



FCC TEST REPORT

for

Zhenjiang Mapor Electronic Technology Co.,Ltd

BOOK SHAPE PC

Model Number: WP-C700

Prepared for : Zhenjiang Mapor Electronic Technology Co.,Ltd

Address : Dajiahe Village,Dajiahe Town,Ninghai,Ningbo,
Zhejiang,China

Prepared By : NS Technology Co., Ltd.

Address : Chenwu Industrial Zone, Houjie Town, Dongguan City,
Guangdong, China

Tel: +86-769-85935656

Fax: +86-769-85991080

Report Number : NSE- F10054868

Date of Test : May 20~May 28, 2010

Date of Report : May 29, 2010



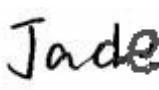
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NS Technology Co., Ltd.

Applicant:	Zhenjiang Mapor Electronic Technology Co.,Ltd Dajiahe Village,Dajiahe Town,Ninghai,Ningbo, Zhejiang,China		
Manufacturer:	Zhenjiang Mapor Electronic Technology Co.,Ltd Dajiahe Village,Dajiahe Town,Ninghai,Ningbo, Zhejiang,China		
E.U.T:	BOOK SHAPE PC		
Model Number:	WP-C700		
Trade Name:	I-ZOON	Operating Frequency:	IEEE802.11b 2412~2462MHz IEEE802.11g 2412~2462MHz
Date of Receipt:	Mar.16, 2010	Date of Test:	May 20~May 28, 2010
Test Specification:	FCC Part 15 Subpart C: Oct.1,2009 ANSI C63.4:2003		
Test Result:	The equipment under test was found to be compliance with the requirements of the standards applied.		
Issue Date: May 29, 2010			
Tested by:	Reviewed by:	Approved by:	
			
Jade/ Engineer	Iceman Hu / Supervisor	Steven Lee / Manager	
Other Aspects:	None.		
Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under tested			
This test report is based on a single evaluation of one sample of above mentioned products ,It is not permitted to be duplicated in extracts without written approval of NS Technology Co., Ltd.			



1. GENERAL PRODUCT INFORMATION

1.1. Product Function

Details please refer to Technical Construction Form and User Manual.

1.2. Description of Device (EUT)

E.U.T.	: BOOK SHAPE PC
Model No.	: WP-C700
Operating Frequency	: 2412~2462MHz
Number of Channels	: 11 Channels
Channel frequency	: $F = 2412 + 5(K-1)$ K=1,2,.....11
Type of Modulation	: DSSS for IEEE 802.11b/g
Data Rate	: IEEE 802.11b:11/5.5/2/1M bps IEEE 802.11g:54/48/36/24/18/12/9/6Mbps
Antenna Type	: Integral
Antenna Gain	: 0.5dBi
System Input Voltage	: DC 9V from adapter input AC 120V/60Hz
Temperature Range(Operating)	: 0 ~+ 40°C
Adapter	: M/N:GFP151C-090160B-1 I/P:100-240V~50/60Hz 0.5A O/P:9V __ 1. 6A DC Line:Unshielded,Undetachable ,1.5m

1.3. Independent Operation Modes

The basic operation modes are:

- 1.4.1. IEEE 802.11b; TX CH1 (2412MHz)
- 1.4.2. IEEE 802.11b; TX CH 6 (2437MHz)
- 1.4.3. IEEE 802.11b; TX CH11 (2462MHz)
- 1.4.4. IEEE 802.11g; TX CH1 (2412MHz)
- 1.4.5. IEEE 802.11g; TX CH 6 (2437MHz)
- 1.4.6. IEEE 802.11g; TX CH11 (2462MHz)

1.4. Test Supporting System

1.4.1. Earphone

Model Number	: a6608cn
Manufacturer	: Vtech
Earphonr line	: Unshielded, Detachable, 1.2m

1.4.2. U Disk

Model Number	: 520A00LF
Manufacturer	: Kingston

1.4.3. Mini SD card

Model Number	: KD74467
Manufacturer	: Kingston



2. TEST SITES

2.1. Test Facilities

EMC Lab : Accredited by TUV Rheinland, Germany
Date of registration: July 28, 2003

Accredited by CNAS, China
Registration No.: L1744
Date of registration: November 25, 2004

Accredited by Intertek ETL SEMKO
Registration No.: TMP-013
Date of registration: June 11, 2005

Accredited by TUV/PS, Hong Kong
Date of registration: December 1, 2005

Accredited by ATCB, USA
Date of registration: August 3, 2006

Accredited by VCCI, Japan
Member No.:2115
Registration No.: R-2527, R-3012 & C-2770
Date of registration: March 23, 2007

Accredited by FCC, USA
Registration No.: 502831
Date of registration: February 9, 2009

Accredited by Industry Canada
Registration No.: 5936A
Date of registration: March 4, 2009

Accredited by American Association for Laboratory
Accreditation (A2LA), USA
Certificate No.: 2951.01
Date of registration: March 31, 2010

Name of Firm : NS Technology Co., Ltd.

Site Location : Chenwu Industrial Zone, Houjie Town, Dongguan City,
Guangdong, China



2.2. List of Test and Measurement Instruments

2.2.1. For conducted emission at the mains terminals test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESCS30	100340	May 31,09	May 31,10
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	May 31,09	May 31,10
Artificial Mains Network (AUX)	Kyoritsu	KNW-407	8-1579-1	Jan.19,09	Jan.19,11
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100168	May 2,10	May 2,11

2.2.2. For radiated emission test (30MHz-1GHz)

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde & Schwarz	ESCS30	100340	May 31,09	May 31,10
Spectrum Analyzer	Agilent	E7405A	MY45118807	May 30,09	May 30,10
Bilog Antenna	Teseq	CBL 6111D	25758	Oct. 27,09	Oct. 27,10
Signal Amplifier	Agilent	8447D	2944A10488	May 2,10	May 2,11
50Ω Coaxial Switch	ANRITSU	MP59B	6200530577	May 2,10	May 2,11

2.2.3. For radiated emission test(Above 1GHz)

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Spectrum Analyzer	Agilent	E7405A	MY45118807	May 30,09	May 30,10
Horn Antenna	EMCO	3117	00062558	Jan. 19,09	Jan. 19,11
Signal Amplifier	BURGEON	PEC-38-30M18G-12-SFF	NSEMC001	May 31,09	May 31,11

2.2.4. For output power Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
100V Insertion Unit 50Ω	Rohde&Schwarz	URV5-Z4	100207	May 30,09	May 30,10
Power Meter	Rohde&Schwarz	NRVS	101732	May 30,09	May 30,10

2.2.5. For 6dB bandwidth and power spectral density Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Spectrum Analyzer	Agilent	E7405A	MY45118807	May 30,09	May 30,10

2.2.6. For Band edge compliance test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Spectrum Analyzer	Agilent	E7405A	MY45118807	May 30,09	May 30,10
Horn Antenna	EMCO	3117	00062558	Jan. 19,09	Jan. 19,11
Signal Amplifier	BURGEON	PEC-38-30M18G-12-SFF	NSEMC001	May 31,09	May 31,11



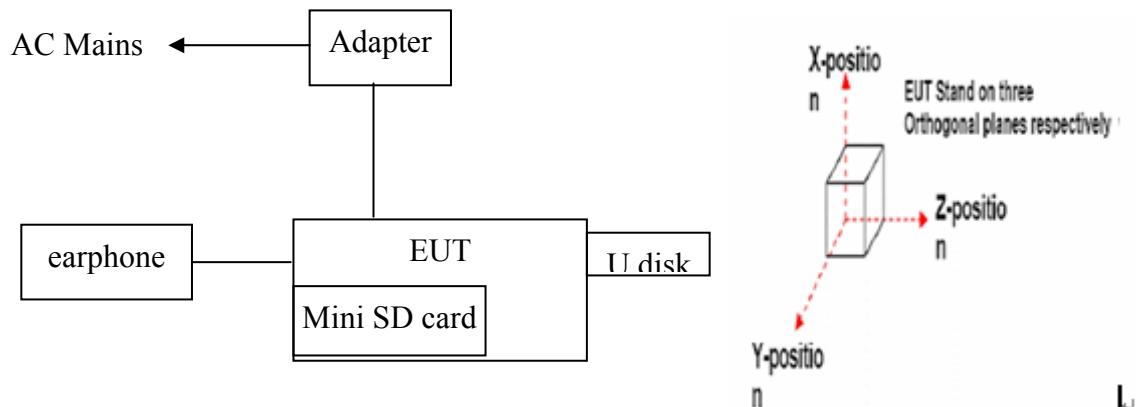
3. TEST SET-UP AND OPERATION MODES

3.1. Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its highest possible radiated level. The test modes were adapted accordingly in reference to the Operating Instructions.

3.2. Block Diagram of Test Set-up

System Diagram of Connections Between EUT and Simulators



(EUT : BOOK SHAPE PC)

Note: We test X-axis, Y-axis, and Z-axis,. The Y-axis is the worst mode, so only the worst mode test data was included in the report.

3.3. Test Operation Mode and Test Software

Refer to clause 1.4

3.4. Special Accessories and Auxiliary Equipment

3.5. Countermeasures to Achieve EMC Compliance

None.

4. TEST SUMMARY

Test items and result lists

No.	Item	Standard	Results
1	Data rate VS power	N/A	N/A
2	Conduction Emission Test	FCC Part15C: 15.207 ANSI C63.4-2003 KDB558074	PASS
3	Radiated Emission Test	FCC Part15C: 15.209 ANSI C63.4-2003 KDB558074	PASS
4	Band Edge Compliance Test	FCC Part15: 15.247 KDB558074	PASS
5	Output Power Test	FCC Part15: 15.247 KDB558074	PASS
6	6dB Bandwith Test	FCC Part15: 15.247 KDB558074	PASS
7	Power Spectral Density Test	FCC Part15: 15.247 KDB558074	PASS
8	Antenna requirement	FCC Part 15:15.203	PASS



5. DATA RATE VS POWER

Mode	data rate (Mbps)	CH	Read (dBm)	Factor (dB)	Result (dBm)
11b	1	CH6	7.32	5	12.32
	2	CH6	7.26	5	12.26
	5.5	CH6	7.46	5	12.46
	11	CH6	7.16	5	12.16
11g	54	CH6	5.25	5	10.25
	48	CH6	4.23	5	9.23
	36	CH6	4.85	5	9.85
	24	CH6	4.61	5	9.61
	18	CH6	4.32	5	9.32
	12	CH6	4.37	5	9.37
	9	CH6	3.94	5	8.94
	6	CH6	4.09	5	9.09
Result=Read+Factor Factor=cable loss+antenna gain When IEEE 802.11b's data rate was 5.5Mbps ; IEEE 802.11g's data rate was 54Mbps, the EUT have maximum output power and all the test was performed in this data rate set.					



6. EMISSION TEST RESULTS

6.1. Conducted Emission at The Mains Terminals Test

RESULT : Pass
 Test procedure : FCC Part 15 Subpart C
 Frequency range : 0.15~30MHz
 Test Site : Shielded Room
 Limits : FCC Part 15 Subpart C

Test Setup

Date of test : Jan. 20, 2010
 Model No. : WP-C700
 Input Voltage : DC 9V from adapter input AC 120V/60Hz
 Operation Mode : TX Mode

The EUT was put on a wooden table which was 0.8metre high above the ground and connected to the AC mains through a Artificial Mains Network (A.M.N). The mains lead in excess of 1 m separating the EUT from the AMN was folded at the cable centre into a bundle no longer than 0.4 m.

The EUT was kept 0.4m from any other earthed conducting surface. Both sides of AC line were checked to find out the maximum conducted emission levels according to the test procedure during conducted emission test.

The bandwidth of the test receiver (R&S ESCS30) was set at 9 kHz.

The frequency range from 150 kHz to 30 MHz was investigated.

The test data of the worst case condition(s) was reported on the following page.

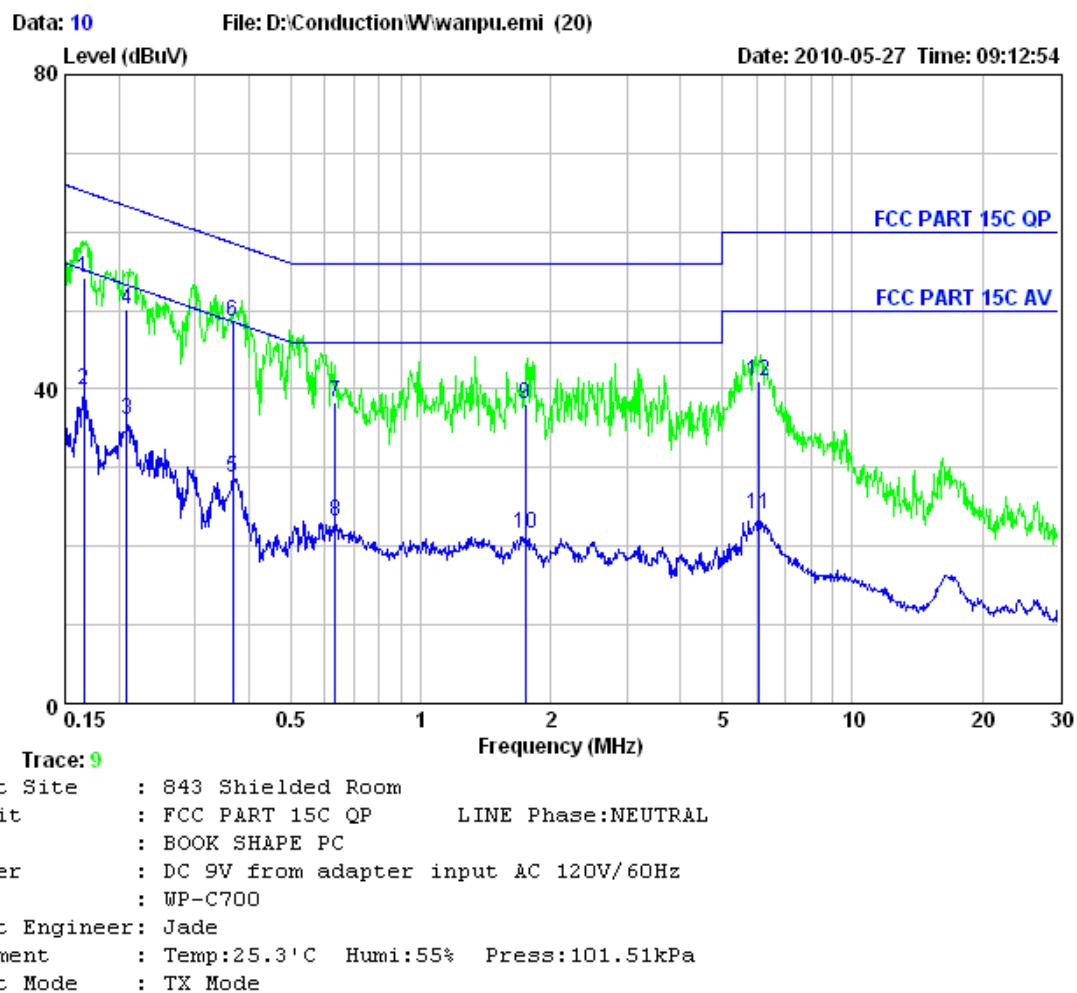
When 802.11b's data rate was 5.5MHz;802.11g's data rate was 54MHz;the EUT have Maximum output and all the test was performed in this data rate set.

Note: Test uncertainty: $\pm 2.54\text{dB}$ at a level of confidence of 95%.:



NS Technology

Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080

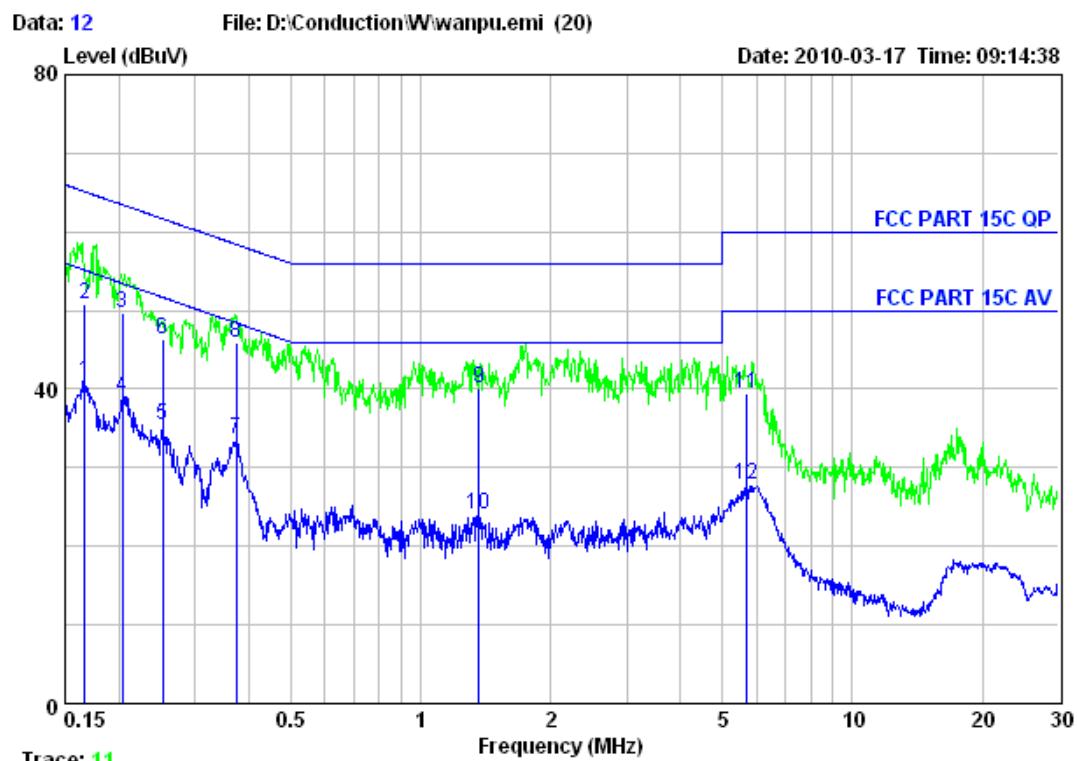


Freq.	Level	Limits	Margin	Remark
(MHz)	(dBuV)	(dBuV)	(dB)	
<hr/>				
1	0.17	54.20	65.16	QP
2	0.17	39.80	55.16	Average
3	0.21	35.99	53.27	Average
4	0.21	50.10	63.27	QP
5	0.37	28.72	48.56	Average
6	0.37	48.50	58.56	QP
7	0.63	38.30	56.00	QP
8	0.63	23.19	46.00	Average
9	1.74	38.10	56.00	QP
10	1.74	21.59	46.00	Average
11	6.09	24.06	50.00	Average
12	6.09	40.90	60.00	QP



NS Technology

Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080



Test Site : 843 Shielded Room
 Limit : FCC PART 15C QP LINE Phase:LINE
 EUT : BOOK SHAPE PC
 Power : DC 9V from adapter input AC 120V/60Hz
 M/N : WP-C700
 Test Engineer: Jade
 Comment : Temp:25.3'C Humi:55% Press:101.51kPa
 Test Mode : TX Mode

Freq. (MHz)	Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
<hr/>				
1 0.17	41.09	55.12	14.03	Average
2 0.17	50.80	65.12	14.32	QP
3 0.20	49.60	63.45	13.85	QP
4 0.20	39.06	53.45	14.39	Average
5 0.25	35.41	51.69	16.28	Average
6 0.25	46.40	61.69	15.29	QP
7 0.37	33.59	48.43	14.84	Average
8 0.37	45.80	58.43	12.63	QP
9 1.37	40.20	56.00	15.80	QP
10 1.37	24.04	46.00	21.96	Average
11 5.68	39.40	60.00	20.60	QP
12 5.68	27.86	50.00	22.14	Average



6.2. Radiated Emission

6.2.1. Test limits

- 1) FCC part 15C section 15.209
- 2) FCC part 15C section 15.247(a)

6.2.2. Test procedure

The EUT was placed on a turn table which was 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna which was mounted on a antenna tower. At the frequency band of 30MHz to 1GHz, The measuring antenna moved up and down to find out the maximum emission level. It moved from 1 to 4 m for horizontal and vertical polarizations. The broadband antenna (calibrated by dipole antenna) was used as a receiving antenna. At the frequency band of 1GHz to 25GHz, The measuring antenna moved from 1 to 4 m for horizontal and vertical polarization. The horn antenna was used as a receiving antenna.

The resolution bandwidth and video bandwidth of the test receiver was 120 kHz and 300kHz for Quasi-peak detection at frequency below 1GHz.

The resolution bandwidth and video bandwidth of the test receiver was 1MHz and 1MHz for Peak detection at frequency above 1GHz.

For Average measurement at frequency above 1GHz. The resolution bandwidth of the test receiver was 1MHz ; due to the shortest pulse width T is 116us, according the video bandwidth should not smaller than 1/T, so the video bandwidth is 10Hz.

In 18GHz to 25GHz, The EUT was checked by Horn ANT . But the test result is background.

When 802.11b's data rate was 5.5MHz; 802.11g's data rate was 54MHz; the EUT have Maximum output and all the test was performed in this data rate set.

The EUT position(X.-axis, Y-axis, Z-axis) were checked and worse case was happened in Y-axis position. So Y-axis position was chose for find measurement.

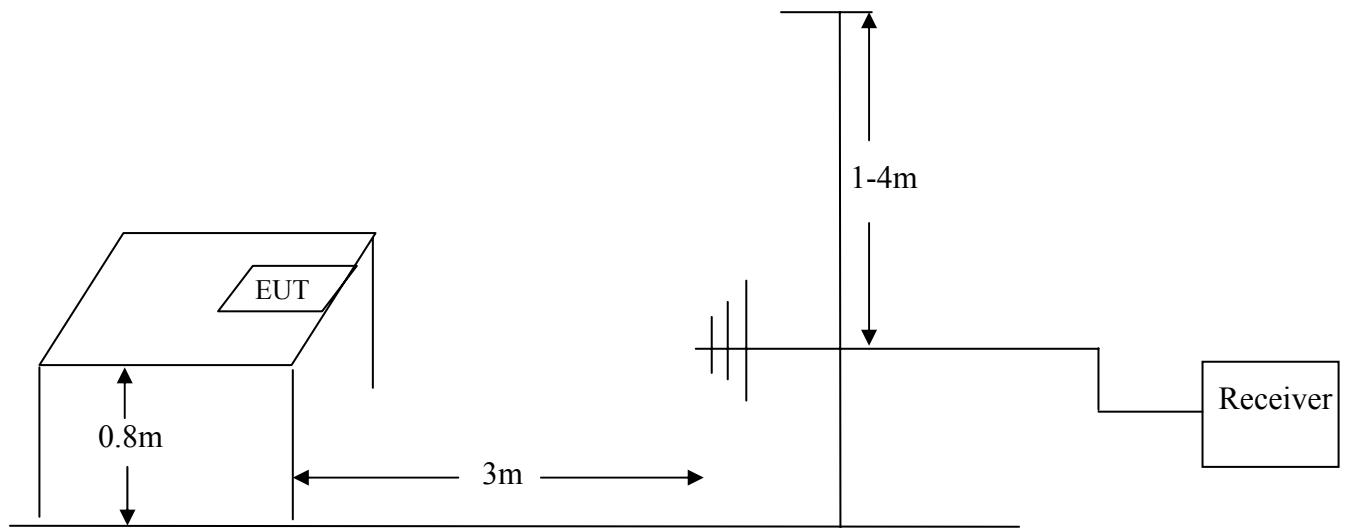
The EUT was tested in Chamber Site.

Note: Test uncertainty: $\pm 2.62\text{dB}$ at a level of confidence of 95%.:

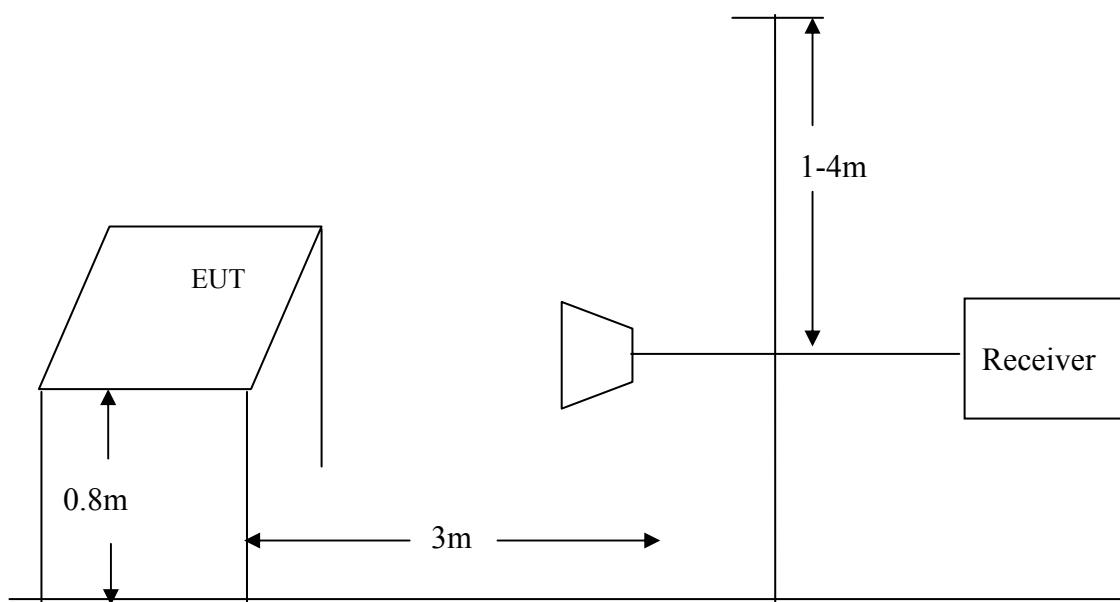


6.2.3. Test Setup Diagram

5.1.3.1. Frequency range: 30MHz-1000MHz



5.1.3.2. Frequency range: 1GHz -25GHz



The test plots as following:

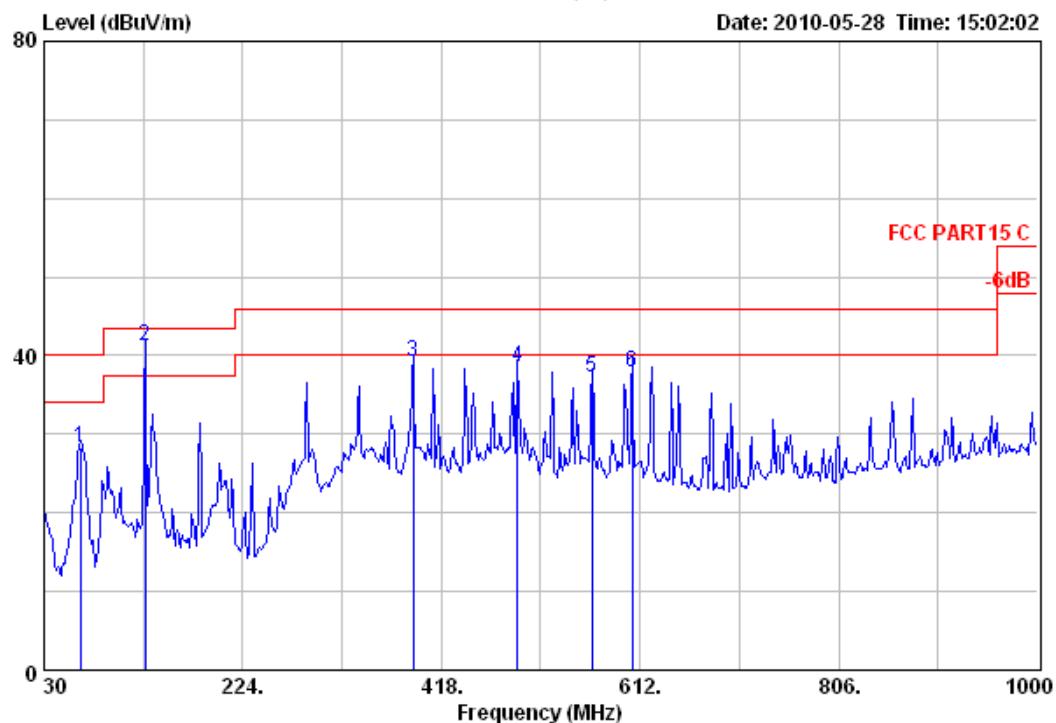
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080

Data: 38

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:02:02



Test Site : 10m Chamber
 Limit : FCC PART15 C
 Dis. / Ant. : 3m 25758-3 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:55% Press:101.43kPa
 Test Mode : TX Mode

Freq. (MHz)	Emission			Ant. Cable				Remark
	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor	Loss (dB/m)	(dB)	
1 65.89	28.27	40.00	11.73	21.86	5.60	0.81	QP	
2 128.94	41.11	43.50	2.39	27.95	11.96	1.20	QP	
3 390.84	39.19	46.00	6.81	20.74	16.32	2.13	QP	
4 492.69	38.55	46.00	7.45	17.76	18.36	2.43	QP	
5 565.44	37.26	46.00	8.74	14.60	20.00	2.66	QP	
6 604.24	37.94	46.00	8.06	14.82	20.38	2.74	QP	



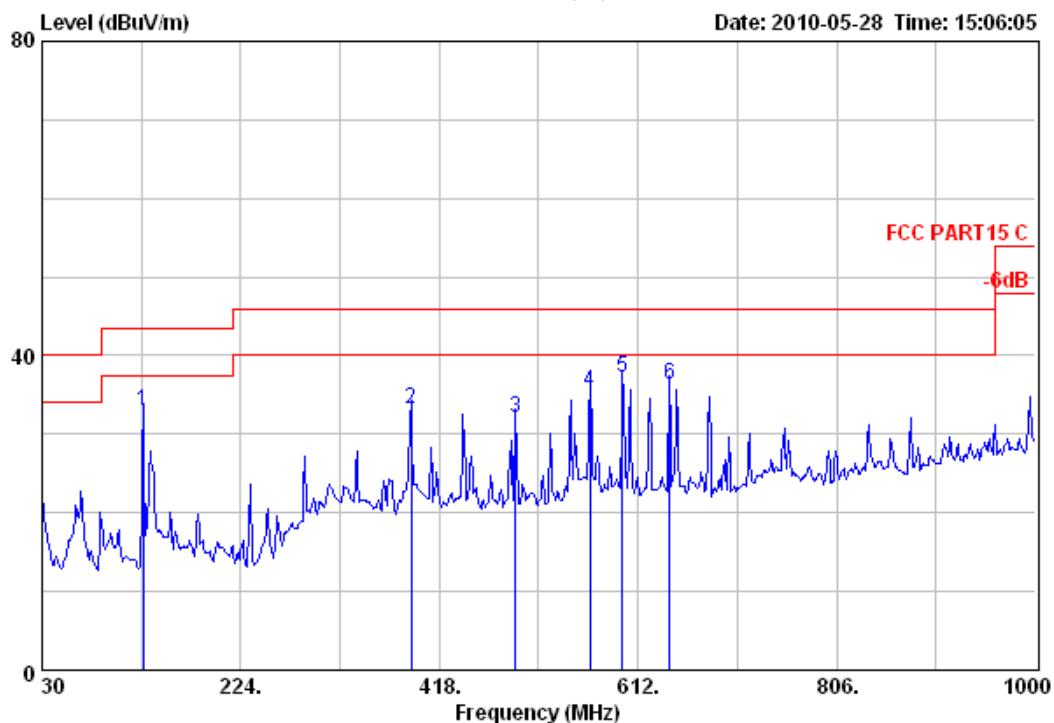
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080

Data: 39

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:06:05



Test Site : 10m Chamber
 Limit : FCC PART15 C
 Dis. / Ant. : 3m 25758-3 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:55% Press:101.43kPa
 Test Mode : TX Mode

Freq. (MHz)	Emission			Ant. Cable				Remark
	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor	Loss (dB/m)	(dB)	
1 128.94	32.91	43.50	10.59	19.75	11.96	1.20	QP	
2 390.84	33.21	46.00	12.79	14.76	16.32	2.13	QP	
3 492.69	32.12	46.00	13.88	11.33	18.36	2.43	QP	
4 565.44	35.35	46.00	10.65	12.69	20.00	2.66	QP	
5 596.48	37.18	46.00	8.82	14.34	20.12	2.72	QP	
6 643.04	36.37	46.00	9.63	12.83	20.73	2.81	QP	



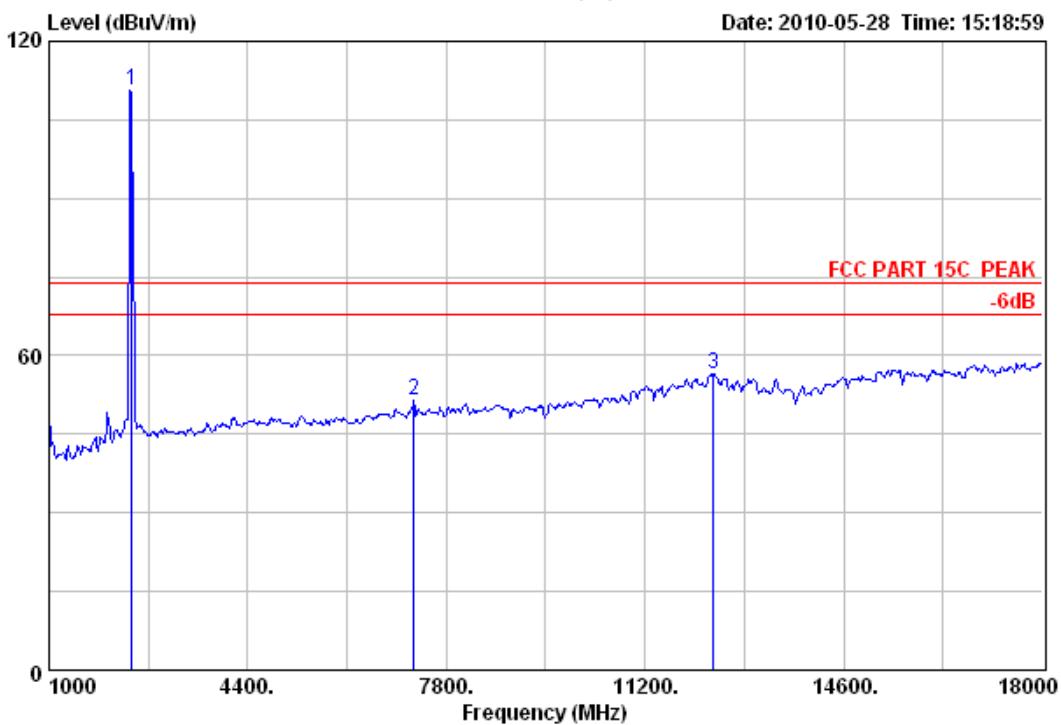
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080

Data: 44

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:18:59



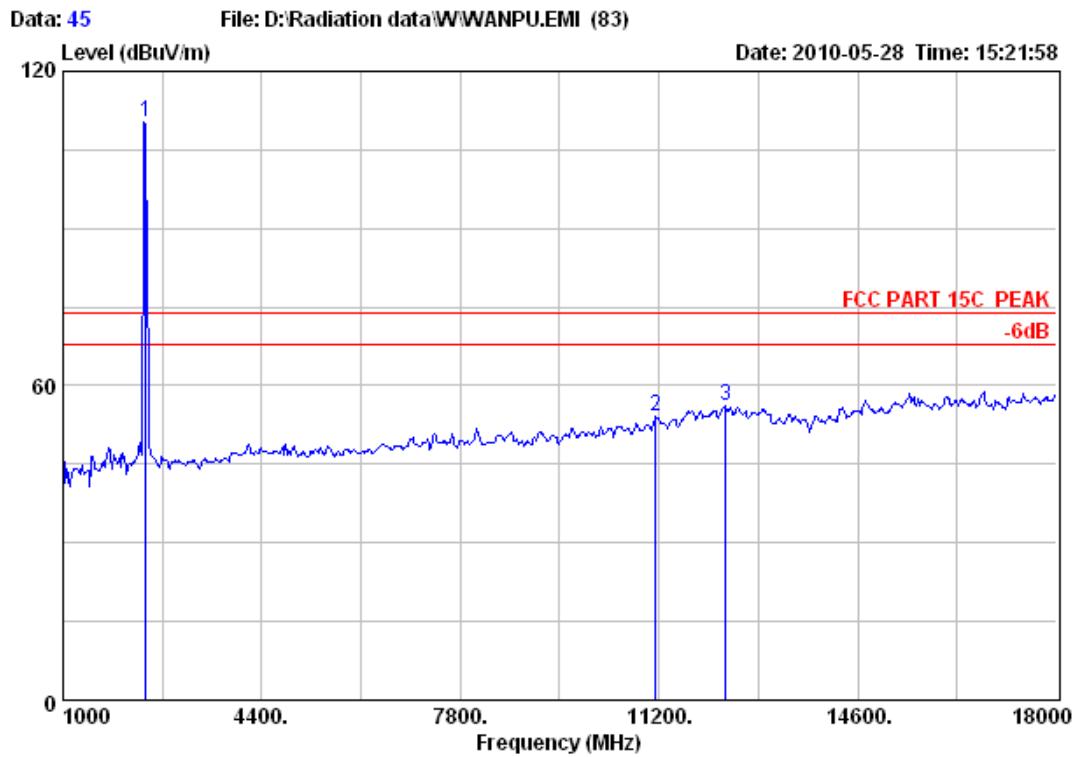
Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH1 2412MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)	
1 2412.00	110.65	114.00	3.35	76.92	31.50	2.23 Peak
2 7239.00	51.54	74.00	22.46	12.16	36.85	2.53 Peak
3 312373.00	56.53	74.00	17.47	13.74	39.95	2.84 Peak



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Tel: +86-769-85935656
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Test Site : 10m Chamber
Limit : FCC PART 15C PEAK
Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
EUT : BOOK SHAPE PC
M/N : WP-C700
Power : DC 9V from adapter input AC 120V/60Hz
Test Engineer : Jade
Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
Test Mode : TX Mode 802.11g CH1 2412MHz

Emission				Ant.	Cable	Remark	
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)	Loss (dB)	
1 2412.00	110.15	114.00	3.85	76.42	31.50	2.23	Peak
211149.00	54.11	74.00	19.89	12.80	38.54	2.77	Peak
312339.00	56.01	74.00	17.99	13.23	39.94	2.84	Peak



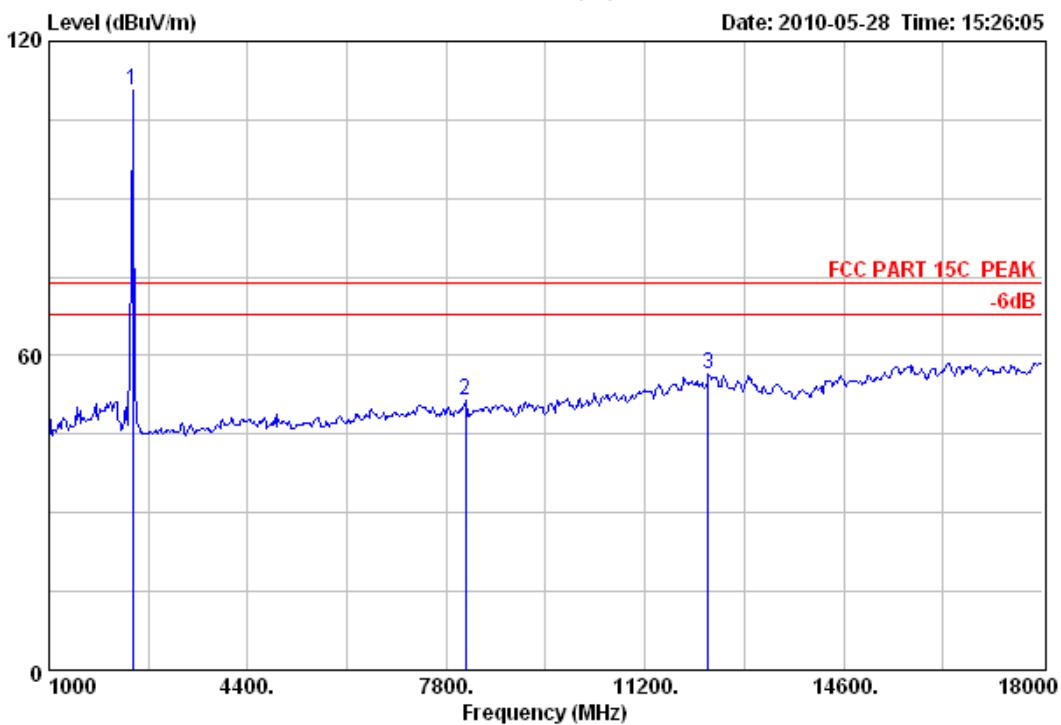
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080

Data: 46

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:26:05



Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH6 2437MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)	
1 2437.00	110.63	114.00	3.37	76.86	31.54	2.23 Peak
2 8123.00	51.31	74.00	22.69	11.76	36.97	2.58 Peak
3 12288.00	56.41	74.00	17.59	13.65	39.92	2.84 Peak



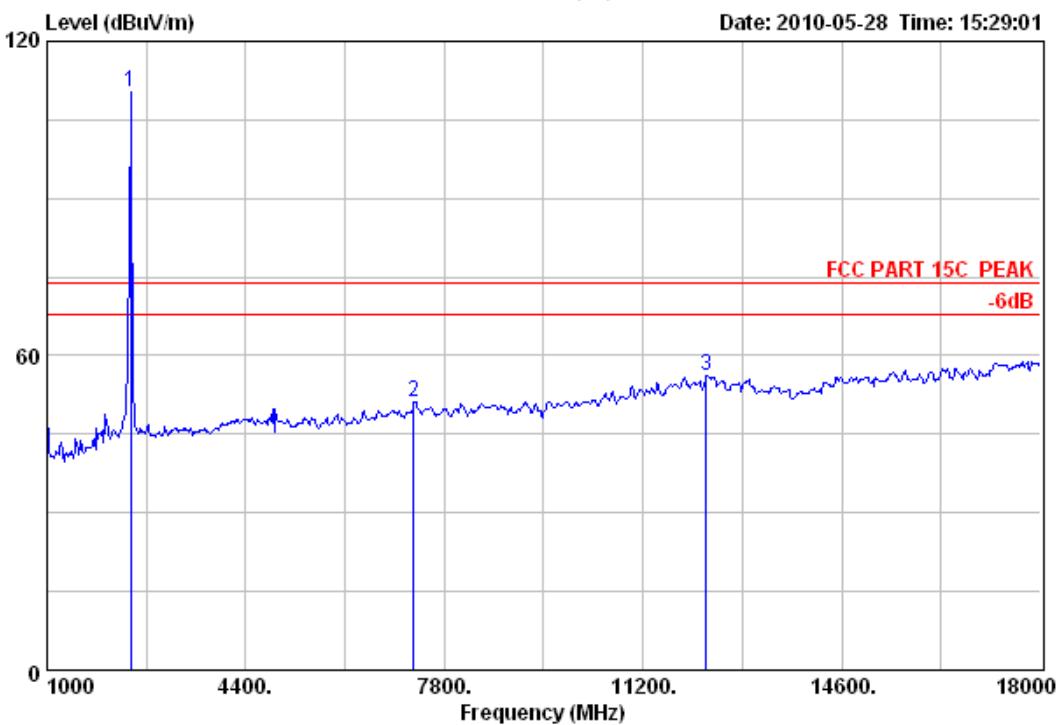
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080

Data: 47

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:29:01



Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH6 2437MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)	
1 2437.00	110.20	114.00	3.80	76.43	31.54	2.23 Peak
2 7273.00	51.09	74.00	22.91	11.71	36.85	2.53 Peak
3 12288.00	56.12	74.00	17.88	13.36	39.92	2.84 Peak



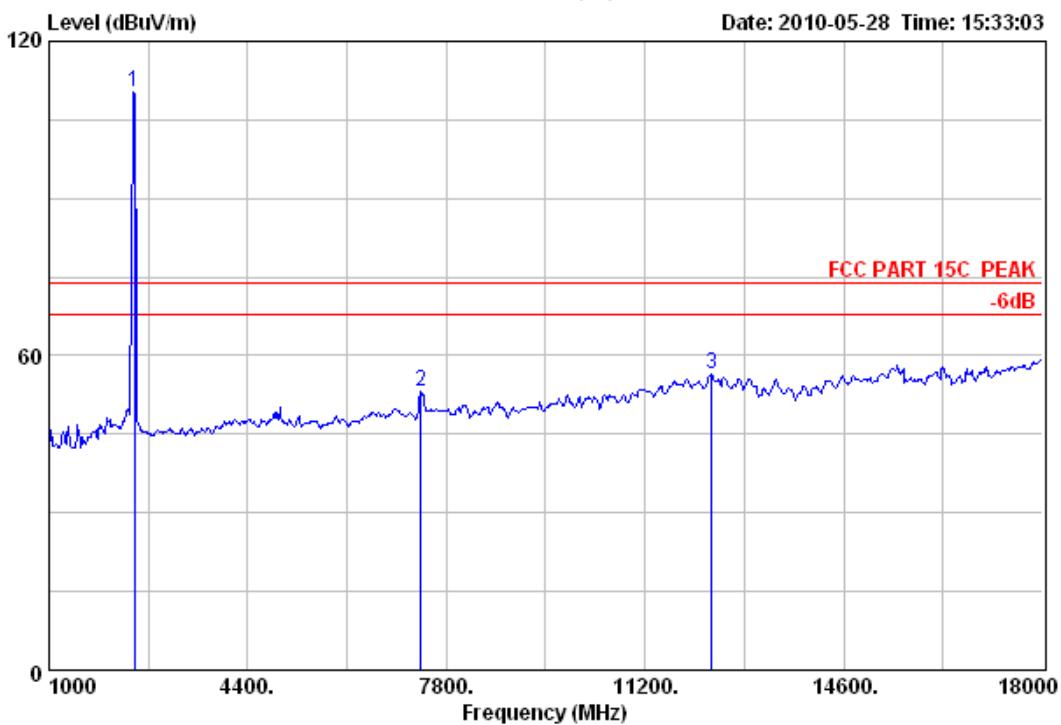
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Tel: +86-769-85935656
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Data: 48

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:33:03



Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH11 2462MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)	
1 2462.00	110.16	114.00	3.84	76.37	31.56	2.23 Peak
2 7358.00	53.17	74.00	20.83	13.81	36.83	2.53 Peak
3 12333.900	56.62	74.00	17.38	13.84	39.94	2.84 Peak



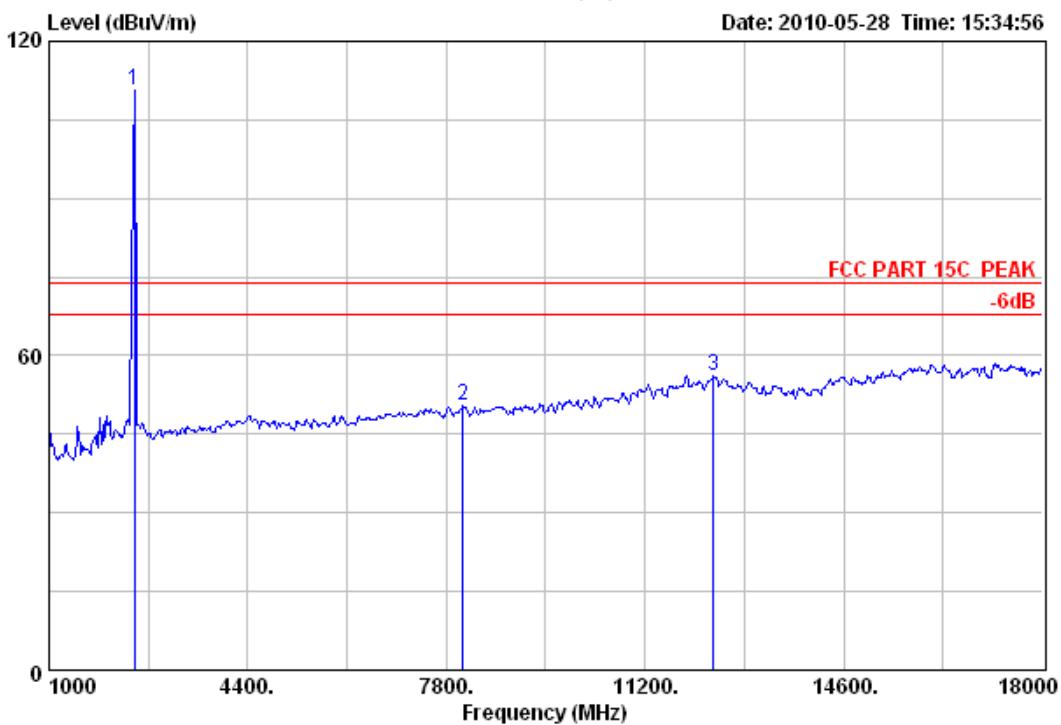
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Data: 49

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:34:56



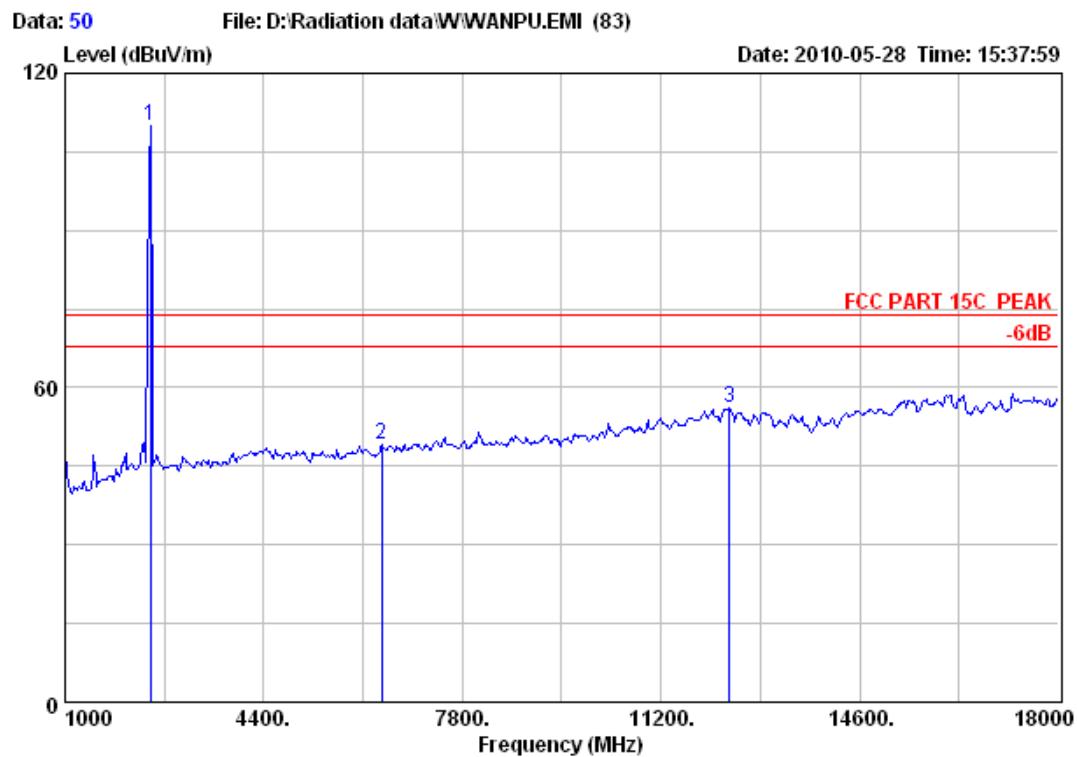
Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH11 2462MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)	
1 2462.00	110.67	114.00	3.33	76.88	31.56	2.23 Peak
2 8089.00	50.38	74.00	23.62	10.82	36.98	2.58 Peak
3 12373.00	56.02	74.00	17.98	13.23	39.95	2.84 Peak



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Test Site : 10m Chamber
Limit : FCC PART 15C PEAK
Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
EUT : BOOK SHAPE PC
M/N : WP-C700
Power : DC 9V from adapter input AC 120V/60Hz
Test Engineer : Jade
Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
Test Mode : TX Mode 802.11b CH11 2462MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor Loss (dB/m)	
1 2462.00	110.00	114.00	4.00	76.21	31.56	2.23 Peak
2 6423.00	48.99	74.00	25.01	9.99	36.52	2.48 Peak
3 123373.00	56.01	74.00	17.99	13.22	39.95	2.84 Peak



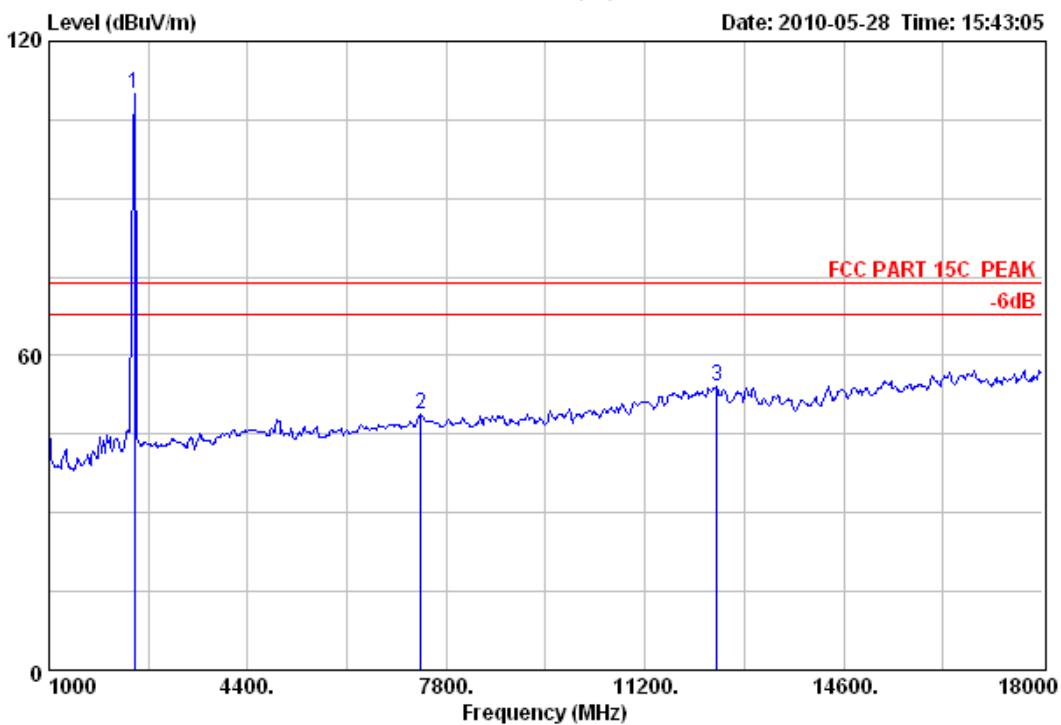
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Data: 51

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:43:05



Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH11 2462MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB)	
1 2462.00	110.02	114.00	3.98	76.23	31.56	2.23 Peak
2 7358.00	48.77	74.00	25.23	9.41	36.83	2.53 Peak
3 12424.00	54.05	74.00	19.95	11.23	39.97	2.85 Peak



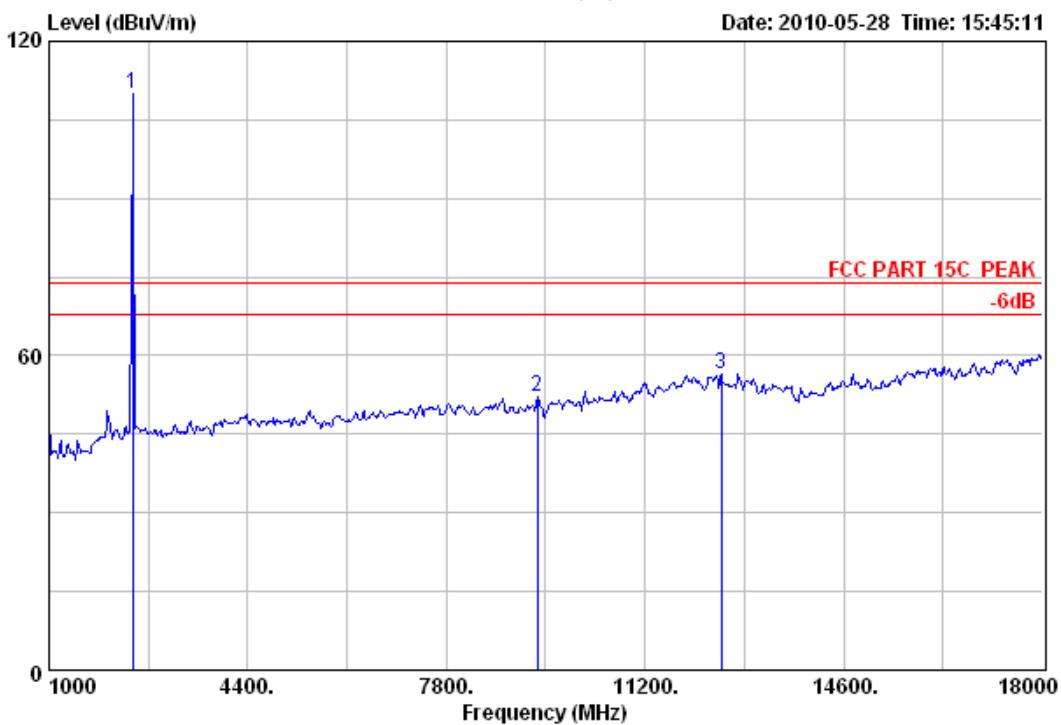
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Data: 52

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:45:11



Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH6 2437MHz

Emission				Ant.	Cable		Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor	Loss (dB/m)	
1 2437.00	110.06	114.00	3.94	76.29	31.54	2.23	Peak
2 9364.00	52.00	74.00	22.00	11.95	37.39	2.66	Peak
3 312509.00	56.59	74.00	17.41	13.73	40.01	2.85	Peak



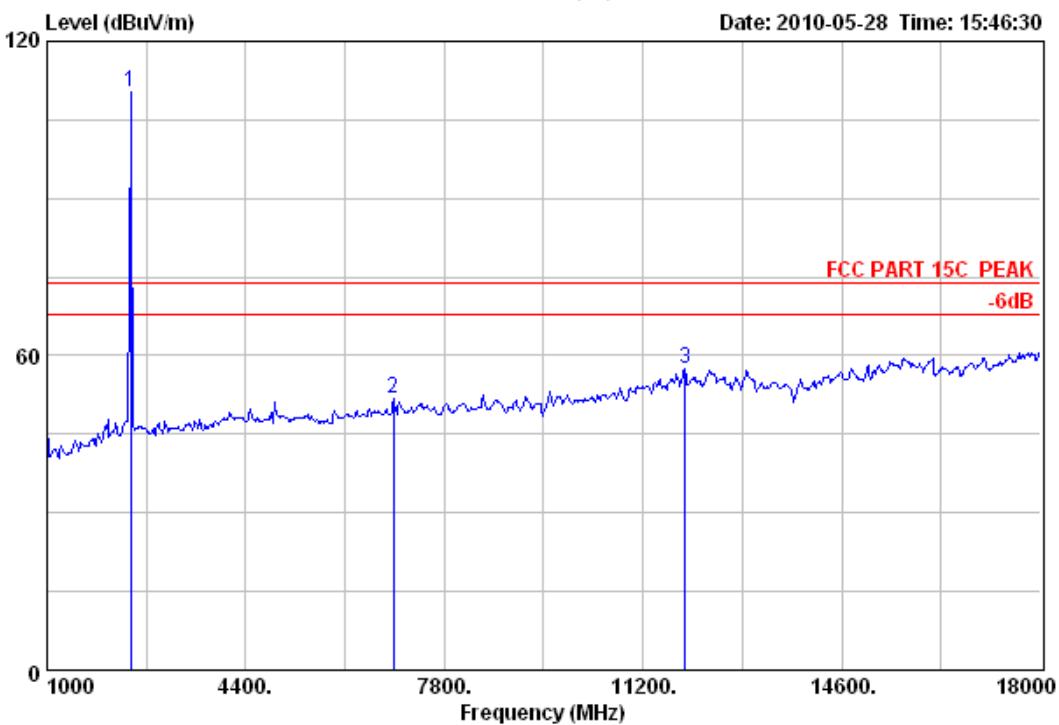
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Data: 53

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:46:30



Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH6 2437MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)	
1 2437.00	110.22	114.00	3.78	76.45	31.54	2.23 Peak
2 6933.00	51.67	74.00	22.33	12.30	36.86	2.51 Peak
3 311914.00	57.56	74.00	16.44	15.07	39.67	2.82 Peak



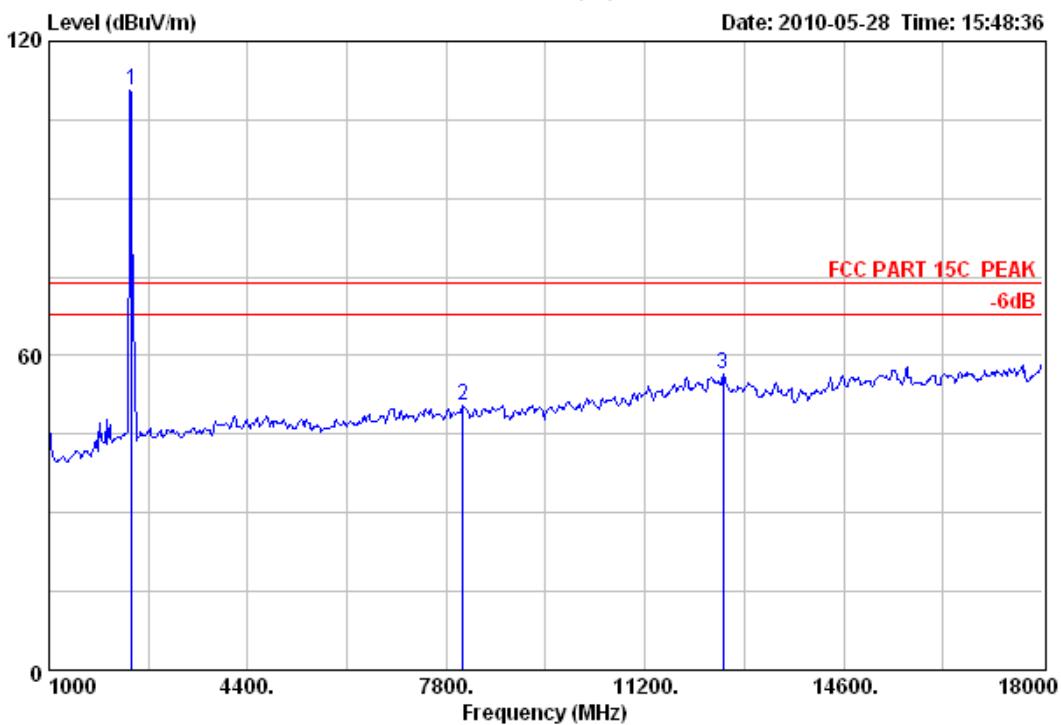
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Data: 54

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:48:36



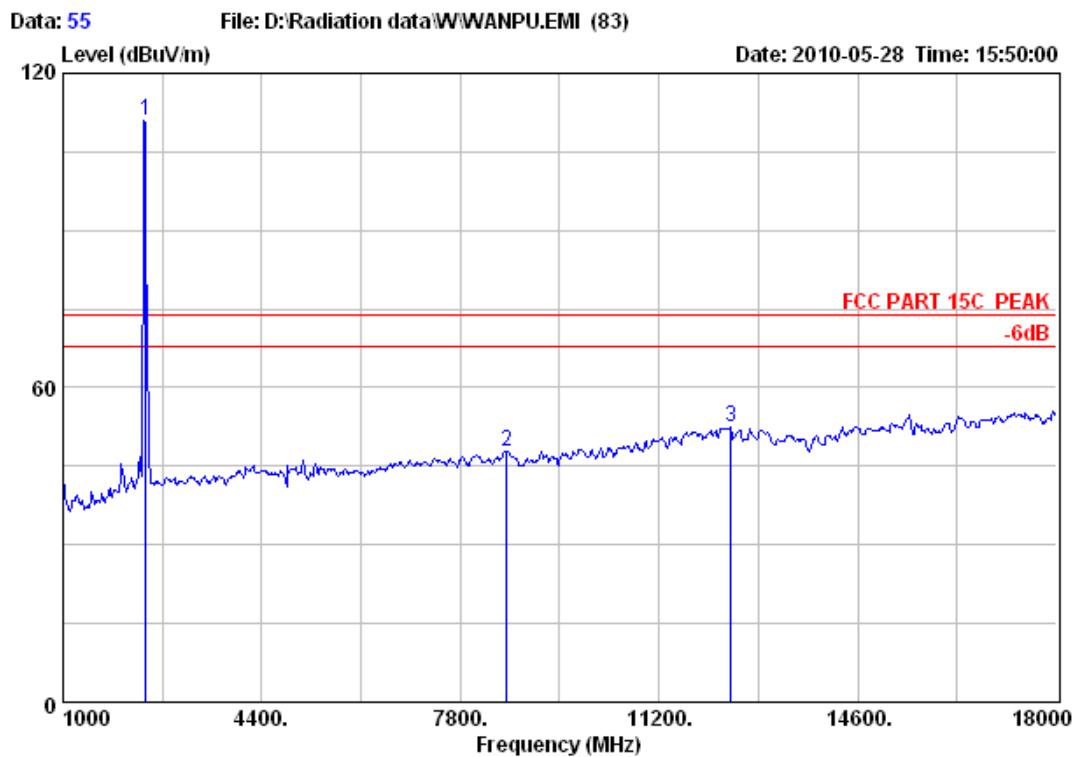
Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH1 2412MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)	
1 2412.00	110.72	114.00	3.28	76.99	31.50	2.23 Peak
2 8089.00	50.56	74.00	23.44	11.00	36.98	2.58 Peak
3 312543.00	56.47	74.00	17.53	13.59	40.03	2.85 Peak



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Fax: +86-769-85991080



Test Site : 10m Chamber
Limit : FCC PART 15C PEAK
Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
EUT : BOOK SHAPE PC
M/N : WP-C700
Power : DC 9V from adapter input AC 120V/60Hz
Test Engineer : Jade
Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
Test Mode : TX Mode 802.11b CH1 2412MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)	
<hr/>						
1 2412.00	110.85	114.00	3.15	77.12	31.50	2.23 Peak
2 8599.00	47.89	74.00	26.11	8.34	36.94	2.61 Peak
3 12424.00	52.43	74.00	21.57	9.61	39.97	2.85 Peak



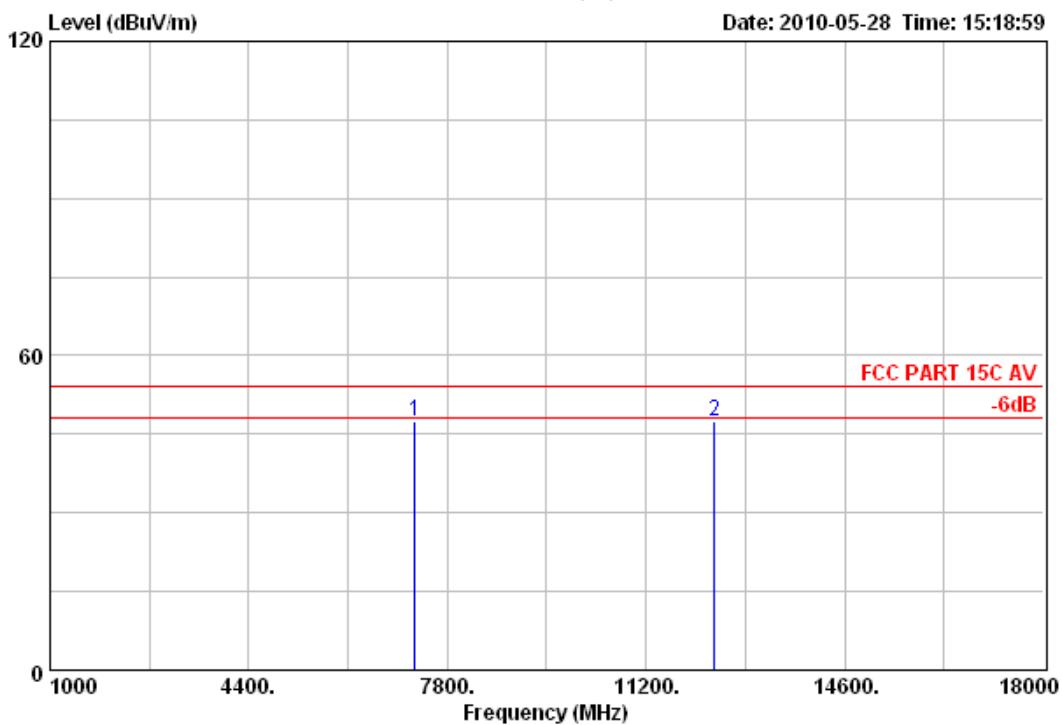
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Dongguan, Guangdong, China
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Data: 56

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:18:59



Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH1 2412MHz

Emission				Ant. Cable			
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB)	Loss (dB/m)	Remark

1 7239.00	47.54	54.00	6.46	8.16	36.85	2.53	Average
21237.30	47.53	54.00	6.47	4.74	39.95	2.84	Average



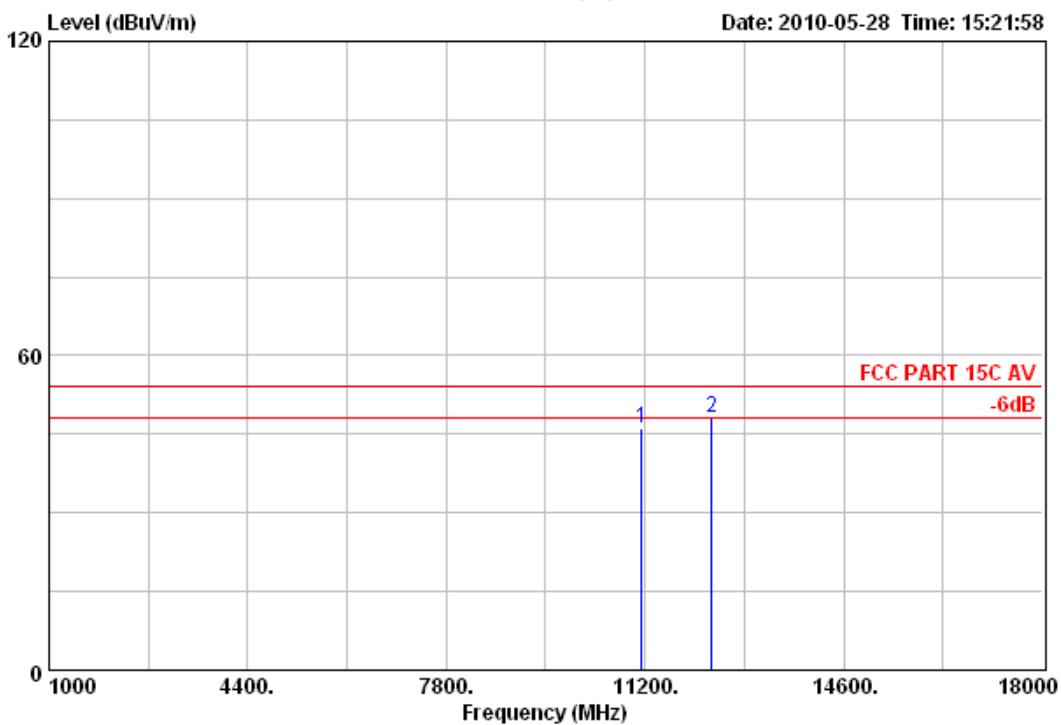
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Dongguan, Guangdong, China
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Data: 57

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:21:58



Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH1 2412MHz

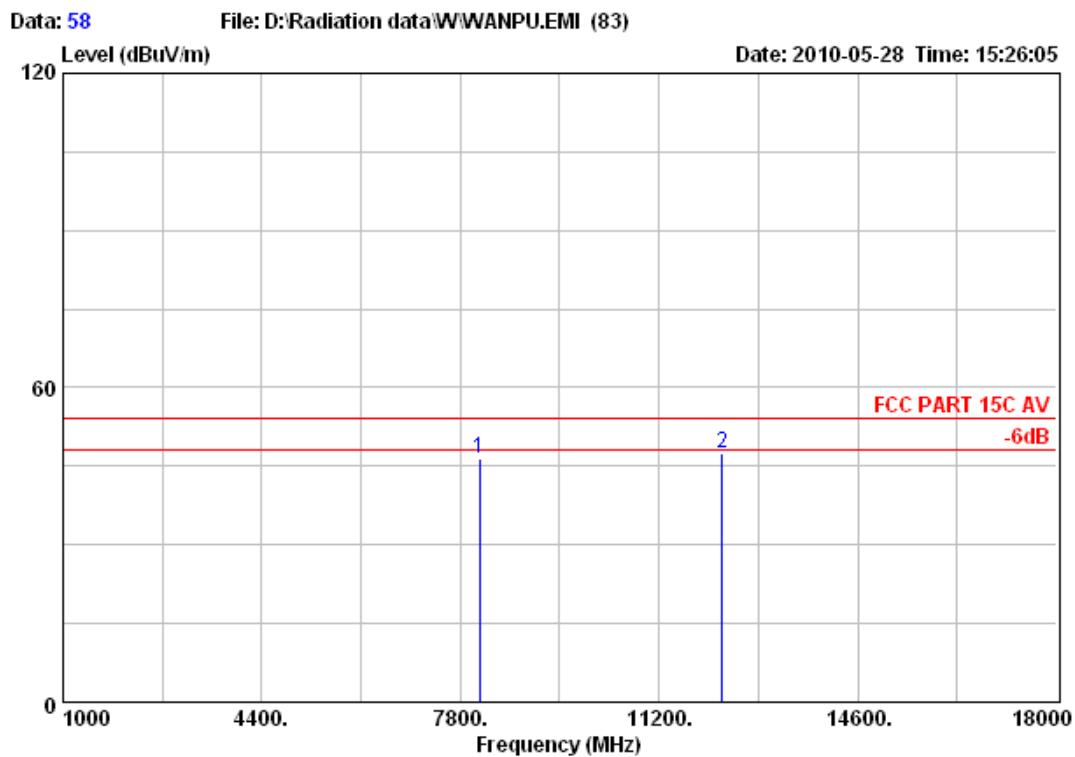
Emission				Ant. Cable			
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor	Loss (dB/m)	Remark

111149.00	46.11	54.00	7.89	4.80	38.54	2.77	Average
212339.00	48.01	54.00	5.99	5.23	39.94	2.84	Average



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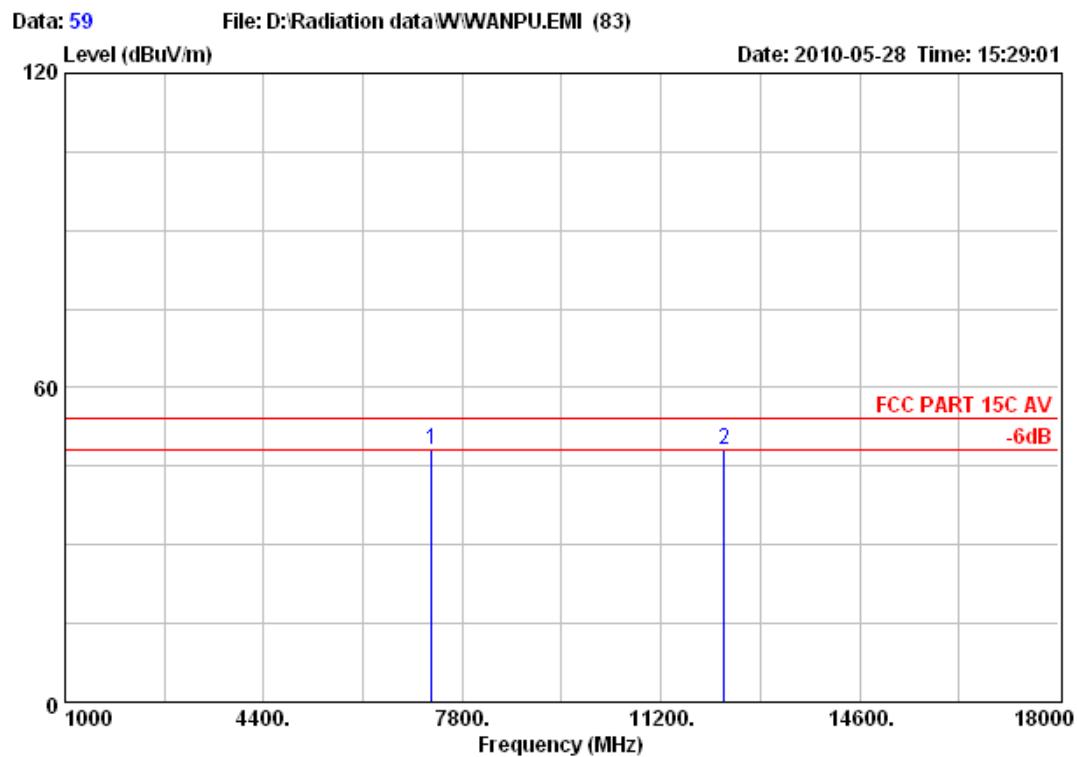
Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH6 2437MHz

Emission				Ant.	Cable		Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor	Loss (dB/m)	
<hr/>							
1 8123.00	46.31	54.00	7.69	6.76	36.97	2.58	Average
212288.00	47.41	54.00	6.59	4.65	39.92	2.84	Average



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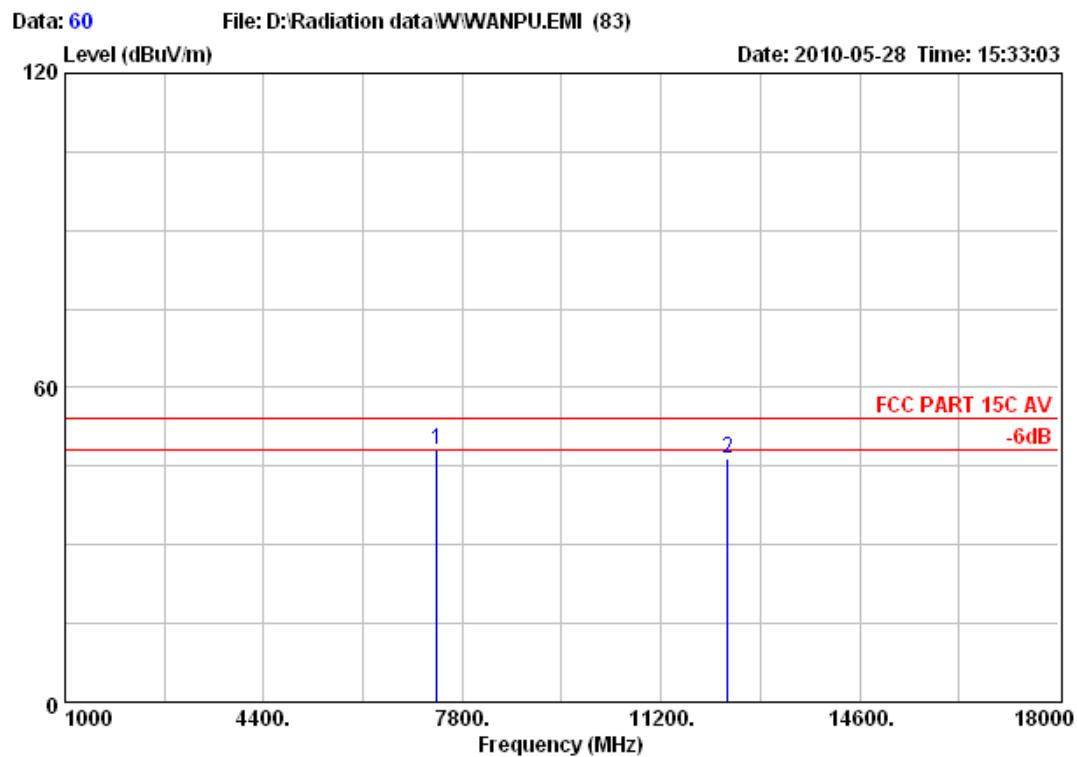
Test Site : 10m Chamber
Limit : FCC PART 15C AV
Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
EUT : BOOK SHAPE PC
M/N : WP-C700
Power : DC 9V from adapter input AC 120V/60Hz
Test Engineer : Jade
Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
Test Mode : TX Mode 802.11g CH6 2437MHz

Emission				Ant. Cable			
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB)	Loss (dB/m)	Remark
<hr/>							
1 7273.00	48.09	54.00	5.91	8.71	36.85	2.53	Average
2 21228.80	48.12	54.00	5.88	5.36	39.92	2.84	Average



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Fax: +86-769-85991080



Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH11 2462MHz

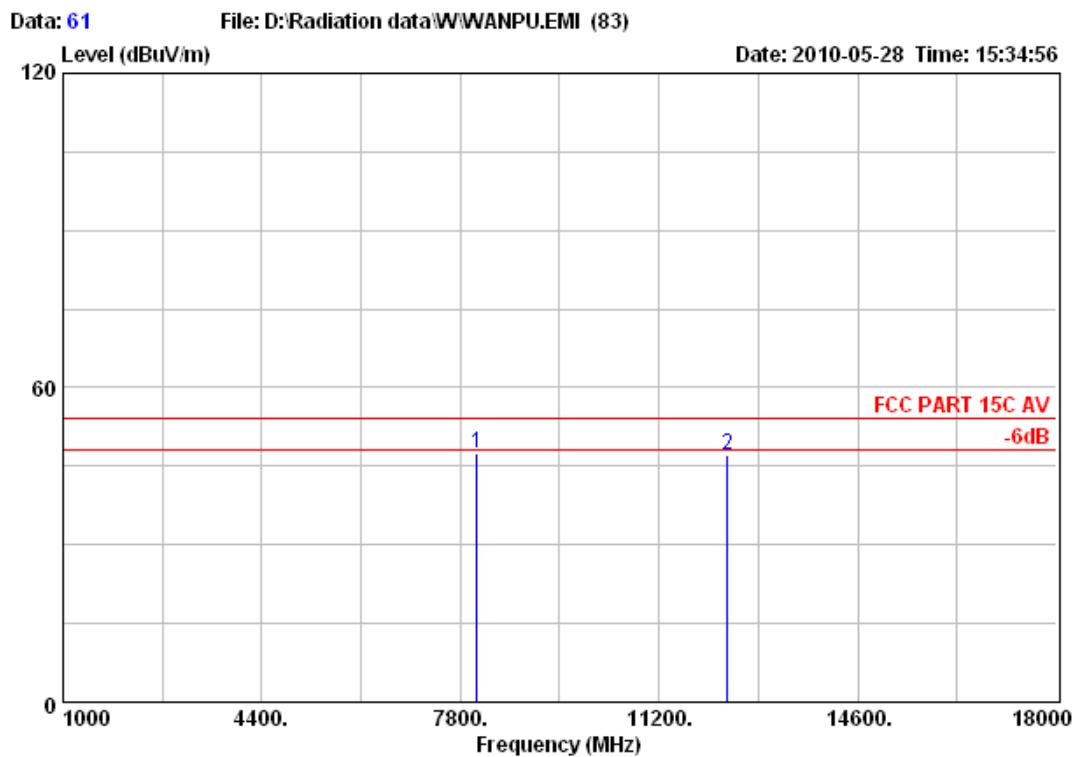
Emission				Ant. Cable			
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB)	Loss (dB/m)	Remark

1 7358.00	48.17	54.00	5.83	8.81	36.83	2.53	Average
21233.90	46.62	54.00	7.38	3.84	39.94	2.84	Average



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Test Site : 10m Chamber
Limit : FCC PART 15C AV
Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
EUT : BOOK SHAPE PC
M/N : WP-C700
Power : DC 9V from adapter input AC 120V/60Hz
Test Engineer : Jade
Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
Test Mode : TX Mode 802.11g CH11 2462MHz

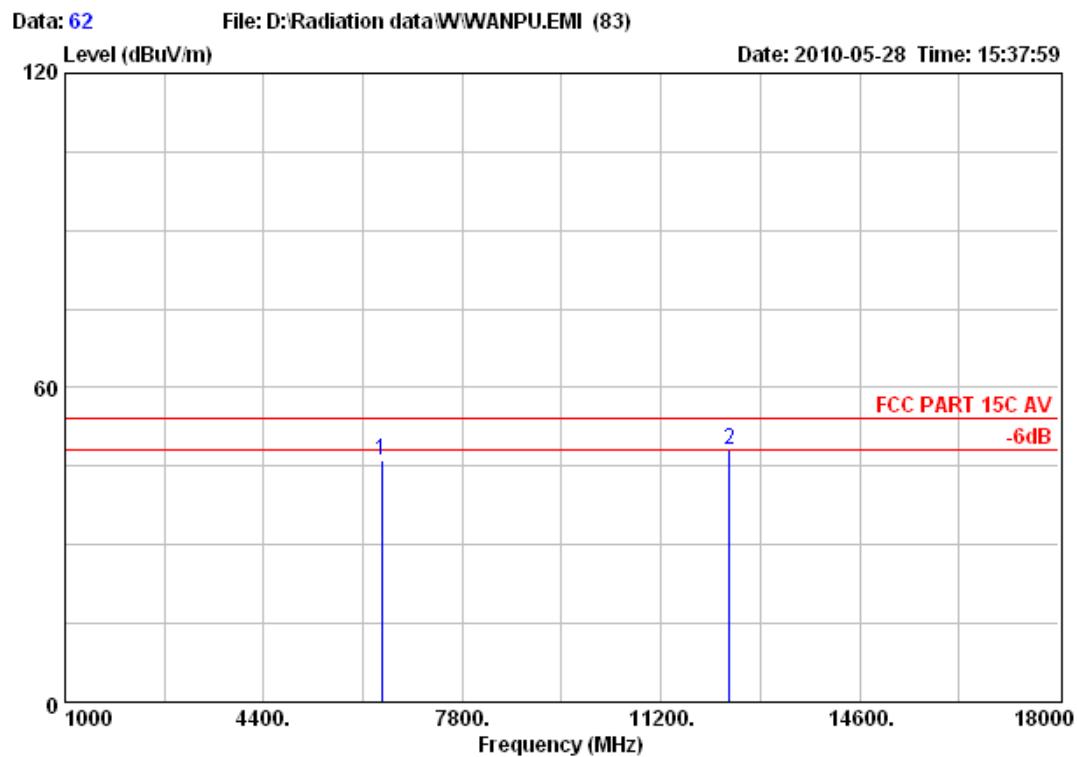
Emission				Ant. Cable			
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB)	Loss (dB/m)	Remark

1 8089.00	47.38	54.00	6.62	7.82	36.98	2.58	Average
2 21237.30	47.02	54.00	6.98	4.23	39.95	2.84	Average



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Fax: +86-769-85991080



Test Site : 10m Chamber
Limit : FCC PART 15C AV
Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
EUT : BOOK SHAPE PC
M/N : WP-C700
Power : DC 9V from adapter input AC 120V/60Hz
Test Engineer : Jade
Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
Test Mode : TX Mode 802.11b CH11 2462MHz

Emission				Ant.	Cable		Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)	Loss (dB)	
1 6423.00	45.99	54.00	8.01	6.99	36.52	2.48	Average
2 21237.30	48.01	54.00	5.99	5.22	39.95	2.84	Average



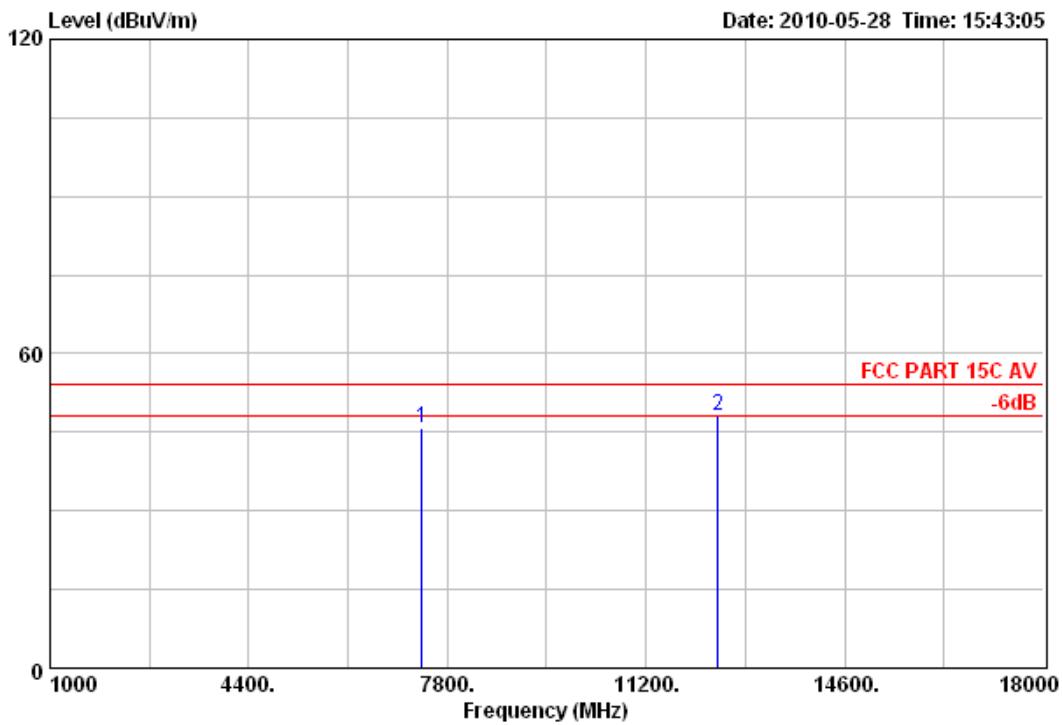
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Tel: +86-769-85935656
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Data: 63

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:43:05



Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH11 2462MHz

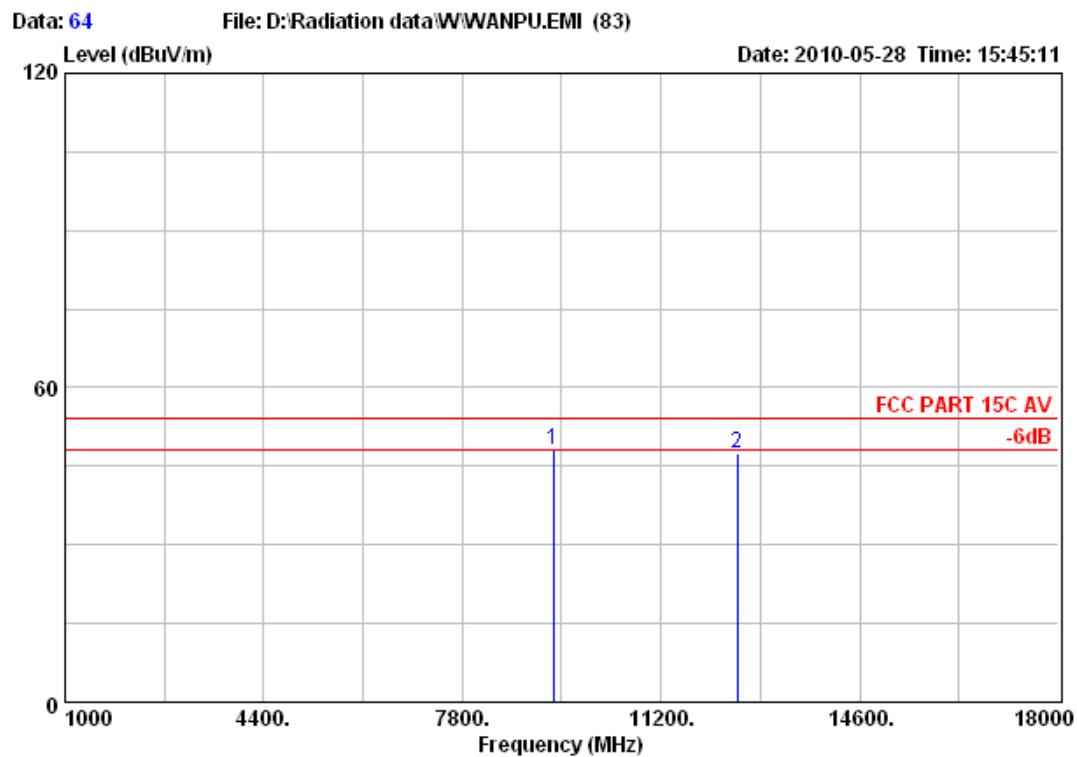
Emission				Ant. Cable			
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB)	Loss (dB/m)	Remark

1 7358.00	45.77	54.00	8.23	6.41	36.83	2.53	Average
2 21242.40	48.05	54.00	5.95	5.23	39.97	2.85	Average



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Test Site : 10m Chamber
Limit : FCC PART 15C AV
Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
EUT : BOOK SHAPE PC
M/N : WP-C700
Power : DC 9V from adapter input AC 120V/60Hz
Test Engineer : Jade
Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
Test Mode : TX Mode 802.11b CH6 2437MHz

Emission				Ant.	Cable		Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor	Loss (dB/m)	
<hr/>							
1 9364.00	48.00	54.00	6.00	7.95	37.39	2.66	Average
212509.00	47.59	54.00	6.41	4.73	40.01	2.85	Average



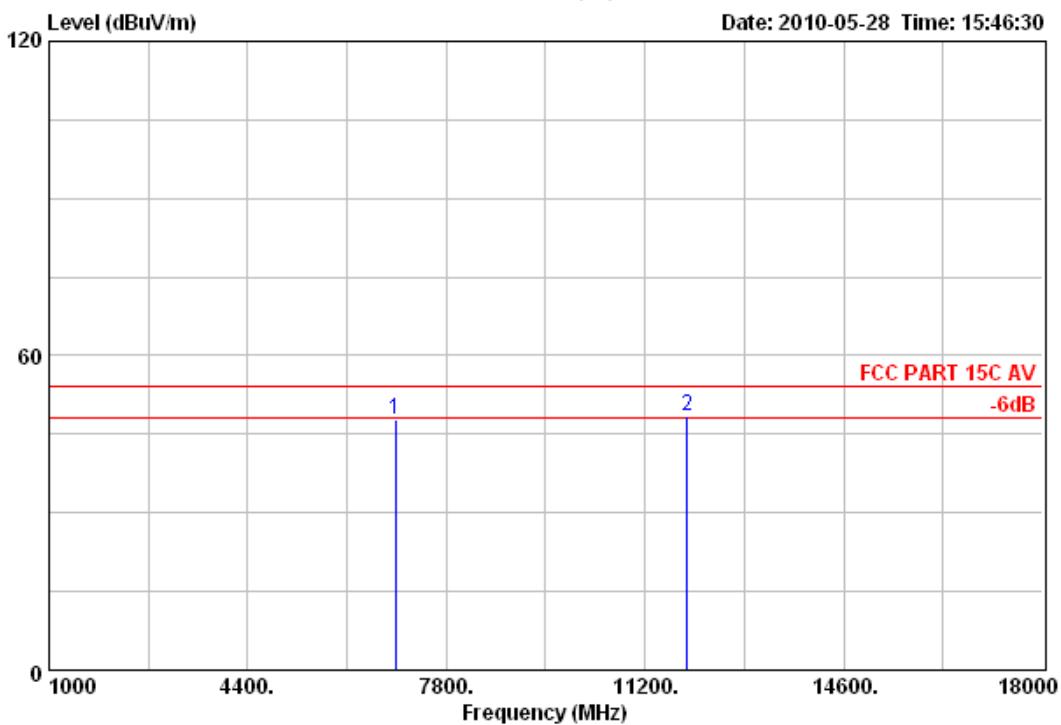
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Data: 65

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:46:30



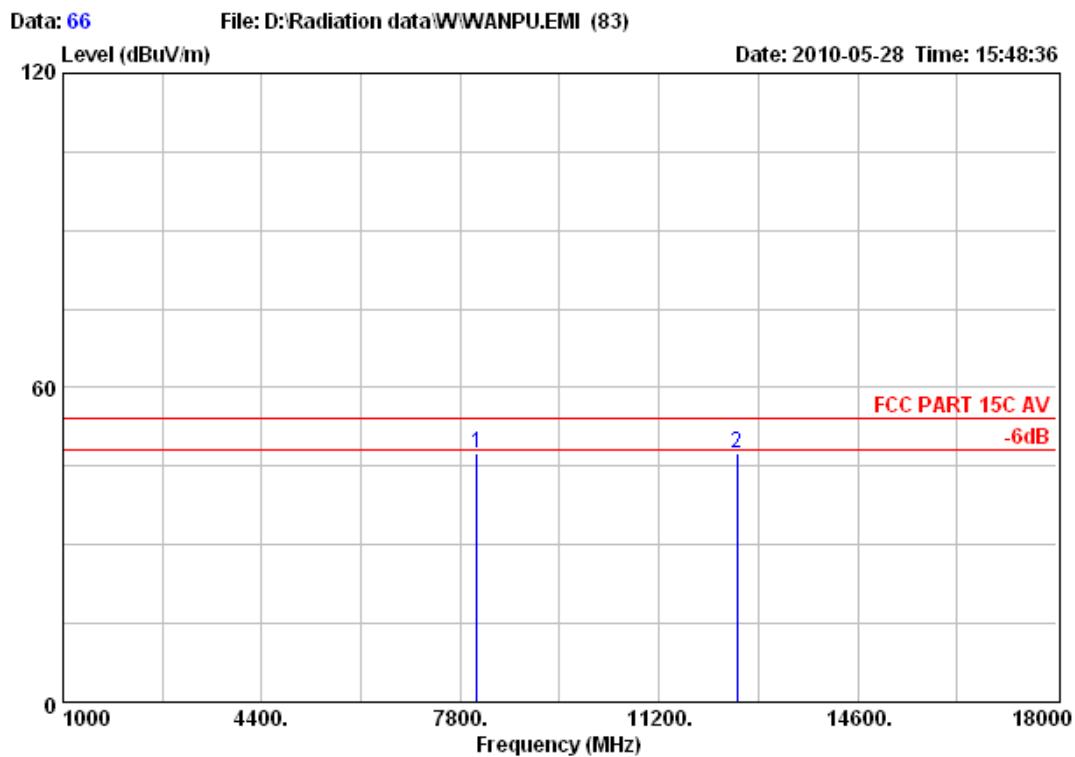
Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH6 2437MHz

Emission				Ant.	Cable		Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB)	Loss (dB/m)	
1 6933.00	47.67	54.00	6.33	8.30	36.86	2.51	Average
2 211914.00	48.56	54.00	5.44	6.07	39.67	2.82	Average



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Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH1 2412MHz

Emission				Ant.	Cable		Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB)	Loss (dB/m)	
<hr/>							
1 8089.00	47.56	54.00	6.44	8.00	36.98	2.58	Average
212543.00	47.47	54.00	6.53	4.59	40.03	2.85	Average



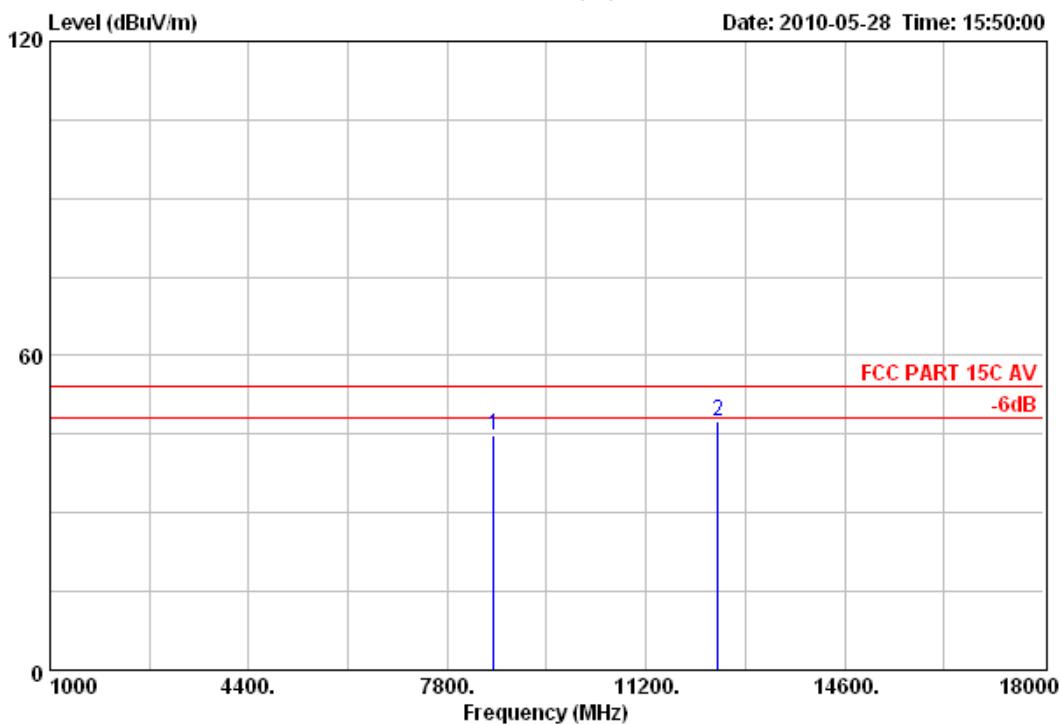
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080

Data: 67

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:50:00



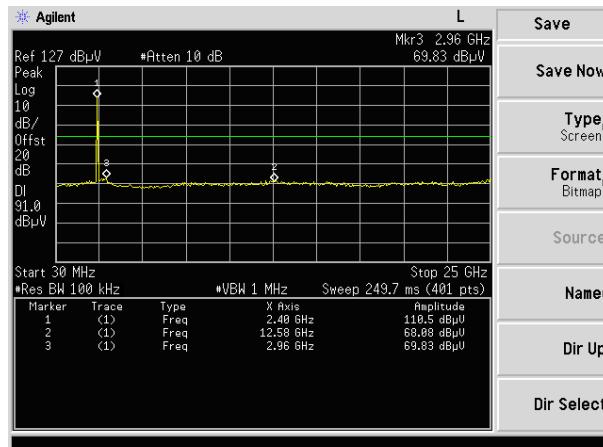
Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH1 2412MHz

Emission				Ant.	Cable		Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)	Loss (dB)	
1 8599.00	44.89	54.00	9.11	5.34	36.94	2.61	Average
2 21242.40	47.43	54.00	6.57	4.61	39.97	2.85	Average

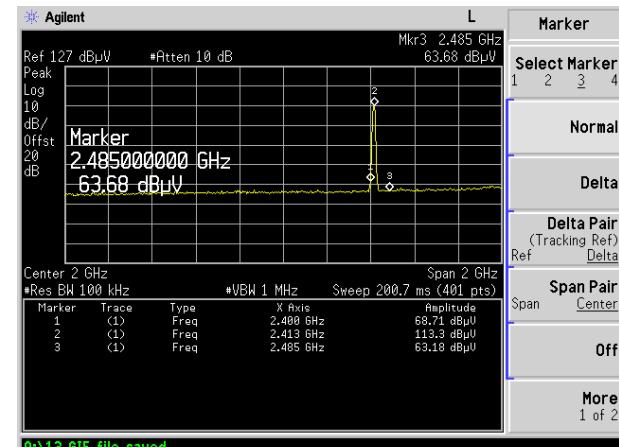


Conducted emission test data

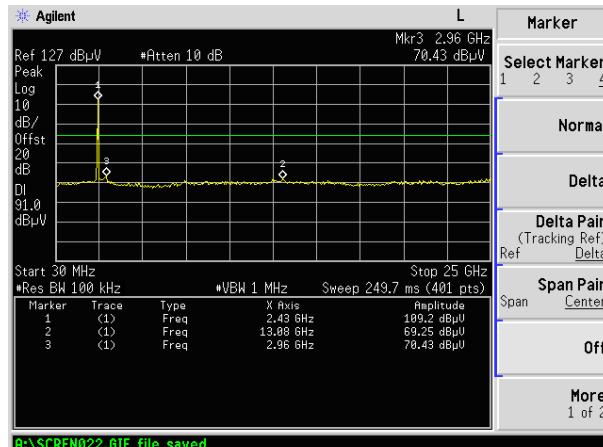
802.11b CH1 2412MHz



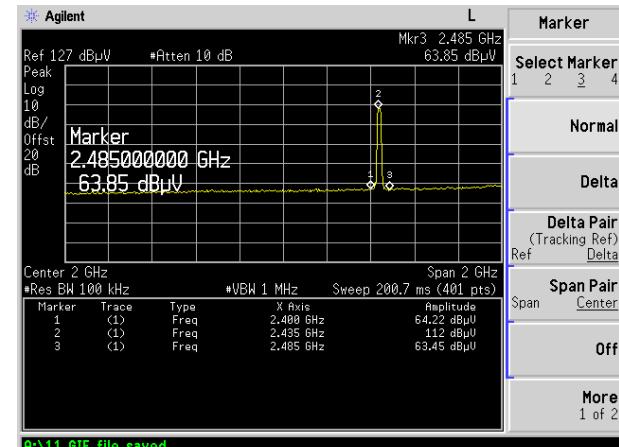
802.11b CH1 2412MHz



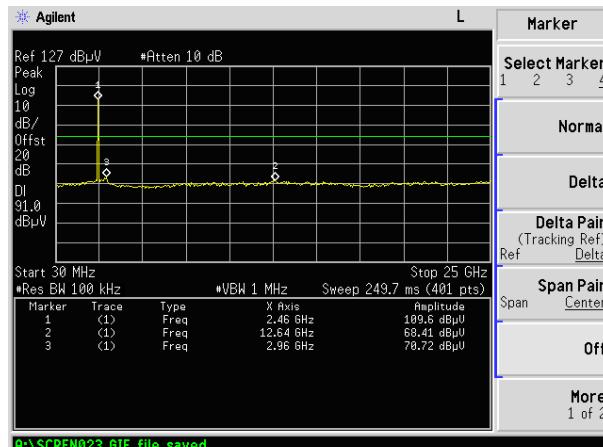
802.11b CH6 2437MHz



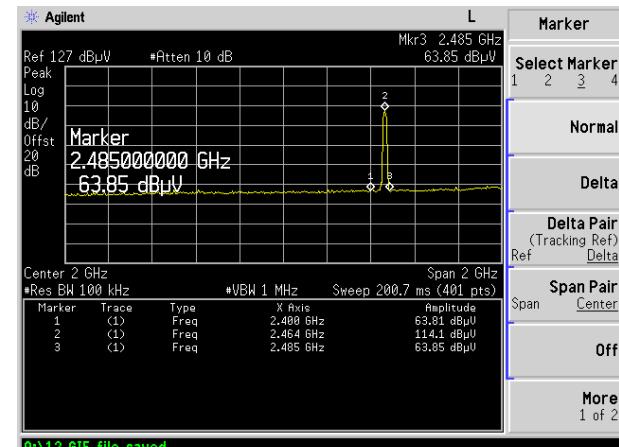
802.11b CH6 2437MHz



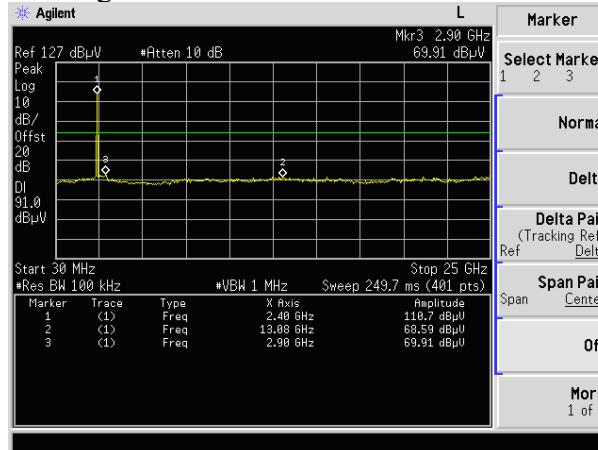
802.11b CH11 2462MHz



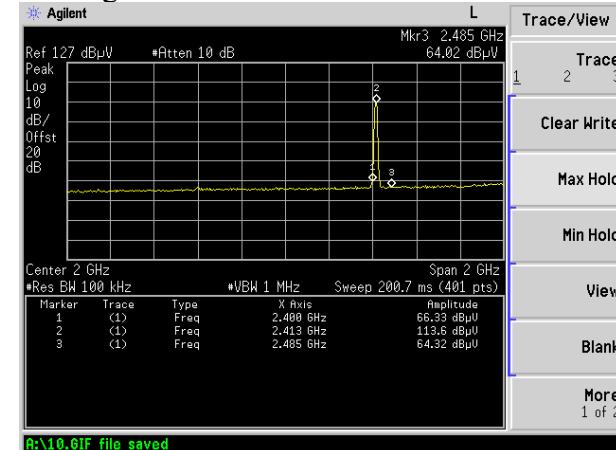
802.11b CH11 2462MHz



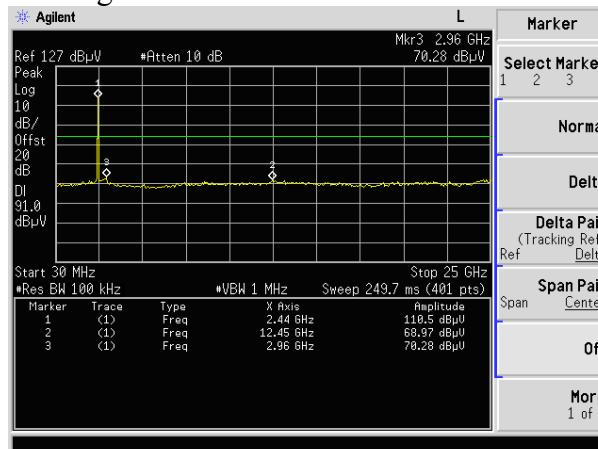
802.11g CH1 2412MHz



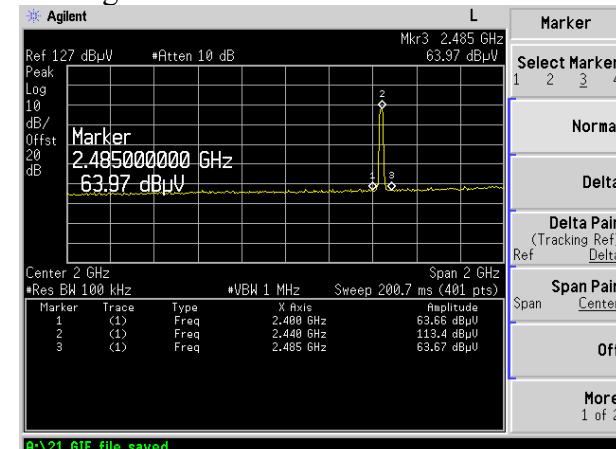
802.11g CH1 2412MHz



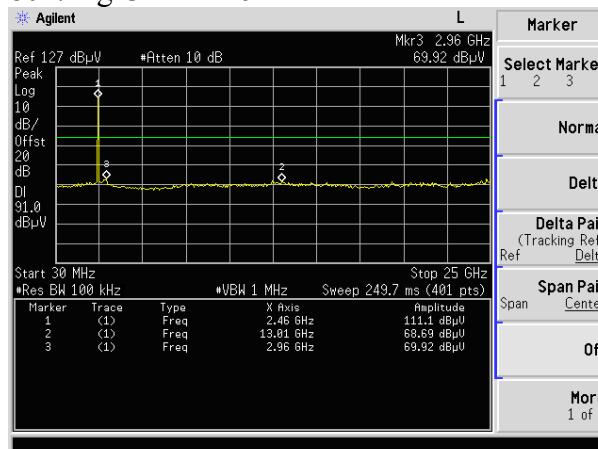
802.11g CH6 2437MHz



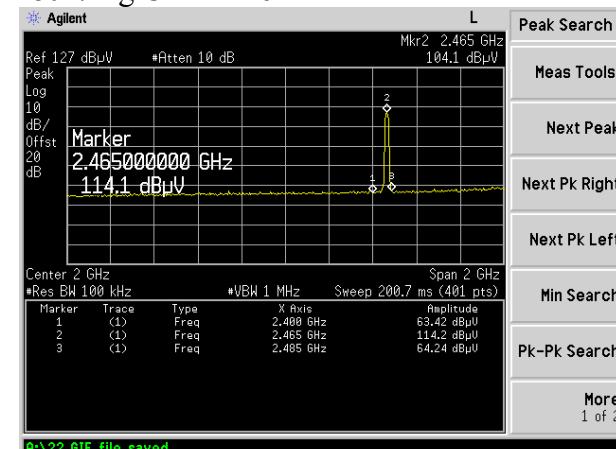
802.11g CH6 2437MHz



802.11g CH11 2462MHz



802.11g CH11 2462MHz



6.3. 6dB Bandwidth

6.3.1. Test limits

>500kHz.

6.3.2. Test procedure

1. The EUT was placed on a table which is 0.8m above ground plane.
2. Connect EUT RF output port to the spectrum analyzer through an RF attenuator.
3. Set SA Center Frequency = Operation frequency, RBW=100kHz, VBW=300kHz.
4. Set SA trace max hold, then view.

6.3.3. Test result

Pass

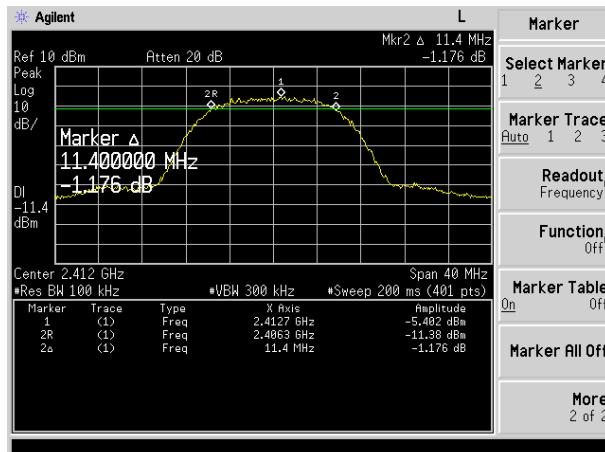
Test Channel	Frequency MHz	6dB bandwidth MHz	Conclusion
802.11b CH1	2412MHz	11.4	Pass
802.11b CH6	2437MHz	11.4	Pass
802.11b CH11	2462MHz	11.4	Pass
802.11g CH1	2412MHz	16.6	Pass
802.11g CH6	2437MHz	16.6	Pass
802.11g CH11	2462MHz	16.6	Pass

When 802.11b's data rate was 5.5MHz; 802.11g's data rate was 54MHz; the EUT have Maximum output and all the test was performed in this data rate set.

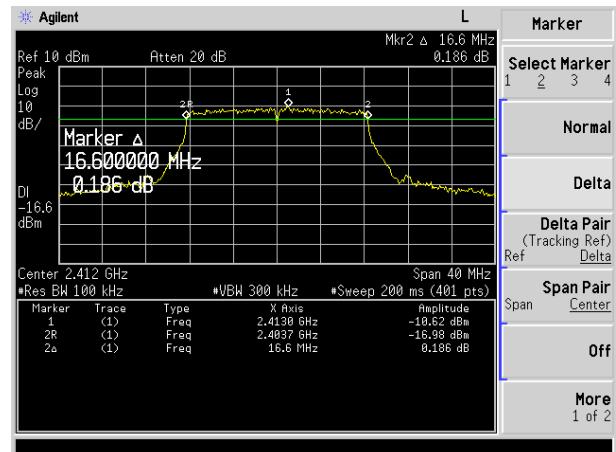
The test plots as following:



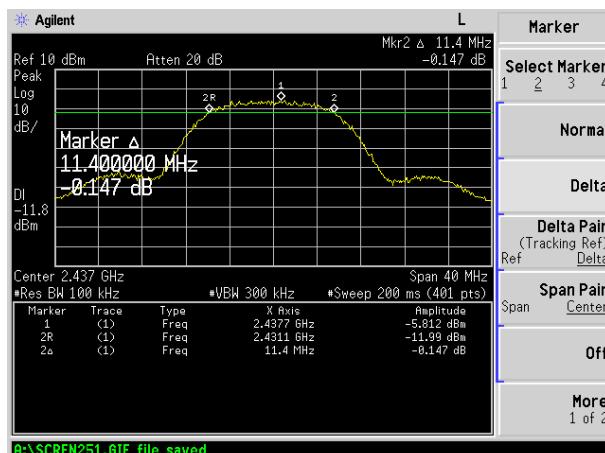
802.11b CH1 2412MHz



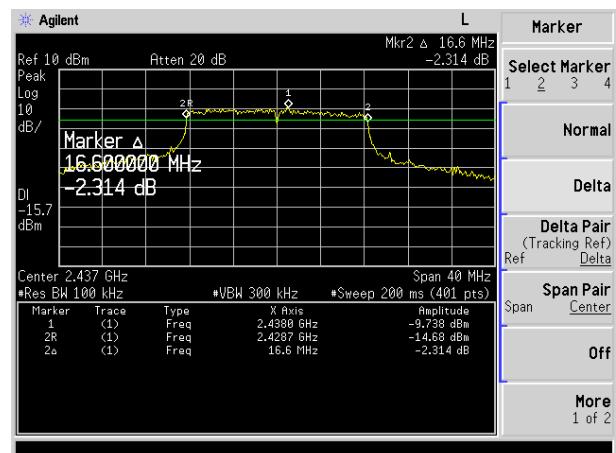
802.11g CH1 2412MHz



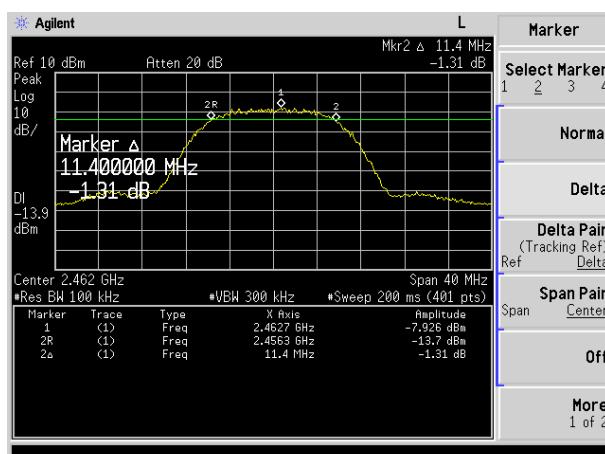
802.11b CH6 2437MHz



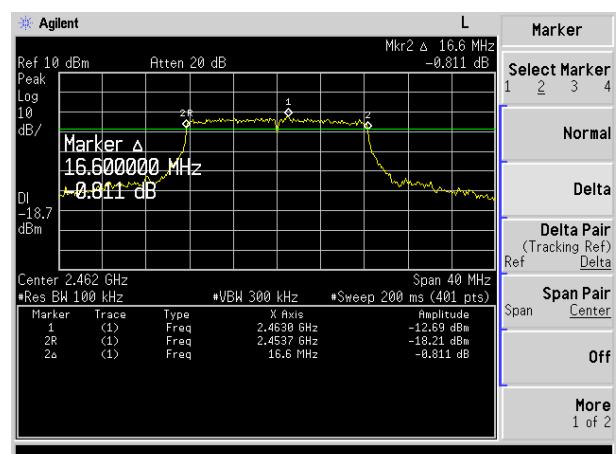
802.11g CH6 2437MHz



802.11b CH11 2462MHz



802.11g CH11 2462MHz



6.4. Power Spectral Density Test

6.4.1. Test procedure

1. The EUT was placed on a table which is 0.8m above ground plane.
2. Connect EUT RF output port to the spectrum analyzer through an RF attenuator.
3. Set SA Center Frequency = Operation frequency, RBW=3kHz, VBW=30kHz.
4. Set SA trace max hold, then view.

6.4.2. Test result

Pass

Test Channel	Read (dBm)	Factor (dB)	Result (dBm)	Limit
802.11b CH1	-14.75	5	-9.75	8.0
802.11b CH6	-14.36	5	-9.36	8.0
802.11b CH11	-15.25	5	-10.25	8.0
802.11g CH1	-17.95	5	-12.95	8.0
802.11g CH6	-19.13	5	-14.13	8.0
802.11g CH11	-18.26	5	-13.26	8.0

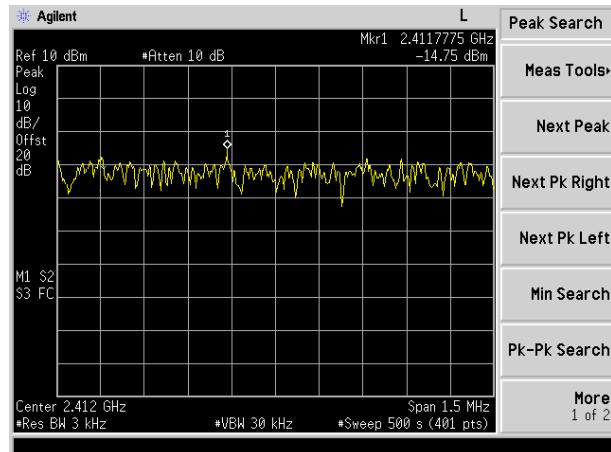
Note:Result=Read+Factor

Factor=cable loss+antenna gain

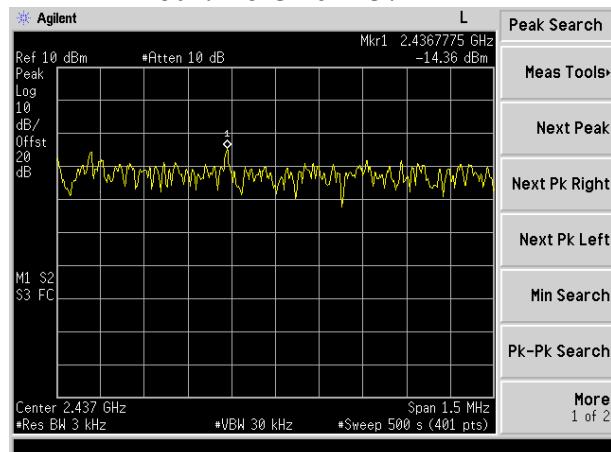
The test plots as following:

When 802.11b's data rate was 5.5MHz;802.11g's data rate was 54MHz;the EUT have Maximum output and all the test was performed in this data rate set.

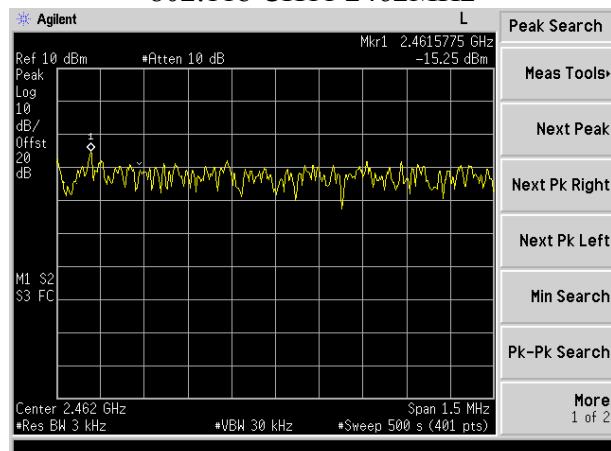
802.11b CH1 2412MHz



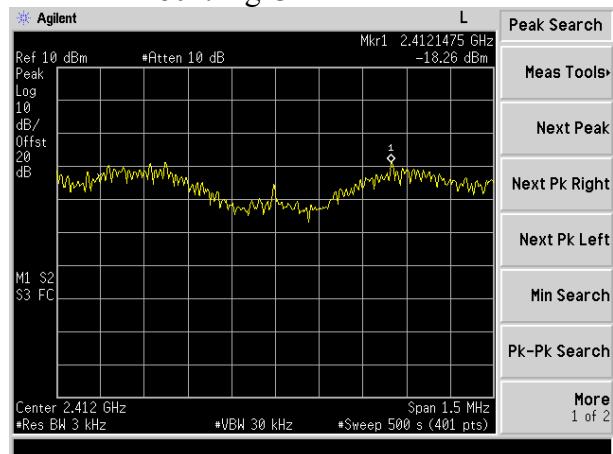
802.11b CH6 2437MHz



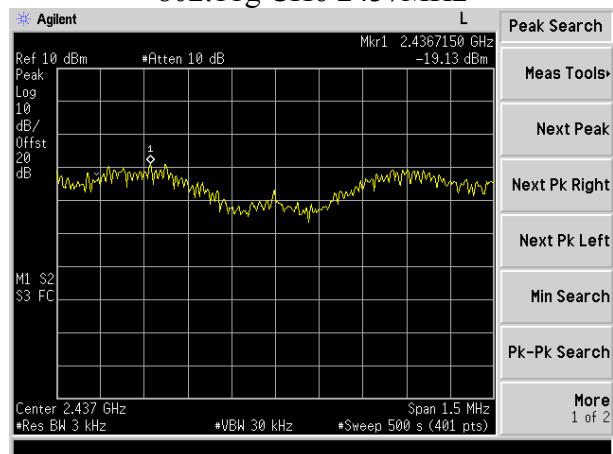
802.11b CH11 2462MHz



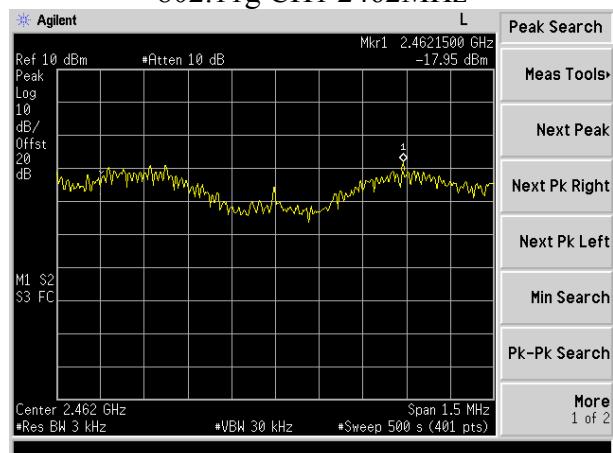
802.11g CH1 2412MHz



802.11g CH6 2437MHz



802.11g CH1 2462MHz



6.5. Output Power Test

6.5.1. Test procedure

1. The EUT was placed on a table which is 0.8m above ground plane.
2. Connect EUT RF output port to the Power meter through an RF attenuator.

6.5.2. Test result

Pass

Test Channel	Read (dBm)	Factor (dB)	Result (dBm)	Limit
802.11b CH1	7.19	5	12.19	30.00
802.11b CH6	7.46	5	12.46	30.00
802.11b CH11	7.31	5	12.31	30.00
802.11g CH1	5.53	5	10.53	30.00
802.11g CH6	5.25	5	10.25	30.00
802.11g CH11	5.09	5	10.09	30.00

Note:Result=Read+Factor

Factor=cable loss+antenna gain

When 802.11b's data rate was 5.5MHz;802.11g's data rate was 54MHz;the EUT have Maximum output and all the test was performed in this data rate set.



6.6. Band Edge

6.6.1. Test limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

6.6.2. Test procedure

The EUT was placed on a turn table which was 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna which was mounted on a antenna tower. At the frequency band of 1G Hz to 18GHz, The measuring antenna moved from 1 to 4 m for horizontal and vertical polarization. The horn antenna was used was a receiving antenna.

The resolution bandwidth and video bandwidth of the test receiver was 1MHz and 1MHz for peak detection at frequency above 1GHz.

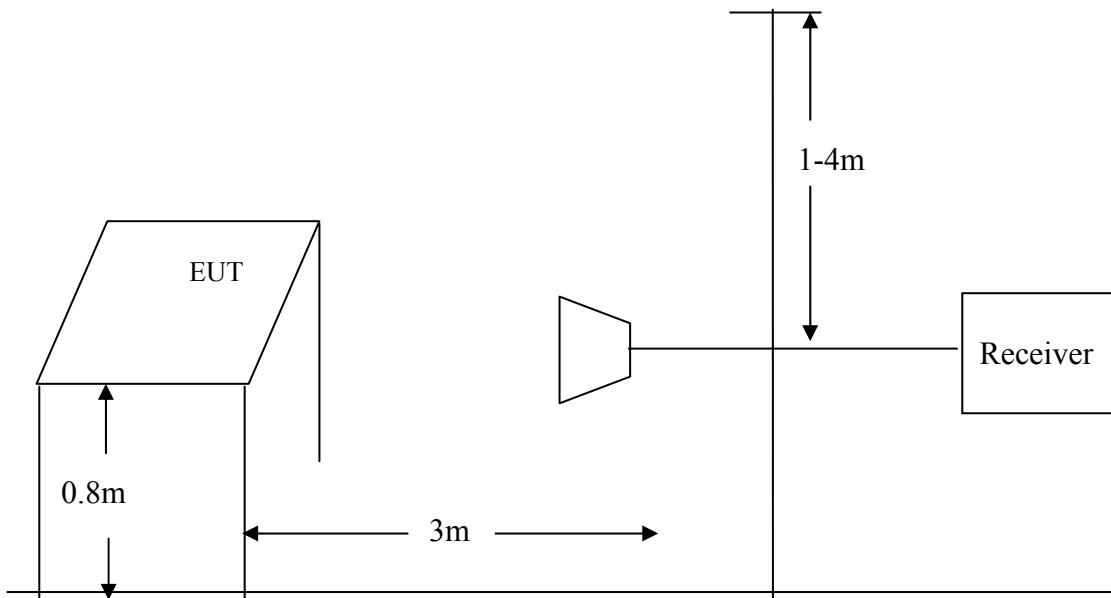
The resolution bandwidth was 1MHz and video bandwidth was 10Hz of the test receiver for average detection at frequency above 1GHz.

When 802.11b's data rate was 5.5MHz; 802.11g's data rate was 54MHz; the EUT have Maximum output and all the test was performed in this data rate set.

The EUT position(X.-axis, Y-axis, Z-axis) were checked and worse case was happened in Y-axis position. So Y-axis position was chose for find measurement.

The EUT was tested in Chamber Site.

6.6.3. Test Setup Diagram



6.6.4. Test result

PASS.

The test plots as following:



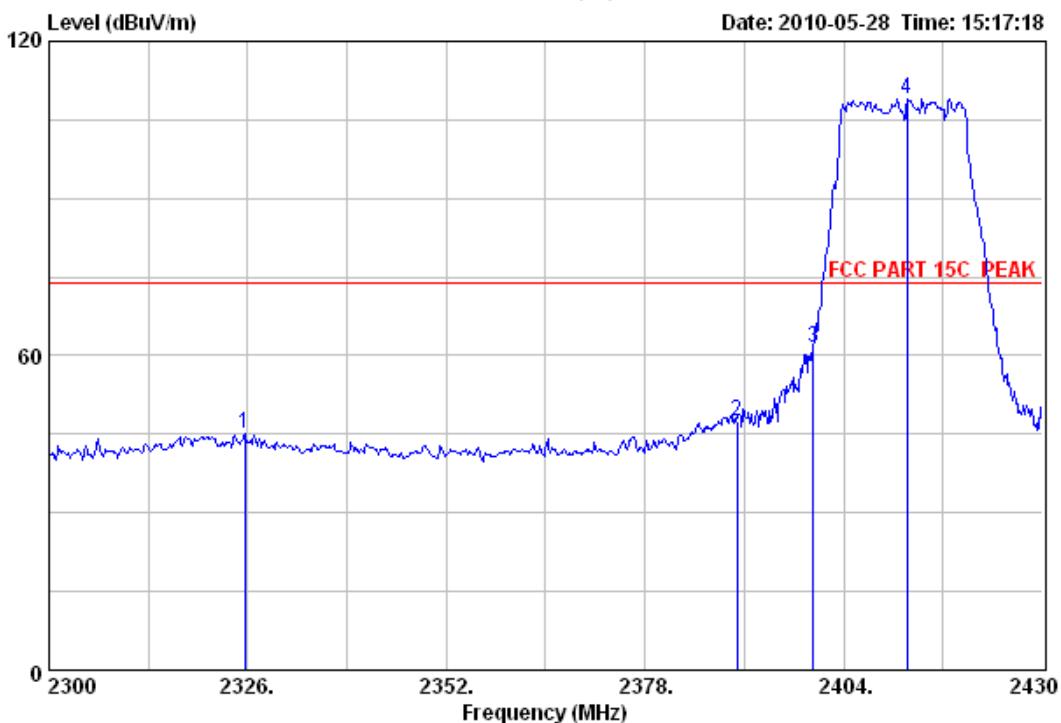
NS Technology

Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080

Data: 83

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:17:18



Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH11 2412MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)	
<hr/>						
1 2325.61	45.25	74.00	28.75	11.60	31.43	2.22 Peak
2 2390.00	47.54	74.00	26.46	13.84	31.48	2.22 Peak
3 2400.00	61.48	74.00	12.52	27.75	31.50	2.23 Peak
4 2412.32	109.06	74.00	-35.06	75.33	31.50	2.23 Peak



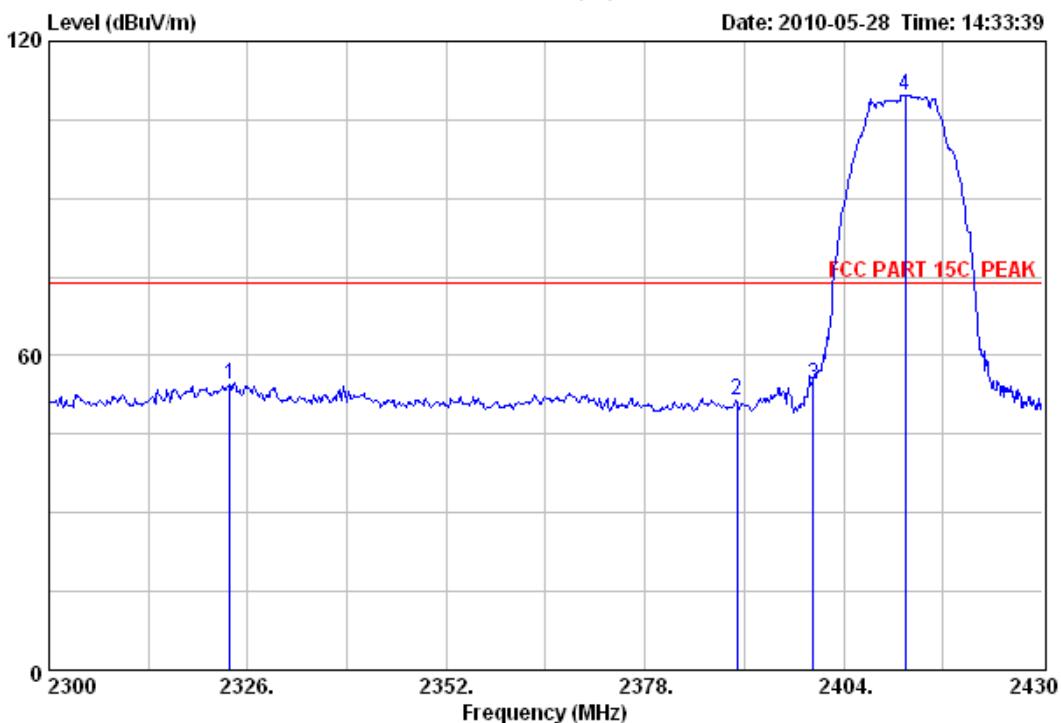
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080

Data: 68

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 14:33:39



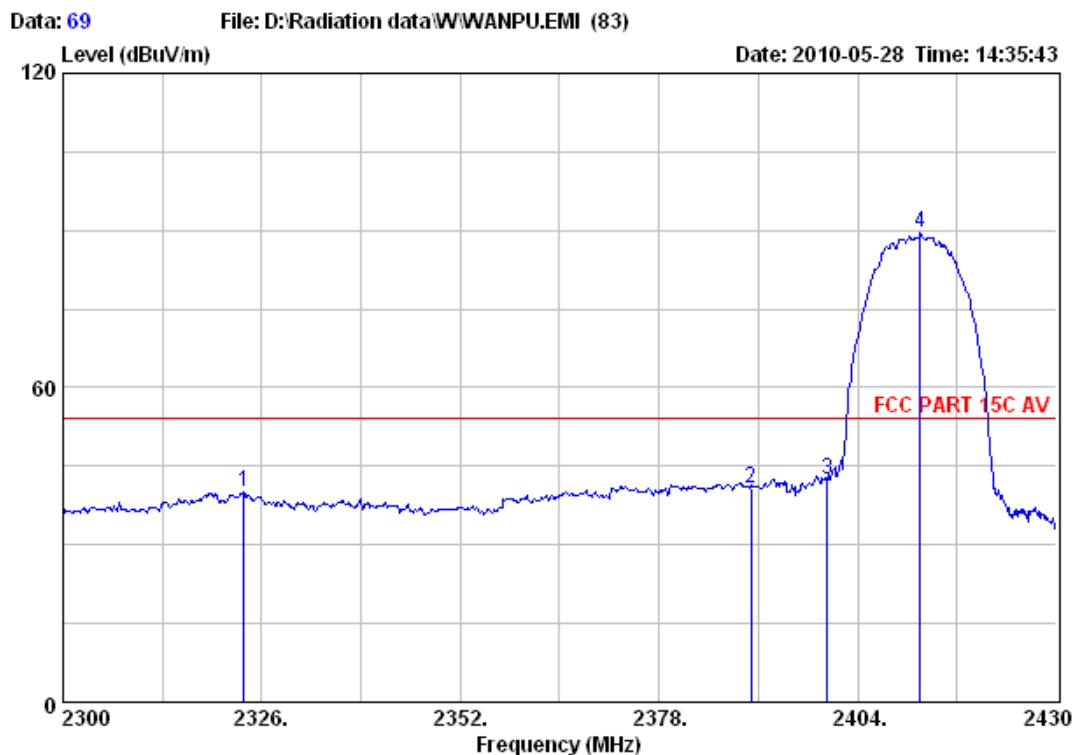
Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH1 2412MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)	
1 2323.66	54.53	74.00	19.47	20.88	31.43	2.22 Peak
2 2390.00	51.49	74.00	22.51	17.79	31.48	2.22 Peak
3 2400.00	54.63	74.00	19.37	20.90	31.50	2.23 Peak
4 2412.06	109.70	74.00	-35.70	75.97	31.50	2.23 Peak



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Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080



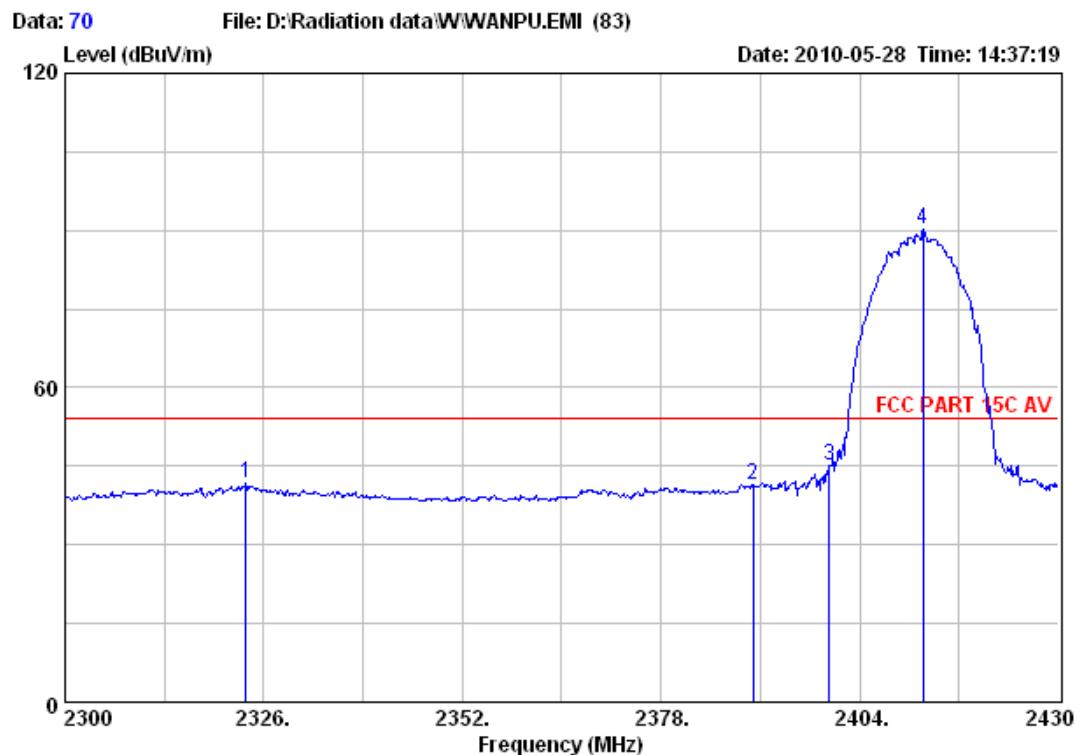
Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH1 2412MHz

Freq. (MHz)	Emission			Ant. Reading (dBuV)	Cable Factor (dB)	Loss (dB/m)	Remark
	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)				
1 2323.66	39.99	54.00	14.01	6.34	31.43	2.22	Average
2 2390.00	40.89	54.00	13.11	7.19	31.48	2.22	Average
3 2400.00	42.42	54.00	11.58	8.69	31.50	2.23	Average
4 2412.19	89.42	54.00	-35.42	55.69	31.50	2.23	Average



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Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080



Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH1 2412MHz

Emission			Ant. Cable				
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dBuV)	Loss (dB/m)	Remark
1 2323.66	41.63	54.00	12.37	7.98	31.43	2.22	Average
2 2390.00	41.45	54.00	12.55	7.75	31.48	2.22	Average
3 2400.00	45.17	54.00	8.83	11.44	31.50	2.23	Average
4 2412.32	90.16	54.00	-36.16	56.43	31.50	2.23	Average



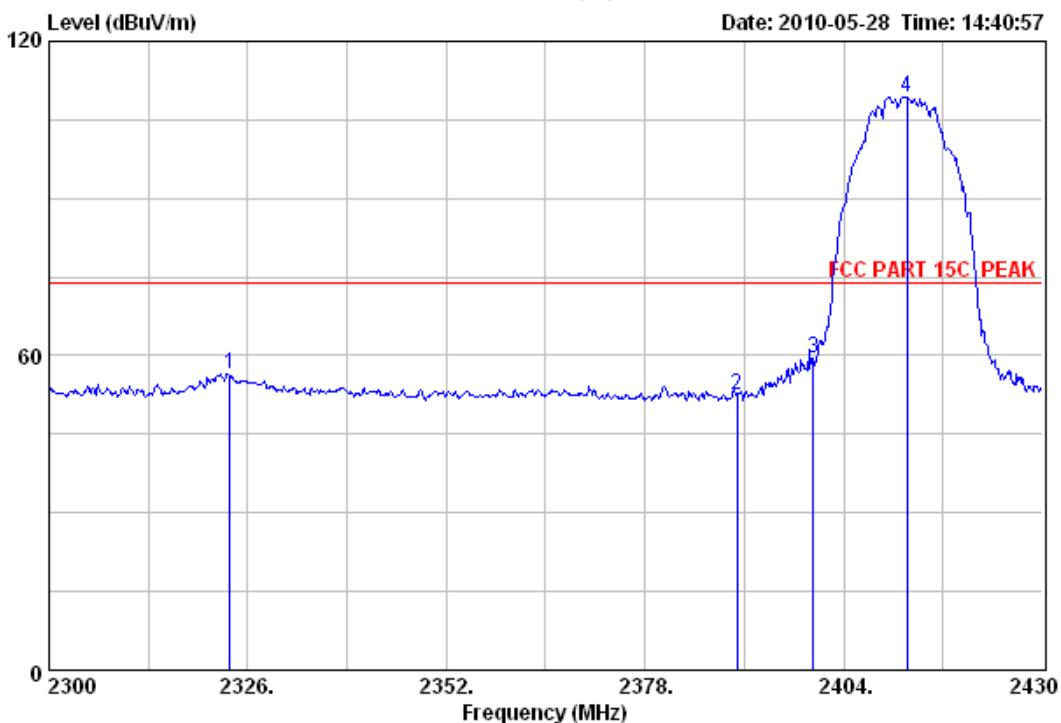
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080

Data: 71

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 14:40:57



Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH1 2412MHz

Emission				Ant.	Cable		Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor	Loss (dB/m)	
1 2323.66	56.62	74.00	17.38	22.97	31.43	2.22	Peak
2 2390.00	52.38	74.00	21.62	18.68	31.48	2.22	Peak
3 2400.00	59.42	74.00	14.58	25.69	31.50	2.23	Peak
4 2412.32	109.34	74.00	-35.34	75.61	31.50	2.23	Peak



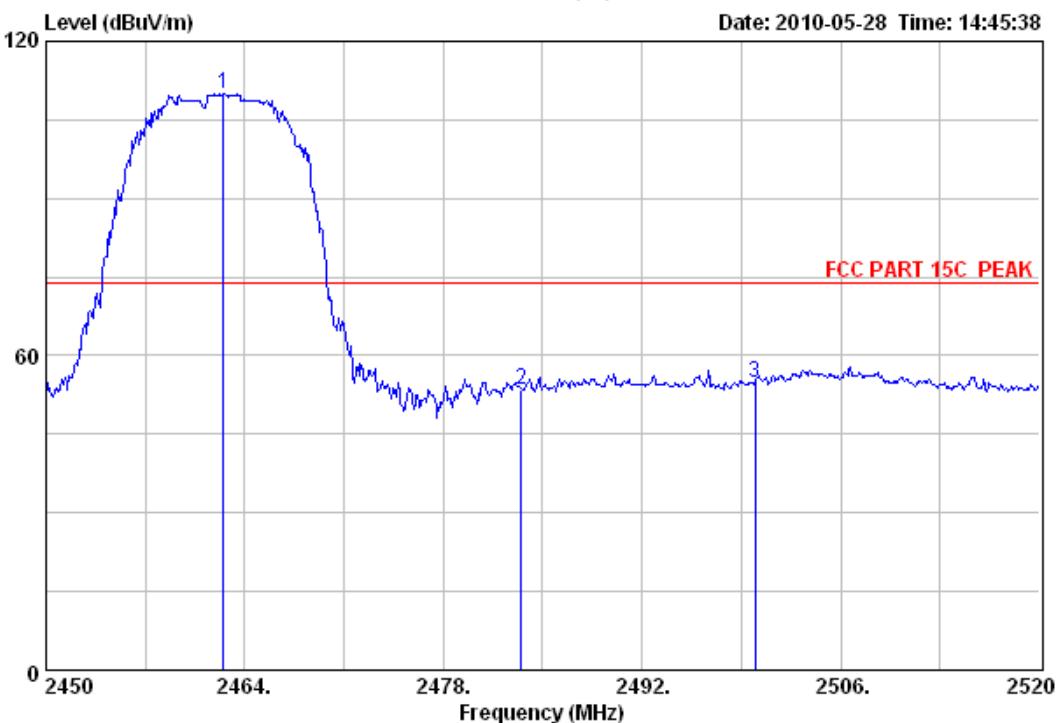
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080

Data: 72

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 14:45:38



Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH11 2462MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB)	
<hr/>						
1 2462.53	109.95	74.00	-35.95	76.16	31.56	2.23 Peak
2 2483.50	53.49	74.00	20.51	19.68	31.58	2.23 Peak
3 2500.00	54.92	74.00	19.08	21.09	31.60	2.23 Peak



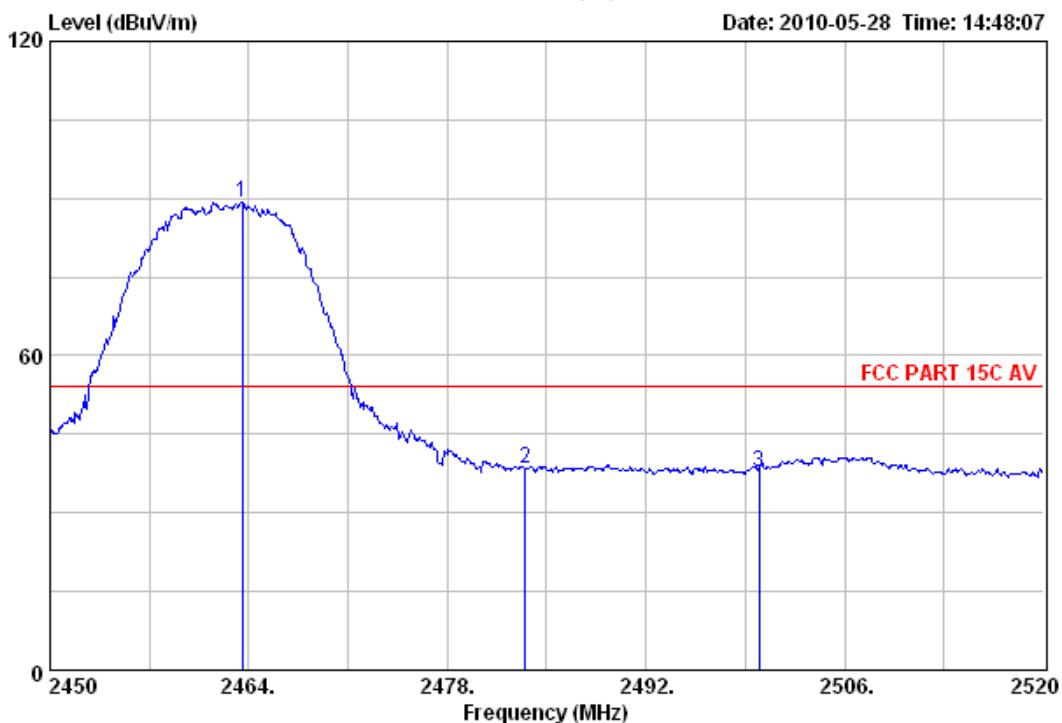
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080

Data: 73

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 14:48:07



Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH11 2462MHz

Emission				Ant.	Cable		
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor	Loss (dB/m)	Remark
1 2463.58	89.34	54.00	-35.34	55.55	31.56	2.23	Average
2 2483.50	38.36	54.00	15.64	4.55	31.58	2.23	Average
3 2500.00	37.91	54.00	16.09	4.08	31.60	2.23	Average



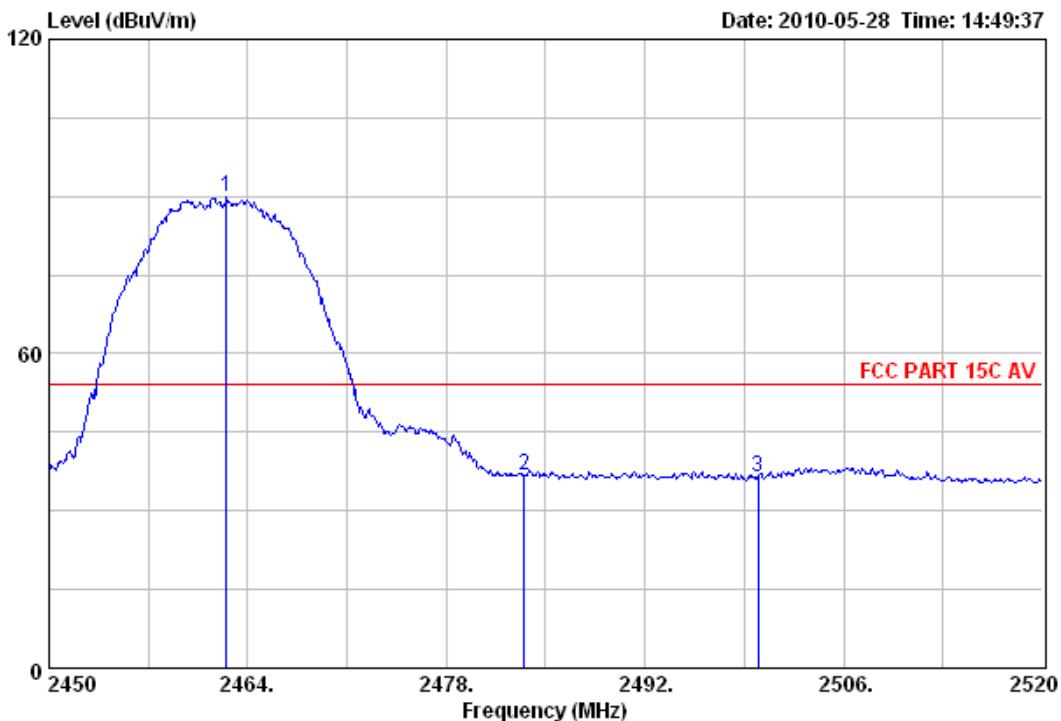
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080

Data: 74

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 14:49:37



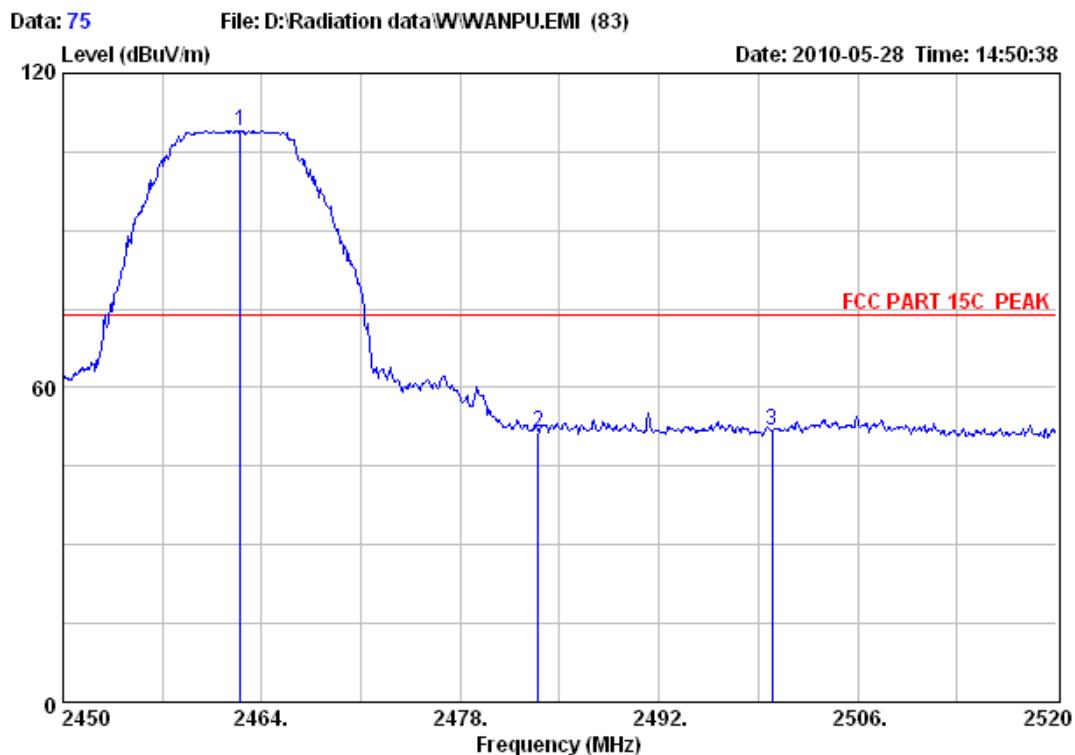
Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH11 2462MHz

Emission				Ant.	Cable		
Freq.	Level	Limits	Margin	Reading	Factor	Loss	Remark
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB)	(dB/m)	(dB)
1 2462.53	89.92	54.00	-35.92	56.13	31.56	2.23	Average
2 2483.50	36.88	54.00	17.12	3.07	31.58	2.23	Average
3 2500.00	36.48	54.00	17.52	2.65	31.60	2.23	Average



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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080



Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11b CH11 2462MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)	
1 2462.53	109.01	74.00	-35.01	75.22	31.56	2.23 Peak
2 2483.50	51.35	74.00	22.65	17.54	31.58	2.23 Peak
3 2500.00	51.79	74.00	22.21	17.96	31.60	2.23 Peak



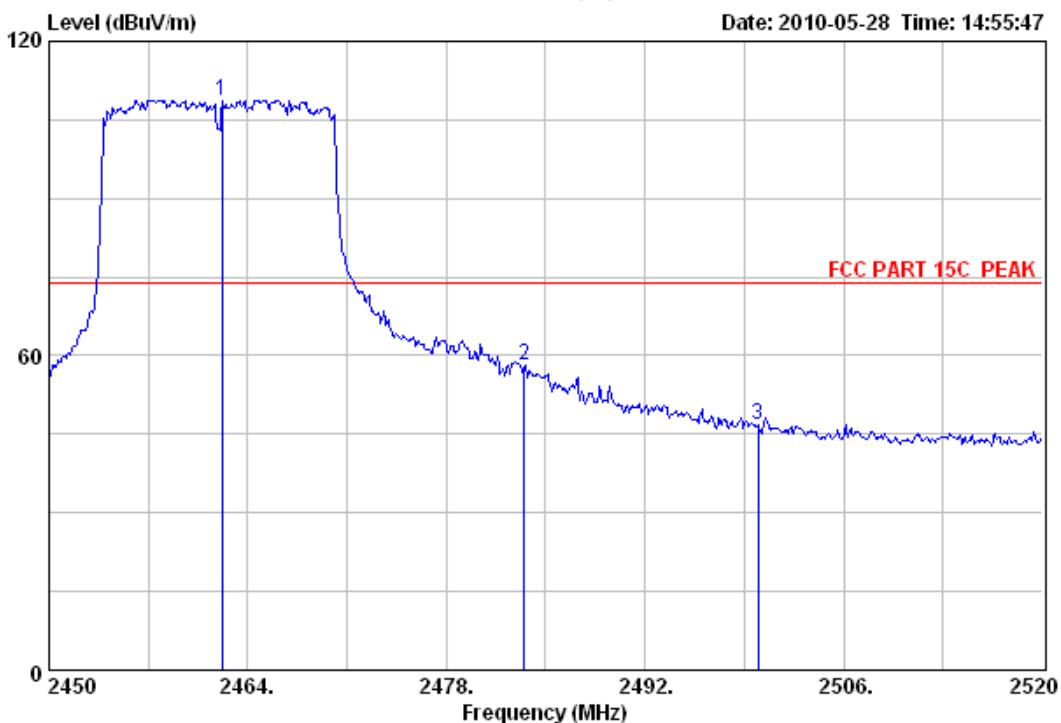
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Chenwu Industrial Zone, Houjie Town,
 Dongguan, Guangdong, China
 Tel: +86-769-85935656
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Data: 76

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 14:55:47



Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH11 2462MHz

Emission			Ant. Cable				
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dBuV)	Loss (dB/m)	Remark
1 2462.18	108.78	74.00	-34.78	74.99	31.56	2.23	Peak
2 2483.50	58.28	74.00	15.72	24.47	31.58	2.23	Peak
3 2500.00	46.71	74.00	27.29	12.88	31.60	2.23	Peak



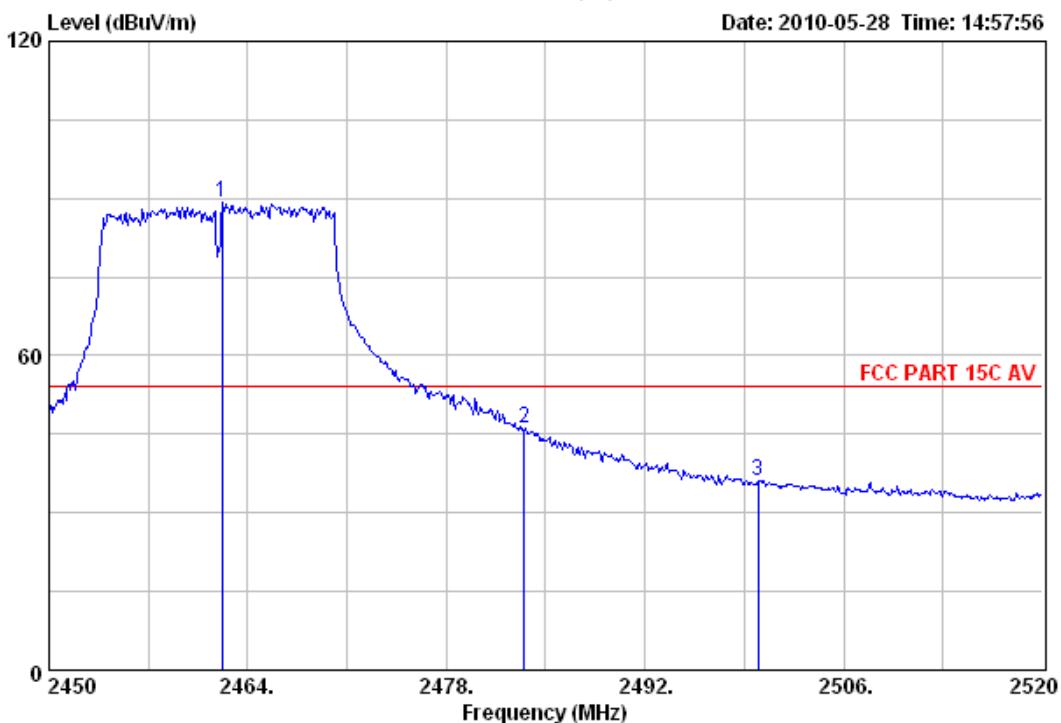
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
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Data: 77

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 14:57:56



Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH11 2462MHz

Emission				Ant.	Cable		
Freq.	Level	Limits	Margin	Reading	Factor	Loss	Remark
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(dB)	(dB/m)	(dB)
1 2462.18	89.28	54.00	-35.28	55.49	31.56	2.23	Average
2 2483.50	46.01	54.00	7.99	12.20	31.58	2.23	Average
3 2500.00	36.25	54.00	17.75	2.42	31.60	2.23	Average



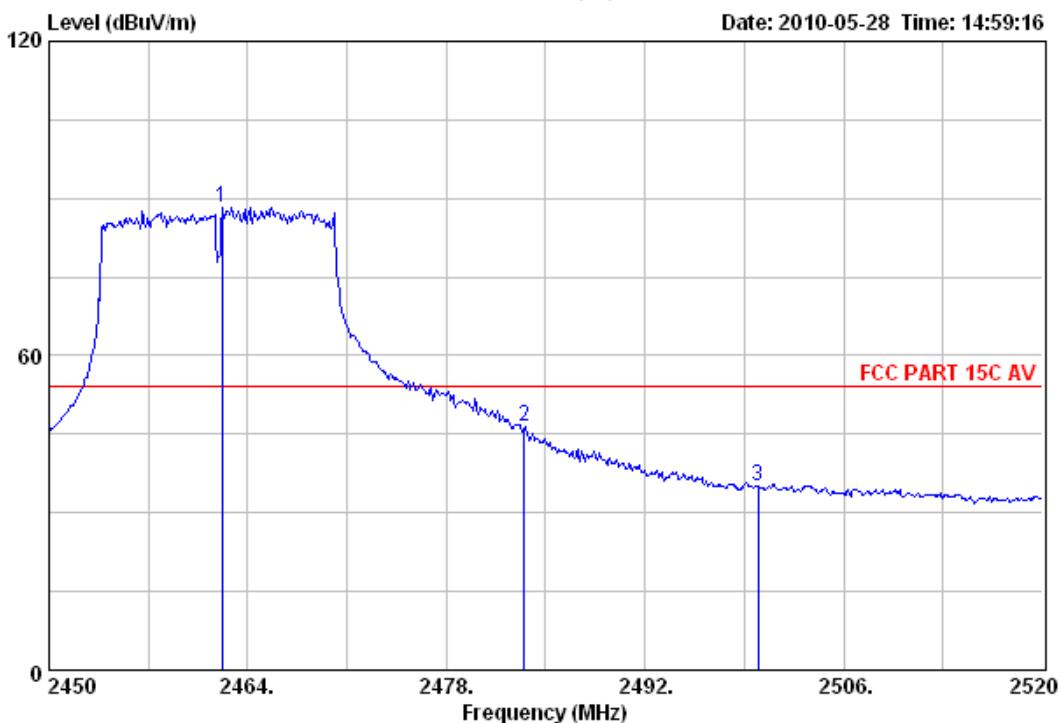
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Dongguan, Guangdong, China
Tel: +86-769-85935656
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Data: 78

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 14:59:16



Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH11 2462MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)	Loss (dB)
1 2462.18	88.32	54.00	-34.32	54.53	31.56	2.23
2 2483.50	46.58	54.00	7.42	12.77	31.58	2.23
3 2500.00	35.07	54.00	18.93	1.24	31.60	2.23
Average						



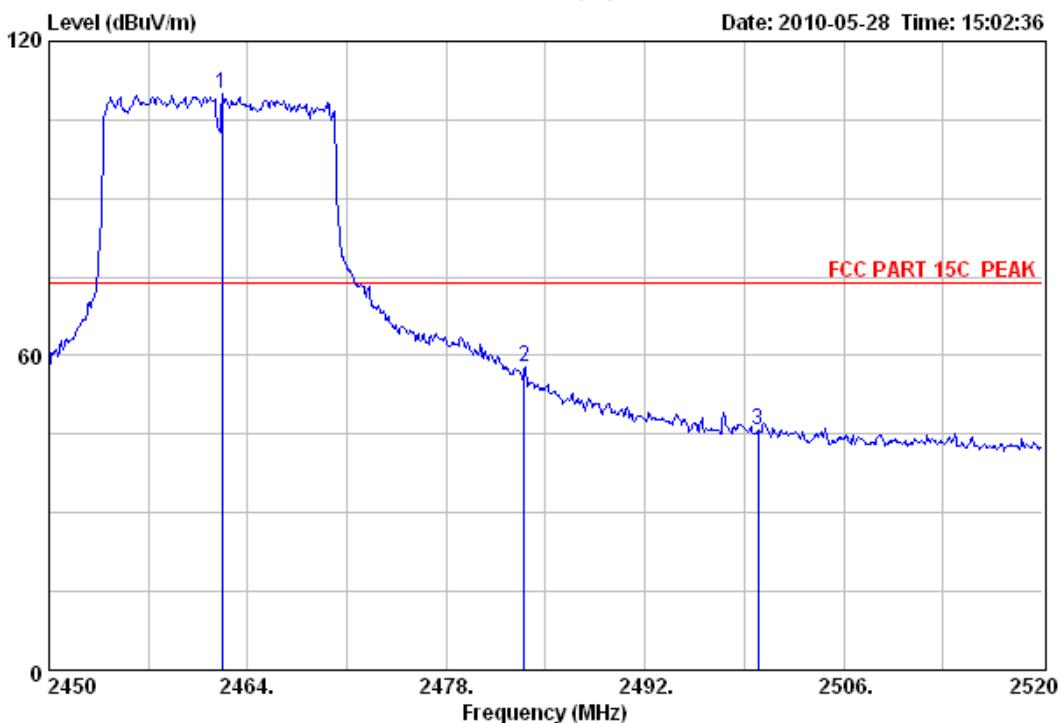
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
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Data: 79

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:02:36



Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH11 2462MHz

Emission				Ant.	Cable	Remark
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB)	
<hr/>						
1 2462.18	109.98	74.00	-35.98	76.19	31.56	2.23 Peak
2 2483.50	57.76	74.00	16.24	23.95	31.58	2.23 Peak
3 2500.00	45.83	74.00	28.17	12.00	31.60	2.23 Peak



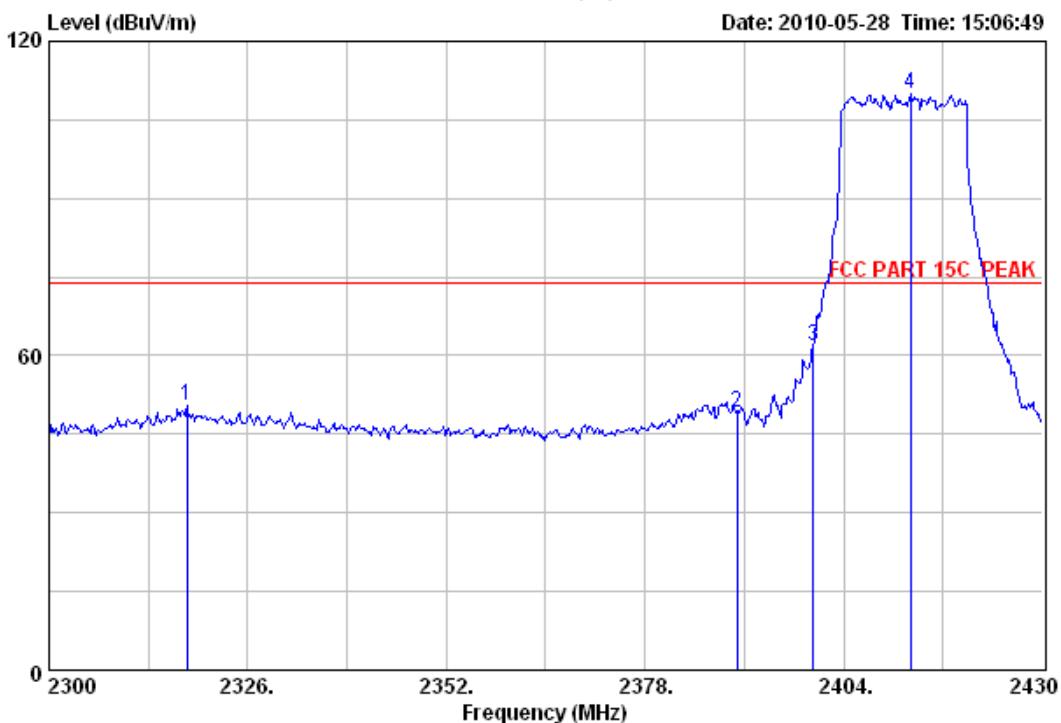
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
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Data: 80

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:06:49



Test Site : 10m Chamber
 Limit : FCC PART 15C PEAK
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH11 2412MHz

Freq. (MHz)	Emission			Ant. Reading (dBuV)	Cable Factor (dB)	Loss (dB/m)	Remark
	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)				
1 2318.07	50.38	74.00	23.62	16.75	31.41	2.22	Peak
2 2390.00	49.08	74.00	24.92	15.38	31.48	2.22	Peak
3 2400.00	61.72	74.00	12.28	27.99	31.50	2.23	Peak
4 2412.71	109.85	74.00	-35.85	76.12	31.50	2.23	Peak



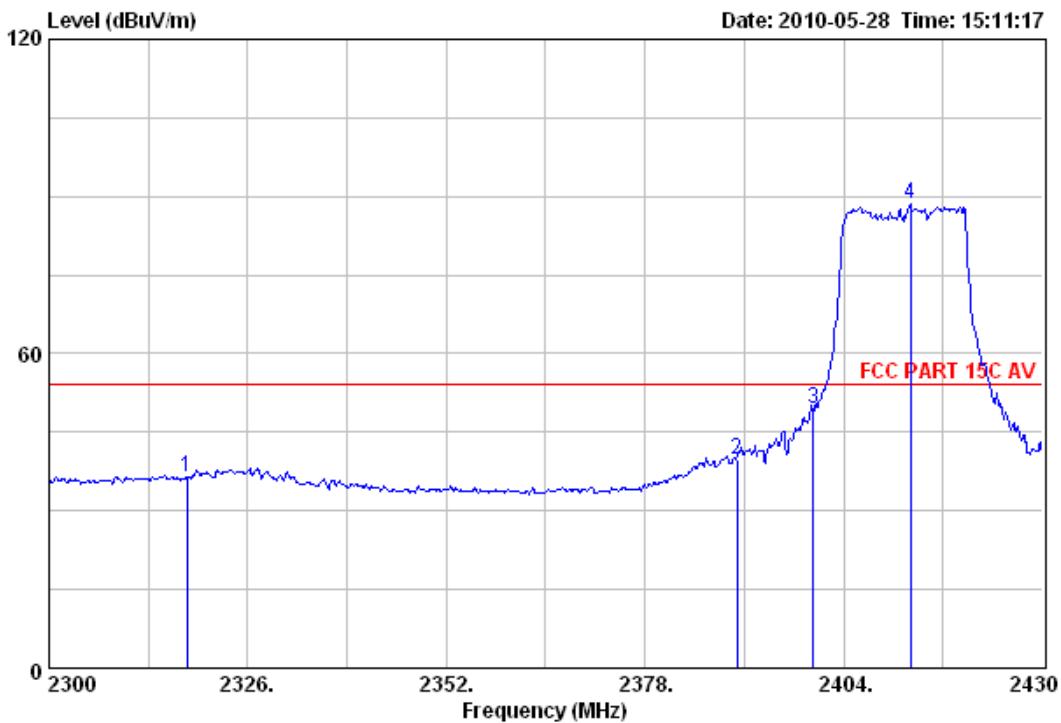
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
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Data: 81

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:11:17



Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: HORIZONTAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH11 2412MHz

Freq. (MHz)	Emission			Ant. Reading (dBuV)	Cable Factor (dB)	Loss (dB)	Remark
	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)				
1 2318.07	36.39	54.00	17.61	2.76	31.41	2.22	Average
2 2390.00	39.81	54.00	14.19	6.11	31.48	2.22	Average
3 2400.00	49.62	54.00	4.38	15.89	31.50	2.23	Average
4 2412.71	88.59	54.00	-34.59	54.86	31.50	2.23	Average



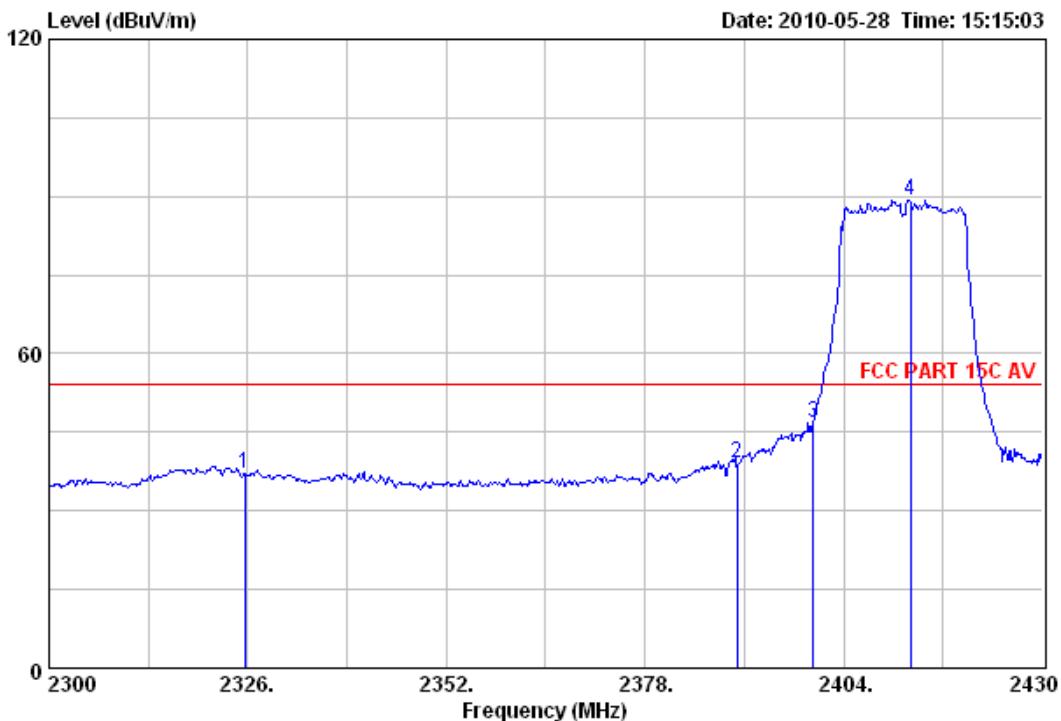
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Chenwu Industrial Zone, Houjie Town,
Dongguan, Guangdong, China
Tel: +86-769-85935656
Fax: +86-769-85991080

Data: 82

File: D:\Radiation data\WWANPU.EMI (83)

Date: 2010-05-28 Time: 15:15:03



Test Site : 10m Chamber
 Limit : FCC PART 15C AV
 Dis. / Ant. : 3m 3117 Ant. Pol.: VERTICAL
 EUT : BOOK SHAPE PC
 M/N : WP-C700
 Power : DC 9V from adapter input AC 120V/60Hz
 Test Engineer : Jade
 Comment : Temp.:25.2'C Humi.:56% Press:101.51kPa
 Test Mode : TX Mode 802.11g CH11 2412MHz

Emission				Ant.	Cable	Remark	
Freq. (MHz)	Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Reading (dBuV)	Factor (dB/m)		
1 2325.61	37.25	54.00	16.75	3.60	31.43	2.22	Average
2 2390.00	39.21	54.00	14.79	5.51	31.48	2.22	Average
3 2400.00	46.83	54.00	7.17	13.10	31.50	2.23	Average
4 2412.71	89.36	54.00	-35.36	55.63	31.50	2.23	Average



6.7. ANTENNA REQUIREMENT

6.7.1. STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

6.7.2. ANTENNA CONNECTED CONSTRUCTION

The antenna used for this product is monopole antenna (see EUT photo) that no antenna other than that furnished by the responsible party shall be used with the device, The maximum peak gain of this antenna is only 0.5dBi.

