

FCC/IC TEST REPORT

for

47 CFR, Part 15 Subpart E and RSS-210

Equipment : Notebook Computer

Trade Name : Fujitsu Siemens Computers, Fujitsu Limited

Model No. : E83XX (X maybe any alphanumeric character or blank)

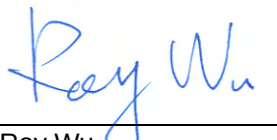
FCC ID : EJE-WB0049

IC ID : 337J-WB0049

Filing Type : Certification

Applicant : **Fujitsu Limited**
4-1-1 Kamikodanaka, Nakahara-ku, Kawasaki-shi, Kanagawa, 211-8588, Japan

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- The data shown in this test report were carried out on May 14, 2007 at **Sporton International Inc. LAB.**
- Report No.: FR6D2906-F, Report Version: Rev. 01.



Roy Wu
Deputy 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: May 15, 2007

Report No.	Description

1. General Description of Equipment under Test

1.1 Applicant

Fujitsu Limited

4-1-1 Kamikodanaka, Nakahara-ku, Kawasaki-shi, Kanagawa, 211-8588, Japan

1.2 Manufacturer

Fujitsu Siemens Computers GmbH

Buergermeister-Ulrich-Str. 100, 86199 Augsburg, Germany

1.3 Basic Description of Equipment under Test

Equipment	: Notebook Computer
Trade Name	: Fujitsu Siemens Computers, Fujitsu Limited
Model No.	: E83XX (X maybe any alphanumeric character or blank)
FCC ID	: EJE-WB0049
IC ID	: 337J-WB0049
Power Supply Type	: Switching
AC Power Cord	: AC 120V, 1.2 meter, 2 pin

1.4 Feature of Equipment under Test

Product Feature & Specification				
1. DUT Type	Notebook Computer			
2. Trade Name	Fujitsu Siemens Computers, Fujitsu Limited			
3. Model Name	E83XX (X maybe any alphanumeric character or blank)			
4. FCC ID	EJE-WB0049			
5. IC ID	337J-WB0049			
6. Freq. Range/Carrier Freqs.	802.11a : 5150 ~ 5250MHz (Band I) / 5725MHz ~ 5850MHz (Band III) 802.11b/g : 2400MHz ~ 2483.5MHz BT : 2400MHz ~ 2483.5MHz			
7. Number of Channels	802.11a : 4 (Band I) / 5 (Band III) 802.11b/g : 11 BT : 79			
8. Carrier Frequency of each channel	802.11a Band I : 5000+n*5 MHz, n=36, 40, 44, 48 802.11a Band III : 5000+n*5 MHz, n=149, 153, 157, 161, 165 802.11b/g : 2412MHz+(n-1)*5MHz, n=1~11 BT : 2402MHz+n*1MHz, n=0~78			
9. Channel Spacing	802.11a : 20MHz 802.11b/g : 5MHz BT : 1MHz			
10. Antenna Type	PIFA Antenna			
11. Antenna Gain	3 dBi			
12. Maximum Output Power to Antenna (Normal condition)	802.11a : 16.87 dBm (Band I) / 21.14 dBm (Band III) 802.11b : 21.08 dBm / 802.11g: 23.97 dBm BT : 0.49 dBm (Normal) / 1.27 dBm (EDR)			
13. Modulation Type/Data Rate	802.11a : OFDM 802.11b/g : DSSS / OFDM BT : GFSK / 1/4DQPSK / 8DPSK			
14. Function Type	Transmitter		Transceiver	V

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. The complete test system refers to section 2.2 and EUT for EMI test.
- c. The EUT can operate on 5150MHz to 5250MHz and 5725MHz to 5850MHz as listed in section 1.4.
- d. Test Mode for radiated emission and conducted emission:

	802.11a Band I
Radiated Emission	Mode 1: Tx_Ch36_5180 MHz Mode 2: Tx_CH42_5210 MHz_Turbo mode Mode 3: Tx_CH44_5220 MHz Mode 4: Tx_CH48_5240 MHz
Conducted Emission	Mode 1: BT Link + WLAN Link + Adapter

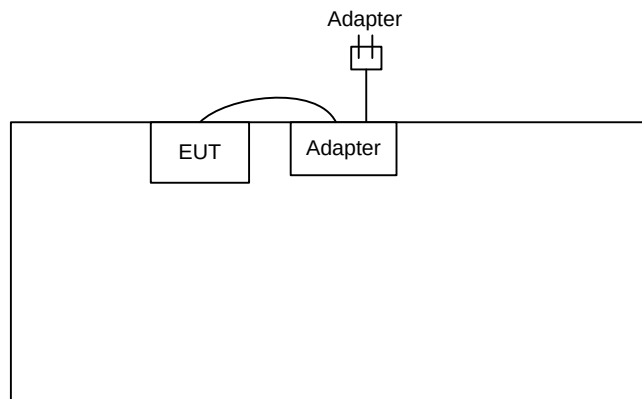
- e. Frequency range investigated: conduction 150 KHz to 30 MHz, radiation 30 MHz to 40000MHz.

2.2 Description of Test System

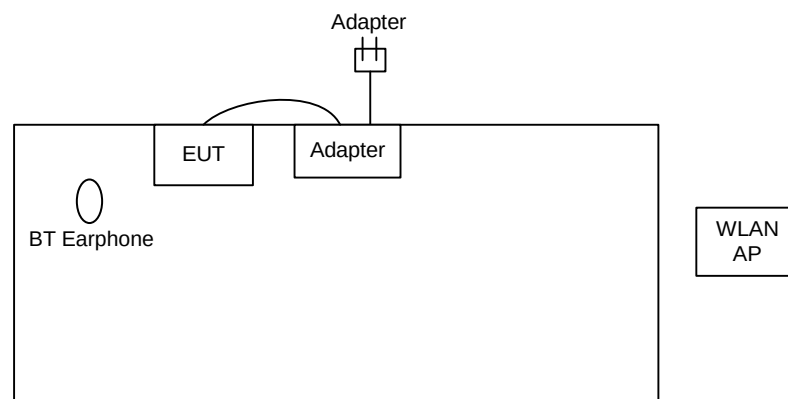
Item	Asset	Model Name	Power Cord
1.	WLAN AP (SMC)	SMC-100	N/A
2.	Bluetooth Earphone (Free Style)	JD-100	N/A

2.3 Connection Diagram of Test System

<Radiated Emission>



<Conducted Emission>



3. Operation of Equipment under Test

During the test, the following programs on WINXP were executed:
one self test program "EMCTest.exe" and "art" to keep transmitting signals.

4. General Information of Test

Test Site Location : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park,
Kwei-Shan Hsiag, Tao Yuan Hsien, Taiwan, R.O.C.
TEL : 886-3-327-3456
FAX : 886-3-318-0055
Test Site No : CO04-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

FCC Part 15, Subpart E and IC RSS-210 Issue 6

4.4 Frequency Range Investigated

- a. Conduction: from 150 kHz to 30 MHz
- b. Radiation: from 30 MHz to 40000MHz

4.5 Test Distance

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

5. Report of Measurements and Examinations

5.1 List of Measurements and Examinations

FCC Rule	Description of Test	Result
15.407(b)(5)	Conducted Emission	Pass
15.407(a)(1)(2)	Peak Transmit Power	Pass
15.407(b)(1)(2)(5)	Radiated Emission	Pass
15.407(a)(1)(2)	Power Spectral Density	Pass
15.407(b)(1)(2)	Band Edges Measurement	Pass
15.407(a)(1)(2)	Antenna Requirement	Pass
15.407(a)(6)	Peak Excursion Ratio Measurement	Pass
15.407(c)	Automatically Discontinue Transmission	Pass

5.2 Emission Bandwidth

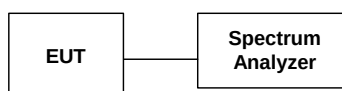
5.2.1 Measuring Instruments :

As described in chapter 6 of this test report.

5.2.2 Test Procedure :

The transmitter output is connected to the spectrum analyzer. The resolution bandwidth is set to approximately 1% of the emission bandwidth. For these tests, the resolution bandwidth is 300 kHz, and peak detection is used. The 26 dB bandwidth is defined as the frequency range where the power is higher than the peak power minus 26 dB.

Test Setup Layout :



5.2.3 Test Result :

- Temperature : 23°C
- Relative Humidity :47%

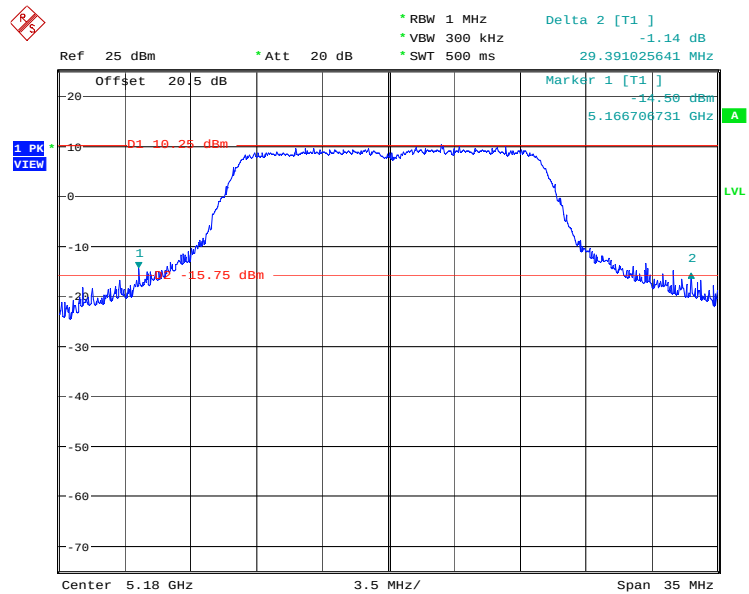
➤ Application: 802.11a

Channel	Frequency (MHz)	26dB Emission bandwidth (MHz)	Mode Ref. No.
36	5180	29.39	1
42	5210	46.32	2
44	5220	30.23	3
48	5240	27.15	4

5.2.4 Test Data

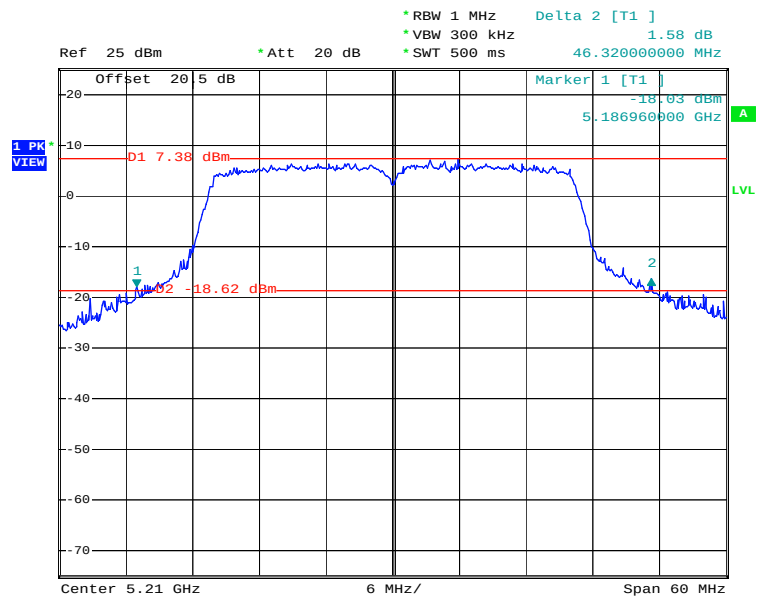
Mode Ref. No.

1



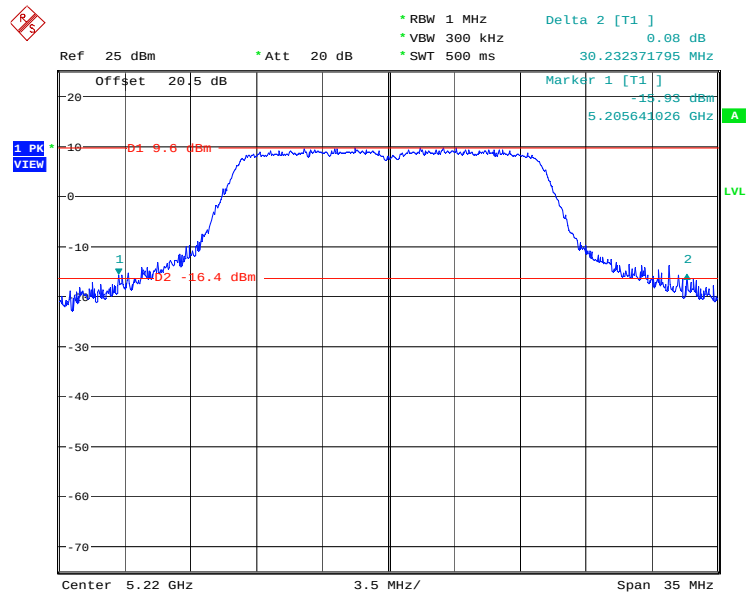
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2



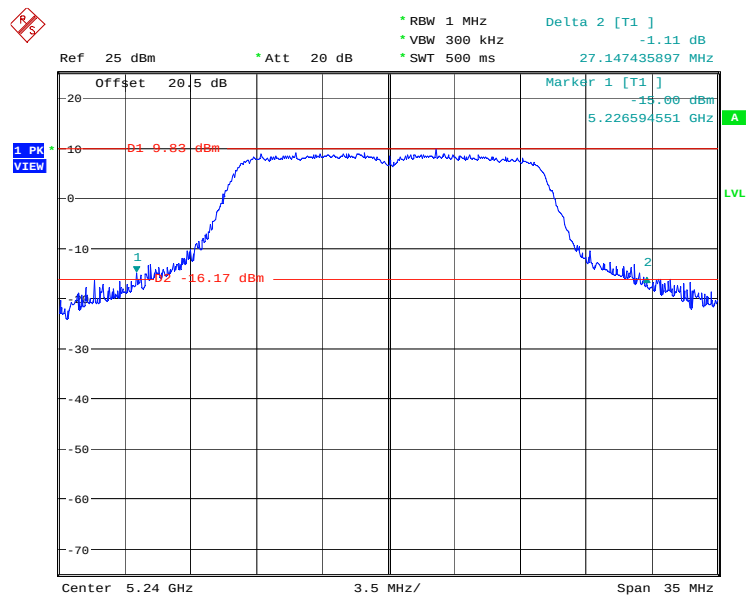
Date: 14.MAY.2007 16:31:36

3



Date: 11.MAY.2007 11:36:33

4



Date: 11.MAY.2007 11:39:21

5.3 Peak Transmit Power

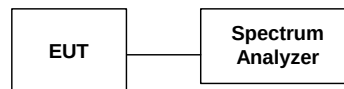
5.3.1 Measuring Instruments :

As described in chapter 6 of this test report.

5.3.2 Test Procedure :

The transmitter output is connected to the spectrum analyzer. The resolution bandwidth is set to 1 MHz, and peak detection is used. The peak power is measured by channel power integration over the previously measured emissions bandwidth..

5.3.3 Test Setup Layout :



5.3.4 Test Result :

- Temperature : 23℃
- Relative Humidity :47%

➤ Application: 802.11a

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (dBm)	Mode Ref. No.
36	5180	14.86	17	1
42	5210	16.87	17	2
44	5220	15.46	17	3
48	5240	15.90	17	4

Comments : The peak transmit power shall not exceed the lesser of 17dBm or 4dBm+10logB in 5150~5250 band;
24dBm

5180MHz 4dBm + 10log(29.39 MHz) = 18.68 dBm

5210MHz 4dBm + 10log(46.32 MHz) = 20.66 dBm

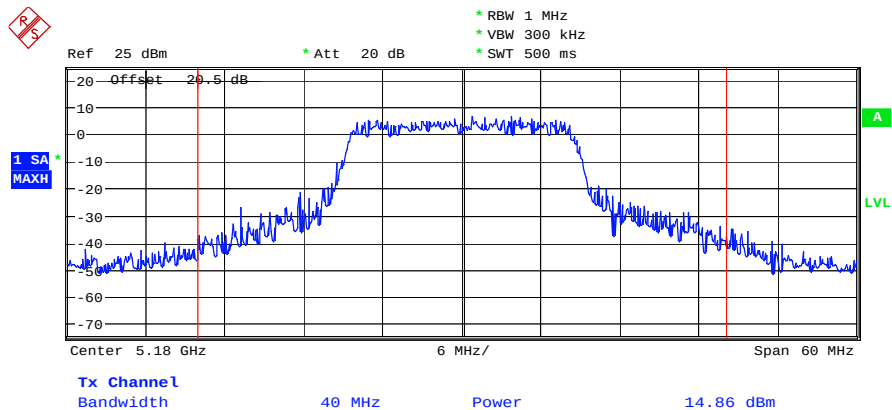
5220MHz 4dBm + 10log(30.23 MHz) = 18.80 dBm

5240MHz 4dBm + 10log(27.15 MHz) = 18.34 dBm

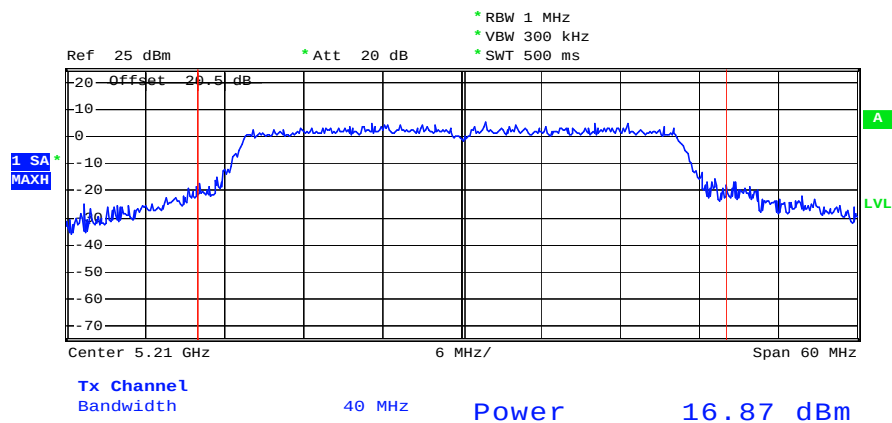
5.3.5 Test Data

Mode Ref. No.

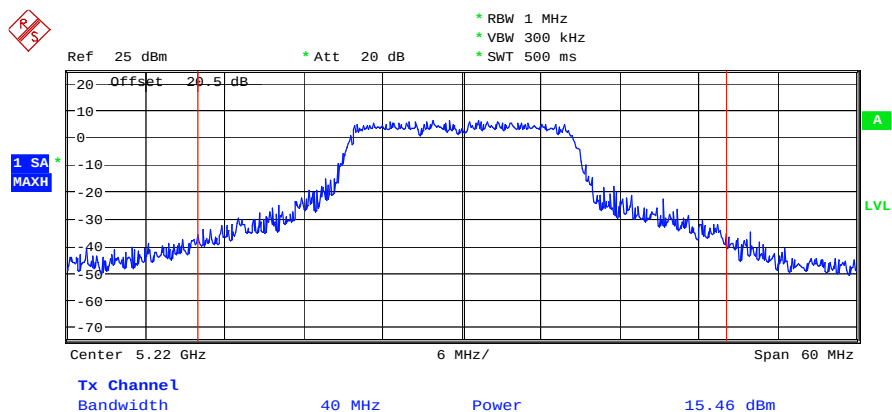
1



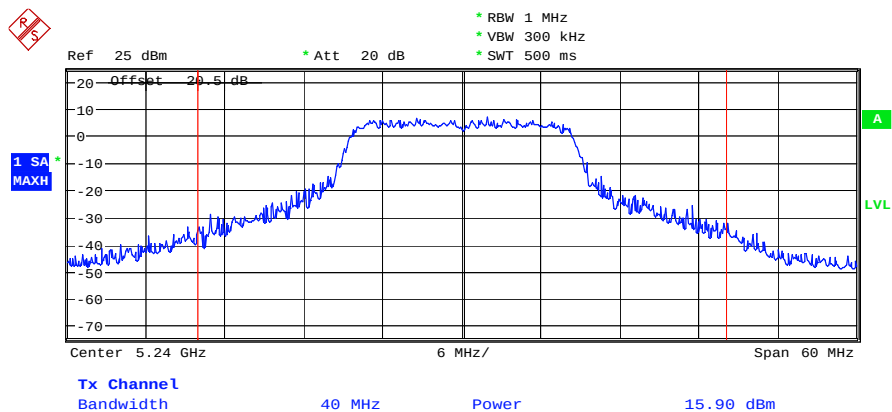
2



3



4



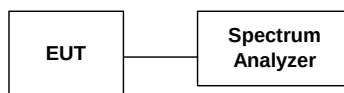
5.4 Peak Power Spectral Density

5.4.1 Measuring Instruments :

As described in chapter 6 of this test report.

5.4.2 Test Procedure :

The transmitter output is connected to the spectrum analyzer. The resolution bandwidth is set to 1 MHz, sample detection is used, and the analyzer is set for video averaging.



5.4.3 Test Result :

- Temperature : 23°C
- Relative Humidity :47%

➤ Application: 802.11a

Channel	Frequency (MHz)	Power Spectral	Limits (dBm)	Mode
		Density (dBm)		Ref. No.
36	5180	3.98	4	1
42	5240	-0.70	4	2
44	5220	3.40	4	3
48	5240	2.38	4	4

Mode Ref. No.

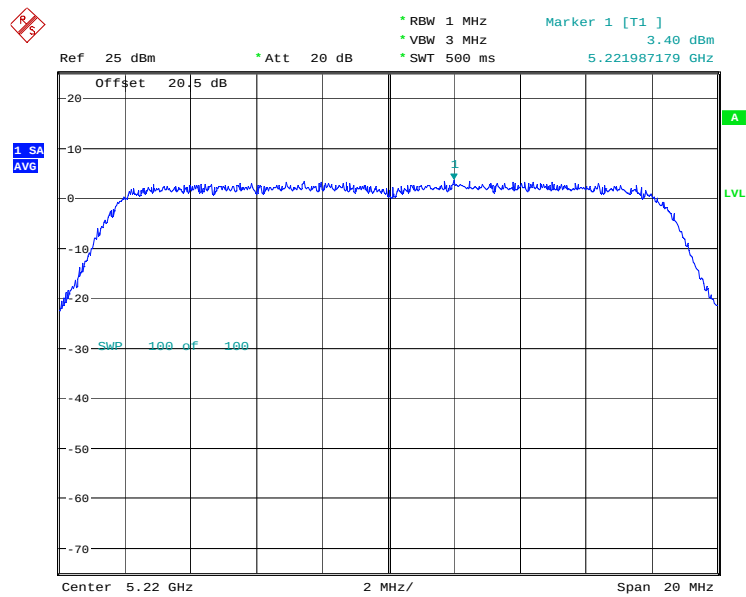


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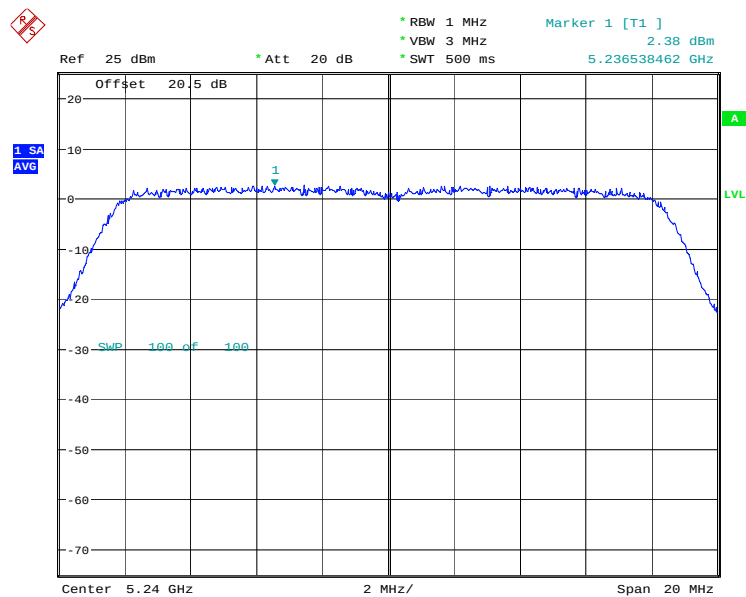
Date: 14.MAY.2007 16:29:08

3



Date: 11.MAY.2007 11:54:01

4



Date: 11.MAY.2007 11:52:39

5.5 Test of Conducted Emission

As described in chapter 6 of this test report.

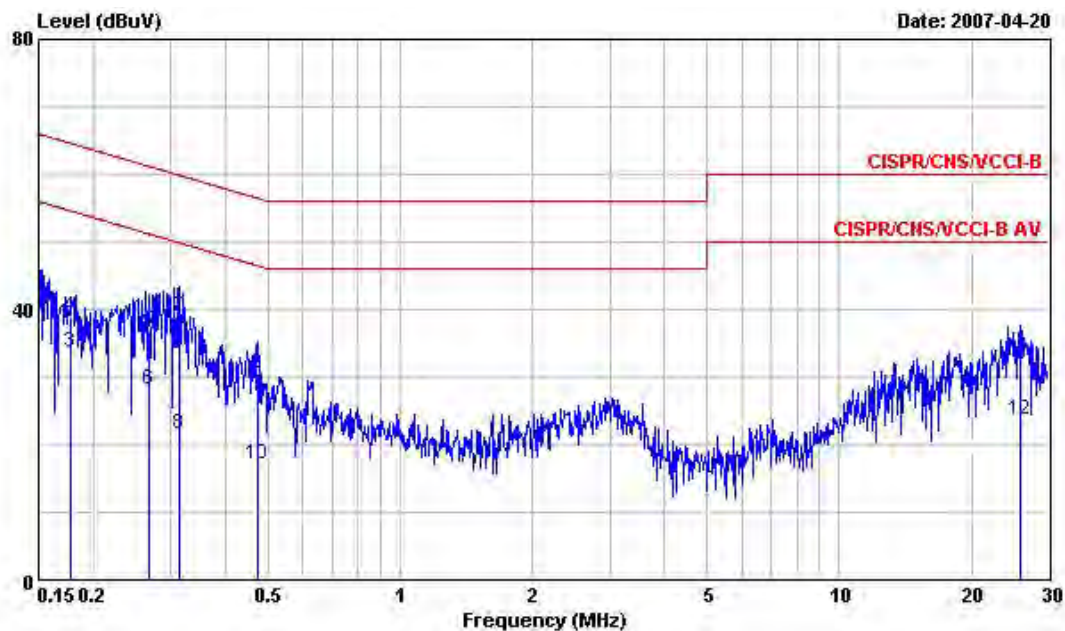
5.5.1 Test Procedures :

1. 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.
2. Connect EUT to the power port of a line impedance stabilization network (LISN).
3. All the support units are connected to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

5.5.2 Test Data

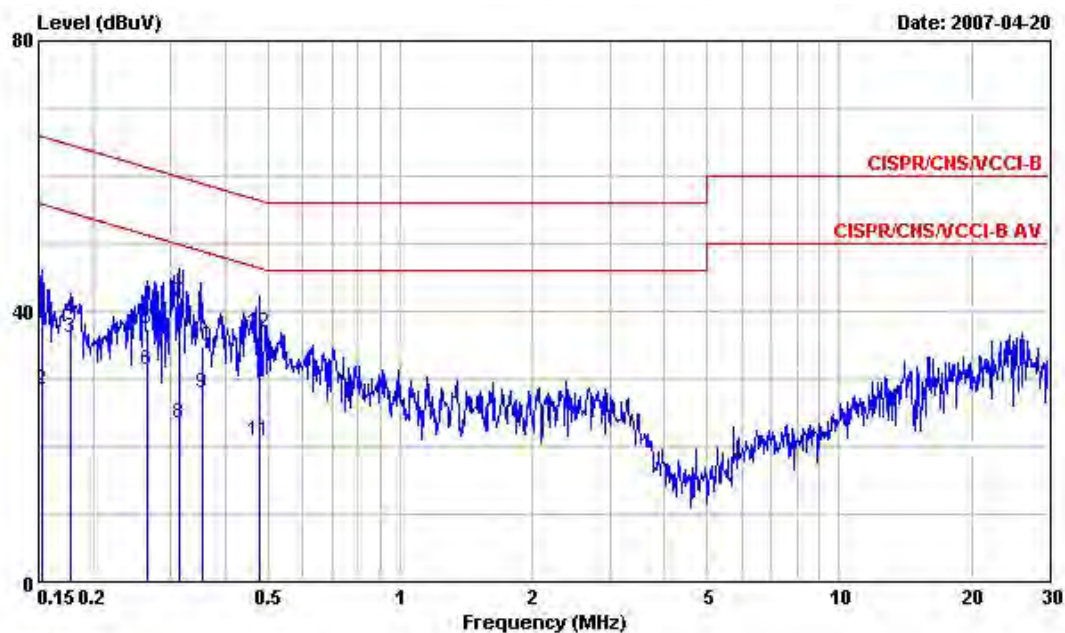
- Frequency Range of Test : 150kHz to 30 MHz
- Test Mode : Mode 1
- Temperature : 23 °C
- Relative Humidity : 47 %
- Test Engineer : James

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



Site : CO04-HY
 Condition : CISPR/CNS/VCCI-B LISN 200604 99041 LINE
 EUT : Notebook
 POWER: AC 120V/60Hz
 Model : FR6D2906
 Memo : BT Link + WLAN Link + Adapter

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1500000	29.02	-26.98	56.00	28.22	0.10	0.70	Average
2	0.1500000	42.06	-23.94	66.00	41.26	0.10	0.70	QP
3	0.1773960	33.77	-20.84	54.61	33.09	0.10	0.58	Average
4	0.1773960	38.96	-25.65	64.61	38.28	0.10	0.58	QP
5	0.2667270	36.89	-24.33	61.22	36.33	0.10	0.46	QP
6	0.2667270	28.09	-23.13	51.22	27.53	0.10	0.46	Average
7	0.3149460	38.94	-20.90	59.84	38.44	0.10	0.40	QP
8	0.3149460	21.65	-28.19	49.84	21.15	0.10	0.40	Average
9	0.4736030	30.63	-25.82	56.45	30.08	0.10	0.45	QP
10	0.4736030	17.15	-29.30	46.45	16.60	0.10	0.45	Average
11	25.730	32.15	-27.85	60.00	30.91	0.32	0.92	QP
12	25.730	23.71	-26.29	50.00	22.47	0.32	0.92	Average



Site : C004-HY
 Condition : CISPR/CNS/VCCI-B LISN 200604 99041 NEUTRAL
 EUT : Notebook
 POWER: AC 120V/60Hz
 Model : FR6D2906
 Memo : BT Link + WLAN Link + Adapter

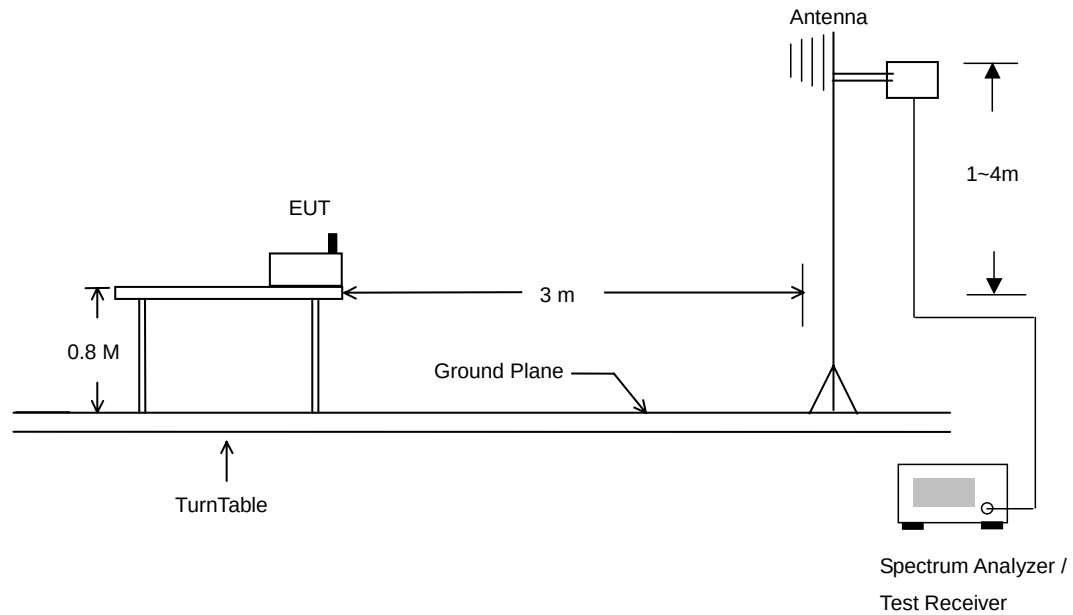
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1524030	41.38	-24.49	65.87	40.59	0.10	0.69	QP
2	0.1524030	28.46	-27.41	55.87	27.67	0.10	0.69	Average
3	0.1767760	36.11	-18.53	54.64	35.42	0.10	0.59	Average
4	0.1767760	38.65	-25.99	64.64	37.96	0.10	0.59	QP
5	0.2658290	37.24	-24.01	61.25	36.67	0.10	0.47	QP
6	0.2658290	31.44	-19.81	51.25	30.87	0.10	0.47	Average
7	0.3149460	41.36	-18.48	59.84	40.86	0.10	0.40	QP
8	0.3149460	23.33	-26.51	49.84	22.83	0.10	0.40	Average
9	0.3558320	27.81	-21.02	48.83	27.31	0.10	0.40	Average
10	0.3558320	34.86	-23.97	58.83	34.36	0.10	0.40	QP
11	0.4761190	20.88	-25.53	46.41	20.34	0.10	0.44	Average
12	0.4761190	36.94	-19.47	56.41	36.40	0.10	0.44	QP

5.6 Test of Radiated Emission

As described in chapter 6 of this test report.

5.6.1 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.

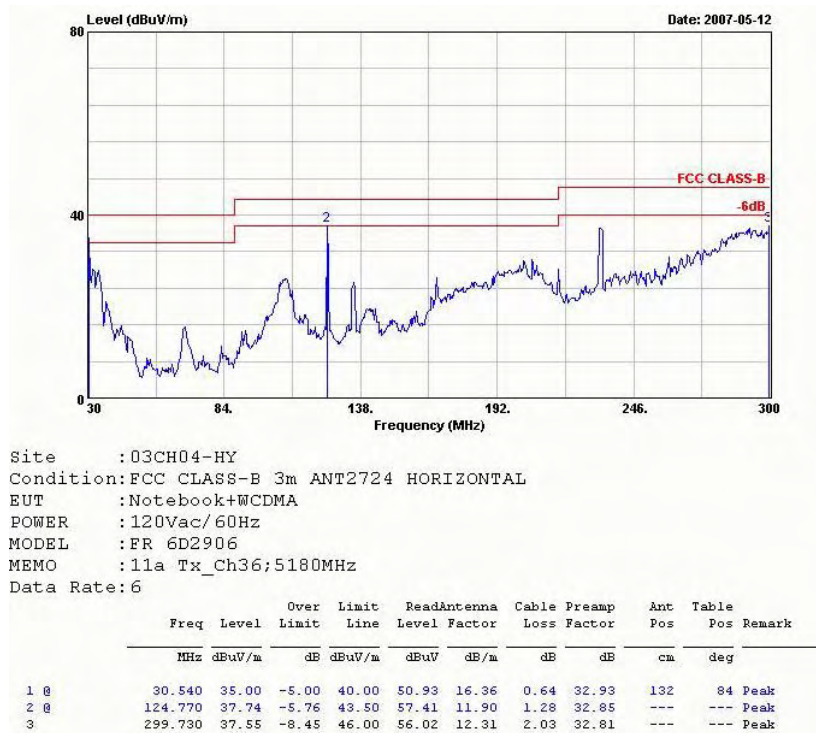
5.6.2 Typical Test Setup Layout of Radiated Emission

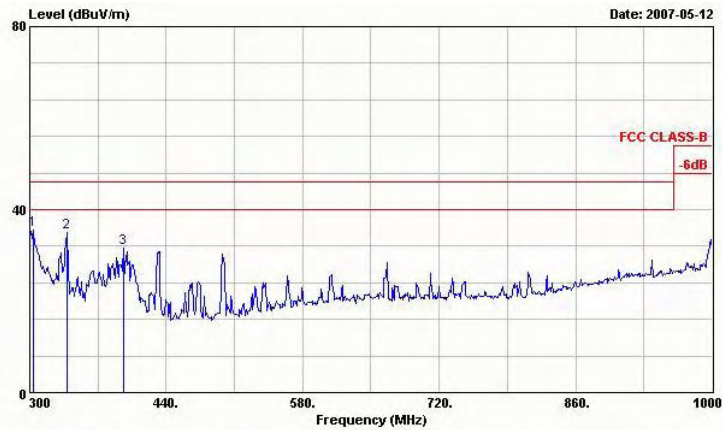
5.6.3 Test Data

➤ Test Mode : Mode 1

- Temperature : 24°C
- Relative Humidity :53%
- Test Enginner : Andrew
- Polarization : Horizontal

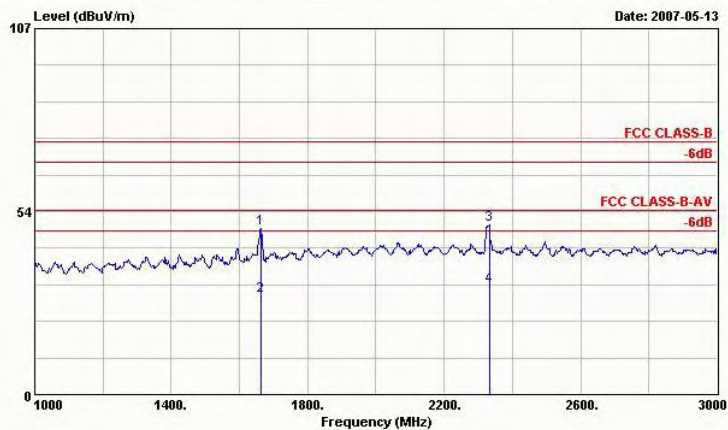
■ The test that passed at minimum margin was marked by the frame in the following table.





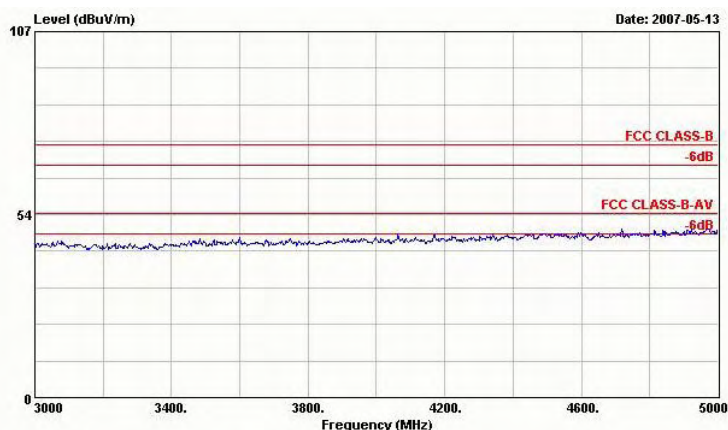
Site : 03CH04-HY
Condition: FCC CLASS-B 3m ANT2724 HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch36;5180MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	304.200	35.49	-10.51	46.00	53.79	12.48	2.04	32.81	---	---
2	337.800	35.08	-10.92	46.00	52.19	13.61	2.10	32.83	---	---
3	396.600	31.55	-14.45	46.00	46.44	15.65	2.32	32.86	---	---

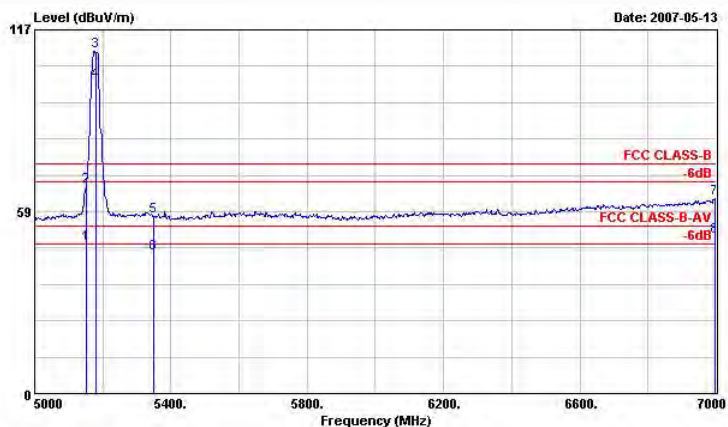


Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch36;5180MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	1662.000	48.72	-25.28	74.00	50.88	28.57	2.97	33.70	100	0 Peak
2	1662.000	28.86	-25.14	54.00	31.02	28.57	2.97	33.70	100	342 Average
3	2332.000	49.56	-24.44	74.00	48.93	30.71	3.69	33.77	100	0 Peak
4	2332.000	31.71	-22.29	54.00	31.08	30.71	3.69	33.77	100	349 Average



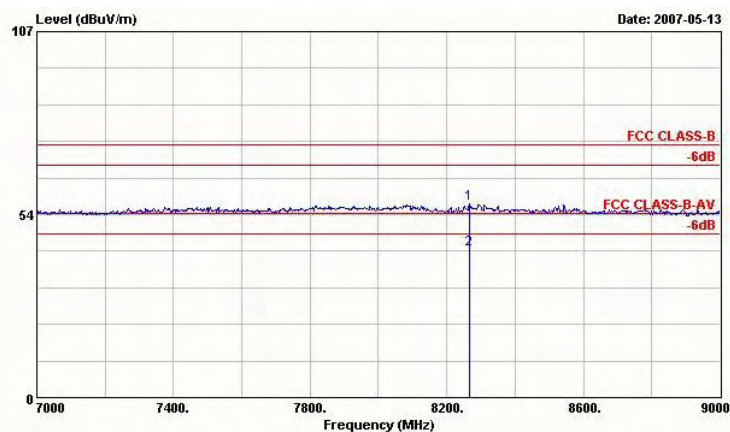
Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch36;5180MHz
Data Rate:6



Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch36;5180MHz
Data Rate:6

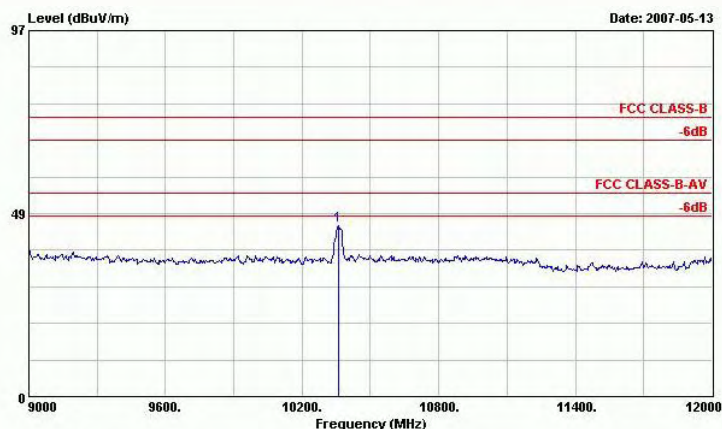
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	5150.000	48.15	-5.85	54.00	42.43	33.96	6.00	34.24	100	73 Average
2	5150.000	66.68	-7.32	74.00	60.96	33.96	6.00	34.24	100	0 Peak
3 @	5180.000	110.05			104.31	33.97	6.00	34.23	100	0 Peak
4 @	5180.000	100.28			94.54	33.97	6.00	34.23	100	73 Average
5	5350.000	56.79	-17.21	74.00	50.90	34.04	6.00	34.15	100	0 Peak
6	5350.000	45.03	-8.97	54.00	39.14	34.04	6.00	34.15	100	73 Average
7	6998.000	62.68	-11.32	74.00	51.12	37.70	6.36	32.50	100	0 Peak
8 @	6998.000	50.27	-3.73	54.00	38.71	37.70	6.36	32.50	100	314 Average

Remark: #3 and #4 Fundamental Signal



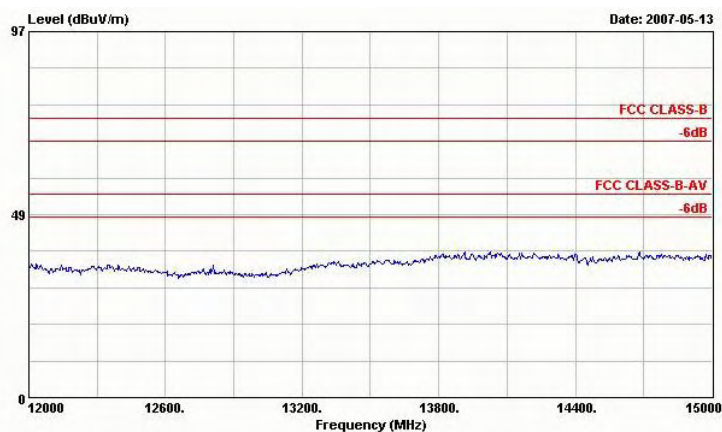
Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch36;5180MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	8268.000	56.76	-17.24	74.00	44.49	39.39	6.90	34.02	100	0 Peak
2	8268.000	43.18	-10.82	54.00	30.91	39.39	6.90	34.02	100	247 Average

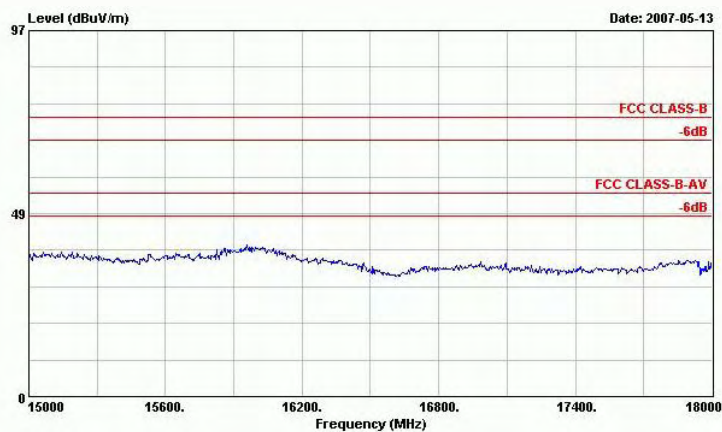


Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch36;5180MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	10362.000	45.34	-28.66	74.00	80.92	-8.72	7.80	34.65	100	0 Peak



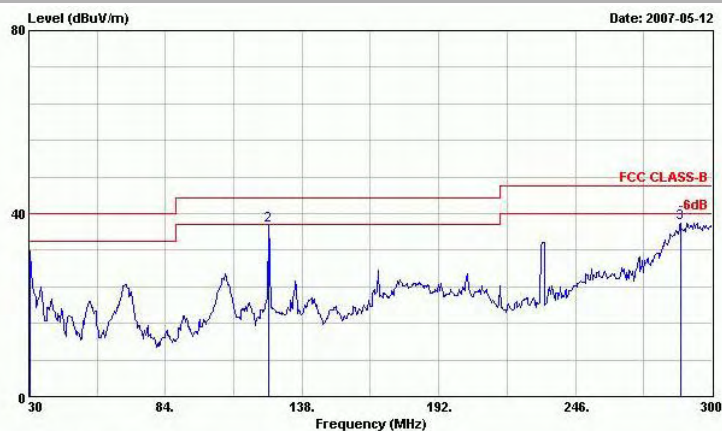
Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch36;5180MHz
Data Rate: 6



Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch36;5180MHz
Data Rate: 6

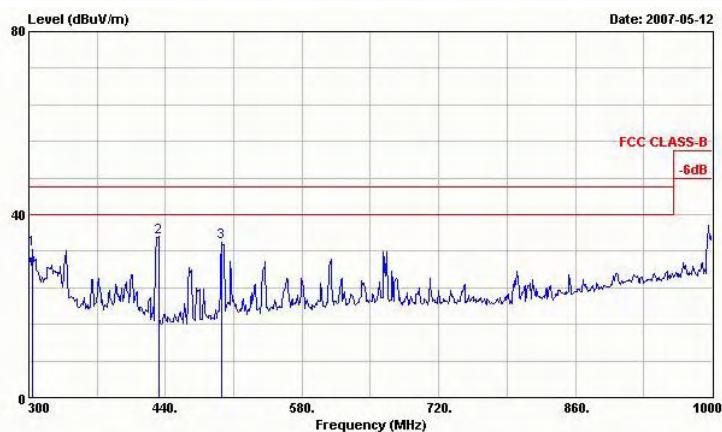
- Polarization : Vertical

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



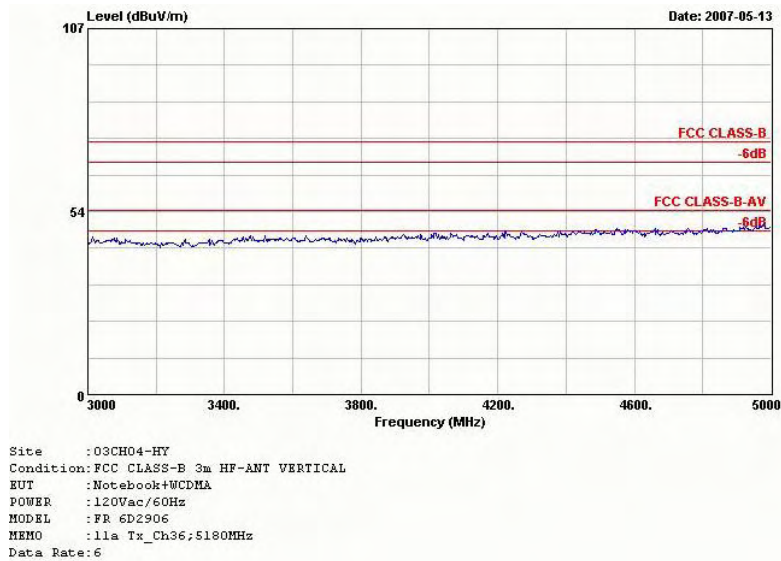
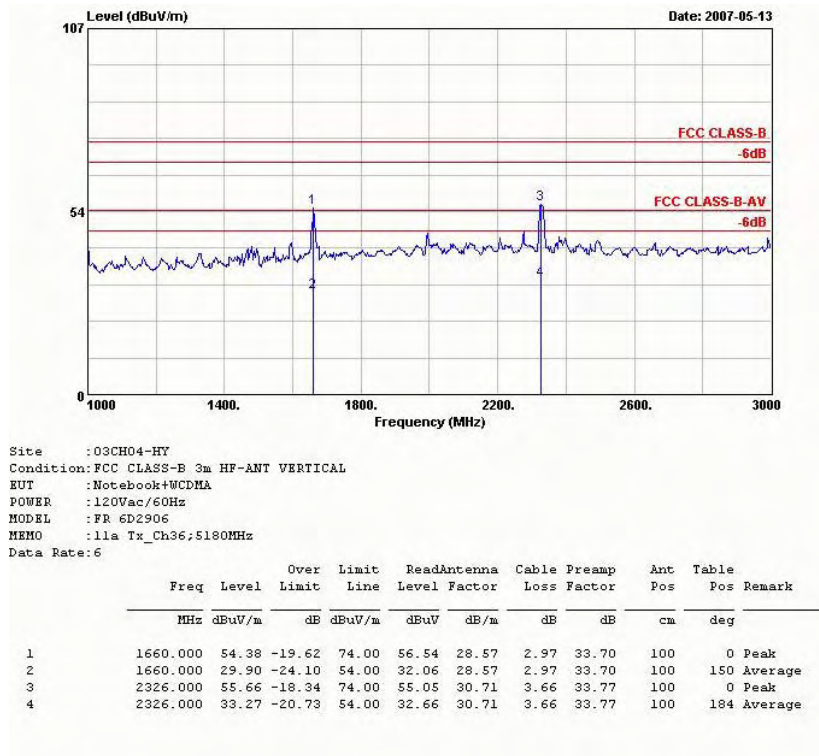
Site : 03CH04-HY
Condition: FCC CLASS-B 3m ANT2724 VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch36;5180MHz
Data Rate: 6

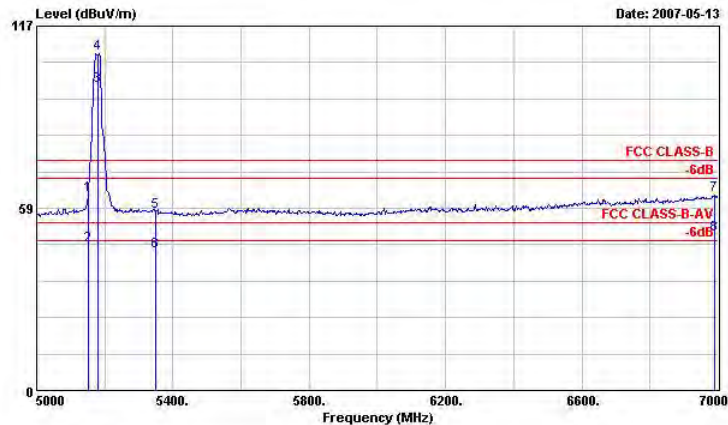
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	30.540	31.79	-8.21	40.00	47.72	16.36	0.64	32.93	---	---
2	124.770	37.29	-6.21	43.50	56.96	11.90	1.28	32.85	107	334
3	287.580	37.98	-8.02	46.00	56.44	12.37	2.00	32.83	---	---



Site : 03CH04-HY
Condition: FCC CLASS-B 3m ANT2724 VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch36;5180MHz
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	304.200	32.25	-13.75	46.00	50.55	12.48	2.04	32.81	---	---
2	433.000	35.13	-10.87	46.00	49.34	16.13	2.43	32.78	---	---
3	497.400	33.83	-12.17	46.00	47.00	16.88	2.60	32.65	---	---

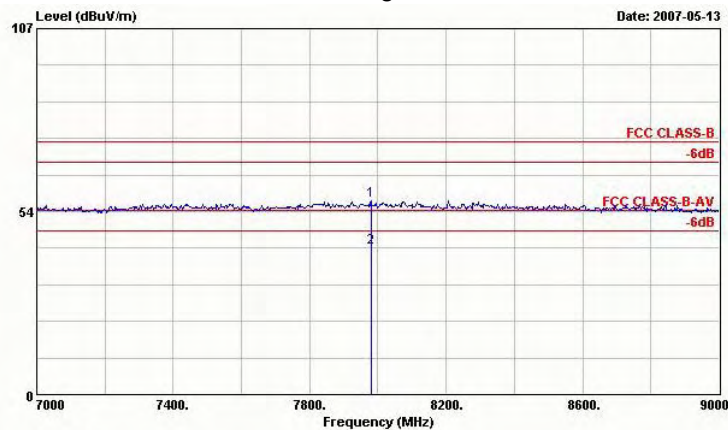




Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch36;5180MHz
Data Rate: 6

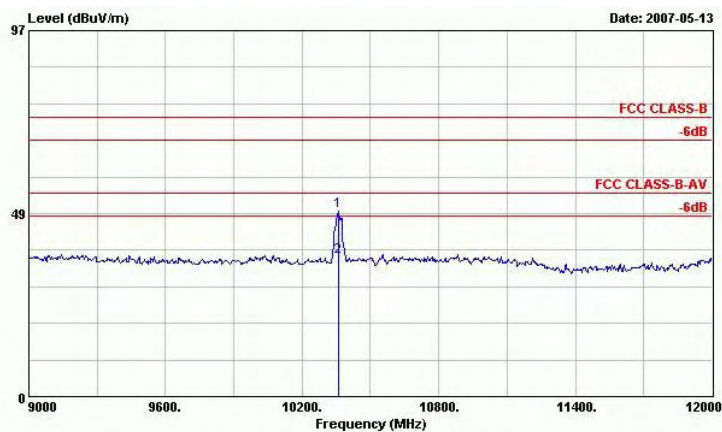
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	5180.000	62.84	-11.16	74.00	57.12	33.96	6.00	34.24	100	0 Peak
2	5180.000	46.49	-7.51	54.00	40.77	33.96	6.00	34.24	103	10 Average
3	5180.000	97.77			92.03	33.97	6.00	34.23	103	10 Average
4	5180.000	108.03			102.29	33.97	6.00	34.23	100	0 Peak
5	5350.000	57.48	-16.52	74.00	51.59	34.04	6.00	34.15	100	0 Peak
6	5350.000	44.75	-9.25	54.00	38.86	34.04	6.00	34.15	103	10 Average
7	6990.000	62.72	-11.28	74.00	51.26	37.60	6.36	32.50	100	0 Peak
8	6990.000	50.14	-3.86	54.00	38.68	37.60	6.36	32.50	108	121 Average

Remark: #3 and #4 Fundamental Signal



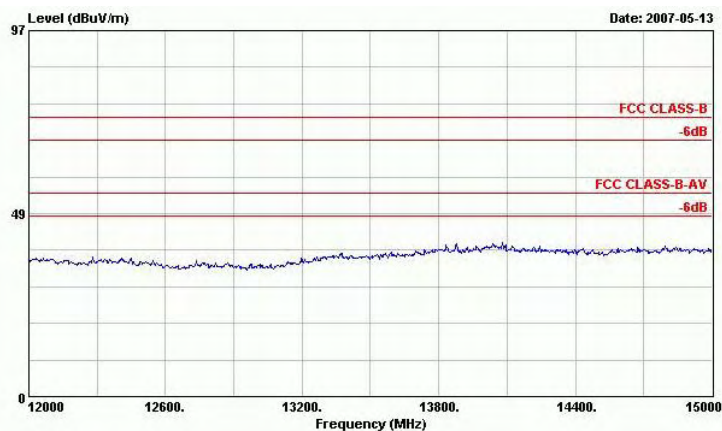
Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch36;5180MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	7980.000	56.61	-17.39	74.00	43.98	39.49	6.75	33.61	100	0 Peak
2	7980.000	42.85	-11.15	54.00	30.22	39.49	6.75	33.61	100	314 Average

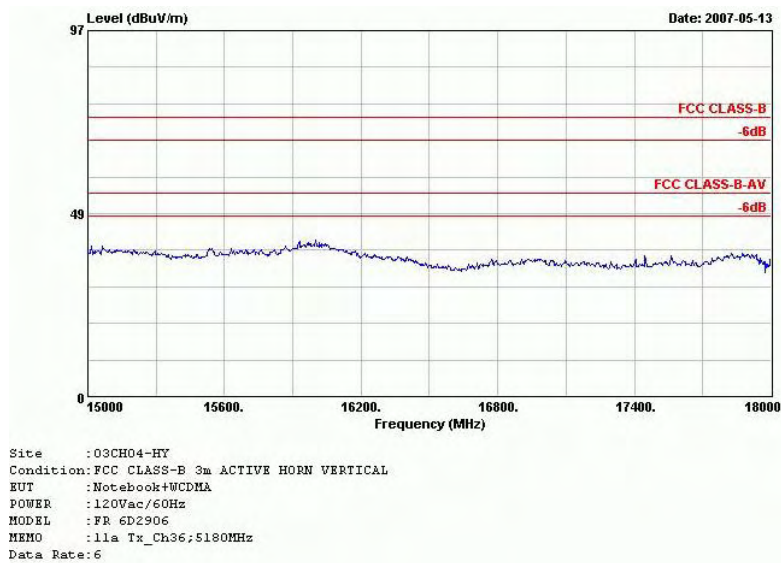


Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch36;5180MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	Level Factor	Loss Factor	dB	Pos	Pos	Remark
					dB			cm	deg	
1	10362.000	49.22	-24.78	74.00	84.80	-8.72	7.80	34.65	100	0 Peak
2	10362.000	36.96	-17.04	54.00	72.54	-8.72	7.80	34.65	100	339 Average



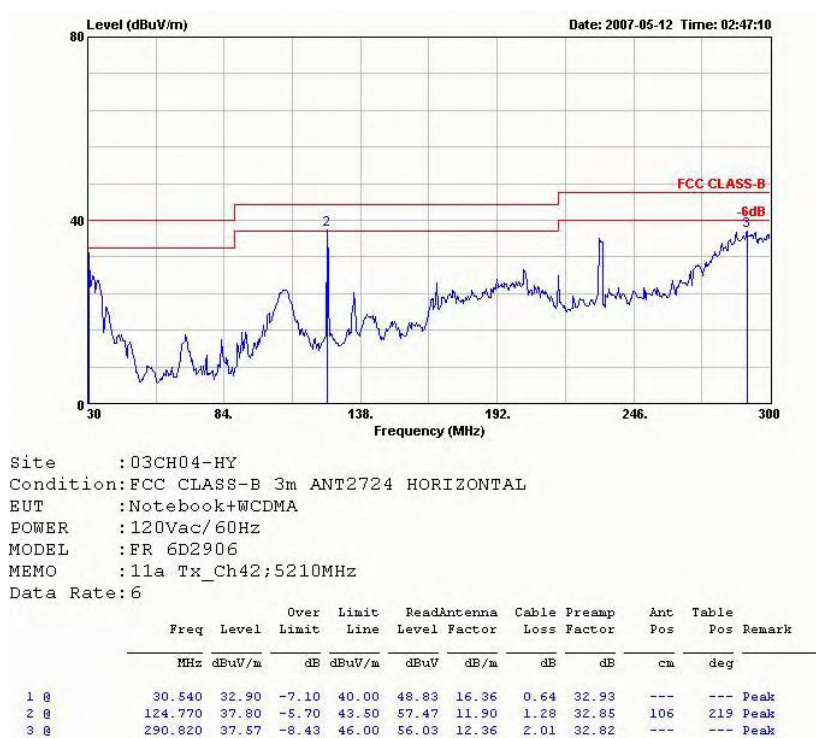
Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch36;5180MHz
Data Rate: 6

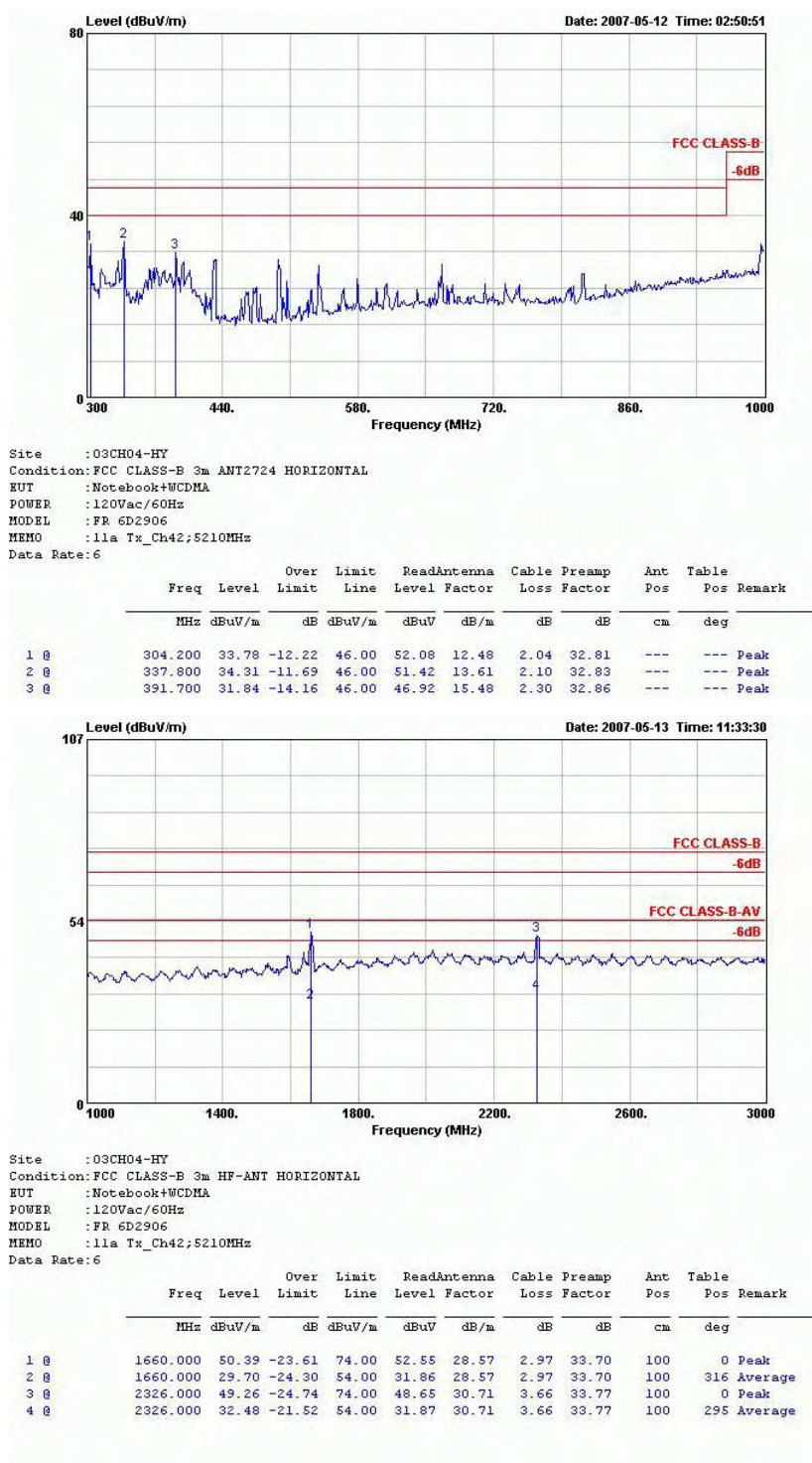


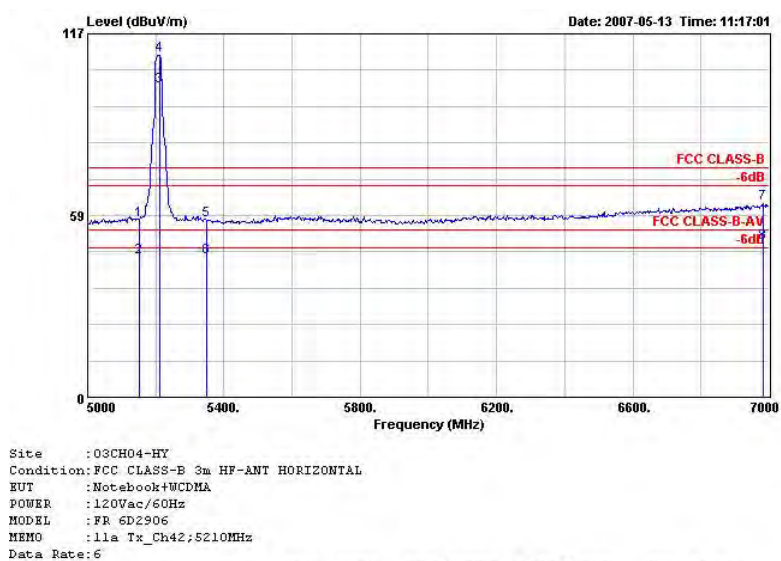
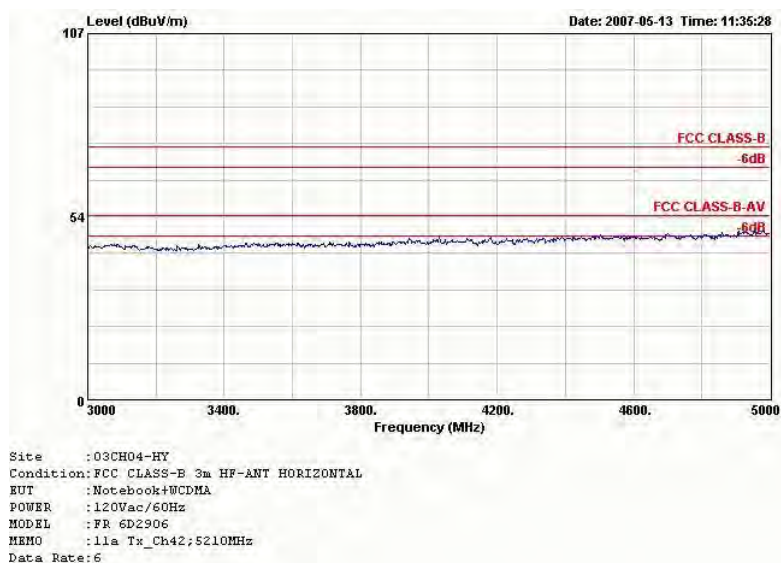
Remark : Frequency from 18GHz to 40GHz, the emission emitted by the EUT is too low to be measured.

- Test Mode : Mode 2
- Temperature : 24°C
 - Relative Humidity :53%
 - Test Enginner : Andrew
 - Polarization : Horizontal

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

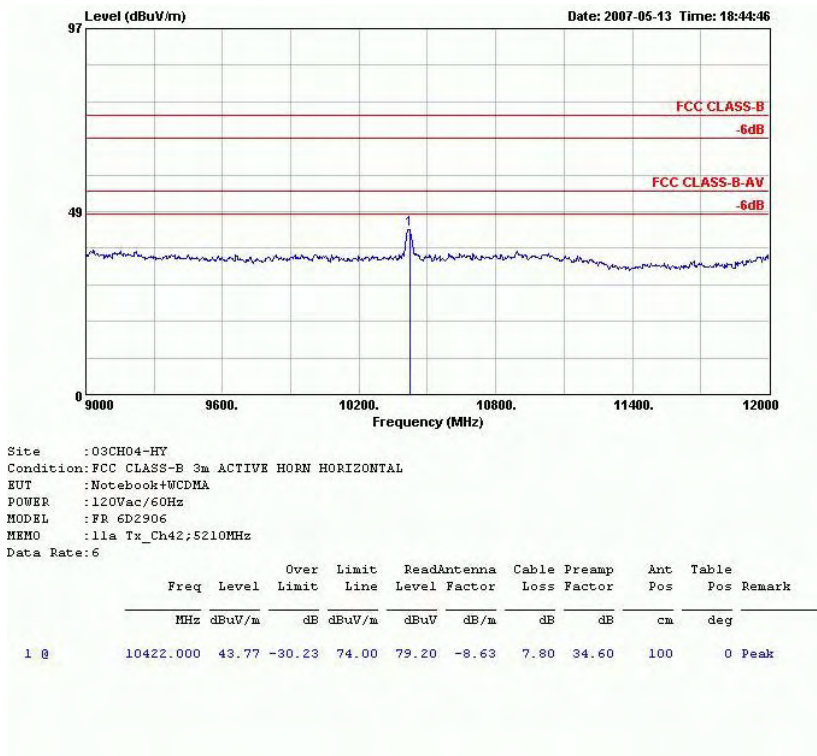


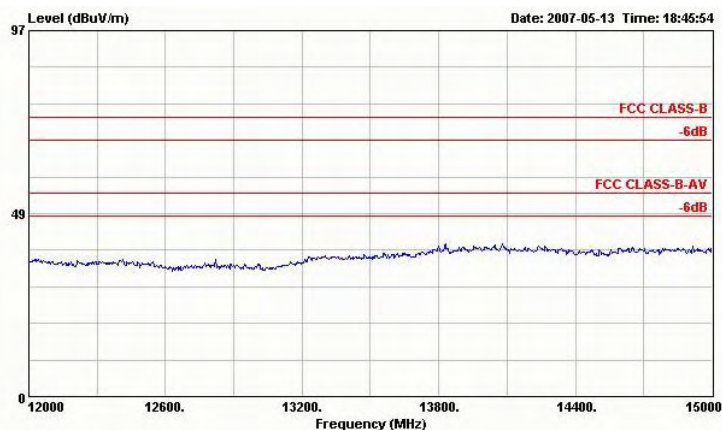




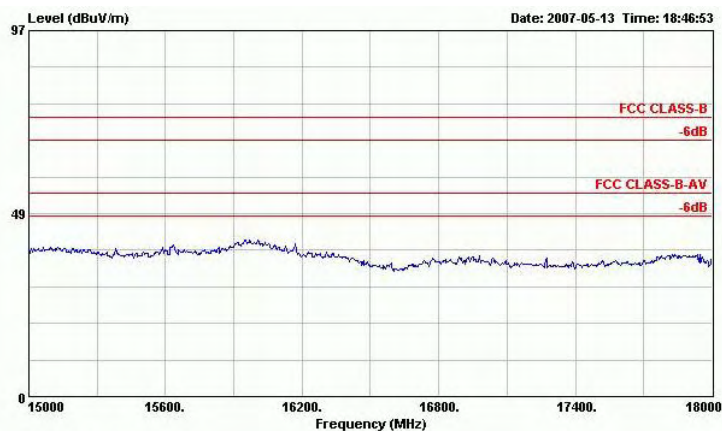
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	5150.000	56.87	-17.13	74.00	51.15	33.96	6.00	34.24	100	0 Peak
2	5150.000	45.22	-8.78	54.00	39.50	33.96	6.00	34.24	100	74 Average
3	5210.000	99.92			94.15	33.99	6.00	34.22	100	74 Average
4	5210.000	110.01			104.25	33.98	6.00	34.22	100	0 Peak
5	5350.000	57.11	-16.89	74.00	51.22	34.04	6.00	34.15	100	0 Peak
6	5350.000	45.05	-8.95	54.00	39.16	34.04	6.00	34.15	100	74 Average
7	6982.000	62.24	-11.76	74.00	50.79	37.60	6.35	32.50	100	0 Peak
8	6982.000	49.74	-4.26	54.00	38.29	37.60	6.35	32.50	100	305 Average

Remark: #3 and #4 Fundamental Signal





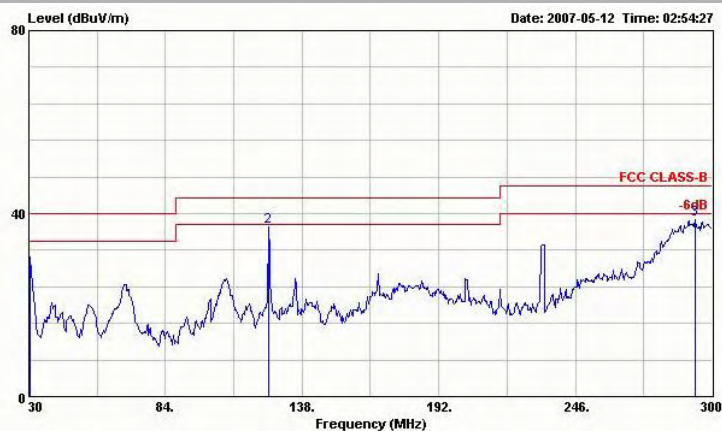
Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch42;5210MHz
Data Rate: 6



Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch42;5210MHz
Data Rate: 6

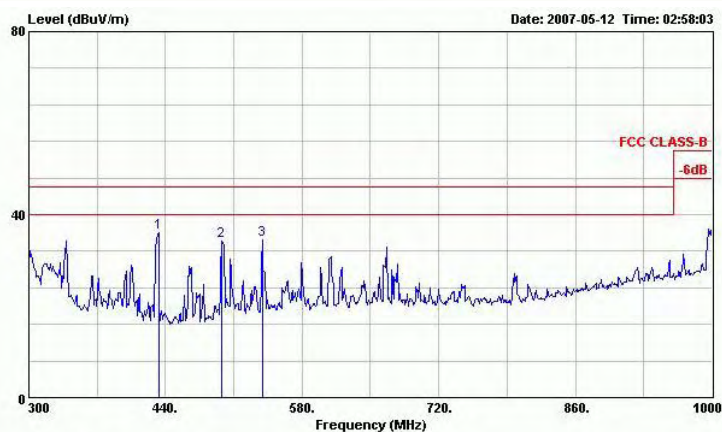
- Polarization : Vertical

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



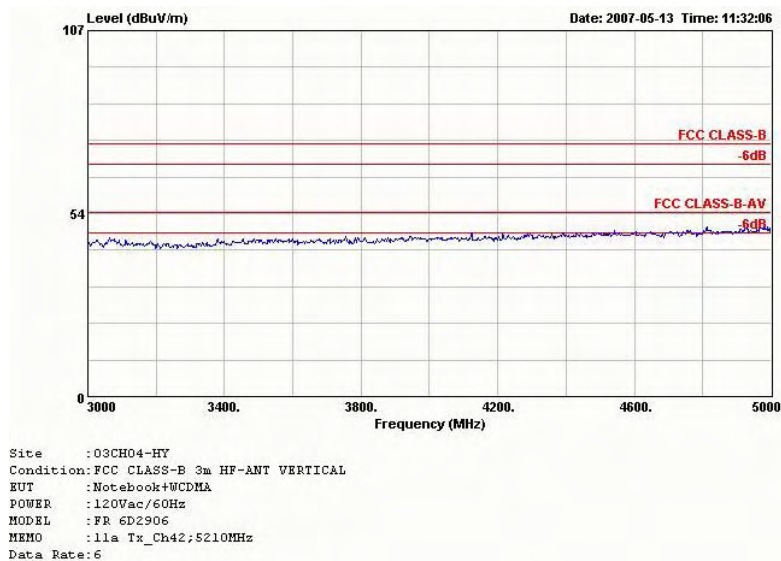
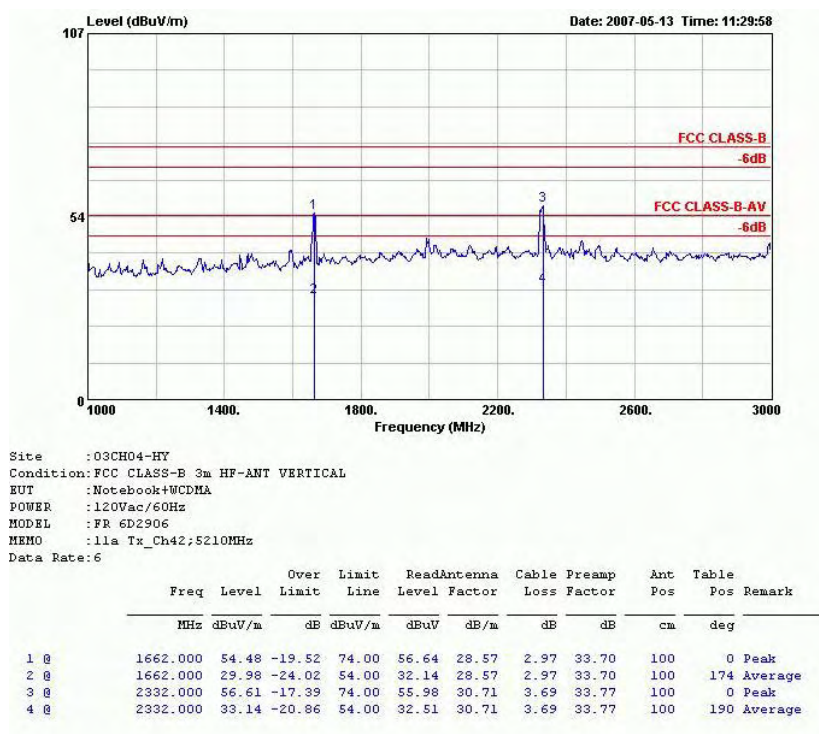
Site : 03CH04-HY
Condition: FCC CLASS-B 3m ANT2724 VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch42;5210MHz
Data Rate: 6

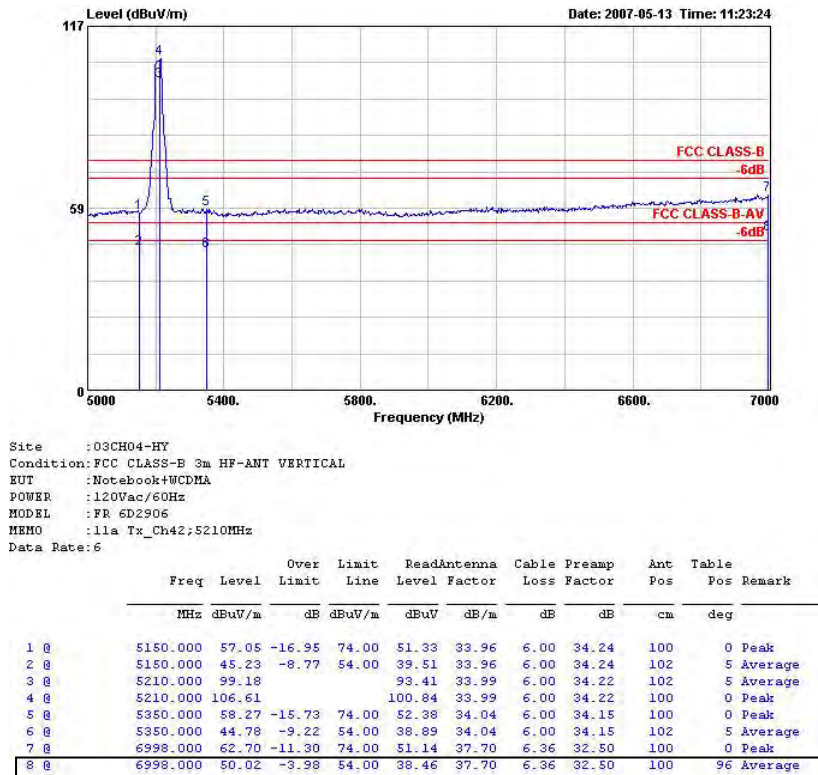
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	30.540	30.58	-9.42	40.00	46.51	16.36	0.64	32.93	---	--- Peak
2	124.770	37.22	-6.28	43.50	56.89	11.90	1.28	32.85	112	85 Peak
3	293.250	38.66	-7.34	46.00	57.12	12.35	2.01	32.82	---	--- Peak



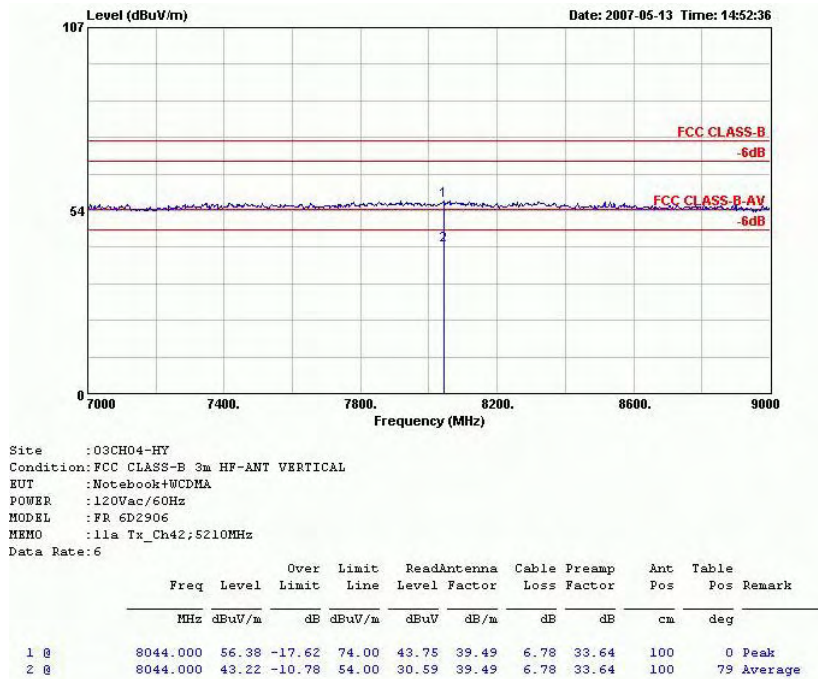
Site : 03CH04-HY
Condition: FCC CLASS-B 3m ANT2724 VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch42;5210MHz
Data Rate: 6

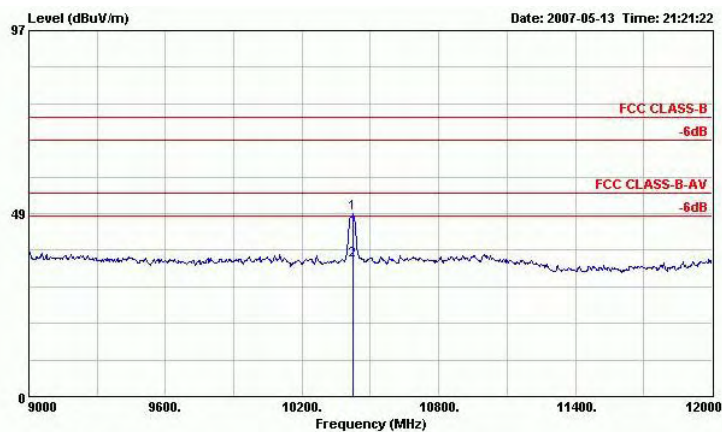
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	433.000	35.96	-10.04	46.00	50.17	16.13	2.43	32.78	---	--- Peak
2	498.100	34.20	-11.80	46.00	47.36	16.89	2.60	32.64	---	--- Peak
3	539.400	34.52	-11.48	46.00	46.09	18.07	2.73	32.37	---	--- Peak





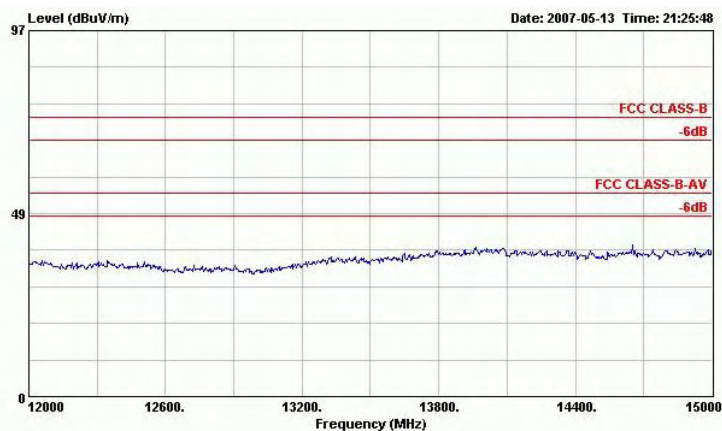
Remark: #3 and #4 Fundamental Signal



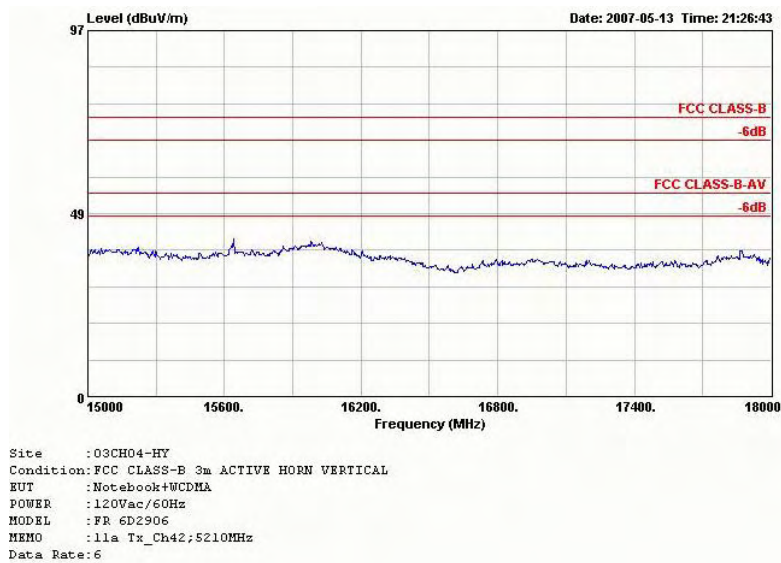


Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch42;5210MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	Level	Loss	Factor	Pos	Pos	Remark
					Factor					
					dB		dB	cm	deg	
1 @	10425.000	48.64	-25.36	74.00	84.04	-8.63	7.80	34.58	100	0 Peak
2 @	10425.000	35.99	-18.01	54.00	71.39	-8.63	7.80	34.58	100	36 Average



Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch42;5210MHz
Data Rate: 6



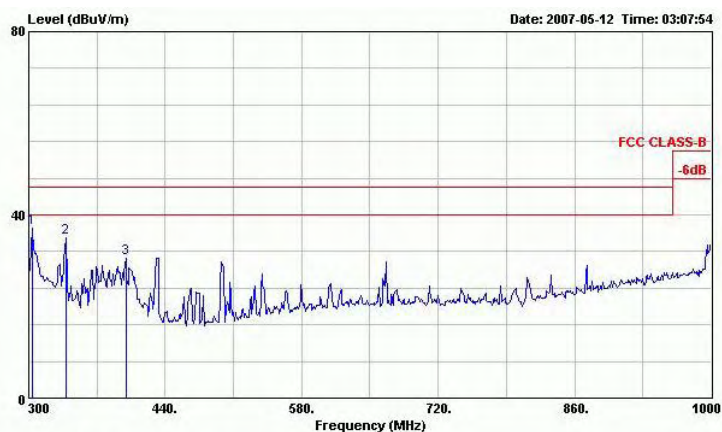
Remark : Frequency from 18GHz to 40GHz, the emission emitted by the EUT is too low to be measured.

➤ Test Mode : Mode 3

- Temperature : 24°C
- Relative Humidity :53%
- Test Enginner : Andrew
- Polarization : Horizontal

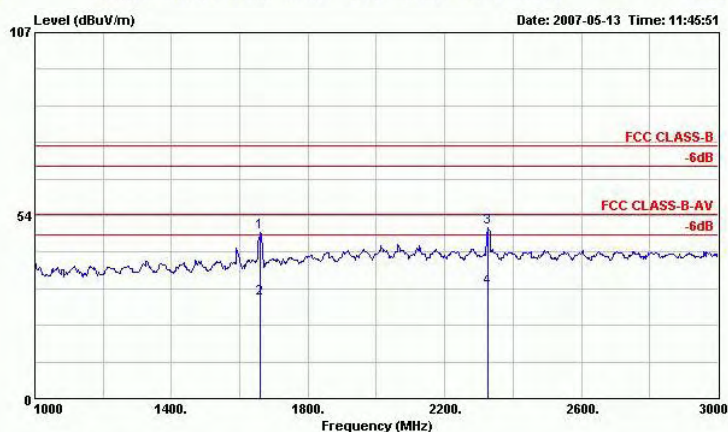
■ The test that passed at minimum margin was marked by the frame in the following table.





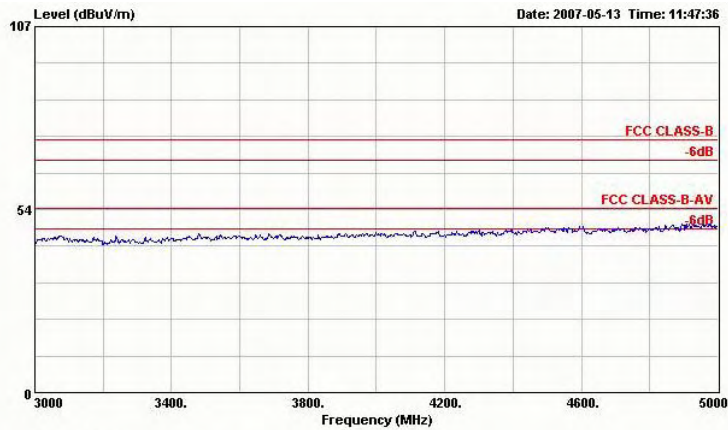
Site : 03CH04-HY
Condition: FCC CLASS-B 3m ANT2724 HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch44;5220MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	304.200	37.08	-8.92	46.00	55.38	12.48	2.04	32.81	---	Peak
2 @	337.800	35.00	-11.00	46.00	52.11	13.61	2.10	32.83	---	Peak
3 @	399.400	30.63	-15.37	46.00	45.41	15.75	2.33	32.86	---	Peak

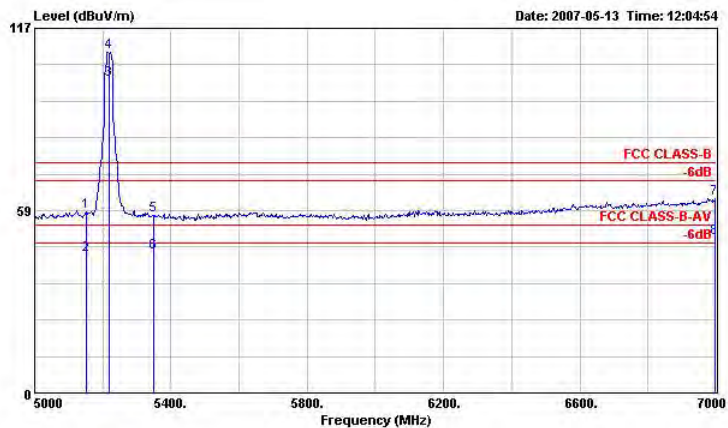


Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch44;5220MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	1660.000	48.56	-25.44	74.00	50.72	28.57	2.97	33.70	100	0 Peak
2 @	1660.000	29.38	-24.62	54.00	31.54	28.57	2.97	33.70	100	327 Average
3 @	2326.000	50.02	-23.98	74.00	49.41	30.71	3.66	33.77	100	0 Peak
4 @	2326.000	32.47	-21.53	54.00	31.86	30.71	3.66	33.77	100	325 Average



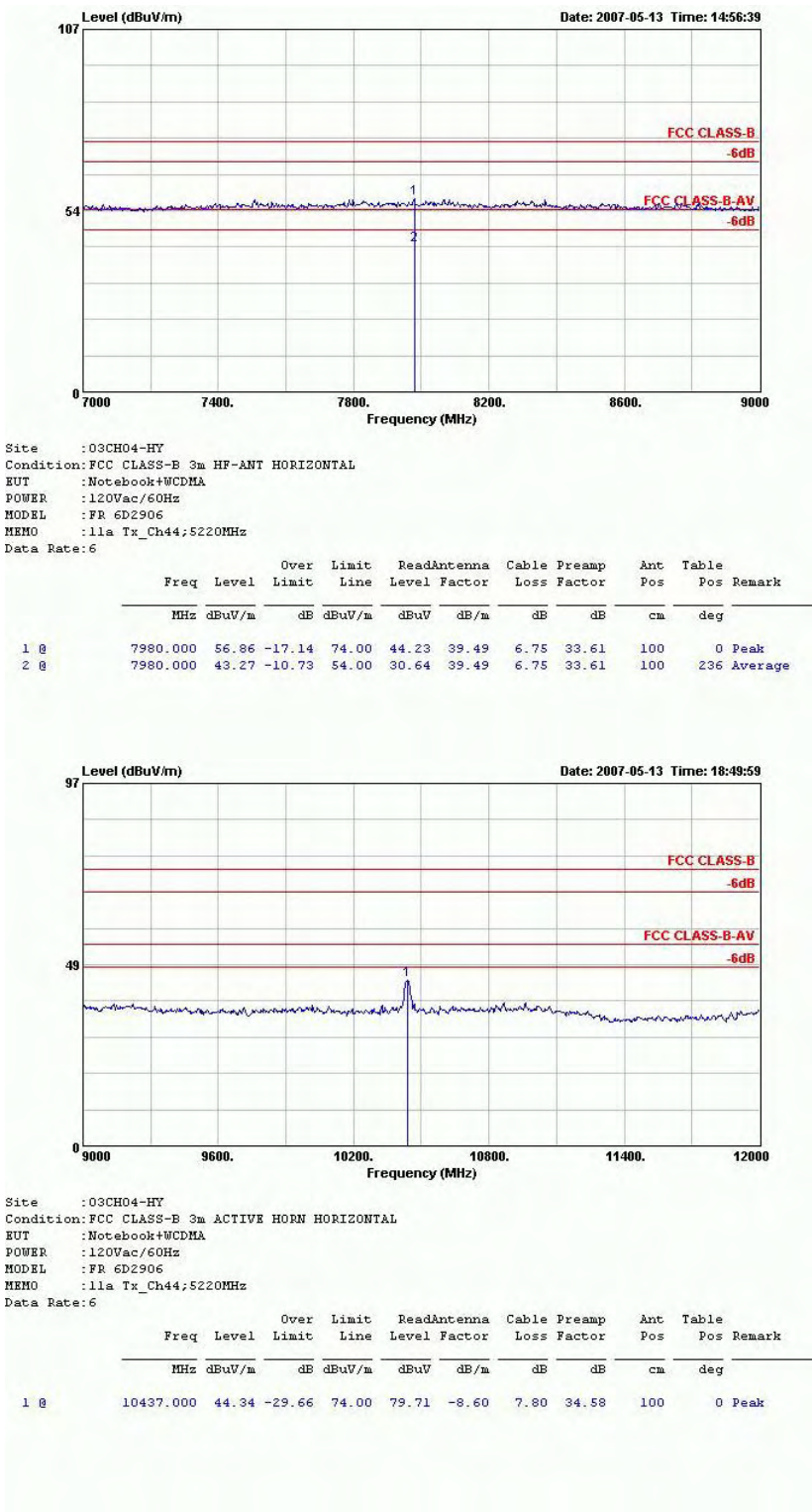
Site : 03CH04-HY
 Condition: FCC CLASS-B 3m HF-ANT HORIZONTAL
 EUT : Notebook+WCDMA
 POWER : 120Vac/60Hz
 MODEL : FR 6D2906
 MEMO : 11a Tx_Ch44;5220MHz
 Data Rate: 6

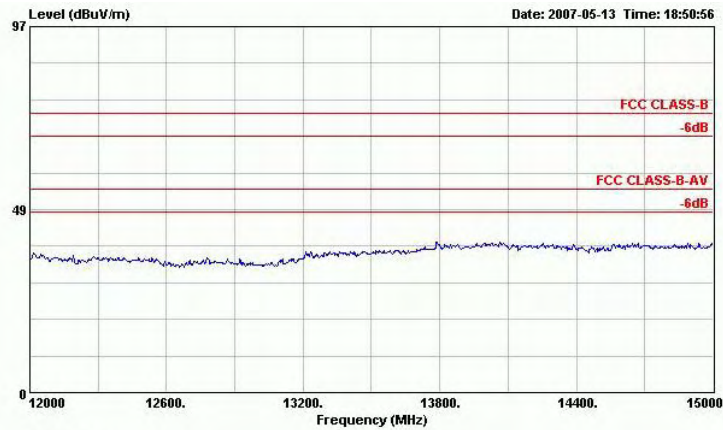


Site : 03CH04-HY
 Condition: FCC CLASS-B 3m HF-ANT HORIZONTAL
 EUT : Notebook+WCDMA
 POWER : 120Vac/60Hz
 MODEL : FR 6D2906
 MEMO : 11a Tx_Ch44;5220MHz
 Data Rate: 6

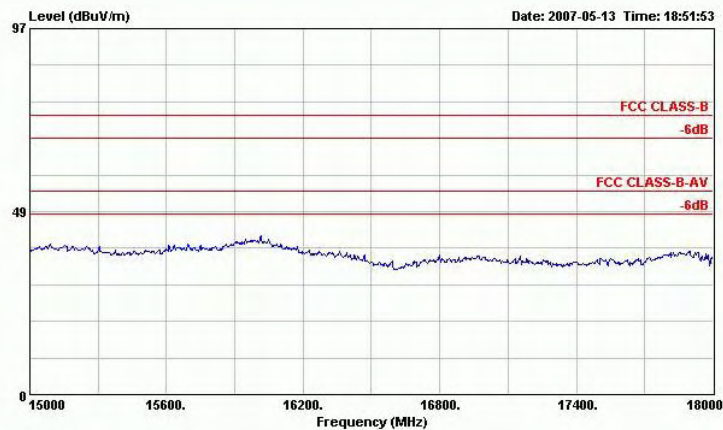
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	5150.000	58.29	-15.71	74.00	52.57	33.96	6.00	34.24	100	0 Peak
2 @	5150.000	44.39	-9.61	54.00	38.67	33.96	6.00	34.24	100	70 Average
3 @	5220.000	100.37			94.60	33.99	6.00	34.22	100	70 Average
4 @	5220.000	109.22			103.45	33.99	6.00	34.22	100	0 Peak
5 @	5350.000	56.85	-17.15	74.00	50.96	34.04	6.00	34.15	100	0 Peak
6 @	5350.000	44.92	-9.08	54.00	39.03	34.04	6.00	34.15	100	70 Average
7 @	6998.000	62.24	-11.76	74.00	50.68	37.70	6.36	32.50	100	0 Peak
8 @	6998.000	49.83	-4.17	54.00	38.27	37.70	6.36	32.50	100	286 Average

Remark: #3 and #4 Fundamental Signal





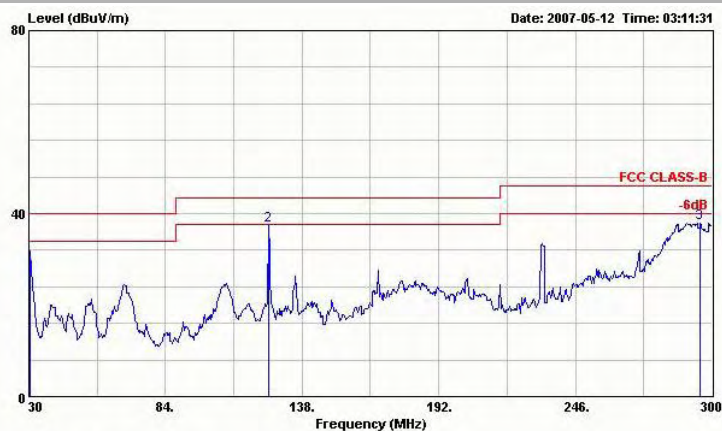
Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch44;5220MHz
Data Rate: 6



Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch44;5220MHz
Data Rate: 6

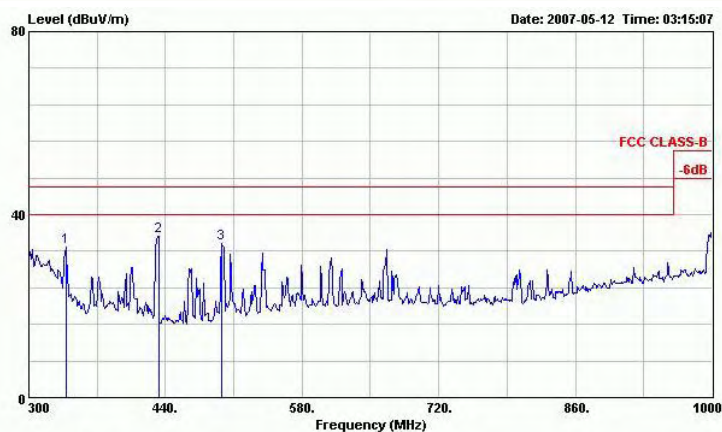
- Polarization : Vertical

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



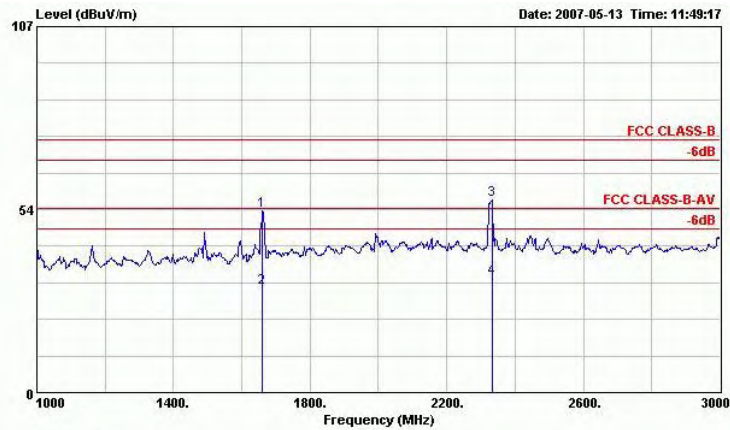
Site : 03CH04-HY
Condition: FCC CLASS-B 3m ANT2724 VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch44;S220MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	30.540	31.92	-8.08	40.00	47.85	16.36	0.64	32.93	---	---
2	124.770	37.37	-6.13	43.50	57.04	11.90	1.28	32.85	106	80
3	295.410	37.95	-8.05	46.00	56.42	12.33	2.02	32.82	---	---



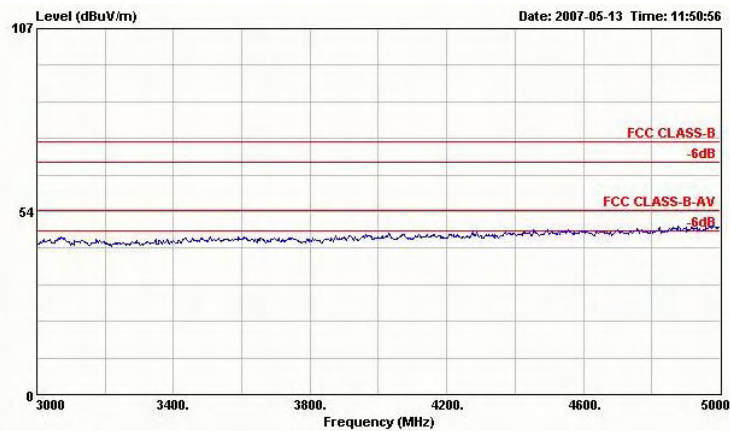
Site : 03CH04-HY
Condition: FCC CLASS-B 3m ANT2724 VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch44;S220MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	337.800	32.86	-13.14	46.00	49.97	13.61	2.10	32.83	---	---
2	433.000	35.30	-10.70	46.00	49.51	16.13	2.43	32.78	---	---
3	498.100	33.70	-12.30	46.00	46.86	16.89	2.60	32.64	---	---

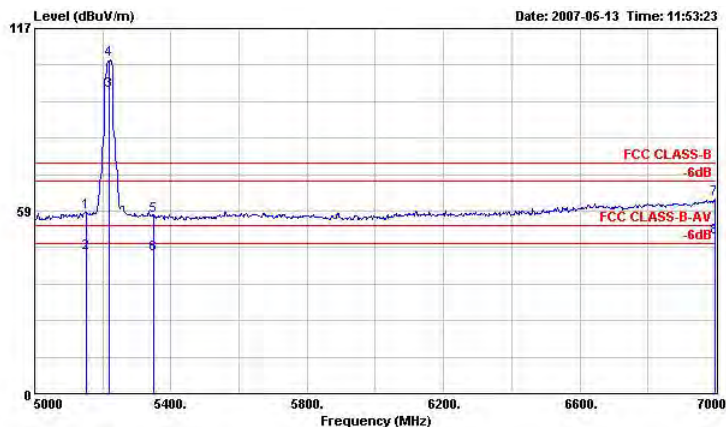


Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch44;5220MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level Factor	Loss Factor	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	1660.000	53.28	-20.72	74.00	55.44	28.57	2.97	33.70	100	0 Peak
2 @	1660.000	30.52	-23.48	54.00	32.68	28.57	2.97	33.70	100	132 Average
3 @	2332.000	56.22	-17.78	74.00	55.59	30.71	3.69	33.77	100	0 Peak
4 @	2332.000	33.58	-20.42	54.00	32.95	30.71	3.69	33.77	100	169 Average



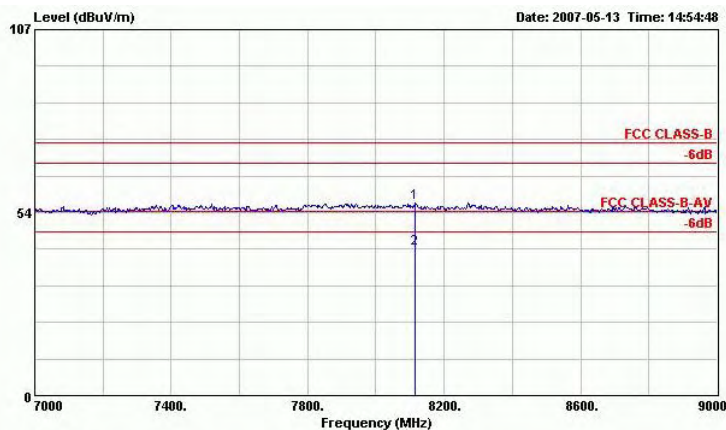
Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch44;5220MHz
Data Rate: 6



Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch44;5220MHz
Data Rate: 6

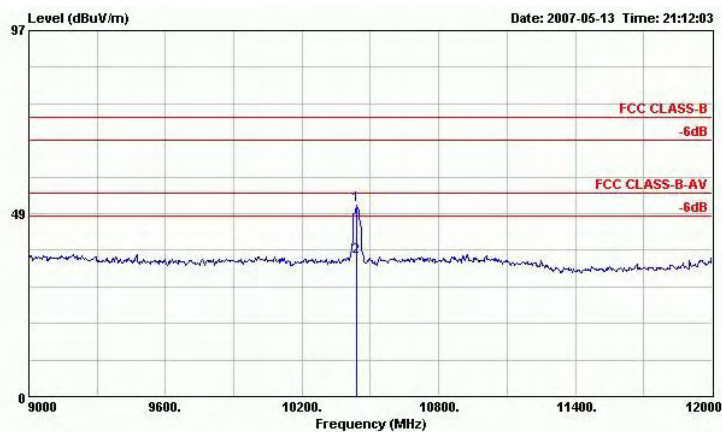
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	5150.000	58.02	-15.98	74.00	52.30	33.96	6.00	34.24	100	0 Peak
2 @	5150.000	45.16	-8.84	54.00	39.44	33.96	6.00	34.24	103	20 Average
3 @	5220.000	97.03			91.26	33.99	6.00	34.22	103	20 Average
4 @	5220.000	107.17			101.39	33.99	6.00	34.21	100	0 Peak
5 @	5350.000	56.87	-17.13	74.00	50.98	34.04	6.00	34.15	100	0 Peak
6 @	5350.000	44.77	-9.23	54.00	38.88	34.04	6.00	34.15	103	20 Average
7 @	6996.000	62.19	-11.81	74.00	50.63	37.70	6.36	32.50	100	0 Peak
8 @	6996.000	50.08	-3.92	54.00	38.52	37.70	6.36	32.50	100	64 Average

Remark: #3 and #4 Fundamental Signal



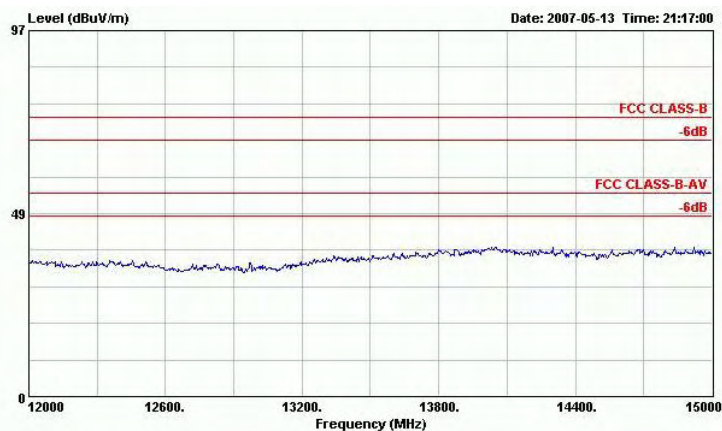
Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch44;5220MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	8116.000	56.18	-17.82	74.00	43.69	39.45	6.81	33.77	100	0 Peak
2 @	8116.000	43.05	-10.95	54.00	30.56	39.45	6.81	33.77	100	68 Average

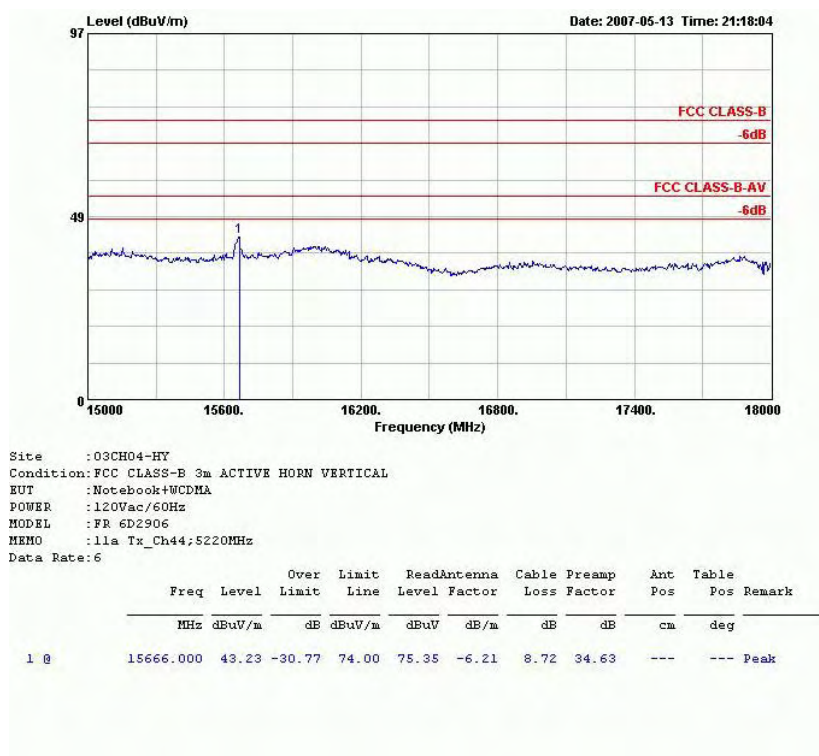


Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch44;5220MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	Level Factor	Loss Factor	dB	Pos	Pos	Remark
					dB	dB/m			cm	deg
1 @	10437.000	50.71	-23.29	74.00	86.08	-8.60	7.80	34.58	100	0 Peak
2 @	10437.000	37.12	-16.88	54.00	72.49	-8.60	7.80	34.58	100	338 Average



Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch44;5220MHz
Data Rate: 6

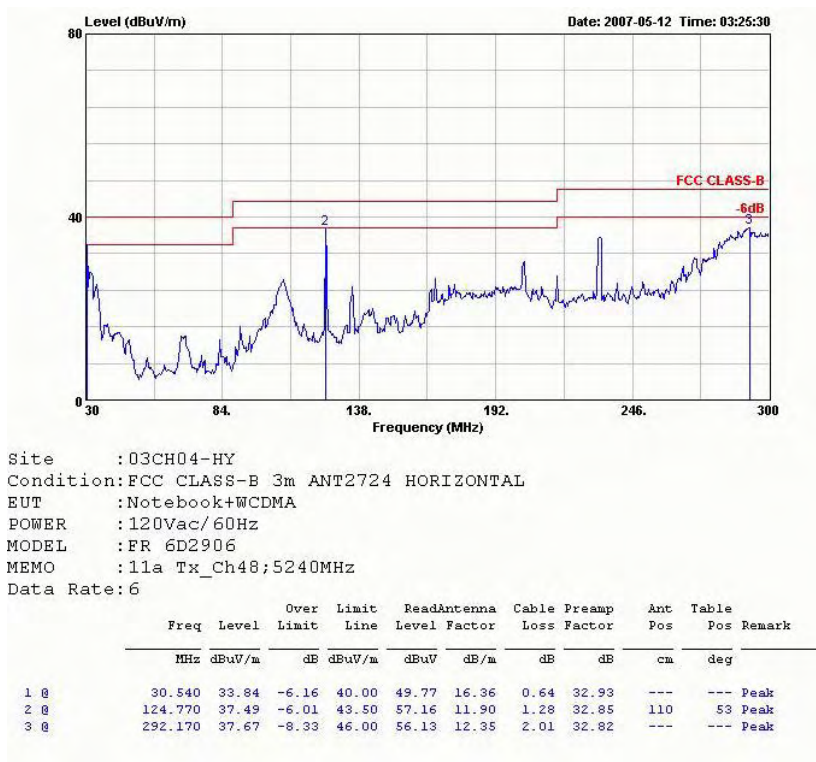


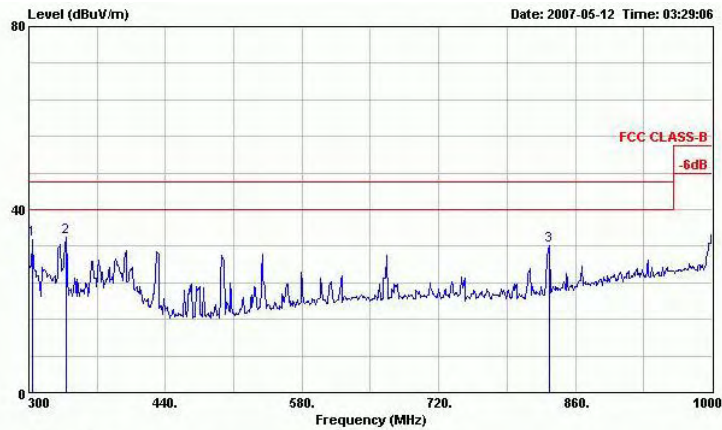
Remark : Frequency from 18GHz to 40GHz, the emission emitted by the EUT is too low to be measured.

➤ Test Mode : Mode 4

- Temperature : 24°C
- Relative Humidity :53%
- Test Enginner : Andrew
- Polarization : Horizontal

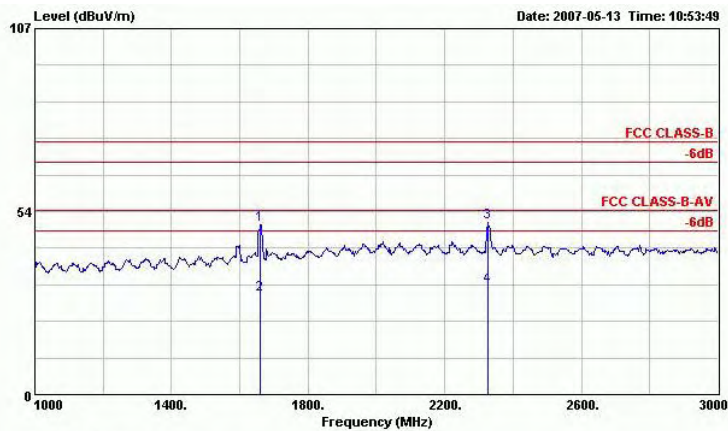
■ The test that passed at minimum margin was marked by the frame in the following table.





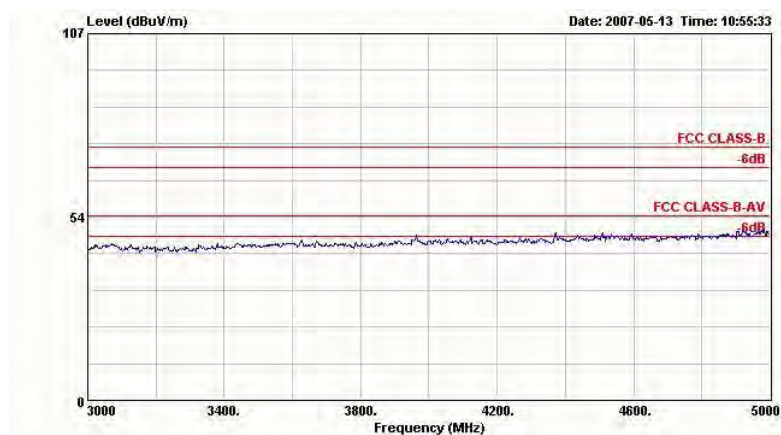
Site : 03CH04-HY
Condition: FCC CLASS-B 3m ANT2724 HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	304.200	33.36	-12.64	46.00	51.66	12.48	2.04	32.81	---	Peak
2 @	337.800	34.07	-11.93	46.00	51.18	13.61	2.10	32.83	---	Peak
3 @	833.400	31.99	-14.01	46.00	39.26	21.06	3.49	31.82	---	Peak

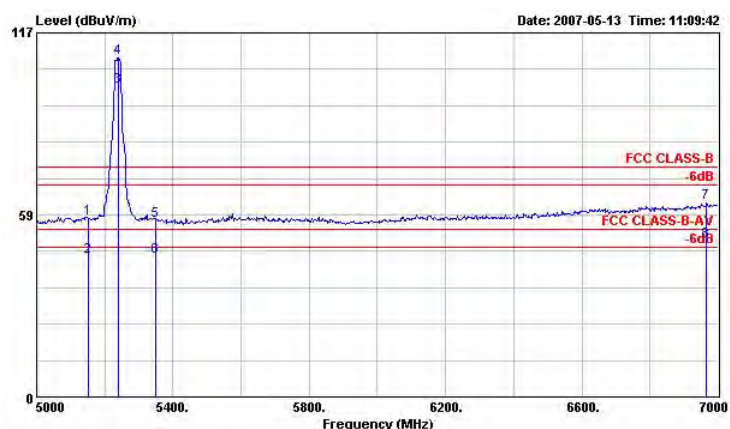


Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	1660.000	49.66	-24.34	74.00	51.82	28.57	2.97	33.70	100	0 Peak
2 @	1660.000	29.05	-24.95	54.00	31.21	28.57	2.97	33.70	100	331 Average
3 @	2326.000	50.47	-23.53	74.00	49.86	30.71	3.66	33.77	100	0 Peak
4 @	2326.000	31.76	-22.24	54.00	31.15	30.71	3.66	33.77	100	315 Average



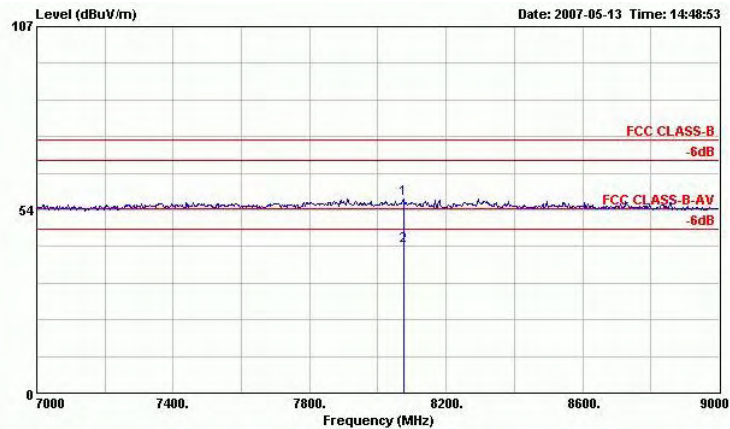
Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate:6



Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate:6

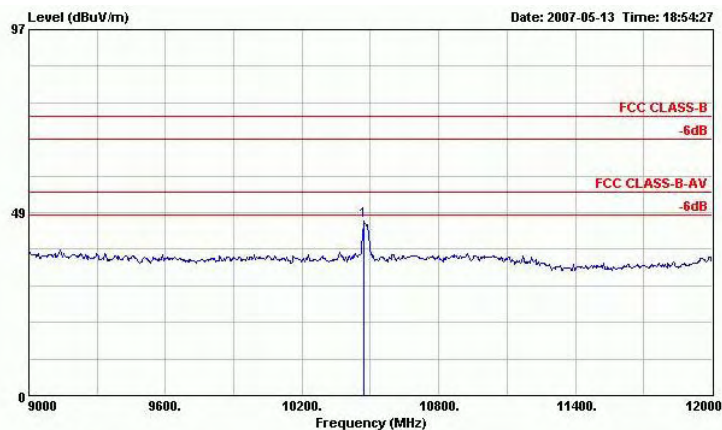
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level Factor	Loss Factor	dB	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1 @	5150.000	57.28	-16.72	74.00	51.56	33.96	6.00	34.24	100	0 Peak
2 @	5150.000	45.18	-8.82	54.00	39.46	33.96	6.00	34.24	100	70 Average
3 @	5240.000	99.59			93.80	33.99	6.00	34.21	100	70 Average
4 @	5240.000	109.05			103.26	33.99	6.00	34.21	100	0 Peak
5 @	5350.000	56.72	-17.28	74.00	50.83	34.04	6.00	34.15	100	0 Peak
6 @	5350.000	44.92	-9.08	54.00	39.03	34.04	6.00	34.15	100	70 Average
7 @	6966.000	62.17	-11.83	74.00	50.84	37.50	6.35	32.52	100	0 Peak
8 @	6966.000	50.02	-3.98	54.00	38.69	37.50	6.35	32.52	100	62 Average

Remark: #3 and #4 Fundamental Signal



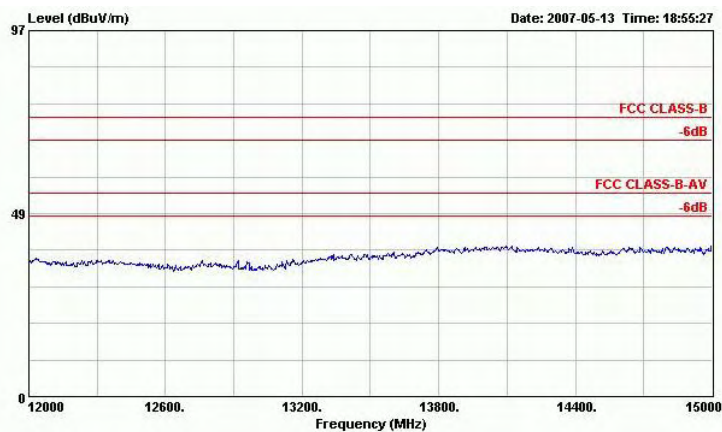
Site : 03CH04-HV
Condition: FCC CLASS-B 3m HF-ANT HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate: 6

	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 @	8076.000	56.63	-17.37	74.00	44.04	39.47	6.80	33.68	100	0 Peak
2 @	8076.000	42.98	-11.02	54.00	30.39	39.47	6.80	33.68	100	229 Average

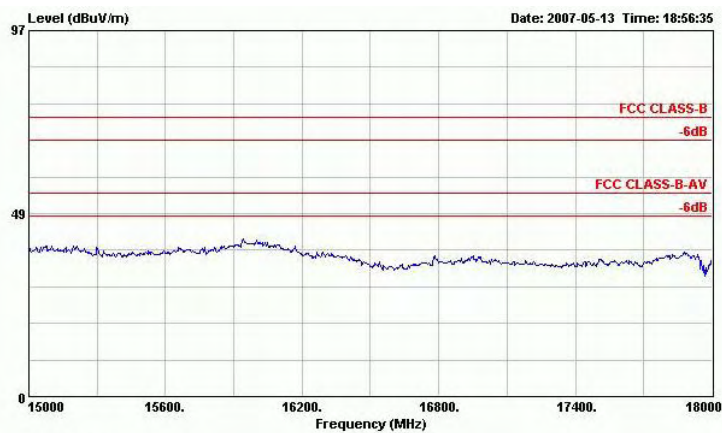


Site : 03CH04-HV
Condition: FCC CLASS-B 3m ACTIVE HORN HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate: 6

	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 @	10473.000	46.11	-27.89	74.00	81.41	-8.55	7.80	34.55	100	0 Peak



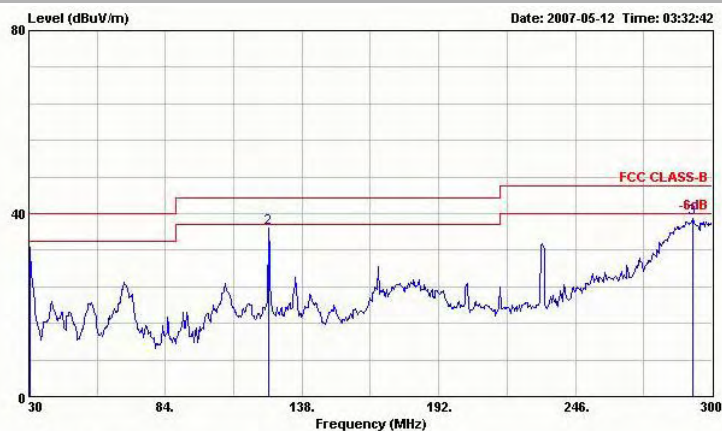
Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate: 6



Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN HORIZONTAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate: 6

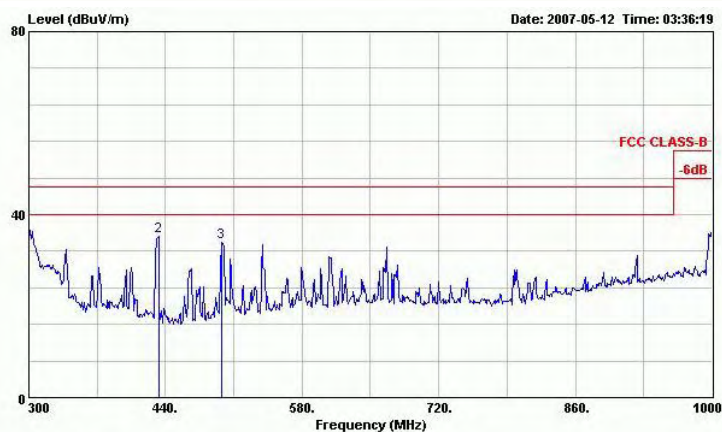
- Polarization : Vertical

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



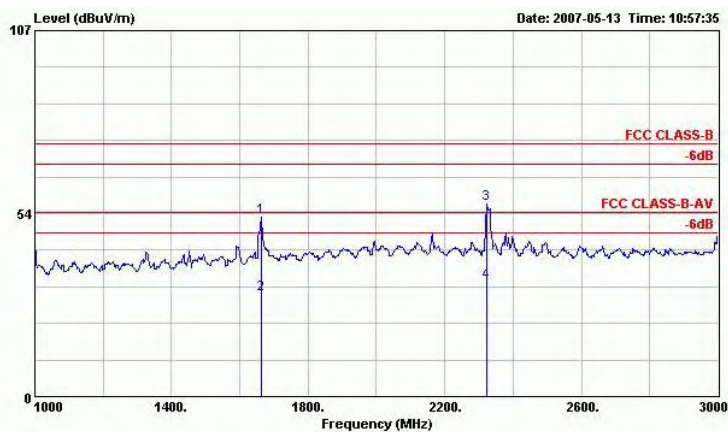
Site : 03CH04-HY
Condition: FCC CLASS-B 3m ANT2724 VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Line	dBuV/m	Level	Loss	Factor	Pos	Pos	Remark
					dBuV	dB/m	dB	dB	cm	deg
1	0	30.540	32.52	-7.48	40.00	48.45	16.36	0.64	32.93	---
2	0	124.770	36.95	-6.55	43.50	56.62	11.90	1.28	32.85	114 96 Peak
3	0	292.170	39.00	-7.00	46.00	57.46	12.35	2.01	32.82	---



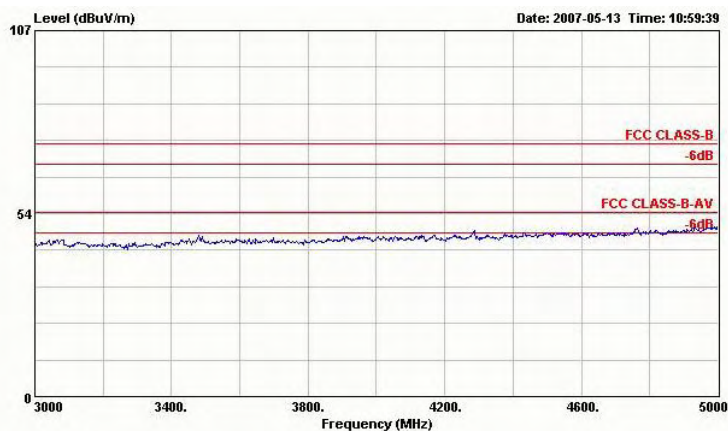
Site : 03CH04-HY
Condition: FCC CLASS-B 3m ANT2724 VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Line	dBuV/m	Level	Loss	Factor	Pos	Pos	Remark
					dBuV	dB/m	dB	dB	cm	deg
1	0	300.000	37.12	-8.88	46.00	55.59	12.31	2.03	32.81	---
2	0	433.000	35.25	-10.75	46.00	49.46	16.13	2.43	32.78	---
3	0	498.100	33.99	-12.01	46.00	47.15	16.89	2.60	32.64	---

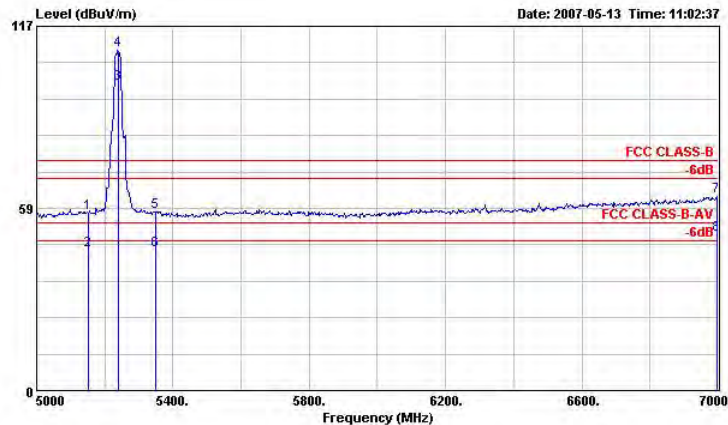


Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level Factor	Loss Factor	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	1662.000	52.37	-21.63	74.00	54.53	28.57	2.97	33.70	100	0 Peak
2 @	1662.000	29.80	-24.20	54.00	31.96	28.57	2.97	33.70	100	172 Average
3 @	2324.000	56.44	-17.56	74.00	55.83	30.71	3.66	33.77	100	0 Peak
4 @	2324.000	33.46	-20.54	54.00	32.85	30.71	3.66	33.77	100	188 Average



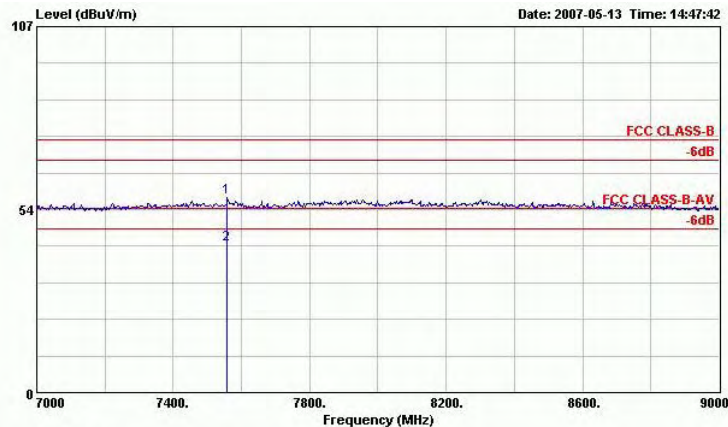
Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate: 6



Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate:6

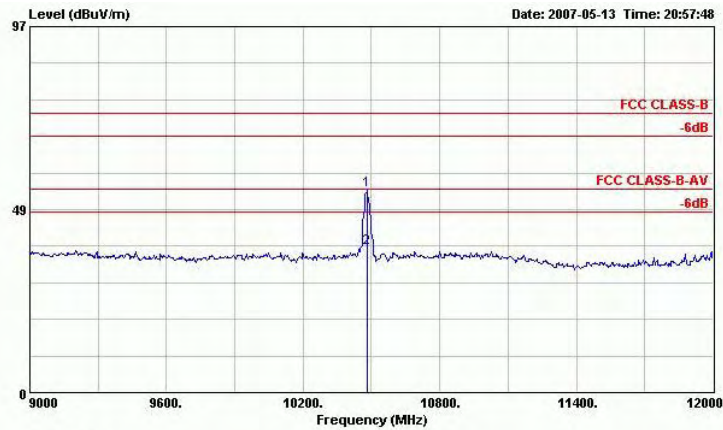
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	5150.000	56.85	-17.15	74.00	51.13	33.96	6.00	34.24	100	0 Peak
2 @	5150.000	44.90	-9.10	54.00	39.18	33.96	6.00	34.24	100	4 Average
3 @	5240.000	98.35			92.56	33.99	6.00	34.21	100	4 Average
4 @	5240.000	109.31			103.52	33.99	6.00	34.21	100	0 Peak
5 @	5350.000	57.44	-16.56	74.00	51.55	34.04	6.00	34.15	100	0 Peak
6 @	5350.000	44.92	-9.08	54.00	39.03	34.04	6.00	34.15	100	4 Average
7 @	6996.000	62.19	-11.81	74.00	50.63	37.70	6.36	32.50	100	0 Peak
8 @	6996.000	49.89	-4.11	54.00	38.33	37.70	6.36	32.50	100	336 Average

Remark: #3 and #4 Fundamental Signal



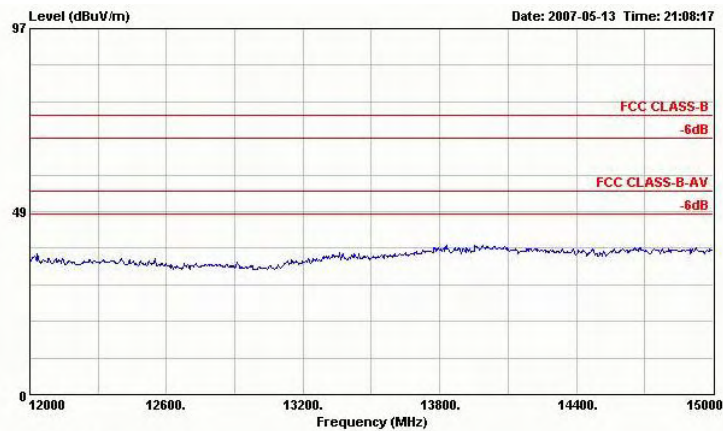
Site : 03CH04-HY
Condition: FCC CLASS-B 3m HF-ANT VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate:6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	7558.000	56.90	-17.10	74.00	44.95	39.15	6.58	33.78	100	0 Peak
2 @	7558.000	43.24	-10.76	54.00	31.29	39.15	6.58	33.78	100	67 Average

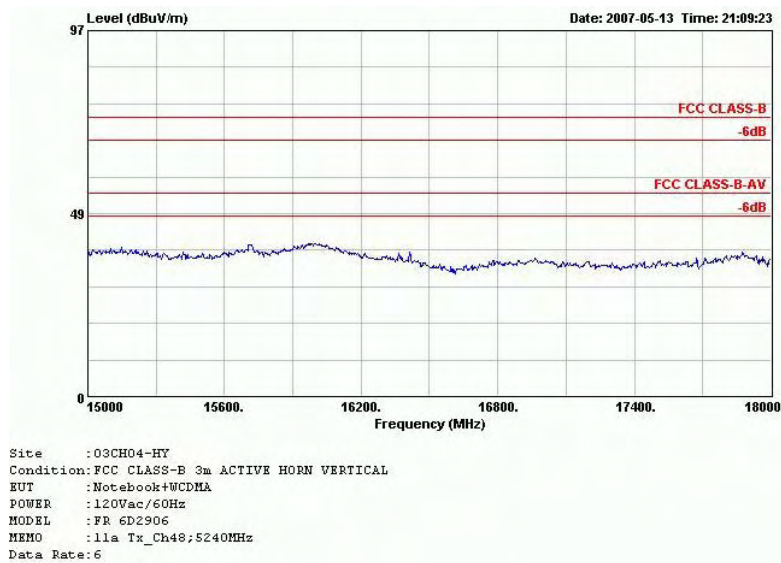


Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate: 6

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	Level Factor	Loss Factor	dB	Pos	Pos	Remark
					dB	dB/m			cm	deg
1 @	10482.000	53.66	-20.34	74.00	88.92	-8.53	7.80	34.53	100	0 Peak
2 @	10482.000	38.38	-15.62	54.00	73.64	-8.53	7.80	34.53	100	33 Average



Site : 03CH04-HY
Condition: FCC CLASS-B 3m ACTIVE HORN VERTICAL
EUT : Notebook+WCDMA
POWER : 120Vac/60Hz
MODEL : FR 6D2906
MEMO : 11a Tx_Ch48;5240MHz
Data Rate: 6



Remark : Frequency from 18GHz to 40GHz, the emission emitted by the EUT is too low to be measured.

5.7 Band Edges Measurement

5.7.1 Measuring Instruments :

As described in chapter 6 of this test report.

5.7.2 Test Procedure :

1. Set both RBW and VBW of spectrum analyzer to 1MHz with convenient frequency span including 1MHz bandwidth from band edge.
2. The band edges was measured and recorded.

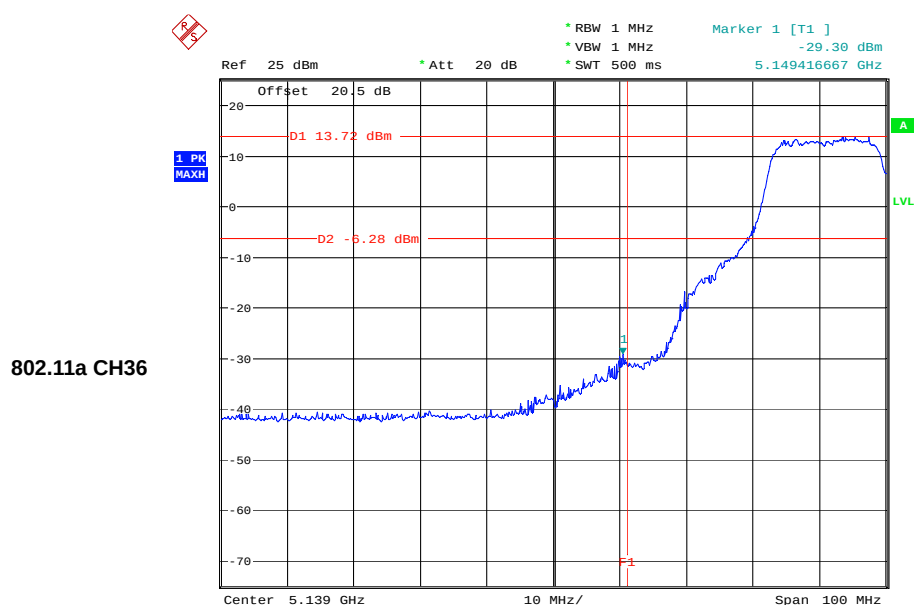
5.7.3 Test Result :

- Temperature : 23°C
- Relative Humidity :47%

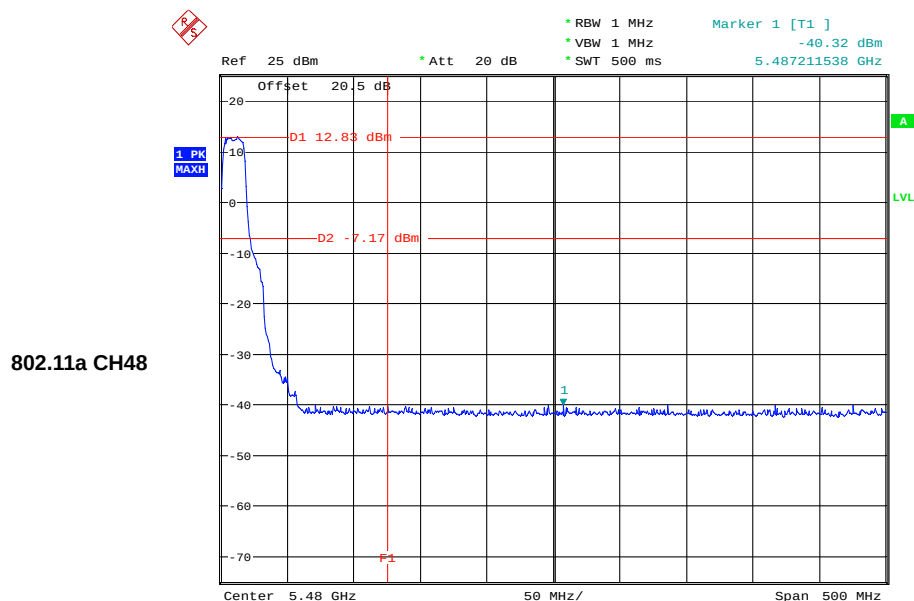
Test Result Mode
Test Result for 802.11a band I

Verdict
PASS

5.7.4 Test Data



Date: 11.MAY.2007 11:43:20



Date: 11.MAY.2007 12:07:49

5.7.5 EIRP Power

For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz.

Frequency(MHz)	Field Strength(dBuV/m)	EIRP (dBm)	Over Limit (dB)	Limit (EIPR dBm)
5150.00 MHz	62.84 dBuV/m	-37.16	-10.16	-27.00
5150.00 MHz	57.05 dBuV/m	-42.95	-15.95	-27.00
5350.00 MHz	56.72 dBuV/m	-43.28	-16.28	-27.00

5.8 Peak Excursion Ratio Measurement

5.8.1 Measuring Instruments :

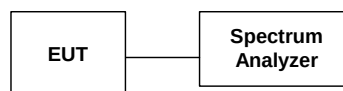
As described in chapter 6 of this test report.

5.8.2 Test Procedure :

The transmitter output is connected to the spectrum analyzer. The resolution bandwidth is set to and maintained at 1 MHz. First the video bandwidth is set to 1 MHz, Trace A is set to Max Hold, then to View. Then the video bandwidth is readjusted to 300 KHz, and the signal under this measurement condition is captured in Trace B.

The difference between the traces is investigated. The marker is placed at the frequency which shows the largest difference. The amplitude delta between the traces at this frequency is the peak excursion.

5.8.3 Test Setup Layout :



5.8.4 Test Result :

- Temperature : 23°C
- Relative Humidity :47%

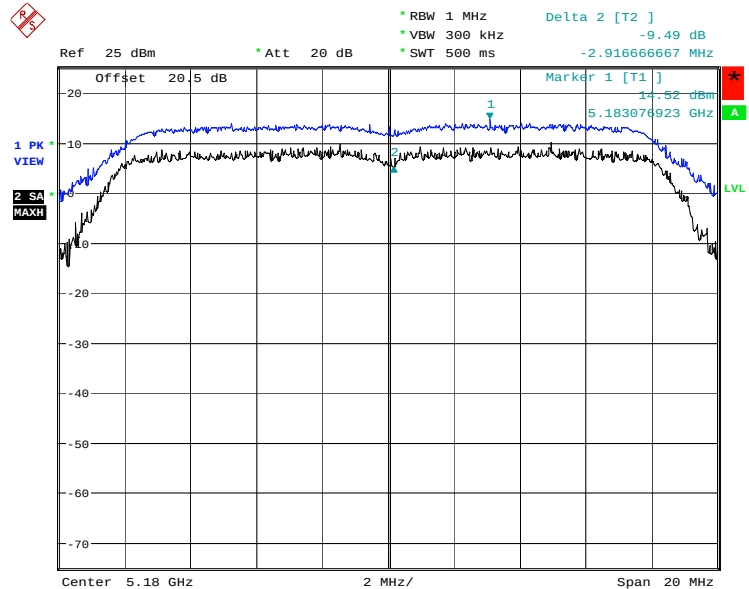
➤ Application: 802.11a

Channel	Frequency (MHz)	Peak Excursion (dB)	Limits (dB)	Mode Ref. No.
36	5180	-9.49	13	1
42	5210	-9.08	13	2
44	5220	-8.45	13	3
48	5240	-9.15	13	4

5.8.5 Test Data

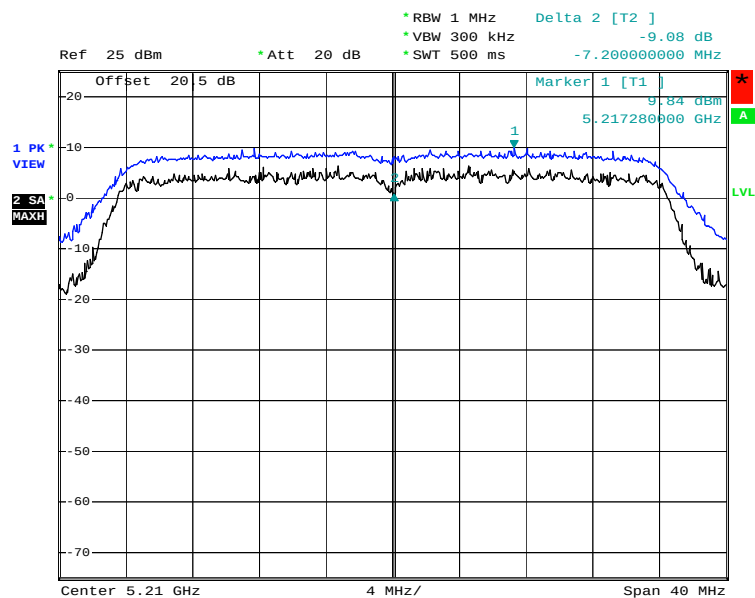
Mode Ref. No.

1



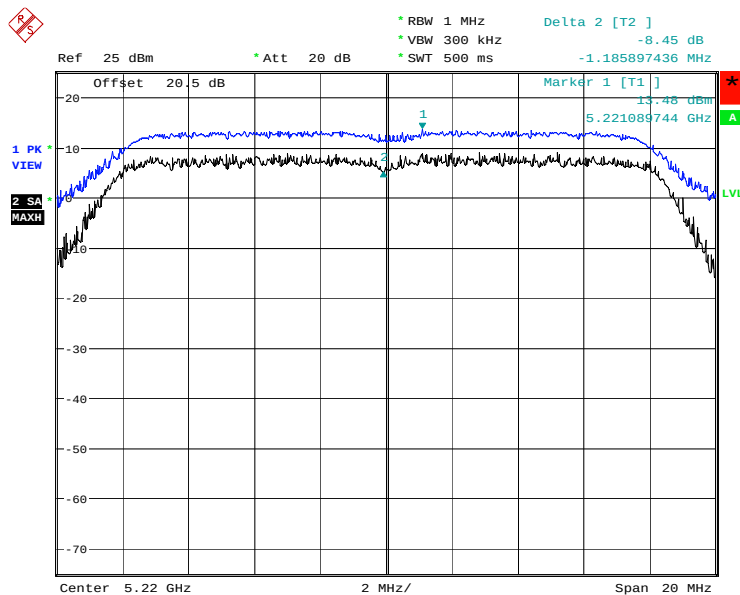
Date: 11.MAY.2007 11:44:54

2



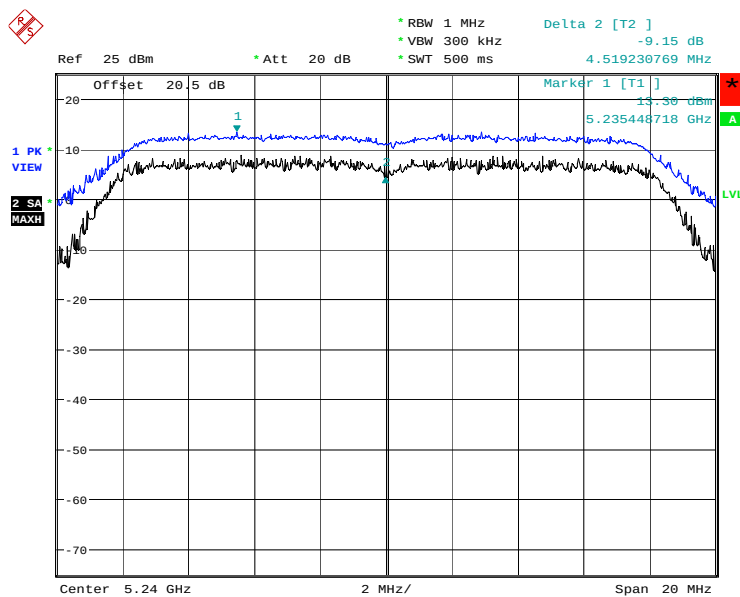
Date: 14.MAY.2007 16:41:07

3



Date: 11.MAY.2007 11:46:03

4



Date: 11.MAY.2007 11:47:06

5.9 Frequency Stability

To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.

The EUT was operated at the maximum output power, and connected to the spectrum analyzer which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

Frequency(MHz)	Low Frequency (Fl)	High Frequency (Fh)	Center Frequency (Fc)	Frequency Stability (ppm)
5180	5171.68	5188.32	5180	0.00
5210	5192.96	5227.12	5210.04	0.04
5220	5211.68	5228.32	5220	0.00
5240	5231.68	5248.32	5240	0.00

5.10 Automatically discontinue transmission

During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving .The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission .

5.11 Antenna Requirements

The EUT meets antenna requirement of FCC for the following reasons.

5.11.1 Standard Applicable

According to FCC 47 CFR Section 15.407(a)(1)(2), if transmitting antennas of directional gain greater than 6 dBi are used, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.11.2 Antenna Connected Construction

The antenna used in this product is PIFA for both WLAN and BT. The connector is I-PEX on antenna port and it is considered to meet antenna requirement of FCC.

5 List of Measuring Equipments Used

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
EMC Receiver	R&S	ESCS 30	100359	9kHz – 2.75GHz	Mar. 01, 2007	Mar. 01, 2008	Conduction (CO04-HY)
LISN	MessTec	NNB-2/16Z	99079	9kHz – 30MHz	Mar. 31, 2007	Mar. 31, 2008	Conduction (CO04-HY)
LISN (Support Unit)	EMCO	3810/2NM	9703-1839	9kHz – 30MHz	Mar. 22, 2007	Mar. 22, 2008	Conduction (CO04-HY)
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9kHz – 30MHz	Apr. 20, 2007	Apr. 20, 2008	Conduction (CO04-HY)
ISN	SCHAFFNER	ISN T400	21653	9kHz – 30MHz	Mar. 27, 2007	Mar. 27, 2008	Conduction (CO04-HY)
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	N/A	N/A	Conduction (CO04-HY)
Isolation Transformer	Erika Fiedler OHG	D-65396 Walluf	58	45MHz-2.15GHz	N/A	N/A	Conduction (CO04-HY)
3m Semi Anechoic	TDK	SAC-3M	03CH04-HY	30 MHz - 1 GHz 3m	Oct. 30, 2006	Oct. 30, 2007	Radiation (03CH04-HY)
Amplifier	Schaffner	CPA9231A	3564	9 kHz - 2 GHz	Aug. 31, 2006	Aug. 31, 2007	Radiation (03CH04-HY)
Spectrum Analyzer	R&S	FSP7	100641	9 kHz – 7GHz	Sep. 08, 2006	Sep. 08, 2007	Radiation (03CH04-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2724	30 MHz - 1 GHz	Aug. 14, 2006	Aug. 14, 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. 21, 2007	Radiation (03CH04-HY)

6 Uncertainty of Test Site

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	0.11	Normal(k=2)	0.06
Antenna factor calibration	0.91	Normal(k=2)	0.46
Cable loss calibration	0.12	Normal(k=2)	0.06
Pre Amplifier Gain calibration	0.15	Normal(k=2)	0.08
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.52	Rectangular	0.88
Mismatch	+0.45/-0.48	U-shaped	0.33
combined standard uncertainty Uc(y)	1.30		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	2.60		

The measured result is : y dBuV $\pm$ U dB

for a level of confidence of approximately 95% , (k= 2)

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 Uc(y)	2.36				
Measuring uncertainty for a level of confidence of 95% U=2Ue(y)	4.72				