FCC 47 CFR PART 15 SUBPART C

Product Type	:	WiFi Router
Applicant	:	DrayTek Corp.
Address	:	No. 26, Fu-Shing Rd., HuKou County, Hsin-Chu Industrial Park, Hsin-Chu,Taiwan 303 R.O.C.
Trade Name	:	DrayTek
Model Number	:	VigorFly200(Model list see Section 2.1)
FCC ID	:	VGYVFLY200
Test Specification	:	FCC 47 CFR PART 15 SUBPART C: Oct., 2009 ANSI C63.4-2003
Issue Date	:	Jun. 14, 2010

Issue by

A Test Lab Techno Corp.
No. 140-1, Changan Street, Bade City,
Taoyuan Country 334, Taiwan R.O.C.
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Taiwan Accreditation Foundation accreditation number: 1330

Revision History

Rev.	Issue Date	Revisions	Revised By
00	Mar. 31, 2010	Initial Issue	
01	Apr. 23, 2010	Revise model list difference	Linda Su
02	Jun. 14, 2010	Add MIMO test results	Joyce Liao

Test Report Verification

Issued Date: 2010/06/14

Product Type	:	WiFi Router
Applicant	:	DrayTek Corp.
Address	:	No. 26, Fu-Shing Rd., HuKou County, Hsin-Chu Industrial Park, Hsin-Chu,Taiwan 303 R.O.C.
Trade Name	:	DrayTek
Model Number	:	VigorFly200(Model list see Section 2.1)
FCC ID	:	VGYVFLY200
EUT Rated Voltage	:	DC 12-15V, 0.6-0.5A
Test Voltage	:	120 Vac / 60 Hz
Applicable Standard	:	FCC 47 CFR PART 15 SUBPART C: Oct., 2009 ANSI C63.4-2003
Test Result	:	Complied
Performed Lab.	:	A Test Lab Techno Corp. No. 140-1, Changan Street, Bade City, Taoyuan Country 334, Taiwan R.O.C. Tel：+886-3-2710188 / Fax：+886-3-2710190 Taiwan Accreditation Foundation accreditation number: 1330 http://www.atl-lab.com.tw/e-index.htm

The above equipment has been tested by A Test Lab Techno Corp., and found compliance with the requirements set forth in the Electromagnetic Compatibility Directive 2004/108/EC and technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved By	:		Reviewed By	:
(Manager)		(Miller Lee)	(Testing Engineer)	(Gary Wu)

TABLE OF CONTENTS

1 General Information

1.1 Summary of Test Result

Standard	Item	Result	Remark
15.247			
15.207	AC Power Conducted Emission	PASS	-----
-----	Receiver Radiated Emissions	PASS	-----
Standard	**Item**	**Result**	**Remark**
15.247			
15.247(d)	Transmitter Radiated Emissions	PASS	-----
15.247(b)(3)	Max. Output Power	PASS	-----
15.247(a)(2)	6dB RF Bandwidth	PASS	-----
15.247(e)	Power Spectral Density	PASS	-----
15.247(c)	Out of Band Conducted Spurious Emission	PASS	-----
15.247(d)	Band Edge Measurement	PASS	-----
15.247(c)	Occupied Bandwidth Measurement	PASS	-----
15.203	Antenna Requirement	PASS	-----

The test results of this report relate only to the tested sample(s) identified in this report. Manufacturer or whom it may concern should recognize the pass or fail of the test result.

1.2 Measurement Uncertainty

Conducted Emission

The measurement uncertainty is evaluated as ± 2.24 dB.

Radiated Emission

The measurement uncertainty of 30 MHz - 1GHz is evaluated as ± 3.072dB.

2 EUT Description

Product	:	WiFi Router
Trade Name	:	DrayTek
Model No.	:	VigorFly200(Model list see Section 2.1)
Applicant	:	DrayTek Corp. No. 26, Fu-Shing Rd., HuKou County, Hsin-Chu Industrial Park, Hsin-Chu,Taiwan 303 R.O.C.
Manufacturer	:	DrayTek Corp. No. 26, Fu-Shing Rd., HuKou County, Hsin-Chu Industrial Park, Hsin-Chu,Taiwan 303 R.O.C.
FCC ID	:	VGYVFLY200
Frequency Range	:	2412 ~ 2462 MHz, 2422 ~ 2452 MHz
Modulation Type	:	IEEE 802.11b:DSSS(CCK, DQPSK, DBPSK) IEEE 802.11g:DSSS(CCK, DQPSK, DBPSK)+ OFDM(QPSK, BPSK, 16-QAM, 64-QAM) draft 802.11n Standard-20MHz channel mode: OFDM(6.5,7.2, 13,14.4, 14.44, 19.5,217,26,28.89,28.9,39.43.3,43.33,52,57.78, 57.8, 58.5, 65.0, 72.2, 78, 86.67,104,115.56,117,130 and 144.44 Mbps) draft 802.11n Wide-40MHz channel mode: OFDM(13.5,15,27,30,40.5, 45,54,60,81,90,108,120, 121.5,135,150,162,180,216,240,243,270 and 300 Mbps)
Antenna Type	:	Fixed
Antenna Gain	:	2 dBi
Max. RF Output Power (Conducted)	:	IEEE 802.11b: 0.073 W / 18.64 dBm IEEE 802.11g: 0.183 W / 22.63 dBm draft 802.11n Standard-20MHz: 0.069 W / 18.40 dBm draft 802.11n Wide-40MHz: 0.064 W / 18.05 dBm
Component		
Power Adapter (1)	:	HON-KWANG, HK-H1-A12 I/P: 100-240VAC, 50/60Hz, 0.8A O/P: 12.0VDC, 0-2.5A (SET AT 2.0A) Cable out: Non-Shielded, 1.87m, Non-Detachable at Power Adaptor
Power Adapter (2)	:	Channel Well Technology, CAP018121 I/P: 100-240VAC, 47-63Hz, 0.6A O/P: 12.0VDC, 1.5A Cable out: Non-Shielded, 1.47m, Non-Detachable at Power Adaptor
Power Adapter (3)	:	Channel Well Technology, CAP012121 I/P: 100-240VAC, 47-63Hz, 0.35A O/P: 12.0VDC, 1.0A Cable out: Non-Shielded, 1.5m, Non-Detachable at Power Adaptor
Power Adapter (4)	:	Channel Well Technology, CAP028561 I/P: 100-240VAC, 47-63Hz, 1.0A O/P: 56.0VDC, 0.5A Cable out: Non-Shielded, 1.5m, Non-Detachable at Power Adaptor

2.1. Difference Description of EUT

VigorFly200 series model list and difference									
Item	**Model No.**	**LAN (10/100)**	**WAN (10/100)**	**USB**	**1x1 WLAN**	**2x2 WLAN**	**PWR jack**	**Push button**	**WLAN WPS push button**
1	**VigorPhone-Z**	x1 (PSE)	x1 (PD)	N/A	N/A	N/A	1	1	N/A
2	**VigorFly201**	x4	x1	host 2.0 x1	1	N/A	1	1	Yes
3	**VigorFly200**	x4	x1	host 2.0 x1	N/A	1	1	1	Yes
4	**VigorFly210**	x4	x1	host 2.0 x1	N/A	1	1	1	Yes
5	**VigorAP800**	x4 (PD x1)	N/A	host 2.0 x1	N/A	1	1	1	Yes

The model (DrayTek VigorFly200) have different WLAN antenna for sell. The other circuit designed is the same. The WLAN antenna models list below.

Component Name	Component Model Number	Antenna Specification	Remark
WLAN Antenna (1)	MAG. LAYERS, 450-7000002-00	External Type, Gain: 2dBi	(*)
WLAN Antenna (2)	MAG. LAYERS, 450-9001000-00	External Type, Gain: 2dBi	
WLAN Antenna (3)	MAG. LAYERS, EDA-8709-2G4C1-A31	External Type, Gain: 2dBi	

Remark: (*) The testing used.

3 Test Methodology

3.1. Mode of Operation

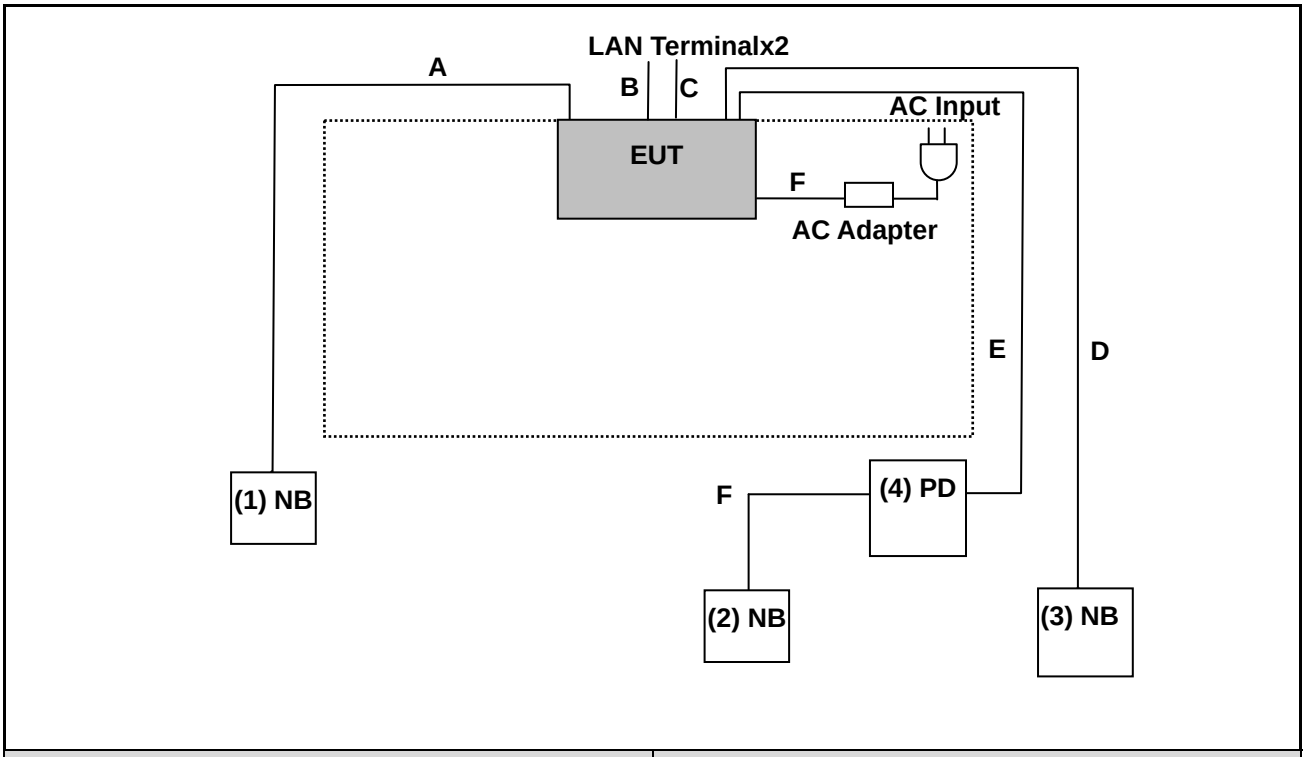
Decision of Test ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: Normal Operation Mode
Mode 2: IEEE 802.11b Link Mode
Mode 3: IEEE 802.11g Link Mode
Mode 4: draft 802.11n Standard-20MHz Link Mode
Mode 5: draft 802.11n Wide-40MHz Link Mode

3.2. EUT Exercise Software

1.	Setup the EUT and simulators as shown on 3.3.
2.	Turn on the power of all equipment.
3.	Data will communicate between the notebook and partner notebook through EUT.
4.	The notebook and partner notebook will show the transmitting and receiving characteristics when
5.	Repeat the above procedure (3) to (4).

3.3. Configuration of Test System Details



Signal Cable Type		Signal Cable Description
A	LAN Cable	Non-Shielded, 7m
B	LAN Cable	Non-Shielded, 7m
C	LAN Cable	Non-Shielded, 7m
D	LAN Cable	Non-Shielded, 7m
E	LAN Cable	Non-Shielded, 3m
F	LAN Cable	Non-Shielded, 3m
G	Power Cable	Non-Shielded, 1.5m

Devices Description					
Product		Manufacturer	Model No.	Serial No.	Power Cord
1.	Notebook	DELL	D531	GCDCD-T6HYQ-3MQ8 R-JCPD3-3G8G2	Non-Shielded, 1.5m with one core
2.	Notebook	DELL	D830	CN-OHN341-48643-88 Q-1221	Non-Shielded, 1.5m with one core
3.	Notebook	DELL	D531	CN-OXM006-48643-87 A-3398	Non-Shielded, 1.5m with one core
4.	WiFi Router	DrayTek	VigorFly200	N/A	Non-Shielded, 1.5m

3.4. Test Site Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	25
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950

4 Conducted Emission Measurement

4.1. Limit

Frequency (MHz)	Quasi-peak	Average
0.15 - 0.5	66 to 56	56 to 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

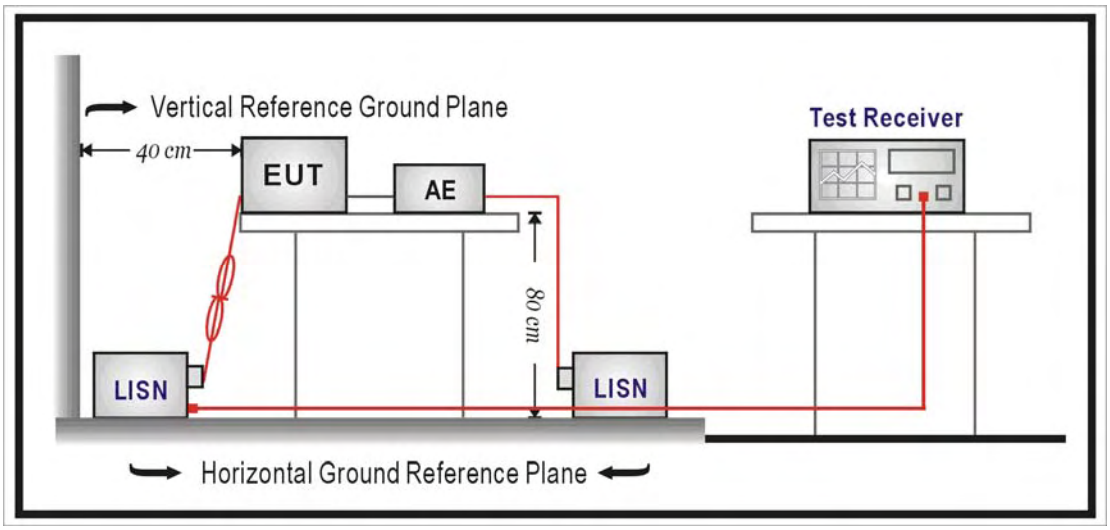
4.2. Test Instruments

Describe	Manufacturer	Model No.	Serial No.	Cal. Date	Remark
Test Receiver	R&S	ESCI	100367	07/01/2009	(1)
LISN	EMCO	3816/2 SH	00060110	06/05/2009	(1)
LISN	EMCO	3816/2 SH	00060111	06/29/2009	(1)
Transient Limiter	ELECTRO-METRICS	EM-7600	777	09/22/2009	(2)
Test Site	ATL	TE02	TE02	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

4.3. Test Setup



4.4. Test Procedure

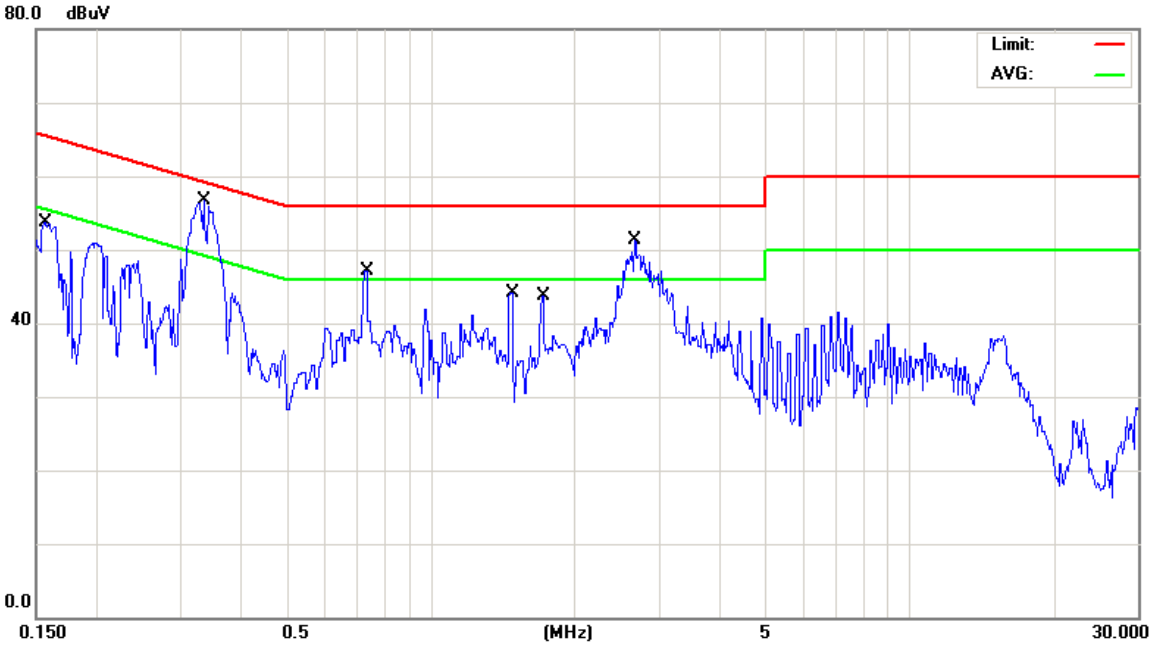
The power line conducted emission measurements were performed in a shielded enclosure. The EUT was assembled on a wooden table which is 80 centimeters high, was placed 40 centimeters from the back wall and at least 1 meter from the sidewall.

Power was fed to the EUT from the public utility power grid through a line filter and EMCO Model 3162/2 SH Line Impedance Stabilization Networks (LISN). The LISN housing, measuring instrumentation case, ground plane, etc., were electrically bonded together at the same RF potential. The Spectrum analyzer was connected to the AC line through an isolation transformer. The 50-ohm output of the LISN was connected to the spectrum analyzer directly. Conducted emission levels were in the CISPR quasi-peak detection mode. The analyzer's 6 dB bandwidth was set to 9 KHz. No post-detector video filter was used.

The spectrum was scanned from 150 KHz to 30 MHz. The physical arrangement of the test system and associated cabling was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude and frequency. All spurious emission frequencies were observed. The highest emission amplitudes relative to the appropriate limit were measured and have been recorded in paragraph 4.1.

4.5. Test Result

File :09-0337-EO(Conduction)PS Data :#1 Date: 2010/01/21 Time: 下午 11:00:33



Site : Conducted Phase: *L1* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 55 %

EUT: WiFi Router

M/N: VigorFly200

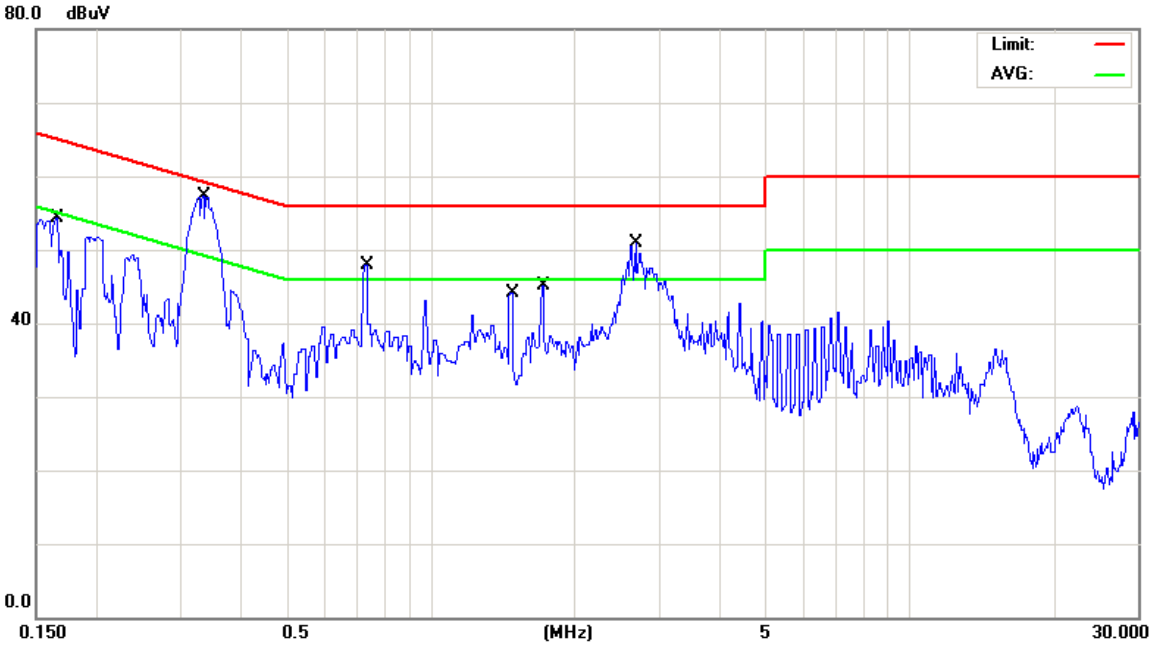
Mode: 1

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1563	41.30	9.73	51.03	65.65	-14.62	QP	
2		0.1563	25.20	9.73	34.93	55.65	-20.72	AVG	
3		0.3348	42.00	9.78	51.78	59.33	-7.55	QP	
4		0.3348	35.20	9.78	44.98	49.33	-4.35	AVG	
5		0.7340	36.70	9.80	46.50	56.00	-9.50	QP	
6	*	0.7340	34.90	9.80	44.70	46.00	-1.30	AVG	
7		1.4720	33.20	9.81	43.01	56.00	-12.99	QP	
8		1.4720	32.60	9.81	42.41	46.00	-3.59	AVG	
9		1.7150	34.30	9.82	44.12	56.00	-11.88	QP	
10		1.7150	33.00	9.82	42.82	46.00	-3.18	AVG	
11		2.6690	33.60	9.92	43.52	56.00	-12.48	QP	
12		2.6690	25.20	9.92	35.12	46.00	-10.88	AVG	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :09-0337-EO(Conduction)PS Data :#2 Date: 2010/01/21 Time: 下午 11:03:14



Site : Conducted Phase: *L2* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 55 %

EUT: WiFi Router

M/N: VigorFly200

Mode: 1

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1654	39.40	9.73	49.13	65.18	-16.05	QP	
2		0.1654	27.80	9.73	37.53	55.18	-17.65	AVG	
3		0.3341	42.30	9.78	52.08	59.35	-7.27	QP	
4		0.3341	36.70	9.78	46.48	49.35	-2.87	AVG	
5		0.7340	36.70	9.80	46.50	56.00	-9.50	QP	
6	*	0.7340	35.00	9.80	44.80	46.00	-1.20	AVG	
7		1.4720	33.20	9.81	43.01	56.00	-12.99	QP	
8		1.4720	32.50	9.81	42.31	46.00	-3.69	AVG	
9		1.7150	34.40	9.82	44.22	56.00	-11.78	QP	
10		1.7150	33.00	9.82	42.82	46.00	-3.18	AVG	
11		2.6780	38.60	9.92	48.52	56.00	-7.48	QP	
12		2.6780	27.40	9.92	37.32	46.00	-8.68	AVG	

*:Maximum data x:Over limit !:over margin ●Reference Only

5 Radiated Interference Measurement

5.1. Limit

Frequency Range (MHz)	Peak (dBuV)
30 to 88	39
88 to 216	43.5
216 to 960	46.4
Above 960	49.5

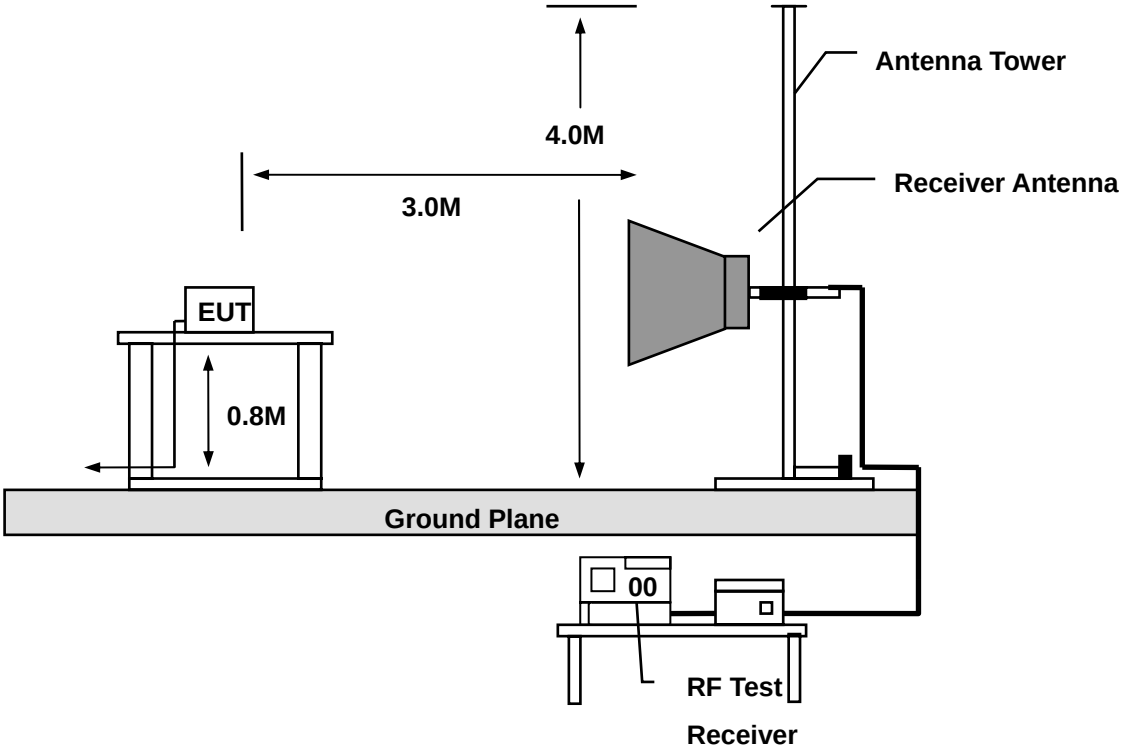
5.2. Test Instruments

3 Meter Chamber					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Date**	**Remark**
RF Pre-selector	Agilent	N9039A	MY46520256	01/27/2009	(2)
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/20/2009	(2)
Pre Amplifier	Agilent	8449B	3008A02237	07/01/2009	(1)
Pre Amplifier	Agilent	8447D	2944A10961	06/30/2009	(1)
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	06/23/2009	(2)
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	07/01/2009	(2)
Horn Antenna (18~40GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	06/30/2009	(2)
Test Site	ATL	TE01	TE01	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

5.3. Setup



5.4. Test Procedure

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 30 MHz to 26.5 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

A nonconductive material surrounded the EUT to supporting the EUT for standing on tree orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Biconilog Antenna (mode VULB9163) at 3 Meter and the SCHWARZBECK Double Ridged Guide Antenna (model BBHA9120D&9170) was used in frequencies 1 – 26.5 GHz at a distance of 1 meter. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade).

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 peak 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.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts pre meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro colts per meter (dBuV/m).

The actual field is intensity in referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

(1) Amplitude (dBuV/m) = FI (dBuV) +AF (dBuV) +CL (dBuV)-Gain (dB)

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

(2) Actual Amplitude (dBuV/m) = Amplitude (dBuV)-Dis(dB)

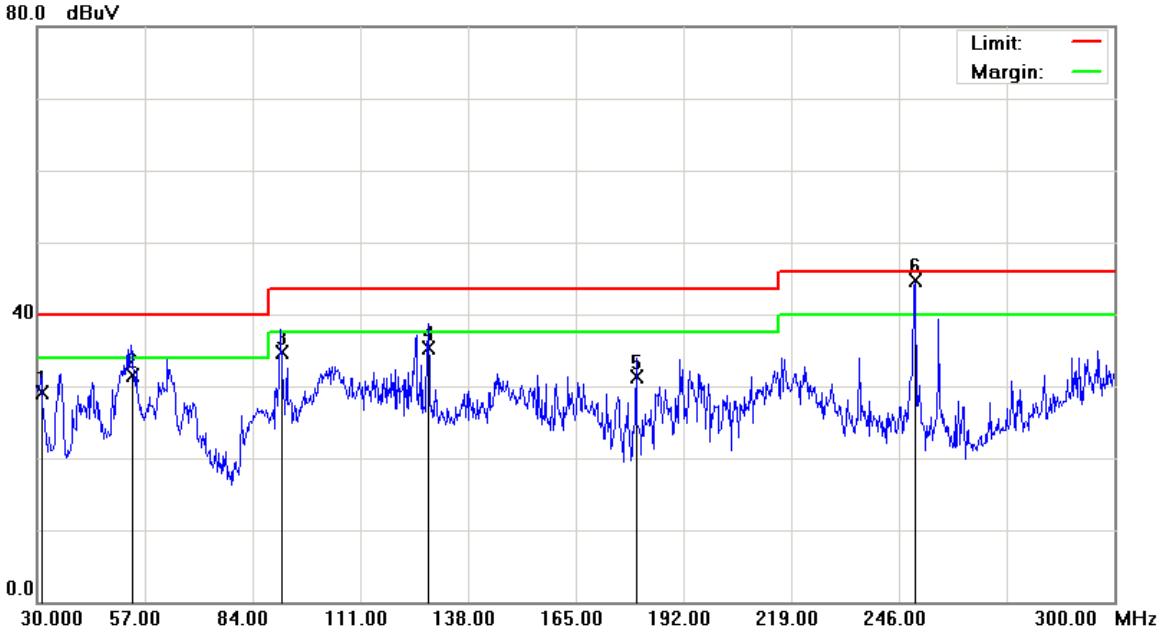
The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

(a) For fundamental frequency : Transmitter Output < +30dBm

(b) For spurious frequency : Spurious emission limits = fundamental emission limit /10

5.5. Test Result

File :BIGphone(Normal) Data :#1 Date: 2010/1/25 Time: 上午 03:31:56



Site: : 966 Chamber
Limit: FCC Class B 3M Radiation
EUT: WiFi Router
M/N: VigorFly200
Mode: 1
Note:
.

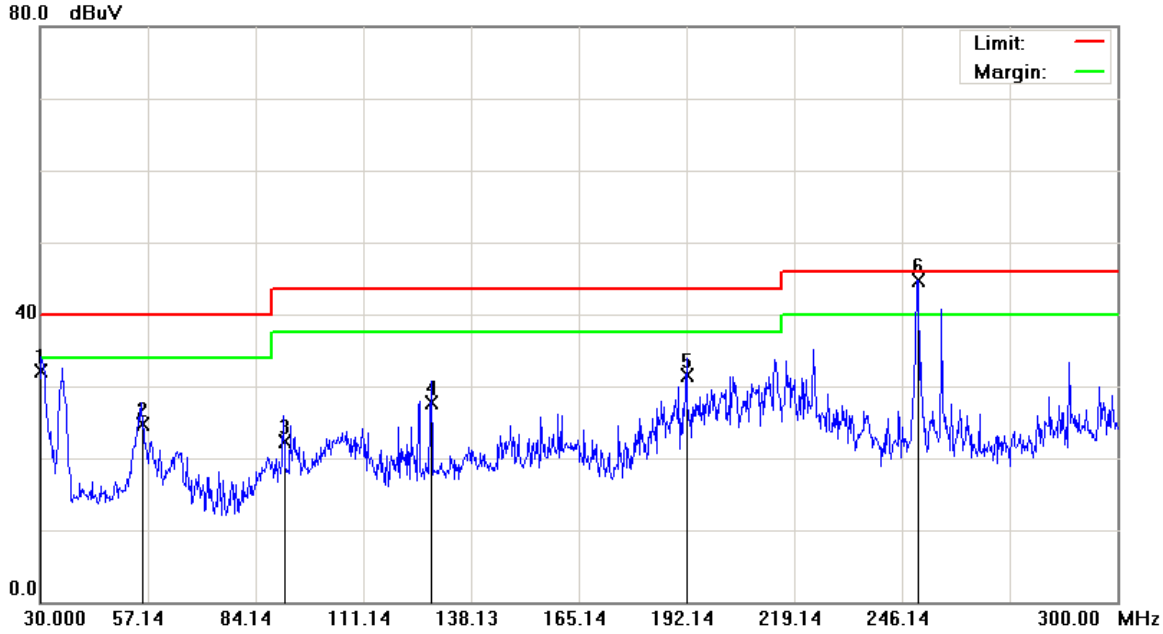
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 120 KHz VBW: 300 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		31.2150	42.32	-13.29	29.03	40.00	-10.97	QP			
2		53.6250	43.65	-12.20	31.45	40.00	-8.55	QP			
3		91.1550	47.65	-12.91	34.74	43.50	-8.76	QP			
4		128.0100	50.67	-15.40	35.27	43.50	-8.23	QP			
5		180.1200	45.69	-14.31	31.38	43.50	-12.12	QP			
6	*	250.0500	55.52	-10.82	44.70	46.00	-1.30	QP			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Normal) Data :#3 Date: 2010/1/25 Time: 上午 03:37:44



Site: : 966 Chamber
Limit: FCC Class B 3M Radiation
EUT: WiFi Router
M/N: VigorFly200
Mode: 1
Note:

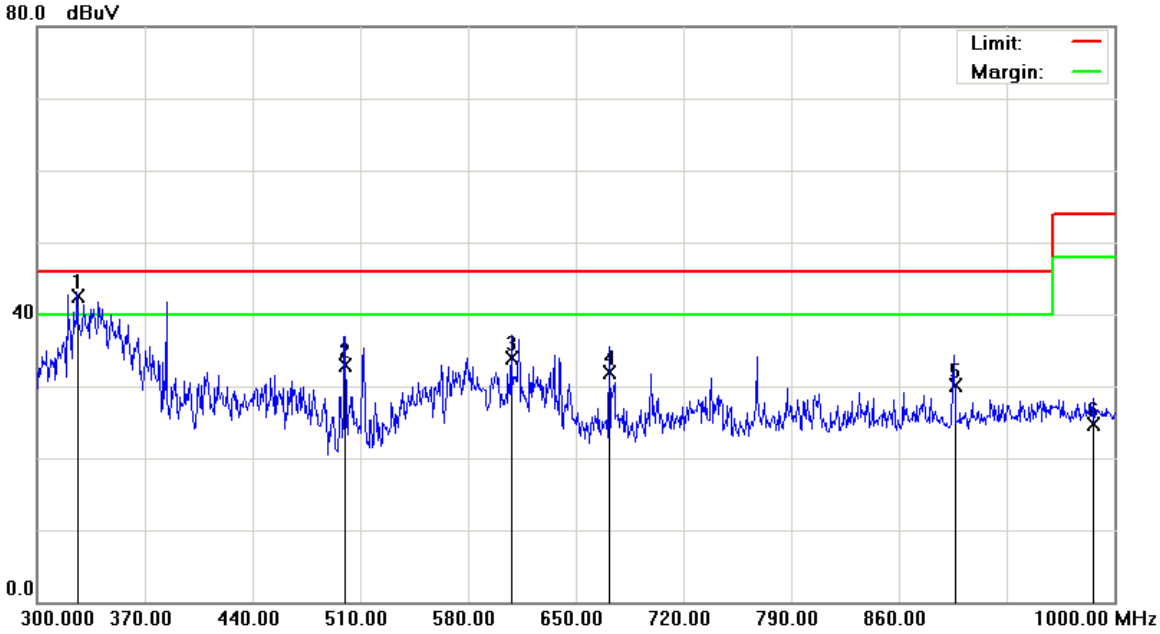
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 120 KHz VBW: 300 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		30.2700	45.36	-13.32	32.04	40.00	-7.96	QP			
2		55.5150	36.98	-12.24	24.74	40.00	-15.26	QP			
3		91.1550	35.18	-12.91	22.27	43.50	-21.23	QP			
4		128.0100	43.18	-15.40	27.78	43.50	-15.72	QP			
5		192.0000	44.78	-13.26	31.52	43.50	-11.98	QP			
6	*	249.9150	55.46	-10.83	44.63	46.00	-1.37	QP			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Normal) Data :#2 Date: 2010/1/25 Time: 上午 03:34:50



Site: : 966 Chamber
Limit: FCC Class B 3M Radiation
EUT: WiFi Router
M/N: VigorFly200
Mode: 1
Note:

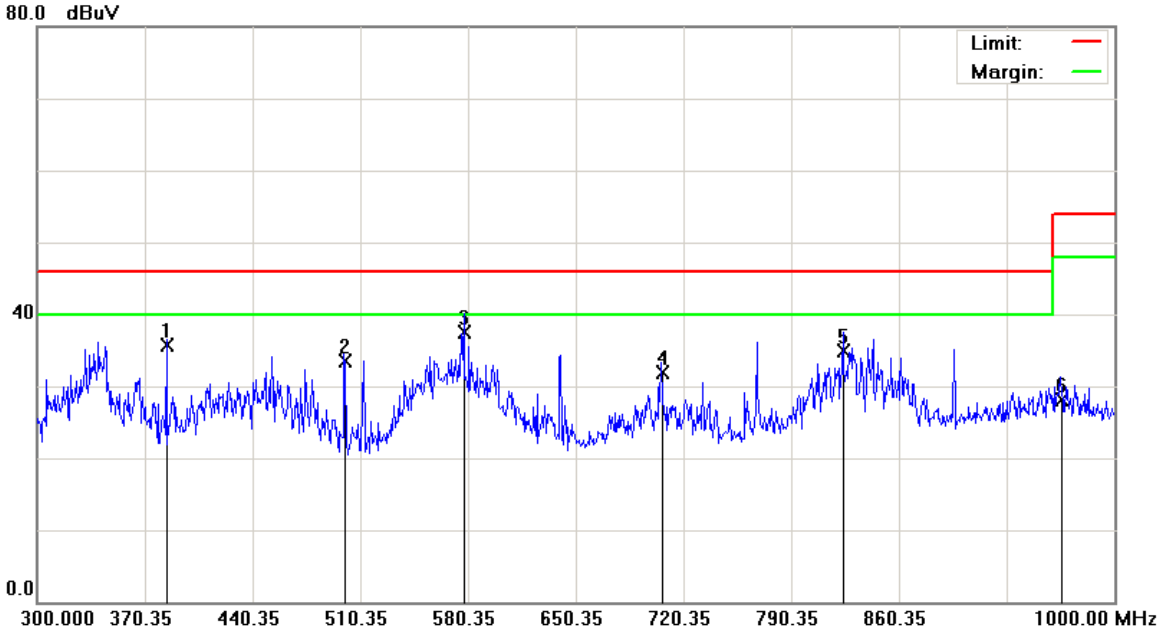
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 120 KHz VBW: 300 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	326.2500	52.10	-9.55	42.55	46.00	-3.45	QP			
2		500.2000	40.14	-7.17	32.97	46.00	-13.03	QP			
3		608.0000	38.41	-4.60	33.81	46.00	-12.19	QP			
4		671.7000	36.14	-4.28	31.86	46.00	-14.14	QP			
5		896.0500	30.67	-0.48	30.19	46.00	-15.81	QP			
6		986.3500	24.08	0.65	24.73	54.00	-29.27	QP			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Normal) Data :#4 Date: 2010/1/25 Time: 上午 03:40:39



Site: : 966 Chamber
Limit: FCC Class B 3M Radiation
EUT: WiFi Router
M/N: VigorFly200
Mode: 1
Note:

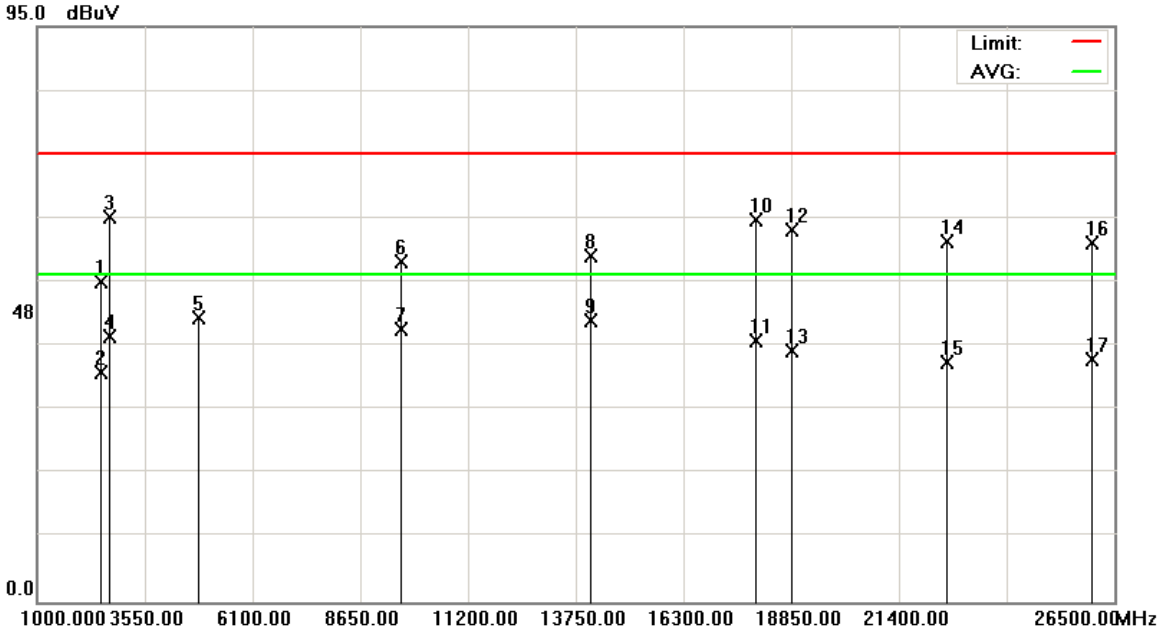
Polarization: ***Horizontal***
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 120 KHz VBW: 300 KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		384.0000	44.36	-8.62	35.74	46.00	-10.26	QP			
2		499.8500	40.68	-7.17	33.51	46.00	-12.49	QP			
3	*	577.5500	42.78	-5.32	37.46	46.00	-8.54	QP			
4		705.6500	35.98	-4.01	31.97	46.00	-14.03	QP			
5		823.6000	36.41	-1.54	34.87	46.00	-11.13	QP			
6		965.3500	27.46	0.68	28.14	54.00	-25.86	QP			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2412MHZ) Data :#17 Date: 2009/12/17 Time: 下午 11:14:00



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 2
Note: CH01(2412MHz)

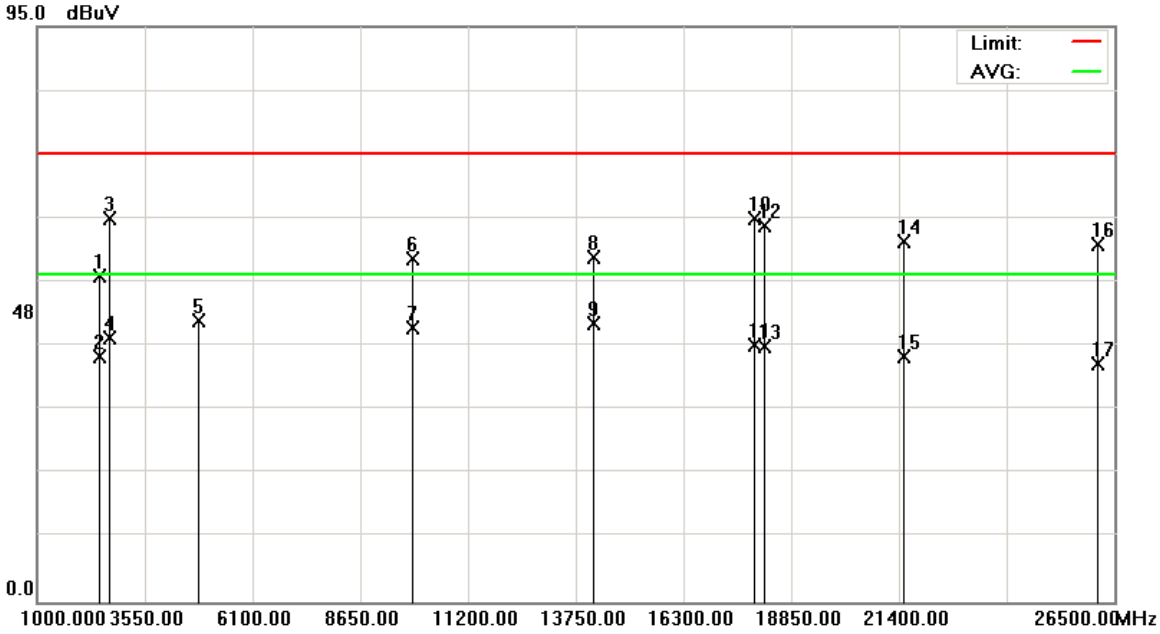
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2490.900	52.64	0.26	52.90	74.00	-21.10	peak			
2		2490.900	37.67	0.26	37.93	54.00	-16.07	AVG			
3		2700.000	40.93	22.58	63.51	74.00	-10.49	peak			
4		2700.000	21.29	22.58	43.87	54.00	-10.13	AVG			
5		4824.000	39.39	7.48	46.87	74.00	-27.13	peak			
6		9616.750	39.02	17.25	56.27	74.00	-17.73	peak			
7		9616.750	27.64	17.25	44.89	54.00	-9.11	AVG			
8		14100.000	38.22	18.90	57.12	74.00	-16.88	peak			
9	*	14100.000	27.61	18.90	46.51	54.00	-7.49	AVG			
10		18000.000	37.51	25.57	63.08	74.00	-10.92	peak			
11		18000.000	17.45	25.57	43.02	54.00	-10.98	AVG			
12		18850.000	38.28	23.15	61.43	74.00	-12.57	peak			
13		18850.000	18.24	23.15	41.39	54.00	-12.61	AVG			
14		22526.250	38.64	20.89	59.53	74.00	-14.47	peak			
15		22526.250	18.69	20.89	39.58	54.00	-14.42	AVG			
16		25947.500	40.56	18.60	59.16	74.00	-14.84	peak			
17		25947.500	21.47	18.60	40.07	54.00	-13.93	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2412MHZ) Data :#18 Date: 2009/12/17 Time: 下午 11:15:37



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 2
Note: CH01(2412MHz)

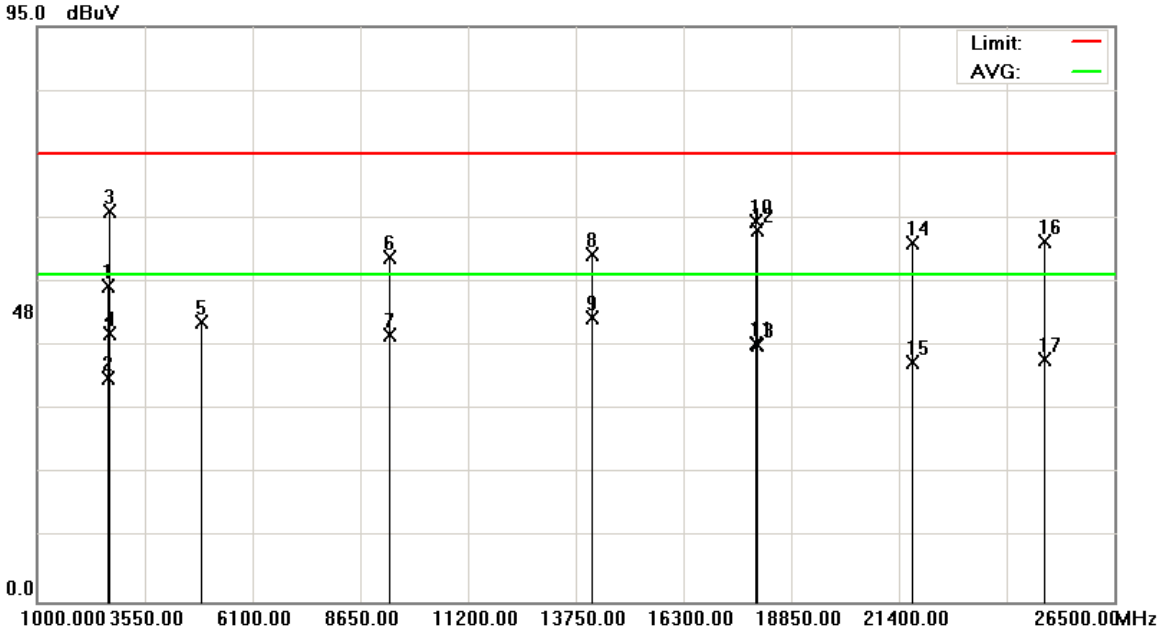
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2468.800	53.52	0.19	53.71	74.00	-20.29	peak			
2		2468.800	40.40	0.19	40.59	54.00	-13.41	AVG			
3		2700.000	40.75	22.58	63.33	74.00	-10.67	peak			
4		2700.000	21.07	22.58	43.65	54.00	-10.35	AVG			
5		4824.000	38.93	7.48	46.41	74.00	-27.59	peak			
6		9872.250	38.79	17.84	56.63	74.00	-17.37	peak			
7		9872.250	27.39	17.84	45.23	54.00	-8.77	AVG			
8		14140.000	38.09	18.84	56.93	74.00	-17.07	peak			
9	*	14140.000	27.21	18.84	46.05	54.00	-7.95	AVG			
10		17980.000	38.03	25.21	63.24	74.00	-10.76	peak			
11		17980.000	17.18	25.21	42.39	54.00	-11.61	AVG			
12		18212.500	38.81	23.22	62.03	74.00	-11.97	peak			
13		18212.500	19.04	23.22	42.26	54.00	-11.74	AVG			
14		21506.250	38.15	21.35	59.50	74.00	-14.50	peak			
15		21506.250	19.19	21.35	40.54	54.00	-13.46	AVG			
16		26075.000	40.45	18.51	58.96	74.00	-15.04	peak			
17		26075.000	20.78	18.51	39.29	54.00	-14.71	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2437MHZ) Data :#17 Date: 2009/12/17 Time: 下午 11:17:57



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 2
Note: CH06(2437MHz)
.

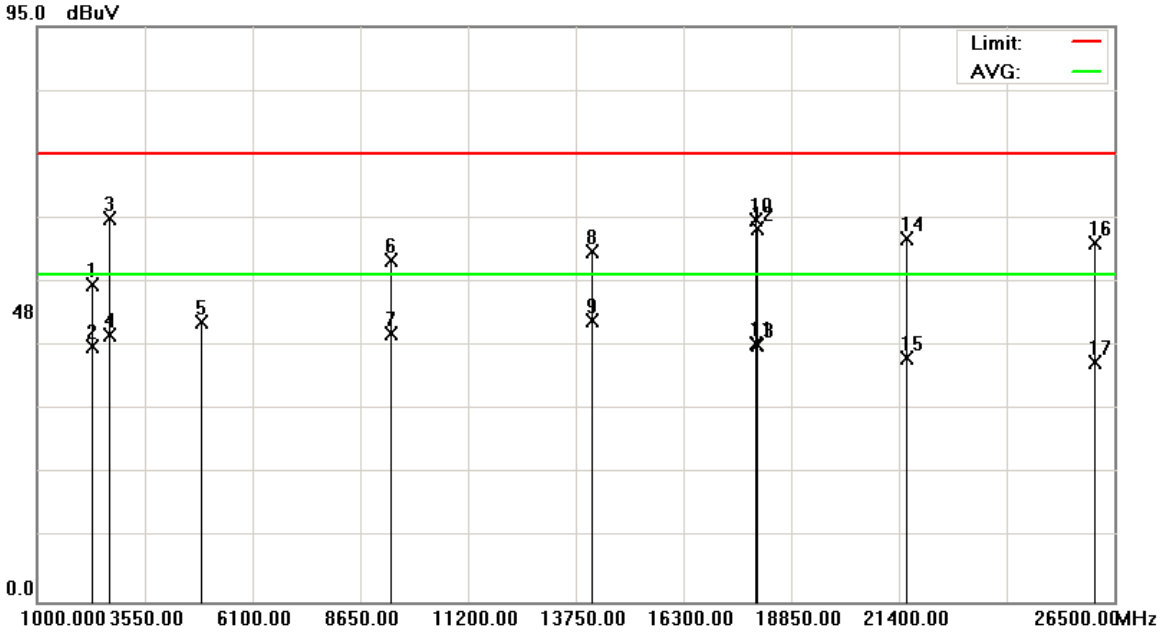
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2666.000	51.16	0.98	52.14	74.00	-21.86	peak			
2		2666.000	35.98	0.98	36.96	54.00	-17.04	AVG			
3		2700.000	42.01	22.58	64.59	74.00	-9.41	peak			
4		2700.000	21.62	22.58	44.20	54.00	-9.80	AVG			
5		4874.000	38.40	7.72	46.12	74.00	-27.88	peak			
6		9324.750	39.96	16.91	56.87	74.00	-17.13	peak			
7		9324.750	27.19	16.91	44.10	54.00	-9.90	AVG			
8		14120.000	38.53	18.87	57.40	74.00	-16.60	peak			
9	*	14120.000	27.98	18.87	46.85	54.00	-7.15	AVG			
10		18000.000	37.23	25.57	62.80	74.00	-11.20	peak			
11		18000.000	17.01	25.57	42.58	54.00	-11.42	AVG			
12		18042.500	38.22	23.27	61.49	74.00	-12.51	peak			
13		18042.500	19.15	23.27	42.42	54.00	-11.58	AVG			
14		21718.750	38.12	21.23	59.35	74.00	-14.65	peak			
15		21718.750	18.38	21.23	39.61	54.00	-14.39	AVG			
16		24821.250	40.02	19.53	59.55	74.00	-14.45	peak			
17		24821.250	20.55	19.53	40.08	54.00	-13.92	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2437MHZ) Data :#18 Date: 2009/12/17 Time: 下午 11:19:34



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 2
Note: CH06(2437MHz)

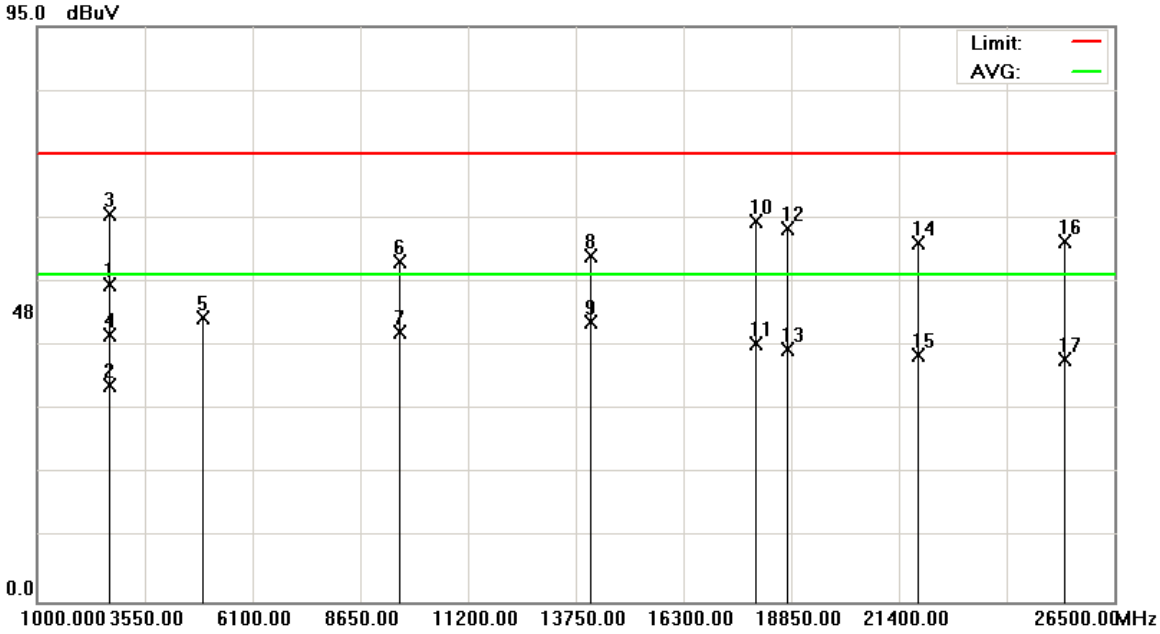
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2280.100	52.00	0.46	52.46	74.00	-21.54	peak			
2		2280.100	41.79	0.46	42.25	54.00	-11.75	AVG			
3		2700.000	40.78	22.58	63.36	74.00	-10.64	peak			
4		2700.000	21.37	22.58	43.95	54.00	-10.05	AVG			
5		4874.000	38.39	7.72	46.11	74.00	-27.89	peak			
6		9361.250	39.36	16.98	56.34	74.00	-17.66	peak			
7		9361.250	27.34	16.98	44.32	54.00	-9.68	AVG			
8		14120.000	38.85	18.87	57.72	74.00	-16.28	peak			
9	*	14120.000	27.57	18.87	46.44	54.00	-7.56	AVG			
10		18000.000	37.51	25.57	63.08	74.00	-10.92	peak			
11		18000.000	17.14	25.57	42.71	54.00	-11.29	AVG			
12		18021.250	38.42	23.28	61.70	74.00	-12.30	peak			
13		18021.250	19.03	23.28	42.31	54.00	-11.69	AVG			
14		21570.000	38.64	21.31	59.95	74.00	-14.05	peak			
15		21570.000	18.95	21.31	40.26	54.00	-13.74	AVG			
16		26032.500	40.73	18.54	59.27	74.00	-14.73	peak			
17		26032.500	21.00	18.54	39.54	54.00	-14.46	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2462MHZ) Data :#17 Date: 2009/12/18 Time: 上午 12:00:18



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 2
Note: CH11(2462MHz)
.

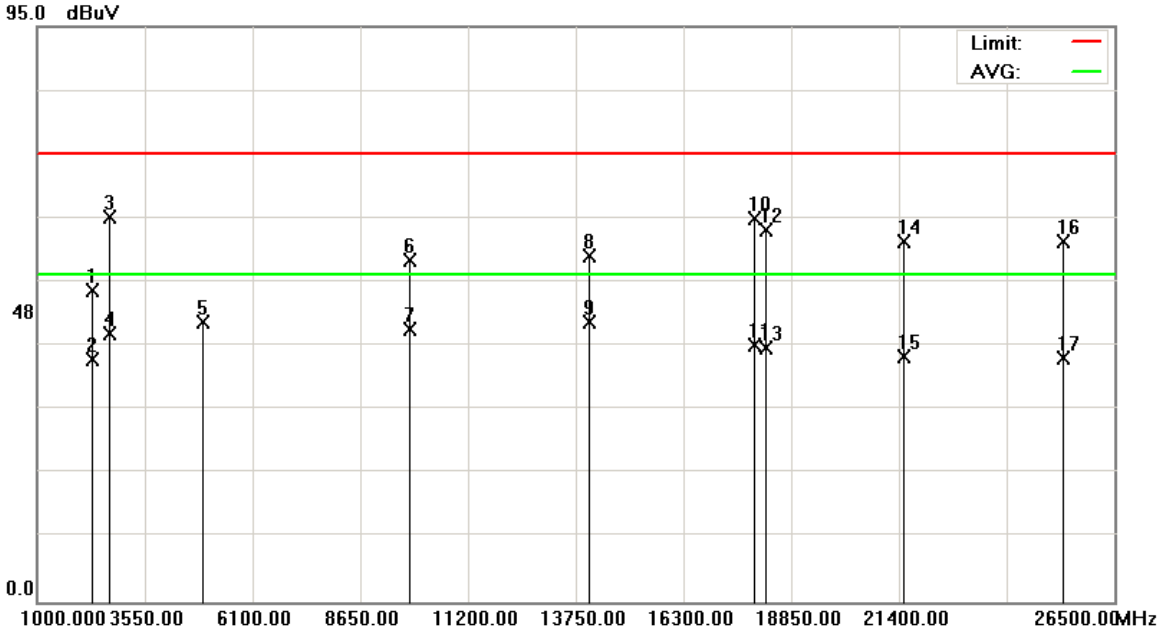
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2694.900	51.36	0.93	52.29	74.00	-21.71	peak			
2		2694.900	34.85	0.93	35.78	54.00	-18.22	AVG			
3		2700.000	41.37	22.58	63.95	74.00	-10.05	peak			
4		2700.000	21.38	22.58	43.96	54.00	-10.04	AVG			
5		4924.000	39.18	7.65	46.83	74.00	-27.17	peak			
6		9580.250	38.87	17.31	56.18	74.00	-17.82	peak			
7		9580.250	27.30	17.31	44.61	54.00	-9.39	AVG			
8		14100.000	38.19	18.90	57.09	74.00	-16.91	peak			
9	*	14100.000	27.35	18.90	46.25	54.00	-7.75	AVG			
10		18000.000	37.26	25.57	62.83	74.00	-11.17	peak			
11		18000.000	17.17	25.57	42.74	54.00	-11.26	AVG			
12		18743.750	38.46	23.13	61.59	74.00	-12.41	peak			
13		18743.750	18.63	23.13	41.76	54.00	-12.24	AVG			
14		21846.250	38.03	21.20	59.23	74.00	-14.77	peak			
15		21846.250	19.59	21.20	40.79	54.00	-13.21	AVG			
16		25310.000	40.30	19.10	59.40	74.00	-14.60	peak			
17		25310.000	20.94	19.10	40.04	54.00	-13.96	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2462MHZ) Data :#18 Date: 2009/12/18 Time: 上午 12:01:55



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 2
Note: CH11(2462MHz)

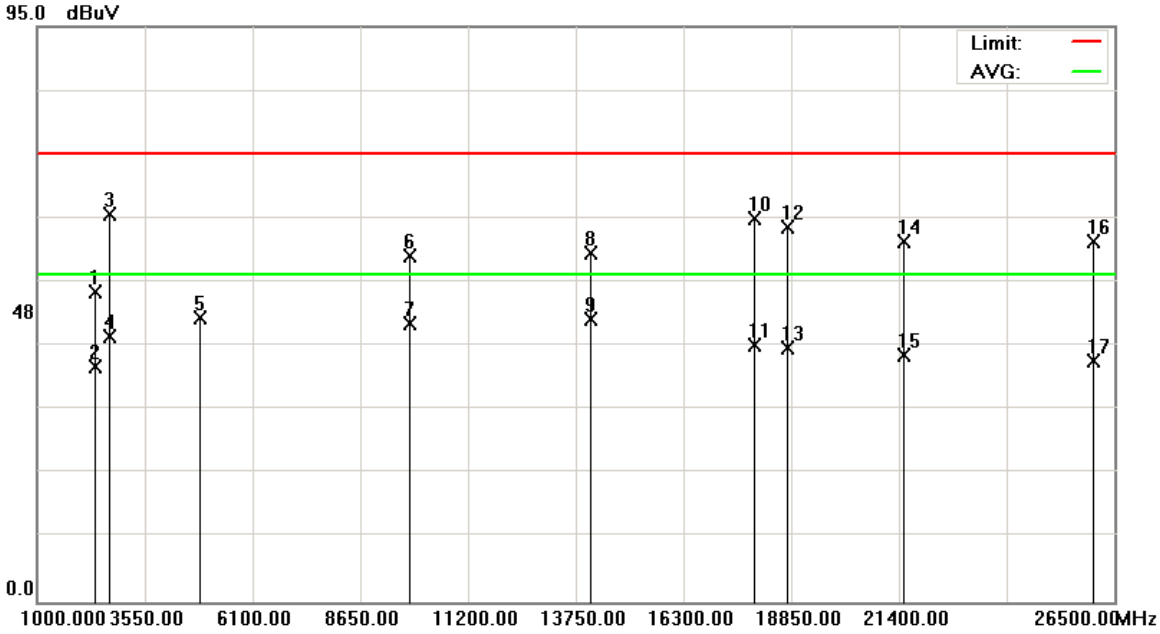
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2298.800	50.84	0.53	51.37	74.00	-22.63	peak			
2		2298.800	39.44	0.53	39.97	54.00	-14.03	AVG			
3		2700.000	40.90	22.58	63.48	74.00	-10.52	peak			
4		2700.000	21.68	22.58	44.26	54.00	-9.74	AVG			
5		4924.000	38.46	7.65	46.11	74.00	-27.89	peak			
6		9799.250	38.74	17.67	56.41	74.00	-17.59	peak			
7		9799.250	27.26	17.67	44.93	54.00	-9.07	AVG			
8		14040.000	38.46	18.66	57.12	74.00	-16.88	peak			
9	*	14040.000	27.64	18.66	46.30	54.00	-7.70	AVG			
10		17980.000	38.03	25.21	63.24	74.00	-10.76	peak			
11		17980.000	17.25	25.21	42.46	54.00	-11.54	AVG			
12		18233.750	38.16	23.21	61.37	74.00	-12.63	peak			
13		18233.750	18.81	23.21	42.02	54.00	-11.98	AVG			
14		21527.500	38.22	21.35	59.57	74.00	-14.43	peak			
15		21527.500	19.14	21.35	40.49	54.00	-13.51	AVG			
16		25288.750	40.36	19.11	59.47	74.00	-14.53	peak			
17		25288.750	21.22	19.11	40.33	54.00	-13.67	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2412MHZ) Data :#17 Date: 2009/12/17 Time: 下午 11:02:04



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 3
Note: CH01(2412MHz)
.

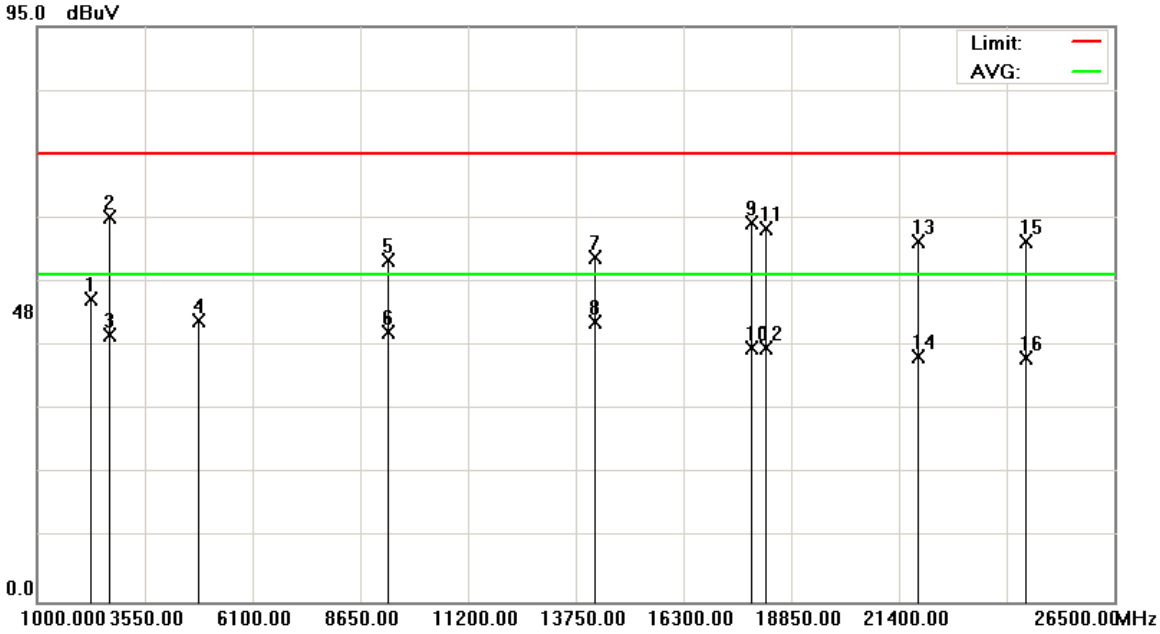
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2360.000	50.89	0.22	51.11	74.00	-22.89	peak			
2		2360.000	38.62	0.22	38.84	54.00	-15.16	AVG			
3		2700.000	41.52	22.58	64.10	74.00	-9.90	peak			
4		2700.000	21.25	22.58	43.83	54.00	-10.17	AVG			
5		4842.000	39.23	7.67	46.90	74.00	-27.10	peak			
6		9817.500	39.38	17.75	57.13	74.00	-16.87	peak			
7		9817.500	28.15	17.75	45.90	54.00	-8.10	AVG			
8		14100.000	38.73	18.90	57.63	74.00	-16.37	peak			
9	*	14100.000	27.67	18.90	46.57	54.00	-7.43	AVG			
10		17980.000	37.99	25.21	63.20	74.00	-10.80	peak			
11		17980.000	17.25	25.21	42.46	54.00	-11.54	AVG			
12		18765.000	38.69	23.13	61.82	74.00	-12.18	peak			
13		18765.000	18.70	23.13	41.83	54.00	-12.17	AVG			
14		21527.500	38.25	21.35	59.60	74.00	-14.40	peak			
15		21527.500	19.34	21.35	40.69	54.00	-13.31	AVG			
16		25990.000	40.88	18.56	59.44	74.00	-14.56	peak			
17		25990.000	21.13	18.56	39.69	54.00	-14.31	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2412MHZ) Data :#18 Date: 2009/12/17 Time: 下午 11:03:42



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 3
Note: CH01(2412MHz)

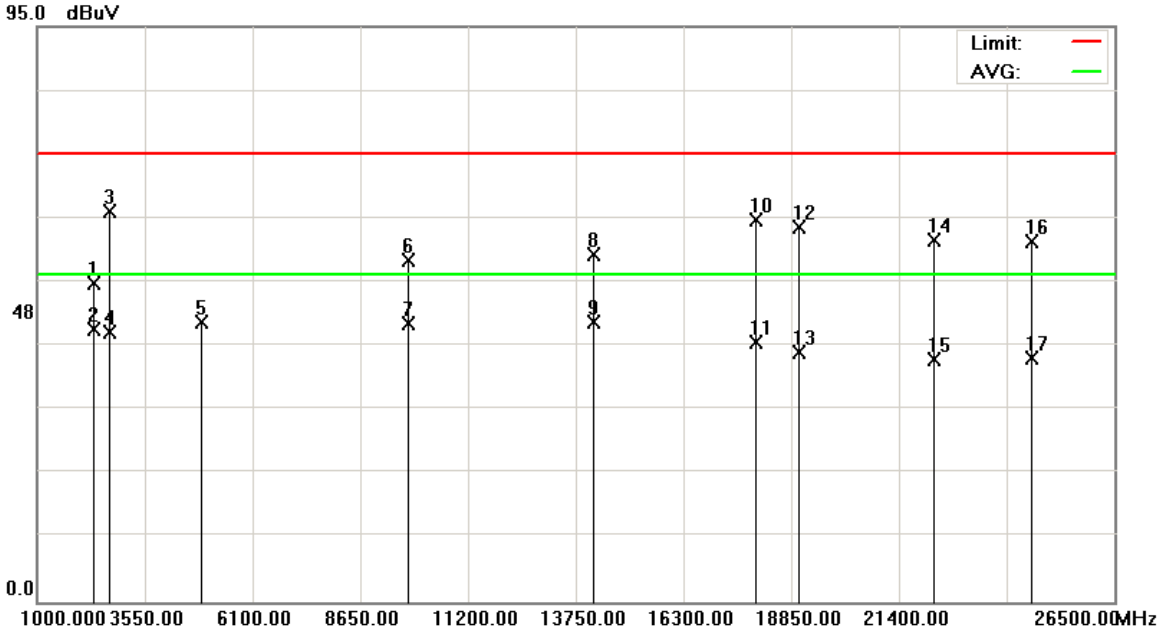
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2269.900	49.62	0.42	50.04	74.00	-23.96	peak			
2		2700.000	40.85	22.58	63.43	74.00	-10.57	peak			
3		2700.000	21.48	22.58	44.06	54.00	-9.94	AVG			
4		4824.000	39.03	7.48	46.51	74.00	-27.49	peak			
5		9306.500	39.52	16.89	56.41	74.00	-17.59	peak			
6		9306.500	27.65	16.89	44.54	54.00	-9.46	AVG			
7		14200.000	38.12	18.86	56.98	74.00	-17.02	peak			
8	*	14200.000	27.34	18.86	46.20	54.00	-7.80	AVG			
9		17900.000	37.69	24.96	62.65	74.00	-11.35	peak			
10		17900.000	17.05	24.96	42.01	54.00	-11.99	AVG			
11		18255.000	38.44	23.20	61.64	74.00	-12.36	peak			
12		18255.000	18.73	23.20	41.93	54.00	-12.07	AVG			
13		21846.250	38.35	21.20	59.55	74.00	-14.45	peak			
14		21846.250	19.35	21.20	40.55	54.00	-13.45	AVG			
15		24396.250	39.85	19.72	59.57	74.00	-14.43	peak			
16		24396.250	20.65	19.72	40.37	54.00	-13.63	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2437MHZ) Data :#17 Date: 2009/12/17 Time: 下午 11:06:09



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 3
Note: CH06(2437MHz)
.

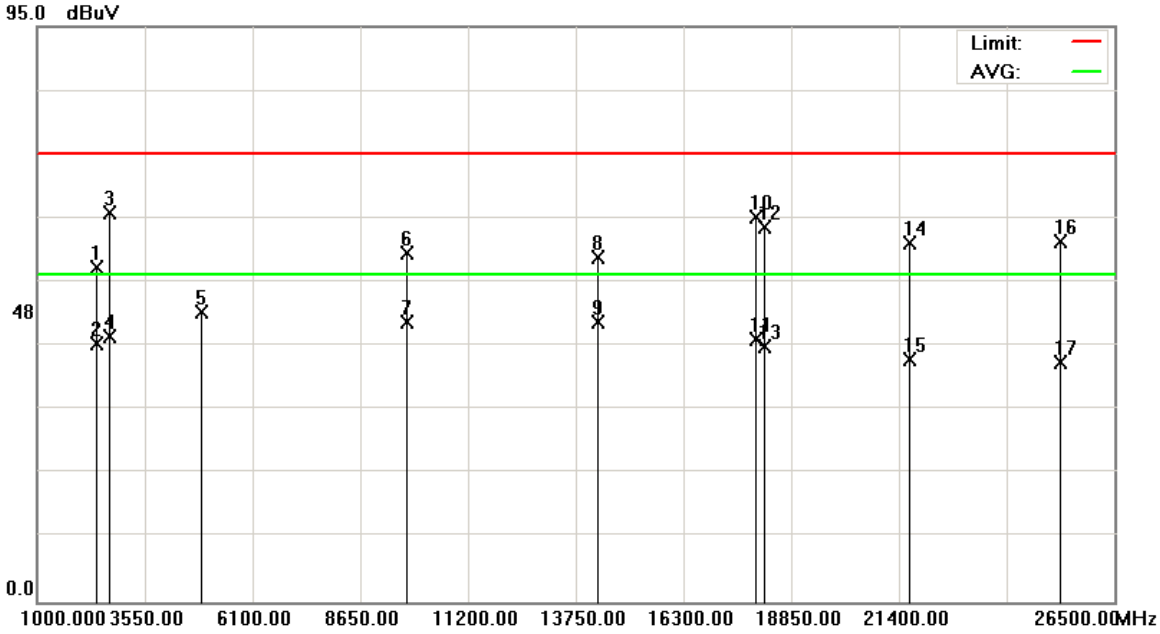
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2320.900	52.28	0.26	52.54	74.00	-21.46	peak			
2		2320.900	44.73	0.26	44.99	54.00	-9.01	AVG			
3		2700.000	42.00	22.58	64.58	74.00	-9.42	peak			
4		2700.000	21.98	22.58	44.56	54.00	-9.44	AVG			
5		4874.000	38.59	7.72	46.31	74.00	-27.69	peak			
6		9762.750	38.65	17.70	56.35	74.00	-17.65	peak			
7		9762.750	28.36	17.70	46.06	54.00	-7.94	AVG			
8		14160.000	38.51	18.83	57.34	74.00	-16.66	peak			
9	*	14160.000	27.41	18.83	46.24	54.00	-7.76	AVG			
10		18000.000	37.51	25.57	63.08	74.00	-10.92	peak			
11		18000.000	17.35	25.57	42.92	54.00	-11.08	AVG			
12		19020.000	38.76	23.07	61.83	74.00	-12.17	peak			
13		19020.000	18.20	23.07	41.27	54.00	-12.73	AVG			
14		22207.500	38.76	21.02	59.78	74.00	-14.22	peak			
15		22207.500	18.99	21.02	40.01	54.00	-13.99	AVG			
16		24523.750	39.95	19.65	59.60	74.00	-14.40	peak			
17		24523.750	20.57	19.65	40.22	54.00	-13.78	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2437MHZ) Data :#18 Date: 2009/12/17 Time: 下午 11:07:46



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 3
Note: CH06(2437MHz)

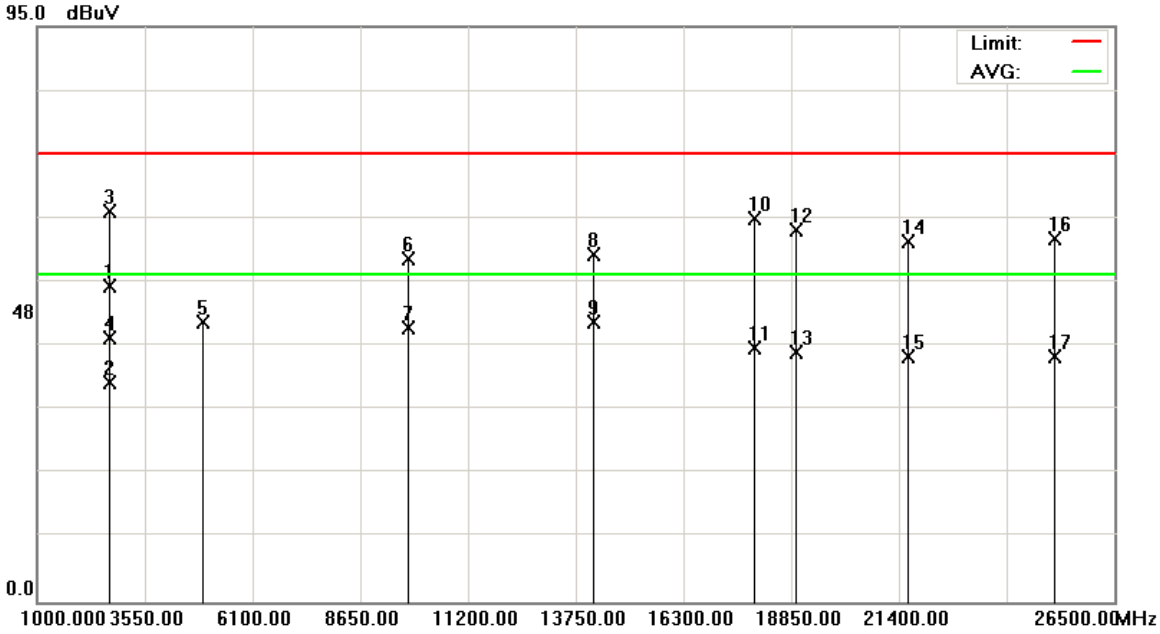
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2385.500	55.04	0.15	55.19	74.00	-18.81	peak			
2		2385.500	42.58	0.15	42.73	54.00	-11.27	AVG			
3		2700.000	41.68	22.58	64.26	74.00	-9.74	peak			
4		2700.000	21.24	22.58	43.82	54.00	-10.18	AVG			
5		4874.000	40.11	7.72	47.83	74.00	-26.17	peak			
6		9744.500	39.86	17.69	57.55	74.00	-16.45	peak			
7		9744.500	28.41	17.69	46.10	54.00	-7.90	AVG			
8		14240.000	38.16	18.71	56.87	74.00	-17.13	peak			
9	*	14240.000	27.41	18.71	46.12	54.00	-7.88	AVG			
10		18000.000	37.96	25.57	63.53	74.00	-10.47	peak			
11		18000.000	17.87	25.57	43.44	54.00	-10.56	AVG			
12		18191.250	38.65	23.22	61.87	74.00	-12.13	peak			
13		18191.250	18.89	23.22	42.11	54.00	-11.89	AVG			
14		21655.000	37.87	21.27	59.14	74.00	-14.86	peak			
15		21655.000	18.71	21.27	39.98	54.00	-14.02	AVG			
16		25203.750	40.36	19.18	59.54	74.00	-14.46	peak			
17		25203.750	20.45	19.18	39.63	54.00	-14.37	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2462MHZ) Data :#17 Date: 2009/12/17 Time: 下午 11:09:50



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 3
Note: CH11(2462MHz)
.

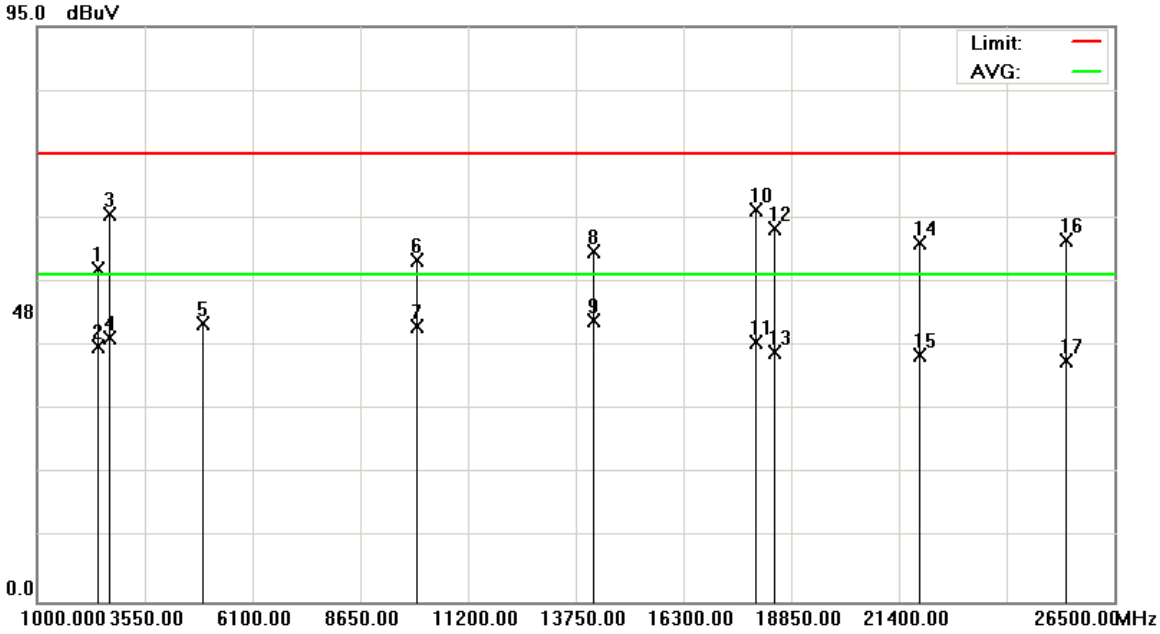
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2686.400	51.21	1.02	52.23	74.00	-21.77	peak			
2		2686.400	35.17	1.02	36.19	54.00	-17.81	AVG			
3		2700.000	41.93	22.58	64.51	74.00	-9.49	peak			
4		2700.000	21.10	22.58	43.68	54.00	-10.32	AVG			
5		4924.000	38.48	7.65	46.13	74.00	-27.87	peak			
6		9781.000	38.88	17.69	56.57	74.00	-17.43	peak			
7		9781.000	27.49	17.69	45.18	54.00	-8.82	AVG			
8		14180.000	38.45	18.85	57.30	74.00	-16.70	peak			
9	*	14180.000	27.45	18.85	46.30	54.00	-7.70	AVG			
10		17960.000	38.36	24.84	63.20	74.00	-10.80	peak			
11		17960.000	17.12	24.84	41.96	54.00	-12.04	AVG			
12		18956.250	38.26	23.11	61.37	74.00	-12.63	peak			
13		18956.250	18.08	23.11	41.19	54.00	-12.81	AVG			
14		21612.500	38.22	21.28	59.50	74.00	-14.50	peak			
15		21612.500	19.12	21.28	40.40	54.00	-13.60	AVG			
16		25076.250	40.63	19.31	59.94	74.00	-14.06	peak			
17		25076.250	21.27	19.31	40.58	54.00	-13.42	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2462MHZ) Data :#18 Date: 2009/12/17 Time: 下午 11:11:27



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 3
Note: CH11(2462MHz)

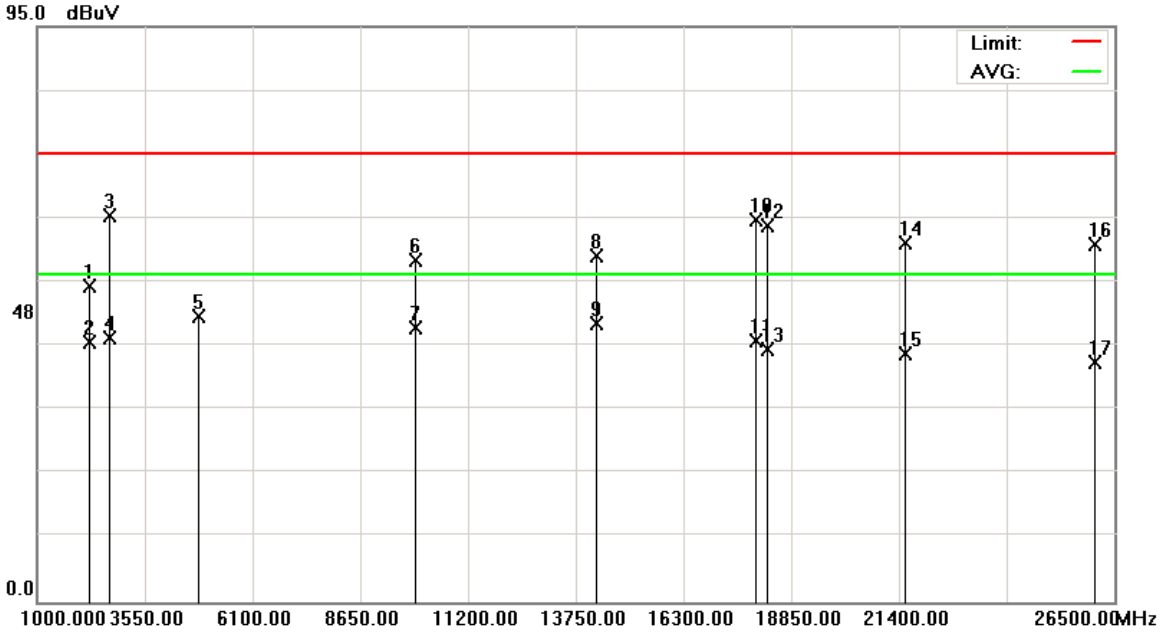
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2411.000	54.98	0.10	55.08	74.00	-18.92	peak			
2		2411.000	41.95	0.10	42.05	54.00	-11.95	AVG			
3		2700.000	41.36	22.58	63.94	74.00	-10.06	peak			
4		2700.000	21.06	22.58	43.64	54.00	-10.36	AVG			
5		4924.000	38.27	7.65	45.92	74.00	-28.08	peak			
6		9981.750	38.56	17.88	56.44	74.00	-17.56	peak			
7		9981.750	27.54	17.88	45.42	54.00	-8.58	AVG			
8		14140.000	38.89	18.84	57.73	74.00	-16.27	peak			
9	*	14140.000	27.54	18.84	46.38	54.00	-7.62	AVG			
10		18000.000	39.11	25.57	64.68	74.00	-9.32	peak			
11		18000.000	17.24	25.57	42.81	54.00	-11.19	AVG			
12		18467.500	38.50	23.12	61.62	74.00	-12.38	peak			
13		18467.500	18.10	23.12	41.22	54.00	-12.78	AVG			
14		21867.500	37.97	21.19	59.16	74.00	-14.84	peak			
15		21867.500	19.54	21.19	40.73	54.00	-13.27	AVG			
16		25352.500	40.63	19.07	59.70	74.00	-14.30	peak			
17		25352.500	20.71	19.07	39.78	54.00	-14.22	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2412MHZ) Data :#17 Date: 2009/12/17 Time: 下午 10:47:27



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 4
Note: CH01(2412MHz)
.

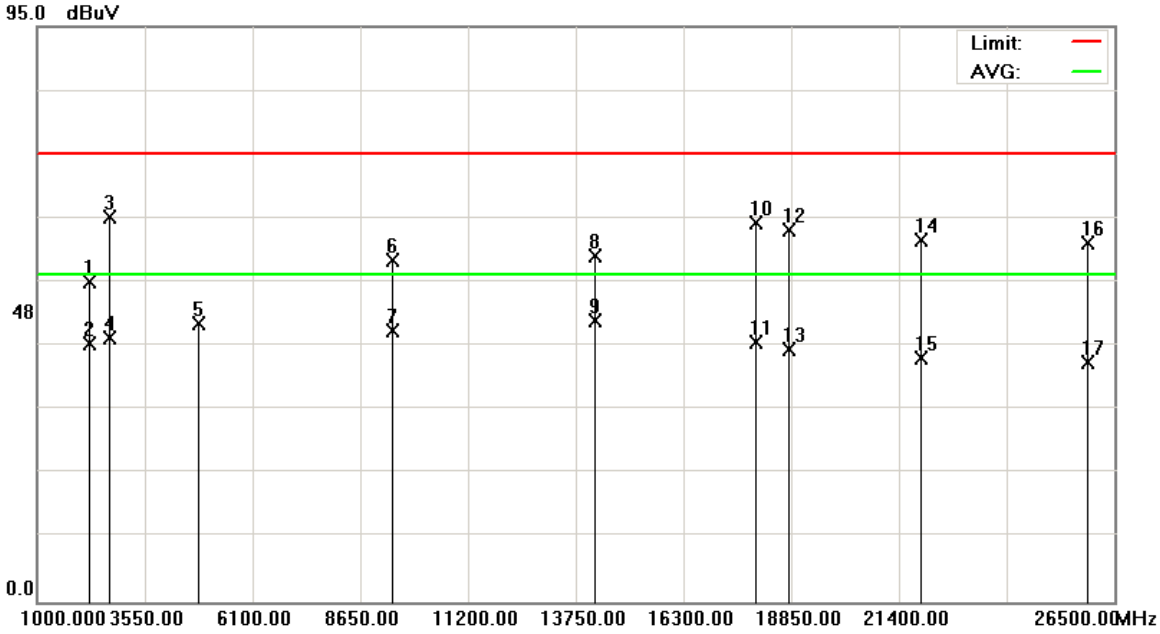
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2241.000	51.68	0.44	52.12	74.00	-21.88	peak			
2		2241.000	42.41	0.44	42.85	54.00	-11.15	AVG			
3		2700.000	41.11	22.58	63.69	74.00	-10.31	peak			
4		2700.000	21.06	22.58	43.64	54.00	-10.36	AVG			
5		4824.000	39.68	7.48	47.16	74.00	-26.84	peak			
6		9945.250	38.55	17.78	56.33	74.00	-17.67	peak			
7		9945.250	27.46	17.78	45.24	54.00	-8.76	AVG			
8		14220.000	38.23	18.78	57.01	74.00	-16.99	peak			
9	*	14220.000	27.25	18.78	46.03	54.00	-7.97	AVG			
10		18000.000	37.45	25.57	63.02	74.00	-10.98	peak			
11		18000.000	17.54	25.57	43.11	54.00	-10.89	AVG			
12		18276.250	38.78	23.21	61.99	74.00	-12.01	peak			
13		18276.250	18.38	23.21	41.59	54.00	-12.41	AVG			
14		21548.750	37.92	21.33	59.25	74.00	-14.75	peak			
15		21548.750	19.62	21.33	40.95	54.00	-13.05	AVG			
16		26032.500	40.42	18.54	58.96	74.00	-15.04	peak			
17		26032.500	21.01	18.54	39.55	54.00	-14.45	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2412MHZ) Data :#18 Date: 2009/12/17 Time: 下午 10:49:03



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 4
Note: CH01(2412MHz)

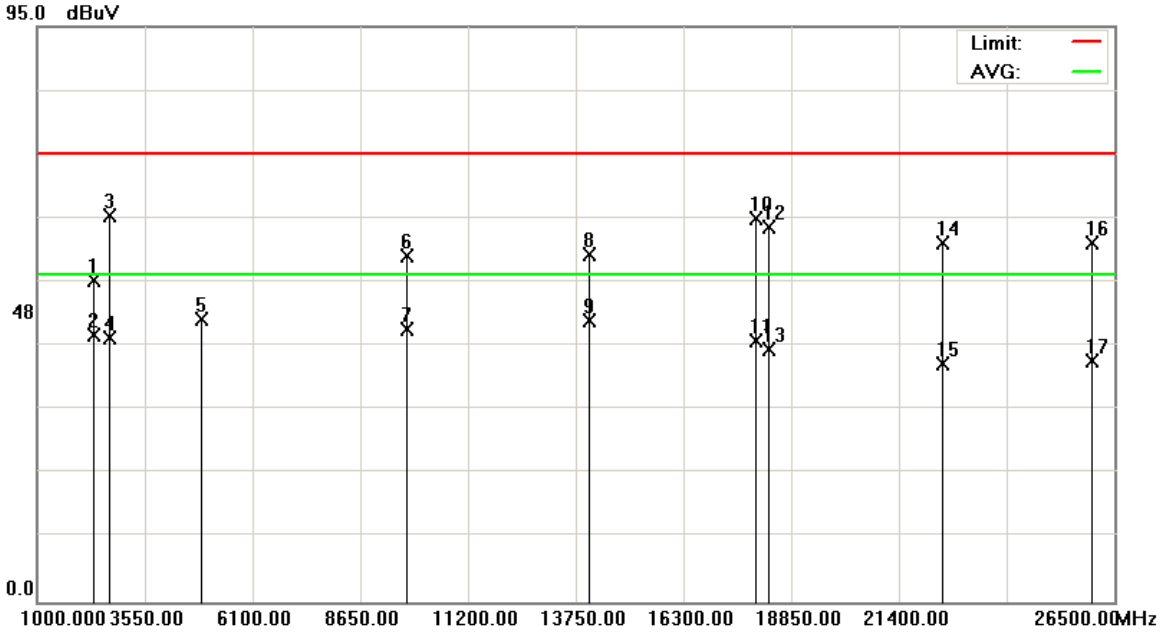
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2241.000	52.47	0.44	52.91	74.00	-21.09	peak			
2		2241.000	42.12	0.44	42.56	54.00	-11.44	AVG			
3		2700.000	40.91	22.58	63.49	74.00	-10.51	peak			
4		2700.000	21.05	22.58	43.63	54.00	-10.37	AVG			
5		4824.000	38.45	7.48	45.93	74.00	-28.07	peak			
6		9397.750	39.43	17.07	56.50	74.00	-17.50	peak			
7		9397.750	27.76	17.07	44.83	54.00	-9.17	AVG			
8		14200.000	38.34	18.86	57.20	74.00	-16.80	peak			
9	*	14200.000	27.68	18.86	46.54	54.00	-7.46	AVG			
10		18000.000	37.10	25.57	62.67	74.00	-11.33	peak			
11		18000.000	17.22	25.57	42.79	54.00	-11.21	AVG			
12		18786.250	38.14	23.14	61.28	74.00	-12.72	peak			
13		18786.250	18.43	23.14	41.57	54.00	-12.43	AVG			
14		21910.000	38.55	21.16	59.71	74.00	-14.29	peak			
15		21910.000	19.20	21.16	40.36	54.00	-13.64	AVG			
16		25841.250	40.45	18.69	59.14	74.00	-14.86	peak			
17		25841.250	20.89	18.69	39.58	54.00	-14.42	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2437MHZ) Data :#17 Date: 2009/12/17 Time: 下午 10:53:57



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 4
Note: CH06(2437MHz)
.

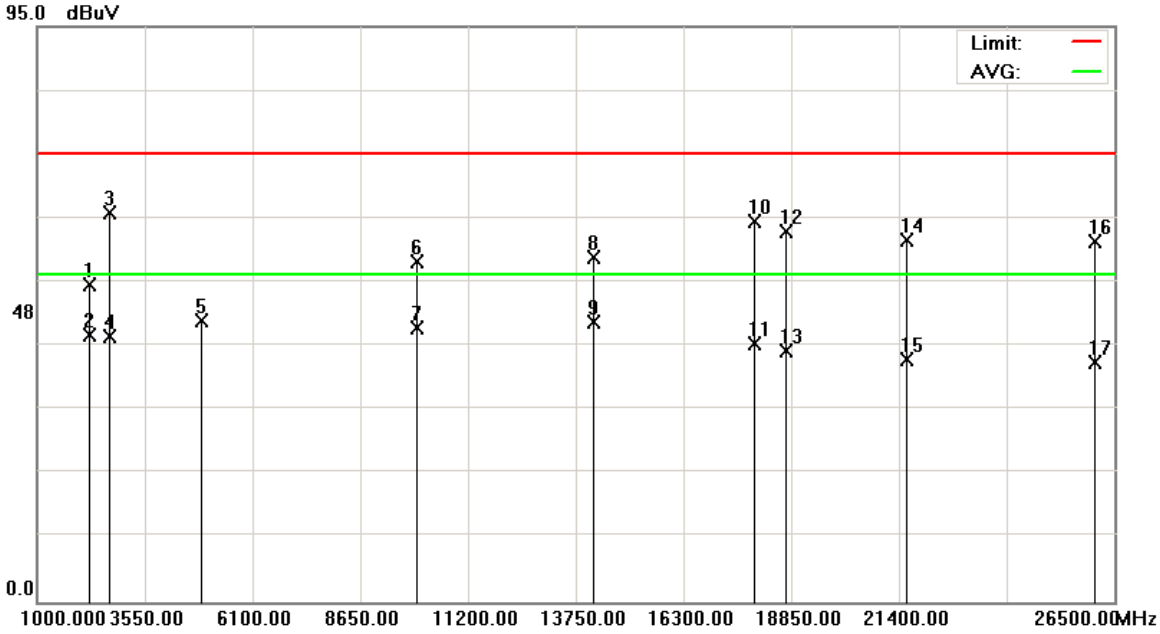
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2320.900	52.72	0.26	52.98	74.00	-21.02	peak			
2		2320.900	43.86	0.26	44.12	54.00	-9.88	AVG			
3		2700.000	41.11	22.58	63.69	74.00	-10.31	peak			
4		2700.000	20.92	22.58	43.50	54.00	-10.50	AVG			
5		4874.000	38.91	7.72	46.63	74.00	-27.37	peak			
6		9726.250	39.45	17.60	57.05	74.00	-16.95	peak			
7		9726.250	27.47	17.60	45.07	54.00	-8.93	AVG			
8		14060.000	38.63	18.72	57.35	74.00	-16.65	peak			
9	*	14060.000	27.67	18.72	46.39	54.00	-7.61	AVG			
10		18000.000	37.68	25.57	63.25	74.00	-10.75	peak			
11		18000.000	17.43	25.57	43.00	54.00	-11.00	AVG			
12		18297.500	38.68	23.20	61.88	74.00	-12.12	peak			
13		18297.500	18.38	23.20	41.58	54.00	-12.42	AVG			
14		22398.750	38.26	20.93	59.19	74.00	-14.81	peak			
15		22398.750	18.48	20.93	39.41	54.00	-14.59	AVG			
16		25947.500	40.56	18.60	59.16	74.00	-14.84	peak			
17		25947.500	21.28	18.60	39.88	54.00	-14.12	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2437MHZ) Data :#18 Date: 2009/12/17 Time: 下午 10:55:34



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 4
Note: CH06(2437MHz)

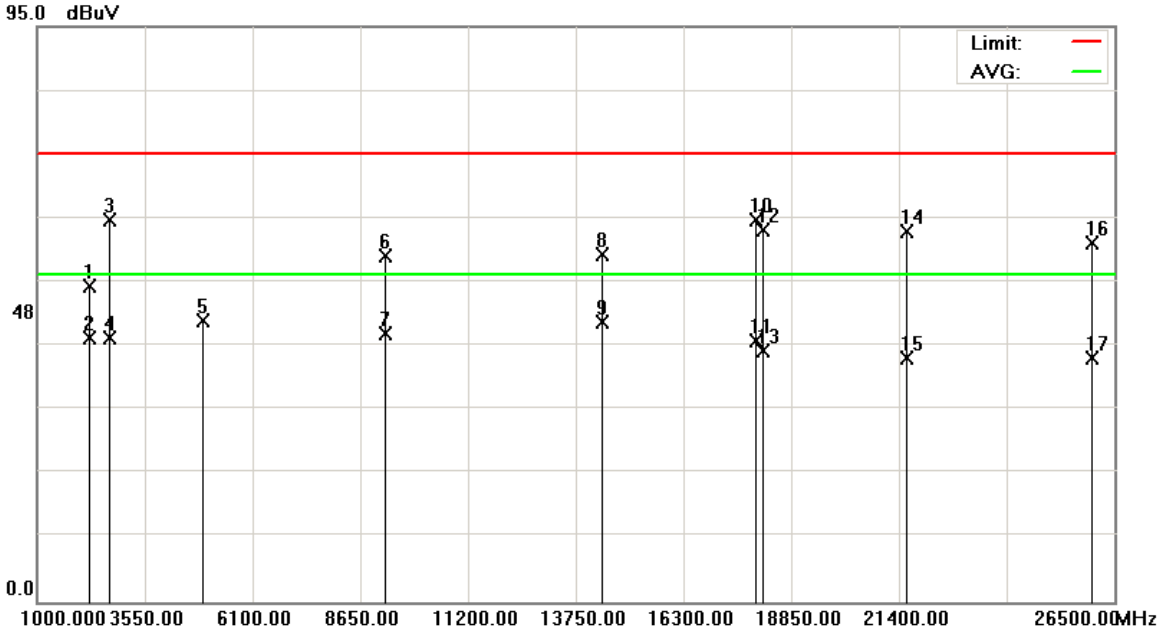
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2241.000	51.92	0.44	52.36	74.00	-21.64	peak			
2		2241.000	43.64	0.44	44.08	54.00	-9.92	AVG			
3		2700.000	41.64	22.58	64.22	74.00	-9.78	peak			
4		2700.000	21.15	22.58	43.73	54.00	-10.27	AVG			
5		4874.000	38.64	7.72	46.36	74.00	-27.64	peak			
6		10000.000	38.30	17.94	56.24	74.00	-17.76	peak			
7		10000.000	27.39	17.94	45.33	54.00	-8.67	AVG			
8		14180.000	38.05	18.85	56.90	74.00	-17.10	peak			
9	*	14180.000	27.36	18.85	46.21	54.00	-7.79	AVG			
10		17980.000	37.71	25.21	62.92	74.00	-11.08	peak			
11		17980.000	17.54	25.21	42.75	54.00	-11.25	AVG			
12		18701.250	38.15	23.11	61.26	74.00	-12.74	peak			
13		18701.250	18.28	23.11	41.39	54.00	-12.61	AVG			
14		21570.000	38.52	21.31	59.83	74.00	-14.17	peak			
15		21570.000	18.81	21.31	40.12	54.00	-13.88	AVG			
16		26032.500	40.91	18.54	59.45	74.00	-14.55	peak			
17		26032.500	20.99	18.54	39.53	54.00	-14.47	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2462MHZ) Data :#17 Date: 2009/12/17 Time: 下午 10:57:55



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 4
Note: CH11(2462MHz)
.

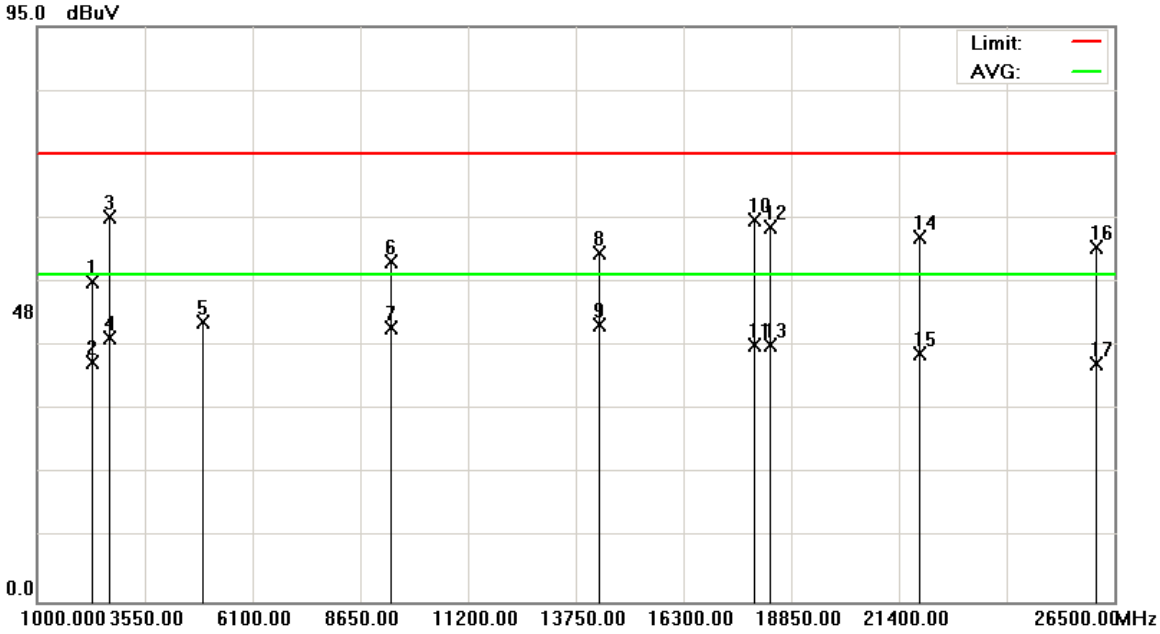
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2241.000	51.78	0.44	52.22	74.00	-21.78	peak			
2		2241.000	43.09	0.44	43.53	54.00	-10.47	AVG			
3		2700.000	40.59	22.58	63.17	74.00	-10.83	peak			
4		2700.000	21.10	22.58	43.68	54.00	-10.32	AVG			
5		4924.000	38.72	7.65	46.37	74.00	-27.63	peak			
6		9233.500	40.80	16.38	57.18	74.00	-16.82	peak			
7		9233.500	27.89	16.38	44.27	54.00	-9.73	AVG			
8		14340.000	38.71	18.54	57.25	74.00	-16.75	peak			
9	*	14340.000	27.65	18.54	46.19	54.00	-7.81	AVG			
10		18000.000	37.55	25.57	63.12	74.00	-10.88	peak			
11		18000.000	17.45	25.57	43.02	54.00	-10.98	AVG			
12		18170.000	38.19	23.23	61.42	74.00	-12.58	peak			
13		18170.000	18.26	23.23	41.49	54.00	-12.51	AVG			
14		21570.000	39.88	21.31	61.19	74.00	-12.81	peak			
15		21570.000	18.84	21.31	40.15	54.00	-13.85	AVG			
16		25947.500	40.66	18.60	59.26	74.00	-14.74	peak			
17		25947.500	21.68	18.60	40.28	54.00	-13.72	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2462MHZ) Data :#18 Date: 2009/12/17 Time: 下午 10:59:34



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 4
Note: CH11(2462MHz)

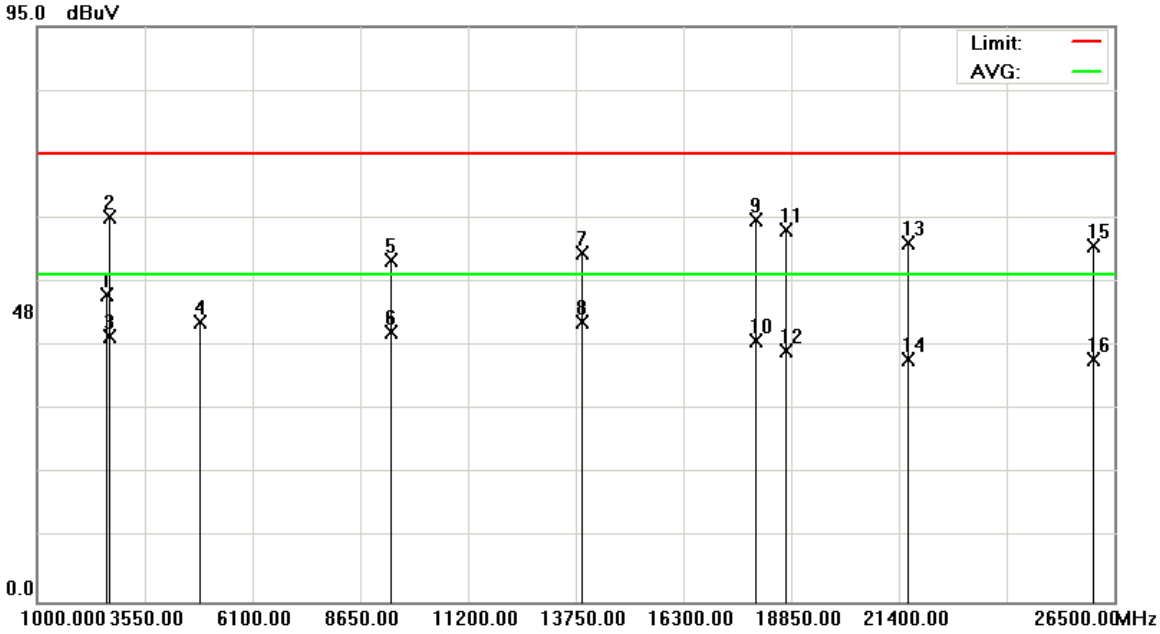
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2280.100	52.50	0.46	52.96	74.00	-21.04	peak			
2		2280.100	39.12	0.46	39.58	54.00	-14.42	AVG			
3		2700.000	40.88	22.58	63.46	74.00	-10.54	peak			
4		2700.000	21.12	22.58	43.70	54.00	-10.30	AVG			
5		4924.000	38.48	7.65	46.13	74.00	-27.87	peak			
6		9343.000	39.23	16.93	56.16	74.00	-17.84	peak			
7		9343.000	28.20	16.93	45.13	54.00	-8.87	AVG			
8		14300.000	39.08	18.61	57.69	74.00	-16.31	peak			
9	*	14300.000	27.18	18.61	45.79	54.00	-8.21	AVG			
10		17980.000	37.88	25.21	63.09	74.00	-10.91	peak			
11		17980.000	17.15	25.21	42.36	54.00	-11.64	AVG			
12		18318.750	38.59	23.19	61.78	74.00	-12.22	peak			
13		18318.750	19.31	23.19	42.50	54.00	-11.50	AVG			
14		21867.500	39.01	21.19	60.20	74.00	-13.80	peak			
15		21867.500	19.70	21.19	40.89	54.00	-13.11	AVG			
16		26053.750	39.98	18.52	58.50	74.00	-15.50	peak			
17		26053.750	20.76	18.52	39.28	54.00	-14.72	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2422MHZ) Data :#17 Date: 2009/12/17 Time: 下午 10:43:02



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 5
Note: CH03(2422MHz)
.

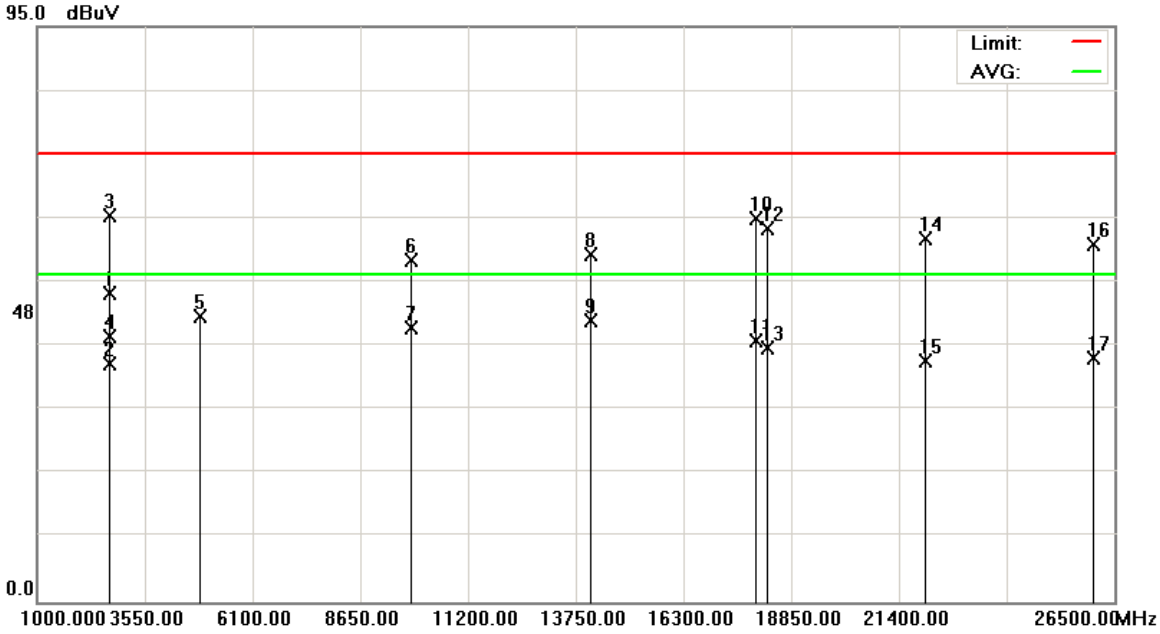
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2650.700	49.74	0.96	50.70	74.00	-23.30	peak			
2		2700.000	40.97	22.58	63.55	74.00	-10.45	peak			
3		2700.000	21.23	22.58	43.81	54.00	-10.19	AVG			
4		4844.000	38.53	7.67	46.20	74.00	-27.80	peak			
5		9343.000	39.56	16.93	56.49	74.00	-17.51	peak			
6		9343.000	27.62	16.93	44.55	54.00	-9.45	AVG			
7		13900.000	39.06	18.53	57.59	74.00	-16.41	peak			
8	*	13900.000	27.65	18.53	46.18	54.00	-7.82	AVG			
9		18000.000	37.46	25.57	63.03	74.00	-10.97	peak			
10		18000.000	17.58	25.57	43.15	54.00	-10.85	AVG			
11		18701.250	38.30	23.11	61.41	74.00	-12.59	peak			
12		18701.250	18.41	23.11	41.52	54.00	-12.48	AVG			
13		21591.250	37.89	21.30	59.19	74.00	-14.81	peak			
14		21591.250	18.72	21.30	40.02	54.00	-13.98	AVG			
15		25990.000	40.22	18.56	58.78	74.00	-15.22	peak			
16		25990.000	21.56	18.56	40.12	54.00	-13.88	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2422MHZ) Data :#18 Date: 2009/12/17 Time: 下午 10:44:39



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 5
Note: CH03(2422MHz)

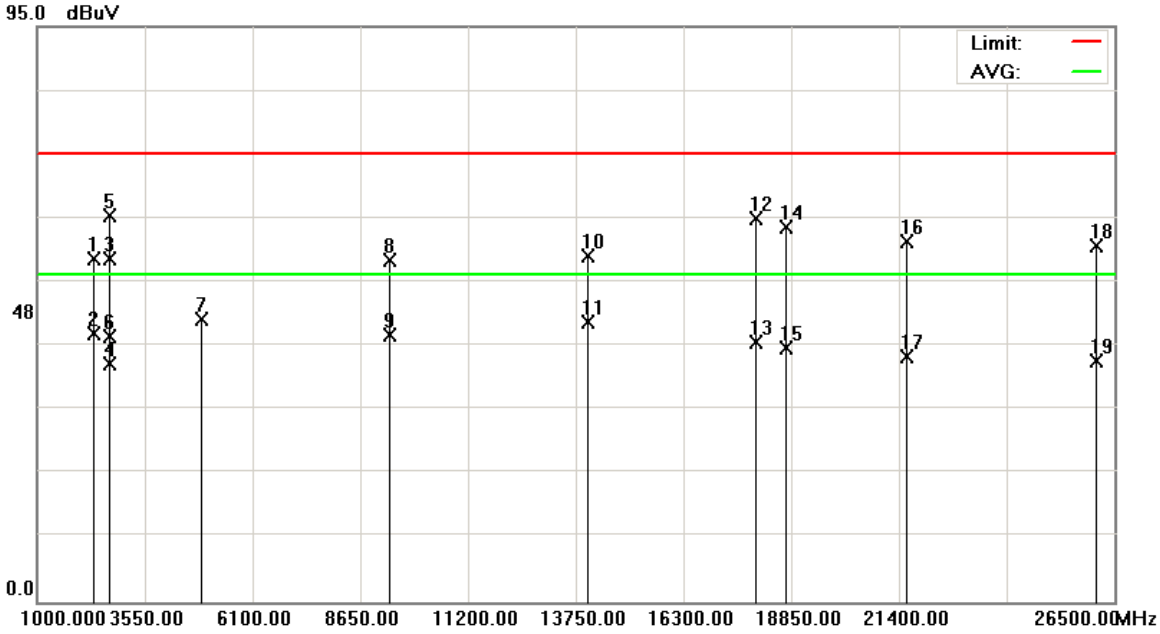
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2694.900	50.09	0.93	51.02	74.00	-22.98	peak			
2		2694.900	38.33	0.93	39.26	54.00	-14.74	AVG			
3		2700.000	41.21	22.58	63.79	74.00	-10.21	peak			
4		2700.000	21.23	22.58	43.81	54.00	-10.19	AVG			
5		4844.000	39.51	7.67	47.18	74.00	-26.82	peak			
6		9835.750	38.66	17.83	56.49	74.00	-17.51	peak			
7		9835.750	27.52	17.83	45.35	54.00	-8.65	AVG			
8		14100.000	38.54	18.90	57.44	74.00	-16.56	peak			
9	*	14100.000	27.64	18.90	46.54	54.00	-7.46	AVG			
10		18000.000	37.65	25.57	63.22	74.00	-10.78	peak			
11		18000.000	17.56	25.57	43.13	54.00	-10.87	AVG			
12		18276.250	38.45	23.21	61.66	74.00	-12.34	peak			
13		18276.250	18.80	23.21	42.01	54.00	-11.99	AVG			
14		22037.500	38.88	21.09	59.97	74.00	-14.03	peak			
15		22037.500	18.60	21.09	39.69	54.00	-14.31	AVG			
16		25990.000	40.41	18.56	58.97	74.00	-15.03	peak			
17		25990.000	21.76	18.56	40.32	54.00	-13.68	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2437MHZ) Data :#17 Date: 2009/12/17 Time: 下午 10:38:00



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 5
Note: CH06(2437MHz)
.

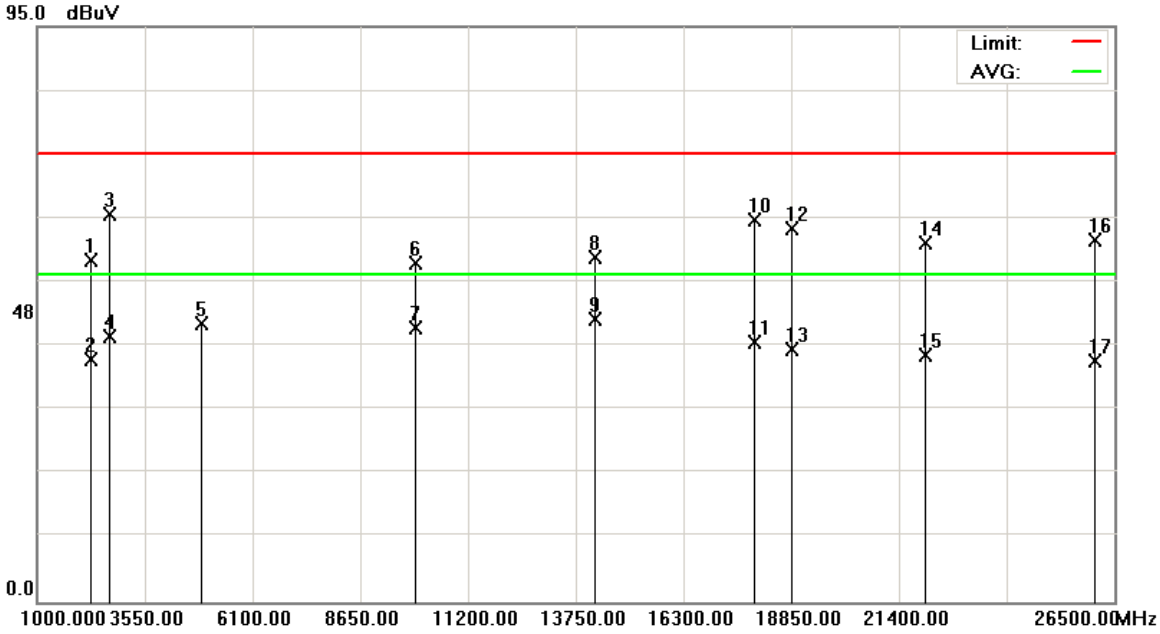
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2320.900	56.30	0.26	56.56	74.00	-17.44	peak			
2		2320.900	44.05	0.26	44.31	54.00	-9.69	AVG			
3		2689.800	55.52	1.03	56.55	74.00	-17.45	peak			
4		2689.800	38.36	1.03	39.39	54.00	-14.61	AVG			
5		2700.000	41.20	22.58	63.78	74.00	-10.22	peak			
6		2700.000	21.22	22.58	43.80	54.00	-10.20	AVG			
7		4874.000	38.97	7.72	46.69	74.00	-27.31	peak			
8		9324.750	39.49	16.91	56.40	74.00	-17.60	peak			
9		9324.750	27.15	16.91	44.06	54.00	-9.94	AVG			
10		14020.000	38.42	18.67	57.09	74.00	-16.91	peak			
11	*	14020.000	27.64	18.67	46.31	54.00	-7.69	AVG			
12		18000.000	37.75	25.57	63.32	74.00	-10.68	peak			
13		18000.000	17.28	25.57	42.85	54.00	-11.15	AVG			
14		18722.500	38.65	23.12	61.77	74.00	-12.23	peak			
15		18722.500	18.79	23.12	41.91	54.00	-12.09	AVG			
16		21570.000	38.14	21.31	59.45	74.00	-14.55	peak			
17		21570.000	19.23	21.31	40.54	54.00	-13.46	AVG			
18		26053.750	40.32	18.52	58.84	74.00	-15.16	peak			
19		26053.750	21.19	18.52	39.71	54.00	-14.29	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2437MHZ) Data :#18 Date: 2009/12/17 Time: 下午 10:39:37



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 5
Note: CH06(2437MHz)

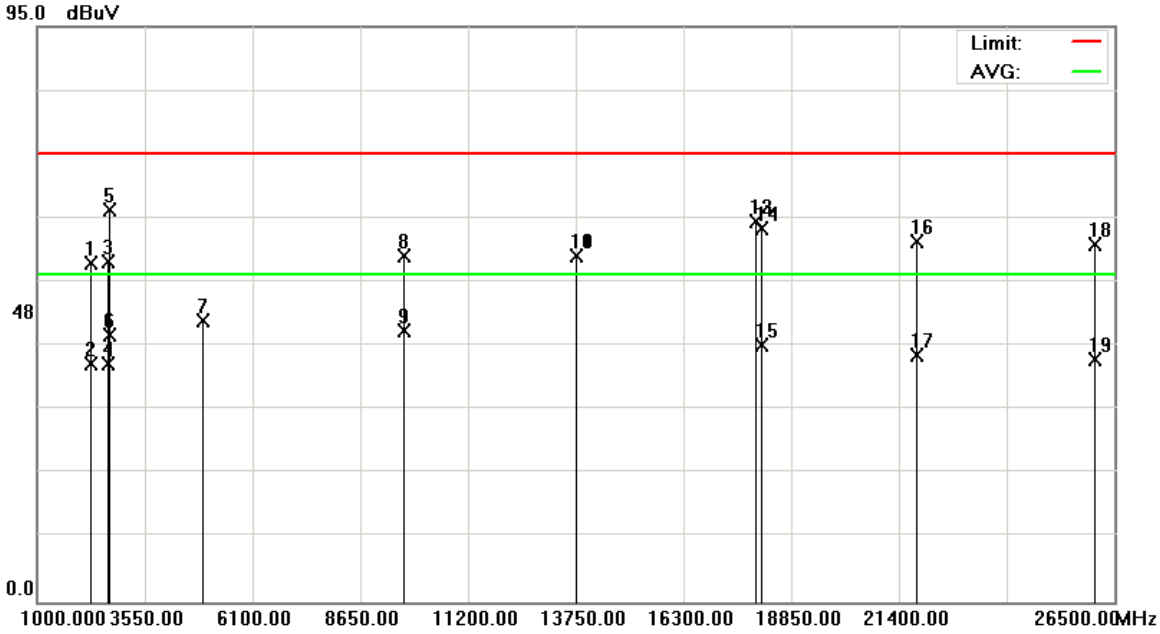
Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2252.900	55.89	0.48	56.37	74.00	-17.63	peak			
2		2252.900	39.44	0.48	39.92	54.00	-14.08	AVG			
3		2700.000	41.36	22.58	63.94	74.00	-10.06	peak			
4		2700.000	21.23	22.58	43.81	54.00	-10.19	AVG			
5		4874.000	38.28	7.72	46.00	74.00	-28.00	peak			
6		9927.000	38.17	17.78	55.95	74.00	-18.05	peak			
7		9927.000	27.50	17.78	45.28	54.00	-8.72	AVG			
8		14200.000	38.14	18.86	57.00	74.00	-17.00	peak			
9	*	14200.000	27.87	18.86	46.73	54.00	-7.27	AVG			
10		17980.000	37.73	25.21	62.94	74.00	-11.06	peak			
11		17980.000	17.65	25.21	42.86	54.00	-11.14	AVG			
12		18850.000	38.41	23.15	61.56	74.00	-12.44	peak			
13		18850.000	18.65	23.15	41.80	54.00	-12.20	AVG			
14		22037.500	38.26	21.09	59.35	74.00	-14.65	peak			
15		22037.500	19.58	21.09	40.67	54.00	-13.33	AVG			
16		26032.500	41.17	18.54	59.71	74.00	-14.29	peak			
17		26032.500	21.34	18.54	39.88	54.00	-14.12	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2452MHZ) Data :#17 Date: 2009/12/17 Time: 下午 10:34:17



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 5
Note: CH09(2462MHz)
.

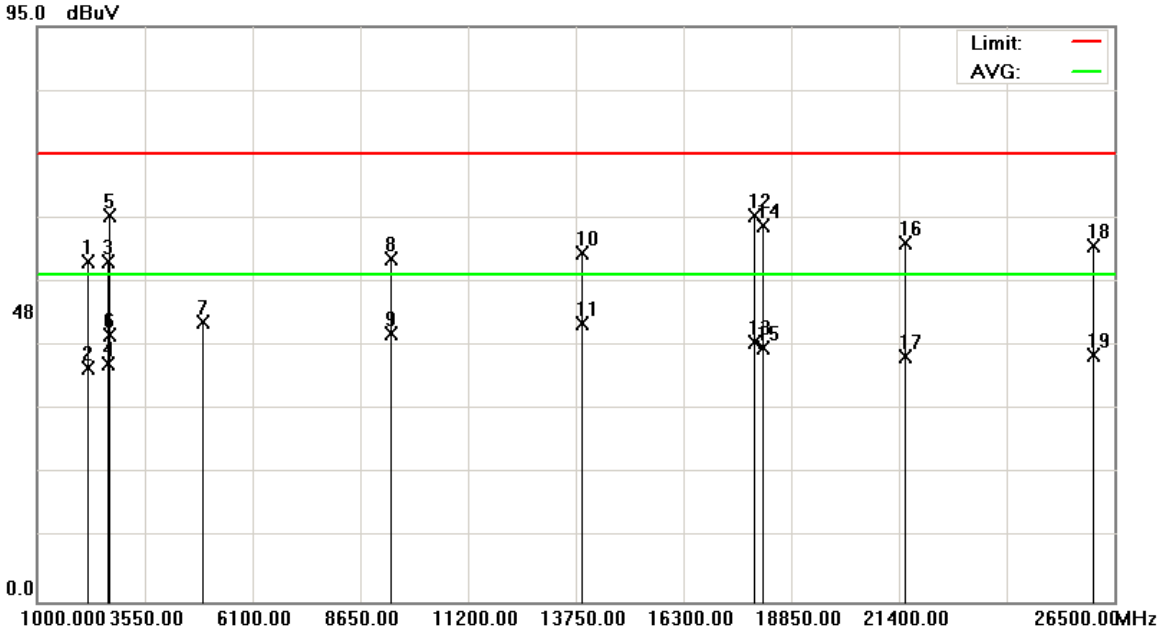
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2266.500	55.58	0.43	56.01	74.00	-17.99	peak			
2		2266.500	38.90	0.43	39.33	54.00	-14.67	AVG			
3		2683.000	55.15	1.01	56.16	74.00	-17.84	peak			
4		2683.000	38.28	1.01	39.29	54.00	-14.71	AVG			
5		2700.000	42.08	22.58	64.66	74.00	-9.34	peak			
6		2700.000	21.38	22.58	43.96	54.00	-10.04	AVG			
7		4904.000	38.72	7.71	46.43	74.00	-27.57	peak			
8		9671.500	39.87	17.15	57.02	74.00	-16.98	peak			
9		9671.500	27.69	17.15	44.84	54.00	-9.16	AVG			
10		13760.000	39.05	18.14	57.19	74.00	-16.81	peak			
11	X	13760.000	39.05	18.14	57.19	54.00	3.19	AVG			
12		18000.000	37.36	25.57	62.93	74.00	-11.07	peak			
13	*	18000.000	37.36	25.57	62.93	54.00	8.93	AVG			
14		18127.500	38.41	23.23	61.64	74.00	-12.36	peak			
15		18127.500	19.28	23.23	42.51	54.00	-11.49	AVG			
16		21803.750	38.19	21.21	59.40	74.00	-14.60	peak			
17		21803.750	19.42	21.21	40.63	54.00	-13.37	AVG			
18		26032.500	40.51	18.54	59.05	74.00	-14.95	peak			
19		26032.500	21.57	18.54	40.11	54.00	-13.89	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(2452MHZ) Data :#18 Date: 2009/12/17 Time: 下午 10:35:54



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 5
Note: CH09(2462MHz)

Polarization: ***Horizontal***
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000KHz VBW: 1000KHz

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2191.700	55.72	0.45	56.17	74.00	-17.83	peak			
2		2191.700	38.22	0.45	38.67	54.00	-15.33	AVG			
3		2677.900	55.16	1.01	56.17	74.00	-17.83	peak			
4		2677.900	38.28	1.01	39.29	54.00	-14.71	AVG			
5		2700.000	41.17	22.58	63.75	74.00	-10.25	peak			
6		2700.000	21.38	22.58	43.96	54.00	-10.04	AVG			
7		4904.000	38.60	7.71	46.31	74.00	-27.69	peak			
8		9343.000	39.64	16.93	56.57	74.00	-17.43	peak			
9		9343.000	27.38	16.93	44.31	54.00	-9.69	AVG			
10		13880.000	39.12	18.38	57.50	74.00	-16.50	peak			
11	*	13880.000	27.54	18.38	45.92	54.00	-8.08	AVG			
12		17980.000	38.48	25.21	63.69	74.00	-10.31	peak			
13		17980.000	17.68	25.21	42.89	54.00	-11.11	AVG			
14		18170.000	38.84	23.23	62.07	74.00	-11.93	peak			
15		18170.000	18.80	23.23	42.03	54.00	-11.97	AVG			
16		21548.750	37.91	21.33	59.24	74.00	-14.76	peak			
17		21548.750	19.23	21.33	40.56	54.00	-13.44	AVG			
18		25990.000	40.20	18.56	58.76	74.00	-15.24	peak			
19		25990.000	22.23	18.56	40.79	54.00	-13.21	AVG			

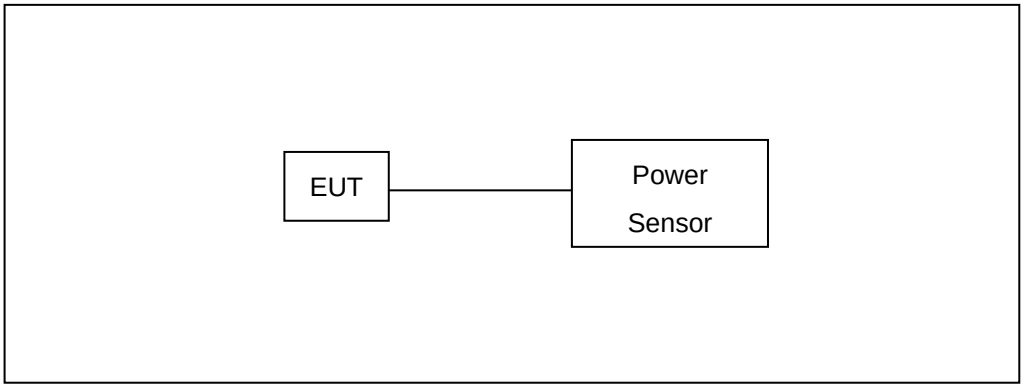
*:Maximum data x:Over limit !:over margin

6 Maximum Conducted Output Power Measurement

6.1. Limit

For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm.

6.2. Test Setup



6.3. Test Instruments

Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Remark
Power Sensor	R&S	NRP-Z81	100017	05/17/2009	(2)
Test Site	ATL	TE06	TE06	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

6.4. Test Procedure

The tests below are run with the EUT's transmitter set at high power in TX mode. The EUT is needed to force selection of output power level and channel number. While testing, EUT was set to transmit continuously. Remove the Subjective device's antenna and connect the RF output port to power sensor. The maximum peak output power shall not exceed 1 watt.

Use a direct connection between the antenna port of transmitter and the power sensor, for prevent the power sensor input attenuation 40-50 dB. Set the RBW Bandwidth of the emission or use a channel power meter mode.

For antennas with gains of 6 dBi or less, maximum allowed transmitter output is 1 watt (+30 dBm). For antennas with gains greater than 6 dBi, transmitter output level must be decreased by an amount equal to (GAIN - 6)/3 dBm.

The antenna port of the EUT was connected to the input of a power sensor. Power was read directly and cable loss correction was added to the reading to obtain power at the EUT antenna terminals.

6.5. Test Result

Product	WiFi Router					
Test Item	Maximum Conducted Output Power					
Test Mode	Mode 2: IEEE 802.11b Link Mode					
Date of Test	01/24/2010			Test Site	TE06	
Frequency (MHz)	Data Rate	Average Power		Peak Power		Limit (dBm)
		(dBm)	(W)	(dBm)	(W)	
2412	1	15.68	0.037	18.62	0.073	< 30
2437	1	15.88	0.039	18.44	0.070	< 30
2462	1	15.83	0.038	18.39	0.069	< 30
2412	11	16.14	0.041	**18.64**	**0.073**	< 30
2437	11	16.11	0.041	18.61	0.073	< 30
2462	11	16.06	0.040	18.45	0.070	< 30

Product	WiFi Router					
Test Item	Maximum Conducted Output Power					
Test Mode	Mode 3: IEEE 802.11g Link Mode					
Date of Test	01/24/2010			Test Site	TE06	
Frequency (MHz)	Data Rate	Average Power		Peak Power		Limit (dBm)
		(dBm)	(W)	(dBm)	(W)	
2412	6	12.08	0.016	21.66	0.147	< 30
2437	6	9.45	0.009	22.05	0.160	< 30
2462	6	12.49	0.018	**22.63**	**0.183**	< 30
2412	54	8.88	0.008	21.30	0.135	< 30
2437	54	8.99	0.008	22.19	0.166	< 30
2462	54	8.88	0.008	21.30	0.135	< 30

Product	WiFi Router													
Test Item	Maximum Conducted Output Power													
Test Mode	Mode 4: draft 802.11n Standard-20MHz Link Mode													
Date of Test	06/10/2010							Test Site	TE06					
Frequency (MHz)	Data Rate	Average Power						Peak Power						Limit (dBm)
		Chan 0		Chan 1		Total		Chan 0		Chan 1		Total		
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
2412	6.5	5.20	0.003	5.38	0.003	8.30	0.007	15.21	0.033	15.57	0.036	**18.40**	**0.069**	< 30
2437	6.5	4.70	0.003	4.88	0.003	7.80	0.006	13.81	0.024	14.17	0.026	17.00	0.050	< 30
2462	6.5	3.79	0.002	3.97	0.002	6.89	0.005	14.07	0.026	14.43	0.028	17.26	0.053	< 30
2412	65	4.77	0.003	4.95	0.003	7.87	0.006	14.69	0.029	15.05	0.032	17.88	0.061	< 30
2437	65	4.63	0.003	4.81	0.003	7.73	0.006	14.54	0.028	14.90	0.031	17.73	0.059	< 30
2462	65	3.46	0.002	3.64	0.002	6.56	0.005	13.32	0.021	13.68	0.023	16.51	0.045	< 30

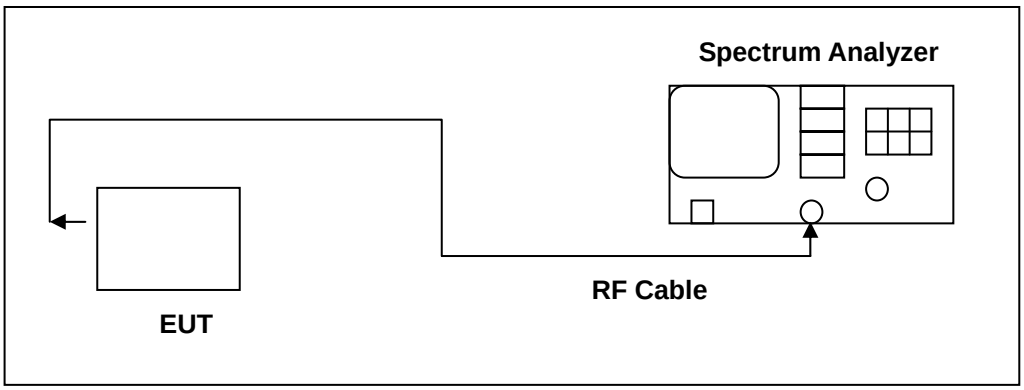
Product	WiFi Router													
Test Item	Maximum Conducted Output Power													
Test Mode	Mode 5: draft 802.11n Wide-40MHz Link Mode													
Date of Test	06/10/2010							Test Site	TE06					
Frequency (MHz)	Data Rate	Average Power						Peak Power						Limit (dBm)
		Chan 0		Chan 1		Total		Chan 0		Chan 1		Total		
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
2422	13.5	4.76	0.003	4.94	0.003	7.86	0.006	14.00	0.025	14.36	0.027	17.19	0.052	< 30
2437	13.5	4.52	0.003	4.70	0.003	7.62	0.006	14.76	0.030	15.12	0.033	17.95	0.062	< 30
2452	13.5	4.16	0.003	4.34	0.003	7.26	0.005	13.43	0.022	13.79	0.024	16.62	0.046	< 30
2422	130.5	4.70	0.003	4.88	0.003	7.80	0.006	14.86	0.031	15.22	0.033	**18.05**	**0.064**	< 30
2437	130.5	4.52	0.003	4.70	0.003	7.62	0.006	14.55	0.029	14.91	0.031	17.74	0.059	< 30
2452	130.5	4.00	0.003	4.18	0.003	7.10	0.005	14.00	0.025	14.36	0.027	17.19	0.052	< 30

7 6dB RF Bandwidth Measurement

7.1. Limit

Systems using digital modulation techniques may operate in the 2400–2483.5 MHz bands. The minimum 6 dB band-width shall be at least 500 kHz.

7.2. Test Setup



7.3. Test Instruments

Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/14/2009	(2)
Test Site	ATL	TE06	TE06	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

7.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer RES BW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A peak output reading was taken, a DISPLAY line was drawn 6 dB lower than peak level. The 6 dB bandwidth was determined from where the channel output spectrum intersected the display line.

The test was performed at 3 channels. (Channel low, middle, high)

7.5. Test Result

Product	WiFi Router		
Test Item	6dB RF Bandwidth		
Test Mode	Mode 2: IEEE 802.11b Link Mode		
Date of Test	01/24/2010	Test Site	TE06

Frequency (MHz)	Measurement (kHz)	Limit (kHz)
2412	13080	> 500
2437	13080	> 500
2462	13250	> 500

Product	WiFi Router		
Test Item	6dB RF Bandwidth		
Test Mode	Mode 3: IEEE 802.11g Link Mode		
Date of Test	01/24/2010	Test Site	TE06

Frequency (MHz)	Measurement (kHz)	Limit (kHz)
2412	16330	> 500
2437	16080	> 500
2462	16170	> 500

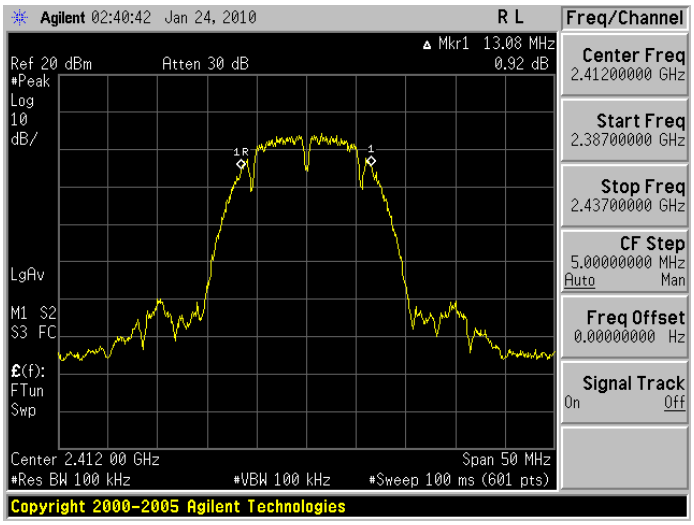
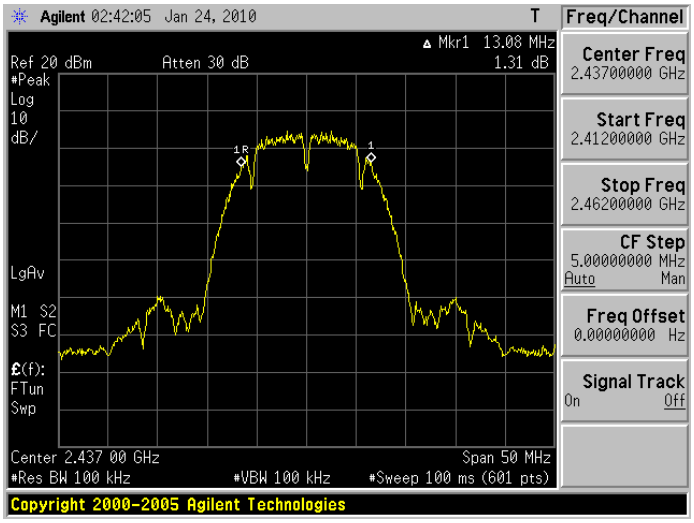
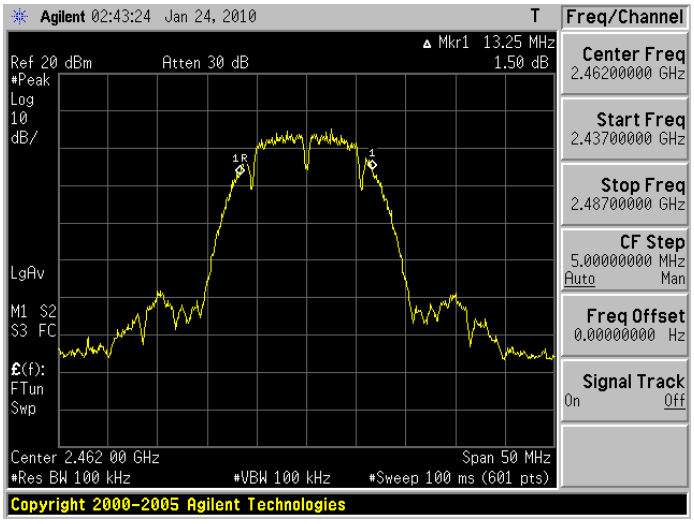
Product	WiFi Router		
Test Item	6dB RF Bandwidth		
Test Mode	Mode 4: draft 802.11n Standard-20MHz Link Mode		
Date of Test	06/09/2010	Test Site	TE06

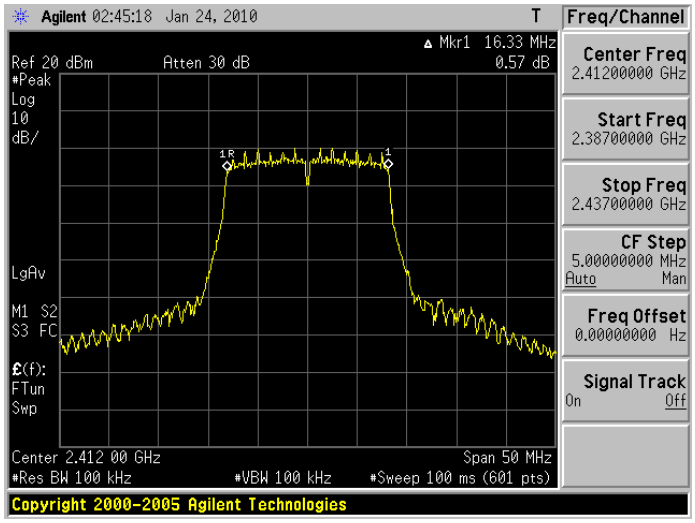
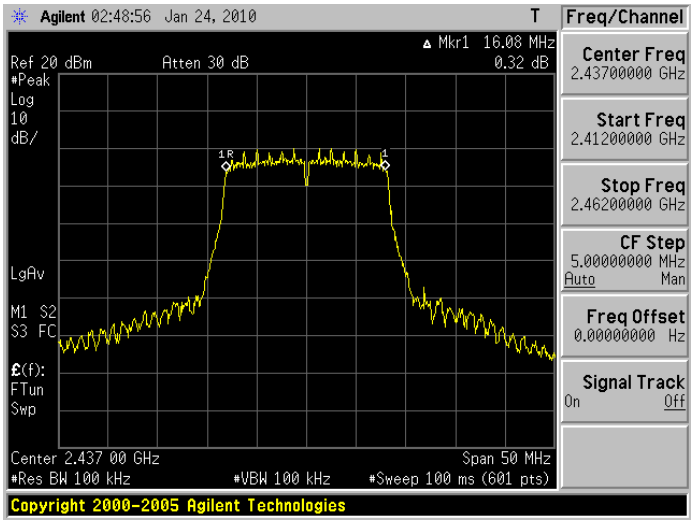
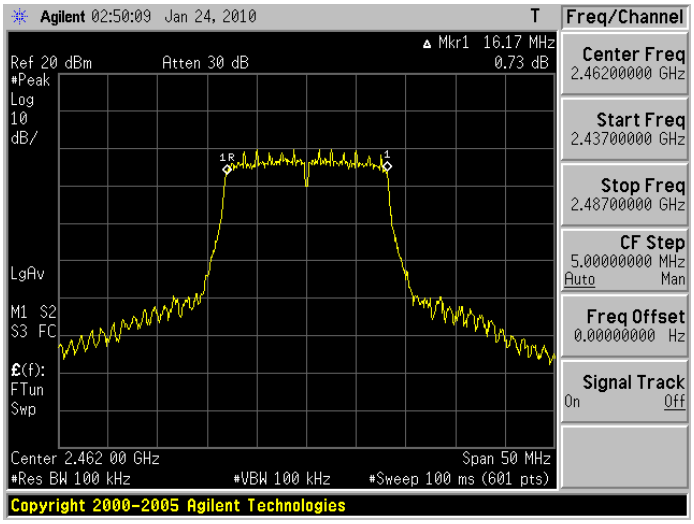
Frequency (MHz)	Measurement(kHz)		Limit (kHz)
	Chan 0	Chan 1	
2412	17250	17500	> 500
2437	17375	17250	> 500
2462	17125	17125	> 500

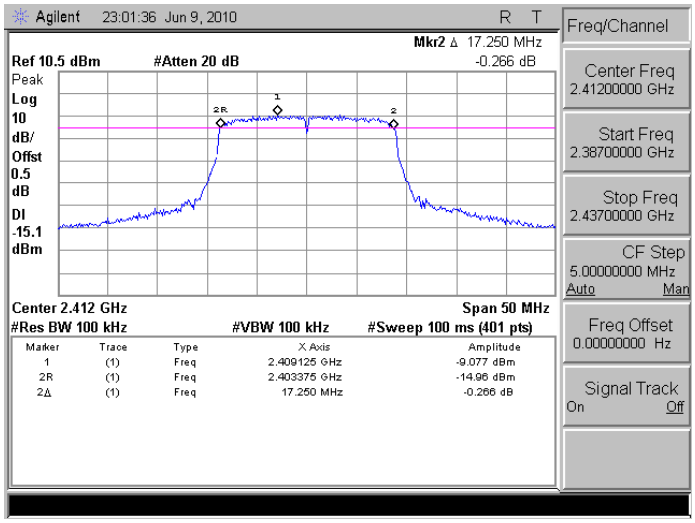
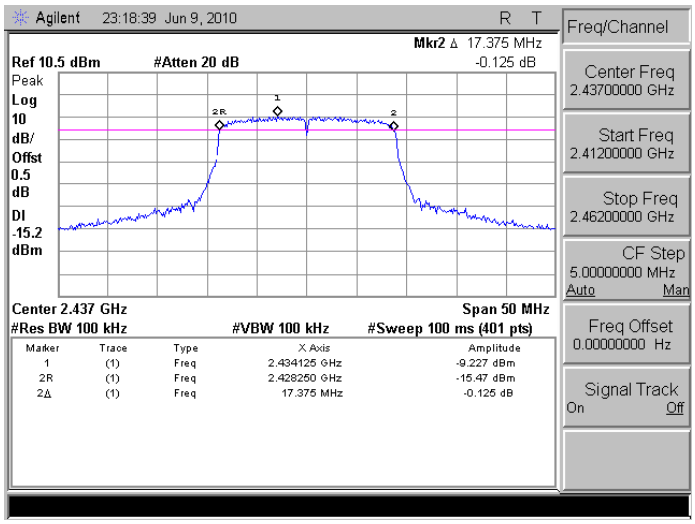
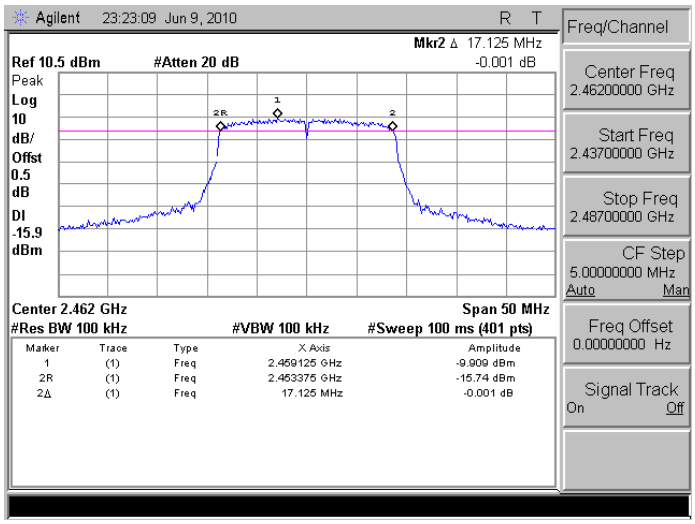
Product	WiFi Router		
Test Item	6dB RF Bandwidth		
Test Mode	Mode 5: draft 802.11n Wide-40MHz Link Mode		
Date of Test	06/09/2010	Test Site	TE06

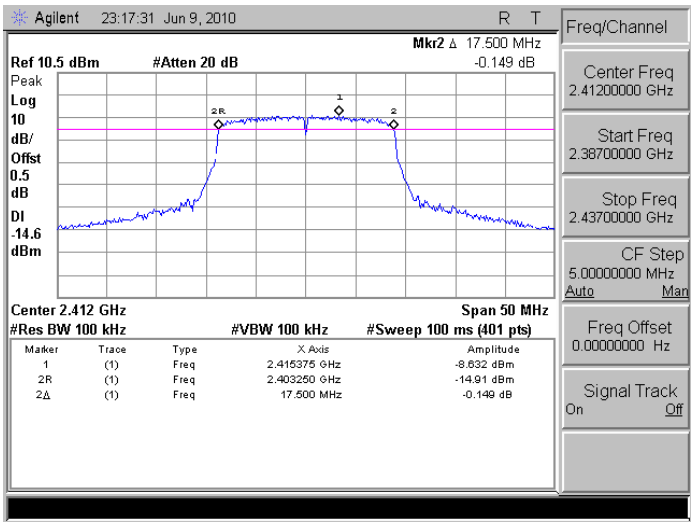
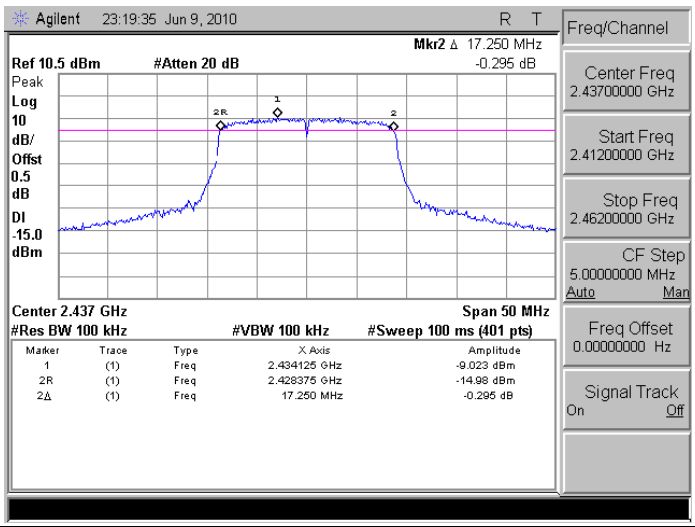
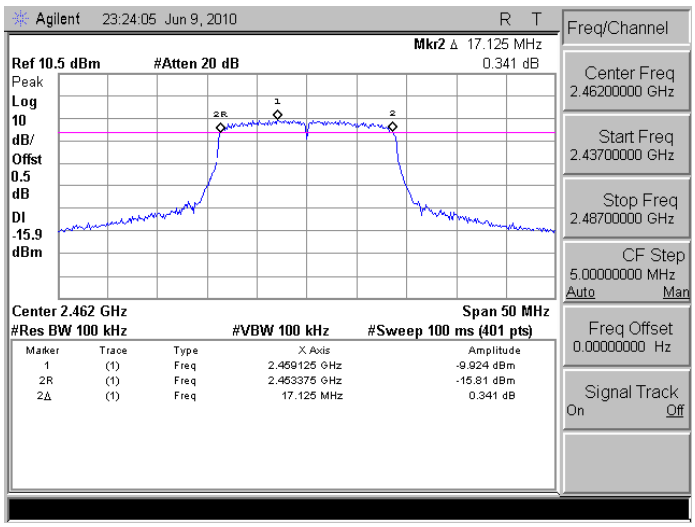
Frequency (MHz)	Measurement(kHz)		Limit (kHz)
	Chan 0	Chan 1	
2422	35375	35000	> 500
2437	35125	35500	> 500
2452	35625	36000	> 500

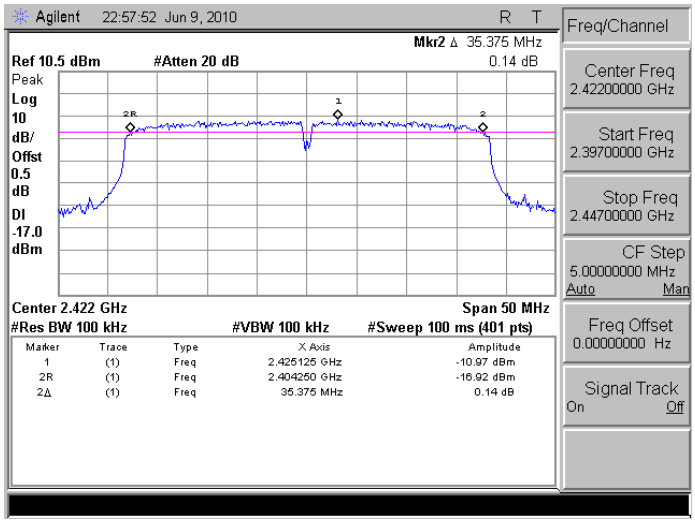
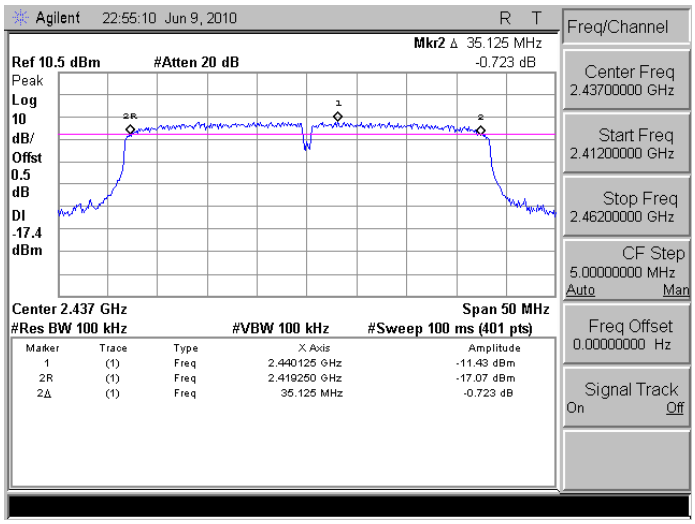
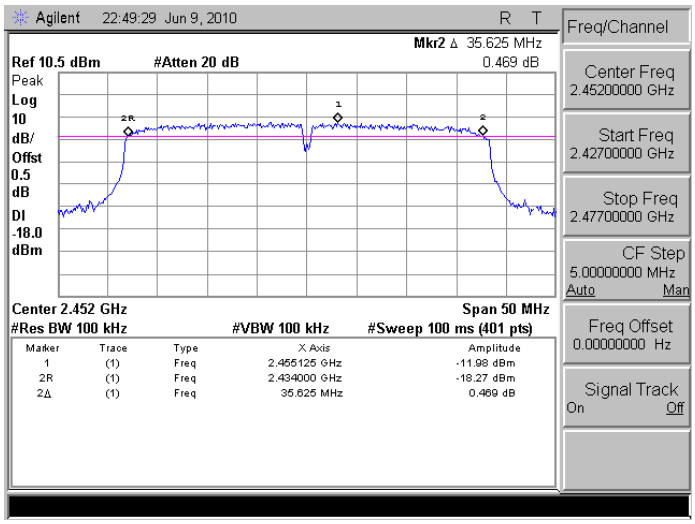
7.6. Test Graphs

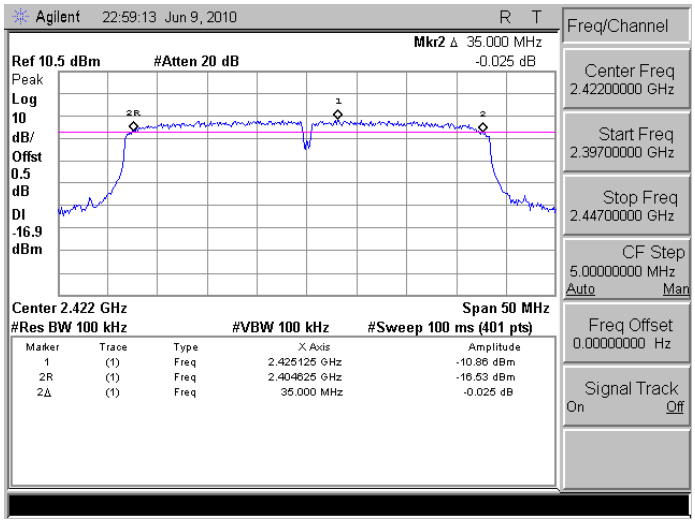
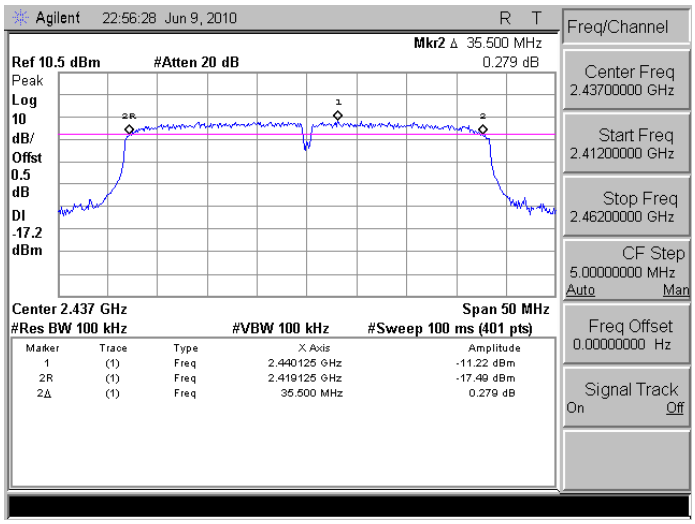
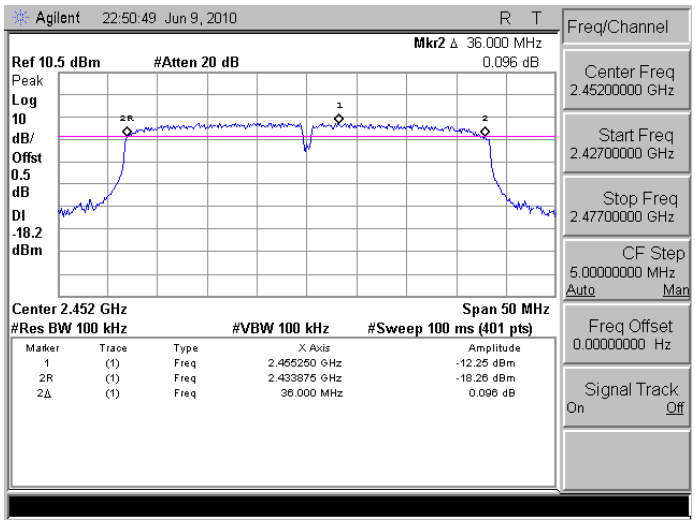
Mode 2: IEEE 802.11b Link Mode	
2412	
2437	
2462	

Mode 3: IEEE 802.11g Link Mode	
2412	
2437	
2462	

Mode 4: draft 802.11n Standard-20MHz Link Mode _ Chan 0	
2412	
2437	
2462	

Mode 4: draft 802.11n Standard-20MHz Link Mode _ Chan 1	
2412	
2437	
2462	

Mode 5: draft 802.11n Wide-40MHz Link Mode	
2422	
2437	
2452	

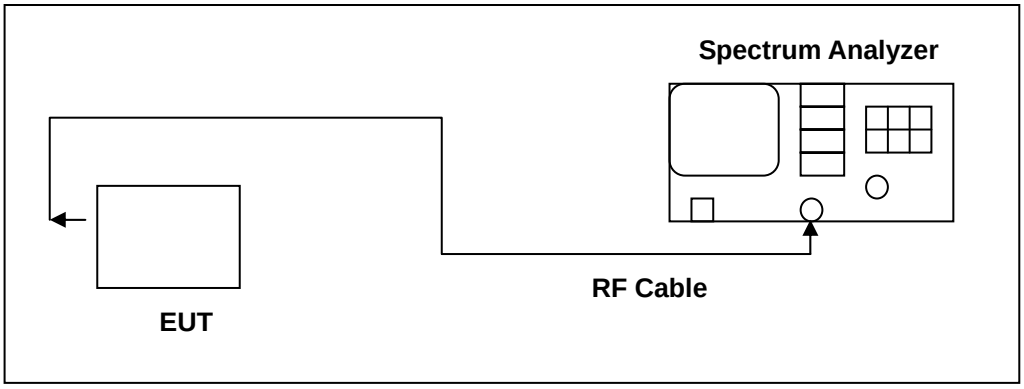
Mode 5: draft 802.11n Wide-40MHz Link Mode _ Chan 1	
2412	
2437	
2462	

8 Maximum Power Density Measurement

8.1. Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

8.2. Test Setup



8.3. Test Instruments

Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/14/2009	(2)
Test Site	ATL	TE06	TE06	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

8.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The spectrum analyzer RES BW was set to 3 kHz. The START and STOP frequencies were set to the band edges of the maximum output pass band. If there is no clear maximum amplitude in any given portion of the band, it may be necessary to make measurements at a number of bands defined by several START and STOP frequency pairs. The specification calls for a 1 second interval at each 3 kHz bandwidth; total SWEEP TIME is calculated as follows:

SWEEP TIME (SEC) = (Fstop, kHz - Fstart, kHz)/3 kHz

Antenna output of the EUT was coupled directly to spectrum analyzer; if an external attenuator and/or cable was used, these losses are compensated for with the analyzer OFFSET function.

8.5. Test Result

Product	WiFi Router		
Test Item	Maximum Power Density		
Test Mode	Mode 2: IEEE 802.11b Link Mode		
Date of Test	01/24/2010	Test Site	TE06

Frequency (MHz)	Measurement (dBm)	Limit (dBm)
2412	-1.50	< 8
2437	-2.60	< 8
2462	-1.17	< 8

Product	WiFi Router		
Test Item	Maximum Power Density		
Test Mode	Mode 3: IEEE 802.11g Link Mode		
Date of Test	01/24/2010	Test Site	TE06

Frequency (MHz)	Measurement (dBm)	Limit (dBm)
2412	-15.05	< 8
2437	-14.99	< 8
2462	-15.14	< 8

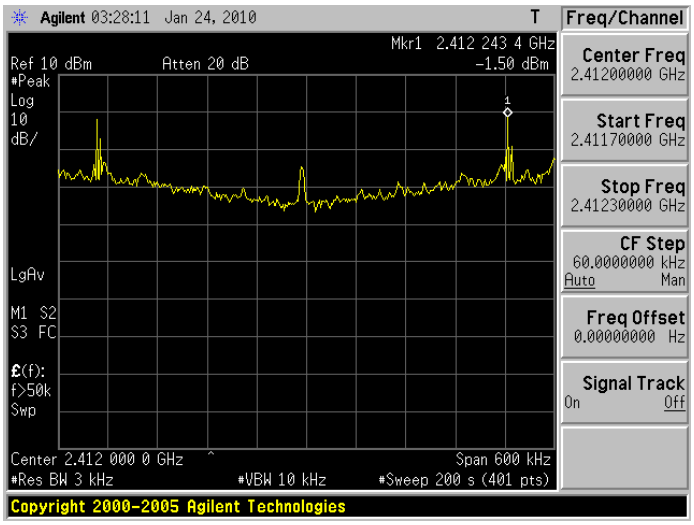
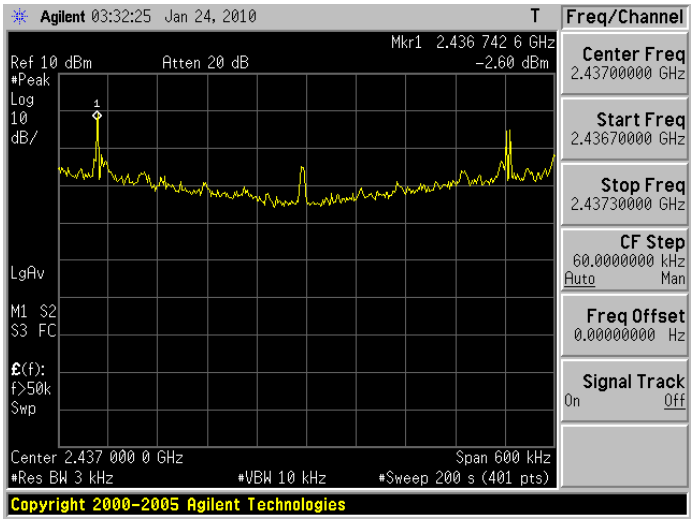
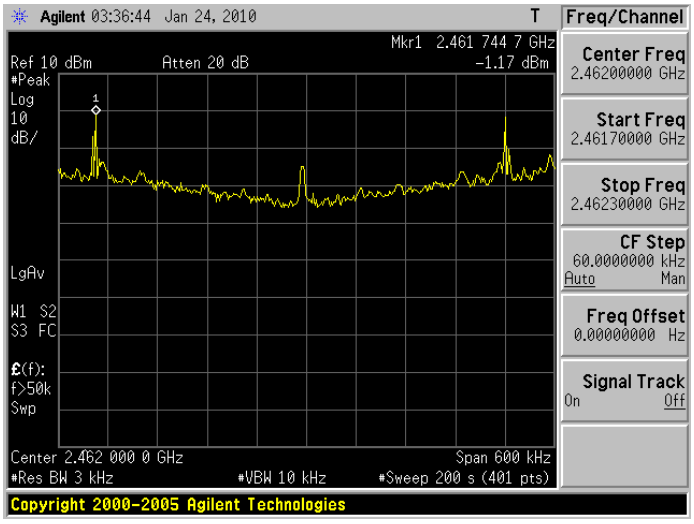
Product	WiFi Router			
Test Item	Maximum Power Density			
Test Mode	Mode 4: draft 802.11n Standard-20MHz Link Mode			
Date of Test	06/09 ~ 06/11/2010		Test Site	TE06

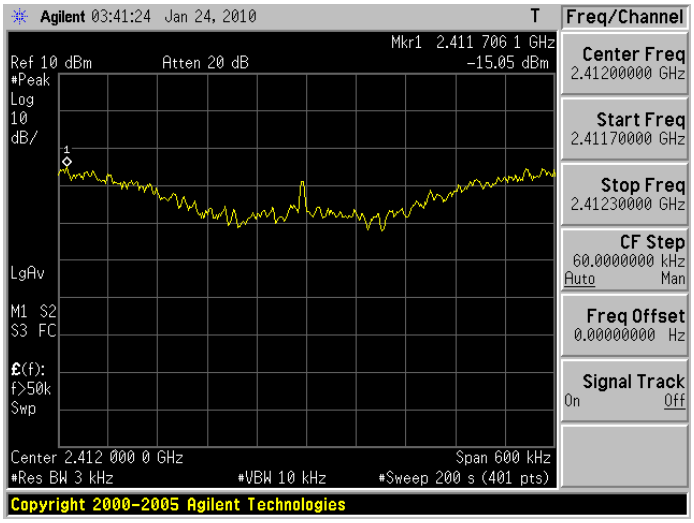
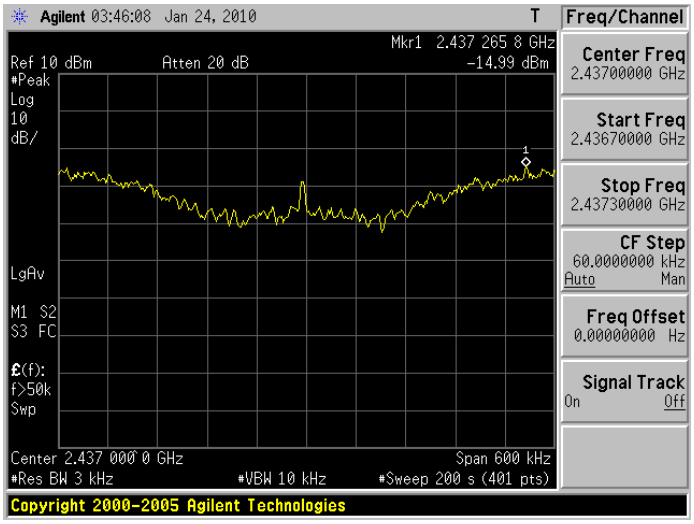
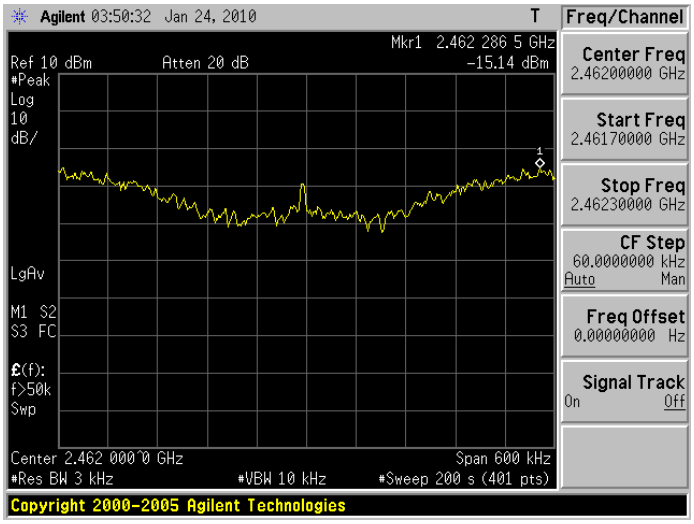
Frequency (MHz)	Measurement(dBm)			Limit (dBm)
	Chan 0	Chan 1	Total	
2412	-21.41	-21.55	-17.92	< 8
2437	-22.67	-22.08	-17.65	< 8
2462	-23.02	-22.93	-18.50	< 8

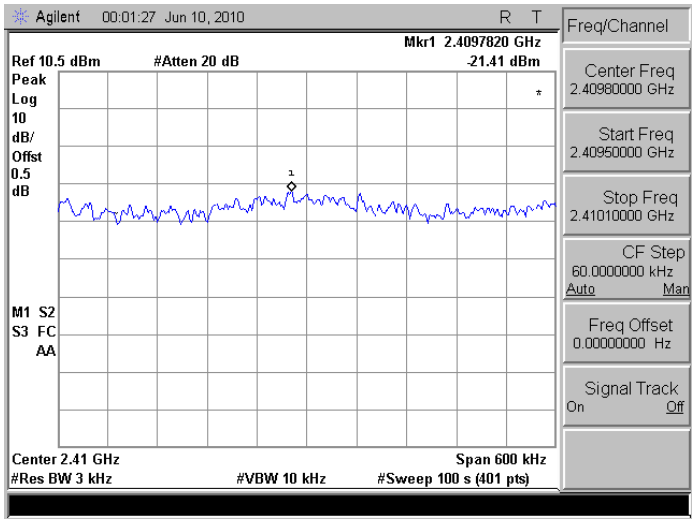
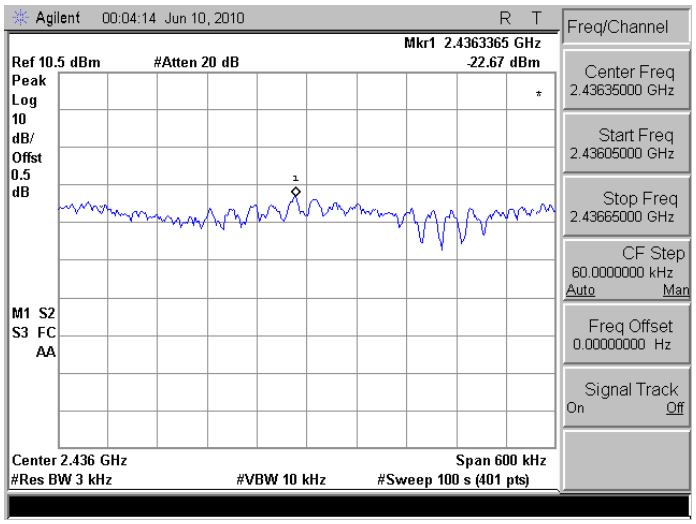
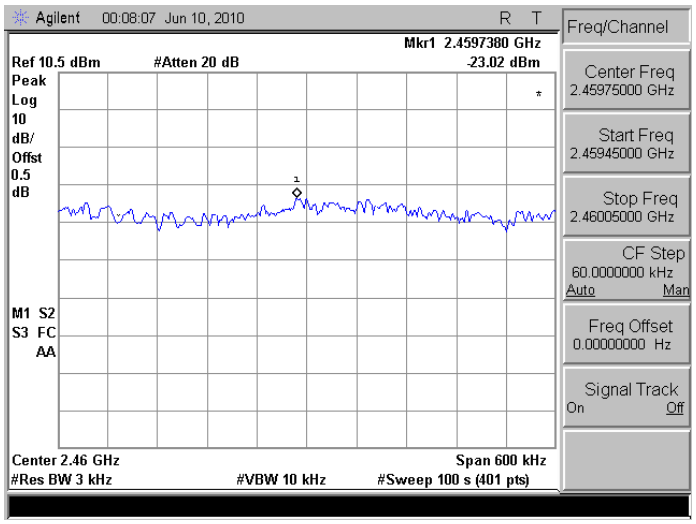
Product	WiFi Router			
Test Item	Maximum Power Density			
Test Mode	Mode 5: draft 802.11n Wide-40MHz Link Mode			
Date of Test	06/09 ~ 06/11/2010		Test Site	TE06

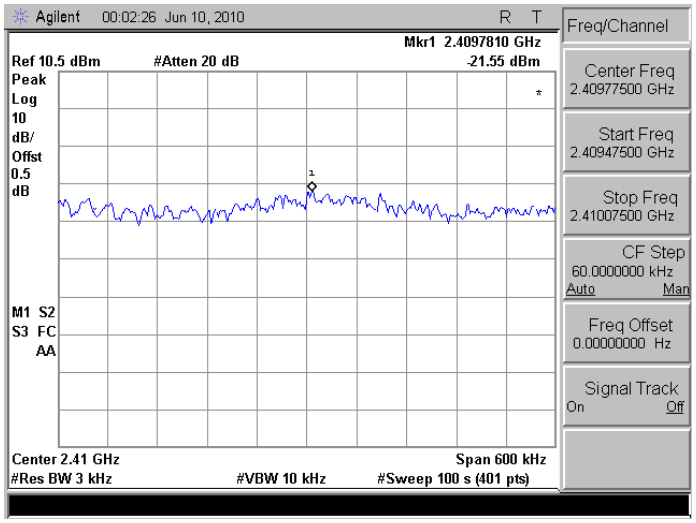
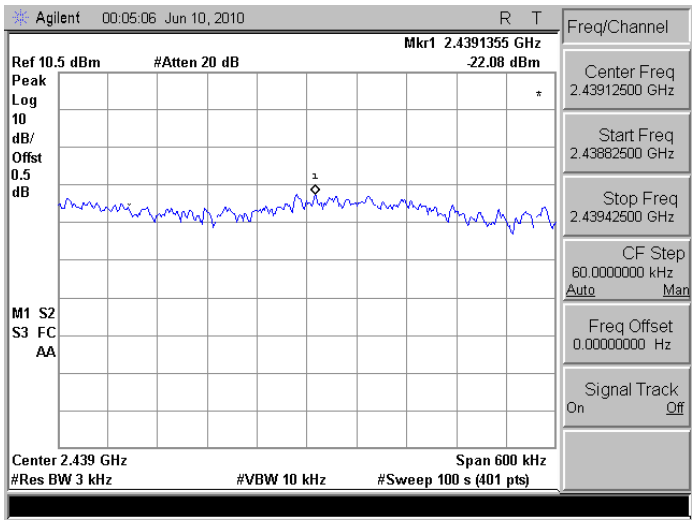
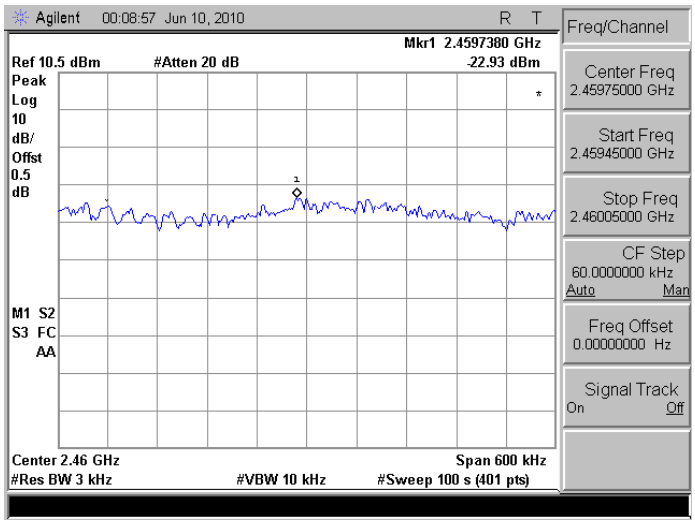
Frequency (MHz)	Measurement(dBm)			Limit (dBm)
	Chan 0	Chan 1	Total	
2422	-21.15	-21.15	-19.92	< 8
2437	-21.72	-21.90	-20.44	< 8
2452	-22.22	-22.17	-21.76	< 8

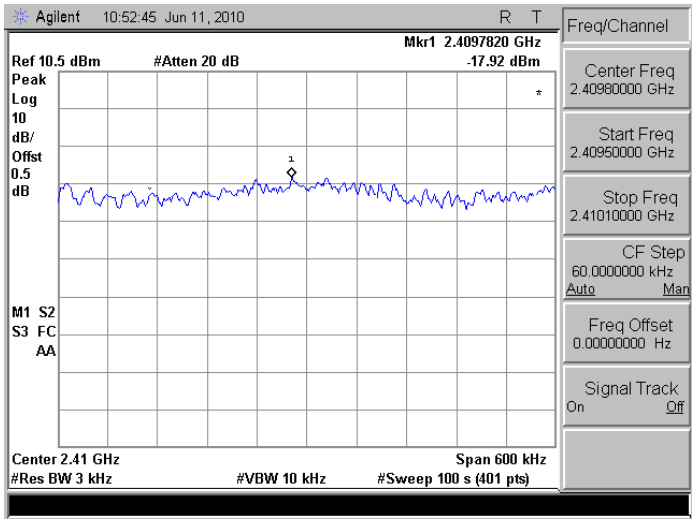
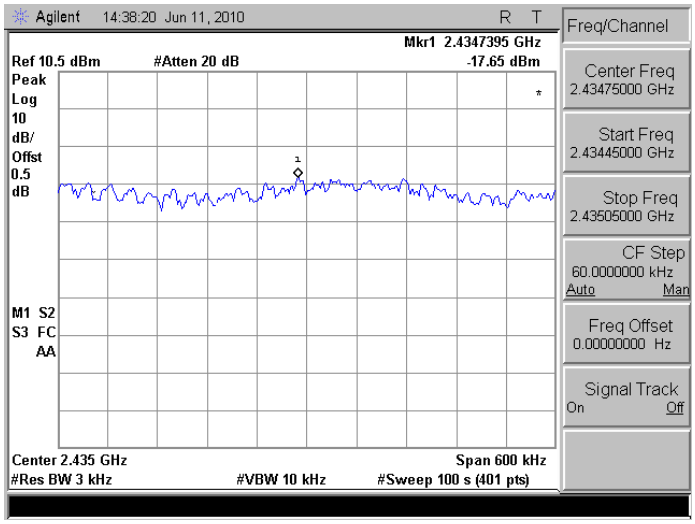
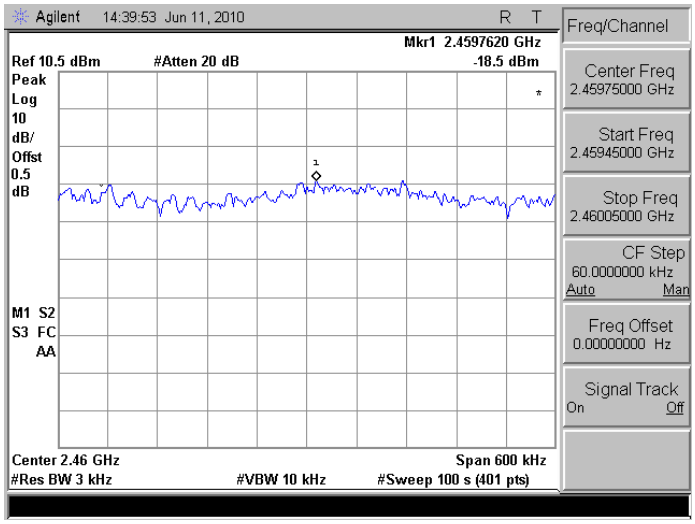
8.6. Test Graphs

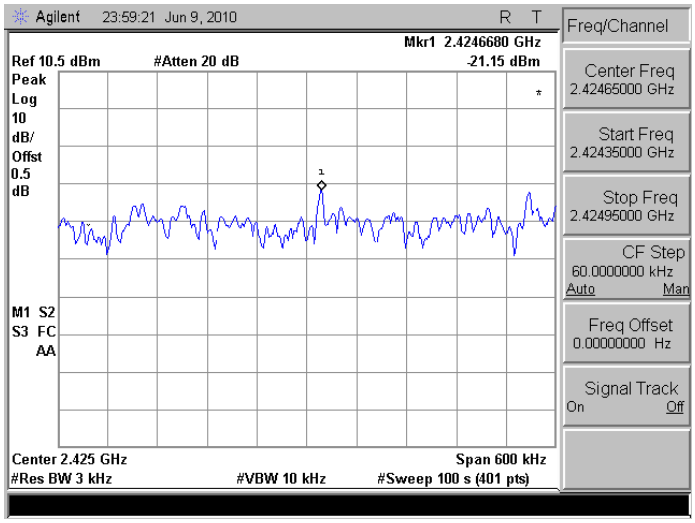
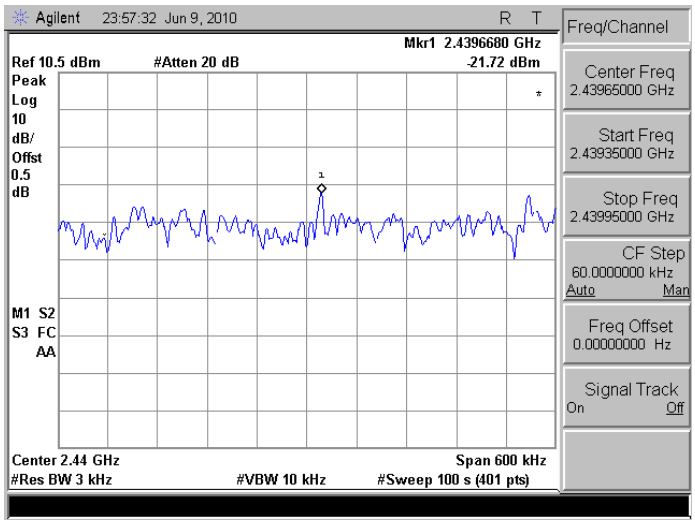
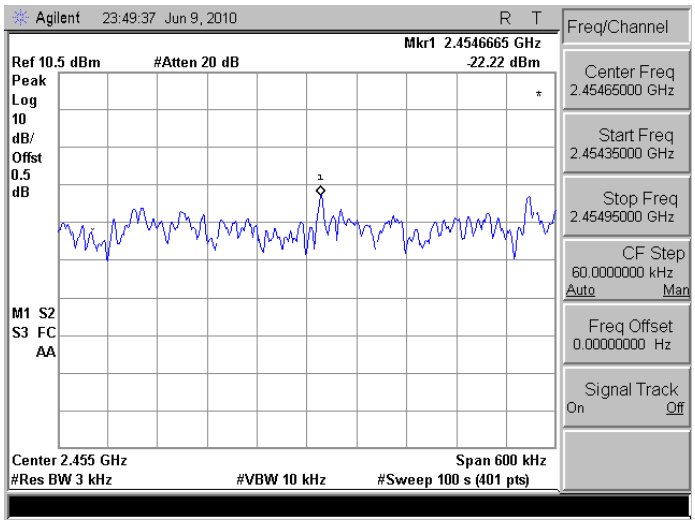
Mode 2: IEEE 802.11b Link Mode	
2412	
2437	
2462	

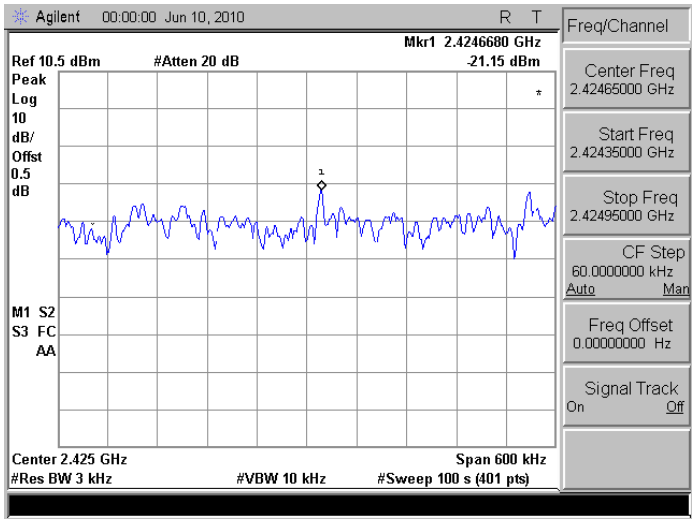
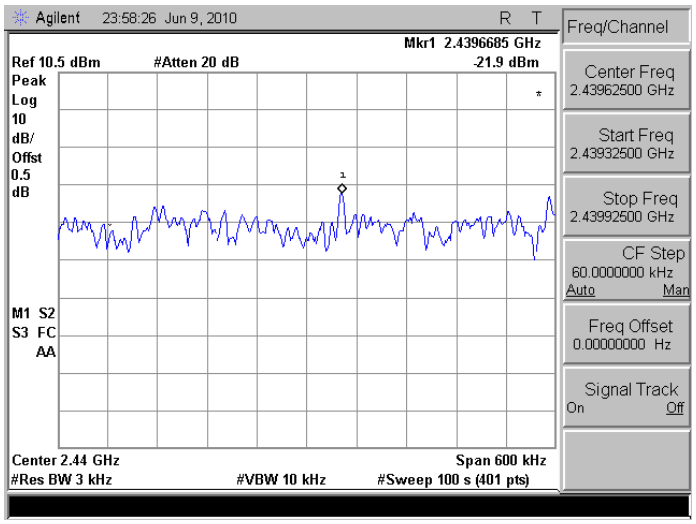
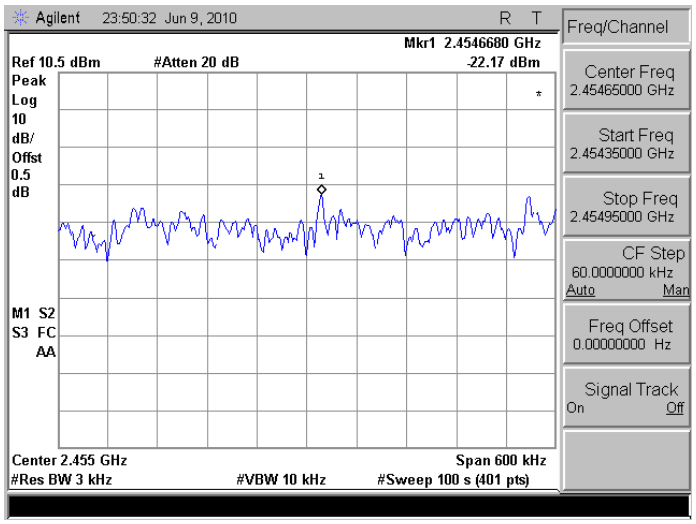
Mode 3: IEEE 802.11g Link Mode	
2412	
2437	
2462	

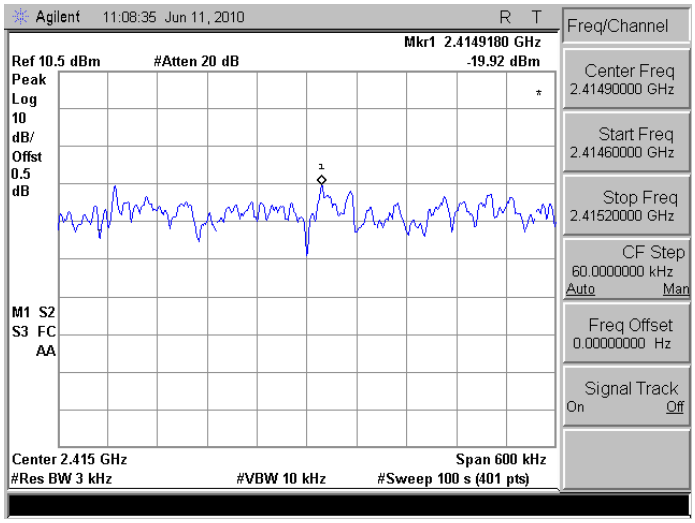
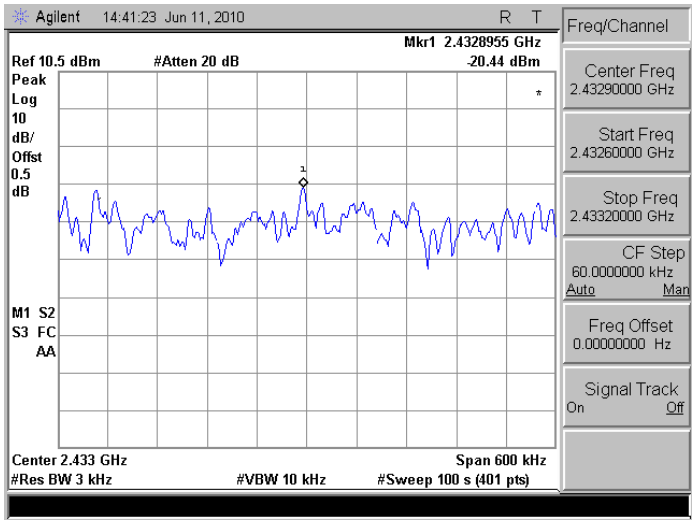
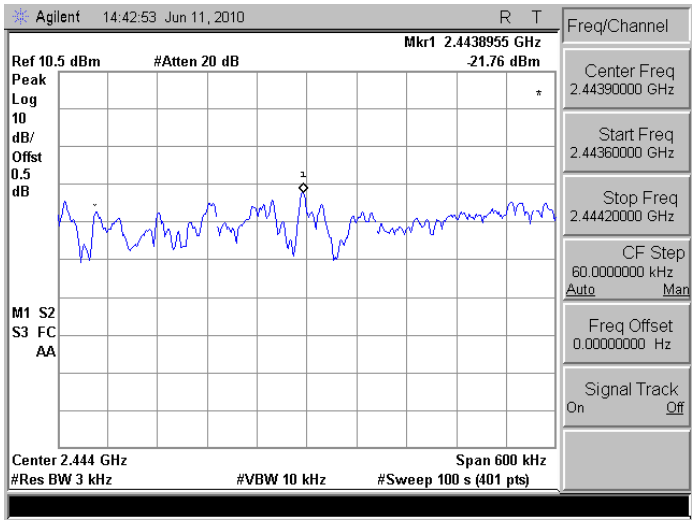
Mode 4: draft 802.11n Standard-20MHz Link Mode _ Chan 0	
2412	
2437	
2462	

Mode 4: draft 802.11n Standard-20MHz Link Mode _ Chan 1	
2412	
2437	
2462	

Mode 4: draft 802.11n Standard-20MHz Link Mode _ Total	
2412	
2437	
2462	

Mode 5: draft 802.11n Wide-40MHz Link Mode _ Chan 0	
2422	
2437	
2452	

Mode 5: draft 802.11n Wide-40MHz Link Mode _ Chan 1	
2422	
2437	
2452	

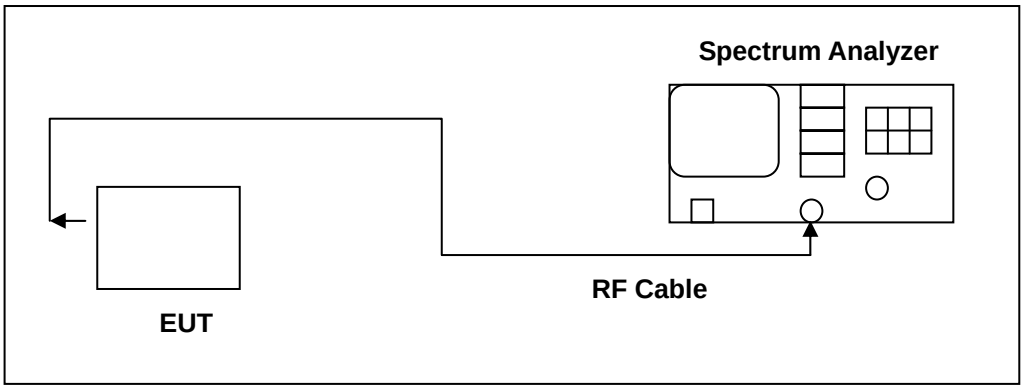
Mode 5: draft 802.11n Wide-40MHz Link Mode _ Total	
2422	
2437	
2452	

9 Out of Band Conducted Emissions Measurement

9.1. Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

9.2. Test Setup



9.3. Test Instruments

Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/14/2009	(2)
Test Site	ATL	TE06	TE06	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

9.4. Test Procedure

In any 100 kHz bandwidth outside the EUT pass band, the RF power produced by the modulation products of the spreading sequence, the information sequence, and the carrier frequency shall be at least 20 dB below that of the maximum in-band 100 kHz emission, antenna output of the EUT was coupled directly to spectrum analyzer; if an external attenuator and/or cable was used, these losses are compensated for with the analyzer OFFSET function.

All other types of emissions from the EUT shall meet the general limits for radiated frequencies outside the pass band. The test was performed at 3 channels. (Channel low, middle, high)

9.5. Test Result

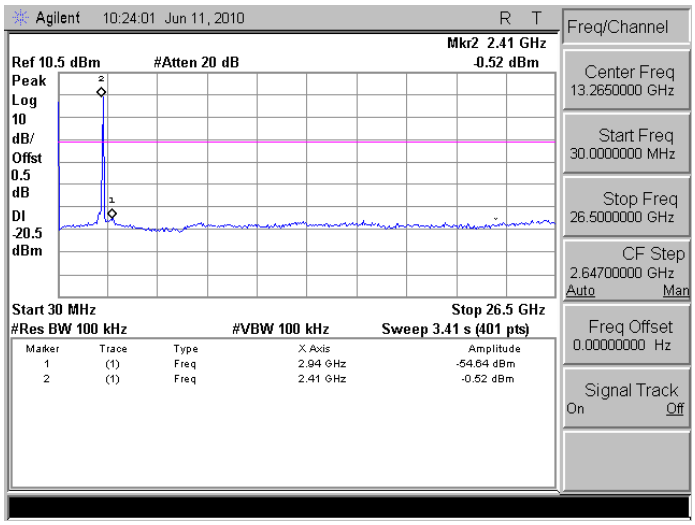
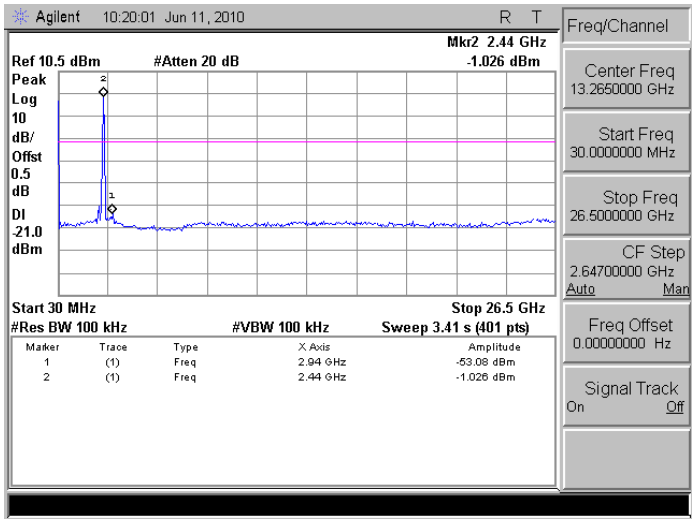
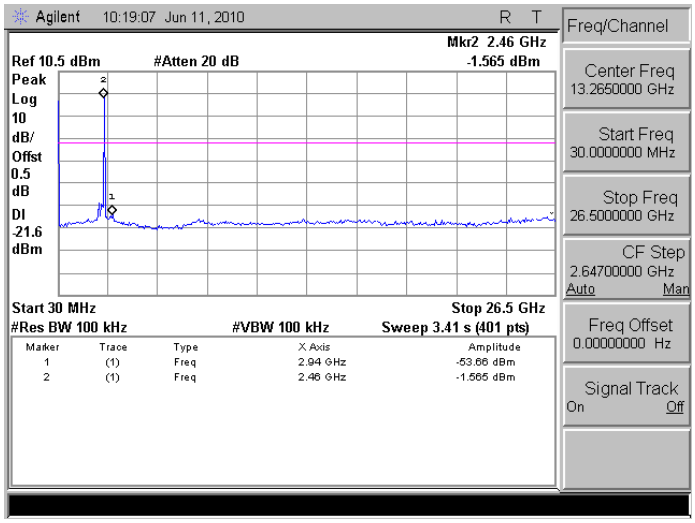
Product	WiFi Router			
Test Item	Out of Band Conducted Emissions			
Test Mode	Mode 2: IEEE 802.11b Link Mode			
Date of Test	06/11/2010		Test Site	TE06
Frequency (MHz)	Fundamental (dBm)	Measurement (dBm)	Limit (dBm)	Margin (dBm)
2412	-0.520	-54.64	-20.52	-34.12
2437	-1.026	-53.08	-21.03	-32.05
2462	-1.565	-53.66	-21.57	-32.10

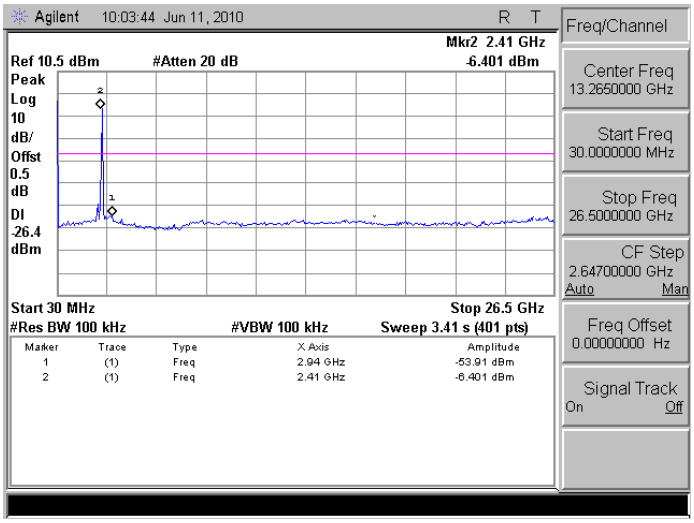
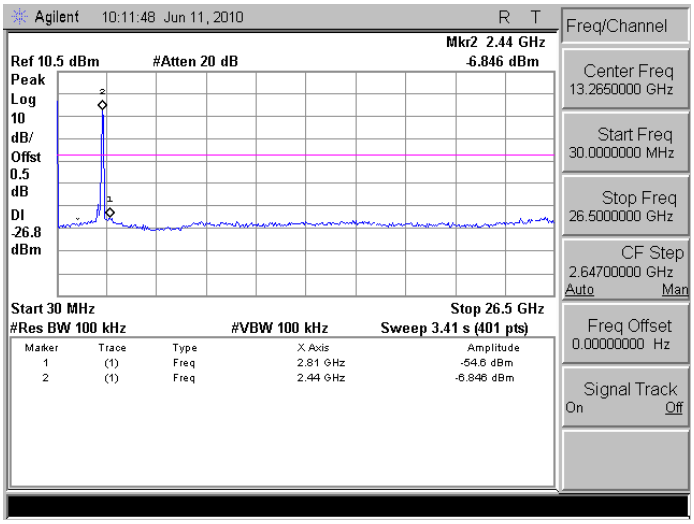
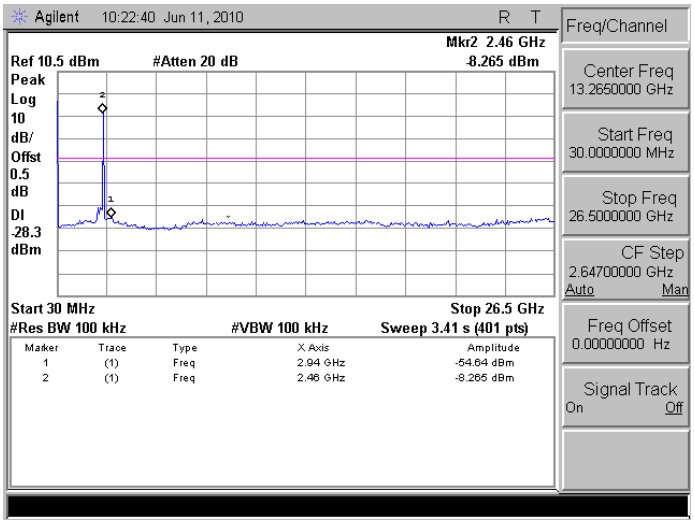
Product	WiFi Router			
Test Item	Out of Band Conducted Emissions			
Test Mode	Mode 3: IEEE 802.11g Link Mode			
Date of Test	06/11/2010		Test Site	TE06
Frequency (MHz)	Fundamental (dBm)	Measurement (dBm)	Limit (dBm)	Margin (dBm)
2412	-6.401	-53.91	-26.40	-27.51
2437	-6.846	-54.60	-26.85	-27.75
2462	-8.265	-54.64	-28.27	-26.35

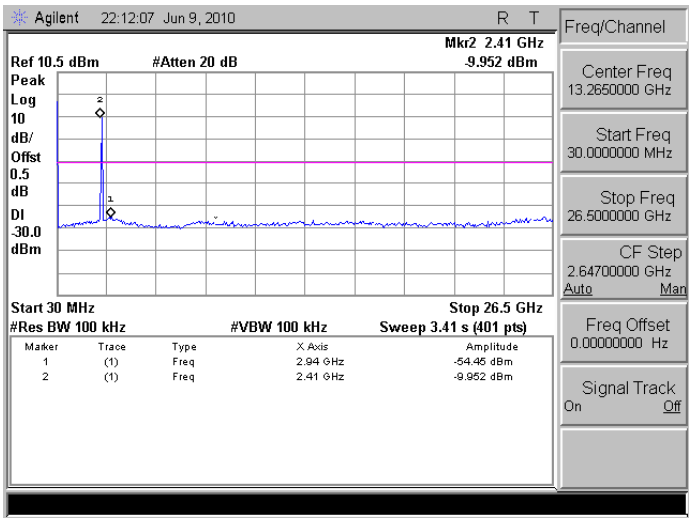
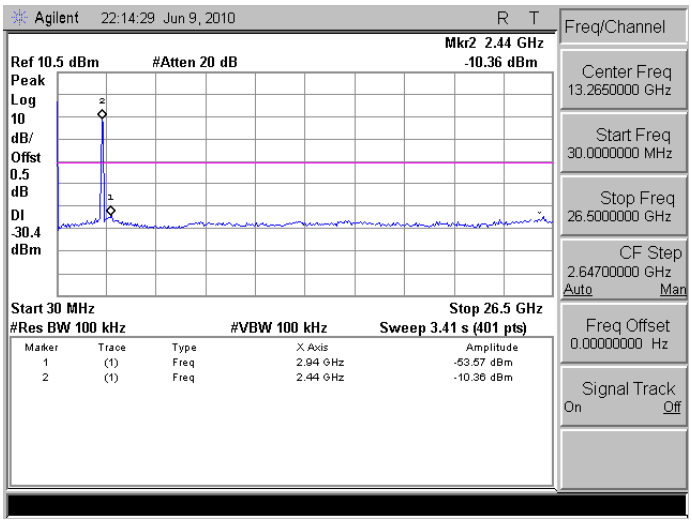
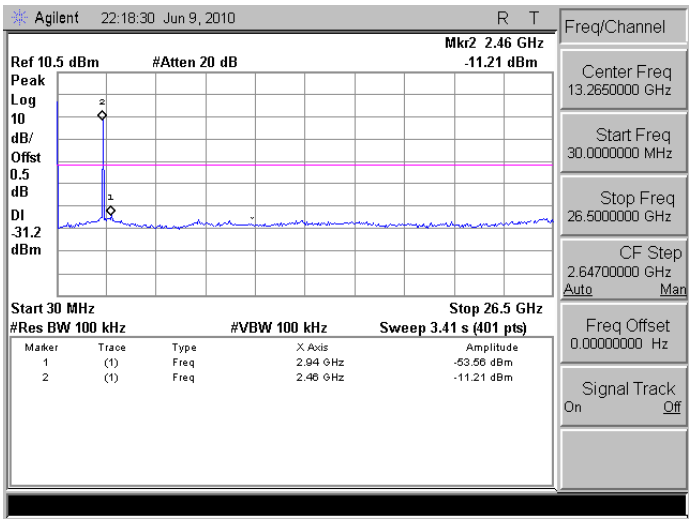
Product	WiFi Router				
Test Item	Out of Band Conducted Emissions				
Test Mode	Mode 4: draft 802.11n Standard-20MHz Link Mode				
Date of Test	06/09/2010			Test Site	TE06
Chan	Frequency (MHz)	Fundamental (dBm)	Measurement (dBm)	Limit (dBm)	Margin (dBm)
0	2412	-9.952	-54.45	-29.95	-24.50
	2437	-10.360	-53.57	-30.36	-23.21
	2462	-11.210	-53.56	-31.21	-22.35
1	2412	-9.292	-54.71	-29.29	-25.42
	2437	-9.382	-54.29	-29.38	-24.91
	2462	-10.880	-54.42	-30.88	-23.54

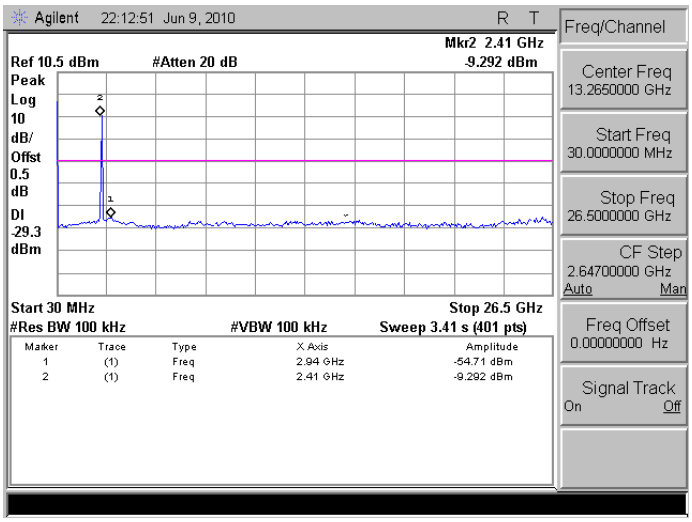
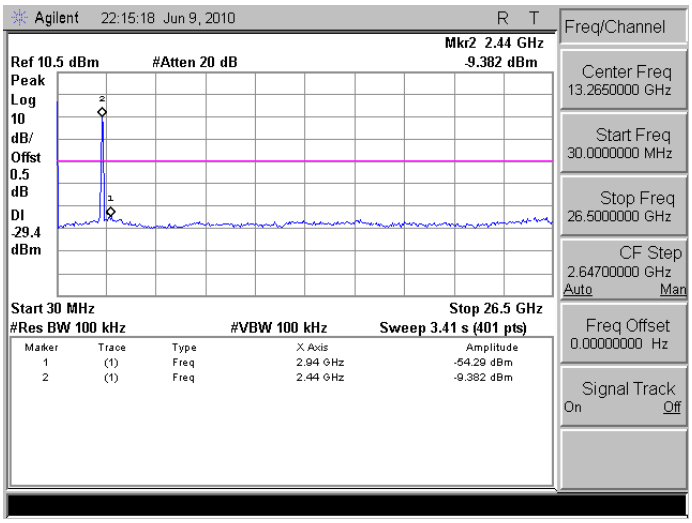
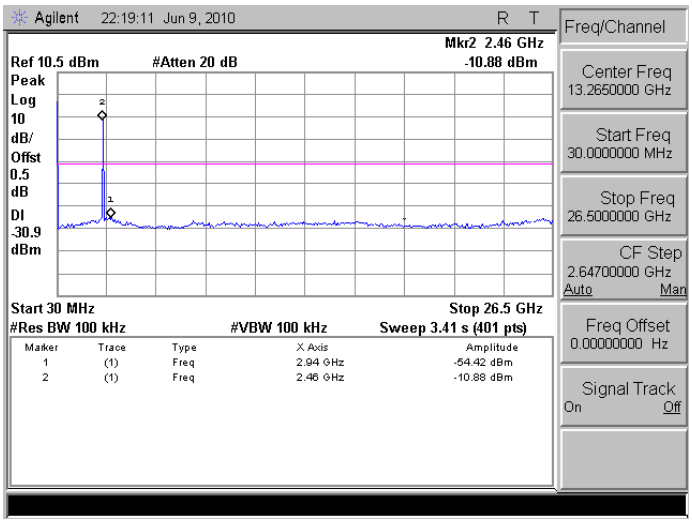
Product	WiFi Router				
Test Item	Out of Band Conducted Emissions				
Test Mode	Mode 5: draft 802.11n Wide-40MHz Link Mode				
Date of Test	06/09/2010			Test Site	TE06
Chan	Frequency (MHz)	Fundamental (dBm)	Measurement (dBm)	Limit (dBm)	Margin (dBm)
0	2422	-9.759	-53.87	-29.76	-24.11
	2437	-11.300	-54.05	-31.30	-22.75
	2452	-12.350	-54.24	-32.35	-21.89
1	2422	-10.410	-53.46	-30.41	-23.05
	2437	-10.420	-54.06	-30.42	-23.64
	2452	-12.560	-54.26	-32.56	-21.70

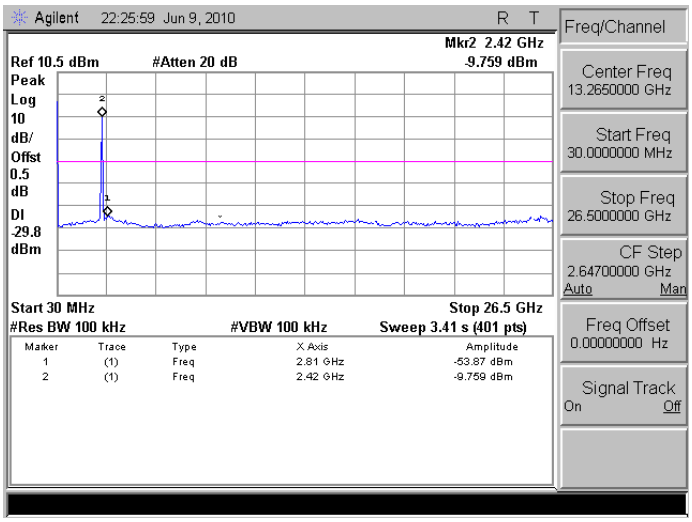
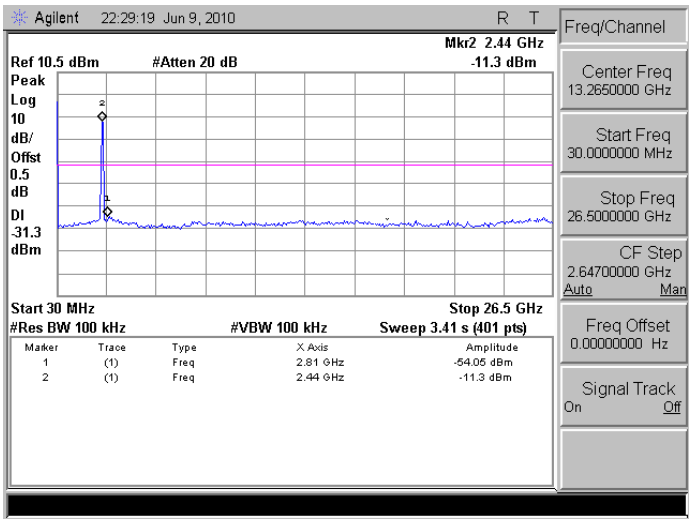
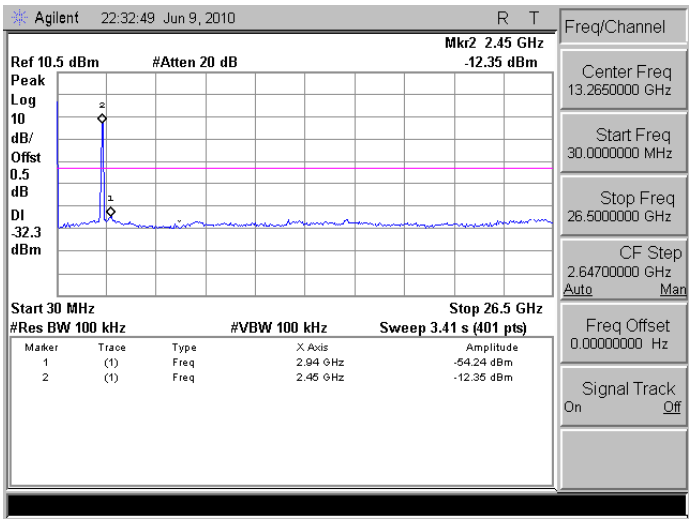
9.6. Test Graphs

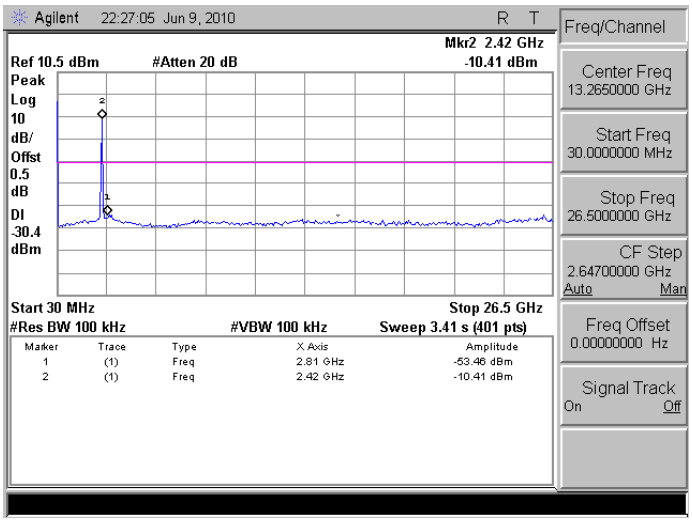
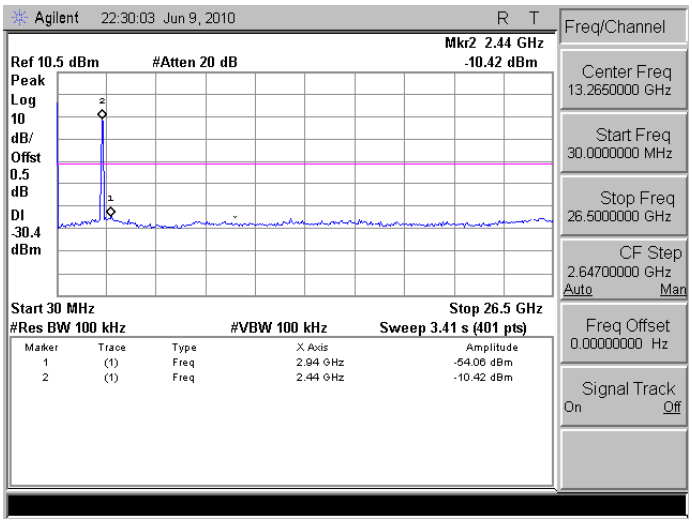
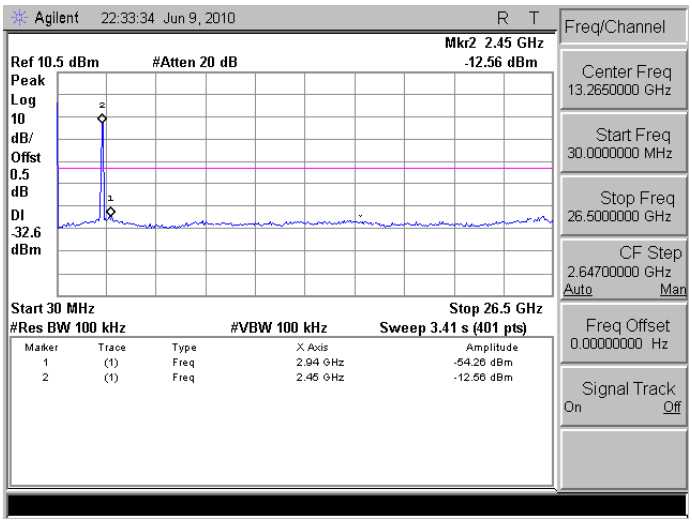
Mode 2: IEEE 802.11b Link Mode	
2412	
2437	
2462	

Mode 3: IEEE 802.11g Link Mode	
2412	
2437	
2462	

Mode 4: draft 802.11n Standard-20MHz Link Mode _ Chan 0	
2412	
2437	
2462	

Mode 4: draft 802.11n Standard-20MHz Link Mode _ Chan 1	
2412	
2437	
2462	

Mode 5: draft 802.11n Wide-40MHz Link Mode _ Chan 0	
2422	
2437	
2452	

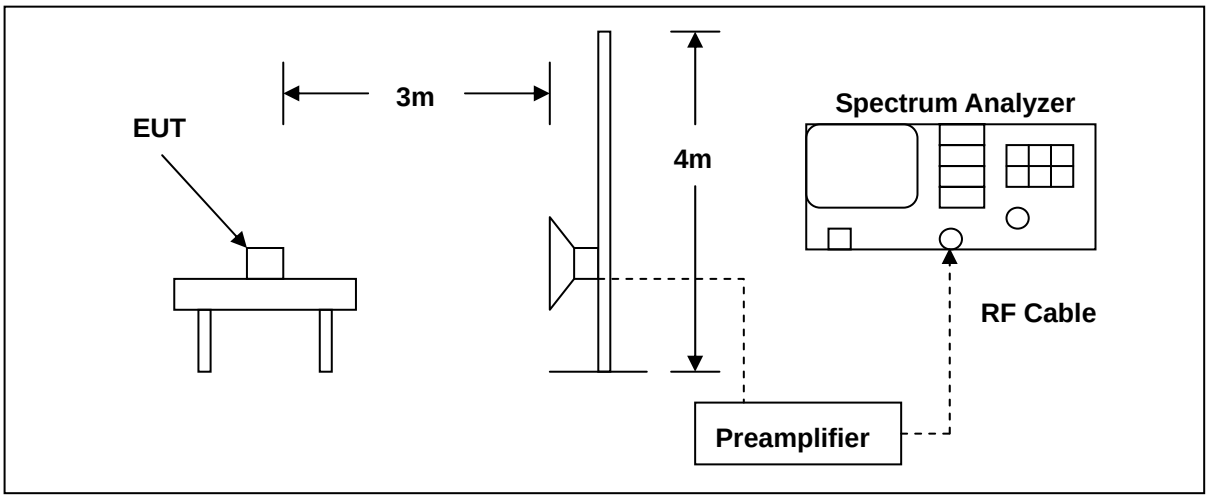
Mode 5: draft 802.11n Wide-40MHz Link Mode _ Chan 1	
2422	
2437	
2452	

10 Band Edges Measurement

10.1. Limit

In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.

10.2. Test Setup



10.3. Test Instruments

Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4408B	MY45107753	01/27/2009	(2)
Pre Amplifier	Agilent	8449B	3008A02237	01/20/2009	(1)
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	9120D	9120D-550	07/01/2009	(2)
Test Site	ATL	TE06	TE06	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

10.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

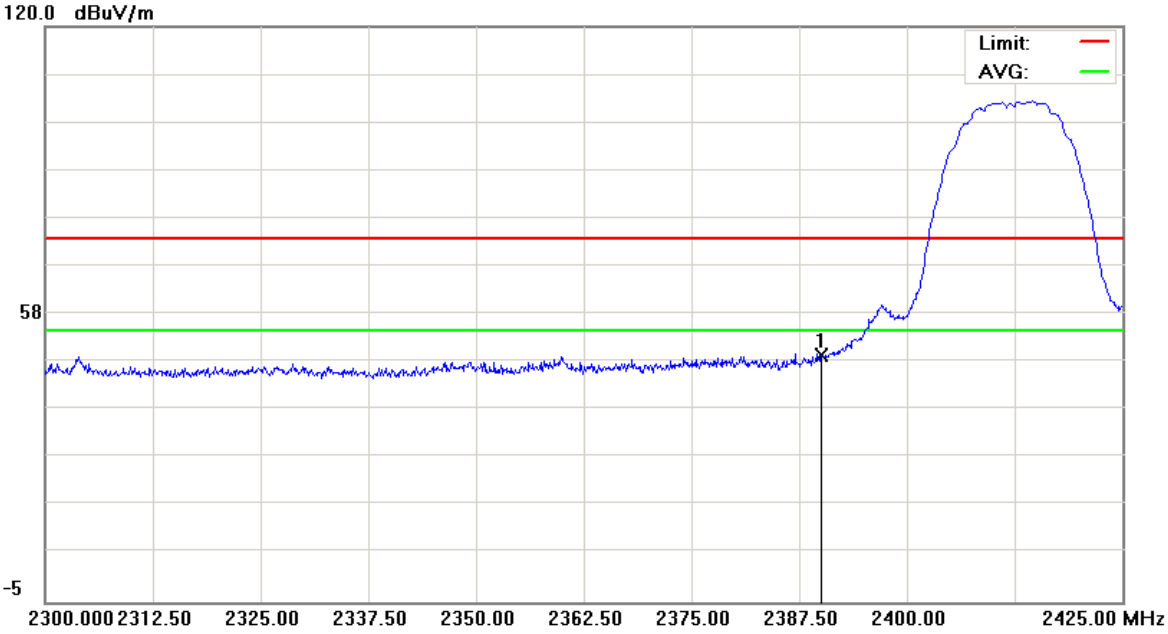
The emissions on the harmonics frequencies, the limits, and the margin of compliance are presented. These tests were made when the transmitter was in full radiated power. The additional test was performed to show compliance with the requirement at the band-edge frequency 2483.5 MHz and up to 2500 MHz and at 2390.0 MHz.

The transmitter was configured with the worst case antenna and setup to transmit at the highest channel. Then the field strength was measured at 2483.5 MHz.

The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel. Then the field strength was measured at 2390.0 MHz. These tests were performed at 4 different bit rates.

10.5. Test Graphs

File :BIGphone(Band Edge) Data :#1 Date: 2009/12/17 Time: 上午 11:39:48



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 2
Note: 2412MHz

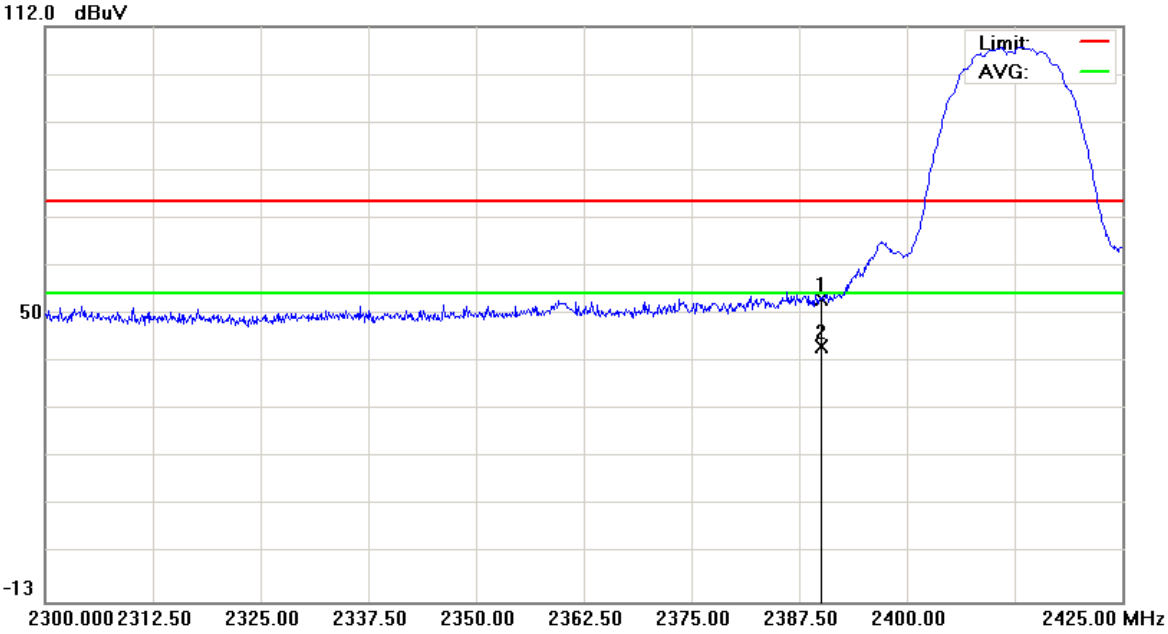
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	2390.000	48.38	0.19	48.57	74.00	-25.43	peak			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Band Edge) Data :#3 Date: 2009/12/17 Time: 上午 11:48:00



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 2
Note: 2412MHz

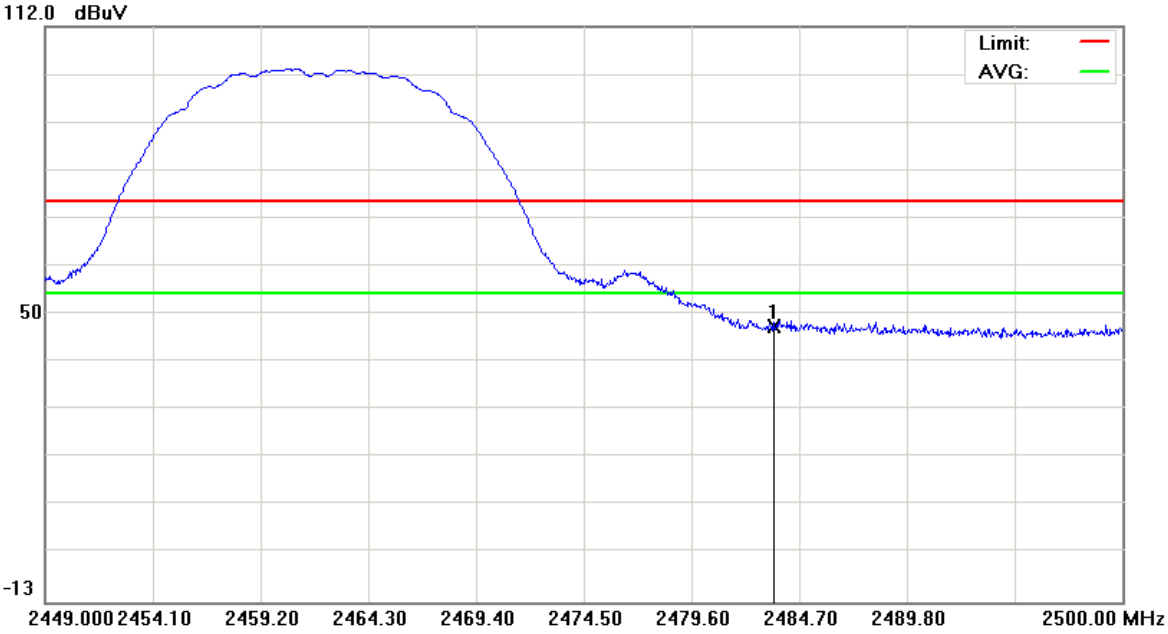
Polarization: ***Horizontal***
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH
VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2390.000	52.74	0.19	52.93	74.00	-21.07	peak			
2	*	2390.000	42.18	0.19	42.37	54.00	-11.63	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Band Edge) Data :#5 Date: 2009/12/17 Time: 下午 12:21:00



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 2
Note: 2412MHz

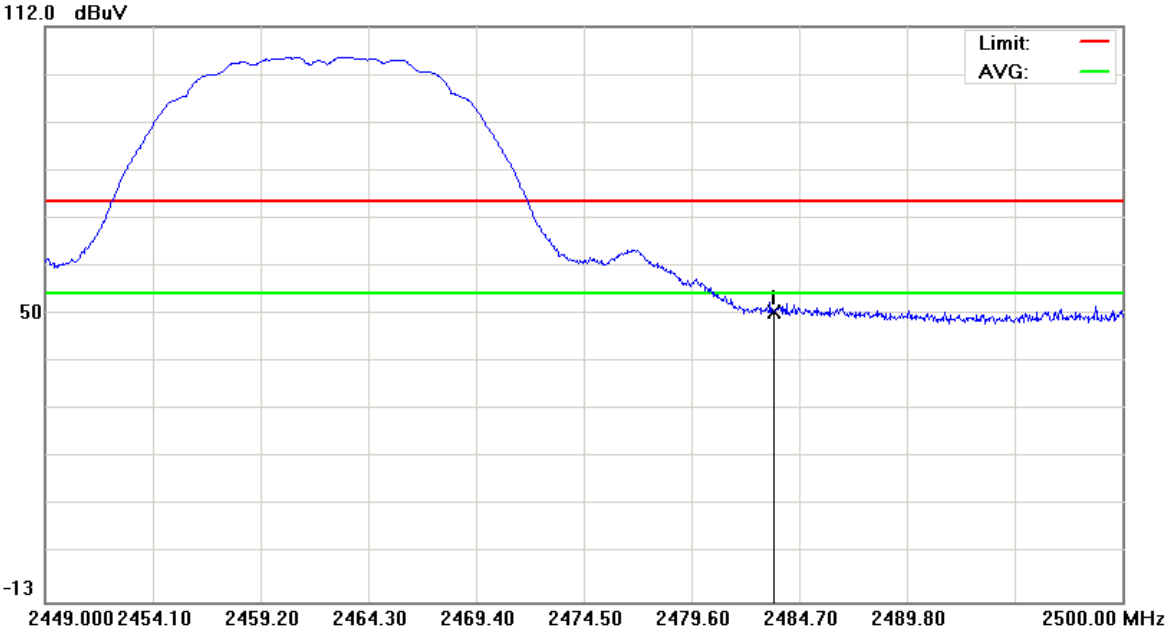
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2483.500	46.70	0.25	46.95	74.00	-27.05	peak			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Band Edge) Data :#7 Date: 2009/12/17 Time: 下午 12:24:06



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 2
Note: 2462MHz

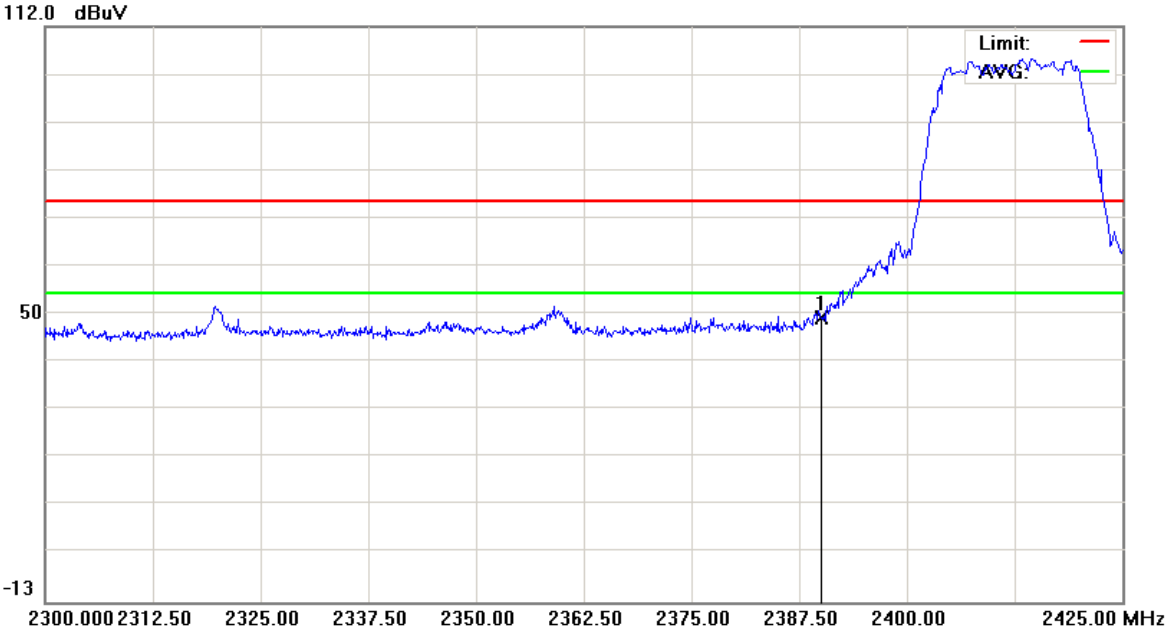
Polarization: ***Horizontal***
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2483.500	49.69	0.25	49.94	74.00	-24.06	peak			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Band Edge) Data :#1 Date: 2009/12/17 Time: 下午 02:32:46



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 3
Note: CH01(2412MHz)

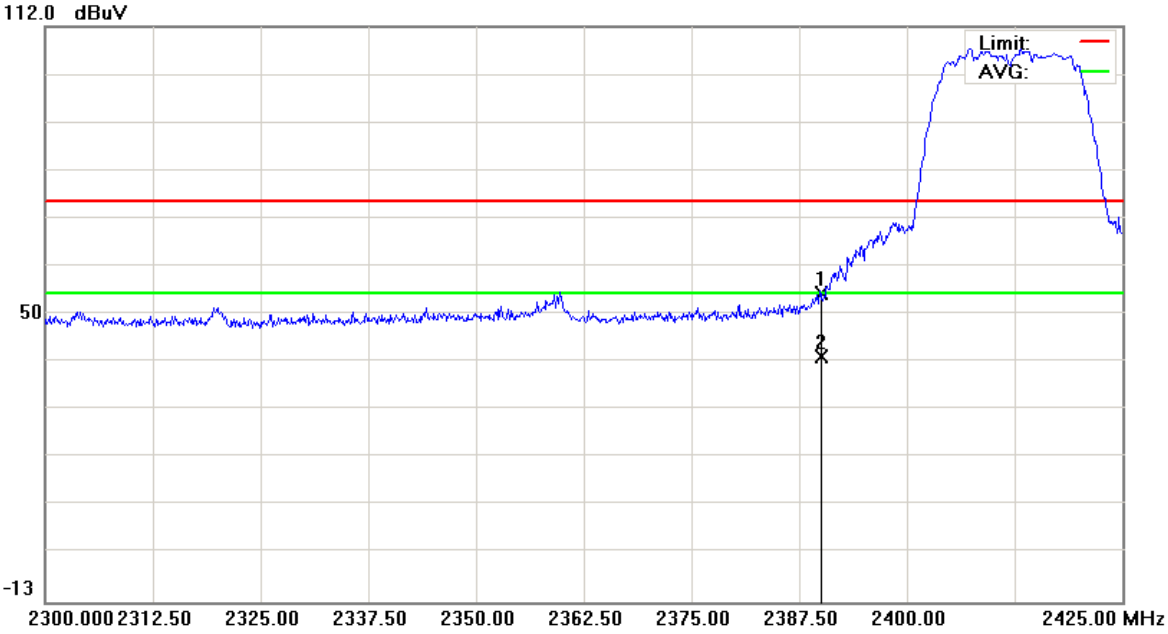
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH
VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2390.000	48.51	0.19	48.70	74.00	-25.30	peak			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Band Edge) Data :#3 Date: 2009/12/17 Time: 下午 02:37:06



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 3
Note: CH11(2462MHz)

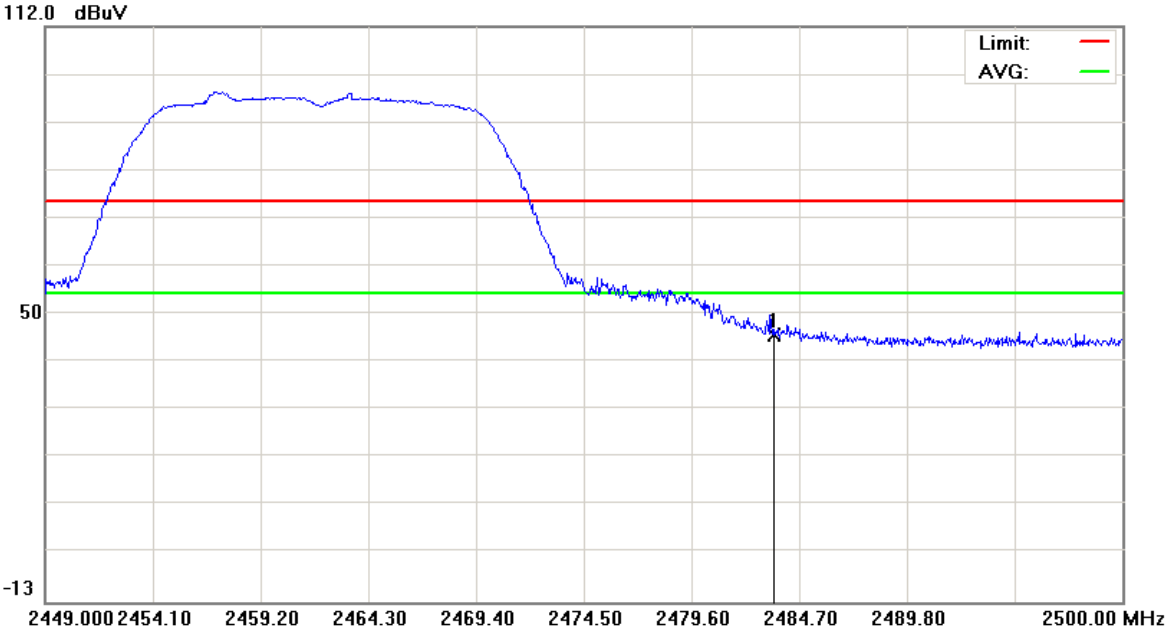
Polarization: ***Horizontal***
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH
VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2390.000	53.85	0.19	54.04	74.00	-19.96	peak			
2	*	2390.000	39.99	0.19	40.18	54.00	-13.82	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Band Edge) Data :#5 Date: 2009/12/17 Time: 下午 02:45:23



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 3
Note: CH01(2412MHz)

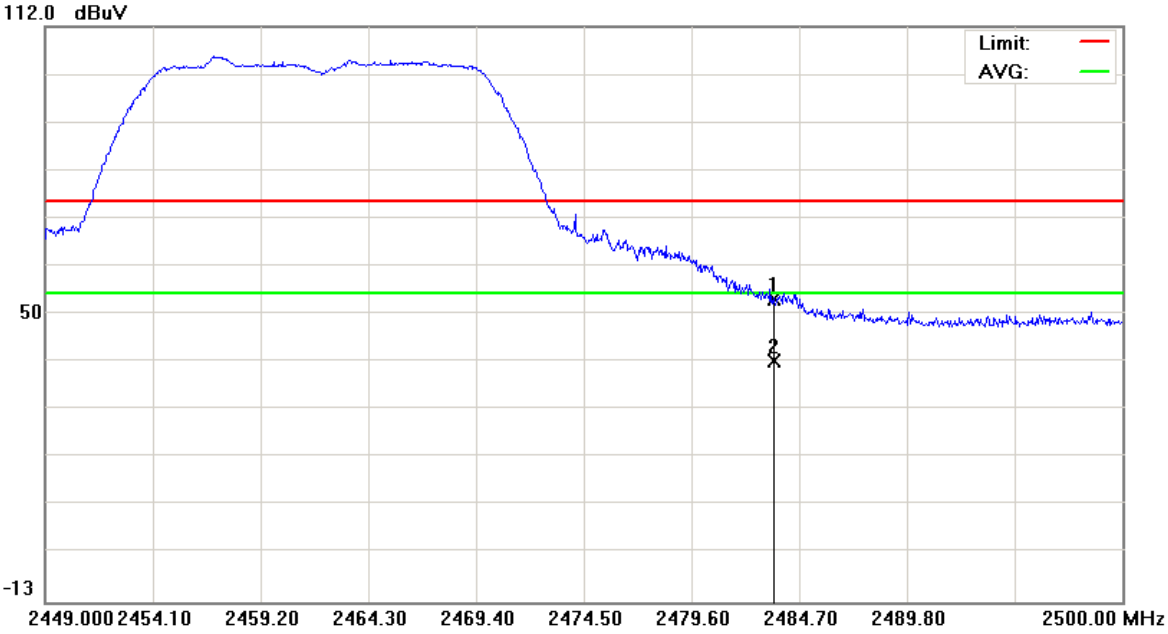
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2483.500	44.64	0.25	44.89	74.00	-29.11	peak			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Band Edge) Data :#7 Date: 2009/12/17 Time: 下午 02:48:41



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 3
Note: CH11(2462MHz)

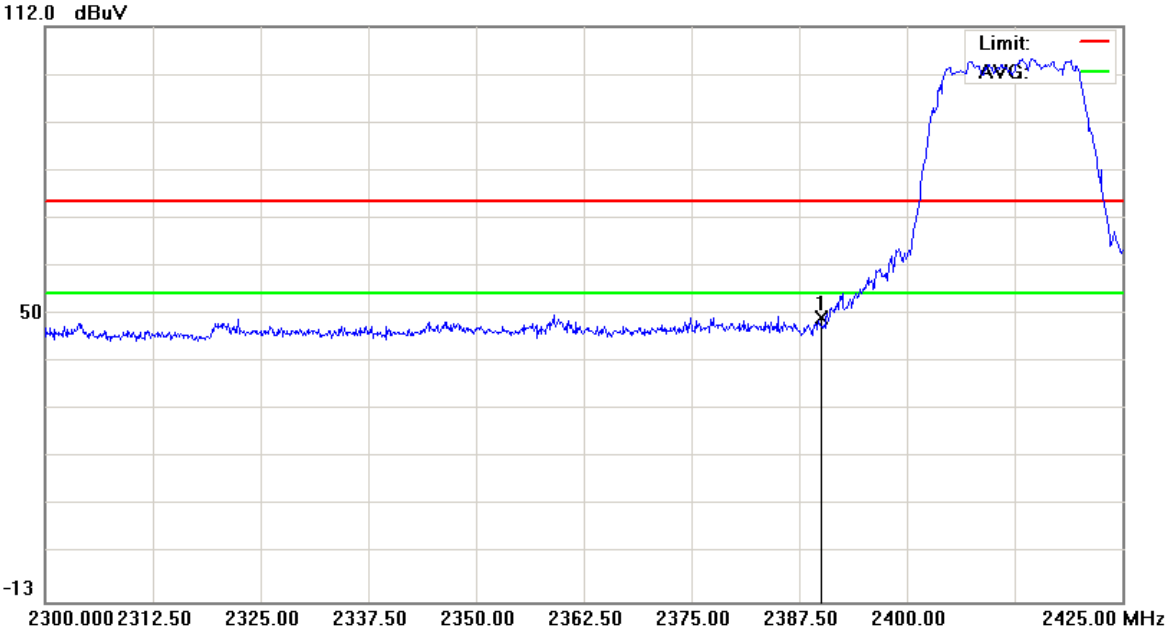
Polarization: ***Horizontal***
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2483.500	52.40	0.25	52.65	74.00	-21.35	peak			
2	*	2483.500	39.20	0.25	39.45	54.00	-14.55	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Band Edge) Data :#1 Date: 2009/12/17 Time: 下午 03:32:35



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 4
Note: CH01(2412MHz)

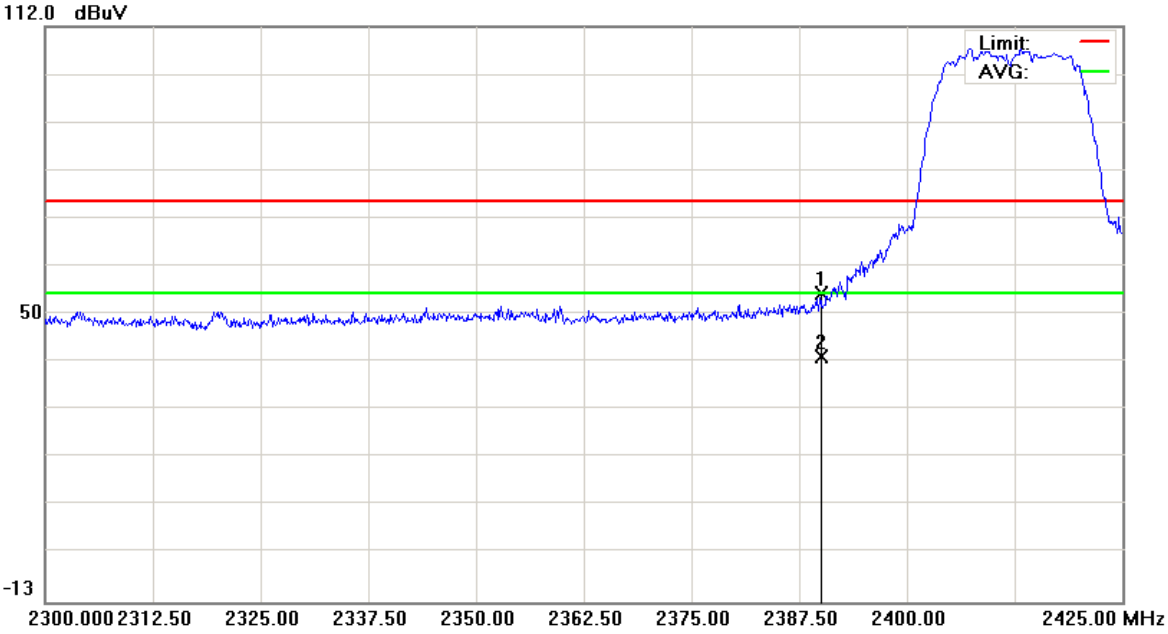
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH
VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2390.000	48.51	0.19	48.70	74.00	-25.30	peak			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Band Edge) Data :#3 Date: 2009/12/17 Time: 下午 04:26:19



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 4
Note: CH11(2462MHz)

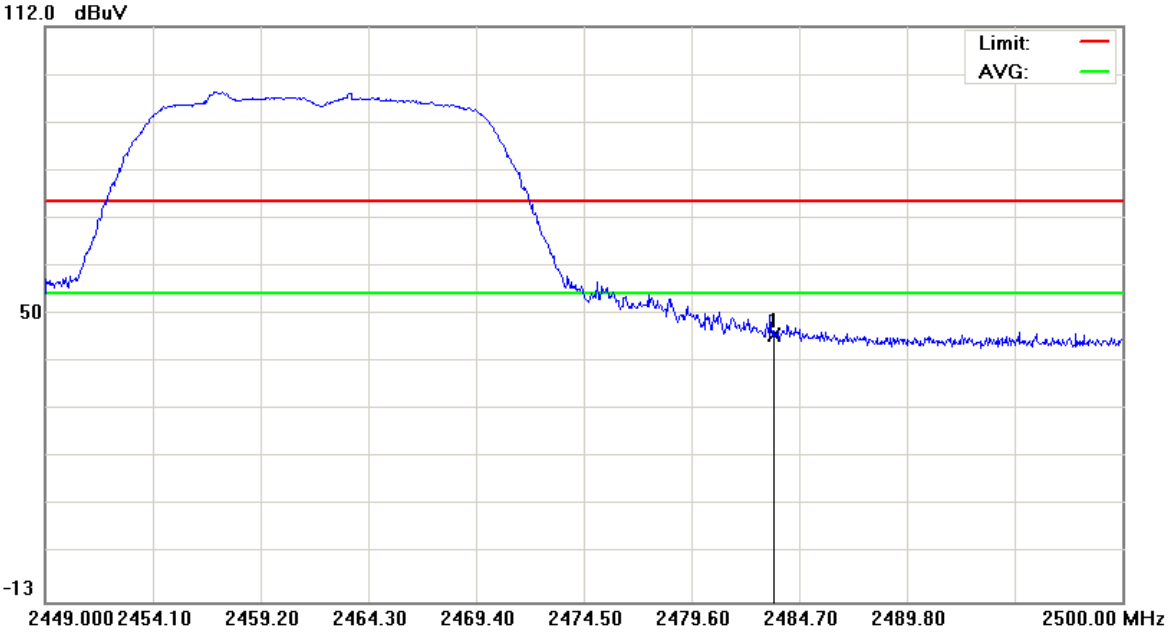
Polarization: ***Horizontal***
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH
VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2390.000	53.85	0.19	54.04	74.00	-19.96	peak			
2	*	2390.000	39.99	0.19	40.18	54.00	-13.82	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Band Edge) Data :#5 Date: 2009/12/17 Time: 下午 04:49:42



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 4
Note: CH01(2412MHz)

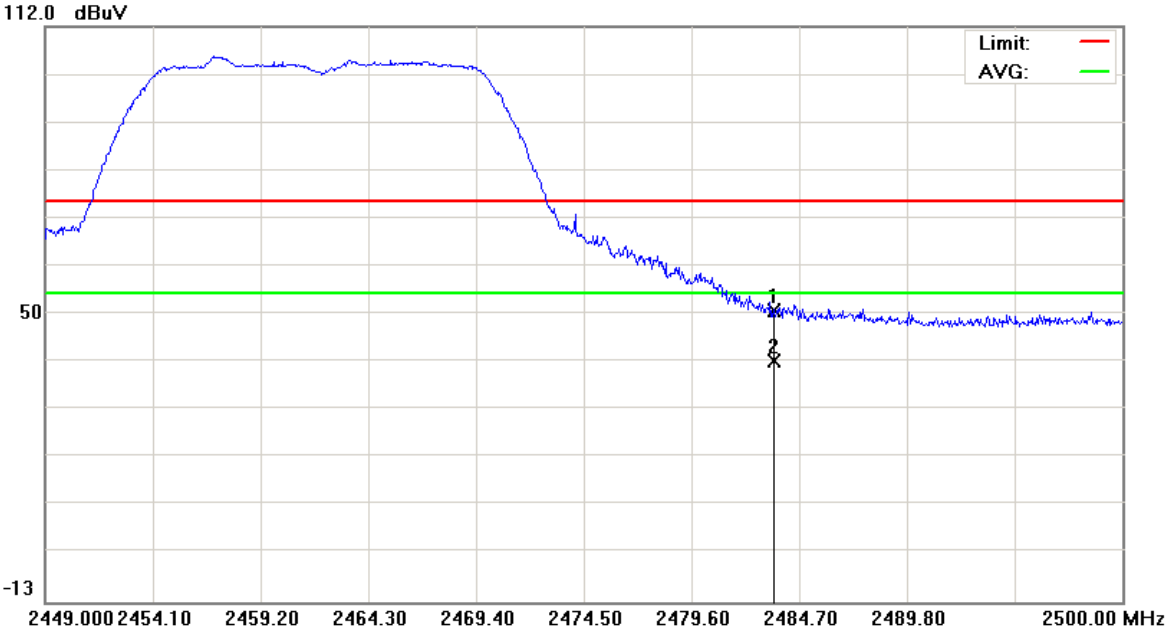
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2483.500	44.64	0.25	44.89	74.00	-29.11	peak			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Band Edge) Data :#7 Date: 2009/12/17 Time: 下午 04:56:07



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 4
Note: CH11(2462MHz)

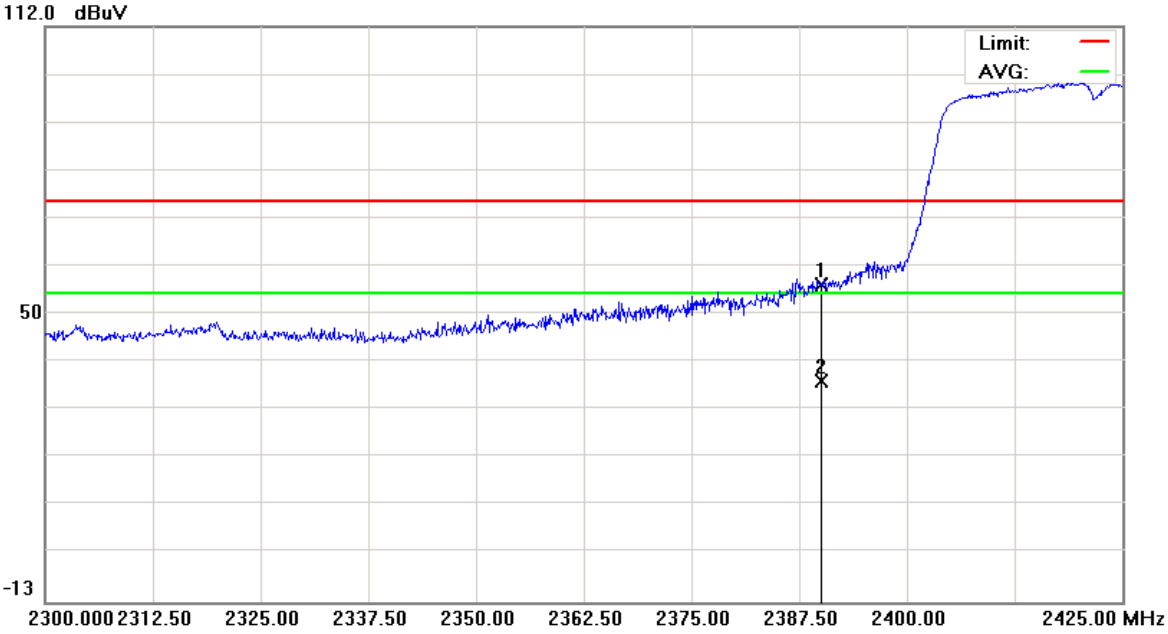
Polarization: ***Horizontal***
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2483.500	49.90	0.25	50.15	74.00	-23.85	peak			
2	*	2483.500	39.20	0.25	39.45	54.00	-14.55	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Band Edge) Data :#1 Date: 2009-12-17 Time: 下午 05:17:36



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 5
Note: CH03(2422MHz)

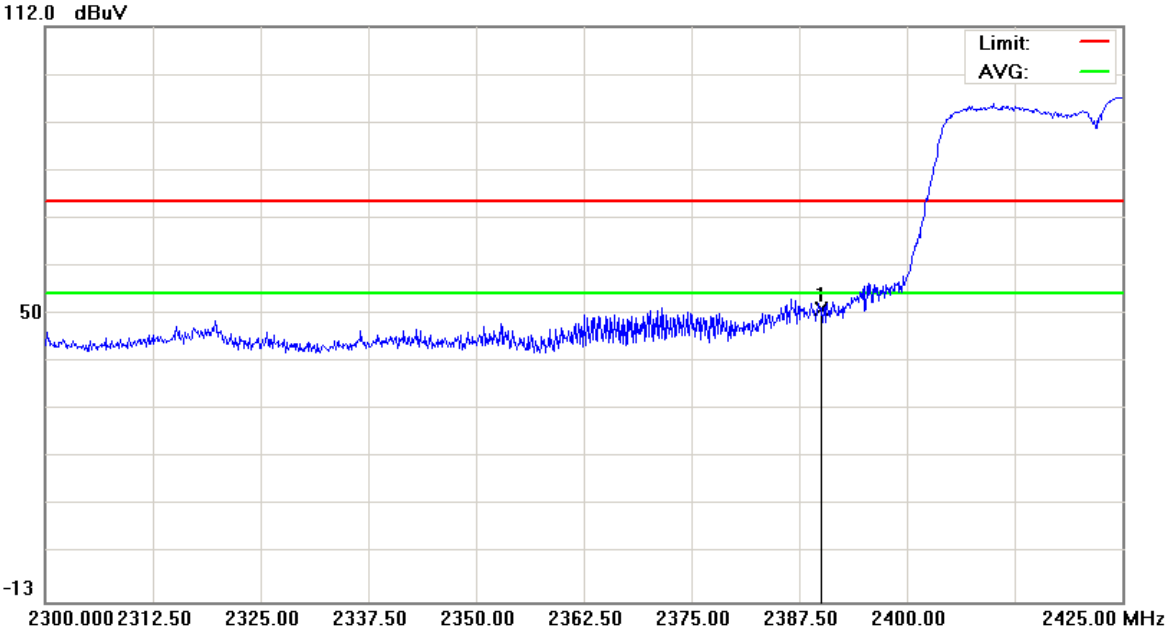
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2390.000	55.73	0.19	55.92	74.00	-18.08	peak			
2		2390.000	34.92	0.19	35.11	54.00	-18.89	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Band Edge) Data :#3 Date: 2009-12-17 Time: 下午 05:23:06



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 5
Note: CH09(2452MHz)

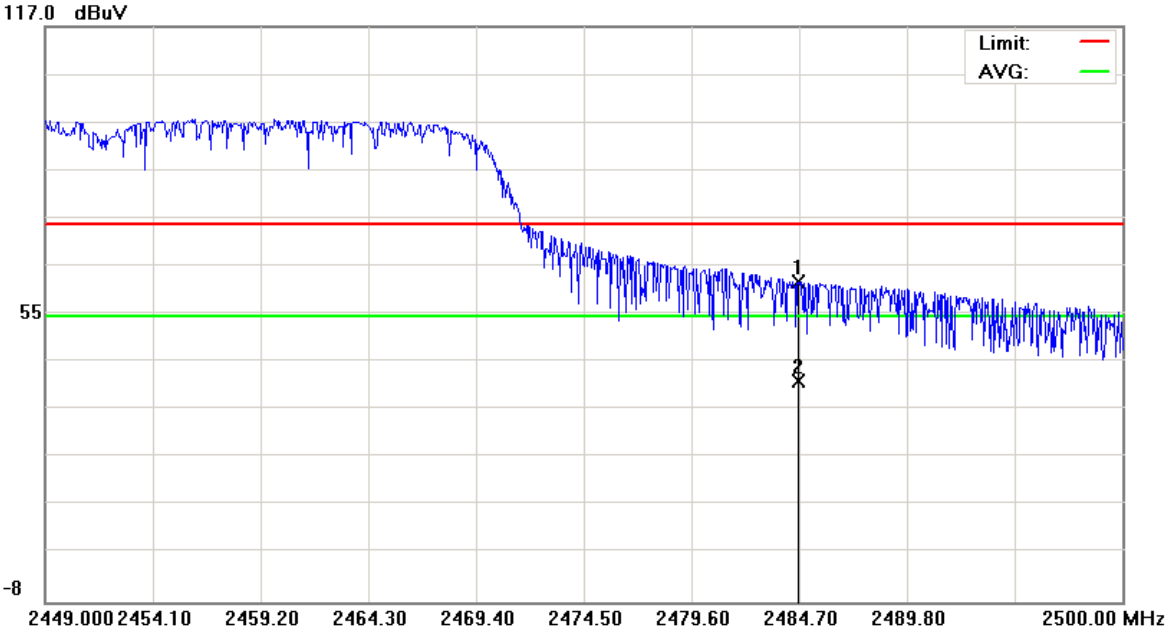
Polarization: ***Horizontal***
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2390.000	50.41	0.19	50.60	74.00	-23.40	peak			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Band Edge) Data :#5 Date: 2009-12-17 Time: 下午 05:34:08



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 5
Note: CH03(2422MHz)

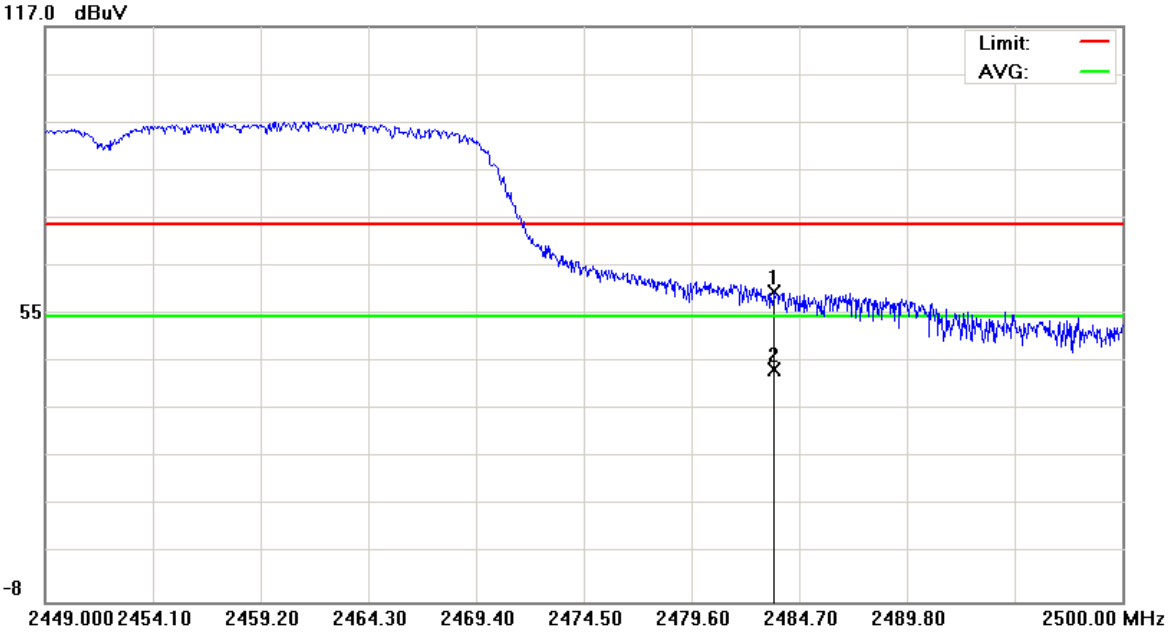
Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2484.649	61.36	0.25	61.61	74.00	-12.39	peak			
2		2484.649	39.63	0.25	39.88	54.00	-14.12	AVG			

*:Maximum data x:Over limit !:over margin

File :BIGphone(Band Edge) Data :#7 Date: 2009-12-17 Time: 下午 05:45:50



Site: : 966 Chamber
Limit: FCC part 15 (PK)
EUT: WiFi Router
M/N: VigorFly200
Mode: 5
Note: CH09(2452MHz)

Polarization: ***Horizontal***
Power:
Distance: 3m

Temperature: 22 ℃
Humidity: 60 %
RBW: 1000 KH
VBW: 1000 KH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		2483.500	58.98	0.25	59.23	74.00	-14.77	peak			
2	*	2483.500	42.11	0.25	42.36	54.00	-11.64	AVG			

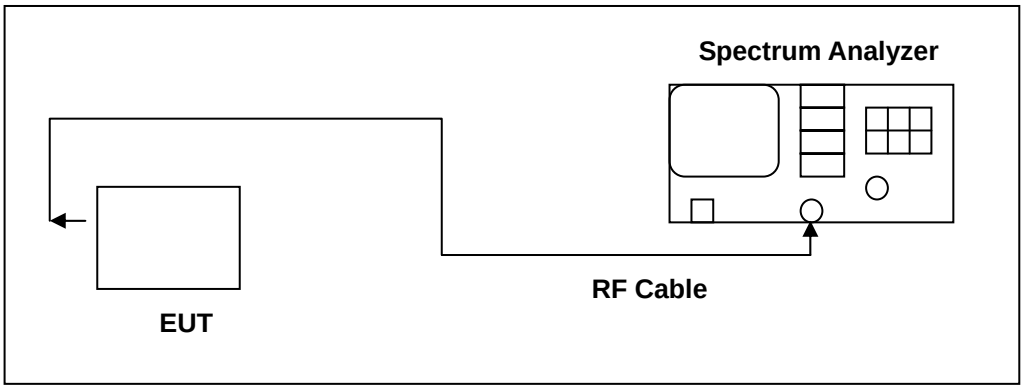
*:Maximum data x:Over limit !:over margin

11 99 % Occupied Bandwidth Measurement

11.1. Limit

N/A

11.2. Test Setup



11.3. Test Instruments

Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/14/2009	(2)
Test Site	ATL	TE06	TE06	N.C.R.	-----

Remark: (1) Calibration period 1 year. (2) Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

11.4. Test Procedure

The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled.

11.5. Test Result

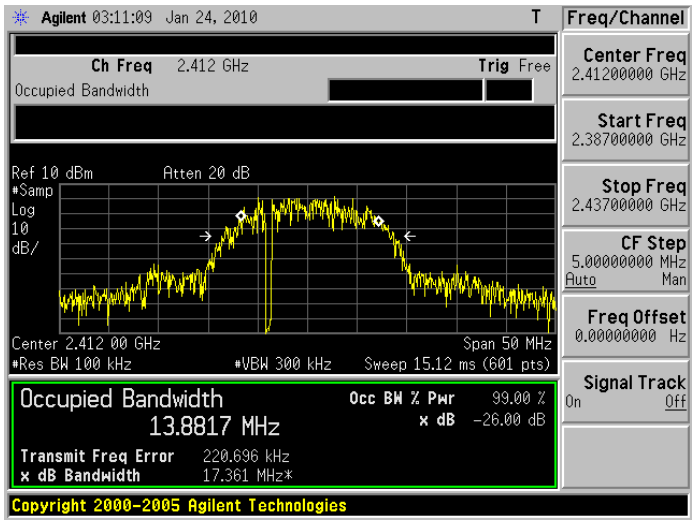
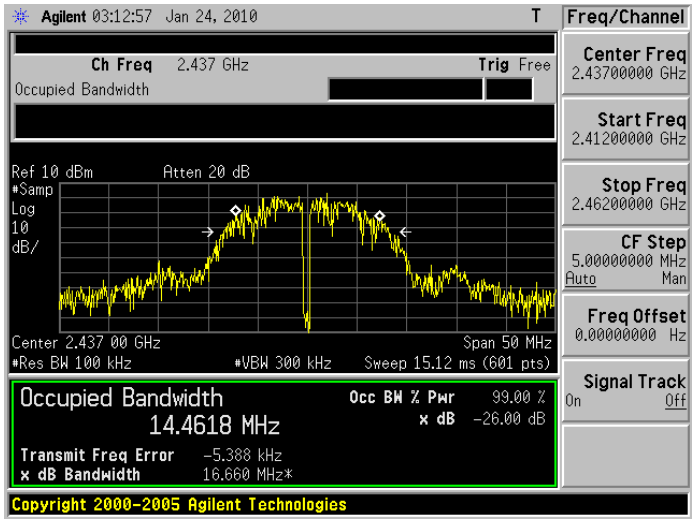
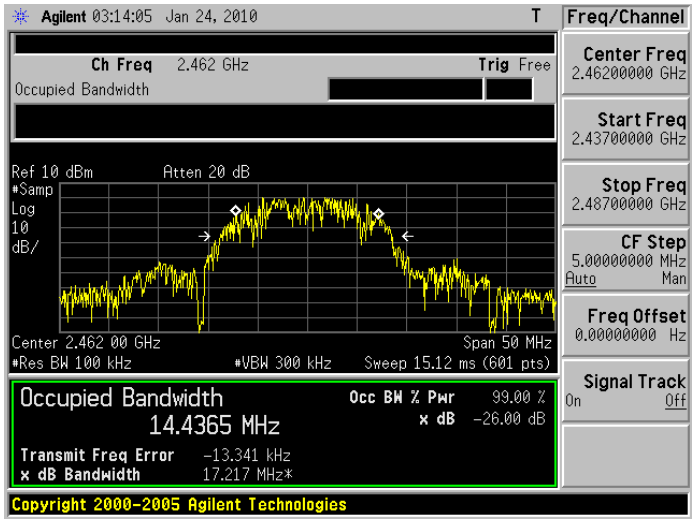
Product	WiFi Router		
Test Item	99 % Occupied Bandwidth		
Test Mode	Mode 2: IEEE 802.11b Link Mode		
Date of Test	01/24/2010	Test Site	TE06
Frequency (MHz)	Measurement (kHz)		Limit (kHz)
2412	13881.7		-----
2437	14461.8		-----
2462	14436.5		-----

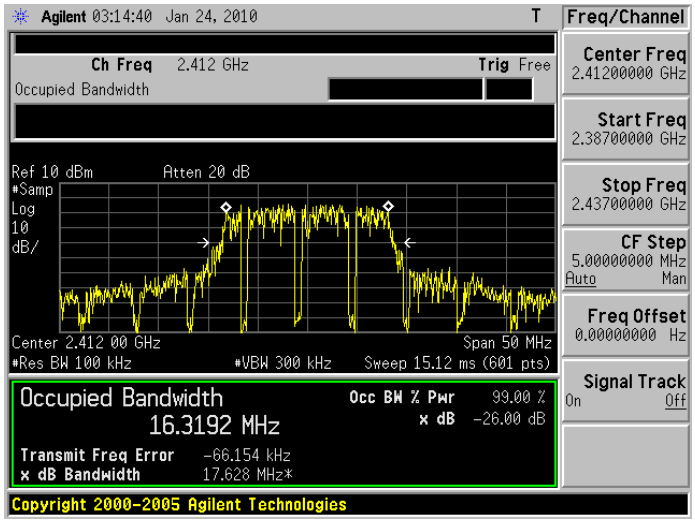
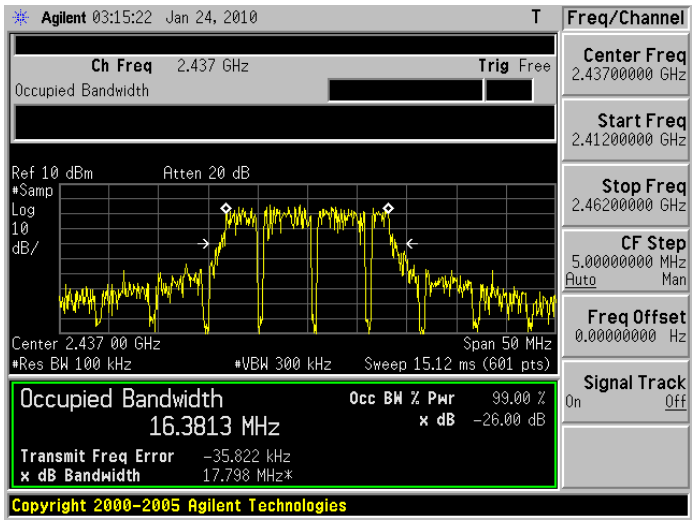
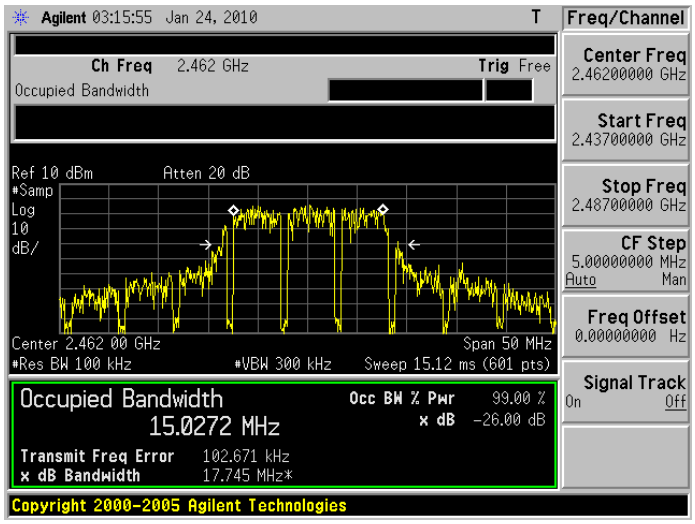
Product	WiFi Router		
Test Item	99 % Occupied Bandwidth		
Test Mode	Mode 3: IEEE 802.11g Link Mode		
Date of Test	01/24/2010	Test Site	TE06
Frequency (MHz)	Measurement (kHz)		Limit (kHz)
2412	16319.2		-----
2437	16381.3		-----
2462	15027.2		-----

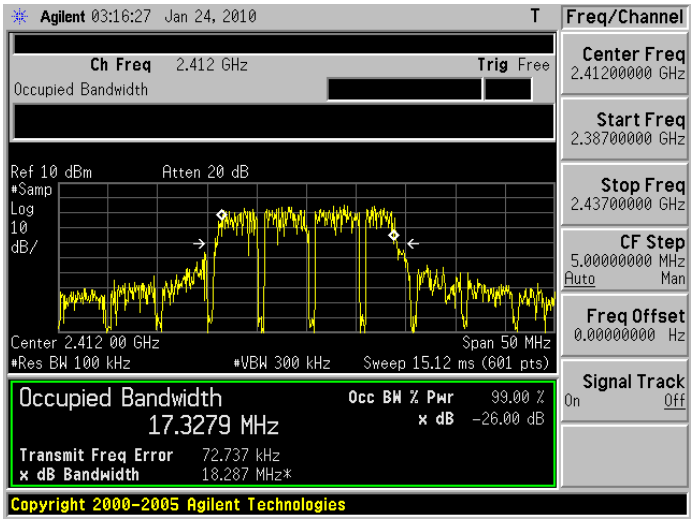
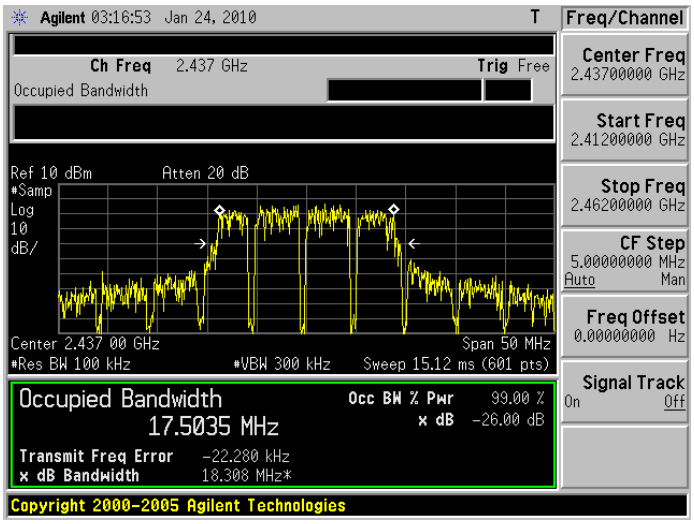
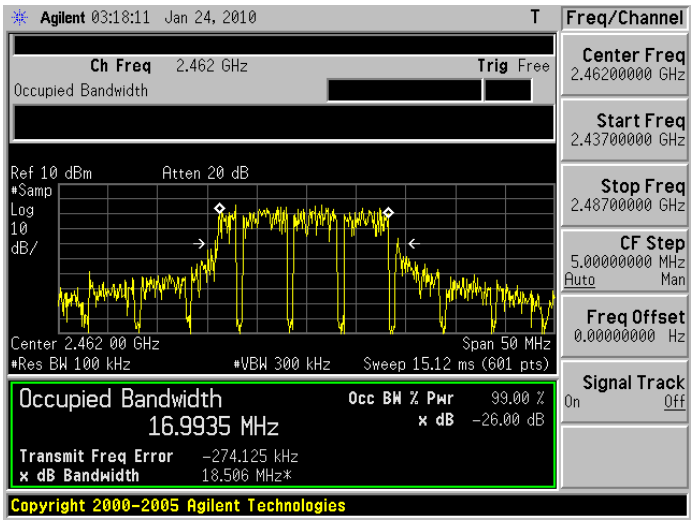
Product	WiFi Router		
Test Item	99 % Occupied Bandwidth		
Test Mode	Mode 4: draft 802.11n Standard-20MHz Link Mode		
Date of Test	01/24/2010	Test Site	TE06
Frequency (MHz)	Measurement (kHz)		Limit (kHz)
2412	17327.9		-----
2437	17503.5		-----
2462	16993.5		-----

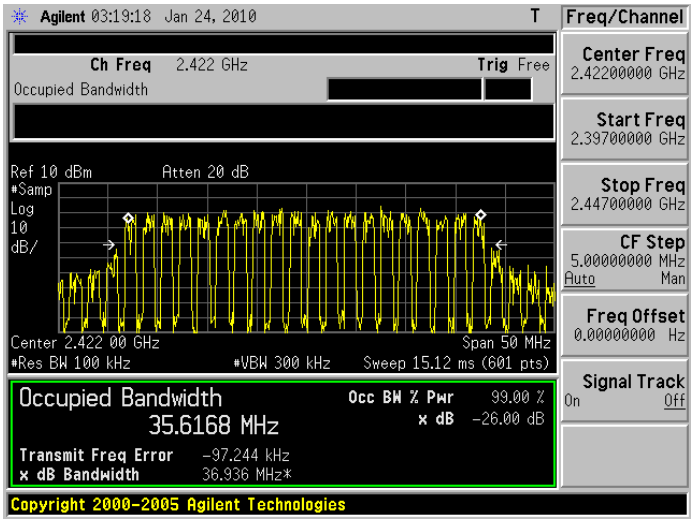
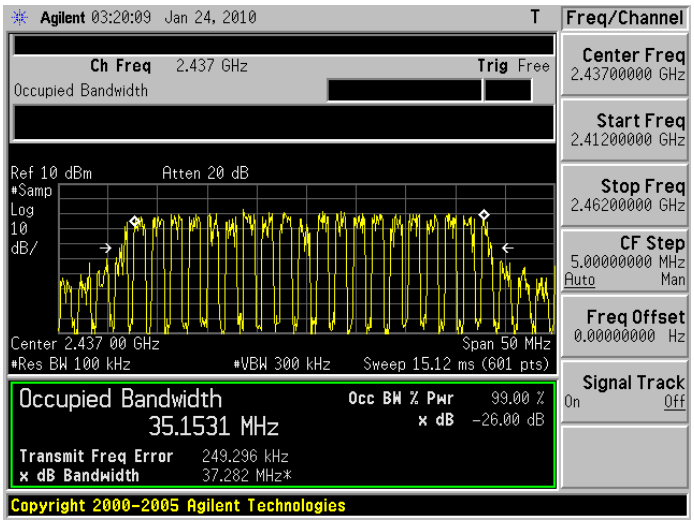
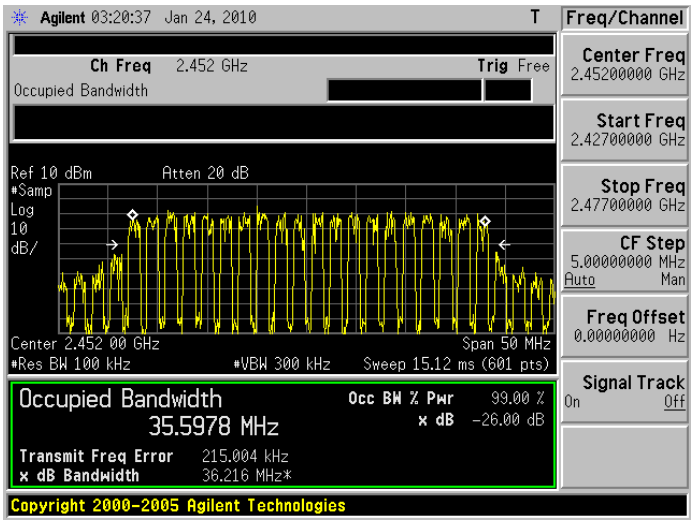
Product	WiFi Router		
Test Item	99 % Occupied Bandwidth		
Test Mode	Mode 5: draft 802.11n Wide-40MHz Link Mode		
Date of Test	01/24/2010	Test Site	TE06
Frequency (MHz)	Measurement (kHz)		Limit (kHz)
2422	35616.8		-----
2437	35153.1		-----
2452	35597.8		-----

11.6. Test Graphs

Mode 2: IEEE 802.11b Link Mode	
2412	
2437	
2462	

Mode 3: IEEE 802.11g Link Mode	
2412	
2437	
2462	

Mode 4: draft 802.11n Standard-20MHz Link Mode	
2412	
2437	
2462	

Mode 5: draft 802.11n Wide-40MHz Link Mode	
2422	
2437	
2452	

12 Antenna Measurement

12.1. Limit

For intentional device, according to 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And According to 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

12.2. Antenna Connector Construction

The antenna used in this product is **Fixed antenna**. And the maximum Gain of this antenna is only **2 dBi**.