38	-8.62	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 36.790MHz with corrected signal level of 36.90dBμV/m (Limit is 40.00dBμV/m) when the antenna was at vertical polarization and at 1.0m 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:



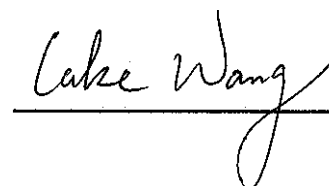
Date of Test :	Oct.21, 2004	Temperature :	24°C
EUT :	xbox 2.4G RF wireless controller (transmit + receiver)	Humidity :	54%
Model No. :	HP8131A (receiver)	Test Mode :	Channel 1
Test Engineer:	Seco		

Frequency MHz	Antenna Factor dB	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dB	Limits dBμV/m	Remark
2402.590	29.03	3.45	37.90	70.38	-23.62	94.00	Average
4805.680	33.91	4.77	6.90	45.58	-8.42	54.00	Average
7028.350	37.06	7.03	2.89	46.98	-7.02	54.00	Average

Frequency MHz	Antenna Factor dB	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dB	Limits dBμV/m	Remark
2402.590	29.03	3.45	48.90	81.38	-12.62	94.00	Peak
4805.680	33.91	4.77	22.90	61.58	-12.42	74.00	Peak
7028.346	37.06	7.03	21.89	65.98	-8.02	74.00	Peak

- Remark: 1. All readings are Peak and Average values.
 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
 3. The bandwidth of the RBW is set at 1MHz and VBW is set at 1MHz.

Reviewer:



Date of Test :	Oct.21, 2004	Temperature :	24°C
EUT :	xbox 2.4G RF wireless controller (transmit + receiver)	Humidity :	54%
Model No. :	HP8131A (receiver)	Test Mode :	Channel 1
Test Engineer:	Seco		

Frequency MHz	Antenna Factor dB	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dB	Limits dBμV/m	Remark
2402.590	29.03	3.45	42.90	75.38	-18.62	94.00	Average
4805.680	33.91	4.77	7.90	46.58	-7.42	54.00	Average
7028.350	37.06	7.03	1.89	45.98	-8.02	54.00	Average

Frequency MHz	Antenna Factor dB	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dB	Limits dBμV/m	Remark
2402.590	29.03	3.45	50.90	83.38	-30.62	114.00	Peak
4805.680	33.91	4.77	25.90	64.58	-9.42	74.00	Peak
7028.346	37.06	7.03	21.89	65.98	-8.02	74.00	Peak

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

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

3. The bandwidth of the RBW is set at 1MHz and VBW is set at 1MHz.

Reviewer:

Cahe Wang

Date of Test :	Oct.21, 2004	Temperature :	24°C
EUT :	xbox 2.4G RF wireless controller (transmit + receiver)	Humidity :	54%
Model No. :	HP8131A (receiver)	Test Mode :	Channel 40
Test Engineer:	Seco		

Frequency MHz	Antenna Factor dB	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dB	Limits dBμV/m	Remark
2465.600	29.15	3.80	39.29	72.24	-21.76	94.00	Average
4931.300	34.20	4.90	6.90	46.00	-8.00	54.00	Average
7396.950	37.63	7.22	1.25	46.10	-7.90	54.00	Average

Frequency MHz	Antenna Factor dB	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dB	Limits dBμV/m	Remark
2465.600	29.15	3.80	51.29	84.24	-9.76	94.00	Peak
4931.300	34.20	4.90	26.90	66.00	-8.00	74.00	Peak
7396.950	37.63	7.22	21.25	66.10	-7.90	74.00	Peak

- Remark: 1. All readings are Peak and Average values.
 2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
 3. The bandwidth of the RBW is set at 1MHz and VBW is set at 1MHz.

Reviewer: Cake Wang

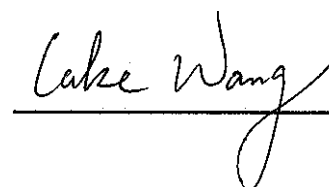
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EUT :	xbox 2.4G RF wireless controller (transmit + receiver)	Humidity :	54%
Model No. :	HP8131A (receiver)	Test Mode :	Channel 40
Test Engineer:	Seco		

Frequency MHz	Antenna Factor dB	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dB	Limits dBμV/m	Remark
2465.600	29.15	3.80	39.29	72.24	-21.76	94.00	Average
4931.300	34.20	4.90	6.90	46.00	-8.00	54.00	Average
7396.950	37.63	7.22	1.25	46.10	-7.90	54.00	Average

Frequency MHz	Antenna Factor dB	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dB	Limits dBμV/m	Remark
2465.600	29.15	3.80	50.29	83.24	-10.76	94.00	Peak
4931.300	34.20	4.90	26.90	66.00	-8.00	74.00	Peak
7396.950	37.63	7.22	21.25	66.10	-7.90	74.00	Peak

- Remark: 1. All readings are Peak and Average values.
2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
3. The bandwidth of the RBW is set at 1MHz and VBW is set at 1MHz.

Reviewer:



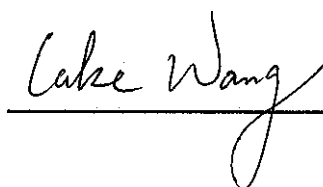
Date of Test :	Oct.21, 2004	Temperature :	24°C
EUT :	xbox 2.4G RF wireless controller (transmit + receiver)	Humidity :	54%
Model No. :	HP8131A (receiver)	Test Mode :	Channel 79
Test Engineer:	Seco		

Frequency MHz	Antenna Factor dB	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dB	Limits dBμV/m	Remark
2480.740	29.19	3.91	40.50	73.60	-20.40	94.00	Average
4961.820	34.29	4.93	6.90	46.12	-7.88	54.00	Average
7442.730	37.72	7.24	0.80	45.76	-8.24	54.00	Average

Frequency MHz	Antenna Factor dB	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dB	Limits dBμV/m	Remark
2480.740	29.19	3.91	49.50	82.60	-11.40	94.00	Peak
4961.820	34.29	4.93	23.90	63.12	-10.88	74.00	Peak
7442.726	37.72	7.24	20.80	65.76	-8.24	74.00	Peak

- Remark: 1. All readings are Peak and Average values.
2. Emission Level = Antenna Factor + Cable Loss + Meter Reading
3. The bandwidth of the RBW is set at 1MHz and VBW is set at 1MHz.

Reviewer:



Date of Test :	Oct.21, 2004	Temperature :	24°C
EUT :	xbox 2.4G RF wireless controller (transmit + receiver)	Humidity :	54%
Model No. :	HP8131A (receiver)	Test Mode :	Channel 79
Test Engineer:	Seco		

Frequency MHz	Antenna Factor dB	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dB	Limits dBμV/m	Remark
2480.740	29.19	3.91	39.50	72.60	-21.40	94.00	Average
4961.820	34.29	4.93	7.90	47.12	-6.88	54.00	Average
7442.730	37.72	7.24	0.80	45.76	-8.24	54.00	Average

Frequency MHz	Antenna Factor dB	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dB	Limits dBμV/m	Remark
2480.740	29.19	3.91	49.50	82.60	-11.40	94.00	Peak
4961.820	34.29	4.93	26.90	66.12	-7.88	74.00	Peak
7442.726	37.72	7.24	20.80	65.76	-8.24	74.00	Peak

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

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

3. The bandwidth of the RBW is set at 1MHz and VBW is set at 1MHz.

Reviewer:

Choke Wang



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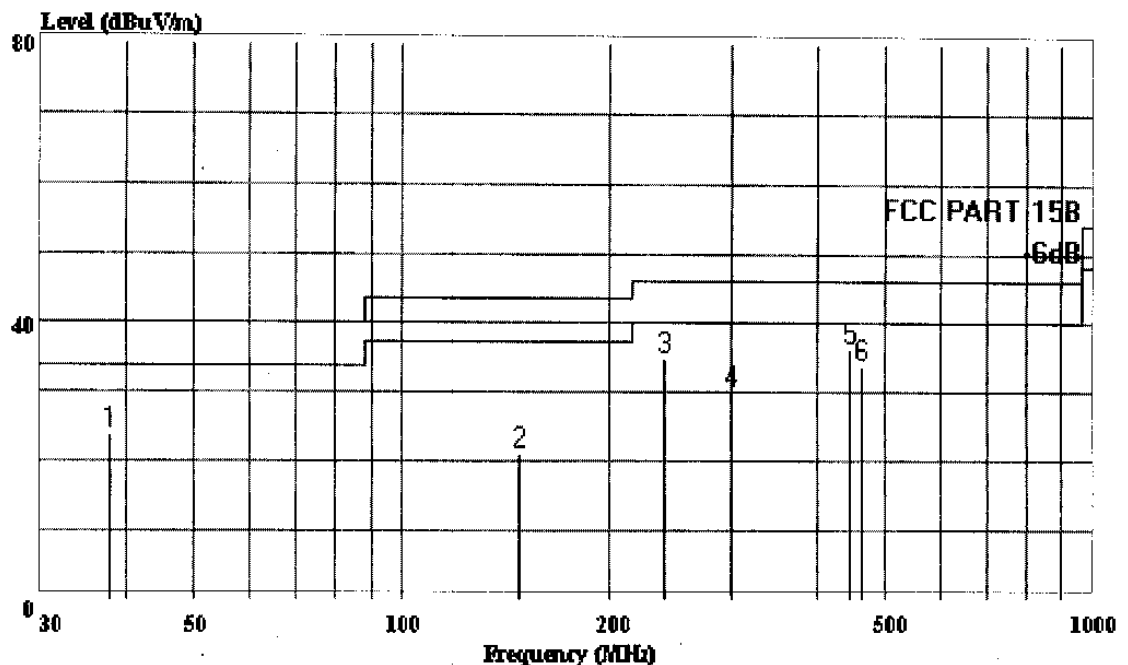
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 38 File#: E-core.emi

Date: 2004-10-22 Time: 08:40:14



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

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR HORIZONTAL

EUT : xbox 2.4G RF wireless controller

: (transmit+receiver)

M/N : HP8131A (receiver)

Power : DC6V With xbox AC Input 120V/60Hz

Test Mode: Channel 1

Engineer : Seco

Memo : Temp:24'C Humi:54%

: Antpos:1.9m Tablepos:0'

Page: 1

			Over	Limit	Read	Probe	Cable
	Freq	Level	Limit	Line	Level	Factor	Loss
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1	37.760	23.80	-16.20	40.00	6.10	16.50	1.20
2	148.340	20.99	-22.51	43.50	6.33	12.16	2.50
3	240.490	35.14	-10.86	46.00	20.58	11.24	3.32
4	299.660	30.00	-16.00	46.00	12.86	13.30	3.83
5	444.190	36.36	-9.64	46.00	14.65	16.73	4.99
6	463.590	33.91	-12.09	46.00	11.72	16.87	5.32



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

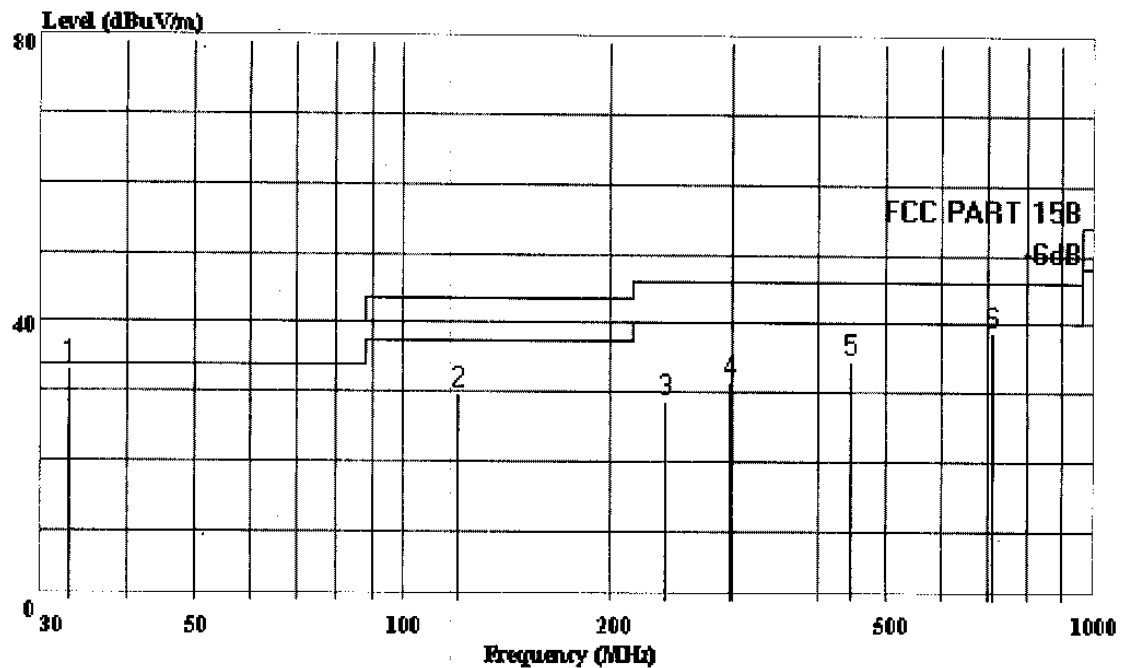
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 40 File#: E-core.emi

Date: 2004-10-22 Time: 08:42:47



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

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR VERTICAL

EUT : xbox 2.4G RF wireless controller

: (transmit+receiver)

M/N : HP8131A (receiver)

Power : DC6V With xbox AC Input 120V/60Hz

Test Mode: Channel 1

Engineer : Seco

Memo : Temp:24'C Humi:54%

: Antpos:1.1m Tablepos:0'

Page: 1

			Over	Limit	Read	Probe	Cable
	Freq	Level	Limit	Line	Level	Factor	Loss
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1	32.910	33.34	-6.66	40.00	18.57	13.71	1.07
2	120.210	29.88	-13.62	43.50	17.66	10.04	2.18
3	240.490	28.69	-17.31	46.00	13.70	11.67	3.32
4	298.690	31.43	-14.57	46.00	14.73	12.89	3.81
5	444.190	34.51	-11.49	46.00	13.35	16.11	5.05
6	712.880	38.84	-7.16	46.00	11.06	21.16	6.62



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

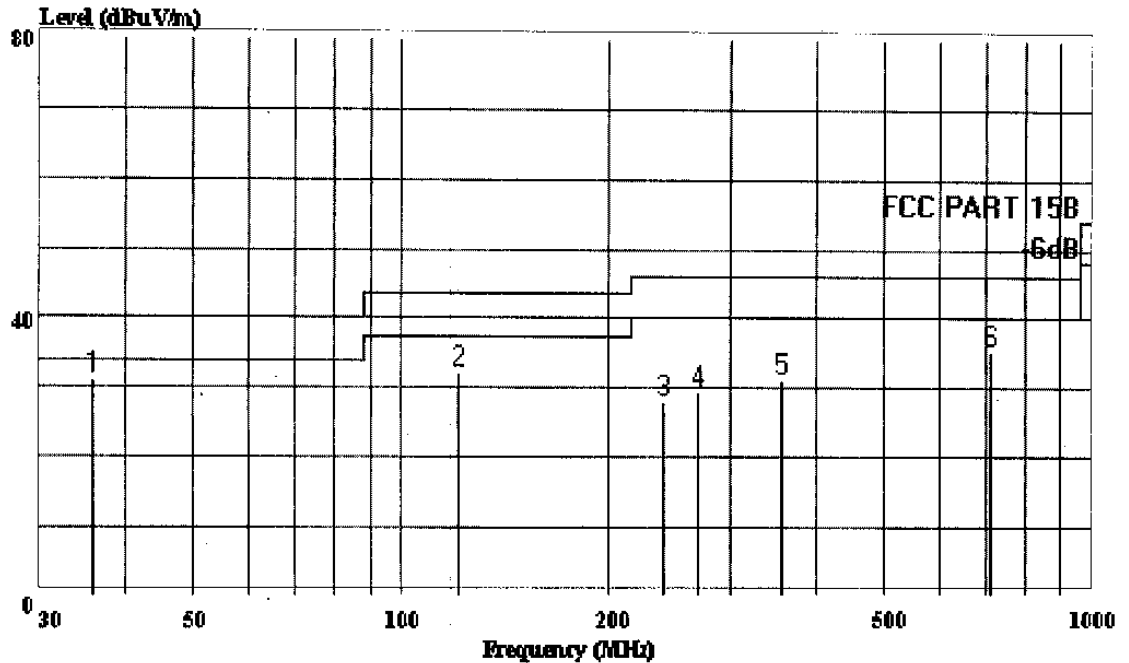
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 44 File#: E-core.emi

Date: 2004-10-22 Time: 08:49:27



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

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR HORIZONTAL

EUT : xbox 2.4G RF wireless controller

: (transmit+receiver)

M/N : HP8131A (receiver)

Power : DC6V With xbox AC Input 120V/60Hz

Test Mode: Channel 40

Engineer : Seco

Memo : Temp:24'C Humi:54%

: Antpos:1.8m Tablepos:0'

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1	35.820	31.27	-8.73	40.00	11.73	18.38	1.16
2	121.180	32.11	-11.39	43.50	17.64	12.33	2.14
3	240.490	28.08	-17.92	46.00	13.52	11.24	3.32
4	270.560	29.49	-16.51	46.00	13.01	12.97	3.50
5	355.920	31.13	-14.87	46.00	11.44	15.47	4.22
6	711.910	35.21	-10.79	46.00	8.21	20.42	6.59



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

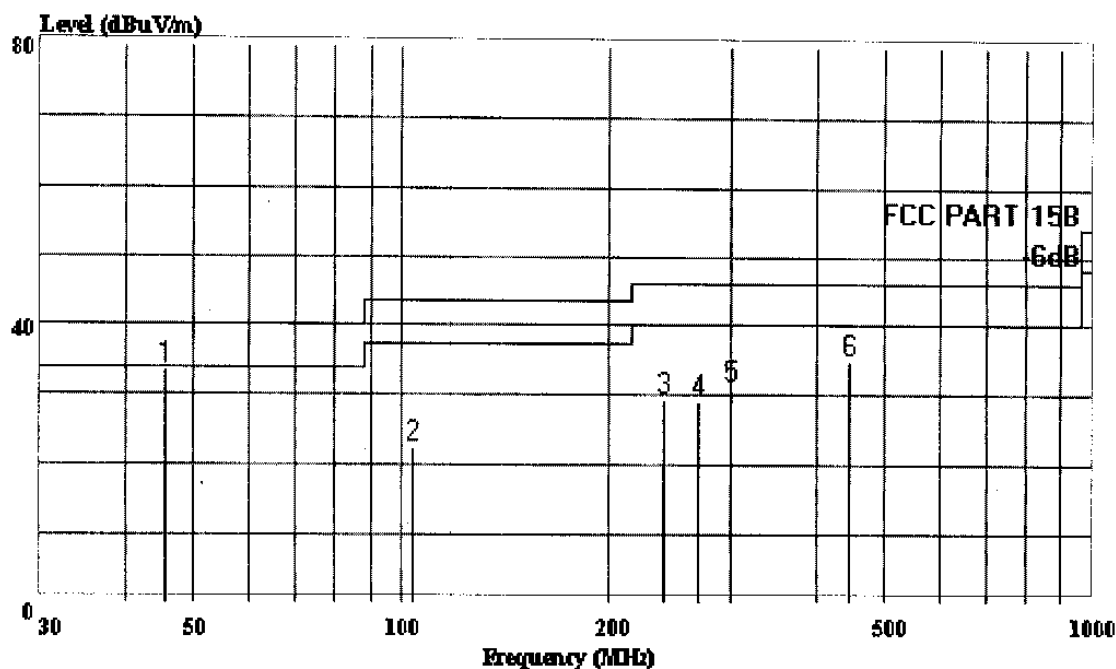
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 42 File#: E-core.emi

Date: 2004-10-22 Time: 08:45:55



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

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR VERTICAL

EUT : xbox 2.4G RF wireless controller

: (transmit+receiver)

M/N : HP8131A (receiver)

Power : DC6V With xbox AC Input 120V/60Hz

Test Mode: Channel 40

Engineer : Seco

Memo : Temp:24'C Humi:54%

: Antpos:1.3m Tablepos:0'

Page: 1

			Over	Limit	Read	Probe	Cable
	Freq	Level	Limit	Line	Level	Factor	Loss
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1	45.520	33.64	-6.36	40.00	24.05	8.28	1.31
2	103.720	22.68	-20.82	43.50	11.19	9.42	2.07
3	240.490	29.60	-16.40	46.00	14.61	11.67	3.32
4	270.560	28.94	-17.06	46.00	12.95	12.49	3.50
5	300.630	31.11	-14.89	46.00	14.32	12.93	3.86
6	444.190	34.93	-11.07	46.00	13.77	16.11	5.05



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

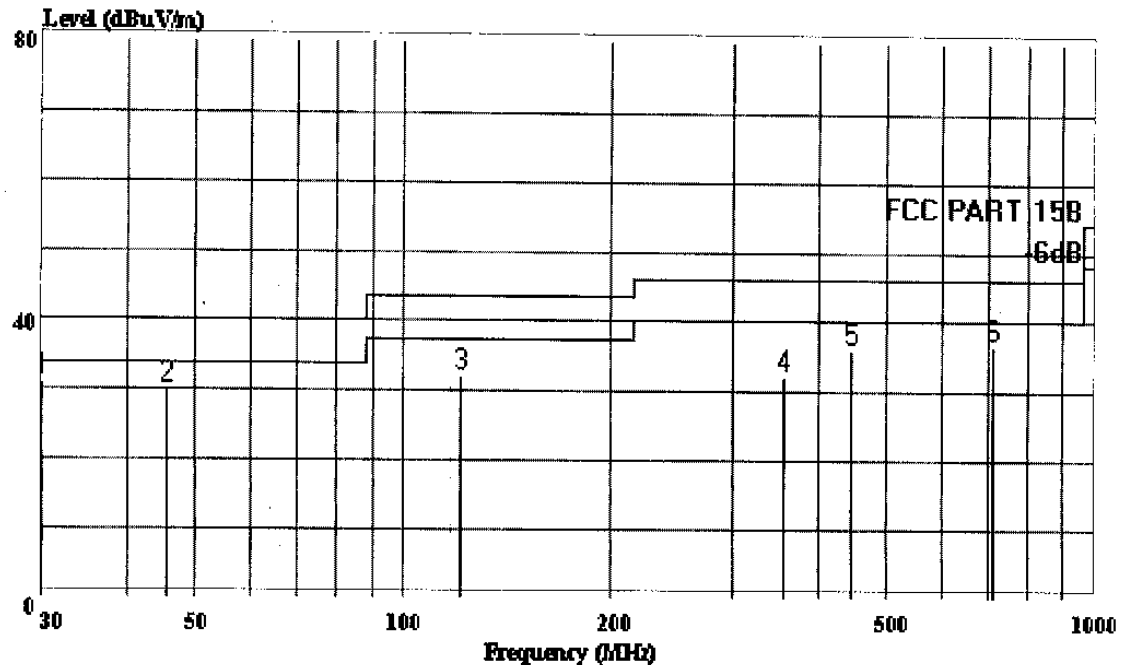
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 46 File#: E-core.emi

Date: 2004-10-22 Time: 08:51:51



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

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR HORIZONTAL

EUT : xbox 2.4G RF wireless controller

: (transmit+receiver)

M/N : HP8131A (receiver)

Power : DC6V With xbox AC Input 120V/60Hz

Test Mode: Channel 79

Engineer : Seco

Memo : Temp:24'C Humi:54%

: Antpos:1.6m Tablepos:0'

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1	30.000	31.17	-8.83	40.00	10.47	19.65	1.05
2	45.520	30.02	-9.98	40.00	17.44	11.27	1.31
3	121.180	32.11	-11.39	43.50	17.64	12.33	2.14
4	356.890	32.15	-13.85	46.00	12.46	15.48	4.21
5	444.190	36.10	-9.90	46.00	14.39	16.66	5.05
6	712.880	36.60	-9.40	46.00	9.60	20.38	6.62



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

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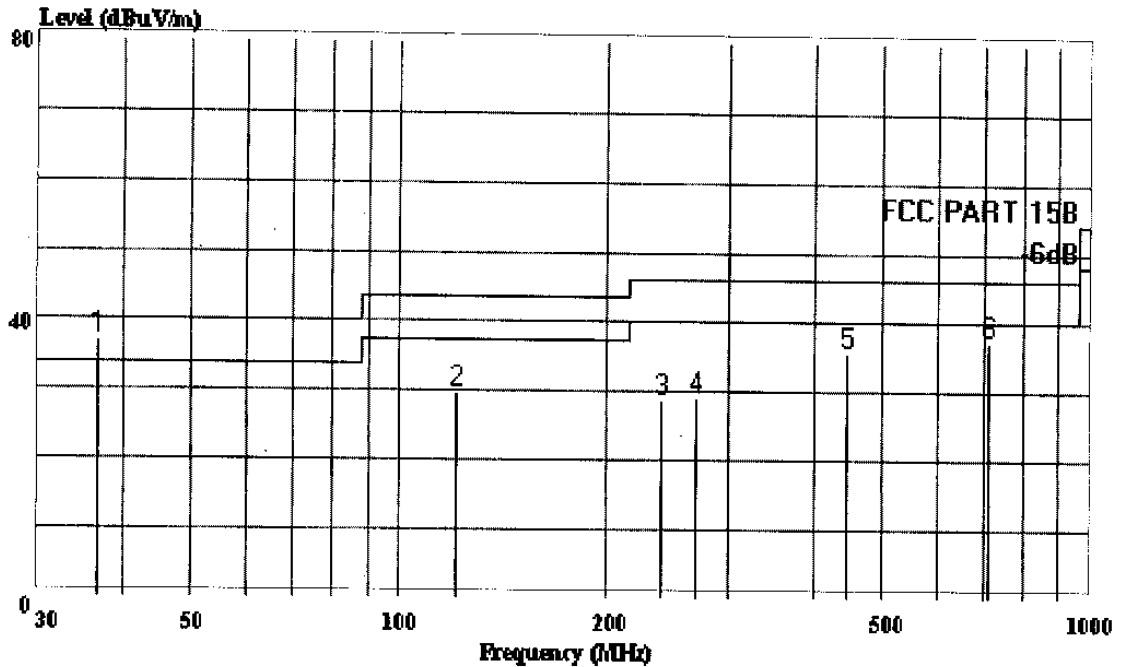
Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 48

File#: E-core.emi

Date: 2004-10-22 Time: 08:53:34



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

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR VERTICAL

EUT : xbox 2.4G RF wireless controller

: (transmit+receiver)

M/N : HP8131A (receiver)

Power : DC6V With xbox AC Input 120V/60Hz

Test Mode: Channel 79

Engineer : Seco

Memo : Temp:24'C Humi:54%

: Antpos:1.0m Tablepos:0'

Page: 1

	Freq	Level	Over Limit	Limit	Read	Probe	Cable
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB
1 !	36.790	36.90	-3.10	40.00	24.80	10.90	1.20
2	121.180	29.77	-13.73	43.50	17.64	9.99	2.14
3	240.490	28.66	-17.34	46.00	13.67	11.67	3.32
4	269.590	29.15	-16.85	46.00	13.19	12.50	3.46
5	444.190	35.55	-10.45	46.00	14.39	16.11	5.05
6	712.880	37.38	-8.62	46.00	9.60	21.16	6.62

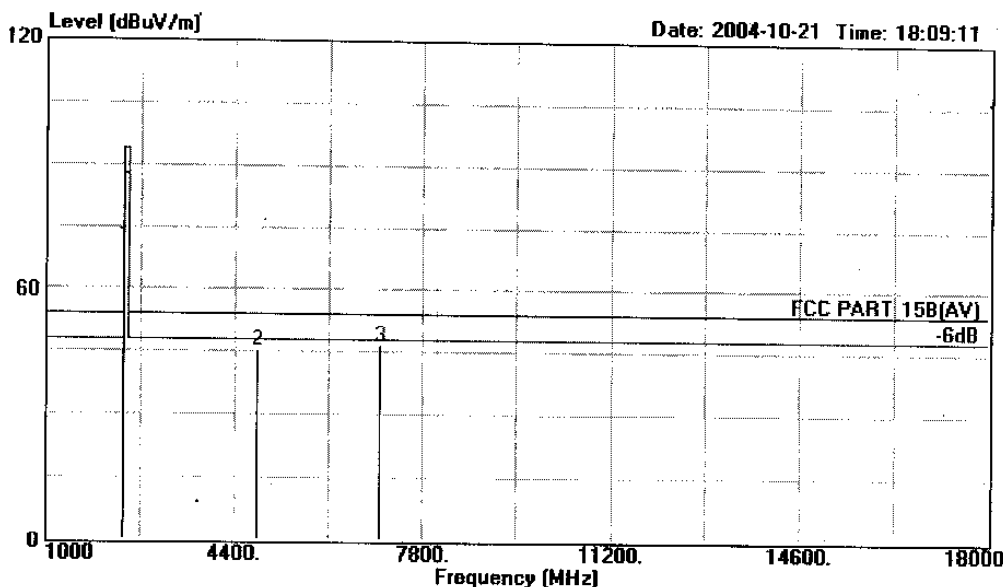


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Data#: 97 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(AV) 3m 3115 FACTOR HORIZONTAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 1
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

			Over	Limit	Read	Probe	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2402.590	70.38	-23.62	94.00	37.90	29.03	3.45	Average
2	4805.680	45.58	-8.42	54.00	6.90	33.91	4.77	Average
3	7028.350	46.98	-7.02	54.00	2.89	37.06	7.03	Average

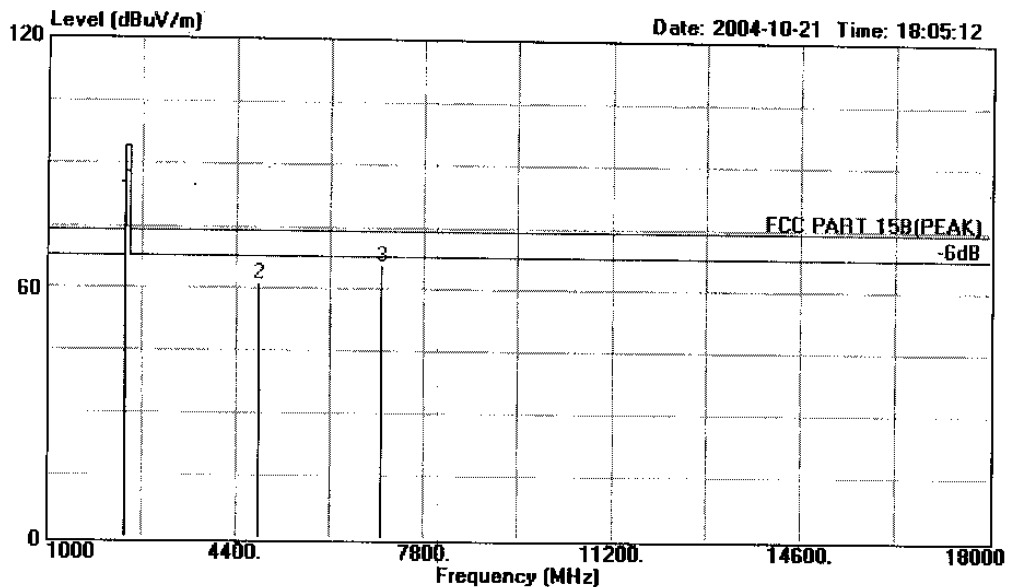


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Data#: 96 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR HORIZONTAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 1
Test Engineer : Seco
Memo : Temp:24°C Humi:54%

			Over	Limit	Read	Probe	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2402.590	81.38	-12.62	94.00	48.90	29.03	3.45	Peak
2	4805.680	61.58	-12.42	74.00	22.90	33.91	4.77	Peak
3	7028.346	65.98	-8.02	74.00	21.89	37.06	7.03	Peak

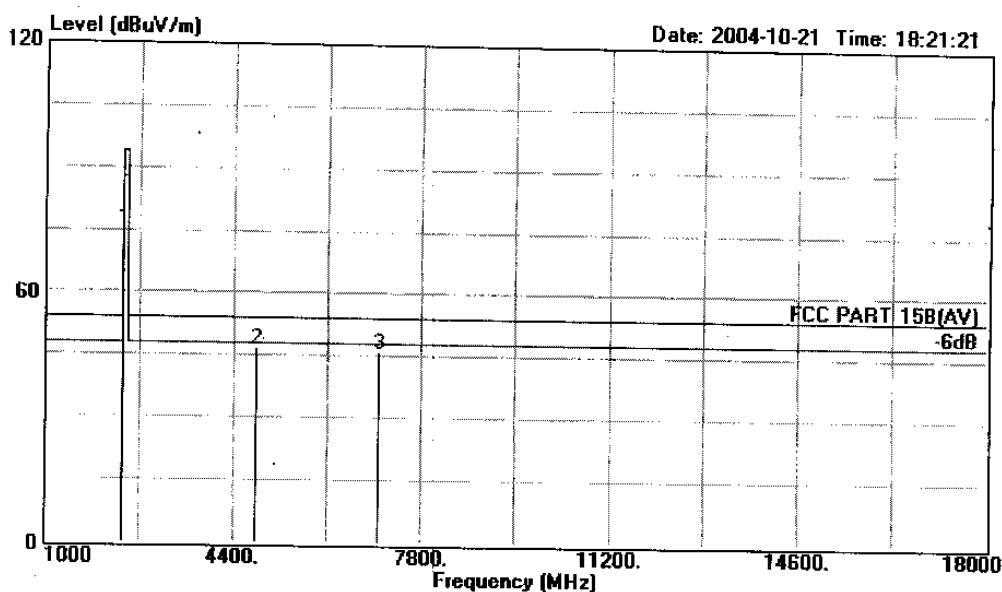


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Tel:+86-755-26639496 Fax:+86-755-26632877

Data#: 100 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(AV) 3m 3115 FACTOR VERTICAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 1
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

			Over	Limit	Read	Probe	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2402.590	75.38	-18.62	94.00	42.90	29.03	3.45	Average
2	4805.680	46.58	-7.42	54.00	7.90	33.91	4.77	Average
3	7028.350	45.98	-8.02	54.00	1.89	37.06	7.03	Average

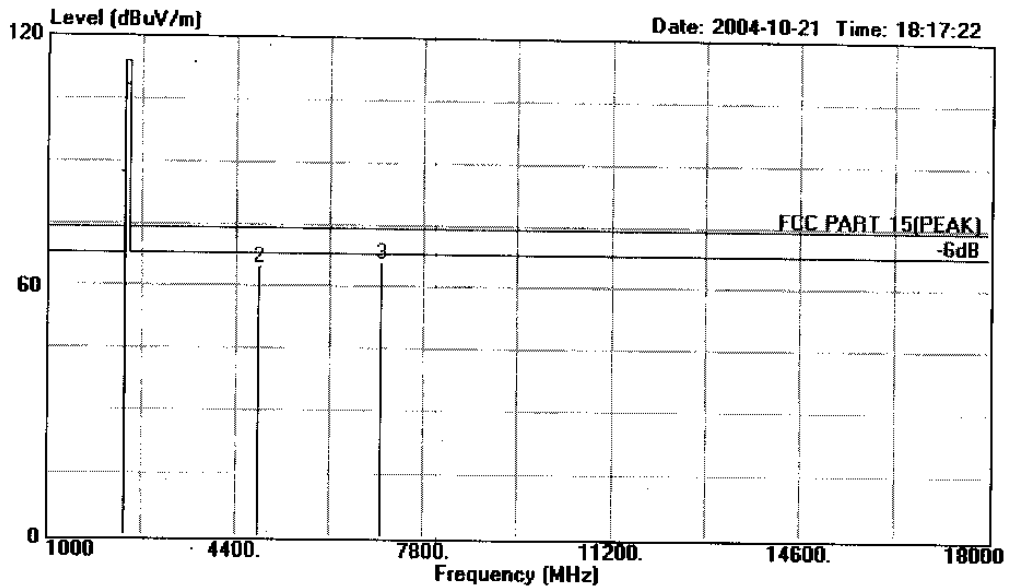


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Data#: 99 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15(PEAK) 3m 3115 FACTOR VERTICAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 1
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

			Over	Limit	Read	Probe	Cable	
Freq	Level	Limit	Line	Level	Factor	Loss	Remark	
MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB		
1	2402.590	83.38	-30.62	114.00	50.90	29.03	3.45	Peak
2	4805.680	64.58	-9.42	74.00	25.90	33.91	4.77	Peak
3	7028.346	65.98	-8.02	74.00	21.89	37.06	7.03	Peak

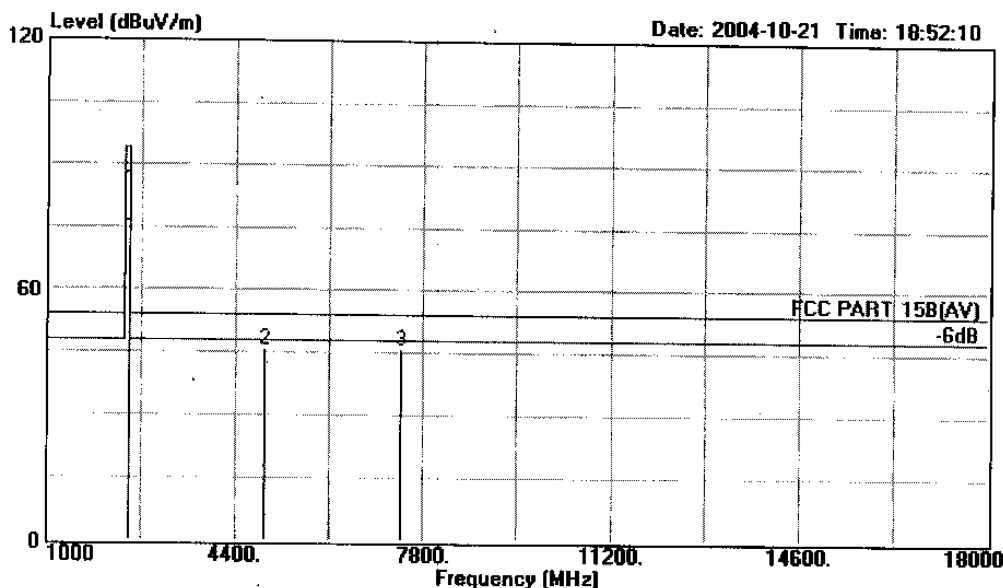


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Tel: +86-755-26639496 Fax: +86-755-26632877

Data#: 108 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(AV) 3m 3115 FACTOR HORIZONTAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 40
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

			Over	Limit	Read	Probe	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2465.600	72.24	-21.76	94.00	39.29	29.15	3.80	Average
2	4931.300	46.00	-8.00	54.00	6.90	34.20	4.90	Average
3	7396.950	46.10	-7.90	54.00	1.25	37.63	7.22	Average

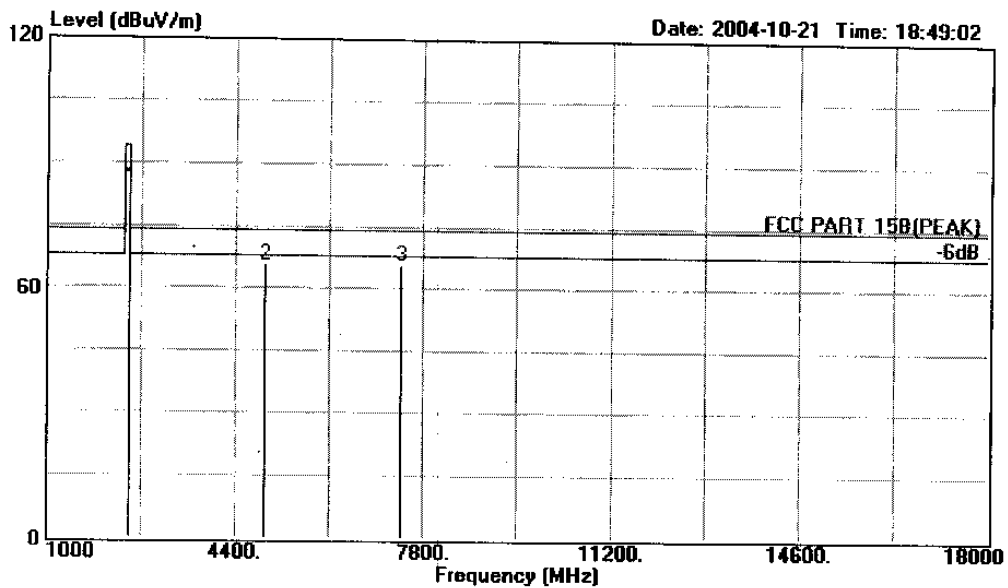


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Tel: +86-755-26639496 Fax: +86-755-26632877

Data#: 107 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR HORIZONTAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 40
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

			Over	Limit	Read	Probe	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2465.600	84.24	-9.76	94.00	51.29	29.15	3.80	Peak
2	4931.300	66.00	-8.00	74.00	26.90	34.20	4.90	Peak
3	7396.950	66.10	-7.90	74.00	21.25	37.63	7.22	Peak

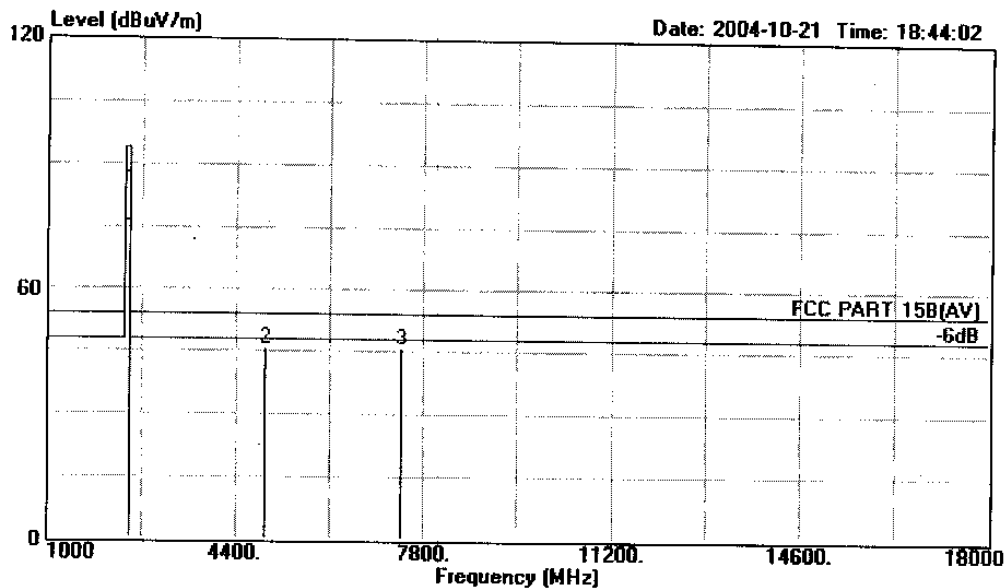


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Data#: 105 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(AV) 3m 3115 FACTOR VERTICAL
EUT : xbox 2.4G RF wireless controller
.: (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 40
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

			Over	Limit	Read	Probe	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2465.600	72.24	-21.76	94.00	39.29	29.15	3.80	Average
2	4931.300	46.00	-8.00	54.00	6.90	34.20	4.90	Average
3	7396.950	46.10	-7.90	54.00	1.25	37.63	7.22	Average

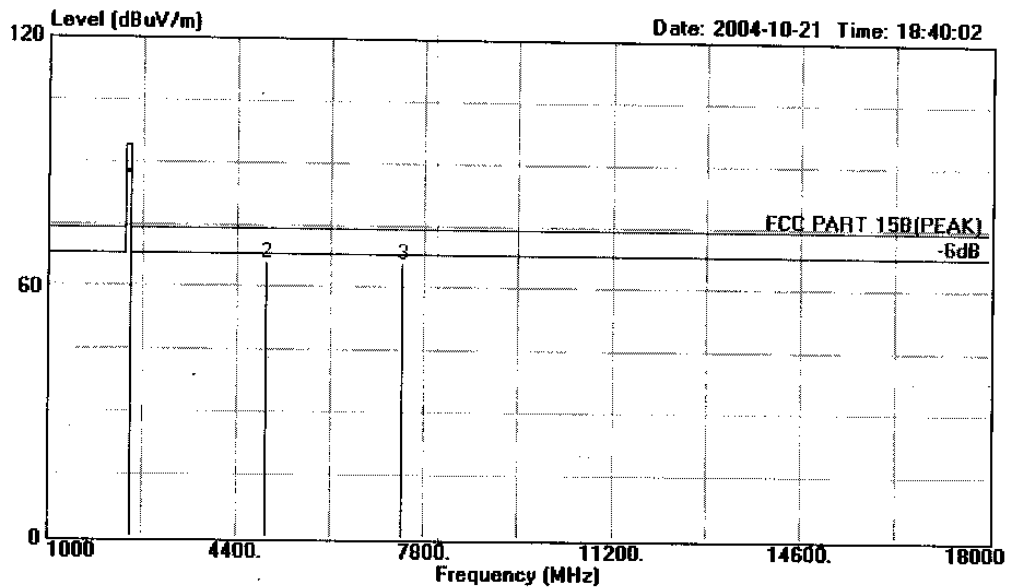


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Data#: 104 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR VERTICAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 40
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

			Over	Limit	Read	Probe	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2465.600	83.24	-10.76	94.00	50.29	29.15	3.80	Peak
2	4931.300	66.00	-8.00	74.00	26.90	34.20	4.90	Peak
3	7396.950	66.10	-7.90	74.00	21.25	37.63	7.22	Peak

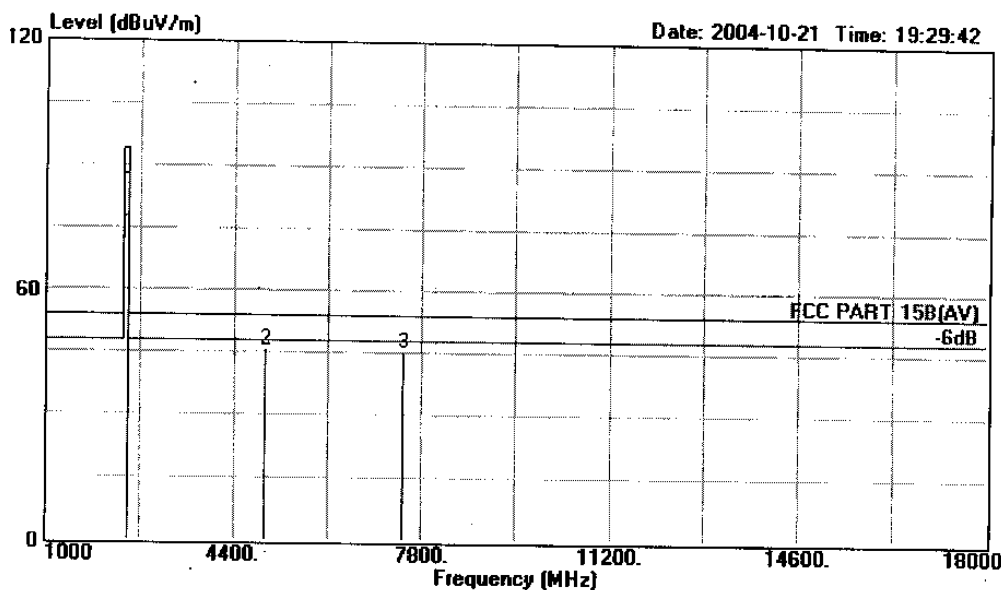


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Tel: +86-755-26639496 Fax: +86-755-26632877

Data#: 116 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(AV) 3m 3115 FACTOR HORIZONTAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 79
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

			Over	Limit	Read	Probe	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2480.740	73.60	-20.40	94.00	40.50	29.19	3.91	Average
2	4961.820	46.12	-7.88	54.00	6.90	34.29	4.93	Average
3	7442.730	45.76	-8.24	54.00	0.80	37.72	7.24	Average

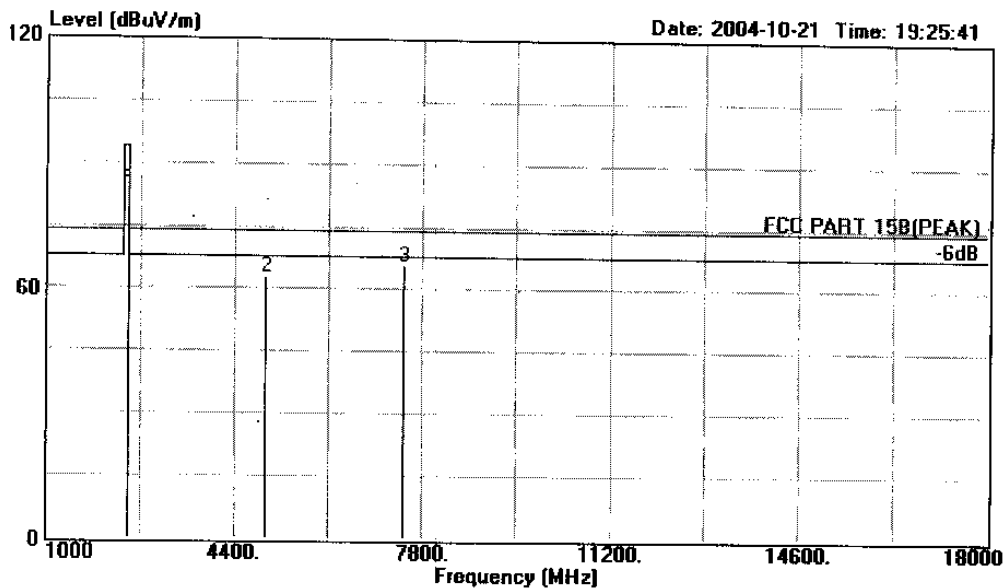


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Data#: 115 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR HORIZONTAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 79
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

			Over	Limit	Read	Probe	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2480.740	82.60	-11.40	94.00	49.50	29.19	3.91	Peak
2	4961.820	63.12	-10.88	74.00	23.90	34.29	4.93	Peak
3	7442.726	65.76	-8.24	74.00	20.80	37.72	7.24	Peak

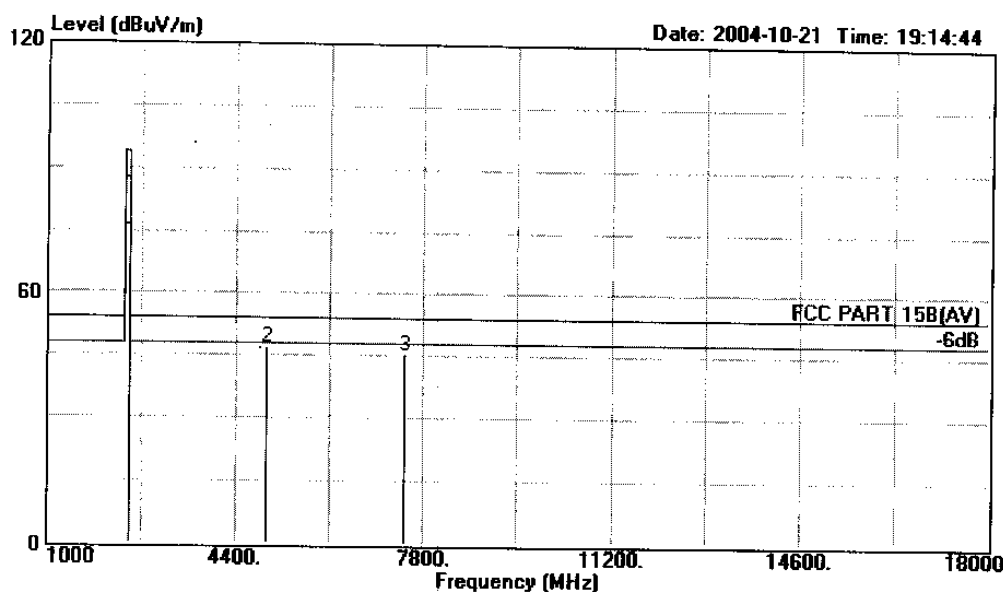


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Data#: 113 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(AV) 3m 3115 FACTOR VERTICAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 79
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

			Over	Limit	Read	Probe	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2480.740	72.60	-21.40	94.00	39.50	29.19	3.91	Average
2	4961.820	47.12	-6.88	54.00	7.90	34.29	4.93	Average
3	7442.730	45.76	-8.24	54.00	0.80	37.72	7.24	Average

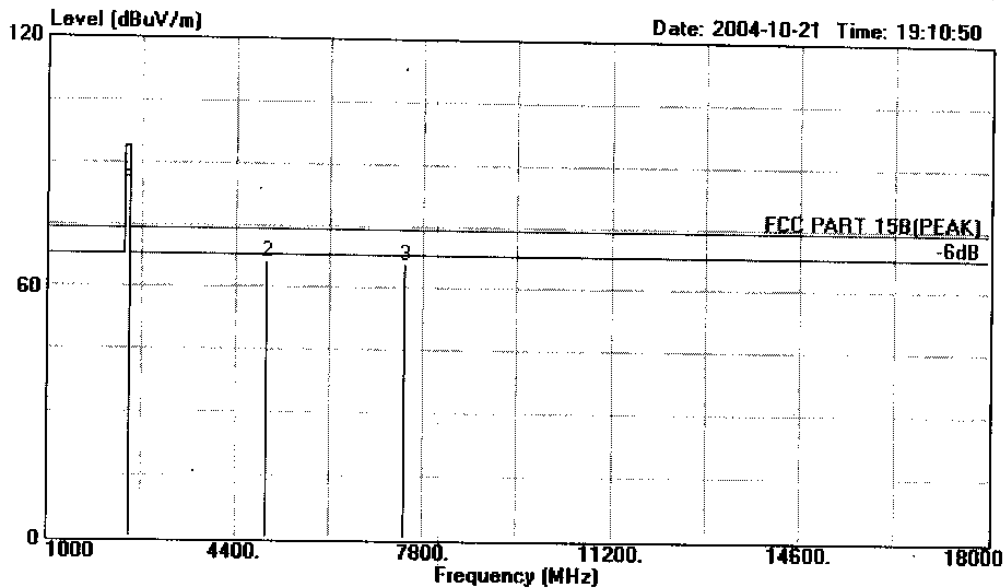


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Data#: 112. File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR VERTICAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 79
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

			Over	Limit	Read	Probe	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2480.740	82.60	-11.40	94.00	49.50	29.19	3.91	Peak
2	4961.820	66.12	-7.88	74.00	26.90	34.29	4.93	Peak
3	7442.726	65.76	-8.24	74.00	20.80	37.72	7.24	Peak

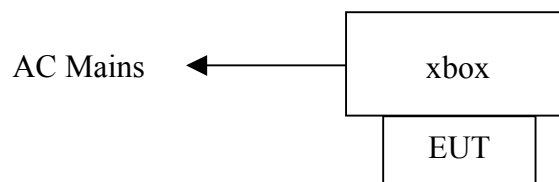
4. FREQUENCY HOPPING SYSTEM CHANNEL NUMBER MEASUREMENT

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: xbox 2.4G RF wireless controller (transmit + receiver))

4.3. Specification Limits (§15.249)

For frequency hopping systems operating in the 2400-2483.5MHz band employing at least 75 hopping channels.

4.4. Operating Condition of EUT

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

4.4.2. Let the EUT work in test mode and test it.

4.5. Test Procedure

EUT and its simulators are placed on a turn table, the EUT and let it work normally, we use a keyboard test soft ware, let EUT working in test mode, then test it.

The bandwidth of the fundamental frequency was measured with the spectrum analyzer using 100kHz RBW and 100kHz VBW, set sweep time : 50ms.

4.6. Test Results

PASSED.

The testing data was attached in the next pages.

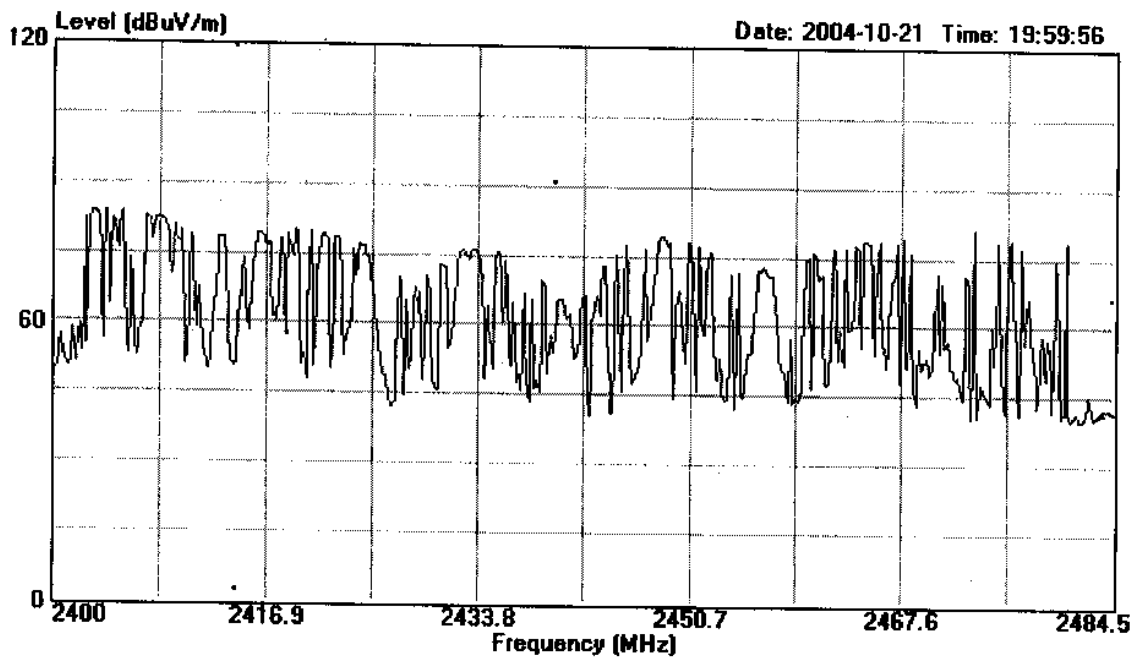


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Data#: 121 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : 3m 3115 FACTOR VERTICAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Numbers of Channels:79
Test Engineer : Seco
Memo : Temp:24°C Humi:54%

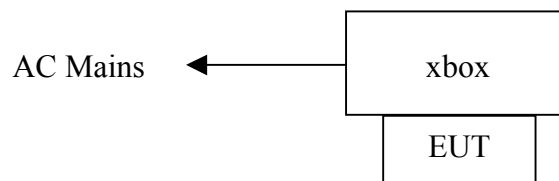
5. BAND EDGES MEASUREMENT

5.1. 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

5.2. Block Diagram of Test Setup



(EUT: xbox 2.4G RF wireless controller (transmit + receiver))

5.3. Specification Limits (§15.247(c))

The highest level should be at least 20 dB below that in the 100kHz bandwidth.

5.4. Operating Condition of EUT

5.4.1. Setup the EUT as shown in Section 5.2..

5.4.2. Let the EUT work in test mode (CH 1/CH 79) and test it.

5.5.Test Procedure

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 software, let EUT working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Horn antenna is used as receiving antenna.

Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100kHz bandwidth from band edge.

5.6.Test Results

PASSED.

The testing data was attached in the next pages.

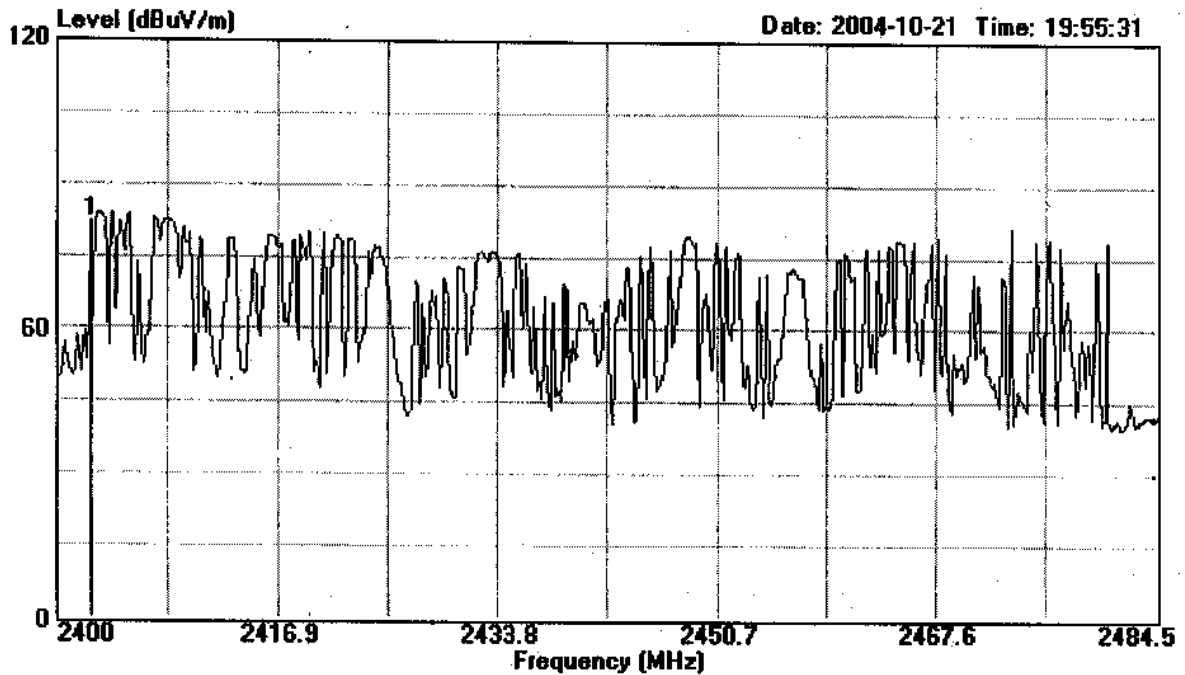


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Data#: 120 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : 3m 3115 FACTOR VERTICAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Band Edge Plots:Channel 1
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

			Over	Limit	Read	Probe	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	
1	2402.590	82.20	-----	-----	82.89	29.03	3.45	Peak

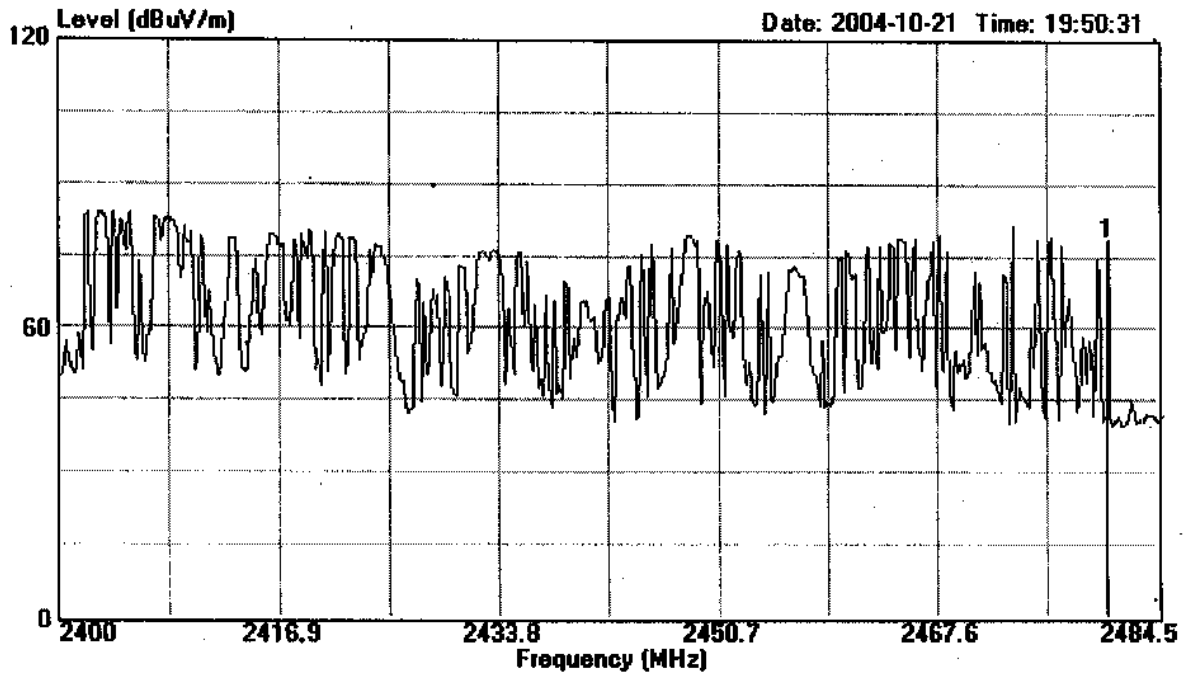


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Data#: 119 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : 3m 3115 FACTOR VERTICAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Band Edge Plots: Channel 79
Test Engineer : Seco
Memo : Temp: 24°C Humi: 54%

Freq	Level	Over Limit		Read		Probe		Cable	Loss	Remark
		Limit	Line	Level	Factor	Level	Factor			
MHz	dBuV/m	dB	dBuV/m	dBuV	dB	dB	dB	dB		
1 2480.740	78.51	-----	-----	45.41	29.19	3.91				Peak

6. DEVIATION TO TEST SPECIFICATIONS

(None.)

APPENDIX I



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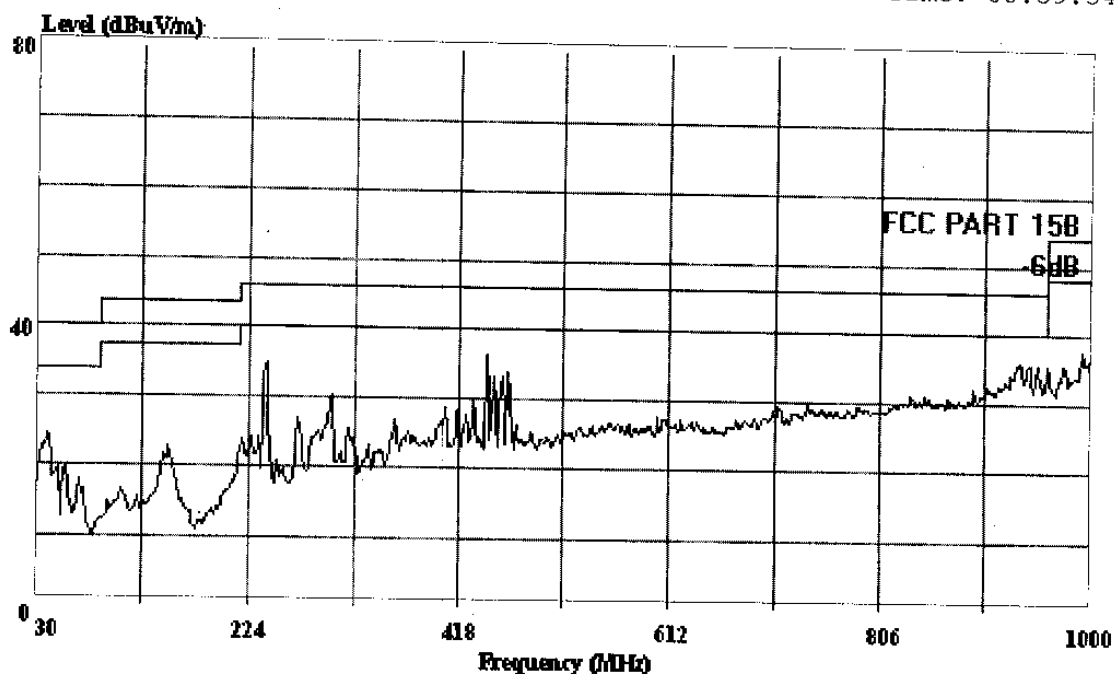
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 37 File#: E-core.emi

Date: 2004-10-22 Time: 08:39:34



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

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR HORIZONTAL

EUT : xbox 2.4G RF wireless controller

: (transmit+receiver)

M/N : HP8131A (receiver)

Power : DC6V With xbox AC Input 120V/60Hz

Test Mode: Channel 1

Engineer : Seco

Memo : Temp:24'C Humi:54%



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

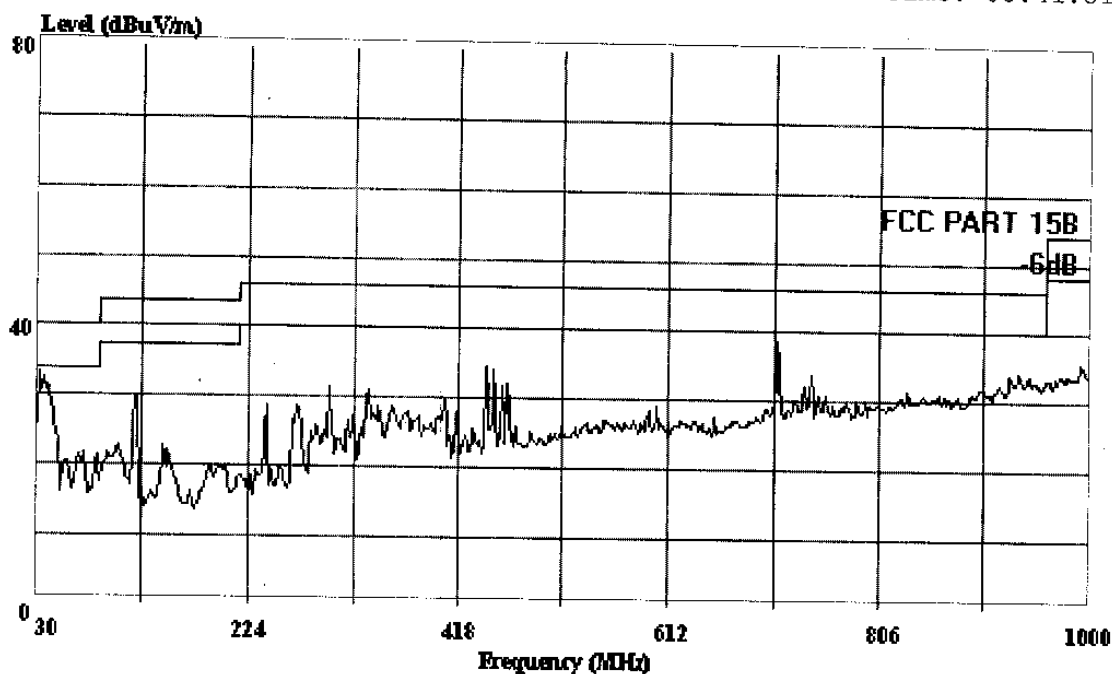
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 39 File#: E-core.emi

Date: 2004-10-22 Time: 08:41:51



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

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR VERTICAL

EUT : xbox 2.4G RF wireless controller

: (transmit+receiver)

M/N : HP8131A (receiver)

Power : DC6V With xbox AC Input 120V/60Hz

Test Mode: Channel 1

Engineer : Seco

Memo : Temp:24'C Humi:54%



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

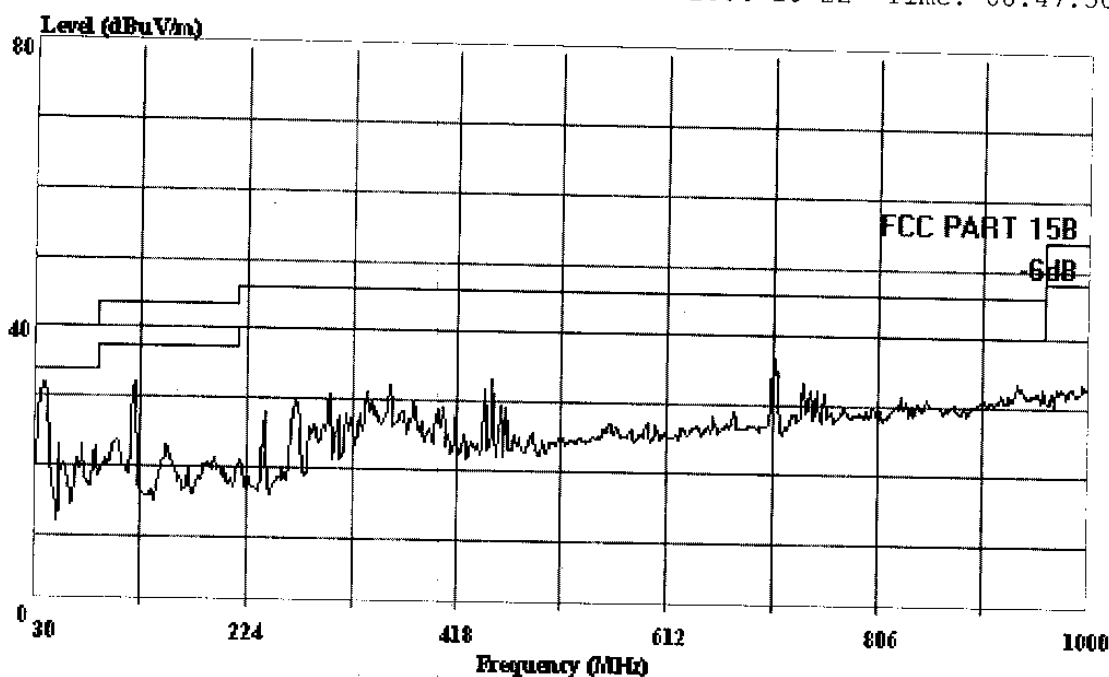
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 43 File#: E-core.emi

Date: 2004-10-22 Time: 08:47:50



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

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR HORIZONTAL

EUT : xbox 2.4G RF wireless controller

: (transmit+receiver)

M/N : HP8131A (receiver)

Power : DC6V With xbox AC Input 120V/60Hz

Test Mode: Channel 40

Engineer : Seco

Memo : Temp:24'C Humi:54%



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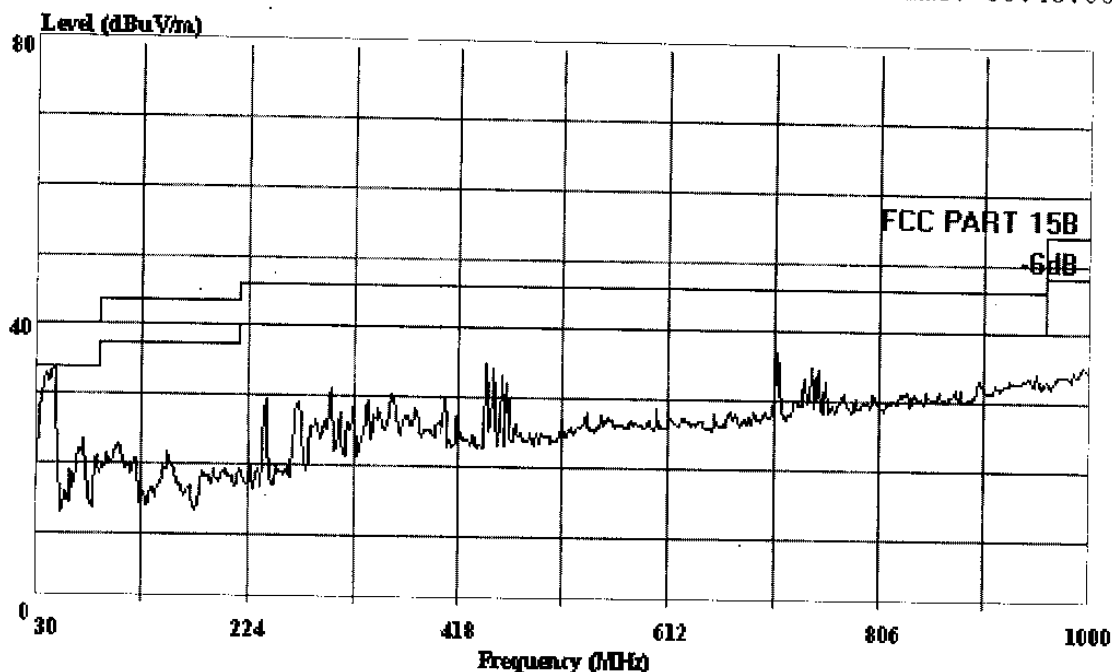
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 41 File#: E-core.emi

Date: 2004-10-22 Time: 08:45:00



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

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR VERTICAL

EUT : xbox 2.4G RF wireless controller

: (transmit+receiver)

M/N : HP8131A (receiver)

Power : DC6V With xbox AC Input 120V/60Hz

Test Mode: Channel 40

Engineer : Seco

Memo : Temp:24'C Humi:54%



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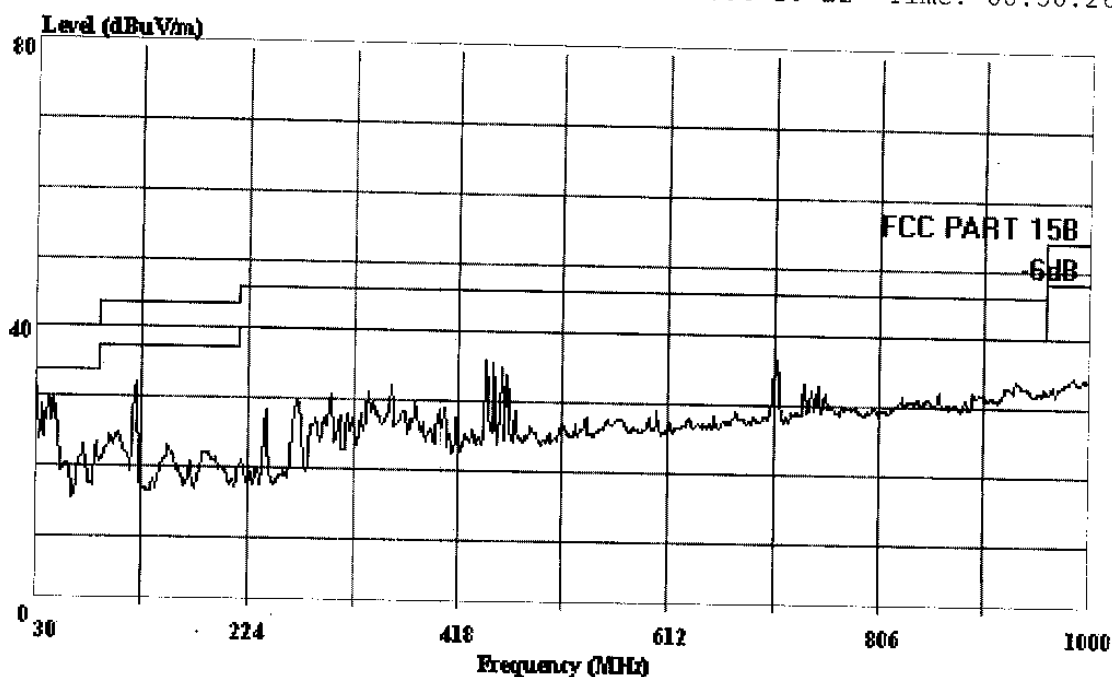
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 45 File#: E-core.emi

Date: 2004-10-22 Time: 08:50:26



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

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR HORIZONTAL

EUT : xbox 2.4G RF wireless controller

: (transmit+receiver)

M/N : HP8131A (receiver)

Power : DC6V With xbox AC Input 120V/60Hz

Test Mode: Channel 79

Engineer : Seco

Memo : Temp:24'C Humi:54%



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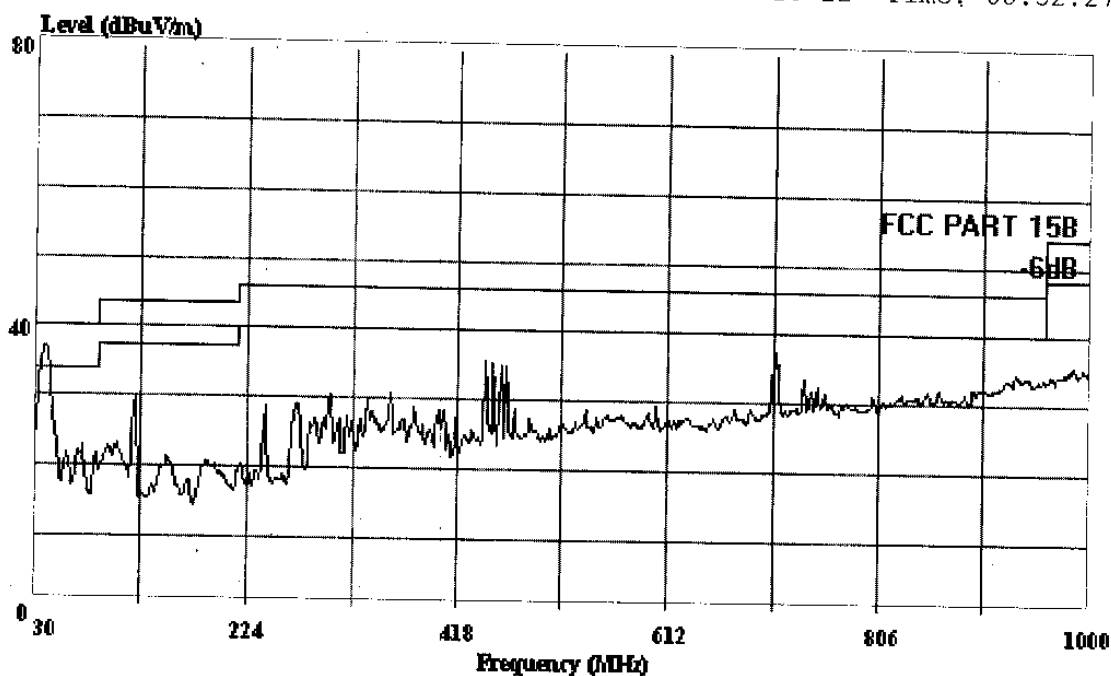
Shenzhen Science & Ind. Park

Tel: 0755-26639495~7

Fax: 0755-26632877

Data#: 47 File#: E-core.emi

Date: 2004-10-22 Time: 08:52:27



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

Trace:

Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR VERTICAL

EUT : xbox 2.4G RF wireless controller

: (transmit+receiver)

M/N : HP8131A (receiver)

Power : DC6V With xbox AC Input 120V/60Hz

Test Mode: Channel 79

Engineer : Seco

Memo : Temp:24'C Humi:54%

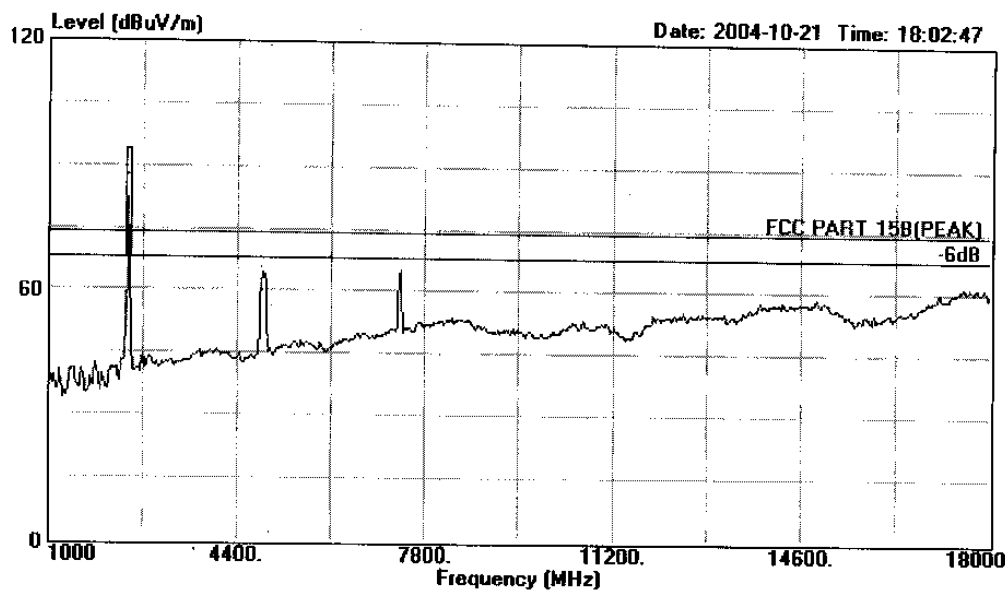


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Data#: 95 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR HORIZONTAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 1
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

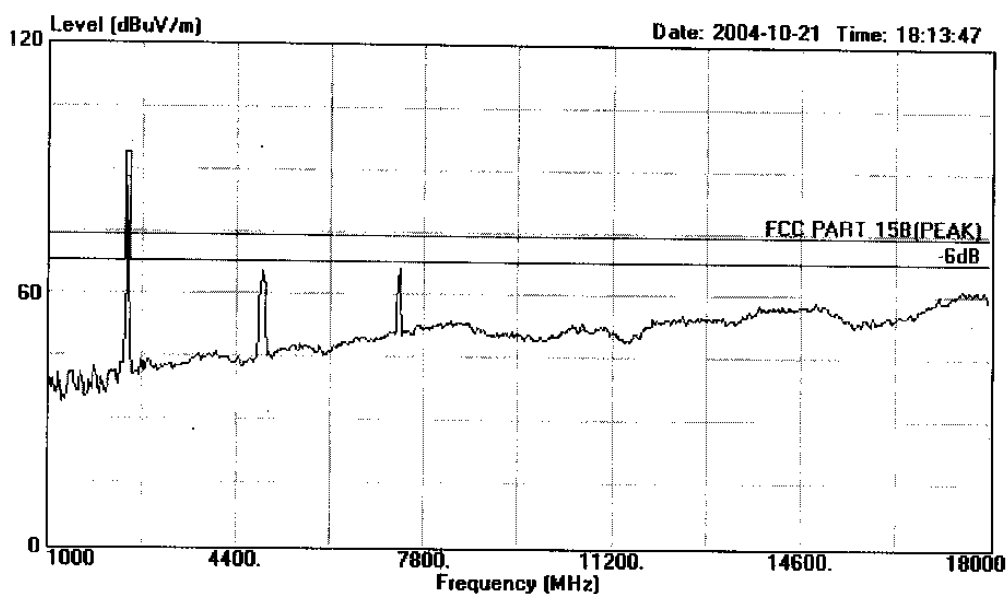


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Data#: 98 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR VERTICAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 1
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

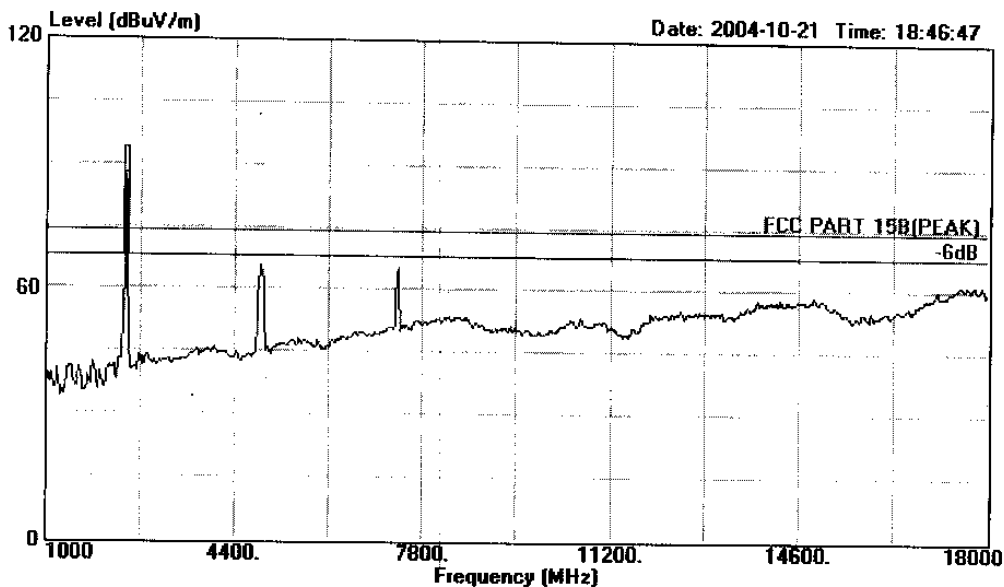


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Data#: 106 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR HORIZONTAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 40
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

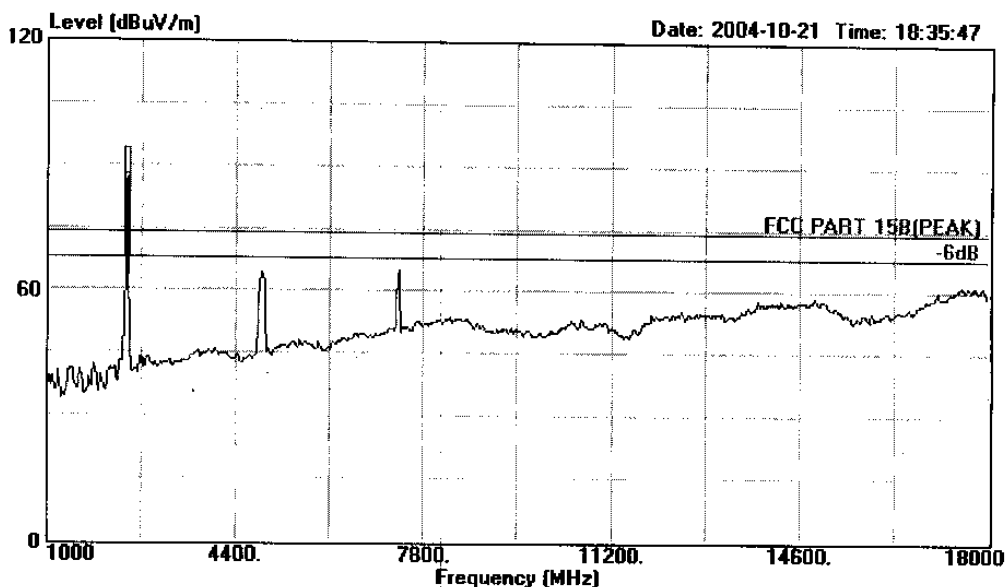


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Data#: 103 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR VERTICAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 40
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

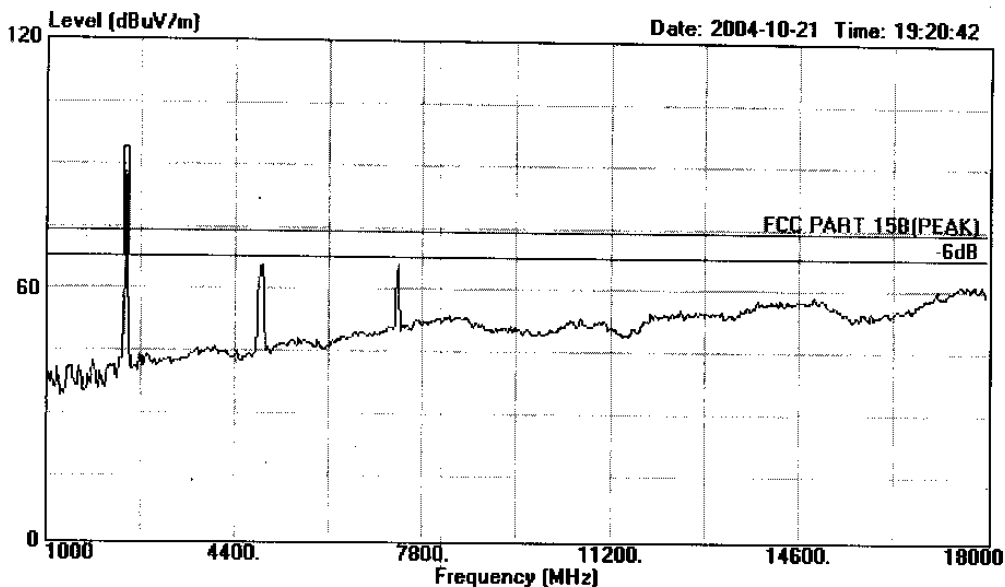


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Data#: 114 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR HORIZONTAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 79
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

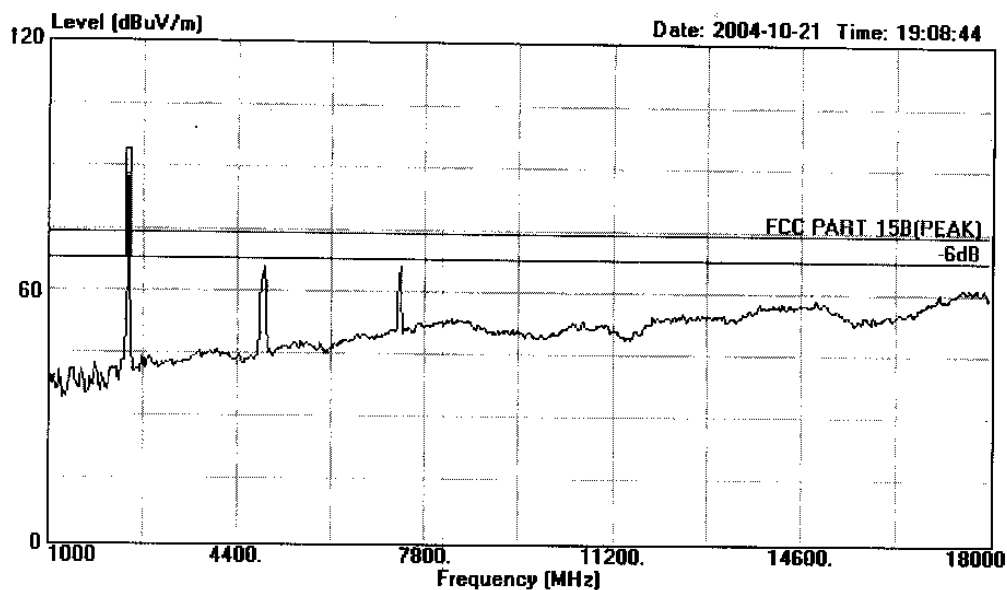


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Data#: 111 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15B(PEAK) 3m 3115 FACTOR VERTICAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 79
Test Engineer : SeCo
Memo : Temp:24'C Humi:54%

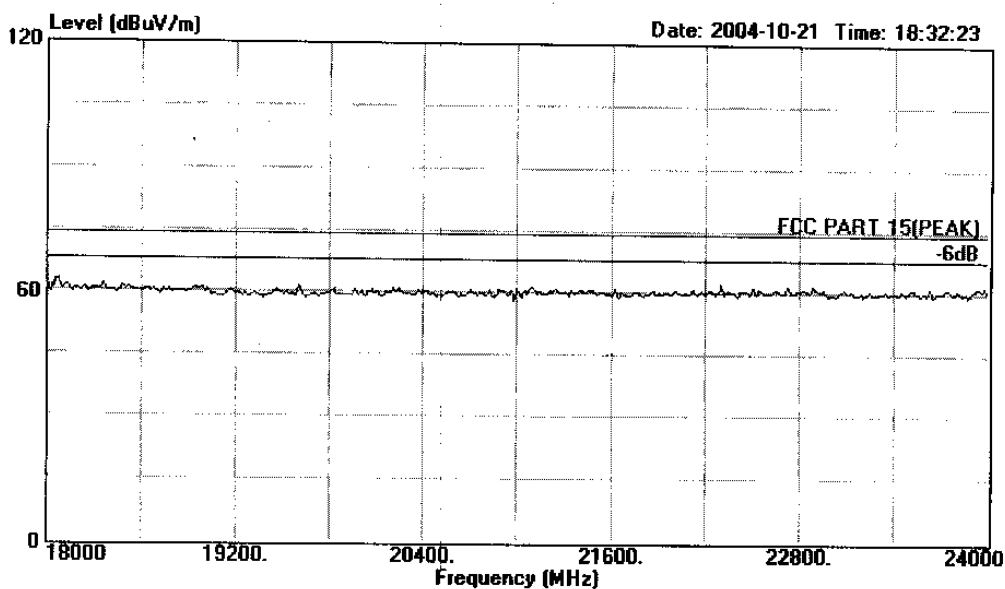


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Data#: 102 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15(PEAK) 3m 3115FACTOR HORIZONTAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 1
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

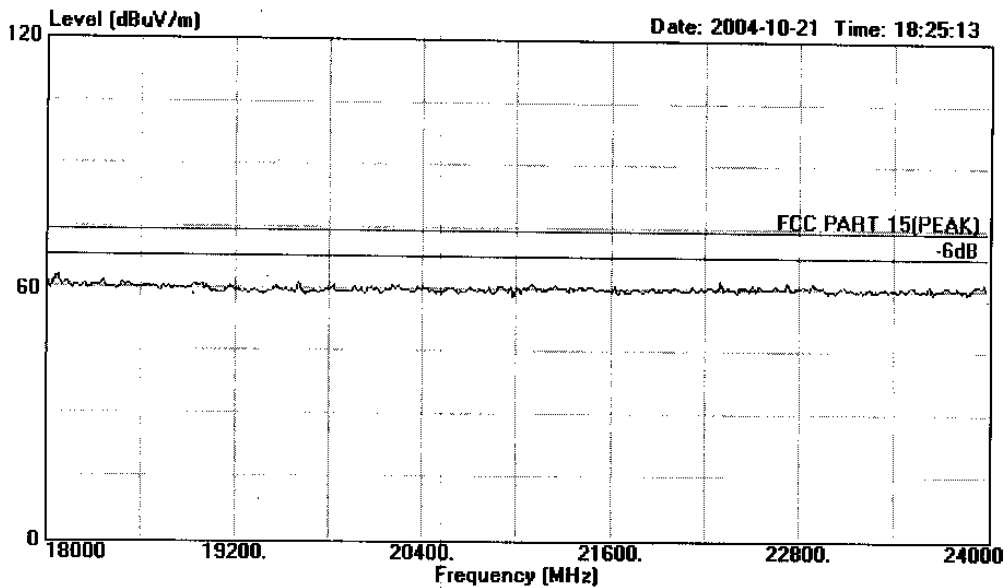


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Data#: 101 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15(PEAK) 3m 311SFACOR VERTICAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 1
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

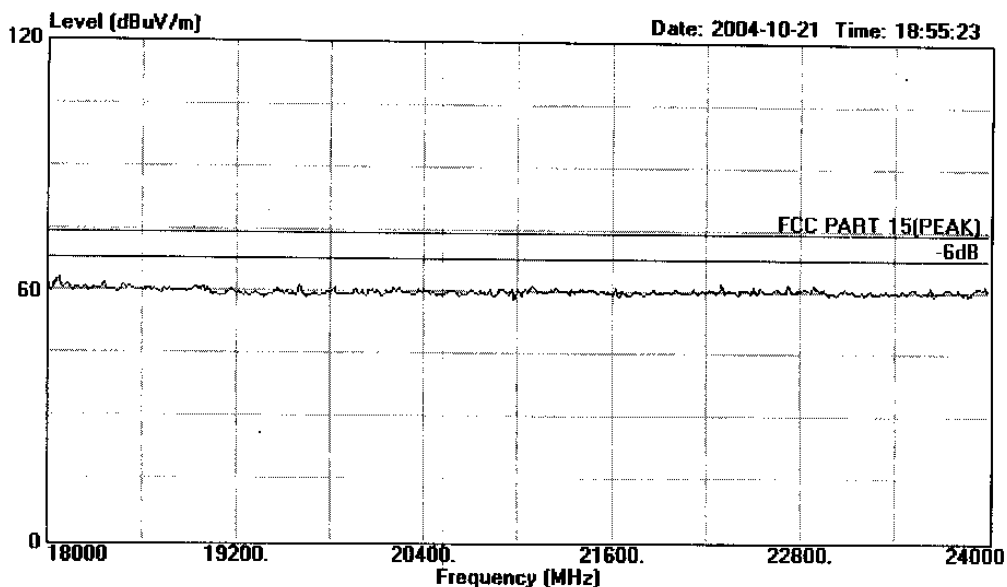


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Data#: 109 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15(PEAK) 3m 3115FACTOR HORIZONTAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 40
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

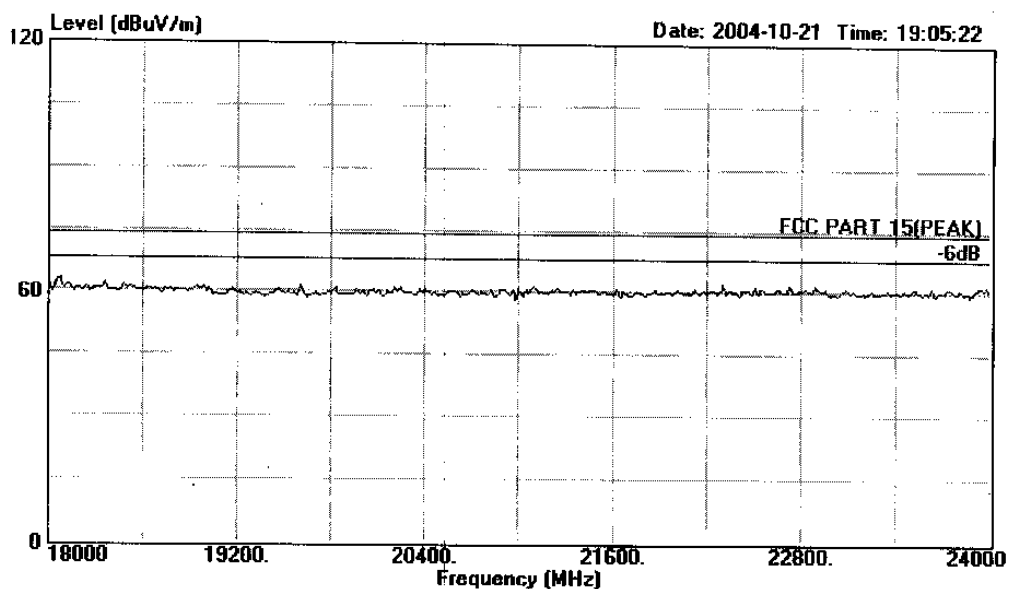


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Data#: 110 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15(PEAK) 3m 3115FACTOR VERTICAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 40
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

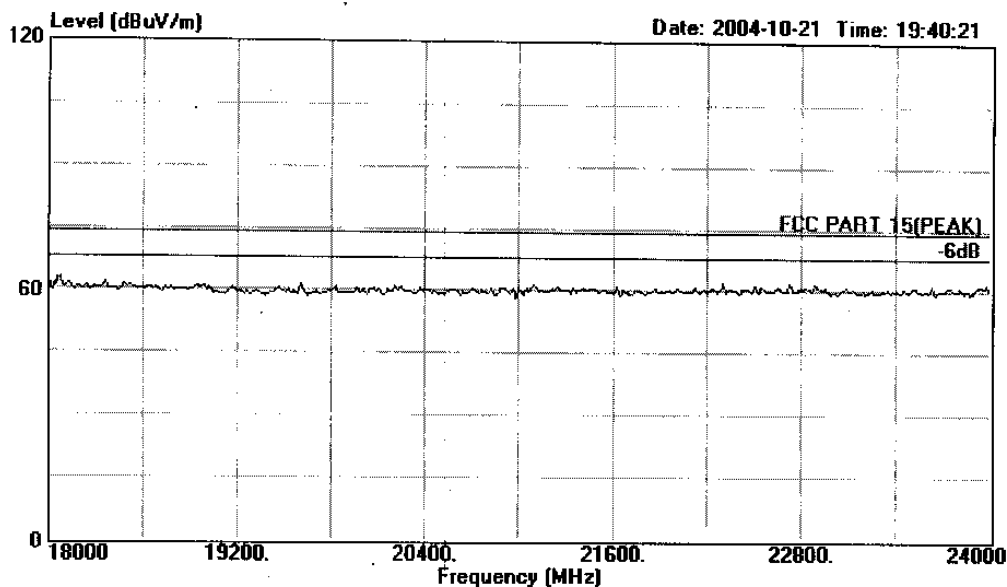


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Data#: 118 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15(PEAK) 3m 3115FACTOR HORIZONTAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 79
Test Engineer : Seco
Memo : Temp:24'C Humi:54%

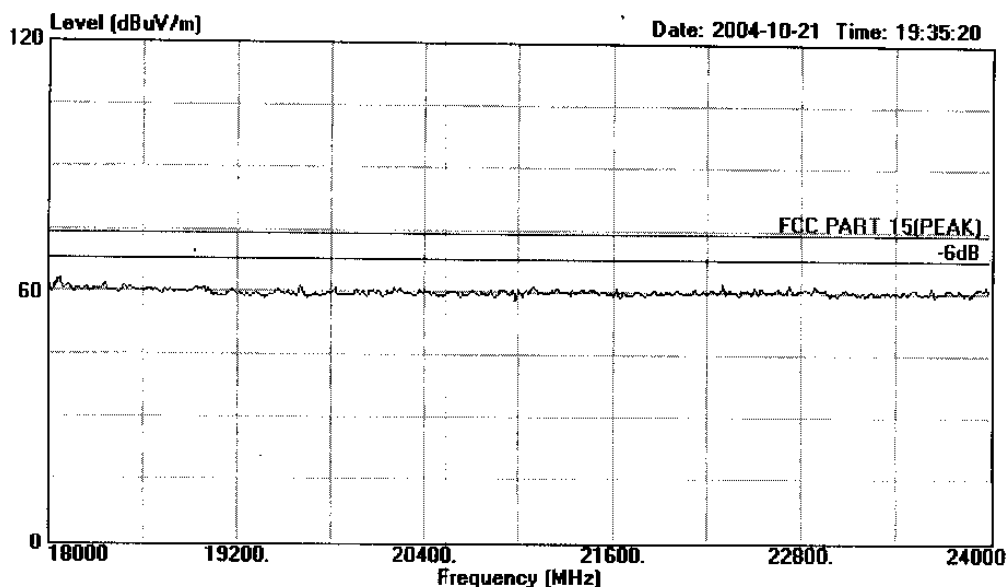


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Data#: 117 File#: C:\EMI TEST DATA\E\E-core.emi



Site : 1# Chamber
Condition : FCC PART 15(PEAK) 3m 3115FACTOR VERTICAL
EUT : xbox 2.4G RF wireless controller
 : (transmit+receiver)
M/N : HP8131A (receiver)
Power : DC6V With xbox AC Input 120V/60Hz
Test Mode : Channel 79
Test Engineer : Seco
Memo : Temp:24'C Humi:54%