

FCC PART 15.247
EMI MEASUREMENT AND TEST REPORT
For

Joyplus International Enterprise Limited
805 Technology Building, Duoli Industrial Park, Shangmeilin, Meihua Road, Futian Dist.,
Shenzhen, China

FCC ID: Z4UNVT21204

May 30, 2012

This Report Concerns: Original Report	Equipment Type: Tablet PC
Test Engineer:	Eric Li 
Report No.:	BST12050221Y-1E-3
Receive EUT Date/Test Date:	May 10, 2012/ May 11-29, 2012
Reviewed By President:	Christina Deng 
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1. GENERAL INFORMATION

1.1. Report information

1.1.1.This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that BST approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that BST in any way guarantees the later performance of the product/equipment.

1.1.2.The sample/s mentioned in this report is/are supplied by Applicant, BST therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.

Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through BST, unless the applicant has authorized BST in writing to do so.

Test Facility -

The test site used to collect the radiated data is located on the address of

Shenzhen Certification Technology Service Co., Ltd

(FCC Registered Test Site Number: 197647) on

2F, Building B, East Area of Nanchang Second Industrial Zone, Gushu 2nd Road,

Bao'an District, shenzhen 518126, China

The Test Site is constructed and calibrated to meet the FCC requirements.

1.2. Measurement Uncertainty

Available upon request.

2. PRODUCT DESCRIPTION

2.1. EUT Description

Applicant	:	Joyplus International Enterprise Limited
Address	:	805 Technology Building, Duoli Industrial Park, Shangmeilin, Meihua Road, Futian Dist., Shenzhen, China
Manufacturer	:	Joyplus International Enterprise Limited
Address	:	805 Technology Building, Duoli Industrial Park, Shangmeilin, Meihua Road, Futian Dist., Shenzhen, China
EUT Description	:	Tablet PC
Trade Name	:	JOYPLUS
Modulation	:	802.11b: DSSS 802.11g/n: OFDM
Wi-fi Frequency Band	:	IEEE 802.11b/g: 2412-2462MHz IEEE802.11n HT20: 2412-2462MHz
Number of Channels	:	11 Channels
Model Number	:	M97B
Power Supply	:	DC 12V (Powered by Adapter) or DC 7.4V (Li-ion battery)
Antenna gain	:	0dBi(2.4GHz)

2.2. Block Diagram of EUT Configuration

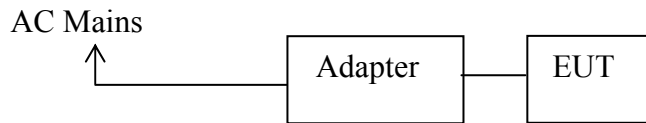


Figure 1 EUT SETUP

2.3. Support Equipment List

Table 2 Ancillary Equipment

Name	Model No	S/N	Manufacturer	Used “ ”
Adapter Input: AC 100-240V, 50/60Hz, 1.5A Output: DC 12V, 2A	DJ-U48S1202	--	Dajing	

2.4. Test Conditions

Temperature: 23~25

Relative Humidity: 50~63 %

After the preliminary test, we found to emit the worst emissions and therefore had been tested under operating condition.

IEEE 802.11b:

Channel Low (2412MHz), Channel Mid (2442MHz) and Channel High (2472MHz) with 1Mbps data rate were chosen for full testing.

IEEE 802.11g:

Channel Low (2412MHz), Channel Mid (2442MHz) and Channel High (2472MHz) with 6Mbps data rate were chosen for full testing.

IEEE 802.11n HT20:

Channel Low (2412MHz), Channel Mid (2442MHz) and Channel High (2472MHz) with 6.5Mbps data rate were chosen for full testing.

3. FCC ID LABEL

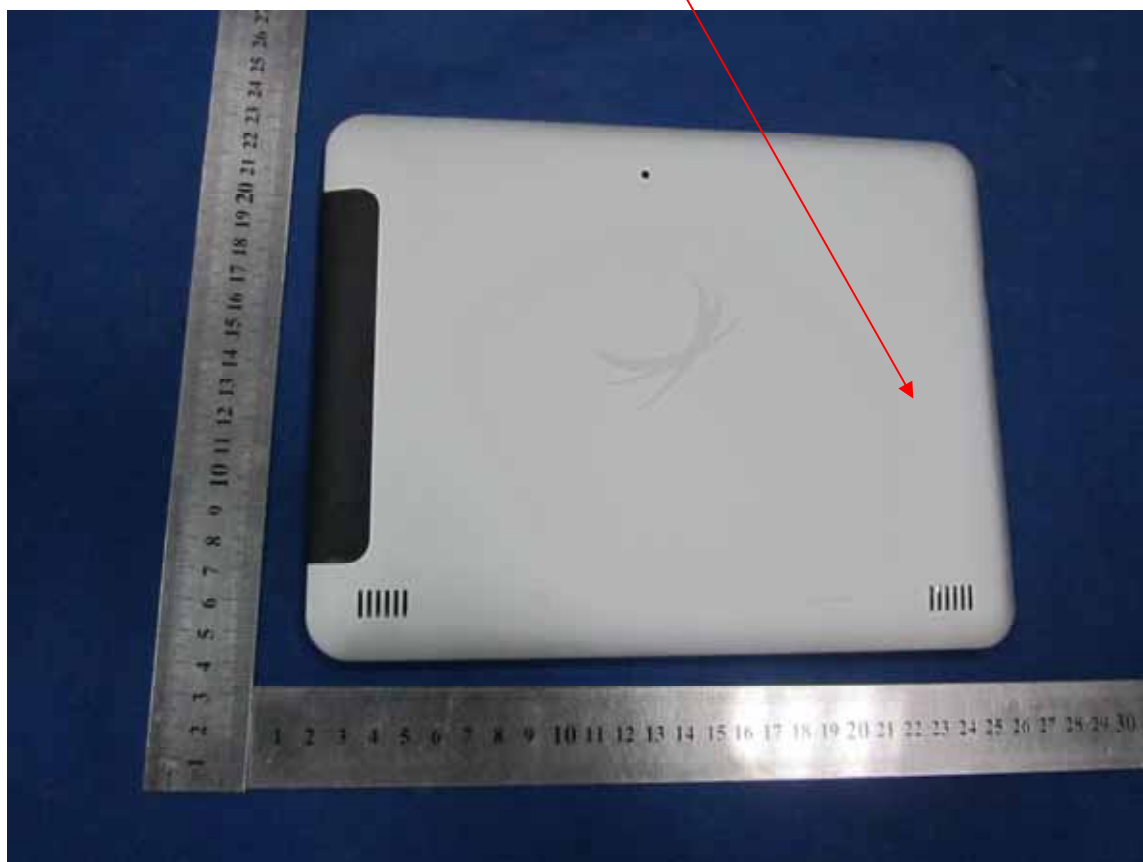
FCC ID: Z4UNVT21204

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and**
- 2. This device must accept any interference received, including interference that may cause undesired operation.**

Label Location on EUT

EUT View/ FCC ID Label Location



4. TEST RESULTS SUMMARY

FCC 15 Subpart C, Paragraph 15.247

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.247 (i) , §1.1307 (b) (1), §2.1093	RF Exposure	PASS
§15.203	Antenna Requirement	PASS
§15.207 (a)	Conducted Emissions	PASS
§15.247(d)	Spurious Emissions at Antenna Port	PASS
§15.205	Restricted Bands	PASS
§15.209, §15.205, §15.247(d)	Spurious Emissions	PASS
§15.247 (a)(2)	6 dB Bandwidth	PASS
§15.247(b)(3)	Maximum Peak Output Power	PASS
§15.247(d)	100kHz Bandwidth of Frequency Band Edge	PASS
§15.247(e)	Power Spectral Density	PASS

Statement: The EUT was setup according to ANSI C63.4-2003 and tested according to DTS test procedure of March 23, 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Modifications

No modification was made.

5. TEST EQUIPMENT USED

Equipment/Facilities	Manufacturer	Model #	Serial no.	Date of Cal.	Cal. Interval
Cable	Resenberger	N/A	NO.1	Mar 10 , 2012	1 Year
Cable	SCHWARZBECK	N/A	NO.2	Mar 10 , 2012	1 Year
Cable	SCHWARZBECK	N/A	NO.3	Mar 10 , 2012	1 Year
LISN	Rohde & Schwarz	ESH3-Z5	100305	Mar 10 , 2012	1 Year
50 Coaxial Switch	ANRITSU CORP	MP59B	6200283933	Mar 10 , 2012	1 Year
EMI Test Receiver	Rohde & Schwarz	ESP13	100180	Oct.11,2011	1 Year
Spectrum Analyzer	Rohde & Schwarz	FSP40	100273	Sep.10,2011	1 Year
3m Semi-Anechoic Chamber	Albatross Projects	9mx6mx6m	N/A	Feb.20,2012	1 Year
Signal Generator	FLUKE	PM5418 + Y/C	LO747012	Feb.20,2012	1 Year
Signal Generator	FLUKE	PM5418TX	LO738007	Feb.20,2012	1 Year
Loop Antenna	SCHWARZBECK	FMZB1516	113	Jan.30,2012	1 Year
Trilog-Super Broadband Antenna	SCHWARZBECK	VULB9161	9161-4079	Sep.22,2011	1 Year
Broad-Band Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-564	Sep.22,2011	1 Year
Horn Antenna	Schwarzbeck	BBHA9170	208 279	May 12, 2012	1 Year
Ultra Broadband Antenna	Rohde & Schwarz	HL-562	100110	June.15,2011	1 Year
AMN	Rohde & Schwarz	ESH3-Z5	100196	Oct.11,2011	1 Year
AMN	Rohde & Schwarz	ESH3-Z5	100197	Oct.11,2011	1 Year
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	N/A	N/A	N/A
Power Meter	Rohde & Schwarz	NRVD	100041	Feb.20,2012	1 Year
EMI Test Receiver	Rohde & Schwarz	ESCS30	100003	Feb.20,2012	1 Year
Coaxial Cable with N-connectors	SCHWARZBECK	AK9515H	95549	Sep.22,2011	1 Year
Radio Communication Test Set	Rohde & Schwarz	CMS 54	846621/024	Feb.20,2012	1 Year
Modulation Analyzer	Hewlett-Packard	8901B	2303A00362	Feb.20,2012	1 Year
Absorbing clamp	Rohde & Schwarz	MDS-21	N/A	Oct.11,2011	1 Year

6. §15.247 (I) AND §1.1307 (B) (1), §2.1093 – RF EXPOSURE

6.1. Standard Applicable

According to §15.247 (i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to KDB 447498 D01 Mobile Portable RF Exposure V04 , no SAR required if power is lower than the flowing threshold:

When routine evaluation is required for SAR and the output power is $\leq 60/f(\text{GHz})$ mW, the test reduction and test exclusion procedures given herein, or in KDB 616217 and its supplement or KDB 648474, are applicable.

A device may be used in portable exposure conditions with no restrictions on host platforms when either the source-based time-averaged output power is $\leq 60/f(\text{GHz})$ mW or all measured 1-g SAR are < 0.4 W/kg. When SAR evaluation is required, the most conservative exposure conditions for all expected operating configurations must be tested.

6.2. Test Result

Measurement Result:

The Max conducted output power = 12.59dBm

Antenna gain = 0 dBi

SAR exclusion threshold= $60/f=60/2.437=24.62$ mW = 13.91 dBm >12.59dBm

So the SAR measurement is not required.

7. §15.203 - ANTENNA REQUIREMENT

7.1. Standard Applicable

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

7.2. Antenna Connector Construction

The antenna used for this product is a short metal soldered wire. The antenna is permanently attached. Refer to the product photo.

8. §15.207 - CONDUCTED EMISSIONS

8.1. Applicable Standard

The specification used was with the FCC Part 15.207 limits.

8.2. Test Procedure

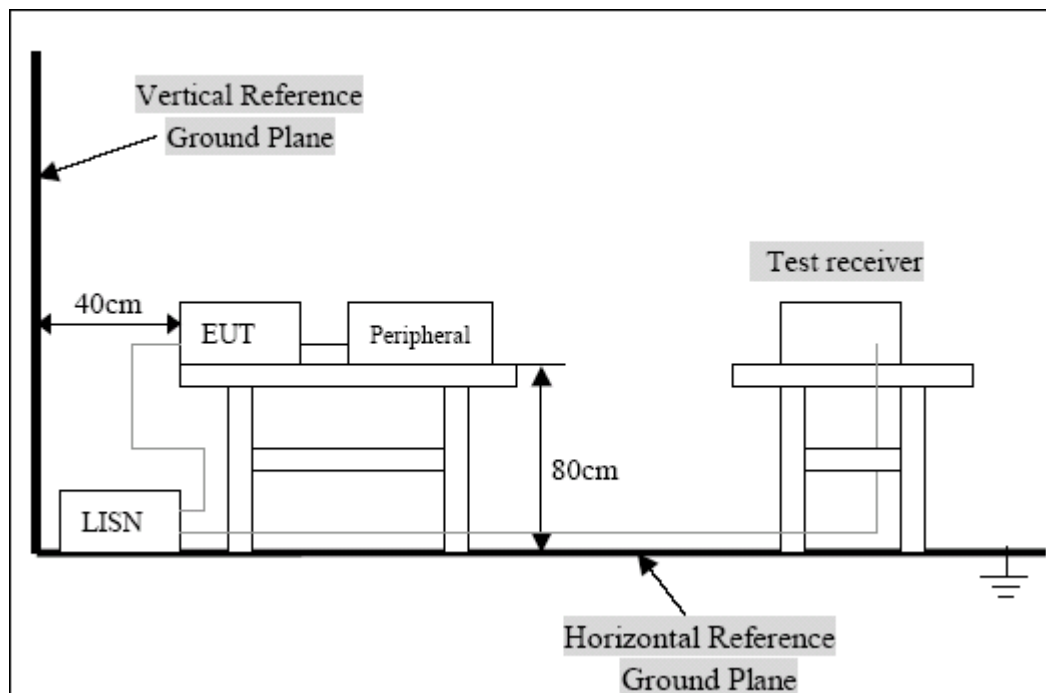
During the conducted emission test, the EUT was connected to the outlet of the LISN. Maximizing procedure was performed on the six (6) highest emissions of the EUT. All data was recorded in the Quasi-peak and average detection mode.

8.3. Conducted Power line Emission Limits

FCC Part 15 Paragraph 15.207 (dBuV)		
Frequency Range (MHz)	Class A QP/AV	Class B QP/AV
0.15-0.5	79/66	65-56/56-46
0.5-5.0	73/60	56-46
5.0-3.0	73/60	60-50

Note: In the above table, the tighter limit applies at the band edges.

8.4. Block Diagram of Test Setup

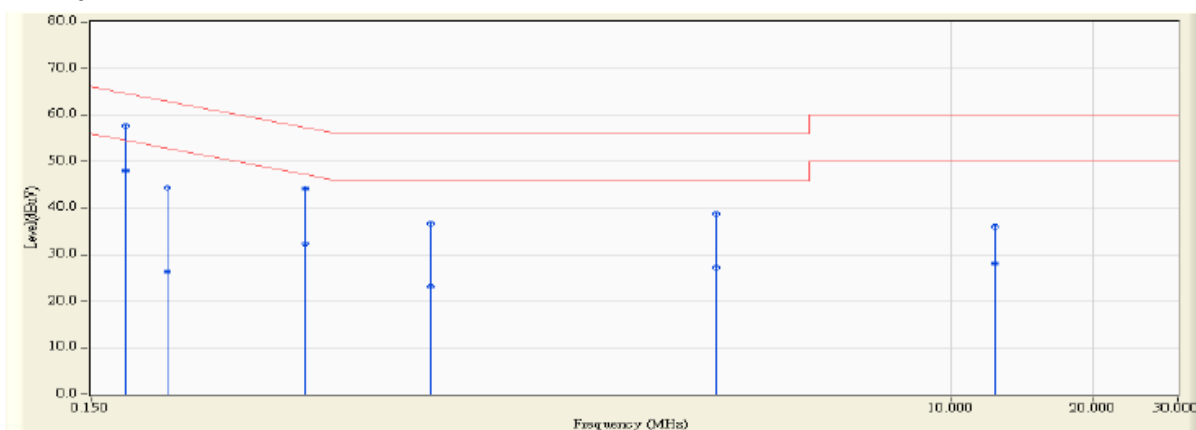


8.5. Conducted Power Line Test Result

Pass.

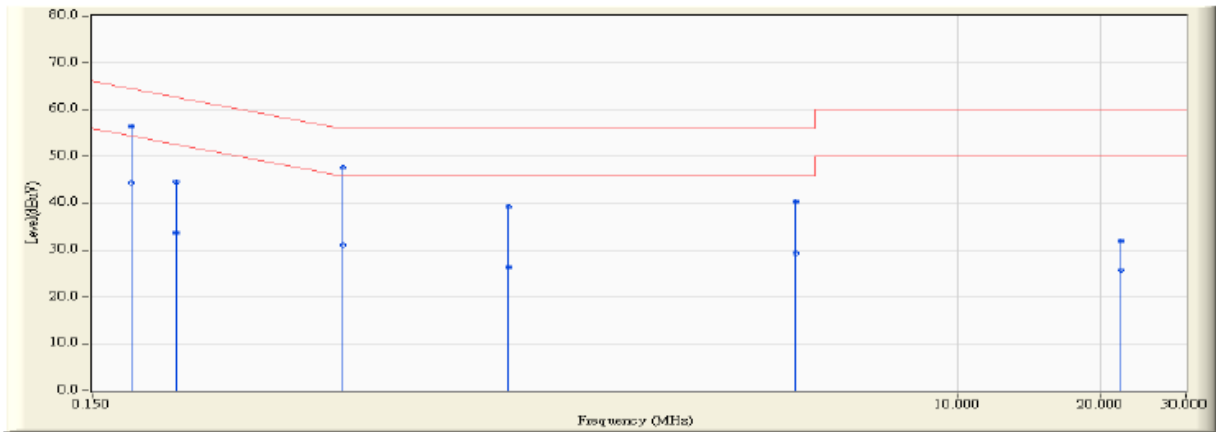
The worst test mode: Wi-Fi TX 2437MHz

L line



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	0.178	9.600	48.143	57.743	-6.836	64.578	QUASIPeAK
2	* 0.178	9.600	38.376	47.976	-6.602	54.578	AVERAGE
3	0.218	9.600	34.899	44.499	-18.396	62.895	QUASIPeAK
4	0.218	9.600	16.716	26.316	-26.579	52.895	AVERAGE
5	0.426	9.610	34.578	44.188	-13.142	57.330	QUASIPeAK
6	0.426	9.610	22.882	32.492	-14.838	47.330	AVERAGE
7	0.786	9.629	27.055	36.684	-19.316	56.000	QUASIPeAK
8	0.786	9.629	13.508	23.137	-22.863	46.000	AVERAGE
9	3.158	9.819	28.970	38.789	-17.211	56.000	QUASIPeAK
10	3.158	9.819	17.526	27.345	-18.655	46.000	AVERAGE
11	12.302	10.141	25.931	36.073	-23.927	60.000	QUASIPeAK
12	12.302	10.141	17.991	28.132	-21.868	50.000	AVERAGE

N line



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1	*	0.182	9.600	46.823	56.423	-7.971	64.394	QUASIPeAK
2		0.182	9.600	34.837	44.437	-9.957	54.394	AVERAGE
3		0.226	9.600	34.990	44.590	-18.006	62.595	QUASIPeAK
4		0.226	9.600	24.151	33.751	-18.844	52.595	AVERAGE
5		0.506	9.600	38.120	47.720	-8.280	56.000	QUASIPeAK
6		0.506	9.600	21.478	31.078	-14.922	46.000	AVERAGE
7		1.126	9.686	29.615	39.301	-16.699	56.000	QUASIPeAK
8		1.126	9.686	16.633	26.319	-19.681	46.000	AVERAGE
9		4.526	9.872	30.500	40.372	-15.628	56.000	QUASIPeAK
10		4.526	9.872	19.607	29.478	-16.522	46.000	AVERAGE
11		21.910	10.654	21.396	32.051	-27.949	60.000	QUASIPeAK
12		21.910	10.654	15.027	25.681	-24.319	50.000	AVERAGE

9. §15.209, §15.205, §15.247(D) - Spurious Emissions

9.1. Test Equipment

Please refer to section 2 this report.

9.2. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Calibrated Loop antenna is used as receiving antenna for frequencies below 30MHz, Calibrated Bilog antenna is used as receiving antenna for frequencies between 30 MHz and 1 GHz, Calibrated Horn antenna is used as receiving antenna for frequencies above 1000MHz. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated emission measurement.

The bandwidth of test receiver is set at 9kHz in below 30MHz. and set at 120kHz in 30-1000MHz, and 1MHz in above 1000MHz.

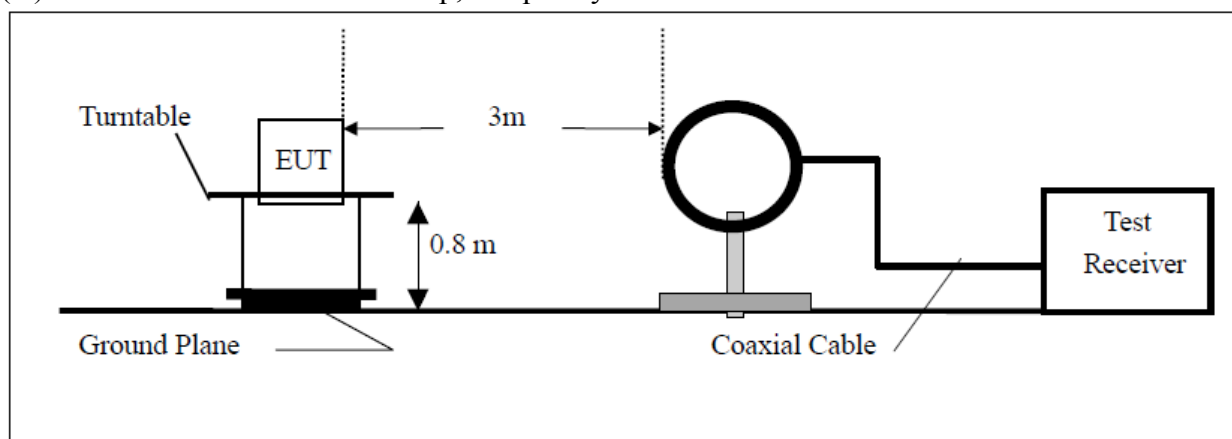
The frequency range from 9kHz to 25GHz is checked.

The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Peak detector and Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.

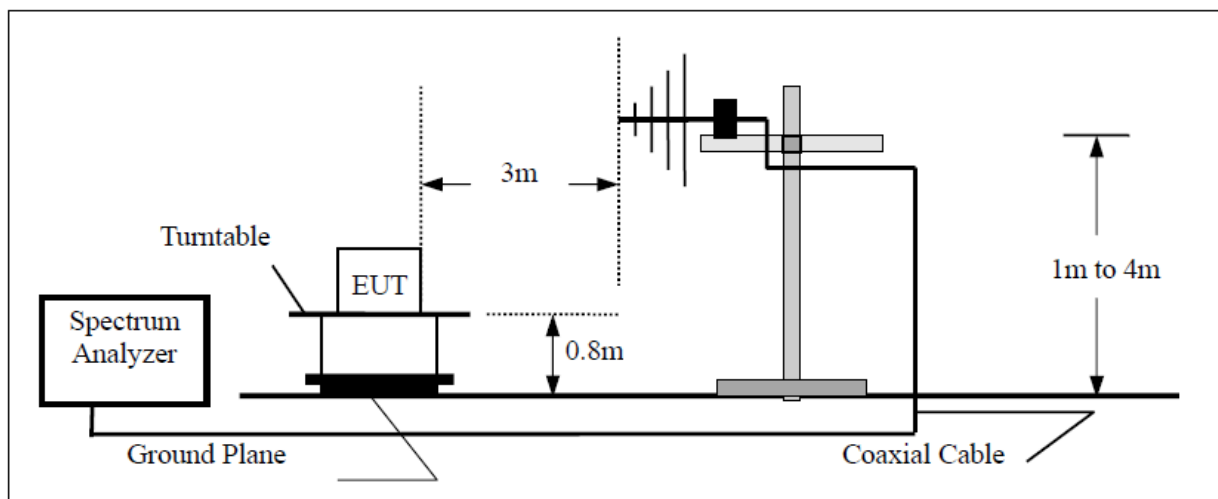
Through three orthogonal axes to determine which attitude and equipment arrangement produces the highest emission relative to the limit.

9.3. Radiated Test Setup

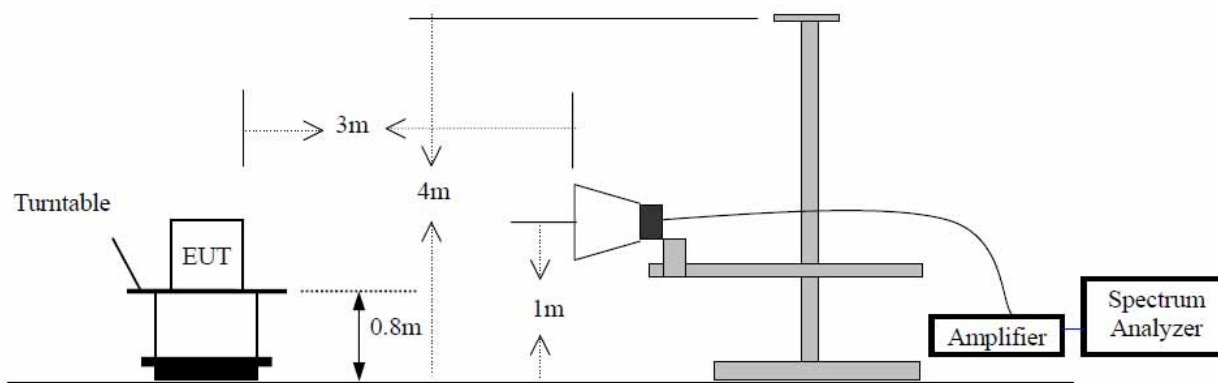
(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(B) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(C) Radiated Emission Test Set-Up, Frequency above 1000MHz



9.4. Radiated Emission Limit

Frequency (MHz)	Limit			The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.
	Field Strength of Quasi-peak Value (microvolts/m)	Field Strength of Quasi-peak Value (dB μ V/m)	Measurement distance (m)	
0.009 - 0.490	2400/F(kHz)	/	300	
0.490 - 1.705	24000/F(kHz)	/	30	
1.705-30	30	29.5	30	
30 - 88	100	40	3	
88 - 216	150	43.5	3	
216 - 960	200	46	3	
Above 960	500	54	3	

Note: (1) RF Voltage (dBuV)=20 log Voltage(uV)

(2) In the Above Table, the tighter limit applies at the band edges.

(3) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

9.5. Radiated Emission Test Result

Pass.

Date of Test:	May 29, 2012	Temperature:	25°C
EUT:	Tablet PC	Humidity:	52%
Model No.:	M97B	Power Supply:	AC 120V/60Hz
Test Mode:	802.11b Channel Low 2412MHz	Test Engineer:	Jack

For below 1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Correct Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	9.582	46.420	56.002	-17.998	74.000
7236.000	14.401	37.430	51.831	-22.169	74.000
9648.000	19.795	36.380	56.175	-17.825	74.000
Average Detector:					
4824.000	9.582	42.980	52.562	-1.438	54.000
9648.000	19.795	22.550	42.345	-11.655	54.000
Vertical					
Peak Detector:					
4824.000	8.462	40.140	48.602	-25.398	74.000
7236.000	15.412	36.060	51.472	-22.528	74.000
9648.000	19.005	36.130	55.135	-18.865	74.000
Average Detector:					
9648.000	19.005	22.550	41.555	-12.445	54.000

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
 2. Measurement Level = Reading Level + Correct Factor.
 3. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test:	May 29, 2012	Temperature:	25°C
EUT:	Tablet PC	Humidity:	52%
Model No.:	M97B	Power Supply:	AC 120V/60Hz
Test Mode:	802.11b Channel Middle 2437MHz	Test Engineer:	Jack

For below 1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Correct Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Frequency MHz	Correct Factor Db	Reading Level dBuV	Measurement Level dBuV/m	Margin Db	Limit dBuV/m
Horizontal					
Peak Detector:					
4874.000	9.473	45.500	54.973	-19.027	74.000
7311.000	14.540	35.900	50.439	-23.561	74.000
9748.000	20.024	37.270	57.295	-16.705	74.000
Average Detector:					
4874.000	9.473	41.910	51.383	-2.617	54.000
9748.000	20.024	23.090	43.115	-10.885	54.000
Vertical					
Peak Detector:					
4874.000	8.882	40.430	49.311	-24.689	74.000
7311.000	15.283	35.250	50.533	-23.467	74.000
9748.000	19.228	36.900	56.129	-17.871	74.000
Average Detector:					
9748.000	19.228	23.130	42.359	-11.641	54.000

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
 2. Measurement Level = Reading Level + Correct Factor.
 3. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test: May 29, 2012

Temperature: 25°C

EUT: Tablet PC

Humidity: 52%

Model No.: M97B

Power Supply: AC 120V/60Hz

Test Mode: 802.11b Channel High 2462MHz

Test Engineer: Jack

For below 1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Correct Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Frequency MHz	Correct Factor Db	Reading Level dBuV	Measurement Level dBuV/m	Margin Db	Limit dBuV/m
Horizontal					
Peak Detector:					
4924.000	9.487	45.000	54.486	-19.514	74.000
7386.000	14.798	35.670	50.468	-23.532	74.000
9848.000	20.005	36.650	56.656	-17.344	74.000
Average Detector:					
4924.000	9.487	41.810	51.296	-2.704	54.000
9848.000	20.005	22.850	42.856	-11.144	54.000
Vertical					
Peak Detector:					
4924.000	9.415	40.840	50.254	-23.746	74.000
7386.000	15.269	34.790	50.059	-23.941	74.000
9848.000	19.191	36.230	55.421	-18.579	74.000
Average Detector:					
9848.000	19.191	22.910	42.101	-11.899	54.000

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
 2. Measurement Level = Reading Level + Correct Factor.
 3. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test:	May 29, 2012	Temperature:	25°C
EUT:	Tablet PC	Humidity:	52%
Model No.:	M97B	Power Supply:	AC 120V/60Hz
Test Mode:	802.11g Channel Low 2412MHz	Test Engineer:	Jack

For below 1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Correct Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Frequency MHz	Correct Factor Db	Reading Level dBuV	Measurement Level dBuV/m	Margin Db	Limit dBuV/m
Horizontal					
Peak Detector:					
4824.000	9.582	41.150	50.732	-23.268	74.000
7236.000	14.401	36.470	50.871	-23.129	74.000
9648.000	19.795	35.930	55.725	-18.275	74.000
Average Detector:					
9648.000	19.795	22.770	42.565	-11.435	54.000
Vertical					
Peak Detector:					
4824.000	8.462	38.010	46.472	-27.528	74.000
7236.000	15.412	36.370	51.782	-22.218	74.000
9648.000	19.005	36.700	55.705	-18.295	74.000
Average Detector:					
9648.000	19.005	23.120	42.125	-11.875	54.000

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
 2. Measurement Level = Reading Level + Correct Factor.
 3. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test: May 29, 2012

Temperature: 25°C

EUT: Tablet PC

Humidity: 52%

Model No.: M97B

Power Supply: AC 120V/60Hz

Test Mode: 802.11g Channel Middle 2437MHz

Test Engineer: Jack

For below 1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Correct Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Frequency MHz	Correct Factor Db	Reading Level dBuV	Measurement Level dBuV/m	Margin Db	Limit dBuV/m
Horizontal					
Peak Detector:					
4874.000	9.473	41.000	50.473	-23.527	74.000
7311.000	14.540	35.700	50.239	-23.761	74.000
9748.000	20.024	36.340	56.364	-17.636	74.000
Average Detector:					
9748.000	20.024	23.070	43.095	-10.905	54.000
Vertical					
Peak Detector:					
4874.000	8.882	38.130	47.011	-26.989	74.000
7311.000	15.283	34.970	50.253	-23.747	74.000
9748.000	19.228	36.330	55.559	-18.441	74.000
Average Detector:					
9748.000	19.228	22.920	42.149	-11.851	54.000

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. Measurement Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test:	May 29, 2012	Temperature:	25°C
EUT:	Tablet PC	Humidity:	52%
Model No.:	M97B	Power Supply:	AC 120V/60Hz
Test Mode:	802.11g Channel High 2462MHz	Test Engineer:	Jack

For below 1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Correct Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Frequency MHz	Correct Factor Db	Reading Level dBuV	Measurement Level dBuV/m	Margin Db	Limit dBuV/m
Horizontal					
Peak Detector:					
4924.000	9.487	41.100	50.586	-23.414	74.000
7386.000	14.798	35.470	50.268	-23.732	74.000
9848.000	20.005	36.870	56.876	-17.124	74.000
Average Detector:					
9848.000	20.005	23.150	43.156	-10.844	54.000
Vertical					
Peak Detector:					
4924.000	9.415	38.160	47.574	-26.426	74.000
7386.000	15.269	34.890	50.159	-23.841	74.000
9848.000	19.191	36.470	55.661	-18.339	74.000
Average Detector:					
9848.000	19.191	23.230	42.421	-11.579	54.000

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
 2. Measurement Level = Reading Level + Correct Factor.
 3. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test: May 29, 2012

Temperature: 25°C

EUT: Tablet PC

Humidity: 52%

Model No.: M97B

Power Supply: AC 120V/60Hz

Test Mode: 802.11n HT20 Channel Low 2412MHz

Test Engineer: Jack

For below 1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Correct Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Frequency MHz	Correct Factor Db	Reading Level dBuV	Measurement Level dBuV/m	Margin Db	Limit dBuV/m
Horizontal					
Peak Detector:					
4824.000	9.582	42.920	52.502	-21.498	74.000
7236.000	14.401	37.110	51.511	-22.489	74.000
9648.000	19.795	35.840	55.635	-18.365	74.000
Average Detector:					
9648.000	19.795	23.150	42.945	-11.055	54.000
Vertical					
Peak Detector:					
4824.000	8.462	38.200	46.662	-27.338	74.000
7236.000	15.412	36.420	51.832	-22.168	74.000
9648.000	19.005	36.410	55.415	-18.585	74.000
Average Detector:					
9648.000	19.005	22.970	41.975	-12.025	54.000

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. Measurement Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test: May 29, 2012

Temperature: 25°C

EUT: Tablet PC

Humidity: 52%

Model No.: M97B

Power Supply: AC 120V/60Hz

Test Mode: 802.11n HT20 Channel Middle 2437MHz

Test Engineer: Jack

For below 1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Correct Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

Frequency MHz	Correct Factor Db	Reading Level dBuV	Measurement Level dBuV/m	Margin Db	Limit dBuV/m
Horizontal					
Peak Detector:					
4874.000	9.473	41.150	50.623	-23.377	74.000
7311.000	14.540	35.140	49.679	-24.321	74.000
9748.000	20.024	36.400	56.425	-17.575	74.000
Average Detector:					
9748.000	20.024	23.220	43.245	-10.755	54.000
Vertical					
Peak Detector:					
4874.000	8.882	37.920	46.801	-27.199	74.000
7311.000	15.283	35.950	51.233	-22.767	74.000
9748.000	19.228	36.700	55.929	-18.071	74.000
Average Detector:					
9748.000	19.228	23.000	42.229	-11.771	54.000

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. Measurement Level = Reading Level + Correct Factor.

3. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test: May 29, 2012

Temperature: 25°C

EUT: Tablet PC

Humidity: 52%

Model No.: M97B

Power Supply: AC 120V/60Hz

Test Mode: 802.11n HT20 Channel High 2462MHz

Test Engineer: Jack

For below 1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Correct Factor (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	Vertical
-	-	-	-	-	-	Horizontal

For 1GHz-25GHz

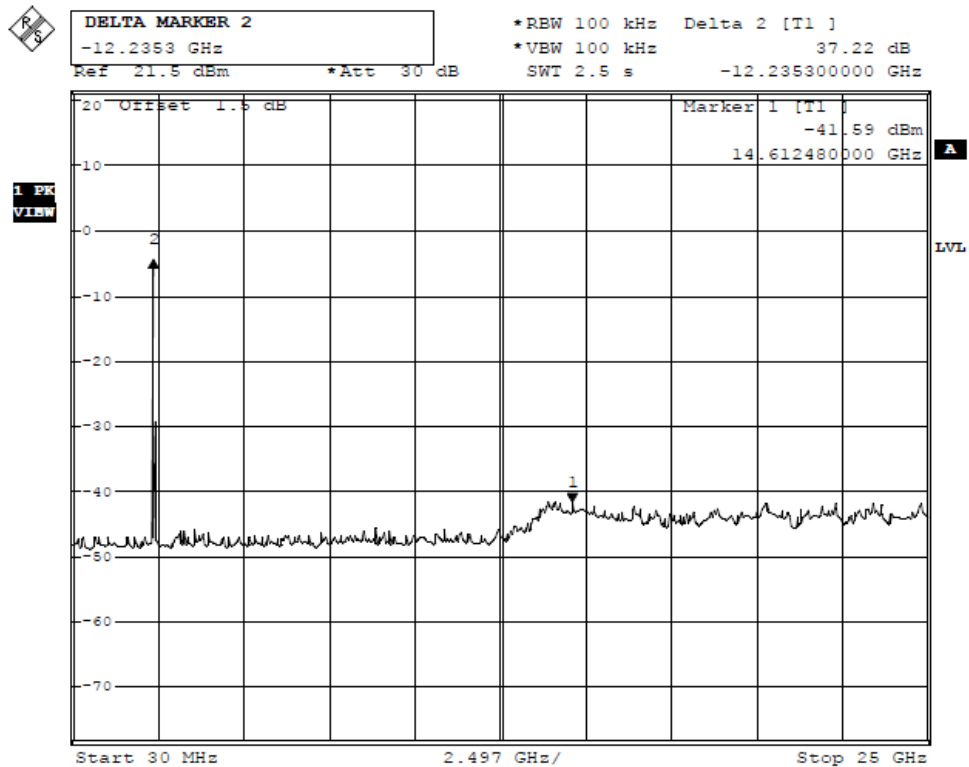
Frequency MHz	Correct Factor Db	Reading Level dBuV	Measurement Level dBuV/m	Margin Db	Limit dBuV/m
Horizontal					
Peak Detector:					
4924.000	9.487	41.790	51.276	-22.724	74.000
7386.000	14.798	35.250	50.048	-23.952	74.000
9848.000	20.005	36.410	56.416	-17.584	74.000
Average Detector:					
9848.000	20.005	23.300	43.306	-10.694	54.000
Vertical					
Peak Detector:					
4924.000	9.415	37.690	47.104	-26.896	74.000
7386.000	15.269	35.430	50.699	-23.301	74.000
9848.000	19.191	36.270	55.461	-18.539	74.000
Average Detector:					
9848.000	19.191	23.020	42.211	-11.789	54.000

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.
 2. Measurement Level = Reading Level + Correct Factor.
 3. The average measurement was not performed when the peak measured data under the limit of average detection.

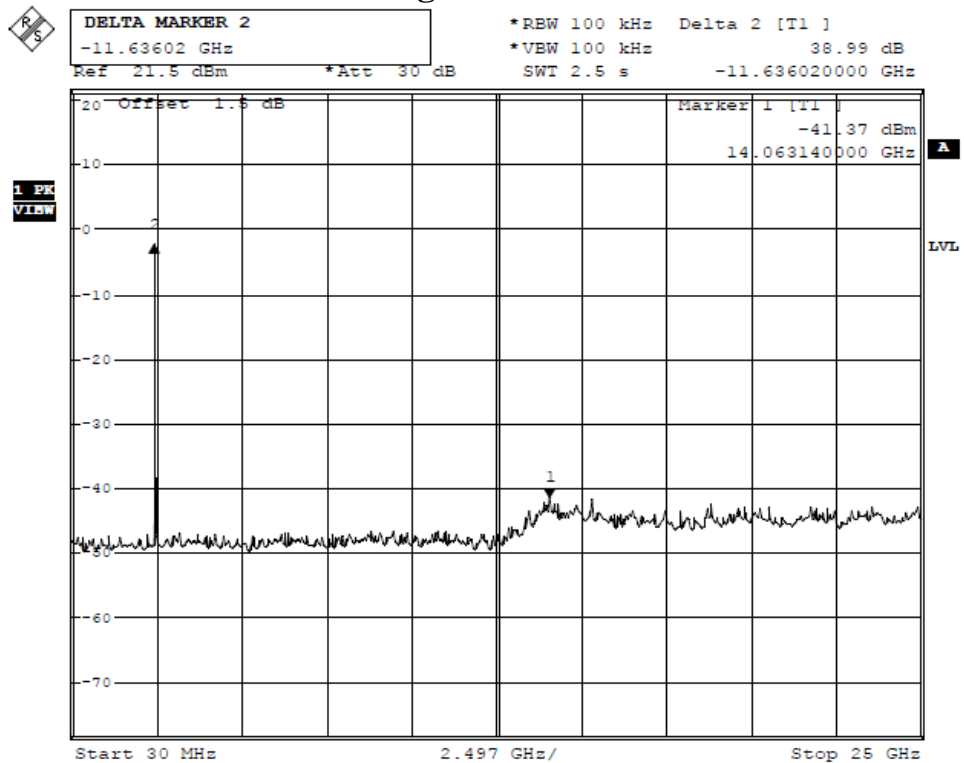
Antenna port conducted spurious emissions

802.11b mode:

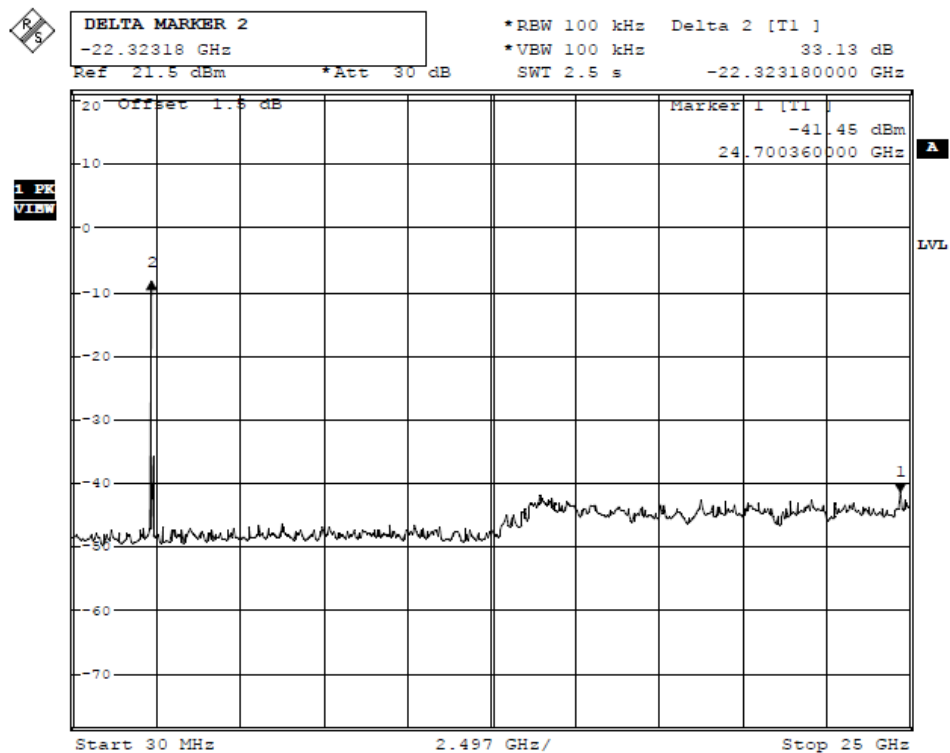
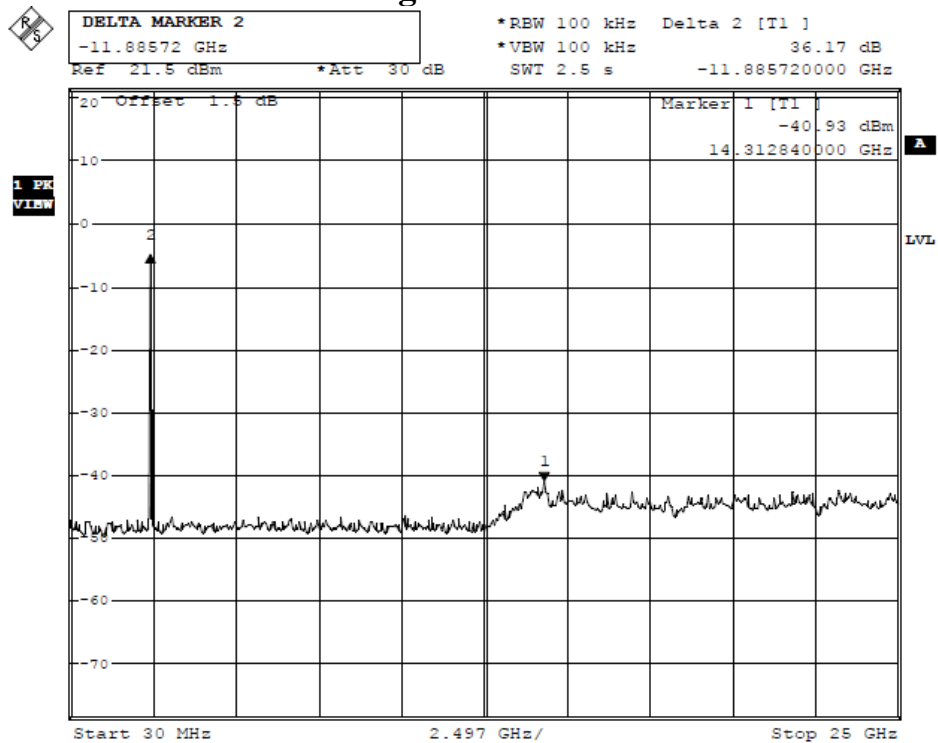
Low channel



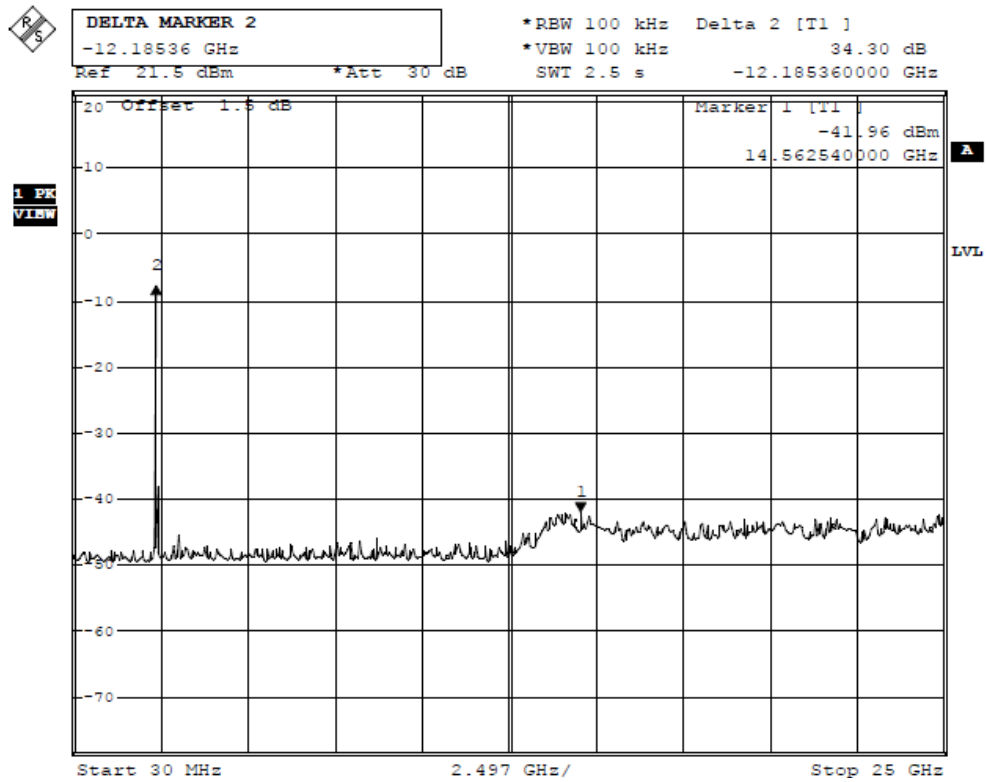
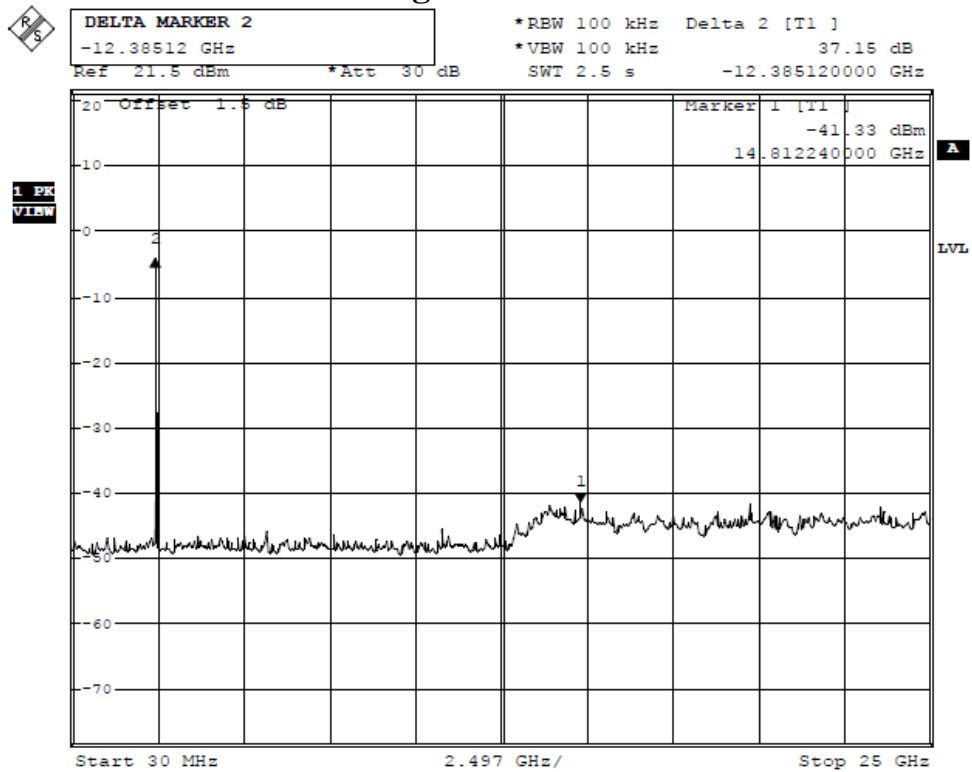
High channel



802.11g mode:

Low channel**High channel**

802.11n (20M) mode:

Low channel**High channel**

10. §15.247(A) (2) – 6DB BANDWIDTH TESTING

10.1. Test Equipment

Please refer to Section 4 this report.

10.2. Test Procedure

1. Set EUT in the transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as RBW=100KHz, VBW RBW, Span=50MHz, Sweep=auto.
4. Mark the peak frequency and -6dB(upper and lower) frequency.
5. Repeat until all the rest channels are investigated.

10.3. Applicable Standard

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

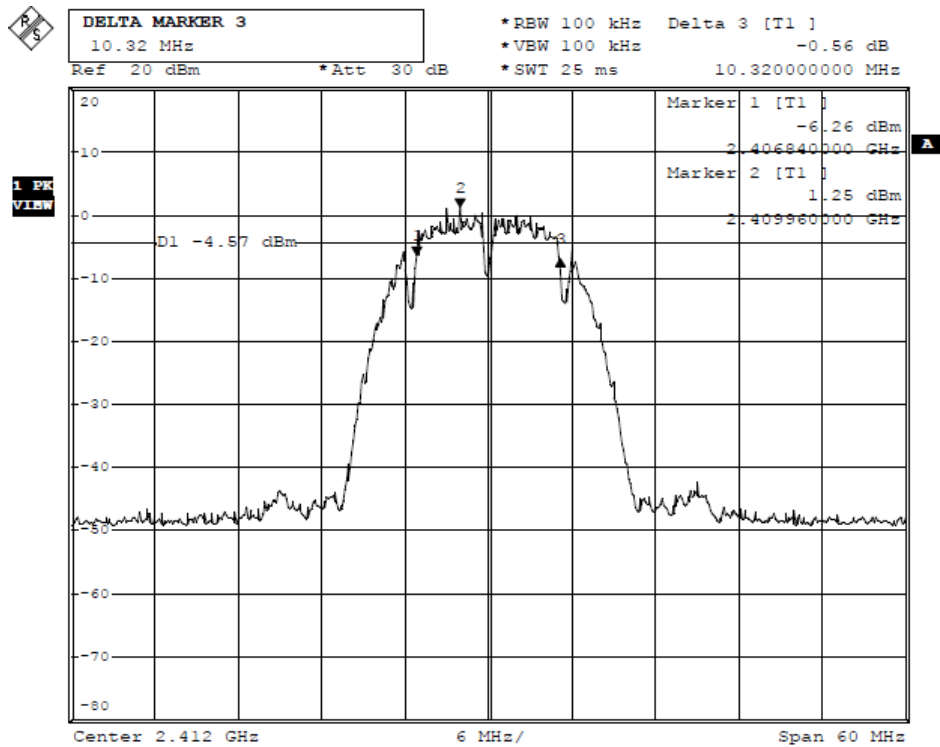
10.4. Test Result: Pass.

Please refer to the following tables

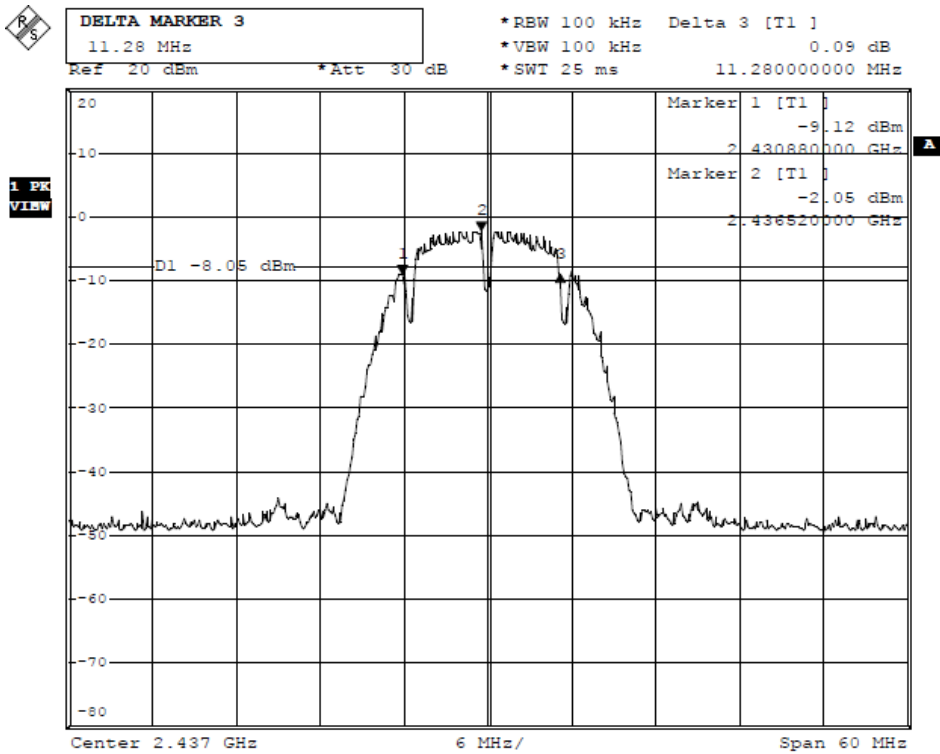
Channel Frequency (MHz)	Data Rate (Mbps)	6dB Bandwidth (kHz)	Limit (kHz)	Result
802.11b Mode				
2412	1	10320	> 500	Pass
2437	1	11280	> 500	Pass
2462	1	10320	> 500	Pass
802.11g Mode				
2412	6	16560	> 500	Pass
2437	6	16560	> 500	Pass
2462	6	16560	> 500	Pass
802.11n (20M) Mode				
2412	6.5	17280	> 500	Pass
2437	6.5	17400	> 500	Pass
2462	6.5	17160	> 500	Pass

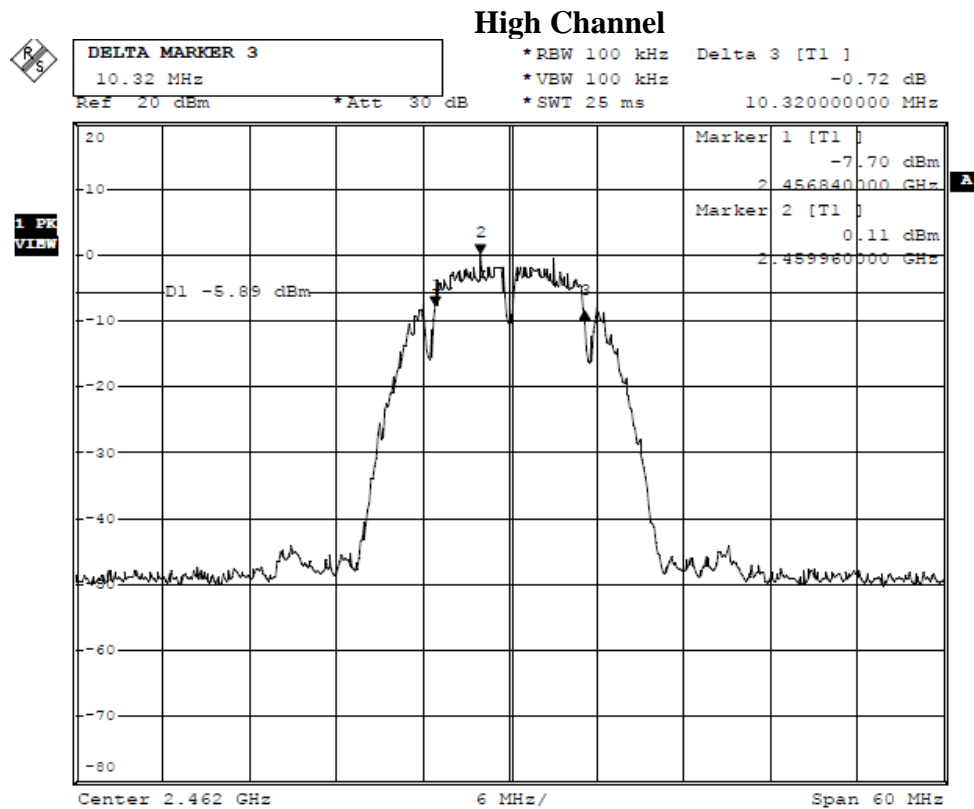
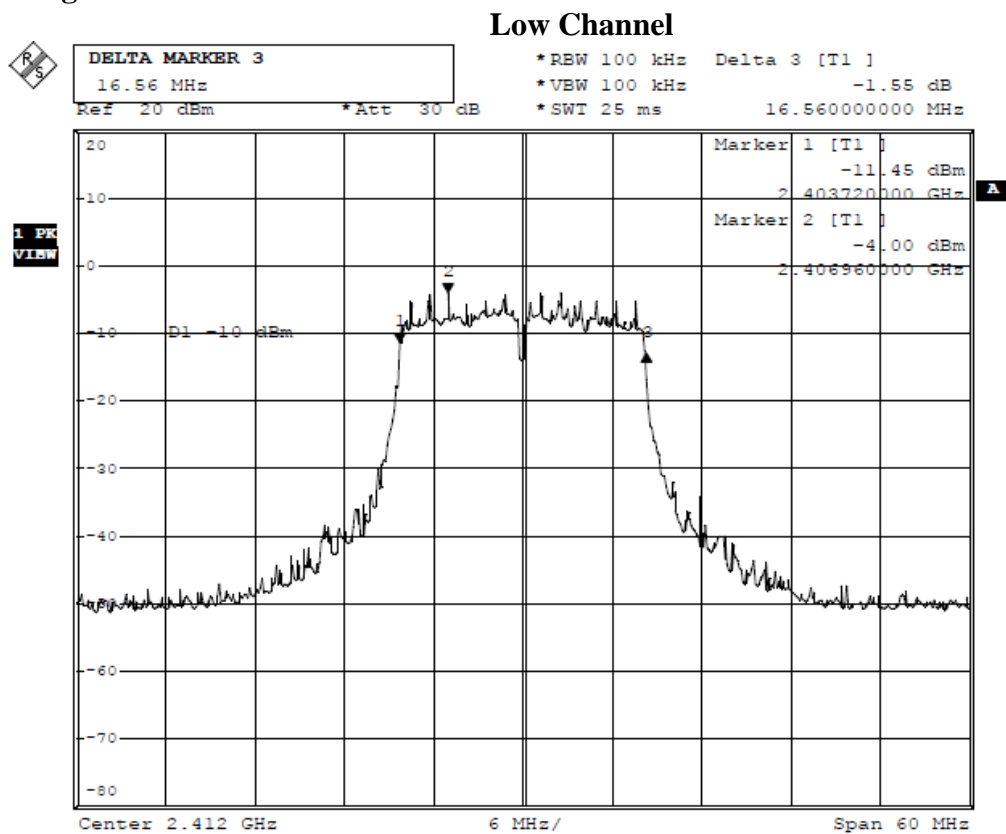
802.11b Mode:

Low Channel

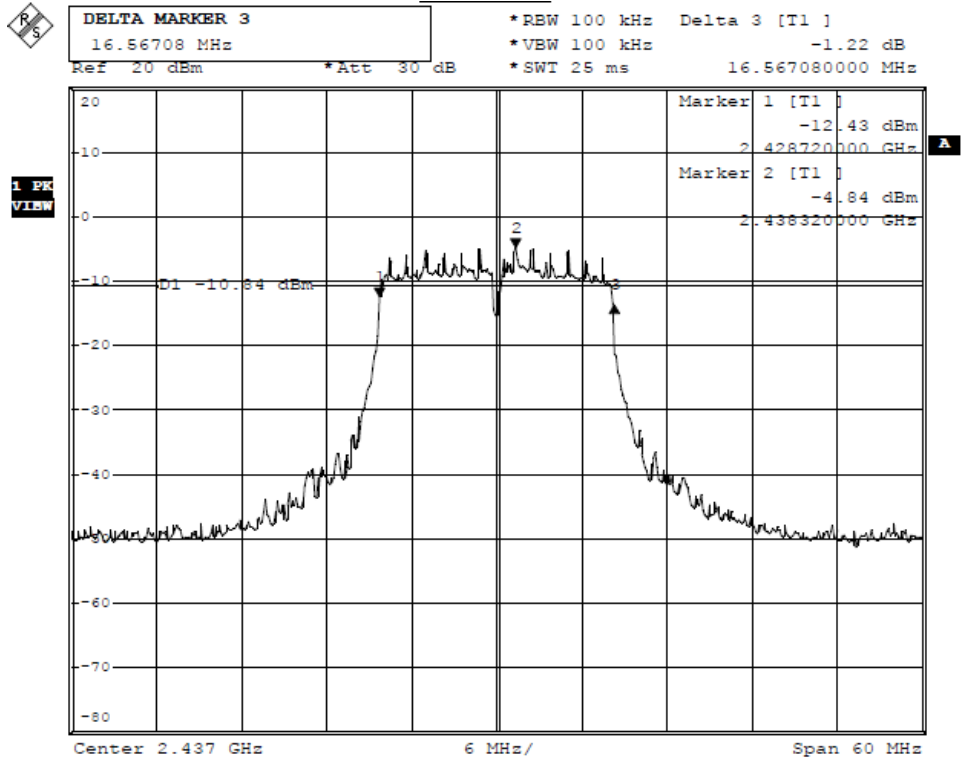


Middle Channel

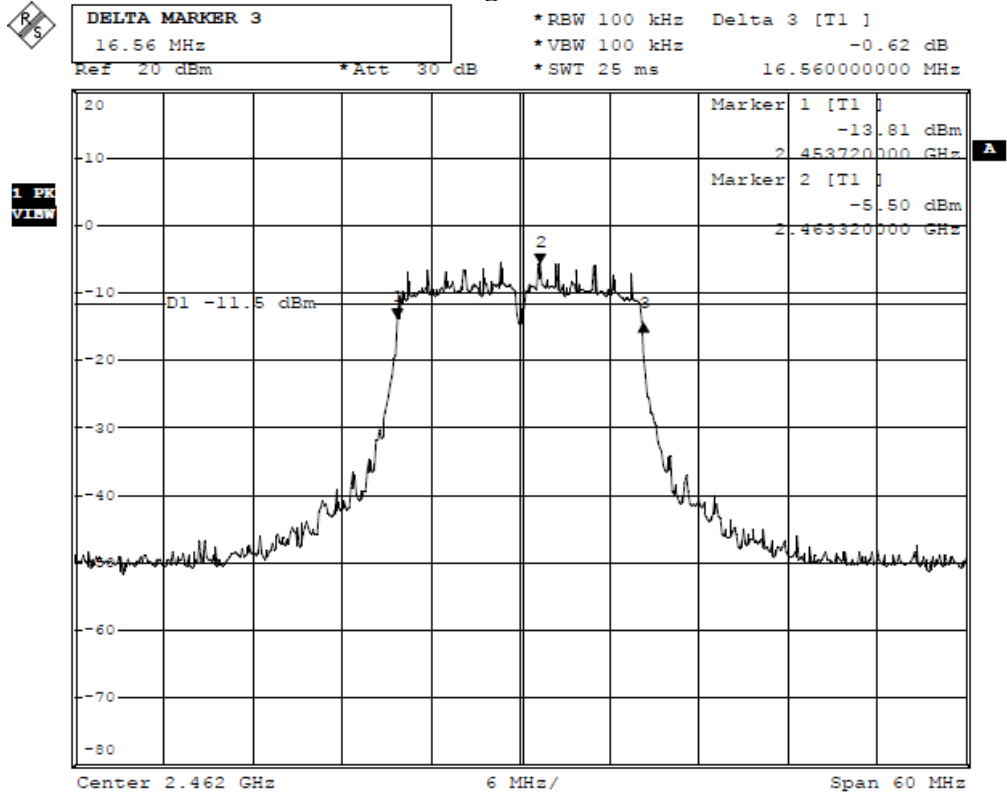


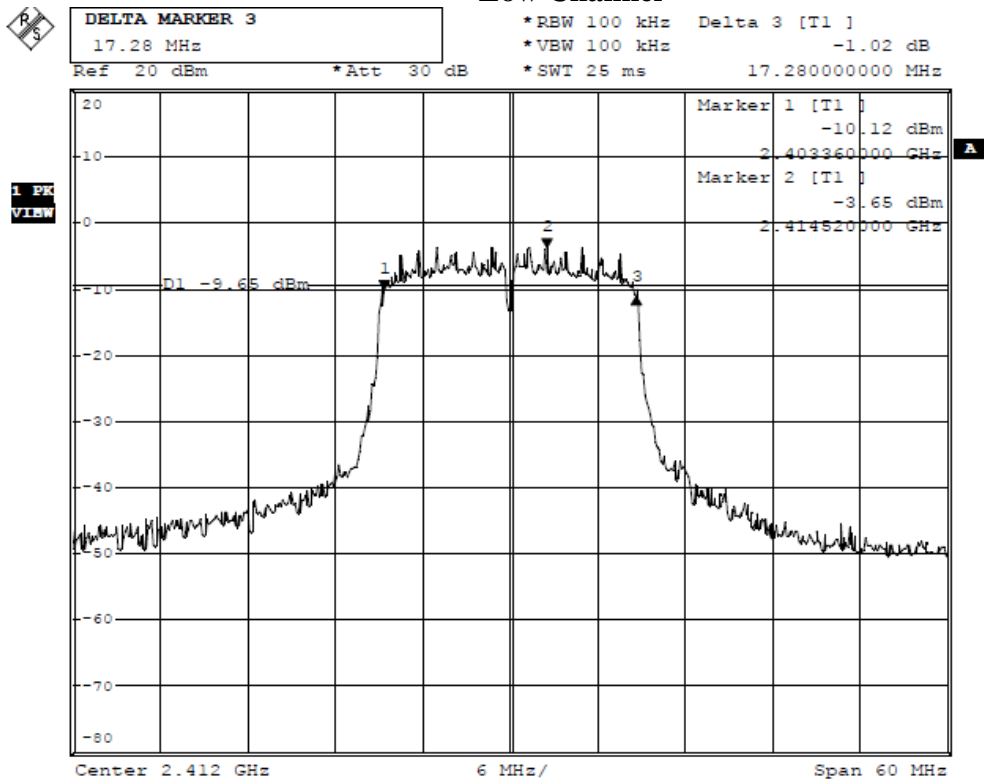
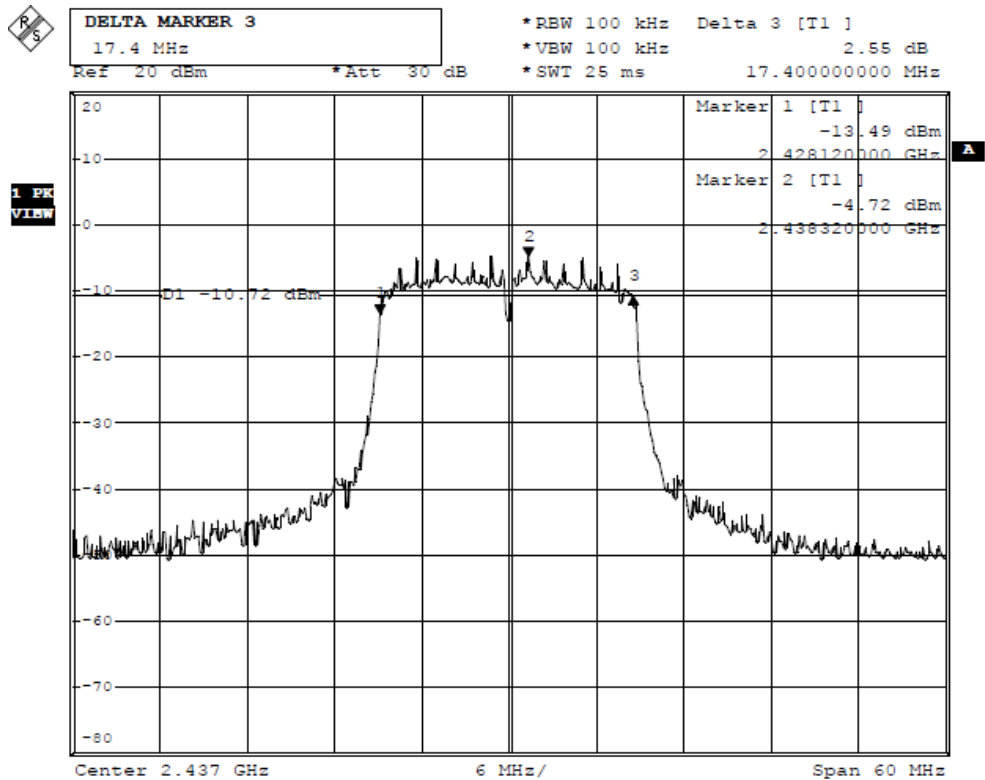
**802.11g Mode:**

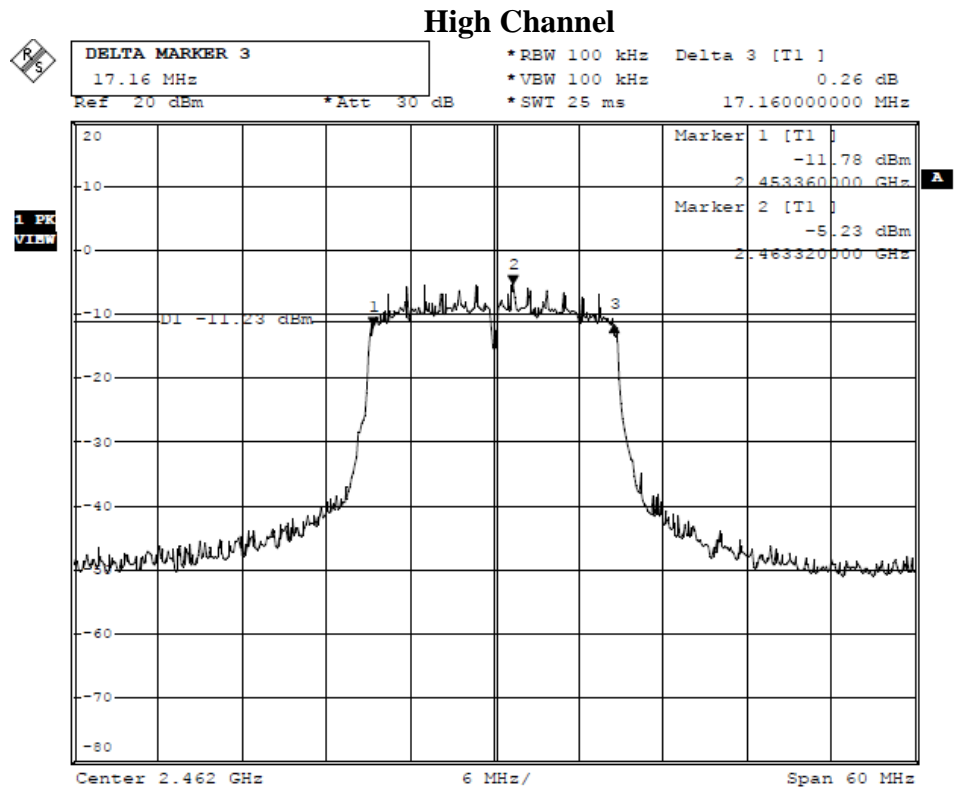
Middle Channel



High Channel



802.11n (20M) Mode:**Low Channel****Middle Channel**



11. §15.247(B) (3) - Maximum Peak Output Power

11.1. Test Equipment

Please refer to Section 4 this report.

11.2. Test Procedure

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz.
3. Set VBW = 3 MHz.
4. Use sample detector mode if bin width (i.e., span/number of points in spectrum display) < 0.5 RBW. Otherwise use peak detector mode.
5. Use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at full control power for entire sweep of every sweep. If the device transmits continuously, with no off intervals or reduced power intervals, the trigger may be set to “free run”.
6. Trace average 100 traces in power averaging mode.
7. Compute power by integrating the spectrum across the 26 dB EBW of the signal. The integration can be performed using the spectrum analyzer’s band power measurement function with band limits set equal to the EBW band edges or by summing power levels in each 1 MHz band in linear power terms. The 1 MHz band power levels to be summed can be obtained by averaging, in linear power terms, power levels in each frequency bin across the 1 MHz.

11.3. Applicable Standard

According to §15.247(b) (3), for systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

11.4. Test Result**Pass****802.11b Mode:**

Channel	Frequency (MHz)	Data Rate (Mbps)	Conducted Power (dBm)	Limit (dBm)
Low	2412	1	12.41	30
Mid	2437	1	12.36	30
High	2462	1	12.22	30

802.11g Mode:

Channel	Frequency (MHz)	Data Rate (Mbps)	Conducted Power (dBm)	Limit (dBm)
Low	2412	6	12.59	30
Mid	2437	6	12.47	30
High	2462	6	12.41	30

802.11n (20M) Mode:

Channel	Frequency (MHz)	Data Rate (Mbps)	Conducted Power (dBm)	Limit (dBm)
Low	2412	6.5	12.35	30
Mid	2437	6.5	12.38	30
High	2462	6.5	12.22	30

12. §15.247(D) – 100 KHZ Bandwidth of Frequency Band Edge

12.1.Test Equipment

Please refer to Section 4 this report.

12.2.Test Procedure

- 1, Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2, Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
- 3, Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
Note: For Rdstricted Band
RBW=1MHz
VBW=1 MHz
- 4, Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
- 5, Repeat above procedures until all measured frequencies were complete.

12.3.Applicable Standard

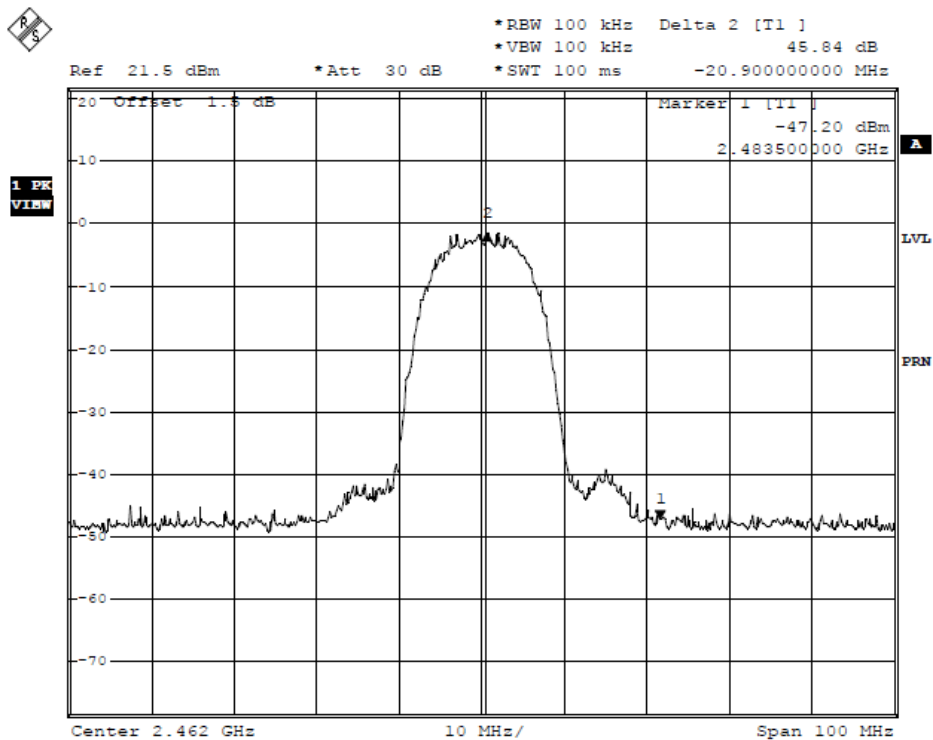
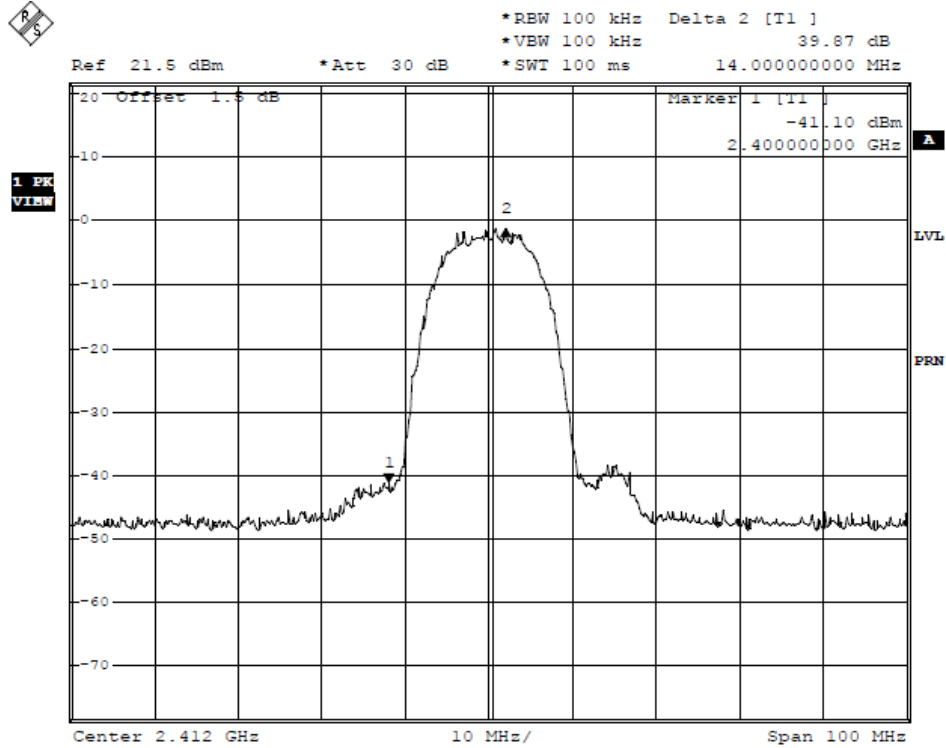
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

12.4.Test Result

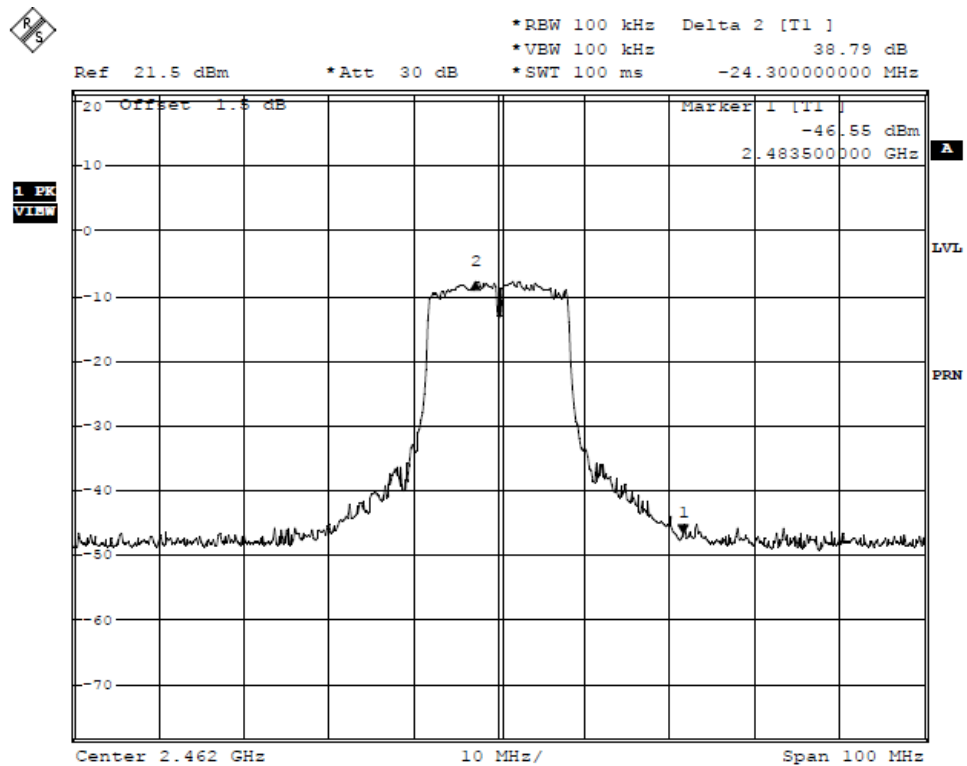
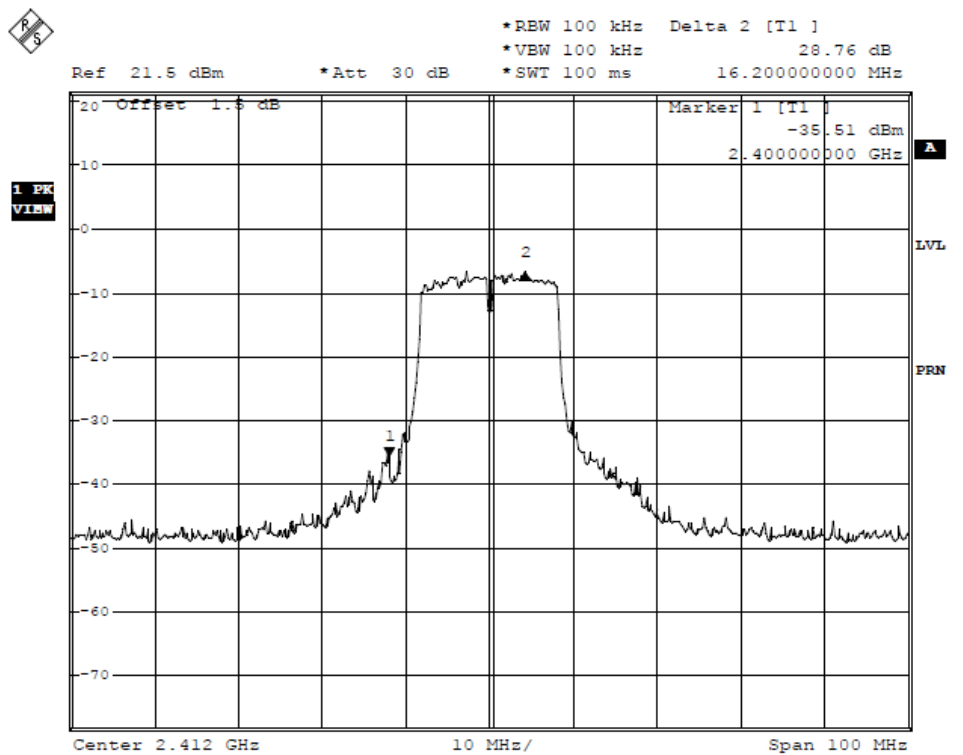
Pass.

Conducted test

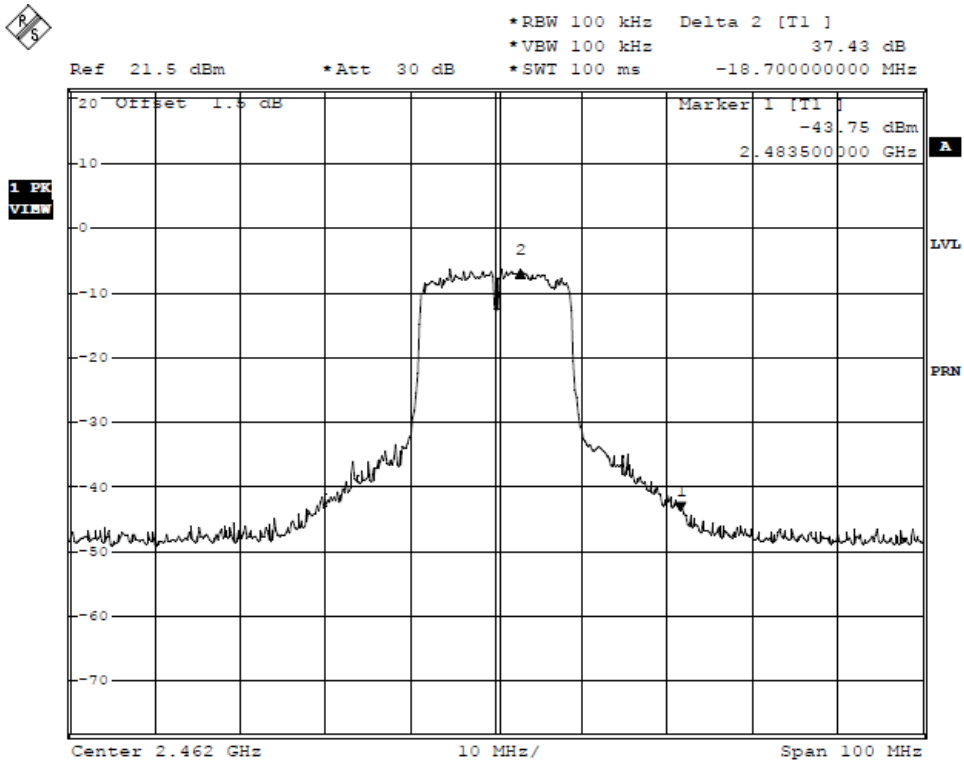
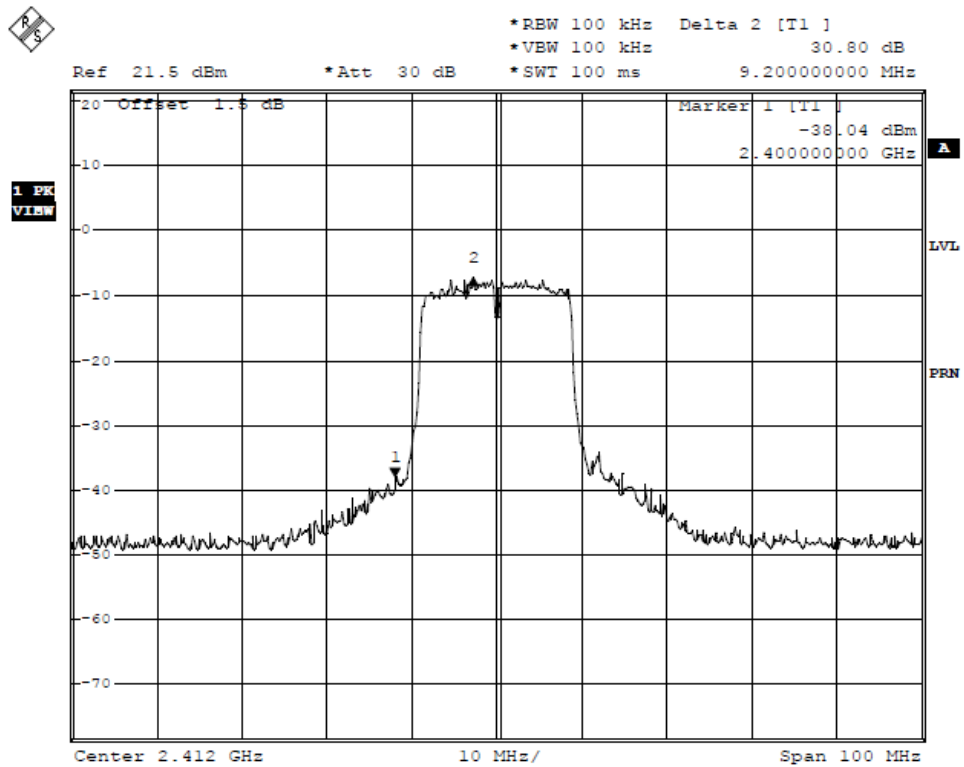
802.11b Mode:



802.11g Mode:



802.11n (20M) Mode:



Radiated test

Date of Test: May 29, 2012

Temperature: 25°C

EUT: Tablet PC

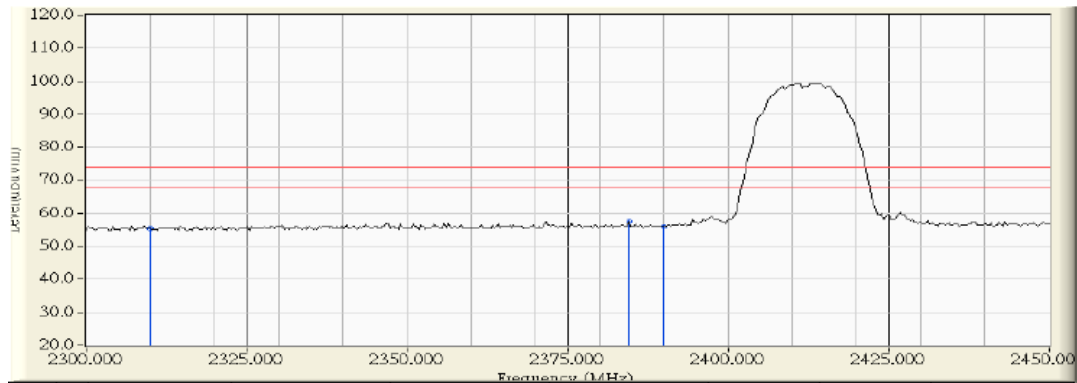
Humidity: 52%

Model No.: M97B

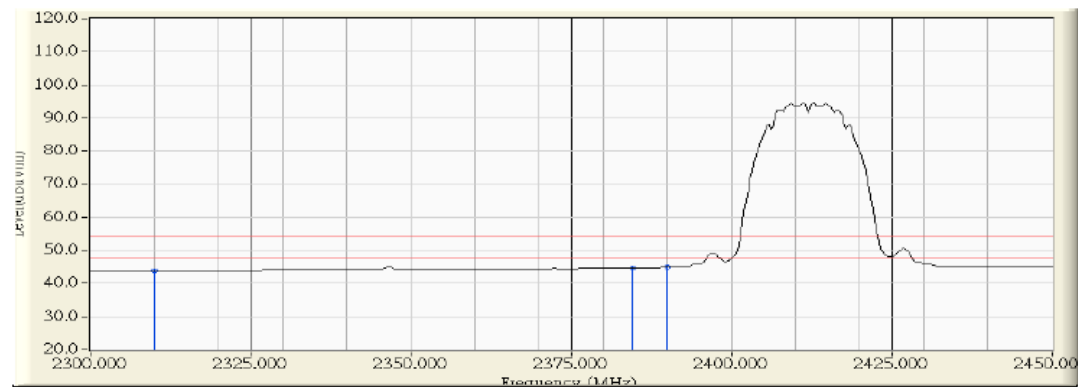
Power Supply: AC 120V/60Hz

Test Mode: 802.11b Channel Low 2412MHz

Polarization: HORIZONTAL



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1	2310.000	29.779	25.683	55.462	-18.538	74.000	PEAK
2 *	2384.600	30.524	27.031	57.555	-16.445	74.000	PEAK
3	2390.000	30.578	25.320	55.898	-18.102	74.000	PEAK

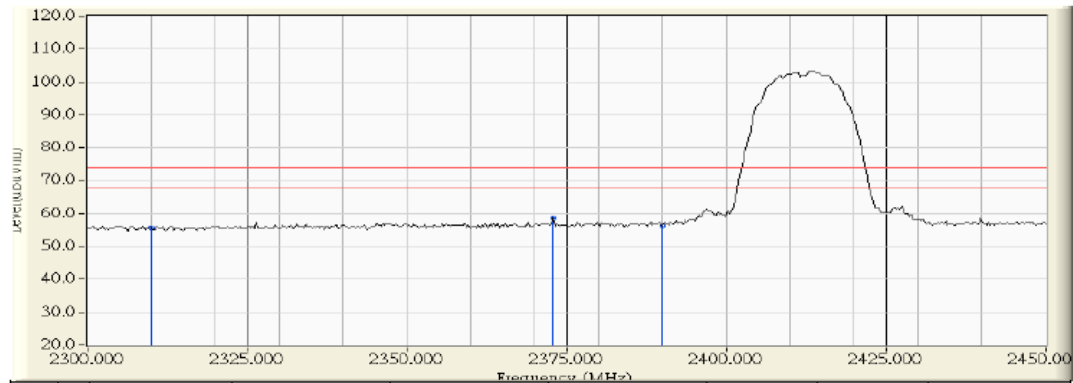


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Measure Level (dBμV/m)	Margin (dB)	Limit (dBμV/m)	Detector Type
1	2310.000	29.779	14.023	43.802	-10.198	54.000	AVERAGE
2	2384.600	30.524	14.146	44.670	-9.330	54.000	AVERAGE
3 *	2390.000	30.578	14.287	44.865	-9.135	54.000	AVERAGE

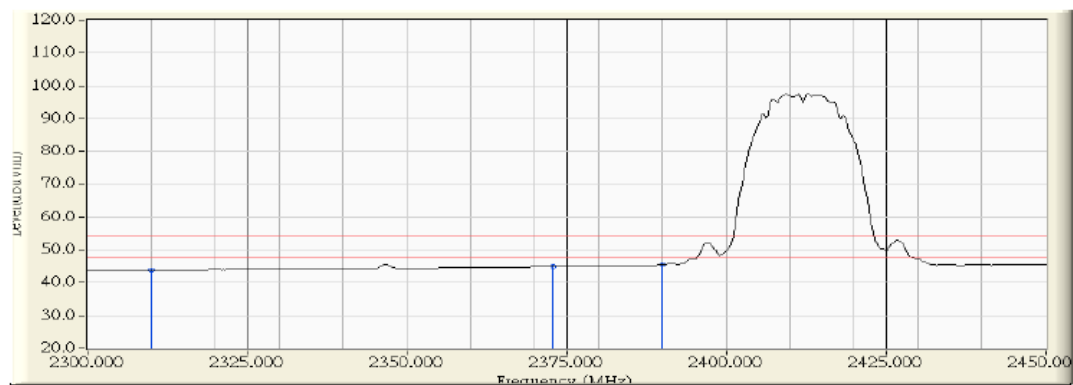
Note: 1. Measurement Level = Reading Level + Correct Factor.

2. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test:	May 29, 2012	Temperature:	25°C
EUT:	Tablet PC	Humidity:	52%
Model No.:	M97B	Power Supply:	AC 120V/60Hz
Test Mode:	802.11b Channel Low 2412MHz	Polarization:	VERTICAL



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2310.000	29.779	25.868	55.647	-18.353	74.000	PEAK
2	* 2372.900	30.407	28.221	58.628	-15.372	74.000	PEAK
3	2390.000	30.578	25.729	56.307	-17.693	74.000	PEAK

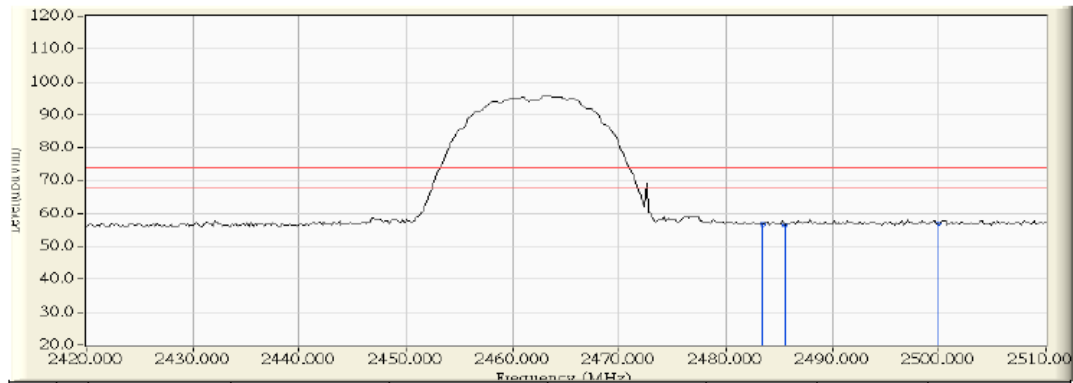


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2310.000	29.779	14.115	43.894	-10.106	54.000	AVERAGE
2	2372.900	30.407	14.550	44.957	-9.043	54.000	AVERAGE
3	* 2390.000	30.578	14.836	45.414	-8.586	54.000	AVERAGE

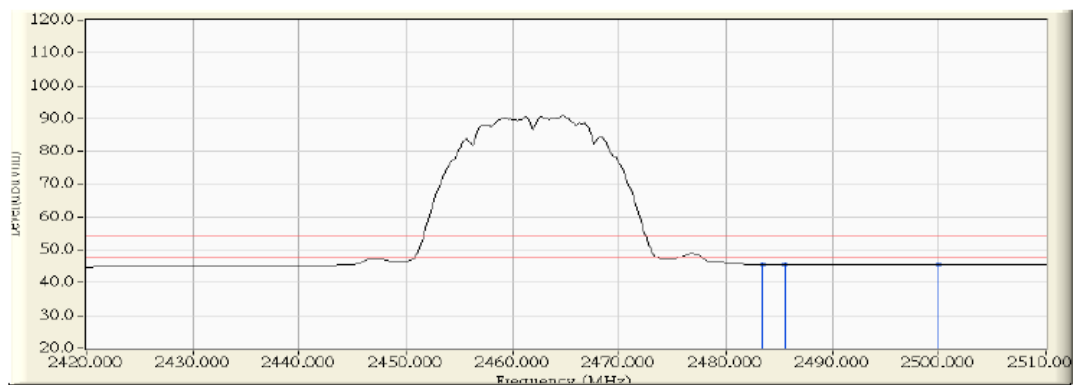
Note: 1. Measurement Level = Reading Level + Correct Factor.

2. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test:	May 29, 2012	Temperature:	25°C
EUT:	Tablet PC	Humidity:	52%
Model No.:	M97B	Power Supply:	AC 120V/60Hz
Test Mode:	802.11b Channel High 2462MHz	Polarization:	HORIZONTAL



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2483.500	31.512	25.323	56.835	-17.165	74.000	PEAK
2	2485.520	31.532	24.967	56.499	-17.501	74.000	PEAK
3	* 2500.000	31.638	25.359	56.998	-17.002	74.000	PEAK

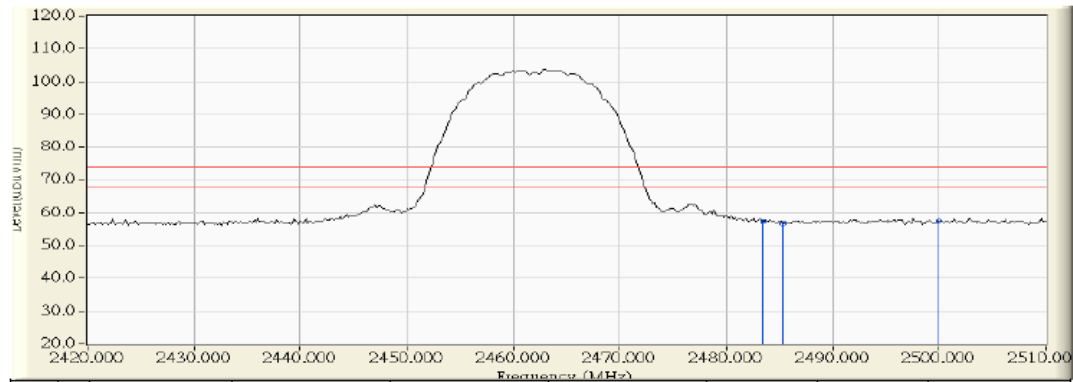


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	* 2483.500	31.512	14.007	45.519	-8.481	54.000	AVERAGE
2	2485.520	31.532	13.982	45.514	-8.486	54.000	AVERAGE
3	2500.000	31.638	13.783	45.422	-8.578	54.000	AVERAGE

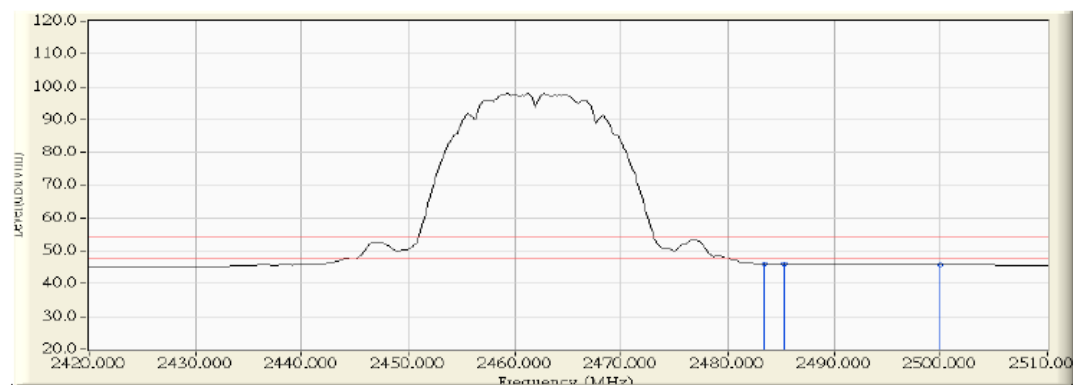
Note: 1. Measurement Level = Reading Level + Correct Factor.

2. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test:	May 29, 2012	Temperature:	25°C
EUT:	Tablet PC	Humidity:	52%
Model No.:	M97B	Power Supply:	AC 120V/60Hz
Test Mode:	802.11b Channel High 2462MHz	Polarization:	VERTICAL



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2483.500	31.512	25.882	57.394	-16.606	74.000	PEAK
2	2485.340	31.530	25.329	56.859	-17.141	74.000	PEAK
3	* 2500.000	31.638	25.974	57.613	-16.387	74.000	PEAK



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	* 2483.500	31.512	14.487	45.999	-8.001	54.000	AVERAGE
2	2485.350	31.530	14.357	45.887	-8.113	54.000	AVERAGE
3	2500.000	31.638	14.101	45.740	-8.260	54.000	AVERAGE

Note: 1. Measurement Level = Reading Level + Correct Factor.

2. The average measurement was not performed when the peak measured data under the limit of average detection.

Radiated test

Date of Test: May 29, 2012

Temperature: 25°C

EUT: Tablet PC

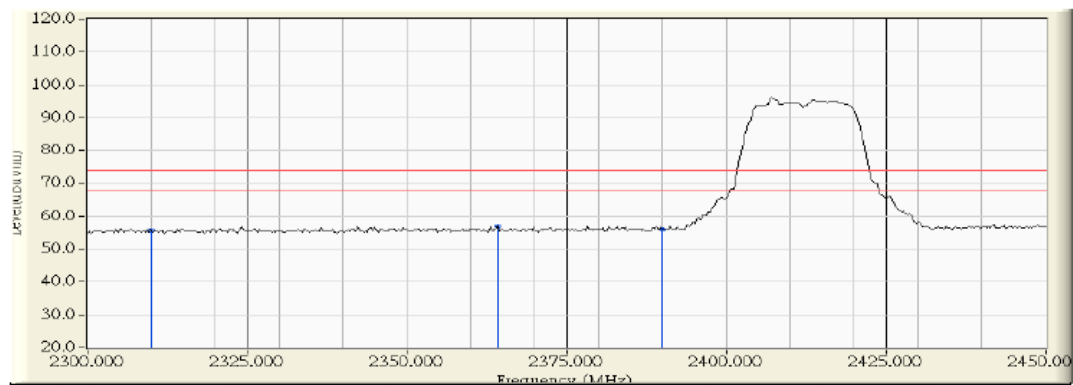
Humidity: 52%

Model No.: M97B

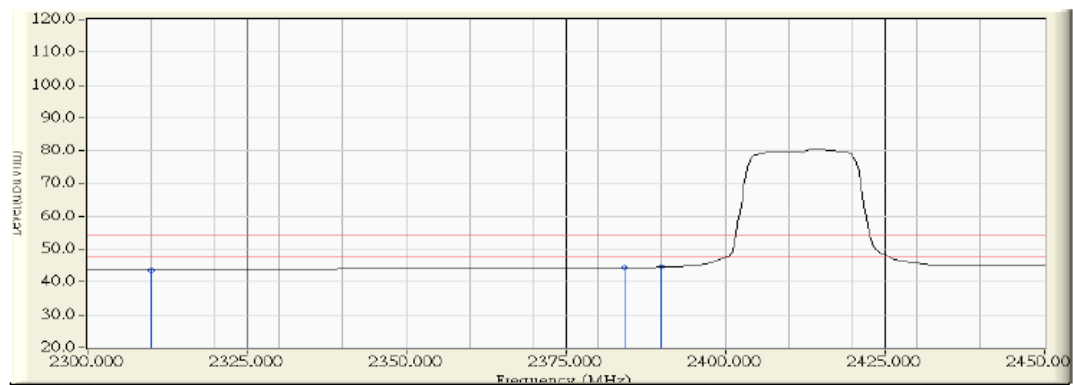
Power Supply: AC 120V/60Hz

Test Mode: 802.11g Channel Low 2412MHz

Polarization: HORIZONTAL



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBUV)	Measure Level (dBUV/m)	Margin (dB)	Limit (dBUV/m)	Detector Type
1	2310.000	29.779	25.928	55.707	-18.293	74.000	PEAK
2	* 2364.200	30.321	26.702	57.022	-16.978	74.000	PEAK
3	2390.000	30.578	25.301	55.879	-18.121	74.000	PEAK

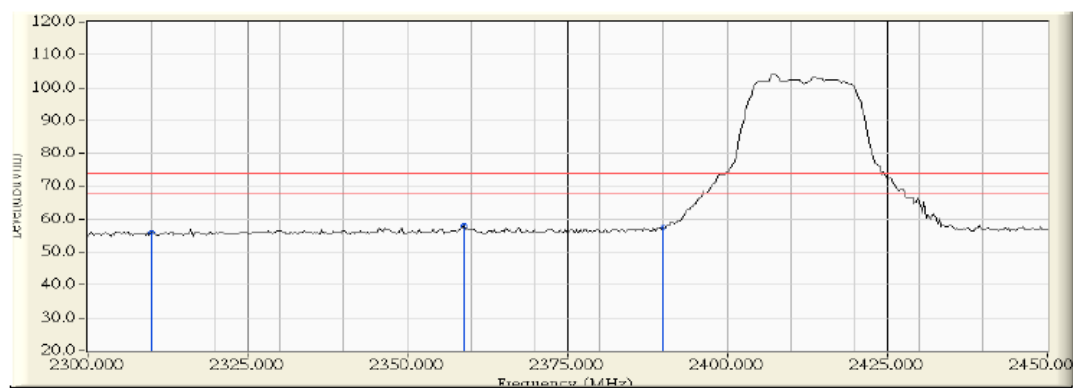


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBUV)	Measure Level (dBUV/m)	Margin (dB)	Limit (dBUV/m)	Detector Type
1	2310.000	29.779	13.941	43.720	-10.280	54.000	AVERAGE
2	2384.200	30.520	13.938	44.458	-9.542	54.000	AVERAGE
3	* 2390.000	30.578	13.974	44.552	-9.448	54.000	AVERAGE

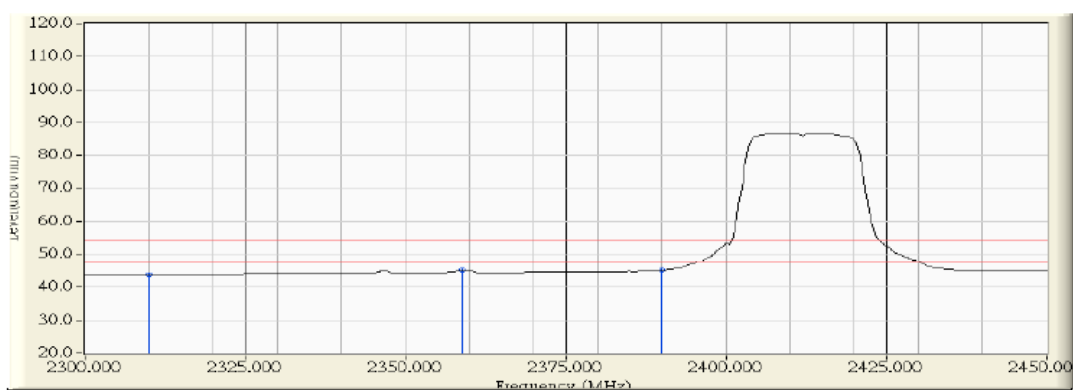
Note: 1. Measurement Level = Reading Level + Correct Factor.

2. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test:	May 29, 2012	Temperature:	25°C
EUT:	Tablet PC	Humidity:	52%
Model No.:	M97B	Power Supply:	AC 120V/60Hz
Test Mode:	802.11g Channel Low 2412MHz	Polarization:	VERTICAL



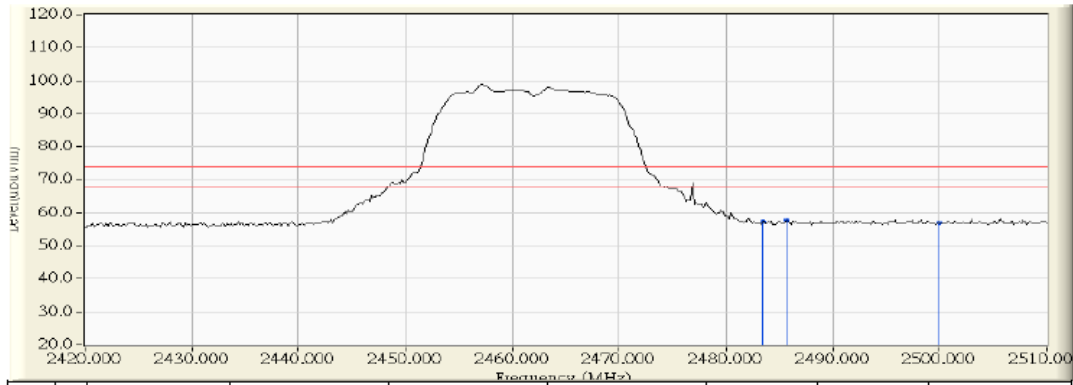
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2310.000	29.779	26.085	55.864	-18.136	74.000	PEAK
2	* 2358.800	30.266	27.798	58.064	-15.936	74.000	PEAK
3	2390.000	30.578	27.007	57.585	-16.415	74.000	PEAK



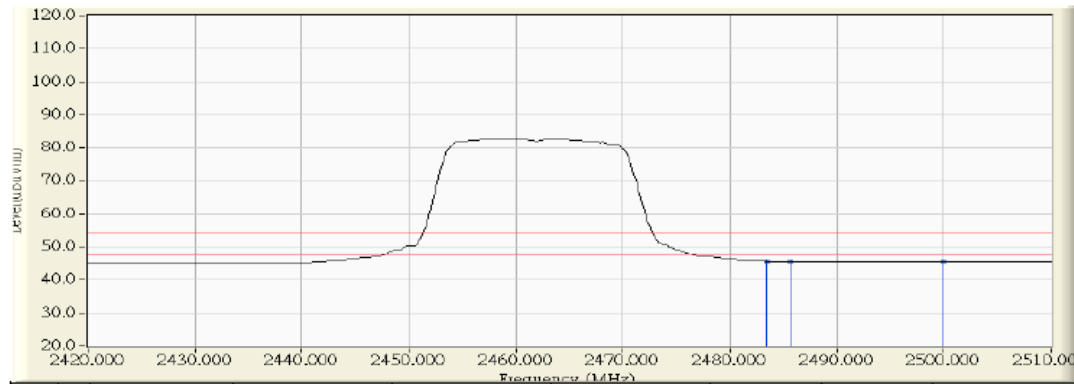
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2310.000	29.779	14.031	43.810	-10.190	54.000	AVERAGE
2	2358.800	30.266	14.818	45.084	-8.916	54.000	AVERAGE
3	* 2390.000	30.578	14.606	45.184	-8.816	54.000	AVERAGE

Note: 1. Measurement Level = Reading Level + Correct Factor.
 2. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test:	May 29, 2012	Temperature:	25°C
EUT:	Tablet PC	Humidity:	52%
Model No.:	M97B	Power Supply:	AC 120V/60Hz
Test Mode:	802.11g Channel High 2462MHz	Polarization:	HORIZONTAL



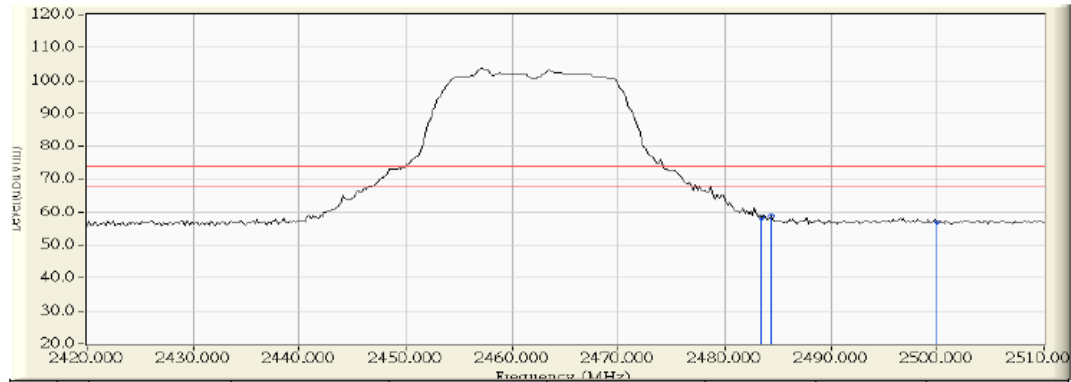
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2483.500	31.512	25.768	57.280	-16.720	74.000	PEAK
2	* 2485.700	31.533	26.371	57.905	-16.095	74.000	PEAK
3	2500.000	31.638	25.404	57.043	-16.957	74.000	PEAK



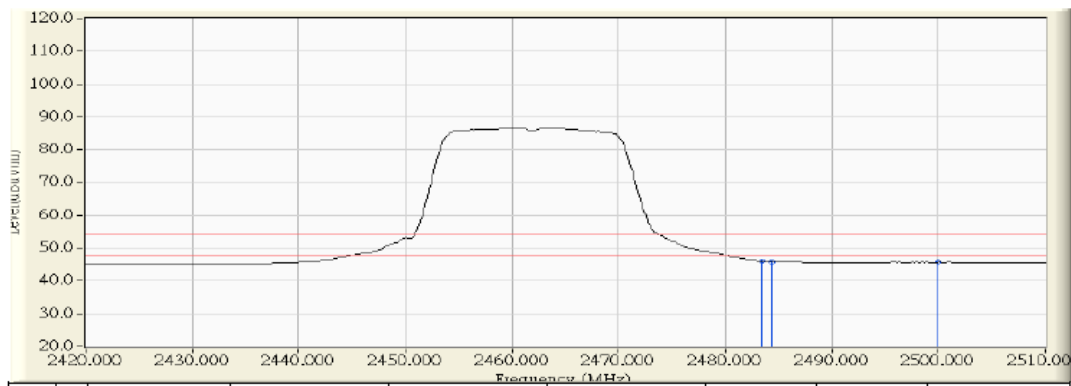
	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	* 2483.500	31.512	14.060	45.572	-8.428	54.000	AVERAGE
2	2485.700	31.533	13.966	45.500	-8.500	54.000	AVERAGE
3	2500.000	31.638	13.858	45.497	-8.503	54.000	AVERAGE

Note: 1. Measurement Level = Reading Level + Correct Factor.
 2. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test:	May 29, 2012	Temperature:	25°C
EUT:	Tablet PC	Humidity:	52%
Model No.:	M97B	Power Supply:	AC 120V/60Hz
Test Mode:	802.11g Channel High 2462MHz	Polarization:	VERTICAL



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2483.500	31.512	26.925	58.437	-15.563	74.000	PEAK
2	* 2484.440	31.521	27.237	58.758	-15.242	74.000	PEAK
3	2500.000	31.638	25.416	57.055	-16.945	74.000	PEAK



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	* 2483.500	31.512	14.503	46.015	-7.985	54.000	AVERAGE
2	2484.440	31.521	14.331	45.852	-8.148	54.000	AVERAGE
3	2500.000	31.638	13.968	45.607	-8.393	54.000	AVERAGE

Note: 1. Measurement Level = Reading Level + Correct Factor.

2. The average measurement was not performed when the peak measured data under the limit of average detection.

Radiated test

Date of Test: May 29, 2012

Temperature: 25°C

EUT: Tablet PC

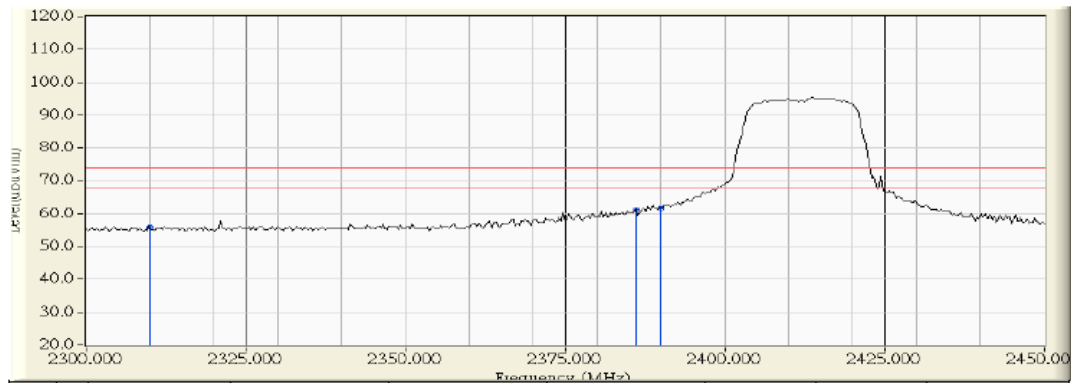
Humidity: 52%

Model No.: M97B

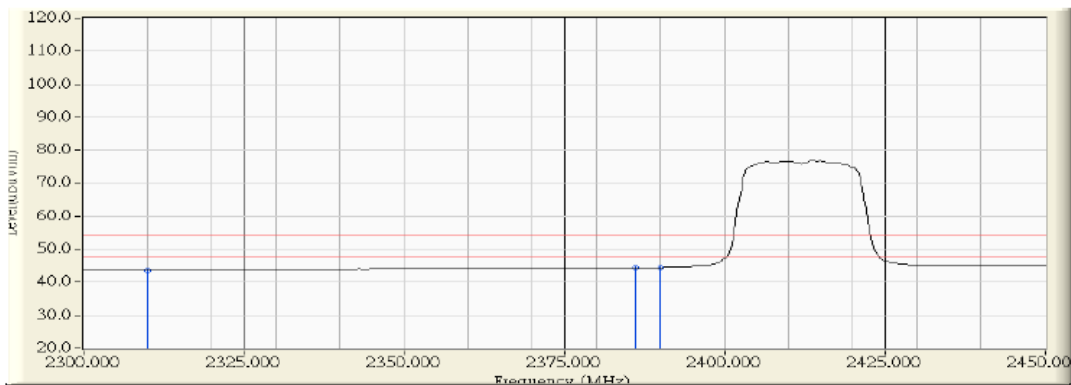
Power Supply: AC 120V/60Hz

Test Mode: 802.11n HT20 Channel Low 2412MHz

Polarization: HORIZONTAL



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBUV)	Measure Level (dBUV/m)	Margin (dB)	Limit (dBUV/m)	Detector Type
1	2310.000	29.779	26.087	55.866	-18.134	74.000	PEAK
2	2386.100	30.539	30.669	61.208	-12.792	74.000	PEAK
3	* 2390.000	30.578	30.991	61.569	-12.431	74.000	PEAK



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBUV)	Measure Level (dBUV/m)	Margin (dB)	Limit (dBUV/m)	Detector Type
1	2310.000	29.779	13.914	43.693	-10.307	54.000	AVERAGE
2	2386.100	30.539	13.877	44.416	-9.584	54.000	AVERAGE
3	* 2390.000	30.578	13.925	44.503	-9.497	54.000	AVERAGE

Note: 1. Measurement Level = Reading Level + Correct Factor.

2. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test: May 29, 2012

Temperature: 25°C

EUT: Tablet PC

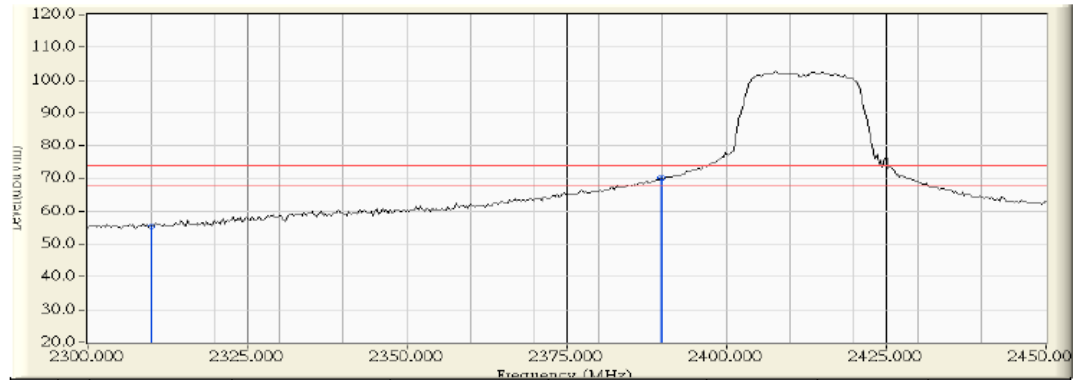
Humidity: 52%

Model No.: M97B

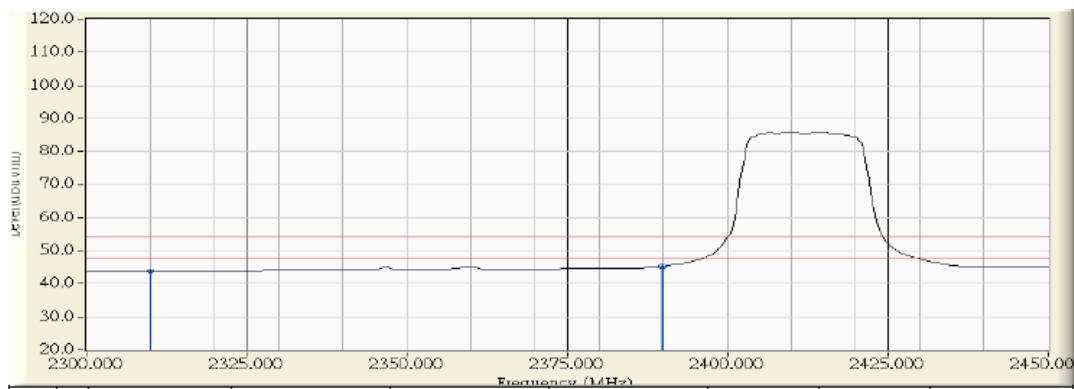
Power Supply: AC 120V/60Hz

Test Mode: 802.11n HT20 Channel Low 2412MHz

Polarization: VERTICAL



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2310.000	29.779	25.647	55.426	-18.574	74.000	PEAK
2	2389.700	30.575	39.612	70.187	-3.813	74.000	PEAK
3	* 2390.000	30.578	39.679	70.257	-3.743	74.000	PEAK



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2310.000	29.779	14.010	43.789	-10.211	54.000	AVERAGE
2	2389.700	30.575	14.579	45.154	-8.846	54.000	AVERAGE
3	* 2390.000	30.578	14.646	45.224	-8.776	54.000	AVERAGE

Note: 1. Measurement Level = Reading Level + Correct Factor.

2. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test: May 29, 2012

Temperature: 25°C

EUT: Tablet PC

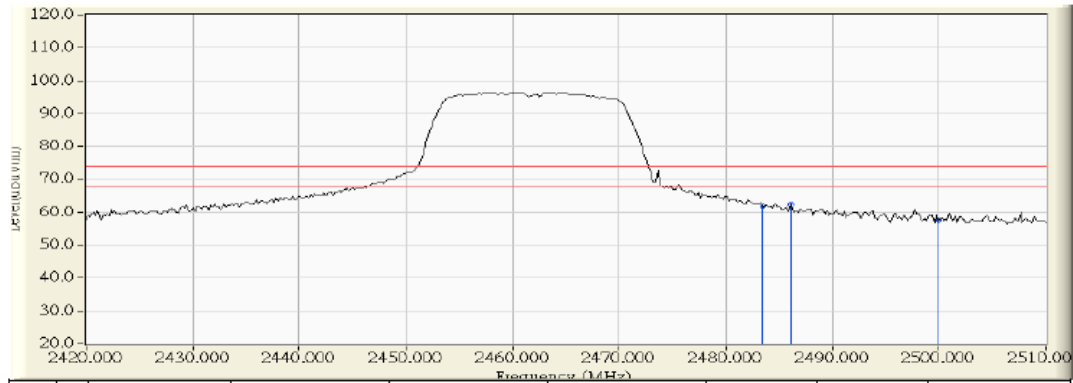
Humidity: 52%

Model No.: M97B

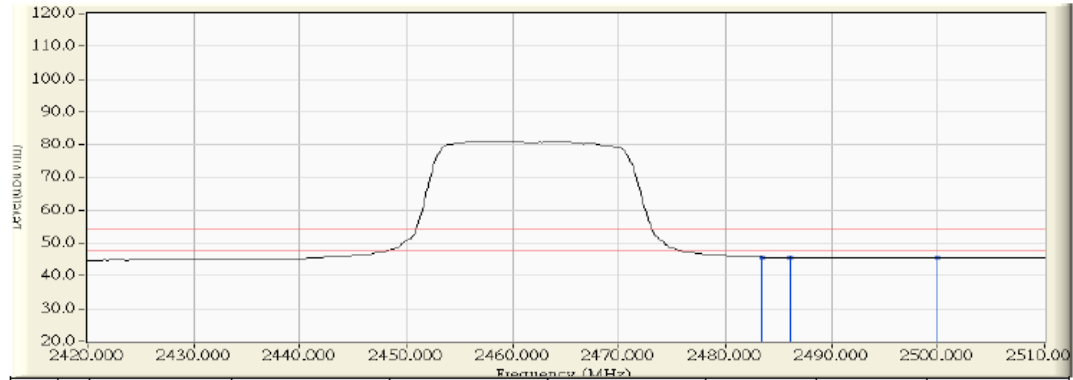
Power Supply: AC 120V/60Hz

Test Mode: 802.11n HT20 Channel High 2462MHz

Polarization: HORIZONTAL



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2483.500	31.512	30.320	61.832	-12.168	74.000	PEAK
2	* 2486.060	31.538	30.752	62.289	-11.711	74.000	PEAK
3	2500.000	31.638	25.894	57.533	-16.467	74.000	PEAK



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	* 2483.500	31.512	14.087	45.599	-8.401	54.000	AVERAGE
2	2486.060	31.538	13.926	45.463	-8.537	54.000	AVERAGE
3	2500.000	31.638	13.743	45.382	-8.618	54.000	AVERAGE

Note: 1. Measurement Level = Reading Level + Correct Factor.

2. The average measurement was not performed when the peak measured data under the limit of average detection.

Date of Test: May 29, 2012

Temperature: 25°C

EUT: Tablet PC

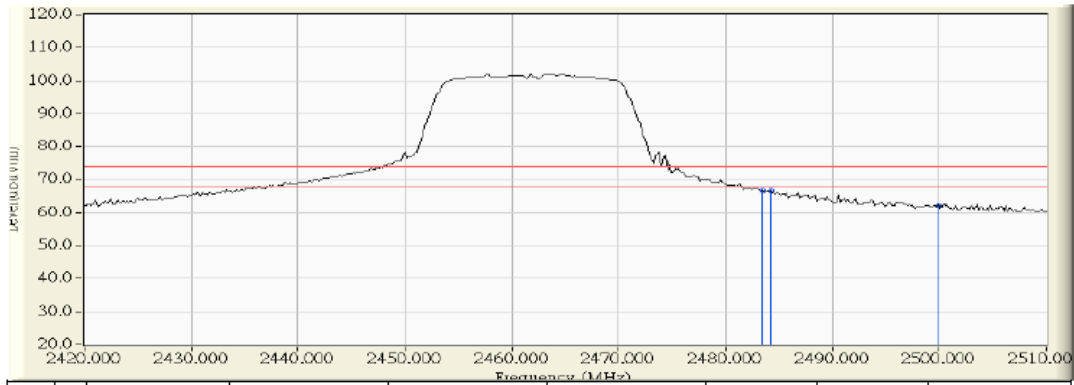
Humidity: 52%

Model No.: M97B

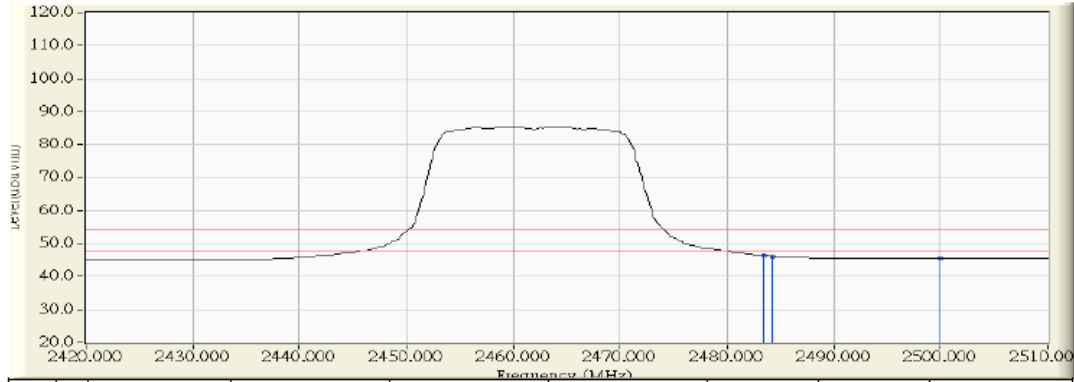
Power Supply: AC 120V/60Hz

Test Mode: 802.11n HT20 Channel High 2462MHz

Polarization: VERTICAL



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	2483.500	31.512	35.036	66.548	-7.452	74.000	PEAK
2	* 2484.260	31.519	35.087	66.606	-7.394	74.000	PEAK
3	2500.000	31.638	30.375	62.014	-11.986	74.000	PEAK



	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	* 2483.500	31.512	14.752	46.264	-7.736	54.000	AVERAGE
2	2484.260	31.519	14.522	46.041	-7.959	54.000	AVERAGE
3	2500.000	31.638	13.736	45.375	-8.625	54.000	AVERAGE

Note: 1. Measurement Level = Reading Level + Correct Factor.

2. The average measurement was not performed when the peak measured data under the limit of average detection.

13. §15.247(E) - Power Spectral Density

13.1. Test Equipment

Please refer to Section 4 this report.

13.2. Test Procedure

- 1, Set EUT in the transmitting mode.
- 2, Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3, Set the spectrum analyzer as RBW=3KHz, VBW=10KHz, Span=1.5MHz, Sweep=500S.
- 4, Record the max. reading
- 5, Repeat the above procedure until the measurements for all frequencies are completed.

13.3. Applicable Standard

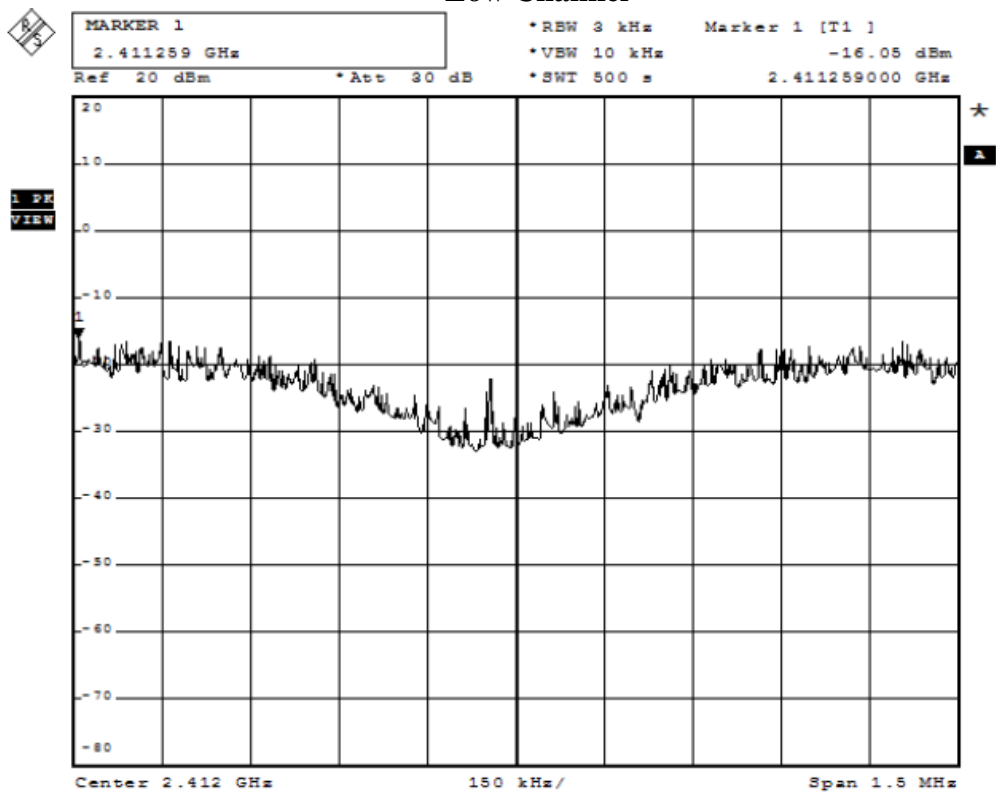
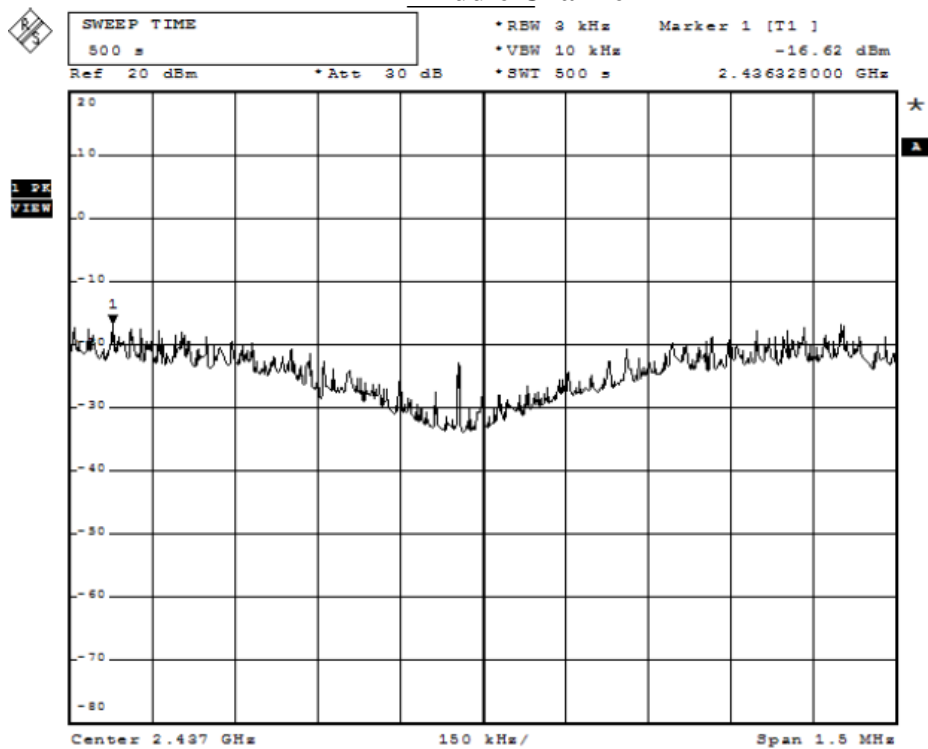
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

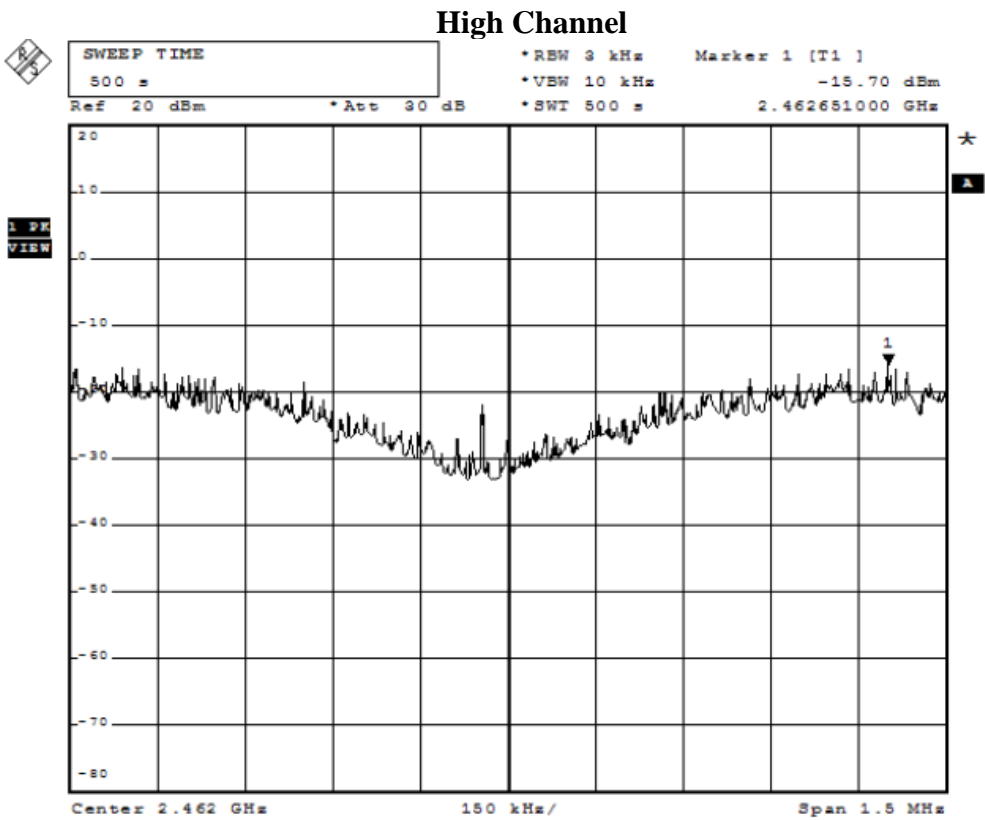
13.4. Test Result

PASS

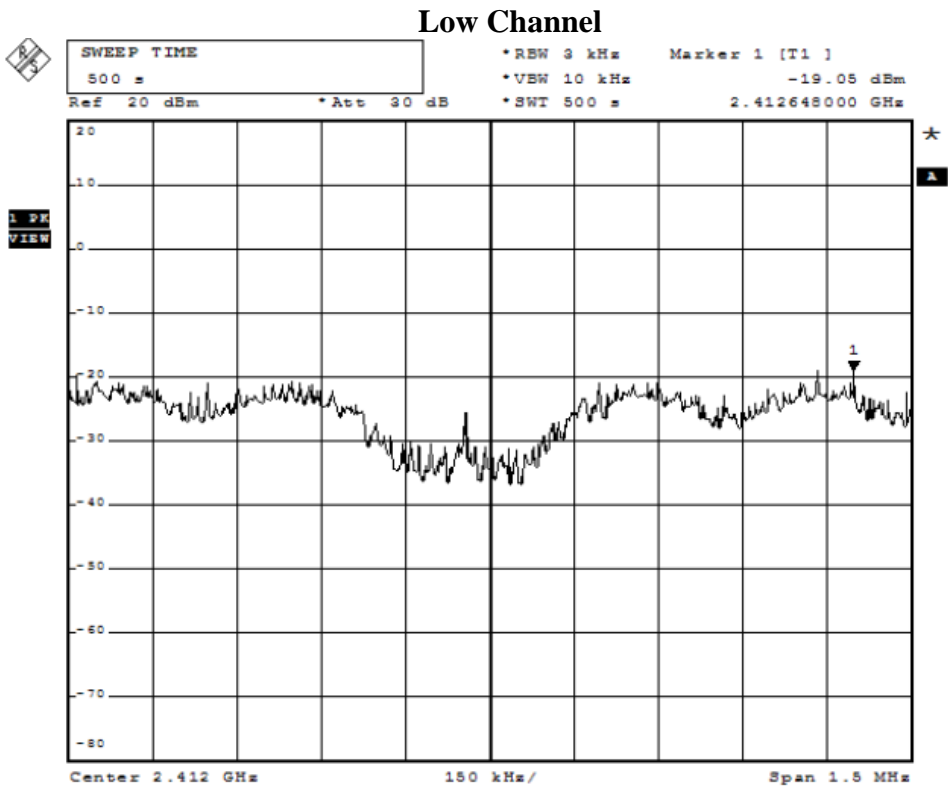
Channel Frequency (MHz)	Data Rate (Mbps)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	RESULT
802.11b Mode				
2412	1	-16.05	8	Compliant
2437	1	-16.62	8	Compliant
2462	1	-15.72	8	Compliant
802.11g Mode				
2412	6	-19.05	8	Compliant
2437	6	-20.67	8	Compliant
2462	6	-21.38	8	Compliant
802.11n (20M) Mode				
2412	6	-23.97	8	Compliant
2437	6	-20.35	8	Compliant
2462	6	-21.37	8	Compliant

802.11b Mode:

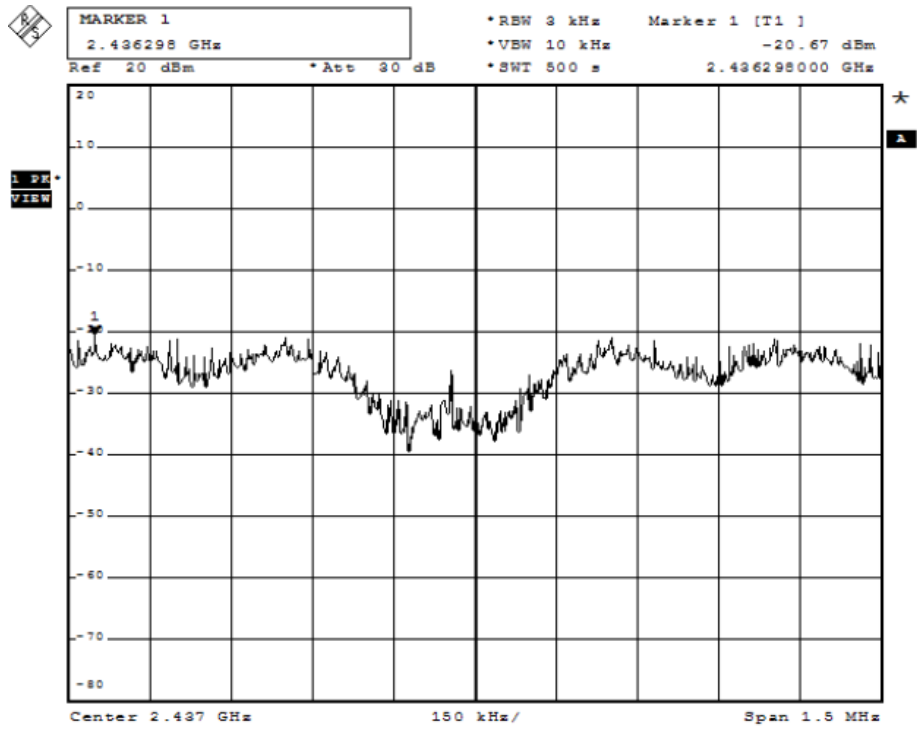
Low Channel**Middle Channel**



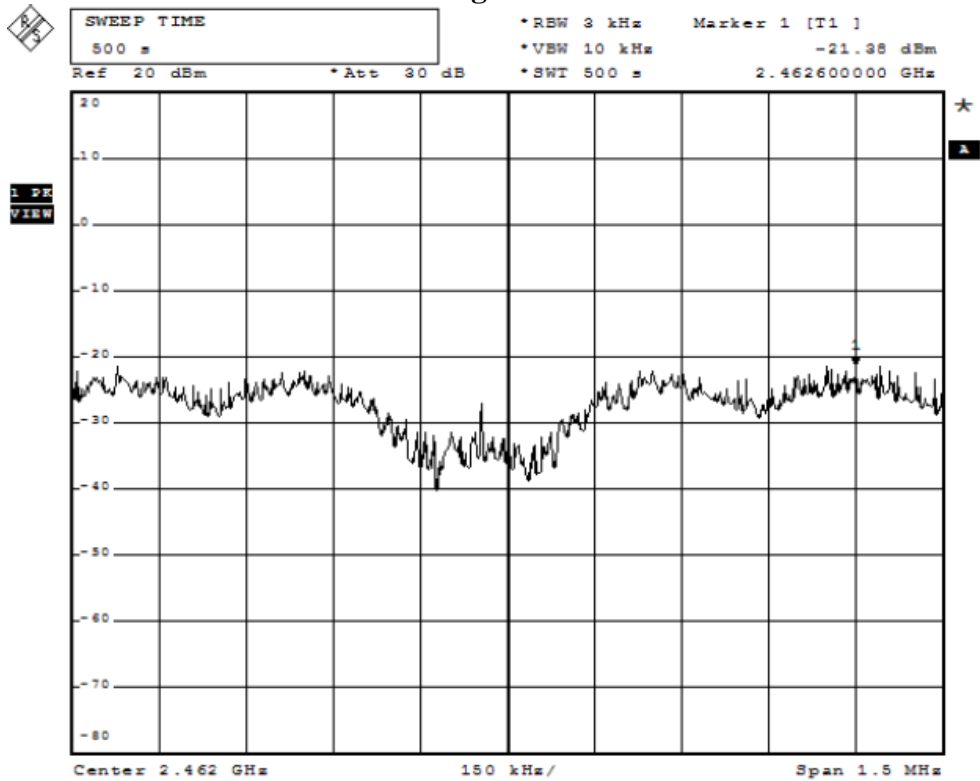
802.11g Mode:



Middle Channel

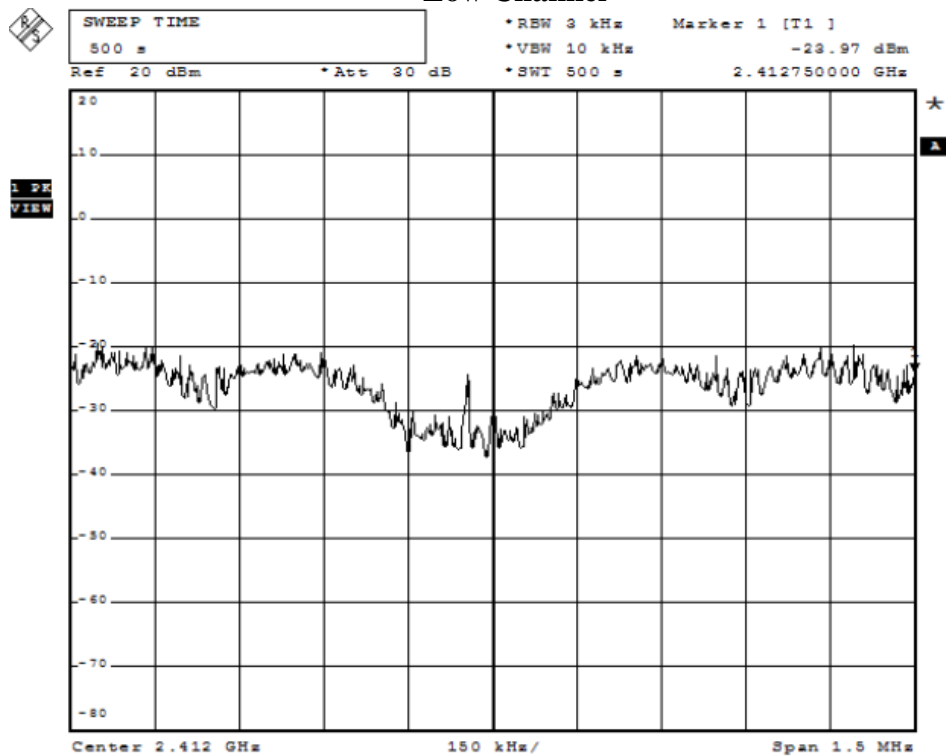


High Channel



802.11n (20M) Mode:

Low Channel



Middle Channel

