APPLICATION FOR CERTIFICATION
On Behalf of

Vision Electronics Co., Ltd.

Gamecube 2.4G RF Wireless Controller

Model Number: 2176/2178

Prepared for : Vision Electronics Co., Ltd.
11F-6, No.400 Huan Pei Rd., Chung Li City,
Tai Wan, R.O.C.

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
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Report Number : ACS-F03123
Date of Test : Apr. 28, 2003
Date of Report : Jun. 09, 2003

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TEST REPORT DECLARATION

Applicant : Vision Electronics Co., Ltd.

Manufacturer : Vision Electronics Co., Ltd.

EUT Description : Gamecube 2.4G RF Wireless Controller

(A) MODEL NO. : 2176/2178
(B) SERIAL NO. : F2003060901
(C) POWER SUPPLY : DC 6V

Test Procedure Used:
FCC Rules and Regulations Part 15 Subpart C Aug 2002.

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 : Apr.28, 2003

Prepared by : Jane Dai / Assistant

Reviewer : Lake Wang / Supervisor

Approved & Authorized Signer : For and on behalf of AUDIX TECHNOLOGY (SHENZHEN) CO.,LTD. Alex Deng / Assistant Manager (Authorized Signature(s))

Name of the Representative of the Responsible Party : _____

Signature : _____

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

Description	:	Gamecube 2.4G RF Wireless Controller (Note: The controller and EUT are separate, and the controllers are not part of this application for certification.)
Modulation Technique	:	DSSS
Range With -5dBi antenna	:	>10m (~33ft) indoor
Model Number	:	2176/2178 (Between the two model 2176 & 2178 the electric circuit are same just the layout and appearance are different.)
Applicant	:	Vision Electronics Co., Ltd. 11F-6, No.400 Huan Pei Rd., Chung Li City, Tai Wan, R.O.C.
Manufacturer	:	Vision Electronics Co., Ltd. 11F-6, No.400 Huan Pei Rd., Chung Li City, Tai Wan, R.O.C.
Data Cable	:	Shielded, Detachable 1.8m
Power Cord	:	Unshielded, Detachable 1.8m
Date of Test	:	Apr. 28, 2003

1.2.Tested Supporting System Details

Gamecube Host	:	Manufacturer: NINTENAO M/N: DOL-001 (USA) DC 12V
Host Power Supply	:	Manufacturer: NINTENAO M/N: DOL-002 (EUR) Input: 230V/50Hz, Output: 12Vac/3.25A
TV	:	Manufacturer: TCL M/N: 1419A
Controller	:	Manufacturer: Vision M/N: 2103/G5090

1.3.Test Facility

Site Description

3m Anechoic Chamber	:	Certificated by FCC, USA Aug. 24, 2000
EMC Lab.		Certificated by DATech, German Feb. 02, 1999
		Certificated by NVLAP, USA NVLAP Code: 200372-0 Mar. 31, 2003
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.Test Uncertainty

Conducted Emission Uncertainty	=	±2.66dB
Radiated Emission Uncertainty	=	±4.26dB

2. POWER LINE CONDUCTED EMISSION TEST

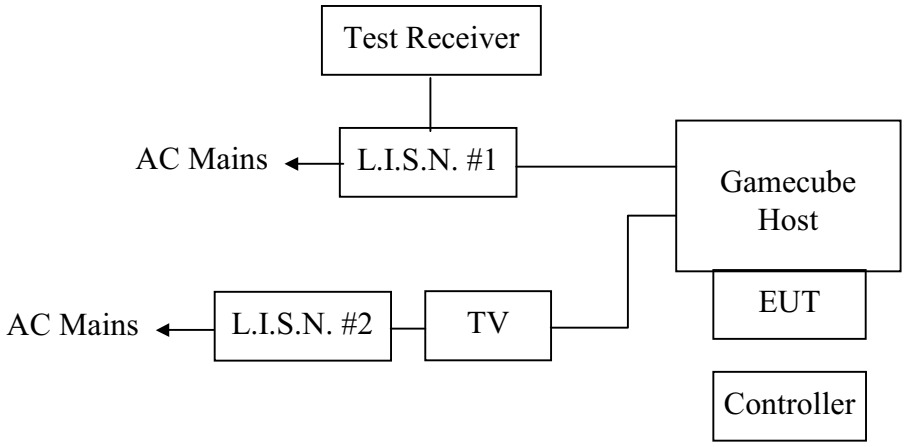
2.1.Test Equipment

The following test equipments are used during the power line conducted emission test:

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS20	836600/006	Jun. 02, 02	1 Year
2.	L.I.S.N. #1	Kyoritsu	KNW-407	8-541-4	Jun. 02, 02	1 Year
3.	L.I.S.N. #2	R&S	ESH2-Z5	834066/011	Jun. 02, 02	1 Year
4.	Terminator	EMCO	50Ω	No. 1	Jun. 02, 02	1 Year
5.	Terminator	EMCO	50Ω	No. 2	Jun. 02, 02	1 Year
6.	RF Cable	FUJIKURA	RG-55/U	LISN Cable	Feb. 22, 03	1/2 Year
7.	Coaxial Switch	Anritsu	MP59B	M74389	Nov. 30, 02	1/2 Year
8	PC	N/A	586ATXS	N/A	N/A	N/A
9	Printer	HP	Laserjet2100	SGGJ092351	N/A	N/A

2.2.Block Diagram of Test Setup

2.2.1.Block diagram of connection between the EUT and simulators



(EUT: Gamecube 2.4G RF Wireless Controller)

2.3.Power Line Conducted Emission Test Limits

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

Notes: 1. * Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

2.4.Configuration of EUT on Test

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

2.4.1.Gamecube 2.4G RF Wireless Controller (EUT)

Model Number	:	2176/2178
Serial Number	:	F2003060901
Manufacturer	:	Vision Electronics Co., Ltd.

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

2.5.Operating Condition of EUT

2.5.1.Setup the EUT and simulator as shown as Section 2.2.
2.5.2.Turn on the power of all equipment.
2.5.3.Let the EUT work in test mode (Running) and test it.

2.6.Test Procedure

The gamecube host is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm coupling impedance for the gamecube host. Please refer the block diagram of the test setup and photographs. 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. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC ANSI C63.4-1992 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESHS20) is set at 10KHz.

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

The test result are reported on Section 2.7., all the scanning waveforms for Conducted Emission Test are attached in Appendix I.

2.7.Power Line Conducted Emission Test Results

PASS.

The frequency range from 150KHz to 30 MHz is investigated.
All emissions not reported below are too low against the prescribed limits.

Date of Test	:	Apr. 28, 2003	Temperature	:	24.6℃
EUT	:	Gamecube 2.4G RF Wireless Controller	Humidity	:	54%
Model No.	:	Controller: 2103, Receiver: 2176	Test Mode	:	Running
Test Engineer	:	Sean Xing			

Frequency (MHz)	Reading (dBμV)				Limit (dBμV)	
	VA		VB			
	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.173	51.73	48.05	*	*	64.84	54.84
0.174	*	*	50.69	47.26	64.79	54.79
0.287	42.04	40.21	*	*	60.62	50.62
0.288	*	*	41.67	39.06	60.57	50.57
0.403	35.39	34.73	*	*	57.80	47.80
1.790	*	*	39.75	35.98	56.00	46.00
1.846	40.62	36.37	*	*	56.00	46.00
1.903	40.67	37.94	*	*	56.00	46.00
1.905	*	*	37.77	33.76	56.00	46.00
2.771	37.10	30.15	34.49	30.68	56.00	46.00
4.156	*	*	37.48	35.08	56.00	46.00

"*" As the QP value is too low against AV limit, So AV Value had been omitted.

Reviewer : Cabe Wang

Date of Test	:	Apr. 28, 2003	Temperature	:	24.6℃
EUT	:	Gamecube 2.4G RF Wireless Controller	Humidity	:	54%
Model No.	:	Controller: G5090, Receiver: 2178	Test Mode	:	Running
Test Engineer	:	Sean Xing			

Frequency (MHz)	Reading (dBμV)				Limit (dBμV)	
	VA		VB			
	Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
0.173	51.73	48.05	*	*	64.84	54.84
0.174	*	*	50.69	47.26	64.79	54.79
0.287	42.04	40.21	*	*	60.62	50.62
0.288	*	*	41.67	39.06	60.57	50.57
0.403	35.39	34.73	*	*	57.80	47.80
1.790	*	*	39.75	35.98	56.00	46.00
1.846	40.62	36.37	*	*	56.00	46.00
1.903	40.67	37.94	*	*	56.00	46.00
1.905	*	*	37.77	33.76	56.00	46.00
2.771	37.10	30.15	34.49	30.68	56.00	46.00
4.156	*	*	37.48	35.08	56.00	46.00

"*" As the QP value is too low against AV limit, So AV Value had been omitted.

Reviewer : Cabe Wang

3. RADIATED EMISSION TEST

3.1.Test Equipment

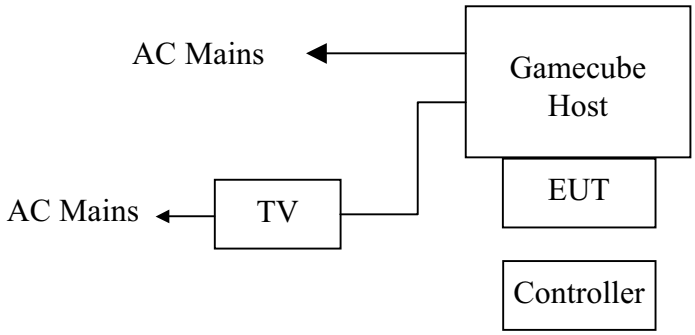
The following test equipments are used during the radiated emission test:

3.1.1.For Anechoic Chamber

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Spectrum	HP	85422E	3625A00181	Jun. 02, 02	1 Year
2.	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	Jun. 02, 02	1 Year
3.	Amplifier	HP	8447D	2944A07794	Mar.19, 03	1/2 Year
4.	Bilog Antenna	Schaffner	CBL6111C	2598	Jan. 14, 03	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	Feb. 03, 03	1/2 Year
8.	RF Cable	MIYAZAKI	5D-2W	3# Chamber No.2	Feb. 03, 03	1/2 Year
9.	RF Cable	FUJIKURA	RG-55/U	3# Chamber No.3	Feb. 03, 03	1/2 Year
10.	RF Cable	FUJIKURA	RG-55/U	3# Chamber No.4	Feb. 03, 03	1/2 Year
11.	Coaxial Switch	Anritsu	MP59B	M73989	Nov. 30, 02	1/2 Year
12.	Spectrum	Agilent	E4407B	MY41440292	Mar.28, 03	1 Year
13.	Amp	HP	8449B	3008A00863	Jun.02, 02	1 Year
14.	Antenna	EMCO	3115	9607-4877	Dec. 04, 02	1.5 Year

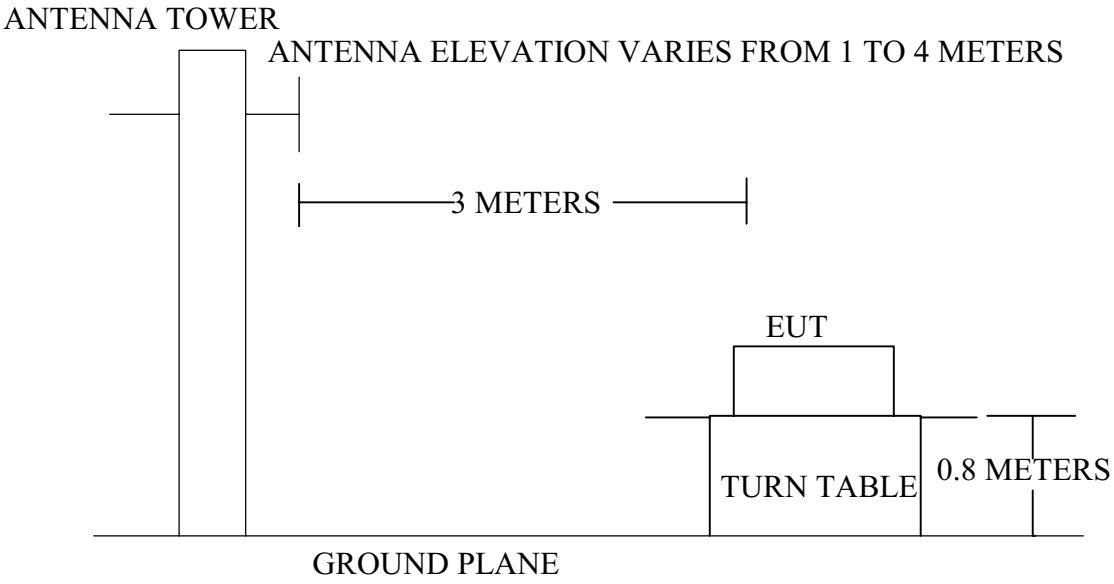
3.2.Block Diagram of Test Setup

3.2.1.Block diagram of connection between the EUT and simulators



(EUT: Gamecube 2.4G RF Wireless Controller)

3.2.2.In Anechoic Chamber



3.3.Radiated Emission Limit

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/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	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

Remark： (1) Emission level (dB)μV = 20 log Emission level μV/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.Gamecube 2.4G RF Wireless Controller (EUT)

Model Number : 2176/2178
Serial Number : F2003060901
Manufacturer : Vision Electronics 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 (Running) 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 (Running) is tested in Anechoic Chamber, and all the scanning waveforms are attached in Appendix II.

3.7.Radiated Emission Test Result

PASS.

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

Date of Test	:	Apr. 28, 2003	Temperature	:	23℃
EUT	:	Gamecube 2.4G RF Wireless Controller	Humidity	:	58%
Model No.	:	Controller: 2103, Receiver: 2176	Test Mode	:	Running
Test Engineer:		Sean Xing			

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dB	Limits dBμV/m
135.430	11.50	2.35	19.40	33.26	-10.24	43.50
159.980	11.16	2.64	19.69	33.49	-10.01	43.50
168.200	10.26	2.70	20.55	33.50	-10.00	43.50
324.230	14.20	4.04	18.53	36.77	-9.23	46.00
499.360	**17.76**	**5.58**	**15.40**	**38.74**	**-7.26**	**46.00**
810.970	21.47	7.02	9.56	38.05	-7.95	46.00

Remark: 1. All readings are Quasi-Peak values.
2. Emission Level = Antenna Factor + Cable Loss + Meter Reading

Reviewer : Cabe Wang

Date of Test	:	Apr. 28, 2003	Temperature	:	23℃
EUT	:	Gamecube 2.4G RF Wireless Controller	Humidity	:	58%
Model No.	:	Controller: 2103, Receiver: 2176	Test Mode	:	Running
Test Engineer:		Sean Xing			

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dB	Limits dBμV/m
51.330	6.97	1.38	22.00	30.35	-9.65	40.00
103.450	10.85	2.07	15.85	28.78	-14.73	43.50
210.440	9.07	3.07	21.66	33.80	-9.70	43.50
484.840	18.29	5.58	14.73	38.60	-7.40	46.00
500.110	18.90	5.58	13.48	37.95	-8.05	46.00
807.450	**21.51**	**7.02**	**10.56**	**39.09**	**-6.91**	**46.00**

Remark: 1. All readings are Quasi-Peak values.
2. Emission Level = Antenna Factor + Cable Loss + Meter Reading

Reviewer : Cabe Wang

Date of Test	:	Apr. 28, 2003	Temperature	:	23℃
EUT	:	Gamecube 2.4G RF Wireless Controller	Humidity	:	58%
Model No.	:	Controller: G5090, Receiver: 2178	Test Mode	:	Running
Test Engineer:		Sean Xing			

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dB	Limits dBμV/m
135.730	11.50	2.35	19.42	33.27	-10.23	43.50
159.980	11.16	2.64	19.69	33.49	-10.01	43.50
169.680	10.26	2.70	20.81	33.77	-9.73	43.50
324.880	14.20	4.04	18.51	36.75	-9.25	46.00
499.480	**17.76**	**5.58**	**15.42**	**38.76**	**-7.24**	**46.00**
809.880	21.47	7.02	10.17	38.66	-7.34	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 499.480MHz with corrected signal level of 38.76dBμV/m(Limit is 46.00 dBμV/m) when the antenna was at horizontal polarization and at 2.0m high and the turn table was at 200 °.
4. 0 °was the table front facing the antenna. Degree is calculated from 0 ° clockwise facing the antenna.

Reviewer : Cabe Wang

Date of Test	:	Apr. 28, 2003	Temperature	:	23℃
EUT	:	Gamecube 2.4G RF Wireless Controller	Humidity	:	58%
Model No.	:	Controller: G5090, Receiver: 2178	Test Mode	:	Running
Test Engineer:		Sean Xing			

Frequency MHz	Antenna Factor dB/m	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dB	Limits dBμV/m
51.340	6.97	1.38	22.49	30.84	-9.16	40.00
103.720	10.85	2.07	15.47	28.39	-15.11	43.50
211.390	9.07	3.07	21.20	33.34	-10.16	43.50
484.930	18.29	5.58	15.12	38.99	-7.01	46.00
499.480	18.90	5.58	13.02	37.50	-8.51	46.00
809.880	**21.51**	**7.02**	**11.30**	**39.83**	**-6.17**	**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 809.880MHz with corrected signal level of 39.83dBμV/m(Limit is 46.00 dBμV/m) when the antenna was at horizontal polarization and at 1.0m high and the turn table was at 240 °.
4. 0 °was the table front facing the antenna. Degree is calculated from 0 ° clockwise facing the antenna.

Reviewer : Cabe Wang

Date of Test :	Apr. 28, 2003	Temperature	:	23℃
EUT :	Gamecube 2.4G RF Wireless Controller	Humidity	:	58%
Model No. :	Receiver: 2176	Test Mode	:	Running
Test Engineer:	Sean Xing			

Frequency MHz	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dB	Limits dBμV/m	Remark
1134.000	23.67	35.55	3.22	51.35	42.69	-31.31	74.00	Peak
1134.000	23.67	35.55	3.22	42.53	33.87	-20.13	54.00	Average
2440.000	28.14	34.98	5.74	63.35	62.25	-	-	Peak
2440.000	28.14	34.98	5.74	54.23	53.13	-	-	Average

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

Frequency MHz	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dB	Limits dBμV/m	Remark
1134.000	23.67	35.55	3.22	53.69	45.03	-28.97	74.00	Peak
1134.000	23.67	35.55	3.22	40.69	32.03	-21.97	54.00	Average
2440.000	28.14	34.98	5.74	67.66	66.56	-	-	Peak
2440.000	28.14	34.98	5.74	53.50	52.40	-	-	Average
4880.000	33.08	34.46	8.01	40.74	47.37	-26.63	74.00	Peak
4880.000	33.08	34.46	8.01	27.54	34.17	-19.83	54.00	Average

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

Reviewer : Cabe Wang

Date of Test :	Apr. 28, 2003	Temperature :	23℃
EUT :	Gamecube 2.4G RF Wireless Controller	Humidity :	58%
Model No. :	Receiver: 2178	Test Mode :	Running
Test Engineer:	Sean Xing		

Frequency MHz	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Meter Reading Horizontal dBμV	Emission Level Horizontal dBμV/m	Over Limits dBμV/m	Limits dBμV/m	Remark
1134.000	23.67	35.55	3.22	50.42	41.76	-32.24	74.00	Peak
1134.000	23.67	35.55	3.22	38.51	29.85	-24.15	54.00	Average
2440.000	28.14	34.98	5.74	62.83	61.73	-	-	Peak
2440.000	28.14	34.98	5.74	54.84	53.74	-	-	Average
4880.000	33.08	34.46	8.01	45.01	51.64	-22.36	74.00	Peak
4880.000	33.08	34.46	8.01	35.80	42.43	-11.57	54.00	Average

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

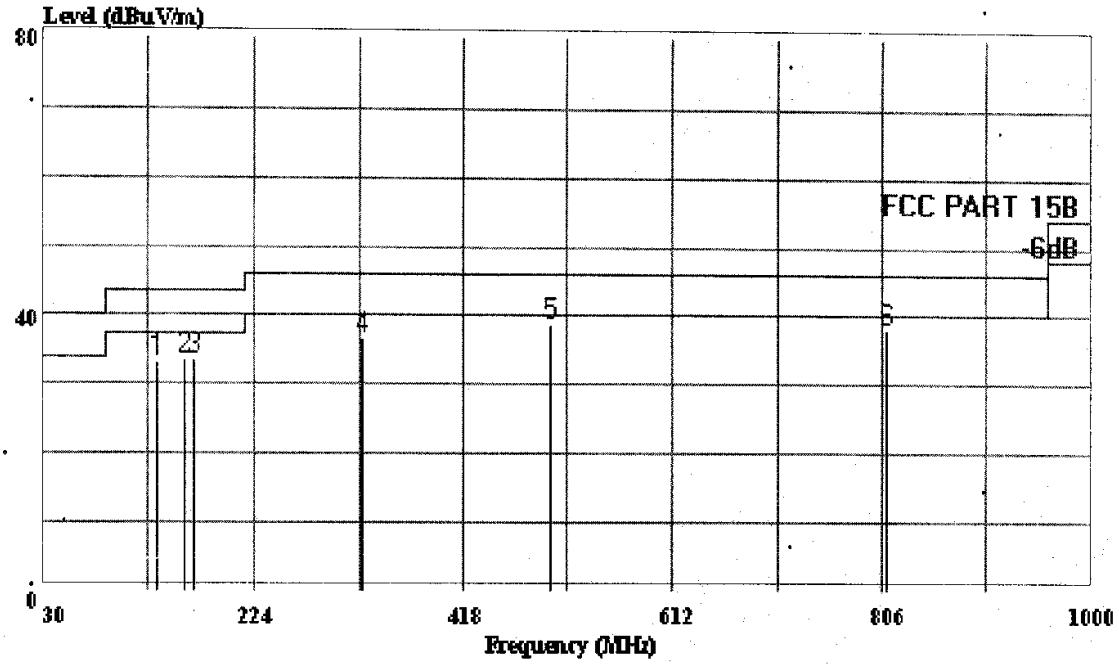
Frequency MHz	Antenna Factor dB	Preamp Factor dB	Cable Loss dB	Meter Reading Vertical dBμV	Emission Level Vertical dBμV/m	Over Limits dBμV/m	Limits dBμV/m	Remark
1134.000	23.67	35.55	3.22	52.96	44.30	-29.70	74.00	Peak
1134.000	23.67	35.55	3.22	40.57	31.91	-22.09	54.00	Average
2440.000	28.14	34.98	5.74	70.58	69.48	-	-	Peak
2440.000	28.14	34.98	5.74	60.55	59.45	-	-	Average

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

Reviewer : Cabe Wang

AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.
Shenzhen Science & Ind. Park
Tel: 0755-26639495~7
Fax: 0755-26632877

Data#: 32 File#: Vision.EMI Date: 2003-04-28 Time: 24:58:21



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

Trace: Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR HORIZONTAL
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Controller: 2103, Receiver: 2176
Power : Host 230V/50Hz DC 4.8V
Test Engineer: Sean Xing
Comment : Temp: 23'C, Humi: 58%
Memo : Running

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	Freq	Level	Limit Line	Over Limit	Read Level	Probe Factor	Cable Loss
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB
1	135.430	33.26	43.50	-10.24	19.40	11.50	2.35
2	159.980	33.49	43.50	-10.01	19.69	11.16	2.64
3	168.200	33.50	43.50	-10.00	20.55	10.26	2.70
4	324.230	36.77	46.00	-9.23	18.53	14.20	4.04
5	499.360	38.74	46.00	-7.26	15.40	17.76	5.58
6	810.970	38.05	46.00	-7.95	9.56	21.47	7.02

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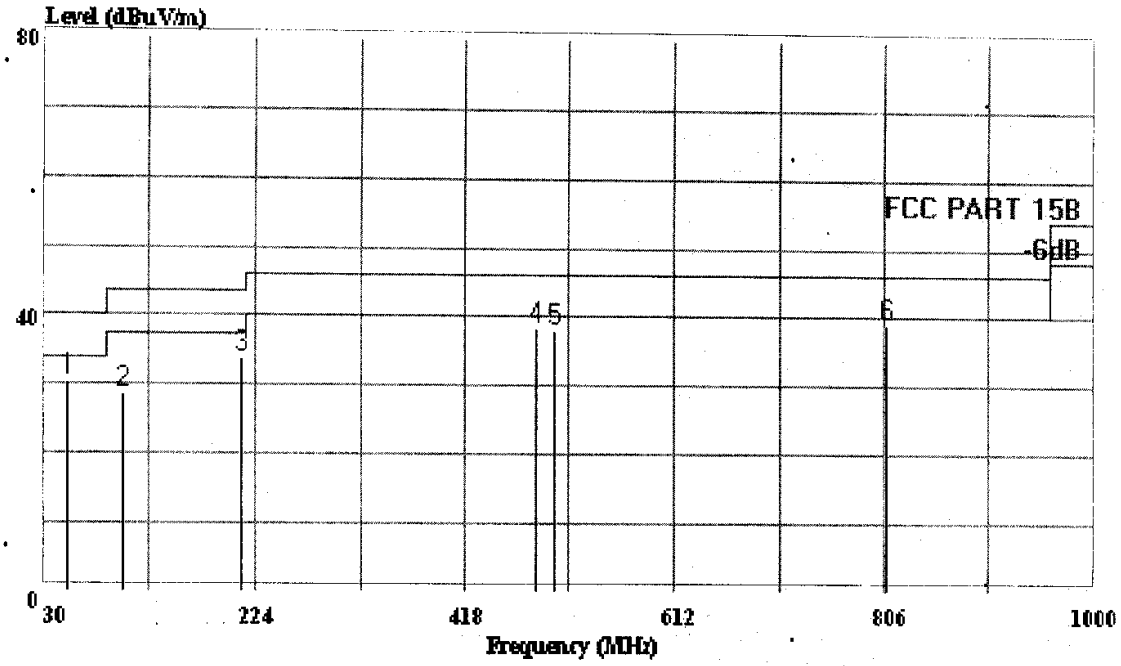
Tel: 0755-26639495~7
Fax: 0755-26632877

Data#: 31 File#: Vision.EMI Date: 2003-04-28 Time: 24:52:23



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

Trace: Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR VERTICAL
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Controller: 2103, Receiver: 2176
Power : Host 230V/50Hz DC 4.8V
Test Engineer: Sean Xing
Comment : Temp: 23'C, Humi: 58%
Memo : Running

Page: 1

	Freq	Level	Limit Line	Over Limit	Read Level	Probe Factor	Cable Loss
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB
1	51.330	30.35	40.00	-9.65	22.00	6.97	1.38
2	103.450	28.78	43.50	-14.73	15.85	10.85	2.07
3	210.440	33.80	43.50	-9.70	21.66	9.07	3.07
4	484.840	38.60	46.00	-7.40	14.73	18.29	5.58
5	500.110	37.95	46.00	-8.05	13.48	18.90	5.58
6	807.450	39.09	46.00	-6.91	10.56	21.51	7.02

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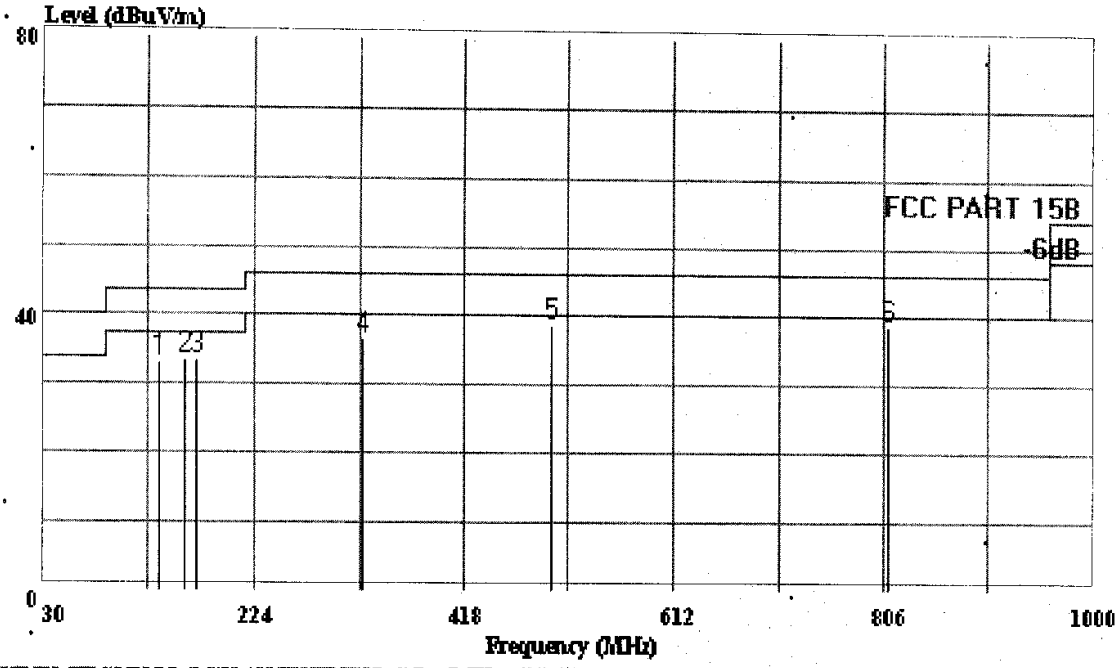
Data#: 24 File#: Vision.EMI Date: 2003-04-28 Time: 23:31:02



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

Trace: Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR HORIZONTAL
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Controller: G5090, Receiver: 2178
Power : Host 230V/50Hz DC 3V
Test Engineer: Sean Xing
Comment : Temp: 23'C, Humi: 58%
Memo : Running
: Freq: 499.480MHz
: Ant Pos: 2 m, T-Table Pos: 200 degree

Page: 1

	Freq	Level	Limit Line	Over Limit	Read Level	Probe Factor	Cable Loss
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB
1	135.730	33.27	43.50	-10.23	19.42	11.50	2.35
2	159.980	33.49	43.50	-10.01	19.69	11.16	2.64
3	169.680	33.77	43.50	-9.73	20.81	10.26	2.70
4	324.880	36.75	46.00	-9.25	18.51	14.20	4.04
5	499.480	38.76	46.00	-7.24	15.42	17.76	5.58
6	809.880	38.66	46.00	-7.34	10.17	21.47	7.02

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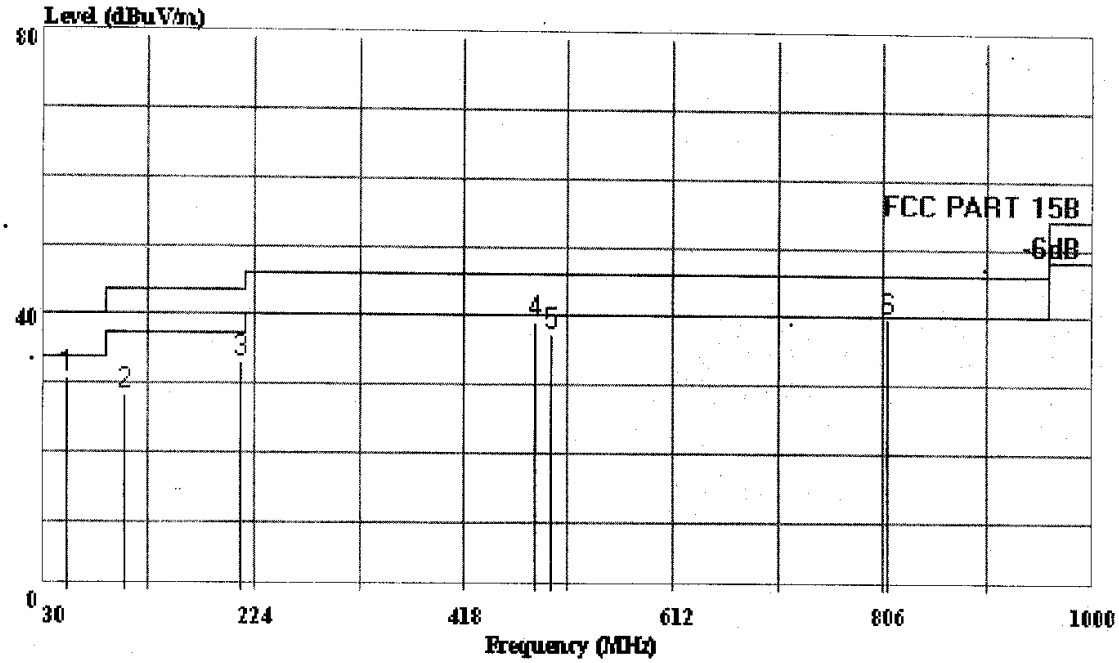
Shenzhen Science & Ind. Park
Tel: 0755-26639495~7
Fax: 0755-26632877

Data#: 23 File#: Vision.EMI Date: 2003-04-28 Time: 23:30:23



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

Trace: Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR VERTICAL
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Controller: G5090, Receiver: 2178
Power : Host 230V/50Hz DC 3V
Test Engineer: Sean Xing
Comment : Temp: 23'C, Humi: 58%
Memo : Running
: Freq: 809.880MHz
: Ant Pos: 1m, T-Table Pos: 240 degree

Page: 1

	Freq	Level	Limit Line	Over Limit	Read Level	Probe Factor	Cable Loss
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB
1	51.340	30.84	40.00	-9.16	22.49	6.97	1.38
2	103.720	28.39	43.50	-15.11	15.47	10.85	2.07
3	211.390	33.34	43.50	-10.16	21.20	9.07	3.07
4	484.930	38.99	46.00	-7.01	15.12	18.29	5.58
5	499.480	37.50	46.00	-8.51	13.02	18.90	5.58
6	809.880	39.83	46.00	-6.17	11.30	21.51	7.02

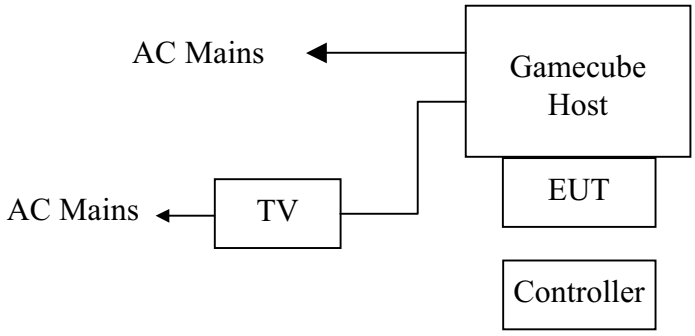
4. 6dB BANDWIDTH MEASUREMENT

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	Mar.28, 03	1 Year
2.	Amp	HP	8449B	3008A00863	Jun.02, 02	1 Year
3.	Antenna	EMCO	3115	9607-4877	Dec. 04, 02	1.5 Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	Jun.02, 02	1 Year

4.2.Block Diagram of Test Setup



(EUT: Gamecube 2.4G RF Wireless Controller)

4.3.Specification Limits (§15.247(a)(2))

The minimum 6dB bandwidth shall be at least 500kHz.

4.4.Operating Condition of EUT

1. Setup the EUT as shown in Section 4.2..
2. Let the EUT work in test mode (Running) and test it.

4.5.Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. 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. Horn antenna is used as receiving antenna.

The bandwidth of the fundamental frequency was measure by spectrum analyzer with 100kHz RBW and 100kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

4.6.Test Results

PASSED.

The testing data was attached in the next pages.

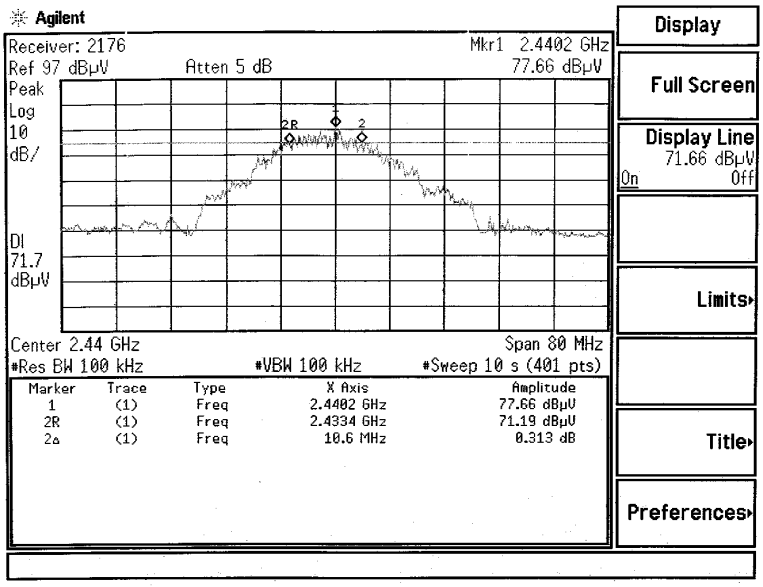
Date of Test	:	Apr. 28, 2003	Temperature	:	23℃
EUT	:	Gamecube 2.4G RF Wireless Controller	Humidity	:	58%
Model No.	:	Receiver: 2176	Test Mode	:	Running
Test Engineer:		Sean Xing			

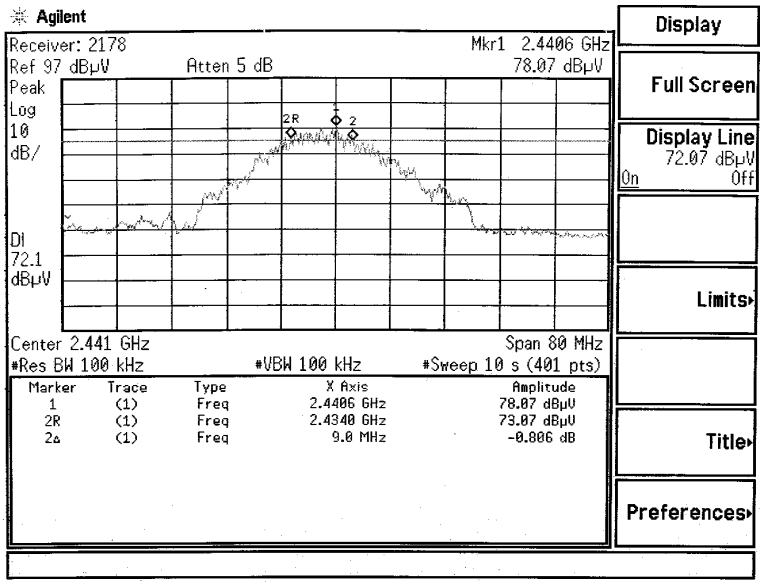
Channel.	Frequency	**6dB Bandwidth**
1	2.4402GHz	**10.6MHz**

Date of Test	:	Apr. 28, 2003	Temperature	:	23℃
EUT	:	Gamecube 2.4G RF Wireless Controller	Humidity	:	58%
Model No.	:	Receiver: 2178	Test Mode	:	Running
Test Engineer:		Sean Xing			

Channel.	Frequency	**6dB Bandwidth**
1	2.4406GHz	**9.0MHz**

Reviewer : Gabe Wang


Agilent
Receiver: 2176
Mkr1 2.4402 GHz
Ref 97 dBµV
Atten 5 dB
77.66 dBµV
Peak
Log
10
dB/
Dl
71.7
dBµV
Center 2.44 GHz
Span 80 MHz
#Res BW 100 kHz
#VBW 100 kHz
#Sweep 10 s (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.4402 GHz 77.66 dBµV
2R (1) Freq 2.4334 GHz 71.19 dBµV
2Δ (1) Freq 10.6 MHz 0.313 dB
Display
Full Screen
Display Line
71.66 dBµV
On Off
Limits
Title
Preferences


Agilent
Receiver: 2178
Mkr1 2.4406 GHz
Ref 97 dBµV
Atten 5 dB
78.07 dBµV
Peak
Log
10
dB/
Dl
72.1
dBµV
Center 2.441 GHz
Span 80 MHz
#Res BW 100 kHz
#VBW 100 kHz
#Sweep 10 s (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.4406 GHz 78.07 dBµV
2R (1) Freq 2.4340 GHz 73.07 dBµV
2Δ (1) Freq 9.0 MHz -0.006 dB
Display
Full Screen
Display Line
72.07 dBµV
On Off
Limits
Title
Preferences

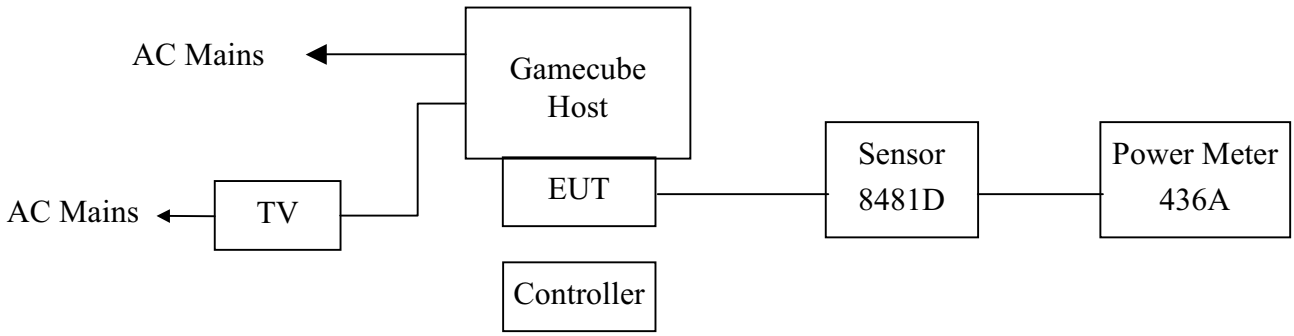
5. PEAK OUTPUT POWER MEASUREMENT

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	Mar.28, 03	1 Year
2.	Amp	HP	8449B	3008A00863	Jun.02, 02	1 Year
3.	Antenna	EMCO	3115	9607-4877	Dec. 04, 02	1.5 Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	Jun.02, 02	1 Year
5.	Power meter	HP	436A	2016A07891	NCR	
6.	Power Sensor	HP	8481D	3318A13613	Jun.02, 02	1Year

5.2.Block Diagram of Test Setup



(EUT: Gamecube 2.4G RF Wireless Controller)

5.3.Specification Limits (§15.247(b)-(3))

The Limits of maximum Peak Output Power for digital modulation in 2400-2483.5MHz is : 1Watt. (30dBm)

5.4.Operating Condition of EUT

1. Setup the EUT as shown in Section 5.2..
2. Let the EUT work in test mode (Running) and test it.

5.5. Test Procedure

Setup the EUT as shown in Section 5.2. Turn on the gamecube host and let the EUT working . The EUT is via the power sensor link to power meter. The test value reading is from power meter.

5.6. Test Results

PASSED.

The testing data was attached in the next pages.

Date of Test :	Apr. 28, 2003	Temperature :	23℃
EUT :	Gamecube 2.4G RF Wireless Controller	Humidity :	58%
Model No. :	Receiver: 2176	Test Mode :	Running
Test Engineer:	Sean Xing		

Frequency	Reading dBm	Cable Loss dBm	Peak Power dBm	Limit dBm
2440.0MHz	-66.1	0.2	-65.9	30.00

Date of Test :	Apr. 28, 2003	Temperature :	23℃
EUT :	Gamecube 2.4G RF Wireless Controller	Humidity :	58%
Model No. :	Receiver: 2178	Test Mode :	Running
Test Engineer:	Sean Xing		

Frequency	Reading dBμV	Cable Loss dBm	Poer Density dBm	Limit dBm
2440.0MHz	-54.0	0.2	-53.8	30.00

Reviewer : Cabe Wang

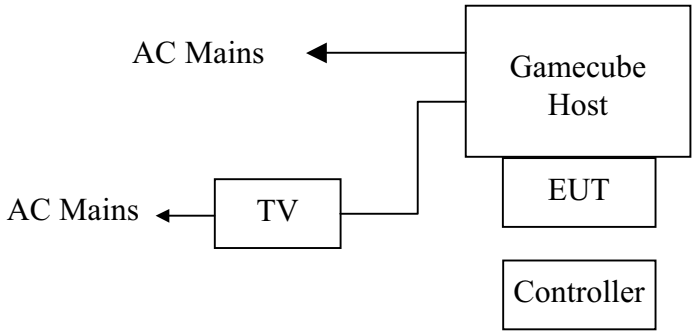
6. BAND EDGES MEASUREMENT

6.1.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	Mar.28, 03	1 Year
2.	Amp	HP	8449B	3008A00863	Jun.02, 02	1 Year
3.	Antenna	EMCO	3115	9607-4877	Dec. 04, 02	1.5 Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	Jun.02, 02	1 Year

6.2.Block Diagram of Test Setup



(EUT: Gamecube 2.4G RF Wireless Controller)

6.3.Specification Limits (§15.247(c))

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

6.4.Operating Condition of EUT

1. Setup the EUT as shown in Section 6.2..
2. Let the EUT work in test mode (Running) and test it.

6.5.Test Procedure

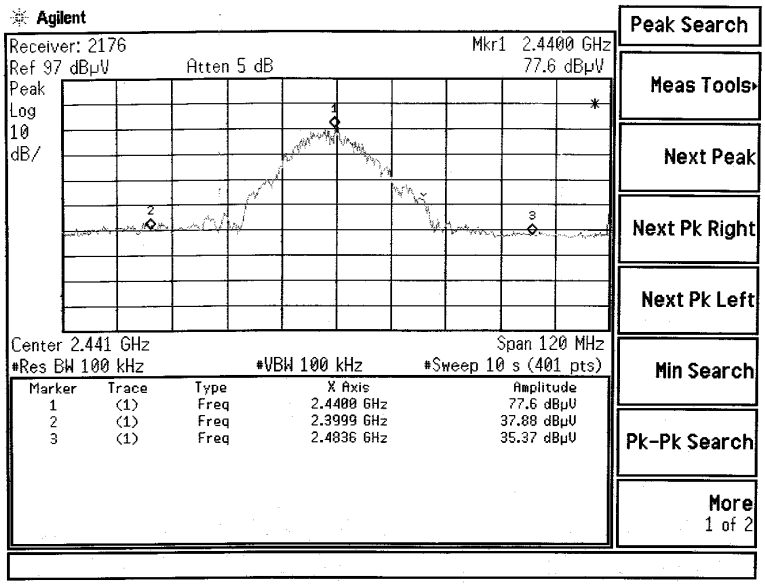
EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it work normally, we use a keyboard test soft ware, let EUT working in test mode, then test 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. Horn antenna is used as receiving antenna.

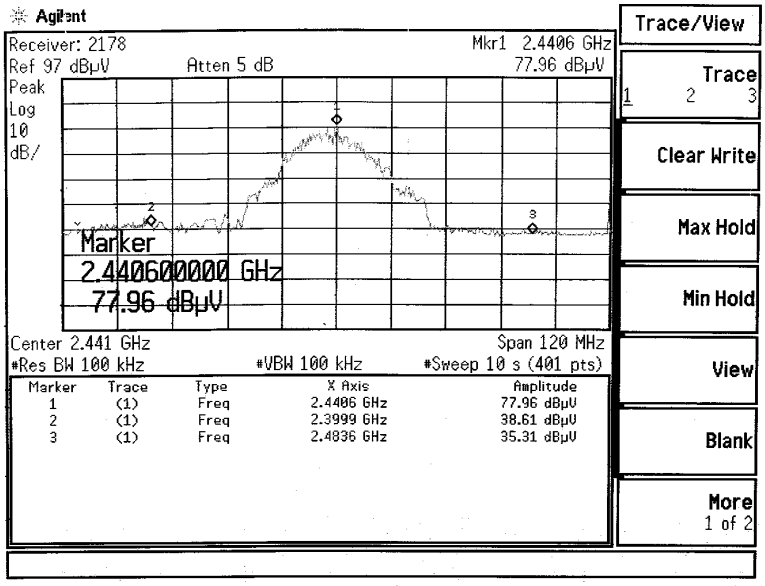
Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100kHz bandwidth from bank edge.

6.6.Test Results

PASSED.

The testing data was attached in the next pages.


Agilent
Receiver: 2176
Mkr1 2.4400 GHz
Ref 97 dBµV
Atten 5 dB
77.6 dBµV
Peak
Log
10
dB/
Center 2.441 GHz
Span 120 MHz
#Res BW 100 kHz
#VBW 100 kHz
#Sweep 10 s (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.4400 GHz 77.6 dBµV
2 (1) Freq 2.3999 GHz 37.88 dBµV
3 (1) Freq 2.4836 GHz 35.37 dBµV
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Receiver: 2178
Mkr1 2.4406 GHz
Ref 97 dBµV
Atten 5 dB
77.96 dBµV
Peak
Log
10
dB/
Marker
2.440600000 GHz
77.96 dBµV
Center 2.441 GHz
Span 120 MHz
#Res BW 100 kHz
#VBW 100 kHz
#Sweep 10 s (401 pts)
Marker Trace Type X Axis Amplitude
1 (1) Freq 2.4406 GHz 77.96 dBµV
2 (1) Freq 2.3999 GHz 38.61 dBµV
3 (1) Freq 2.4836 GHz 35.31 dBµV
Trace/View
Trace
1 2 3
Clear Write
Max Hold
Min Hold
View
Blank
More
1 of 2

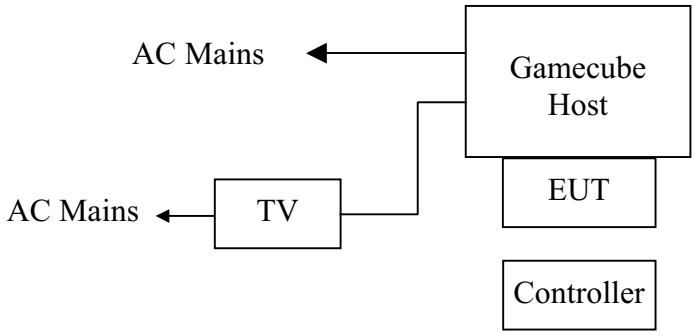
7. POWER SPECTRAL DESITY MEASUREMENT

7.1.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	Mar.28, 03	1 Year
2.	Amp	HP	8449B	3008A00863	Jun.02, 02	1 Year
3.	Antenna	EMCO	3115	9607-4877	Dec. 04, 02	1.5 Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	Jun.02, 02	1 Year

7.2.Block Diagram of Test Setup



(EUT: Gamecube 2.4G RF Wireless Controller)

7.3.Specification Limits (§15.247(d))

The peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band.

7.4.Operating Condition of EUT

1. Setup the EUT as shown in Section 7.2..
2. Let the EUT work in test mode (Running) and test it.

7.5. Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. 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. Horn antenna is used as receiving antenna.

The bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/3kHz.

7.6. Test Results

PASSED.

The testing data was attached in the next pages.

Date of Test :	Apr. 28, 2003	Temperature :	23℃
EUT :	Gamecube 2.4G RF Wireless Controller	Humidity :	58%
Model No. :	Receiver: 2176	Test Mode :	Running
Test Engineer:	Sean Xing		

Frequency	Reading dBμV	Poer Density dBm	Limit dBm
2440.1125MHz	71.49	-18.8	8.00

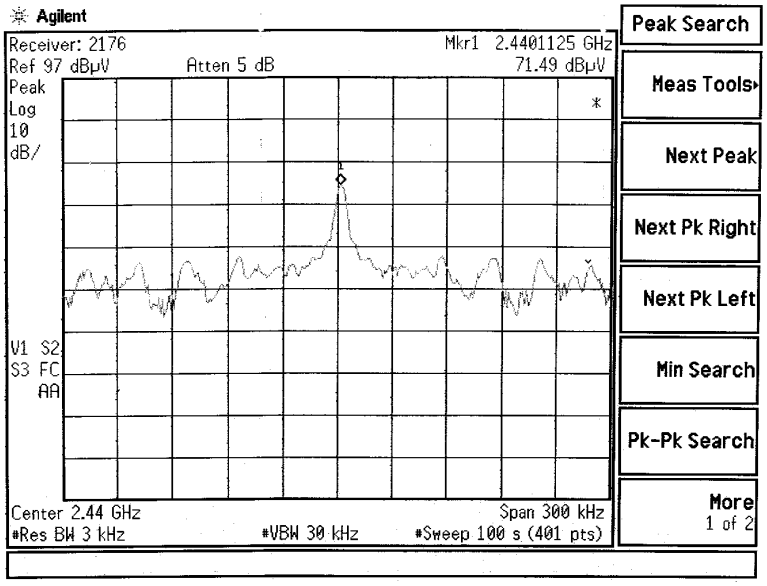
Remark:
Formulas used to calculate Power Density.
Using the relationship between field strength and RF power into an isotropic transmit antenna:
P(Watts)= (E(V/m) x D: meters)^2 / 30G D=Distance
Antenna gain = -5dBi
G(numeric) = 10^(G(dBi)/10) = 10^(-5dBi/10) = 0.32
71.49dBμV = 0.0037540495V/m
P(Watt)= (0.0037540495V/m x 3m)^2 / 9.6 = 1.3212082 x 10^{-5}
10*log 1.3212082 x 10^{-5} x 10^3 = -18.8dBm

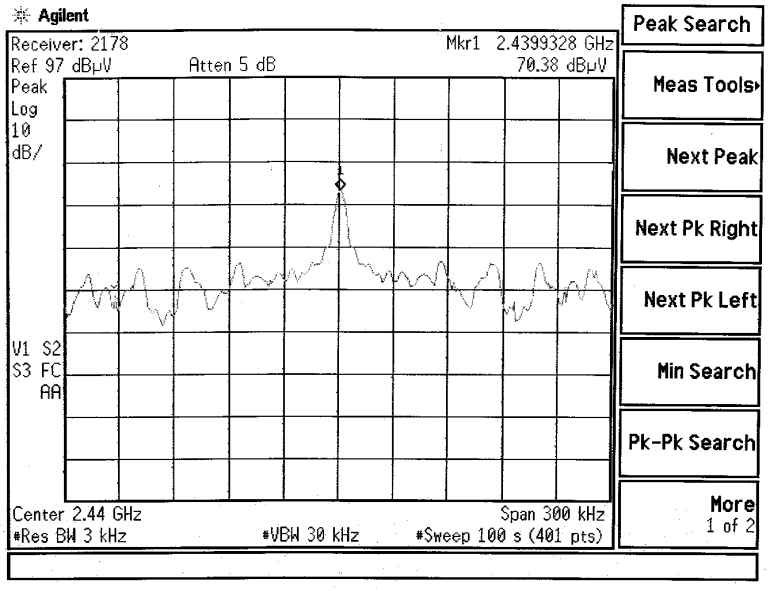
Date of Test :	Apr. 28, 2003	Temperature :	23℃
EUT :	Gamecube 2.4G RF Wireless Controller	Humidity :	58%
Model No. :	Receiver: 2178	Test Mode :	Running
Test Engineer:	Sean Xing		

Frequency	Reading dBμV	Poer Density dBm	Limit dBm
2439.9328MHz	70.38	-19.9	8.00

Remark:
Formulas used to calculate Power Density.
Using the relationship between field strength and RF power into an isotropic transmit antenna:
P(Watts)= (E(V/m) x D: meters)^2 / 30G D=Distance
Antenna gain = -5dBi
G(numeric) = 10^(G(dBi)/10) = 10^(-5dBi/10) = 0.32
70.38dBμV = 0.0033036954V/m
P(Watt)= (0.0033036954V/m x 3m)^2 / 9.6 = 1.0232253 x 10^{-5}
10*log 1.0232253 x 10^{-5} x 10^3 = -19.9dBm

Reviewer : Cabe Wang


Agilent
Receiver: 2176
Mkr1 2.4401125 GHz
Ref 97 dBµV
Atten 5 dB
71.49 dBµV
Peak
Log
10
dB/
V1 S2
S3 FC
AA
Center 2.44 GHz
Span 300 kHz
#Res BW 3 kHz
#VBW 30 kHz
#Sweep 100 s (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2


Agilent
Receiver: 2178
Mkr1 2.4399328 GHz
Ref 97 dBµV
Atten 5 dB
70.38 dBµV
Peak
Log
10
dB/
V1 S2
S3 FC
AA
Center 2.44 GHz
Span 300 kHz
#Res BW 3 kHz
#VBW 30 kHz
#Sweep 100 s (401 pts)
Peak Search
Meas Tools
Next Peak
Next Pk Right
Next Pk Left
Min Search
Pk-Pk Search
More
1 of 2

8. MAXIMUM PERMISSIBLE EXPOSURE

CALCULATIONS

Given

$E=\sqrt{(30*P*G)}/d$

and

$S=E^2/3770$

where

E=Field Strength in Volts/meter
P=Power in Watts
G=Numeric antenna gain
d=distance in meters
S=Power Density in milliwatts/square centimeter

Combining equations and rearranging the terms to express the distance as a function of the remaining variables yields:

$d=\sqrt{((30*P*G)/(3770*S))}$

Changing to units of mW and cm, using:

P(mW)=P(W)/1000 and
d(cm)=100*d(m)

yields

$d=100*\sqrt{((30*(P/1000)*G)/(3770*S))}$
$d=0.282*\sqrt{(P*G/S)}$

where

d=distance in cm
P=Power in mW
G=Numeric antenna gain
S=Power Density in mW/cm^2

Substituting the logarithmic form of power and gain using:

P(mW)=10^(P(dBm)/10) and
G(numeric)=10^(G(dBi)/10)

yields

$d=0.282*10^{((P+G)/20)}/\sqrt{s}$ Equation(1)

where

d=MPE safe distance in cm
P=Power in dBm
G=Antenna Gain in dBi
S=Power Density Limit in mW/cm^2

RESULTS

No non-compliance noted:

MAXIMUM PERMISSIBLE EXPOSURE (2.4GHZ BAND)

EUT output power = -53.8 dBm
Antenna Gain = -5dBi
S = 1.0mW / cm^2 from 1.1310 Table 1

Substituing these parameters into Equation (1) above:

MPE Safe Distance = 0.00032 cm

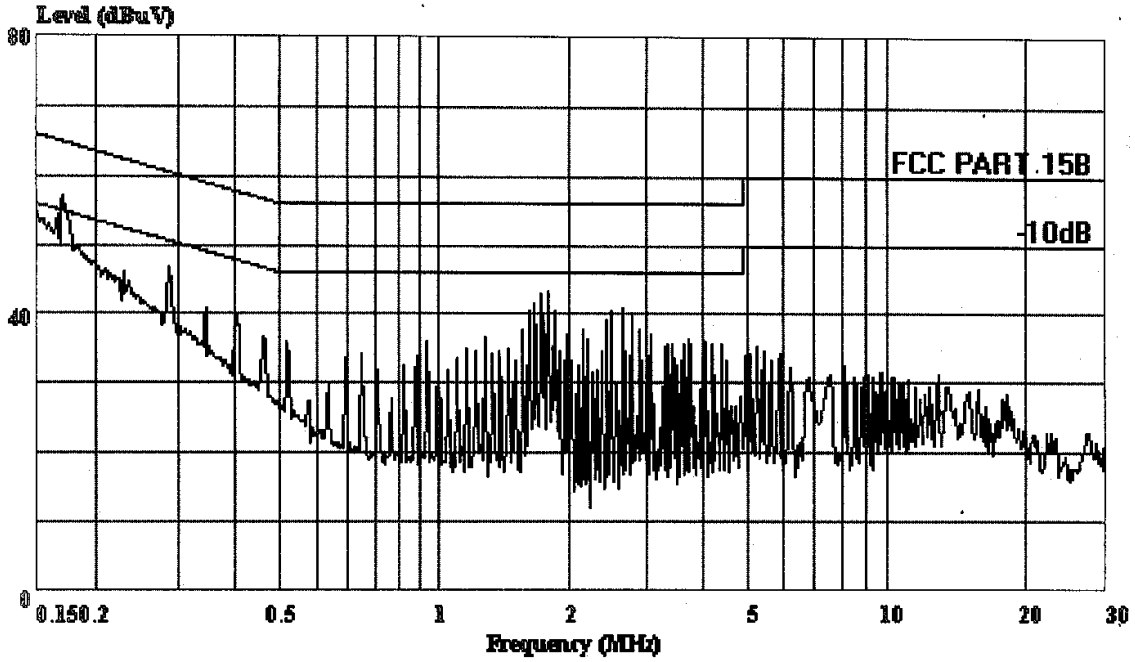
9. DEVIATION TO TEST SPECIFICATIONS

(None.)

APPENDIX I

AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.
Shenzhen Science & Ind Park
Tel:0755-26639496
Fax:26632877

Data#: 45 File#: Vision.EMI Date: 2003-04-28 Time: 09:23:17

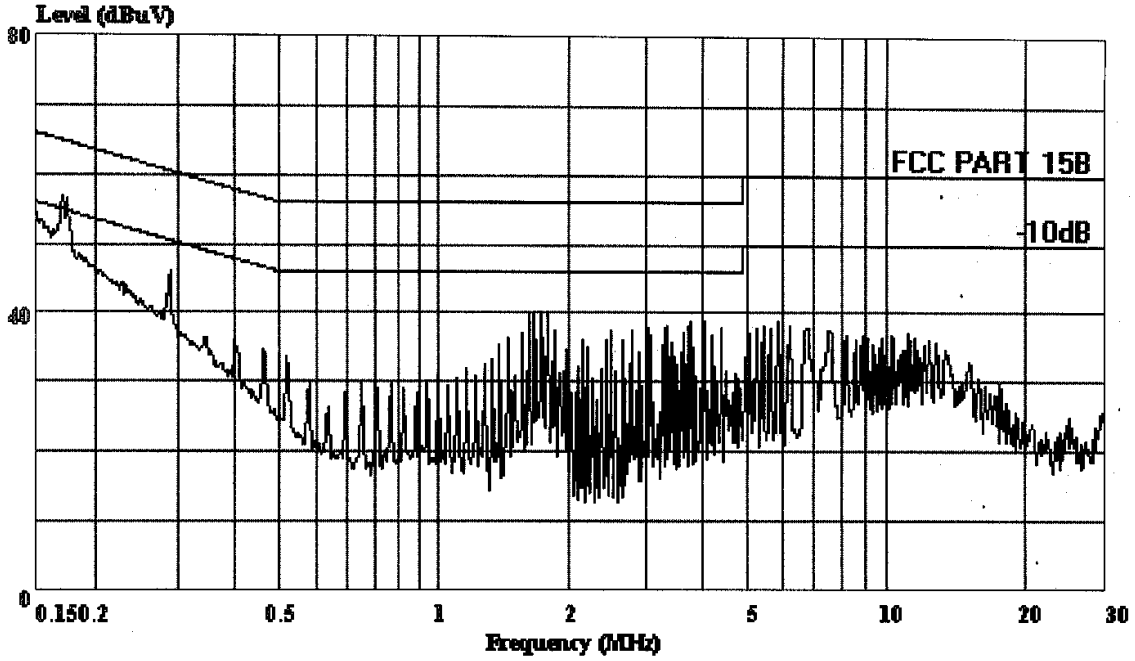


Trace: Ref Trace:

Condition: FCC PART 15B VA(KNW-407)
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Controller: 2103 Receiver: 2176
OP Cond : Running
Test Spec : AC 230V/50Hz DC4.8v
Test Engineer: Chris
Comment : Temp:24.6'C Humi:54%

AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.
Shenzhen Science & Ind Park
Tel:0755-26639496
Fax:26632877

Data#: 46 File#: Vision.EMI Date: 2003-04-28 Time: 09:25:32

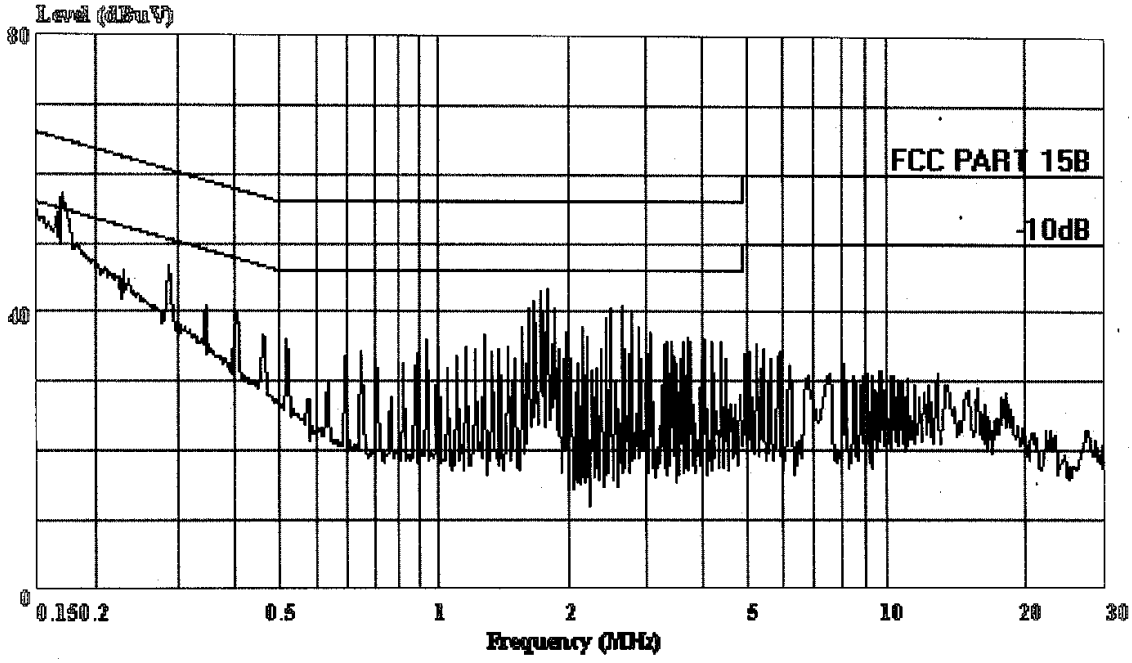


Trace: Ref Trace:

Condition: FCC PART 15B VB(KNW-407)
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Controller: 2103 Receiver: 2176
OP Cond : Running
Test Spec : AC 230V/50Hz DC4.8v
Test Engineer: Chris
Comment : Temp:24.6'C Humi:54%

AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.
Shenzhen Science & Ind Park
Tel:0755-26639496
Fax:26632877

Data#: 57 File#: Vision.EMI Date: 2003-04-28 Time: 09:33:17



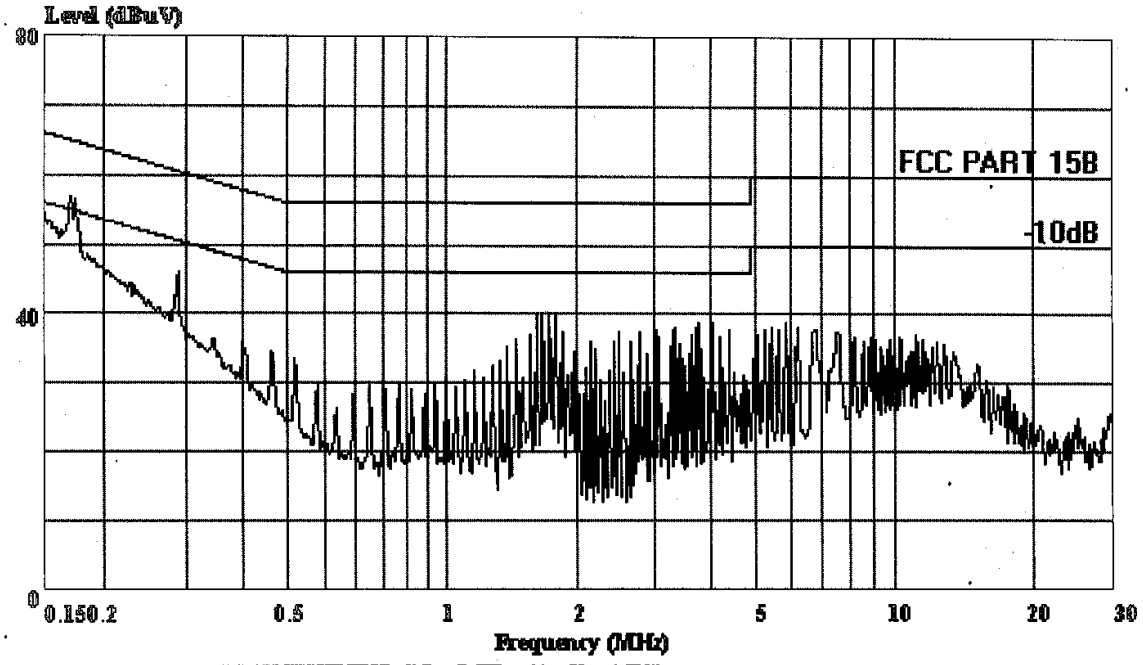
AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (Audix ATC)

Trace: Ref Trace:

Condition: FCC PART 15B VA(KNW-407)
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Controller: G5090 Receiver: 2178
OP Cond : Running
Test Spec : AC 230V/50Hz DC3V
Test Engineer: Chris
Comment : Temp:24.6'C Humi:54%

AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.
Shenzhen Science & Ind Park
Tel:0755-26639496
Fax:26632877

Data#: 58 File#: Vision.EMI Date: 2003-04-28 Time: 09:36:32



AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (Audix ATC)

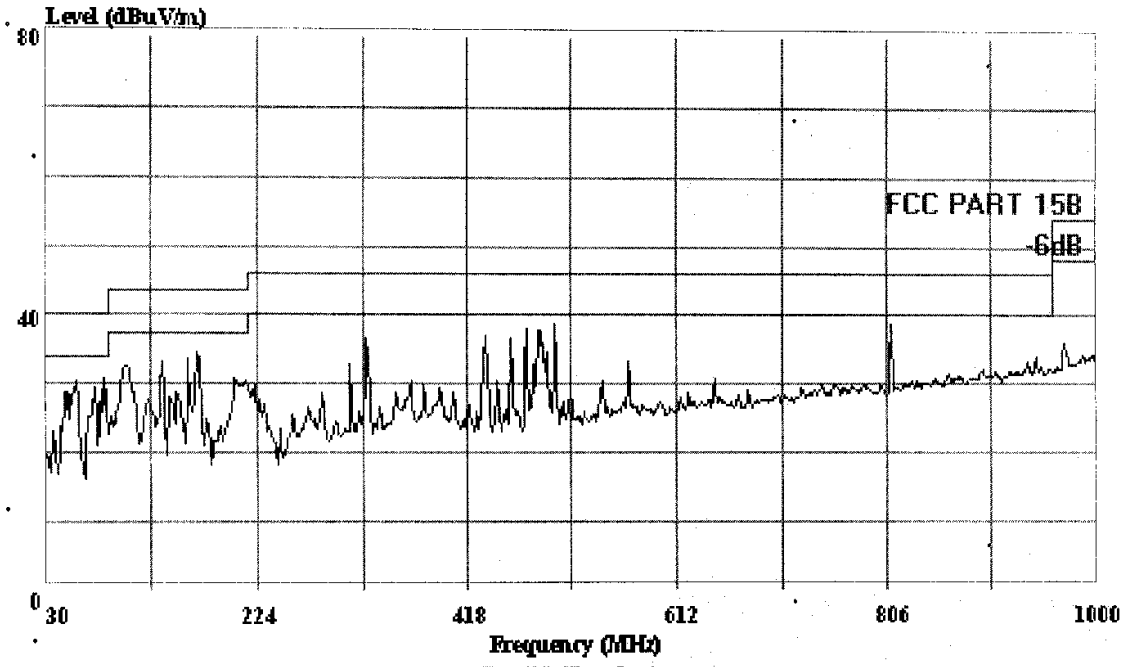
Trace: Ref Trace:

Condition: FCC PART 15B VB(KNW-407)
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Controller: G5090 Receiver: 2178
OP Cond : Running
Test Spec : AC 230V/50Hz DC3V
Test Engineer: Chris
Comment : Temp:24.6'C Humi:54%

APPENDIX II

AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.
Shenzhen Science & Ind. Park
Tel: 0755-26639495~7
Fax: 0755-26632877

Data#: 25 File#: Vision.EMI Date: 2003-04-28 Time: 24:05:23



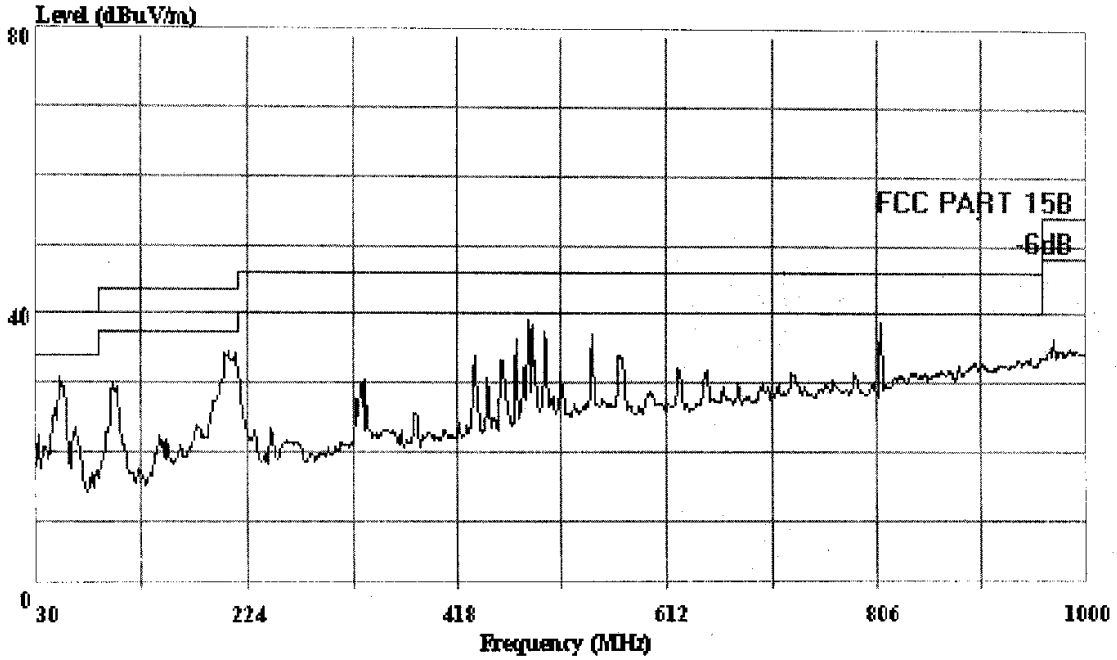
AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace: Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR HORIZONTAL
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Controller: 2103, Receiver: 2176
Power : Host 230V/50Hz DC 4.8V
Test Engineer: Sean Xing
Comment : Temp: 23'C, Humi: 58%
Memo : Running

AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.
Shenzhen Science & Tnd. Park
Tel: 0755-26639495~7
Fax: 0755-26632877

Data#: 26 File#: Vision.EMI Date: 2003-04-28 Time: 24:06:19



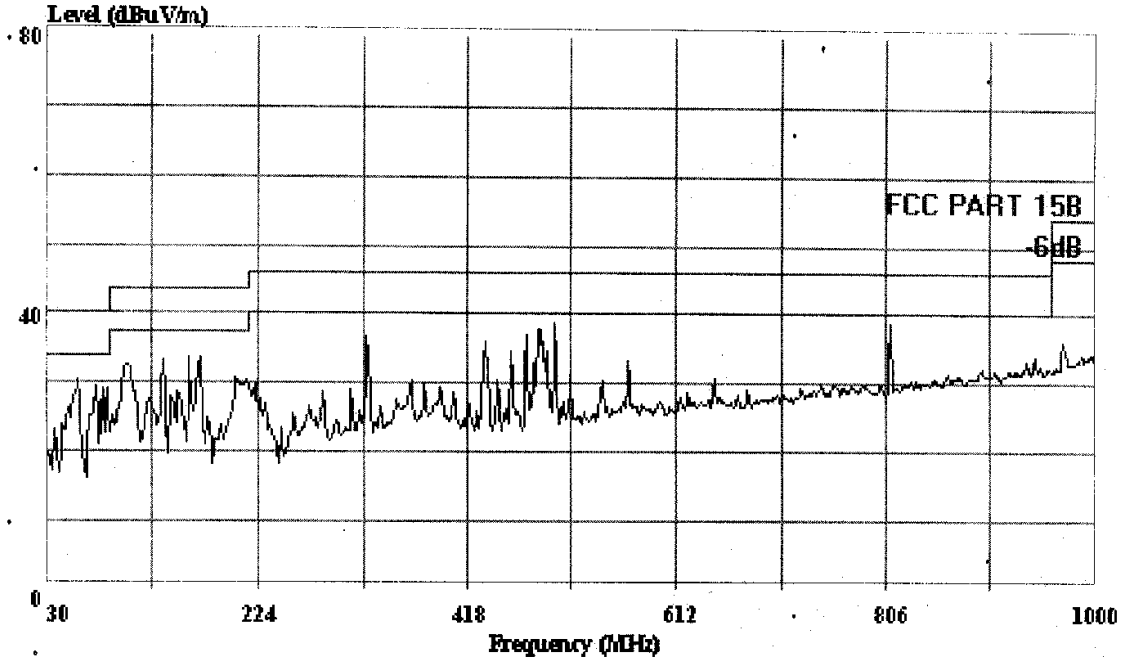
AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace: Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR VERTICAL
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Controller: 2103, Receiver: 2176
Power : Host 230V/50Hz DC 4.8V
Test Engineer: Sean Xing
Comment : Temp: 23'C, Humi: 58%
Memo : Running

AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.
Shenzhen Science & Tnd. Park
Tel: 0755-26639495~7
Fax: 0755-26632877

Data#: 17 File#: Vision.EMI Date: 2003-04-28 Time: 23:01:05



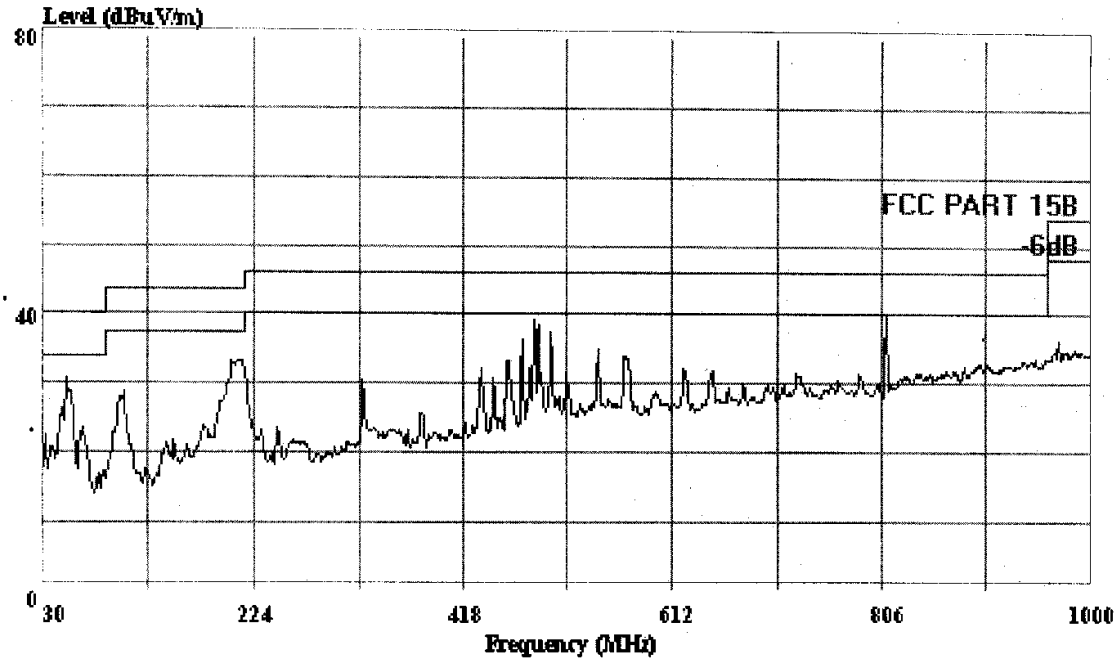
AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. (3# Chamber)

Trace: Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR HORIZONTAL
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Controller: G5090. Receiver: 2178
Power : Host 230V/50Hz DC 3V
Test Engineer: Sean Xing
Comment : Temp: 23'C, Humi: 58%
Memo : Running

AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.
Shenzhen Science & Ind. Park
Tel: 0755-26639495~7
Fax: 0755-26632877

Data#: 18 File#: Vision.EMI Date: 2003-04-28 Time: 23:05:43



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

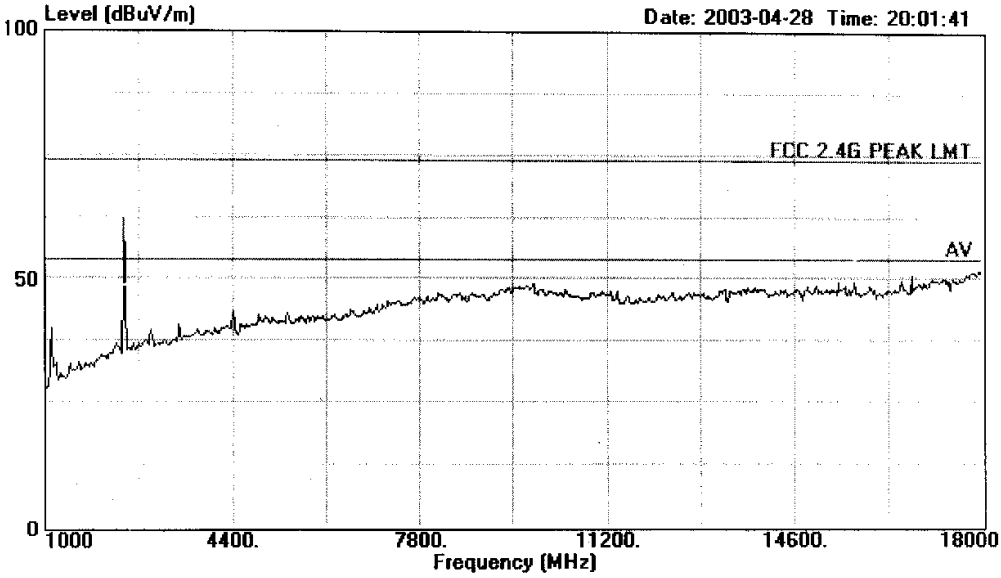
Trace: Ref Trace:

Condition: FCC PART 15B 3m 2598FACTOR VERTICAL
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Controller: G5090. Receiver: 2178
Power : Host 230V/50Hz DC 3V
Test Engineer: Sean Xing
Comment : Temp: 23'C, Humi: 58%
Memo : Running

信華科技(深圳)有限公司
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#: 31 File#: C:\EMI TEST DATA\V\Vision.EMI



Site : 1# Chamber
Condition : FCC 2.4G PEAK LMT 3m 3115FACTOR HORIZONTAL
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Receiver 2176
Power : Host 230V/50Hz
Test Engineer : Sean Xing
Memo : Running

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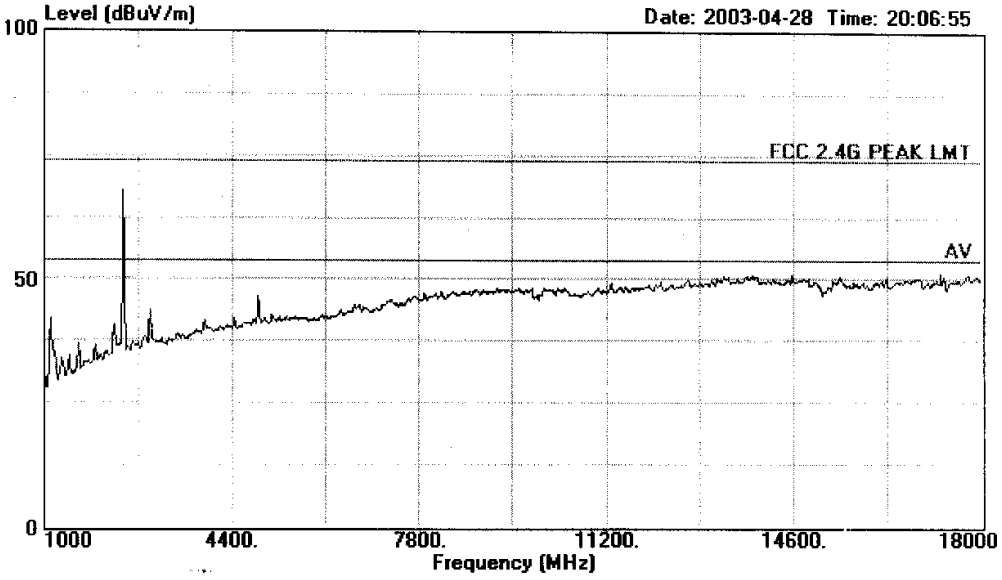
Tel:+86-755-26639496 Fax:+86-755-26632877

Data#: 33 File#: C:\EMI TEST DATA\V\Vision.EMI



Site : 1# Chamber
Condition : FCC 2.4G PEAK LMT 3m 3115FACTOR VERTICAL
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Receiver 2176
Power : Host 230V/50Hz
Test Engineer : Sean Xing
Memo : Running

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AUDIX Technology (Shenzhen) Co.,Ltd.

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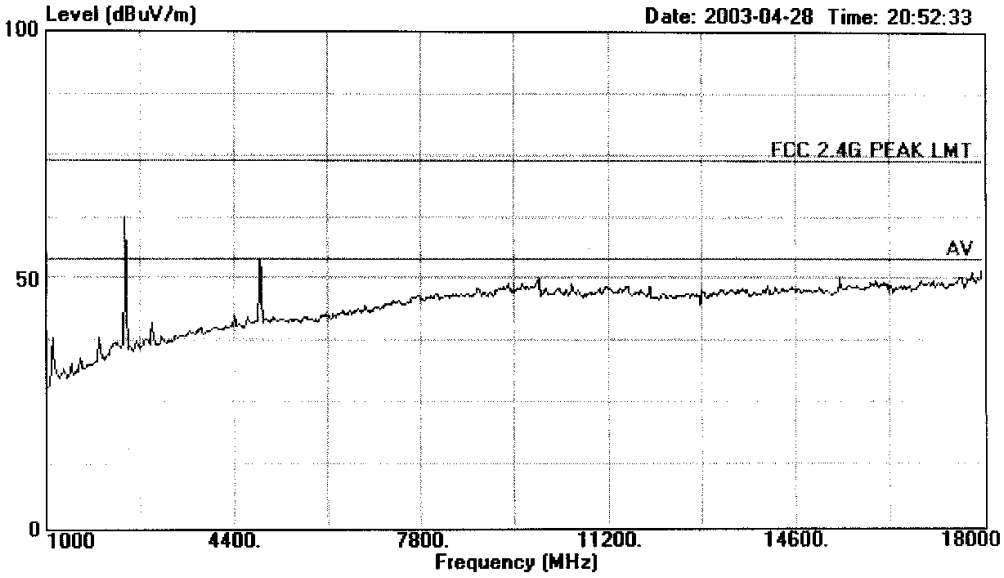
Nantou, Shenzhen, Guangdong, China
Tel:+86-755-26639496 Fax:+86-755-26632877

Data#: 45 File#: C:\EMI TEST DATA\V\Vision.EMI



Site : 1# Chamber
Condition : FCC 2.4G PEAK LMT 3m 3115FACTOR HORIZONTAL
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Receiver 2178
Power : Host 230V/50Hz
Test Engineer : Sean Xing
Memo : Running

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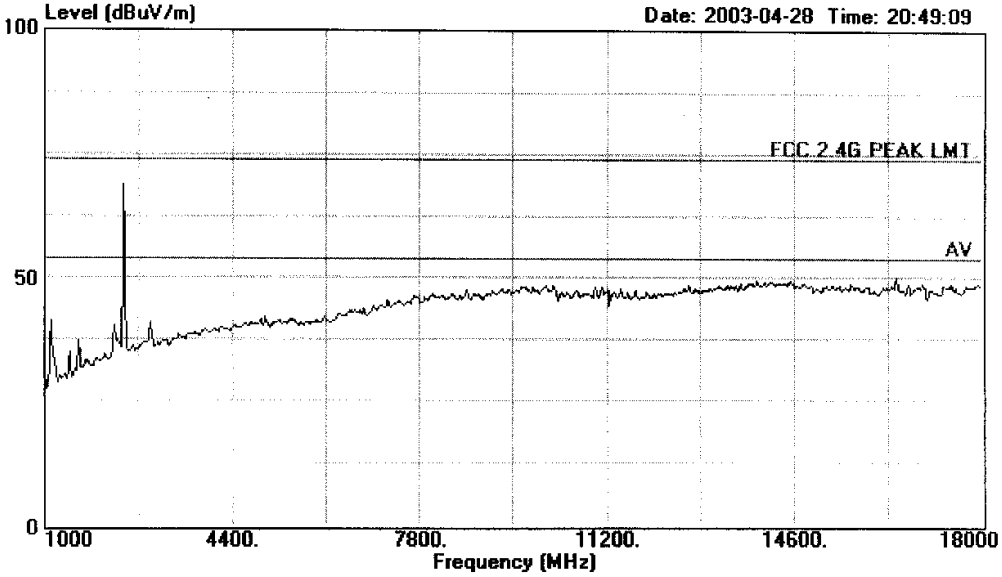
Tel:+86-755-26639496 Fax:+86-755-26632877

Data#: 43 File#: C:\EMI TEST DATA\V\Vision.EMI



Site : 1# Chamber
Condition : FCC 2.4G PEAK LMT 3m 3115FACTOR VERTICAL
EUT : GAMECUBE 2.4G RF Wireless Controller
M/N : Receiver 2178
Power : Host 230V/50Hz
Test Engineer : Sean Xing
Memo : Running