

A Test Lab Techno Corp.

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Part 15 C Measurement Report





Report No. : 0802FR12

Applicant : Innovation Wireless Inc.

Trade Mark : CADEN

Product Model : MD6010

Product Type : Wi-Fi/GSM Dual Mode Phone

FCC ID : V25-MD6010

Dates of Test : Jan. 09 ~ 15, 2008

Test Specification : Part 15 Subpart C (15.247)

Location of Test Lab. : Chang-an Lab.

- 1. The test operations have to be performed with cautious behavior, the test results are as attached.
- 2. The test results are under chamber environment of A Test Lab Techno Corp. A Test Lab Techno Corp. does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples.
- 3. The measurement report has to be written approval of A Test Lab Techno Corp. It may only be reproduced or published in full.

Country Huang

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Measurement Center Manager

John Cheng

Testing Engineer

20080310



CERTIFICATION

We here by verify that:

The test data, data evaluation, test procedures and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4:2001. All test were conducted by *A Test Lab Techno Corp. No.140-1, Chang-an St., Bade City, Tao-Yuan County 334, Taiwan (R.O.C.)* Also, we attest to the accuracy of each.

We further submit that the energy emitted by the sample EUT tested as described in the report is in compliance with Class B radiated and conducted emission limit of FCC Rules Part 15 Subpart C (15.247).

EUT : Wi-Fi/GSM Dual Mode Phone

Applicant : Innovation Wireless Inc.

4F-1, No.81 Shuei-li Rd., Hsinchu 30059, Taiwan, R.O.C.

Model No : MD6010

FCC ID : V25-MD6010

Approved by :

Prepared by :

John Chena

A Test Lab Techno Corp.

No.140-1, Chang-an St., Bade City, Tao-Yuan County 334, Taiwan (R.O.C.) Tel: 03-2710188 / Fax: 03-2710190



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1. GENERAL

1.1 Description of Equipment under Test (EUT)

Innovation Wireless Inc. Applicant:

4F-1, No.81 Shuei-li Rd., Hsinchu 30059, Taiwan, R.O.C.

Manufacturer Innovation Wireless Inc.

Manufacturer Address 4F-1, No.81 Shuei-li Rd., Hsinchu 30059, Taiwan, R.O.C.

Wi-Fi/GSM Dual Mode Phone **Product Type**

Trade Name CADEN Model Name MD6010

FCC ID V25-MD6010

Input Rating 100 - 240VAC / 0.15A (AC Adapter)

Frequency of Channel See Table 1

Type of Modulation : **Direct Sequence Spread Spectrum**

Type of Antenna Internal Type

During testing the EUT was operated at Tx or Rx mode for each emission measured. This was done in order to ensure that maximum emission levels were attained.

802.11b/g Mode						
СН	Frequency					
1	2412					
2	2417					
3	2422					
4	2427					
5	2432					
6	2437					
7	2442					
8	2447					
9	2452					
10	2457					
11	2462					

Table 1. WLAN Frequency of Each Channel (Working Frequency)



1.2 Introduction

The following measurement report is submitted on behalf of **Innovation Wireless Inc.** In support of a Class B Digital Device certification in accordance with Part2 Subpart J and Part 15 Subpart A And B&C of the Commission's and Regulations.

1.3 Summary of Tests

	47 CFR Part 15 Subpart C								
Reference	Test	Results	Note						
15.107	AC Power Conducted Emission	PASS							
15.247(c)	Transmitter Radiated Emissions	PASS							
15.247(b)	Max. Output Power	PASS							
15.247(a)(2)	6dB RF Bandwidth	PASS							
15.247(d)	Max. Power Density	PASS							
15.247(c)	Out of Band Conducted Spurious Emission	PASS							
15.247(c)	Band Edge Measurement	PASS							
15.203	Antenna Requirement	PASS							

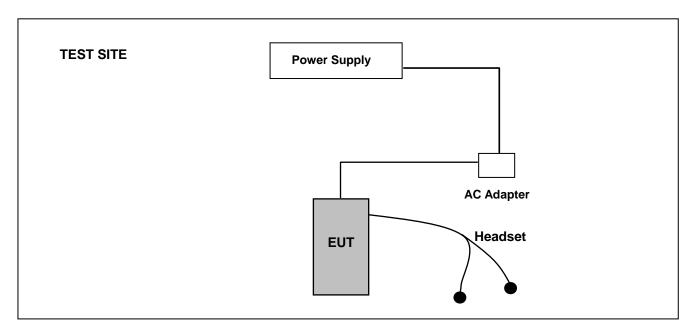


1.4 Description of Support Equipment

Computer	: DELL
Model No.	: PP49L
Serial No.	: UF230 A03
FCC ID	: E2KWM3945ABC
Keyboard	: DELL
Model No.	: SK-8115
Serial No.	: MY-0DJ325-71619-7113-1366
FCC ID	: FCC DOC
<u>Monitor</u>	: DELL
Model No.	: E177FPc
Serial No.	: CN-0FJ179-64180-6BT-4LYS
FCC ID	: FCC DOC
<u>Mouse</u>	: DELL
Model No.	: M056U0A
Serial No.	: F1F026E1
FCC ID	: FCC DOC
<u>Printer</u>	: EPSON
Model No.	: C60
Serial No.	: DR3K041323
FCC ID	: FCC DOC



1.5 Configuration of System under Test



During EMI testing (LINK) the EUT (Wi-Fi/GSM Dual Mode Phone)'s Power port was connected to AC Adapter. EUT (Wi-Fi/GSM Dual Mode Phone)'s ear port connected to headset.

1.6 Test Procedure

All measurements contained in this report were performed according to the techniques described in Measurement procedure ANSI C63.4-2003 "Measurement of un-Intentional Radiators."

1.7 General Test Condition

The conditions under which the EUT operates were varied to determine their effect on the equipment's emission characteristics. The final configuration of the test system and the mode of operation used during these tests were chosen as that which produced the highest emission levels. However, only those conditions which the EUT was considered likely to encounter in normal use were investigated. The system's radiated and conducted emissions were investigated while the computer alternately transferred data to the EUT as well as to the monitor and printer. Using a test program which sent a continuous data and transferred data to and from the EUT was proven to worst case emissions. The system's physical layout and cabling was randomly arranged to ensure that maximum emission levels were attained.



1.8 Test Modes

Preliminary tests were performed in different data rate to find the worst case. The data rate shown in the table below is the worst-case rate (Blue color). Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

802.11b	802.11b							
Channel	Data Rate (Mbps)	Power (dBm)						
	1	21.88						
1	5.5	21.73						
	11	21.56						
	1	22.01						
6	5.5	21.95						
	11	21.91						
	1	21.87						
11	5.5	21.74						
	11	21.58						

802.11g				
Channel	Data Rate (Mbps)	Power (dBm)		
	6	20.17		
1	24	19.98		
	54	19.92		
	6	20.02		
6	24	19.94		
	54	19.91		
	6	19.63		
11	24	19.51		
	54	19.49		



2. Conducted Emissions Requirements

2.1 General & Setup:

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 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 2.6.

2.2 Test Equipment List:

Describe	Manufacturer	Model	Serial Number	Calib	ration
Describe	Manufacturei	Wodel	Serial Number	Cal. Date	Due Date
Spectrum Analyzer	Spectrum Analyzer Advantest		R3132 160300103		Mar. 23, 2008
Test Receiver	Test Receiver R&S		100367	May. 23, 2007	May. 23, 2008
LISN	EMCO	3816/2 SH	00060110	Jun. 06, 2007	Jun. 06, 2008
LISN	EMCO	3816/2 SH	00060111	Jun. 13, 2007	Jun. 13, 2008
Transient Limiter	ELECTRO-METRICS	EM-7600	777	Jun. 26, 2007	Jun. 26, 2008



2.3 Test Configuration:

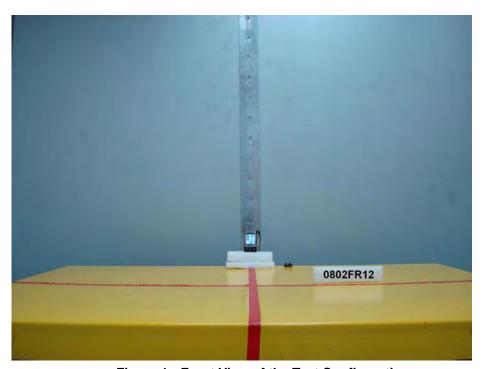


Figure 1. Front View of the Test Configuration



Figure 2. Rear View of the Test Configuration



2.4 Test condition:

EUT tested in accordance with the specifications given by the Manufacturer, and exercised in the most unfavorable manner.

2.5 Conducted Emissions Limits:

Frequency range (MHz)	Limits (dBuV)			
Frequency range (MHZ)	Quasi-peak	Average		
0.15 to 0.50	66 to 56	56 to 46		
0.50 to 5.0	56	46		
5.0 to 30	60	50		



2.6 Measurement Data of Conducted Emissions:

2.6.1 Conducted Emissions (Subpart C)

The following table show a summary of the highest emissions of power line conducted emissions to the HOT and NATURAL conductor of the EUT power.

Applicant : Innovation Wireless Inc.

Model No : MD6010

EUT : Wi-Fi/GSM Dual Mode Phone

Test Mode : AC Adapter _ 802.11b CH Low & Middle & High

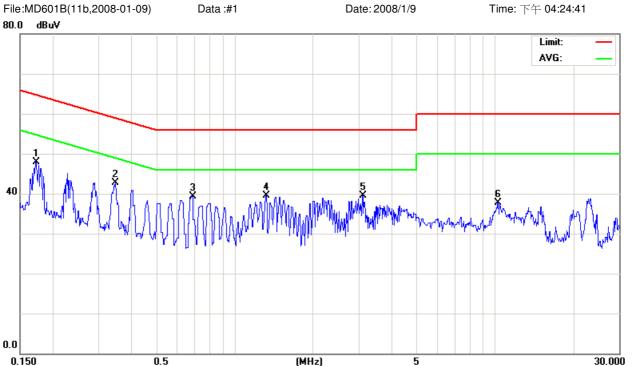
Test Date : 01/09/2008

Please refer to next pager of detail testing data.

Notes:

- 1. L1: One end & Ground L2: The other end & Ground
- 2. Height of table on which the EUT was placed: 0.8 m.
- 3. The Quasi-Peak Value have already met the Average Value Limit showed on above limits.
- 4. The above test results are obtained under the normal condition.





Site site#1 Phase: Temperature: 26 ℃ L1

Power:

AC 110V/60Hz

Humidity:

55 %

Limit: CISPR22 Class B Conduction(QP)

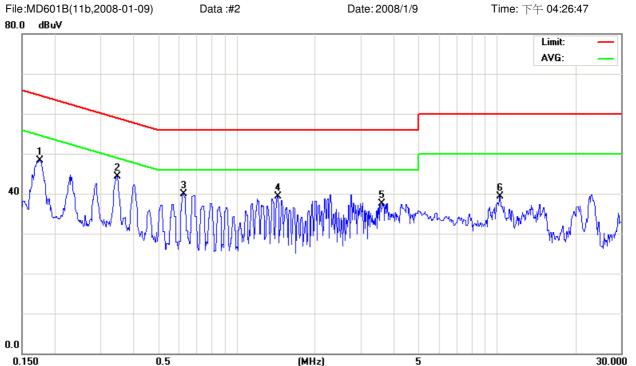
EUT:

M/N:

Mode: WIFI(11b,CH01) Note: KSAFB0500100W1US

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1724	38.27	9.73	48.00	64.84	-16.84	peak	
2	*	0.3474	33.02	9.78	42.80	59.02	-16.22	peak	
3		0.6889	29.49	9.79	39.28	56.00	-16.72	peak	
4		1.3190	29.74	9.82	39.56	56.00	-16.44	peak	
5		3.0920	29.68	9.90	39.58	56.00	-16.42	peak	
6		10.2500	27.68	10.06	37.74	60.00	-22.26	peak	





Site site#1 Phase: L2 Temperature: $26 \, ^{\circ}$ C

Limit: CISPR22 Class B Conduction(QP)

Power: AC 110V/60Hz Humidity:

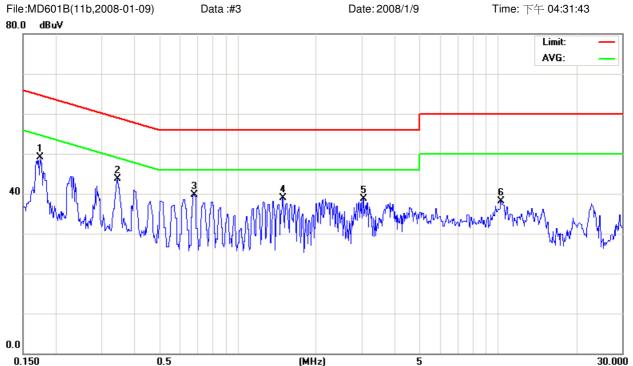
55 %

EUT: M/N:

Mode: WIFI(11b,CH01)
Note: KSAFB0500100W1US

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1751	38.55	9.74	48.29	64.71	-16.42	peak	
2	*	0.3466	34.52	9.78	44.30	59.04	-14.74	peak	
3		0.6260	30.17	9.79	39.96	56.00	-16.04	peak	
4		1.4359	29.59	9.81	39.40	56.00	-16.60	peak	
5		3.6139	27.66	9.93	37.59	56.00	-18.41	peak	
6		10.2500	29.31	10.06	39.37	60.00	-20.63	peak	





Site site#1 Phase: Temperature: 26 ℃ L1

Power:

AC 110V/60Hz

Humidity:

55 %

Limit: CISPR22 Class B Conduction(QP)

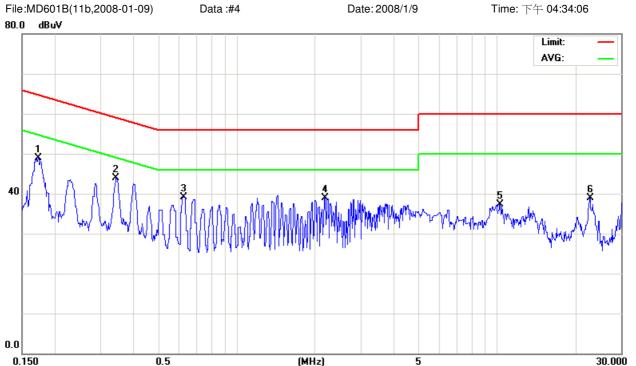
EUT:

Mode: WIFI(11b,CH06) Note: KSAFB0500100W1US

M/N:

No. Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1745	39.45	9.73	49.18	64.74	-15.56	peak	
2 *	0.3460	33.97	9.78	43.75	59.06	-15.31	peak	
3	0.6800	29.86	9.79	39.65	56.00	-16.35	peak	
4	1.4900	29.18	9.81	38.99	56.00	-17.01	peak	
5	3.0290	28.76	9.89	38.65	56.00	-17.35	peak	
6	10.2500	28.14	10.06	38.20	60.00	-21.80	peak	





Site site#1 Phase: L2 Temperature: $26 \, ^{\circ}$ C

Limit: CISPR22 Class B Conduction(QP)

Power: AC 110V/60Hz Humidity:

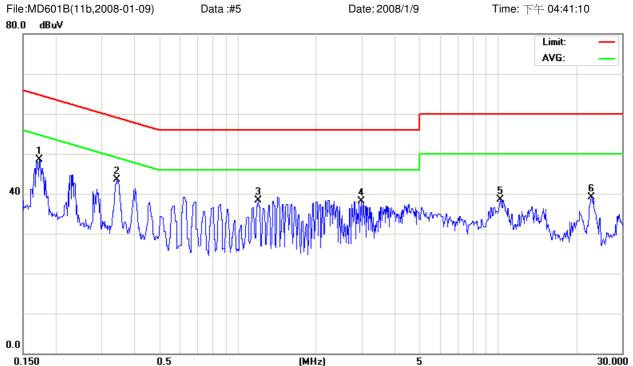
55 %

EUT: M/N:

Mode: WIFI(11b,CH06) Note: KSAFB0500100W1US

No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1731	39.19	9.73	48.92	64.81	-15.89	peak	
2 *	0.3438	34.05	9.78	43.83	59.11	-15.28	peak	
3	0.6260	29.41	9.79	39.20	56.00	-16.80	peak	
4	2.1829	29.10	9.88	38.98	56.00	-17.02	peak	
5	10.2500	27.28	10.06	37.34	60.00	-22.66	peak	
6	22.7000	28.49	10.33	38.82	60.00	-21.18	peak	





Site site#1 Phase: L1 Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP)

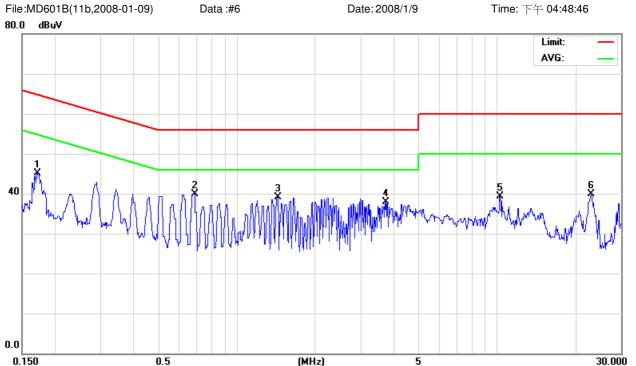
Power: AC 110V/60Hz Humidity: 55 %

EUT: M/N:

Mode: WIFI(11b,CH11)
Note: KSAFB0500100W1US

No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1731	38.80	9.73	48.53	64.81	-16.28	peak	
2 *	0.3446	33.63	9.78	43.41	59.09	-15.68	peak	
3	1.2020	28.54	9.81	38.35	56.00	-17.65	peak	
4	2.9750	28.15	9.89	38.04	56.00	-17.96	peak	
5	10.2000	28.34	10.07	38.41	60.00	-21.59	peak	
6	22.8000	28.83	10.34	39.17	60.00	-20.83	peak	





Site site#1 Phase: <u>L2</u> Temperature: 26 ℃

Power:

AC 110V/60Hz

Humidity:

55 %

Limit: CISPR22 Class B Conduction(QP)

M/N: Mode: WIFI(11b,CH11) Note: KSAFB0500100W1US

EUT:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1717	35.36	9.73	45.09	64.87	-19.78	peak	
2	*	0.6889	30.14	9.79	39.93	56.00	-16.07	peak	
3		1.4360	29.33	9.81	39.14	56.00	-16.86	peak	
4		3.7310	27.92	9.95	37.87	56.00	-18.13	peak	
5		10.2500	29.31	10.06	39.37	60.00	-20.63	peak	
6		23.0000	29.49	10.37	39.86	60.00	-20.14	peak	



2.6.2 Conducted Emissions (Subpart C)

The following table show a summary of the highest emissions of power line conducted emissions to the HOT and NATURAL conductor of the EUT power.

Applicant : Innovation Wireless Inc.

Model No : MD6010

EUT : Wi-Fi/GSM Dual Mode Phone

Test Mode : AC Adapter _ 802.11g CH Low & Middle & High

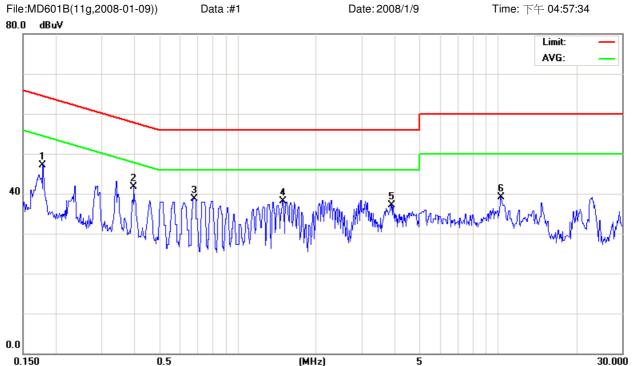
Test Date : 01/09/2008

Please refer to next pager of detail testing data.

Notes:

- 1. L1: One end & Ground L2: The other end & Ground
- 2. Height of table on which the EUT was placed: 0.8 m.
- 3. The Quasi-Peak Value have already met the Average Value Limit showed on above limits.
- 4. The above test results are obtained under the normal condition.





Site site#1 Phase: L1 Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP)

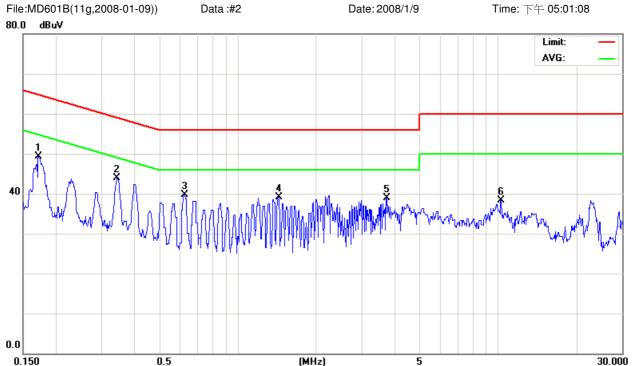
Power: AC 110V/60Hz Humidity: 55 %

EUT: M/N:

Mode: WIFI(11g,CH01)
Note: KSAFB0500100W1US

No. M	/lk. F	req.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	N	ИHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1	1787	37.40	9.74	47.14	64.54	-17.40	peak	
2 *	0.3	3992	31.83	9.78	41.61	57.87	-16.26	peak	
3	0.6	0086	29.01	9.79	38.80	56.00	-17.20	peak	
4	1.4	1900	28.34	9.81	38.15	56.00	-17.85	peak	
5	3.8	3840	27.17	9.96	37.13	56.00	-18.87	peak	
6	10.2	2500	29.04	10.06	39.10	60.00	-20.90	peak	





Site site#1 Phase: L2 Temperature: 26 $^{\circ}$ C

Power:

AC 110V/60Hz

Humidity:

55 %

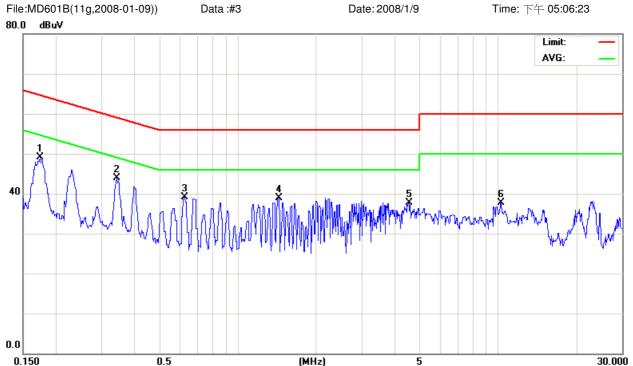
Limit: CISPR22 Class B Conduction(QP)

EUT: M/N:

Mode: WIFI(11g,CH01)
Note: KSAFB0500100W1US

No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.1717	39.53	9.73	49.26	64.87	-15.61	peak	
2 *	0.3446	34.06	9.78	43.84	59.09	-15.25	peak	
3	0.6260	29.83	9.79	39.62	56.00	-16.38	peak	
4	1.4360	29.25	9.81	39.06	56.00	-16.94	peak	
5	3.7310	28.94	9.95	38.89	56.00	-17.11	peak	
6	10.2500	28.27	10.06	38.33	60.00	-21.67	peak	





Site site#1 Phase: L1 Temperature: 26 ℃

Power:

AC 110V/60Hz

Humidity:

55 %

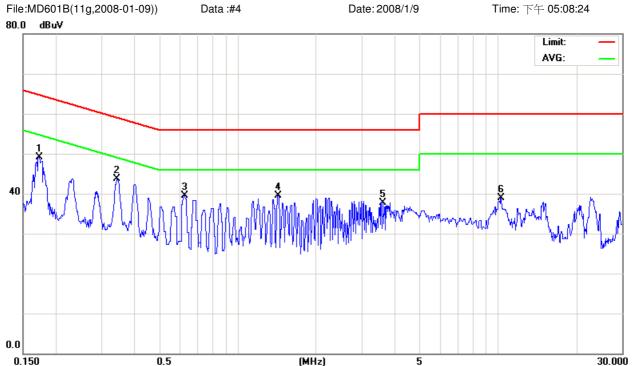
Limit: CISPR22 Class B Conduction(QP)

EUT:
M/N:

Mode: WIFI(11g,CH06) Note: KSAFB0500100W1US

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1745	39.41	9.73	49.14	64.74	-15.60	peak	
2	*	0.3432	34.03	9.78	43.81	59.12	-15.31	peak	
3		0.6260	29.28	9.79	39.07	56.00	-16.93	peak	
4		1.4360	29.18	9.81	38.99	56.00	-17.01	peak	
5		4.5319	27.75	10.02	37.77	56.00	-18.23	peak	
6		10.2500	27.71	10.06	37.77	60.00	-22.23	peak	





Site site#1 Phase: L2 Temperature: 26 °C

Power:

AC 110V/60Hz

Humidity:

55 %

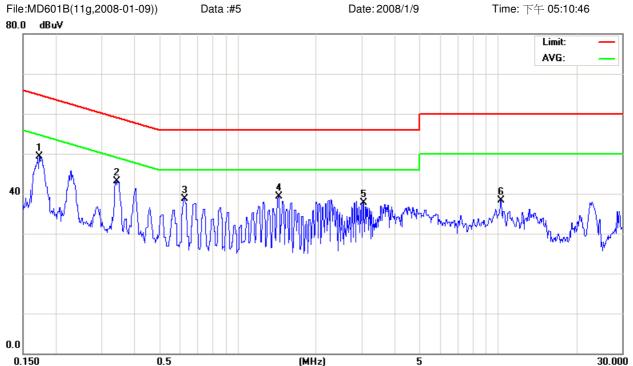
Limit: CISPR22 Class B Conduction(QP)

EUT: M/N:

Mode: WIFI(11g,CH06) Note: KSAFB0500100W1US

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1724	39.45	9.73	49.18	64.84	-15.66	peak	
2	*	0.3438	33.87	9.78	43.65	59.11	-15.46	peak	
3		0.6260	29.72	9.79	39.51	56.00	-16.49	peak	
4		1.4268	29.60	9.81	39.41	56.00	-16.59	peak	
5		3.6139	27.85	9.93	37.78	56.00	-18.22	peak	
6		10.2500	28.83	10.06	38.89	60.00	-21.11	peak	





Site site#1 Phase: L1 Temperature: 26 ℃

Power:

AC 110V/60Hz

Humidity:

55 %

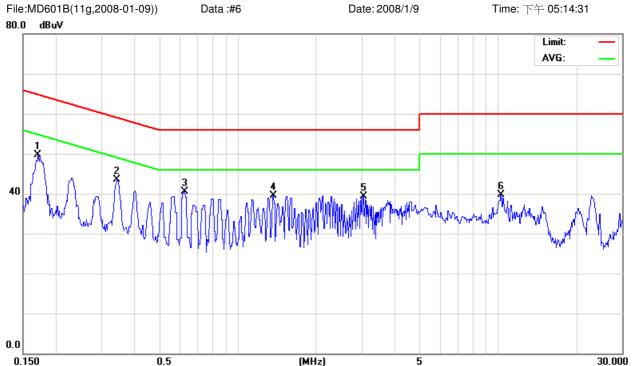
Limit: CISPR22 Class B Conduction(QP)

EUT: M/N:

Mode: WIFI(11g,CH11)
Note: KSAFB0500100W1US

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1731	39.48	9.73	49.21	64.81	-15.60	peak	
2		0.3446	33.39	9.78	43.17	59.09	-15.92	peak	
3		0.6260	28.84	9.79	38.63	56.00	-17.37	peak	
4		1.4360	29.43	9.81	39.24	56.00	-16.76	peak	
5		3.0290	27.89	9.89	37.78	56.00	-18.22	peak	
6		10.2500	28.18	10.06	38.24	60.00	-21.76	peak	





Site site#1 Phase: L2 Temperature: 26 °C

Power:

AC 110V/60Hz

Humidity:

55 %

Limit: CISPR22 Class B Conduction(QP)

EUT:

M/N:

Mode: WIFI(11g,CH11)
Note: KSAFB0500100W1US

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1710	39.95	9.73	49.68	64.91	-15.23	peak	
2		0.3438	33.78	9.78	43.56	59.11	-15.55	peak	
3		0.6260	30.63	9.79	40.42	56.00	-15.58	peak	
4		1.3730	29.69	9.82	39.51	56.00	-16.49	peak	
5		3.0290	29.34	9.89	39.23	56.00	-16.77	peak	
6		10.2500	29.63	10.06	39.69	60.00	-20.31	peak	



3. Radiated Emissions Requirements

3.1 Final radiation measurements were made on a three-meter:

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.

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



3.2 Test Equipment List:

Describe	Manufacturer	Model	Serial Number	Calib	ration
Describe	Manufacture	Wodel	Serial Nulliber	Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4408B	MY45107753	May. 28, 2007	May. 28, 2008
Pre Amplifier	Agilent	8449B	3008A02237	May. 28, 2007	May. 28, 2008
Pre Amplifier	Agilent	8447D	2944A10961	Jun. 09, 2007	Jun. 09, 2008
Test Receiver	R&S	ESCI	100367	May. 23, 2007	May. 23, 2008
Biconilog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	Jun. 26, 2007	Jun. 26, 2008
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	Jun. 26, 2007	Jun. 26, 2008
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	Jun. 09, 2007	Jun. 09, 2008
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120E	0899	Jun. 26, 2007	Jun. 26, 2008



3.3 Test Configuration:



Figure 3. Front View of the Test Configuration



Figure 4. Rear View of the Test Configuration





Figure 5. Front View of the Test Configuration



Figure 6. Rear View of the Test Configuration



3.4 Test condition:

EUT tested in accordance with the specifications given by the manufacturer, and exercised in the most unfavorable manner.

3.5 Radiated Emissions Limits:

Frequency range (MHz)	Peak(dBuV)
30 to 88	40
88 to 216	43.5
216 to 960	46
Above 960	54



3.6 Measurement Data of Radiated Emissions:

3.6.1 Open Field Radiated Emissions (Subpart C)

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : Innovation Wireless Inc.

Model No : MD6010

EUT : Wi-Fi/GSM Dual Mode Phone

Test Mode : AC Adapter _ 802.11b CH1 2412.000 (Local Frequency: 2412.000 MHz)

Test Date : 01/09~15/2008

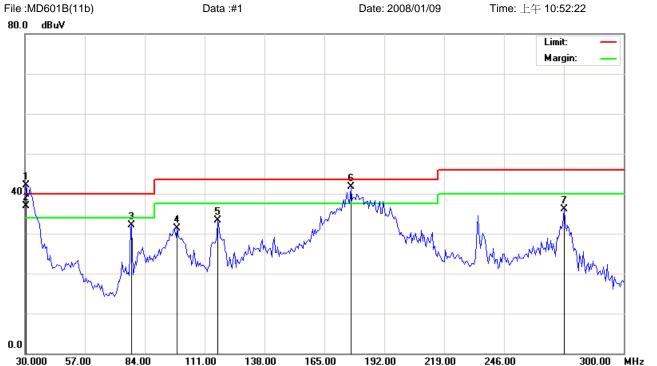
Please refer to next pager of detail testing data.

Notes:

- 1. Margin= Amplitude Limits
- 2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
- 3. Height of table for EUT placed: 0.8 Meter.
- 4. ANT= Antenna height.
- 5. Amplitude= Reading Amplitude Amplifier gain + Cable loss + Antenna factor (Auto calculate in spectrum analyzer)
- 6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
- 7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
- 8. All frequencies from 30MHz to 26.5GHz have been tested



Radiated Emission Measurement



Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11b Note: CH2412 Polarization: Vertical

Power:

Distance: 3m

Temperature: 22 °C

Humidity: 60 %

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	*	30.5400	55.61	-13.45	42.16	40.00	2.16	peak			
2	!	30.5400	50.26	-13.45	36.81	40.00	-3.19	QP			
3		78.0600	48.92	-16.79	32.13	40.00	-7.87	peak			
4		98.5800	43.22	-11.84	31.38	43.50	-12.12	peak			
5		116.9400	46.95	-13.68	33.27	43.50	-10.23	peak			
6	!	176.8800	56.19	-14.52	41.67	43.50	-1.83	peak			
7		273.0000	46.88	-10.85	36.03	46.00	-9.97	peak			

*:Maximum data

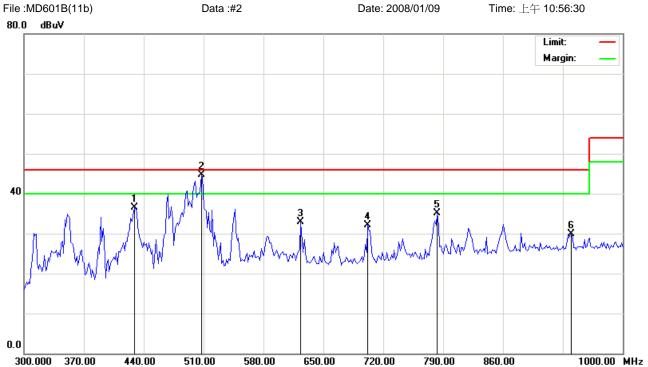
x:Over limit

!:over margin

•Reference Only



Radiated Emission Measurement



Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11b Note: CH2412 Polarization: Vertical Temperature:

Power: Humidity: 60 %

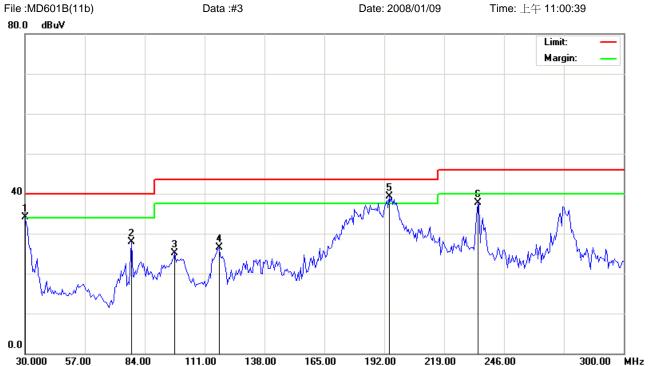
22 ℃

Distance: 3m

MHz dBuV dB dBuV dB uV dB dBuV dB Detector cm degree Comment 1 428.8000 44.58 -8.05 36.53 46.00 -9.47 peak 2 * 507.2000 51.53 -6.77 44.76 46.00 -1.24 peak 3 623.4000 37.42 -4.56 32.86 46.00 -13.14 peak 4 701.8000 36.05 -3.92 32.13 46.00 -13.87 peak 5 783.0000 37.46 -2.41 35.05 46.00 -10.95 peak	No.	Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
2 * 507.2000 51.53 -6.77 44.76 46.00 -1.24 peak 3 623.4000 37.42 -4.56 32.86 46.00 -13.14 peak 4 701.8000 36.05 -3.92 32.13 46.00 -13.87 peak 5 783.0000 37.46 -2.41 35.05 46.00 -10.95 peak			MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
3 623.4000 37.42 -4.56 32.86 46.00 -13.14 peak 4 701.8000 36.05 -3.92 32.13 46.00 -13.87 peak 5 783.0000 37.46 -2.41 35.05 46.00 -10.95 peak	1		428.8000	44.58	-8.05	36.53	46.00	-9.47	peak			
4 701.8000 36.05 -3.92 32.13 46.00 -13.87 peak 5 783.0000 37.46 -2.41 35.05 46.00 -10.95 peak	2	*	507.2000	51.53	-6.77	44.76	46.00	-1.24	peak			
5 783.0000 37.46 -2.41 35.05 46.00 -10.95 peak	3		623.4000	37.42	-4.56	32.86	46.00	-13.14	peak			
	4		701.8000	36.05	-3.92	32.13	46.00	-13.87	peak			
	5		783.0000	37.46	-2.41	35.05	46.00	-10.95	peak			
6 939.8000 29.72 0.27 29.99 46.00 -16.01 peak	6		939.8000	29.72	0.27	29.99	46.00	-16.01	peak			



Radiated Emission Measurement



Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11b Note: CH2412 Polarization: Horizontal

Temperature:

Humidity:

22 ℃

60 %

Power:

Distance: 3m

Reading Correct Measure-Antenna Table Limit Over No. Mk. Freq. Level Factor ment Height Degree MHz dBuV dB dBuV dBuV dB Detector degree cm Comment 1 ! 30.0000 47.50 -13.4934.01 40.00 -5.99peak 2 78.0600 44.75 -16.79 27.96 40.00 -12.04 peak 3 97.5000 37.10 -11.90 25.20 43.50 -18.30 peak 40.18 -13.77 26.41 4 117.4800 43.50 -17.09 peak 194.1600 52.43 -13.15 39.28 -4.22 5 43.50 peak 6 234.1200 49.41 -11.75 37.66 46.00 -8.34 peak





Site site#1

300.000

Limit: FCC Class B 3M Radiation

370.00

440.00

510.00

580.00

EUT:

M/N: MD6010 Mode: 11b Note: CH2412 Polarization: *Horizontal* Temperature:

790.00

Power: Humidity: 60 %

860.00

1000.00 MHz

22 ℃

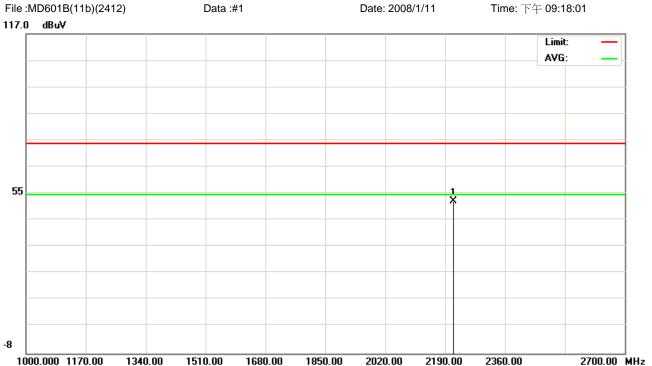
Distance: 3m

720.00

650.00

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		427.4000	46.87	-8.07	38.80	46.00	-7.20	peak			
2	*	507.2000	49.84	-6.77	43.07	46.00	-2.93	peak			
3		623.4000	35.87	-4.56	31.31	46.00	-14.69	peak			
4		703.2000	32.59	-3.96	28.63	46.00	-17.37	peak			
5		861.4000	32.13	-0.89	31.24	46.00	-14.76	peak			
6		937.0000	29.96	0.12	30.08	46.00	-15.92	peak			





Site Polarization: Vertical Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

Limit: FCC part 15 (PK)

EUT: phone

Distance: 3m

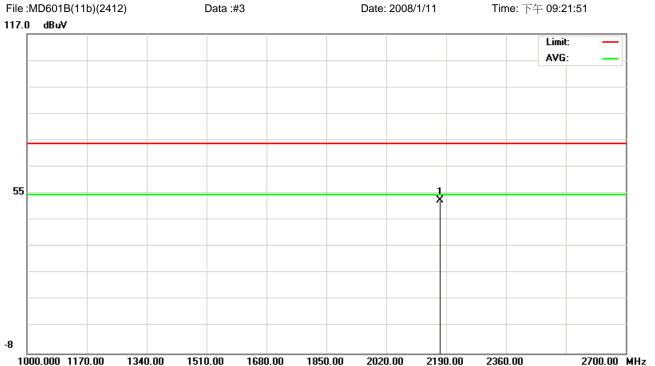
EUT: phone M/N: MD6010

Mode: 11b

Note: CH01(2412MHz)

No. Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1 *	2213.800	51.07	0.38	51.45	74.00	-22.55	peak			





Site Temperature: **22** ℃ Polarization: Horizontal Humidity: 60 %

Limit: FCC part 15 (PK) Power:

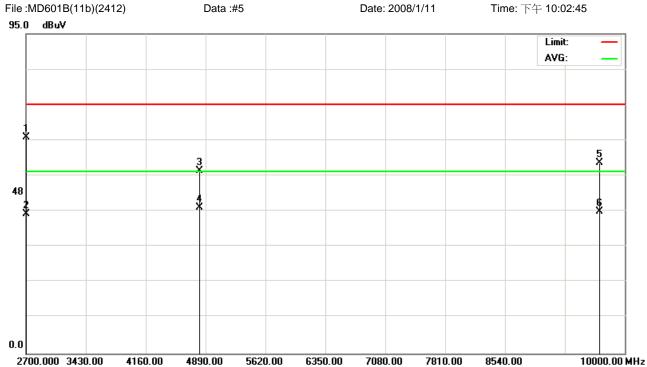
EUT: phone Distance: 3m M/N: MD6010

Mode: 11b

Note: CH01(2412MHz)

No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1 *	2173.000	51.59	0.18	51.77	74.00	-22.23	peak			





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 3m

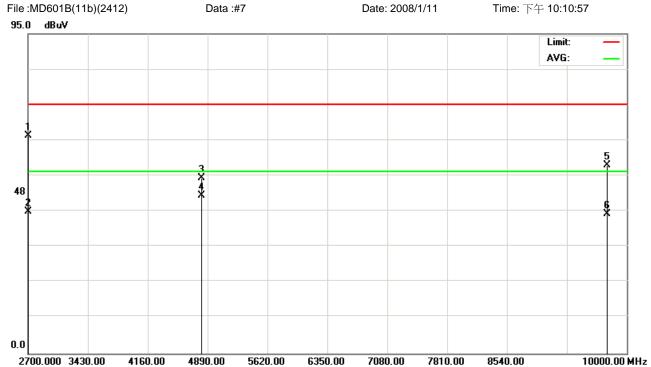
M/N: MD6010 Mode: 11b

Note: CH01(2412MHz)

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

No.	Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2700.000	41.61	22.58	64.19	74.00	-9.81	peak			
2		2700.000	18.76	22.58	41.34	54.00	-12.66	AVG			
3		4817.000	46.88	7.42	54.30	74.00	-19.70	peak			
4		4817.000	35.90	7.42	43.32	54.00	-10.68	AVG			
5		9689.750	39.38	17.35	56.73	74.00	-17.27	peak			
6		9689.750	24.76	17.35	42.11	54.00	-11.89	AVG			





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 3m

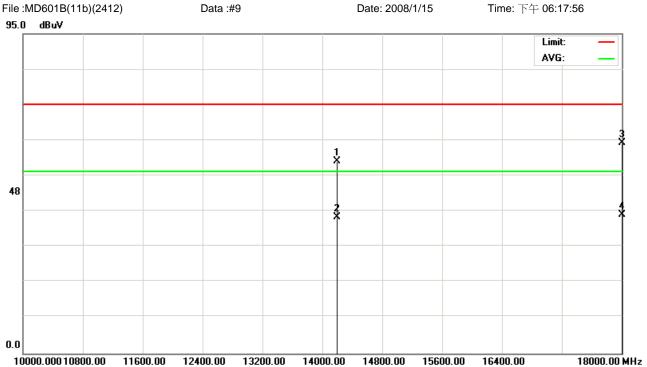
M/N: MD6010 Mode: 11b

Note: CH01(2412MHz)

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

					_						
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	2	2700.000	42.07	22.58	64.65	74.00	-9.35	peak			
2	2	2700.000	19.61	22.58	42.19	54.00	-11.81	AVG			
3		1817.000	44.82	7.42	52.24	74.00	-21.76	peak			
4	* 4	1817.000	39.46	7.42	46.88	54.00	-7.12	AVG			
5	9	9762.750	38.26	17.70	55.96	74.00	-18.04	peak			
6	ç	9762.750	23.65	17.70	41.35	54.00	-12.65	AVG			





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 1m

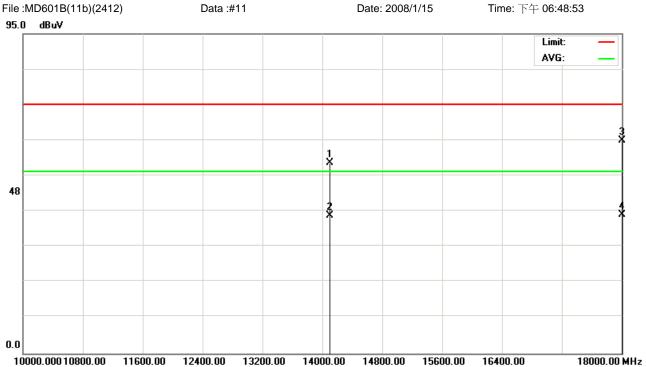
M/N: MD6010 Mode: 11b

Note: CH01(2412MHz)

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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		14200.00	38.29	18.86	57.15	74.00	-16.85	peak			
2		14200.00	21.57	18.86	40.43	54.00	-13.57	AVG			
3	* .	18000.00	37.09	25.57	62.66	74.00	-11.34	peak			
4		18000.00	15.68	25.57	41.25	54.00	-12.75	AVG			





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 1m

M/N: MD6010 Mode: 11b

Note: CH01(2412MHz)

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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	•	14100.00	37.79	18.90	56.69	74.00	-17.31	peak			
2	•	14100.00	22.08	18.90	40.98	54.00	-13.02	AVG			
3	* ,	18000.00	37.70	25.57	63.27	74.00	-10.73	peak			
4	•	18000.00	15.54	25.57	41.11	54.00	-12.89	AVG			





Site Polarization: Vertical Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: PDA Distance: 1m

M/N: MD6010 Mode: 11b

Note: CH01(2412MHz)

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		19060.00	25.20	32.85	58.05	74.00	-15.95	peak			
2	*	19060.00	9.83	32.85	42.68	54.00	-11.32	AVG			
3		21860.00	26.03	30.94	56.97	74.00	-17.03	peak			
4		21860.00	8.76	30.94	39.70	54.00	-14.30	AVG			
5		24480.00	28.28	29.16	57.44	74.00	-16.56	peak			
6		24480.00	12.79	29.16	41.95	54.00	-12.05	AVG			





Site Polarization: Horizontal Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

Limit: FCC part 15 (PK)

EUT: PDA

Power:

Distance: 1m

M/N: MD6010 Mode: 11b

Note: CH01(2412MHz)

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		18020.00	25.38	33.99	59.37	74.00	-14.63	peak			
2	*	18020.00	10.16	33.99	44.15	54.00	-9.85	AVG			
3		22140.00	25.82	30.76	56.58	74.00	-17.42	peak			
4		22140.00	9.61	30.76	40.37	54.00	-13.63	AVG			
5		25400.00	27.87	28.53	56.40	74.00	-17.60	peak			
6		25400.00	13.15	28.53	41.68	54.00	-12.32	AVG			



3.6.2 Open Field Radiated Emissions (Subpart C)

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following

Applicant : Innovation Wireless Inc.

Model No : MD6010

EUT : Wi-Fi/GSM Dual Mode Phone

Test Mode : AC Adapter _ 802.11b CH6 2437.000 (Local Frequency: 2437.000 MHz)

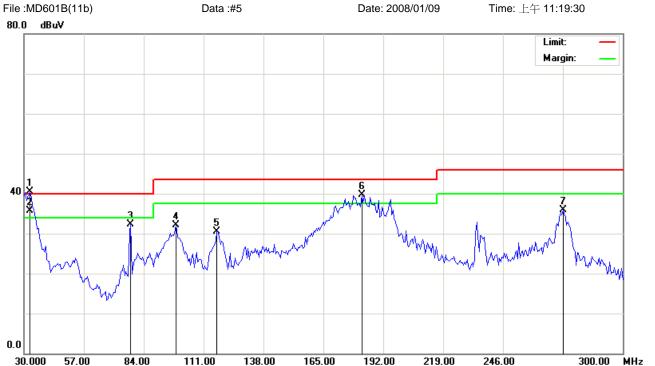
Test Date : 01/09~15/2008

Please refer to next pager of detail testing data.

Notes:

- 1. Margin= Amplitude Limits
- 2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
- 3. Height of table for EUT placed: 0.8 Meter.
- 4. ANT= Antenna height.
- 5. Amplitude= Reading Amplitude Amplifier gain + Cable loss + Antenna factor (Auto calculate in spectrum analyzer)
- 6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
- 7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
- 8. All frequencies from 30MHz to 26.5GHz have been tested





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11b Note: CH2437 Polarization: Vertical

Power:

Distance: 3m

Temperature:

22 ℃

Humidity: 60 %

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	*	32.7000	53.79	-13.33	40.46	40.00	0.46	peak			
2	!	32.7000	49.12	-13.33	35.79	40.00	-4.21	QP			
3		78.0600	49.19	-16.79	32.40	40.00	-7.60	peak			
4		98.5800	43.92	-11.84	32.08	43.50	-11.42	peak			
5		116.9400	44.23	-13.68	30.55	43.50	-12.95	peak			
6	!	182.2800	53.76	-14.09	39.67	43.50	-3.83	peak			
7		273.0000	46.78	-10.85	35.93	46.00	-10.07	peak			

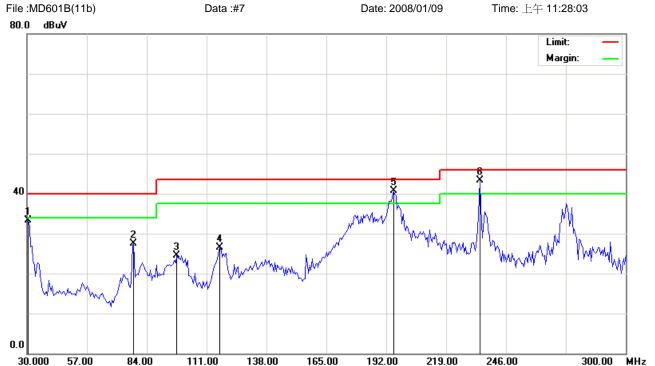
*:Maximum data

x:Over limit

!:over margin

•Reference Only





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11b Note: CH2437 Polarization: Horizontal

Temperature:

Humidity:

22 ℃

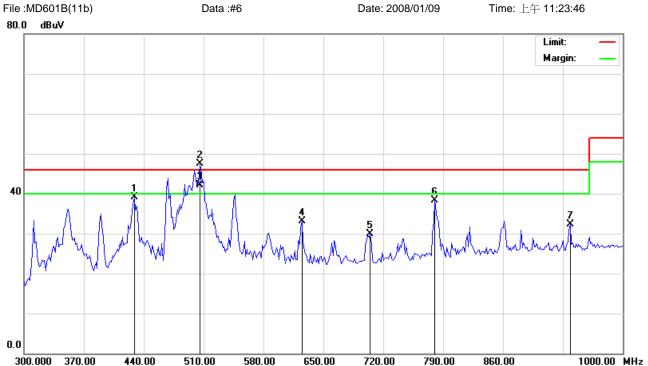
60 %

Power:

Distance: 3m

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		30.5400	46.80	-13.45	33.35	40.00	-6.65	peak			
2		78.0600	44.39	-16.79	27.60	40.00	-12.40	peak			
3		97.5000	36.33	-11.90	24.43	43.50	-19.07	peak			
4	,	116.9400	40.15	-13.68	26.47	43.50	-17.03	peak			
5	! 1	195.2400	53.84	-13.09	40.75	43.50	-2.75	peak			
6	* 2	234.1200	55.15	-11.75	43.40	46.00	-2.60	peak			





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11b Note: CH2437 Polarization: Vertical

Temperature:

Humidity:

22 ℃

60 %

Power:

Distance: 3m

Reading Correct Measure-Antenna Table Limit Over No. Mk. Freq. Level Factor ment Height Degree MHz dBuV dB dBuV dBuV dB Detector degree cm Comment 47.20 1 428.8000 -8.05 39.15 46.00 -6.85peak 1.48 2 505.8000 54.22 -6.74 47.48 46.00 peak 3 ! 505.8000 48.75 -6.74 42.01 46.00 -3.99 QΡ 37.78 33.14 4 624.8000 -4.64 46.00 -12.86 peak 704.6000 33.90 -4.00 29.90 46.00 -16.10 5 peak 6 780.2000 40.75 -2.3638.39 46.00 -7.61 peak 7 938.4000 32.21 0.19 32.40 -13.60 46.00 peak

*: Maximum data

x:Over limit

!:over margin

•Reference Only





Site site#1

300.000

Limit: FCC Class B 3M Radiation

370.00

440.00

510.00

580.00

EUT:

M/N: MD6010 Mode: 11b Note: CH2437 Polarization: *Horizontal* Temperature:

720.00

Power: Humidity:

790.00

860.00

1000.00 MHz

22 ℃

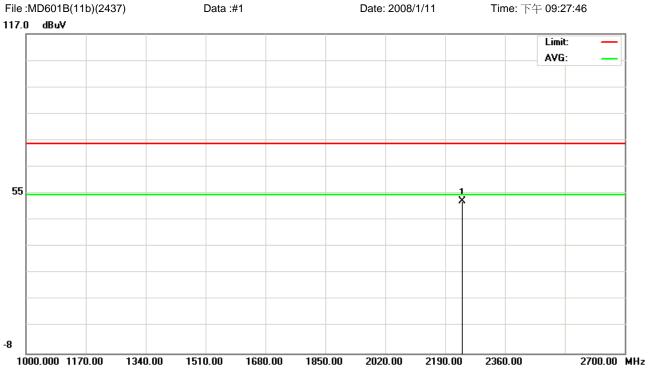
60 %

Distance: 3m

650.00

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		350.4000	47.63	-8.94	38.69	46.00	-7.31	peak			
2	*	504.4000	48.50	-6.79	41.71	46.00	-4.29	peak			
3		623.4000	33.71	-4.56	29.15	46.00	-16.85	peak			
4		703.2000	34.48	-3.96	30.52	46.00	-15.48	peak			
5		860.0000	32.15	-1.03	31.12	46.00	-14.88	peak			
6		935.6000	30.88	0.04	30.92	46.00	-15.08	peak			





Site Polarization: Vertical Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

Limit: FCC part 15 (PK) Power:

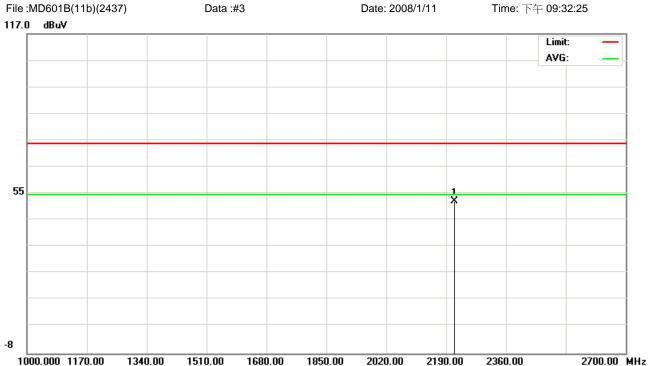
EUT: phone Distance: 3m

M/N: MD6010 Mode: 11b

Note: CH06(2437MHz)

No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1 *	2237.600	51.15	0.44	51.59	74.00	-22.41	peak			





Site Polarization: Horizontal Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

Limit: FCC part 15 (PK)

EUT: phone

Distance: 3m

EUT: phone M/N: MD6010

Mode: 11b

Note: CH06(2437MHz)

No. Mł	κ. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1 *	2213.800	51.21	0.38	51.59	74.00	-22.41	peak			





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 3m

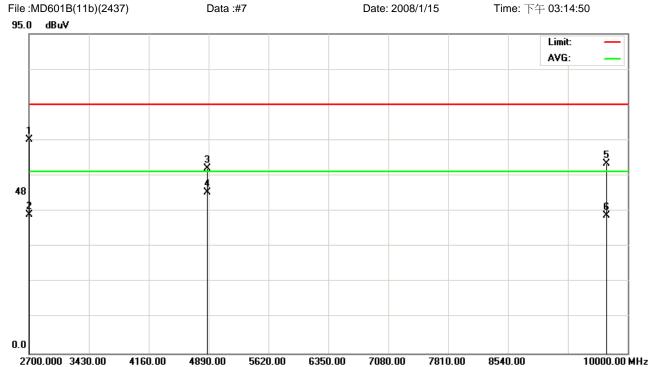
M/N: MD6010 Mode: 11b

Note: CH06(2437MHz)

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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	:	2700.000	41.23	22.58	63.81	74.00	-10.19	peak			
2	:	2700.000	19.75	22.58	42.33	54.00	-11.67	AVG			
3		4871.750	47.34	7.72	55.06	74.00	-18.94	peak			
4	* .	4871.750	40.43	7.72	48.15	54.00	-5.85	AVG			
5	,	9854.000	38.43	17.89	56.32	74.00	-17.68	peak			
6	,	9854.000	23.68	17.89	41.57	54.00	-12.43	AVG			





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 3m

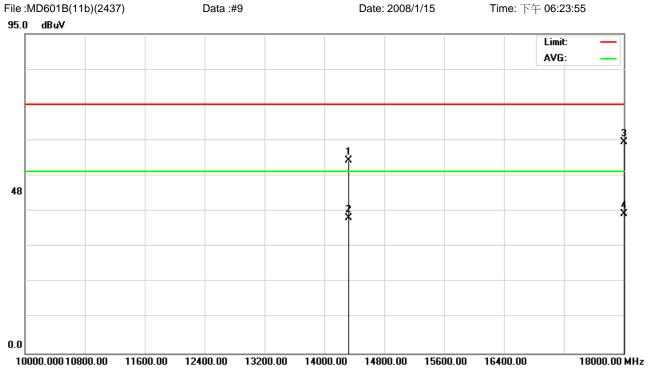
M/N: MD6010 Mode: 11b

Note: CH06(2437MHz)

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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	:	2700.000	40.95	22.58	63.53	74.00	-10.47	peak			
2	:	2700.000	18.58	22.58	41.16	54.00	-12.84	AVG			
3		4871.750	47.26	7.72	54.98	74.00	-19.02	peak			
4	* '	4871.750	40.17	7.72	47.89	54.00	-6.11	AVG			
5	,	9744.500	38.74	17.69	56.43	74.00	-17.57	peak			
6	,	9744.500	23.35	17.69	41.04	54.00	-12.96	AVG			





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 1m

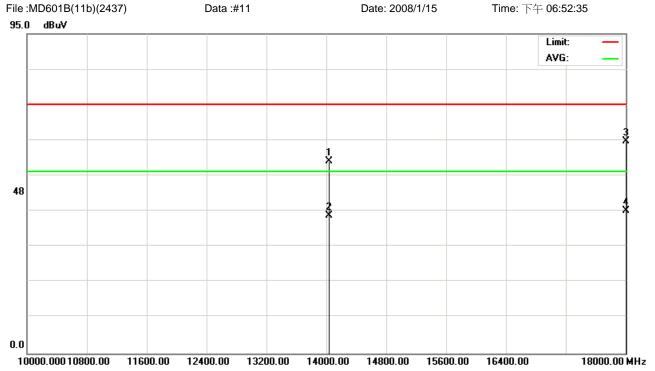
M/N: MD6010 Mode: 11b

Note: CH06(2437MHz)

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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		14320.00	38.68	18.57	57.25	74.00	-16.75	peak			
2		14320.00	21.64	18.57	40.21	54.00	-13.79	AVG			
3	* .	18000.00	37.24	25.57	62.81	74.00	-11.19	peak			
4		18000.00	15.79	25.57	41.36	54.00	-12.64	AVG			





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 1m

M/N: MD6010 Mode: 11b

Note: CH06(2437MHz)

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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	1	14040.00	38.47	18.66	57.13	74.00	-16.87	peak			
2	1	14040.00	22.41	18.66	41.07	54.00	-12.93	AVG			
3	* 1	18000.00	37.47	25.57	63.04	74.00	-10.96	peak			
4	1	18000.00	16.74	25.57	42.31	54.00	-11.69	AVG			





Site Polarization: Vertical Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

Limit: FCC part 15 (PK) Power:
EUT: phone Distance: 1m

M/N: MD6010 Mode: 11b

Note: CH06(2437MHz)

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	1	9800.00	25.29	32.35	57.64	74.00	-16.36	peak			
2	1	9800.00	9.11	32.35	41.46	54.00	-12.54	AVG			
3	2	1860.00	26.53	30.94	57.47	74.00	-16.53	peak			
4	2	1860.00	10.15	30.94	41.09	54.00	-12.91	AVG			
5	2	4480.00	27.78	29.16	56.94	74.00	-17.06	peak			
6	* 2	4480.00	13.81	29.16	42.97	54.00	-11.03	AVG			





Site Polarization: Horizontal Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

Limit: FCC part 15 (PK)

EUT: phone

Distance: 1m

EUT: phone M/N: MD6010 Mode: 11b

Note: CH06(2437MHz)

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	2	20260.00	25.70	32.04	57.74	74.00	-16.26	peak			
2	2	20260.00	10.11	32.04	42.15	54.00	-11.85	AVG			
3	2	22140.00	26.82	30.76	57.58	74.00	-16.42	peak			
4	2	22140.00	12.12	30.76	42.88	54.00	-11.12	AVG			
5	2	24440.00	28.28	29.18	57.46	74.00	-16.54	peak			
6	* 2	24440.00	14.61	29.18	43.79	54.00	-10.21	AVG			



3.6.3 Open Field Radiated Emissions (Subpart C)

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : Innovation Wireless Inc.

Model No : MD6010

EUT : Wi-Fi/GSM Dual Mode Phone

Test Mode : AC Adapter _ 802.11b CH11 2462.000 (Local Frequency: 2462.000 MHz)

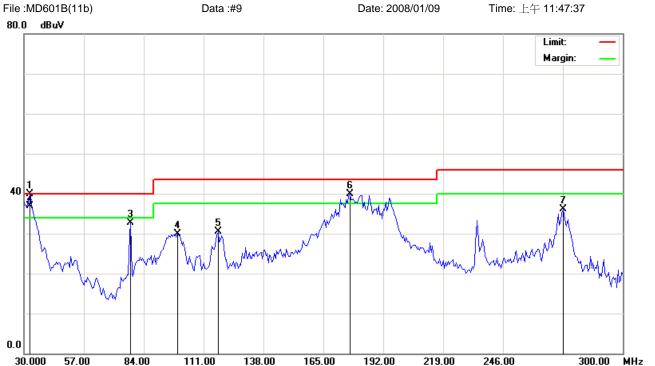
Test Date : 01/09~15/2008

Please refer to next pager of detail testing data.

Notes:

- 1. Margin= Amplitude Limits
- 2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
- 3. Height of table for EUT placed: 0.8 Meter.
- 4. ANT= Antenna height.
- 5. Amplitude= Reading Amplitude Amplifier gain + Cable loss + Antenna factor (Auto calculate in spectrum analyzer)
- 6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
- 7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
- 8. All frequencies from 30MHz to 26.5GHz have been tested





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11b Note: CH2462 Polarization: Vertical Temperature:

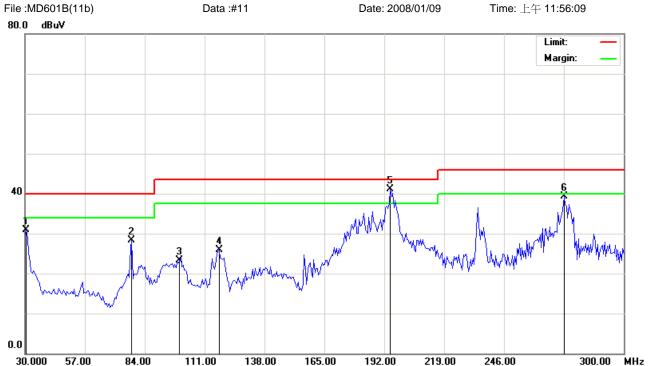
Power: Humidity: 60 %

22 ℃

Distance: 3m

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	*	32.7000	53.32	-13.33	39.99	40.00	-0.01	peak			
2	!	32.7000	50.18	-13.33	36.85	40.00	-3.15	QP			
3		78.0600	49.49	-16.79	32.70	40.00	-7.30	peak			
4		99.1200	41.73	-11.81	29.92	43.50	-13.58	peak			
5		117.4800	44.24	-13.77	30.47	43.50	-13.03	peak			
6	!	176.8800	54.49	-14.52	39.97	43.50	-3.53	peak			
7		273.0000	47.00	-10.85	36.15	46.00	-9.85	peak			





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11b Note: CH2462 Polarization: Horizontal

Power:

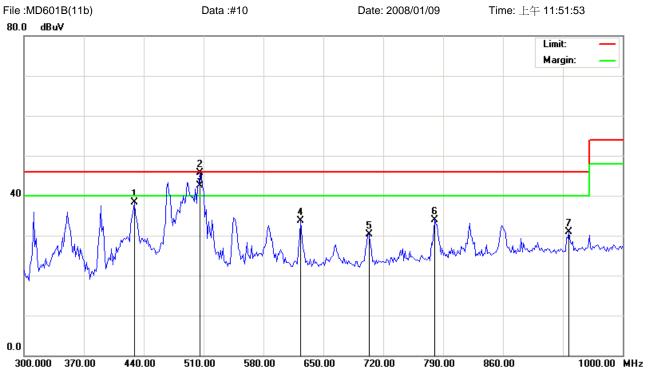
Distance: 3m

Temperature: 22 ℃

Humidity: 60 %

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		30.5400	44.34	-13.45	30.89	40.00	-9.11	peak			
2		78.0600	45.07	-16.79	28.28	40.00	-11.72	peak			
3		99.6600	35.10	-11.78	23.32	43.50	-20.18	peak			
4	1	17.4800	39.74	-13.77	25.97	43.50	-17.53	peak			
5	* 1	94.7000	54.20	-13.12	41.08	43.50	-2.42	peak			
6	2	273.0000	50.10	-10.85	39.25	46.00	-6.75	peak			





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11b Note: CH2462 Polarization: Vertical

Temperature:

Humidity:

22 ℃

60 %

Power:

Distance: 3m

Reading Correct Measure-Antenna Table Limit Over No. Mk. Freq. Level Factor ment Height Degree MHz dBuV dB dBuV dBuV dB Detector degree cm Comment 1 428.8000 46.40 -8.05 38.35 46.00 -7.65 peak 2 505.8000 52.45 -6.74 45.71 46.00 -0.29 peak 3 ! 505.8000 49.17 -6.74 42.43 46.00 -3.57 QΡ 38.29 33.73 4 623.4000 -4.56 46.00 -12.27 peak 703.2000 34.30 -3.96 30.34 46.00 -15.66 5 peak 6 780.2000 36.27 -2.3633.91 46.00 -12.09peak 7 937.0000 30.70 0.12 30.82 46.00 -15.18 peak

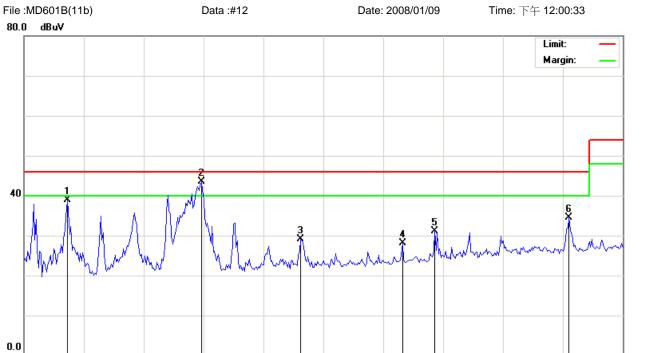
*: Maximum data

x:Over limit

!:over margin

•Reference Only





Site site#1

300.000

Limit: FCC Class B 3M Radiation

370.00

440.00

510.00

580.00

EUT:

M/N: MD6010 Mode: 11b Note: CH2462 Polarization: *Horizontal*

720.00

860.00

Temperature:

Humidity:

1000.00 MHz

22 ℃

60 %

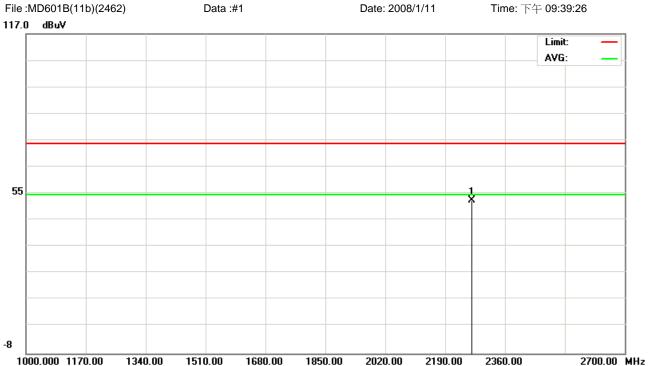
Power:

650.00

Distance: 3m

Reading Correct Measure-Antenna Table Limit Over No. Mk. Freq. Level Factor ment Height Degree MHz dBuV dB dBuV dBuV dB Detector cm degree Comment 47.78 1 350.4000 -8.94 38.84 46.00 -7.16peak 2 507.2000 50.18 -6.77 43.41 46.00 -2.59 peak 3 623.4000 33.67 -4.56 29.11 46.00 -16.89 peak 742.4000 31.30 -3.20 4 28.10 46.00 -17.90 peak 780.2000 33.56 -2.36 31.20 46.00 -14.80 5 peak 6 937.0000 34.36 0.12 34.48 46.00 -11.52 peak





Site Polarization: Vertical Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

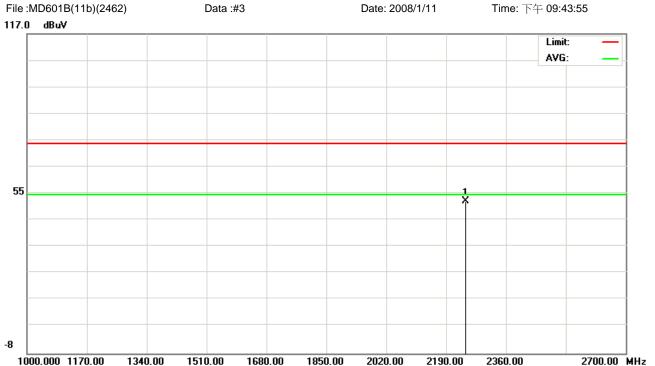
Limit: FCC part 15 (PK) Power:
EUT: phone Distance: 3m

M/N: MD6010 Mode: 11b

Note: CH11(2462MHz)

No. Mł	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1 *	2264.800	51.48	0.44	51.92	74.00	-22.08	peak			





Site Polarization: Horizontal Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

Limit: FCC part 15 (PK)

EUT: phone

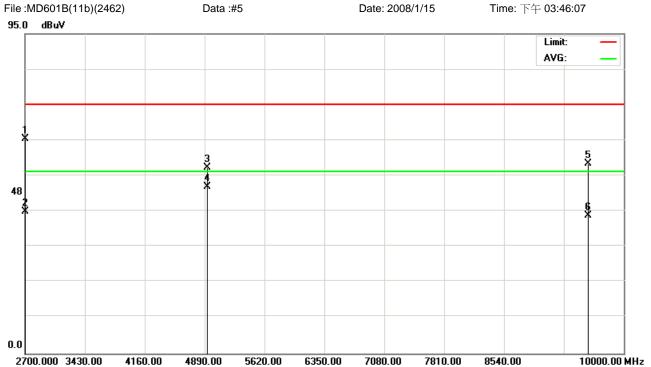
Distance: 3m

EUT: phone M/N: MD6010 Mode: 11b

Note: CH11(2462MHz)

No. Mł	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1 *	2244.400	51.13	0.46	51.59	74.00	-22.41	peak			





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 3m

M/N: MD6010 Mode: 11b

Note: CH11(2462MHz)

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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	:	2700.000	41.21	22.58	63.79	74.00	-10.21	peak			
2	:	2700.000	19.57	22.58	42.15	54.00	-11.85	AVG			
3		4926.500	47.46	7.66	55.12	74.00	-18.88	peak			
4	* '	4926.500	41.75	7.66	49.41	54.00	-4.59	AVG			
5	,	9562.000	39.16	17.21	56.37	74.00	-17.63	peak			
6	,	9562.000	23.67	17.21	40.88	54.00	-13.12	AVG			





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 3m

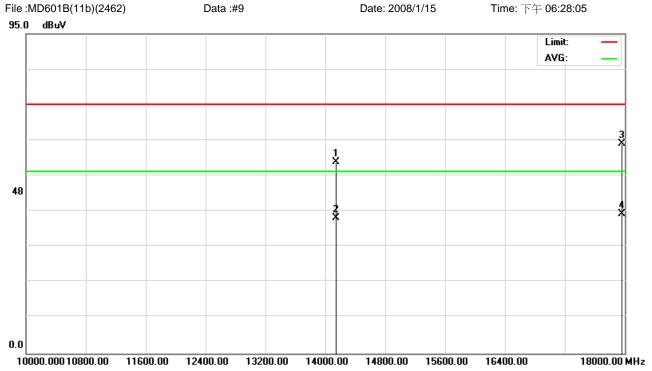
M/N: MD6010 Mode: 11b

Note: CH11(2462MHz)

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

					_						
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	2	2700.000	41.65	22.58	64.23	74.00	-9.77	peak			
2	2	2700.000	19.71	22.58	42.29	54.00	-11.71	AVG			
3	4	4926.500	47.79	7.66	55.45	74.00	-18.55	peak			
4	* 4	4926.500	40.83	7.66	48.49	54.00	-5.51	AVG			
5	ξ	9835.750	38.80	17.83	56.63	74.00	-17.37	peak			
6	ç	9835.750	23.67	17.83	41.50	54.00	-12.50	AVG			





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 1m

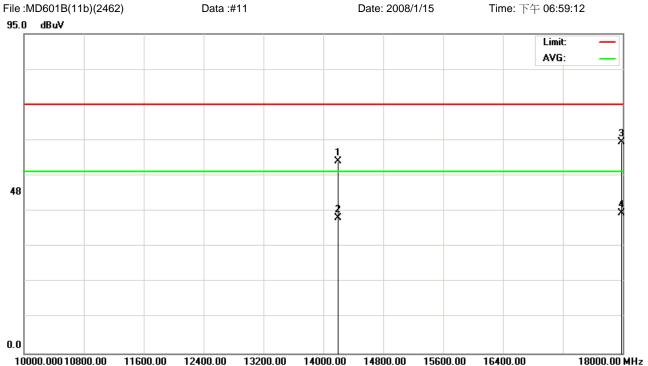
M/N: MD6010 Mode: 11b

Note: CH11(2462MHz)

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	1	4140.00	38.11	18.84	56.95	74.00	-17.05	peak			
2	1	4140.00	21.44	18.84	40.28	54.00	-13.72	AVG			
3	* 1	7960.00	37.61	24.84	62.45	74.00	-11.55	peak			
4	1	7960.00	16.72	24.84	41.56	54.00	-12.44	AVG			





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 1m

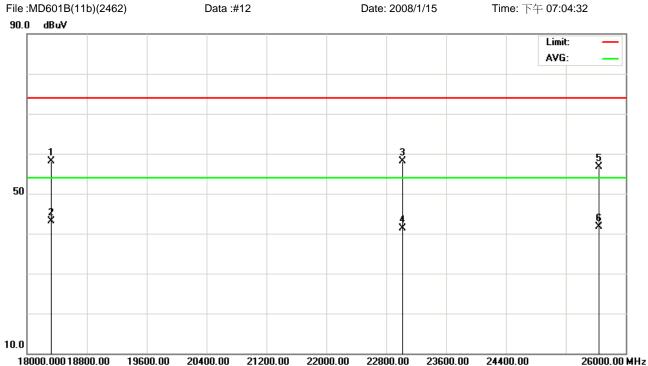
M/N: MD6010 Mode: 11b

Note: CH11(2462MHz)

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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		14200.00	38.32	18.86	57.18	74.00	-16.82	peak			
2		14200.00	21.28	18.86	40.14	54.00	-13.86	AVG			
3	*	17980.00	37.52	25.21	62.73	74.00	-11.27	peak			
4		17980.00	16.54	25.21	41.75	54.00	-12.25	AVG			





Site Polarization: Vertical Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

Limit: FCC part 15 (PK) Power:
EUT: phone Distance: 1m

M/N: MD6010 Mode: 11b

Note: CH11(2462MHz)

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		18320.00	24.01	34.05	58.06	74.00	-15.94	peak			
2	*	18320.00	9.08	34.05	43.13	54.00	-10.87	AVG			
3		23020.00	27.91	30.15	58.06	74.00	-15.94	peak			
4		23020.00	11.17	30.15	41.32	54.00	-12.68	AVG			
5		25640.00	28.31	28.37	56.68	74.00	-17.32	peak			
6		25640.00	13.36	28.37	41.73	54.00	-12.27	AVG			





Site Polarization: Horizontal Temperature: **22** ℃ Power: Humidity: 60 %

23600.00

Limit: FCC part 15 (PK) Distance: 1m

20400.00

EUT: phone M/N: MD6010 Mode: 11b

Note: CH11(2462MHz)

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	,	18600.00	24.62	33.17	57.79	74.00	-16.21	peak			
2	,	18600.00	8.79	33.17	41.96	54.00	-12.04	AVG			
3	2	22560.00	27.09	30.46	57.55	74.00	-16.45	peak			
4	2	22560.00	10.32	30.46	40.78	54.00	-13.22	AVG			
5	2	25400.00	28.87	28.53	57.40	74.00	-16.60	peak			
6	* 2	25400.00	13.45	28.53	41.98	54.00	-12.02	AVG			



3.6.4 Open Field Radiated Emissions (Subpart C)

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : Innovation Wireless Inc.

Model No : MD6010

EUT : Wi-Fi/GSM Dual Mode Phone

Test Mode : AC Adapter _ 802.11g CH1 2412.000 (Local Frequency: 2412.000 MHz)

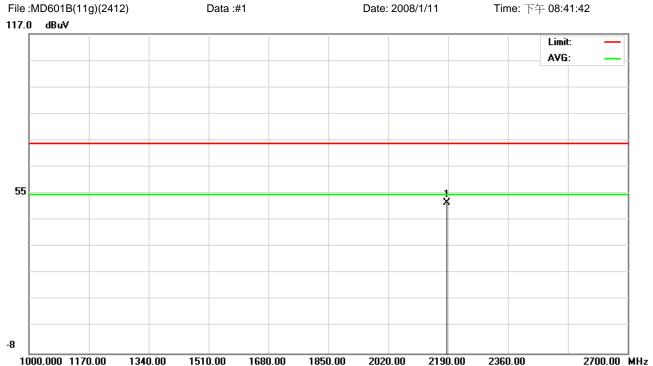
Test Date : 01/09~15/2008

Please refer to next pager of detail testing data.

Notes:

- 1. Margin= Amplitude Limits
- 2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
- 3. Height of table for EUT placed: 0.8 Meter.
- 4. ANT= Antenna height.
- 5. Amplitude= Reading Amplitude Amplifier gain + Cable loss + Antenna factor (Auto calculate in spectrum analyzer)
- 6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
- 7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
- 8. All frequencies from 30MHz to 26.5GHz have been tested





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

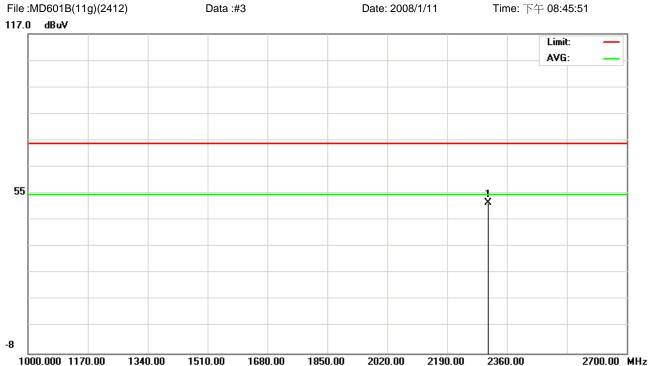
EUT: phone Distance: 3m

M/N: MD6010 Mode: 11g

Note: CH01(2412MHz)

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 *	2186.600	50.63	0.37	51.00	74.00	-23.00	peak			





Site Temperature: **22** ℃ Polarization: Horizontal Humidity: 60 %

Limit: FCC part 15 (PK) Power:

EUT: phone Distance: 3m M/N: MD6010

Mode: 11g

Note: CH01(2412MHz)

No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1 *	2305.600	50.46	0.46	50.92	74.00	-23.08	peak			





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 3m

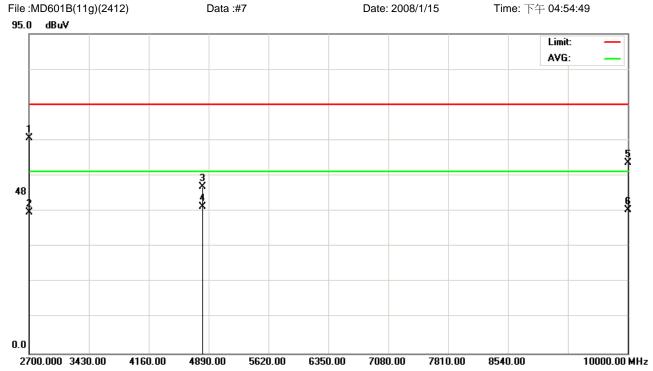
M/N: MD6010 Mode: 11g

Note: CH01(2412MHz)

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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	:	2700.000	40.93	22.58	63.51	74.00	-10.49	peak			
2	:	2700.000	19.34	22.58	41.92	54.00	-12.08	AVG			
3	•	4817.000	43.44	7.42	50.86	74.00	-23.14	peak			
4	* 4	4817.000	40.37	7.42	47.79	54.00	-6.21	AVG			
5	,	9653.250	39.70	16.95	56.65	74.00	-17.35	peak			
6	,	9653.250	24.38	16.95	41.33	54.00	-12.67	AVG			





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 3m

M/N: MD6010 Mode: 11g

Note: CH01(2412MHz)

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

No.	Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2700.000	41.31	22.58	63.89	74.00	-10.11	peak			
2		2700.000	19.35	22.58	41.93	54.00	-12.07	AVG			
3		4817.000	42.01	7.42	49.43	74.00	-24.57	peak			
4		4817.000	36.20	7.42	43.62	54.00	-10.38	AVG			
5		10000.00	38.62	17.94	56.56	74.00	-17.44	peak			
6		10000.00	24.64	17.94	42.58	54.00	-11.42	AVG			





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 1m

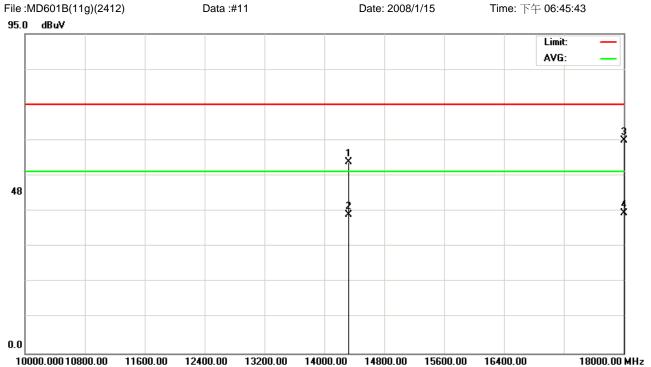
M/N: MD6010 Mode: 11g

Note: CH01(2412MHz)

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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	•	13880.00	38.48	18.38	56.86	74.00	-17.14	peak			
2	,	13880.00	21.46	18.38	39.84	54.00	-14.16	AVG			
3	* /	18000.00	36.98	25.57	62.55	74.00	-11.45	peak			
4	,	18000.00	16.72	25.57	42.29	54.00	-11.71	AVG			





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 1m

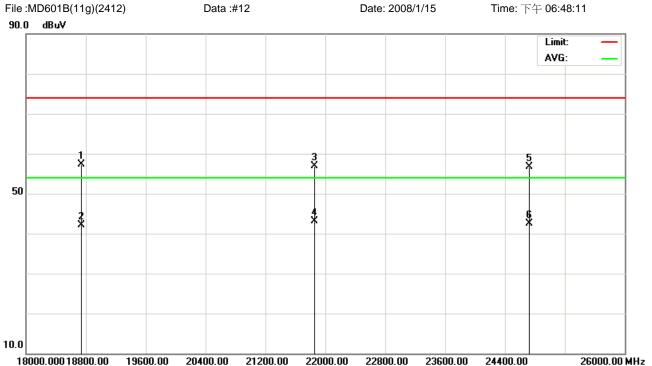
M/N: MD6010 Mode: 11g

Note: CH01(2412MHz)

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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	1	4320.00	38.27	18.57	56.84	74.00	-17.16	peak			
2	1	4320.00	22.64	18.57	41.21	54.00	-12.79	AVG			
3	* 1	8000.00	37.65	25.57	63.22	74.00	-10.78	peak			
4	1	8000.00	16.08	25.57	41.65	54.00	-12.35	AVG			





Site Polarization: Vertical Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

Limit: FCC part 15 (PK)

EUT: phone

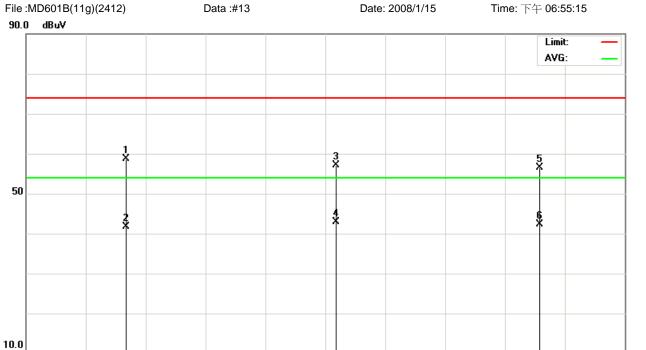
Distance: 1m

EUT: phone M/N: MD6010 Mode: 11g

Note: CH01(2412MHz)

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		18740.00	24.20	33.07	57.27	74.00	-16.73	peak			
2		18740.00	8.96	33.07	42.03	54.00	-11.97	AVG			
3		21860.00	26.03	30.94	56.97	74.00	-17.03	peak			
4	* 4	21860.00	12.22	30.94	43.16	54.00	-10.84	AVG			
5	:	24720.00	27.80	29.00	56.80	74.00	-17.20	peak			
6	:	24720.00	13.59	29.00	42.59	54.00	-11.41	AVG			





Site Polarization: Horizontal Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

22000.00

22800.00

23600.00

24400.00

26000.00 MHz

21200.00

Limit: FCC part 15 (PK)

EUT: phone

Distance: 1m

20400.00

19600.00

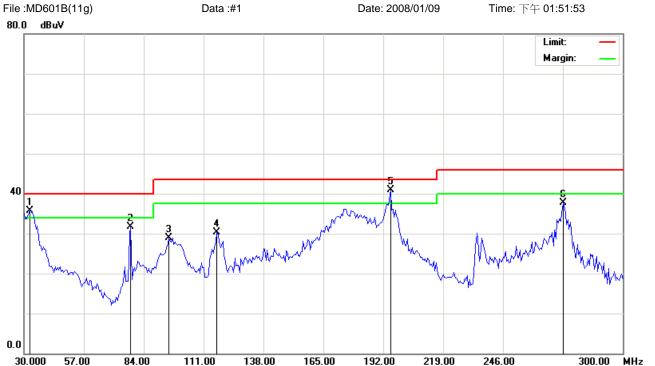
EUT: phone M/N: MD6010 Mode: 11g

Note: CH01(2412MHz)

18000.000 18800.00

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		19340.00	25.95	32.67	58.62	74.00	-15.38	peak			
2		19340.00	8.96	32.67	41.63	54.00	-12.37	AVG			
3		22140.00	26.32	30.76	57.08	74.00	-16.92	peak			
4	*	22140.00	12.12	30.76	42.88	54.00	-11.12	AVG			
5		24860.00	27.58	28.90	56.48	74.00	-17.52	peak			
6		24860.00	13.38	28.90	42.28	54.00	-11.72	AVG			





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11g Note: CH2412 Polarization: Vertical

Power:

Distance: 3m

Temperature: 22 ℃

Humidity: 60 %

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	!	32.7000	49.13	-13.33	35.80	40.00	-4.20	peak			
2		78.0600	48.45	-16.79	31.66	40.00	-8.34	peak			
3		95.3400	40.93	-12.02	28.91	43.50	-14.59	peak			
4		116.9400	43.89	-13.68	30.21	43.50	-13.29	peak			
5	*	195.2400	54.09	-13.09	41.00	43.50	-2.50	peak			
6		273.0000	48.51	-10.85	37.66	46.00	-8.34	peak			

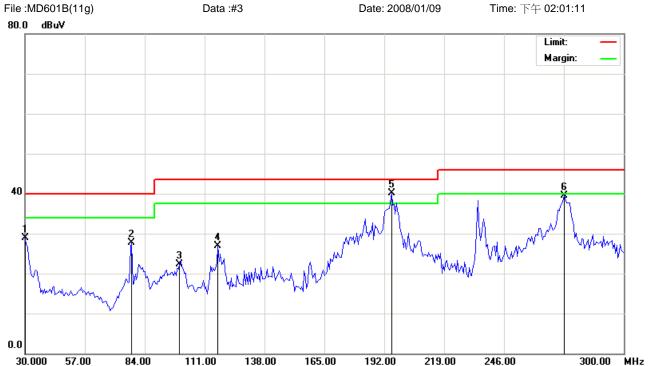
*:Maximum data

x:Over limit

!:over margin

•Reference Only





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11g Note: CH2412 Polarization: *Horizontal*

Temperature:

Humidity:

22 ℃

60 %

Power:

Distance: 3m

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		30.0000	42.44	-13.49	28.95	40.00	-11.05	peak			
2		78.0600	44.43	-16.79	27.64	40.00	-12.36	peak			
3		99.6600	34.05	-11.78	22.27	43.50	-21.23	peak			
4	•	116.9400	40.55	-13.68	26.87	43.50	-16.63	peak			
5	* ,	195.2400	53.25	-13.09	40.16	43.50	-3.34	peak			
6	2	273.0000	50.27	-10.85	39.42	46.00	-6.58	peak			





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11g Note: CH2412 Polarization: Vertical

Temperature:

Humidity:

22 ℃

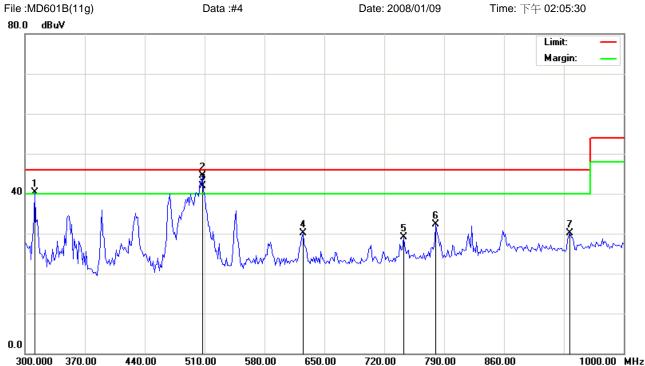
60 %

Power:

Distance: 3m

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		428.8000	46.52	-8.05	38.47	46.00	-7.53	peak			
2	*	505.8000	49.99	-6.74	43.25	46.00	-2.75	peak			
3		626.2000	36.81	-4.59	32.22	46.00	-13.78	peak			
4		701.8000	33.51	-3.92	29.59	46.00	-16.41	peak			
5		780.2000	38.69	-2.36	36.33	46.00	-9.67	peak			
6		938.4000	31.68	0.19	31.87	46.00	-14.13	peak			





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11g Note: CH2412 Polarization: Horizontal

Temperature:

Humidity:

22 ℃

60 %

Power:

Distance: 3m

Reading Correct Measure-Antenna Table Limit Over No. Mk. Freq. Level Factor ment Height Degree MHz dBuV dB dBuV dBuV dB Detector degree cm Comment 1 ! 311.2000 50.14 -9.82 40.32 46.00 -5.68 peak 2 507.2000 51.33 -6.77 44.56 46.00 -1.44 peak 3 ! 507.2000 48.61 -6.77 41.84 46.00 -4.16 QΡ 34.78 -4.64 30.14 4 624.8000 46.00 -15.86 peak 32.22 742,4000 -3.20 29.02 46.00 -16.98 5 peak 6 780.2000 34.61 -2.3632.25 46.00 -13.75 peak 7 937.0000 29.95 0.12 30.07 46.00 -15.93 peak

*: Maximum data

x:Over limit

!:over margin

Reference Only



3.6.5 Open Field Radiated Emissions (Subpart C)

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following

Applicant : Innovation Wireless Inc.

Model No : MD6010

EUT : Wi-Fi/GSM Dual Mode Phone

Test Mode : AC Adapter _ 802.11g CH6 2437.000 (Local Frequency: 2437.000 MHz)

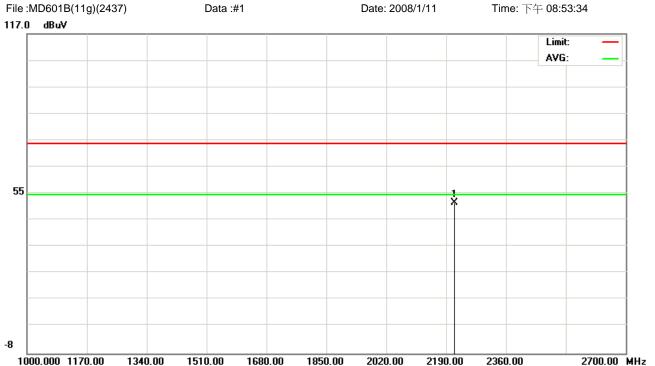
Test Date : 01/09~15/2008

Please refer to next pager of detail testing data.

Notes:

- 1. Margin= Amplitude Limits
- 2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
- 3. Height of table for EUT placed: 0.8 Meter.
- 4. ANT= Antenna height.
- 5. Amplitude= Reading Amplitude Amplifier gain + Cable loss + Antenna factor (Auto calculate in spectrum analyzer)
- 6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
- 7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
- 8. All frequencies from 30MHz to 26.5GHz have been tested





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

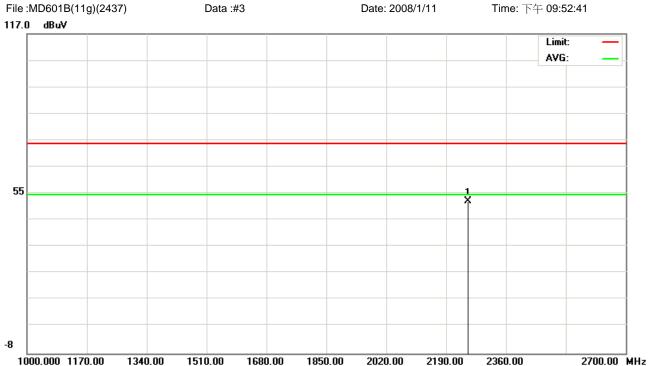
EUT: phone Distance: 3m

M/N: MD6010 Mode: 11g

Note: CH06(2437MHz)

No. Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1 *	2213.800	50.45	0.38	50.83	74.00	-23.17	peak			





Site Polarization: Horizontal Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

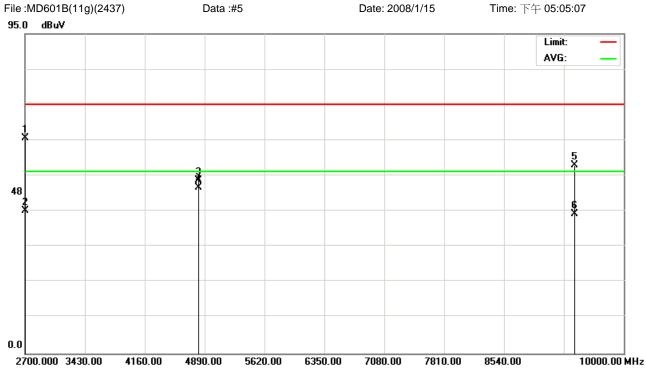
Limit: FCC part 15 (PK) Power:
EUT: phone Distance: 3m

M/N: MD6010 Mode: 11g

Note: CH06(2437MHz)

No. Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1 *	2251.200	50.92	0.49	51.41	74.00	-22.59	peak			





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 3m

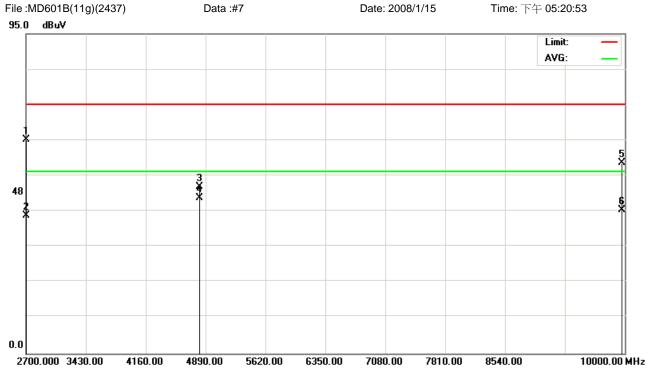
M/N: MD6010 Mode: 11g

Note: CH06(2437MHz)

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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		2700.000	41.49	22.58	64.07	74.00	-9.93	peak			
2		2700.000	19.84	22.58	42.42	54.00	-11.58	AVG			
3		4817.000	43.91	7.42	51.33	74.00	-22.67	peak			
4	*	4817.000	41.98	7.42	49.40	54.00	-4.60	AVG			
5		9397.750	38.94	17.07	56.01	74.00	-17.99	peak			
6		9397.750	24.41	17.07	41.48	54.00	-12.52	AVG			





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 3m

M/N: MD6010 Mode: 11g

Note: CH06(2437MHz)

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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	:	2700.000	41.05	22.58	63.63	74.00	-10.37	peak			
2	:	2700.000	18.47	22.58	41.05	54.00	-12.95	AVG			
3		4817.000	42.18	7.42	49.60	74.00	-24.40	peak			
4	* .	4817.000	38.89	7.42	46.31	54.00	-7.69	AVG			
5	,	9963.500	38.82	17.82	56.64	74.00	-17.36	peak			
6	,	9963.500	24.75	17.82	42.57	54.00	-11.43	AVG			





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 1m

M/N: MD6010 Mode: 11g

Note: CH06(2437MHz)

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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	•	14200.00	38.03	18.86	56.89	74.00	-17.11	peak			
2	,	14200.00	22.23	18.86	41.09	54.00	-12.91	AVG			
3	* ,	18000.00	37.42	25.57	62.99	74.00	-11.01	peak			
4	•	18000.00	16.02	25.57	41.59	54.00	-12.41	AVG			





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 1m

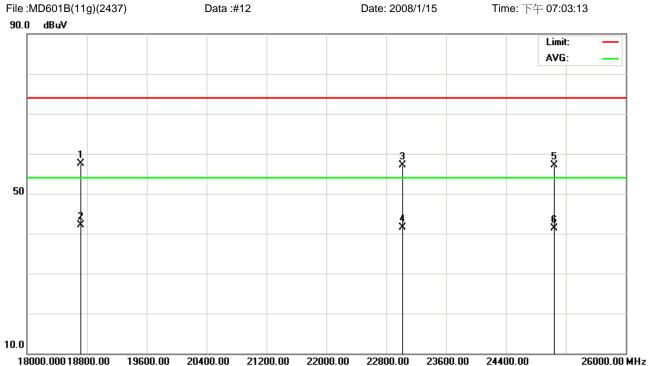
M/N: MD6010 Mode: 11g

Note: CH06(2437MHz)

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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	1	4000.00	38.47	18.67	57.14	74.00	-16.86	peak			
2	1	4000.00	23.15	18.67	41.82	54.00	-12.18	AVG			
3	* 1	8000.00	37.05	25.57	62.62	74.00	-11.38	peak			
4	1	8000.00	16.72	25.57	42.29	54.00	-11.71	AVG			





Site Polarization: Vertical Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

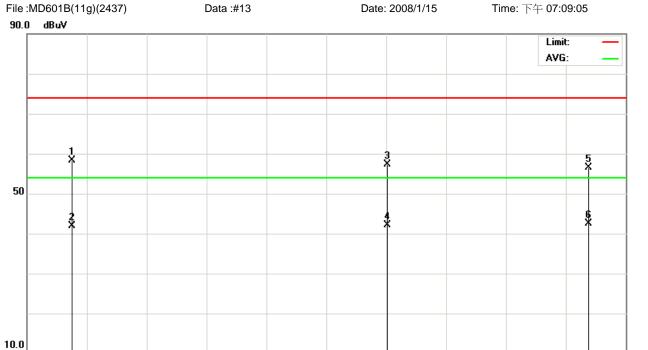
Limit: FCC part 15 (PK) Power:
EUT: phone Distance: 1m

M/N: MD6010 Mode: 11b

Note: CH06(2437MHz)

No.	Mk	x. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		18720.00	24.44	33.09	57.53	74.00	-16.47	peak			
2	*	18720.00	9.11	33.09	42.20	54.00	-11.80	AVG			
3		23020.00	26.91	30.15	57.06	74.00	-16.94	peak			
4		23020.00	11.42	30.15	41.57	54.00	-12.43	AVG			
5		25040.00	28.29	28.77	57.06	74.00	-16.94	peak			
6		25040.00	12.46	28.77	41.23	54.00	-12.77	AVG			





Site Polarization: Horizontal Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

22000.00

22800.00

23600.00

24400.00

26000.00 MHz

21200.00

Limit: FCC part 15 (PK)

EUT: phone

Distance: 1m

20400.00

19600.00

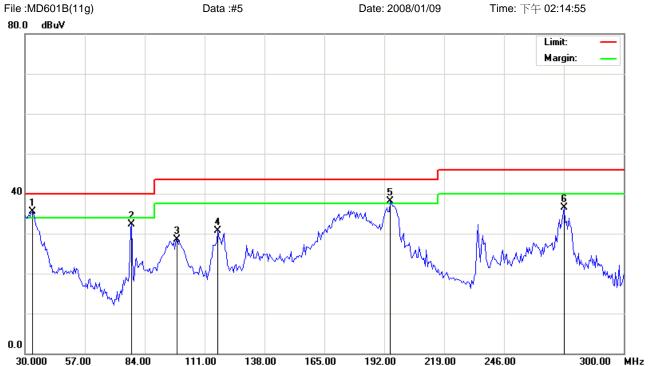
EUT: phone M/N: MD6010 Mode: 11b

Note: CH06(2437MHz)

18000.000 18800.00

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	•	18600.00	25.12	33.17	58.29	74.00	-15.71	peak			
2	,	18600.00	8.76	33.17	41.93	54.00	-12.07	AVG			
3	2	22820.00	27.11	30.29	57.40	74.00	-16.60	peak			
4	2	22820.00	11.76	30.29	42.05	54.00	-11.95	AVG			
5	2	25500.00	28.13	28.46	56.59	74.00	-17.41	peak			
6	* 2	25500.00	13.95	28.46	42.41	54.00	-11.59	AVG			





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11g Note: CH2437 Polarization: Vertical

Power:

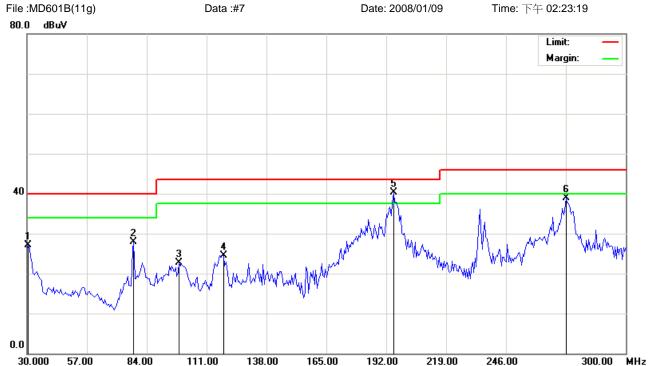
Distance: 3m

Temperature: 22 ℃

Humidity: 60 %

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	*	33.2400	48.73	-13.30	35.43	40.00	-4.57	peak			
2		78.0600	49.17	-16.79	32.38	40.00	-7.62	peak			
3		98.5800	40.40	-11.84	28.56	43.50	-14.94	peak			
4		116.9400	44.45	-13.68	30.77	43.50	-12.73	peak			
5	! '	194.7000	51.13	-13.12	38.01	43.50	-5.49	peak			
6	2	273.0000	47.40	-10.85	36.55	46.00	-9.45	peak			





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11g Note: CH2437 Polarization: Horizontal

Temperature:

Humidity:

22 ℃

60 %

Power:

Distance: 3m

Reading Correct Measure-Antenna Table Limit Over No. Mk. Freq. Level Factor ment Height Degree MHz dBuV dB dBuV dBuV dB Detector degree cm Comment 1 30.5400 40.57 -13.4527.12 40.00 -12.88peak 2 78.0600 44.65 -16.79 27.86 40.00 -12.14 peak 3 98.5800 34.49 -11.84 22.65 43.50 -20.85 peak 38.41 24.45 4 118.5600 -13.96 43.50 -19.05 peak 195.2400 53.32 -13.09 40.23 43.50 -3.27 5 peak 6 273.0000 49.78 -10.85 38.93 46.00 -7.07 peak

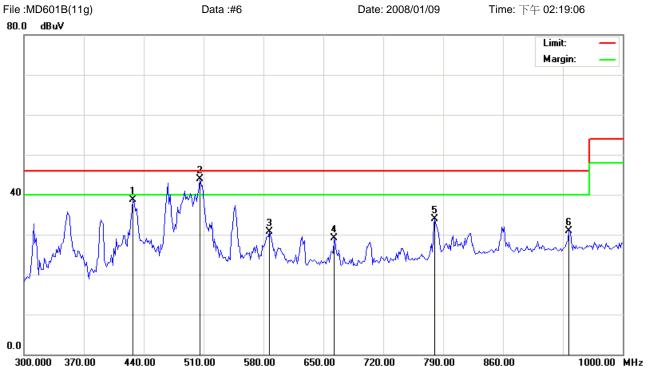
*:Maximum data

x:Over limit

!:over margin

•Reference Only





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11g Note: CH2437 Polarization: Vertical

Temperature:

Humidity:

22 ℃

60 %

Power:

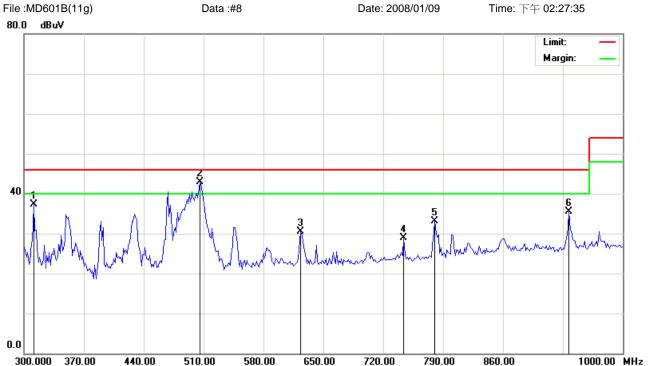
Distance: 3m

Reading Correct Measure-Antenna Table Limit Over No. Mk. Freq. Level Factor ment Height Degree MHz dBuV dB dBuV dBuV dB Detector cm degree Comment 46.72 1 427.4000 -8.07 38.65 46.00 -7.35peak 2 505.8000 50.65 -6.74 43.91 46.00 -2.09 peak 3 587.0000 35.86 -5.10 30.76 46.00 -15.24 peak 33.49 -4.38 29.11 4 662.6000 46.00 -16.89 peak 780.2000 36.26 -2.36 33.90 46.00 -12.10 5 peak 6 937.0000 30.79 0.12 30.91 46.00 -15.09 peak

*:Maximum data x:Over limit

!:over margin





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11g Note: CH2437 Polarization: Horizontal

Power:

Distance: 3m

Temperature: 22 ℃

Humidity: 60 %

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		311.2000	47.08	-9.82	37.26	46.00	-8.74	peak			
2	*	505.8000	49.68	-6.74	42.94	46.00	-3.06	peak			
3		623.4000	35.07	-4.56	30.51	46.00	-15.49	peak			
4		743.8000	32.12	-3.15	28.97	46.00	-17.03	peak			
5		780.2000	35.54	-2.36	33.18	46.00	-12.82	peak			
6		937.0000	35.34	0.12	35.46	46.00	-10.54	peak			

*:Maximum data

x:Over limit

!:over margin

•Reference Only



3.6.6 Open Field Radiated Emissions (Subpart C)

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : Innovation Wireless Inc.

Model No : MD6010

EUT : Wi-Fi/GSM Dual Mode Phone

Test Mode : AC Adapter _ 802.11g CH11 2462.000 (Local Frequency: 2462.000 MHz)

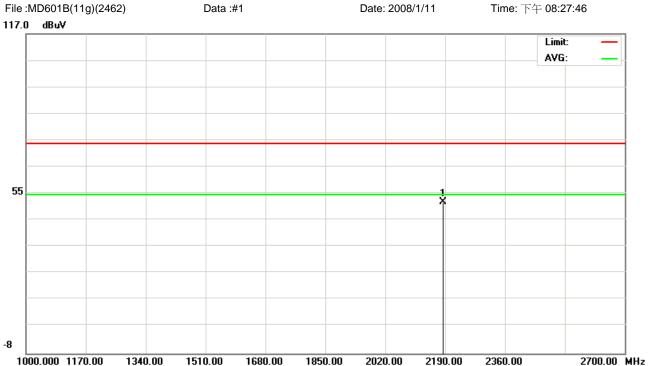
Test Date : 01/09~15/2008

Please refer to next pager of detail testing data.

Notes:

- 1. Margin= Amplitude Limits
- 2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
- 3. Height of table for EUT placed: 0.8 Meter.
- 4. ANT= Antenna height.
- 5. Amplitude= Reading Amplitude Amplifier gain + Cable loss + Antenna factor (Auto calculate in spectrum analyzer)
- 6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
- 7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
- 8. All frequencies from 30MHz to 26.5GHz have been tested





Site Polarization: Vertical Temperature: 22 °C

Humidity:

60 %

Limit: FCC part 15 (PK) Power:

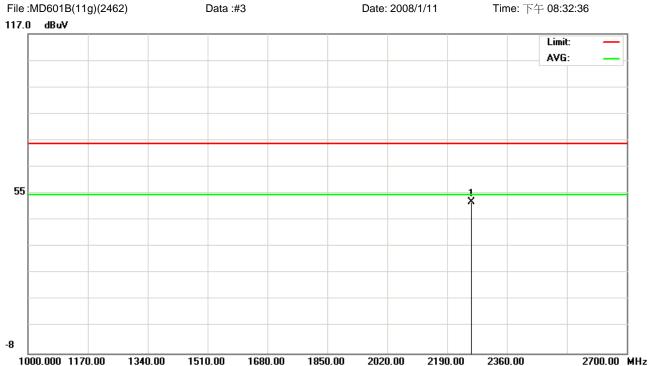
EUT: phone Distance: 3m M/N: MD6010

Mode: 11g

Note: CH11(2462MHz)

No. Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1 *	2183.200	50.80	0.30	51.10	74.00	-22.90	peak			





Site Temperature: **22** ℃ Polarization: Horizontal Humidity: 60 %

Limit: FCC part 15 (PK) Power:

EUT: phone Distance: 3m M/N: MD6010

Mode: 11g

Note: CH11(2462MHz)

No. Mł	κ. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1 *	2258.000	50.73	0.46	51.19	74.00	-22.81	peak			





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 3m

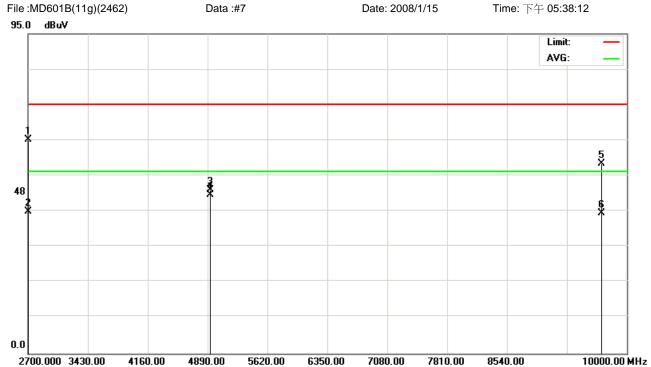
M/N: MD6010 Mode: 11g

Note: CH11(2462MHz)

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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	2	2700.000	41.13	22.58	63.71	74.00	-10.29	peak			
2	2	2700.000	19.68	22.58	42.26	54.00	-11.74	AVG			
3	4	4926.500	43.81	7.66	51.47	74.00	-22.53	peak			
4	* 4	4926.500	40.52	7.66	48.18	54.00	-5.82	AVG			
5	(9835.750	38.98	17.83	56.81	74.00	-17.19	peak			
6	(9835.750	23.87	17.83	41.70	54.00	-12.30	AVG			





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 3m

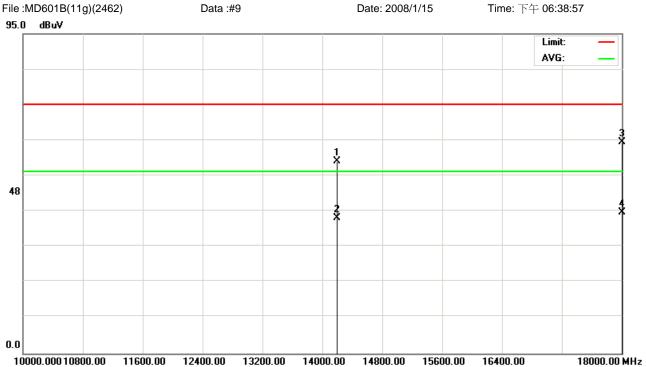
M/N: MD6010 Mode: 11g

Note: CH11(2462MHz)

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

					_						
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	2	2700.000	40.93	22.58	63.51	74.00	-10.49	peak			
2	2	2700.000	19.54	22.58	42.12	54.00	-11.88	AVG			
3	2	4926.500	40.83	7.66	48.49	74.00	-25.51	peak			
4	* 4	4926.500	39.54	7.66	47.20	54.00	-6.80	AVG			
5	9	9689.750	38.95	17.35	56.30	74.00	-17.70	peak			
6	9	9689.750	24.38	17.35	41.73	54.00	-12.27	AVG			





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 1m

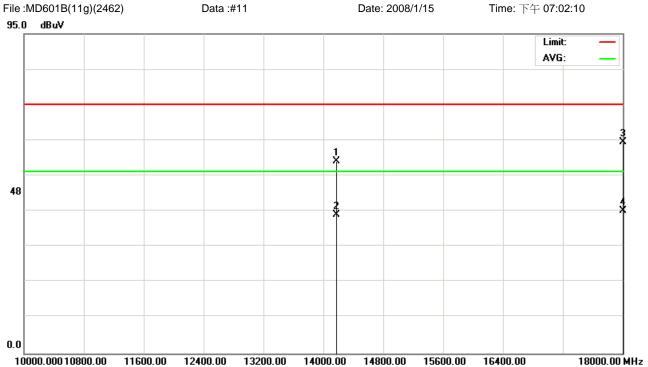
M/N: MD6010 Mode: 11g

Note: CH11(2462MHz)

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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	•	14200.00	38.21	18.86	57.07	74.00	-16.93	peak			
2	•	14200.00	21.34	18.86	40.20	54.00	-13.80	AVG			
3	* ,	18000.00	37.25	25.57	62.82	74.00	-11.18	peak			
4	•	18000.00	16.34	25.57	41.91	54.00	-12.09	AVG			





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: phone Distance: 1m

M/N: MD6010 Mode: 11g

Note: CH11(2462MHz)

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

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	1	4180.00	38.22	18.85	57.07	74.00	-16.93	peak			
2	1	4180.00	22.35	18.85	41.20	54.00	-12.80	AVG			
3	* 1	8000.00	37.27	25.57	62.84	74.00	-11.16	peak			
4	1	8000.00	16.81	25.57	42.38	54.00	-11.62	AVG			





Site Polarization: Vertical Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

Limit: FCC part 15 (PK)

EUT: phone

Distance: 1m

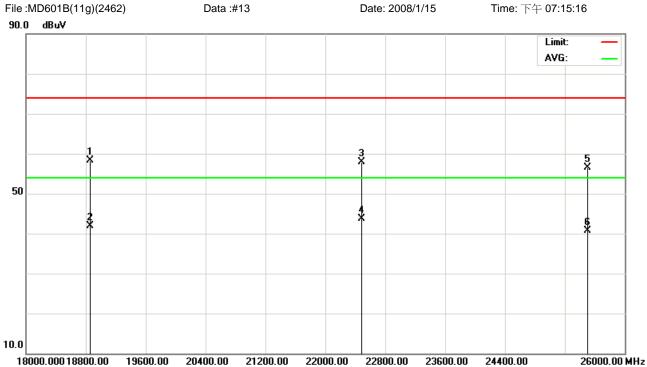
EUT: phone M/N: MD6010

Mode: 11g

Note: CH11(2462MHz)

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	1	9660.00	25.69	32.45	58.14	74.00	-15.86	peak			
2	1	9660.00	10.17	32.45	42.62	54.00	-11.38	AVG			
3	2	1860.00	26.53	30.94	57.47	74.00	-16.53	peak			
4	* 2	1860.00	12.16	30.94	43.10	54.00	-10.90	AVG			
5	2	25340.00	28.78	28.57	57.35	74.00	-16.65	peak			
6	2	25340.00	12.91	28.57	41.48	54.00	-12.52	AVG			





Site Polarization: Horizontal Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

Limit: FCC part 15 (PK)

EUT: phone

Power:

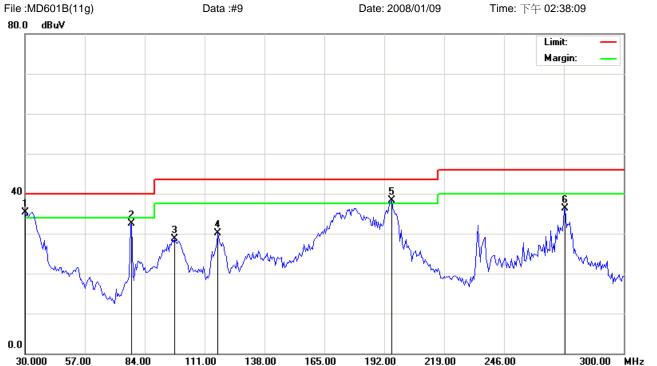
Distance: 1m

EUT: phone M/N: MD6010 Mode: 11g

Note: CH11(2462MHz)

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	•	18860.00	25.31	32.99	58.30	74.00	-15.70	peak			
2	•	18860.00	8.88	32.99	41.87	54.00	-12.13	AVG			
3	2	22480.00	27.45	30.52	57.97	74.00	-16.03	peak			
4	* 4	22480.00	13.14	30.52	43.66	54.00	-10.34	AVG			
5	2	25500.00	28.13	28.46	56.59	74.00	-17.41	peak			
6	2	25500.00	12.16	28.46	40.62	54.00	-13.38	AVG			





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11g Note: CH2462 Polarization: Vertical

Power:

Distance: 3m

Temperature: 22 ℃

Humidity: 60 %

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	*	30.0000	48.86	-13.49	35.37	40.00	-4.63	peak			
2		78.0600	49.26	-16.79	32.47	40.00	-7.53	peak			
3		97.5000	40.66	-11.90	28.76	43.50	-14.74	peak			
4	1	116.9400	43.79	-13.68	30.11	43.50	-13.39	peak			
5	! 1	195.2400	51.38	-13.09	38.29	43.50	-5.21	peak			
6	2	273.5400	47.23	-10.83	36.40	46.00	-9.60	peak			

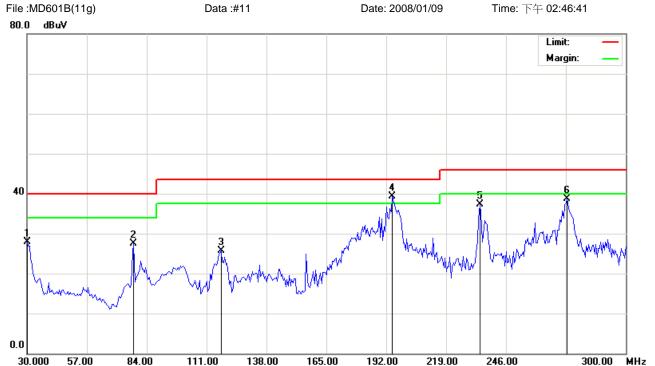
*:Maximum data

x:Over limit

!:over margin

•Reference Only





Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11g Note: CH2462 Polarization: Horizontal

Temperature:

22 ℃

Humidity:

60 %

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		30.0000	41.42	-13.49	27.93	40.00	-12.07	peak			
2		78.0600	44.28	-16.79	27.49	40.00	-12.51	peak			
3	1	117.4800	39.41	-13.77	25.64	43.50	-17.86	peak			
4	* -	194.7000	52.38	-13.12	39.26	43.50	-4.24	peak			
5	2	234.1200	49.06	-11.75	37.31	46.00	-8.69	peak			
6	2	273.5400	49.47	-10.83	38.64	46.00	-7.36	peak			

Power:

Distance: 3m

*:Maximum data

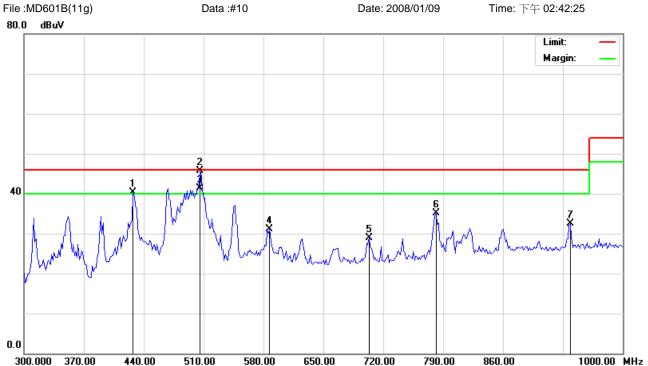
x:Over limit

!:over margin

•Reference Only



Radiated Emission Measurement



Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11g Note: CH2462 Polarization: Vertical Temperature:

Power: Humidity: 60 %

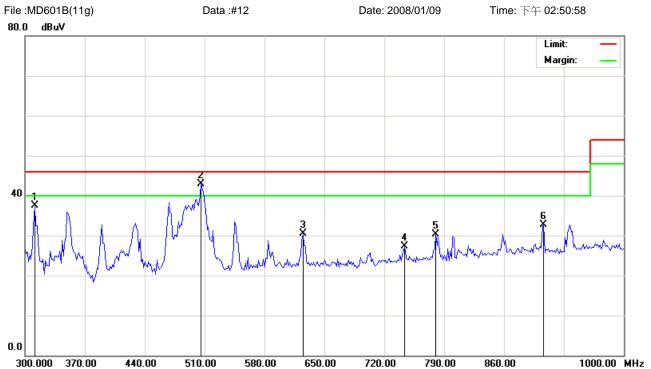
Distance: 3m

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	!	427.4000	48.43	-8.07	40.36	46.00	-5.64	peak			
2	*	505.8000	52.43	-6.74	45.69	46.00	-0.31	peak			
3	!	505.8000	48.01	-6.74	41.27	46.00	-4.73	QP			
4		587.0000	36.24	-5.10	31.14	46.00	-14.86	peak			
5		703.2000	32.88	-3.96	28.92	46.00	-17.08	peak			
6		781.6000	37.45	-2.38	35.07	46.00	-10.93	peak			
7		938.4000	32.40	0.19	32.59	46.00	-13.41	peak			

22 ℃



Radiated Emission Measurement



Site site#1

Limit: FCC Class B 3M Radiation

EUT:

M/N: MD6010 Mode: 11g Note: CH2462 Polarization: Horizontal

Temperature:

Humidity:

22 ℃

60 %

Power:

Distance: 3m

No.	Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		311.2000	47.37	-9.82	37.55	46.00	-8.45	peak			
2	*	505.8000	49.56	-6.74	42.82	46.00	-3.18	peak			
3		624.8000	35.12	-4.64	30.48	46.00	-15.52	peak			
4		743.8000	30.36	-3.15	27.21	46.00	-18.79	peak			
5		780.2000	32.74	-2.36	30.38	46.00	-15.62	peak			
6		906.2000	32.87	-0.19	32.68	46.00	-13.32	peak			



4. Maximum Conducted Output Power Requirements

4.1 Test Condition & Setup:

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.

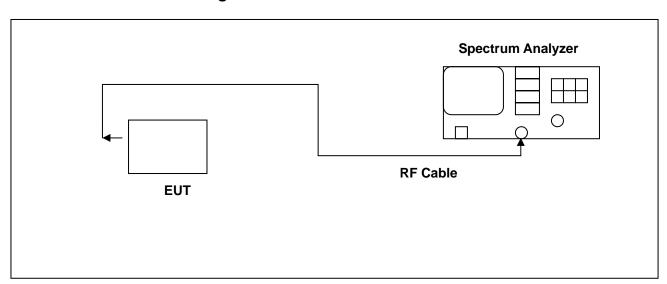
The tests below are run with the EUT's transmitter set at high power in TX mode. The EUT is needed to force selection of output power level and channel number. While testing, EUT was set to transmit continuously. Remove the Subjective device's antenna and connect the RF output port to spectrum analyzer.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

Use a direct connection between the antenna port of transmitter and the spectrum Analyzer, for prevent the spectrum analyzer 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 meter. Power was read directly and cable loss correction was added to the reading to obtain power at the EUT antenna terminals.

4.2 Test Instruments Configuration:





4.3 Test Equipment List:

Describe	Manufacturer	Model	Serial Number	Calibration	
Describe	Manufacturei	Wodel	Serial Number	Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4445A	MY45300744	Nov. 11, 2006	Nov. 11, 2007

4.4 Test Result:

802.11b

Frequency (MHz)	Output (dBm)	Required Limit
2412	21.88	<30dBm
2437	22.01	<30dBm
2462	21.87	<30dBm

802.11g

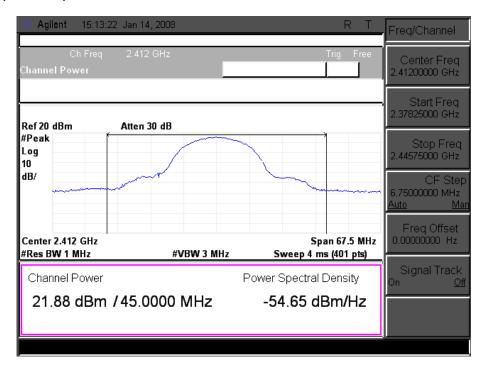
Frequency (MHz)	Output (dBm)	Required Limit
2412	20.17	<30dBm
2437	20.02	<30dBm
2462	19.63	<30dBm

Note: Test Graphs See next page.

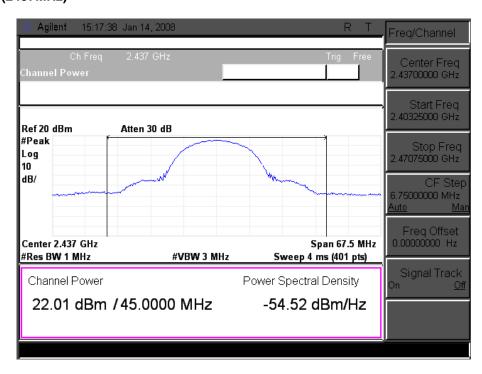


4.5 Test Graphs

802.11b CH1 (2412MHz)

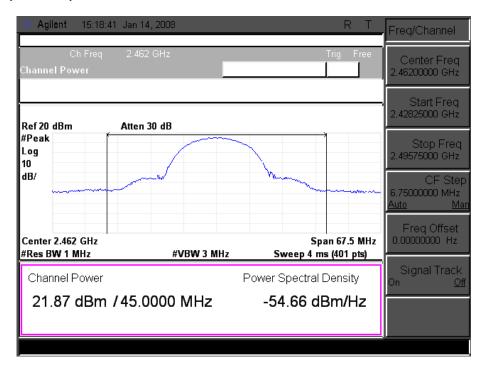


802.11b CH6 (2437MHz)



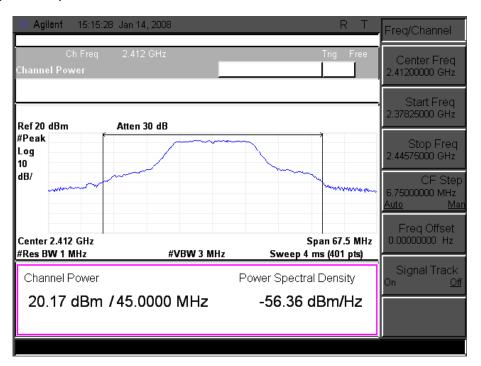


802.11b CH11 (2462MHz)

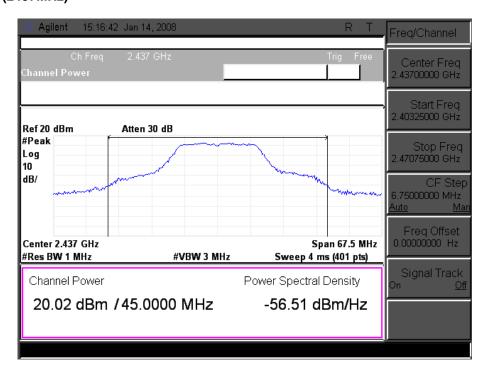




802.11g CH1 (2412MHz)

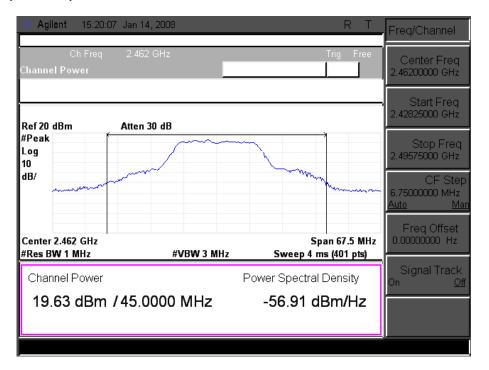


802.11g CH6 (2437MHz)





802.11g CH11 (2462MHz)





5. Minimum 6dB RF Bandwidth Requirements

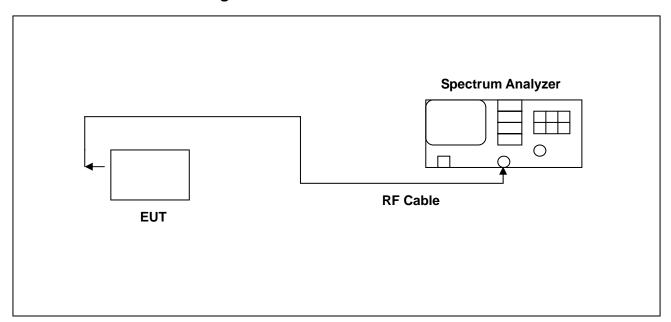
5.1 Test Condition & Setup:

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 1, 6, 11)

5.2 Test Instruments Configuration:



5.3 Test Equipment List:

Describe	Manufacturer	Model	Serial Number	Calibration	
Describe	Manufacture	Wiodei	Serial Nulliber	Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4445A	MY45300744	Nov. 29, 2007	Nov. 29, 2008



5.4 Test Result:

802.11b

Frequency (MHz)	Min. 6dB Bandwidth (MHz)	Required Limit
2412	9.92	> 500 KHz
2437	8.75	> 500 KHz
2462	9.08	> 500 KHz

802.11g

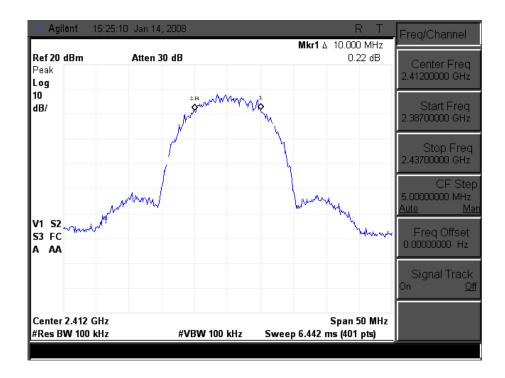
Frequency (MHz)	Min. 6dB Bandwidth (MHz)	Required Limit
2412	16.08	> 500 KHz
2437	16.08	> 500 KHz
2462	16.08	> 500 KHz

Note: Test Graphs See next page.

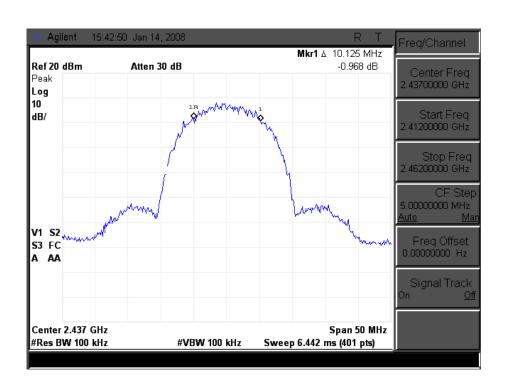


5.5 Test Graphs

802.11b (2412MHz)

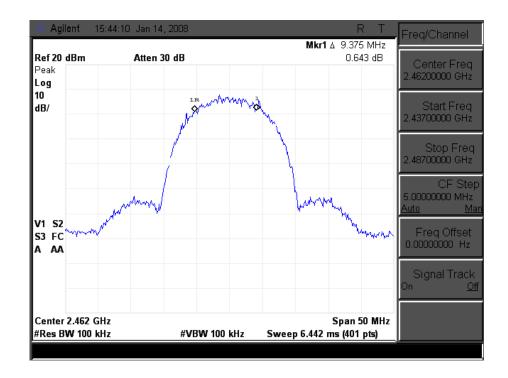


802.11b (2437MHz)



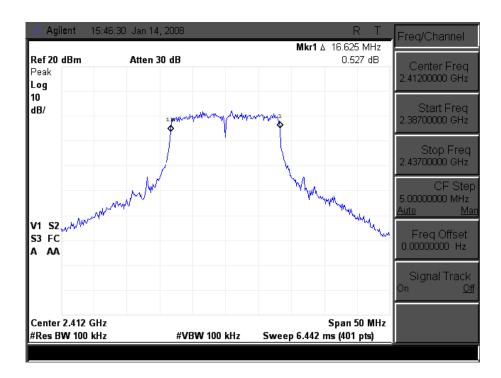


802.11b (2462MHz)

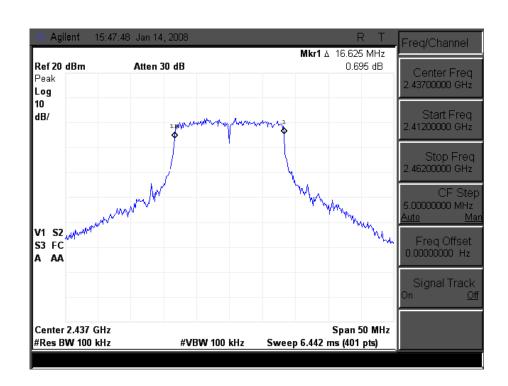




802.11g (2412MHz)

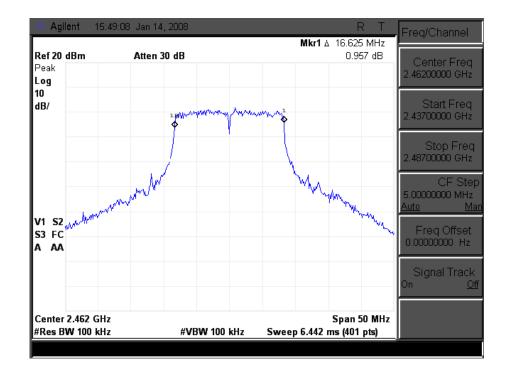


802.11g (2437MHz)





802.11g (2462MHz)





6. Maximum Power Density Requirements

6.1 Test Condition & Setup:

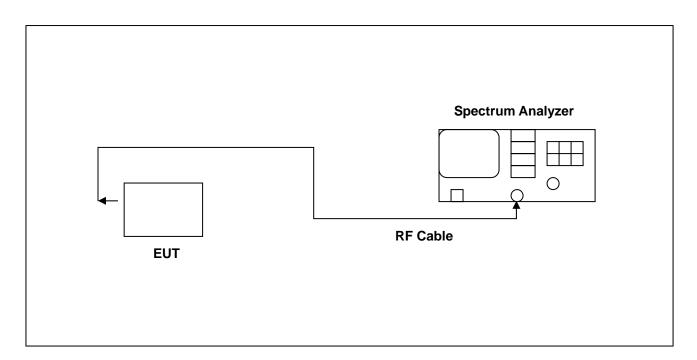
The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

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.

6.2 Test Instruments Configuration:





6.3 Test Equipment List:

Describe	Manufacturer	Model	Serial Number	Calibration	
Describe	Manufacture	Wodel	Serial Nulliber	Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4445A	MY45300744	Nov. 29, 2007	Nov. 29, 2008

6.4 Test Result:

802.11b

Frequency (MHz)	Power Density (dBm)	Required Limit
2412	-6.712	<8dBm
2437	-6.642	<8dBm
2462	-6.875	<8dBm

802.11g

Frequency (MHz)	Power Density (dBm)	Required Limit
2412	-13.56	<8dBm
2437	-13.60	<8dBm
2462	-13.89	<8dBm

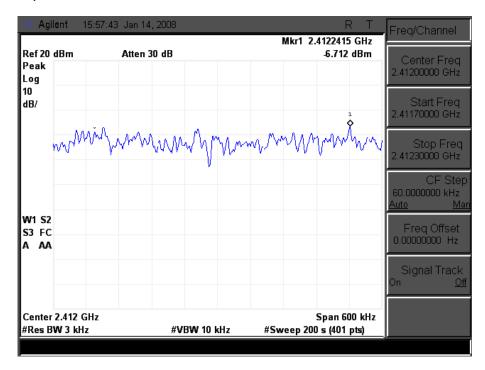
Note:

- 1. Frequency Span= 600 kHz
- 2. Sweep Time = Frequency Span/3 kHz=200secs
- 3. Test Graphs See next page.

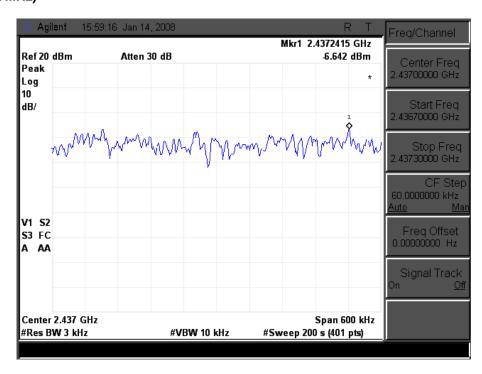


6.5 Test Graphs

802.11b (2412MHz)

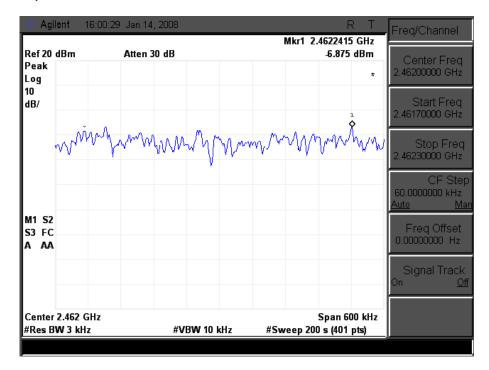


802.11b (2437MHz)



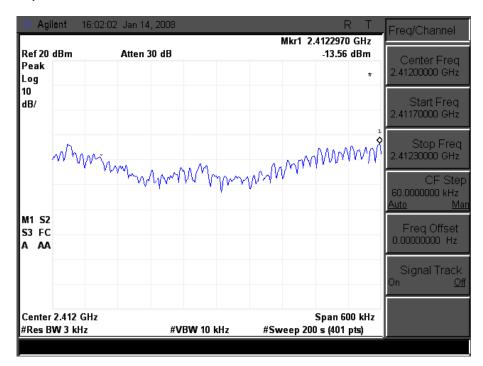


802.11b (2462MHz)

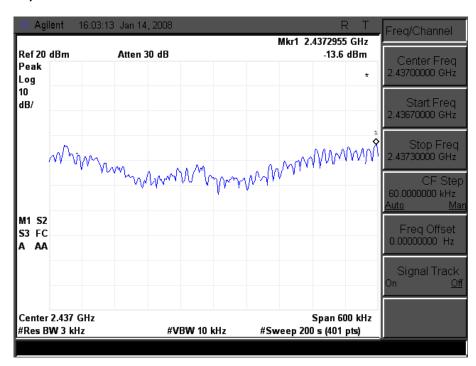




802.11g (2412MHz)

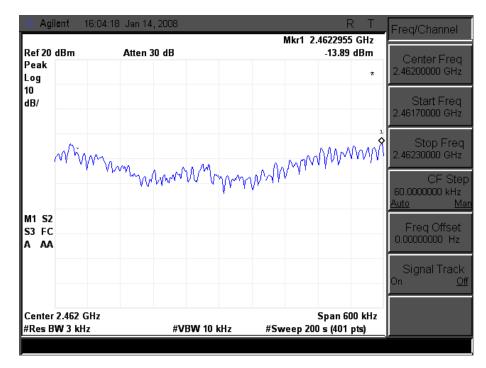


802.11g (2437MHz)





802.11g (2462MHz)





7. Out of Band Conducted Emissions Requirements

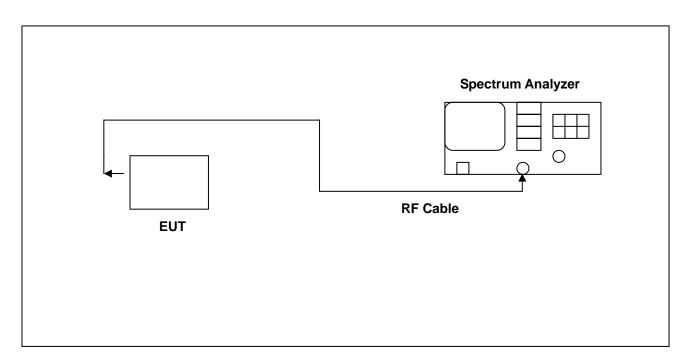
7.1 Test Condition & Setup:

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.

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 1, 6, 11)

7.2 Test Instruments Configuration:





7.3 Test Equipment List:

Describe	Manufacturer	Model	Serial Number	Calibration	
Describe	Manufacturer Model		Serial Nulliber	Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4445A	MY45300744	Nov. 11, 2006	Nov. 11, 2007

7.4 Test Result:

Refer to attached data sheets. Data shows out of band emissions are suppressed well below the -20 dBc minimum required by the Rules.

Note: Test Graphs See next page.

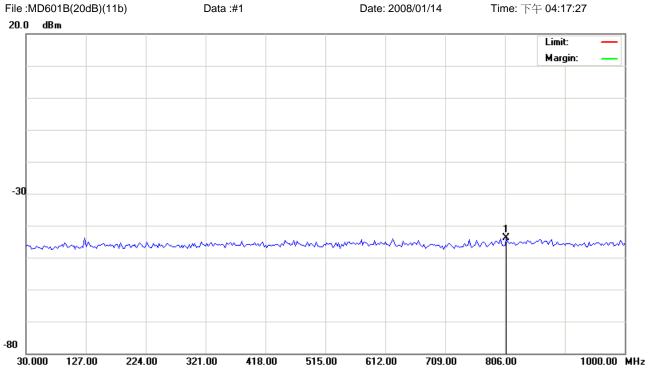


7.5 Test Graphs

7.5.1 802.11b Test Graphs

Please refer to next pager of detail testing data.





Site site#1 Polarization: Temperature: 26 °C

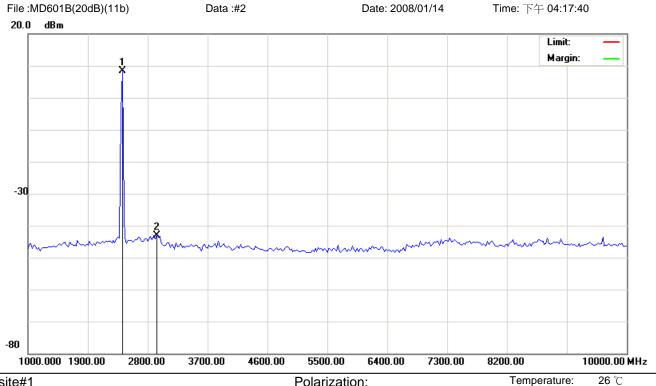
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: MD6010 Mode: 11b Note: ch2412

No. M	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
	MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1 *	808.4250	-44.84	1.00	-43.84			peak			





Site site#1

Limit:

EUT:

M/N: MD6010 Mode: 11b Note: ch2412

Temperature: Polarization: Humidity:

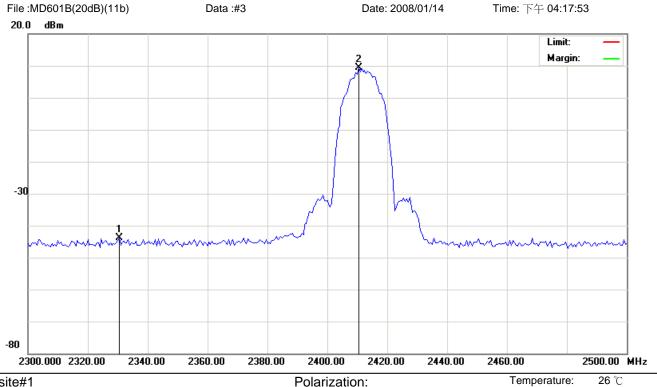
55 %

Power: AC 110V/60Hz

Distance:

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2417.500	7.31	1.01	8.32			peak			
2		2935.000	-44.08	1.01	-43.07			peak			





AC 110V/60Hz

Humidity:

55 %

Site site#1

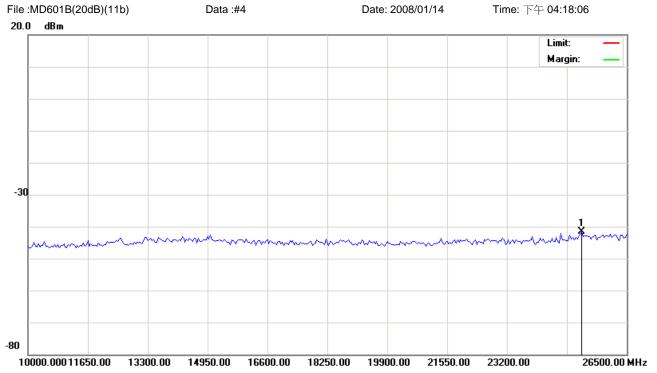
Polarization: Limit: Power:

EUT: Distance:

M/N: MD6010 Mode: 11b Note: ch2412

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		2330.500	-44.99	1.01	-43.98			peak			
2	*	2410.500	8.34	1.01	9.35			peak			





Site site#1 Polarization: Temperature: 26 °C

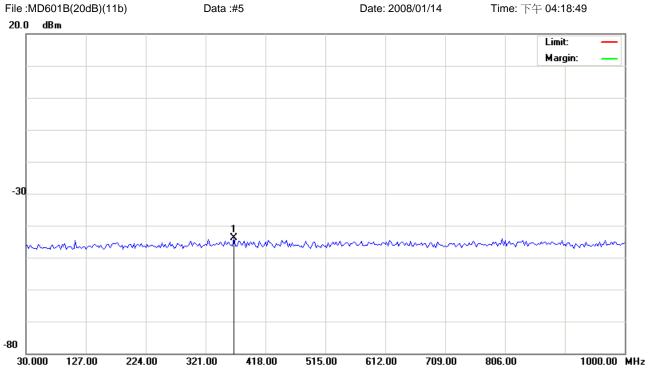
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: MD6010 Mode: 11b Note: ch2412

No. Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
	MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1 *	25262.50	-42.64	1.10	-41.54			peak			





Site site#1 Polarization: Temperature: 26 °C

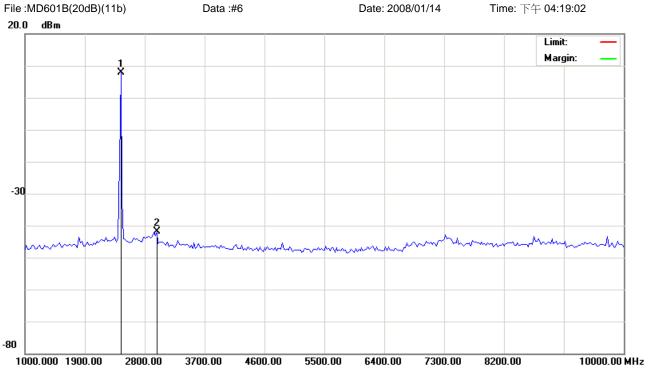
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: MD6010 Mode: 11b Note: ch2437

No. Mk	ι. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
	MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1 *	367.0750	-44.80	1.00	-43.80			peak			





Temperature:

Humidity:

26 ℃

55 %

Site site#1 Polarization:

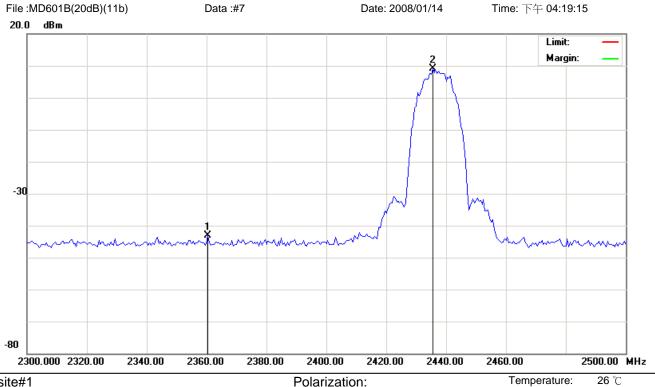
Limit: Power: AC 110V/60Hz

EUT: Distance:

M/N: MD6010 Mode: 11b Note: ch2437

No.	Mŀ	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2440.000	6.78	1.01	7.79			peak			
2		2980.000	-42.96	1.01	-41.95			peak			





Site site#1

Limit:

EUT:

M/N: MD6010 Mode: 11b Note: ch2437

Polarization:

Power: AC 110V/60Hz Humidity:

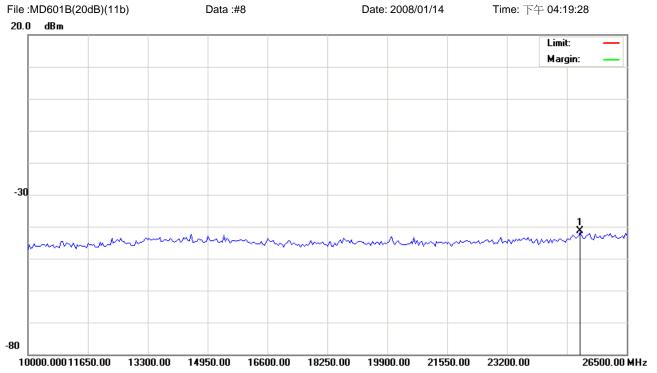
26 ℃

55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		2360.500	-44.07	1.01	-43.06			peak			
2	*	2435.500	8.21	1.01	9.22			peak			

Distance:





Site site#1 Polarization: Temperature: 26 °C

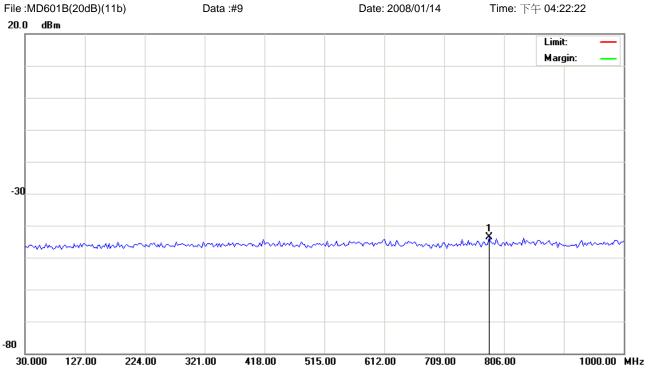
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: MD6010 Mode: 11b Note: ch2437

No. Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
	MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1 *	25221.25	-42.38	1.10	-41.28			peak			





Site site#1 Polarization: Temperature: $26 \, ^{\circ}$

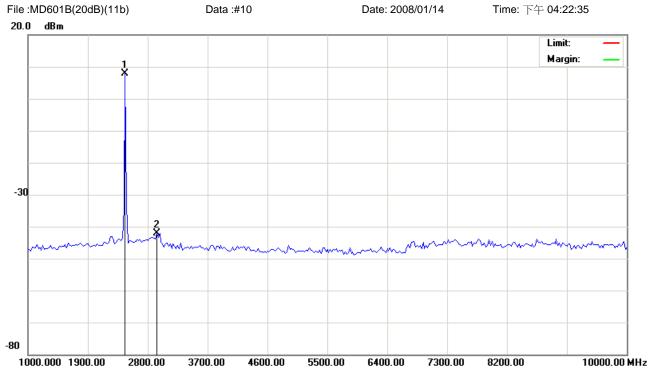
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: MD6010 Mode: 11b Note: ch2462

No. M	k. Fre			Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
	MH	z dB	m	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1 *	781.75	00 -44.	66	1.00	-43.66			peak			





Site site#1

Limit:

EUT:

M/N: MD6010 Mode: 11b Note: ch2462 Polarization:

Power: AC 110V/60Hz

F

26 ℃

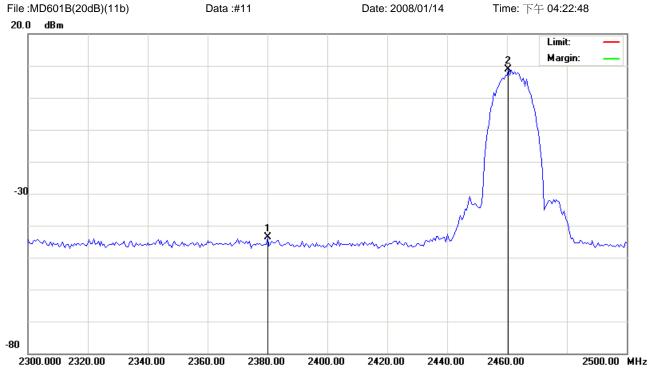
Humidity: 55 %

Temperature:

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2462.500	6.75	1.01	7.76			peak			
2		2935.000	-43.09	1.01	-42.08			peak			

Distance:





Site site#1 Polarization: Temperature: 26 °C

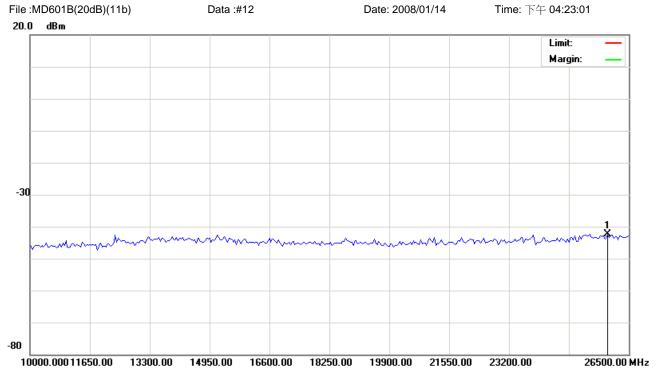
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: MD6010 Mode: 11b Note: ch2462

No.	М	k.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
			MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		238	30.000	-44.51	1.01	-43.50			peak			
2	*	246	60.500	7.96	1.01	8.97			peak			





Site site#1 Polarization: Temperature: 26 °C

Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: MD6010 Mode: 11b Note: ch2462

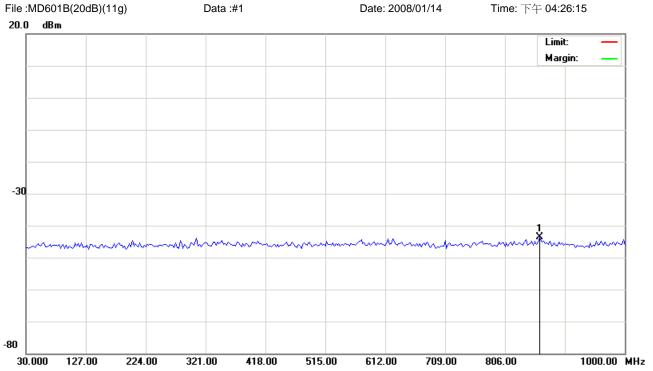
No. Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
	MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1 *	25922.50	-43.49	1.11	-42.38			peak			



7.5.2 802.11g Test Graphs

Please refer to next pager of detail testing data.





Site site#1 Polarization: Temperature: 26 °C

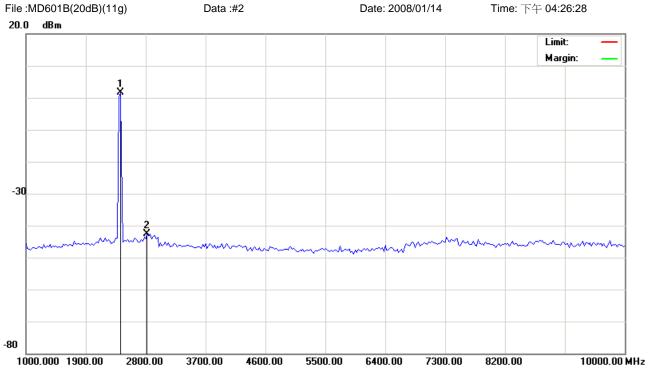
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: MD6010 Mode: 11g Note: ch2412

No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
	MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1 *	861.7750	-44.57	1.00	-43.57			peak			





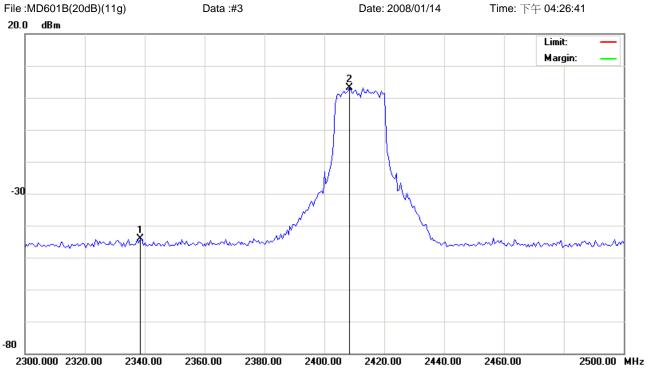
Site site#1Polarization:Temperature:26 ℃Limit:Power:AC 110V/60HzHumidity:55 %

EUT: Distance:

M/N: MD6010 Mode: 11g Note: ch2412

No.	MI	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2417.500	0.70	1.01	1.71			peak			
2		2822.500	-43.62	1.01	-42.61			peak			





Site site#1 Polarization: Temperature:

Limit: Power: AC 110V/60Hz Humidity: 55 %

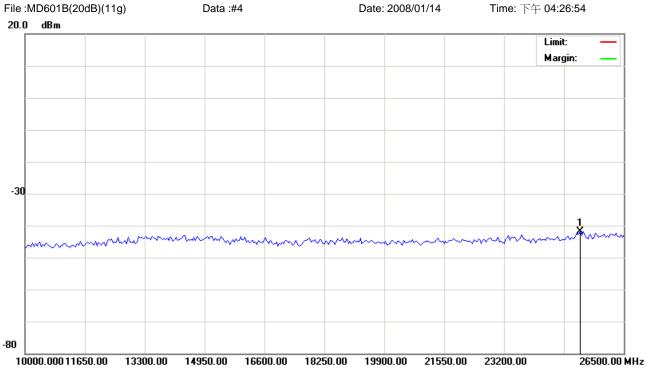
26 ℃

EUT: Distance:

M/N: MD6010 Mode: 11g Note: ch2412

No.	MI	k.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
			MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		233	38.500	-45.21	1.01	-44.20			peak			
2	*	240	08.500	2.24	1.01	3.25			peak			





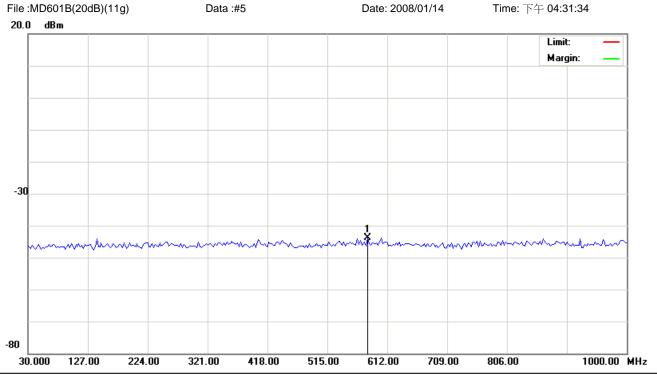
Site site#1 Polarization: Temperature: 26 °C Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: MD6010 Mode: 11g Note: ch2412

No. Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
	MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1 *	25303.75	-42.87	1.11	-41.76			peak			





Limit:

EUT:

M/N: MD6010 Mode: 11g Note: ch2437

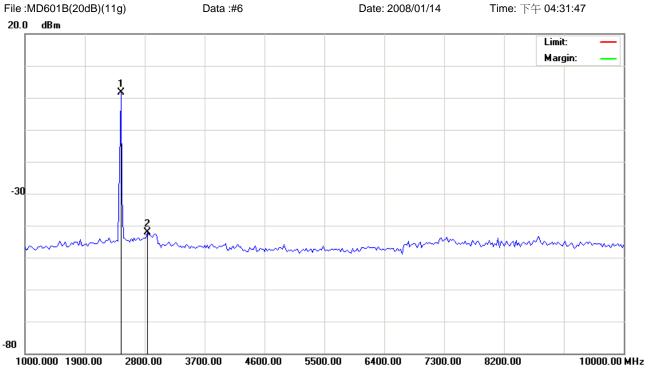
Polarization: Temperature: **26** ℃ 55 %

Power: AC 110V/60Hz Humidity:

Distance:

No.	MŁ	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	580.4750	-44.85	1.00	-43.85			peak			





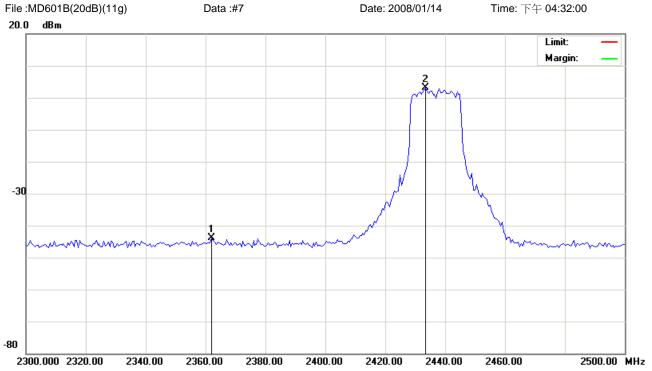
Site site#1Polarization:Temperature:26 ℃Limit:Power:AC 110V/60HzHumidity:55 %

EUT: Distance:

M/N: MD6010 Mode: 11g Note: ch2437

No.	Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2440.000	0.71	1.01	1.72			peak			
2		2845.000	-43.16	1.01	-42.15			peak			





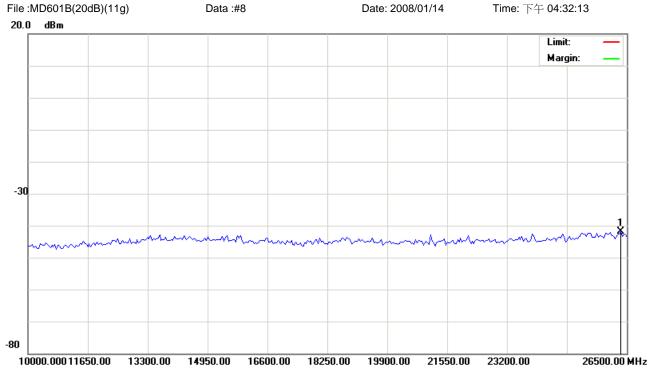
Site site#1 Polarization: Temperature: 26 °C Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: MD6010 Mode: 11g Note: ch2437

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		2362.000	-44.98	1.01	-43.97			peak			
2	*	2433.500	2.15	1.01	3.16			peak			





Site site#1 Polarization: Temperature: 26 ℃

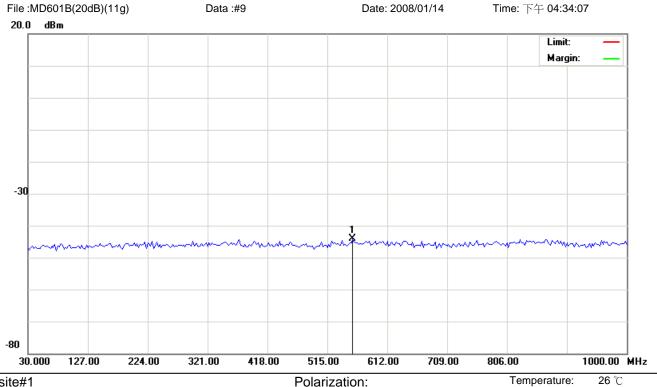
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: MD6010 Mode: 11g Note: ch2437

No. Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
	MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1 *	26335.00	-42.98	1.11	-41.87			peak			





Polarization:

Humidity: 55 %

Limit: EUT:

Distance:

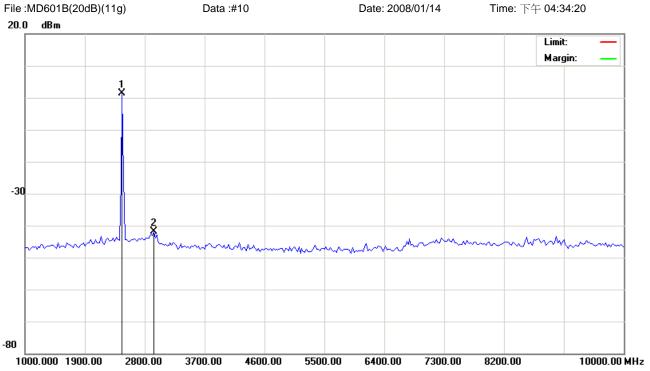
M/N: MD6010 Mode: 11g Note: ch2462

No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
	MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1 *	556.2250	-45.00	1.00	-44.00			peak			

Power:

AC 110V/60Hz





Site site#1 Polarization: Temperature: 26 °C

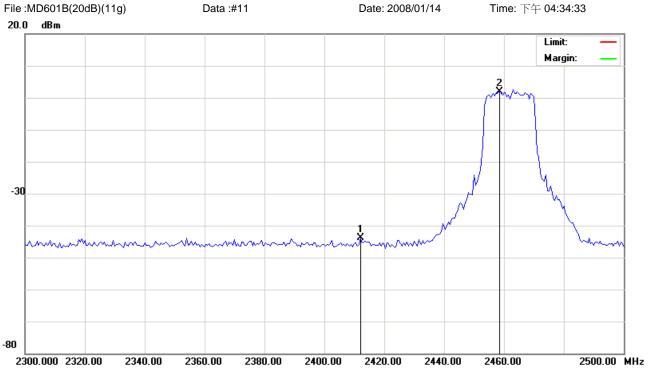
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: MD6010 Mode: 11g Note: ch2462

No.	Mł	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2462.500	0.34	1.01	1.35			peak			
2		2935.000	-42.94	1.01	-41.93			peak			





Site site#1 Polarization: Temperature: $26 \, ^{\circ}$

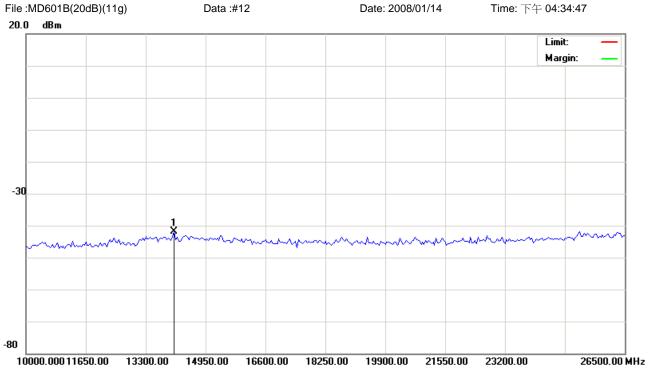
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: MD6010 Mode: 11g Note: ch2462

No.	М	lk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
			MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		24	12.000	-44.79	1.01	-43.78			peak			
2	*	24	58.500	0.89	1.01	1.90			peak			





Site site#1 Polarization: Temperature: 26 $^{\circ}$ C

Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: MD6010 Mode: 11g Note: ch2462

No. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height		
	MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1 *	14083.75	-42.86	1.06	-41.80			peak			



8. Band Edges Requirements

8.1 Test Condition & Setup:

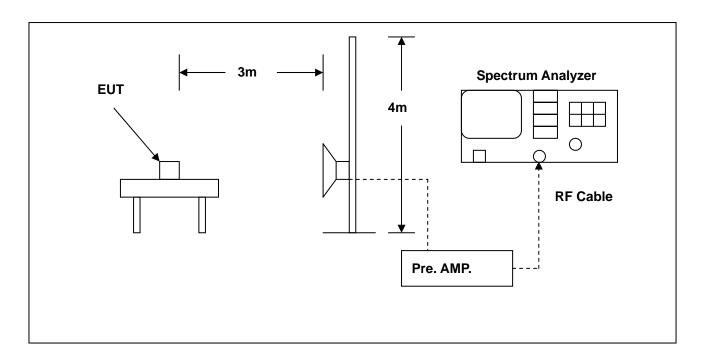
The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

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.

8.2 Test Instruments Configuration:





8.3 Test Equipment List:

Describe	Manufacturer	Model	Serial Number	Calib	ration
Describe	Manufacturei	Woder	Serial Number	Cal. Date	Due Date
Spectrum Analyzer	Agilent	E4408B	MY45107753	May. 28, 2007	May. 28, 2008
Pre Amplifier	Agilent	8449B	3008A02237	May. 28, 2007	May. 28, 2008
Horn Antenna	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	Jun. 26, 2007	Jun. 26, 2008



8.4 Test Result:

8.4.1 Test Result:

Applicant : Innovation Wireless Inc.

Model No : MD6010

EUT : Wi-Fi/GSM Dual Mode Phone

Test Mode : 802.11b Low CH & High CH

Test Date : 01/09/2008

Test Graphs See next page.

Notes:

1. Margin= Amplitude - Limits

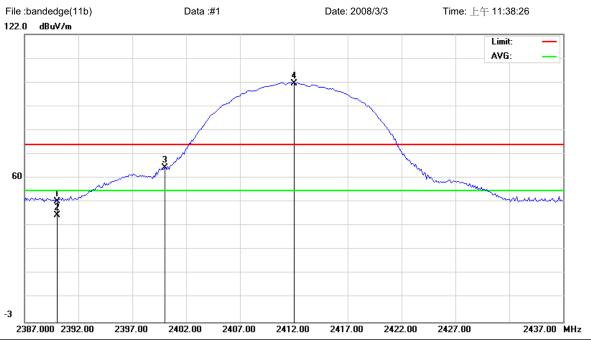
2. Height of table for EUT placed: 0.8 Meter.

- 3. ANT= Antenna height.
- 4. Duty= Duty cycle correction factor.
- 5. Dis= Distance extrapolation factor.
- 6. Amplitude= Reading Amplitude Amplifier gain + Cable loss + Antenna factor

(Auto calculate in spectrum analyzer)

7. Actual Amp= Amplitude - Duty - Dis.





Limit: FCC part 15 (PK)

EUT:

M/N:

Mode: 11b Note: 2412MHz Polarization: Vertical Temperature: 22 °C

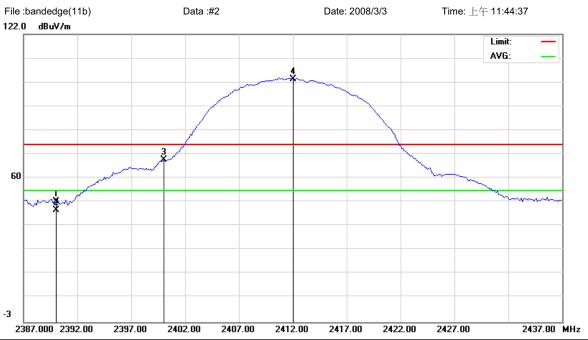
Power: Humidity: 60 %

Distance: 3m

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	49.17	0.16	49.33	74.00	-24.67	peak			
2	2	2390.000	43.26	0.16	43.42	54.00	-10.58	AVG			
3	- 2	2400.000	63.93	0.12	64.05	74.00	-9.95	peak			
4	* 4	2412.000	100.57	0.10	100.67	74.00	26.67	peak			

^{*:}Maximum data x:Over limit !:over margin





Limit: FCC part 15 (PK)

EUT:

M/N:

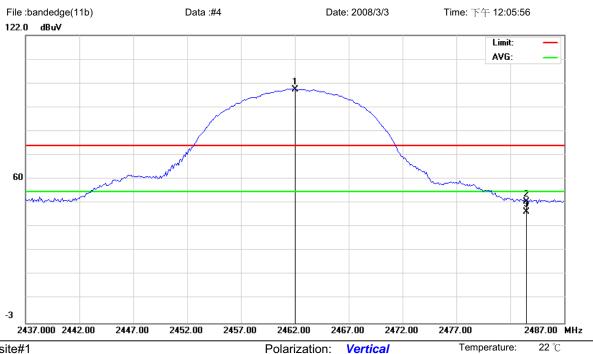
Mode: 11b Note: 2412MHz Polarization: *Horizontal* Temperature: 22 °C Power: Humidity: 60 %

Distance: 3m

No.	Mk	k. 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	49.23	0.16	49.39	74.00	-24.61	peak			
2		2390.000	45.52	0.16	45.68	54.00	-8.32	AVG			
3		2400.000	67.40	0.12	67.52	74.00	-6.48	peak			
4	*	2412.000	102.28	0.10	102.38	74.00	28.38	peak			

^{*:}Maximum data x:Over limit !:over margin





Limit: FCC part 15 (PK)

EUT:

M/N:

Mode: 11b Note: 2462MHz Polarization: Vertical Temperature: Humidity: 60 % Power:

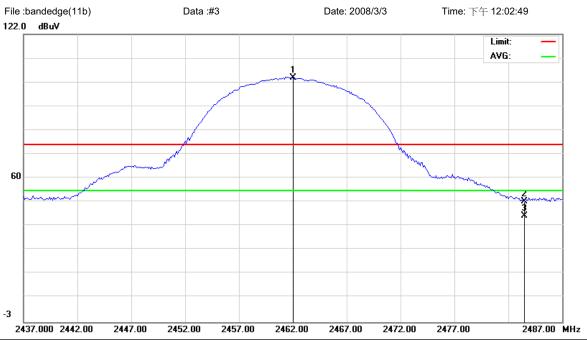
Distance: 3m

No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2462.000	98.38	0.16	98.54	74.00	24.54	peak			
2		2483.500	49.30	0.25	49.55	74.00	-24.45	peak			
3		2483.500	45.18	0.25	45.43	54.00	-8.57	AVG			

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

•Reference Only





Limit: FCC part 15 (PK)

EUT:

M/N:

Mode: 11b Note: 2462MHz Polarization: *Horizontal* Temperature: 22 °C Power: Humidity: 60 %

Distance: 3m

No.	Mk	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1	*	2462.000	102.88	0.16	103.04	74.00	29.04	peak			
2		2483.500	49.06	0.25	49.31	74.00	-24.69	peak			
3		2483.500	42.91	0.25	43.16	54.00	-10.84	AVG			

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

•Reference Only



8.4.2 Test Result:

Applicant : Innovation Wireless Inc.

Model No : MD6010

EUT : Wi-Fi/GSM Dual Mode Phone

Test Mode : 802.11g Low CH & High CH

Test Date : 01/09~11/2008

Test Graphs See next page.

Notes:

1. Margin= Amplitude - Limits

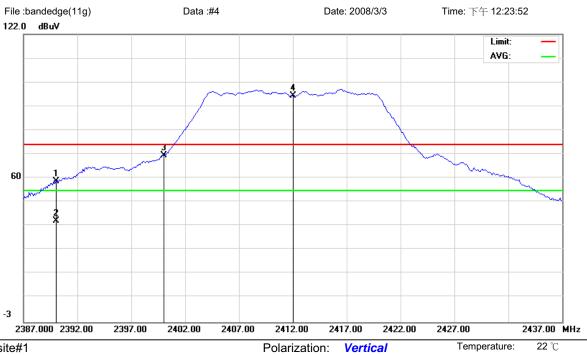
2. Height of table for EUT placed: 0.8 Meter.

- 3. ANT= Antenna height.
- 4. Duty= Duty cycle correction factor.
- 5. Dis= Distance extrapolation factor.
- 6. Amplitude= Reading Amplitude Amplifier gain + Cable loss + Antenna factor

(Auto calculate in spectrum analyzer)

7. Actual Amp= Amplitude - Duty - Dis.





Limit: FCC part 15 (PK)

EUT:

M/N:

Mode: 11g

Note:

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	57.96	0.16	58.12	74.00	-15.88	peak			
2		2390.000	40.82	0.16	40.98	54.00	-13.02	AVG			
3		2400.000	69.28	0.12	69.40	74.00	-4.60	peak			
4	*	2412.000	95.06	0.10	95.16	74.00	21.16	peak			

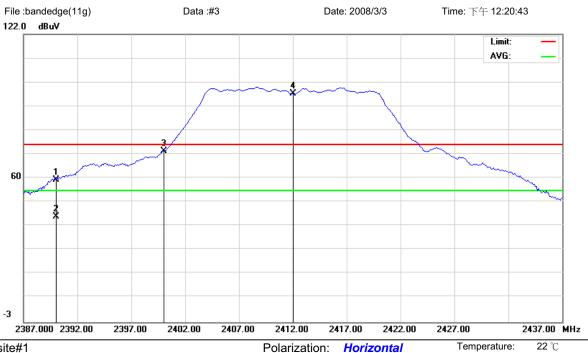
Power: Distance: 3m

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

•Reference Only

Humidity:





Limit: FCC part 15 (PK)

EUT:

M/N:

Mode: 11g

Note:

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	2	2390.000	58.64	0.16	58.80	74.00	-15.20	peak			
2	2	2390.000	42.47	0.16	42.63	54.00	-11.37	AVG			
3	2	2400.000	71.22	0.12	71.34	74.00	-2.66	peak			
4	* 2	2412.000	96.10	0.10	96.20	74.00	22.20	peak			

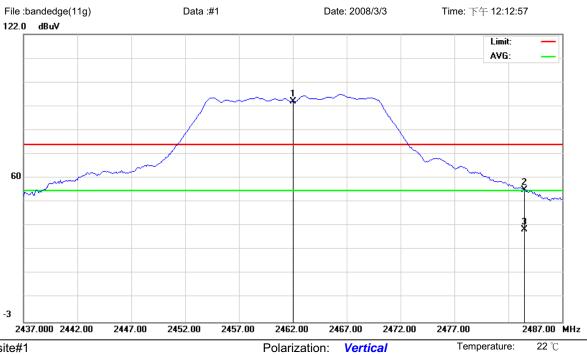
Power: Distance: ^{3m}

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

•Reference Only

Humidity:





Limit: FCC part 15 (PK)

EUT:

M/N:

Mode: 11g

Note:

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	*	2462.000	92.62	0.16	92.78	74.00	18.78	peak			
2		2483.500	54.11	0.25	54.36	74.00	-19.64	peak			
3		2483.500	36.81	0.25	37.06	54.00	-16.94	AVG			

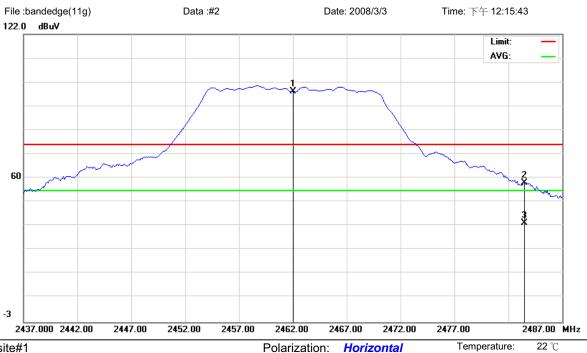
Power: Distance: 3m

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

•Reference Only

Humidity:





Limit: FCC part 15 (PK)

EUT:

M/N:

Mode: 11g

Note:

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	*	2462.000	96.89	0.16	97.05	74.00	23.05	peak			
2		2483.500	57.16	0.25	57.41	74.00	-16.59	peak			
3		2483.500	39.70	0.25	39.95	54.00	-14.05	AVG			

Power: Distance: 3m

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

•Reference Only

Humidity:



9. Antenna Requirements

9.1 Standard Applicable:

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.

9.2 Antenna Connector Construction

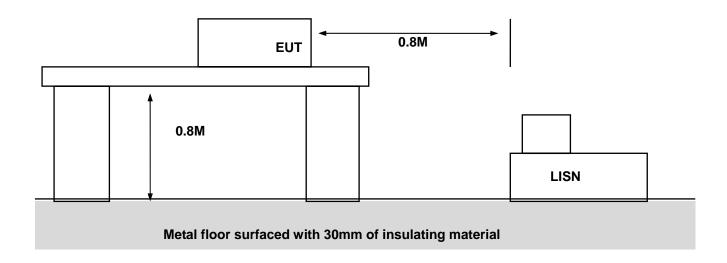
The antenna used in this product is external Whip antenna. And the maximum Gain of this antenna is only **0.3** dBi.

Note: Test Graphs See next page



Appendix A - EUT Test SETUP

MEASUREMENT OF POWER LINE CONDUCTED RFI VOLTAGE





MEASUREMENT OF RADIATED EMISSION

