



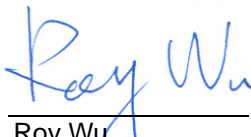
FCC TEST REPORT

for

47 CFR Part 15 Subpart C and IC RSS-210

Equipment : USRobotics Wireless USB Adapter
Trade Name : USRobotics
Model No. : USR5426
FCC ID : IXM-USGBR02REF1
IC ID : 550A-15045
Filing Type : Certification
Applicant : **Universal Scientific Industrial Co., Ltd.**
141, Lane 351, Taiping Road, Sec. 1, Tsao Tuen, Nan-Tou, Taiwan

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- The data shown in this test report were carried out on Jul. 17, 2007 at **Sporton International Inc. LAB.**
- Report No.: FR762909, Report Version: Rev. 01



Roy Wu
Manager

SPORTON International Inc.

6F, No.106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.



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History of this test report

Report Issue Date: Jul. 19, 2007

Report No.	Description



1. General Description of Equipment under Test

1.1 Applicant

Universal Scientific Industrial Co., Ltd.

141, Lane 351, Taiping Road, Sec. 1, Tsao Tuen, Nan-Tou, Taiwan

1.2 Manufacturer

Universal Scientific Industrial Co., Ltd.

141, Lane 351, Taiping Road, Sec. 1, Tsao Tuen, Nan-Tou, Taiwan

1.3 Basic Description of Equipment under Test

Equipment	: USRobotics Wireless USB Adapter
Trade Name	: USRobotics
Model No.	: USR5426
FCC ID	: IXM-USGBR02REF1
IC ID	: 550A-15045



1.4 Feature of Equipment under Test

Product Feature & Specification	
1. DUT Type	USRobotics Wireless USB Adapter
2. Trade Name	USRobotics
3. Model Name	USR5426
4. FCC ID	IXM-USGBR02REF1
5. IC ID	550A-15045
6. Tx Frequency	2400 ~ 2483.5 MHz
7. Rx Frequency	2400 ~ 2483.5 MHz
8. Number of Channels	11
9. Carrier Frequency of Each Channel	$2412+(n-1)*5$ MHz; n=1~11
10. Antenna Connector	N/A
11. Antenna Type	Printed Antenna
12. Antenna Gain	2.02 dBi
13. Maximum Output Power	802.11b : 18.95 dBm 802.11g : 21.81 dBm
14. Type of Modulation	DSSS / OFDM
15. DUT Stage	Identical Prototype
16. Application Type	Certification



2 Test Configuration of Equipment under Test

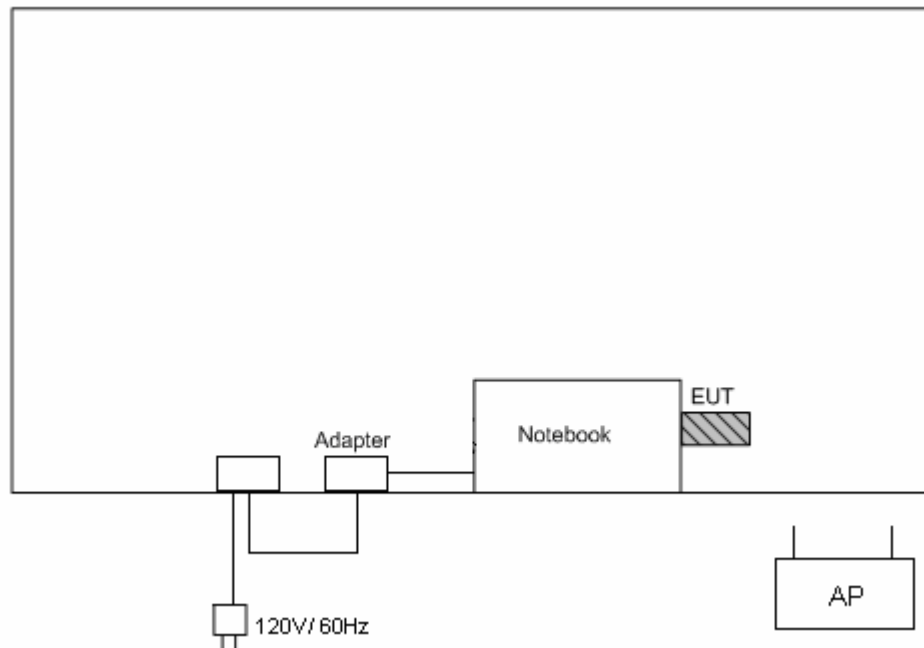
2.1 Test Manner

- a. The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.
- b. For spurious emission below 1GHz, only one channel of each application was tested because it is not related to channel selection.
- c. The EUT is programmed to transmit signal continuously for all testings.
- d. Frequency range investigated: conduction 150 kHz to 30 MHz, radiation 30 MHz to 25000MHz.

2.2 Test Mode

Application		
Radiated Emission	802.11b	802.11g
	Mode 1: Tx_CH01_2412 MHz	Mode 4: Tx_CH01_2412 MHz
	Mode 2: Tx_CH06_2437 MHz	Mode 5: Tx_CH06_2437 MHz
	Mode 3: Tx_CH11_2462 MHz	Mode 6: Tx_CH11_2462 MHz
Conducted Emission	WLAN Ping Mode	

2.3 Connection Diagram of Test System



2.4 Ancillary Equipment List

Item	Asset	Trade Name	Model Name	FCC ID	Power Cord
1.	USB Mouse	Microsoft	B75-00093	DoC	N/A
2.	Mouse(RS232)	State	MS-303	DoC	N/A
3.	WLAN AP	SMC	SMC-100	HEDWG4005ACC	N/A
4.	Notebook	Dell	D400	E2K24GBRL	
5.	Notebook	IBM	X24	DoC	N/A



3. RF Utility

The programmed RF Utility is installed in notebook to provide channel selection, power lever, data rate and the application type. RF Utility can send transmitting signal for all testings. The 802.11b data rate 1Mbps was chosen for testing, and the 802.11g data rate 6Mbps was chosen for testing.



4. General Information of Test

Test Site Location : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park,
Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.
TEL : 886-3-327-3456
FAX : 886-3-318-0055

Test Site No : CO01-HY, 03CH04-HY

4.1 Test Voltage

120V/ 60Hz

4.2 Standard for Methods of Measurement

ANSI C63.4-2003

4.3 Test in Compliance with

47 CFR Part 15 Subpart C and IC RSS-210 Issued 6

4.4 Frequency Range Investigated

- a. Conducted Emission : from 150 KHz to 30 MHz
- b. Radiated Emission : from 30 MHz to 25000 MHz

4.5 Test Distance

The test distance of radiated emission from antenna to EUT is 3 m.



5. Test Data and Test Result

5.1 List of Measurements and Examinations

FCC Rule	IC Rule	Description of Test	Result
15.207	RSS-Gen 7.2.2	Conducted Emission	Pass
15.247(a)(2)	A8.2 (1)	6dB Bandwidth	Pass
15.247(b)	A8.4 (4)	Maximum Peak Output Power	Pass
15.209(a)	2.6	Radiated Emission	Pass
15.247 (c)	A8.5	100kHz Bandwidth of Frequency Band Edges	Pass
15.247(d)	A8.2 (2)	Power Spectral Density	Pass
15.203 15.247(b)(4)	A8.4 (6)	Antenna Requirement	Pass

5.2 6dB Bandwidth Measurement

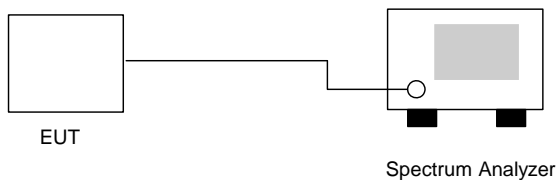
5.2.1 Measuring Instruments :

As described in chapter 6 of this test report.

5.2.2 Test Procedure :

1. The transmitter output was connected to the spectrum analyzer directly.
2. Set RBW of spectrum analyzer to 100kHz and VBW to 100kHz.
3. The 6 dB bandwidth is defined as the frequency range where the power is higher than the peak power minus 6dB.

5.2.3 Test Setup Layout :



5.2.4 Test Result :

- Application Type : WLAN 802.11b/g
- Temperature : 25~27°C
- Relative Humidity : 54~55%
- Test Enginner : Andrew

802.11b

Channel	Frequency (MHz)	6dB Emission bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
01	2412	10.04	> 0.5MHz	Plot 1
06	2437	10.08	> 0.5MHz	Plot 2
11	2462	10.08	> 0.5MHz	Plot 3

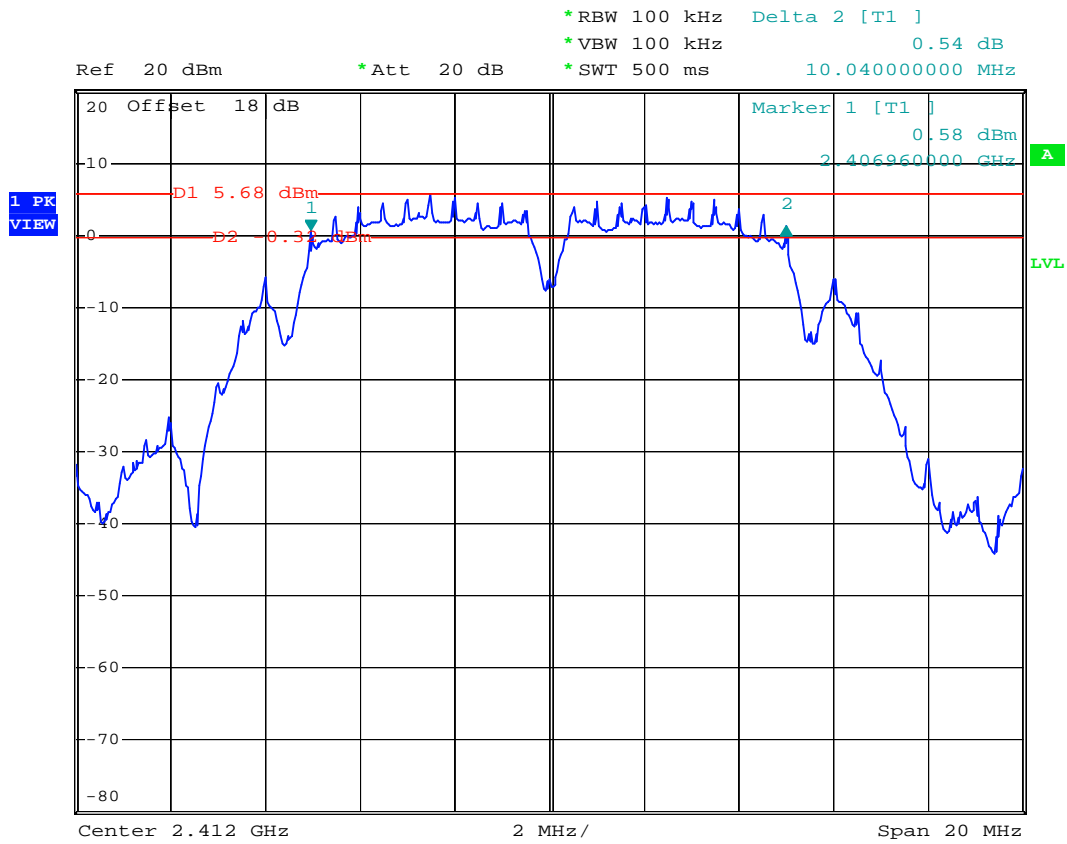
802.11g

Channel	Frequency (MHz)	6dB Emission bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
01	2412	16.36	> 0.5MHz	Plot 4
06	2437	16.36	> 0.5MHz	Plot 5
11	2462	16.36	> 0.5MHz	Plot 6



5.2.5 6dB Bandwidth

Plot 1



Date: 3.JUL.2007 20:06:44



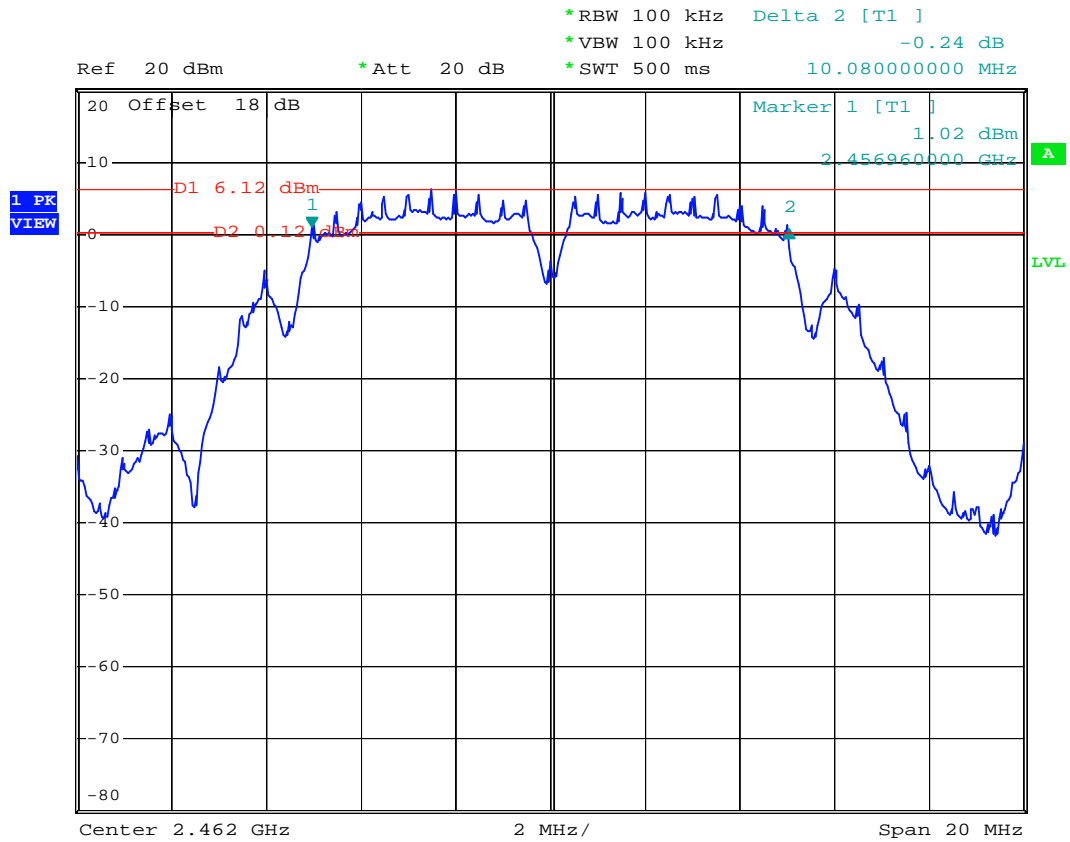
Plot 2



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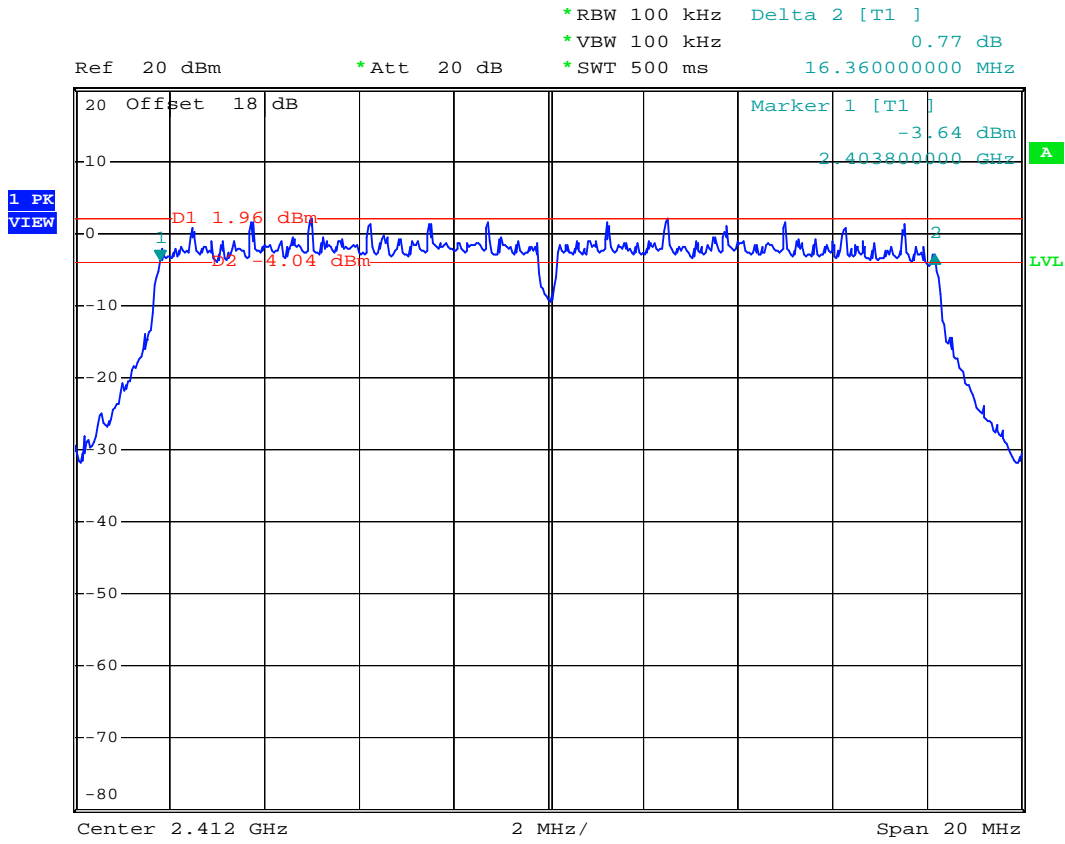
Plot 3



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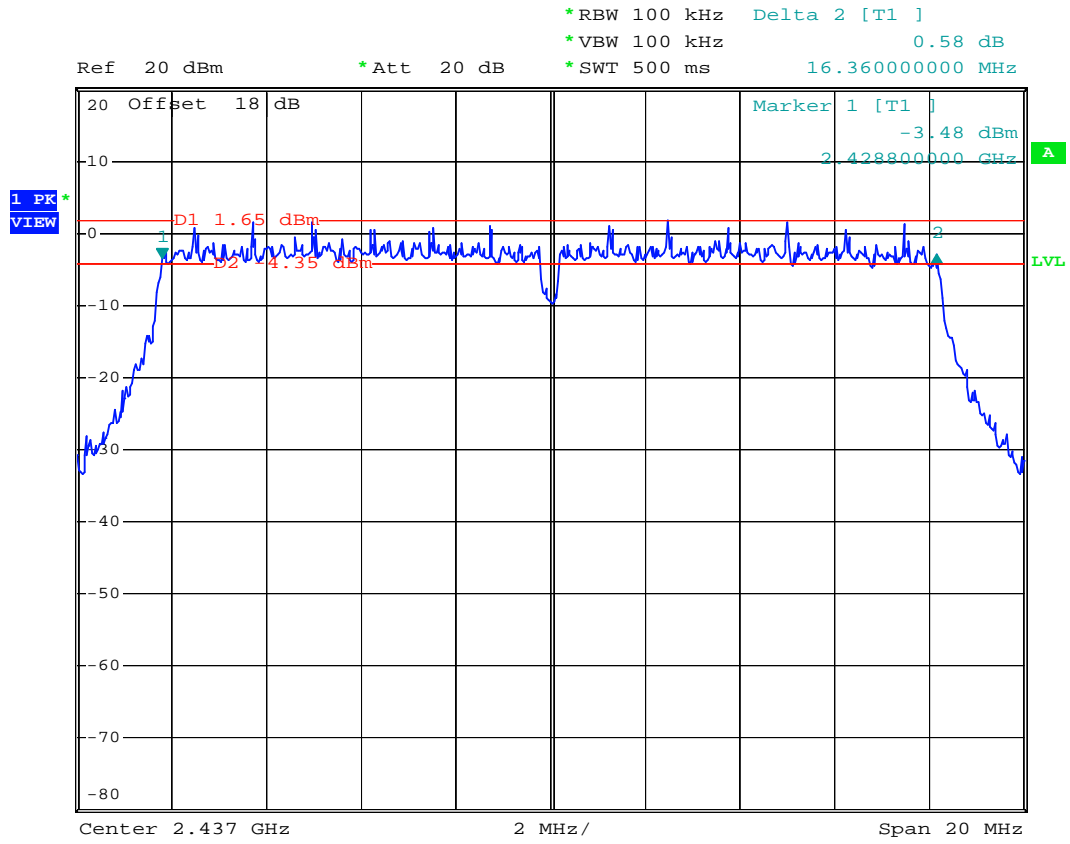
Plot 4



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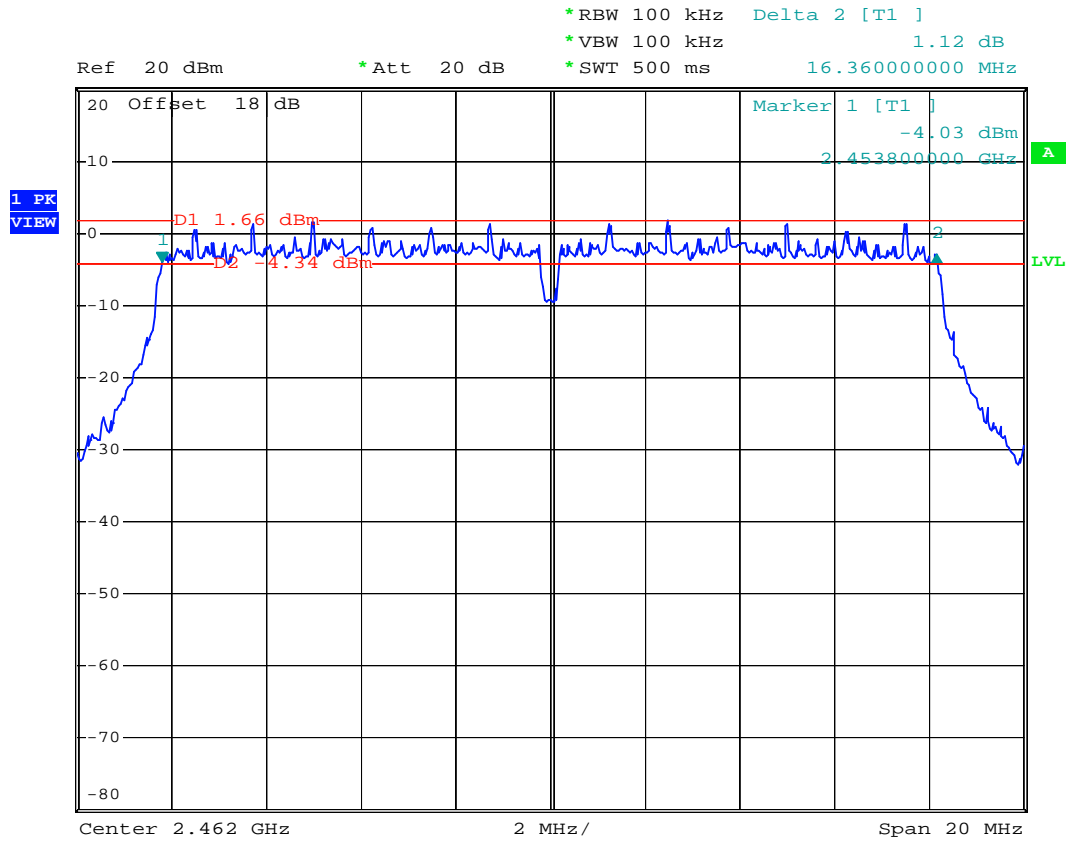
Plot 5



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Plot 6



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5.3 Power Spectral Density Measurement

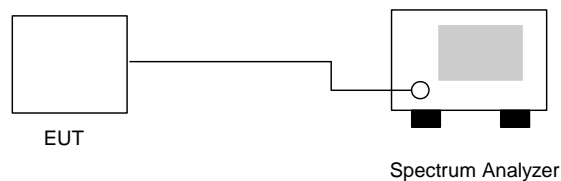
5.3.1 Measuring Instruments :

As described in chapter 6 of this test report.

5.3.2 Test Procedure :

1. The transmitter output was connected to spectrum analyzer directly.
2. The spectrum analyzer's resolution bandwidth was set at 3kHz RBW and 30kHz VBW as that of the fundamental frequency. Set the sweep time=span/3kHz.
3. The power spectral density was measured and recorded.
4. The sweep time is allowed to be longer than span/3kHz for a full response of the mixer in the spectrum analyzer.

5.3.3 Test Setup Layout :





5.3.4 Test Result :

- Application Type : 802.11b/g
- Temperature : 25~26°C
- Relative Humidity : 54~55%
- Test Enginner : Andrew

802.11b

Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)	Plot Ref. No.
01	2412	-8.10	8	Plot 1
06	2437	-8.22	8	Plot 2
11	2462	-7.34	8	Plot 3

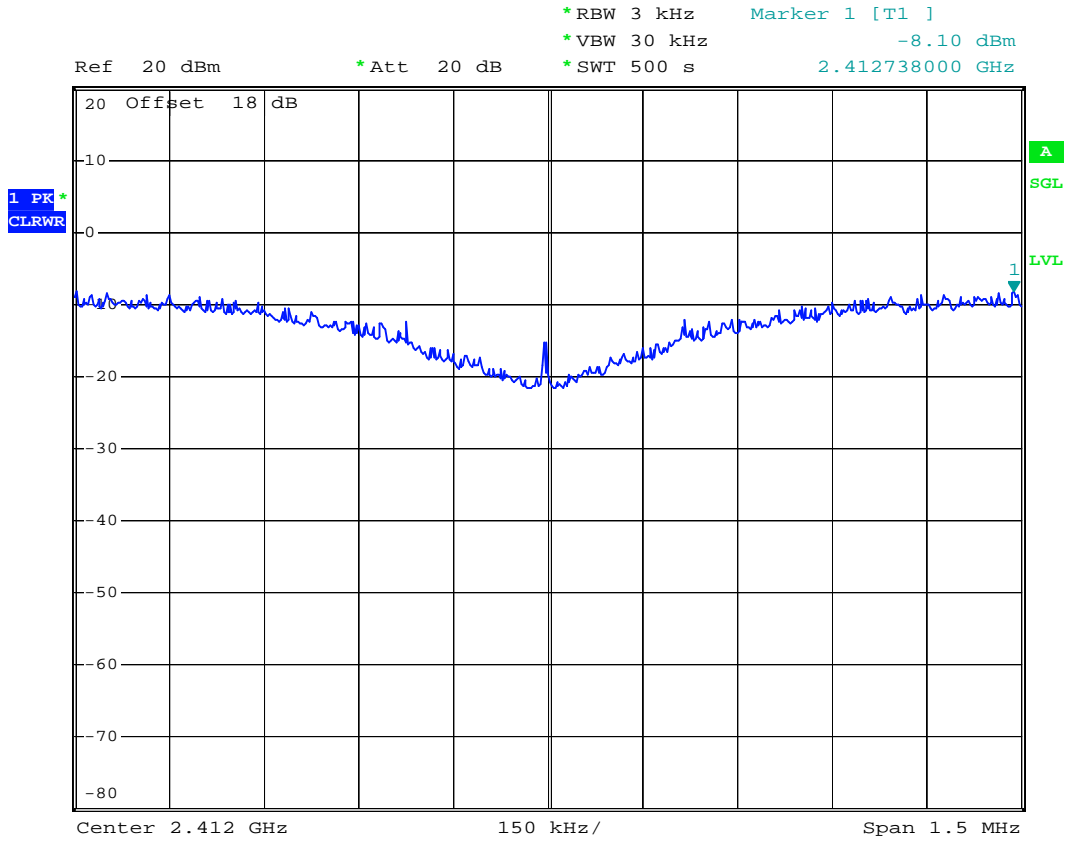
802.11g

Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)	Plot Ref. No.
01	2412	-11.07	8	Plot 4
06	2437	-11.18	8	Plot 5
11	2462	-11.27	8	Plot 6



5.3.5 Power Spectral Density

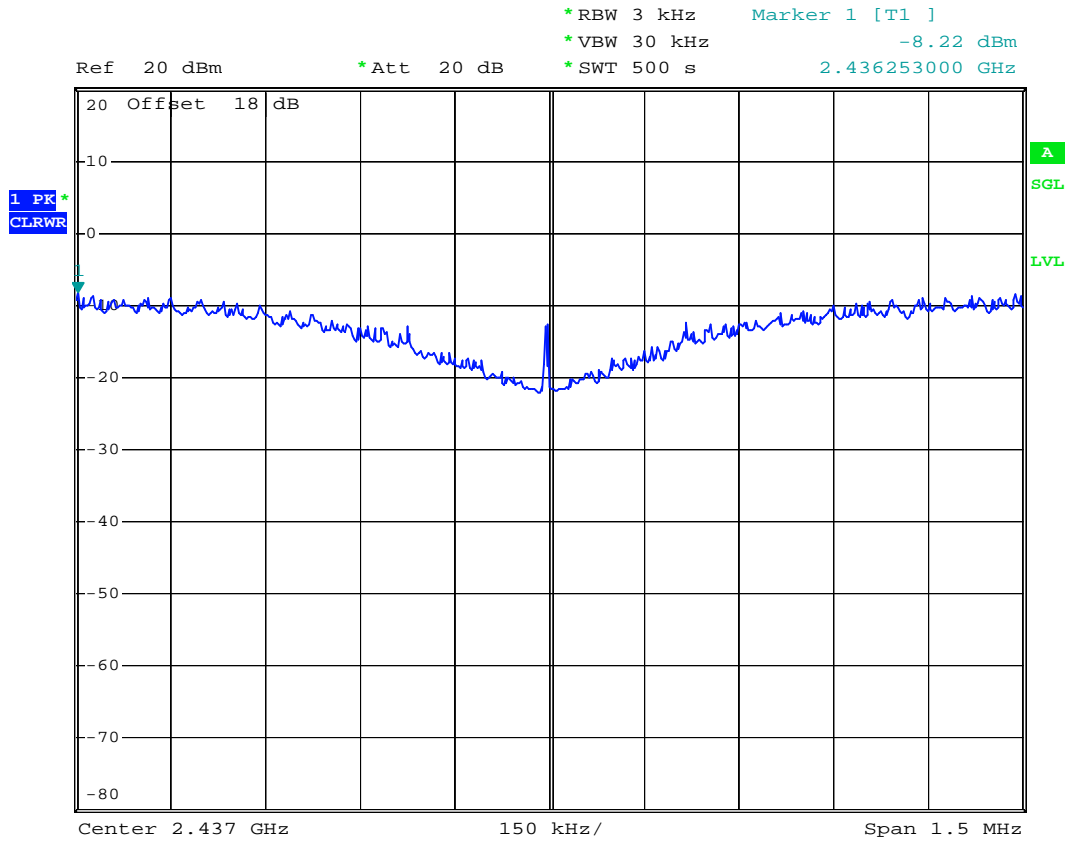
Plot 1



Date: 3.JUL.2007 20:24:21



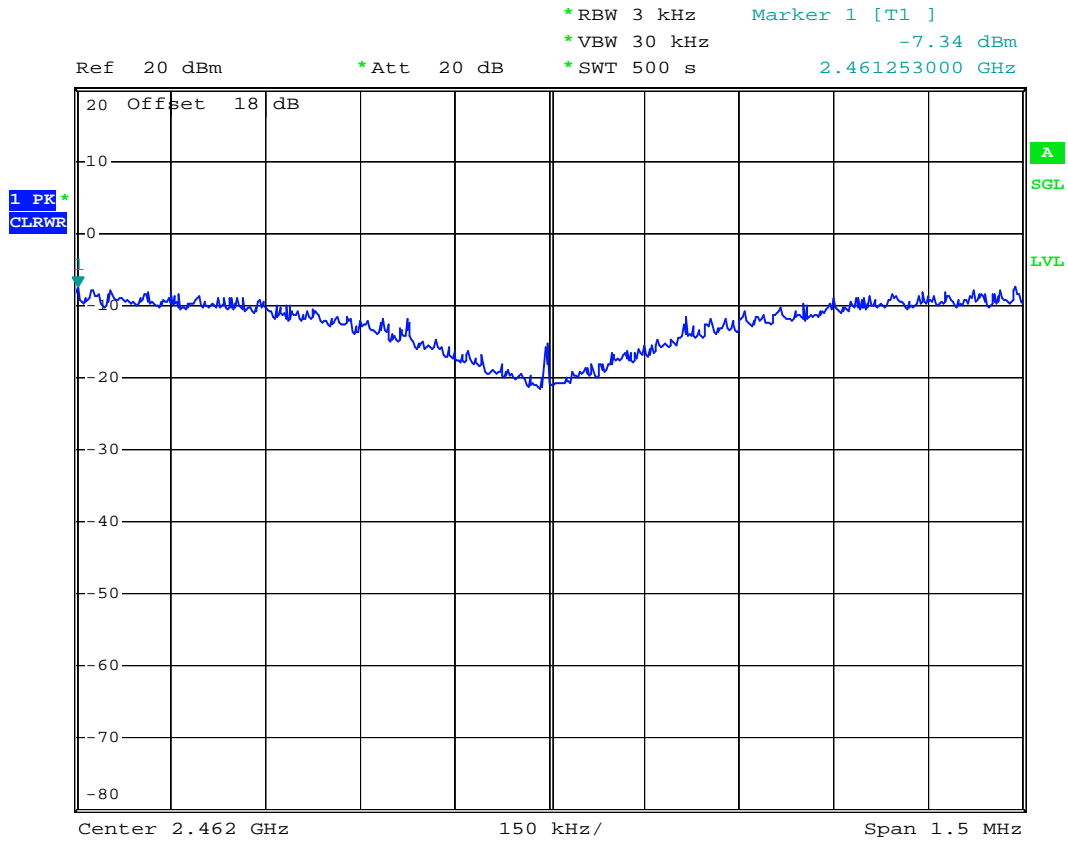
Plot 2



Date: 3.JUL.2007 20:33:44



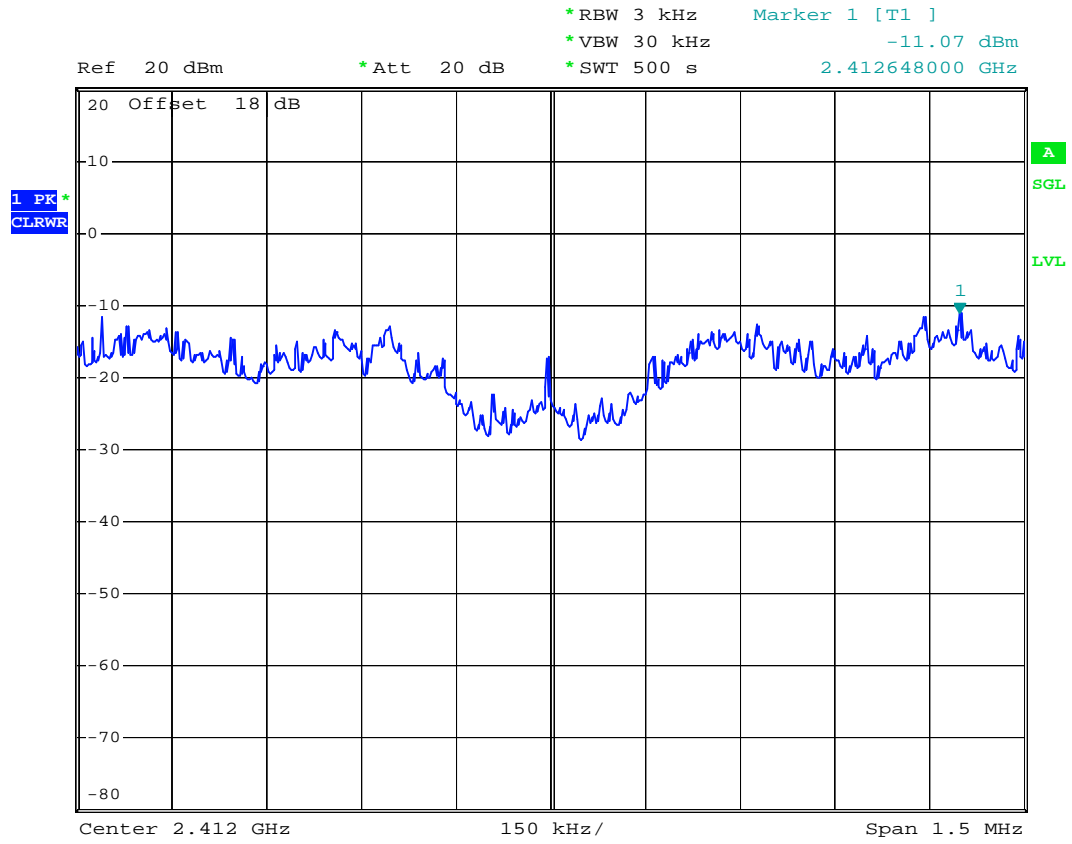
Plot 3



Date: 3.JUL.2007 20:43:13



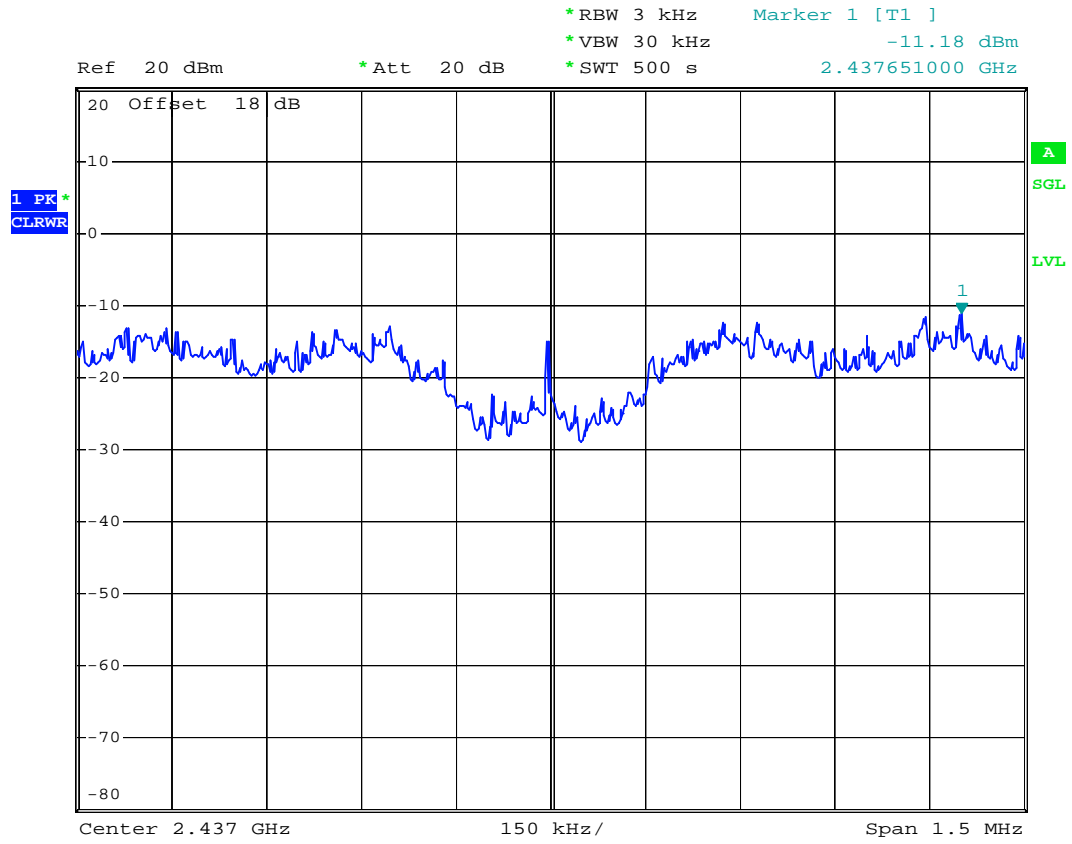
Plot 4



Date: 3.JUL.2007 21:01:31



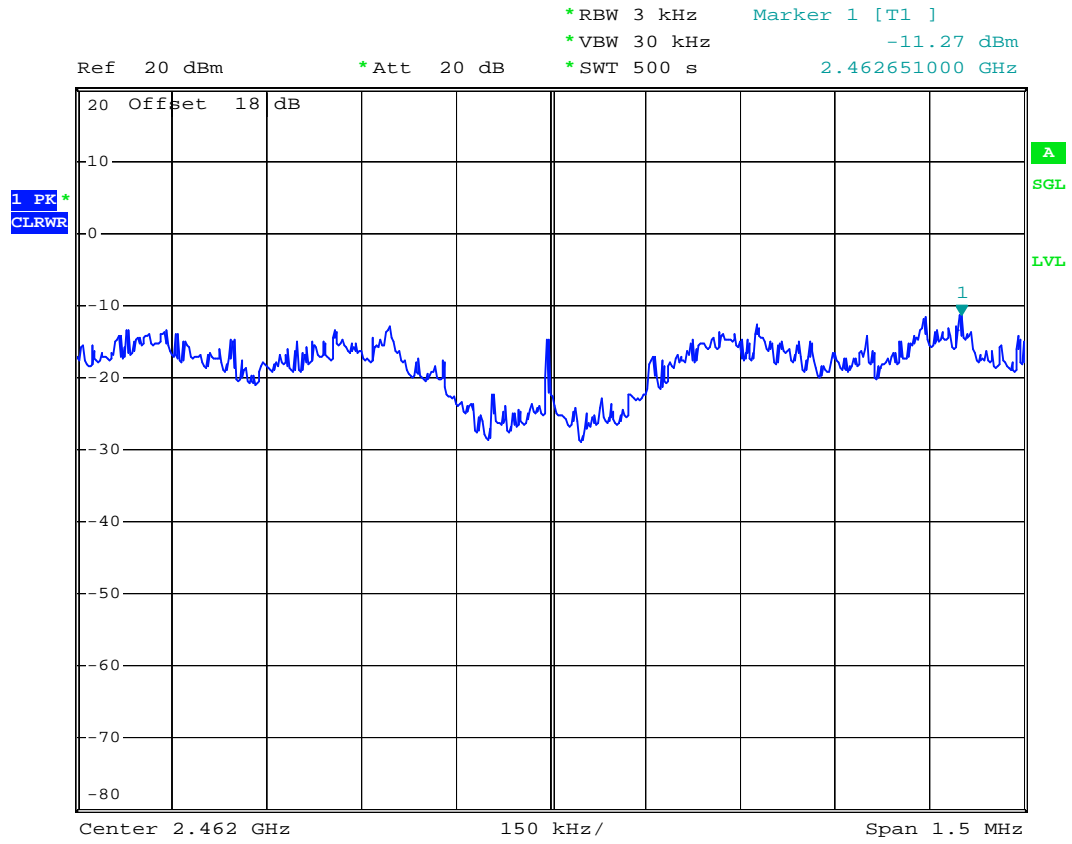
Plot 5



Date: 3.JUL.2007 21:13:35



Plot 6



Date: 3.JUL.2007 21:23:27



5.4 Band Edges Measurement

5.4.1 Measuring Instruments :

As described in chapter 6 of this test report.

5.4.2 Test Procedure :

1. The transmitter output was connected to the spectrum analyzer via a low lose cable.
2. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100 kHz bandwidth from band edge.
3. The band edges was measured and recorded.

5.4.3 Test Result :

- Application Type : WLAN 802.11b/g
- Temperature : 25~26°C
- Relative Humidity : 54~55%
- Test Enginner : Andrew

- Test Result in WLAN lower band (Channel 1) : PASS
- Test Result in WLAN higher band (Channel 11) : PASS

5.4.4 Note on Band Edge Emission :

➤WLAN 802.11b

CH01 (Horizontal)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2390.000	52.99	-21.01	74.00	52.45	30.59	3.74	33.78	100	0	Peak
2390.000	40.19	-13.81	54.00	39.65	30.59	3.74	33.78	100	139	Average

CH01 (Vertical)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2390.000	54.59	-19.41	74.00	54.05	30.59	3.74	33.78	100	0	Peak
2390.000	42.92	-11.08	54.00	42.38	30.59	3.74	33.78	100	205	Average



CH11 (Horizontal)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.500	52.16	-21.84	74.00	51.69	30.43	3.84	33.80	100	0	Peak
2483.500	41.12	-12.88	54.00	40.65	30.43	3.84	33.80	100	140	Average

CH11 (Vertical)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2383.500	55.67	-18.33	74.00	55.20	30.43	3.84	33.80	100	0	Peak
2383.500	45.40	-8.60	54.00	44.93	30.43	3.84	33.80	100	209	Average

➤WLAN 802.11g

CH01 (Horizontal)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2390.000	64.43	-9.57	74.00	63.89	30.59	3.74	33.78	100	0	Peak
2390.000	42.52	-11.48	54.00	41.98	30.59	3.74	33.78	100	139	Average

CH01 (Vertical)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2390.000	67.21	-6.79	74.00	6.67	30.59	3.74	33.78	100	0	Peak
2390.000	45.36	-8.64	54.00	44.82	30.59	3.74	33.78	100	205	Average

CH11 (Horizontal)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.500	64.53	-9.47	74.00	64.06	30.43	3.84	33.80	100	0	Peak
2483.500	45.55	-8.45	54.00	45.08	30.43	3.84	33.80	100	149	Average



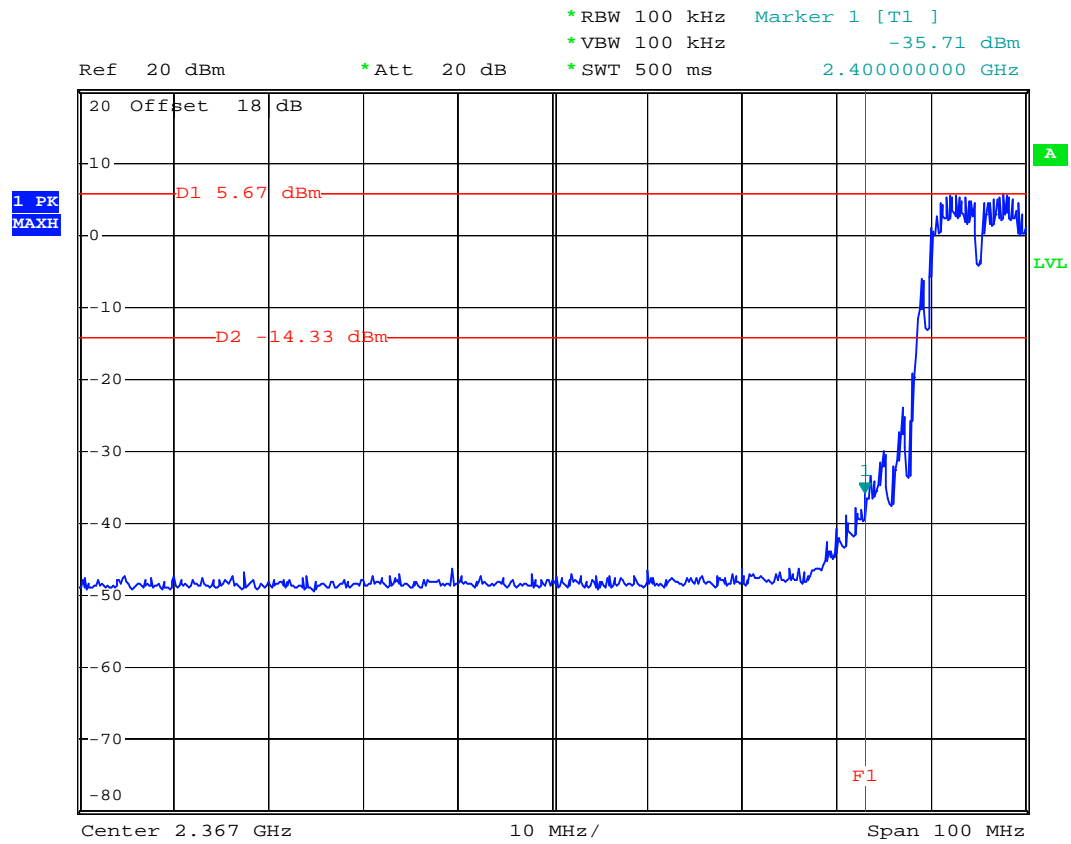
CH11 (Vertical)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.500	64.77	-9.23	74.00	64.30	30.43	3.84	33.80	100	0	Peak
2483.500	46.10	-7.90	54.00	45.63	30.43	3.84	33.80	100	207	Average



5.4.4 20dB Band Edge

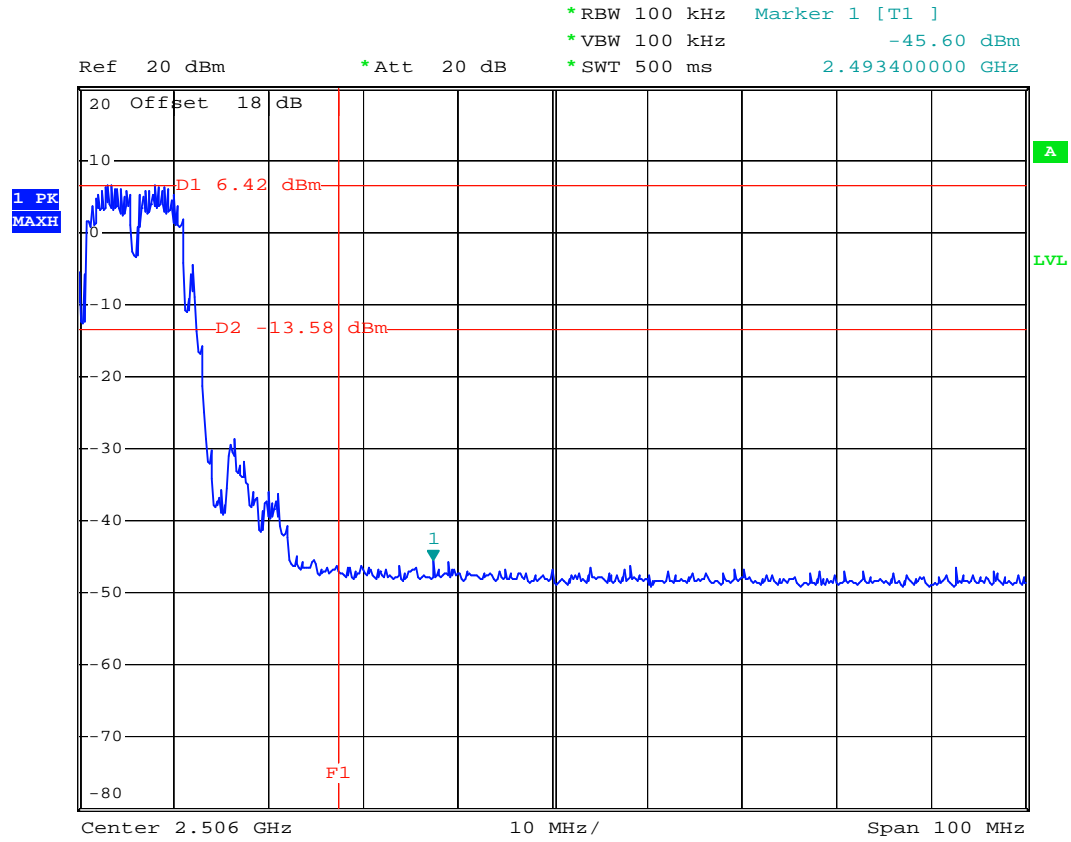
802.11b CH01



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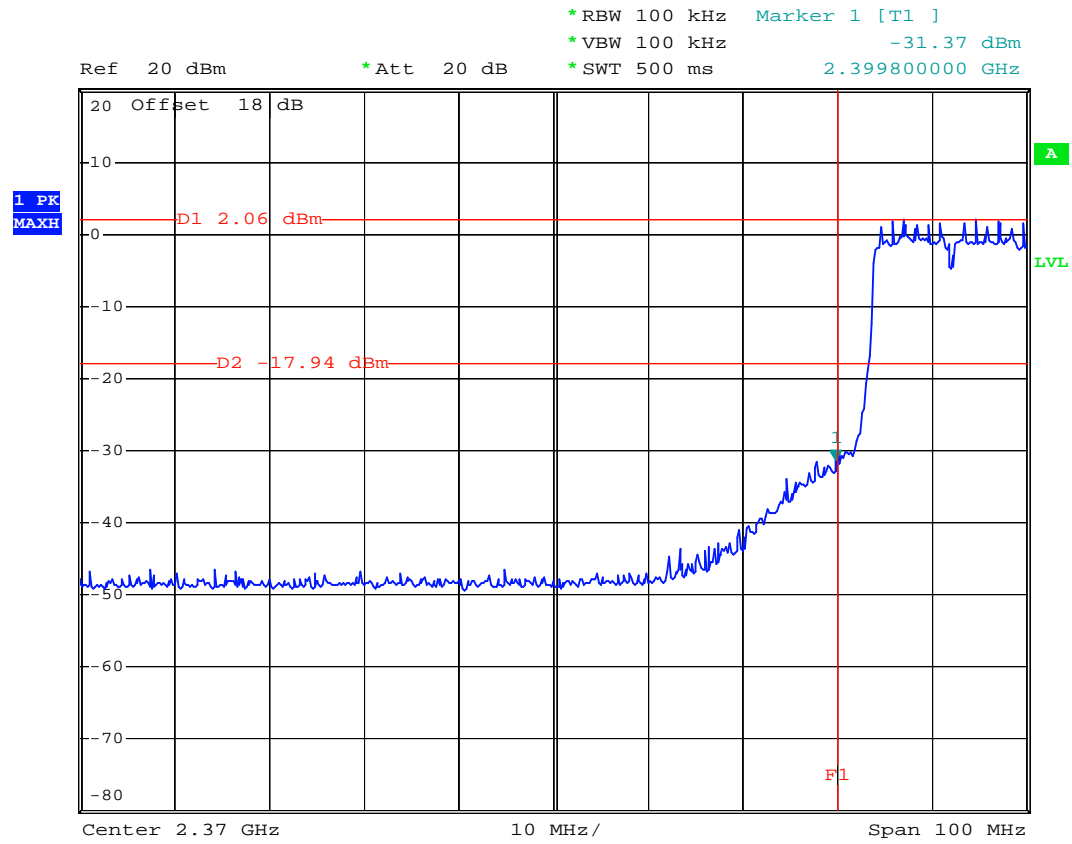
802.11b CH11



Date: 3.JUL.2007 20:10:30



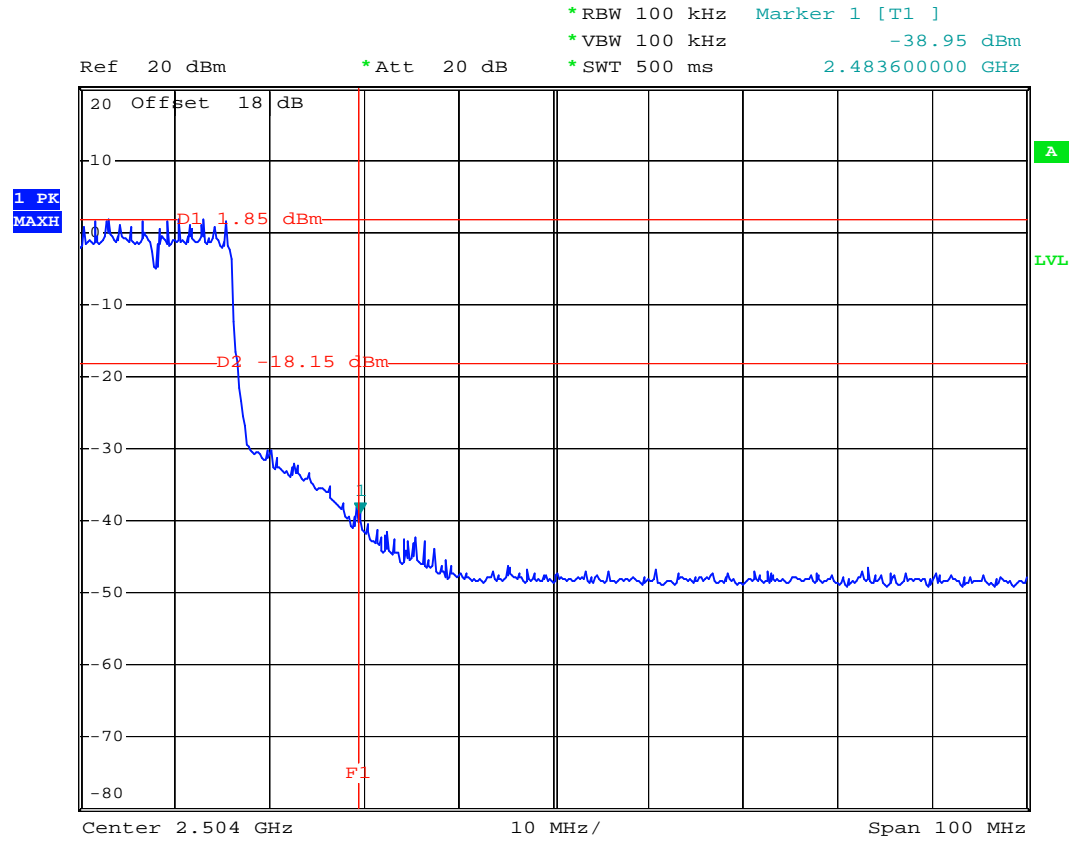
802.11g CH01



Date: 3.JUL.2007 20:50:51



802.11g CH11



Date: 3.JUL.2007 20:48:50

5.5 Peak Output Power Measurement

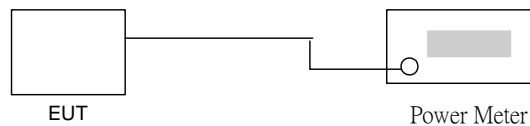
5.5.1 Measuring Instruments :

As described in chapter 6 of this test report.

5.5.2 Test Procedure :

1. The antenna port (RF output) of the EUT was connected to the input (RF input) of a power meter for WLAN measurement. The power is equal to the reading level on power meter plus cable loss at the EUT antenna terminal.
2. The antenna port(RF output) of the EUT was connected to the input (RF input) of a spectrum analyzer for BT measurement. The cable loss has been offset before testing.

5.5.3 Test Setup Layout :



5.5.4 Test Result :

- Application Type : WLAN 802.11b/g
- Temperature : 25~26°C
- Relative Humidity : 54~55%
- Test Enginner : Anderw

802.11b

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
01	2412	17.68	1W/30 dBm
06	2437	18.11	1W/30 dBm
11	2462	18.95	1W/30 dBm

802.11g

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
01	2412	21.81	1W/30 dBm
06	2437	20.68	1W/30 dBm
11	2462	21.74	1W/30 dBm



5.6 Conducted Emission

5.6.1 Measuring Instruments

As described in chapter 6 of this test Report.

5.6.2 Test Procedures :

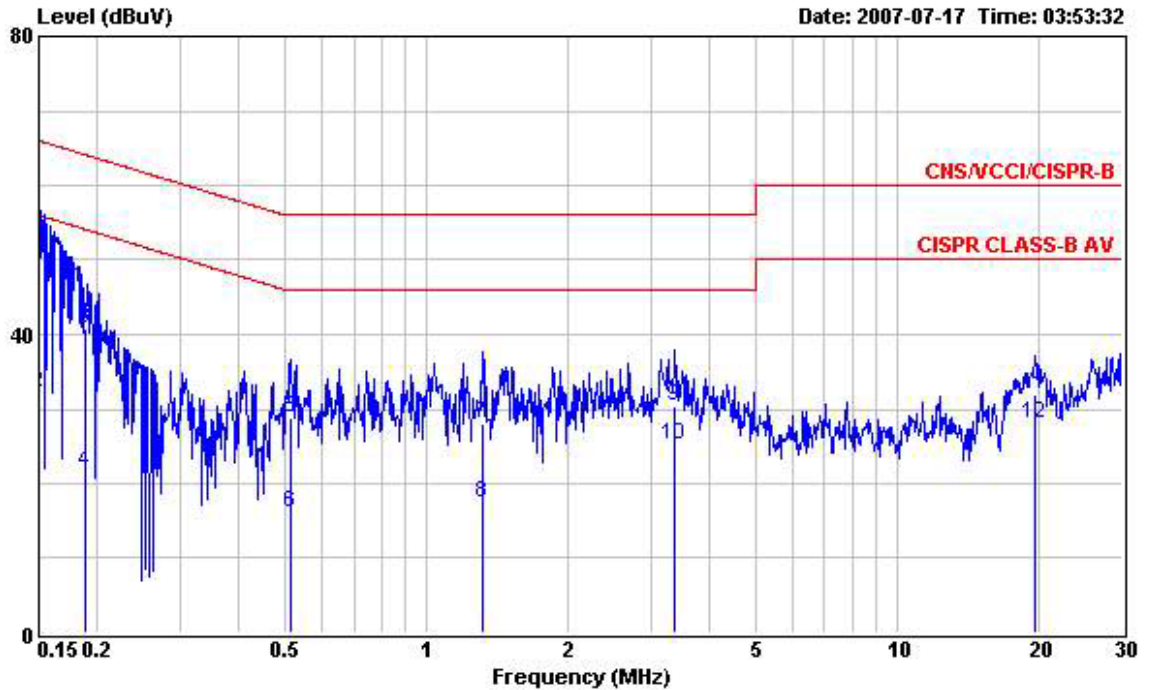
- a. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- b. Connect EUT to the power port of a line impedance stabilization network (LISN).
- c. All the support units are connected to the other LISN.
- d. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- e. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
- f. Both sides of AC line were checked for maximum conducted interference.
- g. The frequency range from 150 kHz to 30 MHz was searched.
- h. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.



5.6.3 Test Data

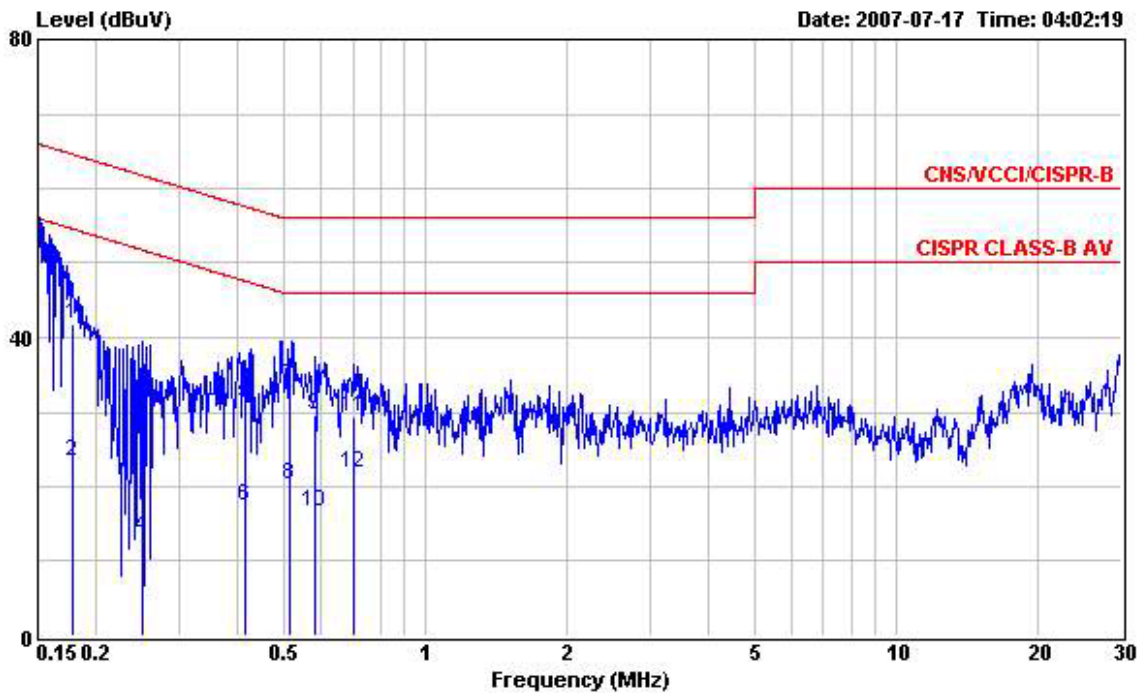
- Temperature : 25~26°C
- Relative Humidity : 54~55%
- Test Enginner : Andrew
- Test Mode : Mode 1

■ The test that passed at minimum margin was marked by the frame in the following table.



Site : CO01-HY
 Condition : CNS/VCCI/CISPR-B 2001/004 200604 LINE
 EUT : USB Dongle (local版)
 Power : 120V/60Hz
 Model : FR762909
 Memo : PING MODE

	Freq	Level	Over	Limit	Read	Cable	Probe	Remark
	MHz	dBuV	Limit	Line	Level	Loss	Factor	
			dB	dBuV	dBuV	dB	dB	
1	0.150	51.85	-14.14	65.99	51.64	0.11	0.10	QP
2	0.150	32.25	-23.74	55.99	32.04	0.11	0.10	Average
3	0.189	40.90	-23.19	64.09	40.63	0.17	0.10	QP
4	0.189	21.64	-32.45	54.09	21.37	0.17	0.10	Average
5	0.513	28.95	-27.05	56.00	28.66	0.19	0.10	QP
6	0.513	16.10	-29.90	46.00	15.81	0.19	0.10	Average
7	1.320	28.10	-27.90	56.00	27.94	0.06	0.10	QP
8	1.320	17.43	-28.57	46.00	17.27	0.06	0.10	Average
9	3.360	30.44	-25.56	56.00	30.24	0.03	0.17	QP
10	3.360	25.10	-20.90	46.00	24.90	0.03	0.17	Average
11	19.530	31.98	-28.02	60.00	31.38	0.21	0.39	QP
12	19.530	27.99	-22.01	50.00	27.39	0.21	0.39	Average



Site : CO01-HY
 Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
 EUT : USB Dongle (local版)
 Power : 120V/60Hz
 Model : FR762909
 Memo : PING MODE

	Freq	Level	Over Limit	Limit Line	Read Level	Cable Loss	Probe Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.178	41.69	-22.90	64.59	41.44	0.15	0.10	QP
2	0.178	23.41	-31.18	54.59	23.16	0.15	0.10	Average
3	0.251	31.40	-30.32	61.72	31.10	0.20	0.10	QP
4	0.251	13.27	-38.45	51.72	12.97	0.20	0.10	Average
5	0.414	31.16	-26.41	57.57	30.84	0.22	0.10	QP
6	0.414	17.51	-30.06	47.57	17.19	0.22	0.10	Average
7	0.514	33.56	-22.44	56.00	33.27	0.19	0.10	QP
8	0.514	20.39	-25.61	46.00	20.10	0.19	0.10	Average
9	0.582	29.54	-26.46	56.00	29.27	0.17	0.10	QP
10	0.582	16.70	-29.30	46.00	16.43	0.17	0.10	Average
11	0.705	29.30	-26.70	56.00	29.06	0.14	0.10	QP
12	0.705	21.73	-24.27	46.00	21.49	0.14	0.10	Average



5.7 Radiated Emission Measurement

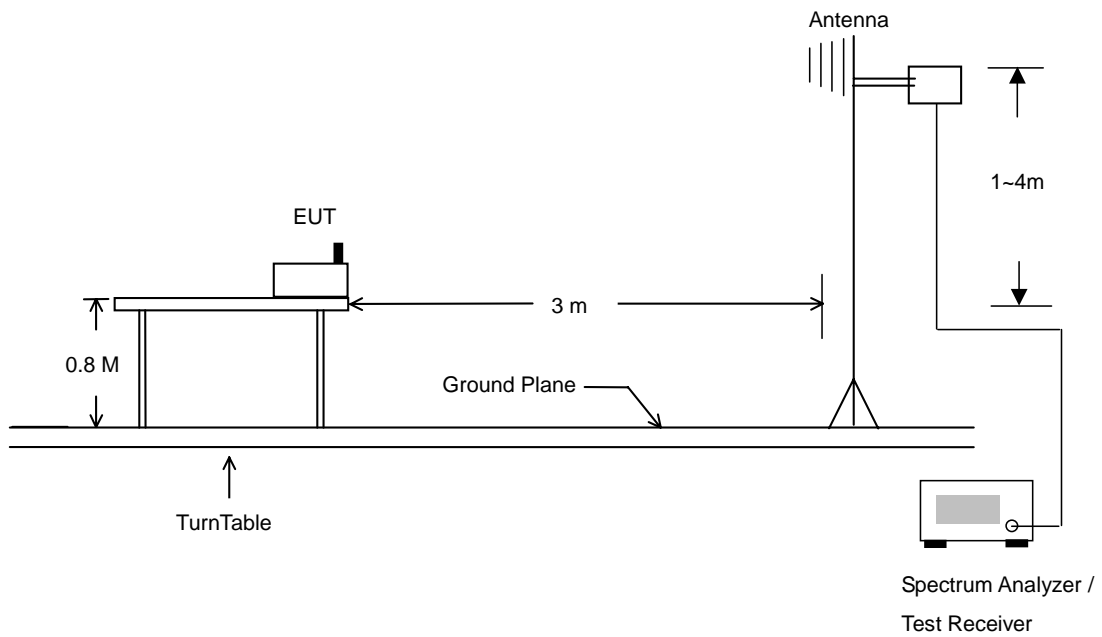
5.7.1 Measuring Instruments

As described in chapter 6 of this Report.

5.7.2 Test Procedures

- a. The EUT was placed on a rotatable table top 0.8 meter above ground.
- b. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- c. The table was rotated 360 degrees to determine the position of the highest radiation.
- d. The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
- e. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
- f. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
- g. For testing below 1GHz, If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the quasi-peak method and reported.
- h. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

5.7.3 Typical Test Setup Layout of Radiated Emission

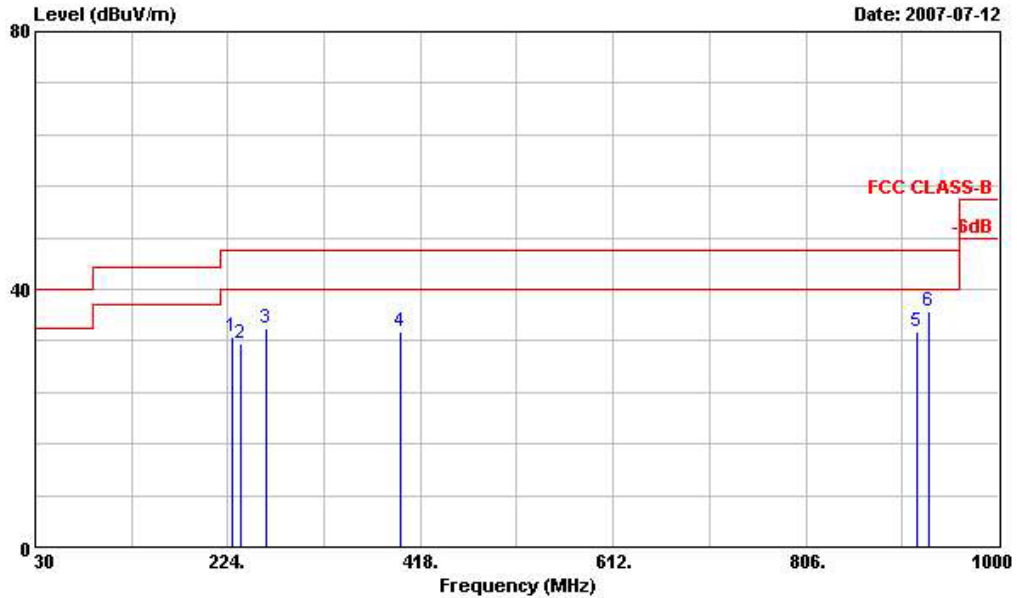




5.7.4 Test Data

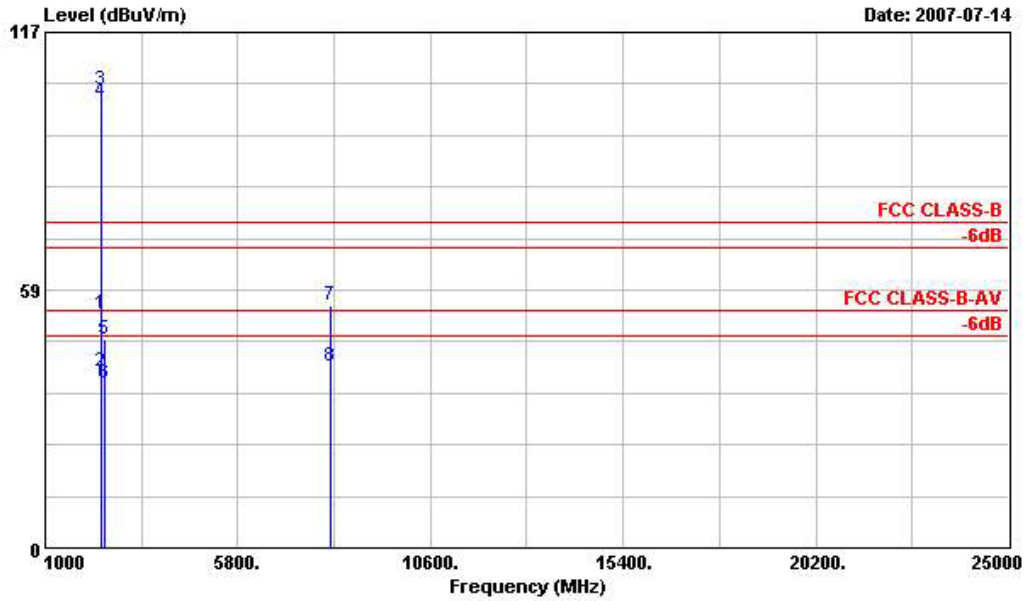
- Temperature : 26°~27C
- Relative Humidity : 57~59%
- Test Enginner : Cash
- Test Mode : Mode 1
- Polarization : Horizontal

■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m ANT2724 HORIZONTAL
 EUT : USB Dongle (local版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11b Tx_Ch01;2412MHz
 Data Rate: 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna	Cable	Preamp	Ant	Table	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	229.260	32.61	-13.39	46.00	52.72	10.94	1.78	32.83	---	---	Peak
2	236.820	31.62	-14.38	46.00	51.11	11.53	1.82	32.85	---	---	Peak
3	261.930	34.00	-12.00	46.00	52.42	12.51	1.93	32.86	---	---	Peak
4	397.300	33.52	-12.48	46.00	48.37	15.68	2.32	32.86	---	---	Peak
5	918.100	33.32	-12.68	46.00	37.18	23.98	3.59	31.43	---	---	Peak
6	929.300	36.70	-9.30	46.00	40.29	24.25	3.58	31.42	107	261	Peak



Site :03CH04-HY
 Condition:FCC CLASS-B 3m HF-ANT HORIZONTAL
 EUT :USB Dongle(local版)
 POWER :From Notebook
 MODEL :FR 762909
 MODE :11b Tx_Ch01;2412MHz
 Data Rate:1

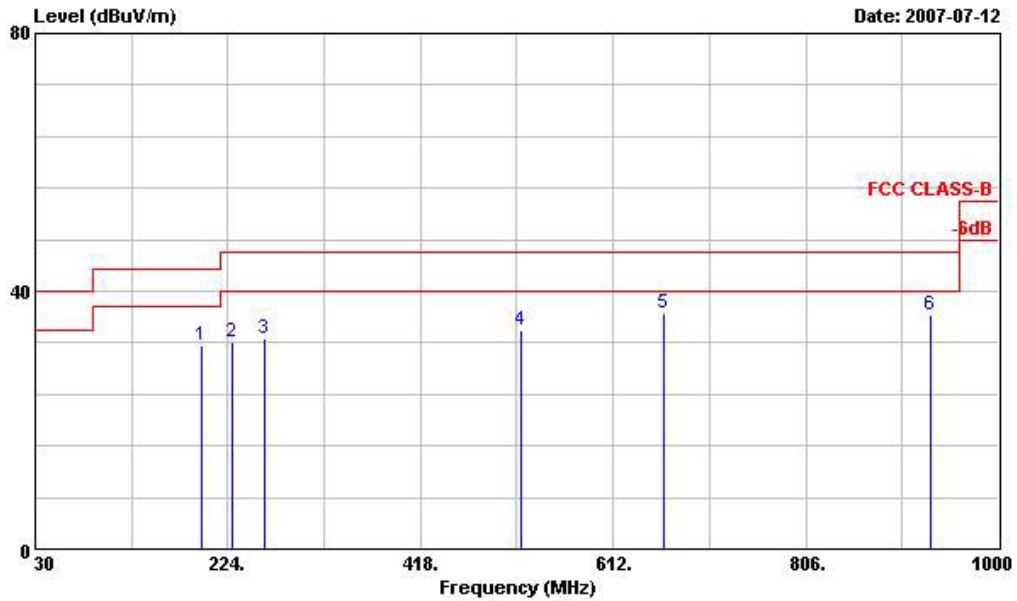
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2390.000	52.99	-21.01	74.00	52.45	30.59	3.74	33.78	100	0	Peak
2	2390.000	40.19	-13.81	54.00	39.65	30.59	3.74	33.78	100	139	Average
3 X	2412.000	104.09			103.55	30.56	3.76	33.78	100	0	Peak
4 X	2412.000	101.15			100.61	30.56	3.76	33.78	100	139	Average
5	2492.000	47.50	-26.50	74.00	47.06	30.40	3.84	33.80	100	0	Peak
6	2492.000	37.28	-16.72	54.00	36.84	30.40	3.84	33.80	100	139	Average
7	8106.000	54.93	-19.07	74.00	42.43	39.46	6.81	33.77	100	0	Peak
8	8106.000	41.21	-12.79	54.00	28.71	39.46	6.81	33.77	100	272	Average

Remark: #3 and #4 Fundamental Signal



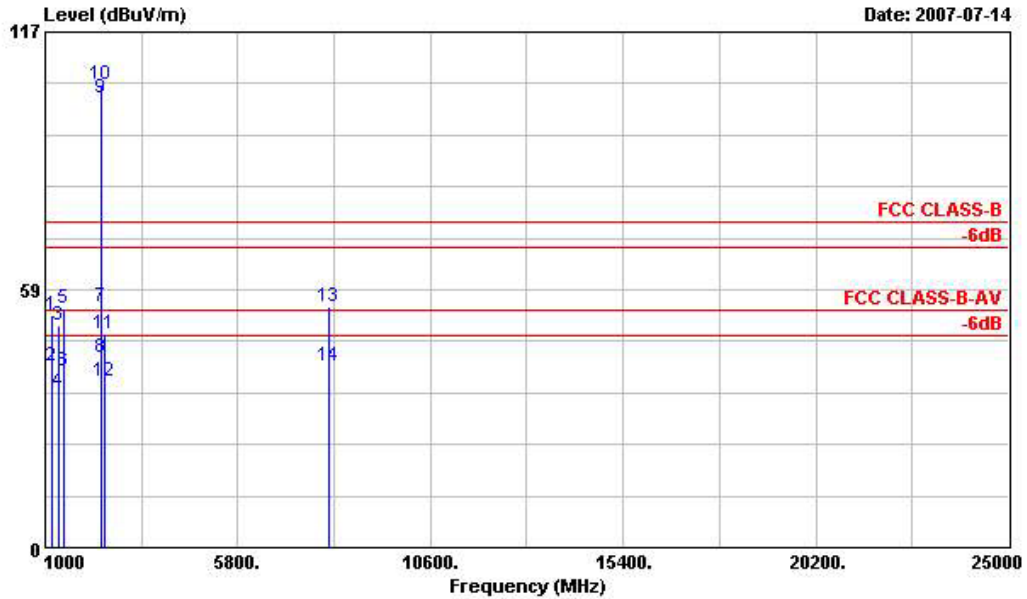
• Polarization : Vertical

■ The test that passed at minimum margin was marked by the frame in the following table.



Site :03CH04-HY
 Condition:FCC CLASS-B 3m ANT2724 VERTICAL
 EUT :USB Dongle(local版)
 POWER :From Notebook
 MODEL :FR 762909
 MODE :11b Tx_Ch01;2412MHz
 Data Rate:1

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	196.860	31.56	-11.94	43.50	53.95	8.77	1.60	32.76	---	---	Peak
2	228.450	32.18	-13.82	46.00	52.29	10.94	1.78	32.83	---	---	Peak
3	261.660	32.62	-13.38	46.00	51.04	12.51	1.93	32.86	---	---	Peak
4	519.800	34.01	-11.99	46.00	46.36	17.49	2.67	32.51	---	---	Peak
5	663.300	36.59	-9.41	46.00	45.46	20.05	3.12	32.04	114	343	Peak
6	931.400	36.29	-9.71	46.00	39.83	24.30	3.58	31.42	---	---	Peak



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m HF-ANT VERTICAL
 EUT : USB Dongle(local版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11b Tx_Ch01;2412MHz
 Data Rate: 1

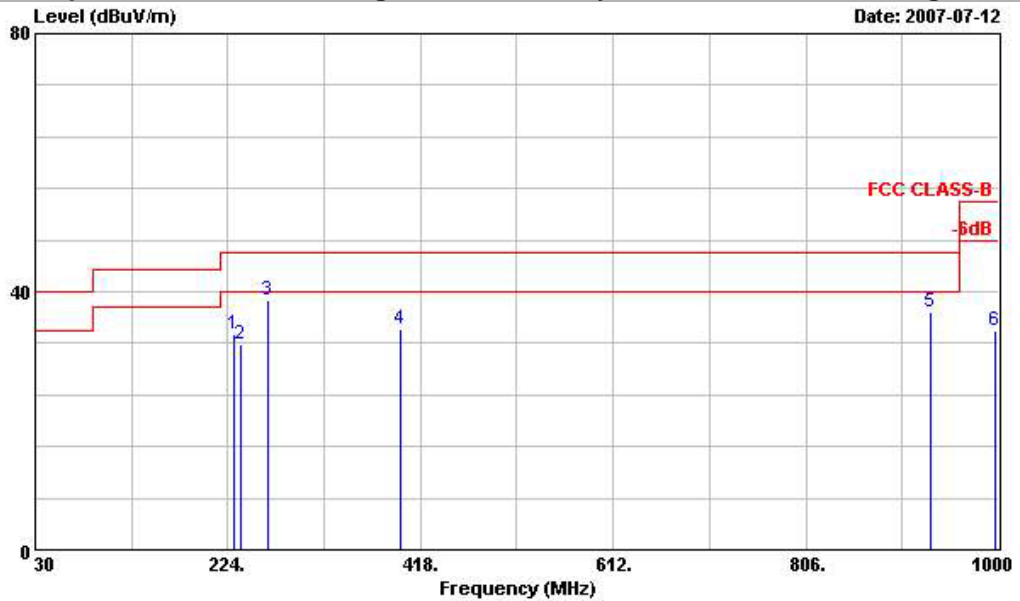
	Freq	Level	Limit	Line	ReadAntenna		Cable Preamp		Ant	Table	
					Level	Factor	Loss	Factor		Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	1190.000	52.55	-21.45	74.00	58.06	26.21	2.44	34.16	100	0	Peak
2	1190.000	41.04	-12.96	54.00	46.55	26.21	2.44	34.16	100	231	Average
3	1326.000	50.58	-23.42	74.00	55.28	26.65	2.60	33.95	100	0	Peak
4	1326.000	35.24	-18.76	54.00	39.94	26.65	2.60	33.95	100	185	Average
5	1460.000	54.11	-19.89	74.00	58.06	27.09	2.73	33.77	100	0	Peak
6	1460.000	40.19	-13.81	54.00	44.14	27.09	2.73	33.77	100	177	Average
7	2390.000	54.59	-19.41	74.00	54.05	30.59	3.74	33.78	100	0	Peak
8	2390.000	42.92	-11.08	54.00	42.38	30.59	3.74	33.78	100	205	Average
9 @	2412.000	101.93			101.39	30.56	3.76	33.78	100	205	Average
10 X	2412.000	105.00			104.46	30.56	3.76	33.78	100	0	Peak
11	2486.000	48.44	-25.56	74.00	47.97	30.43	3.84	33.80	100	0	Peak
12	2486.000	37.66	-16.34	54.00	37.19	30.43	3.84	33.80	100	205	Average
13	8082.000	54.83	-19.17	74.00	42.29	39.47	6.80	33.73	100	0	Peak
14	8082.000	41.24	-12.76	54.00	28.70	39.47	6.80	33.73	100	262	Average

Remark: #9 and #10 Fundamental Signal



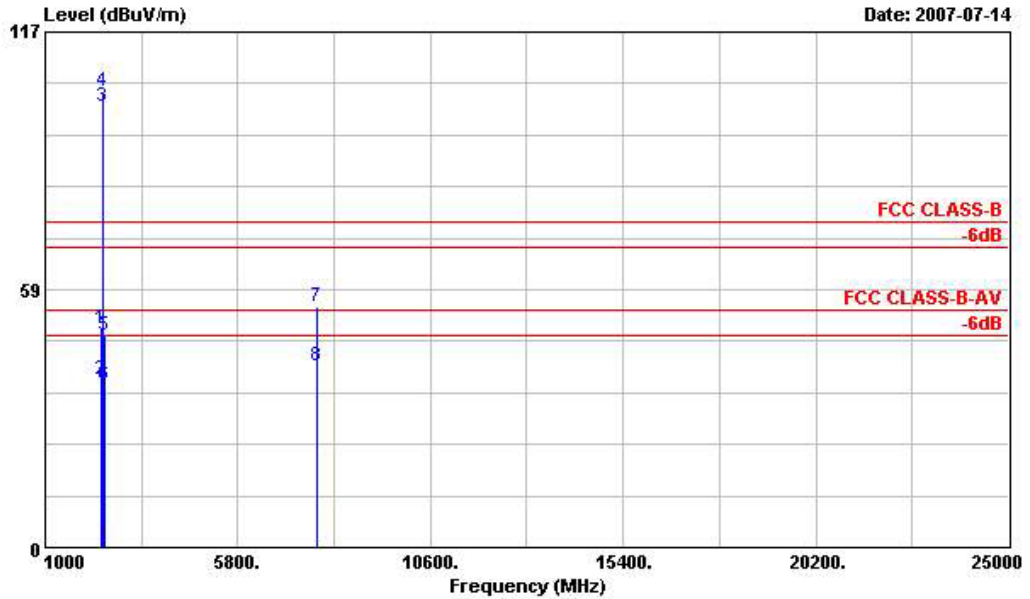
- Test Mode : Mode 2
- Polarization : Horizontal

■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m ANT2724 HORIZONTAL
 EUT : USB Dongle (local版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11b Tx_Ch06;2437MHz
 Data Rate: 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	229.530	33.33	-12.67	46.00	53.36	11.02	1.78	32.83	---	---	Peak
2	236.820	31.97	-14.03	46.00	51.46	11.53	1.82	32.85	---	---	Peak
3	265.170	38.70	-7.30	46.00	57.13	12.49	1.94	32.86	100	156	Peak
4	397.300	34.34	-11.66	46.00	49.19	15.68	2.32	32.86	---	---	Peak
5	931.400	36.76	-9.24	46.00	40.30	24.30	3.58	31.42	---	---	Peak
6	996.500	33.88	-20.12	54.00	35.18	25.95	3.74	31.00	---	---	Peak



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m HF-ANT HORIZONTAL
 EUT : USB Dongle(local版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11b Tx_Ch06;2437MHz
 Data Rate: 1

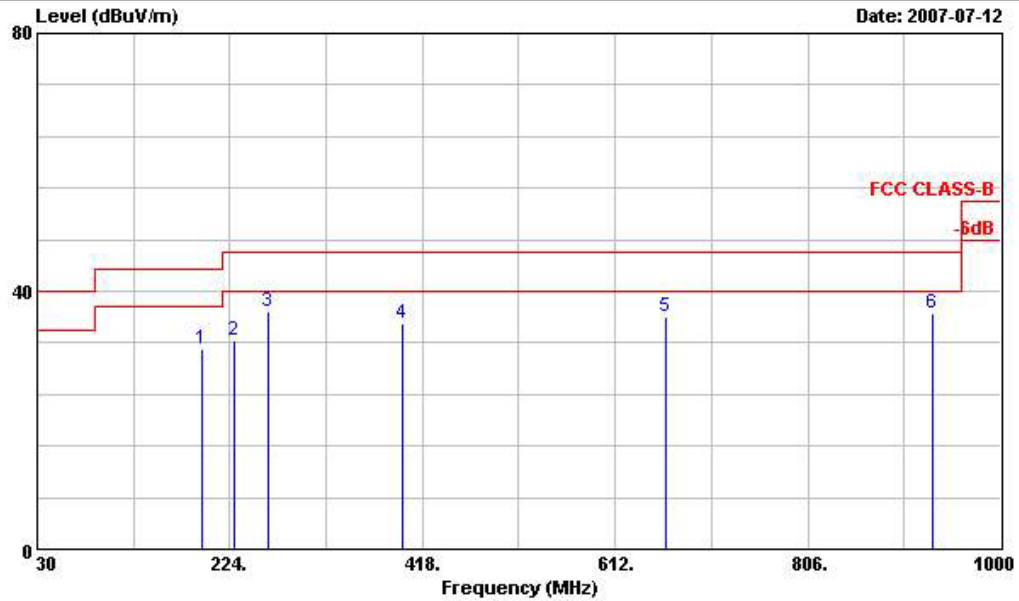
	Freq	Level	Limit	Line	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	Level	Loss	Factor	Pos	Pos	Remark
					dBuV	dB	dB	cm	deg	
1	2380.000	49.47	-24.53	74.00	48.89	30.62	3.74	33.78	100	0 Peak
2	2380.000	38.14	-15.86	54.00	37.56	30.62	3.74	33.78	100	139 Average
3 X	2437.000	100.06			99.56	30.49	3.79	33.79	100	139 Average
4 X	2437.000	103.68			103.18	30.49	3.79	33.79	100	0 Peak
5	2484.000	47.92	-26.08	74.00	47.45	30.43	3.84	33.80	100	0 Peak
6	2484.000	36.81	-17.19	54.00	36.34	30.43	3.84	33.80	100	139 Average
7	7758.000	54.68	-19.32	74.00	42.40	39.31	6.66	33.70	100	0 Peak
8	7758.000	41.07	-12.93	54.00	28.79	39.31	6.66	33.70	100	172 Average

Remark: #3 and #4 Fundamental Signal



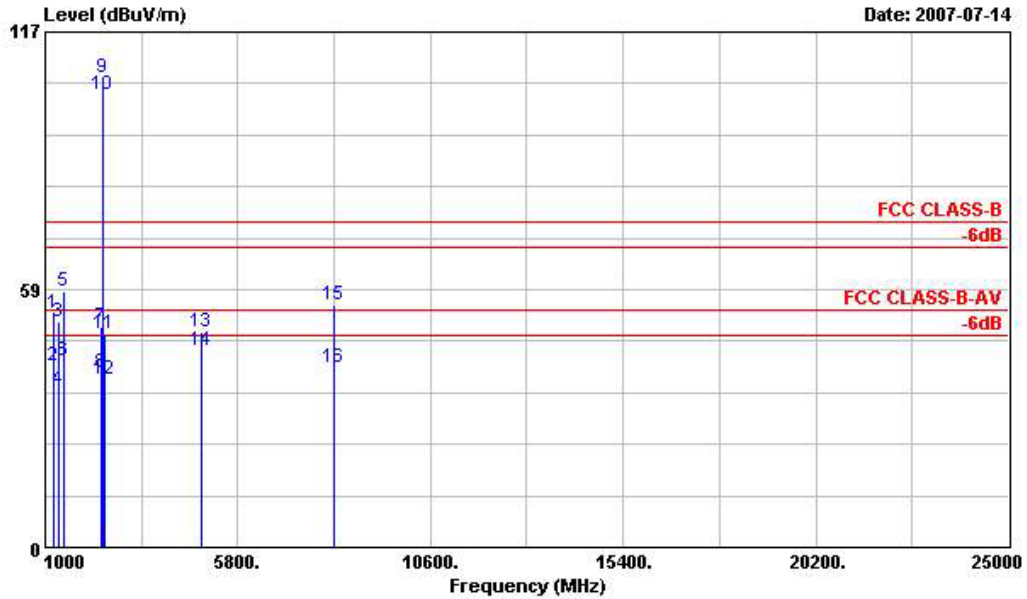
- Polarization : Vertical

■ The test that passed at minimum margin was marked by the frame in the following table.



Site :03CH04-HY
 Condition:FCC CLASS-B 3m ANT2724 VERTICAL
 EUT :USB Dongle(local版)
 POWER :From Notebook
 MODEL :FR 762909
 MODE :11b Tx_Ch06;2437MHz
 Data Rate:1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	196.050	31.01	-12.49	43.50	53.39	8.79	1.60	32.77	---	---	Peak
2	228.450	32.24	-13.76	46.00	52.35	10.94	1.78	32.83	---	---	Peak
3	263.010	36.83	-9.17	46.00	55.26	12.50	1.93	32.86	100	64	Peak
4	397.300	34.88	-11.12	46.00	49.73	15.68	2.32	32.86	---	---	Peak
5	663.300	36.12	-9.88	46.00	44.99	20.05	3.12	32.04	---	---	Peak
6	931.400	36.48	-9.52	46.00	40.02	24.30	3.58	31.42	---	---	Peak



Site :03CH04-HY
 Condition:FCC CLASS-B 3m HF-ANT VERTICAL
 EUT :USB Dongle(local版)
 POWER :From Notebook
 MODEL :FR 762909
 MODE :11b Tx_Ch06;2437MHz
 Data Rate:1

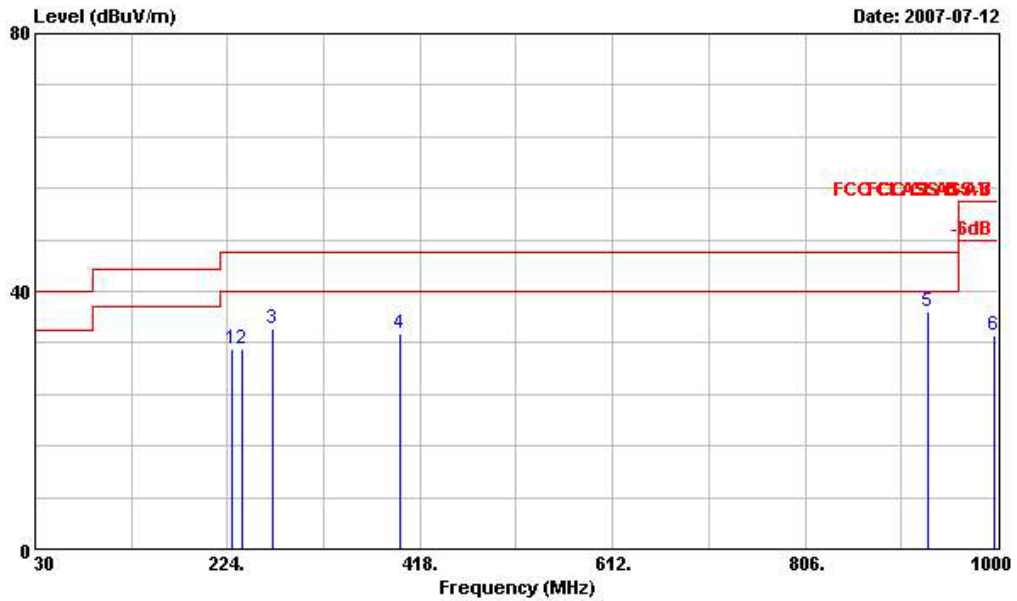
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	1196.000	52.93	-21.07	74.00	58.35	26.26	2.44	34.12	100	0 Peak
2	1196.000	41.13	-12.87	54.00	46.55	26.26	2.44	34.12	100	221 Average
3	1326.000	51.30	-22.70	74.00	56.00	26.65	2.60	33.95	100	0 Peak
4	1326.000	35.74	-18.26	54.00	40.44	26.65	2.60	33.95	100	172 Average
5	1460.000	58.02	-15.98	74.00	61.97	27.09	2.73	33.77	100	0 Peak
6	1460.000	42.15	-11.85	54.00	46.10	27.09	2.73	33.77	100	184 Average
7	2382.000	50.17	-23.83	74.00	49.59	30.62	3.74	33.78	100	0 Peak
8	2382.000	39.64	-14.36	54.00	39.06	30.62	3.74	33.78	100	205 Average
9 X	2437.000	106.58			106.08	30.49	3.79	33.79	100	0 Peak
10 @	2437.000	102.62			102.12	30.49	3.79	33.79	100	205 Average
11	2486.000	48.50	-25.50	74.00	48.03	30.43	3.84	33.80	100	0 Peak
12	2486.000	37.96	-16.04	54.00	37.49	30.43	3.84	33.80	100	205 Average
13	4878.000	49.00	-25.00	74.00	43.79	33.59	5.92	34.30	100	0 Peak
14	4878.000	44.65	-9.35	54.00	39.44	33.59	5.92	34.30	100	172 Average
15	8178.000	54.92	-19.08	74.00	42.49	39.43	6.85	33.85	100	0 Peak
16	8178.000	40.88	-13.12	54.00	28.45	39.43	6.85	33.85	100	255 Average

Remark: #9 and #10 Fundamental Signal



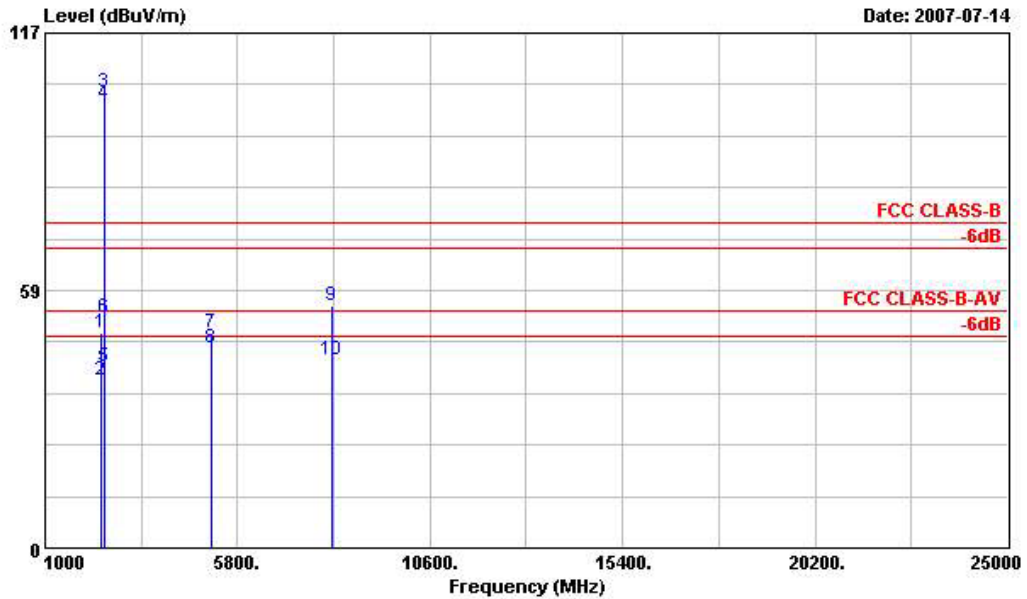
- Test Mode : Mode 3
- Polarization : Horizontal

■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m ANT2724 HORIZONTAL
 EUT : USB Dongle (local版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11b Tx_Ch11;2462MHz
 Data Rate: 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	228.450	31.06	-14.94	46.00	51.17	10.94	1.78	32.83	---	---	Peak
2	237.900	30.97	-15.03	46.00	50.38	11.61	1.83	32.85	---	---	Peak
3	270.300	34.25	-11.75	46.00	52.69	12.46	1.95	32.85	---	---	Peak
4	397.300	33.40	-12.60	46.00	48.25	15.68	2.32	32.86	---	---	Peak
5	929.300	36.92	-9.08	46.00	40.51	24.25	3.58	31.42	100	265	Peak
6	996.500	33.08	-20.92	54.00	34.38	25.95	3.74	31.00	---	---	Peak



Site :03CH04-HY
 Condition:FCC CLASS-B 3m HF-ANT HORIZONTAL
 EUT :USB Dongle(local版)
 POWER :From Notebook
 MODEL :FR 762909
 MODE :11b Tx_Ch11;2462MHz
 Data Rate:1

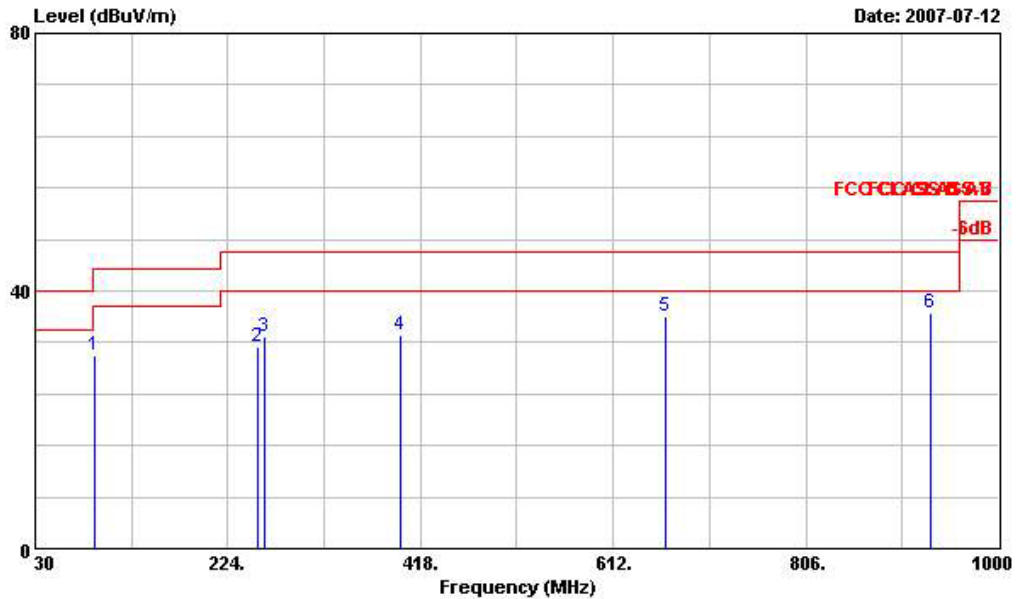
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBUV/m	dB	dBUV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2382.000	48.80	-25.20	74.00	48.22	30.62	3.74	33.78	100	0	Peak
2	2382.000	38.26	-15.74	54.00	37.68	30.62	3.74	33.78	100	140	Average
3 X	2462.000	103.57			103.09	30.46	3.81	33.79	100	0	Peak
4 X	2462.000	100.90			100.42	30.46	3.81	33.79	100	140	Average
5	2483.500	41.12	-12.88	54.00	40.65	30.43	3.84	33.80	100	140	Average
6	2483.500	52.16	-21.84	74.00	51.69	30.43	3.84	33.80	100	0	Peak
7	5157.000	48.96	-25.04	74.00	43.23	33.97	6.00	34.24	100	0	Peak
8	5157.000	45.55	-8.45	54.00	39.82	33.97	6.00	34.24	100	272	Average
9	8154.000	55.18	-18.82	74.00	42.76	39.44	6.83	33.85	100	0	Peak
10	8154.000	42.54	-11.46	54.00	30.12	39.44	6.83	33.85	100	157	Average

Remark: #3 and #4 Fundamental Signal



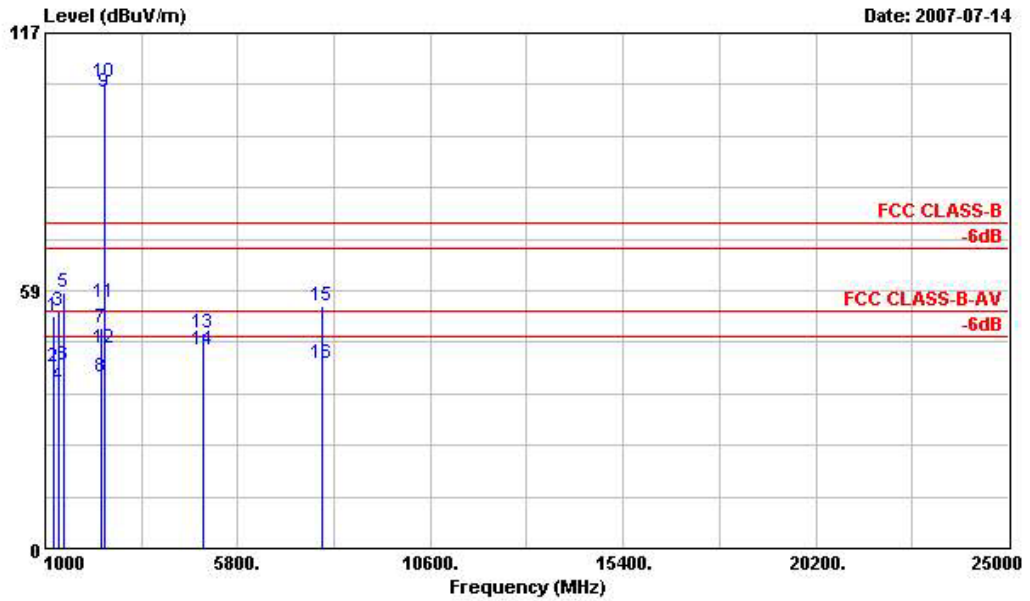
- Polarization : Vertical

■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m ANT2724 VERTICAL
 EUT : USB Dongle (local版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11b Tx_Ch11;2462MHz
 Data Rate: 1

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	Level	Factor	Loss	Factor	Pos	Pos	Remark
					dBuV	dB/m	dB	dB	cm	deg	
1	89.940	29.92	-13.58	43.50	54.21	7.43	1.12	32.84	---	---	Peak
2	254.100	31.41	-14.59	46.00	49.82	12.55	1.91	32.87	---	---	Peak
3	261.660	32.95	-13.05	46.00	51.37	12.51	1.93	32.86	---	---	Peak
4	397.300	33.17	-12.83	46.00	48.02	15.68	2.32	32.86	---	---	Peak
5	665.400	35.93	-10.07	46.00	44.80	20.06	3.12	32.04	---	---	Peak
6	931.400	36.45	-9.55	46.00	39.99	24.30	3.58	31.42	103	46	Peak



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m HF-ANT VERTICAL
 EUT : USB Dongle(local版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11b Tx_Ch11;2462MHz
 Data Rate:1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	1196.000	52.69	-21.31	74.00	58.11	26.26	2.44	34.12	100	0 Peak
2	1196.000	41.33	-12.67	54.00	46.75	26.26	2.44	34.12	100	209 Average
3	1326.000	53.86	-20.14	74.00	58.56	26.65	2.60	33.95	100	0 Peak
4	1326.000	36.95	-17.05	54.00	41.65	26.65	2.60	33.95	100	175 Average
5	1460.000	57.95	-16.05	74.00	61.90	27.09	2.73	33.77	100	0 Peak
6	1460.000	41.59	-12.41	54.00	45.54	27.09	2.73	33.77	100	177 Average
7	2388.000	49.99	-24.01	74.00	49.44	30.59	3.74	33.78	100	0 Peak
8	2388.000	38.92	-15.08	54.00	38.37	30.59	3.74	33.78	100	209 Average
9 @	2462.000	103.39			102.91	30.46	3.81	33.79	100	209 Average
10 X	2462.000	105.90			105.42	30.46	3.81	33.79	100	0 Peak
11	2483.500	55.67	-18.33	74.00	55.20	30.43	3.84	33.80	100	0 Peak
12	2483.500	45.40	-8.60	54.00	44.93	30.43	3.84	33.80	100	209 Average
13	4926.000	48.93	-25.07	74.00	43.56	33.72	5.95	34.30	100	0 Peak
14	4926.000	45.11	-8.89	54.00	39.74	33.72	5.95	34.30	100	172 Average
15	7890.000	54.94	-19.06	74.00	42.47	39.41	6.71	33.65	100	0 Peak
16	7890.000	41.84	-12.16	54.00	29.37	39.41	6.71	33.65	100	155 Average

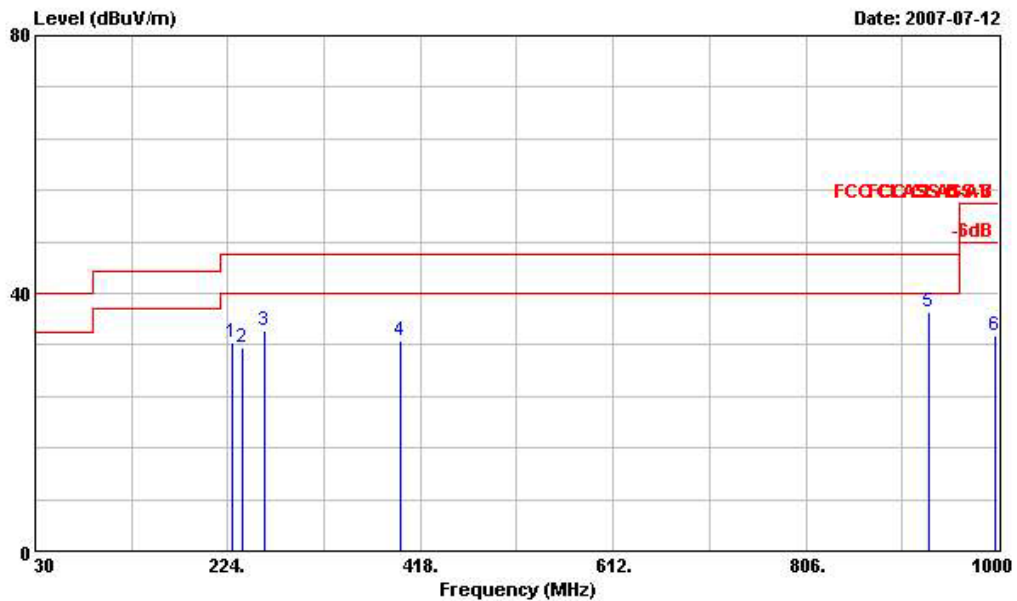
Remark: #9 and #10 Fundamental Signal



Test Mode : Mode 4

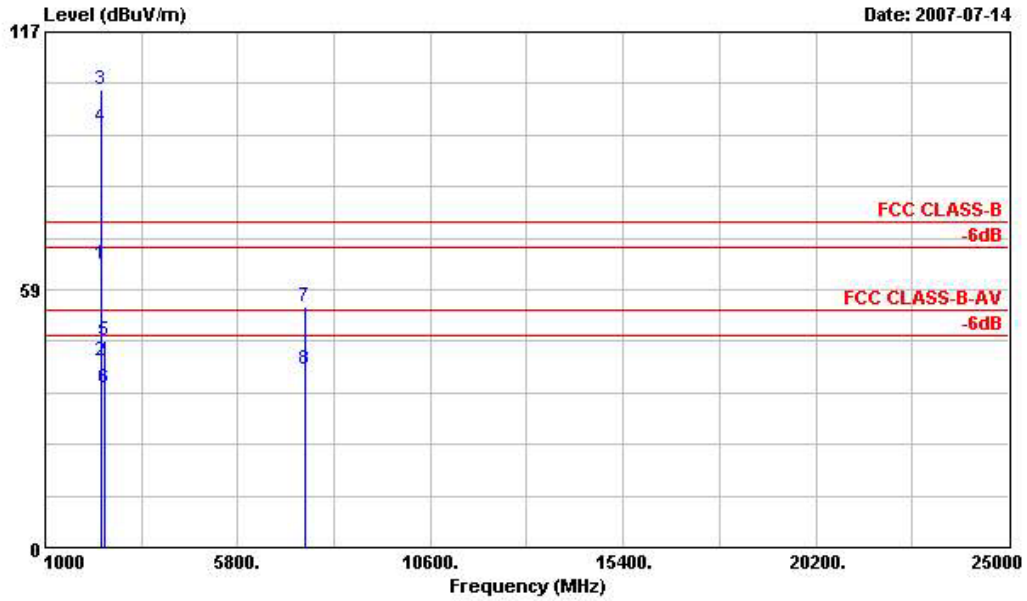
- Polarization : Horizontal

■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m ANT2724 HORIZONTAL
 EUT : USB Dongle (local版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11g Tx_Ch01;2412MHz
 Data Rate: 6

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	228.450	32.37	-13.63	46.00	52.48	10.94	1.78	32.83	---	---	Peak
2	237.900	31.55	-14.45	46.00	50.96	11.61	1.83	32.85	---	---	Peak
3	260.850	34.18	-11.82	46.00	52.60	12.51	1.93	32.86	---	---	Peak
4	397.300	32.61	-13.39	46.00	47.46	15.68	2.32	32.86	---	---	Peak
5	929.300	37.09	-8.91	46.00	40.68	24.25	3.58	31.42	100	242	Peak
6	995.800	33.41	-20.59	54.00	34.71	25.95	3.74	31.00	---	---	Peak



Site :03CH04-HY
 Condition:FCC CLASS-B 3m HF-ANT HORIZONTAL
 EUT :USB Dongle(local版)
 POWER :From Notebook
 MODEL :FR 762909
 MODE :11g Tx_Ch01;2412MHz
 Data Rate:6

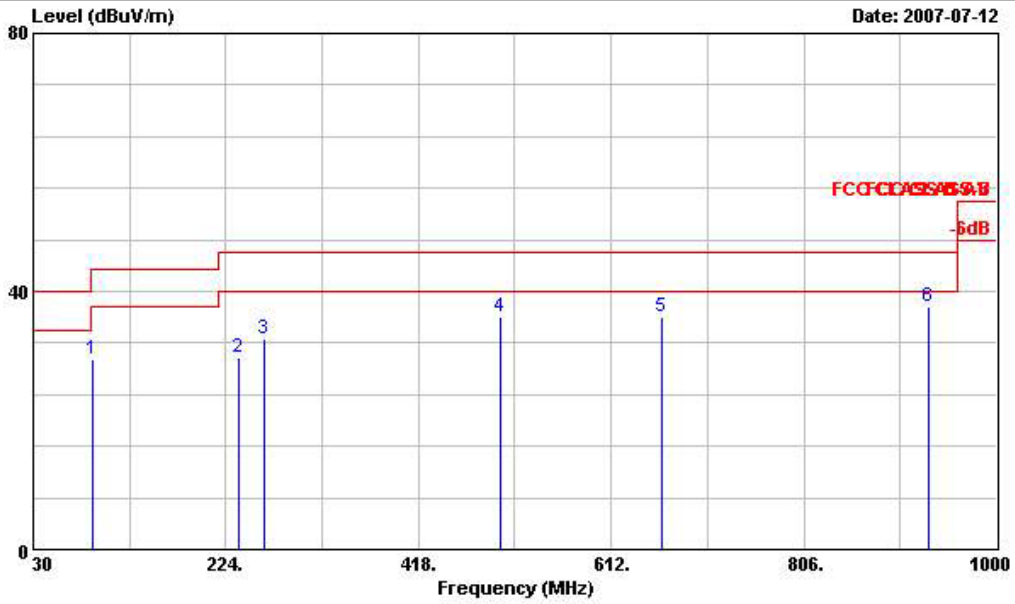
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBUV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos
			dB	dBUV/m	dBuV	dB/m	dB	dB	cm	deg
1	2390.000	64.43	-9.57	74.00	63.89	30.59	3.74	33.78	100	0 Peak
2	2390.000	42.52	-11.48	54.00	41.98	30.59	3.74	33.78	100	139 Average
3 X	2412.000	103.80			103.26	30.56	3.76	33.78	100	0 Peak
4 X	2412.000	95.36			94.82	30.56	3.76	33.78	100	139 Average
5	2486.000	46.97	-27.03	74.00	46.50	30.43	3.84	33.80	100	0 Peak
6	2486.000	36.11	-17.89	54.00	35.64	30.43	3.84	33.80	100	139 Average
7	7458.000	54.50	-19.50	74.00	42.63	39.00	6.54	33.67	100	0 Peak
8	7458.000	40.23	-13.77	54.00	28.36	39.00	6.54	33.67	100	172 Average

Remark: #3 and #4 Fundamental Signal



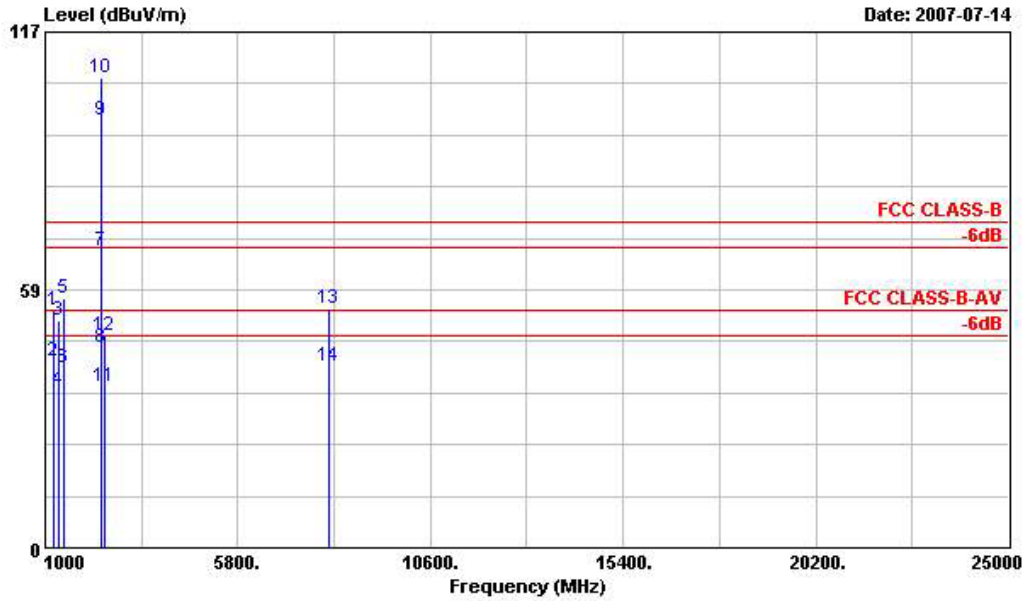
- Polarization : Vertical

■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m ANT2724 VERTICAL
 EUT : USB Dongle (local版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11g Tx_Ch01;2412MHz
 Data Rate: 6

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	89.940	29.38	-14.12	43.50	53.67	7.43	1.12	32.84	---	---	Peak
2	236.820	29.77	-16.23	46.00	49.26	11.53	1.82	32.85	---	---	Peak
3	261.930	32.63	-13.37	46.00	51.05	12.51	1.93	32.86	---	---	Peak
4	500.900	36.18	-9.82	46.00	49.31	16.91	2.60	32.64	---	---	Peak
5	663.300	36.11	-9.89	46.00	44.98	20.05	3.12	32.04	---	---	Peak
6	931.400	37.61	-8.39	46.00	41.15	24.30	3.58	31.42	100	84	Peak



Site :03CH04-HY
 Condition:FCC CLASS-B 3m HF-ANT VERTICAL
 EUT :USB Dongle(local版)
 POWER :From Notebook
 MODEL :FR 762909
 MODE :11g Tx_Ch01;2412MHz
 Data Rate:6

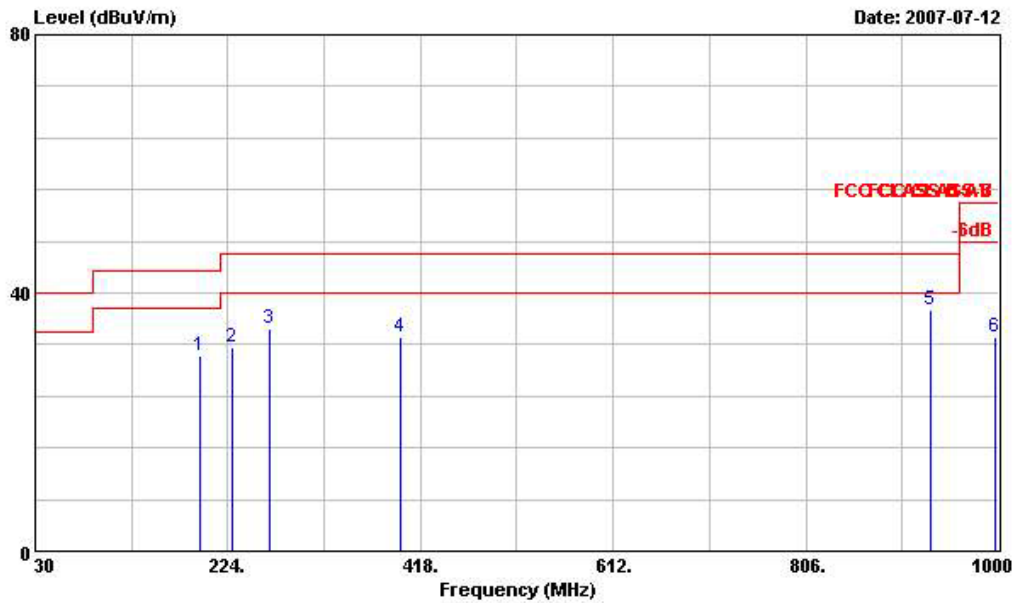
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	1196.000	53.83	-20.17	74.00	59.25	26.26	2.44	34.12	100	0 Peak
2	1196.000	42.43	-11.57	54.00	47.85	26.26	2.44	34.12	100	217 Average
3	1324.000	51.71	-22.29	74.00	56.41	26.65	2.60	33.95	100	0 Peak
4	1324.000	35.94	-18.06	54.00	40.64	26.65	2.60	33.95	100	152 Average
5	1460.000	56.56	-17.44	74.00	60.51	27.09	2.73	33.77	100	0 Peak
6	1460.000	40.87	-13.13	54.00	44.82	27.09	2.73	33.77	100	186 Average
7	2390.000	67.21	-6.79	74.00	66.67	30.59	3.74	33.78	100	0 Peak
8	2390.000	45.36	-8.64	54.00	44.82	30.59	3.74	33.78	100	205 Average
9 @	2412.000	96.89			96.35	30.56	3.76	33.78	100	205 Average
10 X	2412.000	106.57			106.03	30.56	3.76	33.78	100	0 Peak
11	2484.000	36.69	-17.31	54.00	36.22	30.43	3.84	33.80	100	205 Average
12	2484.000	48.26	-25.74	74.00	47.79	30.43	3.84	33.80	100	0 Peak
13	8082.000	54.19	-19.81	74.00	41.65	39.47	6.80	33.73	100	0 Peak
14	8082.000	41.08	-12.92	54.00	28.54	39.47	6.80	33.73	100	172 Average

Remark: #9 and #10 Fundamental Signal



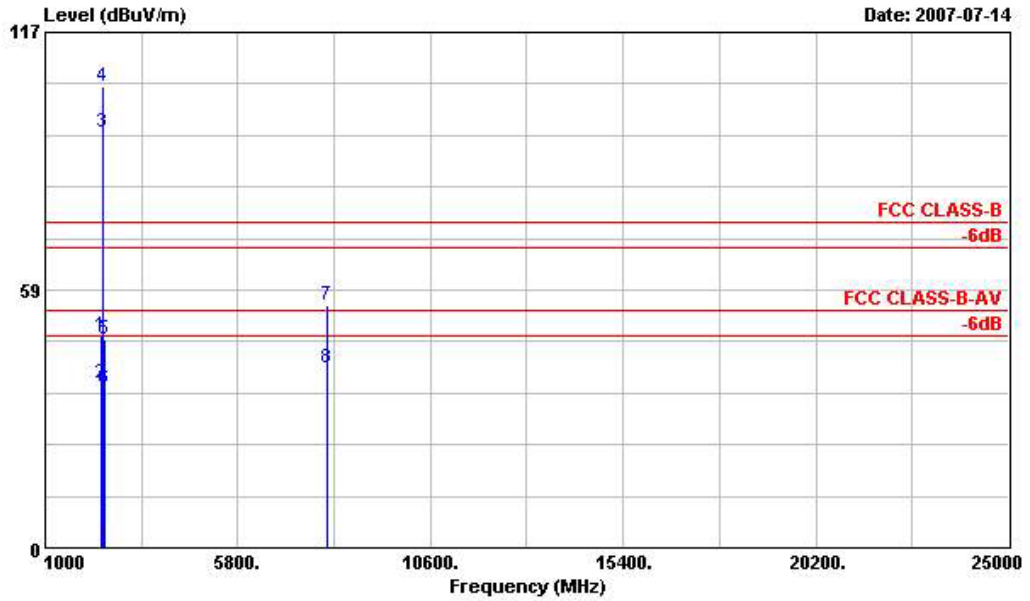
- Test Mode : Mode 5
- Polarization : Horizontal

■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m ANT2724 HORIZONTAL
 EUT : USB Dongle (local版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11g Tx_Ch06;2437MHz
 Data Rate: 6

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	195.780	30.15	-13.35	43.50	52.53	8.79	1.60	32.77	---	---	Peak
2	228.450	31.67	-14.33	46.00	51.78	10.94	1.78	32.83	---	---	Peak
3	266.250	34.35	-11.65	46.00	52.78	12.48	1.94	32.86	---	---	Peak
4	397.300	33.04	-12.96	46.00	47.89	15.68	2.32	32.86	---	---	Peak
5	931.400	37.30	-8.70	46.00	40.84	24.30	3.58	31.42	100	256	Peak
6	995.800	33.04	-20.96	54.00	34.34	25.95	3.74	31.00	---	---	Peak



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m HF-ANT HORIZONTAL
 EUT : USB Dongle(local版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11g Tx_Ch06;2437MHz
 Data Rate: 6

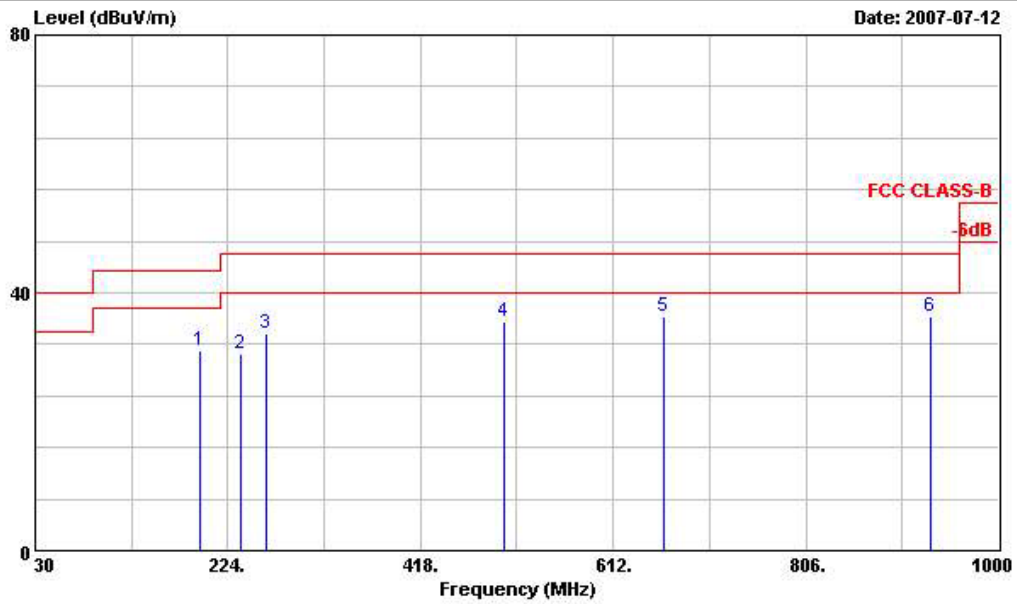
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2382.000	47.98	-26.02	74.00	47.40	30.62	3.74	33.78	100	0	Peak
2	2382.000	37.29	-16.71	54.00	36.71	30.62	3.74	33.78	100	139	Average
3 X	2437.000	94.34			93.84	30.49	3.79	33.79	100	139	Average
4 X	2437.000	104.67			104.18	30.49	3.79	33.79	100	0	Peak
5	2500.000	47.21	-26.79	74.00	46.77	30.40	3.84	33.80	100	0	Peak
6	2500.000	36.27	-17.73	54.00	35.83	30.40	3.84	33.80	100	139	Average
7	8034.000	54.97	-19.03	74.00	42.35	39.49	6.77	33.64	100	0	Peak
8	8034.000	40.99	-13.01	54.00	28.37	39.49	6.77	33.64	100	66	Average

Remark: #3 and #4 Fundamental Signal



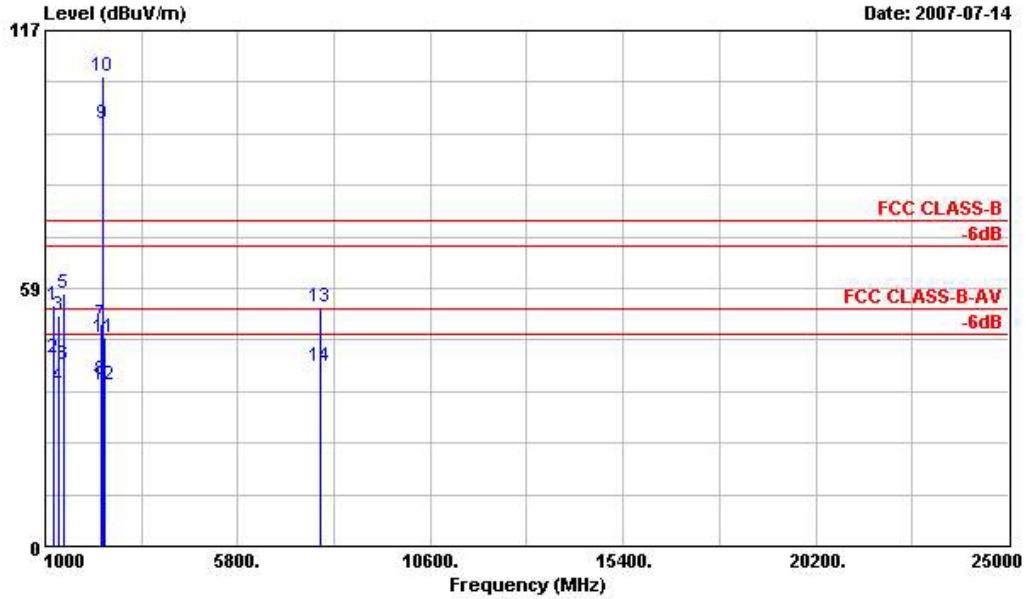
• Polarization : Vertical

■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m ANT2724 VERTICAL
 EUT : USB Dongle (local版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11g Tx_Ch06;2437MHz
 Data Rate: 6

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	195.780	31.10	-12.40	43.50	53.48	8.79	1.60	32.77	---	---	Peak
2	236.820	30.48	-15.52	46.00	49.97	11.53	1.82	32.85	---	---	Peak
3	261.930	33.67	-12.33	46.00	52.09	12.51	1.93	32.86	---	---	Peak
4	503.000	35.64	-10.36	46.00	48.65	17.00	2.61	32.62	---	---	Peak
5	663.300	36.33	-9.67	46.00	45.20	20.05	3.12	32.04	---	---	Peak
6	932.100	36.35	-9.65	46.00	39.87	24.32	3.58	31.42	103	47	Peak



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m HF-ANT VERTICAL
 EUT : USB Dongle (local版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11g Tx_Ch06;2437MHz
 Data Rate: 6

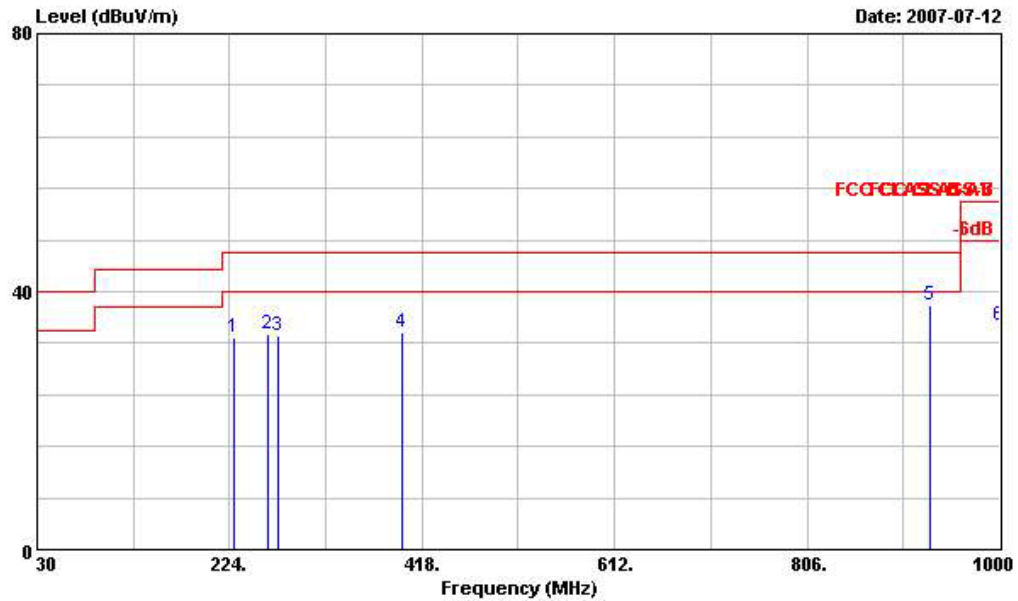
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	1196.000	54.72	-19.28	74.00	60.14	26.26	2.44	34.12	100	0 Peak
2	1196.000	42.53	-11.47	54.00	47.95	26.26	2.44	34.12	100	210 Average
3	1326.000	52.48	-21.52	74.00	57.18	26.65	2.60	33.95	100	0 Peak
4	1326.000	36.07	-17.93	54.00	40.77	26.65	2.60	33.95	100	186 Average
5	1454.000	57.20	-16.80	74.00	61.15	27.09	2.73	33.77	100	0 Peak
6	1454.000	41.13	-12.87	54.00	45.08	27.09	2.73	33.77	100	176 Average
7	2382.000	50.32	-23.68	74.00	49.74	30.62	3.74	33.78	100	0 Peak
8	2382.000	37.65	-16.35	54.00	37.07	30.62	3.74	33.78	100	203 Average
9 @	2437.000	95.71			95.21	30.49	3.79	33.79	100	203 Average
10 X	2437.000	106.77			106.27	30.49	3.79	33.79	100	0 Peak
11	2486.000	47.27	-26.73	74.00	46.80	30.43	3.84	33.80	100	0 Peak
12	2486.000	36.66	-17.34	54.00	36.19	30.43	3.84	33.80	100	203 Average
13	7866.000	54.37	-19.63	74.00	41.93	39.39	6.70	33.66	100	0 Peak
14	7866.000	40.71	-13.29	54.00	28.27	39.39	6.70	33.66	100	137 Average

Remark: #9 and #10 Fundamental Signal



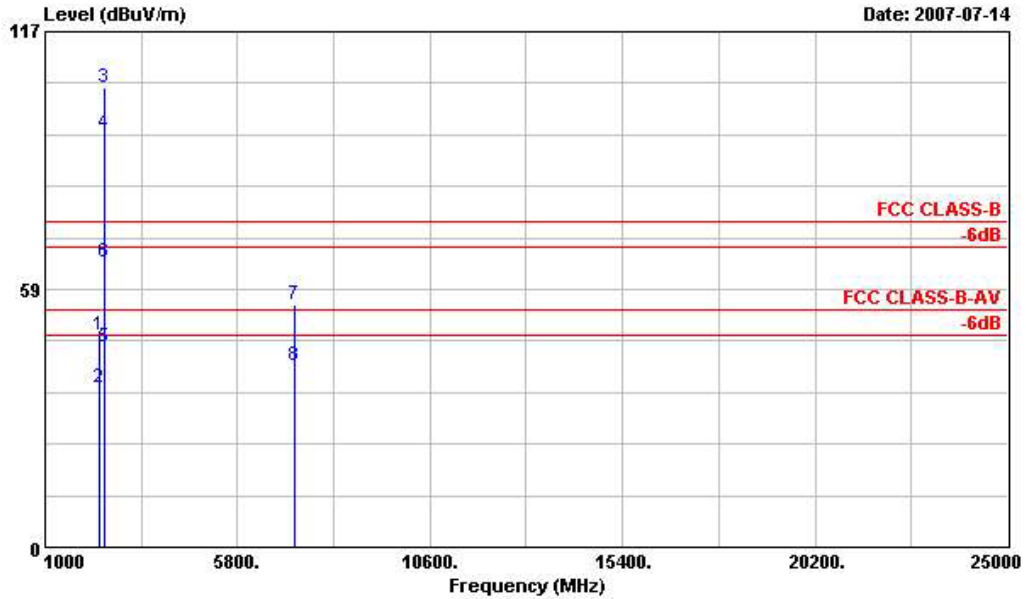
- Test Mode : Mode 6
- Polarization : Horizontal

■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m ANT2724 HORIZONTAL
 EUT : USB Dongle (local版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11g Tx_Ch11;2462MHz
 Data Rate: 6

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	228.450	32.98	-13.02	46.00	53.09	10.94	1.78	32.83	---	---	Peak
2	261.930	33.50	-12.50	46.00	51.92	12.51	1.93	32.86	---	---	Peak
3	272.460	33.18	-12.82	46.00	51.62	12.45	1.96	32.85	---	---	Peak
4	397.300	33.77	-12.23	46.00	48.62	15.68	2.32	32.86	---	---	Peak
5 @	929.300	37.90	-8.10	46.00	41.49	24.25	3.58	31.42	100	261	Peak
6	1000.000	34.66	-19.34	54.00	35.81	26.05	3.76	30.96	---	---	Peak



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m HF-ANT HORIZONTAL
 EUT : USB Dongle (local 版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11g Tx_Ch11;2462MHz
 Data Rate: 6

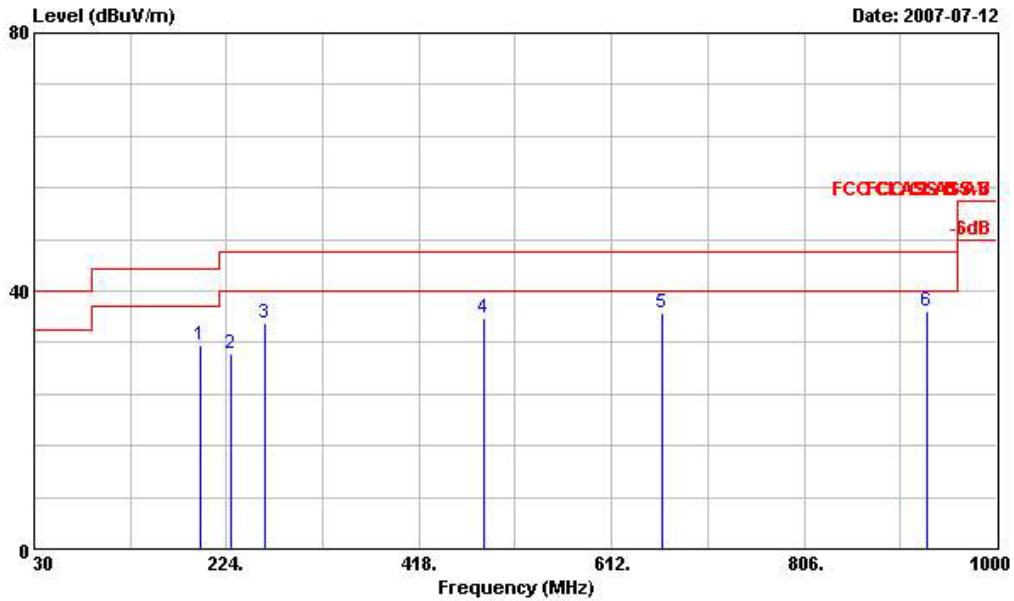
	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	Level	Factor	Loss	Factor	Pos	Pos	Remark
					dBuV	dB/m	dB	dB	cm	deg	
1	2356.000	48.18	-25.82	74.00	47.61	30.65	3.69	33.77	100	0	Peak
2	2356.000	36.36	-17.64	54.00	35.79	30.65	3.69	33.77	100	149	Average
3 X	2462.000	104.19			103.71	30.46	3.81	33.79	100	0	Peak
4 X	2462.000	94.09			93.61	30.46	3.81	33.79	100	149	Average
5	2483.500	45.55	-8.45	54.00	45.08	30.43	3.84	33.80	100	149	Average
6	2483.500	64.53	-9.47	74.00	64.06	30.43	3.84	33.80	100	0	Peak
7	7230.000	54.92	-19.08	74.00	43.22	38.33	6.46	33.09	100	0	Peak
8	7230.000	41.12	-12.88	54.00	29.42	38.33	6.46	33.09	100	66	Average

Remark: #3 and #4 Fundamental Signal



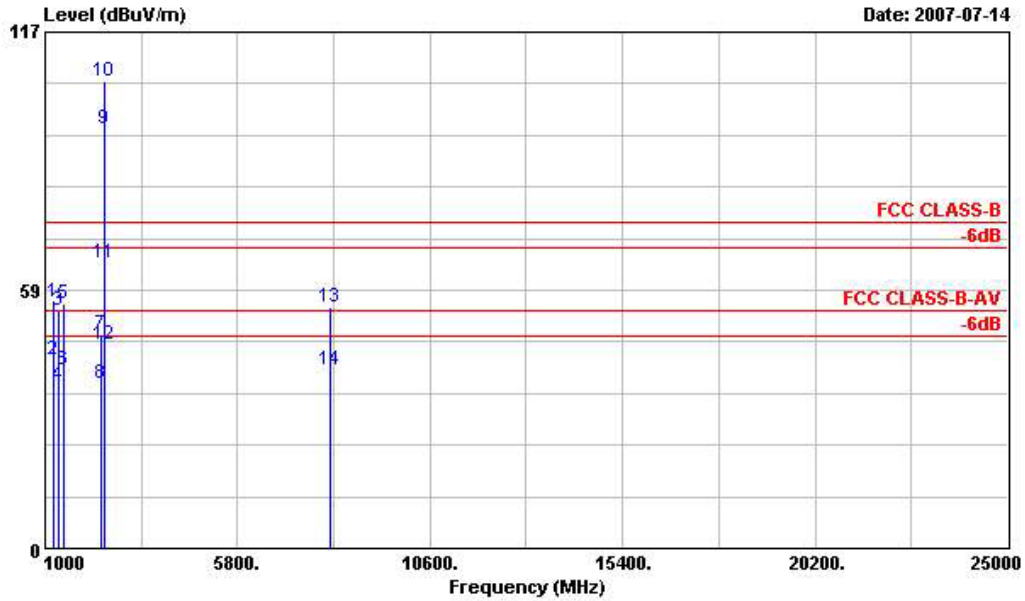
- Polarization : Vertical

■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH04-HY
 Condition: FCC CLASS-B 3m ANT2724 VERTICAL
 EUT : USB Dongle (local版)
 POWER : From Notebook
 MODEL : FR 762909
 MODE : 11g Tx_Ch11;2462MHz
 Data Rate: 6

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	196.860	31.47	-12.03	46.00	53.86	8.77	1.60	32.76	---	---	Peak
2	229.260	30.23	-15.77	46.00	50.34	10.94	1.78	32.83	---	---	Peak
3	261.930	35.06	-10.94	46.00	53.48	12.51	1.93	32.86	---	---	Peak
4	484.100	35.92	-10.08	46.00	49.30	16.72	2.57	32.67	---	---	Peak
5	663.300	36.68	-9.32	46.00	45.55	20.05	3.12	32.04	---	---	Peak
6	929.300	36.80	-9.20	46.00	40.39	24.25	3.58	31.42	102	56	Peak



Site :03CH04-HY
 Condition:FCC CLASS-B 3m HF-ANT VERTICAL
 EUT :USB Dongle(local版)
 POWER :From Notebook
 MODEL :FR 762909
 MODE :1lg Tx_Ch11;2462MHz
 Data Rate:6

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	1196.000	55.75	-18.25	74.00	61.17	26.26	2.44	34.12	100	0 Peak
2	1196.000	42.87	-11.13	54.00	48.29	26.26	2.44	34.12	100	226 Average
3	1326.000	53.97	-20.03	74.00	58.67	26.65	2.60	33.95	100	0 Peak
4	1326.000	36.89	-17.11	54.00	41.59	26.65	2.60	33.95	100	177 Average
5	1460.000	55.41	-18.59	74.00	59.36	27.09	2.73	33.77	100	0 Peak
6	1460.000	40.32	-13.68	54.00	44.27	27.09	2.73	33.77	100	180 Average
7	2390.000	48.52	-25.48	74.00	47.98	30.59	3.74	33.78	100	0 Peak
8	2390.000	37.39	-16.61	54.00	36.85	30.59	3.74	33.78	100	207 Average
9 @	2462.000	95.03			94.55	30.46	3.81	33.79	100	207 Average
10 X	2462.000	105.86			105.38	30.46	3.81	33.79	100	0 Peak
11	2483.500	64.77	-9.23	74.00	64.30	30.43	3.84	33.80	100	0 Peak
12	2483.500	46.10	-7.90	54.00	45.63	30.43	3.84	33.80	100	207 Average
13	8130.000	54.60	-19.40	74.00	42.14	39.45	6.82	33.81	100	0 Peak
14	8130.000	40.59	-13.41	54.00	28.13	39.45	6.82	33.81	100	68 Average

Remark: #9 and #10 Fundamental Signal



5.8 Antenna Requirements

5.8.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no other antenna except assembled by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi.

5.8.2 Antenna Connected Construction

The antenna used in this product is Printed Antenna without connector and it is considered to meet antenna requirement of FCC.

5.8.3 Antenna Gain

The antenna gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



6 List of Measuring Equipments Used

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
EMC Receiver	R&S	ESCS 30	100132	9kHz – 2.75GHz	Aug. 30, 2006	Aug. 29, 2007	Conduction (CO01-HY)
LISN	MessTec	NNB-2/16Z	2001/004	9kHz – 30MHz	Mar. 30, 2007	Mar. 29, 2008	Conduction (CO01-HY)
LISN (Support Unit)	MessTec	NNB-2/16Z	2001/009	9kHz – 30MHz	Mar. 30, 2007	Mar. 29, 2008	Conduction (CO01-HY)
EMI Filter	LINDGREN	LRE-2060	1004	< 450Hz	N/A	N/A	Conduction (CO01-HY)
EMI Filter	LINDGREN	N6006	201052	0 – 60Hz	N/A	N/A	Conduction (CO01-HY)
RF Cable-CON	Suhner Switzerland	RG223/U	CB029	9kHz – 30MHz	Dec. 04, 2006	Dec. 03, 2007	Conduction (CO01-HY)
Isolation Transformer	Erika Fiedler OHG	D-65396 Walluf	58	45MHz-2.15GHz	N/A	N/A	Conduction (CO01-HY)
3m Semi Anechoic	TDK	SAC-3M	03CH04-HY	30 MHz - 1 GHz 3m	Oct. 30, 2006	Oct. 29, 2007	Radiation (03CH04-HY)
Amplifier	Schaffner	CPA9231A	3564	9 kHz - 2 GHz	Aug.31, 2006	Aug.30, 2007	Radiation (03CH04-HY)
Spectrum Analyzer	R&S	FSP7	100641	9 kHz – 7GHz	Sep. 08, 2006	Sep. 07, 2007	Radiation (03CH04-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2724	30 MHz - 1 GHz	Aug. 14, 2006	Aug. 13, 2007	Radiation (03CH04-HY)
Turn Table	HD	Deis HD 2000	420/610	0 - 360 degree	N/A	N/A	Radiation (03CH04-HY)
Antenna Mast	Chaintek	3000		1 m - 4 m	N/A	N/A	Radiation (03CH04-HY)
RF Cable-R03m	Suhner Switzerland +	RG223/U +RG8/U	CB024	30 MHz - 1 GHz	Sep. 21, 2006	Sep. 20, 2007	Radiation (03CH04-HY)



7 Uncertainty Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.10	Normal(k=2)	0.05
Cable loss	0.10	Normal(k=2)	0.05
AMN insertion loss	2.50	Rectangular	0.63
Receiver Spec	1.50	Rectangular	0.43
Site imperfection	1.39	Rectangular	0.80
Mismatch	+0.34/-0.35	U-shape	0.24
combined standard uncertainty Uc(y)	1.13		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	2.26		

Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.41	Normal(k=2)	0.21
Antenna factor calibration	0.83	Normal(k=2)	0.42
Cable loss calibration	0.25	Normal(k=2)	0.13
Pre Amplifier Gain calibration	0.27	Normal(k=2)	0.14
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.43	Rectangular	0.83
Mismatch	+0.39/-0.41	U-shaped	0.28
combined standard uncertainty Uc(y)	1.27		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	2.54		



Uncertainty of Radiated Emission Measurement (1GHz ~ 40GHz)

Contribution	Uncertainty of x_i		$u(x_i)$	C_i	$C_i * u(x_i)$
	dB	Probability Distribution			
Receiver reading	±0.10	Normal(k=1)	0.10	1	0.10
Antenna factor calibration	±1.70	Normal(k=2)	0.85	1	0.85
Cable loss calibration	±0.50	Normal(k=2)	0.25	1	0.25
Receiver Correction	±2.00	Rectangular	1.15	1	1.15
Antenna Factor Directional	±1.50	Rectangular	0.87	1	0.87
Site imperfection	±2.80	Triangular	1.14	1	1.14
Mismatch Receiver VSWR $\Gamma_1 = 0.197$ Antenna VSWR $\Gamma_2 = 0.194$ Uncertainty = $20 \log(1 - \Gamma_1 * \Gamma_2 * \Gamma_3)$	+0.34/-0.35	U-shaped	0.244	1	0.244
Combined standard uncertainty $U_c(y)$	2.36				
Measuring uncertainty for a level of confidence of 95% $U = 2U_c(y)$	4.72				