FCC RF Test Report

APPLICANT	:	PAX Technology Limited
EQUIPMENT	:	Mobile payment Terminal
BRAND NAME	:	PAX
MODEL NAME	:	D900
FCC ID	:	V5PD900W
STANDARD	:	FCC Part 15 Subpart C §15.247
CLASSIFICATION	:	(DTS) Digital Transmission System

The product was received on Apr. 24, 2012 and completely tested on Jul. 09, 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

Jones Tsai / Manager

Testing Laboratory 1190

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

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR242415B	Rev. 01	Initial issue of report	Jul. 24, 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 1.36 dB at 720.640 MHz
3.6	15.207	Gen 7.2.4	AC Conducted Emission	15.207(a)	Pass	Under limit 11.77 dB at 0.180 MHz
3.7	15.203 & 15.247(b)	A8.4	Antenna Requirement	N/A	Pass	-

1 General Description

1.1 Applicant

PAX Technology Limited
Room 2416, 24/F., Sun Hung Kai Centre, 30 Harbour Road, Wanchai, Hong Kong

1.2 Manufacturer

PAX Computer Technology (Shenzhen) Co., Ltd.
4/F No.3 Building, Software Park, Second Central Science-Tech Road, High-Tech industrial Park, Shenzhen,Guangdong, P.R.C.

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	Mobile payment Terminal
Brand Name	PAX
Model Name	D900
FCC ID	V5PD900W
EUT supports Radios application	WLAN 11bgn / Bluetooth
HW Version	D900-XXX-XX3-XXXX
SW Version	V1.XX
EUT Stage	Production Unit

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 : 14.56 dBm (0.029 W) 802.11g : 18.28 dBm (0.067 W) 802.11n HT-20 : 16.89 dBm (0.049 W) 802.11n HT-40 : 16.85 dBm (0.048 W)
Antenna Type	PIFA Antenna with gain 1.40 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.	DC Power Supply	GWINSTEK	GPS-3030D	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	D-link	DIR-855	KA2DIR855A2	N/A	Unshielded, 1.8 m
3.	Notebook	DELL	VOSTRO 1450	PPD-AR5B195	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
4.	Bluetooth Earphone	Nokia	BH-106	QTLBH-106	N/A	N/A

2 Test Configuration of Equipment Under Test

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 as below table and the highest power data rates (11b, 11g, 11n HT-20, 11n HT-40 modes) were chosen for full test in the following sections to demonstrate compliance to the FCC limit line. .

2.4GHz 802.11b mode				
Data Rate (MHz)	1M bps	2M bps	5.5M bps	11M bps
Peak Power (dBm)	14.56	14.51	13.81	14.46

2.4GHz 802.11g mode								
Data Rate (MHz)	6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
Peak Power (dBm)	18.28	17.81	18.11	17.68	18.17	18.04	17.98	18.01

2.4GHz 802.11n HT-20 mode								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Peak Power (dBm)	16.89	16.65	16.81	16.76	16.67	16.68	16.75	16.85

2.4GHz 802.11n HT-40 mode								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Peak Power (dBm)	16.85	16.28	16.61	16.65	16.75	16.58	16.26	16.04

2.3 Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and ANSI C63.10-2009 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), radiated emission (30 MHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

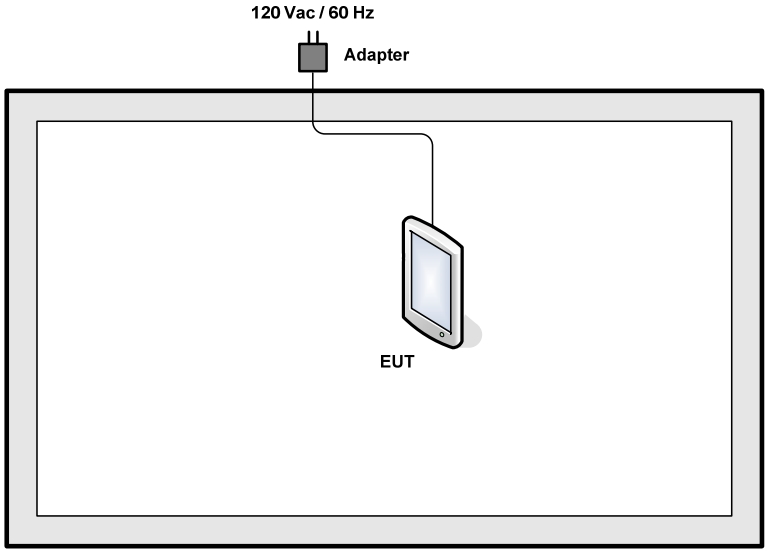
Pre-scanned tests, X, Y, Z in three orthogonal panels, were conducted to determine the final configuration from all possible combinations.

The following tables are showing the test modes as the worst cases (Y plane) and recorded in this report.

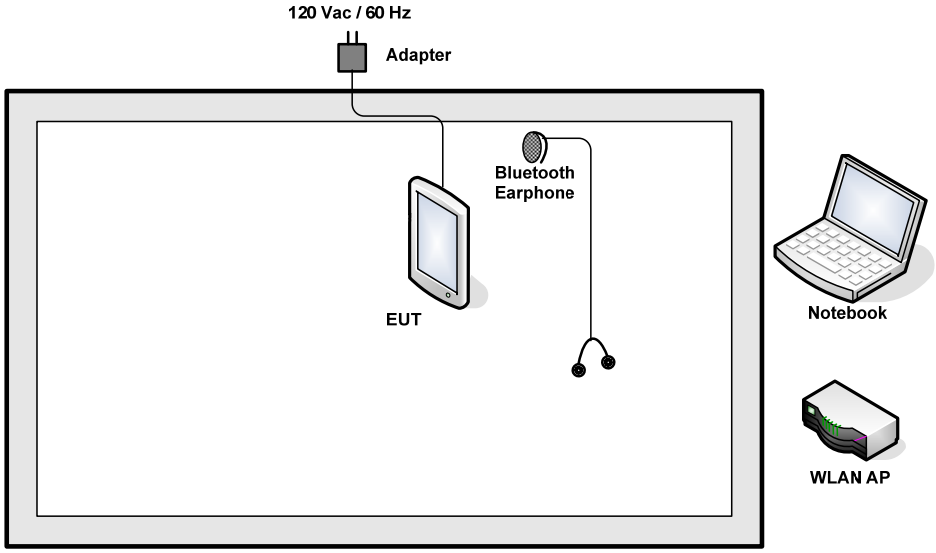
<table>
<tr><th colspan="2">Test Cases</th></tr>
<tr><th>Test Item</th><th>802.11b (Modulation : DSSS) 802.11g/n (Modulation : OFDM)</th></tr>
<tr><td>Conducted TCs</td><td>
<table>
<tr><th>Test Mode</th><th>802.11b</th><th>802.11g</th><th>802.11n HT-20</th></tr>
<tr><td>CH01</td><td>1</td><td>4</td><td>7</td></tr>
<tr><td>CH06</td><td>2</td><td>5</td><td>8</td></tr>
<tr><td>CH11</td><td>3</td><td>6</td><td>9</td></tr>
</table>
<table>
<tr><th>Test Mode</th><th>802.11n HT-40</th></tr>
<tr><td>CH03</td><td>10</td></tr>
<tr><td>CH06</td><td>11</td></tr>
<tr><td>CH09</td><td>12</td></tr>
</table>
</td></tr>
<tr><td>Radiated TCs</td><td>
<table>
<tr><th>Test Mode</th><th>802.11b</th><th>802.11g</th><th>802.11n HT-20</th></tr>
<tr><td>CH01</td><td>1</td><td>4</td><td>7</td></tr>
<tr><td>CH06</td><td>2</td><td>5</td><td>8</td></tr>
<tr><td>CH11</td><td>3</td><td>6</td><td>9</td></tr>
</table>
<table>
<tr><th>Test Mode</th><th>802.11n HT-40</th></tr>
<tr><td>CH03</td><td>10</td></tr>
<tr><td>CH06</td><td>11</td></tr>
<tr><td>CH09</td><td>12</td></tr>
</table>
</td></tr>
<tr><td>AC Conducted Emission</td><td>Mode 1 : Bluetooth Link + WLAN Link + USB Cable (Charging from Adapter) + Camera + Credit Card for Sample 1
Mode 2 : Bluetooth Link + WLAN Link + USB Cable (Charging from Adapter) + Barcode + Credit Card for Sample 2</td></tr>
<tr><td colspan="2">Remark:
1, The worst case of conducted emission is mode 1; only the test data of it was reported.
2, For RSE test, the sample 2 is only verified the worse mode.</td></tr>
</table>

2.4 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



2.5 RF Utility

For WLAN function, execute “ADB” to make the EUT 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.

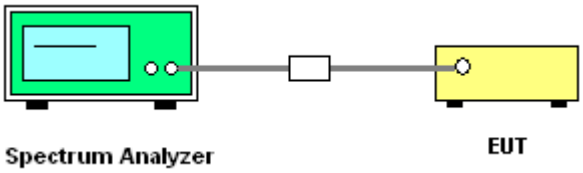
3.1.2 Measuring Instruments

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. 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.
4. The marker-delta reading at this point is the 6 dB bandwidth of the emission.

3.1.4 Test Setup

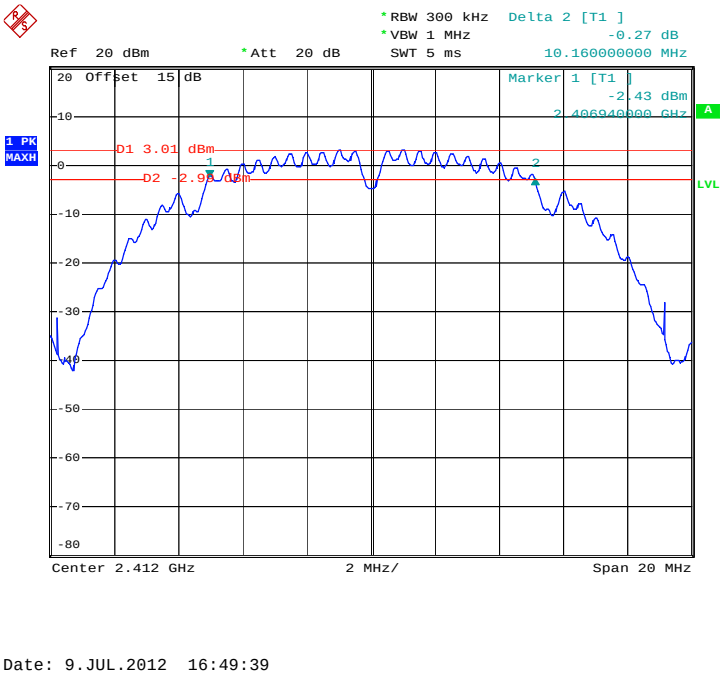


3.1.5 Test Result of 6dB Bandwidth

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

Channel	Frequency (MHz)	802.11b 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
01	2412	10.16	0.5	Pass
06	2437	10.20	0.5	Pass
11	2462	10.20	0.5	Pass

6 dB Bandwidth Plot on 802.11b Channel 01



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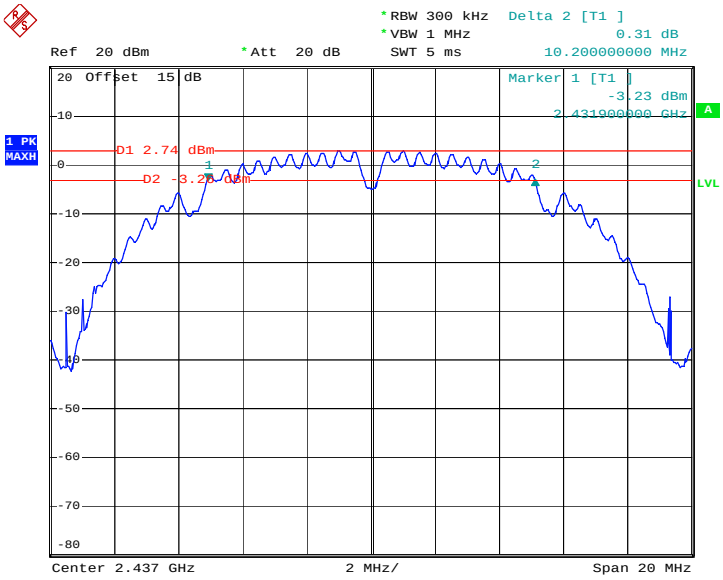
6 dB Bandwidth Plot on 802.11b Channel 06



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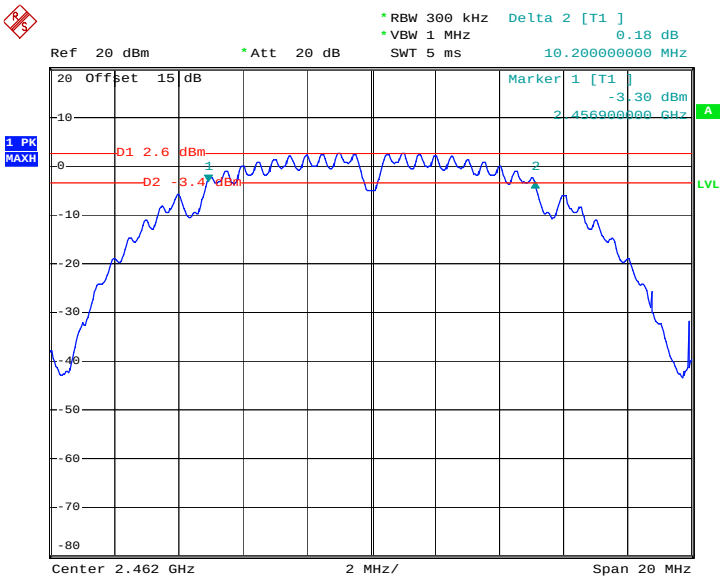
6 dB Bandwidth Plot on 802.11b Channel 11



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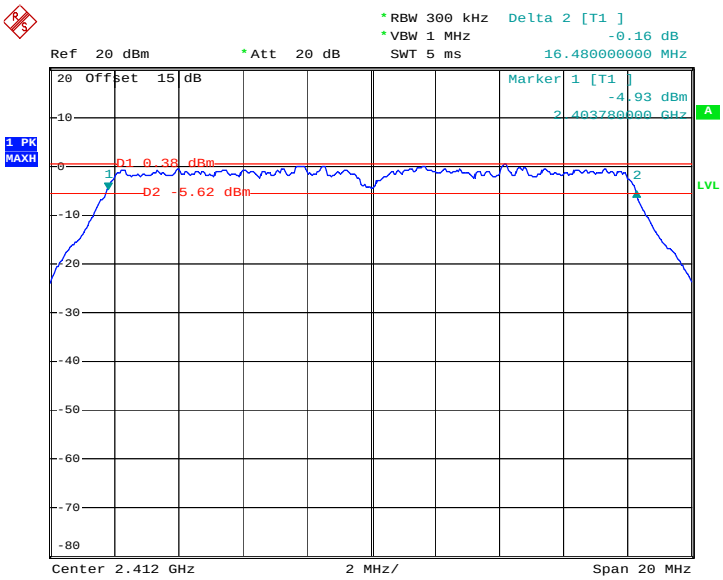
Test Mode :	802.11g	Temperature :	23~24℃
Test Engineer :	Zhi Lu	Relative Humidity :	47~48%

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

6 dB Bandwidth Plot on 802.11g Channel 01



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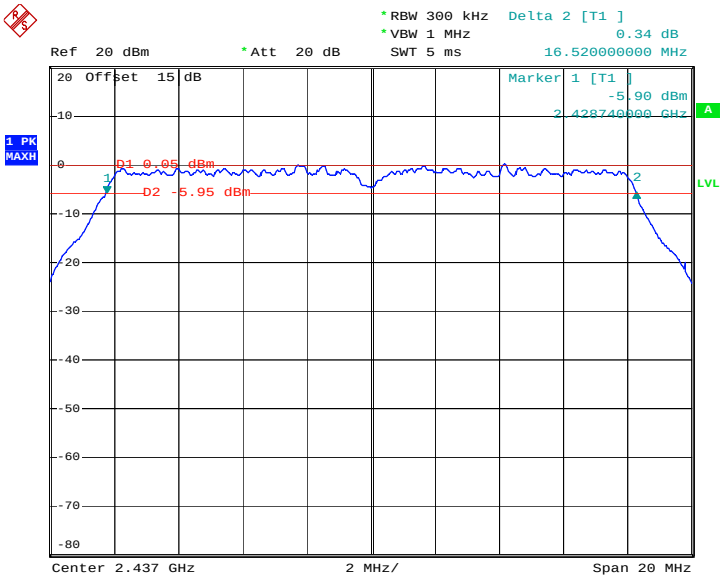
6 dB Bandwidth Plot on 802.11g Channel 06



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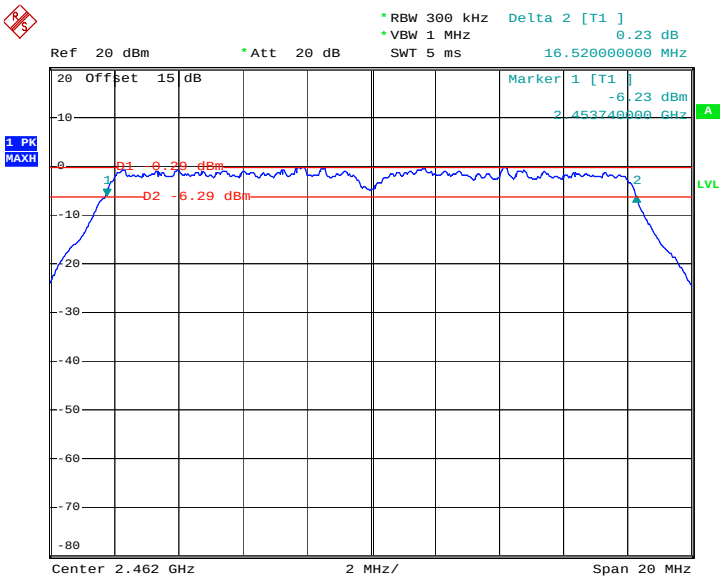
6 dB Bandwidth Plot on 802.11g Channel 11

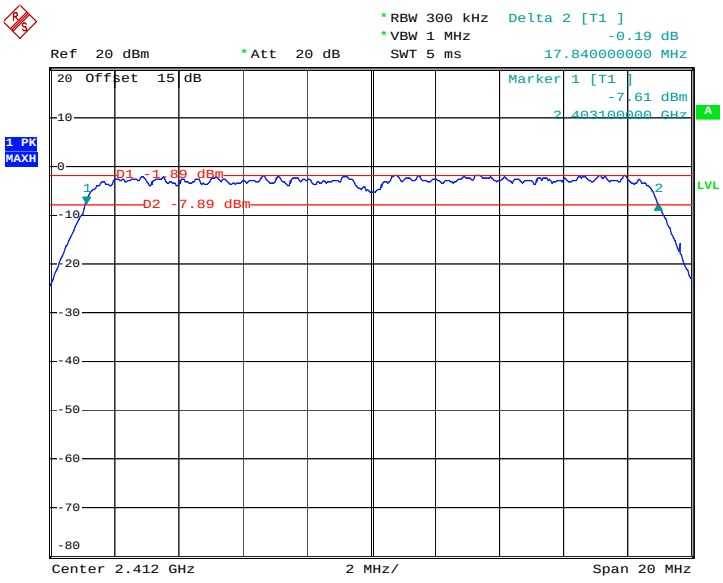


Date: 9.JUL.2012 17:06:50

Test Mode :	802.11n HT-20	Temperature :	23~24℃
Test Engineer :	Zhi Lu	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	17.84	0.5	Pass
06	2437	17.80	0.5	Pass
11	2462	17.80	0.5	Pass

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



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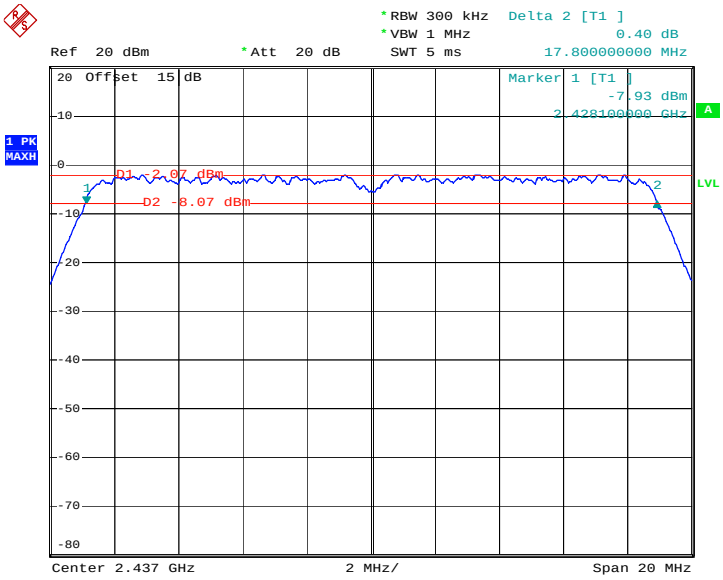
6 dB Bandwidth Plot on 802.11n HT-20 Channel 06



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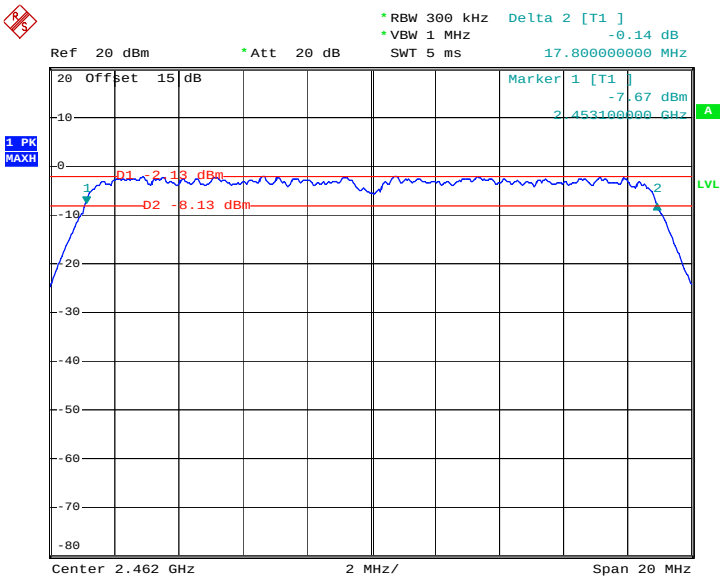
6 dB Bandwidth Plot on 802.11n HT-20 Channel 11

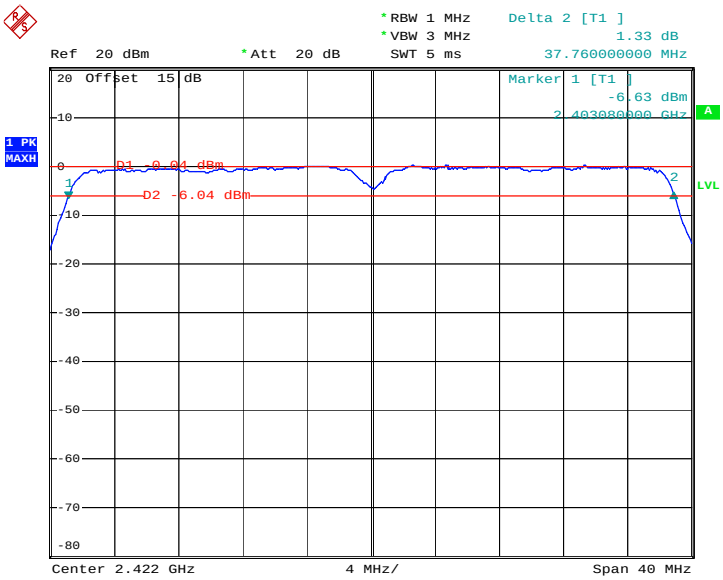


Date: 9.JUL.2012 17:18:54

Test Mode :	802.11n HT-40	Temperature :	23~24℃
Test Engineer :	Zhi Lu	Relative Humidity :	47~48%

Channel	Frequency (MHz)	802.11n HT-40 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
03	2422	37.76	0.5	Pass
06	2437	37.68	0.5	Pass
09	2452	37.68	0.5	Pass

6 dB Bandwidth Plot on 802.11n HT-40 Channel 03



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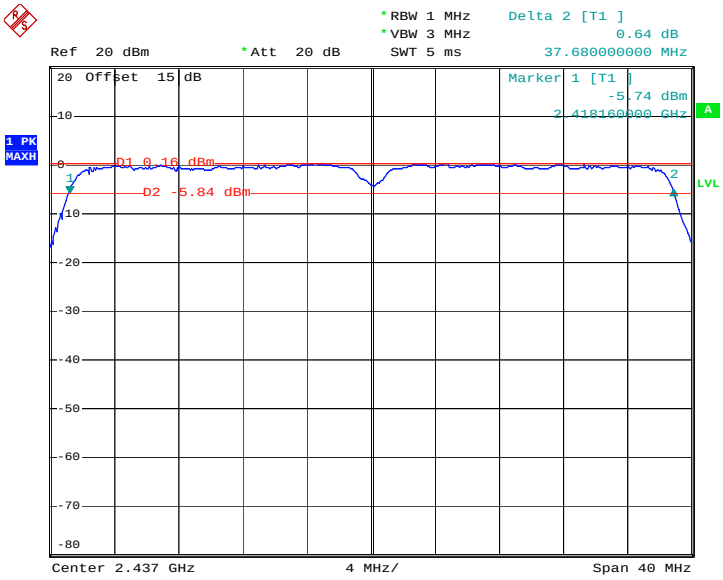
6 dB Bandwidth Plot on 802.11n HT-40 Channel 06



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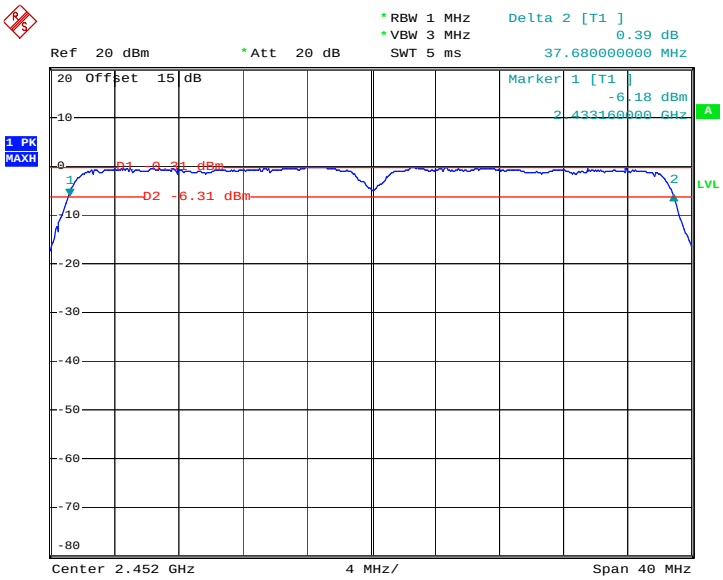
6 dB Bandwidth Plot on 802.11n HT-40Channel 09



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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.

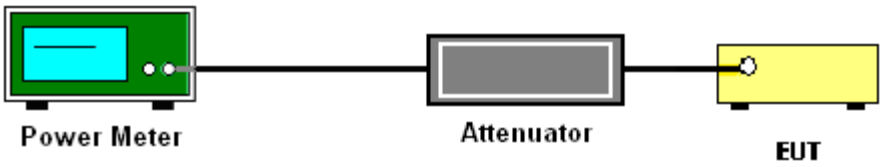
3.2.2 Measuring Instruments

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. Measure the power by power meter.

3.2.4 Test Setup



3.2.5 Test Result of Peak Output Power

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

Channel	Frequency (MHz)	802.11b Peak Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
01	2412	14.56	30	Pass
06	2437	14.29	30	Pass
11	2462	14.52	30	Pass

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

Channel	Frequency (MHz)	802.11g Peak Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
01	2412	18.15	30	Pass
06	2437	18.28	30	Pass
11	2462	18.04	30	Pass

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

Channel	Frequency (MHz)	2.4GHz 802.11n HT-20 Peak Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
01	2412	16.85	30	Pass
06	2437	16.87	30	Pass
11	2462	16.89	30	Pass

Test Mode :	2.4GHz 802.11n HT-40	Temperature :	23~24℃
Test Engineer :	Zhi Lu	Relative Humidity :	47~48%

Channel	Frequency (MHz)	2.4GHz 802.11n HT-40 Peak Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
03	2422	16.18	30	Pass
06	2437	16.85	30	Pass
09	2452	15.88	30	Pass

3.2.6 Test Result of Average output Power (Reporting Only)

Test Mode :	802.11b	Temperature :	23~24℃
Test Engineer :	Zhi Lu	Relative Humidity :	47~48%
Duty Cycle:	100%	Duty Factor:	0.00dB

Channel	Frequency (MHz)	802.11b Average Output Power (dBm)
01	2412	11.89
06	2437	11.67
11	2462	11.98

Test Mode :	802.11g	Temperature :	23~24℃
Test Engineer :	Zhi Lu	Relative Humidity :	47~48%
Duty Cycle:	100%	Duty Factor:	0.00dB

Channel	Frequency (MHz)	802.11g Average Output Power (dBm)
01	2412	9.16
06	2437	9.18
11	2462	9.11

Test Mode :	802.11n HT-20	Temperature :	23~24℃
Test Engineer :	Zhi Lu	Relative Humidity :	47~48%
Duty Cycle:	100%	Duty Factor:	0.00dB

Channel	Frequency (MHz)	802.11n HT-20 Average Output Power (dBm)
01	2412	7.66
06	2437	7.85
11	2462	8.04

Test Mode :	802.11n HT-40	Temperature :	23~24℃
Test Engineer :	Zhi Lu	Relative Humidity :	47~48%
Duty Cycle:	100%	Duty Factor:	0.00dB

Channel	Frequency (MHz)	802.11n HT-40 Average Output Power (dBm)
03	2422	6.65
06	2437	6.85
09	2452	6.52

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.

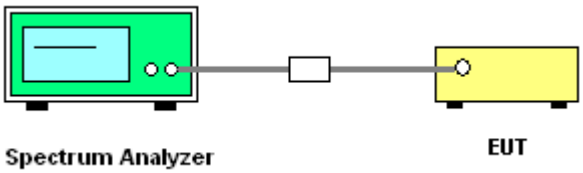
3.3.2 Measuring Instruments

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. Record the measurement data derived from spectrum analyzer.
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. 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

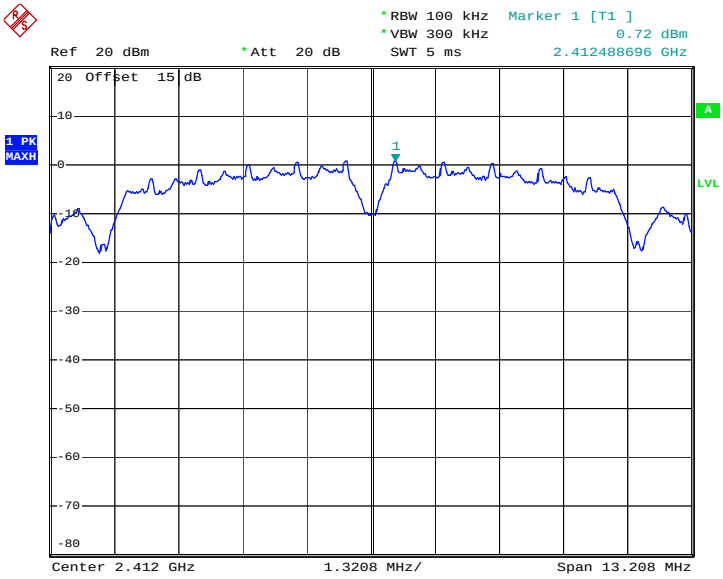
Test Mode :	802.11b	Temperature :	23~24℃
Test Engineer :	Zhi Lu	Relative Humidity :	47~48%

Channel	Frequency (MHz)	802.11b Power Density		Max. Limits (dBm)	Pass/Fail
		Measured PSD/100KHz (dBm)	PSD/3KHz (dBm)		
01	2412	0.72	-14.48	8	Pass
06	2437	0.55	-14.65	8	Pass
11	2462	0.42	-14.78	8	Pass

Note:

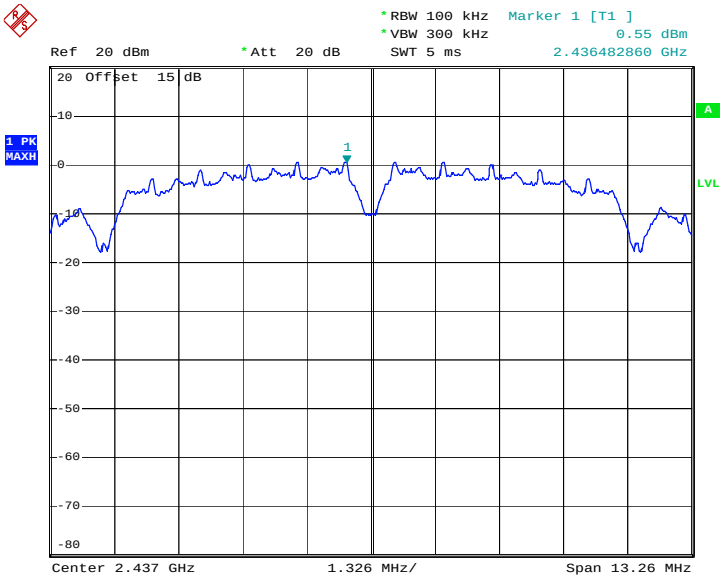
1. *Measured power density (dBm) has offset with cable loss.*
2. *BWCF (dB) = 10 log (3k/100k) = -15.2 dB*
3. *Power Density/ 3kHz (dBm)= Measured power density/ 100KHz (dBm) + BWCF (dB)*

PSD Plot on 802.11b Channel 01



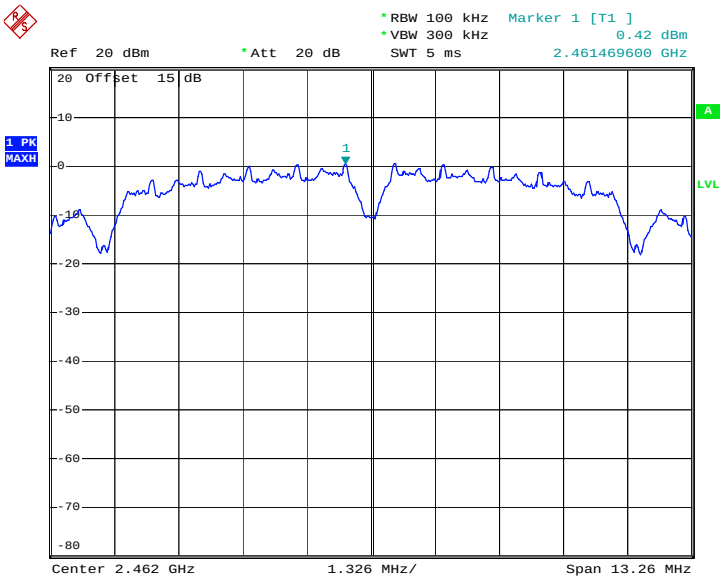
Date: 9.JUL.2012 16:50:13

PSD Plot on 802.11b Channel 06



Date: 9.JUL.2012 16:52:51

PSD Plot on 802.11b Channel 11



Date: 9.JUL.2012 16:55:03

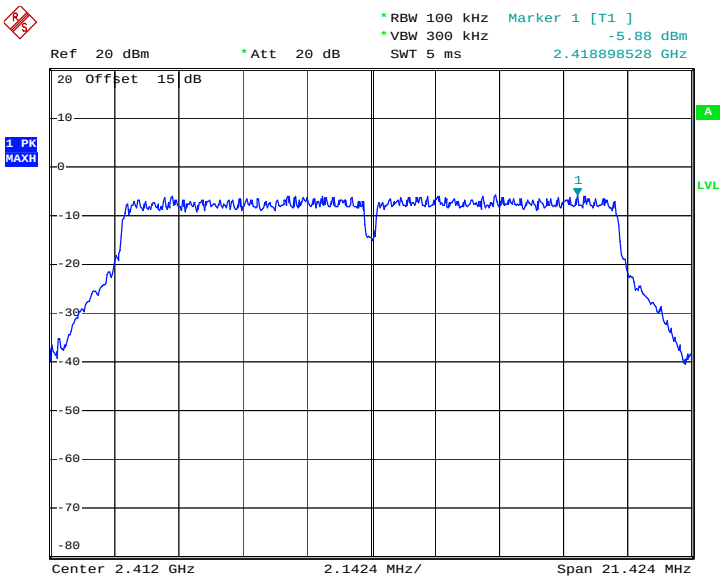
Test Mode :	802.11g	Temperature :	23~24℃
Test Engineer :	Zhi Lu	Relative Humidity :	47~48%

Channel	Frequency (MHz)	802.11g Power Density		Max. Limits (dBm)	Pass/Fail
		Measured PSD/100KHz (dBm)	PSD/3KHz (dBm)		
01	2412	-5.88	-21.08	8	Pass
06	2437	-6.18	-21.38	8	Pass
11	2462	-6.27	-21.47	8	Pass

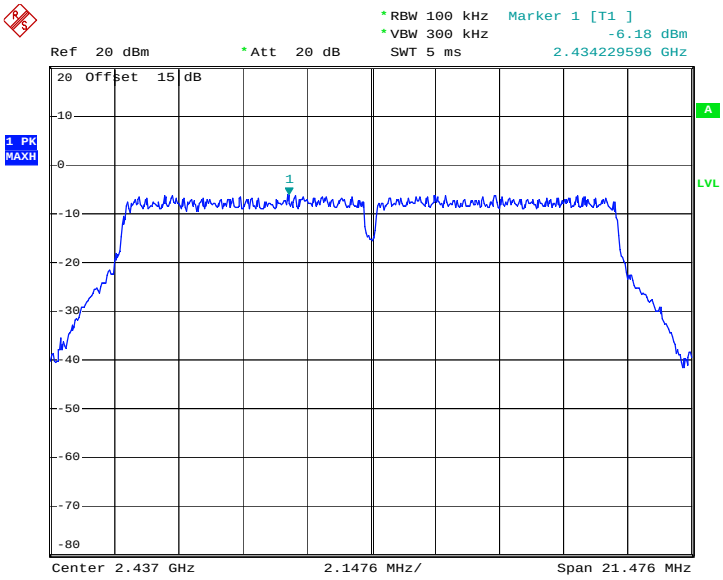
Note:

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

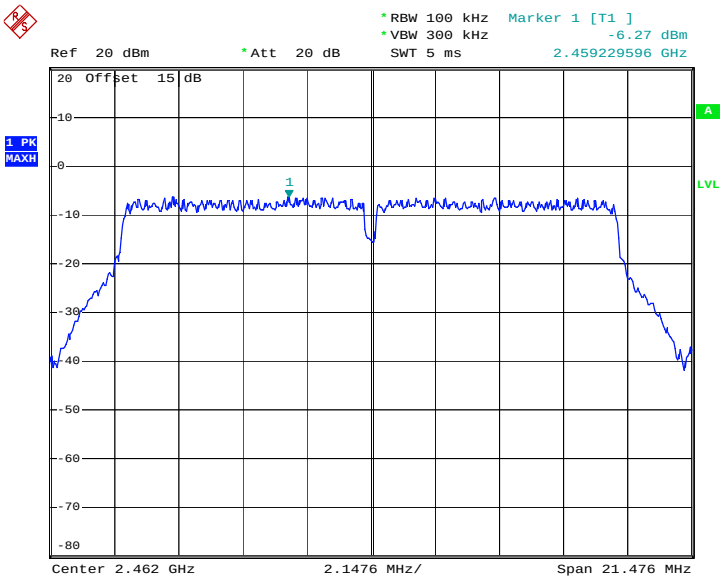


PSD Plot on 802.11g Channel 06



Date: 9.JUL.2012 17:04:24

PSD Plot on 802.11g Channel 11



Date: 9.JUL.2012 17:07:11

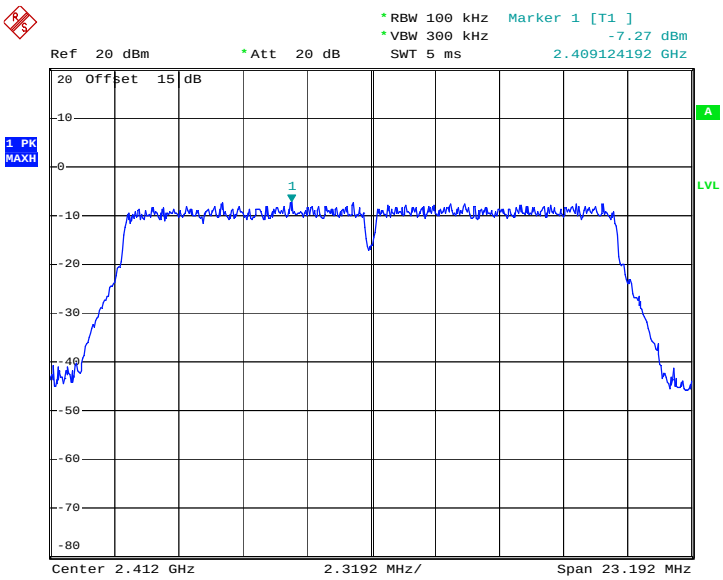
Test Mode :	802.11n HT-20	Temperature :	23~24℃
Test Engineer :	Zhi Lu	Relative Humidity :	47~48%

Channel	Frequency (MHz)	802.11n HT-20 Power Density		Max. Limits (dBm)	Pass/Fail
		Measured PSD/100KHz (dBm)	PSD/3KHz (dBm)		
01	2412	-7.27	-22.47	8	Pass
06	2437	-7.23	-22.43	8	Pass
11	2462	-7.16	-22.36	8	Pass

Note:

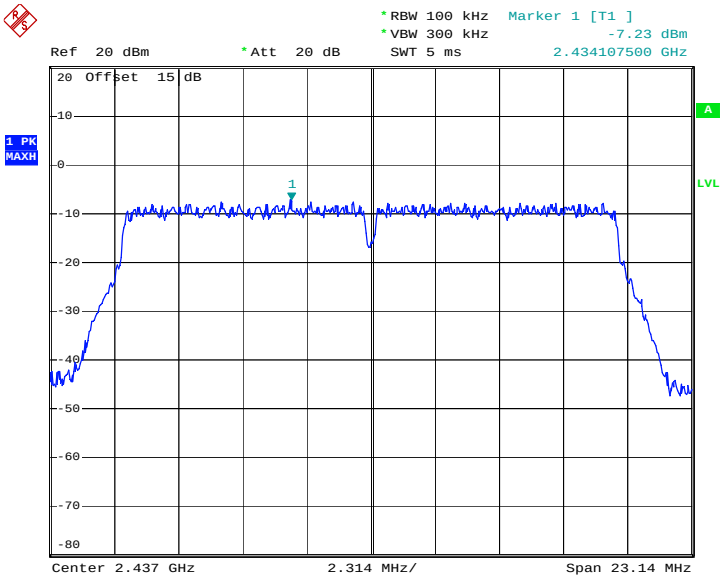
1. *Measured power density (dBm) has offset with cable loss.*
2. *BWCF (dB) = 10 log (3k/100k) = -15.2 dB*
3. *Power Density/ 3KHz (dBm)= Measured power density/ 100KHz (dBm) + BWCF (dB)*

PSD Plot on 802.11n HT-20 Channel 01



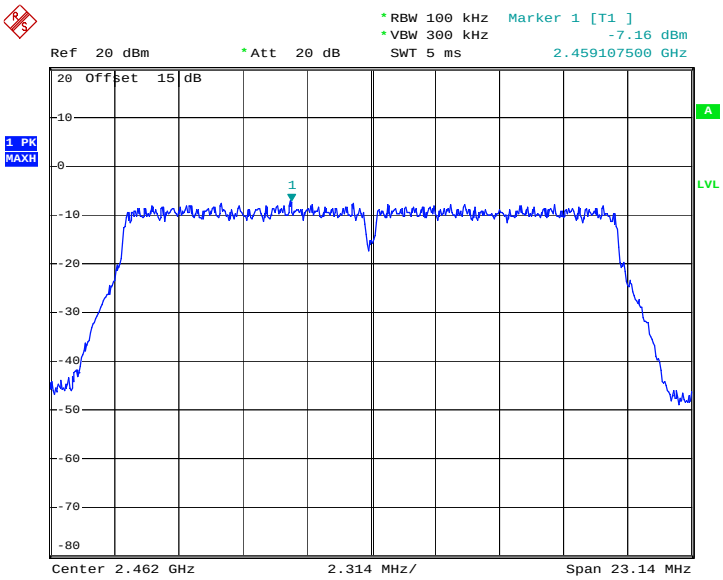
Date: 9.JUL.2012 17:12:14

PSD Plot on 802.11n HT-20 Channel 06



Date: 9.JUL.2012 17:15:55

PSD Plot on 802.11n HT-20 Channel 11



Date: 9.JUL.2012 17:19:13

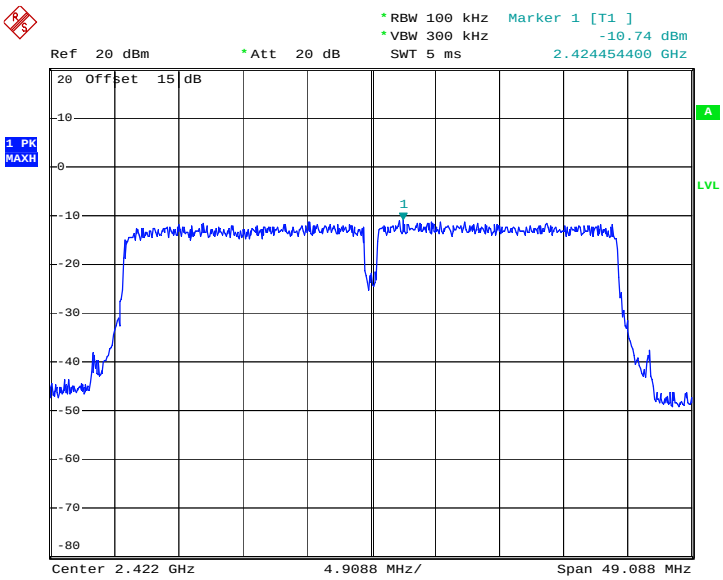
Test Mode :	802.11n HT-40	Temperature :	23~24℃
Test Engineer :	Zhi Lu	Relative Humidity :	47~48%

Channel	Frequency (MHz)	802.11n HT-40 Power Density		Max. Limits (dBm)	Pass/Fail
		Measured PSD/100KHz (dBm)	PSD/3KHz (dBm)		
03	2422	-10.74	-25.94	8	Pass
06	2437	-9.92	-25.12	8	Pass
09	2452	-11.64	-26.84	8	Pass

Note:

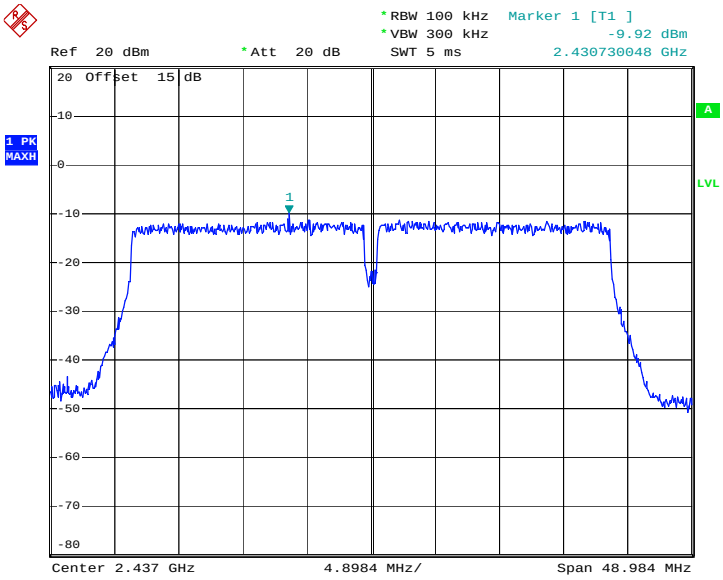
1. *Measured power density (dBm) has offset with cable loss.*
2. *BWCF (dB) = 10 log (3k/100k) = -15.2 dB*
3. *Power Density/ 3KHz (dBm)= Measured power density/ 100KHz (dBm) + BWCF (dB)*

PSD Plot on 802.11n HT-40 Channel 03



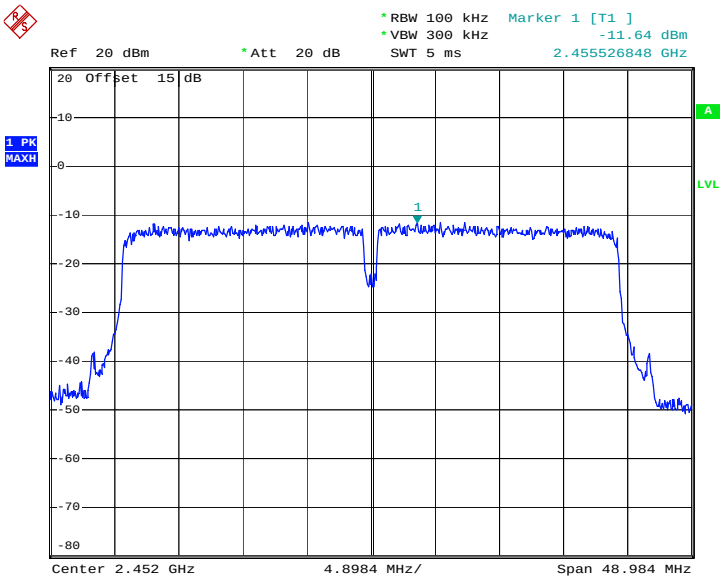
Date: 9.JUL.2012 17:22:33

PSD Plot on 802.11n HT-40 Channel 06



Date: 9.JUL.2012 17:25:40

PSD Plot on 802.11n HT-40 Channel 09



Date: 9.JUL.2012 17:28:33

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

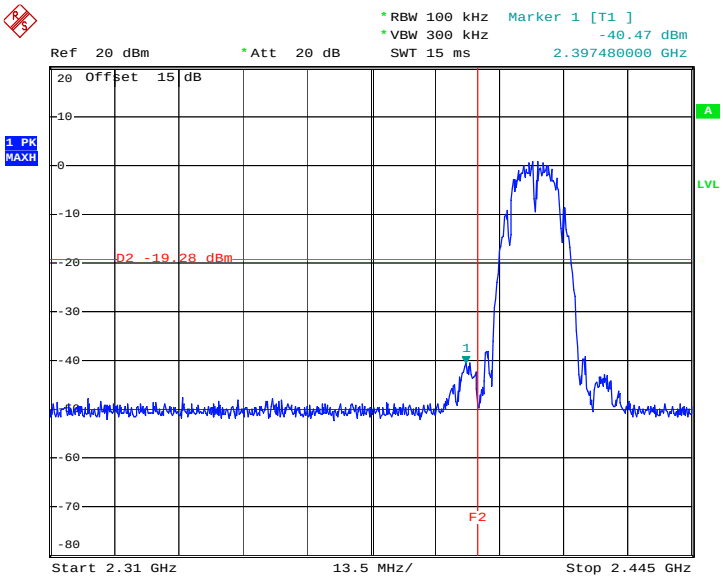
1. The testing follows the guidelines in the Measurement Procedure of FCC KDB Publication No. 558074 D01 DTS Meas. Guidance and TCB Workshop 2012, April.
2. Set RBW = 100 KHz, VBW=300 KHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall 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.

3.4.4 Test Setup

3.4.5 Test Plots of Conducted Band Edges

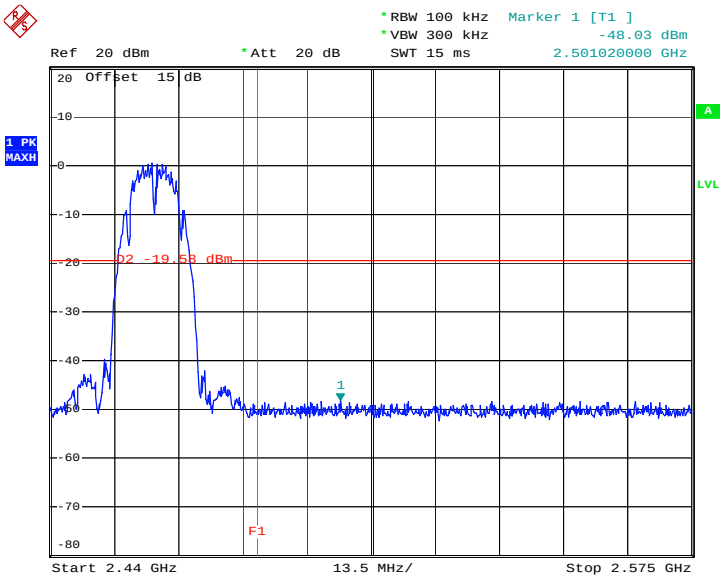
Test Mode :	802.11b	Temperature :	23~24℃
Test Band :	Low and High	Relative Humidity :	47~48%
Test Channel :	01 and 11	Test Engineer :	Zhi Lu

Low Band Edge Plot on 802.11b Channel 01



Date: 9.JUL.2012 16:50:30

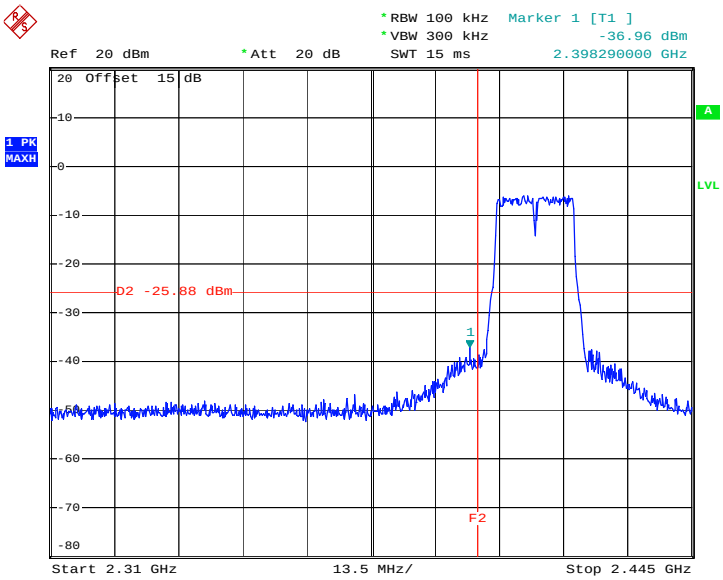
High Band Edge Plot on 802.11b Channel 11



Date: 9.JUL.2012 16:55:23

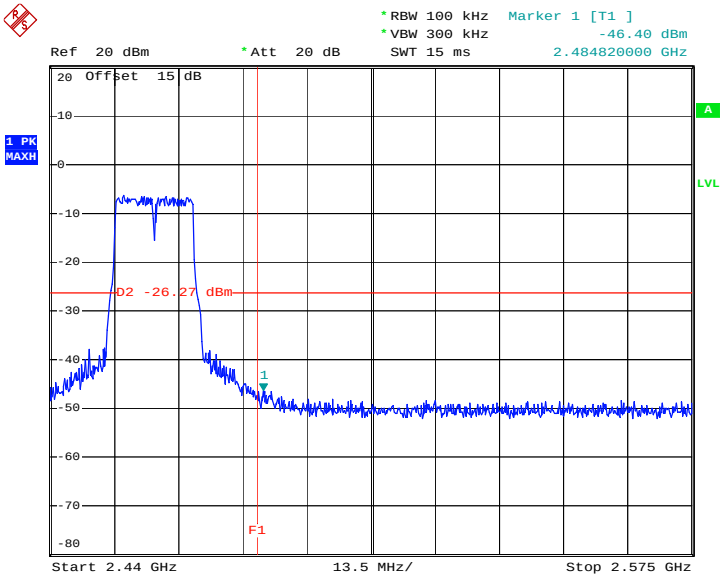
Test Mode :	802.11g	Temperature :	23~24℃
Test Band :	Low and High	Relative Humidity :	47~48%
Test Channel :	01 and 11	Test Engineer :	Zhi Lu

Low Band Edge Plot on 802.11g Channel 01



Date: 9.JUL.2012 17:00:35

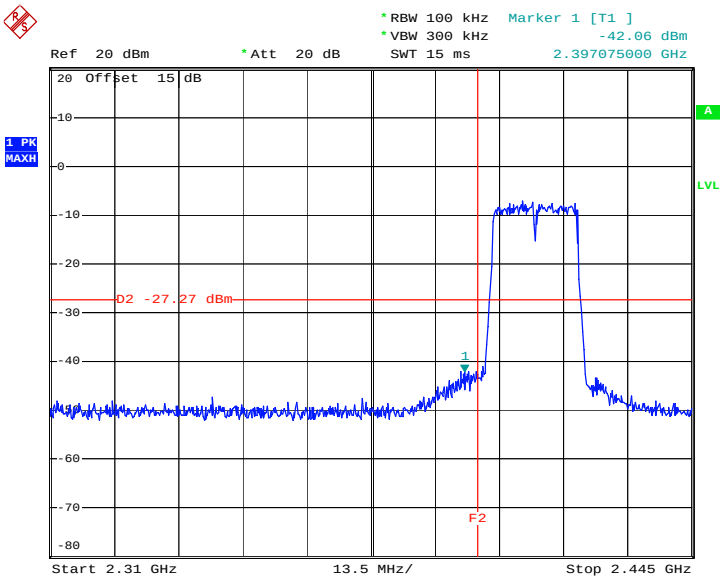
High Band Edge Plot on 802.11g Channel 11



Date: 9.JUL.2012 17:07:25

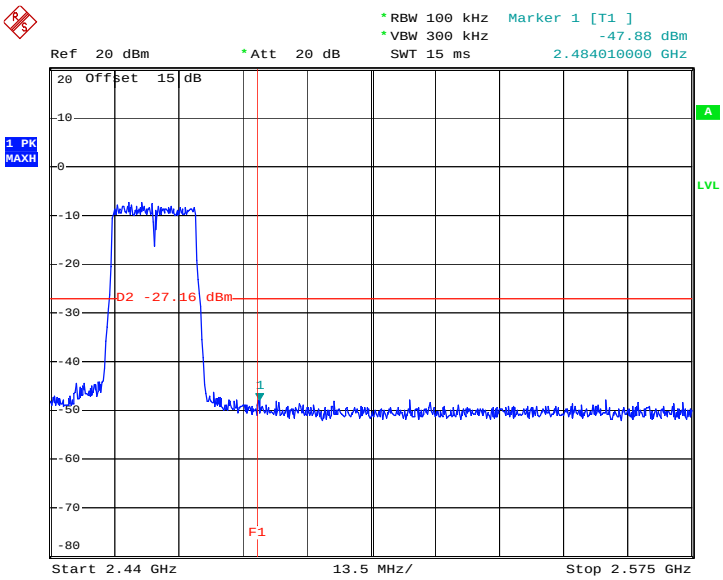
Test Mode :	802.11n HT-20	Temperature :	23~24℃
Test Band :	Low and High	Relative Humidity :	47~48%
Test Channel :	01 and 11	Test Engineer :	Zhi Lu

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



Date: 9.JUL.2012 17:12:31

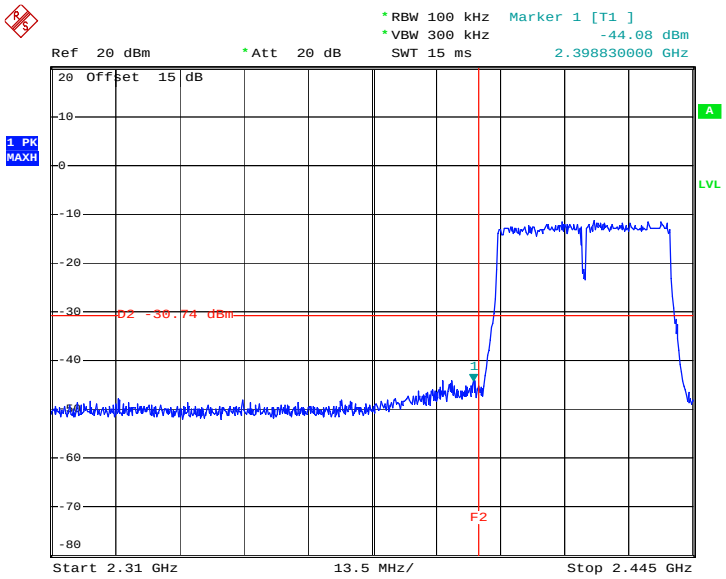
High Band Edge Plot on 802.11n HT-20 Channel 11



Date: 9.JUL.2012 17:19:43

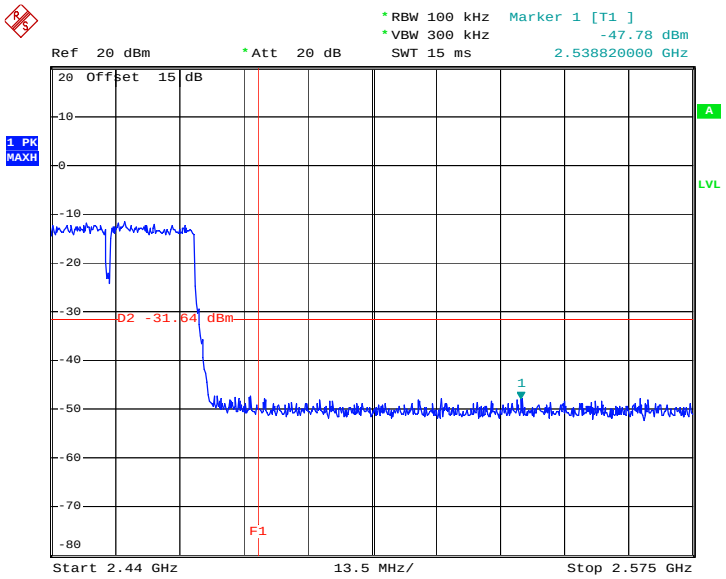
Test Mode :	802.11n HT-40	Temperature :	23~24℃
Test Band :	Low and High	Relative Humidity :	47~48%
Test Channel :	03 and 09	Test Engineer :	Zhi Lu

Low Band Edge Plot on 802.11n HT-40 Channel 03



Date: 9.JUL.2012 17:22:58

High Band Edge Plot on 802.11n HT-40 Channel 09



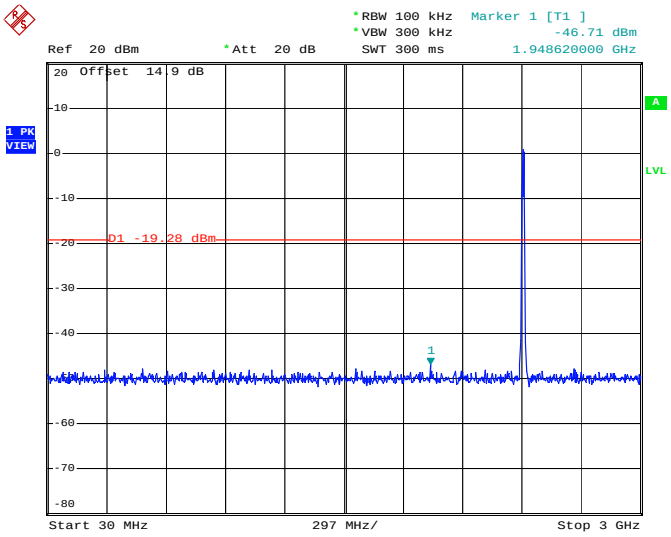
Date: 9.JUL.2012 17:28:55

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 :	Zhi Lu

802.11b 30 MHz~3 GHz

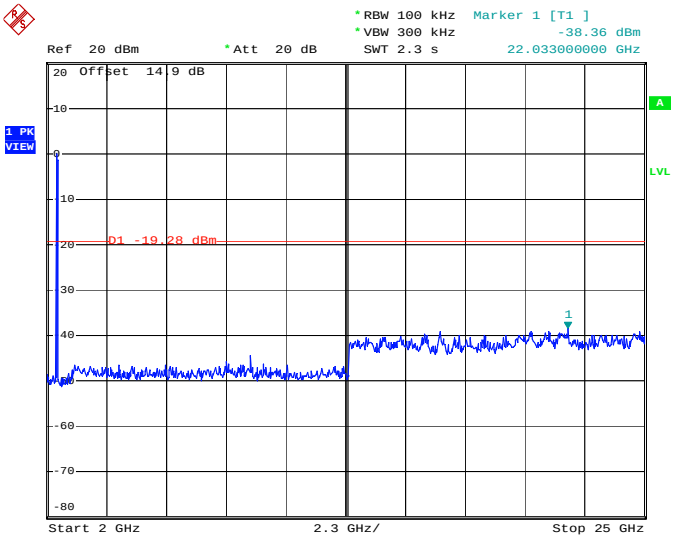
Conducted Spurious Emission Plot on Channel 01



Date: 9.JUL.2012 16:50:53

802.11b 2 GHz~25 GHz

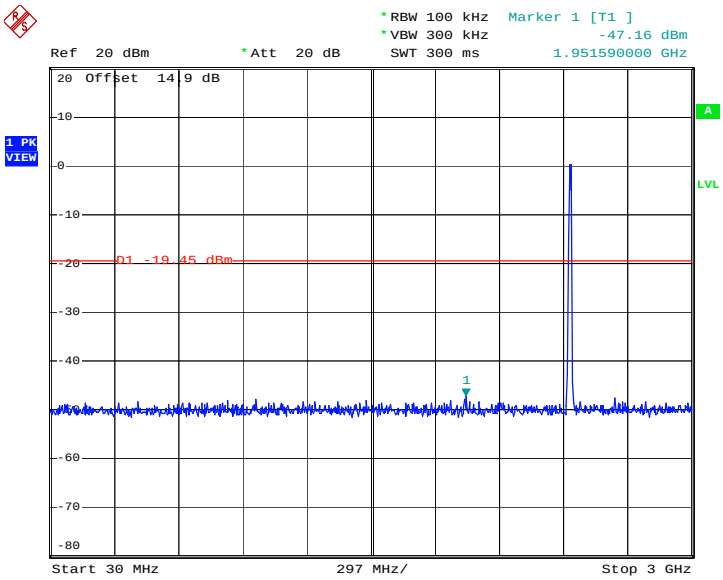
Conducted Spurious Emission Plot on Channel 01



Date: 9.JUL.2012 16:51:11

802.11b 30 MHz~3 GHz

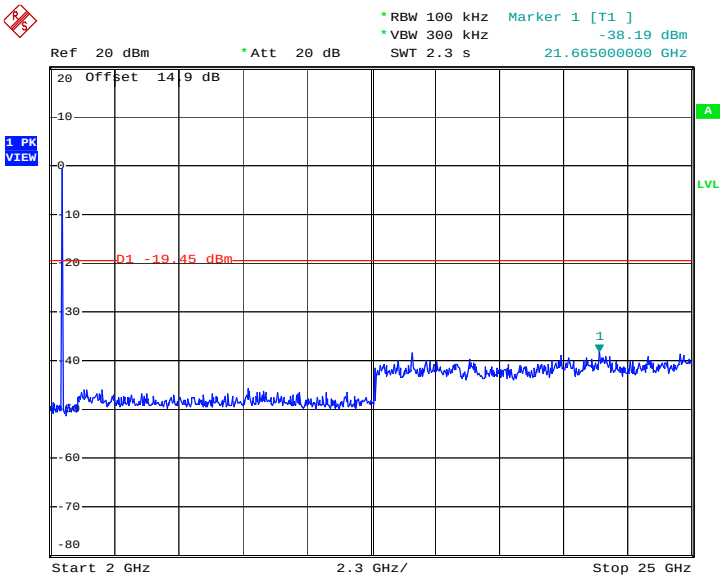
Conducted Spurious Emission Plot on Channel 06



Date: 9.JUL.2012 16:53:13

802.11b 2 GHz~25 GHz

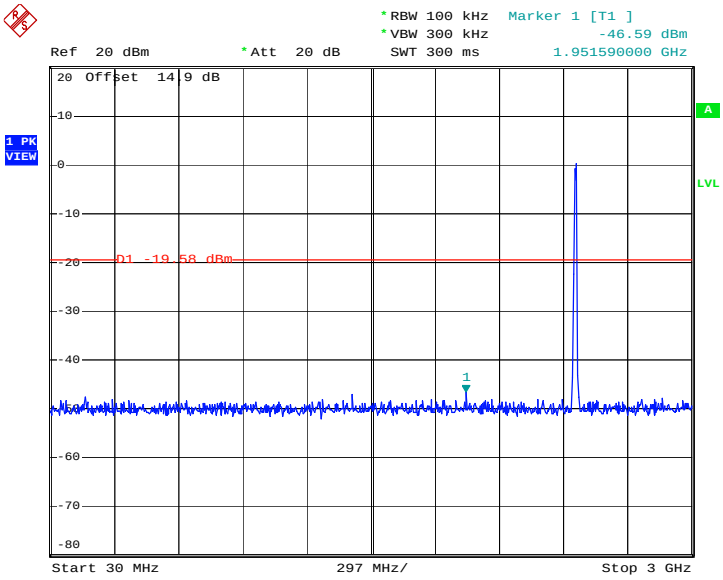
Conducted Spurious Emission Plot on Channel 06



Date: 9.JUL.2012 16:53:31

802.11b 30 MHz~3 GHz

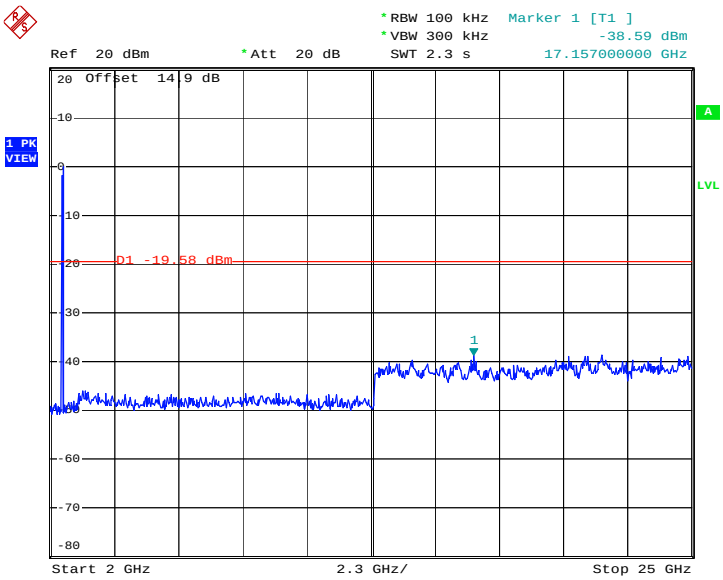
Conducted Spurious Emission Plot on Channel 11



Date: 9.JUL.2012 16:55:46

802.11b 2 GHz~25 GHz

Conducted Spurious Emission Plot on Channel 11

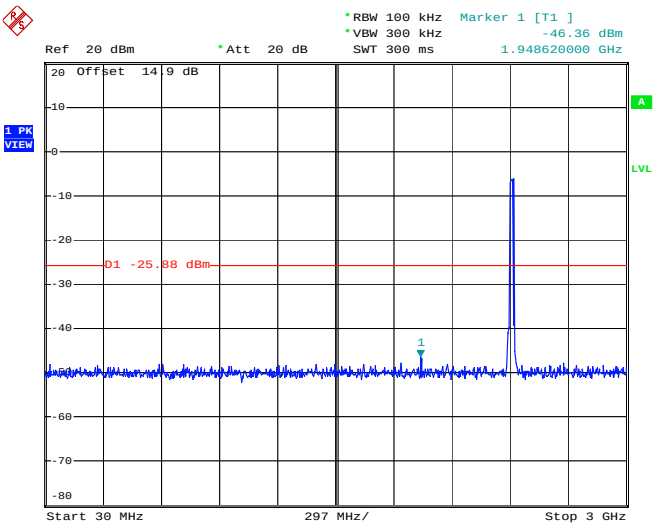


Date: 9.JUL.2012 16:56:04

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 :	Zhi Lu

802.11g 30 MHz~3 GHz

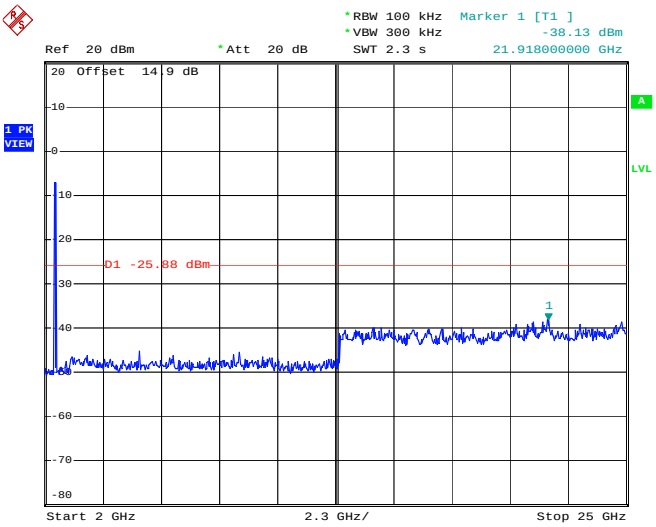
Conducted Spurious Emission Plot on Channel 01



Date: 9.JUL.2012 17:01:12

802.11g 2 GHz~25 GHz

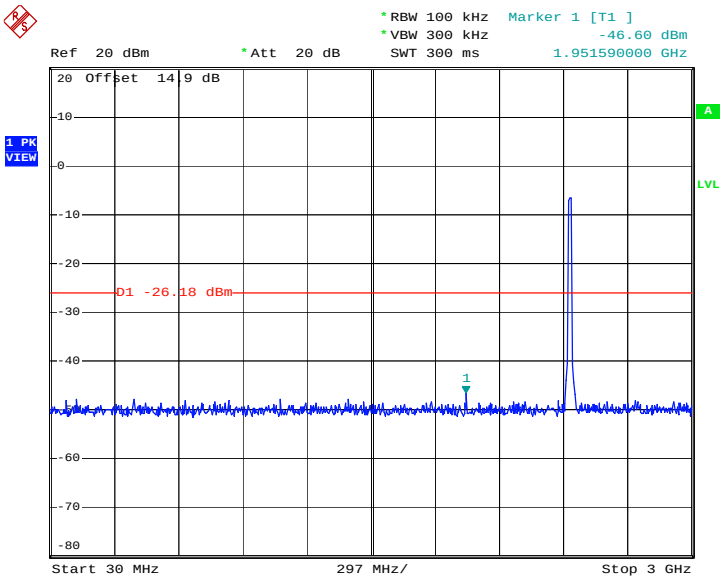
Conducted Spurious Emission Plot on Channel 01



Date: 9.JUL.2012 17:01:31

802.11g 30 MHz~3 GHz

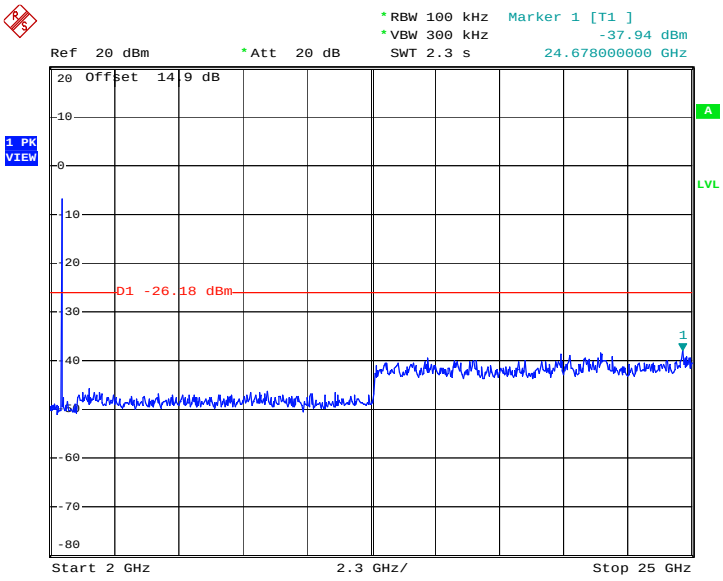
Conducted Spurious Emission Plot on Channel 06



Date: 9.JUL.2012 17:05:14

802.11g 2 GHz~25 GHz

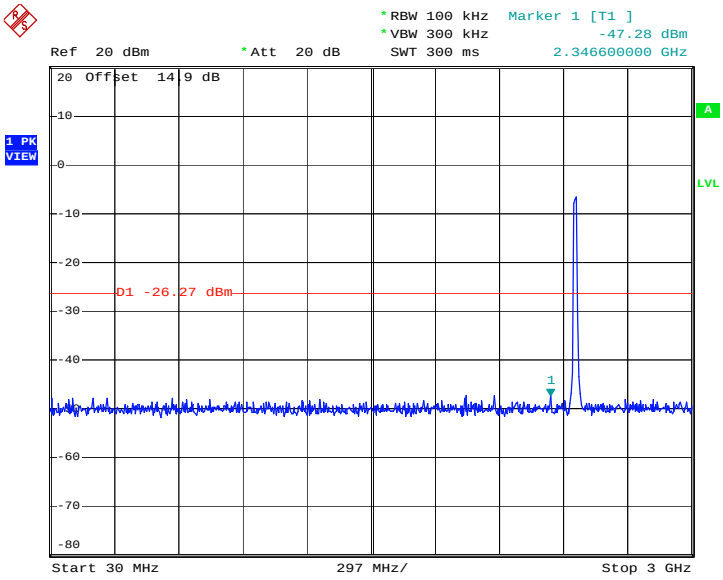
Conducted Spurious Emission Plot on Channel 06



Date: 9.JUL.2012 17:05:33

802.11g 30 MHz~3 GHz

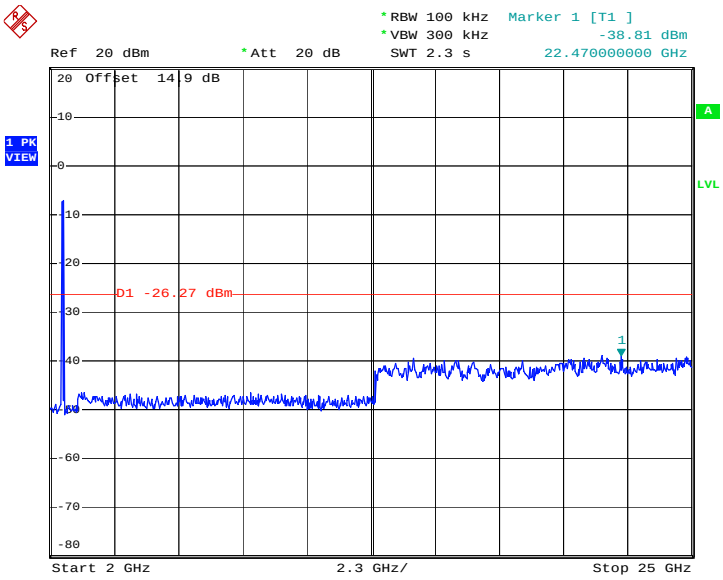
Conducted Spurious Emission Plot on Channel 11



Date: 9.JUL.2012 17:07:48

802.11g 2 GHz~25 GHz

Conducted Spurious Emission Plot on Channel 11

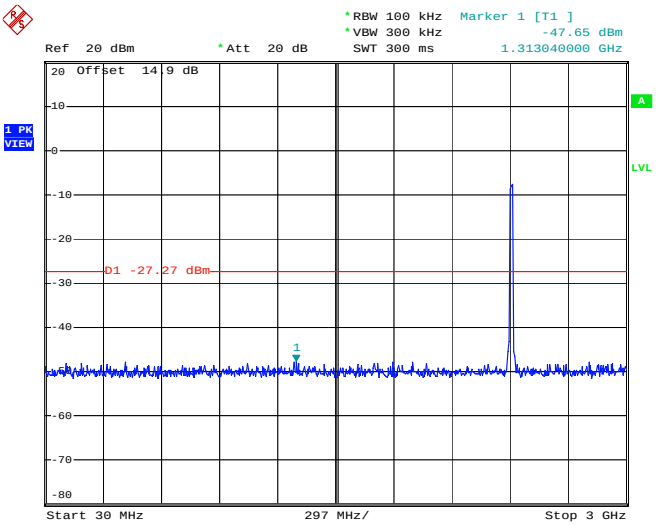


Date: 9.JUL.2012 17:08:07

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 :	Zhi Lu

802.11n HT-20 30 MHz~3 GHz

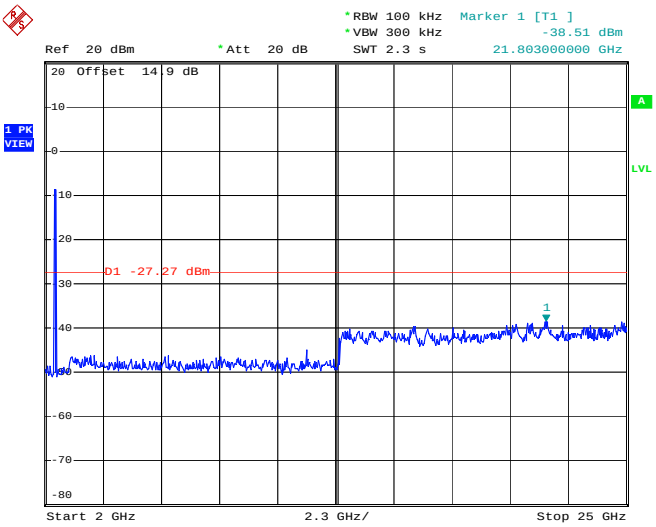
Conducted Spurious Emission Plot on Channel 01



Date: 9.JUL.2012 17:12:58

802.11n HT-20 2 GHz~25 GHz

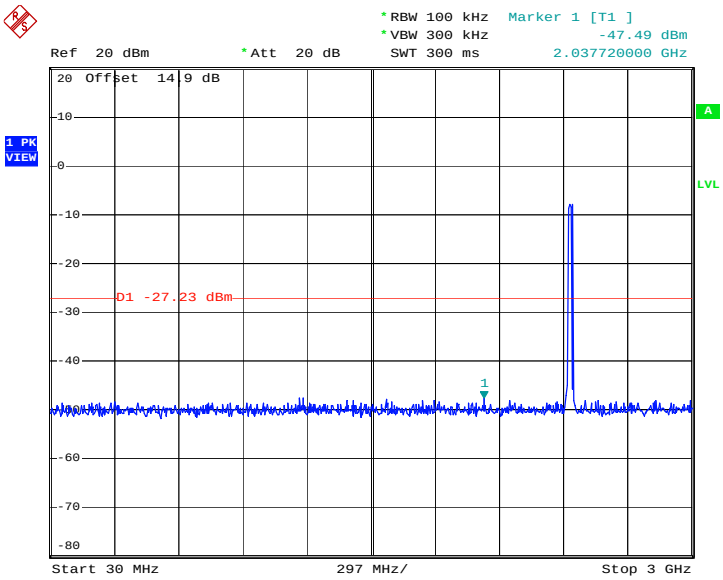
Conducted Spurious Emission Plot on Channel 01



Date: 9.JUL.2012 17:13:16

802.11n HT-20 30 MHz~3 GHz

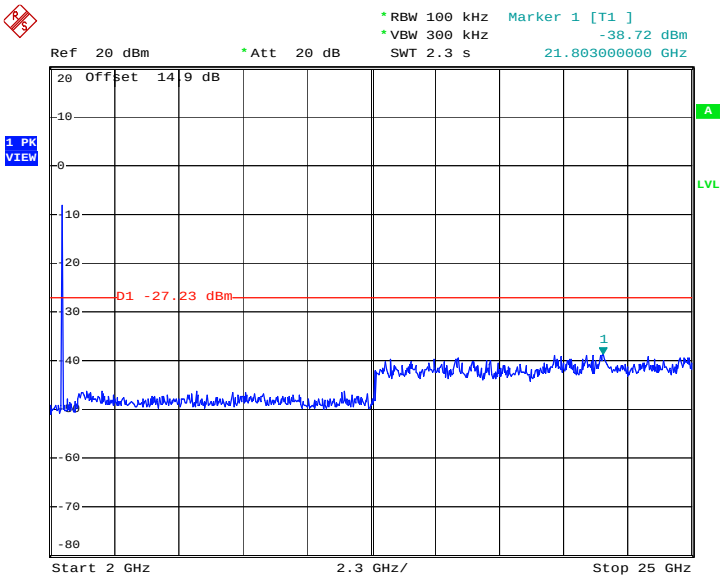
Conducted Spurious Emission Plot on Channel 06



Date: 9.JUL.2012 17:16:25

802.11n HT-20 2 GHz~25 GHz

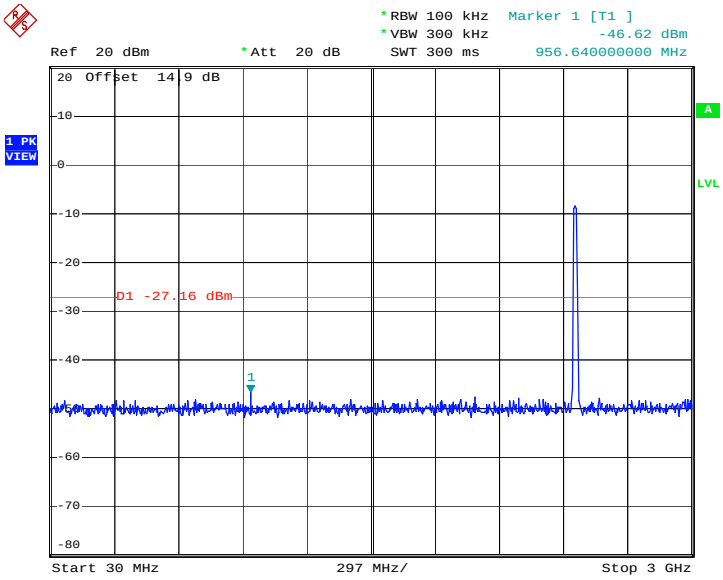
Conducted Spurious Emission Plot on Channel 06



Date: 9.JUL.2012 17:16:44

802.11n HT-20 30 MHz~3 GHz

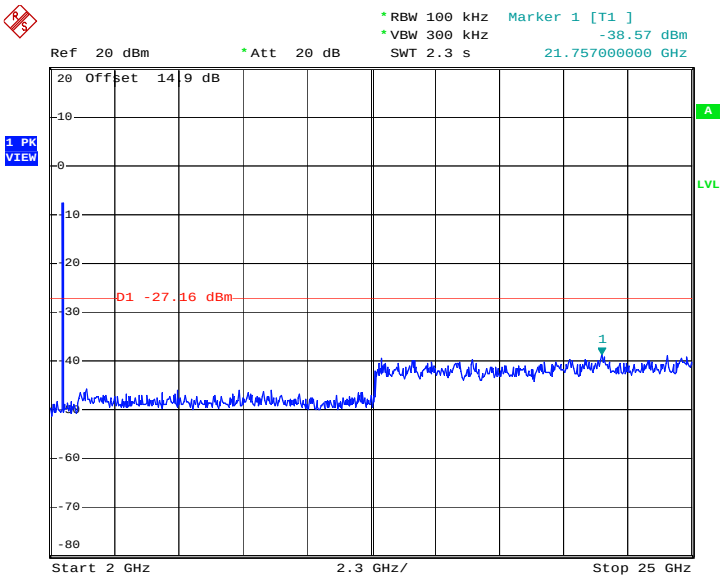
Conducted Spurious Emission Plot on Channel 11



Date: 9.JUL.2012 17:20:12

802.11n HT-20 2 GHz~25 GHz

Conducted Spurious Emission Plot on Channel 11

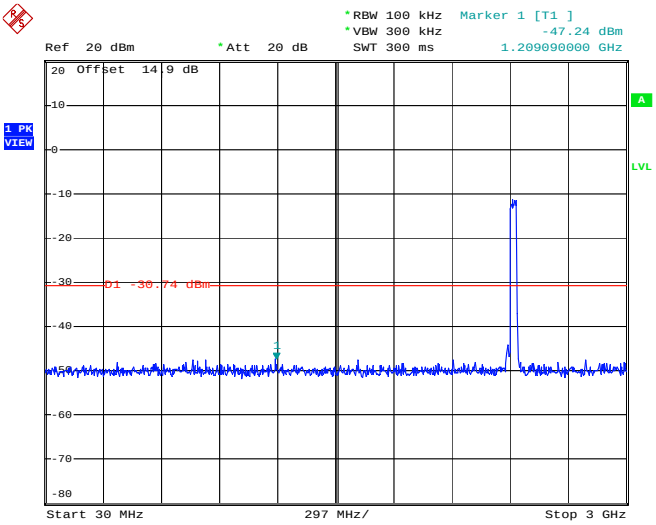


Date: 9.JUL.2012 17:20:30

Test Mode :	802.11n HT-40	Temperature :	23~24℃
Test Band :	30MHz-3GHz and 2G-25GHz	Relative Humidity :	47~48%
Test Channel :	03, 06, 09	Test Engineer :	Zhi Lu

802.11n HT-40 30 MHz~3 GHz

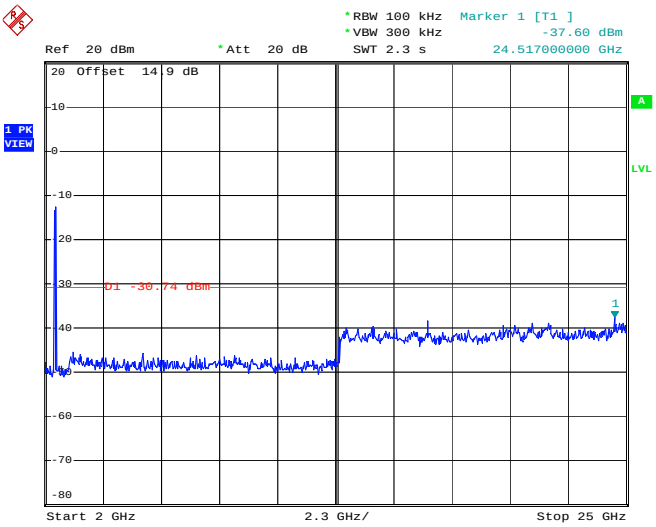
Conducted Spurious Emission Plot on Channel 01



Date: 9.JUL.2012 17:23:19

802.11n HT-40 2 GHz~25 GHz

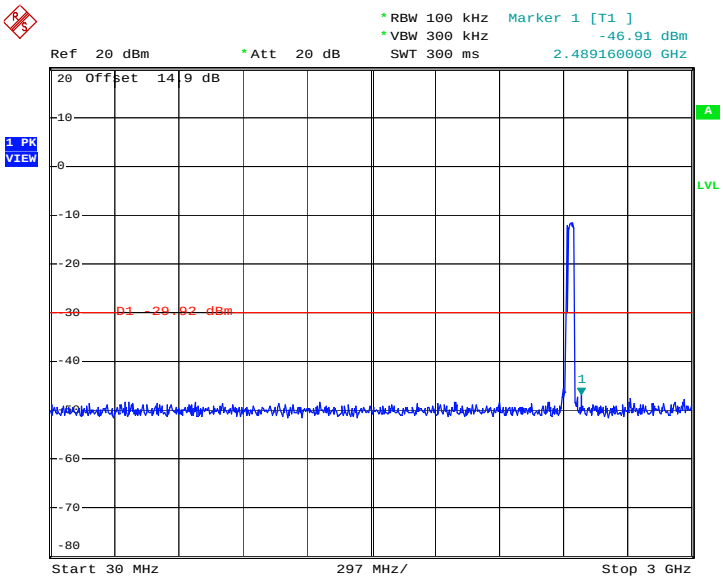
Conducted Spurious Emission Plot on Channel 01



Date: 9.JUL.2012 17:23:37

802.11n HT-40 30 MHz~3 GHz

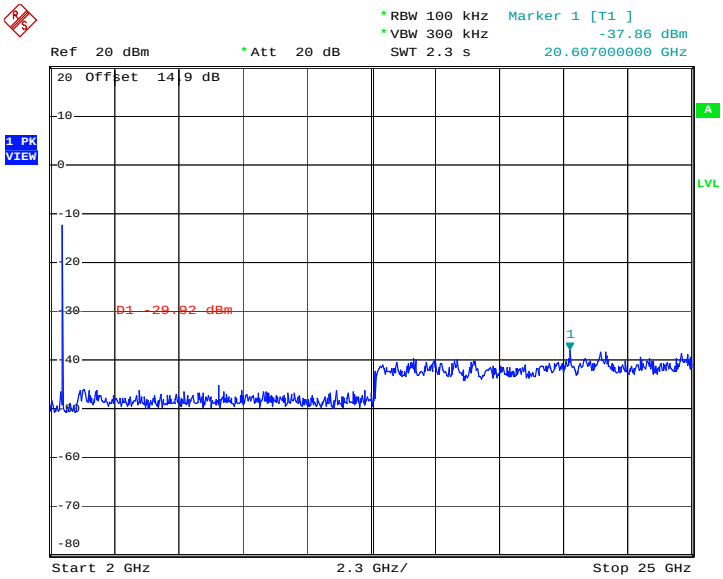
Conducted Spurious Emission Plot on Channel 06



Date: 9.JUL.2012 17:26:03

802.11n HT-40 2 GHz~25 GHz

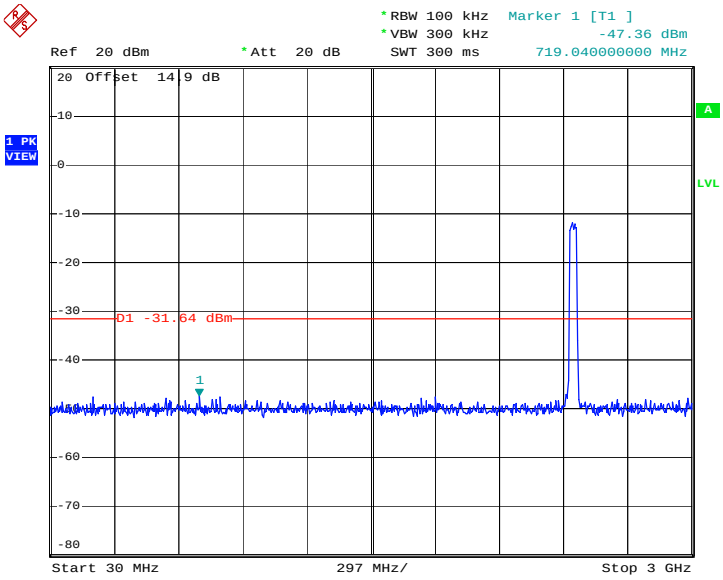
Conducted Spurious Emission Plot on Channel 06



Date: 9.JUL.2012 17:26:21

802.11n HT-40 30 MHz~3 GHz

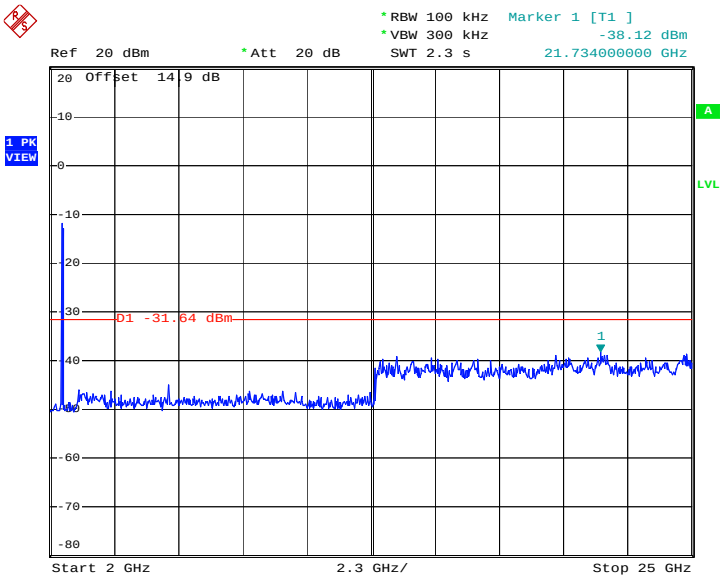
Conducted Spurious Emission Plot on Channel 11



Date: 9.JUL.2012 17:29:29

802.11n HT-40 2 GHz~25 GHz

Conducted Spurious Emission Plot on Channel 11



Date: 9.JUL.2012 17:29:47

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

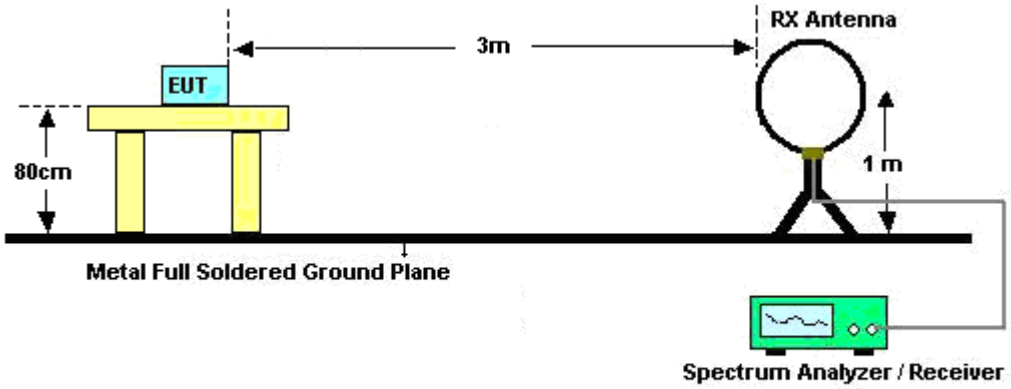
See list of measuring instruments of this test report.

3.5.3 Test Procedures

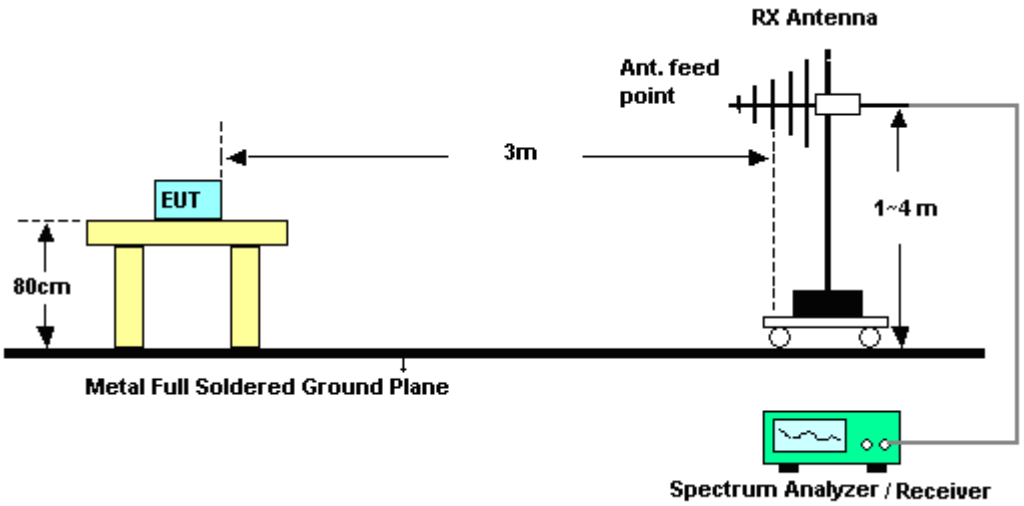
1. The testing follows TCB Workshop 2012, April and fulfills ANSI C63.4-2003 and the guidelines in ANSI C63.10-2009 test site requirement. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) 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. The table was rotated 360 degrees to determine the position of the highest radiation.
5. Use the following spectrum analyzer settings:
   (1) Span shall wide enough to fully capture the emission being measured;
   (2) Set RBW = 1 MHz for f ≥ 1 GHz, 100 KHz for f < 1 GHz; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
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 repeated using the quasi-peak detector and reported

3.5.4 Test Setup

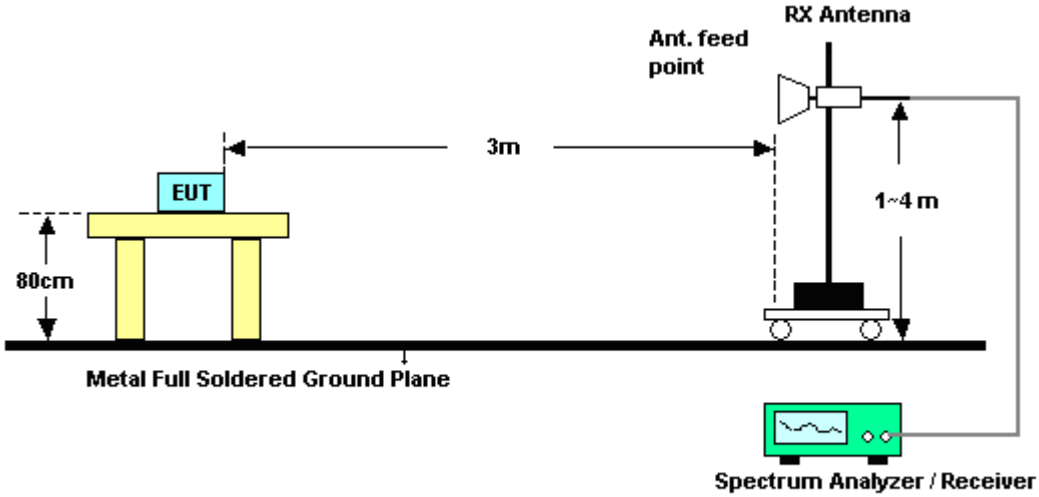
For radiated emissions below 30MHz



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 for sample 1	**Temperature :**	21~22℃
Test Band :	Low	**Relative Humidity :**	46~47%
Test Channel :	01	**Test Engineer :**	Chenmy Cheng

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**
2389.61	53.32	-20.68	74	51.04	32.86	3.47	34.05	100	301	Peak
2389.61	45.14	-8.86	54	42.86	32.86	3.47	34.05	100	301	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**
2389.99	49.51	-24.49	74	47.23	32.86	3.47	34.05	138	360	Peak
2389.99	37.53	-16.47	54	35.25	32.86	3.47	34.05	138	360	Average

Test Mode :	802.11b for sample 1	Temperature :	21~22℃
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	11	Test Engineer :	Chenmy Cheng

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
2485.75	50.47	-23.53	74	47.98	33.01	3.68	34.2	100	311	Peak
2485.75	41.28	-12.72	54	38.79	33.01	3.68	34.2	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
2488.22	50.48	-23.52	74	47.94	33.05	3.72	34.23	100	0	Peak
2488.22	36.26	-17.74	54	33.72	33.05	3.72	34.23	100	0	Average

Test Mode :	802.11b for sample 2	Temperature :	21~22℃
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	11	Test Engineer :	Chenmy Cheng

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
2498.29	51.01	-22.99	74	48.47	33.05	3.72	34.23	100	0	Peak
2498.29	37.16	-16.84	54	34.62	33.05	3.72	34.23	100	0	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
2485.18	51.11	-22.89	74	48.62	33.01	3.68	34.2	100	0	Peak
2485.18	38.01	-15.99	54	35.52	33.01	3.68	34.2	100	0	Average

Test Mode :	802.11g for sample 1	Temperature :	21~22℃
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	01	Test Engineer :	Chenmy Cheng

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
2389.61	70.06	-3.94	74	67.78	32.86	3.47	34.05	100	36	Peak
2389.61	49.29	-4.71	54	47.01	32.86	3.47	34.05	100	36	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
2388.85	65.32	-8.68	74	63.04	32.86	3.47	34.05	100	157	Peak
2388.85	44.14	-9.86	54	41.86	32.86	3.47	34.05	100	157	Average

Test Mode :	802.11g for sample 1	Temperature :	21~22℃
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	11	Test Engineer :	Chenmy Cheng

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
2483.66	65.12	-8.88	74	62.63	33.01	3.68	34.2	100	106	Peak
2483.66	44.94	-9.06	54	42.45	33.01	3.68	34.2	100	106	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
2483.66	59.06	-14.94	74	56.57	33.01	3.68	34.2	100	0	Peak
2483.66	40.15	-13.85	54	37.66	33.01	3.68	34.2	100	0	Average

Test Mode :	802.11n HT-20 for sample 1	Temperature :	21~22℃
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	01	Test Engineer :	Chenmy Cheng

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
2389.8	72.24	-1.76	74	69.96	32.86	3.47	34.05	146	360	Peak
2389.8	50.45	-3.55	54	48.17	32.86	3.47	34.05	146	360	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
2389.42	62.73	-11.27	74	60.45	32.86	3.47	34.05	120	243	Peak
2389.42	41.84	-12.16	54	39.56	32.86	3.47	34.05	120	243	Average

Test Mode :	802.11n HT-20 for sample 1	Temperature :	21~22℃
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	11	Test Engineer :	Chenmy Cheng

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
2485.18	68.76	-5.24	74	66.27	33.01	3.68	34.2	164	127	Peak
2485.18	43.59	-10.41	54	41.1	33.01	3.68	34.2	164	127	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
2485.37	59.59	-14.41	74	57.1	33.01	3.68	34.2	155	316	Peak
2485.37	39.98	-14.02	54	37.49	33.01	3.68	34.2	155	316	Average

Test Mode :	802.11n HT-40 for sample 1	Temperature :	21~22℃
Test Band :	Low	Relative Humidity :	46~47%
Test Channel :	03	Test Engineer :	Chenmy Cheng

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	62.48	-11.52	74	60.2	32.86	3.47	34.05	118	144	Peak
2389.99	43.75	-10.25	54	41.47	32.86	3.47	34.05	118	144	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
2388.85	57.68	-16.32	74	55.4	32.86	3.47	34.05	147	317	Peak
2388.85	38.82	-15.18	54	36.54	32.86	3.47	34.05	147	317	Average

Test Mode :	802.11n HT-40 for sample 1	Temperature :	21~22℃
Test Band :	High	Relative Humidity :	46~47%
Test Channel :	09	Test Engineer :	Chenmy Cheng

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
2487.46	63.6	-10.4	74	61.11	33.01	3.68	34.2	158	204	Peak
2487.46	44.67	-9.33	54	42.18	33.01	3.68	34.2	158	204	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
2487.46	56.18	-17.82	74	53.69	33.01	3.68	34.2	167	191	Peak
2487.46	39.74	-14.26	54	37.25	33.01	3.68	34.2	167	191	Average

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

Test Mode :	802.11b for sample 1	Temperature :	21~22℃
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
320.03	41.06	-4.94	46	56.7	13.55	0.76	29.95	-	-	Peak
480.08	35.65	-10.35	46	47.59	16.87	0.94	29.75	-	-	Peak
720.64	41.13	-4.87	46	50.11	19.53	1.15	29.66	-	-	Peak
816.67	42.46	-3.54	46	50.78	20.03	1.26	29.61	100	159	Peak
831.22	41.89	-4.11	46	49.97	20.29	1.27	29.64	-	-	Peak
998.06	38.02	-15.98	54	45.03	21.09	1.42	29.52	-	-	Peak
2389.61	45.14	-8.86	54	42.86	32.86	3.47	34.05	100	301	Average
2389.61	53.32	-20.68	74	51.04	32.86	3.47	34.05	100	301	Peak
2412	107.58	-	-	105.25	32.89	3.52	34.08	106	37	Peak
2412	104.47	-	-	102.14	32.89	3.52	34.08	106	37	Average
2493.92	36.56	-17.44	54	34.02	33.05	3.72	34.23	100	31	Average
2493.92	49.73	-24.27	74	47.19	33.05	3.72	34.23	100	31	Peak
4824	39.61	-14.39	54	31.74	35.17	4.97	32.27	157	96	Average
4824	52.19	-21.81	74	44.32	35.17	4.97	32.27	157	96	Peak

Test Mode :	802.11b for sample 1	Temperature :	21~22℃
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
177.44	35.59	-7.91	43.5	56.29	8.63	0.56	29.89	-	-	Peak
320.03	34.42	-11.58	46	50.06	13.55	0.76	29.95	-	-	Peak
624.61	33.84	-12.16	46	43.65	18.74	1.08	29.63	-	-	Peak
720.64	43.19	-2.81	46	52.17	19.53	1.15	29.66	100	181	QP
816.67	39.32	-6.68	46	47.64	20.03	1.26	29.61	-	-	Peak
998.06	40.35	-13.65	54	47.36	21.09	1.42	29.52	-	-	Peak
2389.99	37.53	-16.47	54	35.25	32.86	3.47	34.05	138	360	Average
2389.99	49.51	-24.49	74	47.23	32.86	3.47	34.05	138	360	Peak
2412	96.18	-	-	93.85	32.89	3.52	34.08	100	31	Average
2412	103.03	-	-	100.7	32.89	3.52	34.08	100	31	Peak
2495.63	35.23	-18.77	54	32.69	33.05	3.72	34.23	133	51	Average
2495.63	49.06	-24.94	74	46.52	33.05	3.72	34.23	133	51	Peak
4824	39.48	-14.52	54	31.61	35.17	4.97	32.27	126	258	Average
4824	51.01	-22.99	74	43.14	35.17	4.97	32.27	126	258	Peak

Test Mode :	802.11b for sample 1	Temperature :	21~22℃
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
320.03	40.7	-5.3	46	56.34	13.55	0.76	29.95	-	-	Peak
720.64	40.78	-5.22	46	49.76	19.53	1.15	29.66	-	-	Peak
816.67	40.85	-5.15	46	49.17	20.03	1.26	29.61	-	-	Peak
832.19	42.75	-3.25	46	50.82	20.3	1.27	29.64	100	191	Peak
914.64	34.89	-11.11	46	42.56	20.52	1.31	29.5	-	-	Peak
998.06	39.22	-14.78	54	46.23	21.09	1.42	29.52	-	-	Peak
2380	35.48	-18.52	54	33.24	32.83	3.42	34.01	100	315	Average
2380	49.17	-24.83	74	46.93	32.83	3.42	34.01	100	315	Peak
2437	105.66	-	-	103.26	32.95	3.6	34.15	100	30	Peak
2437	99.57	-	-	97.17	32.95	3.6	34.15	100	30	Average
2495.63	36.53	-17.47	54	33.99	33.05	3.72	34.23	100	29	Average
2495.63	49.4	-24.6	74	46.86	33.05	3.72	34.23	100	29	Peak
4874	39.25	-14.75	54	31.36	35.18	4.98	32.27	153	168	Average
4874	52.88	-21.12	74	44.99	35.18	4.98	32.27	153	168	Peak

Test Mode :	802.11b for sample 1	Temperature :	21~22℃
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
163.86	35.52	-7.98	43.5	55.47	9.44	0.54	29.93	-	-	Peak
320.03	34.36	-11.64	46	50	13.55	0.76	29.95	-	-	Peak
624.61	33.98	-12.02	46	43.79	18.74	1.08	29.63	-	-	Peak
720.64	43.18	-2.82	46	52.16	19.53	1.15	29.66	100	102	QP
816.67	39.45	-6.55	46	47.77	20.03	1.26	29.61	-	-	Peak
998.06	40.49	-13.51	54	47.5	21.09	1.42	29.52	-	-	Peak
2342.87	35.38	-18.62	54	33.21	32.78	3.33	33.94	100	61	Average
2342.87	49.11	-24.89	74	46.94	32.78	3.33	33.94	100	61	Peak
2437	100.27	-	-	97.87	32.95	3.6	34.15	109	345	Peak
2437	96.11	-	-	93.71	32.95	3.6	34.15	109	345	Average
2496.77	35.94	-18.06	54	33.4	33.05	3.72	34.23	100	0	Average
2496.77	51.88	-22.12	74	49.34	33.05	3.72	34.23	100	0	Peak
4874	52.24	-21.76	74	44.35	35.18	4.98	32.27	109	48	Peak
4874	39.13	-14.87	54	31.24	35.18	4.98	32.27	109	48	Average

Test Mode :	802.11b for sample 1	Temperature :	21~22℃
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
320.03	41.48	-4.52	46	57.12	13.55	0.76	29.95	-	-	Peak
480.08	35.35	-10.65	46	47.29	16.87	0.94	29.75	-	-	Peak
720.64	41.11	-4.89	46	50.09	19.53	1.15	29.66	-	-	Peak
816.67	41.16	-4.84	46	49.48	20.03	1.26	29.61	-	-	Peak
831.22	41.89	-4.11	46	49.97	20.29	1.27	29.64	100	26	Peak
998.06	38.43	-15.57	54	45.44	21.09	1.42	29.52	-	-	Peak
2346.1	36.57	-17.43	54	34.4	32.78	3.33	33.94	100	350	Average
2346.1	50.3	-23.7	74	48.13	32.78	3.33	33.94	100	350	Peak
2462	109.33	-	-	106.88	32.98	3.64	34.17	100	261	Peak
2462	105.58	-	-	103.13	32.98	3.64	34.17	100	261	Average
2485.75	41.28	-12.72	54	38.79	33.01	3.68	34.2	100	311	Average
2485.75	50.47	-23.53	74	47.98	33.01	3.68	34.2	100	311	Peak
4924	41.31	-12.69	54	33.39	35.19	4.99	32.26	188	253	Average
4924	52.71	-21.29	74	44.79	35.19	4.99	32.26	188	253	Peak

Test Mode :	802.11b for sample 1	Temperature :	21~22℃
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
162.89	36.6	-6.9	43.5	56.51	9.49	0.53	29.93	-	-	Peak
320.03	34.37	-11.63	46	50.01	13.55	0.76	29.95	-	-	Peak
624.61	37.33	-8.67	46	47.14	18.74	1.08	29.63	-	-	Peak
720.64	44.13	-1.87	46	53.11	19.53	1.15	29.66	100	180	QP
816.67	39.47	-6.53	46	47.79	20.03	1.26	29.61	-	-	Peak
998.06	40.9	-13.1	54	47.91	21.09	1.42	29.52	-	-	Peak
2369.33	36.85	-17.15	54	34.61	32.83	3.42	34.01	112	55	Average
2369.33	49.09	-24.91	74	46.85	32.83	3.42	34.01	112	55	Peak
2462	95.33	-	-	92.88	32.98	3.64	34.17	100	165	Average
2462	100.51	-	-	98.06	32.98	3.64	34.17	100	165	Peak
2488.22	36.26	-17.74	54	33.72	33.05	3.72	34.23	100	0	Average
2488.22	50.48	-23.52	74	47.94	33.05	3.72	34.23	100	0	Peak
4924	39.88	-14.12	54	31.96	35.19	4.99	32.26	105	49	Average
4924	52.65	-21.35	74	44.73	35.19	4.99	32.26	105	49	Peak

Test Mode :	802.11b for sample 2	Temperature :	21~22℃
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
320.03	41.17	-4.83	46	56.81	13.55	0.76	29.95	-	-	Peak
720.64	40.64	-5.36	46	49.62	19.53	1.15	29.66	-	-	Peak
748.77	36.5	-9.5	46	44.97	19.89	1.18	29.54	-	-	Peak
816.67	42.22	-3.78	46	50.54	20.03	1.26	29.61	100	93	Peak
832.19	39.75	-6.25	46	47.82	20.3	1.27	29.64	-	-	Peak
914.64	36.46	-9.54	46	44.13	20.52	1.31	29.5	-	-	Peak
2333.18	51.01	-22.99	74	48.88	32.76	3.27	33.9	100	200	Peak
2333.18	37.29	-16.71	54	35.16	32.76	3.27	33.9	100	200	Average
2462	103.47	-	-	101.02	32.98	3.64	34.17	100	152	Peak
2462	99.26	-	-	96.81	32.98	3.64	34.17	100	152	Average
2498.29	51.01	-22.99	74	48.47	33.05	3.72	34.23	100	0	Peak
2498.29	37.16	-16.84	54	34.62	33.05	3.72	34.23	100	0	Average

Test Mode :	802.11b for sample 2	Temperature :	21~22℃
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
170.65	34.47	-9.03	43.5	54.69	9.14	0.55	29.91	-	-	Peak
320.03	34.28	-11.72	46	49.92	13.55	0.76	29.95	-	-	Peak
624.61	33.68	-12.32	46	43.49	18.74	1.08	29.63	-	-	Peak
720.64	44.19	-1.81	46	53.17	19.53	1.15	29.66	100	227	QP
816.67	39.05	-6.95	46	47.37	20.03	1.26	29.61	-	-	Peak
998.06	40.43	-13.57	54	47.44	21.09	1.42	29.52	-	-	Peak
2360.54	50.18	-23.82	74	47.97	32.81	3.38	33.98	100	179	Peak
2360.54	37.37	-16.63	54	35.16	32.81	3.38	33.98	100	119	Average
2462	105.92	-	-	103.47	32.98	3.64	34.17	100	176	Peak
2462	100.01	-	-	97.56	32.98	3.64	34.17	100	176	Average
2485.18	51.11	-22.89	74	48.62	33.01	3.68	34.2	100	0	Peak
2485.18	38.01	-15.99	54	35.52	33.01	3.68	34.2	100	0	Average

Test Mode :	802.11g for sample 1	Temperature :	21~22℃
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
320.03	41.49	-4.51	46	57.13	13.55	0.76	29.95	-	-	Peak
720.64	40.46	-5.54	46	49.44	19.53	1.15	29.66	-	-	Peak
748.77	36.35	-9.65	46	44.82	19.89	1.18	29.54	-	-	Peak
816.67	41.66	-4.34	46	49.98	20.03	1.26	29.61	-	-	Peak
831.22	42.71	-3.29	46	50.79	20.29	1.27	29.64	100	68	Peak
998.06	39.24	-14.76	54	46.25	21.09	1.42	29.52	-	-	Peak
2389.61	49.29	-4.71	54	47.01	32.86	3.47	34.05	100	36	Average
2389.61	70.06	-3.94	74	67.78	32.86	3.47	34.05	100	36	Peak
2412	97.28	-	-	94.95	32.89	3.52	34.08	100	261	Average
2412	105.73	-	-	103.4	32.89	3.52	34.08	100	261	Peak
2499.62	37.58	-16.42	54	35.04	33.05	3.72	34.23	100	115	Average
2499.62	49.57	-24.43	74	47.03	33.05	3.72	34.23	100	115	Peak
4824	39.12	-14.88	54	31.25	35.17	4.97	32.27	115	269	Average
4824	52.24	-21.76	74	44.37	35.17	4.97	32.27	115	269	Peak

Test Mode :	802.11g for sample 1	Temperature :	21~22℃
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
170.65	33.43	-10.07	43.5	53.65	9.14	0.55	29.91	-	-	Peak
320.03	34.77	-11.23	46	50.41	13.55	0.76	29.95	-	-	Peak
624.61	36.5	-9.5	46	46.31	18.74	1.08	29.63	-	-	Peak
720.64	44.19	-1.81	46	53.17	19.53	1.15	29.66	100	26	QP
816.67	39.45	-6.55	46	47.77	20.03	1.26	29.61	-	-	Peak
998.06	40.92	-13.08	54	47.93	21.09	1.42	29.52	-	-	Peak
2388.85	44.14	-9.86	54	41.86	32.86	3.47	34.05	100	157	Average
2388.85	65.32	-8.68	74	63.04	32.86	3.47	34.05	100	157	Peak
2412	101.09	-	-	98.76	32.89	3.52	34.08	112	316	Peak
2412	91.27	-	-	88.94	32.89	3.52	34.08	112	316	Average
2496.2	36.16	-17.84	54	33.62	33.05	3.72	34.23	100	90	Average
2496.2	48.74	-25.26	74	46.2	33.05	3.72	34.23	100	90	Peak
4824	52.57	-21.43	74	44.7	35.17	4.97	32.27	167	47	Peak
4824	39.15	-14.85	54	31.28	35.17	4.97	32.27	167	47	Average

Test Mode :	802.11g for sample 1	Temperature :	21~22℃
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
320.03	41.52	-4.48	46	57.16	13.55	0.76	29.95	-	-	Peak
480.08	36.63	-9.37	46	48.57	16.87	0.94	29.75	-	-	Peak
720.64	41.44	-4.56	46	50.42	19.53	1.15	29.66	-	-	Peak
816.67	42.62	-3.38	46	50.94	20.03	1.26	29.61	100	162	Peak
831.22	41.73	-4.27	46	49.81	20.29	1.27	29.64	-	-	Peak
998.06	39.68	-14.32	54	46.69	21.09	1.42	29.52	-	-	Peak
2368.14	37.27	-16.73	54	35.06	32.81	3.38	33.98	100	311	Average
2368.14	54.97	-19.03	74	52.76	32.81	3.38	33.98	100	311	Peak
2437	106.29	-	-	103.89	32.95	3.6	34.15	102	343	Peak
2437	98.24	-	-	95.84	32.95	3.6	34.15	102	343	Average
2493.73	38.77	-15.23	54	36.23	33.05	3.72	34.23	100	28	Average
2493.73	56.57	-17.43	74	54.03	33.05	3.72	34.23	100	28	Peak
4874	52.89	-21.11	74	45	35.18	4.98	32.27	105	89	Peak
4874	39.98	-14.02	54	32.09	35.18	4.98	32.27	105	89	Average

Test Mode :	802.11g for sample 1	Temperature :	21~22℃
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
173.56	33.58	-9.92	43.5	53.98	8.95	0.55	29.9	-	-	Peak
320.03	34.58	-11.42	46	50.22	13.55	0.76	29.95	-	-	Peak
624.61	33.58	-12.42	46	43.39	18.74	1.08	29.63	-	-	Peak
720.64	44.27	-1.73	46	53.25	19.53	1.15	29.66	100	166	QP
816.67	40.25	-5.75	46	48.57	20.03	1.26	29.61	-	-	Peak
998.06	40.46	-13.54	54	47.47	21.09	1.42	29.52	-	-	Peak
2336.41	35.45	-18.55	54	33.28	32.78	3.33	33.94	110	186	Average
2336.41	49.11	-24.89	74	46.94	32.78	3.33	33.94	110	186	Peak
2437	98.51	-	-	96.11	32.95	3.6	34.15	113	192	Peak
2437	88.08	-	-	85.68	32.95	3.6	34.15	113	192	Average
2499.24	35.81	-18.19	54	33.27	33.05	3.72	34.23	100	0	Average
2499.24	49.79	-24.21	74	47.25	33.05	3.72	34.23	100	0	Peak
4874	52.44	-21.56	74	44.55	35.18	4.98	32.27	158	278	Peak
4874	38.96	-15.04	54	31.07	35.18	4.98	32.27	158	278	Average

Test Mode :	802.11g for sample 1	Temperature :	21~22℃
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
320.03	41.76	-4.24	46	57.4	13.55	0.76	29.95	-	-	Peak
480.08	36.32	-9.68	46	48.26	16.87	0.94	29.75	-	-	Peak
720.64	41.3	-4.7	46	50.28	19.53	1.15	29.66	-	-	Peak
816.67	42.44	-3.56	46	50.76	20.03	1.26	29.61	-	-	Peak
832.19	42.73	-3.27	46	50.8	20.3	1.27	29.64	100	153	Peak
900.09	42.31	-3.69	46	50.04	20.45	1.3	29.48	-	-	Peak
2373.65	36.49	-17.51	54	34.25	32.83	3.42	34.01	120	0	Average
2373.65	49.36	-24.64	74	47.12	32.83	3.42	34.01	120	0	Peak
2462	105.19	-	-	102.74	32.98	3.64	34.17	105	34	Peak
2462	95.83	-	-	93.38	32.98	3.64	34.17	105	34	Average
2483.66	44.94	-9.06	54	42.45	33.01	3.68	34.2	100	106	Average
2483.66	65.12	-8.88	74	62.63	33.01	3.68	34.2	100	106	Peak
4924	52.87	-21.13	74	44.95	35.19	4.99	32.26	138	247	Peak
4924	39.37	-14.63	54	31.45	35.19	4.99	32.26	138	247	Average

Test Mode :	802.11g for sample 1	Temperature :	21~22℃
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
170.65	33.15	-10.35	43.5	53.37	9.14	0.55	29.91	-	-	Peak
320.03	34.92	-11.08	46	50.56	13.55	0.76	29.95	-	-	Peak
624.61	33.28	-12.72	46	43.09	18.74	1.08	29.63	-	-	Peak
720.64	44.64	-1.36	46	53.62	19.53	1.15	29.66	100	92	QP
816.67	39.79	-6.21	46	48.11	20.03	1.26	29.61	-	-	Peak
998.06	39.56	-14.44	54	46.57	21.09	1.42	29.52	-	-	Peak
2342.87	35.68	-18.32	54	33.51	32.78	3.33	33.94	137	0	Average
2342.87	49.36	-24.64	74	47.19	32.78	3.33	33.94	137	0	Peak
2462	99.88	-	-	97.43	32.98	3.64	34.17	137	330	Peak
2462	90.5	-	-	88.05	32.98	3.64	34.17	137	330	Average
2483.66	40.15	-13.85	54	37.66	33.01	3.68	34.2	100	0	Average
2483.66	59.06	-14.94	74	56.57	33.01	3.68	34.2	100	0	Peak
4924	53.26	-20.74	74	45.34	35.19	4.99	32.26	100	360	Peak
4924	39.33	-14.67	54	31.41	35.19	4.99	32.26	100	360	Average

Test Mode :	802.11n-HT20 for sample 1	Temperature :	21~22℃
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
320.03	40.94	-5.06	46	56.58	13.55	0.76	29.95	-	-	Peak
528.58	34.57	-11.43	46	45.3	17.99	0.98	29.7	-	-	Peak
720.64	40.24	-5.76	46	49.22	19.53	1.15	29.66	-	-	Peak
748.77	35.66	-10.34	46	44.13	19.89	1.18	29.54	-	-	Peak
816.67	42.36	-3.64	46	50.68	20.03	1.26	29.61	100	123	Peak
831.22	41.34	-4.66	46	49.42	20.29	1.27	29.64	-	-	Peak
2389.8	72.24	-1.76	74	69.96	32.86	3.47	34.05	146	360	Peak
2389.8	50.45	-3.55	54	48.17	32.86	3.47	34.05	146	360	Average
2412	99.43	-	-	97.1	32.89	3.52	34.08	100	350	Average
2412	108.35	-	-	106.02	32.89	3.52	34.08	100	350	Peak
2498.1	51.47	-22.53	74	48.93	33.05	3.72	34.23	173	229	Peak
2498.1	38.88	-15.12	54	36.34	33.05	3.72	34.23	173	229	Average
4824	39.25	-14.75	54	31.38	35.17	4.97	32.27	126	85	Average
4824	52.65	-21.35	74	44.78	35.17	4.97	32.27	126	85	Peak

Test Mode :	802.11n-HT20 for sample 1	Temperature :	21~22℃
Test Channel :	01	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
169.68	35.52	-7.98	43.5	55.69	9.2	0.54	29.91	-	-	Peak
320.03	34.61	-11.39	46	50.25	13.55	0.76	29.95	-	-	Peak
624.61	33.65	-12.35	46	43.46	18.74	1.08	29.63	-	-	Peak
720.64	44.13	-1.87	46	53.11	19.53	1.15	29.66	100	156	QP
816.67	40.01	-5.99	46	48.33	20.03	1.26	29.61	-	-	Peak
998.06	40.94	-13.06	54	47.95	21.09	1.42	29.52	-	-	Peak
2389.42	62.73	-11.27	74	60.45	32.86	3.47	34.05	120	243	Peak
2389.42	41.84	-12.16	54	39.56	32.86	3.47	34.05	120	243	Average
2412	88.16	-	-	85.83	32.89	3.52	34.08	112	180	Average
2412	100.21	-	-	97.88	32.89	3.52	34.08	112	180	Peak
2496.96	49.95	-24.05	74	47.41	33.05	3.72	34.23	200	340	Peak
2496.96	30.04	-23.96	54	27.5	33.05	3.72	34.23	200	340	Average
4824	39.22	-14.78	54	31.35	35.17	4.97	32.27	113	52	Average
4824	52.28	-21.72	74	44.41	35.17	4.97	32.27	113	52	Peak

Test Mode :	802.11n-HT20 for sample 1	Temperature :	21~22℃
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
320.03	41.67	-4.33	46	57.31	13.55	0.76	29.95	-	-	Peak
480.08	36.11	-9.89	46	48.05	16.87	0.94	29.75	-	-	Peak
720.64	41.29	-4.71	46	50.27	19.53	1.15	29.66	-	-	Peak
816.67	41.88	-4.12	46	50.2	20.03	1.26	29.61	100	151	Peak
832.19	41.35	-4.65	46	49.42	20.3	1.27	29.64	-	-	Peak
914.64	36.78	-9.22	46	44.45	20.52	1.31	29.5	-	-	Peak
2371.18	54.01	-19.99	74	51.77	32.83	3.42	34.01	113	360	Peak
2371.18	37.41	-16.59	54	35.17	32.83	3.42	34.01	113	360	Average
2437	96.73	-	-	94.33	32.95	3.6	34.15	100	350	Average
2437	105.92	-	-	103.52	32.95	3.6	34.15	100	350	Peak
2488.98	54.53	-19.47	74	51.99	33.05	3.72	34.23	172	213	Peak
2488.98	38.83	-15.17	54	36.29	33.05	3.72	34.23	172	213	Average
4874	39.31	-14.69	54	31.42	35.18	4.98	32.27	139	268	Average
4874	52.11	-21.89	74	44.22	35.18	4.98	32.27	139	268	Peak

Test Mode :	802.11n-HT20 for sample 1	Temperature :	21~22℃
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
170.65	33.56	-9.94	43.5	53.78	9.14	0.55	29.91	-	-	Peak
320.03	34.5	-11.5	46	50.14	13.55	0.76	29.95	-	-	Peak
624.61	33.08	-12.92	46	42.89	18.74	1.08	29.63	-	-	Peak
720.64	44.22	-1.78	46	53.2	19.53	1.15	29.66	100	121	QP
816.67	40.06	-5.94	46	48.38	20.03	1.26	29.61	-	-	Peak
998.06	39.52	-14.48	54	46.53	21.09	1.42	29.52	-	-	Peak
2328.43	48.89	-25.11	74	46.76	32.76	3.27	33.9	122	104	Peak
2328.43	35.68	-18.32	54	33.55	32.76	3.27	33.9	122	104	Average
2437	89.51	-	-	87.11	32.95	3.6	34.15	141	94	Average
2437	97.7	-	-	95.3	32.95	3.6	34.15	141	94	Peak
2486.7	49.14	-24.86	74	46.65	33.01	3.68	34.2	200	42	Peak
2486.7	36.56	-17.44	54	34.07	33.01	3.68	34.2	200	42	Average
4874	39.22	-14.78	54	31.33	35.18	4.98	32.27	148	52	Average
4874	52.77	-21.23	74	44.88	35.18	4.98	32.27	148	52	Peak

Test Mode :	802.11n-HT20 for sample 1	Temperature :	21~22℃
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
320.03	41.31	-4.69	46	56.95	13.55	0.76	29.95	-	-	Peak
480.08	36.31	-9.69	46	48.25	16.87	0.94	29.75	-	-	Peak
720.64	41.32	-4.68	46	50.3	19.53	1.15	29.66	-	-	Peak
748.77	36.96	-9.04	46	45.43	19.89	1.18	29.54	-	-	Peak
816.67	42.61	-3.39	46	50.93	20.03	1.26	29.61	100	163	Peak
832.19	41.99	-4.01	46	50.06	20.3	1.27	29.64	-	-	Peak
2389.23	38.53	-15.47	54	36.25	32.86	3.47	34.05	125	360	Average
2389.23	50.92	-23.08	74	48.64	32.86	3.47	34.05	125	360	Peak
2462	107.13	-	-	104.68	32.98	3.64	34.17	100	341	Peak
2462	96.9	-	-	94.45	32.98	3.64	34.17	100	341	Average
2485.18	43.59	-10.41	54	41.1	33.01	3.68	34.2	164	127	Average
2485.18	68.76	-5.24	74	66.27	33.01	3.68	34.2	164	127	Peak
4924	52.2	-21.8	74	44.28	35.19	4.99	32.26	128	341	Peak
4924	39.43	-14.57	54	31.51	35.19	4.99	32.26	128	341	Average

Test Mode :	802.11n-HT20 for sample 1	Temperature :	21~22℃
Test Channel :	11	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
163.86	34.08	-9.42	43.5	54.03	9.44	0.54	29.93	-	-	Peak
320.03	34.28	-11.72	46	49.92	13.55	0.76	29.95	-	-	Peak
624.61	33.5	-12.5	46	43.31	18.74	1.08	29.63	-	-	Peak
720.64	44.24	-1.76	46	53.22	19.53	1.15	29.66	100	136	QP
816.67	39.74	-6.26	46	48.06	20.03	1.26	29.61	-	-	Peak
998.06	41.05	-12.95	54	48.06	21.09	1.42	29.52	-	-	Peak
2332.04	36.68	-17.32	54	34.55	32.76	3.27	33.9	124	143	Average
2332.04	49.37	-24.63	74	47.24	32.76	3.27	33.9	124	143	Peak
2462	97.59	-	-	95.14	32.98	3.64	34.17	137	94	Peak
2462	90.13	-	-	87.68	32.98	3.64	34.17	137	94	Average
2485.37	39.98	-14.02	54	37.49	33.01	3.68	34.2	155	316	Average
2485.37	59.59	-14.41	74	57.1	33.01	3.68	34.2	155	316	Peak
4924	52.32	-21.68	74	44.4	35.19	4.99	32.26	137	89	Peak
4924	39.42	-14.58	54	31.5	35.19	4.99	32.26	137	89	Average

Test Mode :	802.11n-HT40 for sample 1	Temperature :	21~22℃
Test Channel :	03	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	Polarization :	Horizontal
Remark :	2422 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
320.03	42.12	-3.88	46	57.76	13.55	0.76	29.95	100	109	Peak
720.64	40.88	-5.12	46	49.86	19.53	1.15	29.66	-	-	Peak
748.77	37.39	-8.61	46	45.86	19.89	1.18	29.54	-	-	Peak
816.67	41.83	-4.17	46	50.15	20.03	1.26	29.61	-	-	Peak
831.22	41.94	-4.06	46	50.02	20.29	1.27	29.64	-	-	Peak
914.64	37.55	-8.45	46	45.22	20.52	1.31	29.5	-	-	Peak
2389.99	43.75	-10.25	54	41.47	32.86	3.47	34.05	118	144	Average
2389.99	62.48	-11.52	74	60.2	32.86	3.47	34.05	118	144	Peak
2422	100.76	-	-	98.4	32.92	3.56	34.12	108	44	Peak
2422	90.89	-	-	88.53	32.92	3.56	34.12	108	44	Average
2485.75	37.95	-16.05	54	35.46	33.01	3.68	34.2	107	234	Average
2485.75	51.02	-22.98	74	48.53	33.01	3.68	34.2	107	234	Peak
4844	53.04	-20.96	74	45.15	35.18	4.98	32.27	126	258	Peak
4844	39.34	-14.66	54	31.45	35.18	4.98	32.27	126	258	Average

Test Mode :	802.11n-HT40 for sample 1	Temperature :	21~22℃
Test Channel :	03	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	Polarization :	Vertical
Remark :	2422 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
157.07	32.58	-10.92	43.5	52.3	9.71	0.52	29.95	-	-	Peak
320.03	34.47	-11.53	46	50.11	13.55	0.76	29.95	-	-	Peak
624.61	33.29	-12.71	46	43.1	18.74	1.08	29.63	-	-	Peak
720.64	43.88	-2.12	46	52.86	19.53	1.15	29.66	100	208	QP
816.67	39.37	-6.63	46	47.69	20.03	1.26	29.61	-	-	Peak
998.06	39.29	-14.71	54	46.3	21.09	1.42	29.52	-	-	Peak
2388.85	38.82	-15.18	54	36.54	32.86	3.47	34.05	147	317	Average
2388.85	57.68	-16.32	74	55.4	32.86	3.47	34.05	147	317	Peak
2422	95.8	-	-	93.44	32.92	3.56	34.12	138	360	Peak
2422	84.04	-	-	81.68	32.92	3.56	34.12	138	360	Average
2490.69	37.15	-16.85	54	34.61	33.05	3.72	34.23	122	144	Average
2490.69	49.48	-24.52	74	46.94	33.05	3.72	34.23	122	144	Peak
4844	53.24	-20.76	74	45.35	35.18	4.98	32.27	100	360	Peak
4844	39.69	-14.31	54	31.8	35.18	4.98	32.27	100	360	Average

Test Mode :	802.11n-HT40 for sample 1	Temperature :	21~22℃
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
320.03	40.72	-5.28	46	56.36	13.55	0.76	29.95	-	-	Peak
480.08	35.16	-10.84	46	47.1	16.87	0.94	29.75	-	-	Peak
720.64	40.89	-5.11	46	49.87	19.53	1.15	29.66	-	-	Peak
748.77	36.05	-9.95	46	44.52	19.89	1.18	29.54	-	-	Peak
816.67	42.44	-3.56	46	50.76	20.03	1.26	29.61	100	199	Peak
831.22	41.39	-4.61	46	49.47	20.29	1.27	29.64	-	-	Peak
2389.04	40.24	-13.76	54	37.96	32.86	3.47	34.05	109	325	Average
2389.04	59.42	-14.58	74	57.14	32.86	3.47	34.05	109	325	Peak
2437	102.2	-	-	99.8	32.95	3.6	34.15	100	346	Peak
2437	92.92	-	-	90.52	32.95	3.6	34.15	100	346	Average
2485.37	42.08	-11.92	54	39.59	33.01	3.68	34.2	189	13	Average
2485.37	58.72	-15.28	74	56.23	33.01	3.68	34.2	189	13	Peak
4874	52.76	-21.24	74	44.87	35.18	4.98	32.27	126	349	Peak
4874	39.15	-14.85	54	31.26	35.18	4.98	32.27	126	349	Average

Test Mode :	802.11n-HT40 for sample 1	Temperature :	21~22℃
Test Channel :	06	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	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
157.07	33.41	-10.09	43.5	53.13	9.71	0.52	29.95	-	-	Peak
320.03	34.44	-11.56	46	50.08	13.55	0.76	29.95	-	-	Peak
624.61	33.19	-12.81	46	43	18.74	1.08	29.63	-	-	Peak
720.64	44.3	-1.7	46	53.28	19.53	1.15	29.66	100	251	QP
816.67	39.87	-6.13	46	48.19	20.03	1.26	29.61	-	-	Peak
998.06	39.33	-14.67	54	46.34	21.09	1.42	29.52	-	-	Peak
2389.23	37.49	-16.51	54	35.21	32.86	3.47	34.05	133	126	Average
2389.23	52.52	-21.48	74	50.24	32.86	3.47	34.05	133	126	Peak
2437	94.29	-	-	91.89	32.95	3.6	34.15	140	91	Peak
2437	85.9	-	-	83.5	32.95	3.6	34.15	140	91	Average
2486.51	37.53	-16.47	54	35.04	33.01	3.68	34.2	200	87	Average
2486.51	49.43	-24.57	74	46.94	33.01	3.68	34.2	200	87	Peak
4874	52.22	-21.78	74	44.33	35.18	4.98	32.27	100	360	Peak
4874	39.1	-14.9	54	31.21	35.18	4.98	32.27	100	360	Average

Test Mode :	802.11n-HT40 for sample 1	Temperature :	21~22℃
Test Channel :	09	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	Polarization :	Horizontal
Remark :	2452 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
320.03	41.69	-4.31	46	57.33	13.55	0.76	29.95	100	216	Peak
480.08	35.32	-10.68	46	47.26	16.87	0.94	29.75	-	-	Peak
527.61	34.48	-11.52	46	45.24	17.96	0.98	29.7	-	-	Peak
720.64	40.32	-5.68	46	49.3	19.53	1.15	29.66	-	-	Peak
816.67	41.56	-4.44	46	49.88	20.03	1.26	29.61	-	-	Peak
832.19	40.93	-5.07	46	49	20.3	1.27	29.64	-	-	Peak
2375.74	37.03	-16.97	54	34.79	32.83	3.42	34.01	120	149	Average
2375.74	53.37	-20.63	74	51.13	32.83	3.42	34.01	120	149	Peak
2452	100.47	-	-	98.07	32.95	3.6	34.15	130	34	Peak
2452	91.07	-	-	88.67	32.95	3.6	34.15	130	34	Average
2487.46	44.67	-9.33	54	42.18	33.01	3.68	34.2	158	204	Average
2487.46	63.6	-10.4	74	61.11	33.01	3.68	34.2	158	204	Peak
4904	52.4	-21.6	74	44.48	35.19	4.99	32.26	128	124	Peak
4904	39.66	-14.34	54	31.74	35.19	4.99	32.26	128	124	Average

Test Mode :	802.11n-HT40 for sample 1	Temperature :	21~22℃
Test Channel :	09	Relative Humidity :	46~47%
Test Engineer :	Chenmy Cheng	Polarization :	Vertical
Remark :	2452 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
157.07	33.87	-9.63	43.5	53.59	9.71	0.52	29.95	-	-	Peak
320.03	34.06	-11.94	46	49.7	13.55	0.76	29.95	-	-	Peak
624.61	33.21	-12.79	46	43.02	18.74	1.08	29.63	-	-	Peak
720.64	44.15	-1.85	46	53.13	19.53	1.15	29.66	100	183	QP
816.67	39.53	-6.47	46	47.85	20.03	1.26	29.61	-	-	Peak
998.06	40.9	-13.1	54	47.91	21.09	1.42	29.52	-	-	Peak
2337.74	36.71	-17.29	54	34.54	32.78	3.33	33.94	115	318	Average
2337.74	49.83	-24.17	74	47.66	32.78	3.33	33.94	115	318	Peak
2452	94.12	-	-	91.72	32.95	3.6	34.15	109	360	Peak
2452	84.17	-	-	81.77	32.95	3.6	34.15	109	360	Average
2487.46	39.74	-14.26	54	37.25	33.01	3.68	34.2	167	191	Average
2487.46	56.18	-17.82	74	53.69	33.01	3.68	34.2	167	191	Peak
4904	52.38	-21.62	74	44.46	35.19	4.99	32.26	100	360	Peak
4904	39.63	-14.37	54	31.71	35.19	4.99	32.26	100	360	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.

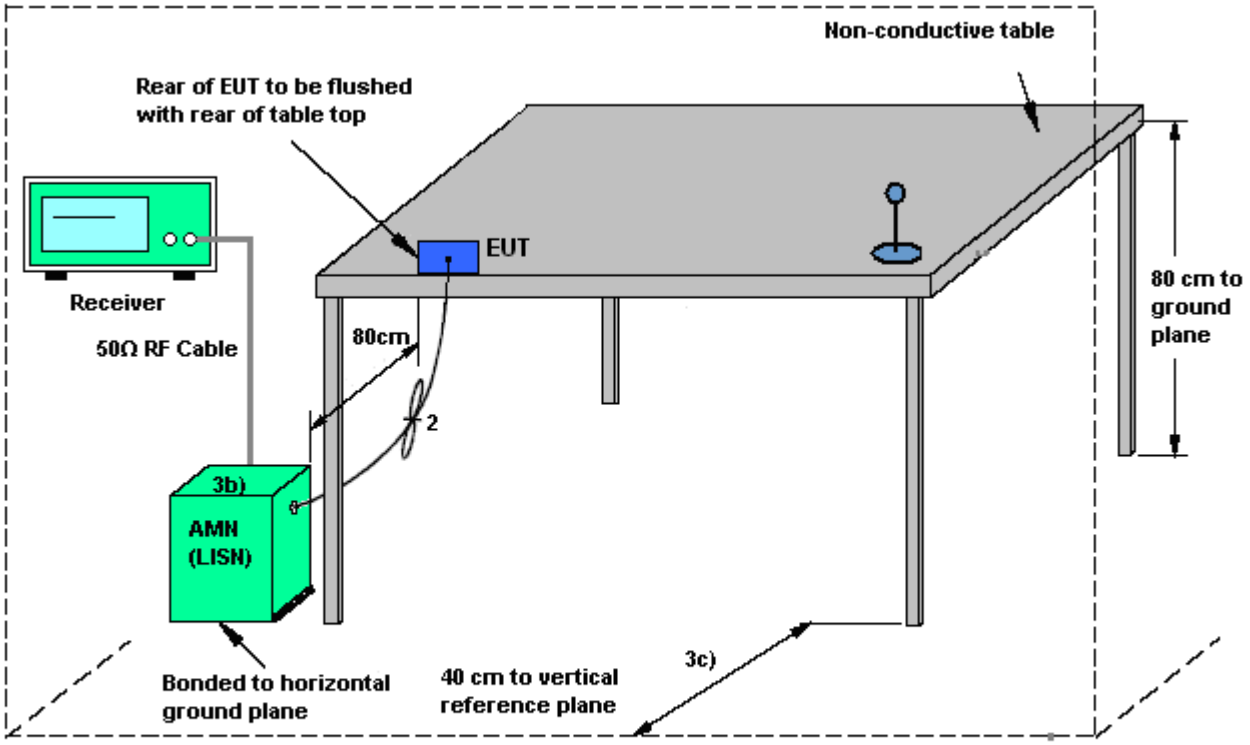
3.6.2 Measuring Instruments

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.

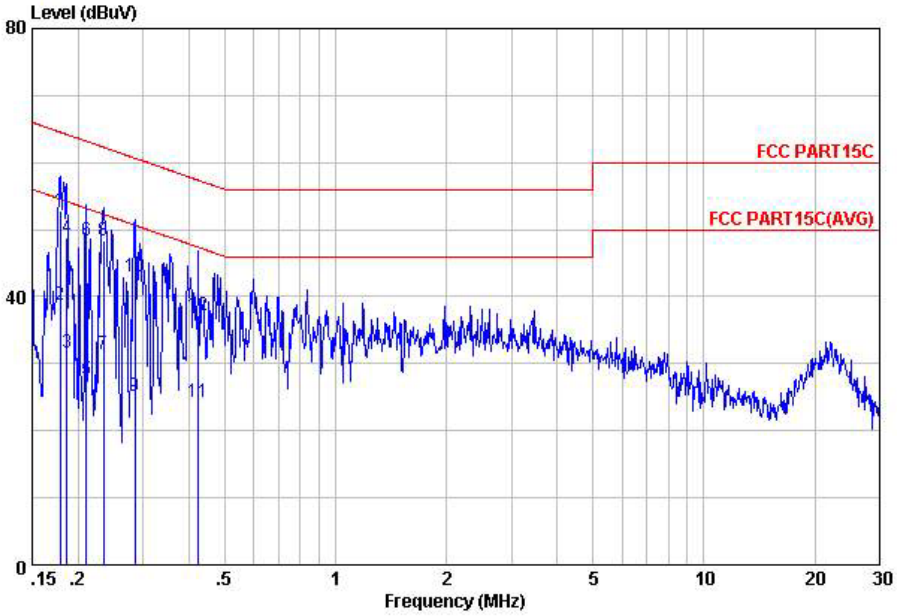
3.6.4 Test Setup



AMN = Artificial mains network (LISN)
AE = Associated equipment
EUT = Equipment under test
ISN = Impedance stabilization network

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 :	Bluetooth Link + WLAN Link + USB Cable (Charging from Adapter) + Camera + Credit Card for Sample 1		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

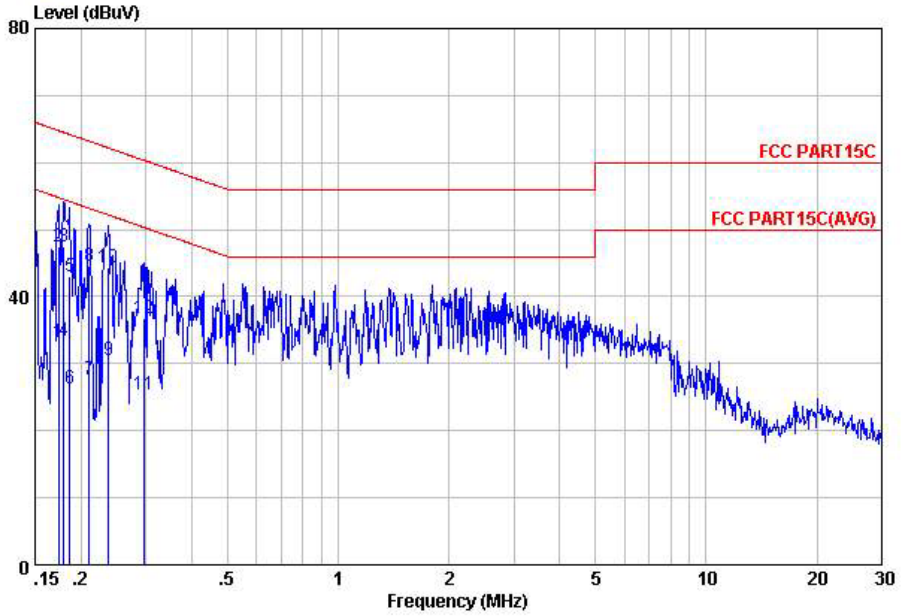


Site : C001-KS
Condition: FCC PART15C LISN-111230 LINE

mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.18	52.78	-11.77	64.55	42.40	-0.07	10.45	QP
2	0.18	38.88	-15.67	54.55	28.50	-0.07	10.45	Average
3	0.19	31.71	-22.49	54.20	21.30	-0.07	10.48	Average
4	0.19	48.71	-15.49	64.20	38.30	-0.07	10.48	QP
5	0.21	27.63	-25.55	53.18	17.19	-0.07	10.51	Average
6	0.21	48.43	-14.75	63.18	37.99	-0.07	10.51	QP
7	0.23	31.35	-20.95	52.30	20.90	-0.07	10.52	Average
8	0.23	48.45	-13.85	62.30	38.00	-0.07	10.52	QP
9	0.28	25.19	-25.49	50.68	14.70	-0.07	10.56	Average
10	0.28	43.09	-17.59	60.68	32.60	-0.07	10.56	QP
11	0.42	24.34	-23.03	47.37	13.80	-0.08	10.62	Average
12	0.42	37.24	-20.13	57.37	26.70	-0.08	10.62	QP

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



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

mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.17	33.26	-21.51	54.77	22.90	-0.08	10.44	Average
2	0.17	47.56	-17.21	64.77	37.20	-0.08	10.44	QP
3	0.18	47.38	-17.12	64.50	37.00	-0.08	10.46	QP
4	0.18	33.48	-21.02	54.50	23.10	-0.08	10.46	Average
5	0.19	43.00	-21.20	64.20	32.59	-0.07	10.48	QP
6	0.19	26.40	-27.80	54.20	15.99	-0.07	10.48	Average
7	0.21	27.53	-25.65	53.18	17.09	-0.07	10.51	Average
8	0.21	44.63	-18.55	63.18	34.19	-0.07	10.51	QP
9	0.24	30.45	-21.72	52.17	20.00	-0.07	10.52	Average
10	0.24	44.45	-17.72	62.17	34.00	-0.07	10.52	QP
11	0.30	25.50	-24.82	50.32	14.99	-0.07	10.58	Average
12	0.30	36.70	-23.62	60.32	26.19	-0.07	10.58	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	May 30, 2012~ Jul. 09, 2012	Dec. 29, 2012	Conducted (TH01-KS)
Power Meter	Agilent	E4416A	MY45101555	N/A	Aug. 23, 2011	May 30, 2012~ Jul. 09, 2012	Aug. 22, 2012	Conducted (TH01-KS)
Power Sensor	Agilent	E9327A	MY44421198	N/A	Aug. 23, 2011	May 30, 2012~ Jul. 09, 2012	Aug. 22, 2012	Conducted (TH01-KS)
DC Power Supply	GWINSTEK	GPS-3030D	E1884515	N/A	Aug. 23, 2011	May 30, 2012~ Jul. 09, 2012	Aug. 22, 2012	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	N/A	Dec. 30, 2011	May 30, 2012~ Jul. 09, 2012	Dec. 29, 2012	Conducted (TH01-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz	Jun. 01, 2012	Jul. 06, 2012	May 31, 2013	Conduction (CO01-KS)
LISN	MessTec	AN3016	60103	9kHz~30MHz	Dec. 30, 2011	Jul. 06, 2012	Dec. 29, 2012	Conduction (CO01-KS)
LISN	MessTec	AN3016	60105	9kHz~30MHz	Dec. 30, 2011	Jul. 06, 2012	Dec. 29, 2012	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	N/A	Nov. 16, 2011	Jul. 06, 2012	Nov. 15, 2012	Conduction (CO01-KS)
System Simulator	R&S	CMU200	837587/066	2G Full-Band	Dec. 30, 2011	Jul. 06, 2012	Dec. 29, 2012	Conduction (CO01-KS)
EMI Test Receiver	R&S	ESCI	100534	9kHz~3GHz	Nov. 09, 2011	Jul. 06, 2012	Nov. 08, 2012	Radiation (03CH01-KS)
Spectrum Analyzer	R&S	FSP40	100319	9kHz~40GHz	Dec. 30, 2011	Jul. 06, 2012	Dec. 29, 2012	Radiation (03CH01-KS)
Bilog Antenna	SCHAFFNER	CBL6112D	23182	25MHz~2GHz	Dec. 08, 2011	Jul. 06, 2012	Dec. 07, 2012	Radiation (03CH01-KS)
Loop Antenna	R&S	HFH2-Z2	860004/00	9 kHz~30 MHz	Jul. 28, 2011	Jul. 06, 2012	Jul. 27, 2012	Radiation (03CH01-KS)
Double Ridge Horn Antenna	EMCO	3117	00075959	1GHz~18GHz	Jan. 06, 2012	Jul. 06, 2012	Jan. 05, 2013	Radiation (03CH01-KS)
Amplifier	Wireless	FPA-6592G	060004	30MHz~2GHz	Dec. 30, 2011	Jul. 06, 2012	Dec. 29, 2012	Radiation (03CH01-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Dec. 30, 2011	Jul. 06, 2012	Dec. 29, 2012	Radiation (03CH01-KS)
Active Horn Antenna	com-power	AHA-118	701023	1GHz~18GHz	Nov. 07, 2011	Jul. 06, 2012	Nov. 06, 2012	Radiation (03CH01-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz~40GHz	Oct. 11, 2011	Jul. 06, 2012	Oct.10, 2012	Radiation (03CH01-KS)

5 Uncertainty of Evaluation

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

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

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

Appendix A. Photographs of EUT

Please refer to Sporton report number EP242415 as below.