FCC RF Test Report

APPLICANT	:	ZTE CORPORATION
EQUIPMENT	:	CDMA/LTE Digital Mobile Handset
BRAND NAME	:	ZTE
MODEL NAME	:	ZTE N9120
FCC ID	:	Q78-ZTEN9120
STANDARD	:	FCC Part 15 Subpart C §15.247
CLASSIFICATION	:	(DTS) Digital Transmission System

The product was received on Jul. 13, 2012 and completely tested on Aug. 20, 2012. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and shown the compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (KUNSHAN) INC., the test report shall not be reproduced except in full.

Reviewed by:

Jones Tsai / Manager

Testing Laboratory 1190

SPORTON INTERNATIONAL (KUNSHAN) INC.
No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C.

TABLE OF CONTENTS

REVISION HISTORY **3**

SUMMARY OF TEST RESULT **4**

1 GENERAL DESCRIPTION **5**

1.1 Applicant 5
1.2 Manufacturer 5
1.3 Feature of Equipment Under Test 5
1.4 Testing Site 6
1.5 Applied Standards 6
1.6 Ancillary Equipment List 6

2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST **7**

2.1 Carrier Frequency Channel 7
2.2 Pre-Scanned RF Power 8
2.3 Test Mode 9
2.4 Connection Diagram of Test System 10
2.5 RF Utility 10

3 TEST RESULT **11**

3.1 6dB Bandwidth Measurement 11
3.2 Output Power Measurement 18
3.3 Power Spectral Density Measurement 21
3.4 Conducted Band Edges and Spurious Emission Measurement 28
3.5 Radiated Emission Measurement 41
3.6 AC Conducted Emission Measurement 66
3.7 Antenna Requirements 70

4 LIST OF MEASURING EQUIPMENT **71**

5 UNCERTAINTY OF EVALUATION **72**

APPENDIX A. PHOTOGRAPHS OF EUT

APPENDIX B. SETUP PHOTOGRAPHS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR271302B	Rev. 01	Initial issue of report	Aug. 31, 2012

SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.247(a)(2)	A8.2(a)	6dB Bandwidth	≥ 0.5MHz	Pass	-
3.2	15.247(b)	A8.4	Power Output Measurement	≤ 30dBm	Pass	-
3.3	15.247(e)	A8.2(b)	Power Spectral Density	≤ 8dBm/3kHz	Pass	-
3.4	15.247(d)	A8.5	Conducted Band Edges	≤ 20dBc	Pass	-
			Conducted Spurious Emission		Pass	-
3.5	15.247(d)	A8.5	Radiated Band Edges	15.209(a) & 15.247(d)	Pass	-
			Radiated Spurious Emission		Pass	Under limit 4.26 dB at 830.400 MHz
3.6	15.207	Gen 7.2.4	AC Conducted Emission	15.207(a)	Pass	Under limit 16.74 dB at 0.370 MHz
3.7	15.203 & 15.247(b)	A8.4	Antenna Requirement	N/A	Pass	-

1 General Description

1.1 Applicant

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.2 Manufacturer

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	CDMA/LTE Digital Mobile Handset
Brand Name	ZTE
Model Name	ZTE N9120
FCC ID	Q78-ZTEN9120
EUT supports Radios application	CDMA/EV-DO/LTE/WLAN 11bgn/Bluetooth
HW Version	N9120.H02
SW Version	N9120V1.0.0B03
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Product Specification subjective to this standard	
Tx/Rx Frequency Range	2412 MHz ~ 2462 MHz
Number of Channels	11
Carrier Frequency of Each Channel	2412+(n-1)*5 MHz; n=1~11
Maximum Output Power to Antenna	802.11b : 18.18 dBm (0.0658 W) 802.11g : 22.72 dBm (0.1871 W) 802.11n HT-20 : 22.71 dBm (0.1866 W)
Antenna Type	PIFA Antenna with gain -1.00 dBi
Type of Modulation	802.11b : DSSS (BPSK / QPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)

1.4 Testing Site

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.			
Test Site Location	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C. TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958			
Test Site No.	Sporton Site No.			FCC/IC Registration No.
	TH01-KS	CO01-KS	03CH01-KS	149928/4086E-1

1.5 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart C §15.247
- FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v01
- FCC TCB Workshop 2012, April
- ANSI C63.4-2003 and ANSI C63.10-2009
- IC RSS-210 Issue 8
- IC RSS-Gen Issue 3

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

1.6 Ancillary Equipment List

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	DC Power Supply	GWINSTEK	GPS-3030D	N/A	N/A	Unshielded, 1.8 m
3.	WLAN AP	D-link	DIR-855	KA2DIR855A2	N/A	Unshielded, 1.8 m
4.	Bluetooth Earphone	Nokia	BH-106	QTLBH-106	N/A	N/A

2 Test Configuration of Equipment Under Test

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conducted emission (150 KHz to 30 MHz) and radiated emission (9 KHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.

The final configuration from all the combinations and the worst-case data rates were investigated by measuring the maximum power across all the data rates and modulation modes under section 2.2.

Based on the worst configuration found above, the RF power setting is set individually to meet FCC compliance limit for the final conducted and radiated tests shown in section 2.3.

2.1 Carrier Frequency Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	1	2412	7	2442
	2	2417	8	2447
	3	2422	9	2452
	4	2427	10	2457
	5	2432	11	2462
	6	2437	-	-

2.2 Pre-Scanned RF Power

Preliminary tests were performed in different data rate and antenna configurations as following table and the highest power data rates were chosen for full test in the following tables. Final Output Power equals to Measured Output Power adds the duty factor.

Channel	Frequency	2.4GHz 802.11b mode			
		DSSS Data Rate			
		1 Mbps	2 Mbps	5.5 Mbps	11 Mbps
CH 01	2412 MHz	18.18	18.16	18.05	18.09
CH 06	2437 MHz	17.37	17.34	17.33	17.36
CH 11	2462 MHz	17.16	17.11	17.08	17.12

Channel	Frequency	2.4GHz 802.11g mode							
		OFDM Data Rate							
		6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps
CH 01	2412 MHz	22.72	22.59	22.53	22.42	22.53	22.56	22.64	22.39
CH 06	2437 MHz	22.43	22.20	22.39	22.13	22.09	22.12	21.89	21.98
CH 11	2462 MHz	22.56	22.29	22.28	22.23	22.16	22.08	22.16	21.88

Channel	Frequency	2.4GHz 802.11n HT-20 mode							
		OFDM Data Rate							
		MCS=0	MCS=1	MCS=2	MCS=3	MCS=4	MCS=5	MCS=6	MCS=7
		6.5 Mbps	13 Mbps	19.5 Mbps	26 Mbps	39 Mbps	52 Mbps	58.5 Mbps	65 Mbps
CH 01	2412 MHz	22.71	22.51	22.38	22.41	22.31	22.19	22.31	22.29
CH 06	2437 MHz	22.39	22.21	22.39	22.23	22.19	22.13	22.02	21.89
CH 11	2462 MHz	22.25	22.22	22.13	22.16	22.12	22.09	22.25	22.21

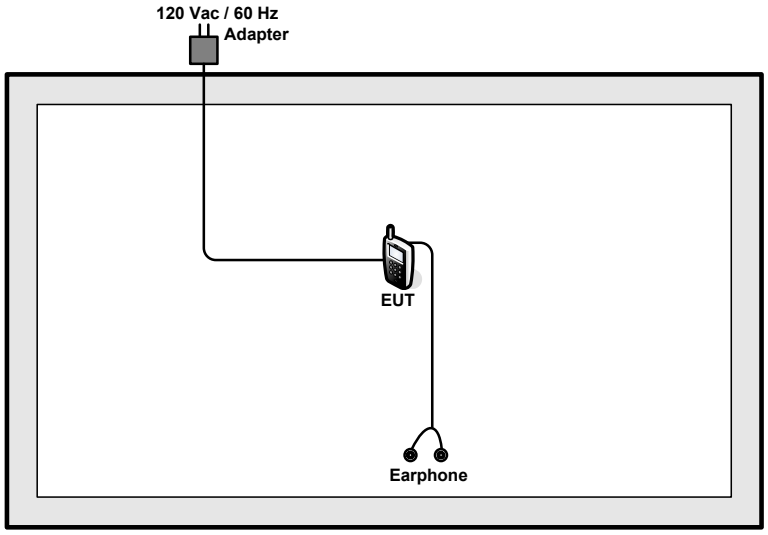
2.3 Test Mode

Final results of test modes, data rates and test channels are shown as following table.

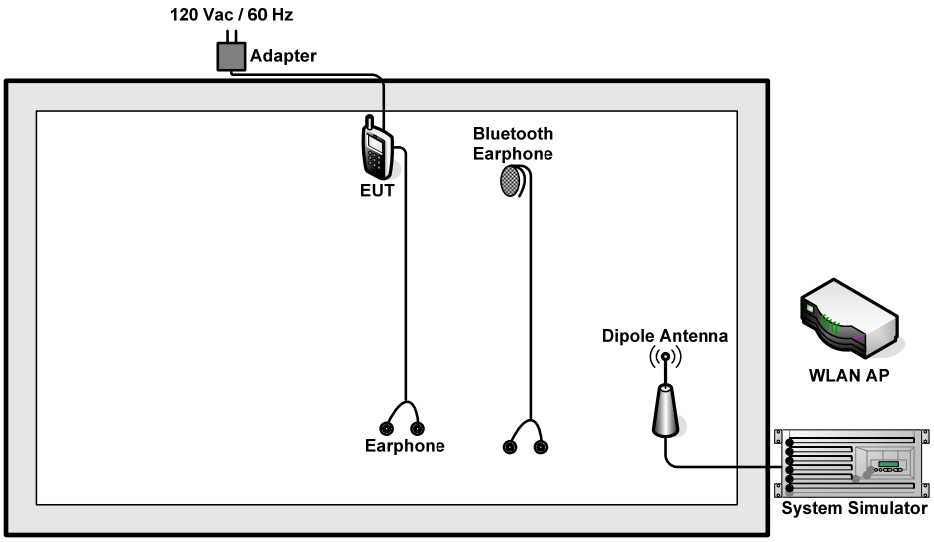
Test Cases				
	Test Items	Mode	Data Rate	Test Channel
Conducted TCs	6dB BW Power Spectral Density	802.11b	1 Mbps	1/6/11
		802.11g	6 Mbps	1/6/11
		802.11n HT-20	6.5 Mbps	1/6/11
	Output Power	802.11b	1 Mbps	1/6/11
		802.11g	6 Mbps	1/6/11
		802.11n HT-20	6.5 Mbps	1/6/11
	Conducted Band EDGE	802.11b	1 Mbps	1/11
		802.11g	6 Mbps	1/11
		802.11n HT-20	6.5 Mbps	1/11
	Conducted Spurious Emission	802.11b	1 Mbps	1/6/11
		802.11g	6 Mbps	1/6/11
		802.11n HT-20	6.5 Mbps	1/6/11
Radiated TCs	Radiated Band EDGE	802.11b	1 Mbps	1/11
		802.11g	6 Mbps	1/11
		802.11n HT-20	6.5 Mbps	1/11
	Radiated Spurious Emission	802.11b	1 Mbps	1/6/11
		802.11g	6 Mbps	1/6/11
		802.11n HT-20	6.5 Mbps	1/6/11
AC Conducted Emission	Mode 1 : CDMA 2000 BC0 Idle + WLAN Link + Bluetooth Link + USB Cable (Charging from Adapter) + Camera + Earphone			

2.4 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



2.5 RF Utility

For WLAN function, turn on “FCC Test” on the EUT directly. Then, the EUT will get into the engineering modes to contact with WLAN AP for continuous transmitting and receiving signals.

3 Test Result

3.1 6dB Bandwidth Measurement

3.1.1 Limit of 6dB Bandwidth

The minimum 6 dB bandwidth shall be at least 500 KHz.

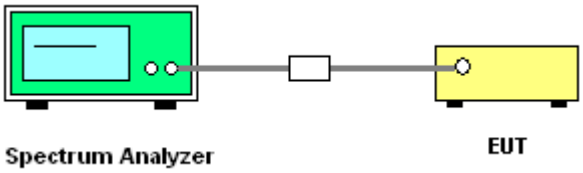
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance and TCB Workshop 2012, April.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 1-5% of the emission bandwidth (EBW).Set the Video bandwidth (VBW) ≥ 3 * RBW. In order to make an accurate measurement. The 6 dB bandwidth must be greater than 500 KHz.

3.1.4 Test Setup

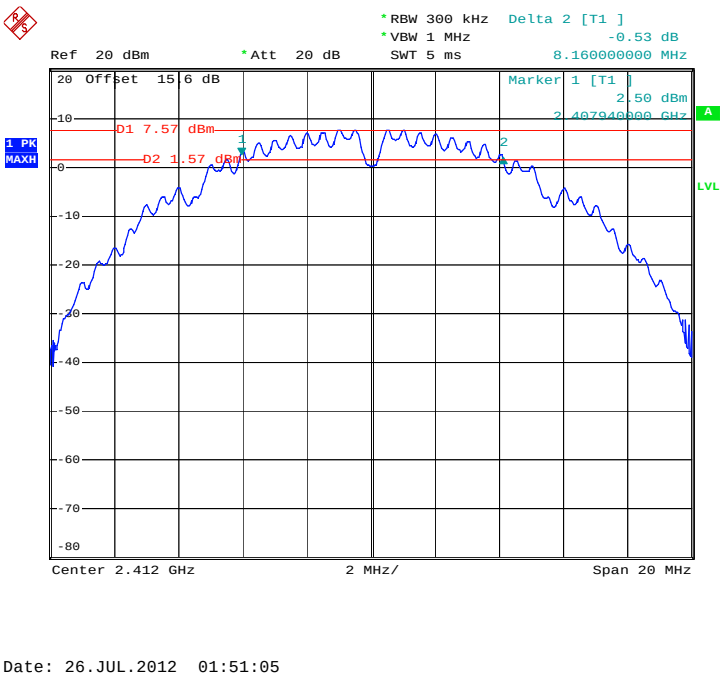


3.1.5 Test Result of 6dB Bandwidth

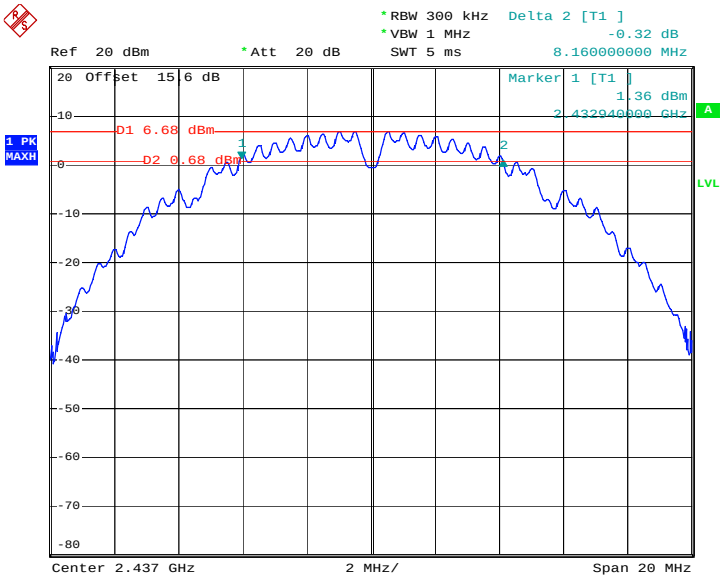
Test Mode :	802.11b	Temperature :	23~24℃
Test Engineer :	Lizy Li	Relative Humidity :	47~48%

Channel	Frequency (MHz)	802.11b 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
01	2412	8.16	0.5	Pass
06	2437	8.16	0.5	Pass
11	2462	8.16	0.5	Pass

6 dB Bandwidth Plot on 802.11b Channel 01



6 dB Bandwidth Plot on 802.11b Channel 06



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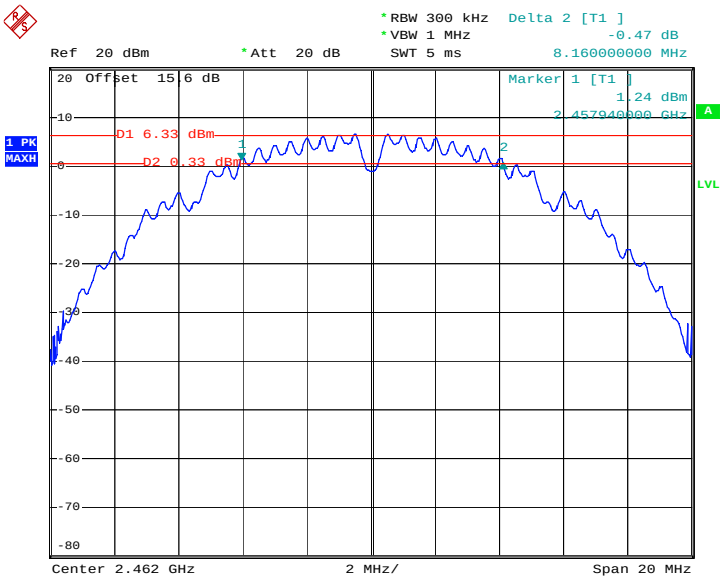
6 dB Bandwidth Plot on 802.11b Channel 11



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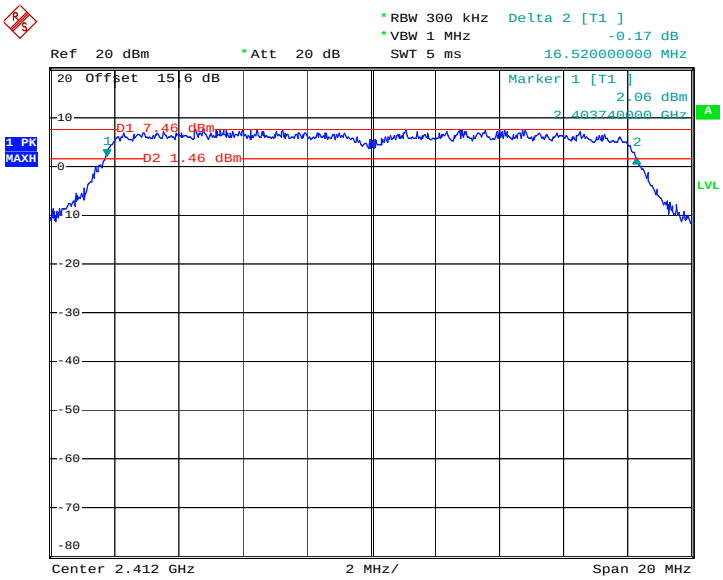
Test Mode :	802.11g	Temperature :	23~24℃
Test Engineer :	Lizy Li	Relative Humidity :	47~48%

Channel	Frequency (MHz)	802.11g 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
01	2412	16.52	0.5	Pass
06	2437	16.48	0.5	Pass
11	2462	16.56	0.5	Pass

6 dB Bandwidth Plot on 802.11g Channel 01



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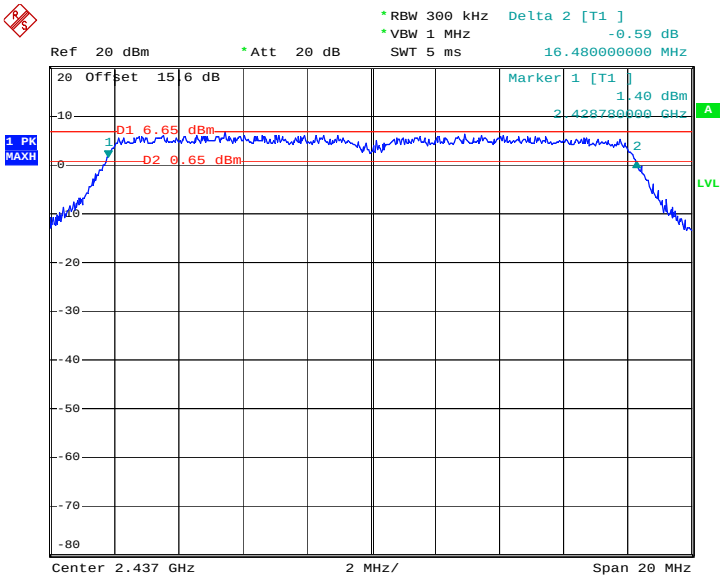
6 dB Bandwidth Plot on 802.11g Channel 06



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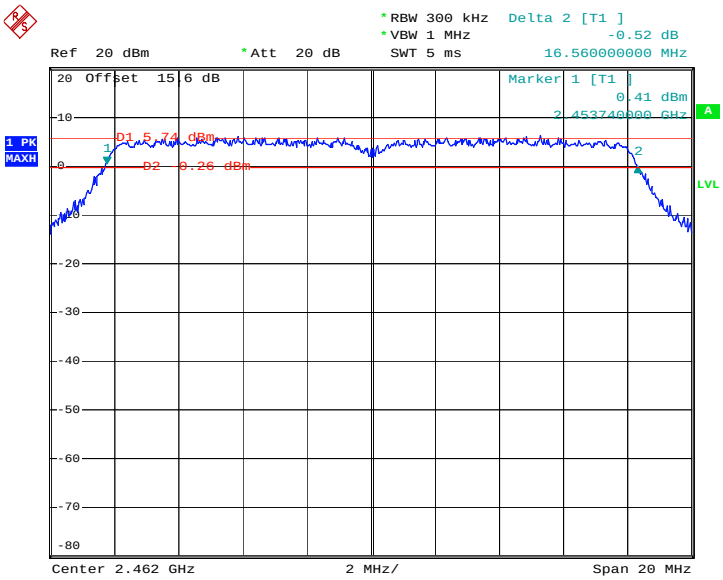
6 dB Bandwidth Plot on 802.11g Channel 11



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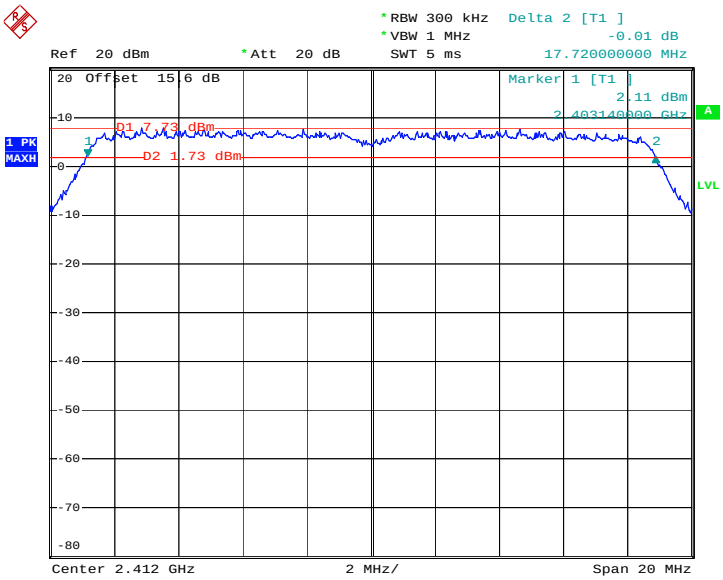
Test Mode :	802.11n HT-20	Temperature :	23~24℃
Test Engineer :	Lizy Li	Relative Humidity :	47~48%

Channel	Frequency (MHz)	2.4GHz 802.11n HT-20 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
01	2412	17.72	0.5	Pass
06	2437	17.72	0.5	Pass
11	2462	17.72	0.5	Pass

6 dB Bandwidth Plot on 802.11n HT-20 Channel 01



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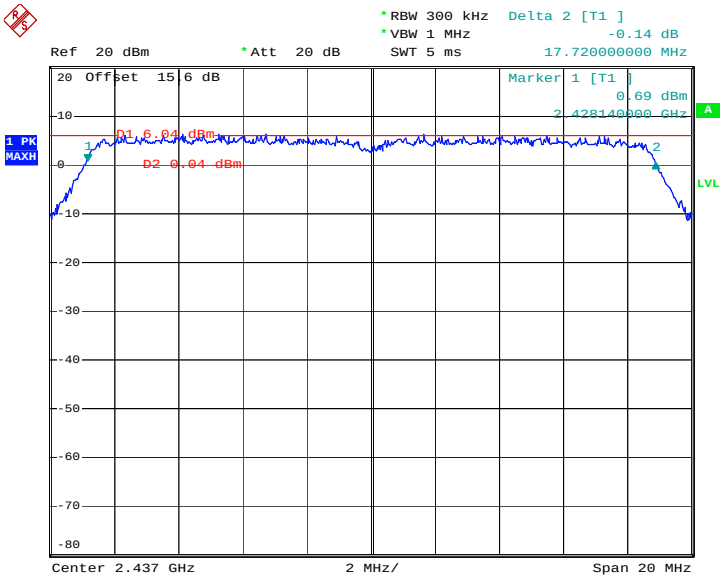
6 dB Bandwidth Plot on 802.11n HT-20 Channel 06



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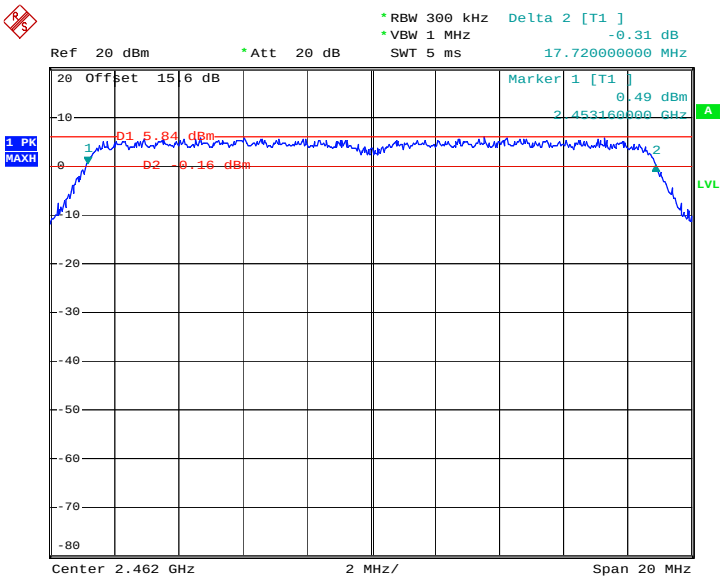
6 dB Bandwidth Plot on 802.11n HT-20 Channel 11



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3.2 Output Power Measurement

3.2.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm. If transmitting antenna of directional gain greater than 6dBi are used the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

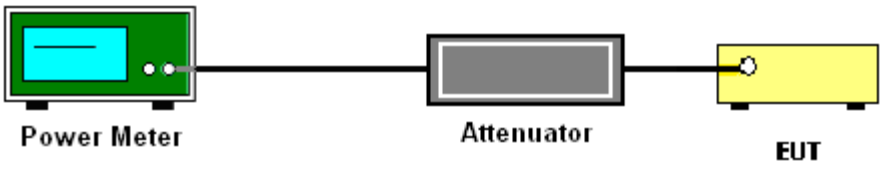
3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

3.2.3 Test Procedures

1. The testing follows the Measurement Procedure 7.2.1.3 Option 3(peak power meter method) of FCC KDB No. 558074 DTS Meas. Guidance DR01.
2. The RF output of EUT was connected to the power meter by a low loss cable
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power and record the results in the test report.

3.2.4 Test Setup



3.2.5 Test Result of Peak Output Power

Test Mode :	802.11b	Temperature :	23~24℃
Test Engineer :	Lizy Li	Relative Humidity :	47~48%

Channel	Frequency (MHz)	802.11b Peak Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
01	2412	18.18	30	Pass
06	2437	17.37	30	Pass
11	2462	17.16	30	Pass

Test Mode :	802.11g	Temperature :	23~24℃
Test Engineer :	Lizy Li	Relative Humidity :	47~48%

Channel	Frequency (MHz)	802.11g Peak Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
01	2412	22.72	30	Pass
06	2437	22.43	30	Pass
11	2462	22.56	30	Pass

Test Mode :	802.11n HT-20	Temperature :	23~24℃
Test Engineer :	Lizy Li	Relative Humidity :	47~48%

Channel	Frequency (MHz)	2.4GHz 802.11n HT-20 Peak Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
01	2412	22.71	30	Pass
06	2437	22.39	30	Pass
11	2462	22.25	30	Pass

3.2.6 Test Result of Average output Power (Reporting Only)

Test Mode :	802.11b	Temperature :	23~24℃
Test Engineer :	Lizy Li	Relative Humidity :	47~48%
Duty Cycle:	97.67%	Duty Factor:	0.10dB

Channel	Frequency (MHz)	802.11b Average Output Power (dBm)
01	2412	15.28
06	2437	14.56
11	2462	13.88

Test Mode :	802.11g	Temperature :	23~24℃
Test Engineer :	Lizy Li	Relative Humidity :	47~48%
Duty Cycle:	69.12%	Duty Factor:	1.60dB

Channel	Frequency (MHz)	802.11g Average Output Power (dBm)
01	2412	14.95
06	2437	14.09
11	2462	13.70

Test Mode :	802.11n HT-20	Temperature :	23~24℃
Test Engineer :	Lizy Li	Relative Humidity :	47~48%
Duty Cycle:	86.09%	Duty Factor:	0.65dB

Channel	Frequency (MHz)	802.11n HT-20 Average Output Power (dBm)
01	2412	15.43
06	2437	14.34
11	2462	14.01

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

The peak power spectral density shall not be greater than 8dBm in any 3KHz band at any time interval of continuous transmission.

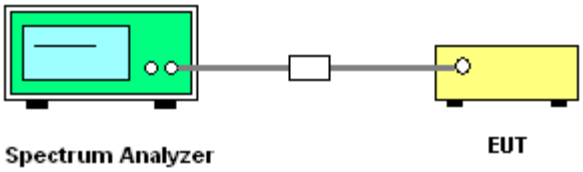
3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

3.3.3 Test Procedures

1. The testing follows Measurement Procedure 5.3.1 (Peak PSD) of FCC KDB Publication No. 558074 D01 DTS Meas. Guidance and TCB Workshop 2012, April.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 KHz. Video bandwidth (VBW) >= 300 KHz In order to make an accurate measurement, set the span to 5-30% greater than Emission Bandwidth (EBW)
5. Detector = peak, Sweep time = auto couple, Trace mode = max hold, Allow trace to fully stabilize. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.
6. Record the measurement data derived from spectrum analyzer.
7. Scale the observed power level to an equivalent value in 3 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log (3 kHz/100 kHz = -15.2 dB).

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

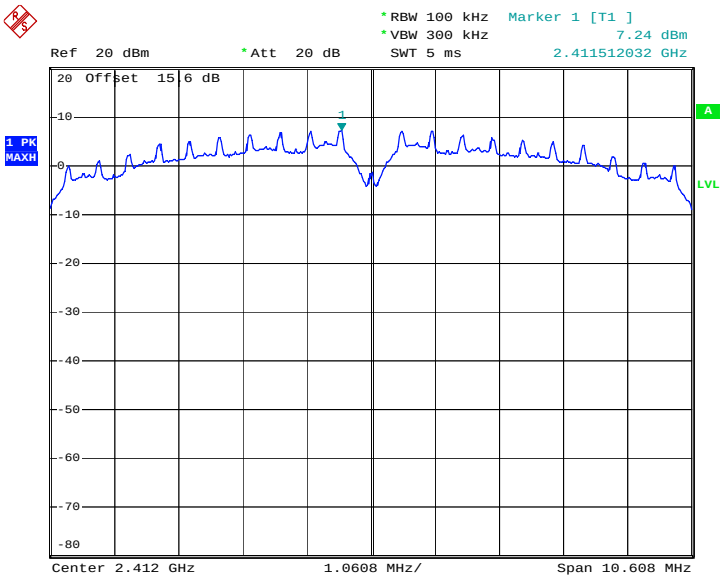
Test Mode :	802.11b	Temperature :	23~24℃
Test Engineer :	Lizy Li	Relative Humidity :	47~48%

Channel	Frequency (MHz)	802.11b Power Density		Max. Limits (dBm)	Pass/Fail
		Measured PSD/100KHz (dBm)	PSD/3KHz (dBm)		
01	2412	7.24	-7.96	8	Pass
06	2437	6.19	-9.01	8	Pass
11	2462	5.99	-9.21	8	Pass

Note:

1. *Measured power density (dBm) has offset with cable loss.*
2. *BWCF (dB) = 10 log (3k/100k) = -15.2 dB*
3. *Power Density/ 3kHz (dBm)= Measured power density/ 100KHz (dBm) + BWCF (dB)*

PSD Plot on 802.11b Channel 01



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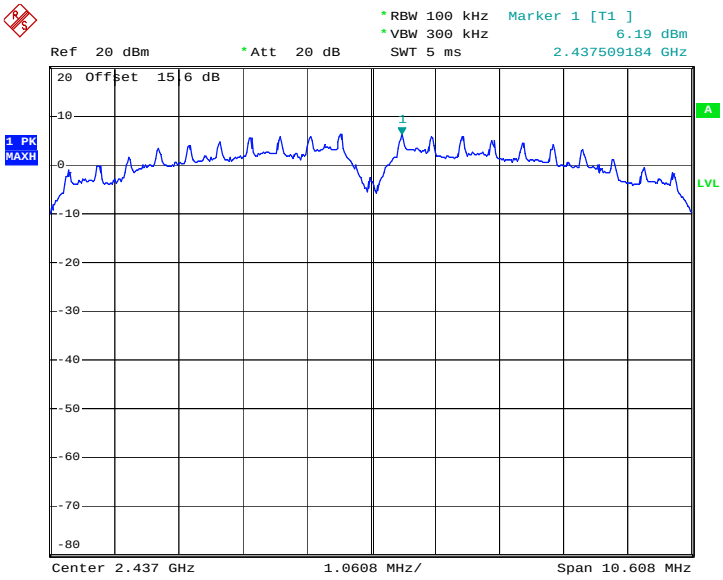
PSD Plot on 802.11b Channel 06



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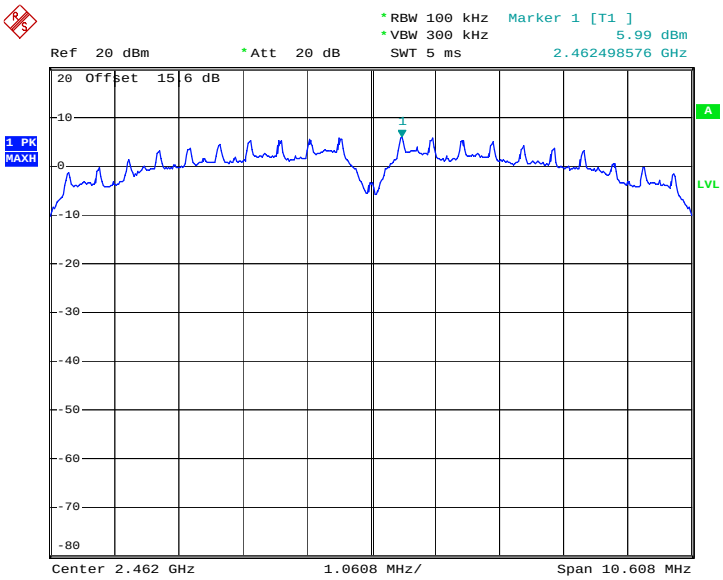
PSD Plot on 802.11b Channel 11



Date: 26.JUL.2012 02:09:37

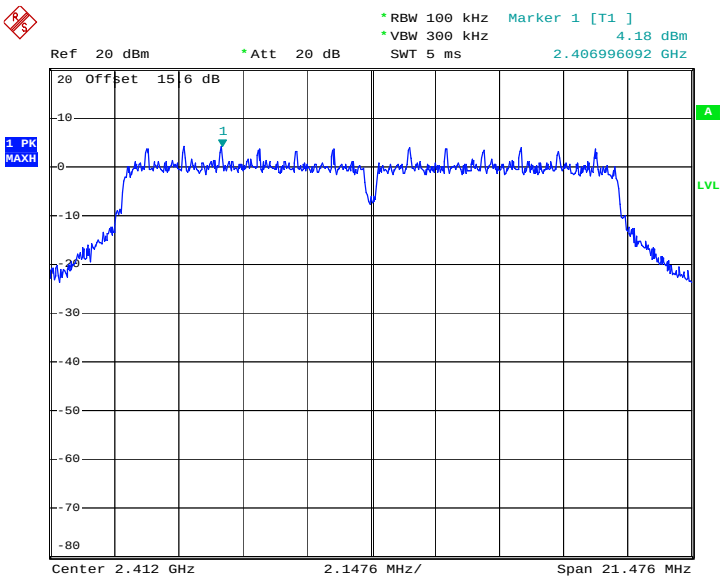
Test Mode :	802.11g	Temperature :	23~24℃
Test Engineer :	Lizy Li	Relative Humidity :	47~48%

Channel	Frequency (MHz)	802.11g Power Density		Max. Limits (dBm)	Pass/Fail
		Measured PSD/100KHz (dBm)	PSD/3KHz (dBm)		
01	2412	4.18	-11.02	8	Pass
06	2437	2.92	-12.28	8	Pass
11	2462	2.75	-12.45	8	Pass

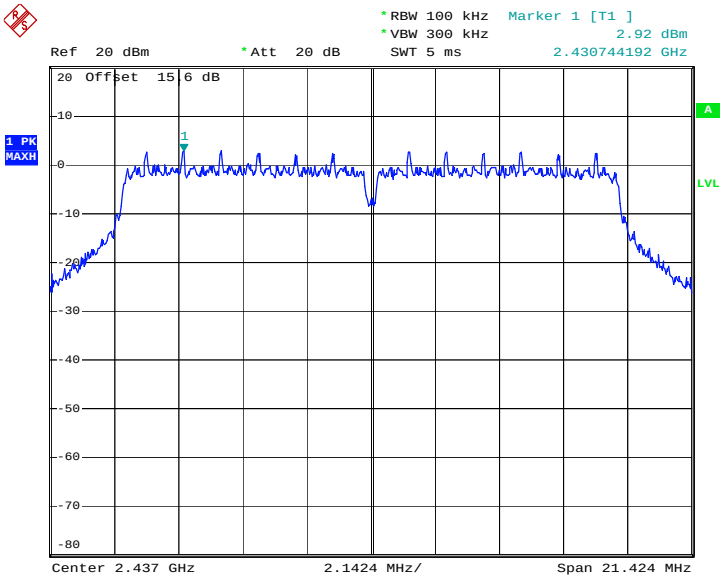
Note:

1. *Measured power density (dBm) has offset with cable loss.*
2. *BWCF (dB) = 10 log (3k/100k) = -15.2 dB*
3. *Power Density/ 3KHz (dBm)= Measured power density/ 100KHz (dBm) + BWCF (dB)*

PSD Plot on 802.11g Channel 01

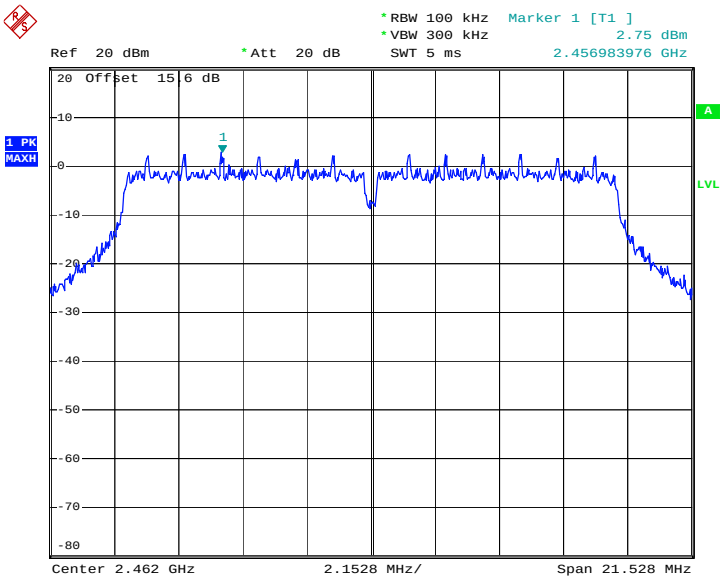


PSD Plot on 802.11g Channel 06



Date: 26.JUL.2012 02:24:59

PSD Plot on 802.11g Channel 11



Date: 26.JUL.2012 02:30:59

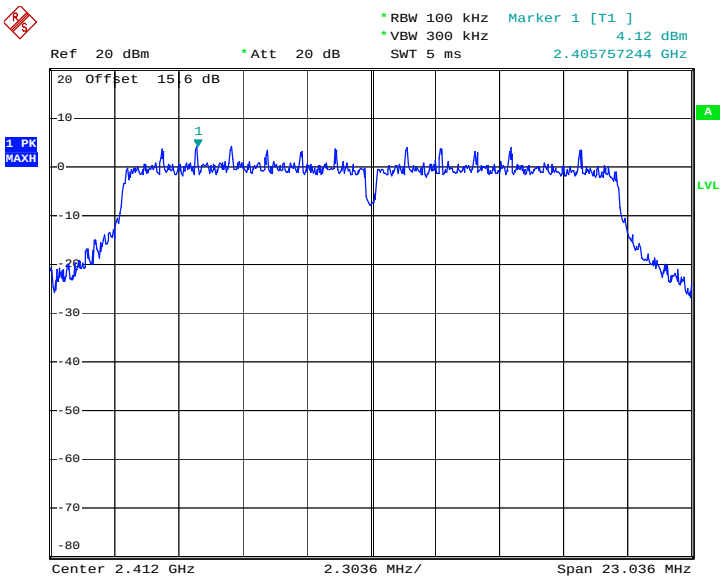
Test Mode :	802.11n HT-20	Temperature :	23~24℃
Test Engineer :	Lizy Li	Relative Humidity :	47~48%

Channel	Frequency (MHz)	802.11n HT-20 Power Density		Max. Limits (dBm)	Pass/Fail
		Measured PSD/100KHz (dBm)	PSD/3KHz (dBm)		
01	2412	4.12	-11.08	8	Pass
06	2437	2.94	-12.26	8	Pass
11	2462	2.63	-12.57	8	Pass

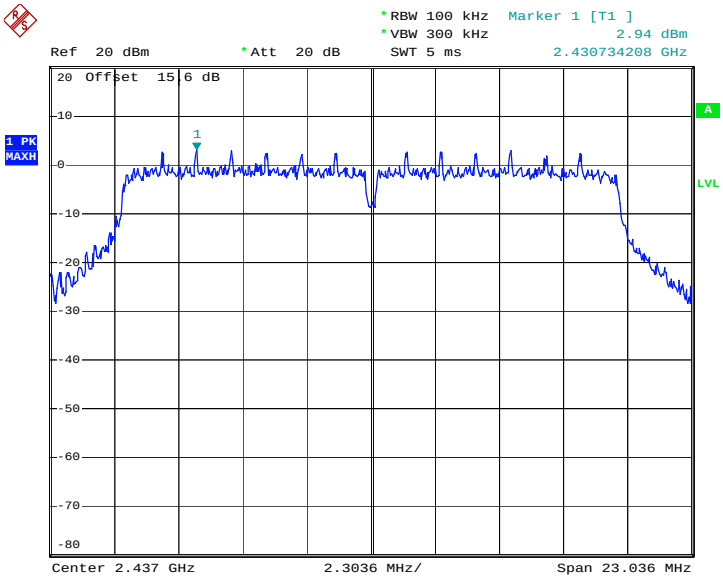
Note:

1. *Measured power density (dBm) has offset with cable loss.*
2. *BWCF (dB) = 10 log (3k/100k) = -15.2 dB*
3. *Power Density/ 3KHz (dBm)= Measured power density/ 100KHz (dBm) + BWCF (dB)*

PSD Plot on 802.11n HT-20 Channel 01

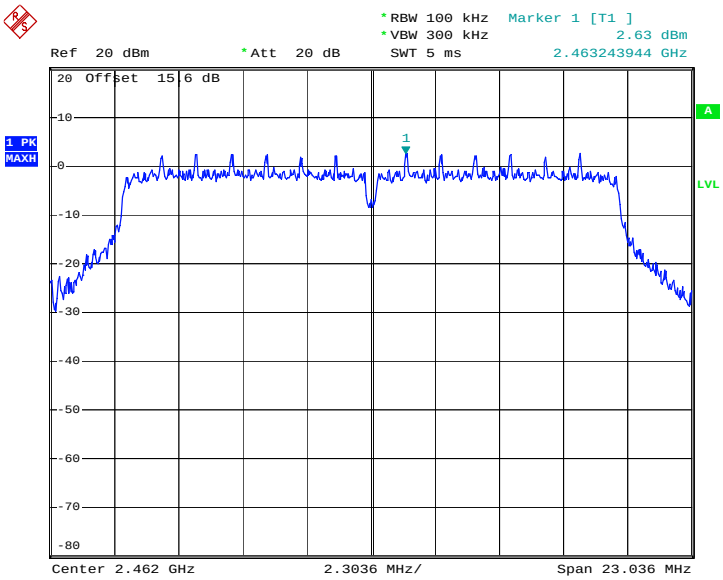


PSD Plot on 802.11n HT-20 Channel 06



Date: 26.JUL.2012 02:44:37

PSD Plot on 802.11n HT-20 Channel 11



Date: 26.JUL.2012 02:49:38

3.4 Conducted Band Edges and Spurious Emission Measurement

3.4.1 Limit of Conducted Band Edges and Spurious Emission Measurement

In any 100 kHz bandwidth outside of the authorized frequency band, the emissions which fall in the non-restricted bands shall be attenuated at least 20 dB / 30dB relative to the maximum PSD level in 100 kHz by RF conducted measurement and radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

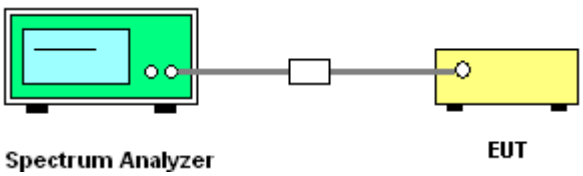
3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

3.4.3 Test Procedures

1. The testing follows the guidelines in the Measurement Procedure of FCC KDB Publication No. 558074 D01 DTS Meas. Guidance and TCB Workshop 2012, April.
2. Set to the maximum power setting and enable the EUT transmit continuously.
3. Set RBW = 100 KHz, VBW=300 KHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz, when maximum peak conducted output power procedure is used. The attenuation is set to 30dB, when maximum conducted output power procedure is used.
4. Measure and record the results in the test report.

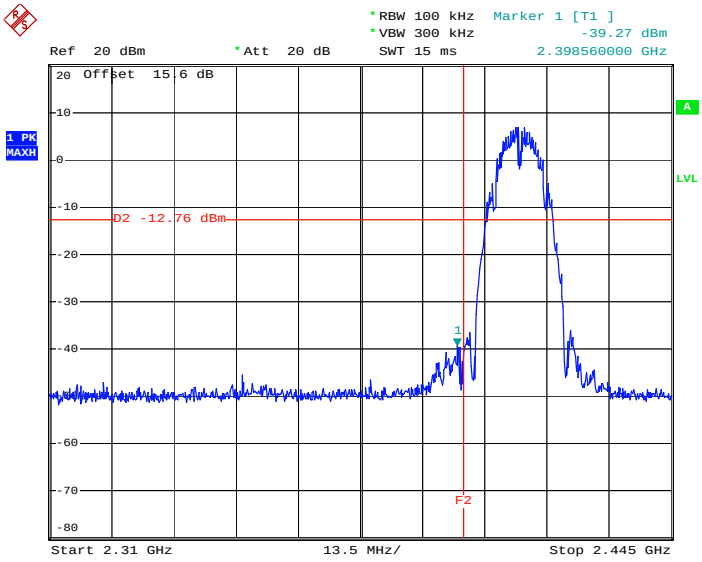
3.4.4 Test Setup



3.4.5 Test Plots of Conducted Band Edges

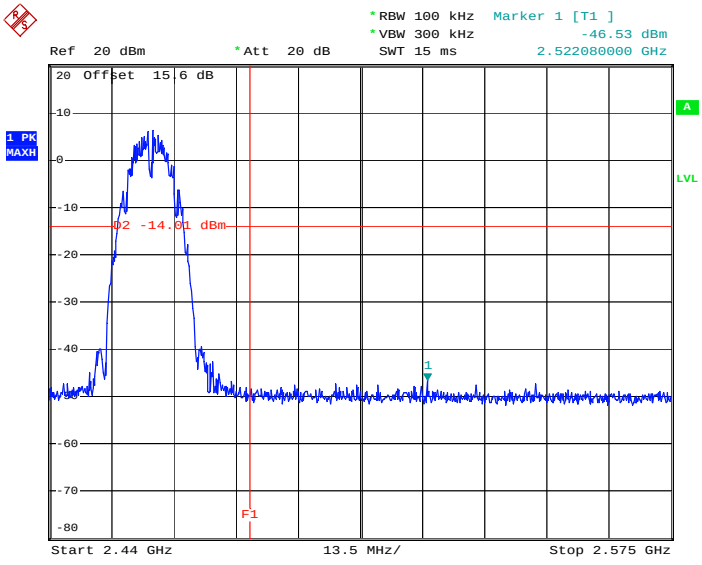
Test Mode :	802.11b	Temperature :	23~24℃
Test Band :	Low and High	Relative Humidity :	47~48%
Test Channel :	01 and 11	Test Engineer :	Lizy Li

Low Band Edge Plot on 802.11b Channel 01



Date: 26.JUL.2012 01:55:28

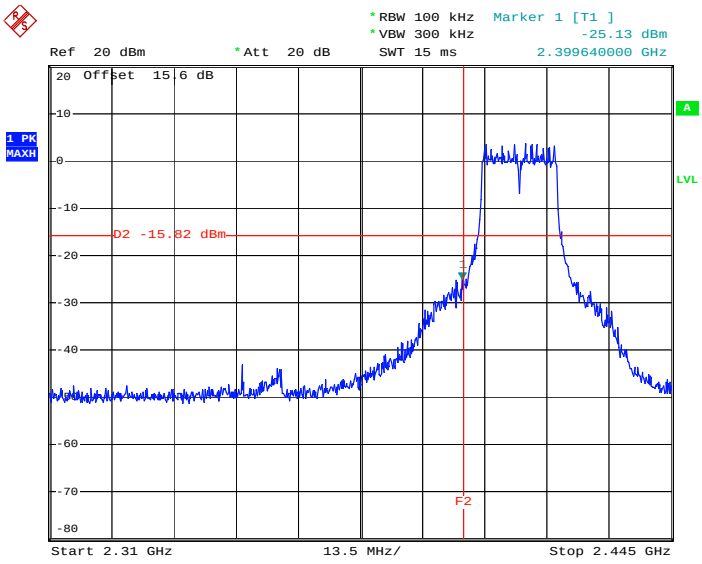
High Band Edge Plot on 802.11b Channel 11



Date: 26.JUL.2012 02:09:53

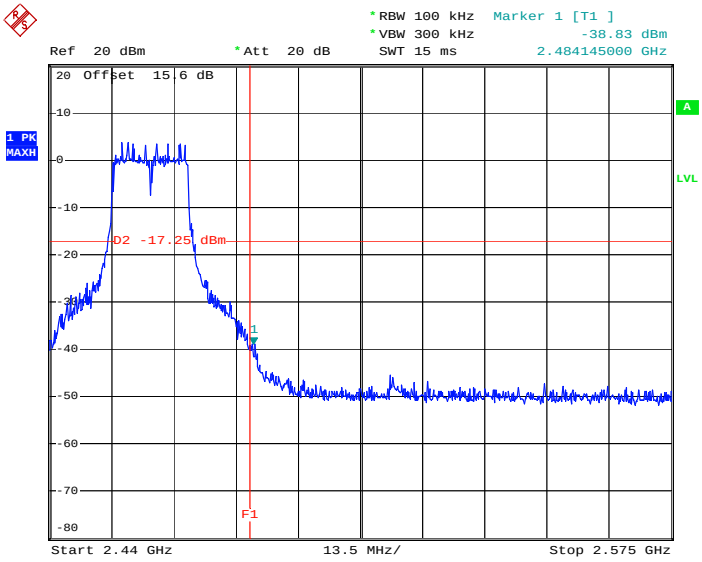
Test Mode :	802.11g	Temperature :	23~24℃
Test Band :	Low and High	Relative Humidity :	47~48%
Test Channel :	01 and 11	Test Engineer :	Lizy Li

Low Band Edge Plot on 802.11g Channel 01



Date: 26.JUL.2012 02:16:35

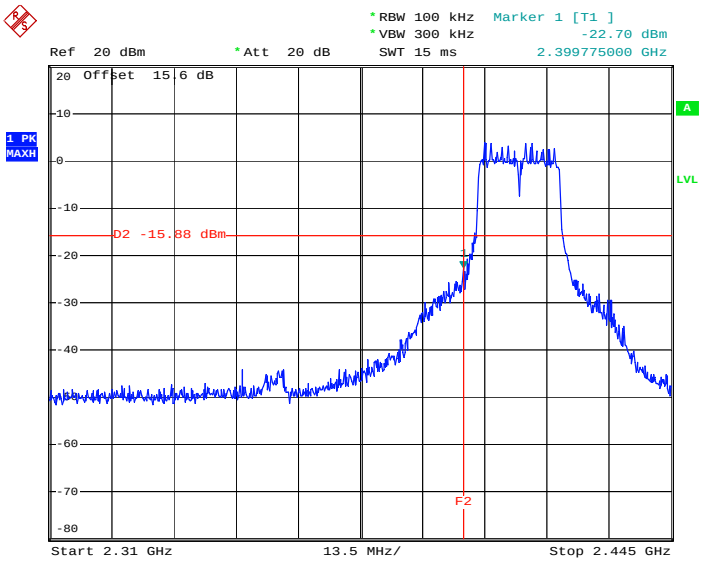
High Band Edge Plot on 802.11g Channel 11



Date: 26.JUL.2012 02:35:42

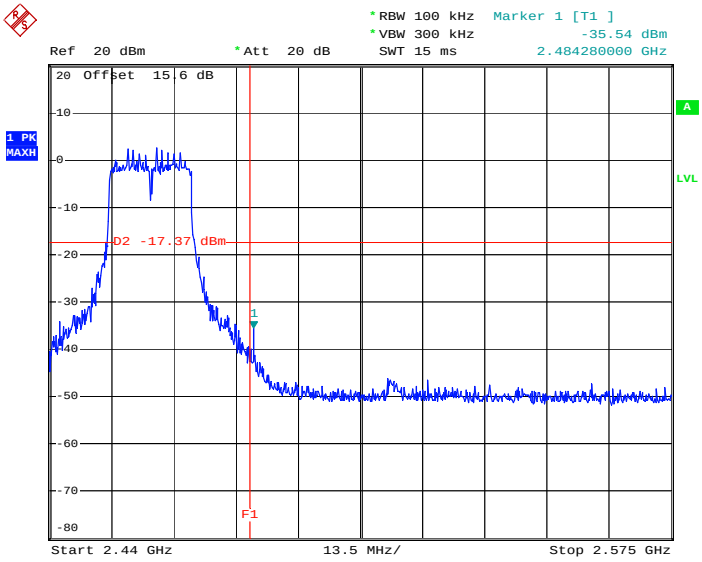
Test Mode :	802.11n HT-20	Temperature :	23~24℃
Test Band :	Low and High	Relative Humidity :	47~48%
Test Channel :	01 and 11	Test Engineer :	Lizy Li

Low Band Edge Plot on 802.11n HT-20 Channel 01



Date: 26.JUL.2012 02:41:01

High Band Edge Plot on 802.11n HT-20 Channel 11



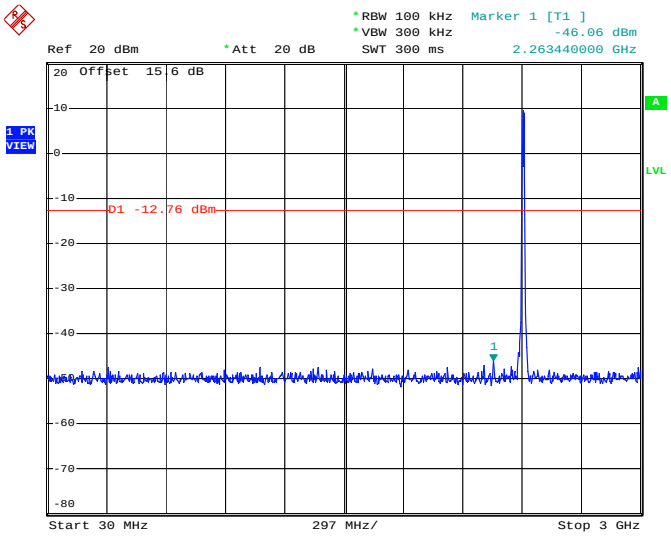
Date: 26.JUL.2012 02:51:06

3.4.6 Test Plots of Spurious Emission

Test Mode :	802.11b	Temperature :	23~24℃
Test Band :	30MHz-3GHz and 2G-25GHz	Relative Humidity :	47~48%
Test Channel :	01, 06, 11	Test Engineer :	Lizy Li

802.11b 30 MHz~3 GHz

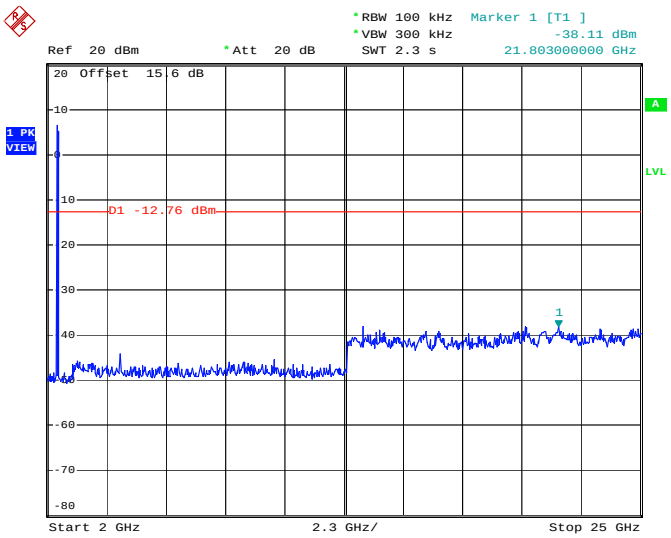
Conducted Spurious Emission Plot on Channel 01



Date: 26.JUL.2012 02:01:34

802.11b 2 GHz~25 GHz

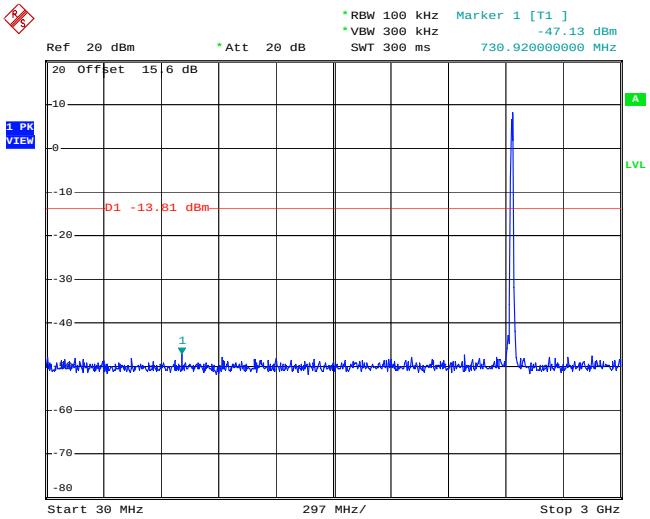
Conducted Spurious Emission Plot on Channel 01



Date: 26.JUL.2012 02:01:52

802.11b 30 MHz~3 GHz

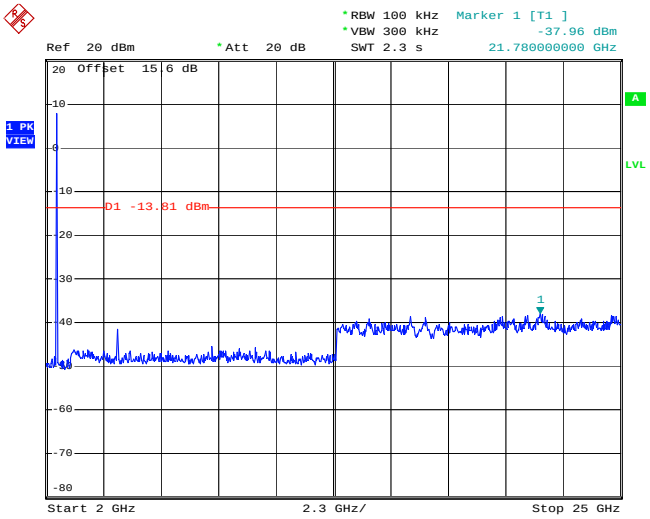
Conducted Spurious Emission Plot on Channel 06



Date: 26.JUL.2012 02:05:51

802.11b 2 GHz~25 GHz

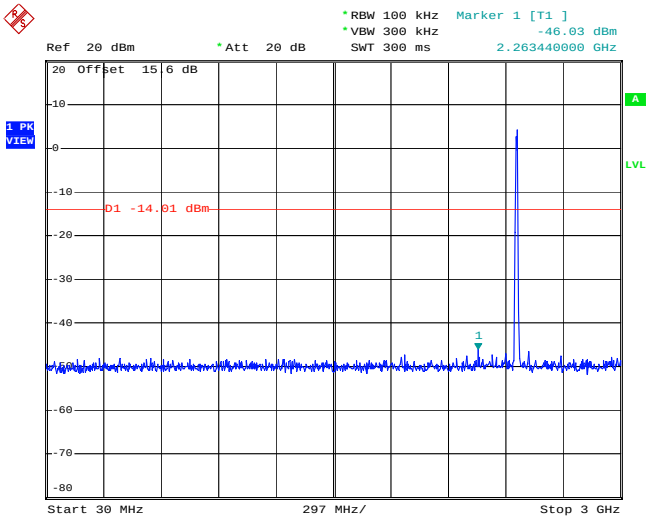
Conducted Spurious Emission Plot on Channel 06



Date: 26.JUL.2012 02:06:09

802.11b 30 MHz~3 GHz

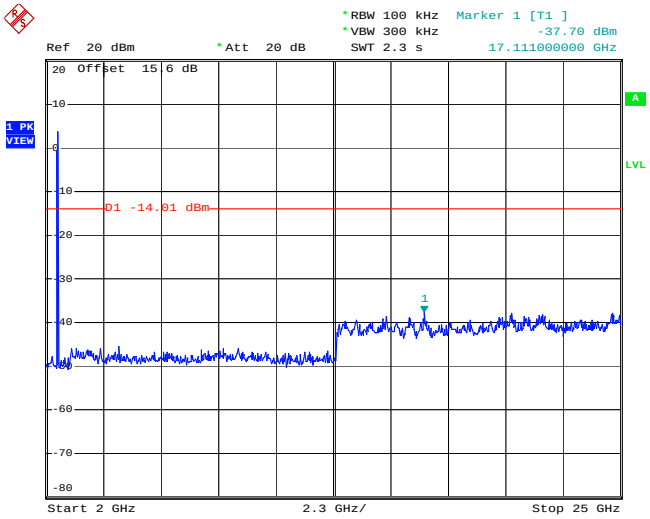
Conducted Spurious Emission Plot on Channel 11



Date: 26.JUL.2012 02:10:21

802.11b 2 GHz~25 GHz

Conducted Spurious Emission Plot on Channel 11

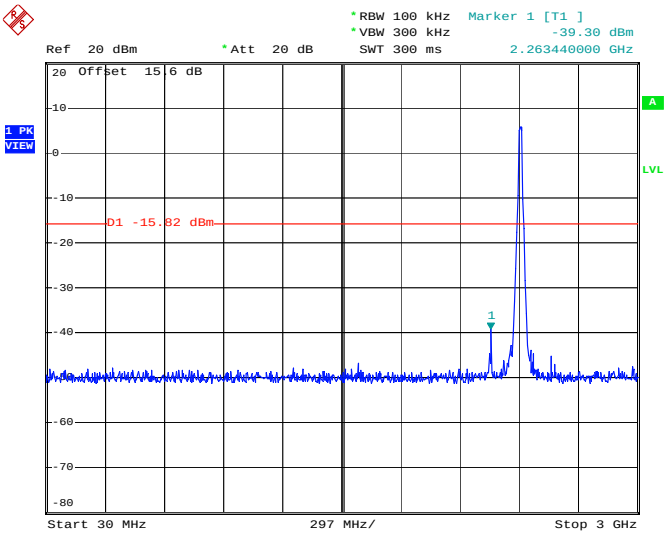


Date: 26.JUL.2012 02:10:40

Test Mode :	802.11g	Temperature :	23~24℃
Test Band :	30MHz-3GHz and 2G-25GHz	Relative Humidity :	47~48%
Test Channel :	01, 06, 11	Test Engineer :	Lizy Li

802.11g 30 MHz~3 GHz

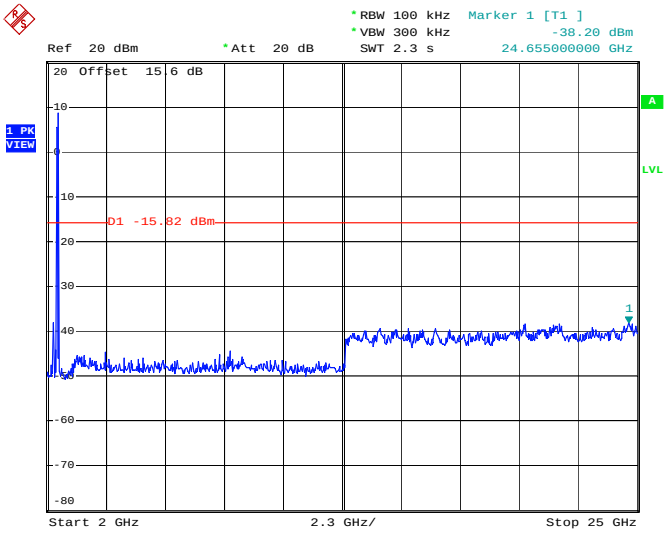
Conducted Spurious Emission Plot on Channel 01



Date: 26.JUL.2012 02:22:22

802.11g 2 GHz~25 GHz

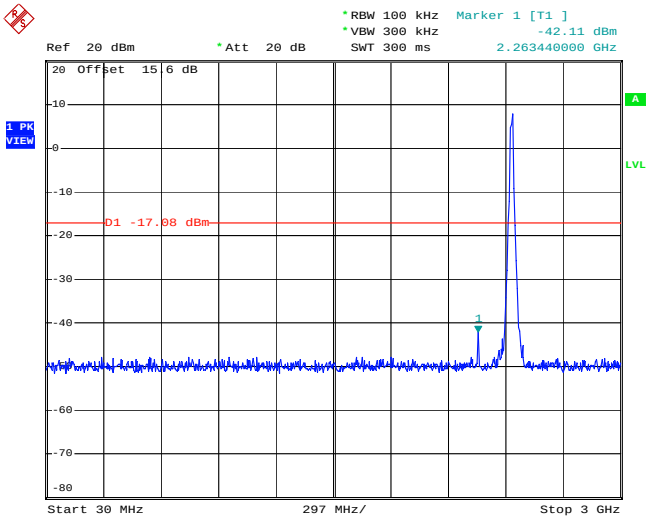
Conducted Spurious Emission Plot on Channel 01



Date: 26.JUL.2012 02:22:40

802.11g 30 MHz~3 GHz

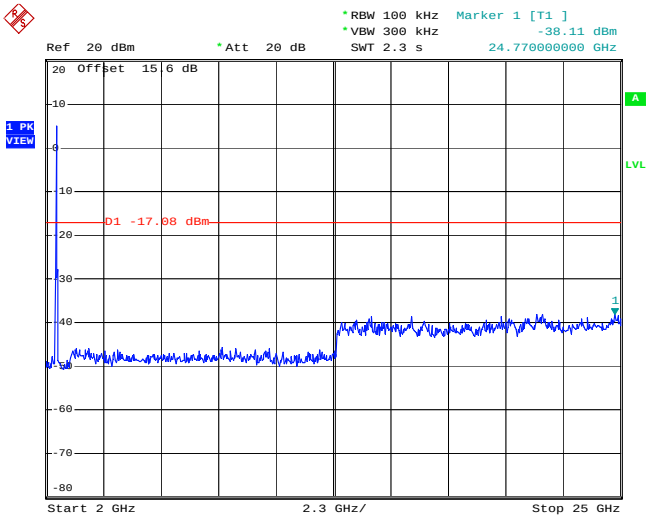
Conducted Spurious Emission Plot on Channel 06



Date: 26.JUL.2012 02:28:23

802.11g 2 GHz~25 GHz

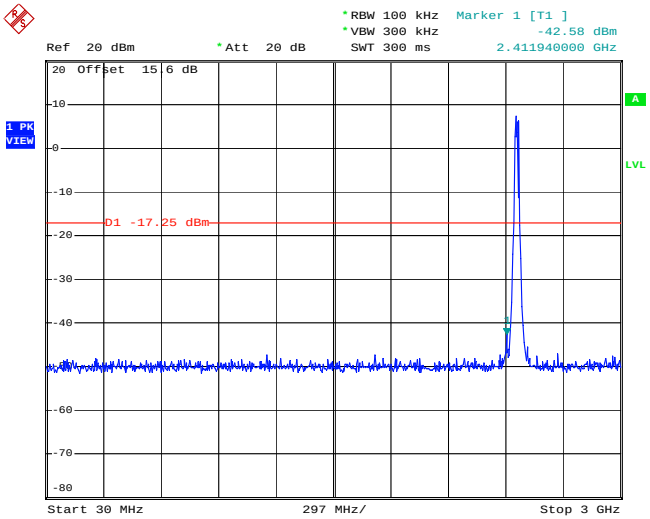
Conducted Spurious Emission Plot on Channel 06



Date: 26.JUL.2012 02:28:41

802.11g 30 MHz~3 GHz

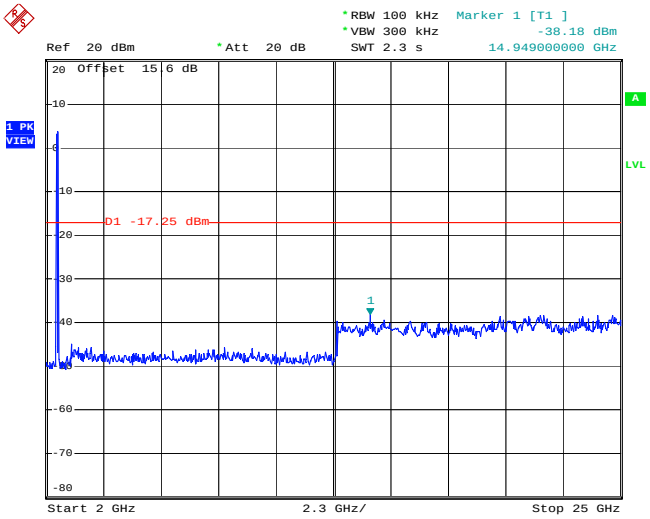
Conducted Spurious Emission Plot on Channel 11



Date: 26.JUL.2012 02:34:15

802.11g 2 GHz~25 GHz

Conducted Spurious Emission Plot on Channel 11

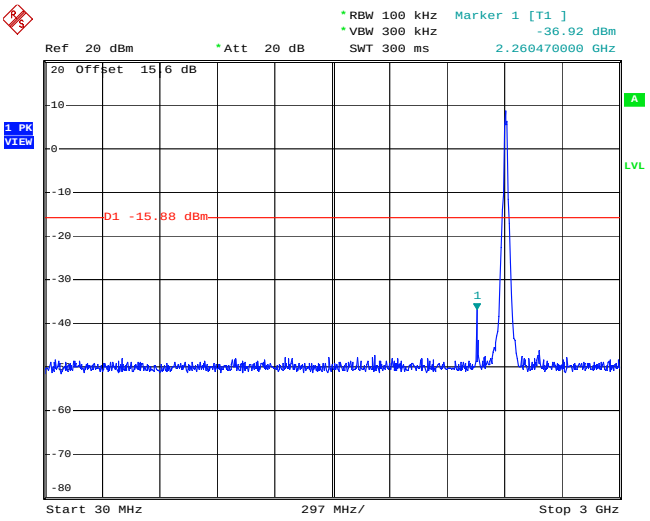


Date: 26.JUL.2012 02:34:33

Test Mode :	802.11n HT-20	Temperature :	23~24℃
Test Band :	30MHz-3GHz and 2G-25GHz	Relative Humidity :	47~48%
Test Channel :	01, 06, 11	Test Engineer :	Lizy Li

802.11n HT-20 30 MHz~3 GHz

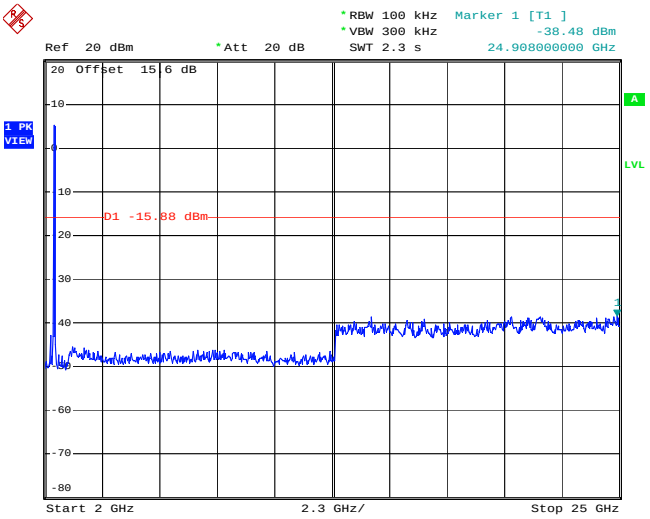
Conducted Spurious Emission Plot on Channel 01



Date: 26.JUL.2012 02:42:29

802.11n HT-20 2 GHz~25 GHz

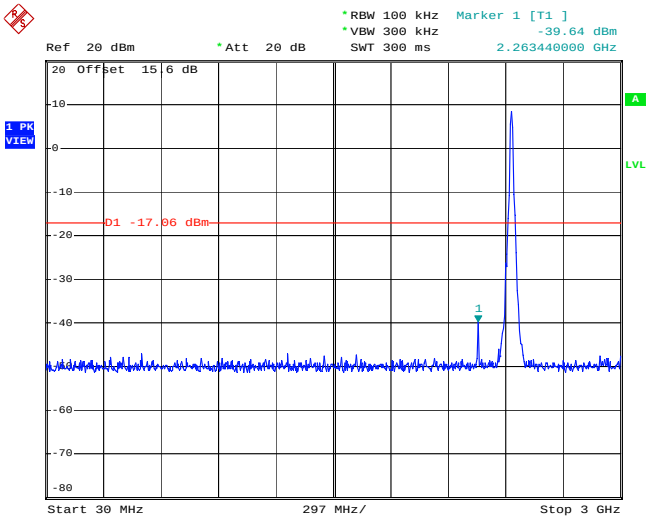
Conducted Spurious Emission Plot on Channel 01



Date: 26.JUL.2012 02:42:48

802.11n HT-20 30 MHz~3 GHz

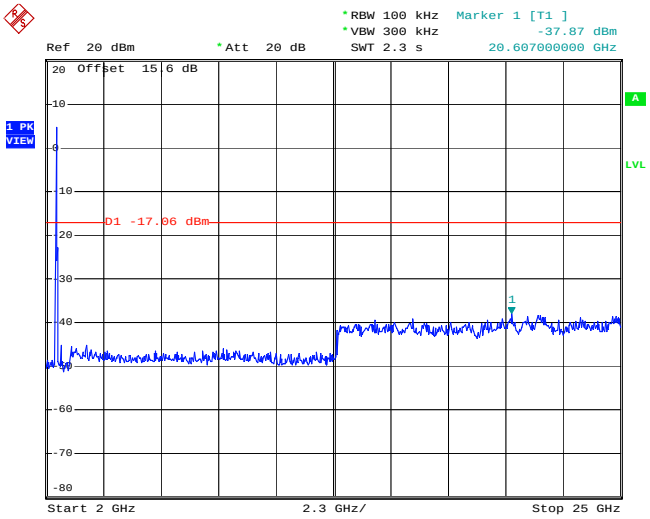
Conducted Spurious Emission Plot on Channel 06



Date: 26.JUL.2012 02:46:22

802.11n HT-20 2 GHz~25 GHz

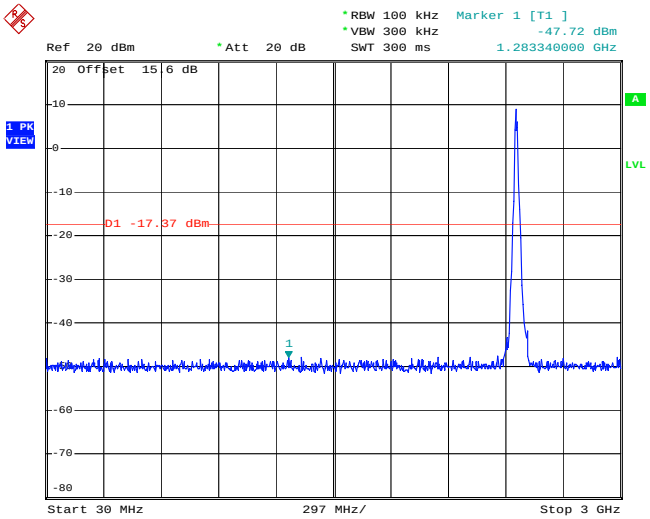
Conducted Spurious Emission Plot on Channel 06



Date: 26.JUL.2012 02:46:40

802.11n HT-20 30 MHz~3 GHz

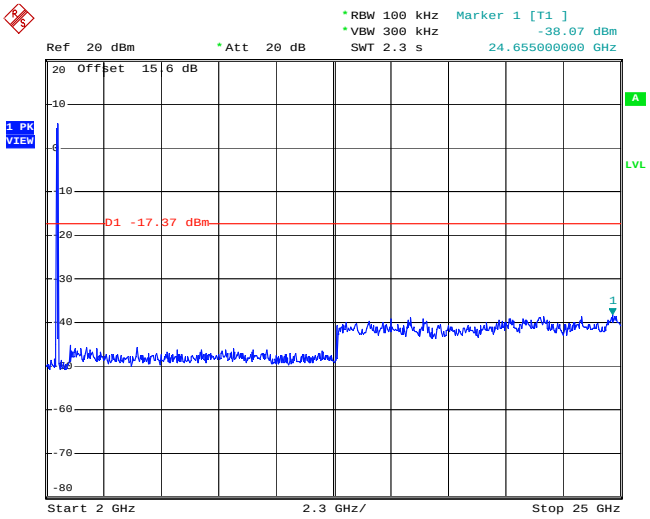
Conducted Spurious Emission Plot on Channel 11



Date: 26.JUL.2012 02:51:38

802.11n HT-20 2 GHz~25 GHz

Conducted Spurious Emission Plot on Channel 11



Date: 26.JUL.2012 02:51:57

3.5 Radiated Emission Measurement

3.5.1 Limit of Radiated Emission

In any 100 KHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(KHz)	300
0.490 – 1.705	24000/F(KHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.5.2 Measuring Instruments

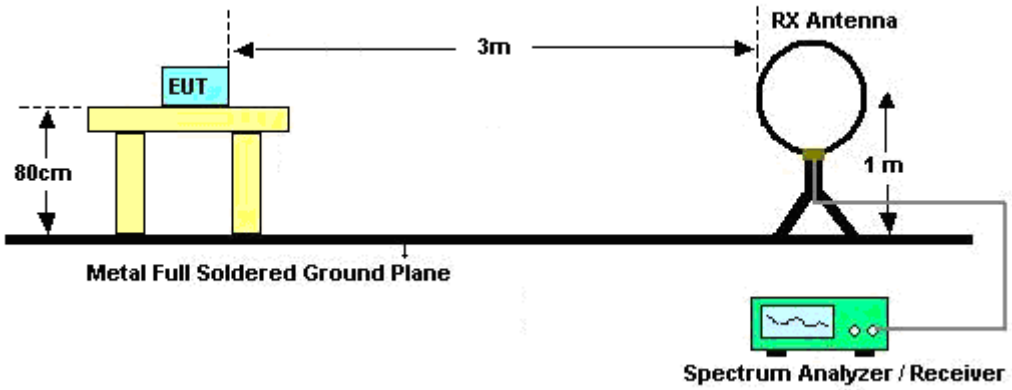
See list of measuring instruments of this test report.

3.5.3 Test Procedures

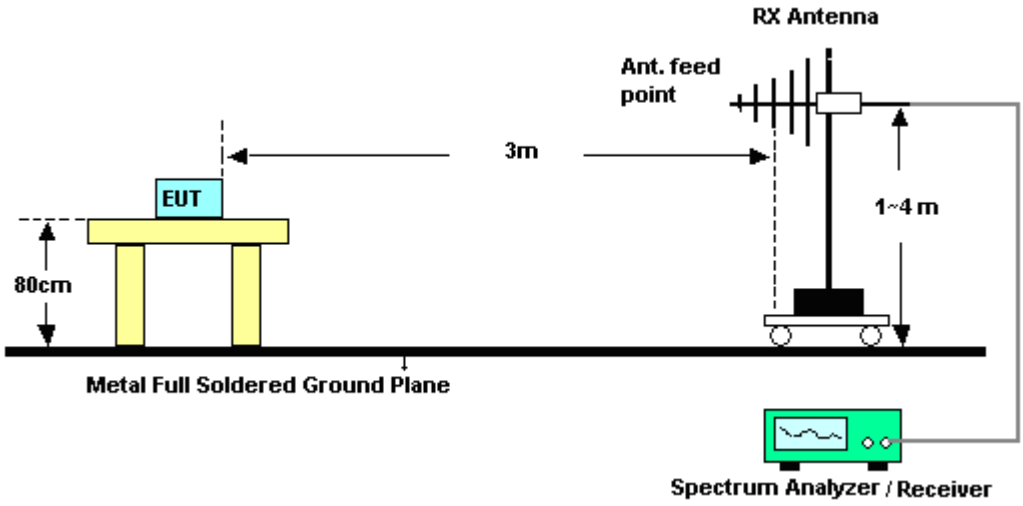
1. The testing follows TCB Workshop 2012, April and fulfills ANSI C63.4-2003 and the guidelines in ANSI C63.10-2009 test site requirement. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
2. The EUT was placed on a turntable with 0.8 meter above ground.
3. The EUT was set 3 meters from the interference receiving Antenna, which was mounted on the top of a variable height Antenna tower.
4. Set to the maximum power setting and enable the EUT transmit continuously.
5. Use the following spectrum analyzer settings:
   (1) Span shall wide enough to fully capture the emission being measured;
   (2) Set RBW=100 KHz for f < 1 GHz; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
   (3) Set RBW = 1 MHz, VBW= 3MHz for f ≥ 1 GHz for Peak measurement, and then set VBW=10Hz, while maintaining all of the other instrument settings for Average measurement.
6. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
7. If the emission level of the EUT measured by the peak detector is more than 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be reported by using the quasi-peak detector.

3.5.4 Test Setup

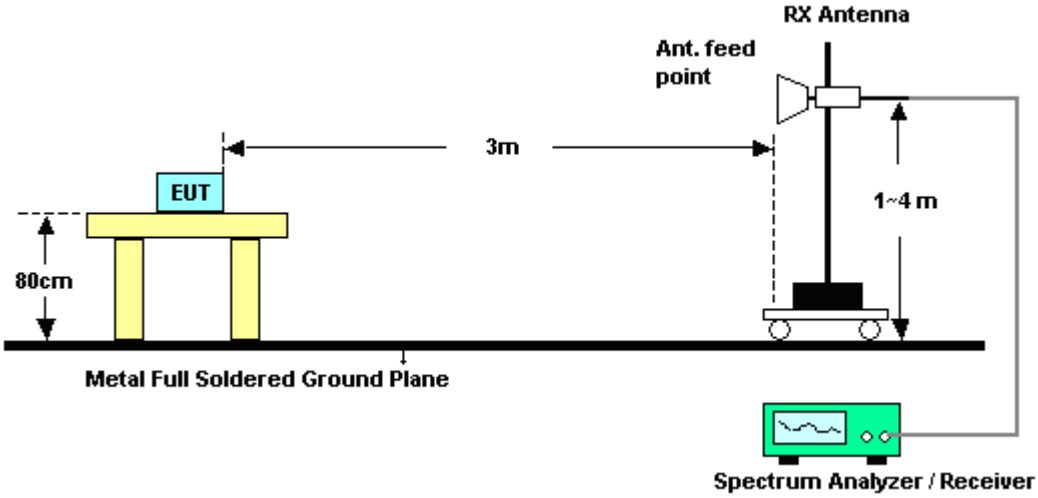
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.5.5 Test Results of Radiated Emissions (9 KHz ~ 30 MHz)

The low frequency, which started from 9 KHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

3.5.6 Test Result of Radiated Band Edges

Test Mode :	802.11b	Temperature :	20~21℃
Test Band :	Low	Relative Humidity :	41~42%
Test Channel :	01	Test Engineer :	Jack Li

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2387.52	60.08	-13.92	74	52.07	32.86	4.23	29.08	100	32	Peak
2387.52	41.33	-12.67	54	33.32	32.86	4.23	29.08	100	32	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2388.47	62.66	-11.34	74	54.65	32.86	4.23	29.08	100	276	Peak
2388.47	43.81	-10.19	54	35.8	32.86	4.23	29.08	100	276	Average

Test Mode :	802.11b	Temperature :	20~21℃
Test Band :	High	Relative Humidity :	41~42%
Test Channel :	11	Test Engineer :	Jack Li

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2484.8	59.08	-14.92	74	50.78	33.01	4.29	29	124	228	Peak
2484.8	41.68	-12.32	54	33.38	33.01	4.29	29	124	228	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2486.13	58.01	-15.99	74	49.71	33.01	4.29	29	100	163	Peak
2486.13	40.53	-13.47	54	32.23	33.01	4.29	29	100	163	Average

Test Mode :	802.11g	Temperature :	20~21℃
Test Band :	Low	Relative Humidity :	41~42%
Test Channel :	01	Test Engineer :	Jack Li

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.99	64.75	-9.25	74	56.74	32.86	4.23	29.08	191	89	Peak
2389.99	42.01	-11.99	54	34	32.86	4.23	29.08	191	89	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.23	62.87	-11.13	74	54.86	32.86	4.23	29.08	100	265	Peak
2389.23	43.5	-10.5	54	35.49	32.86	4.23	29.08	100	265	Average

Test Mode :	802.11g	Temperature :	20~21℃
Test Band :	High	Relative Humidity :	41~42%
Test Channel :	11	Test Engineer :	Jack Li

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.5	57.69	-16.31	74	49.39	33.01	4.29	29	112	59	Peak
2483.5	43.49	-10.51	54	35.19	33.01	4.29	29	112	59	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.5	61.52	-12.48	74	53.22	33.01	4.29	29	100	114	Peak
2483.5	48.14	-5.86	54	39.84	33.01	4.29	29	100	114	Average

Test Mode :	802.11n HT-20	Temperature :	20~21℃
Test Band :	Low	Relative Humidity :	41~42%
Test Channel :	01	Test Engineer :	Jack Li

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2388.85	60.05	-13.95	74	52.04	32.86	4.23	29.08	100	311	Peak
2388.85	44.5	-9.5	54	36.49	32.86	4.23	29.08	100	311	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.23	60.13	-13.87	74	52.12	32.86	4.23	29.08	132	143	Peak
2389.23	42.27	-11.73	54	34.26	32.86	4.23	29.08	132	143	Average

Test Mode :	802.11n HT-20	Temperature :	20~21℃
Test Band :	High	Relative Humidity :	41~42%
Test Channel :	11	Test Engineer :	Jack Li

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.85	58.89	-15.11	74	50.59	33.01	4.29	29	100	332	Peak
2483.85	44.8	-9.2	54	36.5	33.01	4.29	29	100	332	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2484.42	62.83	-11.17	74	54.53	33.01	4.29	29	100	259	Peak
2484.42	45.1	-8.9	54	36.8	33.01	4.29	29	100	259	Average

3.5.7 Test Result of Radiated Emission (30 MHz ~ 10th Harmonic)

Test Mode :	802.11b	Temperature :	20~21℃
Test Channel :	01	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2412 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
96.099	28.5	-15	43.5	48.16	9.91	0.4	29.97	-	-	Peak
106.385	25.59	-17.91	43.5	43.7	11.43	0.42	29.96	-	-	Peak
183.844	24.29	-19.21	43.5	45.18	8.44	0.57	29.9	-	-	Peak
537.589	26.02	-19.98	46	36.48	18.24	0.99	29.69	-	-	Peak
833.317	32.87	-13.13	46	40.92	20.32	1.27	29.64	-	-	Peak
942.131	37.44	-8.56	46	44.94	20.7	1.33	29.53	100	59	Peak
2387.52	60.08	-13.92	74	52.07	32.86	4.23	29.08	100	32	Peak
2387.52	41.33	-12.67	54	33.32	32.86	4.23	29.08	100	32	Average
2412	105.62	-	-	97.54	32.89	4.24	29.05	200	29	Peak
2412	99.82	-	-	91.74	32.89	4.24	29.05	200	29	Average
2488.41	53.78	-20.22	74	45.44	33.05	4.29	29	100	12	Peak
2488.41	39.49	-14.51	54	31.15	33.05	4.29	29	100	12	Average

Test Mode :	802.11b	Temperature :	20~21℃
Test Channel :	01	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2412 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.424	31.91	-8.09	40	43.73	18	0.26	30.08	-	-	Peak
36.254	31.62	-8.38	40	46.82	14.65	0.23	30.08	-	-	Peak
53.318	31.68	-8.32	40	54.72	6.8	0.29	30.13	-	-	Peak
57.796	25.39	-14.61	40	49.64	5.59	0.3	30.14	-	-	Peak
455.906	28.35	-17.65	46	40.84	16.38	0.91	29.78	-	-	Peak
942.131	38.69	-7.31	46	46.19	20.7	1.33	29.53	100	315	Peak
2388.47	62.66	-11.34	74	54.65	32.86	4.23	29.08	100	276	Peak
2388.47	43.81	-10.19	54	35.8	32.86	4.23	29.08	100	276	Average
2412	107.09	-	-	99.01	32.89	4.24	29.05	100	283	Peak
2412	100.95	-	-	92.87	32.89	4.24	29.05	100	283	Average
2489.93	55.5	-18.5	74	47.15	33.05	4.3	29	100	181	Peak
2489.93	40.51	-13.49	54	32.16	33.05	4.3	29	100	181	Average

Test Mode :	802.11b	Temperature :	20~21℃
Test Channel :	06	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2437 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
80.927	28.8	-11.2	40	51.62	6.87	0.35	30.04	100	200	Peak
96.099	28.35	-15.15	43.5	48.01	9.91	0.4	29.97	-	-	Peak
186.441	26.96	-16.54	43.5	47.85	8.46	0.57	29.92	-	-	Peak
537.589	26.81	-19.19	46	37.27	18.24	0.99	29.69	-	-	Peak
833.317	29.56	-16.44	46	37.61	20.32	1.27	29.64	-	-	Peak
948.761	32.37	-13.63	46	39.85	20.73	1.33	29.54	-	-	Peak
2381.44	53.89	-20.11	74	45.93	32.83	4.22	29.09	200	35	Peak
2381.44	39.94	-14.06	54	31.98	32.83	4.22	29.09	200	35	Average
2437	105.12	-	-	96.95	32.95	4.25	29.03	200	32	Peak
2437	98.64	-	-	90.47	32.95	4.25	29.03	200	32	Average
2489.93	54.97	-19.03	74	46.62	33.05	4.3	29	200	125	Peak
2489.93	41.05	-12.95	54	32.7	33.05	4.3	29	200	125	Average

Test Mode :	802.11b	Temperature :	20~21℃
Test Channel :	06	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2437 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
31.289	32.15	-7.85	40	44.69	17.29	0.25	30.08	-	-	Peak
36.637	33.77	-6.23	40	49.41	14.19	0.24	30.07	100	201	Peak
48.163	30.8	-9.2	40	52.53	8.12	0.28	30.13	-	-	Peak
89.905	29.45	-14.05	43.5	50.15	8.9	0.39	29.99	-	-	Peak
281.008	28.23	-17.77	46	44.8	12.68	0.7	29.95	-	-	Peak
833.317	35.17	-10.83	46	43.22	20.32	1.27	29.64	-	-	Peak
2383.72	54.59	-19.41	74	46.62	32.83	4.22	29.08	100	323	Peak
2383.72	39.47	-14.53	54	31.5	32.83	4.22	29.08	100	323	Average
2437	106.35	-	-	98.18	32.95	4.25	29.03	100	283	Peak
2437	98.79	-	-	90.62	32.95	4.25	29.03	100	283	Average
2489.93	55.23	-18.77	74	46.88	33.05	4.3	29	100	305	Peak
2489.93	39.4	-14.6	54	31.05	33.05	4.3	29	100	305	Average

Test Mode :	802.11b	Temperature :	20~21℃
Test Channel :	11	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2462 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
33.445	24.03	-15.97	40	38.33	15.56	0.23	30.09	-	-	Peak
94.428	27.74	-15.76	43.5	47.66	9.66	0.4	29.98	-	-	Peak
100.229	31.48	-12.02	43.5	50.53	10.5	0.41	29.96	100	65	Peak
537.589	25.86	-20.14	46	36.32	18.24	0.99	29.69	-	-	Peak
833.317	32.11	-13.89	46	40.16	20.32	1.27	29.64	-	-	Peak
945.44	32.36	-13.64	46	39.86	20.71	1.33	29.54	-	-	Peak
2337.93	53.91	-20.09	74	46.1	32.78	4.2	29.17	200	325	Peak
2337.93	39.42	-14.58	54	31.61	32.78	4.2	29.17	200	325	Average
2462	105.11	-	-	96.87	32.98	4.27	29.01	200	310	Peak
2462	98.81	-	-	90.57	32.98	4.27	29.01	200	310	Average
2484.8	59.08	-14.92	74	50.78	33.01	4.29	29	124	228	Peak
2484.8	41.68	-12.32	54	33.38	33.01	4.29	29	124	228	Average

Test Mode :	802.11b	Temperature :	20~21℃
Test Channel :	11	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2462 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
39.162	31.18	-8.82	40	47.99	12.98	0.25	30.04	100	0	Peak
44.743	30.95	-9.05	40	51.21	9.6	0.27	30.13	-	-	Peak
51.121	30.88	-9.12	40	53.52	7.21	0.28	30.13	-	-	Peak
96.099	27.75	-15.75	43.5	47.41	9.91	0.4	29.97	-	-	Peak
833.317	35.72	-10.28	46	43.77	20.32	1.27	29.64	-	-	Peak
948.761	31.95	-14.05	46	39.43	20.73	1.33	29.54	-	-	Peak
2322.54	54.14	-19.86	74	46.39	32.76	4.19	29.2	100	259	Peak
2322.54	39.23	-14.77	54	31.48	32.76	4.19	29.2	100	259	Average
2462	104.37	-	-	96.13	32.98	4.27	29.01	100	248	Peak
2462	98.14	-	-	89.9	32.98	4.27	29.01	100	248	Average
2486.13	58.01	-15.99	74	49.71	33.01	4.29	29	100	163	Peak
2486.13	40.53	-13.47	54	32.23	33.01	4.29	29	100	163	Average

Test Mode :	802.11g	Temperature :	20~21℃
Test Channel :	01	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2412 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
33.799	19.79	-20.21	40	34.09	15.56	0.23	30.09	-	-	Peak
96.099	23.13	-20.37	43.5	42.79	9.91	0.4	29.97	-	-	Peak
181.92	24.41	-19.09	43.5	45.32	8.42	0.56	29.89	-	-	Peak
211.527	22.58	-20.92	43.5	42.43	9.54	0.6	29.99	-	-	Peak
833.317	34.49	-11.51	46	42.54	20.32	1.27	29.64	100	96	Peak
942.131	32.8	-13.2	46	40.3	20.7	1.33	29.53	-	-	Peak
2389.99	64.75	-9.25	74	56.74	32.86	4.23	29.08	191	89	Peak
2389.99	42.01	-11.99	54	34	32.86	4.23	29.08	191	89	Average
2412	104.56	-	-	96.48	32.89	4.24	29.05	200	142	Peak
2412	86.36	-	-	78.28	32.89	4.24	29.05	200	142	Average
2487.08	53.76	-20.24	74	45.46	33.01	4.29	29	136	344	Peak
2487.08	40.92	-13.08	54	32.62	33.01	4.29	29	136	344	Average

Test Mode :	802.11g	Temperature :	20~21℃
Test Channel :	01	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2412 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.745	32.73	-7.27	40	45.27	17.29	0.25	30.08	100	251	Peak
37.416	28.1	-11.9	40	44.22	13.7	0.24	30.06	-	-	Peak
42.9	29.09	-10.91	40	48.44	10.48	0.26	30.09	-	-	Peak
539.478	27.42	-18.58	46	37.83	18.29	0.99	29.69	-	-	Peak
833.317	35.82	-10.18	46	43.87	20.32	1.27	29.64	-	-	Peak
942.131	30.94	-15.06	46	38.44	20.7	1.33	29.53	-	-	Peak
2389.23	62.87	-11.13	74	54.86	32.86	4.23	29.08	100	265	Peak
2389.23	43.5	-10.5	54	35.49	32.86	4.23	29.08	100	265	Average
2412	107.16	-	-	99.08	32.89	4.24	29.05	101	260	Peak
2412	89.37	-	-	81.29	32.89	4.24	29.05	101	260	Average
2490.12	54.91	-19.09	74	46.56	33.05	4.3	29	156	269	Peak
2490.12	41.02	-12.98	54	32.67	33.05	4.3	29	156	269	Average

Test Mode :	802.11g	Temperature :	20~21℃
Test Channel :	06	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2437 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
96.099	28.69	-14.81	43.5	48.35	9.91	0.4	29.97	-	-	Peak
105.272	25.79	-17.71	43.5	44.04	11.29	0.42	29.96	-	-	Peak
211.527	22.31	-21.19	43.5	42.16	9.54	0.6	29.99	-	-	Peak
537.589	26.92	-19.08	46	37.38	18.24	0.99	29.69	-	-	Peak
833.317	36.77	-9.23	46	44.82	20.32	1.27	29.64	100	50	Peak
942.131	32.77	-13.23	46	40.27	20.7	1.33	29.53	-	-	Peak
2340.4	55.6	-18.4	74	47.79	32.78	4.2	29.17	176	318	Peak
2340.4	40.97	-13.03	54	33.16	32.78	4.2	29.17	176	318	Average
2437	106.37	-	-	98.2	32.95	4.25	29.03	110	0	Peak
2437	87.13	-	-	78.96	32.95	4.25	29.03	110	0	Average
2490.88	55.78	-18.22	74	47.43	33.05	4.3	29	120	22	Peak
2490.88	42.06	-11.94	54	33.71	33.05	4.3	29	120	22	Average

Test Mode :	802.11g	Temperature :	20~21℃
Test Channel :	06	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2437 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.317	32.58	-7.42	40	44.4	18	0.26	30.08	-	-	Peak
38.752	31.58	-8.42	40	48.39	12.98	0.25	30.04	-	-	Peak
50.057	25.48	-14.52	40	47.93	7.4	0.28	30.13	-	-	Peak
88.964	22.69	-20.81	43.5	43.68	8.61	0.39	29.99	-	-	Peak
833.317	39.27	-6.73	46	47.32	20.32	1.27	29.64	100	227	Peak
948.761	32.08	-13.92	46	39.56	20.73	1.33	29.54	-	-	Peak
2384.1	56.12	-17.88	74	48.15	32.83	4.22	29.08	102	266	Peak
2384.1	43.23	-10.77	54	35.26	32.83	4.22	29.08	102	266	Average
2437	108.44	-	-	100.27	32.95	4.25	29.03	100	256	Peak
2437	89.12	-	-	80.95	32.95	4.25	29.03	100	256	Average
2489.55	55.6	-18.4	74	47.25	33.05	4.3	29	130	360	Peak
2489.55	44.37	-9.63	54	36.02	33.05	4.3	29	130	360	Average

Test Mode :	802.11g	Temperature :	20~21℃
Test Channel :	11	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2462 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
96.099	29.13	-14.37	43.5	48.79	9.91	0.4	29.97	-	-	Peak
104.536	25.87	-17.63	43.5	44.26	11.15	0.42	29.96	-	-	Peak
211.527	22.48	-21.02	43.5	42.33	9.54	0.6	29.99	-	-	Peak
537.589	26.37	-19.63	46	36.83	18.24	0.99	29.69	-	-	Peak
830.4	36.94	-9.06	46	45.03	20.27	1.27	29.63	100	285	Peak
948.761	36.35	-9.65	46	43.83	20.73	1.33	29.54	-	-	Peak
2339.83	53.97	-20.03	74	46.16	32.78	4.2	29.17	167	249	Peak
2339.83	42.46	-11.54	54	34.65	32.78	4.2	29.17	167	249	Average
2462	106.19	-	-	97.95	32.98	4.27	29.01	146	49	Peak
2462	88	-	-	79.76	32.98	4.27	29.01	146	49	Average
2483.5	57.69	-16.31	74	49.39	33.01	4.29	29	112	59	Peak
2483.5	43.49	-10.51	54	35.19	33.01	4.29	29	112	59	Average

Test Mode :	802.11g	Temperature :	20~21℃
Test Channel :	11	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2462 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
31.071	32.56	-7.44	40	45.1	17.29	0.25	30.08	144	234	Peak
39.024	31.32	-8.68	40	48.13	12.98	0.25	30.04	-	-	Peak
88.964	23.1	-20.4	43.5	44.09	8.61	0.39	29.99	-	-	Peak
537.589	29.33	-16.67	46	39.79	18.24	0.99	29.69	-	-	Peak
833.317	37.09	-8.91	46	45.14	20.32	1.27	29.64	-	-	Peak
942.131	32.51	-13.49	46	40.01	20.7	1.33	29.53	-	-	Peak
2340.02	55.77	-18.23	74	47.96	32.78	4.2	29.17	200	15	Peak
2340.02	43.49	-10.51	54	35.68	32.78	4.2	29.17	200	15	Average
2462	106.87	-	-	98.63	32.98	4.27	29.01	101	262	Peak
2462	88.06	-	-	79.82	32.98	4.27	29.01	101	262	Average
2483.5	61.52	-12.48	74	53.22	33.01	4.29	29	100	114	Peak
2483.5	48.14	-5.86	54	39.84	33.01	4.29	29	100	114	Average

Test Mode :	802.11n-HT20	Temperature :	20~21℃
Test Channel :	01	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2412 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
93.768	28.32	-15.18	43.5	48.24	9.66	0.4	29.98	-	-	Peak
103.806	25.17	-18.33	43.5	43.7	11.01	0.42	29.96	-	-	Peak
460.727	24.86	-21.14	46	37.28	16.45	0.91	29.78	-	-	Peak
537.589	25.5	-20.5	46	35.96	18.24	0.99	29.69	-	-	Peak
830.4	39.23	-6.77	46	47.32	20.27	1.27	29.63	-	-	Peak
942.131	40.62	-5.38	46	48.12	20.7	1.33	29.53	200	35	Peak
2388.85	60.05	-13.95	74	52.04	32.86	4.23	29.08	100	311	Peak
2388.85	44.5	-9.5	54	36.49	32.86	4.23	29.08	100	311	Average
2412	107	-	-	98.92	32.89	4.24	29.05	150	308	Peak
2412	90.03	-	-	81.95	32.89	4.24	29.05	150	308	Average
2488.41	53.26	-20.74	74	44.92	33.05	4.29	29	120	0	Peak
2488.41	40.9	-13.1	54	32.56	33.05	4.29	29	120	0	Average

Test Mode :	802.11n-HT20	Temperature :	20~21℃
Test Channel :	01	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2412 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.745	31.83	-8.17	40	44.37	17.29	0.25	30.08	-	-	Peak
39.162	31.33	-8.67	40	48.14	12.98	0.25	30.04	-	-	Peak
88.964	22.99	-20.51	43.5	43.98	8.61	0.39	29.99	-	-	Peak
537.589	27.27	-18.73	46	37.73	18.24	0.99	29.69	-	-	Peak
830.4	39.43	-6.57	46	47.52	20.27	1.27	29.63	151	206	Peak
942.131	38.05	-7.95	46	45.55	20.7	1.33	29.53	-	-	Peak
2389.23	60.13	-13.87	74	52.12	32.86	4.23	29.08	132	143	Peak
2389.23	42.27	-11.73	54	34.26	32.86	4.23	29.08	132	143	Average
2412	107.16	-	-	99.08	32.89	4.24	29.05	101	277	Peak
2412	87.47	-	-	79.39	32.89	4.24	29.05	101	277	Average
2490.69	55.28	-18.72	74	46.93	33.05	4.3	29	200	16	Peak
2490.69	43.53	-10.47	54	35.18	33.05	4.3	29	200	16	Average

Test Mode :	802.11n-HT20	Temperature :	20~21℃
Test Channel :	06	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2437 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
96.099	28.91	-14.59	43.5	48.57	9.91	0.4	29.97	-	-	Peak
106.385	25.42	-18.08	43.5	43.53	11.43	0.42	29.96	-	-	Peak
211.527	21.77	-21.73	43.5	41.62	9.54	0.6	29.99	-	-	Peak
537.589	25.82	-20.18	46	36.28	18.24	0.99	29.69	-	-	Peak
830.4	38.06	-7.94	46	46.15	20.27	1.27	29.63	-	-	Peak
942.131	40.29	-5.71	46	47.79	20.7	1.33	29.53	200	19	Peak
2384.48	54.93	-19.07	74	46.96	32.83	4.22	29.08	200	110	Peak
2384.48	42.48	-11.52	54	34.51	32.83	4.22	29.08	200	110	Average
2437	105.12	-	-	96.95	32.95	4.25	29.03	151	303	Peak
2437	88.01	-	-	79.84	32.95	4.25	29.03	151	303	Average
2493.92	53.68	-20.32	74	45.32	33.05	4.3	28.99	114	360	Peak
2493.92	41.62	-12.38	54	33.26	33.05	4.3	28.99	114	360	Average

Test Mode :	802.11n-HT20	Temperature :	20~21℃
Test Channel :	06	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2437 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
30.853	31.92	-8.08	40	44.46	17.29	0.25	30.08	-	-	Peak
38.346	31.33	-8.67	40	48.14	12.98	0.25	30.04	-	-	Peak
49.359	25.7	-14.3	40	47.8	7.75	0.28	30.13	-	-	Peak
537.589	28.54	-17.46	46	39	18.24	0.99	29.69	-	-	Peak
833.317	38.24	-7.76	46	46.29	20.32	1.27	29.64	100	281	Peak
948.761	37.71	-8.29	46	45.19	20.73	1.33	29.54	-	-	Peak
2385.05	55.92	-18.08	74	47.95	32.83	4.22	29.08	100	110	Peak
2385.05	44.4	-9.6	54	36.43	32.83	4.22	29.08	100	110	Average
2437	107.12	-	-	98.95	32.95	4.25	29.03	101	102	Peak
2437	88.06	-	-	79.89	32.95	4.25	29.03	101	102	Average
2488.79	56.04	-17.96	74	47.7	33.05	4.29	29	200	221	Peak
2488.79	44.13	-9.87	54	35.79	33.05	4.29	29	200	221	Average

Test Mode :	802.11n-HT20	Temperature :	20~21℃
Test Channel :	11	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Horizontal
Remark :	2462 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
98.142	28.57	-14.93	43.5	47.98	10.15	0.41	29.97	-	-	Peak
104.903	25.34	-18.16	43.5	43.73	11.15	0.42	29.96	-	-	Peak
211.527	22.54	-20.96	43.5	42.39	9.54	0.6	29.99	-	-	Peak
537.589	26.11	-19.89	46	36.57	18.24	0.99	29.69	-	-	Peak
830.4	41.74	-4.26	46	49.83	20.27	1.27	29.63	200	201	Peak
942.131	39.23	-6.77	46	46.73	20.7	1.33	29.53	-	-	Peak
2340.02	54.49	-19.51	74	46.68	32.78	4.2	29.17	177	316	Peak
2340.02	42.47	-11.53	54	34.66	32.78	4.2	29.17	177	316	Average
2462	104.46	-	-	96.22	32.98	4.27	29.01	121	310	Peak
2462	85.9	-	-	77.66	32.98	4.27	29.01	121	310	Average
2483.85	58.89	-15.11	74	50.59	33.01	4.29	29	100	332	Peak
2483.85	44.8	-9.2	54	36.5	33.01	4.29	29	100	332	Average

Test Mode :	802.11n-HT20	Temperature :	20~21℃
Test Channel :	11	Relative Humidity :	41~42%
Test Engineer :	Jack Li	Polarization :	Vertical
Remark :	2462 MHz is fundamental signal which can be ignored.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
32.293	30.86	-9.14	40	44.16	16.55	0.24	30.09	-	-	Peak
38.616	31.9	-8.1	40	48.71	12.98	0.25	30.04	-	-	Peak
49.881	25.89	-14.11	40	47.99	7.75	0.28	30.13	-	-	Peak
537.589	27.28	-18.72	46	37.74	18.24	0.99	29.69	-	-	Peak
833.317	37.05	-8.95	46	45.1	20.32	1.27	29.64	-	-	Peak
942.131	40.8	-5.2	46	48.3	20.7	1.33	29.53	200	156	Peak
2370.42	53.29	-20.71	74	45.34	32.83	4.22	29.1	144	167	Peak
2370.42	42.22	-11.78	54	34.27	32.83	4.22	29.1	144	167	Average
2462	107.04	-	-	98.8	32.98	4.27	29.01	100	261	Peak
2462	87.78	-	-	79.54	32.98	4.27	29.01	100	261	Average
2484.42	62.83	-11.17	74	54.53	33.01	4.29	29	100	259	Peak
2484.42	45.1	-8.9	54	36.8	33.01	4.29	29	100	259	Average

3.6 AC Conducted Emission Measurement

3.6.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 KHz to 30 MHz shall not exceed the limits in the following table.

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

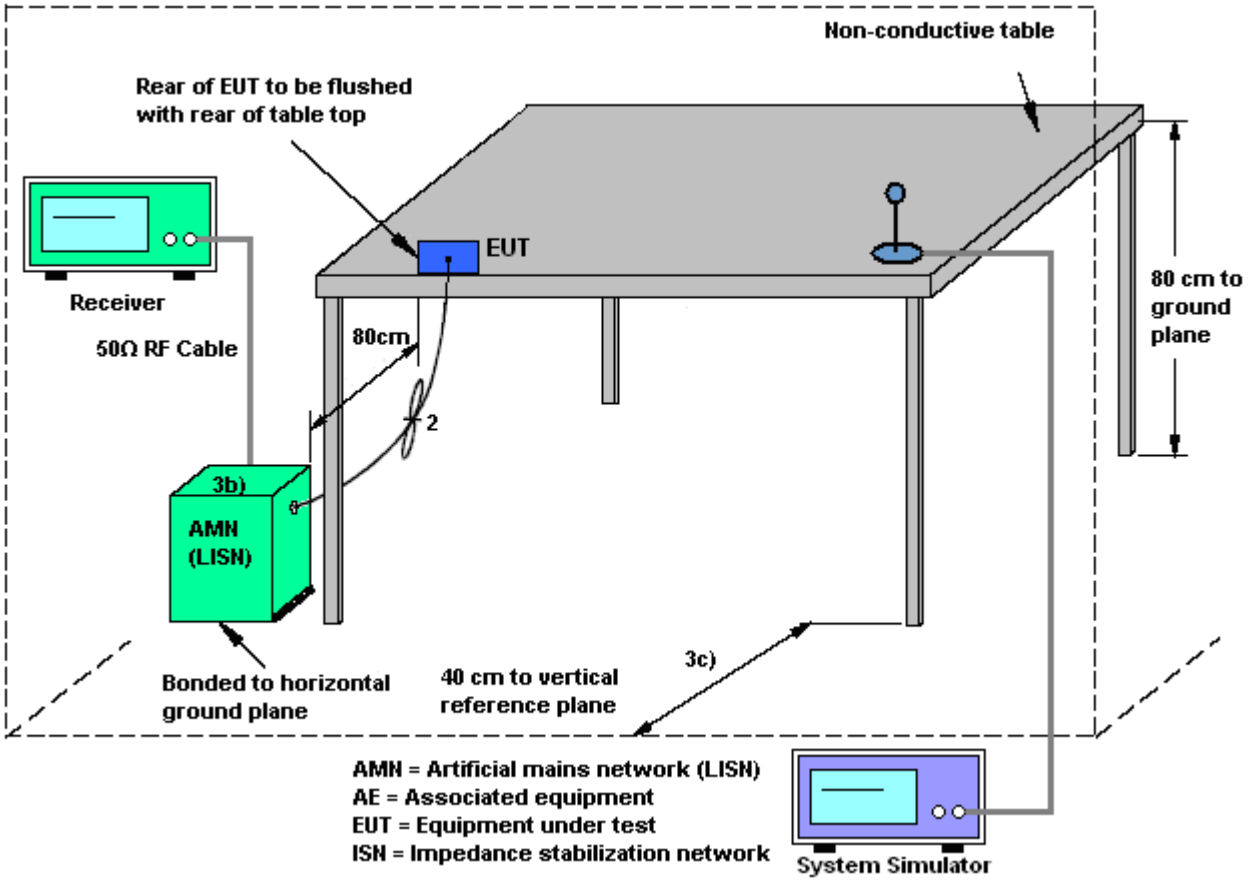
3.6.2 Measuring Instruments

See list of measuring instruments of this test report.

3.6.3 Test Procedures

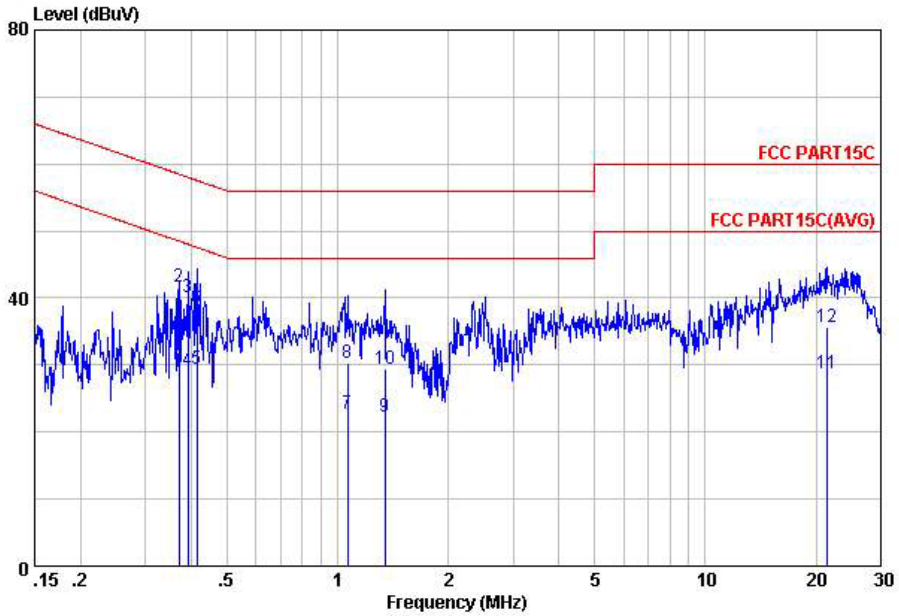
1. The testing follows the guidelines in ANSI C63.4-2003 and ANSI C63.10-2009.
2. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
3. Connect EUT to the power mains through a line impedance stabilization network (LISN).
4. All the support units are connecting to the other LISN.
5. The LISN provides 50 ohm coupling impedance for the measuring instrument.
6. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
7. Both sides of AC line were checked for maximum conducted interference.
8. The frequency range from 150 KHz to 30 MHz was searched.
9. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

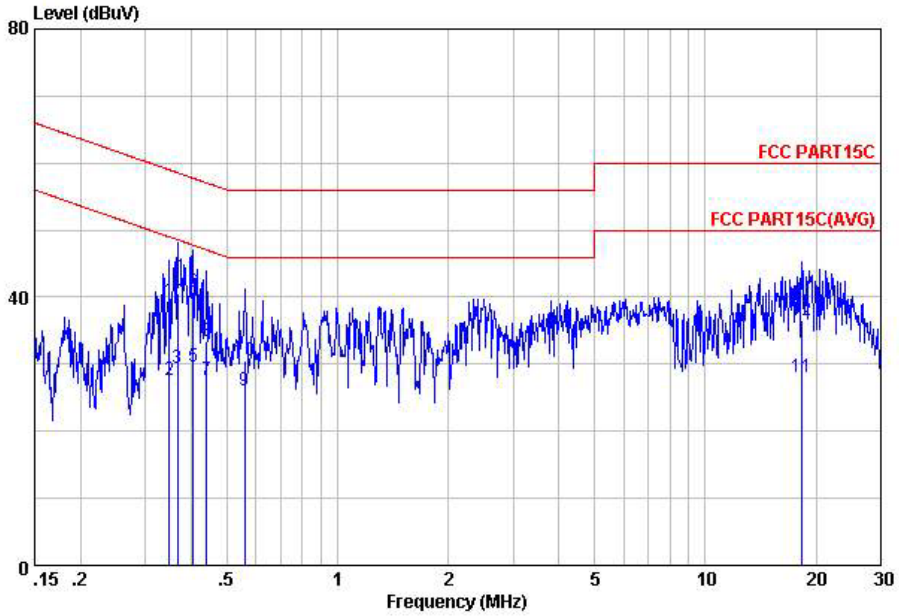
Test Mode :	Mode 1	Temperature :	19~20℃
Test Engineer :	Tom Wang	Relative Humidity :	39~40%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	CDMA 2000 BC0 Idle + WLAN Link + Bluetooth Link + USB Cable (Charging from Adapter) + Camera + Earphone		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : C001-KS
Condition: FCC PART15C LISN-111230 LINE

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.37	29.03	-19.44	48.47	18.50	-0.08	10.61	Average
2	0.37	41.73	-16.74	58.47	31.20	-0.08	10.61	QP
3	0.39	40.04	-17.99	58.03	29.50	-0.08	10.62	QP
4	0.39	29.24	-18.79	48.03	18.70	-0.08	10.62	Average
5	0.41	29.44	-18.11	47.55	18.90	-0.08	10.62	Average
6	0.41	38.54	-19.01	57.55	28.00	-0.08	10.62	QP
7	1.07	22.75	-23.25	46.00	12.20	-0.10	10.65	Average
8	1.07	30.35	-25.65	56.00	19.80	-0.10	10.65	QP
9	1.34	22.36	-23.64	46.00	11.79	-0.10	10.67	Average
10	1.34	29.46	-26.54	56.00	18.89	-0.10	10.67	QP
11	21.49	28.79	-21.21	50.00	17.61	0.08	11.10	Average
12	21.49	35.59	-24.41	60.00	24.41	0.08	11.10	QP

Test Mode :	Mode 1	Temperature :	19~20℃
Test Engineer :	Tom Wang	Relative Humidity :	39~40%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	CDMA 2000 BC0 Idle + WLAN Link + Bluetooth Link + USB Cable (Charging from Adapter) + Camera + Earphone		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
Condition: FCC PART15C LISN-111230 NEUTRAL

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.35	39.43	-19.57	59.00	28.91	-0.08	10.60	QP
2	0.35	27.53	-21.47	49.00	17.01	-0.08	10.60	Average
3	0.37	29.33	-19.23	48.56	18.80	-0.08	10.61	Average
4	0.37	40.63	-17.93	58.56	30.10	-0.08	10.61	QP
5	0.40	29.64	-18.13	47.77	19.10	-0.08	10.62	Average
6	0.40	40.74	-17.03	57.77	30.20	-0.08	10.62	QP
7	0.44	27.64	-19.43	47.07	17.10	-0.08	10.62	Average
8	0.44	33.34	-23.73	57.07	22.80	-0.08	10.62	QP
9	0.56	26.15	-19.85	46.00	15.60	-0.08	10.63	Average
10	0.56	30.45	-25.55	56.00	19.90	-0.08	10.63	QP
11	18.23	28.03	-21.97	50.00	16.91	0.06	11.06	Average
12	18.23	36.63	-23.37	60.00	25.51	0.06	11.06	QP

3.7 Antenna Requirements

3.7.1 Standard Applicable

If directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. 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 FCC rule.

3.7.2 Antenna Connected Construction

Non-standard connector used.

3.7.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100319	9kHz~40GHz	Dec. 30, 2011	Jul. 21, 2012 ~ Aug. 01, 2012	Dec. 29, 2012	Conducted (TH01-KS)
Power Meter	Agilent	E4416A	MY45101555	N/A	Aug. 23, 2011	Jul. 21, 2012 ~ Aug. 01, 2012	Aug. 22, 2012	Conducted (TH01-KS)
Power Sensor	Agilent	E9327A	MY44421198	N/A	Aug. 23, 2011	Jul. 21, 2012 ~ Aug. 01, 2012	Aug. 22, 2012	Conducted (TH01-KS)
DC Power Supply	GWINSTEK	GPS-3030D	E1884515	N/A	Aug. 23, 2011	Jul. 21, 2012 ~ Aug. 01, 2012	Aug. 22, 2012	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	N/A	Dec. 30, 2011	Jul. 21, 2012 ~ Aug. 01, 2012	Dec. 29, 2012	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESCI	100534	9kHz~3GHz	Nov. 09, 2011	Aug. 20, 2012	Nov. 08, 2012	Radiation (03CH01-KS)
Spectrum Analyzer	R&S	FSP40	100319	9kHz~40GHz	Dec. 30, 2011	Aug. 20, 2012	Dec. 29, 2012	Radiation (03CH01-KS)
Bilog Antenna	SCHAFFNER	CBL6112D	23182	25MHz~2GHz	Dec. 08, 2011	Aug. 20, 2012	Dec. 07, 2012	Radiation (03CH01-KS)
Loop Antenna	R&S	HFH2-Z2	860004/00	9 kHz~30 MHz	Jul. 28, 2012	Aug. 20, 2012	Jul. 27, 2013	Radiation (03CH01-KS)
Double Ridge Horn Antenna	EMCO	3117	00075959	1GHz~18GHz	Jan. 06, 2012	Aug. 20, 2012	Jan. 05, 2013	Radiation (03CH01-KS)
Amplifier	Wireless	FPA-6592G	060004	30MHz~2GHz	Dec. 30, 2011	Aug. 20, 2012	Dec. 29, 2012	Radiation (03CH01-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Dec. 30, 2011	Aug. 20, 2012	Dec. 29, 2012	Radiation (03CH01-KS)
Active Horn Antenna	com-power	AHA-118	701023	1GHz~18GHz	Nov. 07, 2011	Aug. 20, 2012	Nov. 06, 2012	Radiation (03CH01-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz~40GHz	Oct. 11, 2011	Aug. 20, 2012	Oct.10, 2012	Radiation (03CH01-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz	Jun. 01, 2012	Jul. 19, 2012	May 31, 2013	Conduction (CO01-KS)
LISN	MessTec	AN3016	60103	9kHz~30MHz	Dec. 30, 2011	Jul. 19, 2012	Dec. 29, 2012	Conduction (CO01-KS)
LISN	MessTec	AN3016	60105	9kHz~30MHz	Dec. 30, 2011	Jul. 19, 2012	Dec. 29, 2012	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	N/A	Nov. 16, 2011	Jul. 19, 2012	Nov. 15, 2012	Conduction (CO01-KS)
System Simulator	R&S	CMU200	837587/066	2G Full-Band	Dec. 30, 2011	Jul. 19, 2012	Dec. 29, 2012	Conduction (CO01-KS)

5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.54**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.72**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.26**