



FCC Test Report

According to

47 CFR Part 15 Subpart C

Equipment : Notebook Computer

Trade Name : acer

Model Name : ZG5, Aspire one

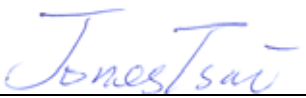
FCC ID : HLZZG5

Filing Type : Certification

Applicant : Acer Inc.

8F, 88, Sec.1, Hsin Tai Wu Rd. Hsichih Taipei Hsien 221
Taiwan, R.O.C.

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- **Certificate or Test Report must not be used by the applicant to claim the product in this test report endorsement by NVLAP or any agency of U.S. government.**
- The data shown in this test report were carried out on Jul. 22, 2008 at **Sporton International Inc. LAB.**
- Report No.: FR870804, Report Version: Rev.01



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Manager

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Report Version: Rev.01

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History of This Test Report

Report Issue Date: Jul. 22, 2008

Report No.	Description

1. General Description of Equipment under Test

1.1 Applicant

Acer Inc.

8F, 88, Sec.1, Hsin Tai Wu Rd. Hsichih Taipei Hsien 221 Taiwan, R.O.C.

1.2 Manufacturer

Quanta Computer Inc.

1. No.2, Lane 58, Sanzhuang Road, Songjiang Export Processing Zone, Shanghai, P.R. China
2. No.4, Wen Ming 1st Street, Kuei Shan Hsiang, Taoyuan Shien, Taiwan, R.O.C.333
3. No.8, Dongjing Rd., Songjiang Industrial Zone, Shanghai, P.R. China
4. No.4, Lane 58 Sanzhuang Road, Songjiang Export Processing Zone, Shanghai, P.R. China
5. North to Songsheng. Road, Songjiang Industrial Zone, Shanghai, P.R. China
6. B#, No.1 South Rongteng Road, Songjiang Export Processing Zone, Shanghai, P.R. China
7. Standard Factory, South to Valqua, Rongxin Road, Songjiang Export Processing Zone, Shanghai, P.R. China
8. C#, No.1 South Rongteng Road, Songhjang Export Processing Zone, Shanghai, P.R. China
9. No.6, Lane 66 Sanzhuang Road, Songjiang Export Processing Zone, Shanghai, P.R. China
10. No.6, Lane 58 Sanzhuang Road, Songjiang Export Processing Zone, Shanghai, P.R. China
11. Huade Building , No.18 ChuangYe Rd., ShandDi Zone, HaiDian District, Beijing, P.R.C.
12. No.68 Sanzhuang Road, Songjiang Export Processing Zone, Shanghai, P.R. China
13. 2F, C Building, XinYe Rd, Export Processing District In Torch, Zhongshan, Guangdong, P.R.C.

1.3 Basic Description of Equipment under Test

AC Adapter	Brand Name	LITE-ON
	Model Name	PA-1300-04
	Power Rating	I/P:100-240Vac, 50-60Hz, 1.0A; O/P: 19Vdc, 1.58A,
	AC Power Cord Type	3.20 meter shielded cable with ferrite core
Battery	Brand Name	Panasonic
	Model Name	UM08A52
	Power Rating	10.8Vdc, 2900mAh/31Wh
	Type	Li-ion

Remark: Above EUT's information was declared by manufacturer. Please refer to the specifications of manufacturer or User's Manual for more detailed features description.

Notebook Specification			
Housing Type	Plastic		
AC Power Adapter	Lite-on	Model	PA-1300-04AC
AC Power Adapter Rating	I/P: 100-240Vac O/P:19Vdc, 1.58A		
AC Power Core Type	Non-shielded AC 3-pin (1.8m)		
DC Power Cable Type	Non-shielded DC (1.5m) with one ferrite core		
CPU	Intel	Model	N270 (1.6GHz)
Memory Capacity	512MB / 1GB		
8.9" LCD Panel	AUO	Model	A089SW01 V0
			A089SW01 V1
	CHI MEI	Model	N089L6-L02
HDD	Intel	Model	Z-U130 SLC (4GB)
			ZT4 MLC (4GB)
			ZT4 MLC (8GB)
	Sandisk	Model	uSSD MLC (8GB)
	Seagate	Model	ST980310AS (80GB)
	WD	Model	WD800BEVT-22ZCT0 (80GB)
	HGST	Model	HTS543280L9A300 (80GB)
Battery	SIMPLO	Model	UM08A71
			UM08A72
			UM08A73
			UM08B74
	Panasonic	Model	UM08A52
Wireless LAN	Atheros	Model	AR5BXB63
Camera	Lite-On	Model	08PC01 SP0814V1.2
	Suyin		CN0316-M608-0V01

1.4 Feature of Equipment under Test

Product Feature & Specification				
DUT Type :	Notebook Computer			
Trade Name :	acer			
Model Name :	ZG5, Aspire one			
FCC ID :	HLZZG5			
Tx Frequency :	2400 MHz ~ 2483.5 MHz			
Rx Frequency :	2400 MHz ~ 2483.5 MHz			
Number of Channels :	11			
Carrier Frequency of Each Channel :	2412+(n-1)*5 MHz; n=1~11			
Channel Spacing :	5 MHz			
Maximum Output Power to Antenna :	802.11b : 21.19 dBm 802.11g : 21.00 dBm			
Antenna Type :	PCB Antenna			
Antenna Gain :	1.58 dBi			
HW Version :	D			
SW Version :	3109			
Type of Modulation :	DSSS / OFDM			
Function Type :	Transmitter		Transceiver	V
DUT Stage :	Production Unit			

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. Power Table as below:

802.11b

Channel	Frequency (MHz)	Data Rate (dBm)			
		1 Mbps	2 Mbps	5.5 Mbps	11 Mbps
CH 01	2412 MHz	19.96	20.04	20.23	20.07
CH 06	2437 MHz	20.95	21.19	21.13	20.91
CH 11	2462 MHz	20.57	20.64	21.01	21.06

802.11g

Channel	Frequency (MHz)	Data Rate (dBm)							
		6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps
CH 01	2412 MHz	20.73	20.95	20.88	21.00	20.88	20.74	20.79	20.91
CH 06	2437 MHz	20.67	20.80	20.83	20.79	20.81	20.71	20.81	20.85
CH 11	2462 MHz	20.08	20.00	20.4	20.75	20.42	20.58	20.24	20.44

The 802.11b data rate were set in 2Mbps and the 802.11g data rate were set in 18Mbps due to the highest RF output power.

- 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

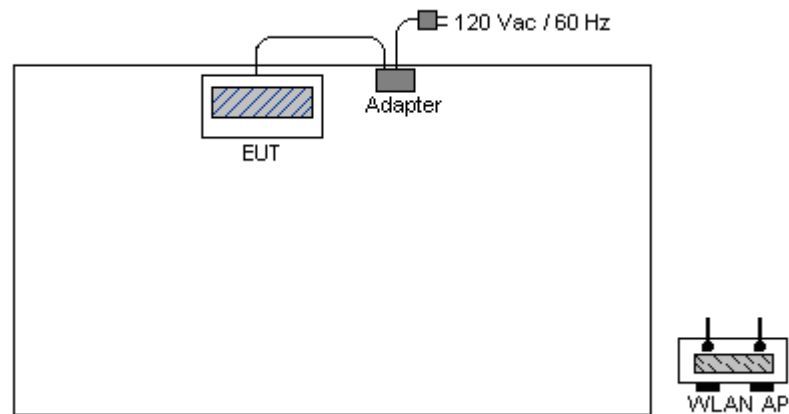
Test Item	Test Mode	
Radiated Emission / RF Conducted	802.11b	802.11g
	Mode 1: CH01_2412 MHz	Mode 4: CH01_2412 MHz
	Mode 2: CH06_2437 MHz	Mode 5: CH06_2437 MHz
	Mode 3: CH11_2462 MHz	Mode 6: CH11_2462 MHz
Conducted Emission	Mode 1: WLAN Link Mode + Adapter	

2.3 Ancillary Equipment List

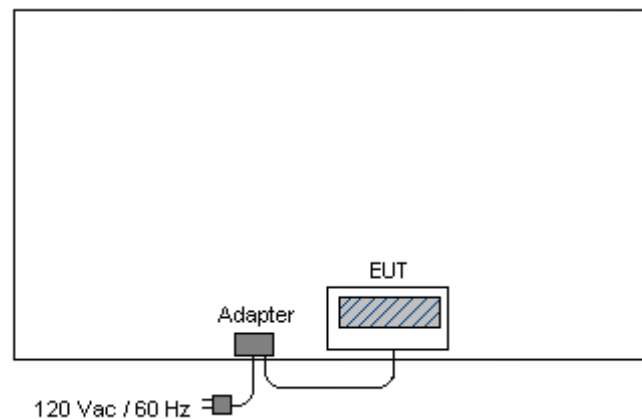
Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	SMC	SMC-100	HEDWG4005ACC	N/A	Unshielded, 1.8 m

2.4 Connection Diagram of Test System

< Conducted Emission >



< Radiated Emission >



3. RF Utility

The programmed RF Utility is installed in EUT to provide channel selection, power level, data rate and the application type. RF Utility can send transmitting signal for all testings.

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 : 886-3-328-4978
Test Site No : CO05-HY, 03CH06-HY
FCC Designation No : TW1022

4.1 Test Voltage

AC 120V / 60Hz

4.2 Standard for Methods of Measurement

ANSI C63.4-2003

4.3 Test Compliance

47 CFR Part 15 Subpart C

4.4 Frequency Range

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

The Emission Mode: Wireless LAN

FCC Rule	Description of Test	Result
15.207	Conducted Emission	Pass
15.247(a)(2)	6dB Bandwidth	Pass
15.247(b)(1)	Maximum Peak Output Power	Pass
15.209(a) 15.247(d)	Radiated Emission	Pass
15.247(d)	100 KHz Bandwidth of Frequency Band Edges	Pass
15.247(e)	Power Spectral Density	Pass
15.203 15.247(b)(4)	Antenna Requirement	Pass

5.2 6dB Bandwidth Measurement

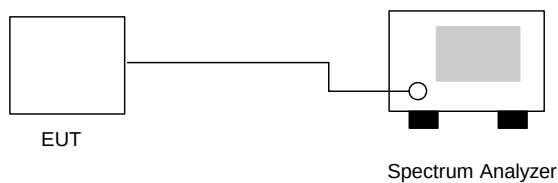
5.2.1 Measuring Instruments

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 : 24~25°C
- Relative Humidity : 51~53%
- Test Enginner : Sam

▪ 802.11b

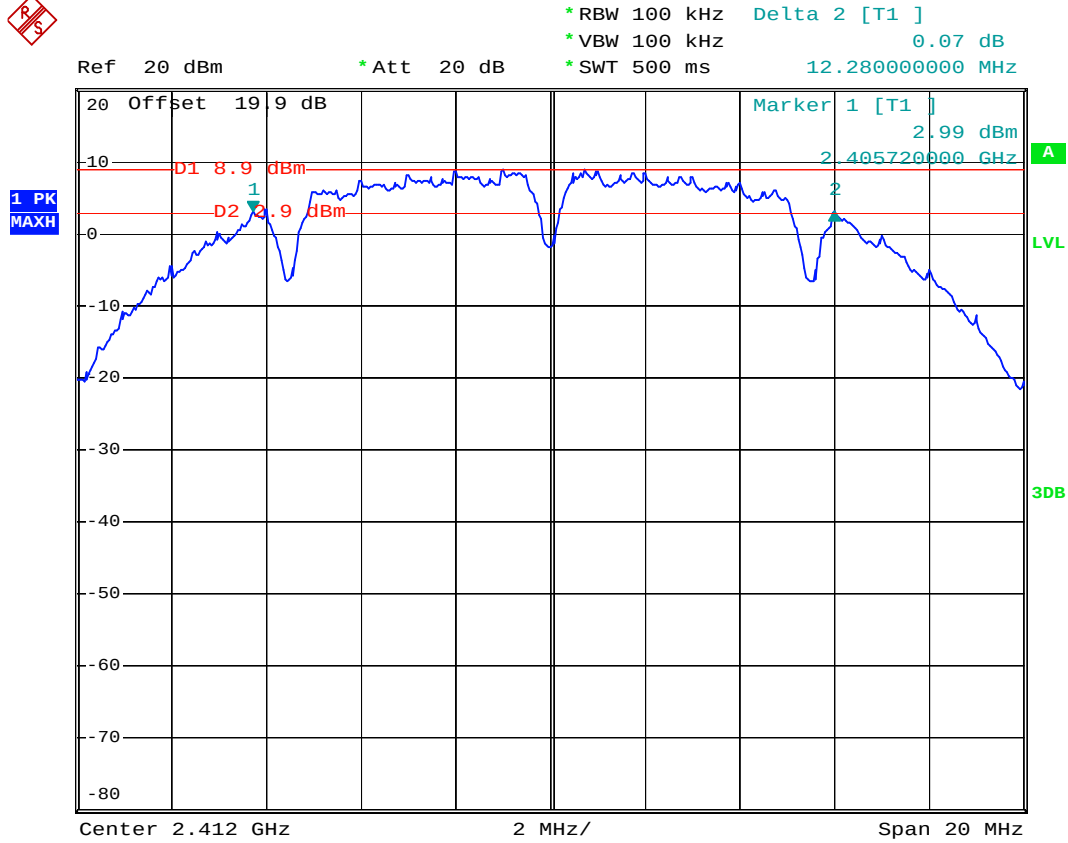
Channel	Frequency (MHz)	6dB Emission bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
01	2412	12.28	> 0.5MHz	Mode 1
06	2437	12.32	> 0.5MHz	Mode 2
11	2462	12.12	> 0.5MHz	Mode 3

▪ 802.11g

Channel	Frequency (MHz)	6dB Emission bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
01	2412	16.44	> 0.5MHz	Mode 4
06	2437	16.36	> 0.5MHz	Mode 5
11	2462	16.40	> 0.5MHz	Mode 6

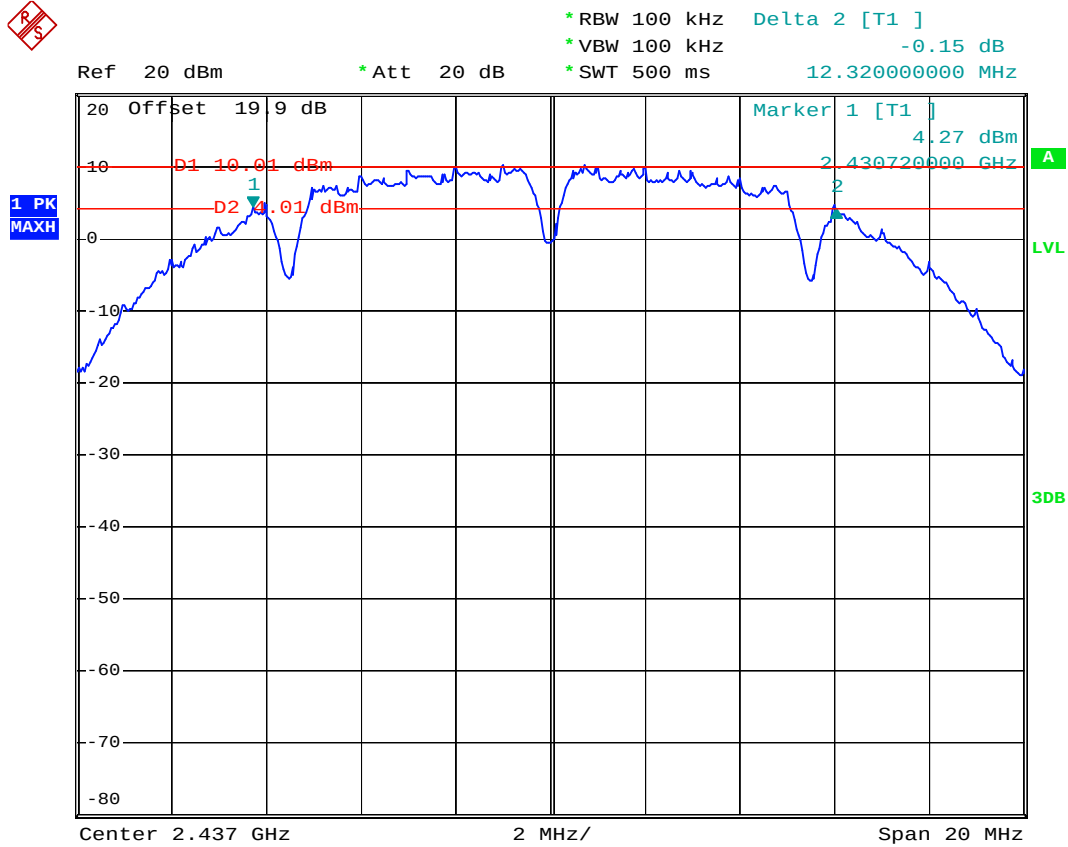
5.2.5 6dB Bandwidth

Mode 1



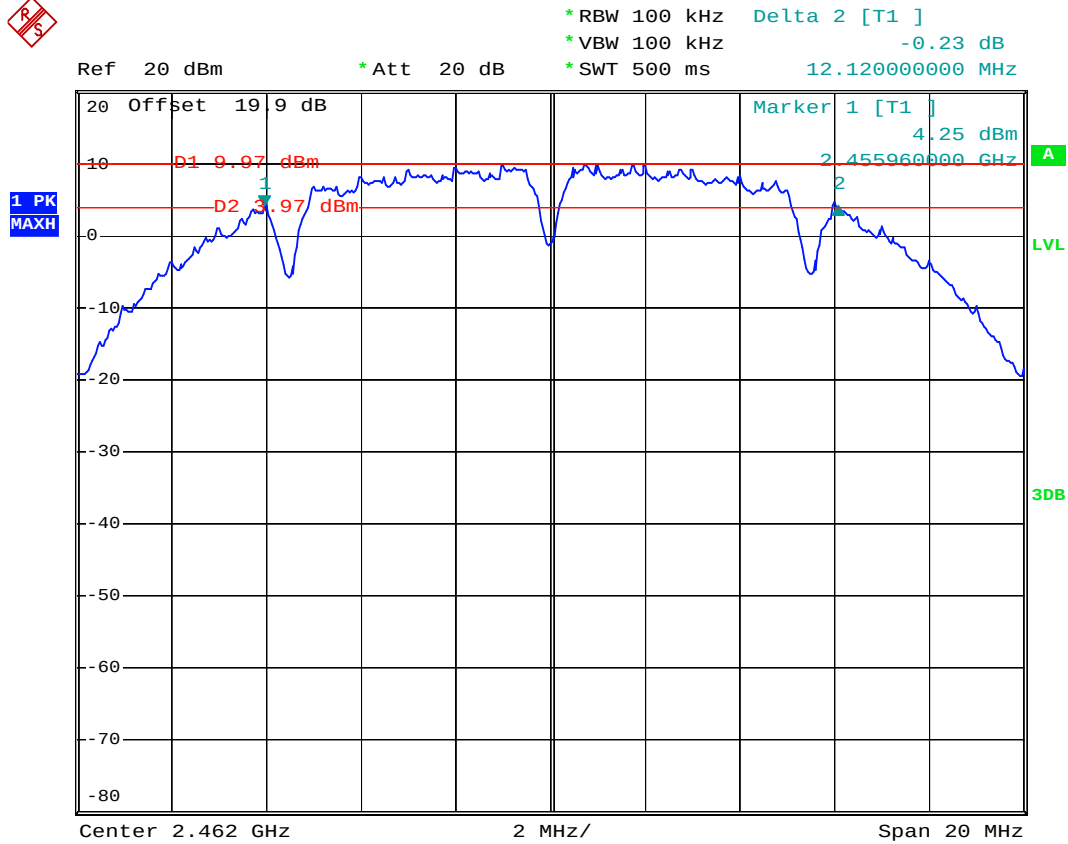
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Mode 2



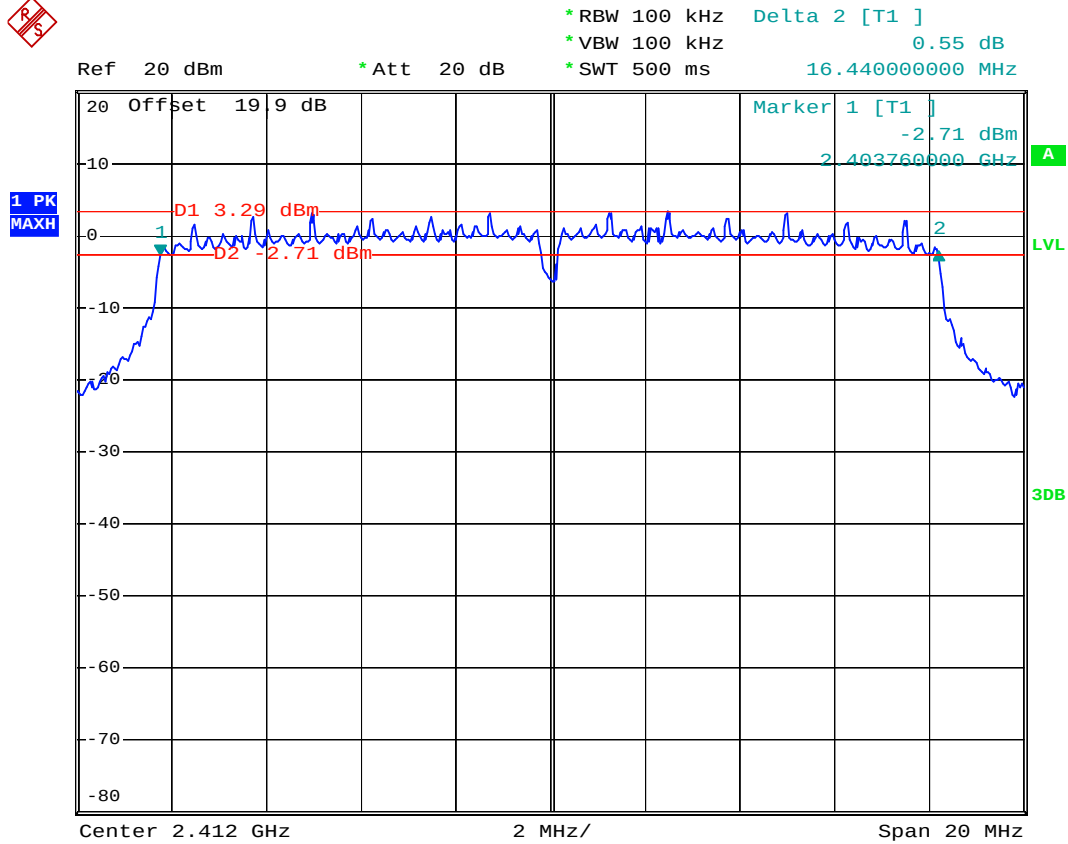
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Mode 3



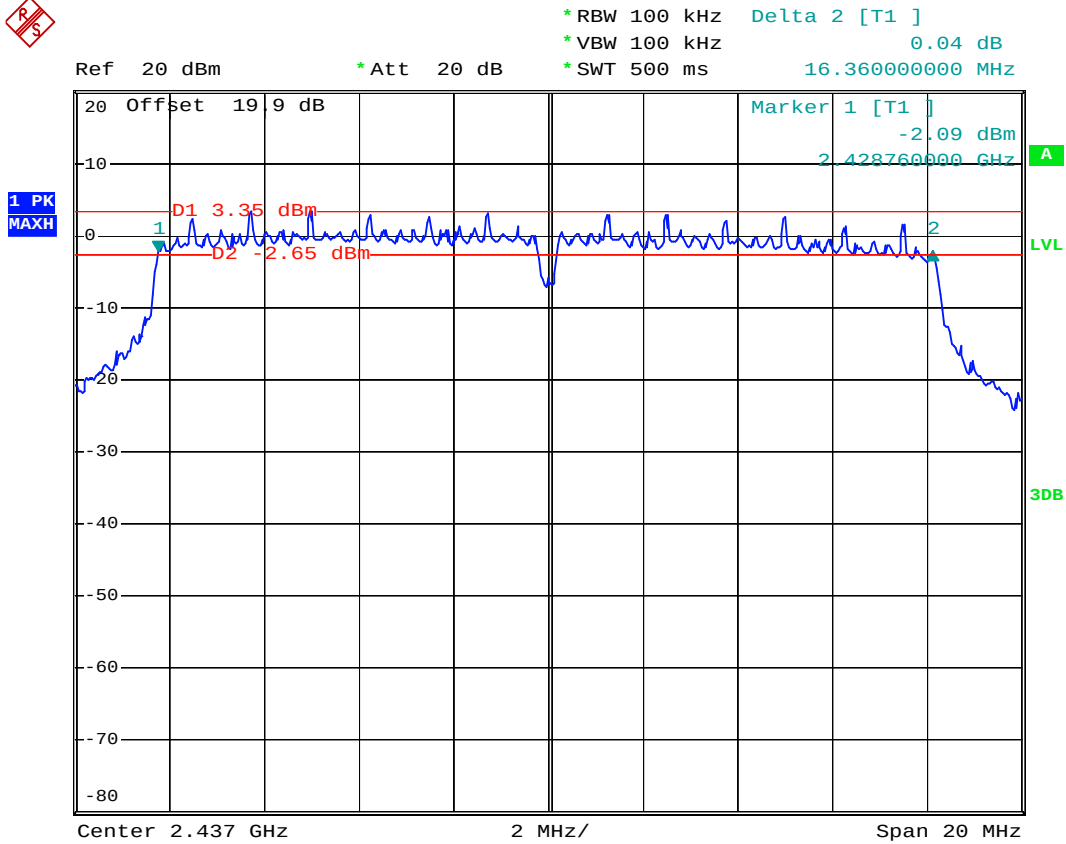
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Mode 4



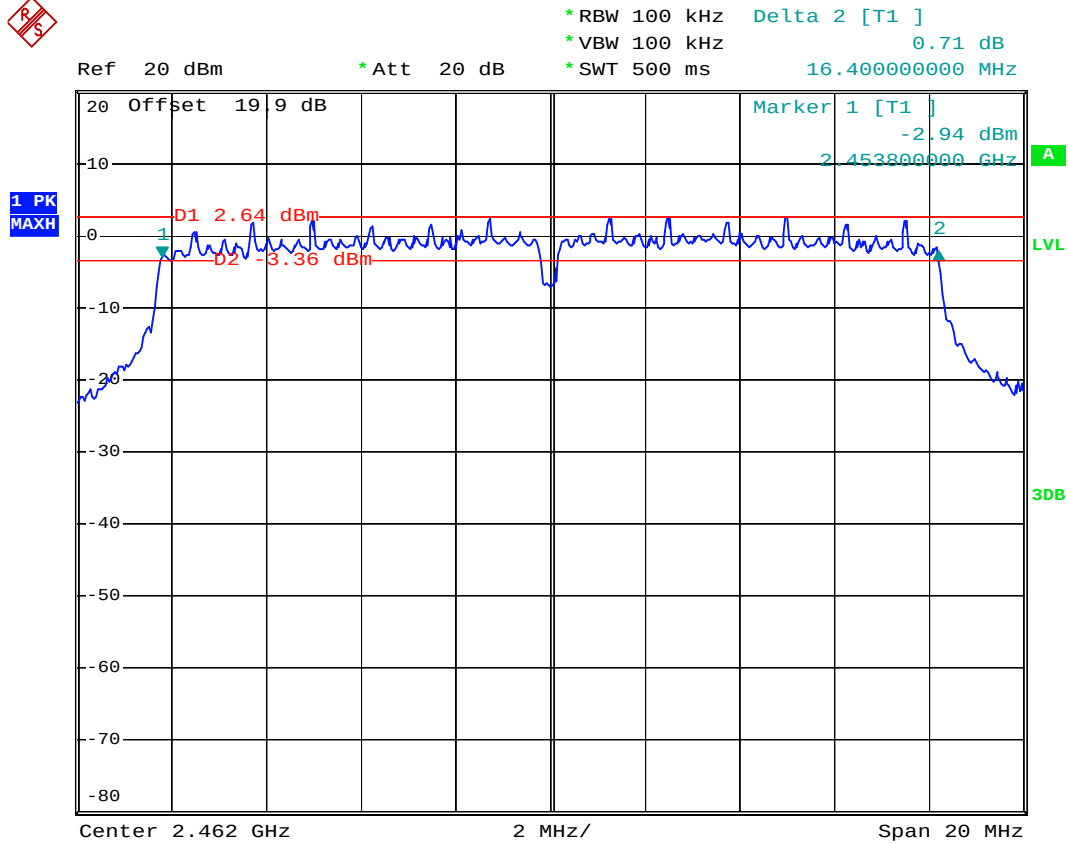
Date: 22.JUL.2008 06:57:48

Mode 5



Date: 22.JUL.2008 06:59:42

Mode 6



Date: 22.JUL.2008 07:00:58

5.3 Power Spectral Density Measurement

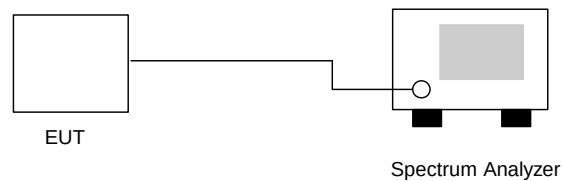
5.3.1 Measuring Instruments

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 : 24~25°C
- Relative Humidity : 51~53%
- Test Enginner : Sam

802.11b

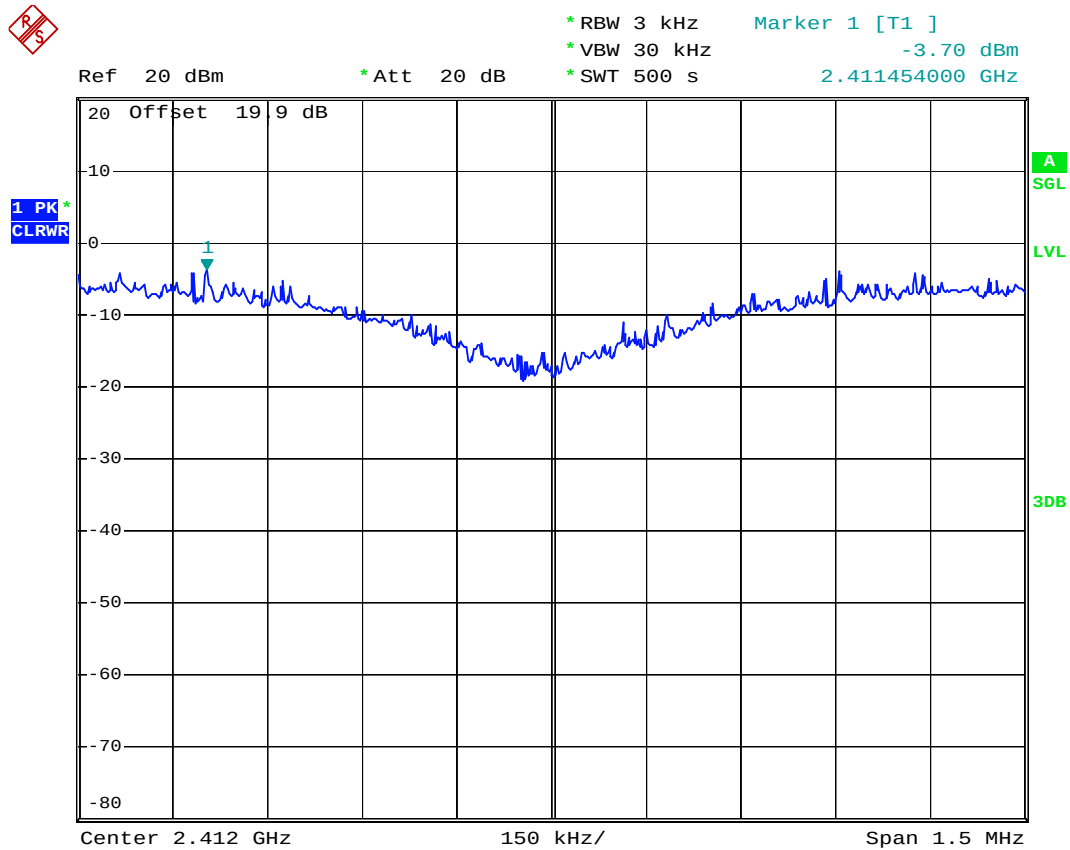
Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)	Plot Ref. No.
01	2412	-3.70	8	Mode 1
06	2437	-2.42	8	Mode 2
11	2462	-2.71	8	Mode 3

802.11g

Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)	Plot Ref. No.
01	2412	-9.29	8	Mode 4
06	2437	-9.69	8	Mode 5
11	2462	-10.10	8	Mode 6

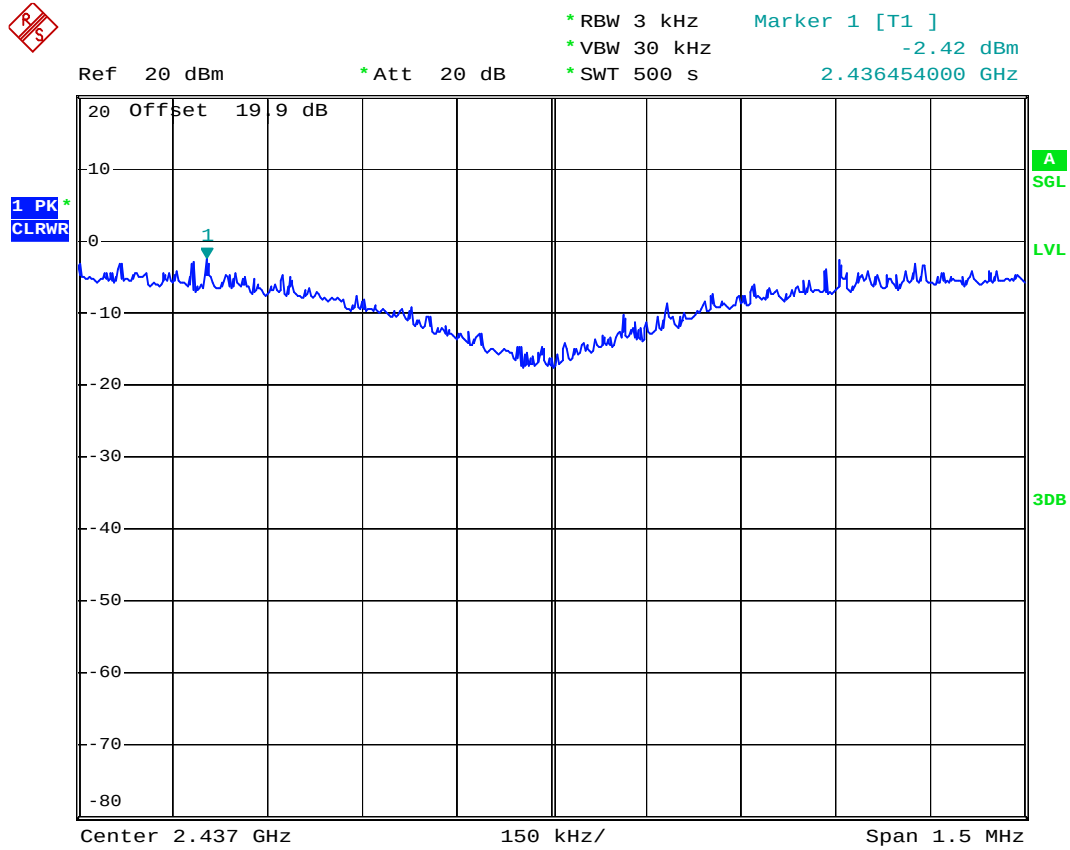
5.3.5 Power Spectral Density

Mode 1



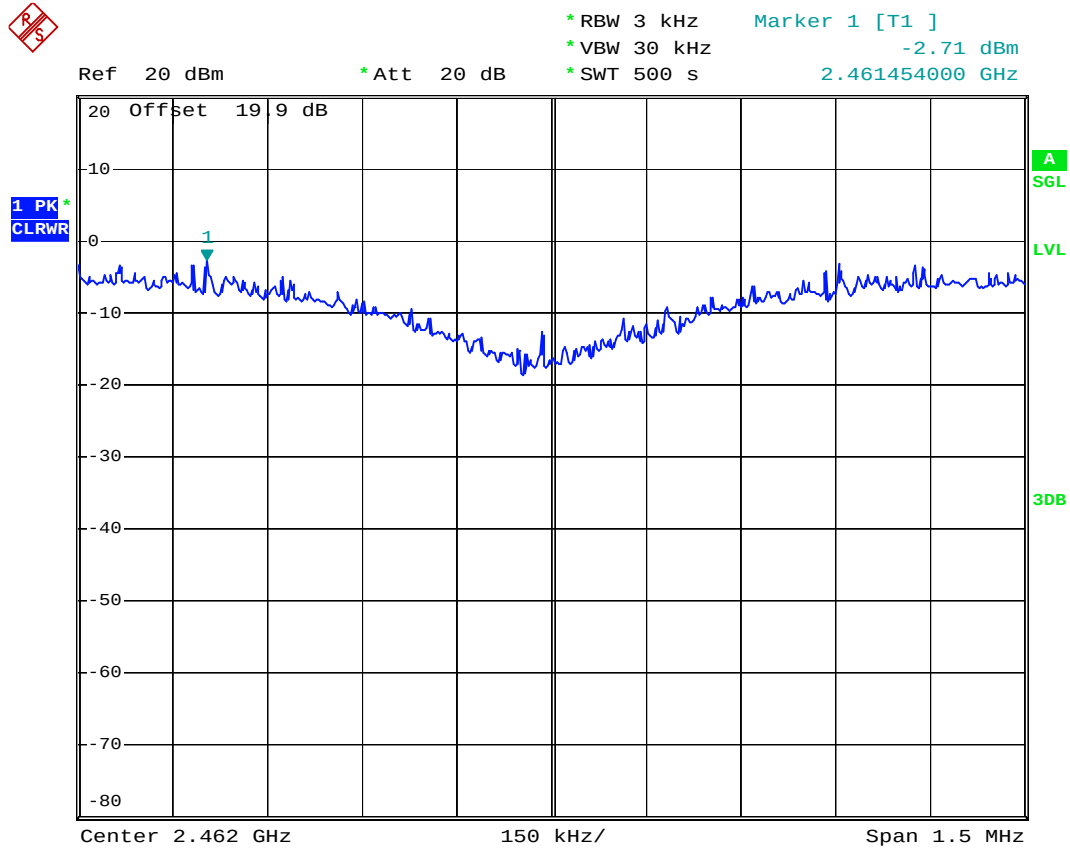
Date: 18.JUL.2008 23:49:01

Mode 2



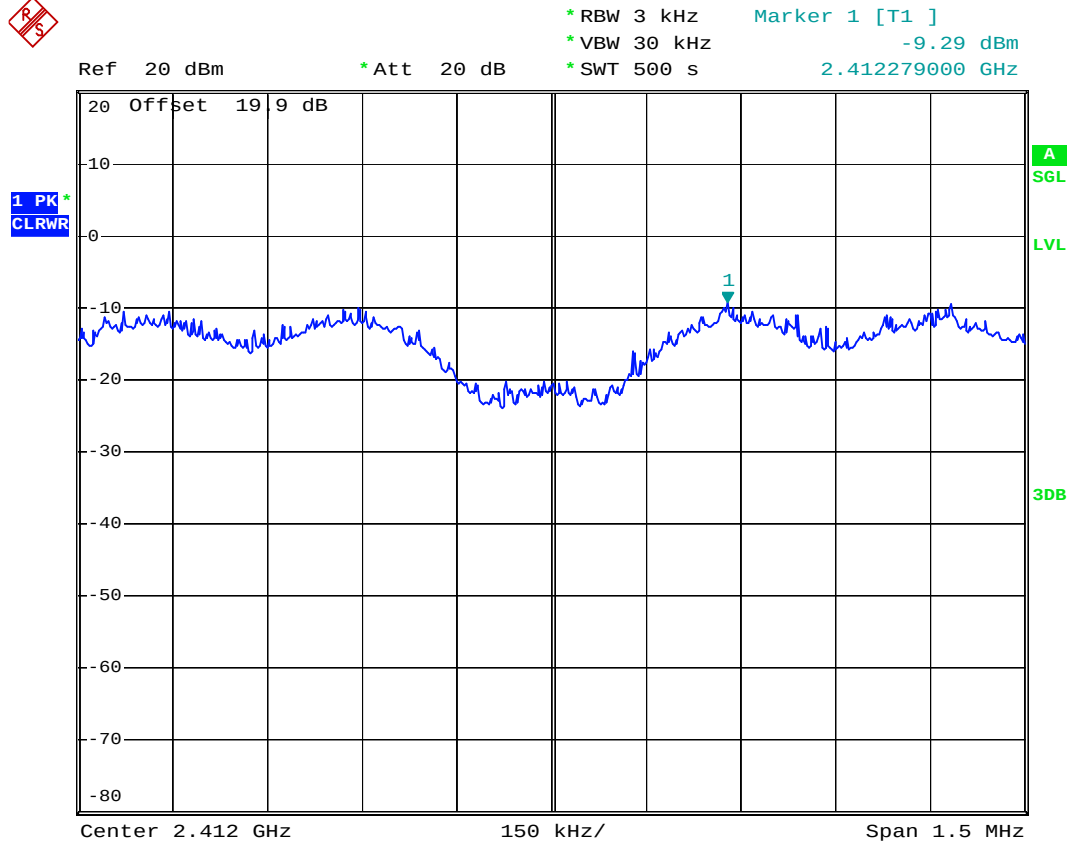
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Mode 3



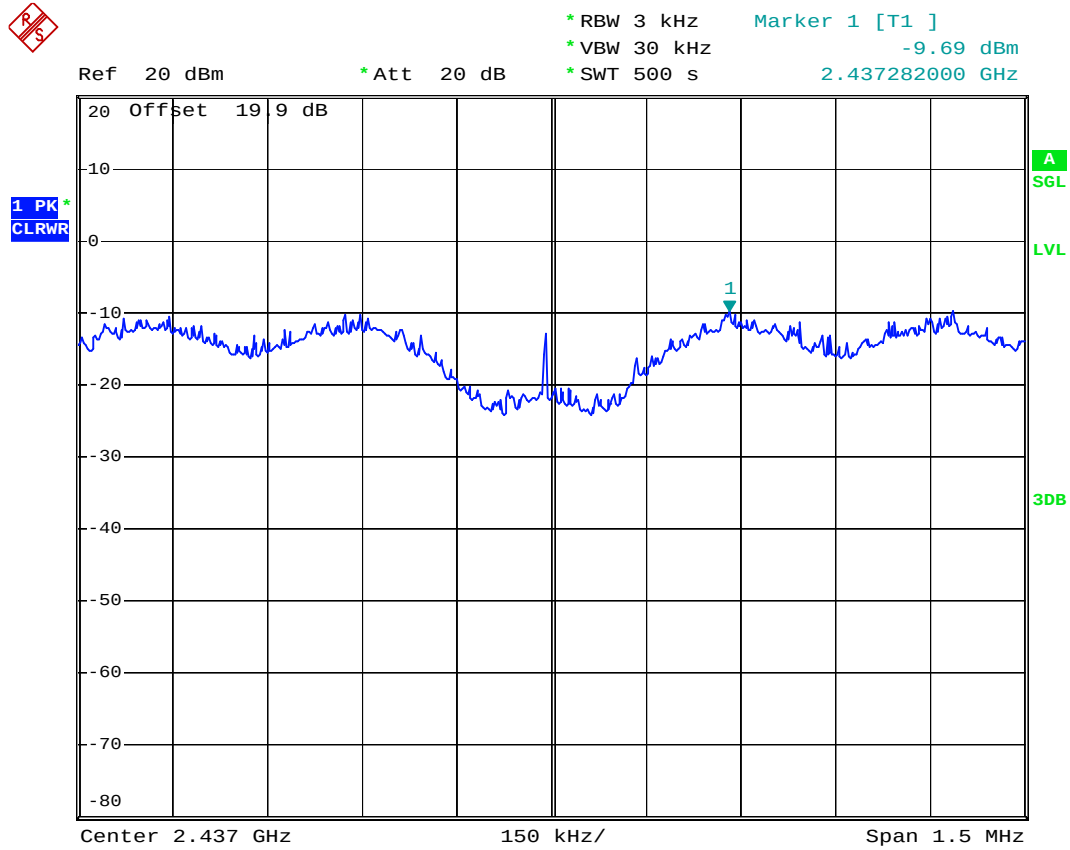
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Mode 4



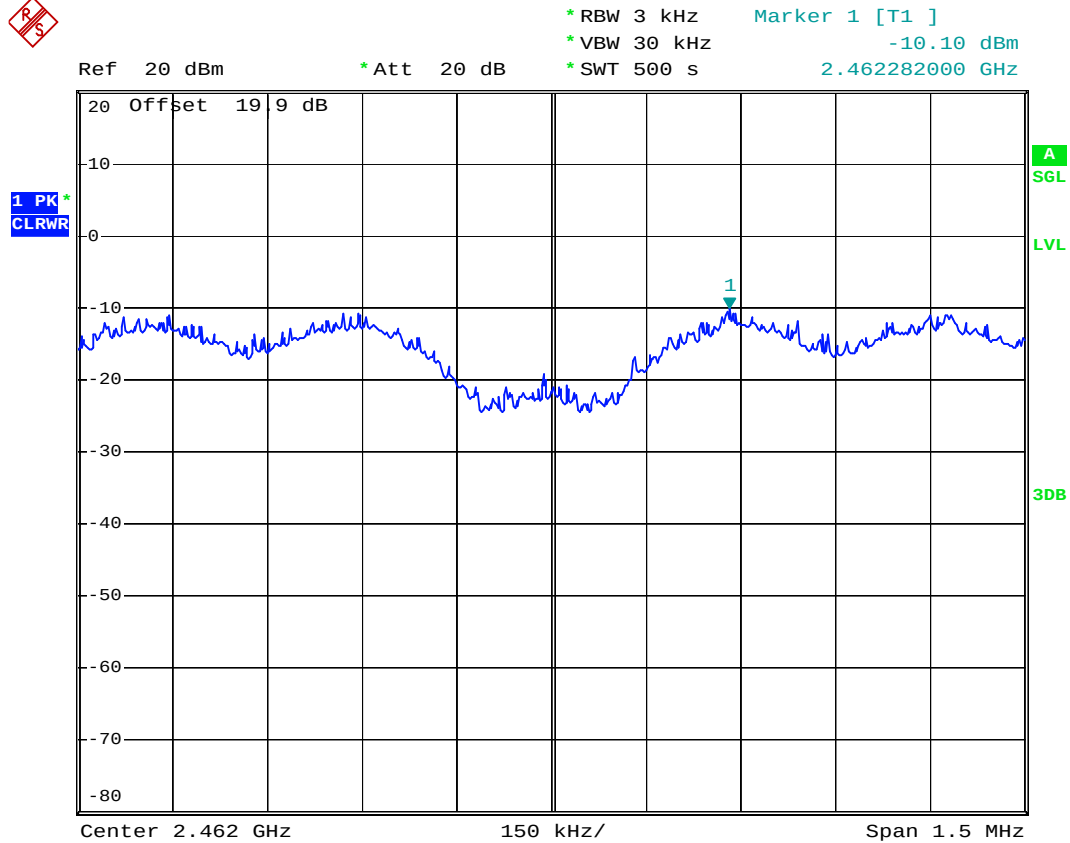
Date: 22.JUL.2008 07:33:26

Mode 5



Date: 22.JUL.2008 07:22:23

Mode 6



Date: 22.JUL.2008 07:11:44

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 100 KHz 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 : 24~25°C
- Relative Humidity : 51~53%
- Test Enginner : Sam

Test Result in WLAN lower band (802.11b/g)	:	PASS
Test Result in WLAN higher band (802.11b/g)	:	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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2385.81	44.56	-9.44	54.00	44.46	31.86	3.92	35.68	121	49	Average
2385.81	52.71	-21.29	74.00	52.61	31.86	3.92	35.68	100	0	Peak

CH01 (Vertical)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.99	51.94	-22.06	74.00	51.84	31.86	3.92	35.68	100	0	Peak
2389.99	42.74	-11.26	54.00	42.64	31.86	3.92	35.68	100	19	Average

CH11 (Horizontal)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.50	57.79	-16.21	74.00	57.46	31.98	4.05	35.70	100	0	Peak
2483.50	49.15	-4.85	54.00	48.82	31.98	4.05	35.70	119	48	Average

CH11 (Vertical)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.50	55.01	-18.99	74.00	54.68	31.98	4.05	35.70	100	0	Peak
2483.50	45.53	-8.47	54.00	45.20	31.98	4.05	35.70	100	31	Average

➤WLAN 802.11g
CH01 (Horizontal)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2390.00	49.95	-4.05	54.00	49.85	31.86	3.92	35.68	121	49	Average
2390.00	74.92	-2.08	74.00	74.82	31.86	3.92	35.68	100	0	Peak

CH01 (Vertical)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2390.00	46.88	-7.12	54.00	46.78	31.86	3.92	35.68	100	18	Average
2390.00	71.35	-2.65	74.00	71.25	31.86	3.92	35.68	100	0	Peak

CH11 (Horizontal)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.50	74.58	-2.42	74.00	71.25	31.98	4.05	35.70	100	0	Peak
2483.50	49.69	-4.31	54.00	49.36	31.98	4.05	35.70	117	48	Average

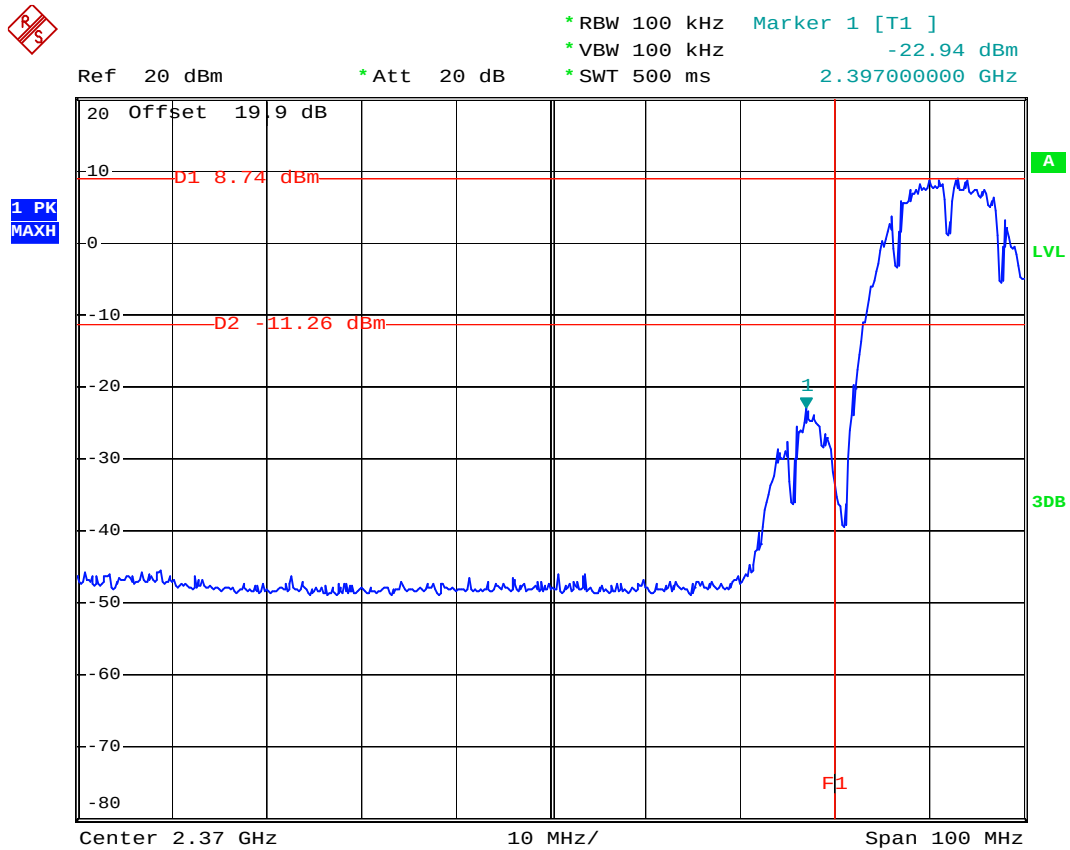
CH11 (Vertical)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.50	69.45	-4.55	74.00	69.12	31.98	4.05	35.70	100	0	Peak
2483.50	47.27	-6.73	54.00	46.94	31.98	4.05	35.70	100	31	Average

5.4.5 20dB Band Edge

WLAN 802.11b

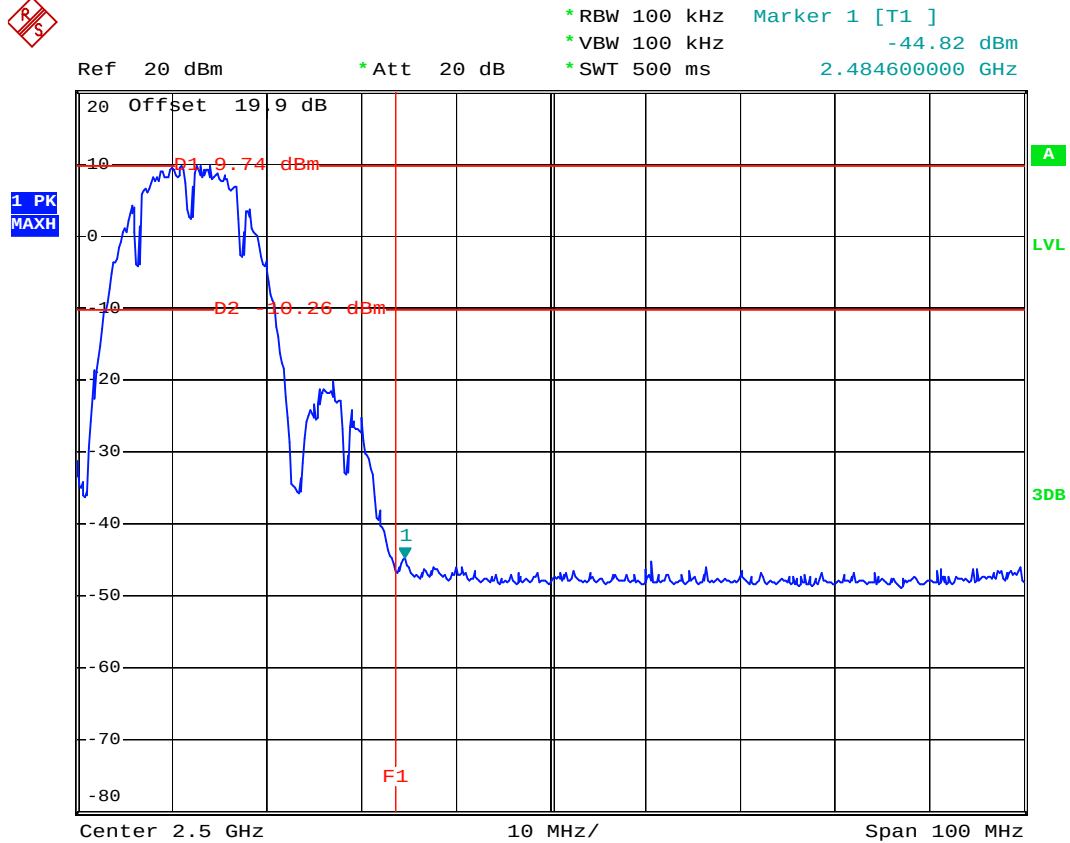
CH01



Date: 18.JUL.2008 23:40:01

WLAN 802.11b

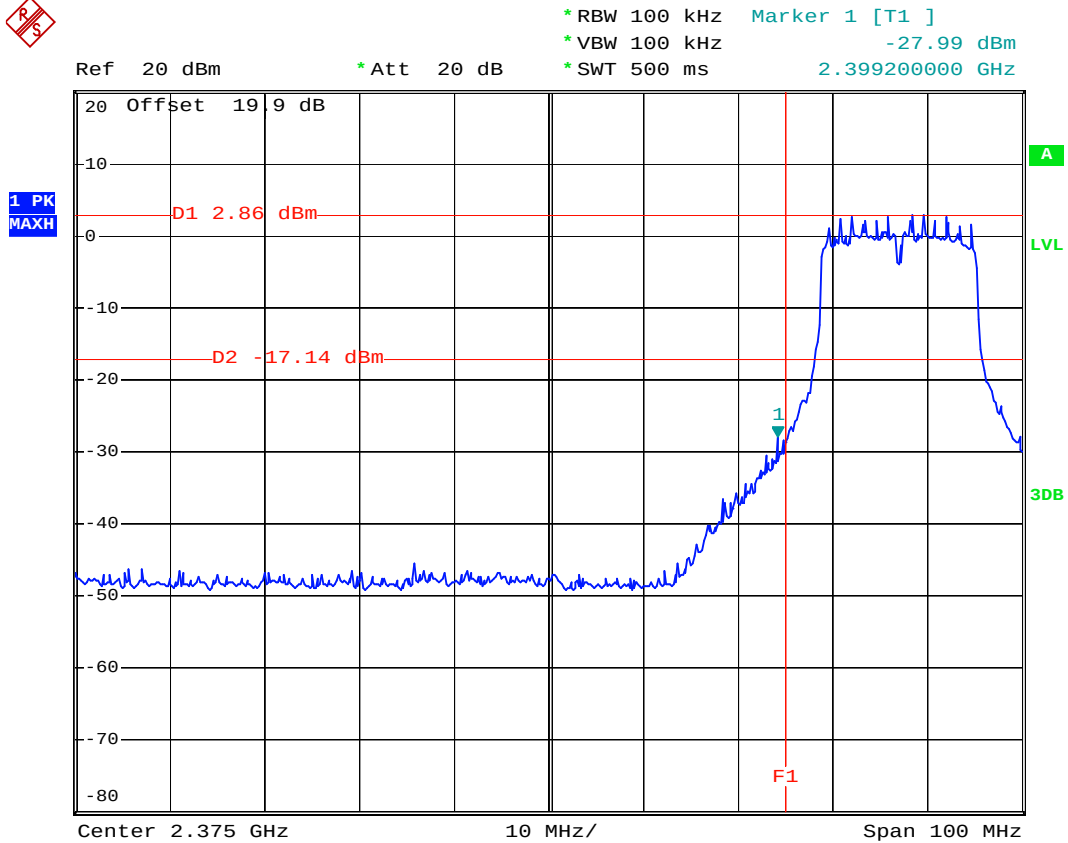
CH11



Date: 18.JUL.2008 23:39:01

WLAN 802.11g

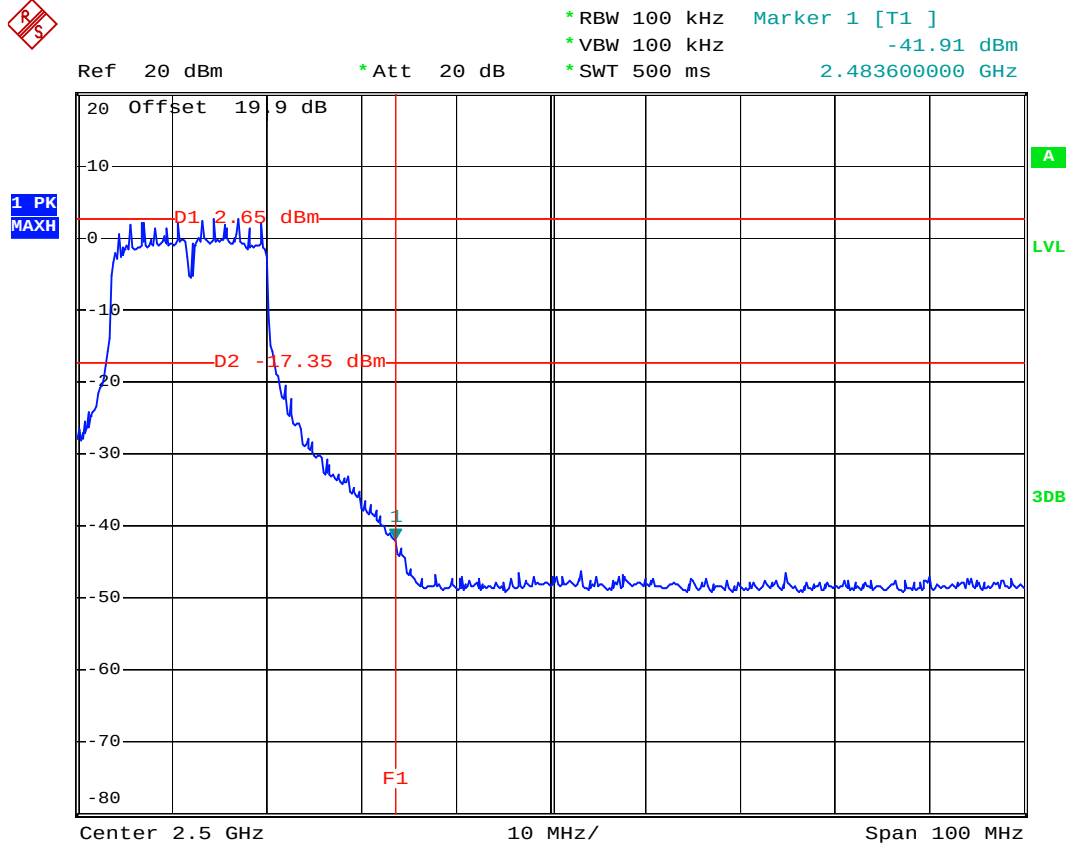
CH01



Date: 22.JUL.2008 06:58:41

WLAN 802.11g

CH11



Date: 22.JUL.2008 07:01:46

5.5 Peak Output Power Measurement

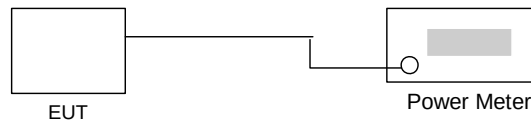
5.5.1 Measuring Instruments

As described in chapter 6 of this test report.

5.5.2 Test Procedure

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.

5.5.3 Test Setup Layout



5.5.4 Test Result

- Application Type : WLAN 802.11b/g
- Temperature : 24~25°C
- Relative Humidity : 51~53%
- Test Enginner : Sam

WLAN 802.11b

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
01	2412	20.04	1W/30 dBm
06	2437	21.19	1W/30 dBm
11	2462	20.64	1W/30 dBm

WLAN 802.11g

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
01	2412	21.00	1W/30 dBm
06	2437	20.79	1W/30 dBm
11	2462	20.75	1W/30 dBm

5.6 Conducted Emission

5.6.1 Measuring Instruments

As described in chapter 6 of this test Report.

The receiver setting :

150 KHz ~ 30 MHz	Detector : Quasi – Peak and Average Bandwidth : 9 KHz
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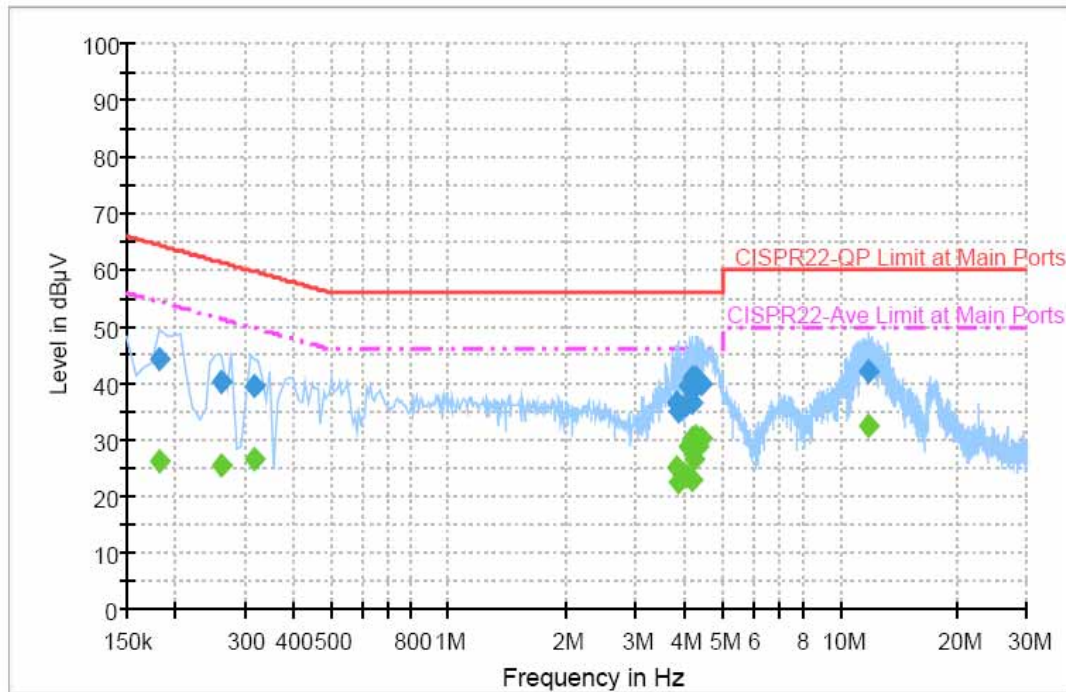
5.6.2 Test Procedures

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.

5.6.3 Test Data

- Test Mode : Mode 1
- Temperature : 24~25°C
- Relative Humidity : 51~53%
- Test Enginner : Sam
- Test Condition : Line

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


Final Result 2

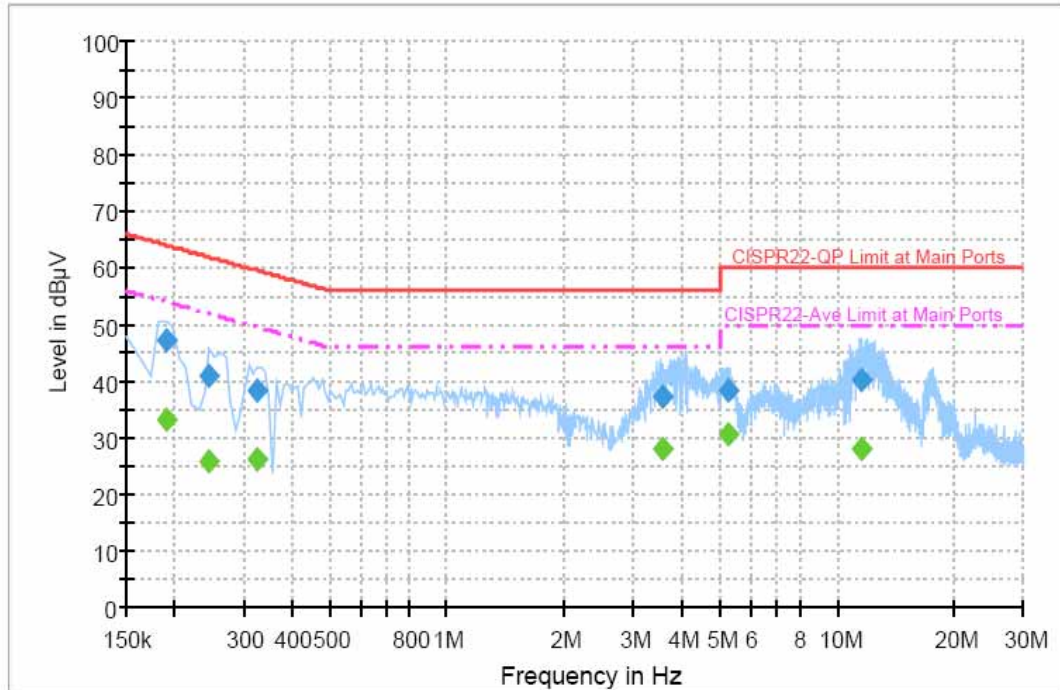
Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.182000	26.2	Off	L1	19.4	28.2	54.4
0.262000	25.6	Off	L1	19.3	25.8	51.4
0.318000	26.5	Off	L1	19.3	23.3	49.8
3.830000	25.2	Off	L1	19.5	20.8	46.0
3.862000	22.3	Off	L1	19.5	23.7	46.0
4.054000	23.5	Off	L1	19.5	22.5	46.0
4.094000	29.0	Off	L1	19.5	17.0	46.0
4.166000	30.3	Off	L1	19.5	15.7	46.0
4.190000	22.8	Off	L1	19.5	23.2	46.0
4.246000	26.7	Off	L1	19.5	19.3	46.0
4.294000	30.7	Off	L1	19.5	15.3	46.0
4.342000	28.9	Off	L1	19.5	17.1	46.0
4.414000	30.4	Off	L1	19.5	15.6	46.0
11.822000	32.6	Off	L1	19.6	17.4	50.0

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.182000	44.5	Off	L1	19.4	20.0	64.4
0.262000	40.1	Off	L1	19.3	21.3	61.4
0.318000	39.4	Off	L1	19.3	20.4	59.8
3.830000	36.7	Off	L1	19.5	19.3	56.0
3.862000	35.2	Off	L1	19.5	20.8	56.0
4.054000	36.3	Off	L1	19.5	19.7	56.0
4.094000	39.5	Off	L1	19.5	16.5	56.0
4.166000	40.8	Off	L1	19.5	15.2	56.0
4.190000	36.6	Off	L1	19.5	19.4	56.0
4.246000	39.6	Off	L1	19.5	16.4	56.0
4.294000	41.1	Off	L1	19.5	14.9	56.0
4.342000	40.0	Off	L1	19.5	16.0	56.0
4.414000	39.9	Off	L1	19.5	16.1	56.0
11.822000	41.9	Off	L1	19.6	18.1	60.0

- Test Condition: Neutral

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



Final Result 2

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.190000	33.1	Off	N	19.4	20.9	54.0
0.246000	25.8	Off	N	19.4	26.1	51.9
0.326000	26.2	Off	N	19.3	23.4	49.6
3.574000	28.2	Off	N	19.5	17.8	46.0
5.270000	30.5	Off	N	19.4	19.5	50.0
11.494000	28.1	Off	N	19.7	21.9	50.0

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.190000	47.1	Off	N	19.4	16.9	64.0
0.246000	40.8	Off	N	19.4	21.1	61.9
0.326000	38.3	Off	N	19.3	21.3	59.6
3.574000	37.3	Off	N	19.5	18.7	56.0
5.270000	38.5	Off	N	19.4	21.5	60.0
11.494000	40.2	Off	N	19.7	19.8	60.0

5.7 Radiated Emission Measurement

5.7.1 Measuring Instruments

As described in chapter 6 of this Report.

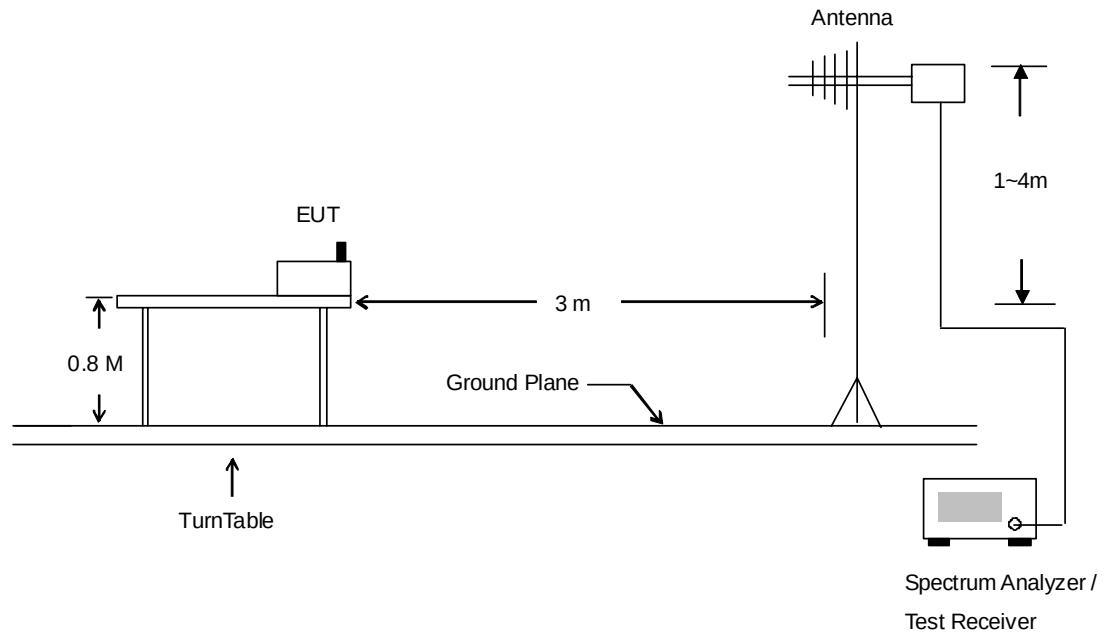
The spectrum analyzer setting :

30 ~ 1000 MHz	Detector : Quasi – Peak Bandwidth : 120 KHz
1 ~ 25 GHz	Detector : Peak and Average Bandwidth : 1 MHz

5.7.2 Test Procedures

1. The EUT was placed on a rotatable table top 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. 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.
5. 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.
6. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
7. 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.
8. 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.

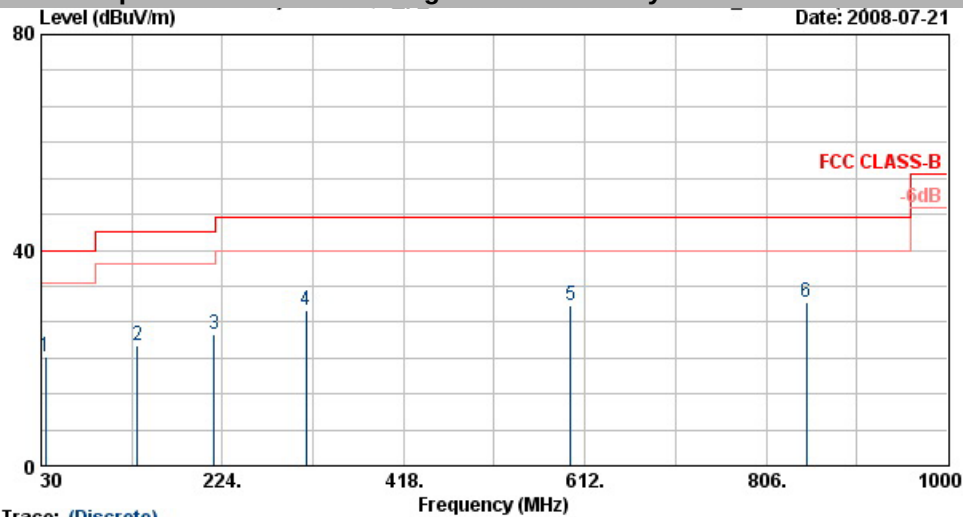
5.7.3 Typical Test Setup Layout of Radiated Emission



5.7.4 Test Data

- Test Mode : Mode 1
- Temperature : 22~23°C
- Relating Humidity : 43~44%
- Test Enginner : Andrew
- Polarization : Horizontal (30MHz-1GHz)

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



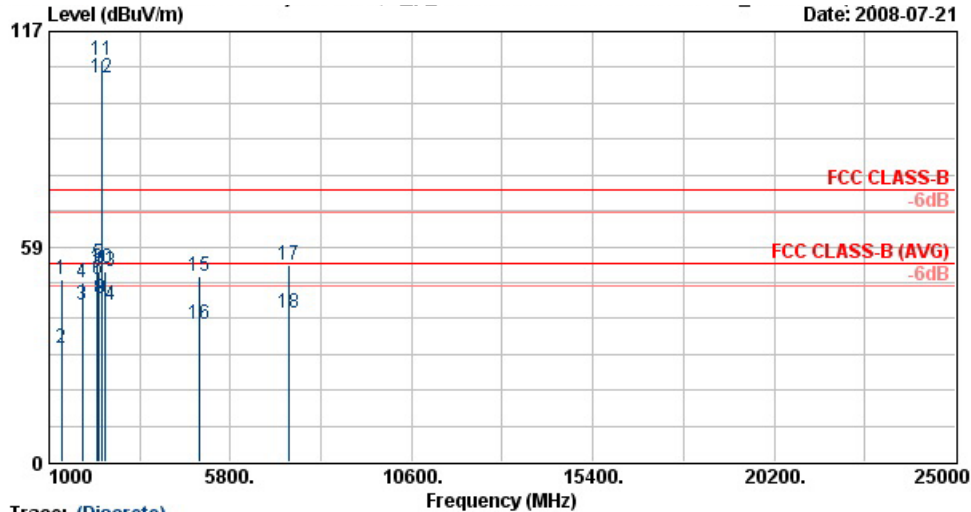
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(051121) HORIZONTAL
EUT : 8.9 #Notebook
Power : 120Vac/60Hz
Model : FR 870804
Memo : 11b Tx_Ch01;2412MHz
Data Rate : 2M

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	34.59	20.35	-19.65	40.00	35.75	16.13	0.30	31.83	---	---	Peak
2	133.14	22.23	-21.27	43.50	42.06	11.37	0.50	31.70	---	---	Peak
3	215.49	24.28	-19.22	43.50	45.47	10.21	0.65	32.06	---	---	Peak
4	313.30	28.72	-17.28	46.00	46.39	13.56	0.80	32.03	---	---	Peak
5	596.80	29.74	-16.26	46.00	42.49	18.43	1.00	32.18	---	---	Peak
6 @	848.80	30.45	-15.55	46.00	41.48	20.16	1.20	32.40	100	335	Peak

- Polarization : Horizontal (1GHz-25GHz)

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



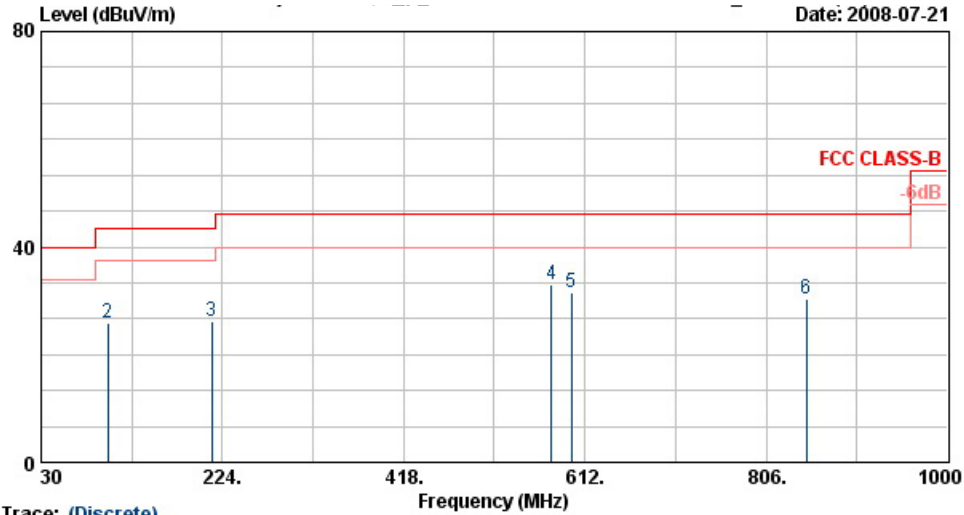
Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
 EUT : 8.9 #Notebook
 Power : 120Vac/60Hz
 Model : FR 870804
 Memo : 11b Tx_Ch01;2412MHz
 Data Rate : 2M

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	1326.00	49.74	-24.26	74.00	55.52	27.78	2.62	36.19	100	0	Peak
2	1326.00	30.71	-23.29	54.00	36.50	27.78	2.62	36.19	121	49	Average
3 @	1878.00	42.76	-11.24	54.00	44.74	30.41	3.26	35.65	121	49	Average
4	1878.00	48.83	-25.17	74.00	50.81	30.41	3.26	35.65	100	0	Peak
5	2286.00	53.77	-20.23	74.00	53.93	31.71	3.79	35.66	100	0	Peak
6 @	2286.00	49.49	-4.51	54.00	49.64	31.71	3.79	35.66	121	49	Average
7	2326.00	51.52	-22.48	74.00	51.60	31.76	3.82	35.67	100	0	Peak
8 @	2326.00	44.19	-9.81	54.00	44.27	31.76	3.82	35.67	121	49	Average
9 @	2385.81	44.56	-9.44	54.00	44.46	31.86	3.92	35.68	121	49	Average
10	2385.81	52.71	-21.29	74.00	52.61	31.86	3.92	35.68	100	0	Peak
11 @	2412.00	109.11			108.95	31.88	3.95	35.68	100	0	Peak
12 @	2412.00	104.56			104.41	31.88	3.95	35.68	121	49	Average
13	2500.00	51.76	-22.24	74.00	51.41	32.00	4.05	35.70	100	0	Peak
14 @	2500.00	42.79	-11.21	54.00	42.44	32.00	4.05	35.70	121	49	Average
15	4992.00	50.43	-23.57	74.00	45.95	34.20	5.88	35.60	100	0	Peak
16	4992.00	37.22	-16.78	54.00	32.74	34.20	5.88	35.60	100	335	Average
17	7356.00	53.49	-20.51	74.00	46.76	35.66	7.22	36.14	100	0	Peak
18 @	7356.00	40.55	-13.45	54.00	33.82	35.66	7.22	36.14	100	299	Average

Remark: #11 and #12 are Fundamental Signals.

- Polarization : Vertical (30MHz-1GHz)

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



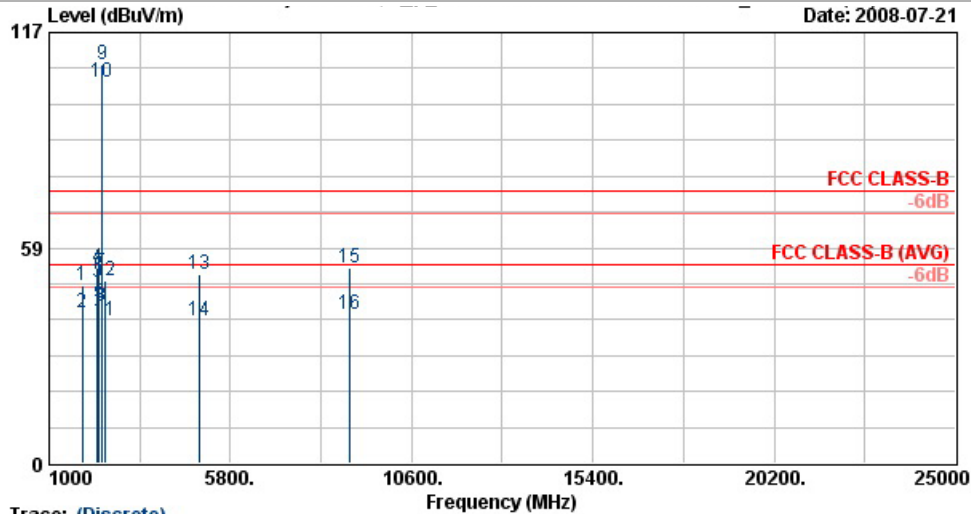
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(951121) VERTICAL
EUT : 8.9 #Notebook
Power : 120Vac/60Hz
Model : FR 870804
Memo : 11b Tx_Ch01;2412MHz
Data Rate : 2M

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV		dB		deg	
1	30.54	24.37	-15.63	40.00	36.73	18.95	0.30	31.61	---	Peak
2	101.28	25.93	-17.57	43.50	46.38	11.07	0.50	32.02	---	Peak
3	212.79	26.07	-17.43	43.50	47.56	10.04	0.62	32.15	---	Peak
4 @	575.80	32.97	-13.03	46.00	45.90	18.22	1.00	32.15	100	336 Peak
5 @	597.50	31.40	-14.60	46.00	44.14	18.44	1.00	32.18	---	Peak
6	848.80	30.29	-15.71	46.00	41.32	20.16	1.20	32.40	---	Peak

- Polarization : Vertical (1GHz-25GHz)

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



Trace: (Discrete)

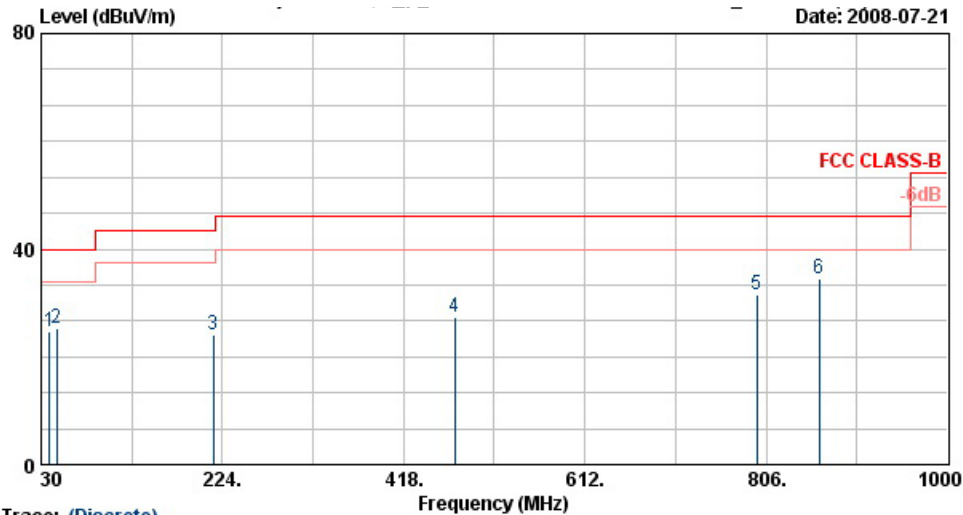
Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : 8.8 #Notebook
Power : 120Vac/60Hz
Model : FR 870804
Memo : 11b Tx_Ch01;2412MHz
Data Rate : 2M

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	1878.00	48.32	-25.68	74.00	50.30	30.41	3.26	35.65	100	0	Peak
2 @	1878.00	40.70	-13.30	54.00	42.68	30.41	3.26	35.65	100	19	Average
3 @	2286.00	49.25	-4.75	54.00	49.40	31.71	3.79	35.66	100	19	Average
4	2286.00	53.26	-20.74	74.00	53.41	31.71	3.79	35.66	100	0	Peak
5 @	2326.00	43.62	-10.38	54.00	43.70	31.76	3.82	35.67	100	19	Average
6	2326.00	50.81	-23.19	74.00	50.89	31.76	3.82	35.67	100	0	Peak
7	2389.99	51.94	-22.06	74.00	51.84	31.86	3.92	35.68	100	0	Peak
8 @	2389.99	42.74	-11.26	54.00	42.64	31.86	3.92	35.68	100	19	Average
9 @	2412.00	108.33			108.18	31.88	3.95	35.68	100	0	Peak
10 @	2412.00	103.72			103.57	31.88	3.95	35.68	100	19	Average
11 @	2500.00	38.74	-15.26	54.00	38.39	32.00	4.05	35.70	100	19	Average
12	2500.00	49.73	-24.27	74.00	49.38	32.00	4.05	35.70	100	0	Peak
13	4986.00	51.52	-22.48	74.00	47.05	34.19	5.88	35.61	100	0	Peak
14 @	4986.00	38.58	-15.42	54.00	34.11	34.19	5.88	35.61	100	332	Average
15	8946.00	53.22	-20.78	74.00	45.64	36.41	7.74	36.57	100	0	Peak
16 @	8946.00	40.33	-13.67	54.00	32.75	36.41	7.74	36.57	100	302	Average

Remark: #9 and #10 are Fundamental Signals.

- Test Mode : Mode 2
- Temperature : 22~23°C
- Relative Humidity : 43~44%
- Test Engineer: Andrew
- Polarization : Horizontal (30MHz-1GHz)

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

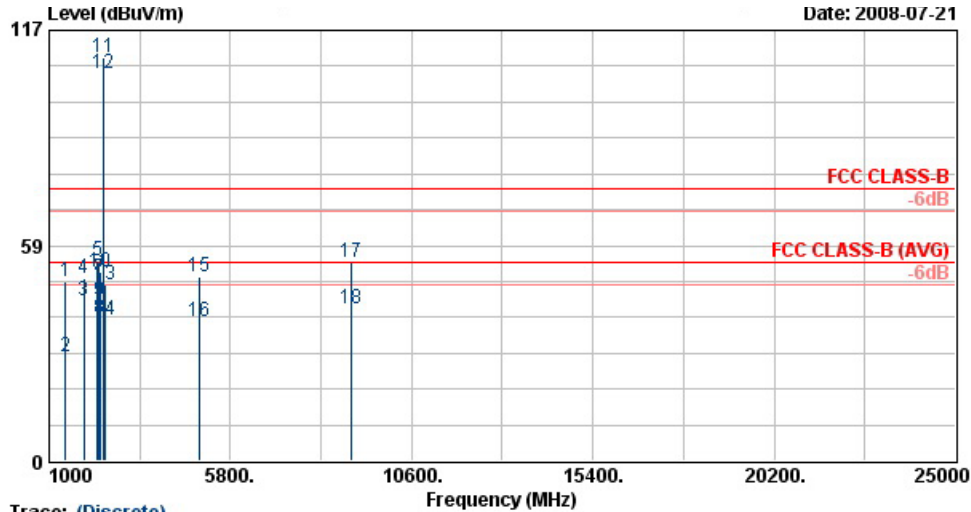


Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m LF-ANT(851121) HORIZONTAL
 EUT : 8.8 *Notebook
 Power : 120Vac/60Hz
 Model : FR 870804
 Memo : 11b Tx_Ch06;2437MHz
 Data Rate : 2M

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	39.18	24.56	-15.44	40.00	41.95	14.03	0.30	31.72	---	Peak
2	46.74	25.25	-14.75	40.00	46.73	10.04	0.30	31.82	---	Peak
3	214.68	24.10	-19.40	43.50	45.39	10.16	0.64	32.09	---	Peak
4	472.90	27.47	-18.53	46.00	41.62	16.98	0.93	32.05	---	Peak
5	796.30	31.38	-14.62	46.00	42.57	19.78	1.20	32.17	---	Peak
6 @	862.80	34.35	-11.65	46.00	45.06	20.27	1.23	32.20	100	330 Peak

- Polarization : Horizontal (1GHz-25GHz)

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



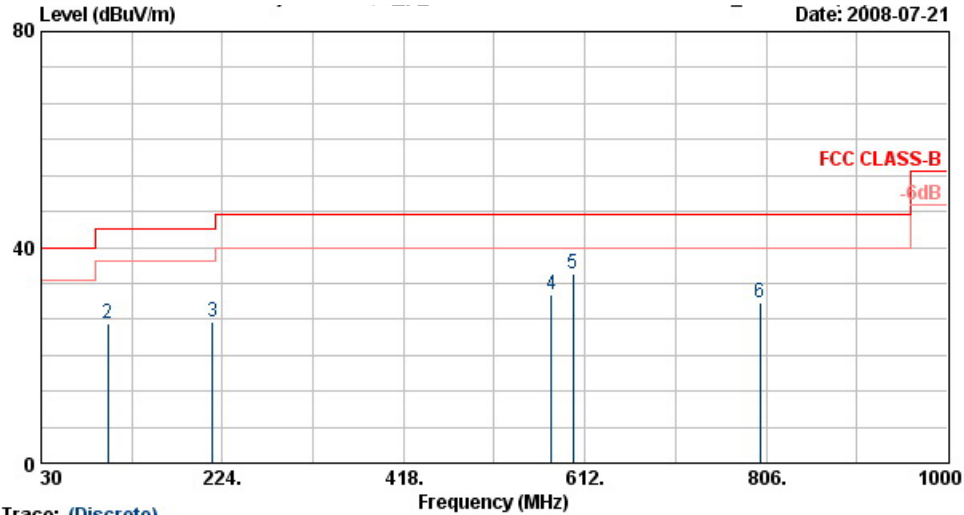
Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
 EUT : 8.8 #Notebook
 Power : 120Vac/60Hz
 Model : FR 870804
 Memo : 11b Tx_Ch06;2437MHz
 Data Rate : 2M

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	1428.00	48.55	-25.45	74.00	54.17	27.61	2.74	35.97	100	0	Peak
2	1428.00	28.41	-25.59	54.00	34.03	27.61	2.74	35.97	100	55	Average
3 @	1918.00	43.66	-10.34	54.00	45.34	30.67	3.29	35.63	100	55	Average
4	1918.00	49.77	-24.23	74.00	51.44	30.67	3.29	35.63	100	0	Peak
5	2286.00	54.44	-19.56	74.00	54.60	31.71	3.79	35.66	100	0	Peak
6 @	2286.00	50.82	-3.18	54.00	50.97	31.71	3.79	35.66	100	55	Average
7	2316.00	49.67	-24.33	74.00	49.78	31.73	3.82	35.67	100	0	Peak
8	2316.00	38.69	-15.31	54.00	38.80	31.73	3.82	35.67	100	55	Average
9 @	2348.00	43.45	-10.55	54.00	43.48	31.78	3.86	35.67	100	55	Average
10	2348.00	51.32	-22.68	74.00	51.36	31.78	3.86	35.67	100	0	Peak
11 @	2437.00	109.73			109.51	31.93	3.99	35.69	100	0	Peak
12 @	2437.00	105.05			104.82	31.93	3.99	35.69	100	55	Average
13	2484.00	47.72	-26.28	74.00	47.39	31.98	4.05	35.70	100	0	Peak
14	2484.00	38.39	-15.61	54.00	38.06	31.98	4.05	35.70	100	55	Average
15	4986.00	50.19	-23.81	74.00	45.73	34.19	5.88	35.61	100	0	Peak
16	4986.00	37.70	-16.30	54.00	33.23	34.19	5.88	35.61	100	317	Average
17	8982.00	53.78	-20.22	74.00	46.09	36.48	7.80	36.59	100	0	Peak
18	8982.00	41.22	-12.78	54.00	33.53	36.48	7.80	36.59	100	335	Average

Remark: #11 and #12 are Fundamental Signals.

- Polarization : Vertical (30MHz-1GHz)

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



Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(951121) VERTICAL
EUT : 8.0 *Notebook
Power : 120Vac/60Hz
Model : FR 870804
Memo : 11b Tx_Ch06;2437MHz
Data Rate : 2M

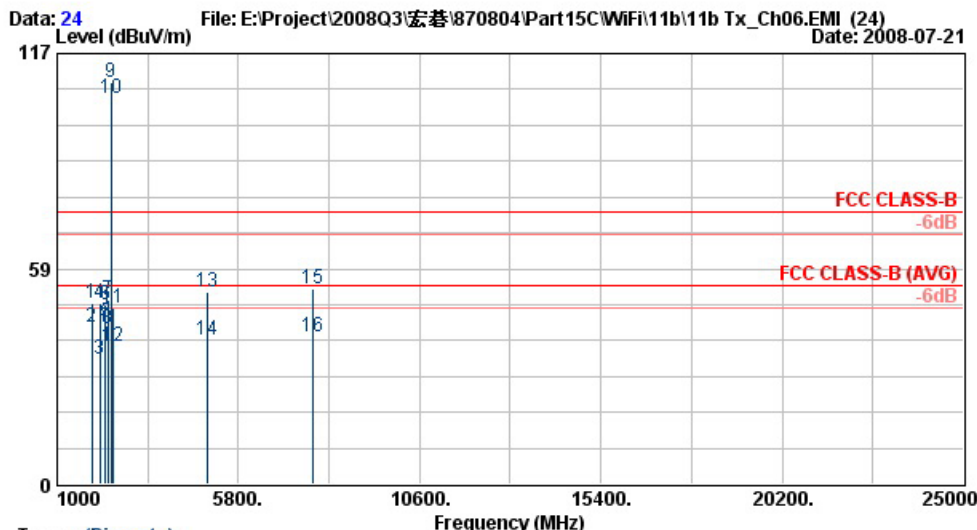
	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.54	24.94	-15.06	40.00	37.30	18.95	0.30	31.61	---	---	Peak
2	101.28	25.75	-17.75	43.50	46.21	11.07	0.50	32.02	---	---	Peak
3	213.33	26.21	-17.29	43.50	47.60	10.10	0.63	32.12	---	---	Peak
4	575.80	31.16	-14.84	46.00	44.09	18.22	1.00	32.15	---	---	Peak
5 @	598.90	35.08	-10.92	46.00	47.80	18.45	1.00	32.18	100	312	Peak
6	799.80	29.63	-16.37	46.00	40.79	19.82	1.20	32.18	---	---	Peak

- Polarization : Vertical (1GHz-25GHz)

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



No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park,
Kwei-Shan Hsiang, TaoYuan Hsien, Taiwan R.O.C.
TEL: 886-2-2696-2466
http://sporton.com.tw



Trace: (Discrete)

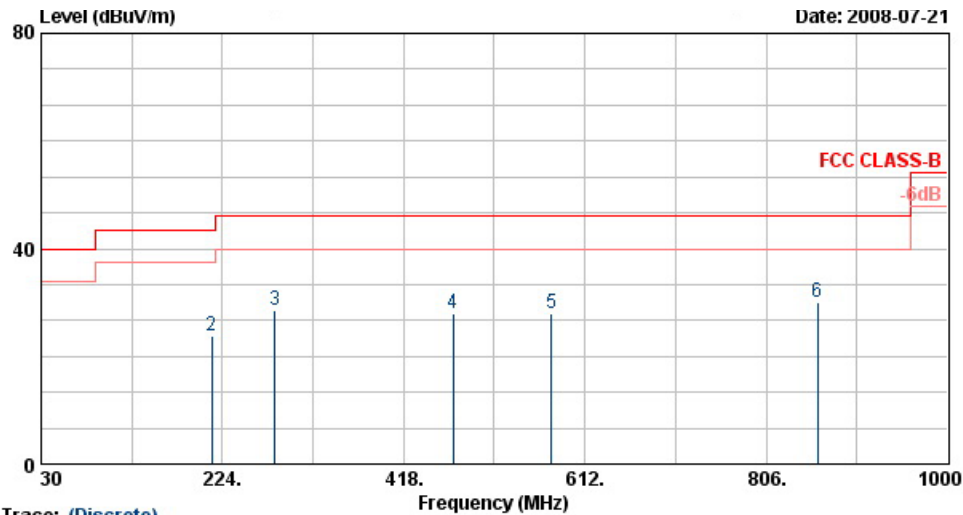
Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : 8.9 #Notebook
Power : 120Vac/60Hz
Model : FR 870804
Memo : 11b Tx_Ch06;2437MHz
Data Rate : 2M

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	1916.00	48.96	-25.04	74.00	50.64	30.67	3.29	35.63	100	0 Peak
2 @	1916.00	42.70	-11.30	54.00	44.38	30.67	3.29	35.63	119	21 Average
3	2124.00	33.74	-20.26	54.00	34.33	31.47	3.56	35.63	119	21 Average
4	2124.00	49.05	-24.95	74.00	49.64	31.47	3.56	35.63	100	0 Peak
5 @	2286.00	44.08	-9.92	54.00	44.23	31.71	3.79	35.66	119	21 Average
6	2286.00	48.70	-25.30	74.00	48.86	31.71	3.79	35.66	100	0 Peak
7	2350.00	50.10	-23.90	74.00	50.13	31.78	3.86	35.67	100	0 Peak
8	2350.00	42.31	-11.69	54.00	42.34	31.78	3.86	35.67	119	21 Average
9 @	2437.00	109.19			108.96	31.93	3.99	35.69	100	0 Peak
10 @	2437.00	104.62			104.39	31.93	3.99	35.69	119	21 Average
11	2484.00	47.76	-26.24	74.00	47.43	31.98	4.05	35.70	100	0 Peak
12	2484.00	37.34	-16.66	54.00	37.01	31.98	4.05	35.70	119	21 Average
13	4992.00	52.28	-21.72	74.00	47.80	34.20	5.88	35.60	100	0 Peak
14	4992.00	39.03	-14.97	54.00	34.55	34.20	5.88	35.60	100	317 Average
15	7776.00	52.91	-21.09	74.00	46.10	35.66	7.40	36.26	100	0 Peak
16	7776.00	40.20	-13.80	54.00	33.40	35.66	7.40	36.26	100	302 Average

Remark: #9 and #10 are Fundamental Signals.

- Test Mode : Mode 3
- Temperature : 22~23°C
- Relative Humidity : 43~44%
- Test Engineer: Andrew
- Polarization : Horizontal (30MHz-1GHz)

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

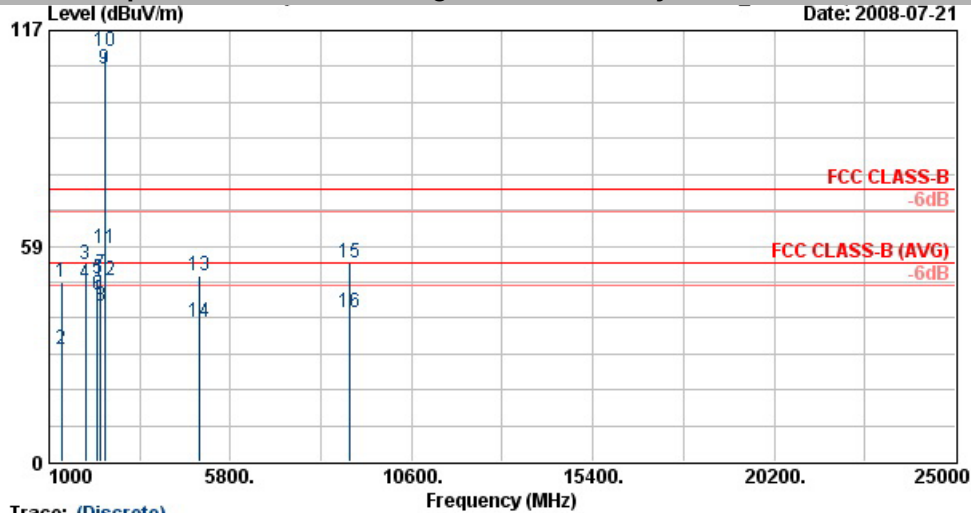


Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
 EUT : 8.9 #Notebook
 Power : 120Vac/60Hz
 Model : FR 870804
 Memo : 11b Tx_Ch11;2462MHz
 Data Rate : 2M

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.27	18.23	-21.77	40.00	29.83	19.66	0.30	31.56	---	---	Peak
2	212.79	23.92	-19.58	43.50	45.41	10.04	0.62	32.15	---	---	Peak
3	280.29	28.50	-17.50	46.00	46.97	12.84	0.70	32.01	---	---	Peak
4	470.80	27.89	-18.11	46.00	42.11	16.93	0.90	32.05	---	---	Peak
5	575.80	27.94	-18.06	46.00	40.88	18.22	1.00	32.15	---	---	Peak
6 @	861.40	30.15	-15.85	46.00	40.91	20.25	1.21	32.23	100	339	Peak

- Polarization : Horizontal (1GHz-25GHz)

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



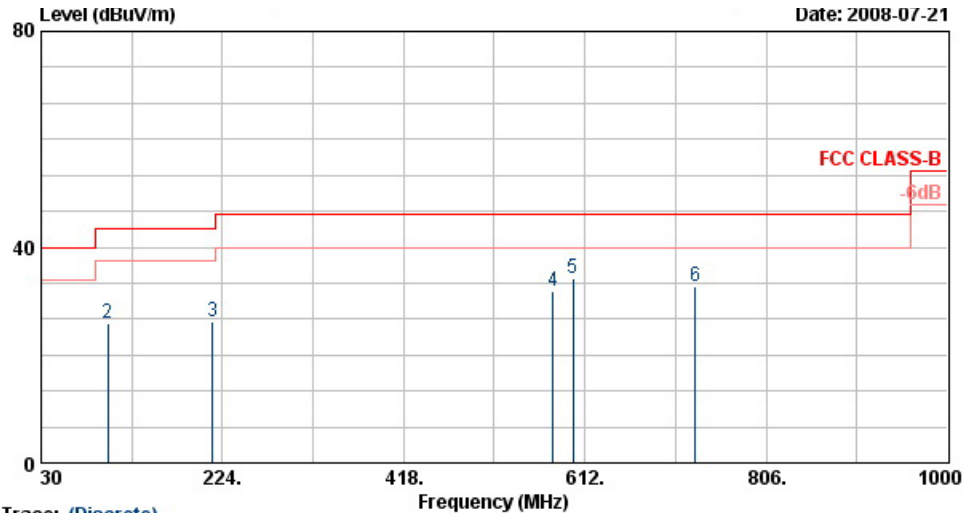
Trace: (Discrete)
 Site : 03CH06-HV
 Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
 EUT : 8.8 #Notebook
 Power : 120Vac/60Hz
 Model : FR 870804
 Memo : 11b Tx_Ch11;2462MHz
 Data Rate : 2M

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	1326.00	48.77	-25.23	74.00	54.55	27.78	2.62	36.19	100	0 Peak
2	1326.00	30.41	-23.59	54.00	36.20	27.78	2.62	36.19	119	48 Average
3	1956.00	53.34	-20.66	74.00	54.70	30.92	3.34	35.62	100	0 Peak
4 @	1956.00	48.45	-5.55	54.00	49.81	30.92	3.34	35.62	119	48 Average
5	2286.00	49.79	-24.21	74.00	49.95	31.71	3.79	35.66	100	0 Peak
6 @	2286.00	45.10	-8.90	54.00	45.25	31.71	3.79	35.66	119	48 Average
7	2374.00	51.02	-22.98	74.00	50.97	31.83	3.89	35.68	100	0 Peak
8 @	2374.00	42.10	-11.90	54.00	42.06	31.83	3.89	35.68	119	48 Average
9 @	2462.00	106.46			106.18	31.95	4.02	35.69	119	48 Average
10 @	2462.00	111.31			111.03	31.95	4.02	35.69	100	0 Peak
11	2483.50	57.79	-16.21	74.00	57.46	31.98	4.05	35.70	100	0 Peak
12 @	2483.50	49.15	-4.85	54.00	48.82	31.98	4.05	35.70	119	48 Average
13	4992.00	50.42	-23.58	74.00	45.93	34.20	5.88	35.60	100	0 Peak
14	4992.00	38.01	-15.99	54.00	33.53	34.20	5.88	35.60	100	332 Average
15	8961.00	53.76	-20.24	74.00	46.13	36.43	7.77	36.57	100	0 Peak
16 @	8961.00	40.55	-13.45	54.00	32.92	36.43	7.77	36.57	100	332 Average

Remark: #9 and #10 are Fundamental Signals.

- Polarization : Vertical (30MHz-1GHz)

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



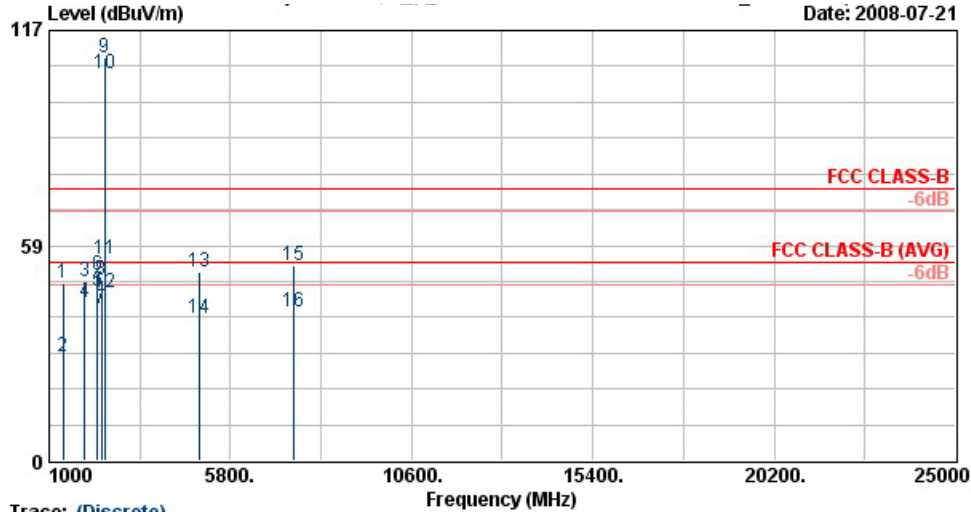
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(951121) VERTICAL
EUT : 6.9 #Notebook
Power : 120Vac/60Hz
Model : FR 870804
Memo : 11b Tx_Ch11;2462MHz
Data Rate : 2M

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	30.54	25.59	-14.41	40.00	37.95	18.95	0.30	31.61	---	---	Peak
2	101.28	26.00	-17.50	43.50	46.46	11.07	0.50	32.02	---	---	Peak
3	213.33	26.20	-17.30	43.50	47.59	10.10	0.63	32.12	---	---	Peak
4 @	577.90	31.97	-14.03	46.00	44.88	18.24	1.00	32.15	---	---	Peak
5 @	598.90	34.26	-11.74	46.00	46.99	18.45	1.00	32.18	100	356	Peak
6 @	729.80	32.65	-13.35	46.00	44.62	19.16	1.11	32.23	---	---	Peak

- Polarization : Vertical (1GHz-25GHz)

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



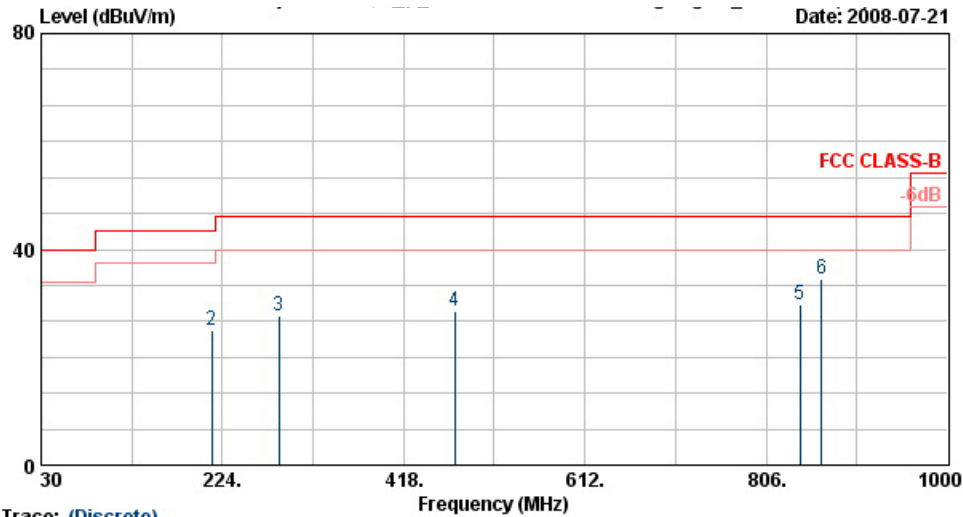
Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
 EUT : 8.9 *Notebook
 Power : 120Vac/60Hz
 Model : FR 870804
 Memo : 11b Tx_Ch11;2462MHz
 Data Rate : 2M

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	1372.00	48.29	-25.71	74.00	53.99	27.69	2.68	36.08	100	0	Peak
2	1372.00	28.47	-25.53	54.00	34.17	27.69	2.68	36.08	100	31	Average
3	1950.00	48.86	-25.14	74.00	50.21	30.92	3.34	35.62	100	0	Peak
4 @	1950.00	43.26	-10.74	54.00	44.62	30.92	3.34	35.62	100	31	Average
5 @	2286.00	46.14	-7.86	54.00	46.29	31.71	3.79	35.66	100	31	Average
6	2286.00	50.34	-23.66	74.00	50.49	31.71	3.79	35.66	100	0	Peak
7 @	2380.00	41.33	-12.67	54.00	41.25	31.83	3.92	35.68	100	31	Average
8	2380.00	49.22	-24.78	74.00	49.14	31.83	3.92	35.68	100	0	Peak
9 @	2462.00	109.41			109.14	31.95	4.02	35.69	100	0	Peak
10 @	2462.00	105.17			104.89	31.95	4.02	35.69	100	31	Average
11	2483.50	55.01	-18.99	74.00	54.68	31.98	4.05	35.70	100	0	Peak
12 @	2483.50	45.53	-8.47	54.00	45.20	31.98	4.05	35.70	100	31	Average
13	4992.00	51.11	-22.89	74.00	46.62	34.20	5.88	35.60	100	0	Peak
14 @	4992.00	38.55	-15.45	54.00	34.07	34.20	5.88	35.60	100	354	Average
15	7467.00	53.17	-20.83	74.00	46.49	35.61	7.25	36.19	100	0	Peak
16 @	7467.00	40.65	-13.35	54.00	33.97	35.61	7.25	36.19	100	308	Average

Remark: #9 and #10 are Fundamental Signals.

- Test Mode : Mode 4
- Temperature : 22~23°C
- Relative Humidity : 43~44%
- Test Engineer: Andrew
- Polarization : Horizontal (30MHz-1GHz)

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

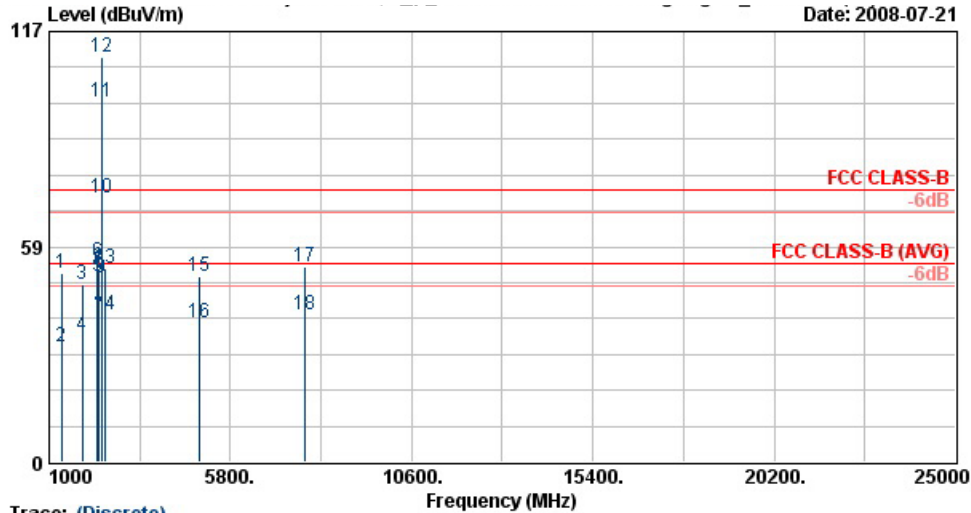


Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
 EUT : 8.8 Notebook
 Power : 120Vac/60Hz
 Model : FR 870804
 Memo : 11g Tx_Ch01;2412MHz
 Data Rate : 16M

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	20.58	-19.42	40.00	32.18	19.66	0.30	31.56	---	---	Peak
2	212.79	25.00	-18.50	43.50	46.50	10.04	0.62	32.15	---	---	Peak
3	284.34	27.58	-18.42	46.00	46.01	12.92	0.70	32.04	---	---	Peak
4	472.90	28.46	-17.54	46.00	42.60	16.98	0.93	32.05	---	---	Peak
5	841.80	29.65	-16.35	46.00	40.70	20.12	1.20	32.37	---	---	Peak
6 @	864.90	34.37	-11.63	46.00	45.01	20.28	1.25	32.18	100	332	Peak

- Polarization : Horizontal (1GHz-25GHz)

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



Trace: (Discrete)

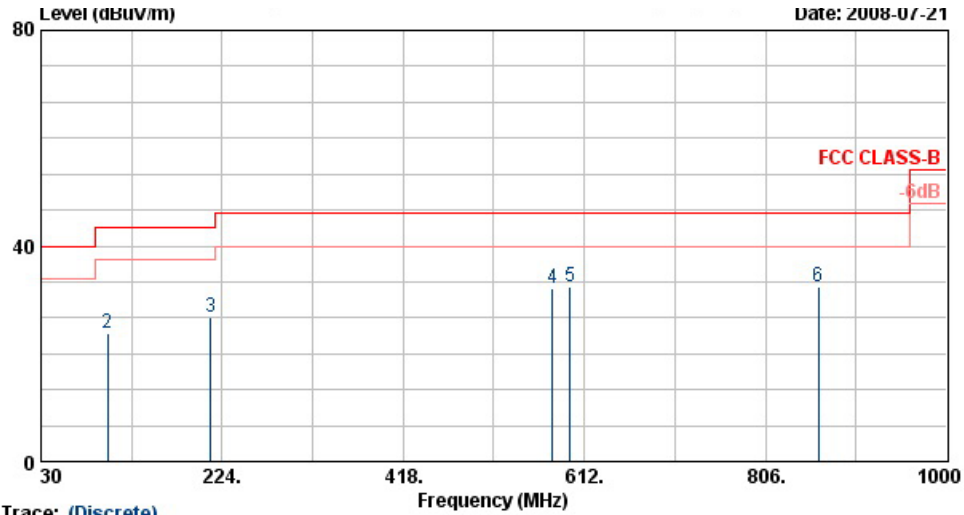
Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
EUT : 8.9 *Notebook
Power : 120Vac/60Hz
Model : FR 870804
Memo : Lig Tx_Ch01;2412MHz
Data Rate : 16M

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	1326.00	51.31	-22.69	74.00	57.10	27.78	2.62	36.19	100	0	Peak
2	1326.00	31.31	-22.69	54.00	37.10	27.78	2.62	36.19	121	49	Average
3	1878.00	48.23	-25.77	74.00	50.21	30.41	3.26	35.65	100	0	Peak
4	1878.00	34.40	-19.60	54.00	36.38	30.41	3.26	35.65	121	49	Average
5 @	2286.00	50.53	-3.47	54.00	50.68	31.71	3.79	35.66	121	49	Average
6	2286.00	54.51	-19.49	74.00	54.67	31.71	3.79	35.66	100	0	Peak
7	2326.00	39.66	-14.34	54.00	39.74	31.76	3.82	35.67	121	49	Average
8	2326.00	51.87	-22.13	74.00	51.95	31.76	3.82	35.67	100	0	Peak
9 @	2390.00	49.95	-4.05	54.00	49.85	31.86	3.92	35.68	121	49	Average
10 @	2390.00	71.92	-2.08	74.00	71.82	31.86	3.92	35.68	100	0	Peak
11 @	2412.00	97.72			97.57	31.88	3.95	35.68	121	49	Average
12 @	2412.00	110.21			110.05	31.88	3.95	35.68	100	0	Peak
13	2500.00	52.74	-21.26	74.00	52.39	32.00	4.05	35.70	100	0	Peak
14	2500.00	40.07	-13.93	54.00	39.72	32.00	4.05	35.70	121	49	Average
15	4992.00	50.33	-23.67	74.00	45.85	34.20	5.88	35.60	100	0	Peak
16	4992.00	37.99	-16.01	54.00	33.51	34.20	5.88	35.60	100	332	Average
17	7776.00	52.94	-21.06	74.00	46.14	35.66	7.40	36.26	100	0	Peak
18	7776.00	40.02	-13.98	54.00	33.22	35.66	7.40	36.26	100	297	Average

Remark: #11 and #12 are Fundamental Signals.

- Polarization : Vertical (30MHz-1GHz)

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

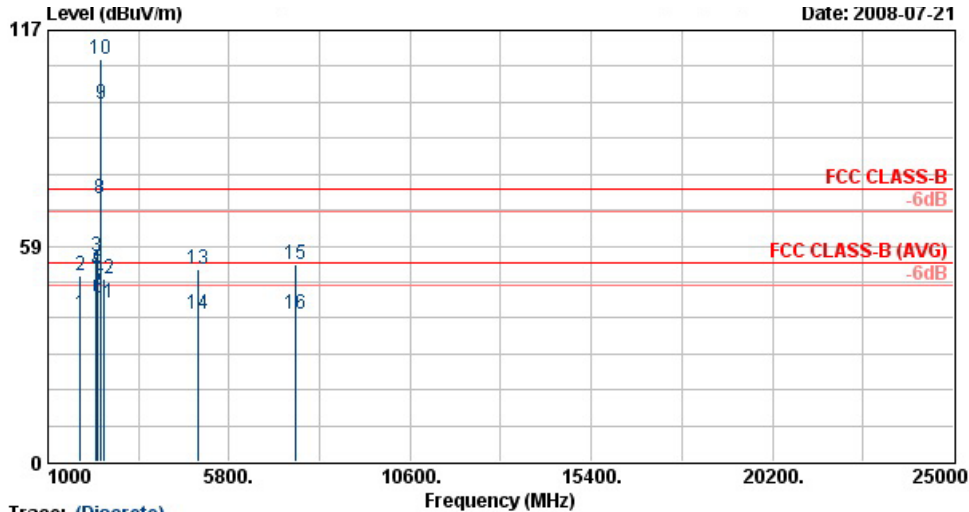


Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(951121) VERTICAL
EUT : 6.9 Notebook
Power : 120Vac/60Hz
Model : FR 670804
Memo : 11g Tx_Ch01;2412MHz
Data Rate : 18M

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.54	25.19	-14.81	40.00	37.55	18.95	0.30	31.61	---	---	Peak
2	101.28	23.79	-19.71	43.50	44.24	11.07	0.50	32.02	---	---	Peak
3	211.98	26.72	-16.78	43.50	48.21	10.04	0.62	32.15	---	---	Peak
4	577.90	32.21	-13.79	46.00	45.13	18.24	1.00	32.15	---	---	Peak
5	596.80	32.36	-13.64	46.00	45.11	18.43	1.00	32.18	---	---	Peak
6	862.80	32.43	-13.57	46.00	43.14	20.27	1.23	32.20	100	332	Peak

- Polarization :Vertical (1GHz-25GHz)

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



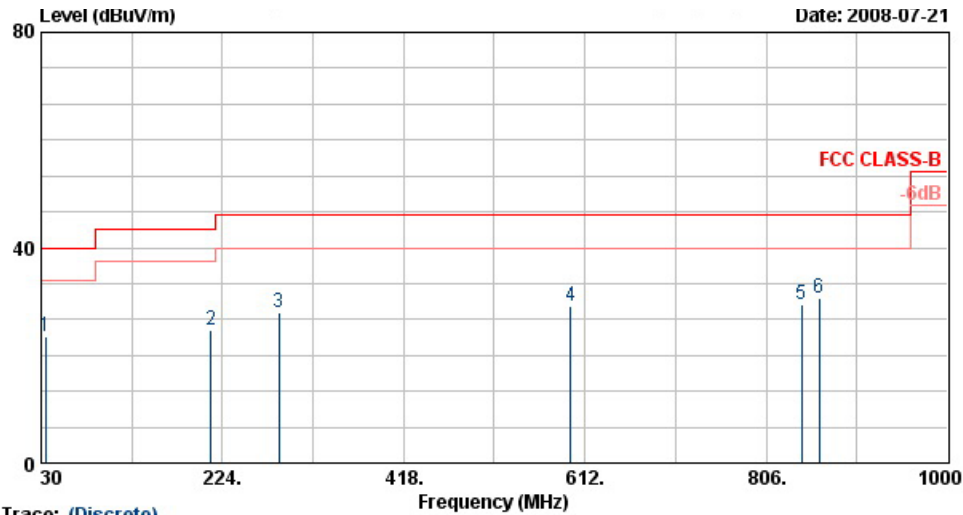
Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
 EUT : 0.9 Notebook
 Power : 120Vac/60Hz
 Model : FR 870804
 Memo : 11g Tx_Ch01;2412MHz
 Data Rate : 18M

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	1860.00	39.88	-14.12	54.00	42.01	30.29	3.23	35.65	100	18	Average
2	1860.00	50.56	-23.44	74.00	52.69	30.29	3.23	35.65	100	0	Peak
3	2286.00	55.50	-18.50	74.00	55.66	31.71	3.79	35.66	100	0	Peak
4 @	2286.00	51.96	-2.04	54.00	52.11	31.71	3.79	35.66	100	18	Average
5	2326.00	52.34	-21.66	74.00	52.42	31.76	3.82	35.67	100	0	Peak
6 @	2326.00	44.28	-9.72	54.00	44.36	31.76	3.82	35.67	100	18	Average
7 @	2390.00	46.88	-7.12	54.00	46.78	31.86	3.92	35.68	100	18	Average
8 @	2390.00	71.35	-2.65	74.00	71.25	31.86	3.92	35.68	100	0	Peak
9 @	2412.00	96.80			96.65	31.88	3.95	35.68	100	18	Average
10 @	2412.00	109.19			109.03	31.88	3.95	35.68	100	0	Peak
11 @	2500.00	43.19	-10.81	54.00	42.84	32.00	4.05	35.70	100	18	Average
12	2500.00	49.72	-24.28	74.00	49.37	32.00	4.05	35.70	100	0	Peak
13	4986.00	52.12	-21.88	74.00	47.65	34.19	5.88	35.61	100	0	Peak
14	4986.00	40.22	-13.78	54.00	35.75	34.19	5.88	35.61	100	332	Average
15	7572.00	53.56	-20.44	74.00	46.86	35.62	7.31	36.22	100	0	Peak
16	7572.00	40.20	-13.80	54.00	33.49	35.62	7.31	36.22	100	330	Average

Remark: #9 and #10 are Fundamental Signals.

- Test Mode : Mode 5
- Temperature : 22~23°C
- Relative Humidity : 43~44%
- Test Engineer: Andrew
- Polarization : Horizontal (30MHz-1GHz)

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

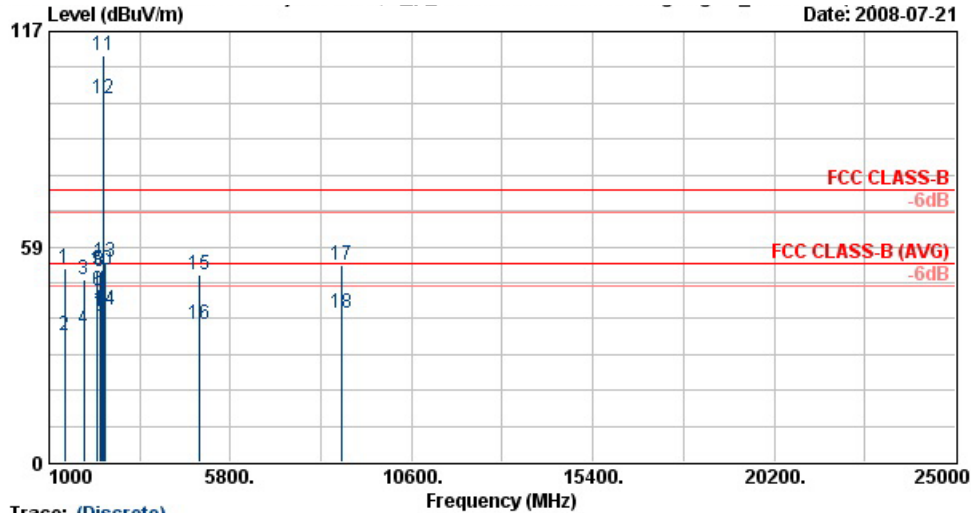


Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m LF-ANT(051121) HORIZONTAL
 EUT : 6.0 *Notebook
 Power : 120Vac/60Hz
 Model : FR 870804
 Memo : 11g Tx_Ch06;2437MHz
 Data Rate : 18M

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	35.13	23.38	-16.62	40.00	38.78	16.13	0.30	31.83	---	---	Peak
2	211.44	24.76	-18.74	43.50	46.35	9.99	0.61	32.19	---	---	Peak
3	284.34	28.08	-17.92	46.00	46.50	12.92	0.70	32.04	---	---	Peak
4	596.80	29.25	-16.75	46.00	41.99	18.43	1.00	32.18	---	---	Peak
5	843.90	29.51	-16.49	46.00	40.55	20.13	1.20	32.37	---	---	Peak
6 @	862.80	30.66	-15.34	46.00	41.36	20.27	1.23	32.20	100	332	Peak

- Polarization : Horizontal (1GHz-25GHz)

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



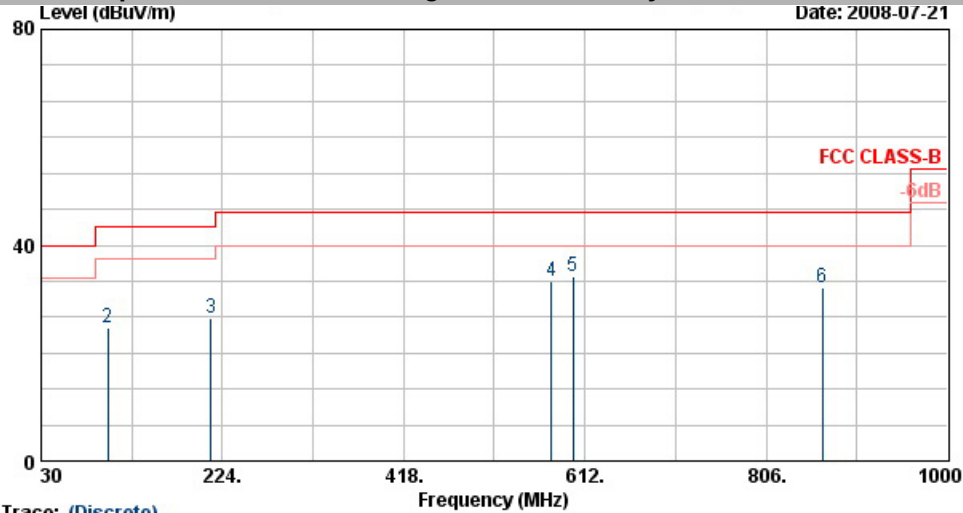
Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
 EUT : 8.9 *Notebook
 Power : 120Vac/60Hz
 Model : FR 870804
 Memo : Lig Tx_Ch06;2437MHz
 Data Rate : 16M

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	1414.00	52.71	-21.29	74.00	58.39	27.64	2.71	36.02	100	0	Peak
2	1414.00	34.50	-19.50	54.00	40.17	27.64	2.71	36.02	119	48	Average
3	1918.00	49.59	-24.41	74.00	51.26	30.67	3.29	35.63	100	0	Peak
4	1918.00	36.20	-17.80	54.00	37.88	30.67	3.29	35.63	119	48	Average
5	2286.00	52.20	-21.80	74.00	52.35	31.71	3.79	35.66	100	0	Peak
6 @	2286.00	46.70	-7.30	54.00	46.85	31.71	3.79	35.66	119	48	Average
7 @	2348.00	39.50	-14.50	54.00	39.53	31.78	3.86	35.67	119	48	Average
8	2348.00	51.62	-22.38	74.00	51.65	31.78	3.86	35.67	100	0	Peak
9 @	2390.00	39.50	-14.50	54.00	39.40	31.86	3.92	35.68	119	48	Average
10	2390.00	52.25	-21.75	74.00	52.16	31.86	3.92	35.68	100	0	Peak
11 @	2437.00	110.32			110.10	31.93	3.99	35.69	100	0	Peak
12 @	2437.00	98.74			98.51	31.93	3.99	35.69	119	48	Average
13	2483.50	54.19	-19.81	74.00	53.85	31.98	4.05	35.70	100	0	Peak
14 @	2483.50	41.20	-12.80	54.00	40.87	31.98	4.05	35.70	119	48	Average
15	4992.00	50.85	-23.15	74.00	46.36	34.20	5.88	35.60	100	0	Peak
16	4992.00	37.58	-16.42	54.00	33.10	34.20	5.88	35.60	100	335	Average
17	8751.00	53.30	-20.70	74.00	46.09	36.15	7.50	36.45	100	0	Peak
18 @	8751.00	40.36	-13.64	54.00	33.16	36.15	7.50	36.45	100	350	Average

Remark: #11 and #12 are Fundamental Signals.

- Polarization : Vertivcal (30MHz-1GHz)

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

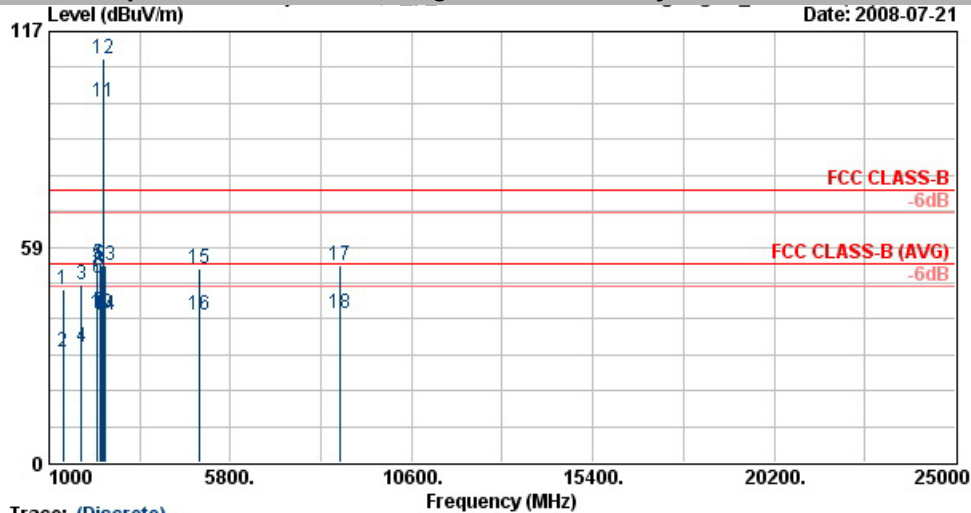


Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m LF-ANT(951121) VERTICAL
 EUT : 8.8 "Notebook
 Power : 120Vac/60Hz
 Model : FR 870804
 Memo : 11g Tx_Ch06;2437MHz
 Data Rate : 18M

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	30.54	25.10	-14.90	40.00	37.46	18.95	0.30	31.61	---	---	Peak
2	101.28	24.75	-18.75	43.50	45.21	11.07	0.50	32.02	---	---	Peak
3	211.98	26.35	-17.15	43.50	47.84	10.04	0.62	32.15	---	---	Peak
4 @	575.80	33.43	-12.57	46.00	46.36	18.22	1.00	32.15	---	---	Peak
5 @	598.90	34.32	-11.68	46.00	47.05	18.45	1.00	32.18	100	338	Peak
6 @	866.30	32.07	-13.93	46.00	42.68	20.29	1.26	32.16	---	---	Peak

- Polarization : Vertical (1GHz-25GHz)

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



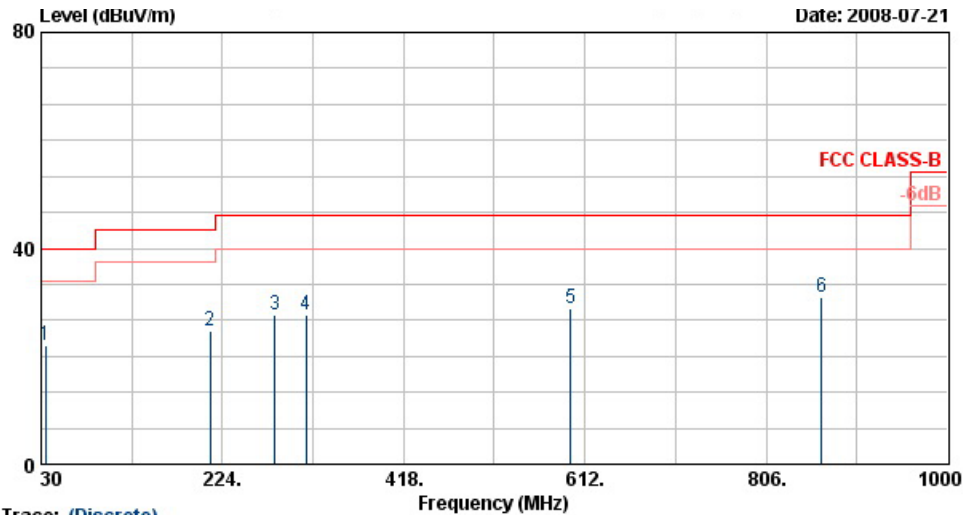
Trace: (Discrete)
 Site : 03CH06-HV
 Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
 EUT : 8.9 #Notebook
 Power : 120Vac/60Hz
 Model : FR 870804
 Memo : 11g Tx_Ch06;2437MHz
 Data Rate : 18M

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	1372.00	47.10	-26.90	74.00	52.81	27.69	2.68	36.08	100	0 Peak
2	1372.00	30.12	-23.88	54.00	35.82	27.69	2.68	36.08	100	19 Average
3	1860.00	48.08	-25.92	74.00	50.21	30.29	3.23	35.65	100	0 Peak
4	1860.00	31.46	-22.54	54.00	33.59	30.29	3.23	35.65	100	19 Average
5	2286.00	54.08	-19.92	74.00	54.24	31.71	3.79	35.66	100	0 Peak
6 @	2286.00	49.90	-4.10	54.00	50.05	31.71	3.79	35.66	100	19 Average
7 @	2350.00	40.70	-13.30	54.00	40.73	31.78	3.86	35.67	100	19 Average
8	2350.00	52.27	-21.73	74.00	52.30	31.78	3.86	35.67	100	0 Peak
9	2388.00	53.57	-20.43	74.00	53.46	31.86	3.92	35.68	100	0 Peak
10 @	2388.00	40.32	-13.68	54.00	40.22	31.86	3.92	35.68	100	19 Average
11 @	2437.00	97.80			97.57	31.93	3.99	35.69	100	19 Average
12 @	2437.00	109.67			109.44	31.93	3.99	35.69	100	0 Peak
13	2486.00	53.52	-20.48	74.00	53.19	31.98	4.05	35.70	100	0 Peak
14 @	2486.00	39.85	-14.15	54.00	39.52	31.98	4.05	35.70	100	19 Average
15	4992.00	52.57	-21.43	74.00	48.08	34.20	5.88	35.60	100	0 Peak
16 @	4992.00	40.10	-13.90	54.00	35.62	34.20	5.88	35.60	100	320 Average
17	8712.00	53.51	-20.49	74.00	46.38	36.10	7.45	36.42	100	0 Peak
18 @	8712.00	40.50	-13.50	54.00	33.37	36.10	7.45	36.42	100	325 Average

Remark: #11 and #12 are Fundamental Signals.

- Test Mode : Mode 6
- Temperature : 22~23°C
- Relative Humidity : 43~44%
- Test Engineer: Andrew
- Polarization : Horizontal (30MHz-1GHz)

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

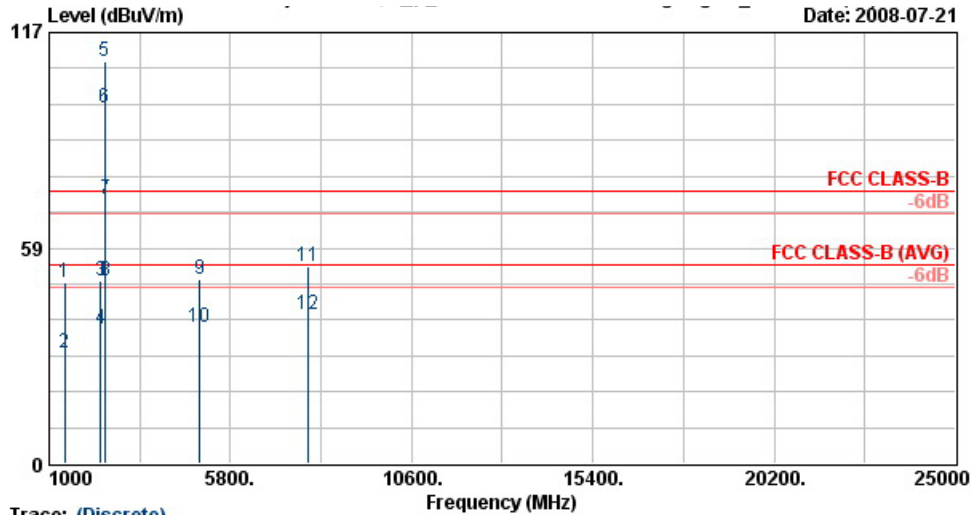


Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
EUT : 8.8" Notebook
Power : 120Vac/60Hz
Model : FR 870804
Memo : Ilg Tx_Ch11;2462MHz
Data Rate : 18M

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	34.59	22.10	-17.90	40.00	37.50	16.13	0.30	31.83	---	Peak
2	210.63	24.66	-18.84	43.50	46.35	9.93	0.60	32.22	---	Peak
3	280.29	27.75	-18.25	46.00	46.22	12.84	0.70	32.01	---	Peak
4	313.30	27.66	-18.34	46.00	45.33	13.56	0.80	32.03	---	Peak
5	596.80	28.83	-17.17	46.00	41.58	18.43	1.00	32.18	---	Peak
6 @	864.90	30.94	-15.06	46.00	41.58	20.28	1.25	32.18	100	332 Peak

- Polarization : Horizontal (1GHz-25GHz)

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



Trace: (Discrete)

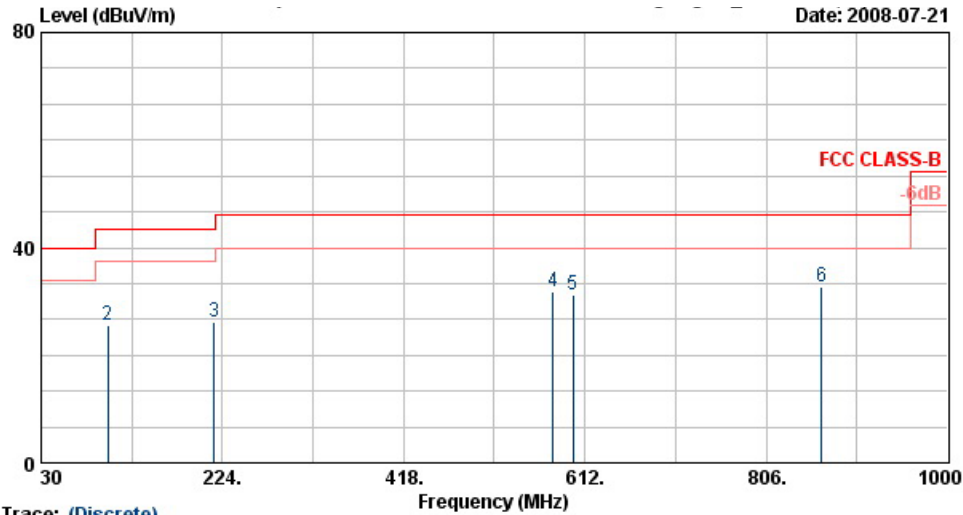
Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
EUT : 8.0 *Notebook
Power : 120Vac/60Hz
Model : FR 870804
Memo : lig Tx_Ch11;2462MHz
Data Rate : 16M

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	1420.00	49.07	-24.93	74.00	54.74	27.61	2.74	36.02	100	0 Peak
2	1420.00	29.97	-24.03	54.00	35.64	27.61	2.74	36.02	117	48 Average
3	2366.00	49.40	-24.60	74.00	49.38	31.81	3.89	35.68	100	0 Peak
4	2366.00	36.57	-17.43	54.00	36.55	31.81	3.89	35.68	117	48 Average
5 @	2462.00	109.22			108.94	31.95	4.02	35.69	100	0 Peak
6 @	2462.00	96.57			96.29	31.95	4.02	35.69	117	48 Average
7 @	2483.50	71.58	-2.42	74.00	71.25	31.98	4.05	35.70	100	0 Peak
8 @	2483.50	49.69	-4.31	54.00	49.36	31.98	4.05	35.70	117	48 Average
9	4992.00	49.97	-24.03	74.00	45.49	34.20	5.88	35.60	100	0 Peak
10	4992.00	36.99	-17.01	54.00	32.51	34.20	5.88	35.60	100	299 Average
11	7872.00	53.41	-20.59	74.00	46.56	35.67	7.45	36.27	100	0 Peak
12 @	7872.00	40.33	-13.67	54.00	33.48	35.67	7.45	36.27	100	302 Average

Remark: #5 and #6 are Fundamental Signals.

- Polarization : Vertical (30MHz-1GHz)

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



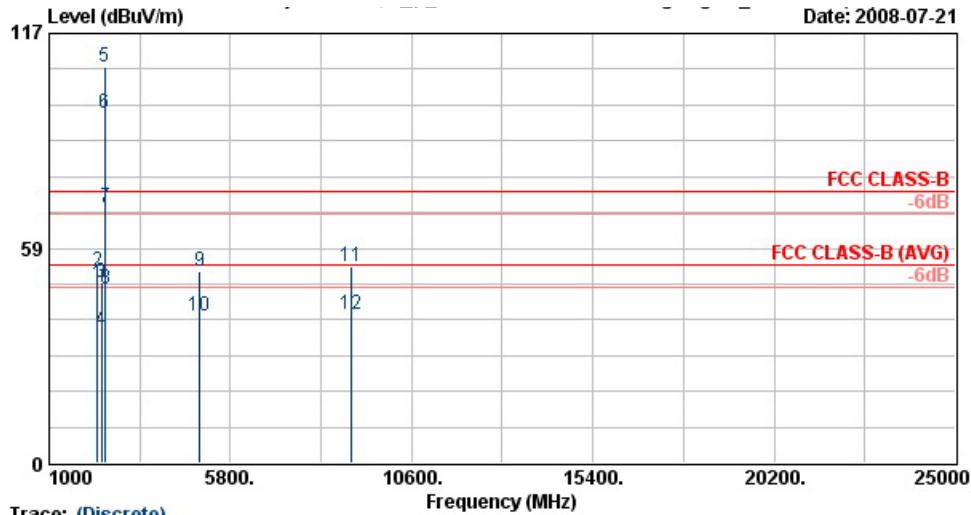
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(051121) VERTICAL
EUT : 8.0 *Notebook
Power : 120Vac/60Hz
Model : FR 870804
Memo : Lig Tx_Ch11;2462MHz
Data Rate : 16M

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	30.54	25.66	-14.34	40.00	38.02	18.95	0.30	31.61	---	---	Peak
2	101.28	25.46	-18.04	43.50	45.92	11.07	0.50	32.02	---	---	Peak
3	215.49	26.15	-17.35	43.50	47.34	10.21	0.65	32.06	---	---	Peak
4 @	577.90	31.93	-14.08	46.00	44.84	18.24	1.00	32.15	---	---	Peak
5 @	598.90	31.35	-14.65	46.00	44.08	18.45	1.00	32.18	---	---	Peak
6 @	864.90	32.73	-13.27	46.00	43.37	20.28	1.25	32.18	100	360	Peak

- Polarization : Vertical (1GHz-25GHz)

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



Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
 EUT : 8.0 Notebook
 Power : 120Vac/60Hz
 Model : FR 870804
 Memo : Lig Tx_Ch11;2462MHz
 Data Rate : 18M

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	2286.00	48.78	-5.22	54.00	48.93	31.71	3.79	35.66	100	31	Average
2	2286.00	52.33	-21.67	74.00	52.48	31.71	3.79	35.66	100	0	Peak
3	2388.00	49.03	-24.97	74.00	48.93	31.86	3.92	35.68	100	0	Peak
4	2388.00	36.30	-17.70	54.00	36.20	31.86	3.92	35.68	100	31	Average
5 @	2462.00	107.79			107.51	31.95	4.02	35.69	100	0	Peak
6 @	2462.00	95.47			95.19	31.95	4.02	35.69	100	31	Average
7 @	2483.50	69.45	-4.55	74.00	69.12	31.98	4.05	35.70	100	0	Peak
8 @	2483.50	47.27	-6.73	54.00	46.94	31.98	4.05	35.70	100	31	Average
9	4992.00	52.16	-21.84	74.00	47.68	34.20	5.88	35.60	100	0	Peak
10 @	4992.00	40.20	-13.80	54.00	35.72	34.20	5.88	35.60	100	350	Average
11	9000.00	53.56	-20.44	74.00	45.86	36.50	7.80	36.60	100	0	Peak
12 @	9000.00	40.33	-13.67	54.00	32.63	36.50	7.80	36.60	100	356	Average

Remark: #5 and #6 are Fundamental Signals.

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 PCB Antenna for WLAN 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

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
EMI Receiver	R&S	ESCS 30	100356	9kHz – 2.75GHz	Jul. 26, 2007	Jul. 25, 2008	Conduction (CO05-HY)
Two-LISN	R&S	ENV216	11-100081	9kHz – 30MHz	Dec. 06, 2007	Dec. 05, 2008	Conduction (CO05-HY)
Two-LISN	R&S	ENV216	11-100080	9kHz – 30MHz	Dec. 06, 2007	Dec. 05, 2008	Conduction (CO05-HY)
DC-Lisn	R&S	ESH3-26	1000485	0.1MHz-200MHz	Feb. 04, 2008	Feb. 03, 2009	Conduction (CO05-HY)
DC-Lisn	R&S	ESH3-26	1000484	0.1MHz-200MHz	Feb. 04, 2008	Feb. 03, 2009	Conduction (CO05-HY)
Spectrum Analyzer	Agilent	E4408B	MY44211028	9KHz-26.5GHz	Oct. 17, 2007	Oct. 16, 2008	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jul. 26, 2007	Jul. 25, 2008	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Dec. 01, 2007	Nov. 30, 2008	Radiation (03CH06-HY)
Double Ridge Horn Antenna	EMCO	3117	00075962	1G~18G	Aug. 29, 2007	Aug. 28, 2008	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBECK	BBHA 9170	9170-251	14G - 40G	Oct. 17, 2007	Oct. 16, 2008	Radiation (03CH06-HY)
Pre Amplifier	Agilent	8449B	3008A01917	1G - 26.5G	Nov. 22, 2007	Nov. 21, 2008	Radiation (03CH06-HY)
Pre Amplifier	EMEC	PA303	PA303-SMA-059	100K~3GHz	Nov. 26, 2007	Nov. 25, 2008	Radiation (03CH06-HY)
Base Station Simulator	R & S	CMU200	103937	Third-Band	Oct. 19, 2007	Oct. 18, 2008	Radiation (03CH06-HY)

7. Uncertainty Evaluation

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

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 (30 MHz ~ 1000 MHz)

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		

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

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				

The measured result is : $y \text{ dBuV} \pm U \text{ dB}$
for a level of confidence of approximately 95%, ($k = 2$)

Appendix A. Photographs of EUT

Please refer to Sporton report number EP870804 as below.