FCC RF Test Report

APPLICANT	:	ZTE CORPORATION
EQUIPMENT	:	CDMA/EVDO/LTE CPE
BRAND NAME	:	ZTE
MODEL NAME	:	MF275U
FCC ID	:	SRQ-MF275U
STANDARD	:	FCC Part 15 Subpart C §15.247
CLASSIFICATION	:	(DTS) Digital Transmission System

The product was received on May 06, 2014 and testing was completed on Jun. 02, 2014. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and shown to be compliant 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: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager

Testing Laboratory
2627

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
FR450602A	Rev. 01	Initial issue of report	Jun. 06, 2014

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.247(a)(2)	6dB Bandwidth	≥ 0.5MHz	Pass	-
3.2	15.247(b)	Power Output Measurement	≤ 30dBm	Pass	-
3.3	15.247(e)	Power Spectral Density	≤ 8dBm/3kHz	Pass	-
3.4	15.247(d)	Conducted Band Edges	≤ 20dBc	Pass	-
		Conducted Spurious Emission		Pass	-
3.5	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 1.86 dB at 2389.470 MHz
3.6	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 5.11 dB at 1.590 MHz
3.7	15.203 & 15.247(b)	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/EVDO/LTE CPE
Brand Name	ZTE
Model Name	MF275U
FCC ID	SRQ-MF275U
EUT supports Radios application	CDMA/EV-DO/LTE/ WLAN 2.4GHz 802.11b/g/n HT20/HT40/ WLAN 5GHz 802.11a/n HT20/HT40
HW Version	dcmB
SW Version	MF275U1.0.3
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.

1.4 Product Specification of Equipment Under Test

<table>
<tr><th colspan="2">Product Specification subjective to this standard</th></tr>
<tr><td>Tx/Rx Channel Frequency Range</td><td>802.11b/g/n : 2412 MHz ~ 2462 MHz
802.11a/n: 5745~5805MHz</td></tr>
<tr><td>Maximum Output Power to Antenna</td><td><2412 MHz ~ 2462 MHz >
802.11b : 17.94 dBm (0.0622 W)
802.11g : 19.12 dBm (0.0817 W)
802.11n HT20 : 21.41 dBm (0.1384 W)
802.11n HT40 : 20.46 dBm (0.1112 W)
<5745 MHz ~ 5805 MHz >
802.11a : 23.49 dBm (0.2234 W)
802.11n HT20 : 26.06 dBm (0.4036 W)
802.11n HT40 : 25.84 dBm (0.3837 W)</td></tr>
<tr><td>Antenna Type</td><td>Chain Port 0: Dipole Antenna
Chain Port 1: Dipole Antenna</td></tr>
<tr><td>Antenna Gain</td><td><2.4GHz>
Chain Port 0 : 2.89 dBi
Chain Port 1 : 3.61 dBi
Chain Port 0 + 1 : 6.27 dBi
<5GHz>
Chain Port 0 : 0.68 dBi
Chain Port 1 : 1.02 dBi
Chain Port 0 + 1 : 3.86 dBi</td></tr>
<tr><td>Type of Modulation</td><td>802.11b : DSSS (DBPSK / DQPSK / CCK)
802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)</td></tr>
<tr><td>Antenna Function for Transmitter</td><td>
<table>
<tr><th></th><th>Chain Port 0</th><th>Chain Port 1</th></tr>
<tr><td>802.11 b</td><td>V</td><td>V</td></tr>
<tr><td>802.11 g</td><td>V</td><td>V</td></tr>
<tr><td>802.11 a</td><td>V</td><td>V</td></tr>
<tr><td>802.11 n SISO</td><td>V</td><td>V</td></tr>
<tr><td>802.11 n MIMO</td><td>V</td><td>V</td></tr>
</table>
</td></tr>
</table>

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 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 Registration No.
	TH01-KS	03CH01-KS	CO01-KS	149928

Note: The test site complies with ANSI C63.4 2003 requirement.

1.7 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 v03r01
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ANSI C63.4-2003

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.

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).

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 and 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		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5725-5850 MHz Band 4	149	5745	157	5785
	151	5755	159	5795
	153	5765	161	5805

2.2 Pre-Scanned RF Power

Preliminary tests were performed in different data rate and data rate associated with the highest power were chosen for full test shown in the following tables.

2.4GHz 802.11b Peak Power (dBm)				
Data Rate (MHz)	1M bps	2M bps	5.5M bps	11M bps
Chain Port 0	17.94	17.76	17.87	17.92
Chain Port 1	17.49	17.22	17.21	17.24

2.4GHz 802.11g Peak Power (dBm)								
Data Rate (MHz)	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
Chain Port 0	19.12	19.03	19.04	19.00	19.11	19.05	19.01	19.10
Chain Port 1	18.13	18.11	18.03	18.12	17.86	17.76	17.62	18.03

2.4GHz 802.11n HT20 Peak Power (dBm)								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Chain Port 0	19.14	18.52	18.68	18.31	18.68	18.91	19.13	19.13
Chain Port 1	18.84	17.79	18.16	18.15	18.05	18.42	17.60	18.63
Data Rate (MHz)	MCS8	MCS9	MCS10	MCS11	MCS12	MCS13	MCS14	MCS15
Chain Port 0+1(0)	18.87	18.64	18.60	18.71	18.45	18.31	18.52	18.61
Chain Port 0+1(1)	17.87	17.42	17.50	17.59	17.73	17.78	17.76	17.77
Chain Port 0+1	21.41	21.08	21.10	21.20	21.12	21.06	21.17	21.22

2.4GHz 802.11n HT40 Peak Power (dBm)								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Chain Port 0	18.00	17.26	17.32	17.29	17.27	17.42	17.46	17.52
Chain Port 1	17.63	17.26	17.40	17.08	17.11	17.35	17.46	17.22
Data Rate (MHz)	MCS8	MCS9	MCS10	MCS11	MCS12	MCS13	MCS14	MCS15
Chain Port 0+1(0)	17.56	16.57	16.38	17.28	16.77	16.31	17.09	16.84
Chain Port 0+1(1)	17.34	17.21	16.67	16.43	17.13	16.81	16.57	16.53
Chain Port 0+1	20.46	19.91	19.54	19.89	19.96	19.58	19.85	19.70

5GHz 802.11a Peak Power (dBm)								
Data Rate (MHz)	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
Chain Port 0	23.37	22.97	23.03	23.05	23.25	22.41	22.28	21.57
Chain Port 1	23.49	22.70	22.62	22.67	22.81	22.83	21.79	21.45

5GHz 802.11n HT20 Peak Power (dBm)								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Chain Port 0	23.55	23.34	23.38	23.48	23.31	22.77	22.31	21.93
Chain Port 1	22.83	22.68	22.78	22.75	22.73	22.32	22.06	21.33
Data Rate (MHz)	MCS8	MCS9	MCS10	MCS11	MCS12	MCS13	MCS14	MCS15
Chain Port 0+1(0)	23.38	22.93	23.07	23.08	23.21	23.31	23.21	23.19
Chain Port 0+1(1)	22.69	22.40	21.22	22.52	22.56	22.62	22.42	22.34
Chain Port 0+1	26.06	25.68	25.25	25.82	25.91	25.99	25.84	25.80

5GHz 802.11n HT40 Peak Power (dBm)								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Chain Port 0	22.87	22.85	22.84	22.75	22.52	22.14	21.88	21.57
Chain Port 1	22.98	22.40	22.45	22.21	22.41	22.08	21.57	21.54
Data Rate (MHz)	MCS8	MCS9	MCS10	MCS11	MCS12	MCS13	MCS14	MCS15
Chain Port 0+1(0)	22.98	22.80	22.94	22.88	22.92	21.04	20.25	20.23
Chain Port 0+1(1)	22.68	22.57	22.60	22.64	22.53	20.93	20.09	19.74
Chain Port 0+1	25.84	25.70	25.78	25.77	25.74	24.00	23.18	23.00

Note:

1. Chain Port 0+1 is a calculated result from sum of the power Chain Port 0+1(0) and Chain Port 0+1(1).
2. The data rates of WLAN 802.11 a/b/g/n were set in 1Mbps for 2.4GHz 802.11b (Chain Port 0), 6Mbps for 2.4GHz 802.11g (Chain Port 0), MCS0 for 2.4GHz 802.11n HT20 (Chain Port 0), MCS8 for 2.4GHz 802.11n HT20 (Chain Port 0+1), MCS0 for 2.4GHz 802.11n HT40 (Chain Port 0), MCS8 for 2.4GHz 802.11n HT40 (Chain Port 0+1), 6Mbps for 5GHz 802.11a (Chain Port 1), MCS0 for 5GHz 802.11n HT20 (Chain Port 0), MCS8 for 5GHz 802.11n HT20 (Chain Port 0+1), MCS0 for 5GHz 802.11n HT40 (Chain Port 1) and MCS8 for 5GHz 802.11n HT40 (Chain Port 0+1) due to the highest RF output power.

2.3 Test Mode

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

<2.4GHz>

Test Cases					
	Test Items	Mode	Data Rate	Test Channel	Remark
Conducted TCs	6dB BW Power Spectral Density	802.11b	1 Mbps	1/6/11	Chain Port 0
		802.11g	6 Mbps	1/6/11	Chain Port 0
		802.11n HT20	MCS0	1/6/11	Chain Port 0
		802.11n HT20	MCS8	1/6/11	Chain Port 0+1 (0)
		802.11n HT20	MCS8	1/6/11	Chain Port 0+1 (1)
		802.11n HT40	MCS0	3/6/9	Chain Port 0
		802.11n HT40	MCS8	3/6/9	Chain Port 0+1 (0)
		802.11n HT40	MCS8	3/6/9	Chain Port 0+1 (1)
	Output Power	802.11b	1 Mbps	1/6/11	Chain Port 0
		802.11b	1 Mbps	1/6/11	Chain Port 1
		802.11g	6 Mbps	1/6/11	Chain Port 0
		802.11g	6 Mbps	1/6/11	Chain Port 1
		802.11n HT20	MCS0	1/6/11	Chain Port 0
		802.11n HT20	MCS0	1/6/11	Chain Port 1
		802.11n HT20	MCS8	1/6/11	Chain Port 0+1 (0)
		802.11n HT20	MCS8	1/6/11	Chain Port 0+1 (1)
		802.11n HT20	MCS8	1/6/11	Chain Port 0+1
		802.11n HT40	MCS0	3/6/9	Chain Port 0
		802.11n HT40	MCS0	3/6/9	Chain Port 1
		802.11n HT40	MCS8	3/6/9	Chain Port 0+1 (0)
		802.11n HT40	MCS8	3/6/9	Chain Port 0+1 (1)
		802.11n HT40	MCS8	3/6/9	Chain Port 0+1
	Conducted Band Edge	802.11b	1 Mbps	1/11	Chain Port 0
		802.11g	6 Mbps	1/11	Chain Port 0
		802.11n HT20	MCS0	1/11	Chain Port 0
		802.11n HT20	MCS8	1/11	Chain Port 0+1 (0)
		802.11n HT20	MCS8	1/11	Chain Port 0+1 (1)
		802.11n HT40	MCS0	3/9	Chain Port 0
		802.11n HT40	MCS8	3/9	Chain Port 0+1 (0)
		802.11n HT40	MCS8	3/9	Chain Port 0+1 (1)
	Conducted Spurious Emission	802.11b	1 Mbps	1/6/11	Chain Port 0
		802.11g	6 Mbps	1/6/11	Chain Port 0
		802.11n HT20	MCS0	1/6/11	Chain Port 0
		802.11n HT20	MCS8	1/6/11	Chain Port 0+1 (0)
		802.11n HT20	MCS8	1/6/11	Chain Port 0+1 (1)
		802.11n HT40	MCS0	3/6/9	Chain Port 0
		802.11n HT40	MCS8	3/6/9	Chain Port 0+1 (0)
		802.11n HT40	MCS8	3/6/9	Chain Port 0+1 (1)

	Test Items	Mode	Data Rate	Test Channel	Remark
Radiated TCs	Radiated Band Edge	802.11b	1 Mbps	1/11	Chain Port 0
		802.11g	6 Mbps	1/11	Chain Port 0
		802.11n HT20	MCS0	1/11	Chain Port 0
		802.11n HT20	MCS8	1/11	Chain Port 0+1
		802.11n HT40	MCS0	3/9	Chain Port 0
		802.11n HT40	MCS8	3/9	Chain Port 0+1
	Radiated Spurious Emission	802.11b	1 Mbps	1/6/11	Chain Port 0
		802.11g	6 Mbps	1/6/11	Chain Port 0
		802.11n HT20	MCS0	1/6/11	Chain Port 0
		802.11n HT20	MCS8	1/6/11	Chain Port 0+1
		802.11n HT40	MCS0	3/6/9	Chain Port 0
		802.11n HT40	MCS8	3/6/9	Chain Port 0+1

<5GHz>

Test Cases					
	Test Items	Mode	Data Rate	Test Channel	Remark
Conducted TCs	6dB BW Power Spectral Density	802.11a	6 Mbps	149/157/165	Chain Port 1
		802.11n HT20	MCS0	149/157/165	Chain Port 0
		802.11n HT20	MCS8	149/157/165	Chain Port 0+1 (0)
		802.11n HT20	MCS8	149/157/165	Chain Port 0+1 (1)
		802.11n HT40	MCS0	151/159	Chain Port 1
		802.11n HT40	MCS8	151/159	Chain Port 0+1 (0)
		802.11n HT40	MCS8	151/159	Chain Port 0+1 (1)
	Output Power	802.11a	6 Mbps	149/157/165	Chain Port 0
		802.11a	6 Mbps	149/157/165	Chain Port 1
		802.11n HT20	MCS0	149/157/165	Chain Port 0
		802.11n HT20	MCS0	149/157/165	Chain Port 1
		802.11n HT20	MCS8	149/157/165	Chain Port 0+1 (0)
		802.11n HT20	MCS8	149/157/165	Chain Port 0+1 (1)
		802.11n HT20	MCS8	149/157/165	Chain Port 0+1
		802.11n HT40	MCS0	151/159	Chain Port 0
		802.11n HT40	MCS0	151/159	Chain Port 1
		802.11n HT40	MCS8	151/159	Chain Port 0+1 (0)
		802.11n HT40	MCS8	151/159	Chain Port 0+1 (1)
		802.11n HT40	MCS8	151/159	Chain Port 0+1
	Conducted Band Edge	802.11a	6 Mbps	149/165	Chain Port 1
		802.11n HT20	MCS0	149/165	Chain Port 0
		802.11n HT20	MCS8	149/165	Chain Port 0+1 (0)
		802.11n HT20	MCS8	149/165	Chain Port 0+1 (1)
		802.11n HT40	MCS0	151/159	Chain Port 1
		802.11n HT40	MCS8	151/159	Chain Port 0+1 (0)
		802.11n HT40	MCS8	151/159	Chain Port 0+1 (1)
	Conducted Spurious Emission	802.11a	6 Mbps	149/157/165	Chain Port 1
		802.11n HT20	MCS0	149/157/165	Chain Port 0
		802.11n HT20	MCS8	149/157/165	Chain Port 0+1 (0)
		802.11n HT20	MCS8	149/157/165	Chain Port 0+1 (1)
		802.11n HT40	MCS0	151/159	Chain Port 1
		802.11n HT40	MCS8	151/159	Chain Port 0+1 (0)
		802.11n HT40	MCS8	151/159	Chain Port 0+1 (1)
Radiated TCs	Radiated Spurious Emission	802.11a	6 Mbps	149/157/165	Chain Port 1
		802.11n HT20	MCS0	149/157/165	Chain Port 0
		802.11n HT20	MCS8	149/157/165	Chain Port 0+1
		802.11n HT40	MCS0	151/159	Chain Port 1
		802.11n HT40	MCS8	151/159	Chain Port 0+1

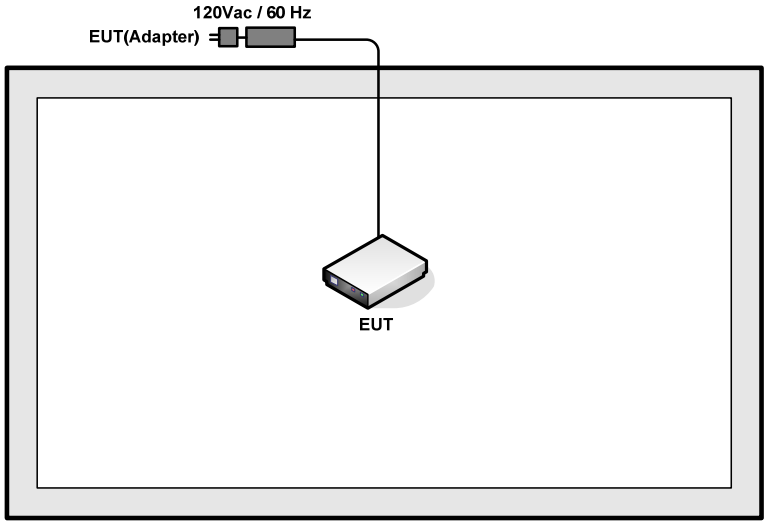
AC Conducted Emission	Mode 1 : CDMA2000 BC0 Idle + WLAN 2.4GHz Link + Adapter Mode 2 CDMA2000 BC0 Idle + WLAN 5GHz Link + Adapter

Remark:

1. The worst case of AC conducted emission is mode 2; only the test data of it is reported.
2. For radiated TCs, the tests cases were performed with adapter.

2.4 Connection Diagram of Test System

<WLAN Tx Mode>



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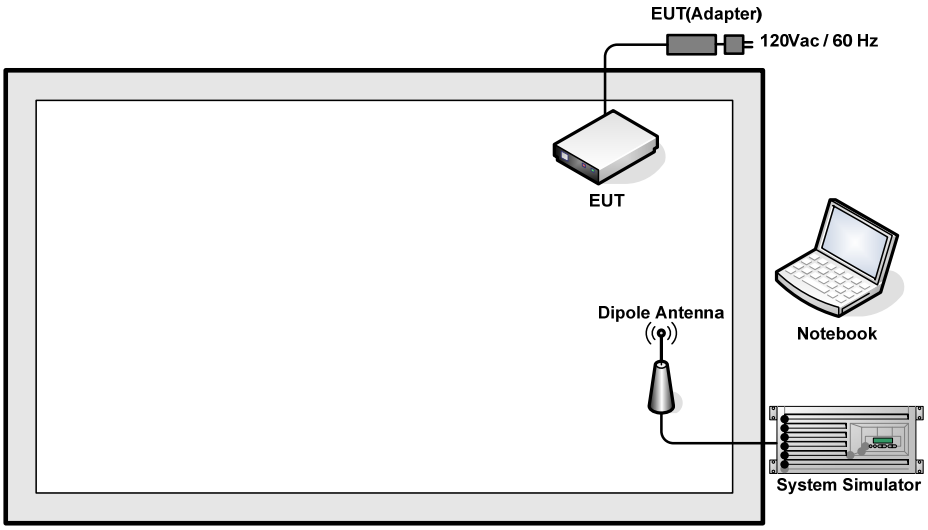


2.5 Support Unit used in test configuration and system

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.	Notebook	Acer	MS2204	QDS-BRCM1018	N/A	AC I/P: Unshielded, 0.9 m DC O/P: Shielded, 1.8 m

2.6 EUT Operation Test Setup

For WLAN RF test items, an engineering test program was provided and enabled to make EUT continuous transmit/receive.

For AC power line conducted emissions, the EUT was set to connect with the WLAN AP under large package sizes transmission.

2.7 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example:
The spectrum analyzer offset is derived from RF cable loss.
Offset = RF cable loss.
Following shows an offset computation example with cable loss 7.1 dB.

Offset (dB) = RF cable loss (dB) = 7.1 (dB)

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.

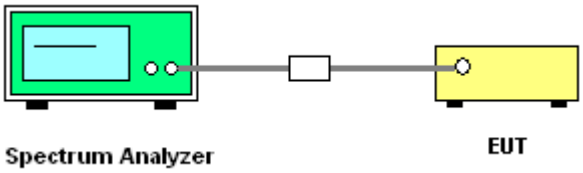
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 DTS D01 Meas. Guidance v03r01.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. 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. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6 dB bandwidth must be greater than 500 kHz.
5. Measure and record the results in the test report.

3.1.4 Test Setup



3.1.5 Test Result of 6dB Occupied Bandwidth

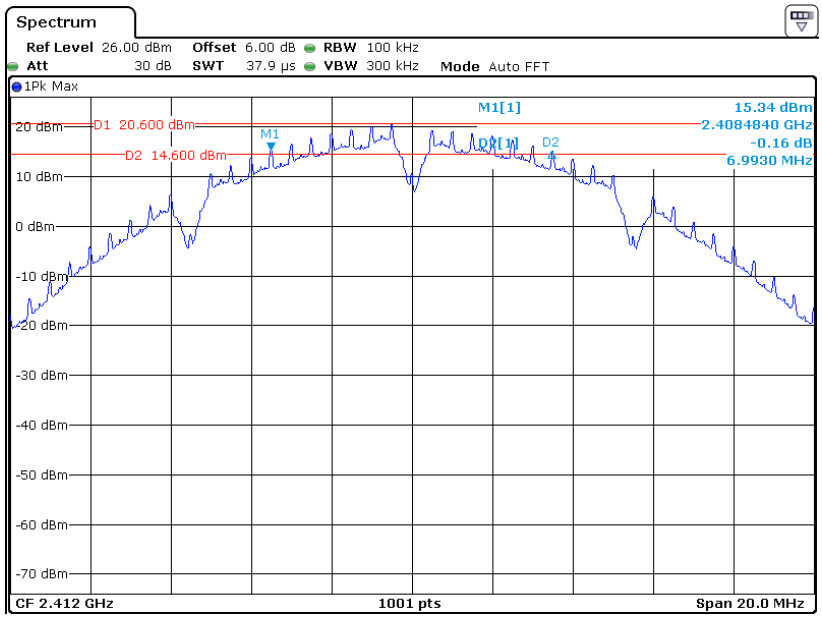
Test Band :	2.4GHz	Temperature :	23~24℃
Test Engineer :	Adonis Li	Relative Humidity :	47~48%

Mod.	Data Rate	N_{TX}	Channel	Freq. (MHz)	6dB Bandwidth (MHz)		6dB Bandwidth Min. Limit (MHz)	Pass/Fail
					Chain Port 0	Chain Port 1		
11b	1Mbps	1	1	2412	6.99	-	0.5	Pass
11b	1Mbps	1	6	2437	7.01	-	0.5	Pass
11b	1Mbps	1	11	2462	7.01	-	0.5	Pass
11g	6Mbps	1	1	2412	16.30	-	0.5	Pass
11g	6Mbps	1	6	2437	16.32	-	0.5	Pass
11g	6Mbps	1	11	2462	16.30	-	0.5	Pass
HT20	MCS0	1	1	2412	17.30	-	0.5	Pass
HT20	MCS0	1	6	2437	17.54	-	0.5	Pass
HT20	MCS0	1	11	2462	17.26	-	0.5	Pass
HT40	MCS0	1	3	2422	35.05	-	0.5	Pass
HT40	MCS0	1	6	2437	33.85	-	0.5	Pass
HT40	MCS0	1	9	2452	35.01	-	0.5	Pass
HT20	MCS8	2	1	2412	17.52	17.14	0.5	Pass
HT20	MCS8	2	6	2437	17.54	17.30	0.5	Pass
HT20	MCS8	2	11	2462	17.30	17.52	0.5	Pass
HT40	MCS8	2	3	2422	35.05	35.01	0.5	Pass
HT40	MCS8	2	6	2437	33.85	35.05	0.5	Pass
HT40	MCS8	2	9	2452	35.01	35.09	0.5	Pass

Test Band :	5GHz	Temperature :	23~24℃
Test Engineer :	Adonis Li	Relative Humidity :	47~48%

Mod.	Data Rate	N_{TX}	Channel	Freq. (MHz)	6dB Bandwidth (MHz)		6dB Bandwidth Min. Limit (MHz)	Pass/Fail
					Chain Port 0	Chain Port 1		
11a	6Mbps	1	149	5745	-	16.32	0.5	Pass
11a	6Mbps	1	157	5785	-	16.28	0.5	Pass
11a	6Mbps	1	161	5805	-	16.28	0.5	Pass
HT20	MCS0	1	149	5745	17.52	-	0.5	Pass
HT20	MCS0	1	157	5785	17.56	-	0.5	Pass
HT20	MCS0	1	161	5805	17.56	-	0.5	Pass
HT40	MCS0	1	151	5755	-	35.12	0.5	Pass
HT40	MCS0	1	159	5795	-	35.04	0.5	Pass
HT20	MCS8	2	149	5745	17.56	17.52	0.5	Pass
HT20	MCS8	2	157	5785	17.60	17.52	0.5	Pass
HT20	MCS8	2	161	5805	17.56	17.52	0.5	Pass
HT40	MCS8	2	151	5755	33.76	34.96	0.5	Pass
HT40	MCS8	2	159	5795	34.96	35.04	0.5	Pass

Minimum 6dB Bandwidth



3.2 Peak Output Power Measurement

3.2.1 Limit of Peak Output Power

For systems using digital modulation in the 2400-2483.5MHz and 5725-5850MHz, the limit for peak output power is 30dBm. If transmitting antenna with directional gain greater than 6dBi is 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.

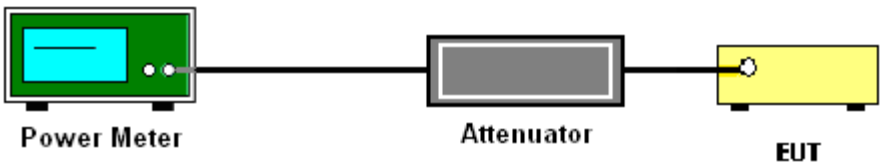
3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

1. The testing follows the Measurement Procedure of FCC KDB No. 558074 DTS D01 Meas. Guidance v03r01.
2. The RF output of EUT was connected to the power meter by RF cable and attenuator. 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. Measure the conducted output power and record the results in the test report.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

3.2.4 Test Setup



3.2.5 Test Result of Peak Output Power

Test Band :	2.4GHz	Temperature :	23~24℃
Test Engineer :	Adonis Li	Relative Humidity :	47~48%

Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Max. Limit (dBm)		DG (dBi)		Pass/Fail
					Chain Port 0	Chain Port 1	SUM	Chain Port 0	Chain Port 1	Chain Port 0	Chain Port 1	
11b	1Mbps	1	1	2412	17.94	17.49	-	30.00	30.00	2.89	3.61	Pass
11b	1Mbps	1	6	2437	17.48	16.17		30.00	30.00	2.89	3.61	Pass
11b	1Mbps	1	11	2462	17.29	16.62		30.00	30.00	2.89	3.61	Pass
11g	6Mbps	1	1	2412	19.12	18.13		30.00	30.00	2.89	3.61	Pass
11g	6Mbps	1	6	2437	18.56	16.61		30.00	30.00	2.89	3.61	Pass
11g	6Mbps	1	11	2462	18.16	17.19		30.00	30.00	2.89	3.61	Pass
HT20	MCS0	1	1	2412	19.14	18.84		30.00	30.00	2.89	3.61	Pass
HT20	MCS0	1	6	2437	18.36	17.67		30.00	30.00	2.89	3.61	Pass
HT20	MCS0	1	11	2462	18.31	17.81		30.00	30.00	2.89	3.61	Pass
HT40	MCS0	1	3	2422	18.00	17.63		30.00	30.00	2.89	3.61	Pass
HT40	MCS0	1	6	2437	17.62	16.51		30.00	30.00	2.89	3.61	Pass
HT40	MCS0	1	9	2452	17.23	16.66		30.00	30.00	2.89	3.61	Pass
HT20	MCS8	2	1	2412	18.87	17.87	21.41	29.73		6.27		Pass
HT20	MCS8	2	6	2437	18.18	16.71	20.52	29.73		6.27		Pass
HT20	MCS8	2	11	2462	18.16	17.44	20.83	29.73		6.27		Pass
HT40	MCS8	2	3	2422	17.56	17.34	20.46	29.73		6.27		Pass
HT40	MCS8	2	6	2437	15.24	15.03	18.15	29.73		6.27		Pass
HT40	MCS8	2	9	2452	15.67	15.16	18.43	29.73		6.27		Pass

Note: Measured power (dBm) has offset with cable loss.

Test Band :	5GHz	Temperature :	23~24℃
Test Engineer :	Adonis Li	Relative Humidity :	47~48%

Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Max. Limit (dBm)		DG (dBi)		Pass/Fail
					Chain Port 0	Chain Port 1	SUM	Chain Port 0	Chain Port 1	Chain Port 0	Chain Port 1	
11a	6Mbps	1	149	5745	22.32	22.74	-	30.00	30.00	0.68	1.02	Pass
11a	6Mbps	1	157	5785	23.37	23.49		30.00	30.00	0.68	1.02	Pass
11a	6Mbps	1	161	5805	22.78	22.67		30.00	30.00	0.68	1.02	Pass
HT20	MCS0	1	149	5745	22.86	22.72		30.00	30.00	0.68	1.02	Pass
HT20	MCS0	1	157	5785	23.55	22.83		30.00	30.00	0.68	1.02	Pass
HT20	MCS0	1	161	5805	23.29	22.49		30.00	30.00	0.68	1.02	Pass
HT40	MCS0	1	151	5755	22.49	22.98		30.00	30.00	0.68	1.02	Pass
HT40	MCS0	1	159	5795	22.87	22.45		30.00	30.00	0.68	1.02	Pass
HT20	MCS8	2	149	5745	22.30	22.68	25.50	30.00		3.86		Pass
HT20	MCS8	2	157	5785	23.38	22.69	26.06	30.00		3.86		Pass
HT20	MCS8	2	161	5805	22.64	22.44	25.55	30.00		3.86		Pass
HT40	MCS8	2	151	5755	22.52	22.50	25.52	30.00		3.86		Pass
HT40	MCS8	2	159	5795	22.98	22.68	25.84	30.00		3.86		Pass

Note: Measured power (dBm) has offset with cable loss.

3.2.6 Test Result of Average output Power (Reporting Only)

Test Band :	2.4GHz	Temperature :	23~24℃
Test Engineer :	Adonis Li	Relative Humidity :	47~48%

Mod.	Data Rate	N_{TX}	Channel	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)		
					Chain Port 0	Chain Port 1	Chain Port 0	Chain Port 1	Sum Power
11b	1Mbps	1	1	2412	0.00	0.00	15.29	15.03	-
11b	1Mbps	1	6	2437	0.00	0.00	14.94	13.83	
11b	1Mbps	1	11	2462	0.00	0.00	14.43	14.22	
11g	6Mbps	1	1	2412	0.09	0.06	10.66	10.21	
11g	6Mbps	1	6	2437	0.09	0.06	10.10	9.30	
11g	6Mbps	1	11	2462	0.09	0.06	9.81	9.22	
HT20	MCS0	1	1	2412	0.05	0.09	10.12	10.08	
HT20	MCS0	1	6	2437	0.05	0.09	9.96	9.44	
HT20	MCS0	1	11	2462	0.05	0.09	9.57	9.22	
HT40	MCS0	1	3	2422	0.17	0.15	10.06	10.01	
HT40	MCS0	1	6	2437	0.17	0.15	8.89	9.90	
HT40	MCS0	1	9	2452	0.17	0.15	8.82	7.72	
HT20	MCS8	2	1	2412	0.12	0.09	9.90	9.75	12.84
HT20	MCS8	2	6	2437	0.12	0.09	9.69	8.99	12.36
HT20	MCS8	2	11	2462	0.12	0.09	9.14	8.74	11.95
HT40	MCS8	2	3	2422	0.17	0.15	8.49	8.44	11.48
HT40	MCS8	2	6	2437	0.17	0.15	6.32	5.38	8.89
HT40	MCS8	2	9	2452	0.17	0.15	6.20	5.28	8.77

Note: Measured power (dBm) has offset with cable loss and duty factor.

Test Band :	5GHz	Temperature :	23~24℃
Test Engineer :	Adonis Li	Relative Humidity :	47~48%

Mod.	Data Rate	N_{TX}	Channel	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)		
					Chain Port 0	Chain Port 1	Chain Port 0	Chain Port 1	Sum Power
11a	6Mbps	1	149	5745	0.14	0.14	16.35	16.99	-
11a	6Mbps	1	157	5785	0.14	0.14	17.05	17.21	
11a	6Mbps	1	161	5805	0.14	0.14	16.92	16.33	
HT20	MCS0	1	149	5745	0.18	0.15	16.99	17.02	
HT20	MCS0	1	157	5785	0.18	0.15	17.49	17.27	
HT20	MCS0	1	161	5805	0.18	0.15	17.45	16.48	
HT40	MCS0	1	151	5755	0.21	0.23	15.80	16.46	
HT40	MCS0	1	159	5795	0.21	0.23	16.34	16.25	
HT20	MCS8	2	149	5745	0.28	0.28	16.18	16.29	19.24
HT20	MCS8	2	157	5785	0.28	0.28	16.80	16.44	19.63
HT20	MCS8	2	161	5805	0.28	0.28	16.55	16.04	19.55
HT40	MCS8	2	151	5755	0.39	0.41	16.20	16.54	19.38
HT40	MCS8	2	159	5795	0.39	0.41	16.59	16.58	19.59

Note: Measured power (dBm) has offset with cable loss and duty factor.

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

The measuring equipment is listed in the section 4 of this test report.

3.3.3 Test Procedures

1. The testing follows Measurement Procedure 10.2 Method PKPSD of FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r01
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. 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) = 3 kHz. Video bandwidth VBW = 10 kHz In order to make an accurate measurement, set the span to 1.5 times DTS Channel Bandwidth. (6dB BW)
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.
6. Measure and record the results in the test report.
7. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

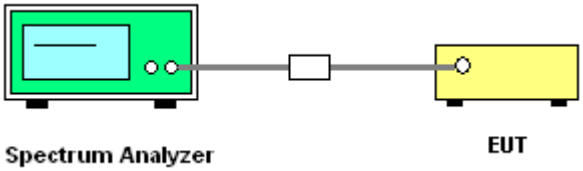
   If measurements performed using method (2) plus 10 log (N) exceeds the emission limit, the test should choose method (1) before declaring that the device fails the emission limit.

   Method (1): Measure and sum the spectra across the outputs.

   The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points, the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

   Method (2): Measure and add 10 log (N) dB, where N is the number of outputs. (N=2)

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Test Band :	2.4GHz	Temperature :	23~24℃
Test Engineer :	Adonis Li	Relative Humidity :	47~48%

Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	Peak Power Density (dBm/3kHz)			Max. Limit (dBm/3kHz)		DG (dBi)		Pass/Fail
					Chain Port 0	Chain Port 1	Worst +10log(2)	Chain Port 0	Chain Port 1	Chain Port 0	Chain Port 1	
11b	1Mbps	1	1	2412	4.32	-	-	8.00	8.00	2.89	3.61	Pass
11b	1Mbps	1	6	2437	3.84	-		8.00	8.00	2.89	3.61	Pass
11b	1Mbps	1	11	2462	3.79	-		8.00	8.00	2.89	3.61	Pass
11g	6Mbps	1	1	2412	-1.28	-		8.00	8.00	2.89	3.61	Pass
11g	6Mbps	1	6	2437	-1.92	-		8.00	8.00	2.89	3.61	Pass
11g	6Mbps	1	11	2462	-2.56	-		8.00	8.00	2.89	3.61	Pass
HT20	MCS0	1	1	2412	-2.10	-		8.00	8.00	2.89	3.61	Pass
HT20	MCS0	1	6	2437	-2.88	-		8.00	8.00	2.89	3.61	Pass
HT20	MCS0	1	11	2462	-2.73	-		8.00	8.00	2.89	3.61	Pass
HT40	MCS0	1	3	2422	-4.42	-		8.00	8.00	2.89	3.61	Pass
HT40	MCS0	1	6	2437	-6.52	-		8.00	8.00	2.89	3.61	Pass
HT40	MCS0	1	9	2452	-4.50	-		8.00	8.00	2.89	3.61	Pass
HT20	MCS8	2	1	2412	-3.53	-4.02	-0.52	7.73		6.27		Pass
HT20	MCS8	2	6	2437	-3.68	-0.93	2.08	7.73		6.27		Pass
HT20	MCS8	2	11	2462	-4.02	-3.78	-0.77	7.73		6.27		Pass
HT40	MCS8	2	3	2422	-6.86	-6.76	-3.75	7.73		6.27		Pass
HT40	MCS8	2	6	2437	-9.11	-9.95	-6.10	7.73		6.27		Pass
HT40	MCS8	2	9	2452	-11.59	-8.26	-5.25	7.73		6.27		Pass

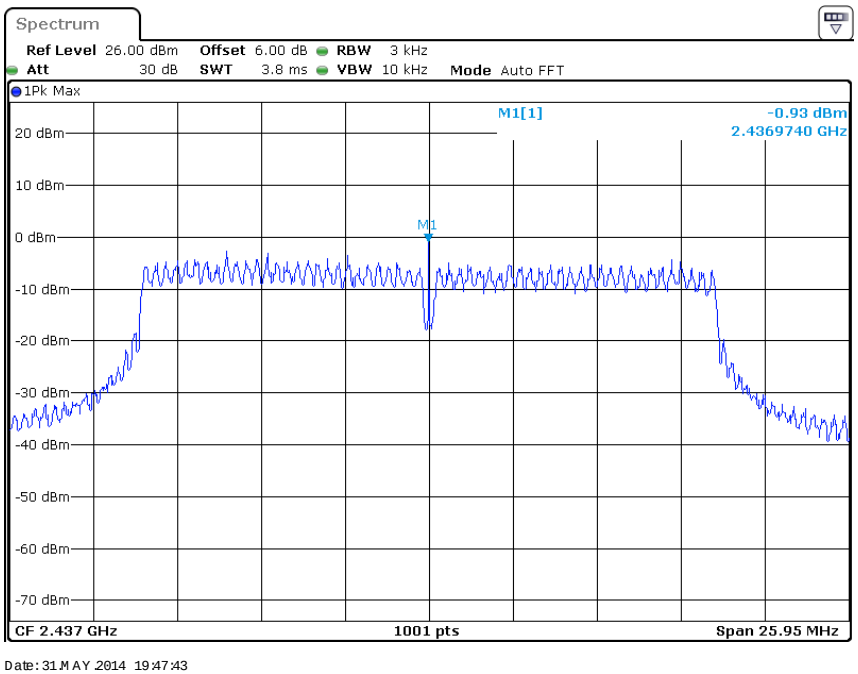
Note: Measured power density (dBm) has offset with cable loss.

Test Band :	5GHz	Temperature :	23~24℃
Test Engineer :	Adonis Li	Relative Humidity :	47~48%

Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	Peak Power Density (dBm/3kHz)			Max. Limit (dBm/3kHz)		DG (dBi)		Pass/Fail
					Chain Port 0	Chain Port 1	Worst +10log(2)	Chain Port 0	Chain Port 1	Chain Port 0	Chain Port 1	
11a	6Mbps	1	149	5745	-	-6.07	-	8.00	8.00	0.68	1.02	Pass
11a	6Mbps	1	157	5785	-	-7.06		8.00	8.00	0.68	1.02	Pass
11a	6Mbps	1	161	5805	-	-7.73		8.00	8.00	0.68	1.02	Pass
HT20	MCS0	1	149	5745	-7.05	-		8.00	8.00	0.68	1.02	Pass
HT20	MCS0	1	157	5785	-6.50	-		8.00	8.00	0.68	1.02	Pass
HT20	MCS0	1	161	5805	-7.45	-		8.00	8.00	0.68	1.02	Pass
HT40	MCS0	1	151	5755	-	-10.83		8.00	8.00	0.68	1.02	Pass
HT40	MCS0	1	159	5795	-	-10.95		8.00	8.00	0.68	1.02	Pass
HT20	MCS8	2	149	5745	-7.42	-5.99	-2.98	8.00		3.86		Pass
HT20	MCS8	2	157	5785	-6.76	-7.98	-3.75	8.00		3.86		Pass
HT20	MCS8	2	161	5805	-6.82	-8.09	-3.81	8.00		3.86		Pass
HT40	MCS8	2	151	5755	-9.68	-10.27	-6.67	8.00		3.86		Pass
HT40	MCS8	2	159	5795	-8.08	-10.41	-5.07	8.00		3.86		Pass

Note: Measured power density (dBm) has offset with cable loss.

Worst Case Power Density (dBm/3kHz)



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

The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r01.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. 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. 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. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB per 15.247(d).
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.4.4 Test Setup

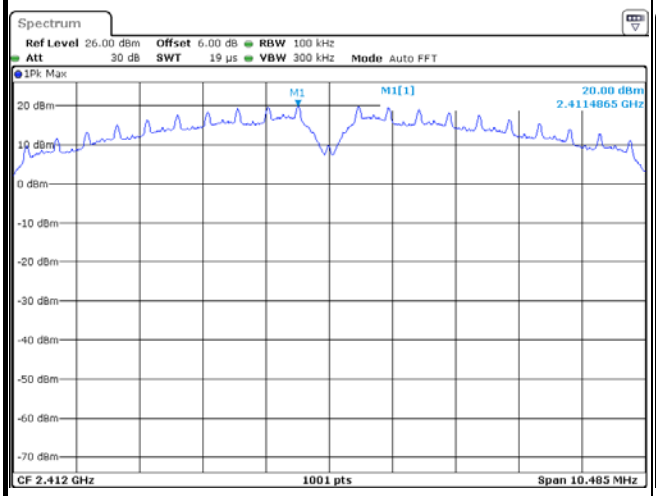
3.4.5 Test Result of Conducted Band Edges and Spurious Emission

Number of TX = 1, Chain Port 0

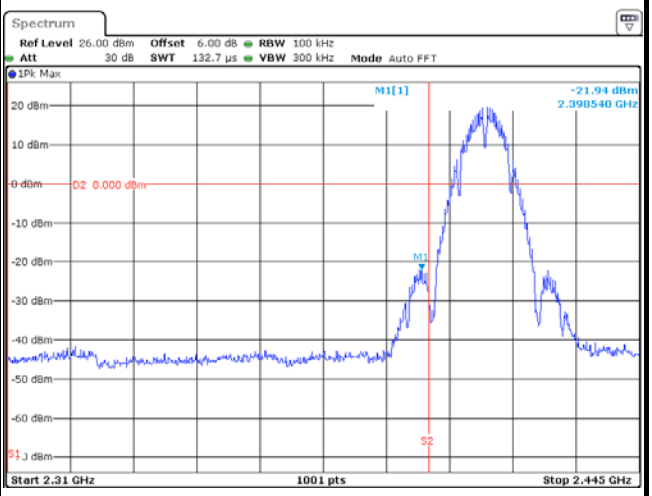
Number of TX	1	**Chain Port**	0
Test Mode :	802.11b	**Temperature :**	23~24℃
Test Band :	2.4GHz Low	**Relative Humidity :**	47~48%
Test Channel :	01	**Test Engineer :**	Adonis Li

WLAN 802.11b Channel 01

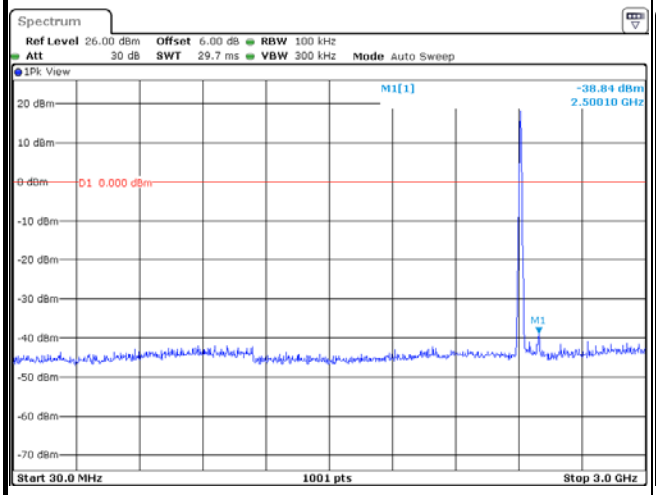
100kHz PSD reference Level



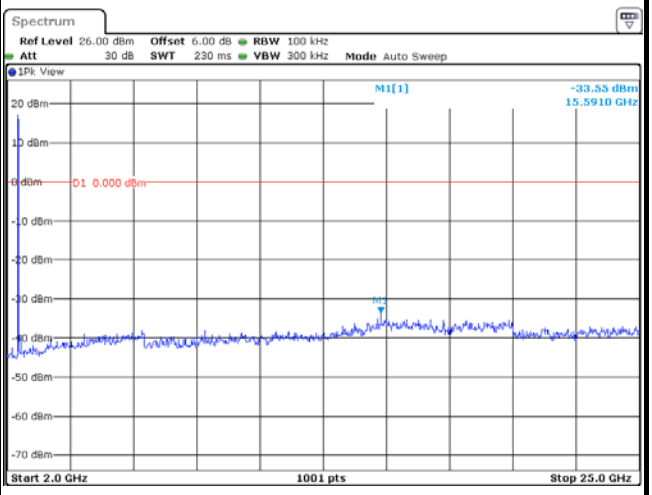
Low Channel Plot



Spurious Emission 30MHz~3GHz



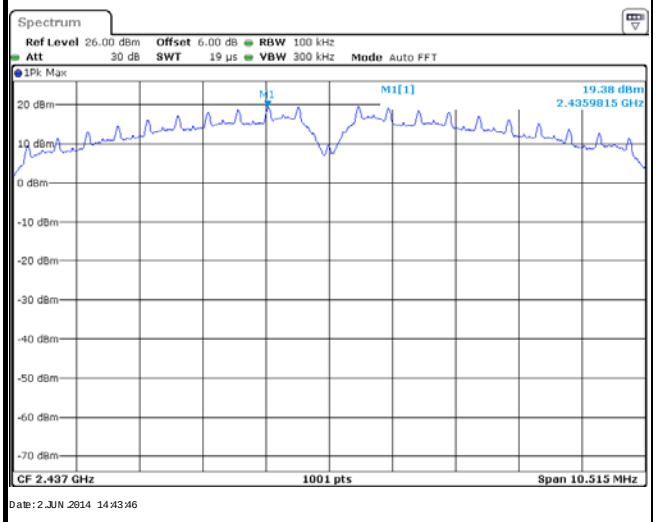
Spurious Emission 2GHz~25GHz



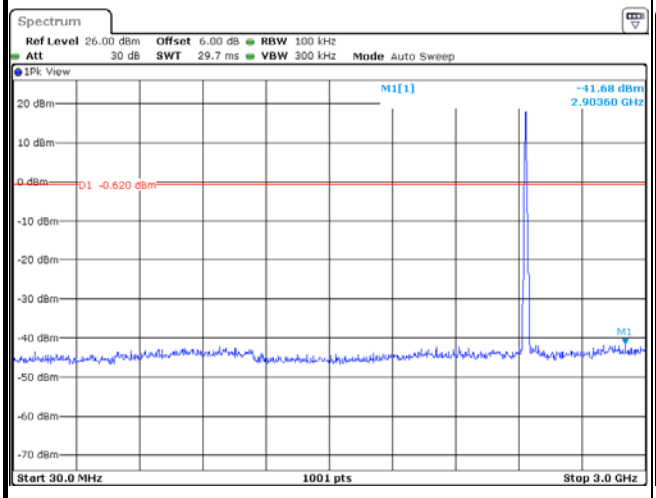
Number of TX :	1	**Chain Port**	0
Test Mode :	802.11b	**Temperature :**	23~24℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	47~48%
Test Channel :	06	**Test Engineer :**	Adonis Li

WLAN 802.11b Channel 06

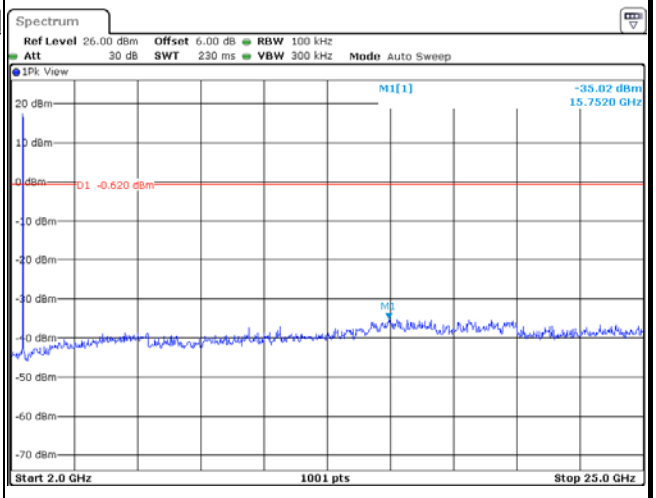
100kHz PSD reference Level



Spurious Emission 30MHz~3GHz



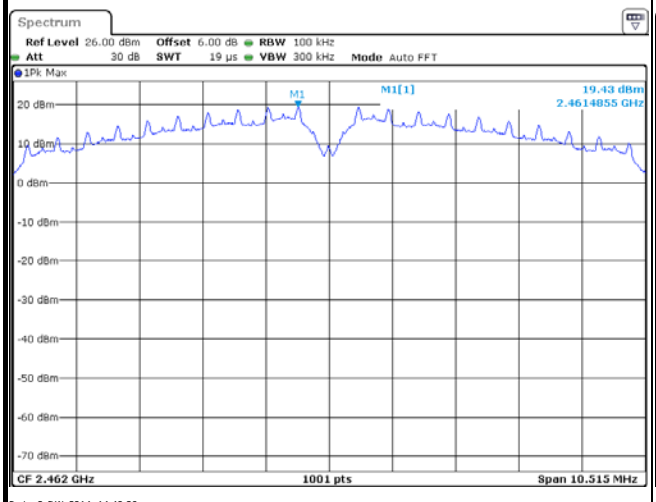
Spurious Emission 2GHz~25GHz



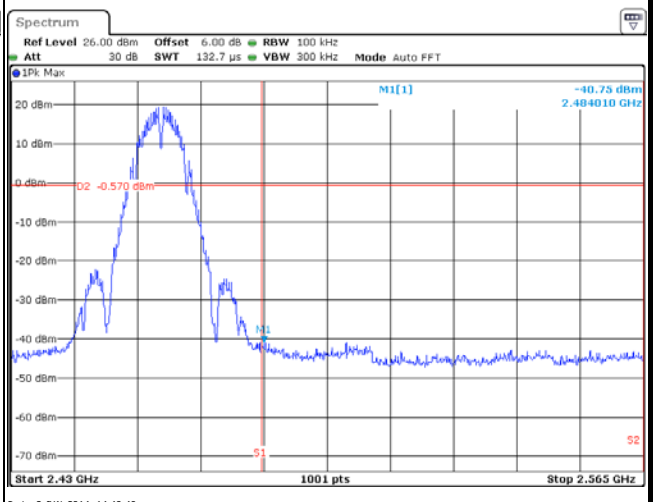
Number of TX :	1	**Chain Port**	0
Test Mode :	802.11b	**Temperature :**	23~24℃
Test Band :	2.4GHz High	**Relative Humidity :**	47~48%
Test Channel :	11	**Test Engineer :**	Adonis Li

WLAN 802.11b Channel 11

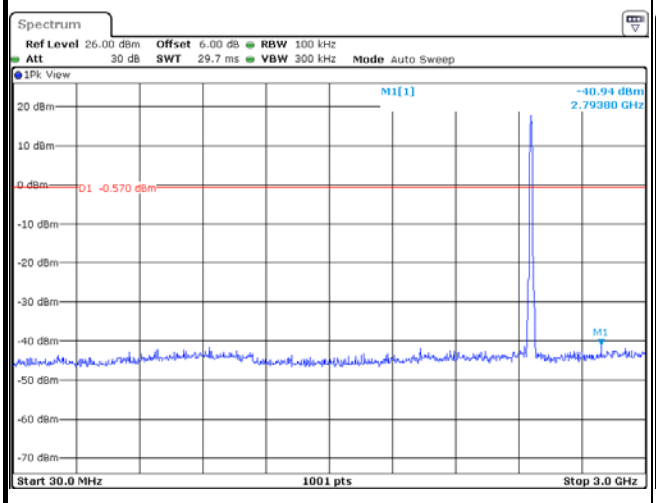
100kHz PSD reference Level



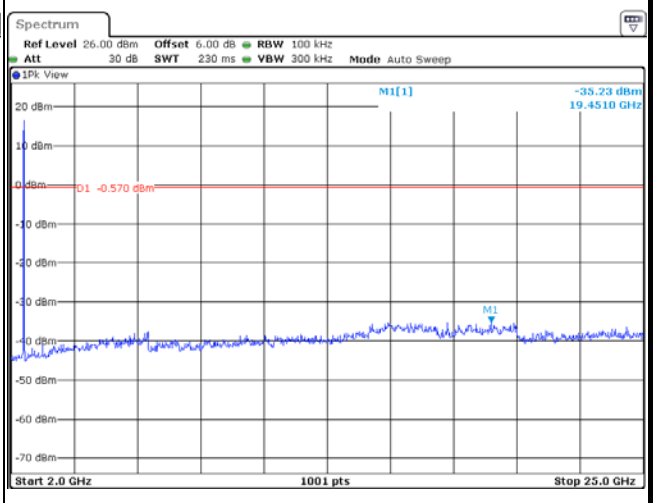
High Channel Plot



Spurious Emission 30MHz~3GHz



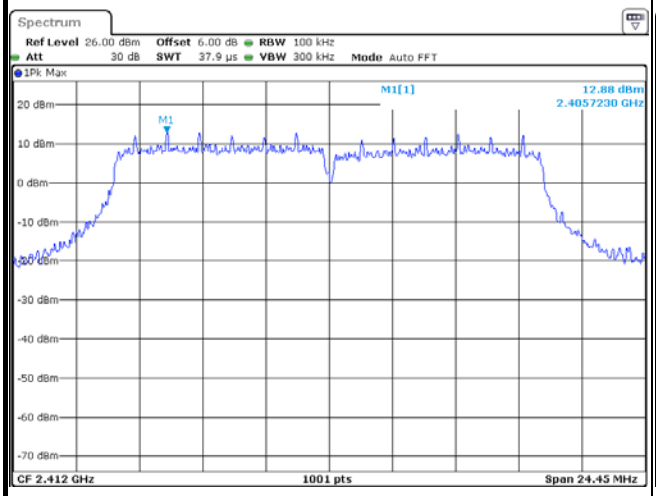
Spurious Emission 2GHz~25GHz



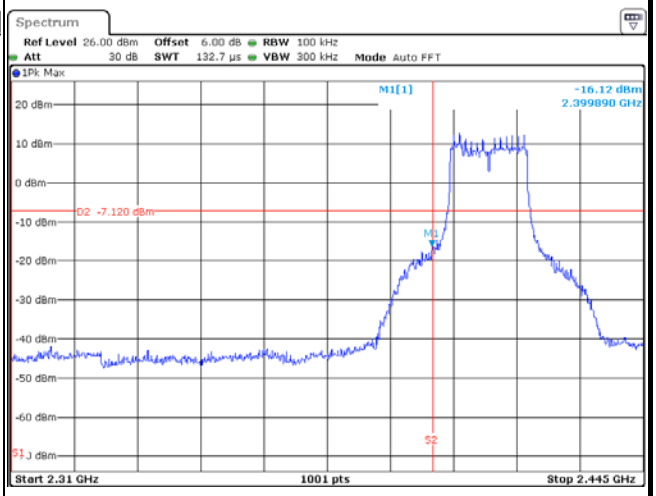
Number of TX :	1	**Chain Port**	0
Test Mode :	802.11g	**Temperature :**	23~24℃
Test Band :	2.4GHz Low	**Relative Humidity :**	47~48%
Test Channel :	01	**Test Engineer :**	Adonis Li

WLAN 802.11g Channel 01

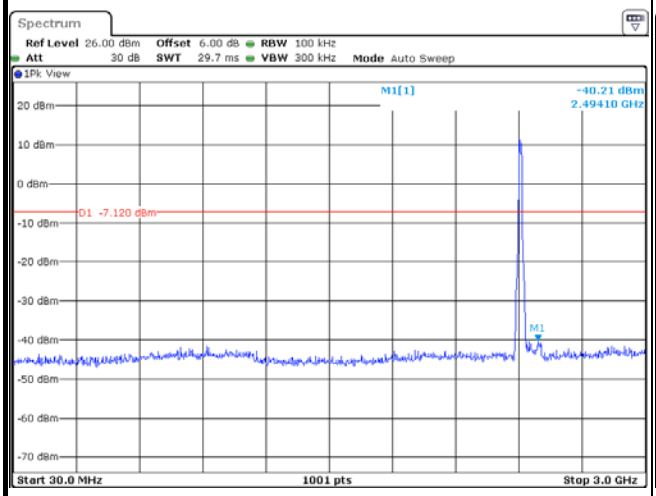
100kHz PSD reference Level



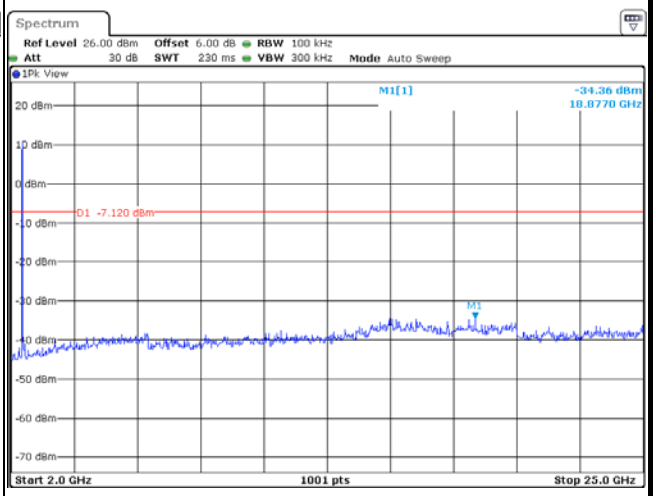
Low Channel Plot



Spurious Emission 30MHz~3GHz



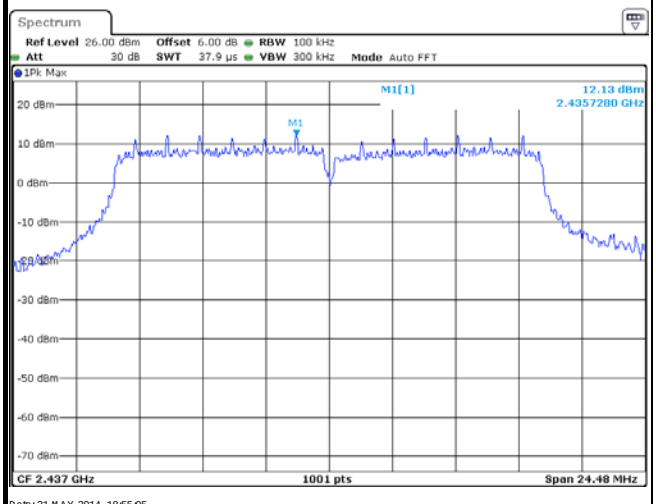
Spurious Emission 2GHz~25GHz



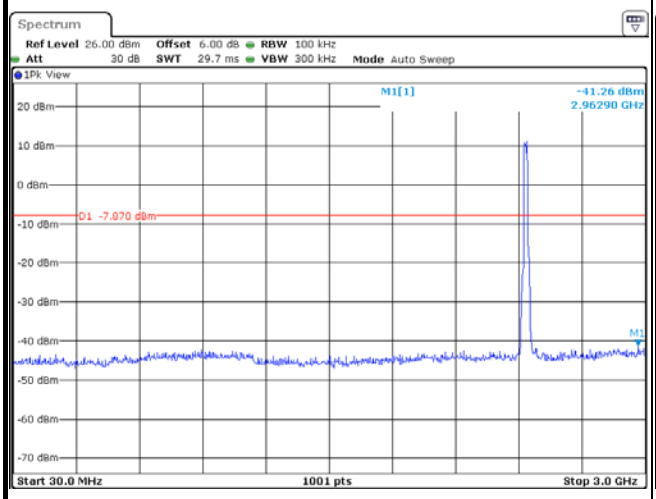
Number of TX :	1	Chain Port	0
Test Mode :	802.11g	Temperature :	23~24℃
Test Band :	2.4GHz Mid	Relative Humidity :	47~48%
Test Channel :	06	Test Engineer :	Adonis Li

WLAN 802.11g Channel 06

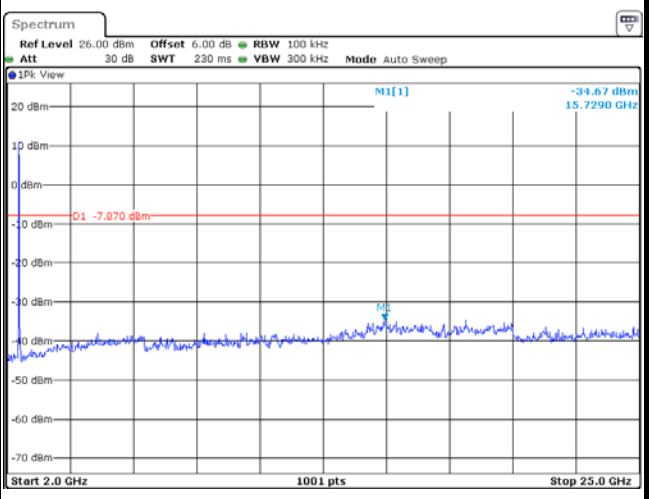
100kHz PSD reference Level



Spurious Emission 30MHz~3GHz



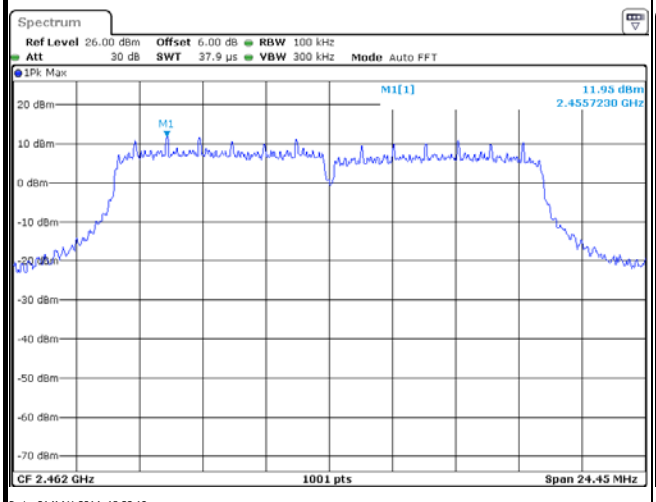
Spurious Emission 2GHz~25GHz



Number of TX :	1	Chain Port	0
Test Mode :	802.11g	Temperature :	23~24℃
Test Band :	2.4GHz High	Relative Humidity :	47~48%
Test Channel :	11	Test Engineer :	Adonis Li

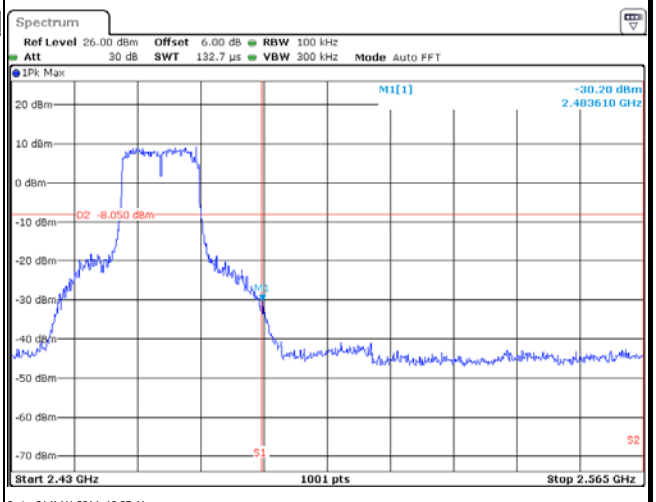
WLAN 802.11g Channel 11

100kHz PSD reference Level



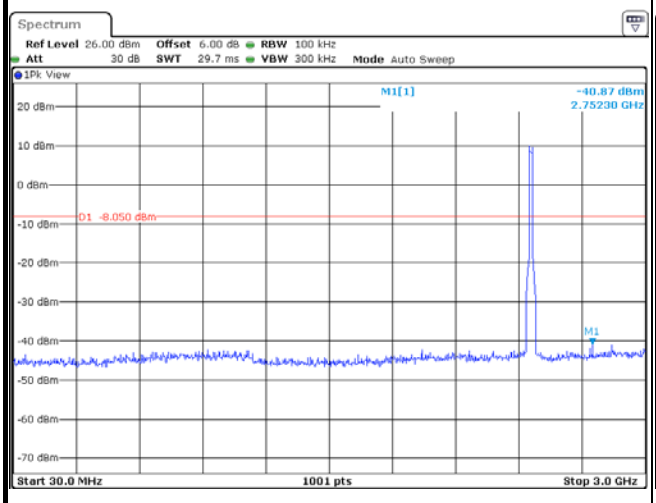
Date: 31.MAY.2014 18:33:19

High Channel Plot



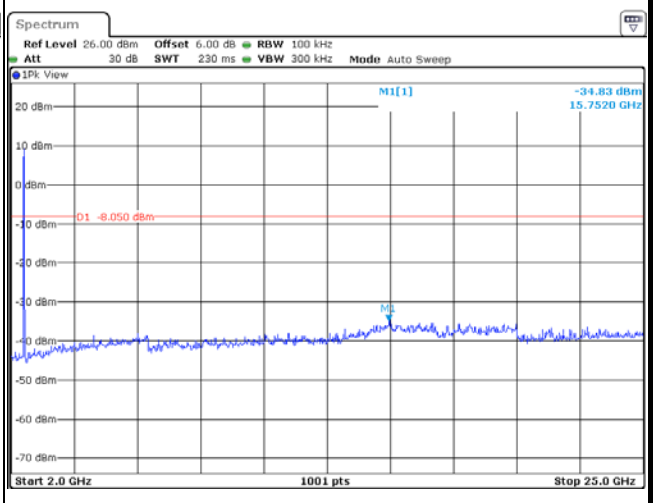
Date: 31.MAY.2014 18:37:41

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2014 18:34:05

Spurious Emission 2GHz~25GHz

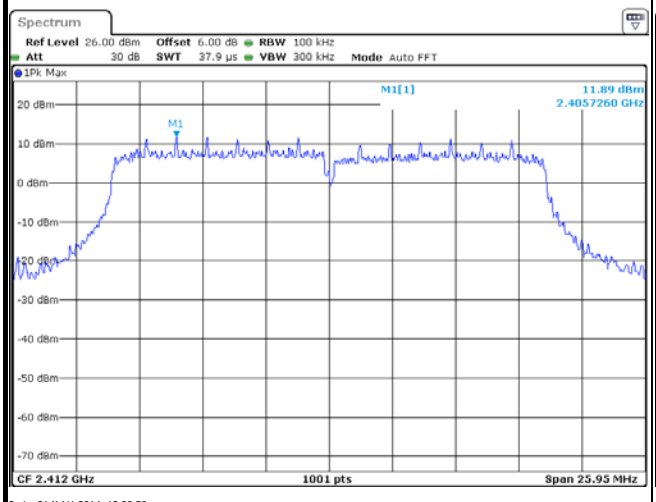


Date: 31.MAY.2014 18:34:30

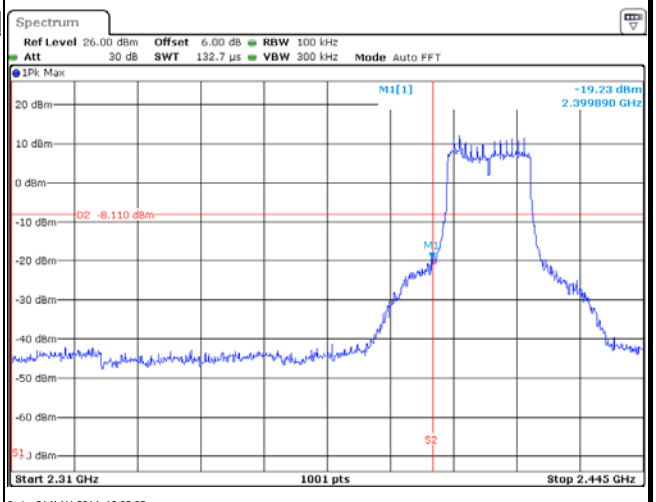
Number of TX :	1	Chain Port	0
Test Mode :	802.11n HT20	Temperature :	23~24℃
Test Band :	2.4GHz Low	Relative Humidity :	47~48%
Test Channel :	01	Test Engineer :	Adonis Li

WLAN 802.11n HT20 Channel 01

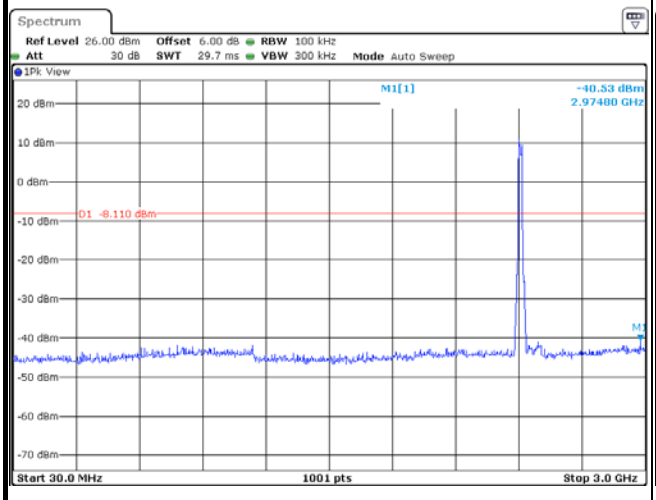
100kHz PSD reference Level



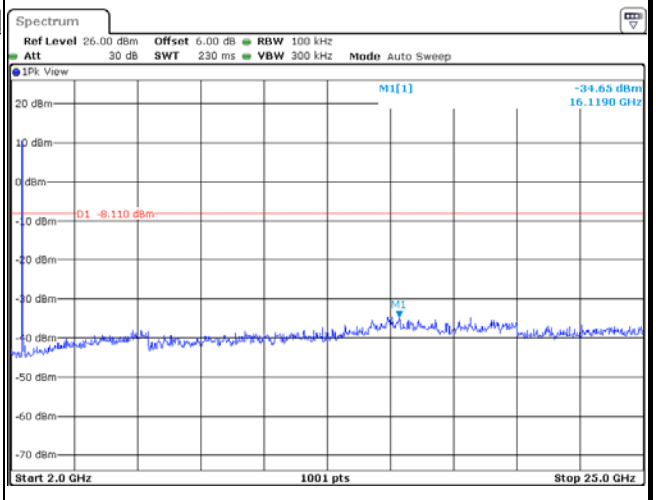
Low Channel Plot



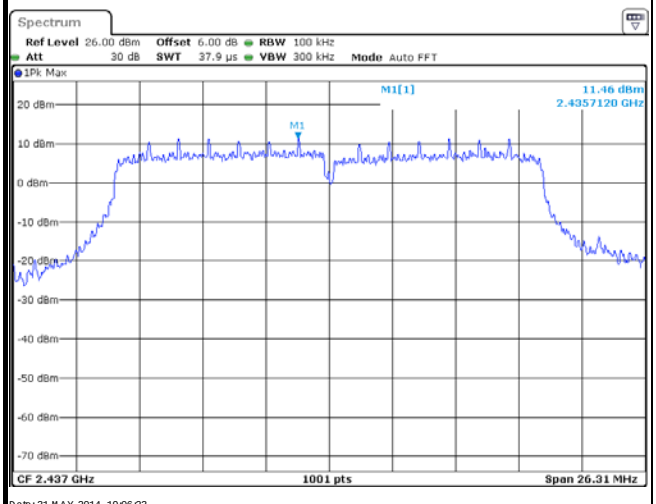
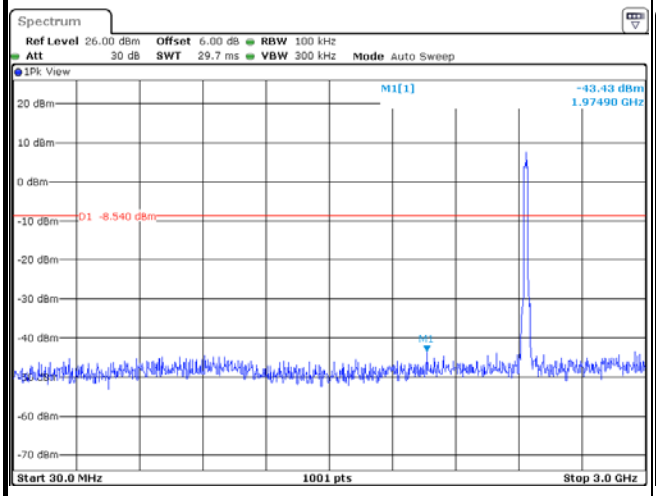
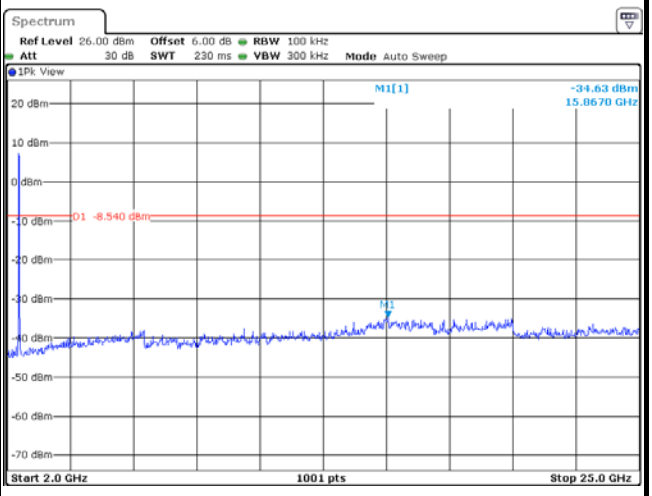
Spurious Emission 30MHz~3GHz



Spurious Emission 2GHz~25GHz



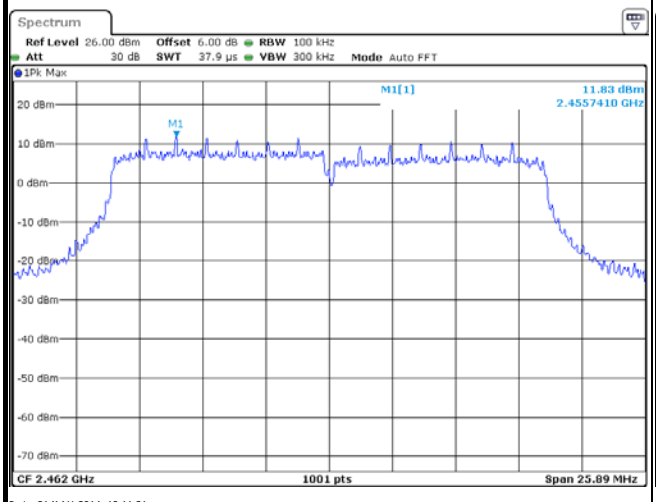
Number of TX :	1	**Chain Port**	0
Test Mode :	802.11n HT20	**Temperature :**	23~24℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	47~48%
Test Channel :	06	**Test Engineer :**	Adonis Li

WLAN 802.11n HT20 Channel 06	
100kHz PSD reference Level	
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

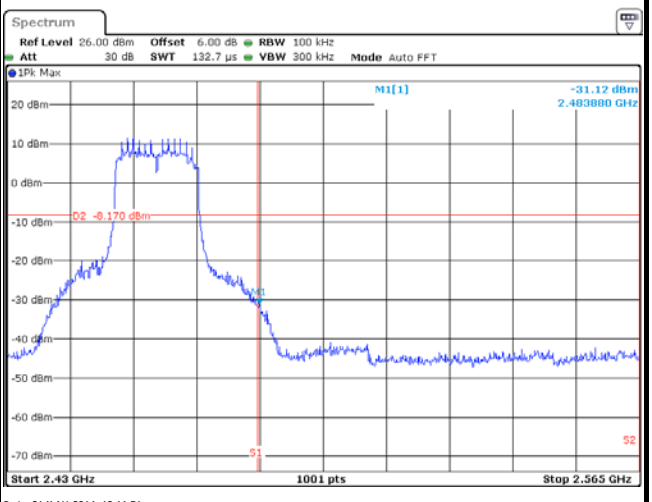
Number of TX :	1	**Chain Port**	0
Test Mode :	802.11n HT20	**Temperature :**	23~24℃
Test Band :	2.4GHz High	**Relative Humidity :**	47~48%
Test Channel :	11	**Test Engineer :**	Adonis Li

WLAN 802.11n HT20 Channel 11

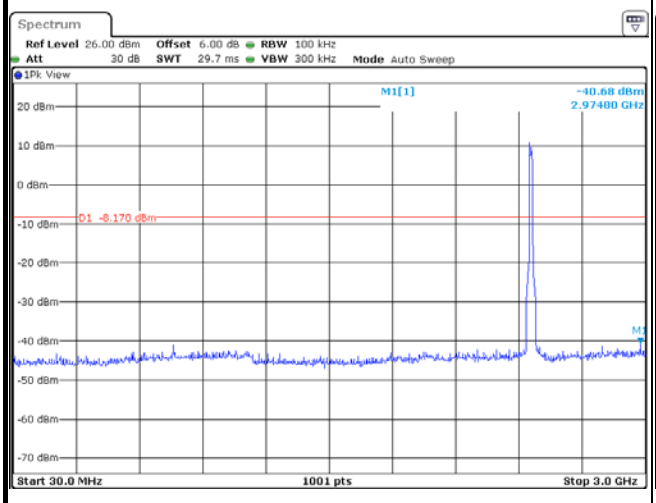
100kHz PSD reference Level



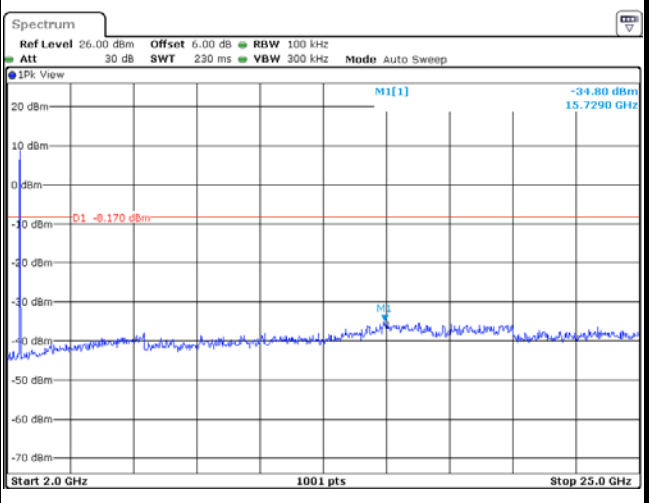
High Channel Plot



Spurious Emission 30MHz~3GHz



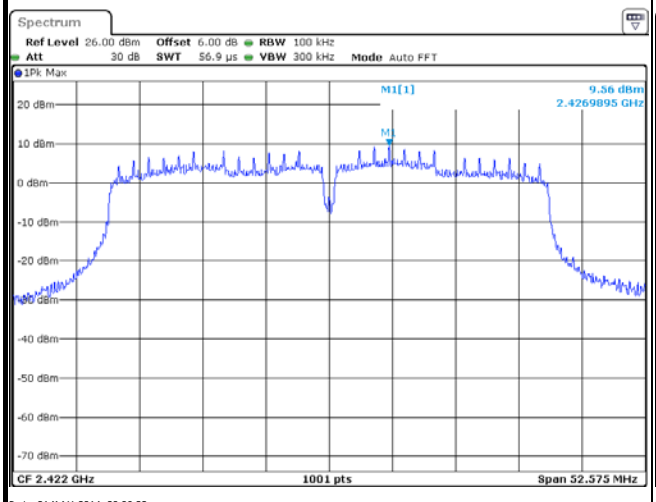
Spurious Emission 2GHz~25GHz



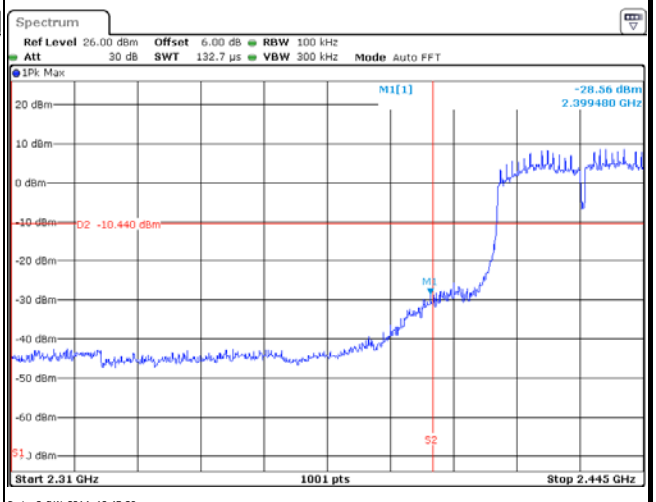
Number of TX :	1	**Chain Port**	0
Test Mode :	802.11n HT40	**Temperature :**	23~24℃
Test Band :	2.4GHz Low	**Relative Humidity :**	47~48%
Test Channel :	03	**Test Engineer :**	Adonis Li

WLAN 802.11n HT40 Channel 03

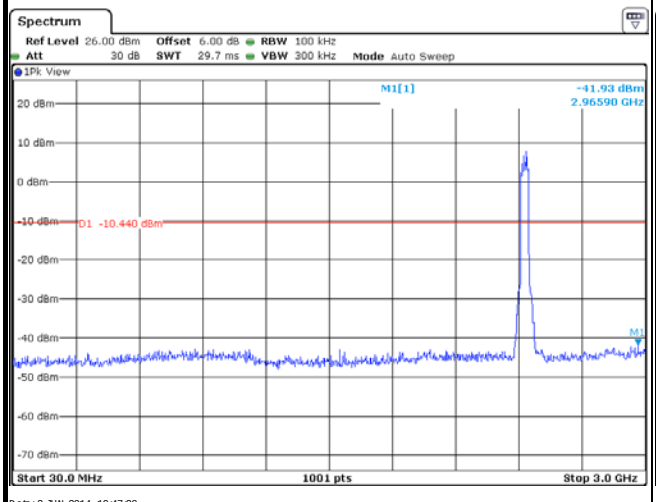
100kHz PSD reference Level



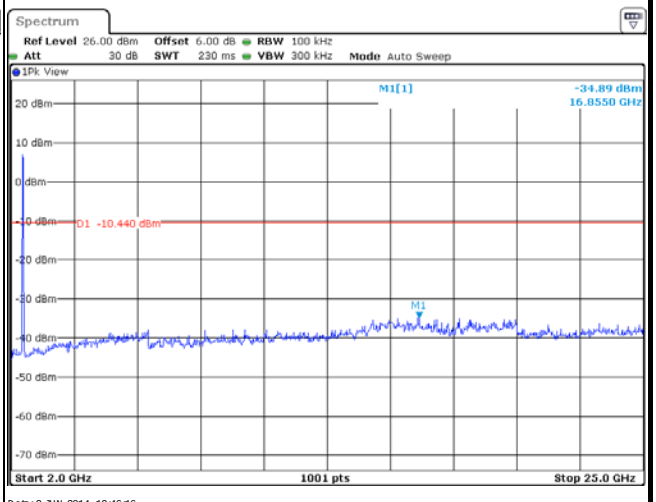
Low Channel Plot



Spurious Emission 30MHz~3GHz



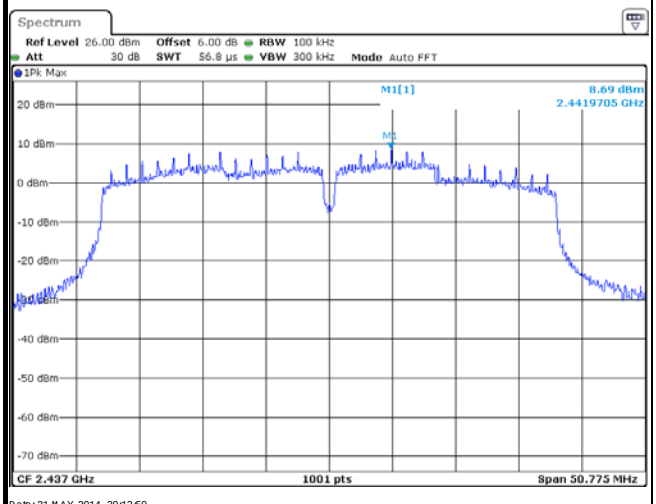
Spurious Emission 2GHz~25GHz



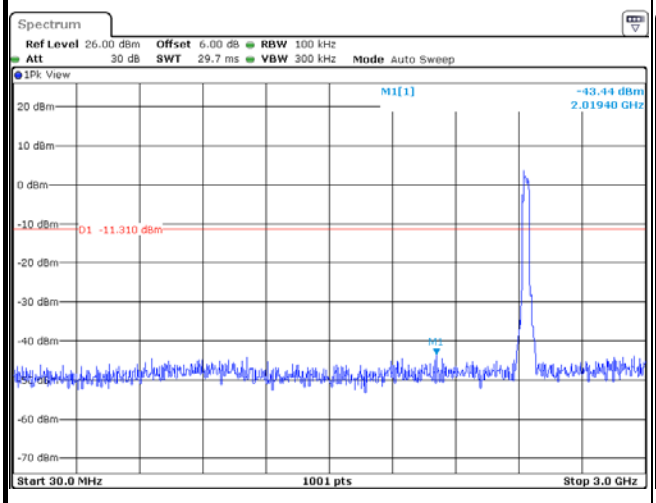
Number of TX :	1	**Chain Port**	0
Test Mode :	802.11n HT40	**Temperature :**	23~24℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	47~48%
Test Channel :	06	**Test Engineer :**	Adonis Li

WLAN 802.11n HT40 Channel 06

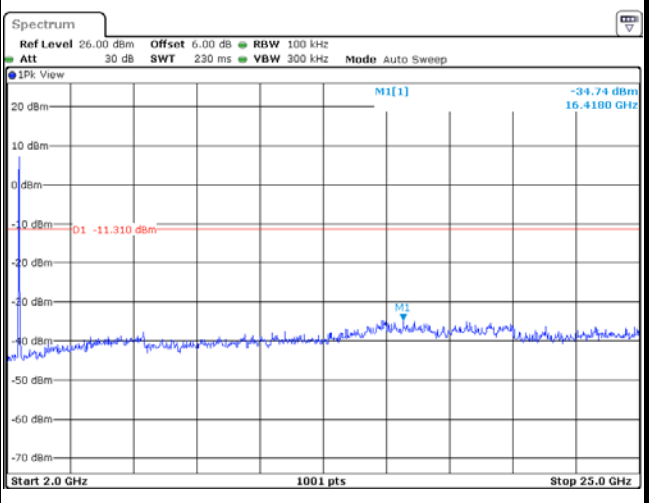
100kHz PSD reference Level



Spurious Emission 30MHz~3GHz



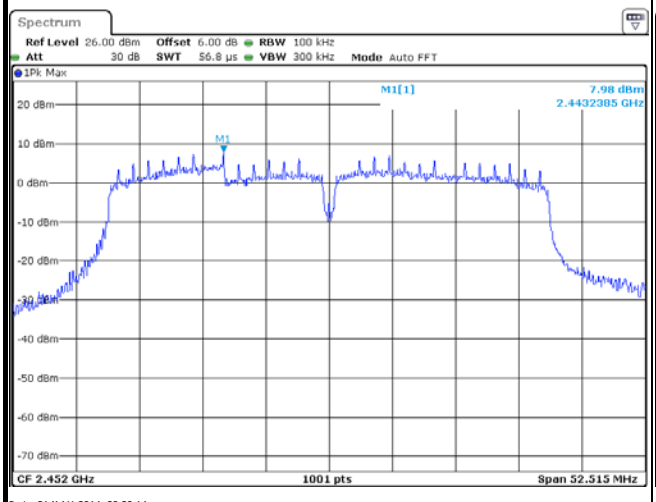
Spurious Emission 2GHz~25GHz



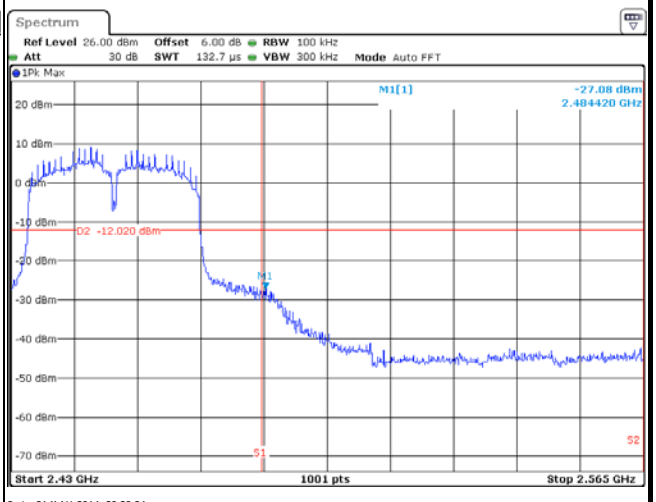
Number of TX :	1	**Chain Port**	0
Test Mode :	802.11n HT40	**Temperature :**	23~24℃
Test Band :	2.4GHz High	**Relative Humidity :**	47~48%
Test Channel :	09	**Test Engineer :**	Adonis Li

WLAN 802.11n HT40 Channel 09

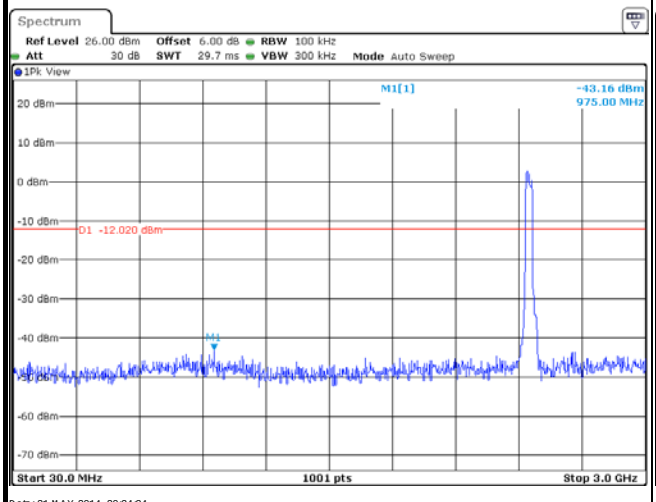
100kHz PSD reference Level



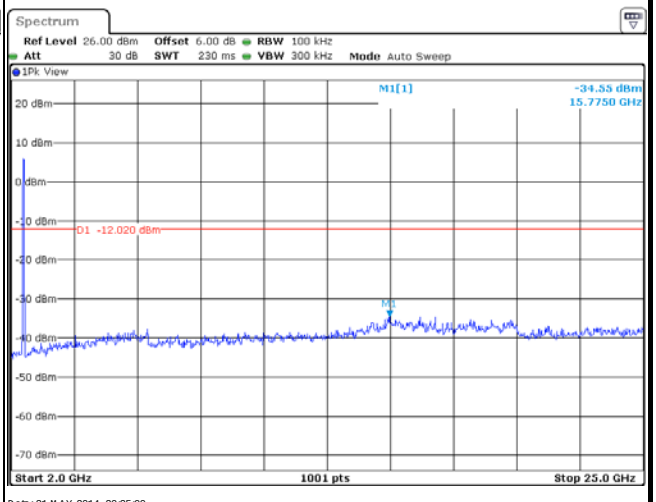
High Channel Plot



Spurious Emission 30MHz~3GHz



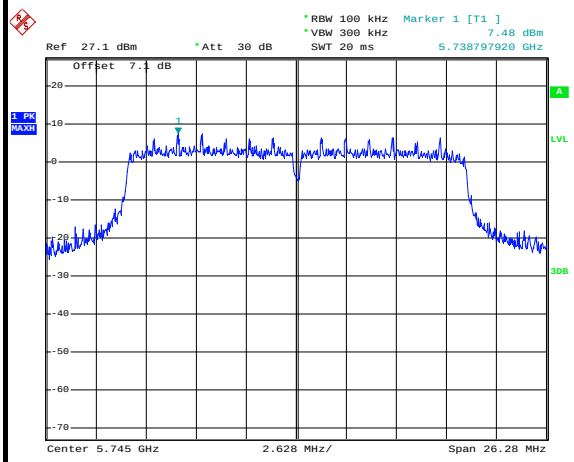
Spurious Emission 2GHz~25GHz



Number of TX :	1	**Chain Port**	0
Test Mode :	802.11n HT20	**Temperature :**	23~24℃
Test Band :	5GHz Low	**Relative Humidity :**	47~48%
Test Channel :	149	**Test Engineer :**	Adonis Li

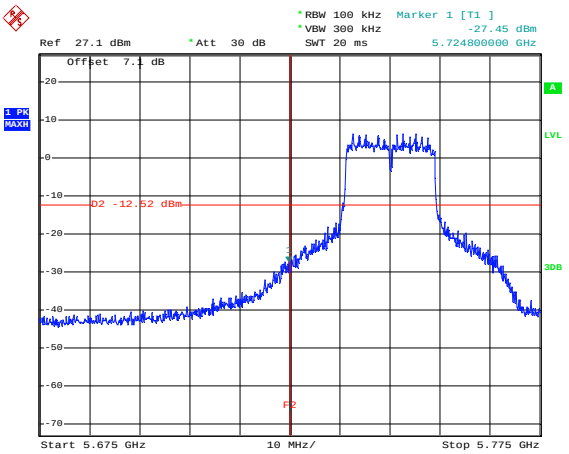
WLAN 802.11n HT20 Channel 149

100kHz PSD reference Level



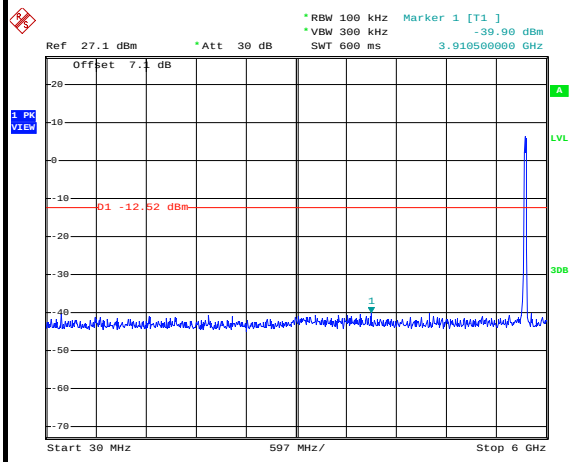
Date: 31.MAY.2014 15:08:10

Low Channel Plot



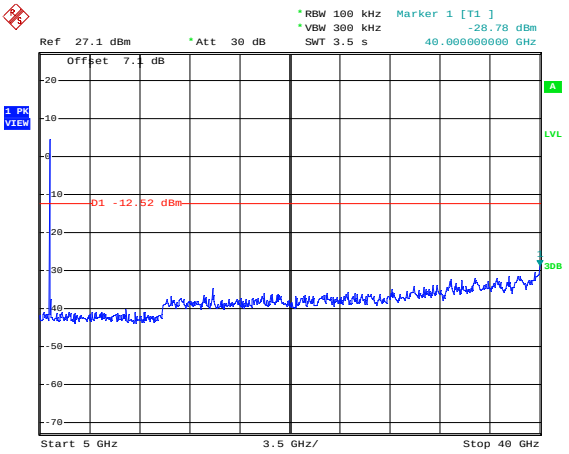
Date: 31.MAY.2014 15:08:24

Spurious Emission 30MHz~6GHz



Date: 31.MAY.2014 15:08:43

Spurious Emission 5GHz~40GHz

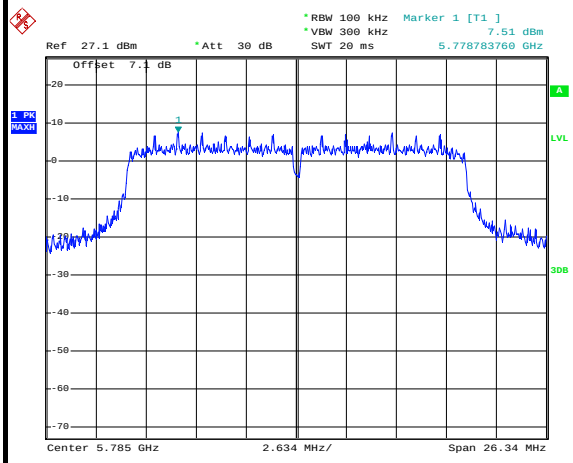


Date: 31.MAY.2014 15:09:02

Number of TX :	1	**Chain Port**	0
Test Mode :	802.11n HT20	**Temperature :**	23~24℃
Test Band :	5GHz Mid	**Relative Humidity :**	47~48%
Test Channel :	157	**Test Engineer :**	Adonis Li

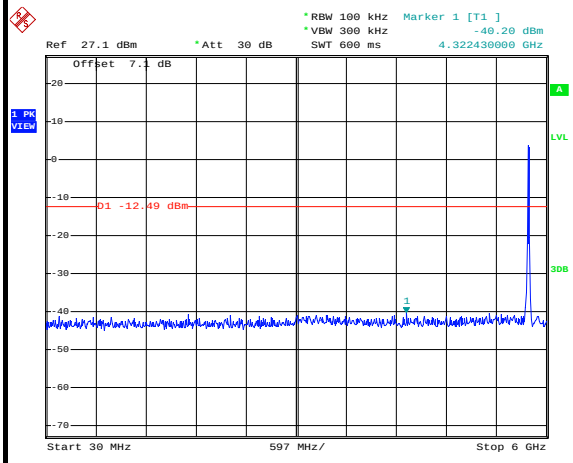
WLAN 802.11n HT20 Channel 157

100kHz PSD reference Level



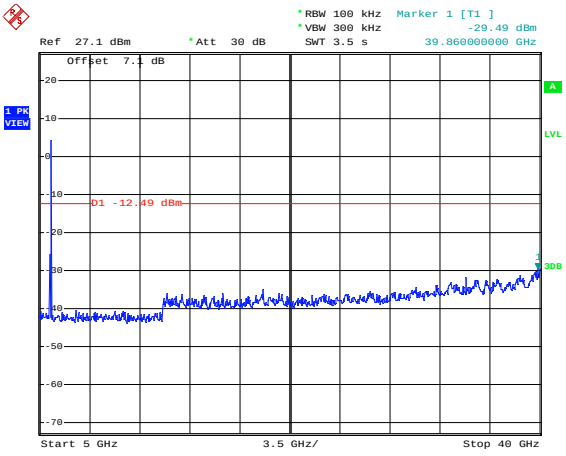
Date: 31.MAY.2014 15:11:47

Spurious Emission 30MHz~6GHz



Date: 31.MAY.2014 15:12:07

Spurious Emission 5GHz~40GHz

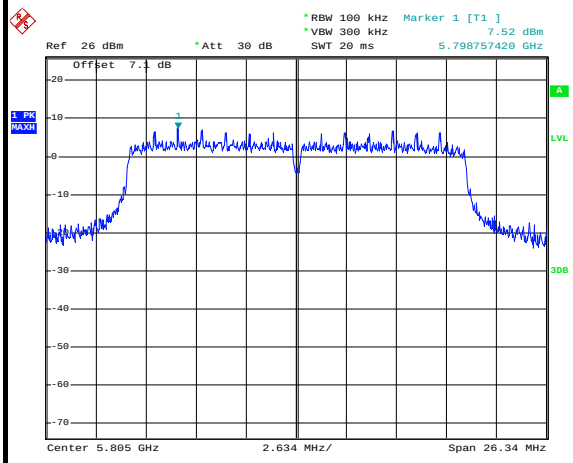


Date: 31.MAY.2014 15:12:26

Number of TX :	1	**Chain Port**	0
Test Mode :	802.11n HT20	**Temperature :**	23~24℃
Test Band :	5GHz High	**Relative Humidity :**	47~48%
Test Channel :	161	**Test Engineer :**	Adonis Li

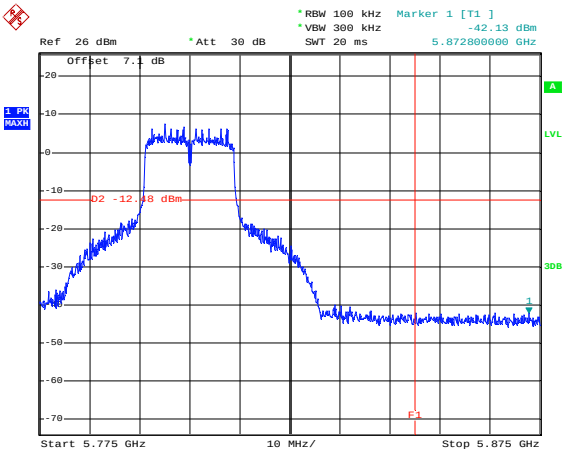
WLAN 802.11n HT20 Channel 161

100kHz PSD reference Level



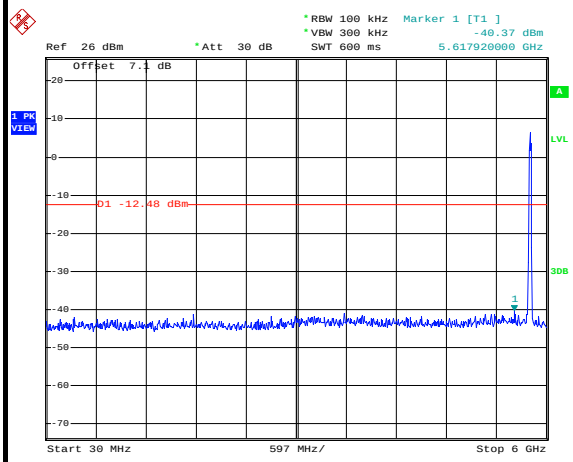
Date: 1.JUN.2014 21:08:51

High Channel Plot



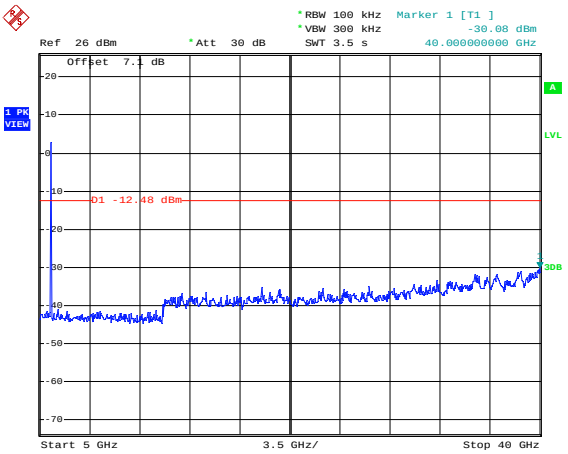
Date: 1.JUN.2014 21:09:05

Spurious Emission 30MHz~6GHz



Date: 1.JUN.2014 21:09:24

Spurious Emission 5GHz~40GHz



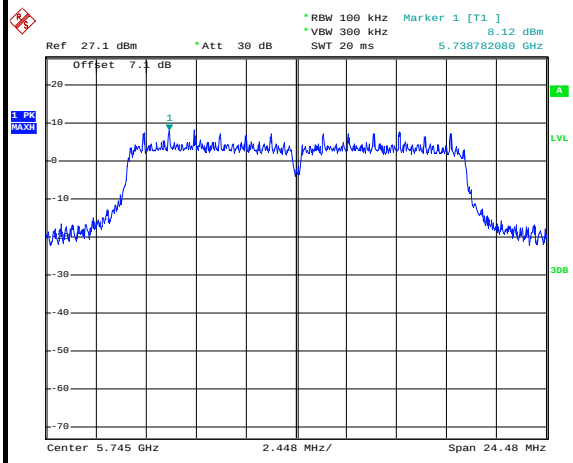
Date: 1.JUN.2014 21:09:43

Number of TX = 1, Chain Port 1

Number of TX :	1	**Chain Port**	1
Test Mode :	802.11a	**Temperature :**	23~24℃
Test Band :	5GHz Low	**Relative Humidity :**	47~48%
Test Channel :	149	**Test Engineer :**	Adonis Li

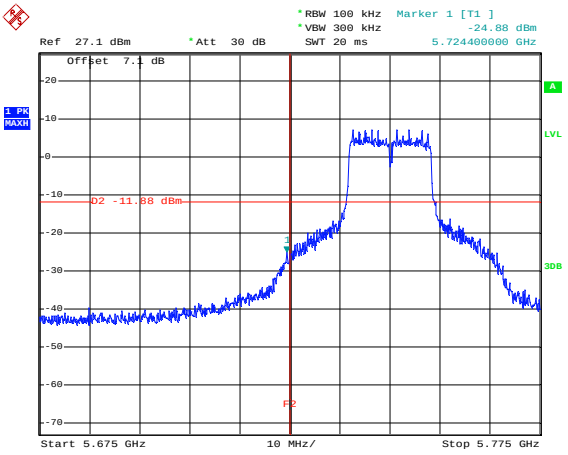
WLAN 802.11a Channel 149

100kHz PSD reference Level



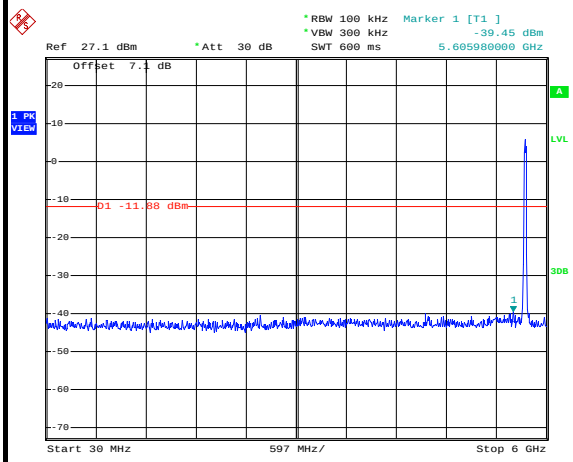
Date: 31.MAY.2014 14:51:46

Low Channel Plot



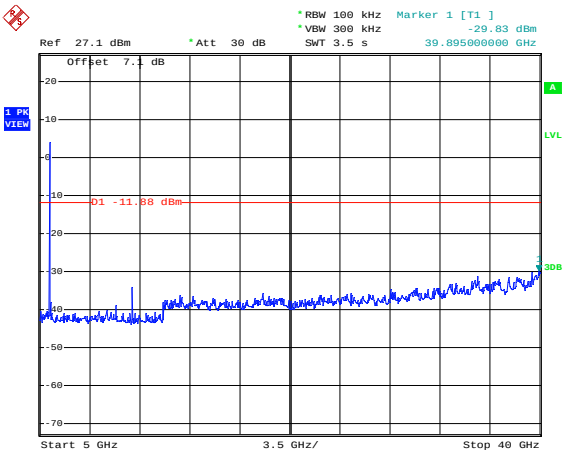
Date: 31.MAY.2014 14:52:00

Spurious Emission 30MHz~6GHz



Date: 31.MAY.2014 14:52:19

Spurious Emission 5GHz~40GHz

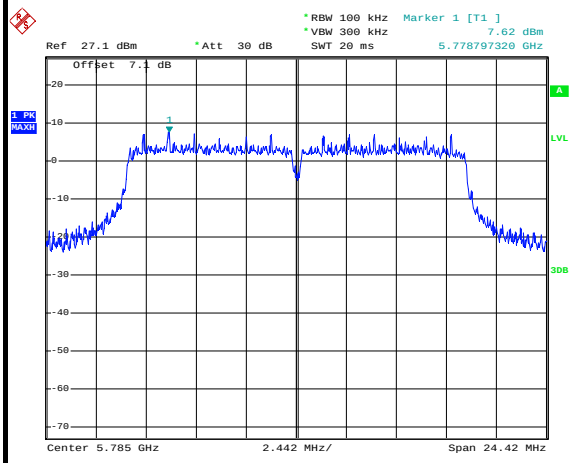


Date: 31.MAY.2014 14:52:38

Number of TX :	1	**Chain Port**	1
Test Mode :	802.11a	**Temperature :**	23~24℃
Test Band :	5GHz Mid	**Relative Humidity :**	47~48%
Test Channel :	157	**Test Engineer :**	Adonis Li

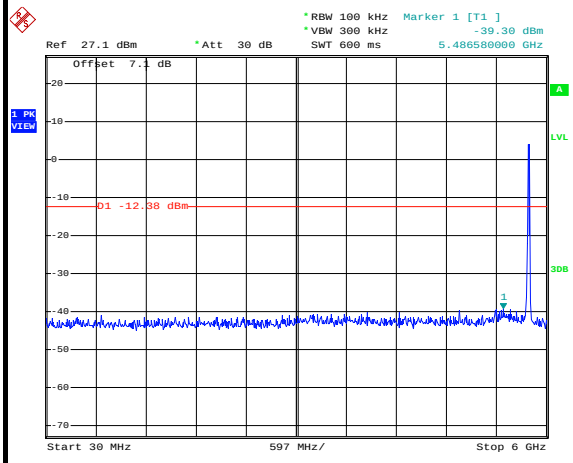
WLAN 802.11a Channel 157

100kHz PSD reference Level



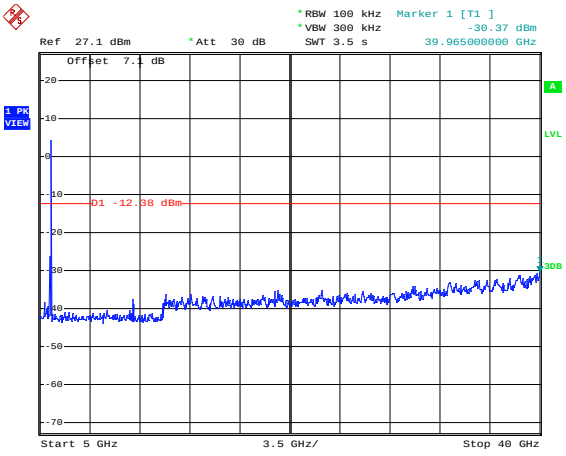
Date: 31.MAY.2014 14:54:21

Spurious Emission 30MHz~6GHz



Date: 31.MAY.2014 14:54:40

Spurious Emission 5GHz~40GHz

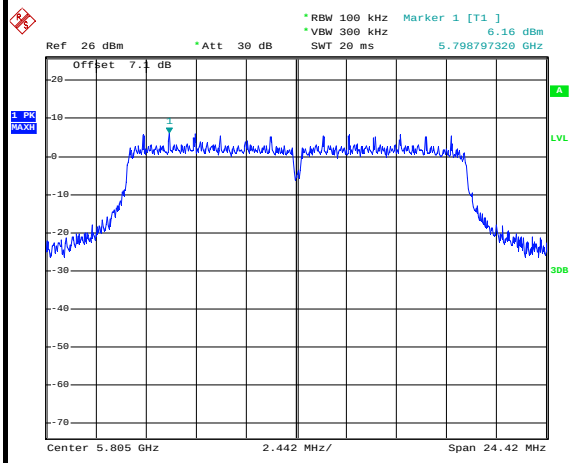


Date: 31.MAY.2014 14:54:59

Number of TX :	1	**Chain Port**	1
Test Mode :	802.11a	**Temperature :**	23~24℃
Test Band :	5GHz High	**Relative Humidity :**	47~48%
Test Channel :	161	**Test Engineer :**	Adonis Li

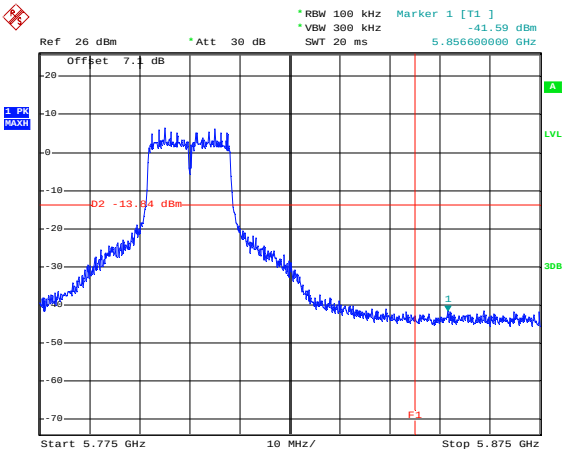
WLAN 802.11a Channel 161

100kHz PSD reference Level



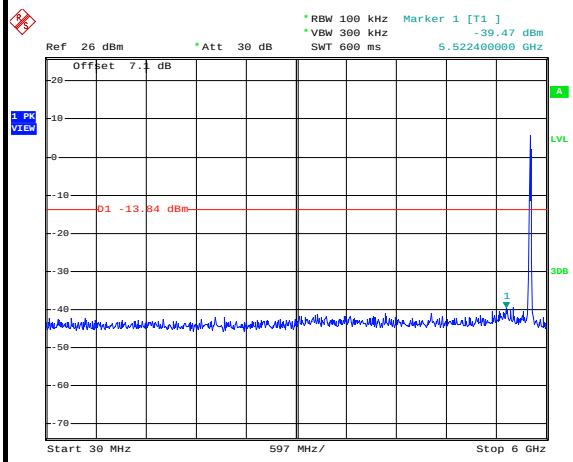
Date: 1.JUN.2014 21:04:18

High Channel Plot



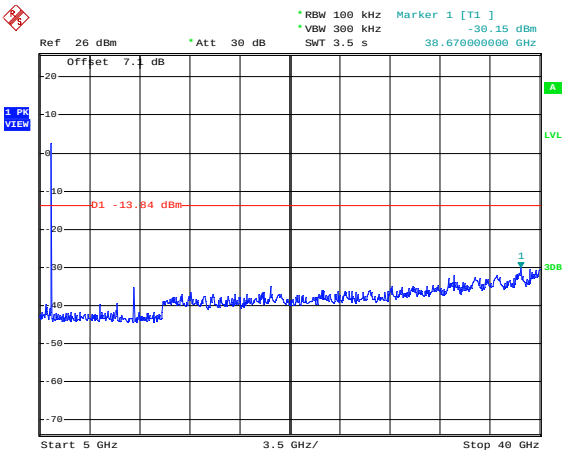
Date: 1.JUN.2014 21:04:32

Spurious Emission 30MHz~6GHz



Date: 1.JUN.2014 21:04:51

Spurious Emission 5GHz~40GHz

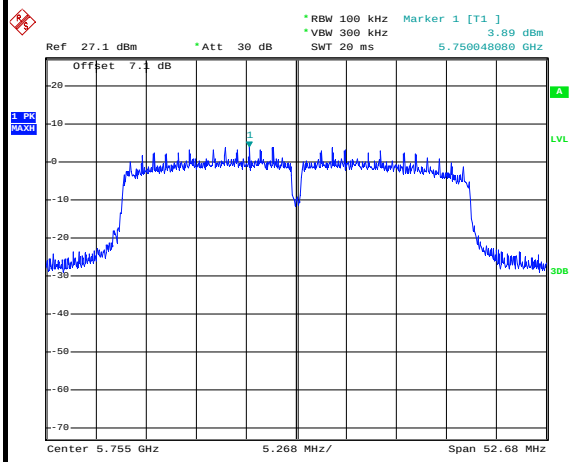


Date: 1.JUN.2014 21:05:09

Number of TX :	1	**Chain Port**	1
Test Mode :	802.11n HT40	**Temperature :**	23~24℃
Test Band :	5GHz Low	**Relative Humidity :**	47~48%
Test Channel :	151	**Test Engineer :**	Adonis Li

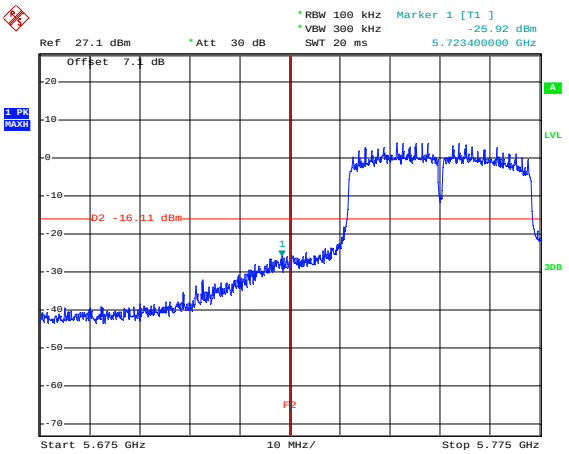
WLAN 802.11n HT40 Channel 151

100kHz PSD reference Level



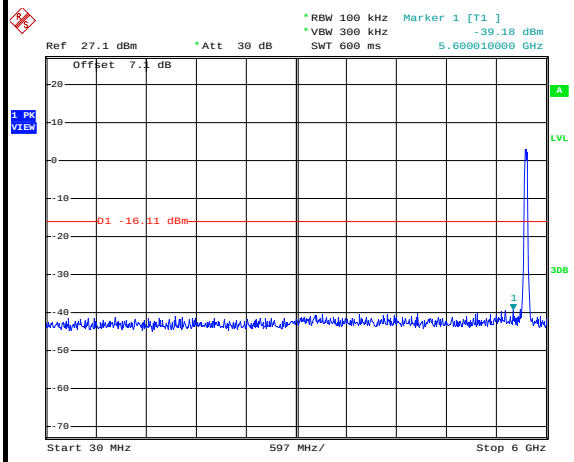
Date: 31.MAY.2014 15:41:32

Low Channel Plot



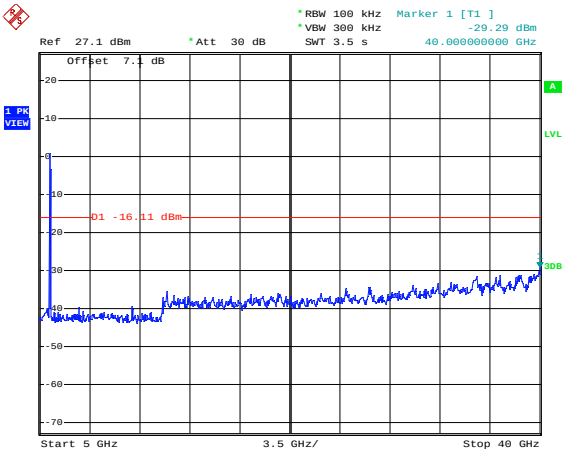
Date: 31.MAY.2014 15:41:46

Spurious Emission 30MHz~6GHz



Date: 31.MAY.2014 15:42:05

Spurious Emission 5GHz~40GHz

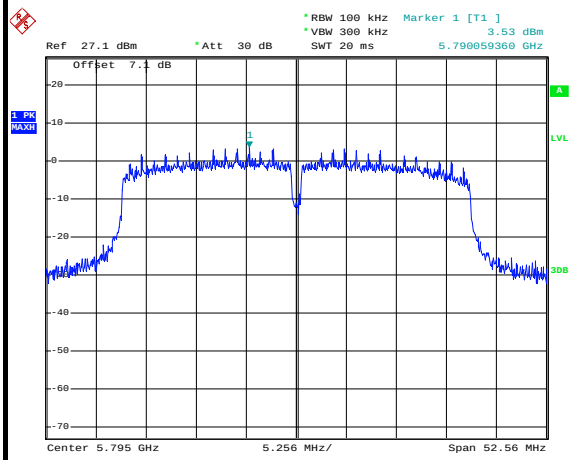


Date: 31.MAY.2014 15:42:24

Number of TX :	1	Chain Port	1
Test Mode :	802.11n HT40	Temperature :	23~24℃
Test Band :	5GHz High	Relative Humidity :	47~48%
Test Channel :	159	Test Engineer :	Adonis Li

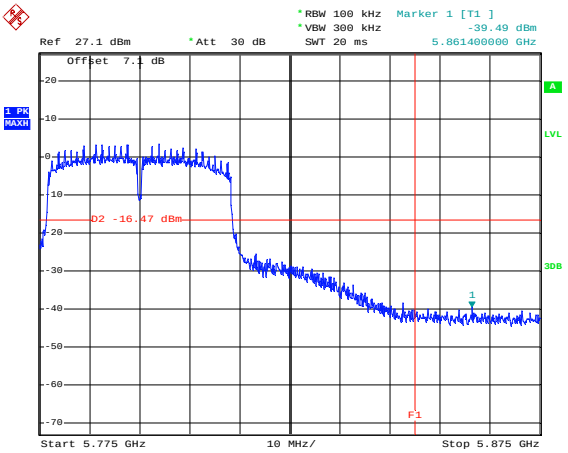
WLAN 802.11n HT40 Channel 159

100kHz PSD reference Level



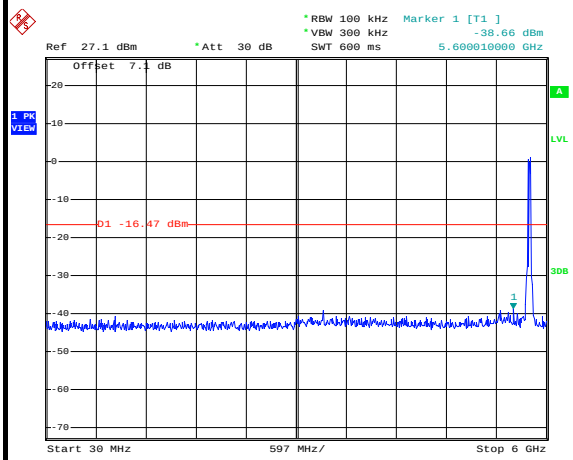
Date: 31.MAY.2014 15:44:55

High Channel Plot



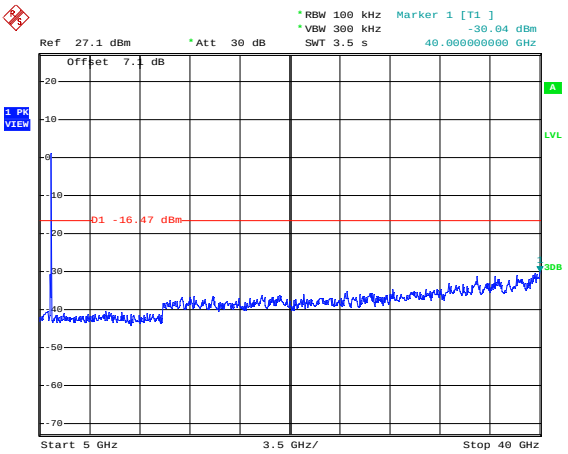
Date: 31.MAY.2014 15:45:09

Spurious Emission 30MHz~6GHz



Date: 31.MAY.2014 15:45:28

Spurious Emission 5GHz~40GHz



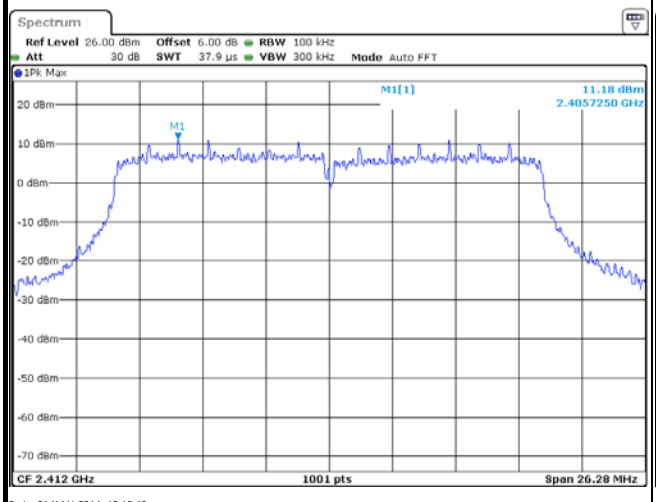
Date: 31.MAY.2014 15:45:47

Number of TX = 2, Chain Port 0

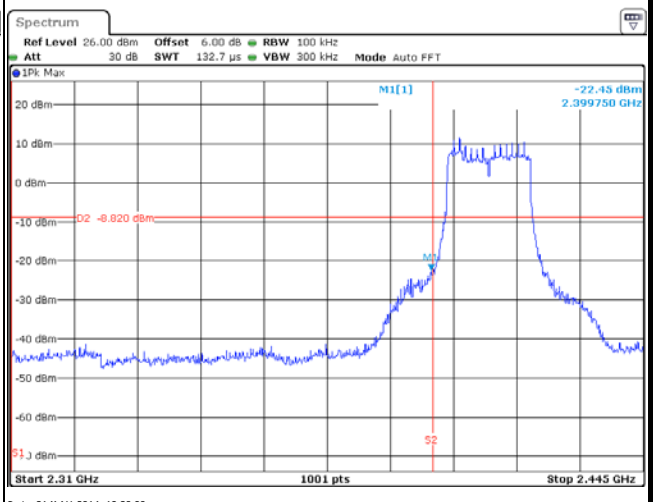
Number of TX :	2	**Chain Port**	0
Test Mode :	802.11n HT20	**Temperature :**	23~24℃
Test Band :	2.4GHz Low	**Relative Humidity :**	47~48%
Test Channel :	01	**Test Engineer :**	Adonis Li

WLAN 802.11n HT20 Channel 01

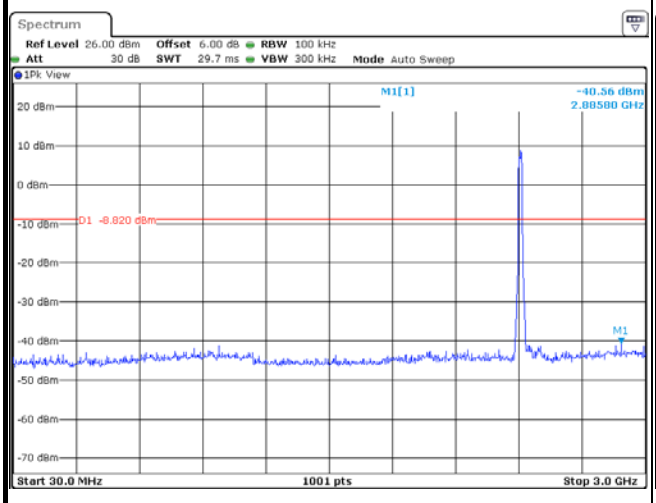
100kHz PSD reference Level



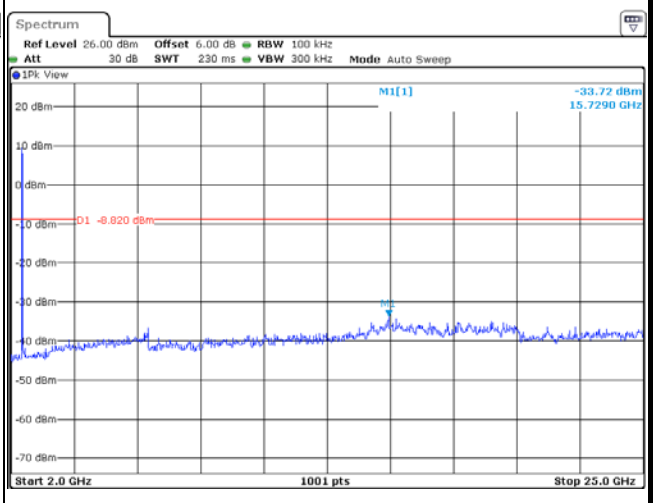
Low Channel Plot



Spurious Emission 30MHz~3GHz



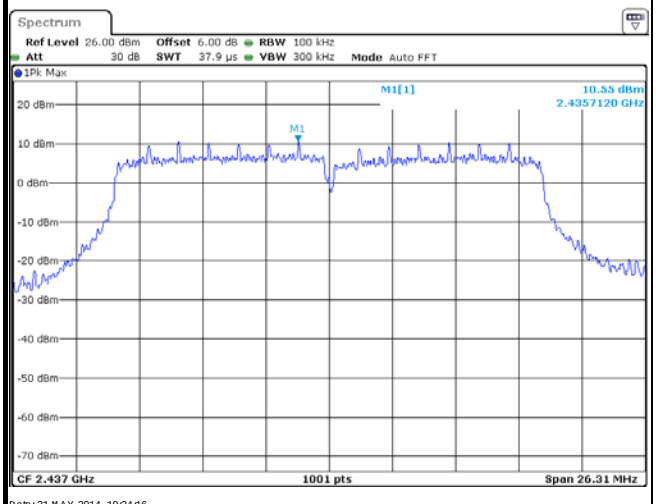
Spurious Emission 2GHz~25GHz



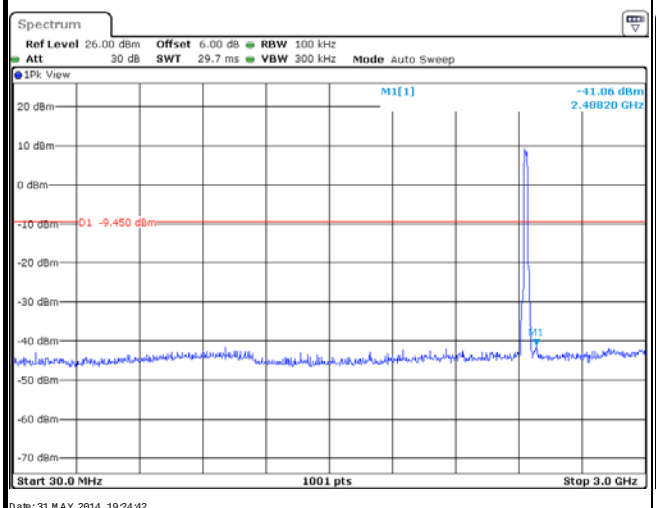
Number of TX :	2	**Chain Port**	0
Test Mode :	802.11n HT20	**Temperature :**	23~24℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	47~48%
Test Channel :	06	**Test Engineer :**	Adonis Li

WLAN 802.11n HT20 Channel 06

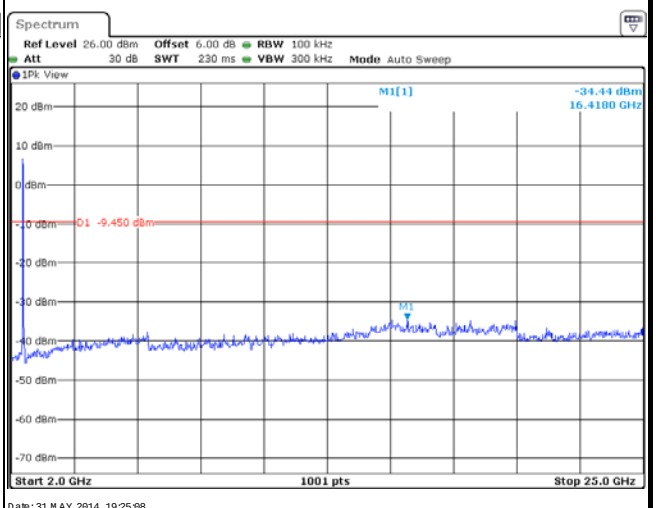
100kHz PSD reference Level



Spurious Emission 30MHz~3GHz



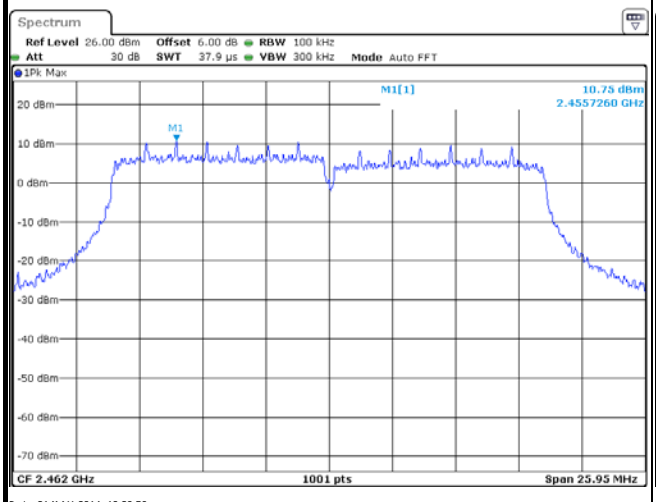
Spurious Emission 2GHz~25GHz



Number of TX :	2	**Chain Port**	0
Test Mode :	802.11n HT20	**Temperature :**	23~24℃
Test Band :	2.4GHz High	**Relative Humidity :**	47~48%
Test Channel :	11	**Test Engineer :**	Adonis Li

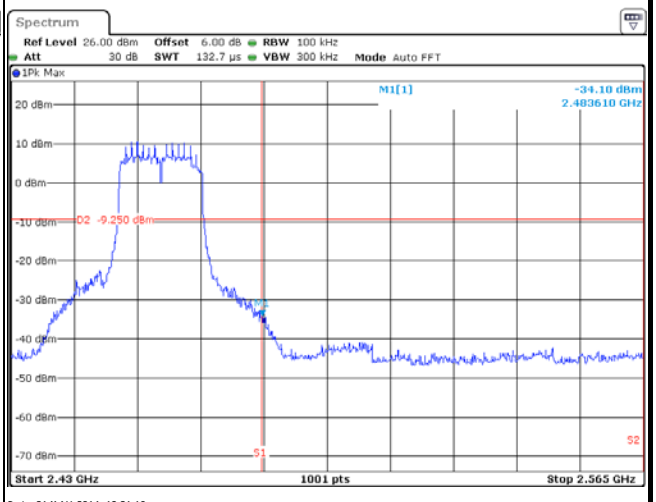
WLAN 802.11n HT20 Channel 11

100kHz PSD reference Level



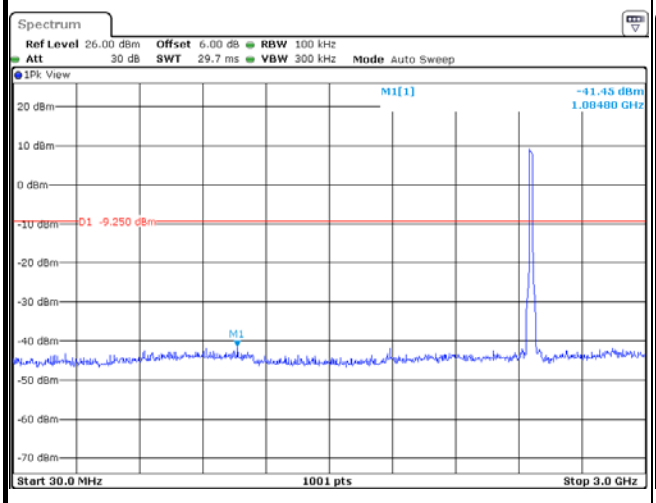
Date: 31.MAY.2014 19:30:56

High Channel Plot



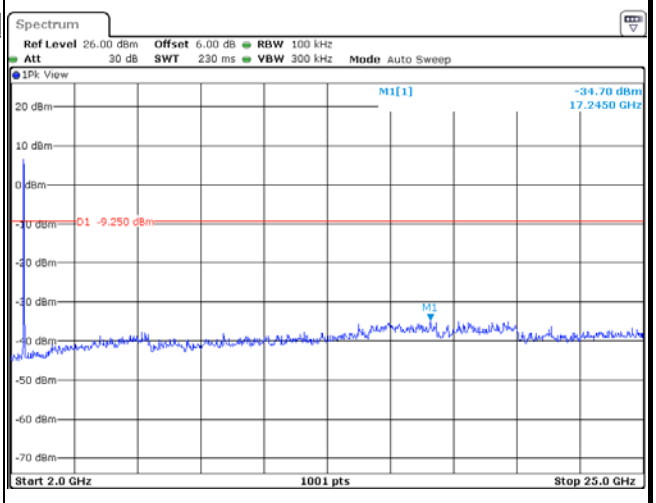
Date: 31.MAY.2014 19:31:16

Spurious Emission 30MHz~3GHz



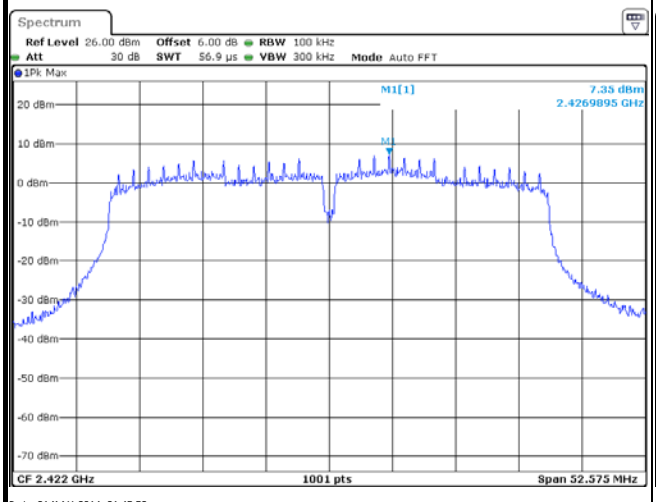
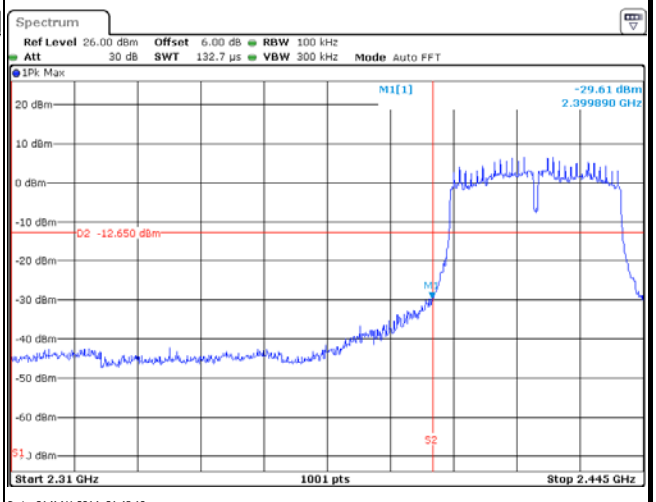
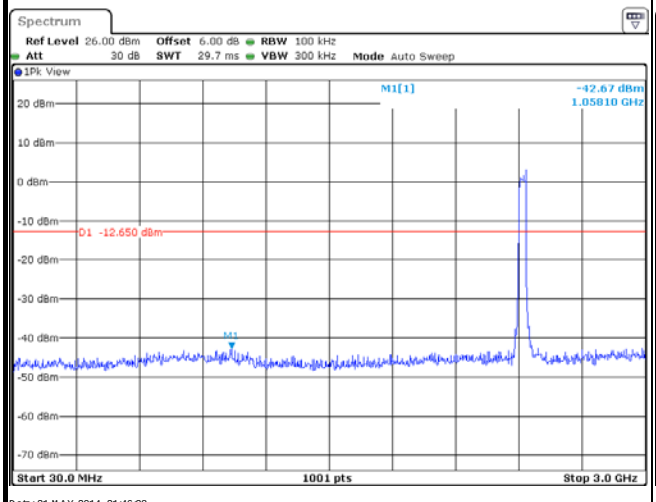
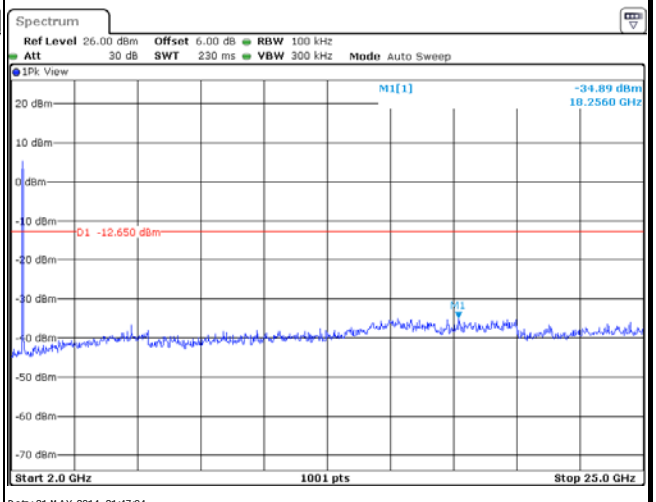
Date: 31.MAY.2014 19:33:02

Spurious Emission 2GHz~25GHz



Date: 31.MAY.2014 19:33:28

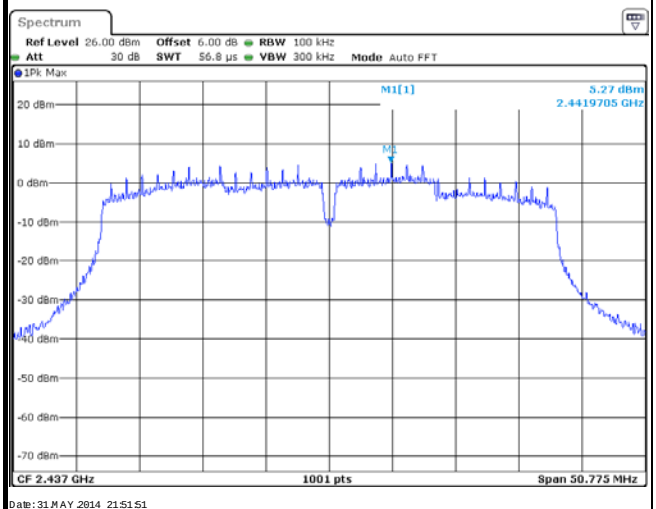
Number of TX :	2	Chain Port	0
Test Mode :	802.11n HT40	Temperature :	23~24℃
Test Band :	2.4GHz Low	Relative Humidity :	47~48%
Test Channel :	03	Test Engineer :	Adonis Li

WLAN 802.11n HT40 Channel 03	
100kHz PSD reference Level	Low Channel Plot
	
Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

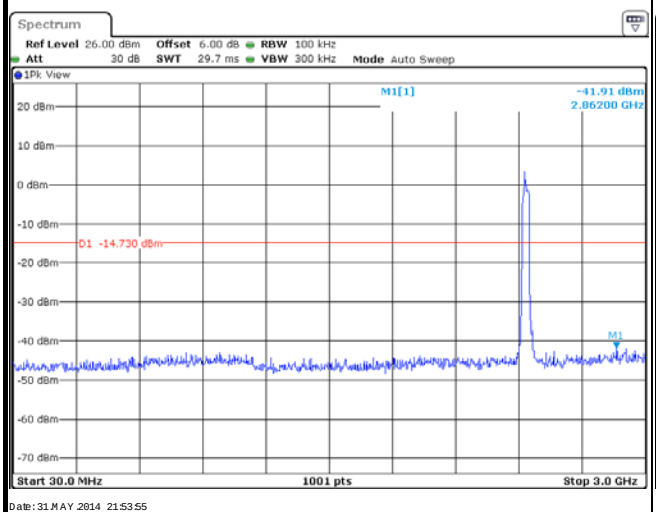
Number of TX :	2	**Chain Port**	0
Test Mode :	802.11n HT40	**Temperature :**	23~24℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	47~48%
Test Channel :	06	**Test Engineer :**	Adonis Li

WLAN 802.11n HT40 Channel 06

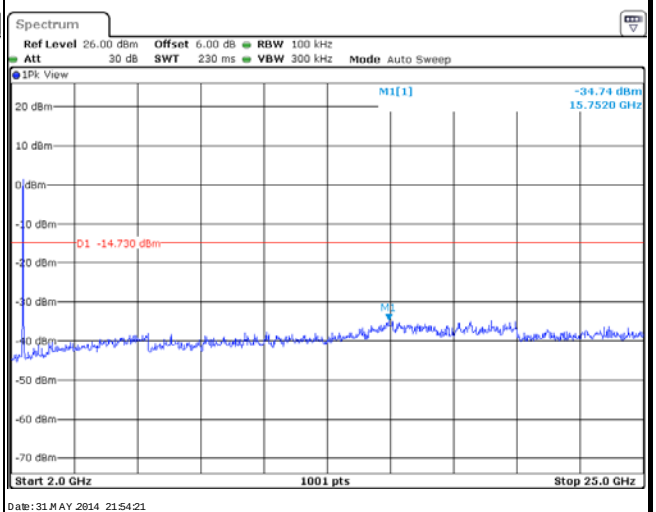
100kHz PSD reference Level



Spurious Emission 30MHz~3GHz



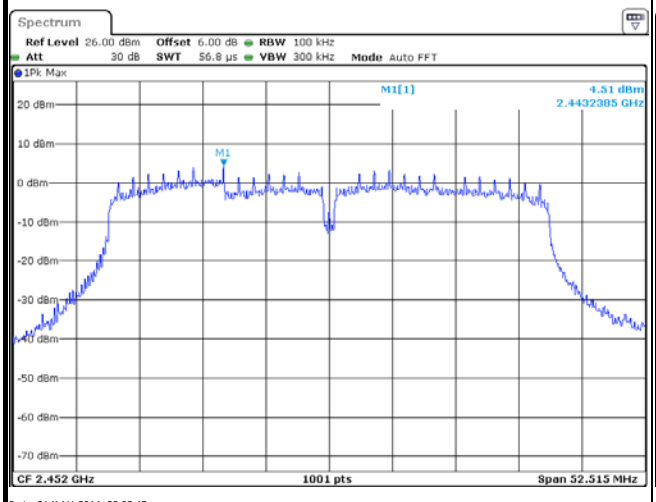
Spurious Emission 2GHz~25GHz



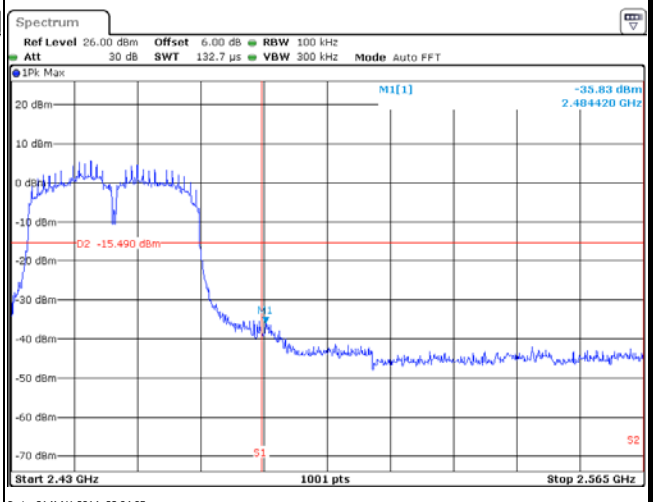
Number of TX :	2	**Chain Port**	0
Test Mode :	802.11n HT40	**Temperature :**	23~24℃
Test Band :	2.4GHz High	**Relative Humidity :**	47~48%
Test Channel :	09	**Test Engineer :**	Adonis Li

WLAN 802.11n HT40 Channel 09

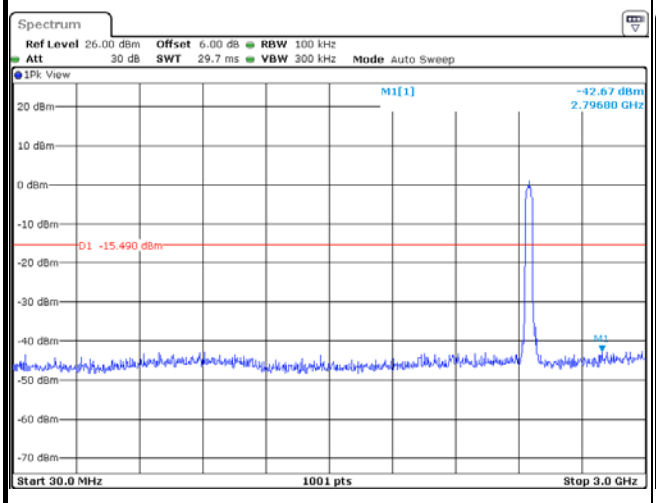
100kHz PSD reference Level



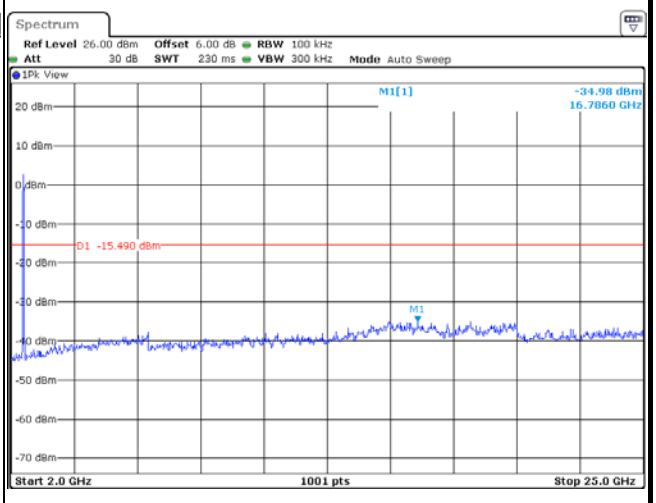
High Channel Plot



Spurious Emission 30MHz~3GHz



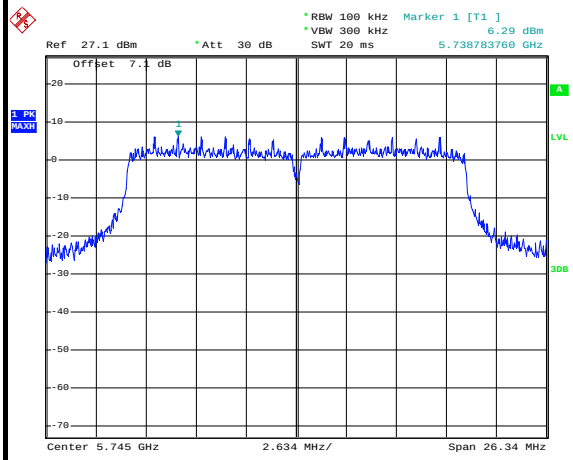
Spurious Emission 2GHz~25GHz



Number of TX :	2	**Chain Port**	0
Test Mode :	802.11n HT20	**Temperature :**	23~24℃
Test Band :	5GHz Low	**Relative Humidity :**	47~48%
Test Channel :	149	**Test Engineer :**	Adonis Li

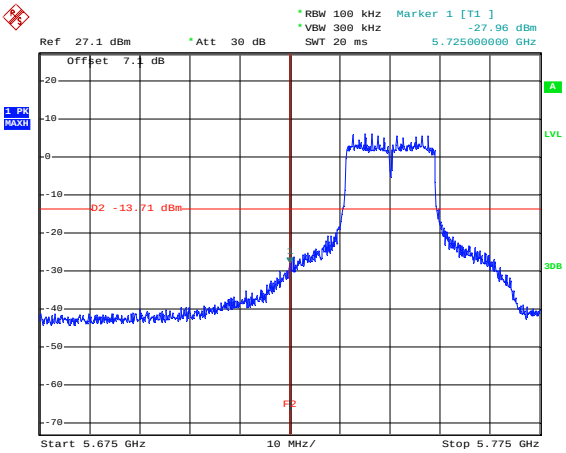
WLAN 802.11n HT20 Channel 149

100kHz PSD reference Level



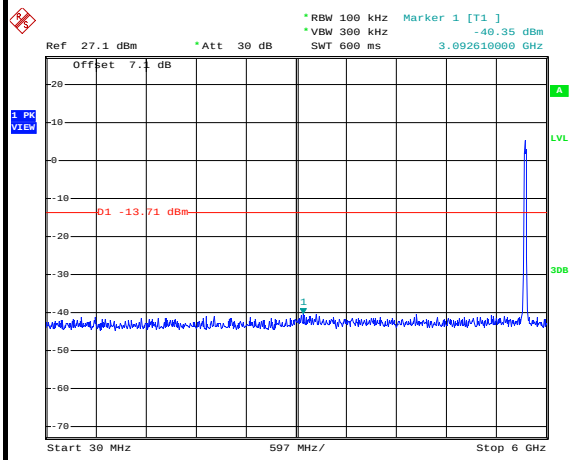
Date: 31.MAY.2014 15:28:00

Low Channel Plot



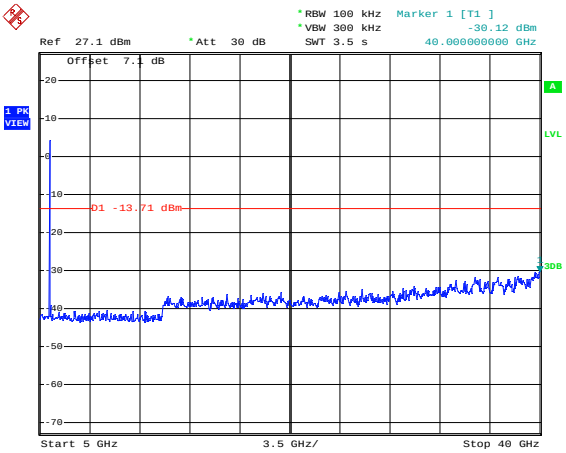
Date: 31.MAY.2014 15:28:14

Spurious Emission 30MHz~6GHz



Date: 31.MAY.2014 15:28:34

Spurious Emission 5GHz~40GHz

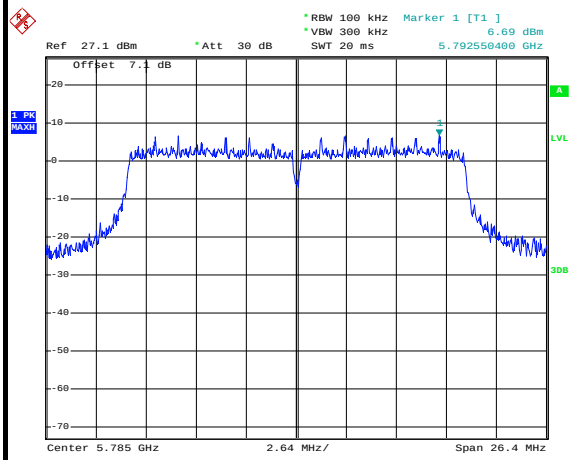


Date: 31.MAY.2014 15:28:52

Number of TX :	2	Chain Port	0
Test Mode :	802.11n HT20	Temperature :	23~24℃
Test Band :	5GHz Mid	Relative Humidity :	47~48%
Test Channel :	157	Test Engineer :	Adonis Li

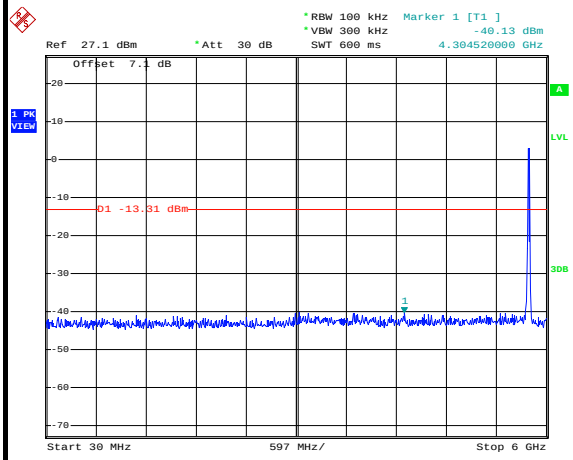
WLAN 802.11n HT20 Channel 157

100kHz PSD reference Level



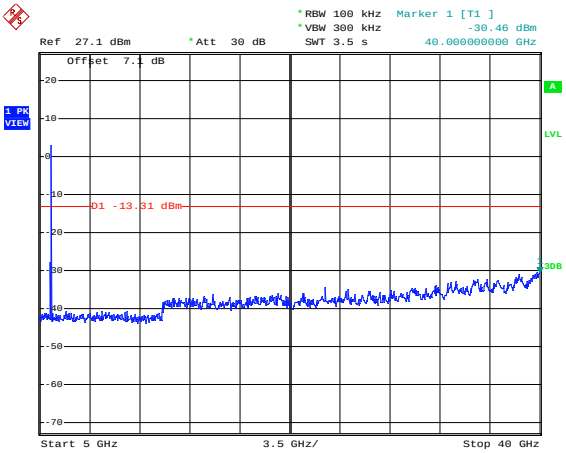
Date: 31.MAY.2014 15:25:02

Spurious Emission 30MHz~6GHz



Date: 31.MAY.2014 15:25:22

Spurious Emission 5GHz~40GHz

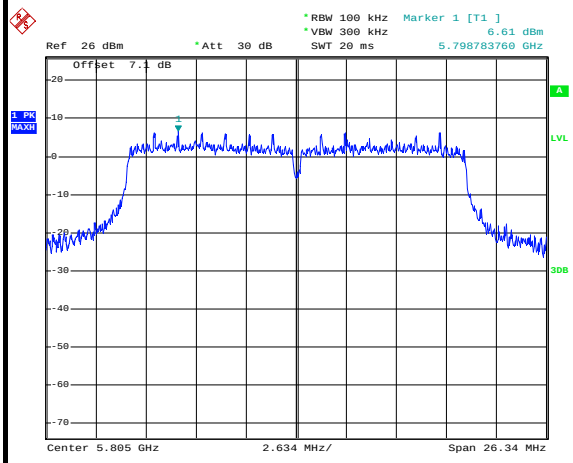


Date: 31.MAY.2014 15:25:40

Number of TX :	2	Chain Port	0
Test Mode :	802.11n HT20	Temperature :	23~24℃
Test Band :	5GHz High	Relative Humidity :	47~48%
Test Channel :	161	Test Engineer :	Adonis Li

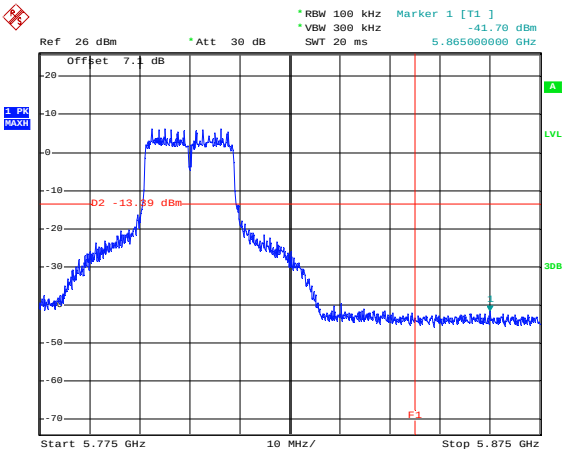
WLAN 802.11n HT20 Channel 161

100kHz PSD reference Level



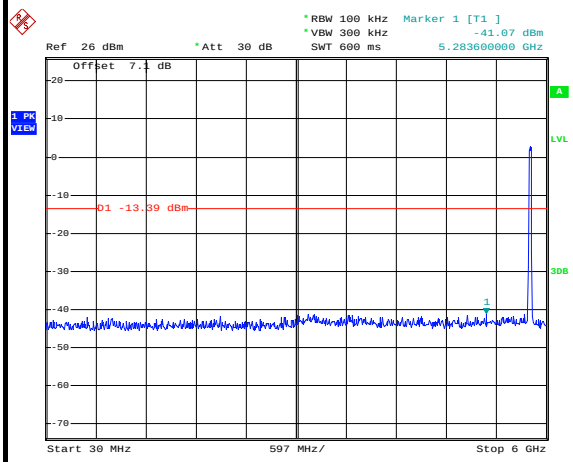
Date: 1.JUN.2014 21:12:23

High Channel Plot



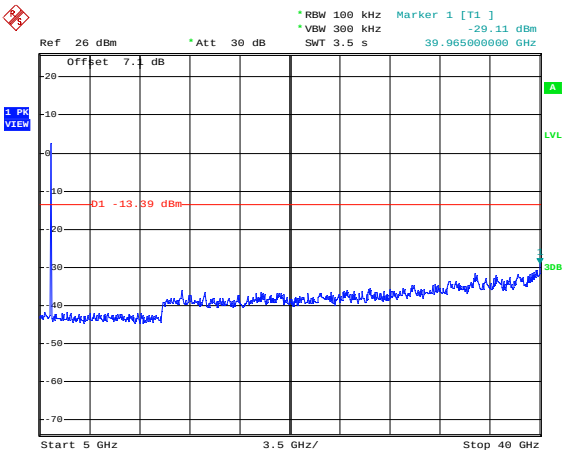
Date: 1.JUN.2014 21:12:37

Spurious Emission 30MHz~6GHz



Date: 1.JUN.2014 21:12:56

Spurious Emission 5GHz~40GHz

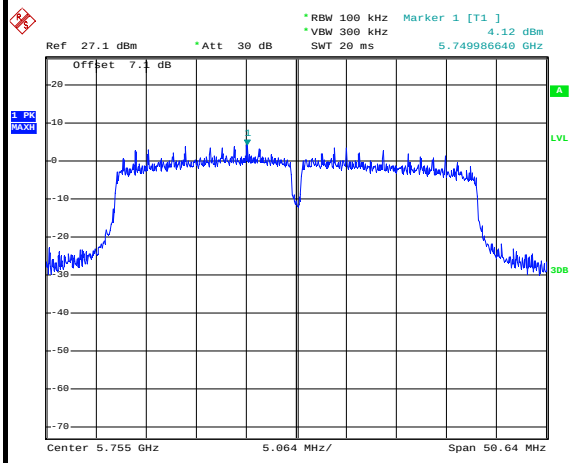


Date: 1.JUN.2014 21:13:15

Number of TX :	2	**Chain Port**	0
Test Mode :	802.11n HT40	**Temperature :**	23~24℃
Test Band :	5GHz Low	**Relative Humidity :**	47~48%
Test Channel :	151	**Test Engineer :**	Adonis Li

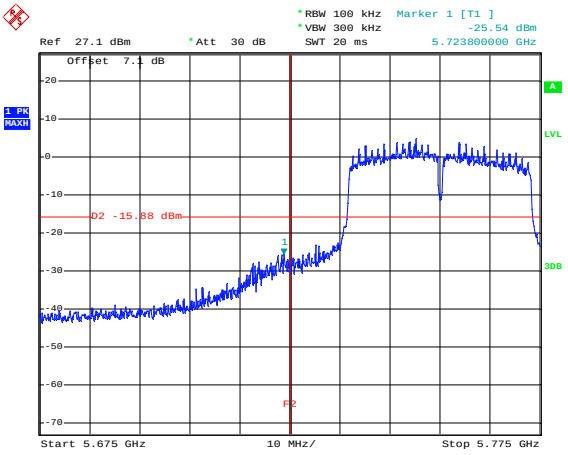
WLAN 802.11n HT40 Channel 151

100kHz PSD reference Level



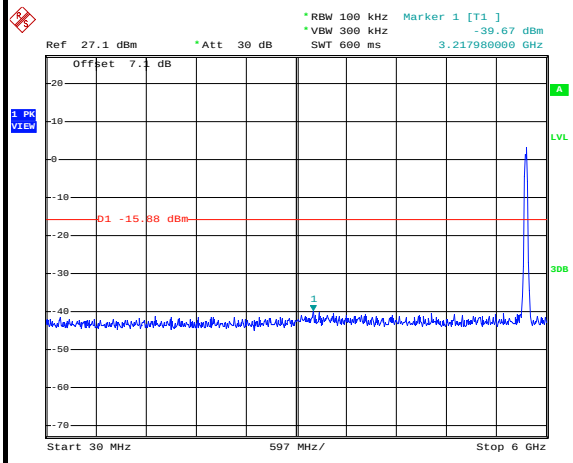
Date: 31.MAY.2014 15:55:21

Low Channel Plot



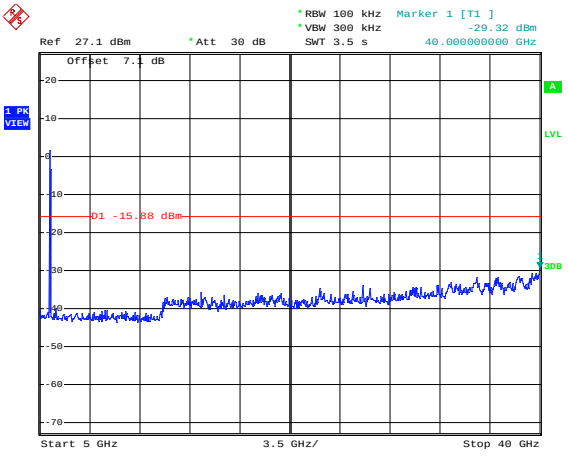
Date: 31.MAY.2014 15:55:35

Spurious Emission 30MHz~6GHz



Date: 31.MAY.2014 15:55:54

Spurious Emission 5GHz~40GHz

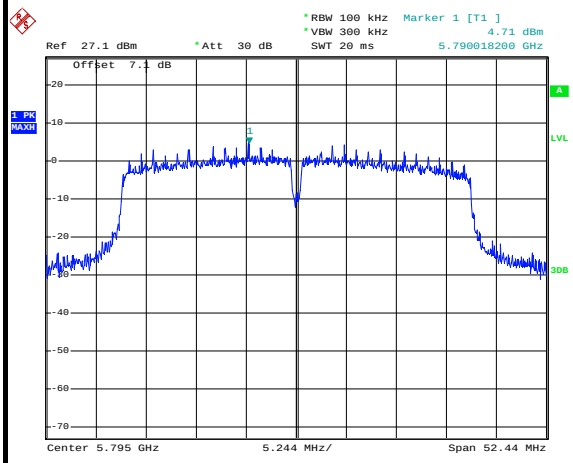


Date: 31.MAY.2014 15:56:13

Number of TX :	2	Chain Port	0
Test Mode :	802.11n HT40	Temperature :	23~24℃
Test Band :	5GHz High	Relative Humidity :	47~48%
Test Channel :	159	Test Engineer :	Adonis Li

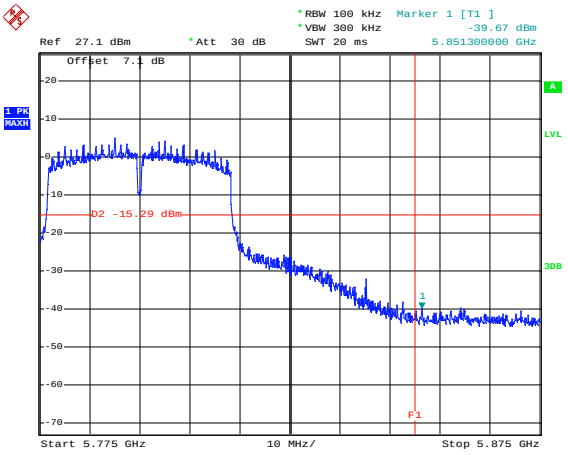
WLAN 802.11n HT40 Channel 159

100kHz PSD reference Level



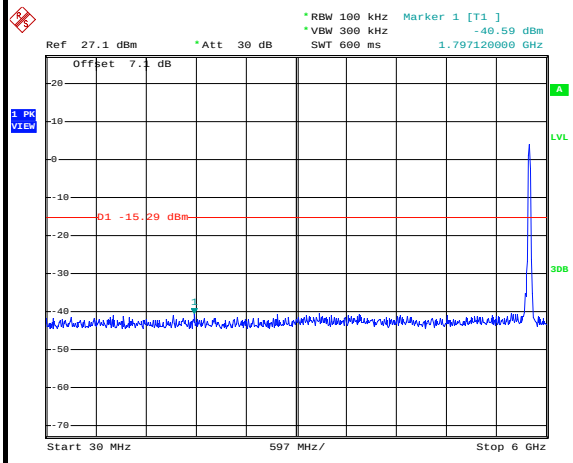
Date: 31.MAY.2014 16:00:52

High Channel Plot



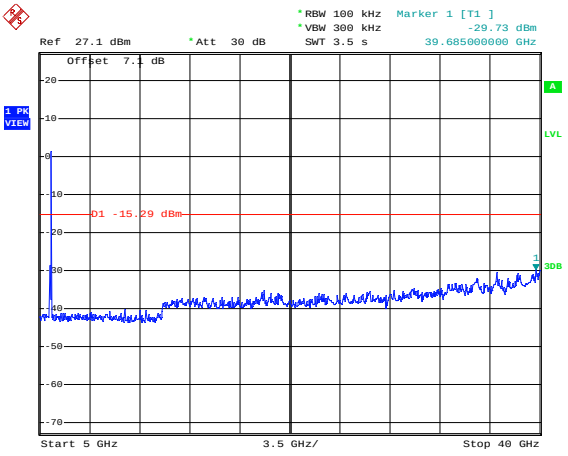
Date: 31.MAY.2014 16:01:06

Spurious Emission 30MHz~6GHz



Date: 31.MAY.2014 16:01:25

Spurious Emission 5GHz~40GHz



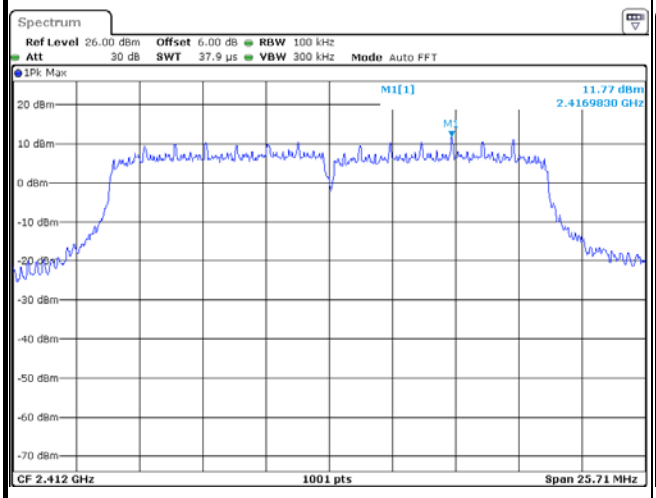
Date: 31.MAY.2014 16:01:44

Number of TX = 2, Chain Port 1

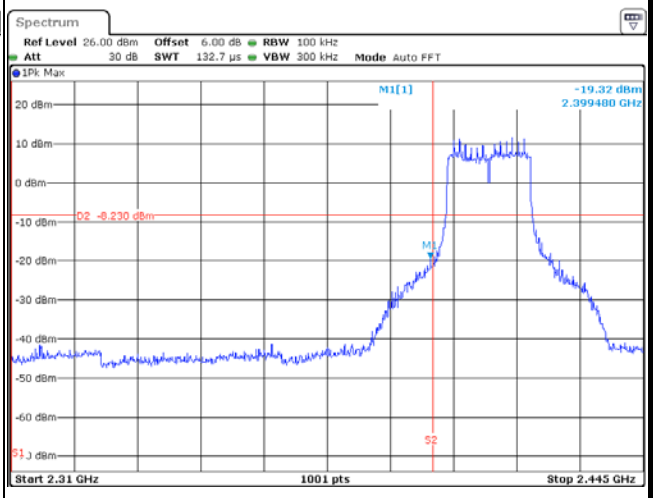
Number of TX :	2	**Chain Port**	1
Test Mode :	802.11n HT20	**Temperature :**	23~24℃
Test Band :	2.4GHz Low	**Relative Humidity :**	47~48%
Test Channel :	01	**Test Engineer :**	Adonis Li

WLAN 802.11n HT20 Channel 01

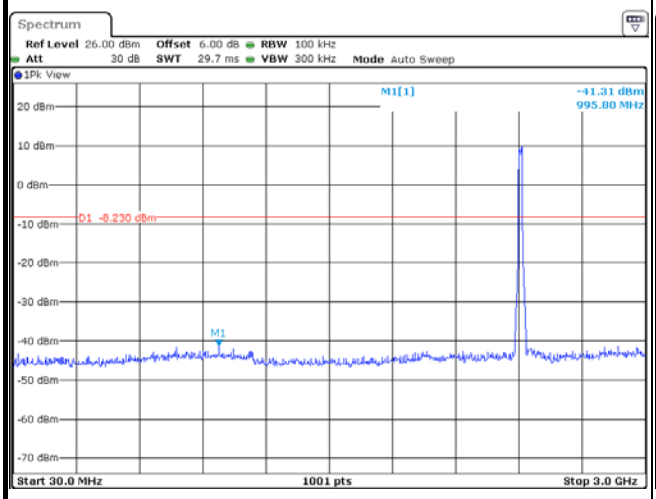
100kHz PSD reference Level



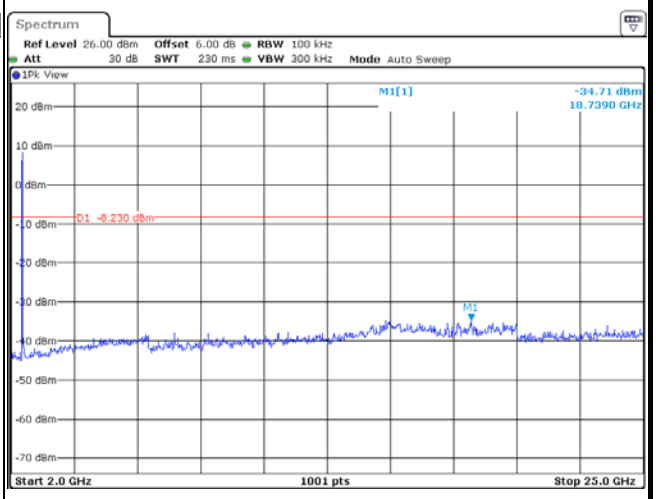
Low Channel Plot



Spurious Emission 30MHz~3GHz



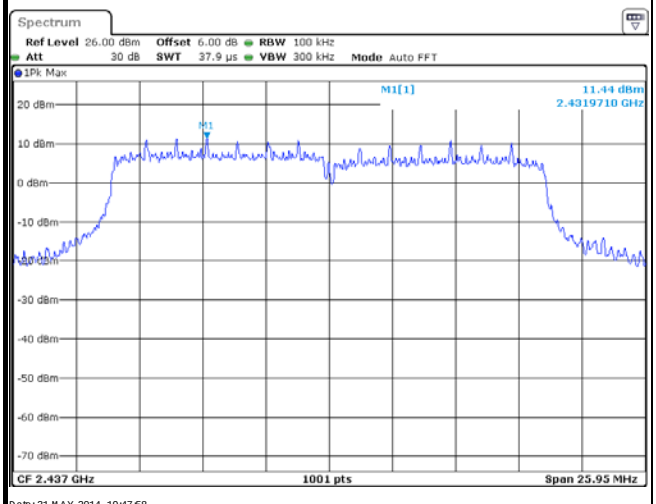
Spurious Emission 2GHz~25GHz



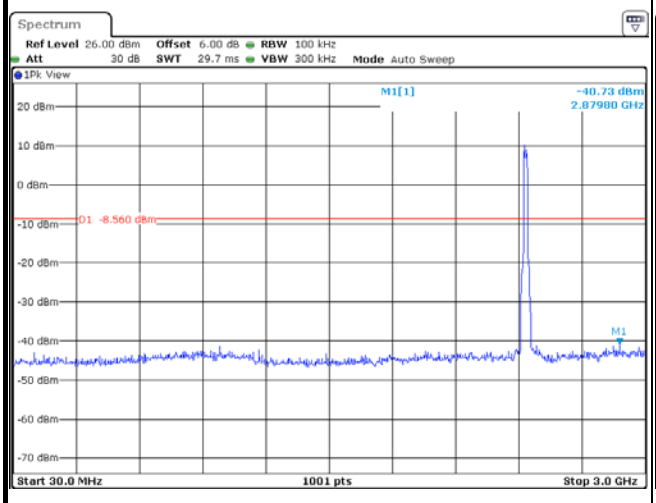
Number of TX :	2	Chain Port	1
Test Mode :	802.11n HT20	Temperature :	23~24℃
Test Band :	2.4GHz Mid	Relative Humidity :	47~48%
Test Channel :	06	Test Engineer :	Adonis Li

WLAN 802.11n HT20 Channel 06

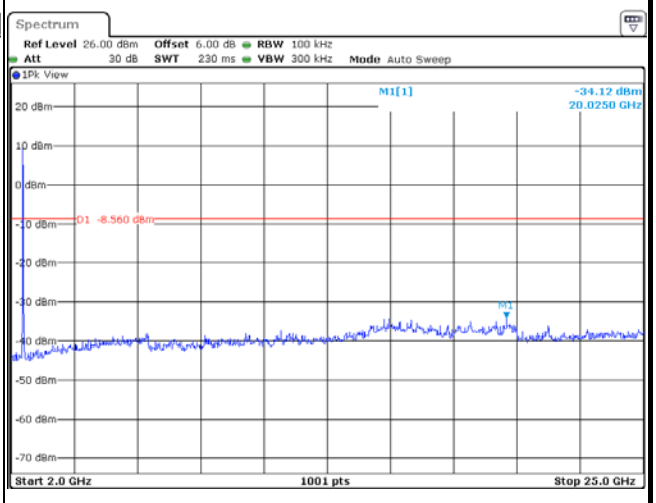
100kHz PSD reference Level



Spurious Emission 30MHz~3GHz



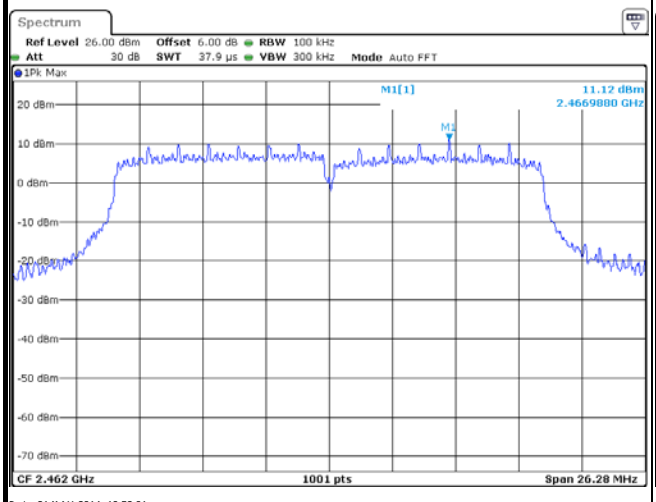
Spurious Emission 2GHz~25GHz



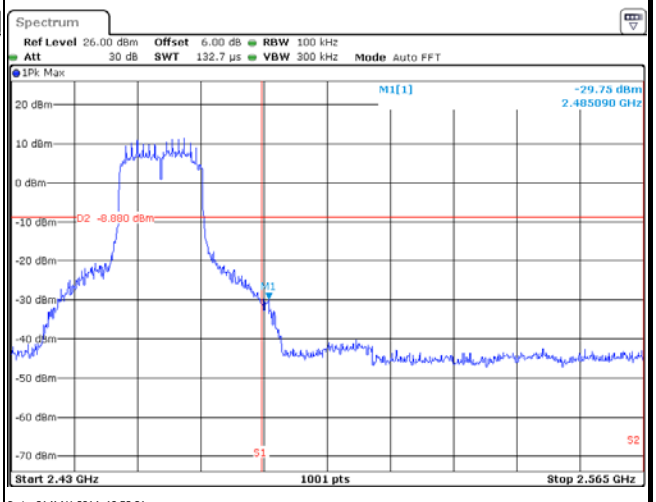
Number of TX :	2	**Chain Port**	1
Test Mode :	802.11n HT20	**Temperature :**	23~24℃
Test Band :	2.4GHz High	**Relative Humidity :**	47~48%
Test Channel :	11	**Test Engineer :**	Adonis Li

WLAN 802.11n HT20 Channel 11

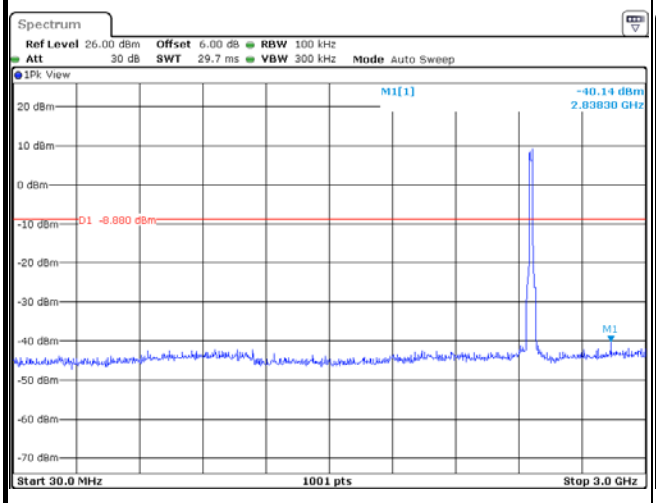
100kHz PSD reference Level



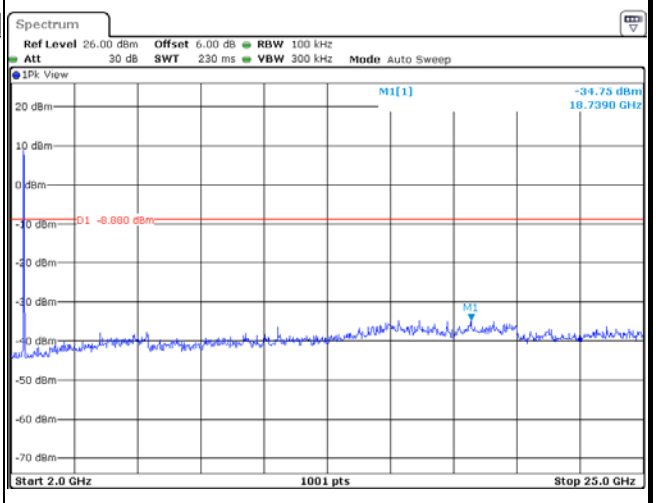
High Channel Plot



Spurious Emission 30MHz~3GHz



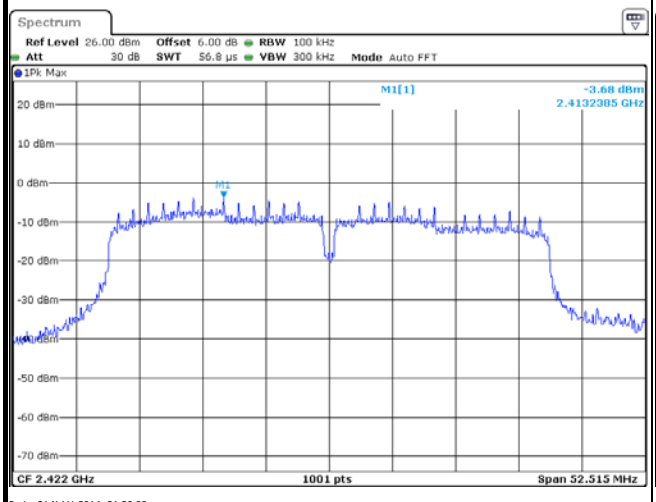
Spurious Emission 2GHz~25GHz



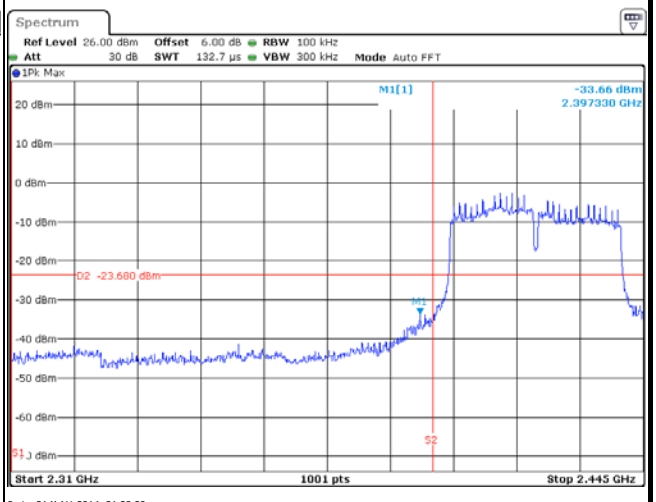
Number of TX :	2	**Chain Port**	1
Test Mode :	802.11n HT40	**Temperature :**	23~24℃
Test Band :	2.4GHz Low	**Relative Humidity :**	47~48%
Test Channel :	03	**Test Engineer :**	Adonis Li

WLAN 802.11n HT40 Channel 03

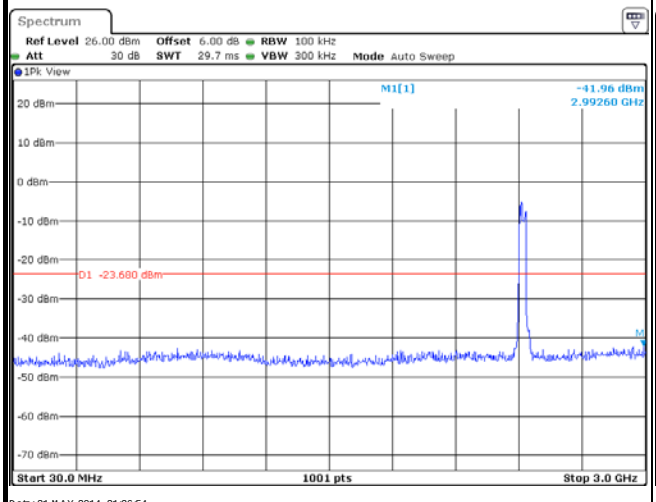
100kHz PSD reference Level



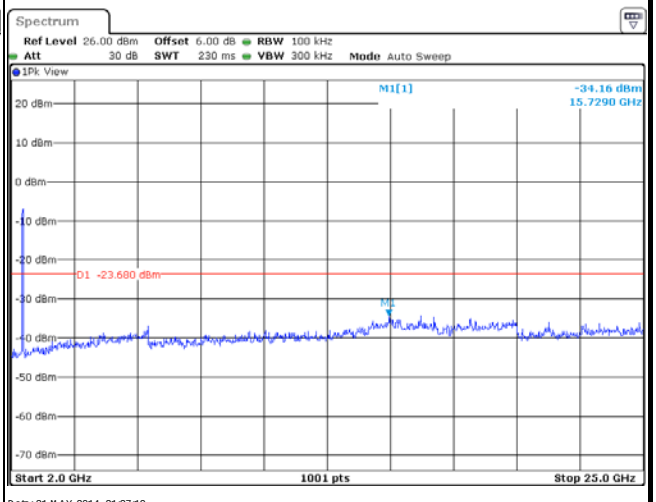
Low Channel Plot



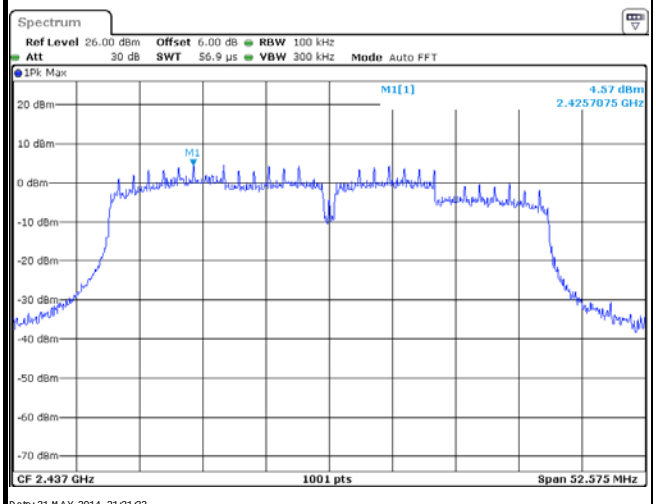
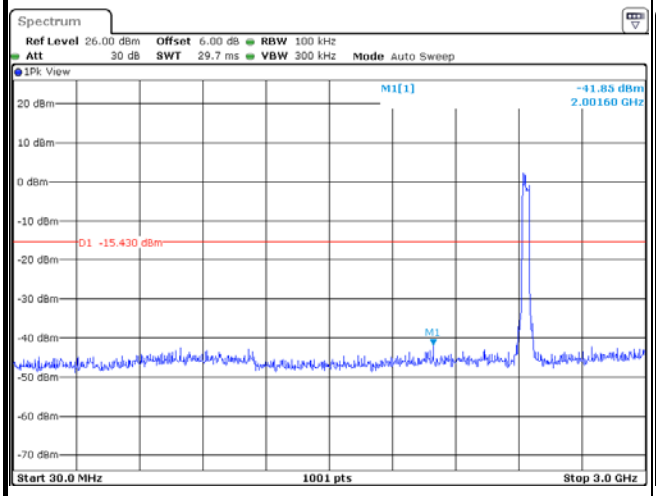
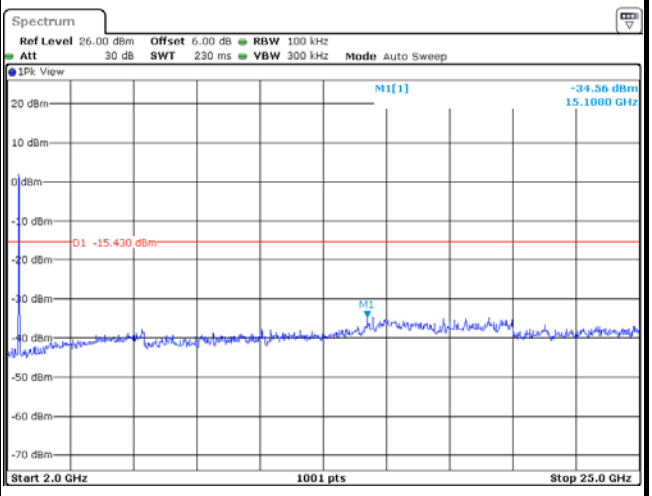
Spurious Emission 30MHz~3GHz



Spurious Emission 2GHz~25GHz



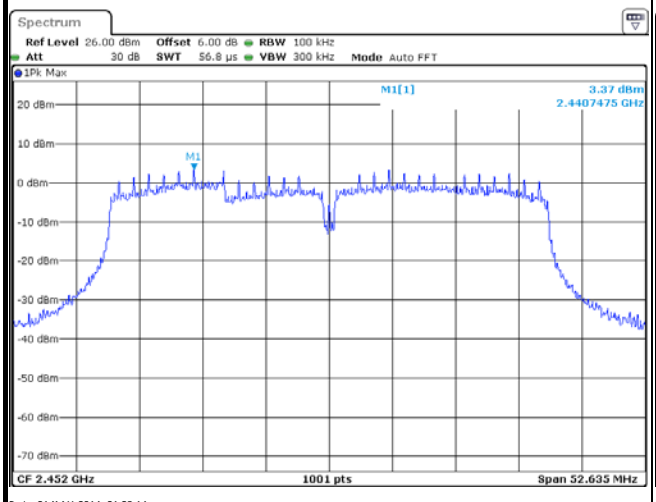
Number of TX :	2	**Chain Port**	1
Test Mode :	802.11n HT40	**Temperature :**	23~24℃
Test Band :	2.4GHz Mid	**Relative Humidity :**	47~48%
Test Channel :	06	**Test Engineer :**	Adonis Li

WLAN 802.11n HT40 Channel 06	
100kHz PSD reference Level	
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

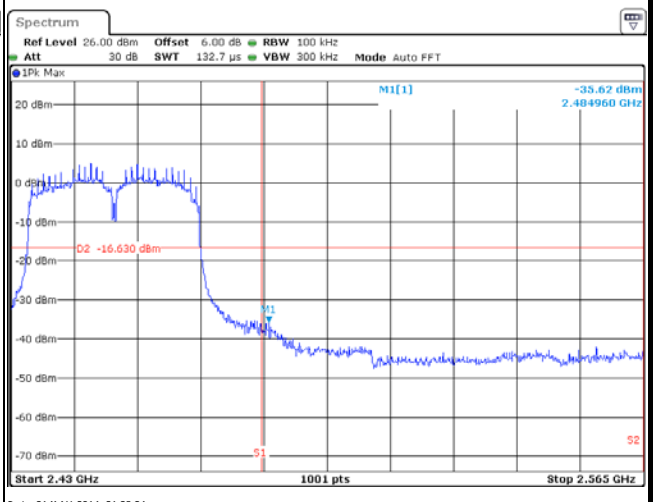
Number of TX :	2	**Chain Port**	1
Test Mode :	802.11n HT40	**Temperature :**	23~24℃
Test Band :	2.4GHz High	**Relative Humidity :**	47~48%
Test Channel :	09	**Test Engineer :**	Adonis Li

WLAN 802.11n HT40 Channel 09

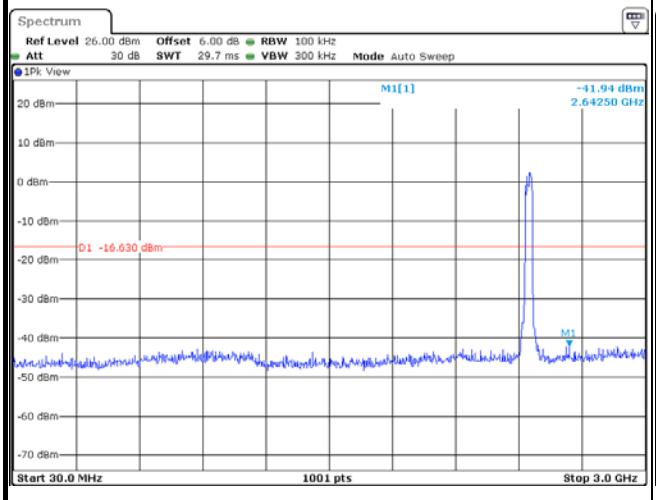
100kHz PSD reference Level



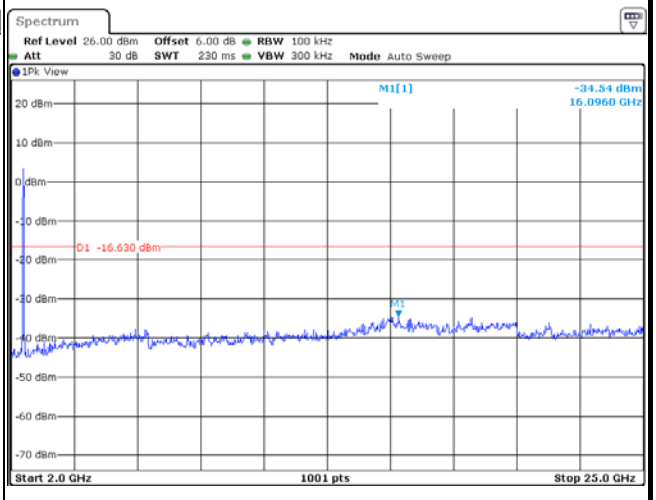
High Channel Plot



Spurious Emission 30MHz~3GHz



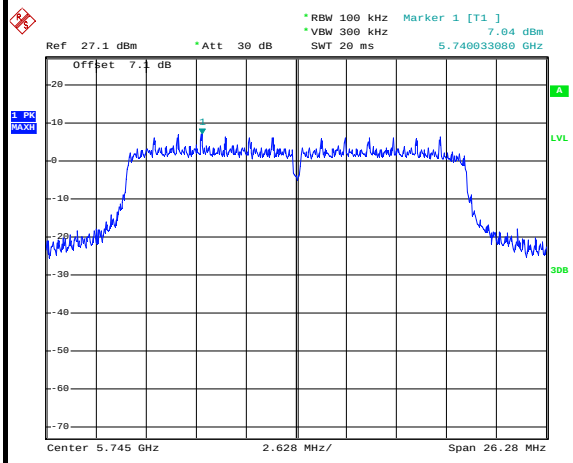
Spurious Emission 2GHz~25GHz



Number of TX :	2	**Chain Port**	1
Test Mode :	802.11n HT20	**Temperature :**	23~24℃
Test Band :	5GHz Low	**Relative Humidity :**	47~48%
Test Channel :	149	**Test Engineer :**	Adonis Li

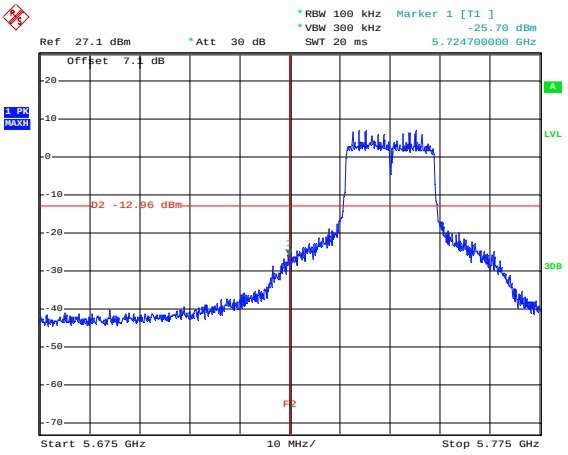
WLAN 802.11n HT20 Channel 149

100kHz PSD reference Level



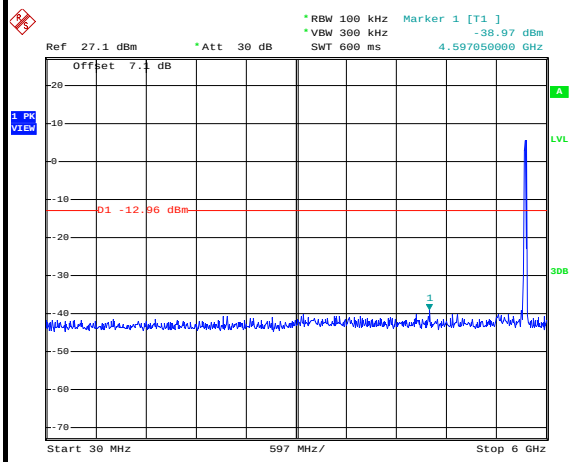
Date: 31.MAY.2014 15:31:16

Low Channel Plot



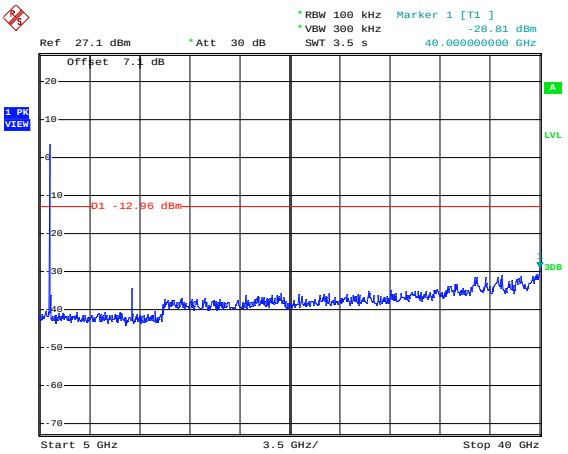
Date: 31.MAY.2014 15:31:30

Spurious Emission 30MHz~6GHz



Date: 31.MAY.2014 15:31:49

Spurious Emission 5GHz~40GHz

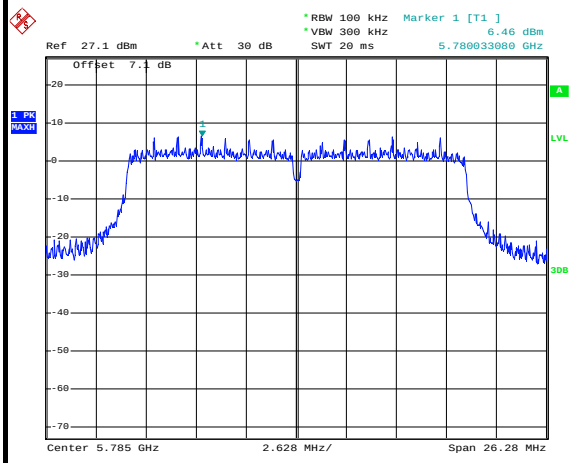


Date: 31.MAY.2014 15:32:08

Number of TX :	2	**Chain Port**	1
Test Mode :	802.11n HT20	**Temperature :**	23~24℃
Test Band :	5GHz Mid	**Relative Humidity :**	47~48%
Test Channel :	157	**Test Engineer :**	Adonis Li

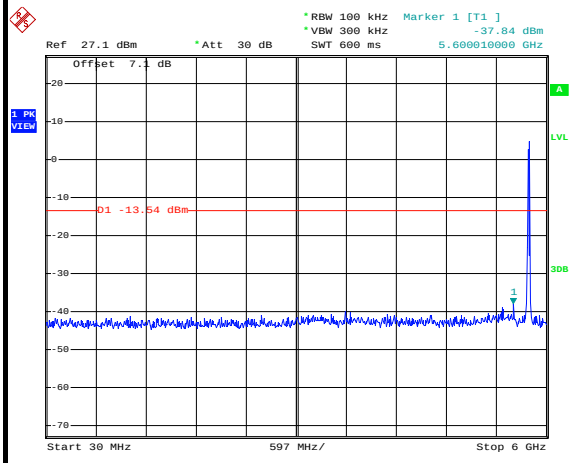
WLAN 802.11n HT20 Channel 157

100kHz PSD reference Level



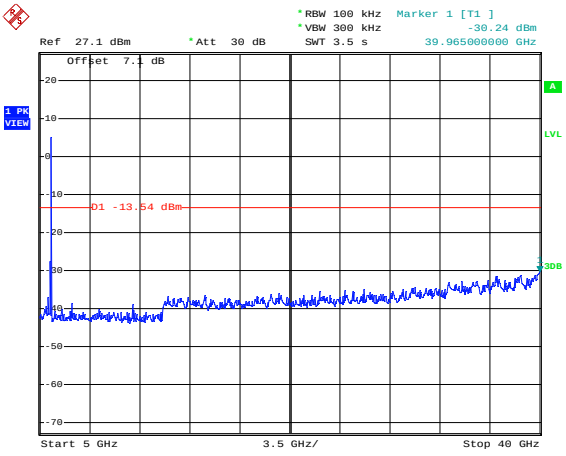
Date: 31.MAY.2014 15:33:42

Spurious Emission 30MHz~6GHz



Date: 31.MAY.2014 15:34:02

Spurious Emission 5GHz~40GHz

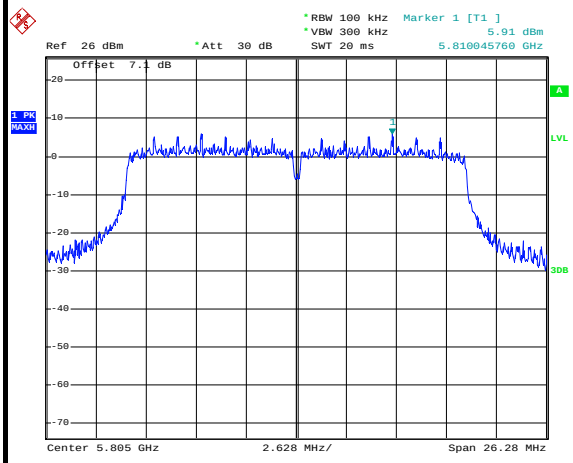


Date: 31.MAY.2014 15:34:20

Number of TX :	2	**Chain Port**	1
Test Mode :	802.11n HT20	**Temperature :**	23~24℃
Test Band :	5GHz High	**Relative Humidity :**	47~48%
Test Channel :	161	**Test Engineer :**	Adonis Li

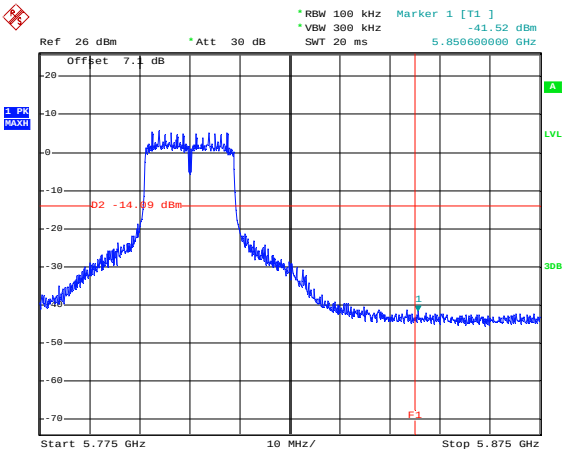
WLAN 802.11n HT20 Channel 161

100kHz PSD reference Level



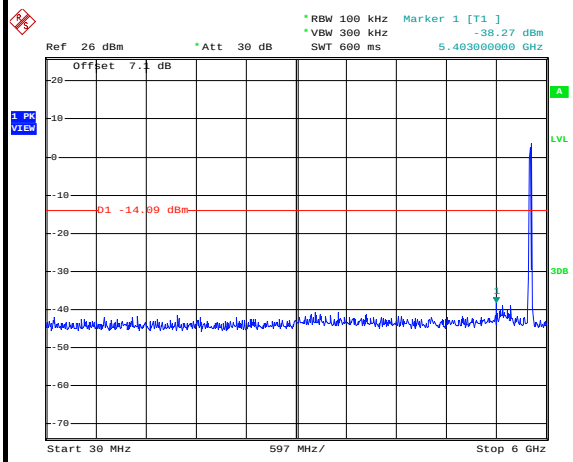
Date: 1.JUN.2014 21:14:47

High Channel Plot



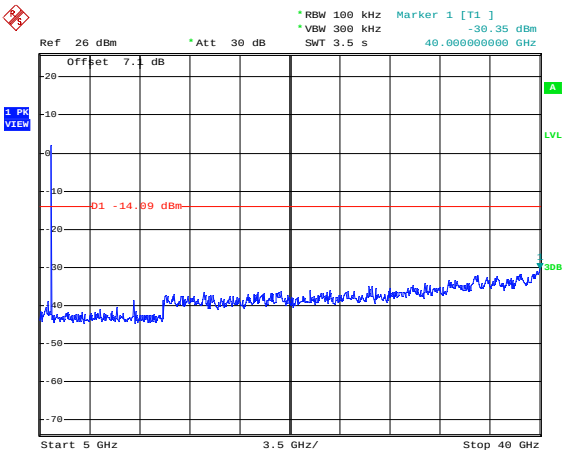
Date: 1.JUN.2014 21:15:01

Spurious Emission 30MHz~6GHz



Date: 1.JUN.2014 21:15:20

Spurious Emission 5GHz~40GHz

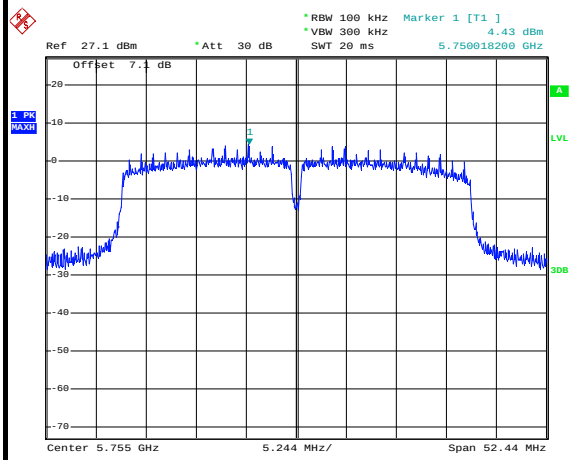


Date: 1.JUN.2014 21:15:39

Number of TX :	2	Chain Port	1
Test Mode :	802.11n HT40	Temperature :	23~24℃
Test Band :	5GHz Low	Relative Humidity :	47~48%
Test Channel :	151	Test Engineer :	Adonis Li

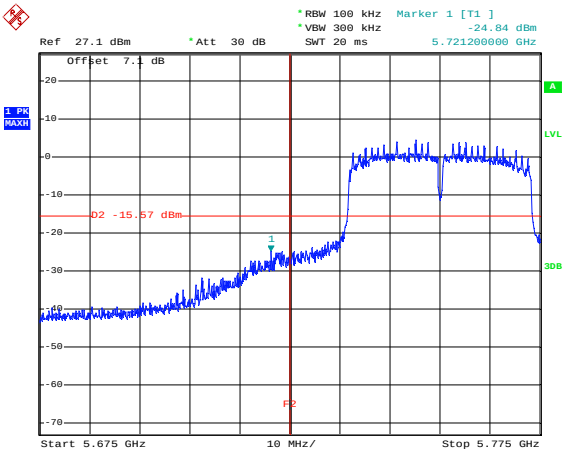
WLAN 802.11n HT40 Channel 151

100kHz PSD reference Level



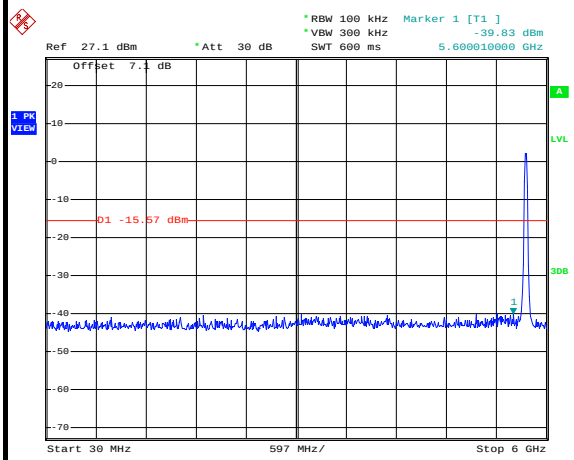
Date: 31.MAY.2014 15:50:49

Low Channel Plot



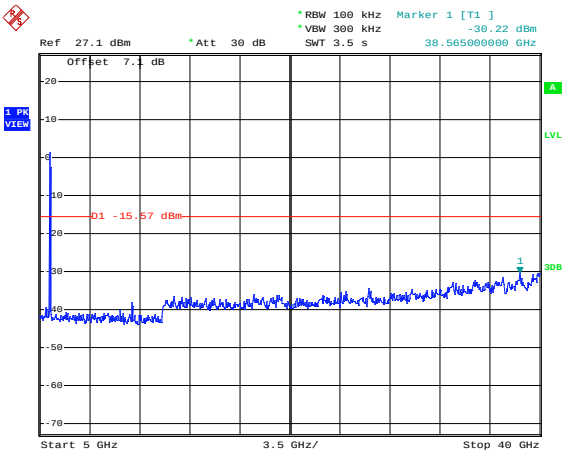
Date: 31.MAY.2014 15:51:03

Spurious Emission 30MHz~6GHz



Date: 31.MAY.2014 15:51:22

Spurious Emission 5GHz~40GHz

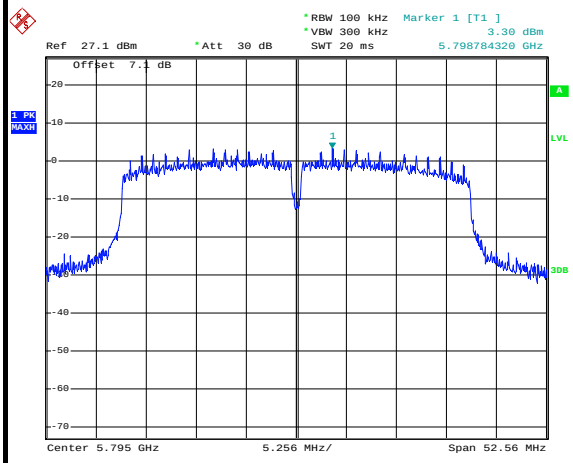


Date: 31.MAY.2014 15:51:41

Number of TX :	2	**Chain Port**	1
Test Mode :	802.11n HT40	**Temperature :**	23~24℃
Test Band :	5GHz High	**Relative Humidity :**	47~48%
Test Channel :	159	**Test Engineer :**	Adonis Li

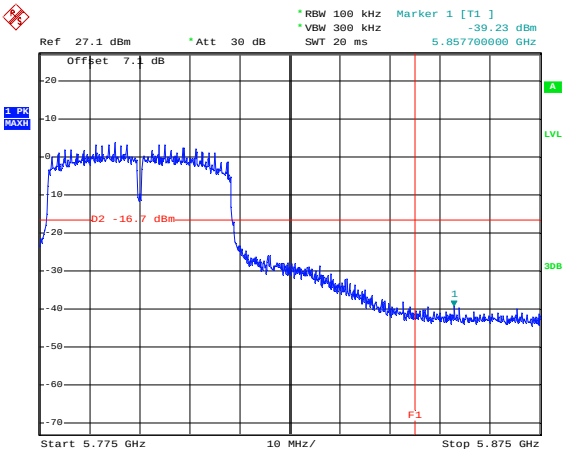
WLAN 802.11n HT40 Channel 159

100kHz PSD reference Level



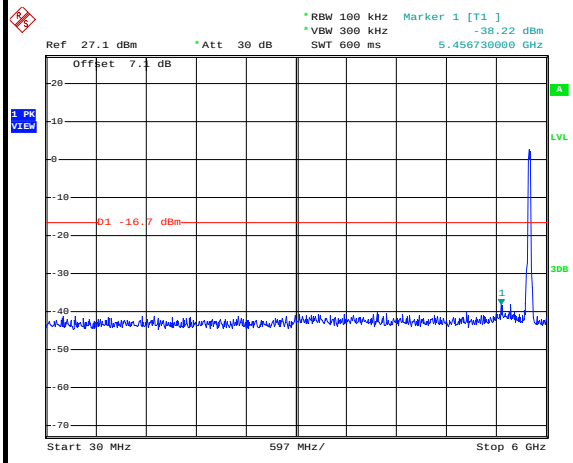
Date: 31.MAY.2014 15:47:46

High Channel Plot



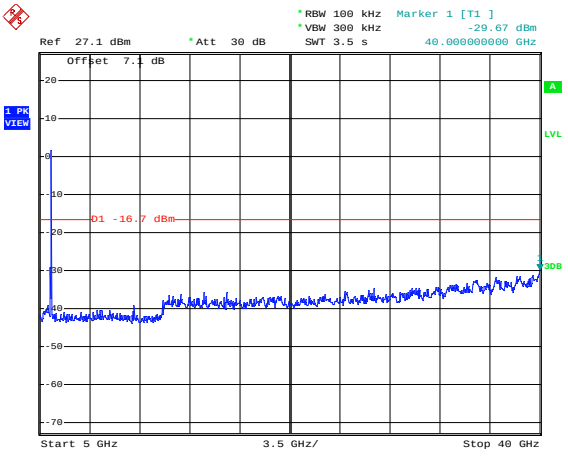
Date: 31.MAY.2014 15:48:00

Spurious Emission 30MHz~6GHz



Date: 31.MAY.2014 15:48:19

Spurious Emission 5GHz~40GHz



Date: 31.MAY.2014 15:48:38

3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 Limit of Radiated band edge and Spurious Emission Measurement

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

The measuring equipment is listed in the section 4 of this test report.

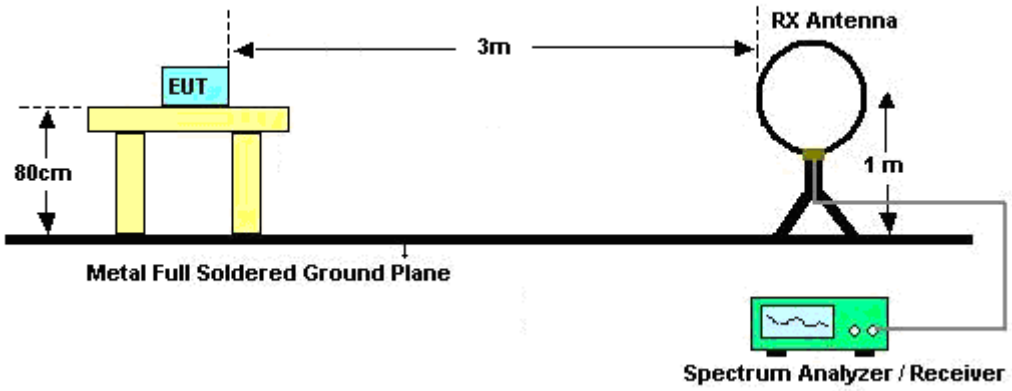
3.5.3 Test Procedure

1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r01.
2. 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.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 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.
7. 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.
   For average measurement:
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

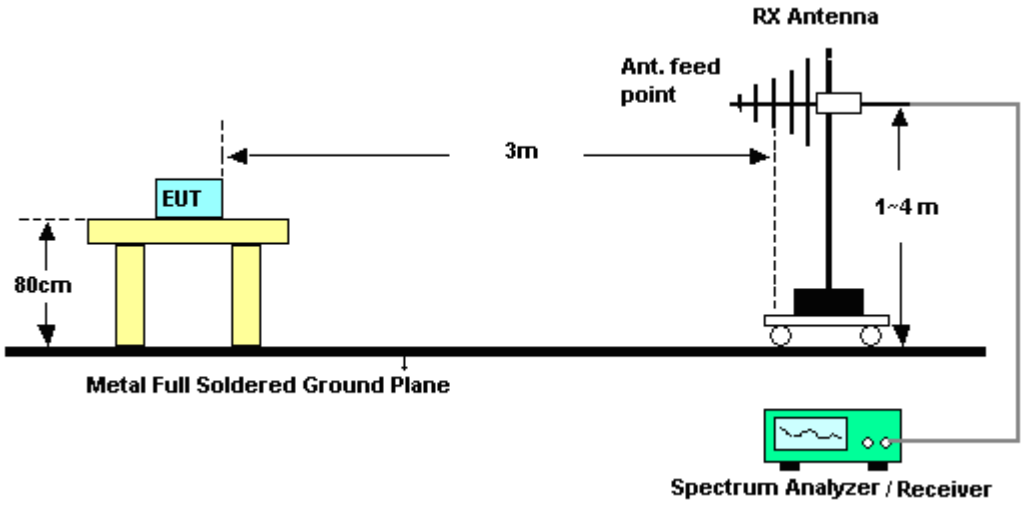
Antenna	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting.
0	802.11b	100.00	-	-	10Hz
0	802.11g	97.84	1.360	0.735	1kHz
0	2.4G 802.11n HT20	98.77	-	-	10Hz
0+1	2.4G 802.11n HT20	97.99	1.270	0.787	1kHz
0	2.4G 802.11n HT40	96.06	0.634	1.577	3kHz
0+1	2.4G 802.11n HT40	96.67	0.638	1.567	3kHz
1	802.11a	96.79	1.354	0.739	1kHz
0	5G 802.11n HT20	96.04	1.267	0.789	1kHz
0+1	5G 802.11n HT20	93.83	0.661	1.513	3kHz
1	5G 802.11n HT40	94.79	0.633	1.579	3kHz
0+1	5G 802.11n HT40	91.44	0.341	2.936	3kHz

3.5.4 Test Setup

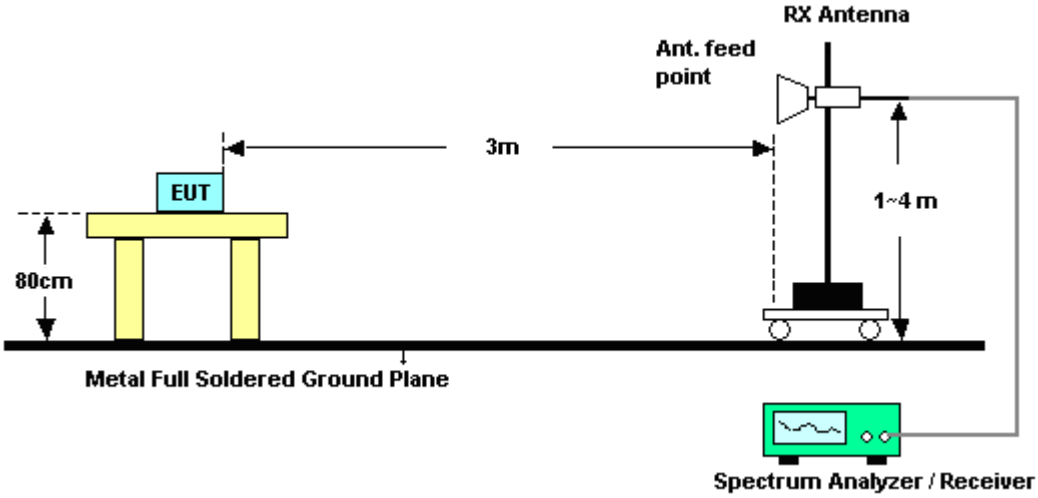
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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 Spurious at Band Edges

Test Mode :	802.11b - Chain Port 0	Temperature :	22~23°C
Test Band :	Low	Relative Humidity :	40~41%
Test Channel :	01	Test Engineer :	Jun Liu

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
2388.3	51.89	-22.11	74	48.7	32.86	3.59	33.26	200	12	Peak
2389.92	39.37	-14.63	54	36.18	32.86	3.59	33.26	200	12	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
2386.68	51.71	-22.29	74	48.52	32.86	3.59	33.26	174	360	Peak
2389.92	40.02	-13.98	54	36.83	32.86	3.59	33.26	174	360	Average

Test Mode :	802.11b - Chain Port 0	Temperature :	22~23°C
Test Band :	High	Relative Humidity :	40~41%
Test Channel :	11	Test Engineer :	Jun Liu

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
2496.91	51.51	-22.49	74	48.1	33.05	3.66	33.3	100	81	Peak
2483.5	38.58	-15.42	54	35.21	33.01	3.65	33.29	100	81	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
2486.14	52.98	-21.02	74	49.61	33.01	3.65	33.29	100	52	Peak
2483.5	39.27	-14.73	54	35.9	33.01	3.65	33.29	100	52	Average

Test Mode :	802.11g - Chain Port 0	Temperature :	22~23°C
Test Band :	Low	Relative Humidity :	40~41%
Test Channel :	01	Test Engineer :	Jun Liu

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
2389.92	71.16	-2.84	74	67.97	32.86	3.59	33.26	181	351	Peak
2389.83	48.74	-5.26	54	45.55	32.86	3.59	33.26	181	351	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
2389.56	66.43	-7.57	74	63.24	32.86	3.59	33.26	102	10	Peak
2389.83	45.23	-8.77	54	42.04	32.86	3.59	33.26	102	10	Average

Test Mode :	802.11g - Chain Port 0	Temperature :	22~23°C
Test Band :	High	Relative Humidity :	40~41%
Test Channel :	11	Test Engineer :	Jun Liu

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
2483.62	68.99	-5.01	74	65.62	33.01	3.65	33.29	200	81	Peak
2483.5	45.56	-8.44	54	42.19	33.01	3.65	33.29	200	81	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
2483.77	67.47	-6.53	74	64.1	33.01	3.65	33.29	100	0	Peak
2483.5	44.85	-9.15	54	41.48	33.01	3.65	33.29	100	0	Average

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0	Temperature :	22~23°C
Test Band :	Low	Relative Humidity :	40~41%
Test Channel :	01	Test Engineer :	Jun Liu

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
2389.47	72.14	-1.86	74	68.95	32.86	3.59	33.26	148	356	Peak
2389.83	49.48	-4.52	54	46.29	32.86	3.59	33.26	148	356	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
2389.65	69.99	-4.01	74	66.8	32.86	3.59	33.26	100	2	Peak
2389.83	46.62	-7.38	54	43.43	32.86	3.59	33.26	100	2	Average

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0	Temperature :	22~23°C
Test Band :	High	Relative Humidity :	40~41%
Test Channel :	11	Test Engineer :	Jun Liu

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
2483.62	68.6	-5.4	74	65.23	33.01	3.65	33.29	200	80	Peak
2483.5	44.81	-9.19	54	41.44	33.01	3.65	33.29	200	80	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
2484.1	67.89	-6.11	74	64.52	33.01	3.65	33.29	100	357	Peak
2483.5	42.79	-11.21	54	39.42	33.01	3.65	33.29	100	357	Average

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0+1	Temperature :	22~23°C
Test Band :	Low	Relative Humidity :	40~41%
Test Channel :	01	Test Engineer :	Jun Liu

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
2389.83	70.29	-3.71	74	67.1	32.86	3.59	33.26	181	355	Peak
2389.83	50.92	-3.08	54	47.73	32.86	3.59	33.26	181	355	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
2389.47	65.37	-8.63	74	62.18	32.86	3.59	33.26	100	283	Peak
2389.74	44.33	-9.67	54	41.14	32.86	3.59	33.26	100	283	Average

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0+1	Temperature :	22~23°C
Test Band :	High	Relative Humidity :	40~41%
Test Channel :	11	Test Engineer :	Jun Liu

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
2484.07	69.94	-4.06	74	66.57	33.01	3.65	33.29	200	85	Peak
2483.59	50.13	-3.87	54	46.76	33.01	3.65	33.29	200	87	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
2484.13	68.65	-5.35	74	65.28	33.01	3.65	33.29	100	287	Peak
2483.53	45.76	-8.24	54	42.39	33.01	3.65	33.29	100	287	Average

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0	Temperature :	22~23°C
Test Band :	Low	Relative Humidity :	40~41%
Test Channel :	03	Test Engineer :	Jun Liu

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
2389.65	68.25	-5.75	74	65.06	32.86	3.59	33.26	118	359	Peak
2389.83	49.68	-4.32	54	46.49	32.86	3.59	33.26	118	359	Average
2495.89	52.85	-21.15	74	49.44	33.05	3.66	33.3	200	86	Peak
2499.34	40.49	-13.51	54	37.08	33.05	3.66	33.3	200	86	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
2389.74	65.21	-8.79	74	62.02	32.86	3.59	33.26	107	10	Peak
2389.92	47.7	-6.3	54	44.51	32.86	3.59	33.26	107	10	Average
2497.96	50.36	-23.64	74	46.95	33.05	3.66	33.3	100	250	Peak
2498.62	37.68	-16.32	54	34.27	33.05	3.66	33.3	100	255	Average

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0	Temperature :	22~23°C
Test Band :	High	Relative Humidity :	40~41%
Test Channel :	09	Test Engineer :	Jun Liu

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
2386.59	49.45	-24.55	74	46.26	32.86	3.59	33.26	200	359	Peak
2386.95	38.69	-15.31	54	35.5	32.86	3.59	33.26	200	359	Average
2483.62	68.39	-5.61	74	65.02	33.01	3.65	33.29	200	83	Peak
2483.56	51.12	-2.88	54	47.75	33.01	3.65	33.29	200	83	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
2388.39	48.24	-25.76	74	45.05	32.86	3.59	33.26	100	21	Peak
2389.02	36.43	-17.57	54	33.24	32.86	3.59	33.26	100	20	Average
2484.67	66.01	-7.99	74	62.64	33.01	3.65	33.29	100	350	Peak
2483.98	48.07	-5.93	54	44.7	33.01	3.65	33.29	100	350	Average

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0+1	Temperature :	22~23°C
Test Band :	Low	Relative Humidity :	40~41%
Test Channel :	03	Test Engineer :	Jun Liu

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
2388.21	64.64	-9.36	74	61.45	32.86	3.59	33.26	120	358	Peak
2389.56	48.52	-5.48	54	45.33	32.86	3.59	33.26	120	358	Average
2494.48	48.77	-25.23	74	45.36	33.05	3.66	33.3	100	0	Peak
2489.41	34.55	-19.45	54	31.14	33.05	3.66	33.3	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
2389.38	60.22	-13.78	74	57.03	32.86	3.59	33.26	100	283	Peak
2389.83	44.23	-9.77	54	41.04	32.86	3.59	33.26	100	283	Average
2497.21	49.83	-24.17	74	46.42	33.05	3.66	33.3	100	225	Peak
2498.23	37.3	-16.7	54	33.89	33.05	3.66	33.3	100	225	Average

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0+1	Temperature :	22~23°C
Test Band :	High	Relative Humidity :	40~41%
Test Channel :	09	Test Engineer :	Jun Liu

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
2386.41	51.94	-22.06	74	48.75	32.86	3.59	33.26	118	305	Peak
2385.51	40.68	-13.32	54	37.49	32.86	3.59	33.26	118	305	Average
2484.25	65.69	-8.31	74	62.32	33.01	3.65	33.29	137	312	Peak
2483.5	50.35	-3.65	54	46.98	33.01	3.65	33.29	137	312	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
2379.75	47.53	-26.47	74	44.38	32.83	3.58	33.26	100	25	Peak
2389.92	35.74	-18.26	54	32.55	32.86	3.59	33.26	100	25	Average
2483.56	58.71	-15.29	74	55.34	33.01	3.65	33.29	172	343	Peak
2483.77	43.2	-10.8	54	39.83	33.01	3.65	33.29	172	343	Average

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

Note: Pre-scanned all test modes and only choose the worst case mode recorded in the test report for radiated spurious emission below 1GHz.

Test Mode :	802.11b-Chain Port 0	**Temperature :**	22~23°C
Test Channel :	01	**Relative Humidity :**	40~41%
Test Engineer :	Jun Liu	**Polarization :**	Horizontal
Remark :	1. 2412 MHz is Fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2412	107.49	-	-	104.26	32.89	3.61	33.27	170	14	Peak
2412	102.91	-	-	99.68	32.89	3.61	33.27	170	14	Average
4824	47.88	-26.12	74	41.26	35.17	5.25	33.8	132	225	Peak

Test Mode :	802.11b-Chain Port 0	**Temperature :**	22~23°C
Test Channel :	01	**Relative Humidity :**	40~41%
Test Engineer :	Jun Liu	**Polarization :**	Vertical
Remark :	1. 2412 MHz is Fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2412	108.42	-	-	105.19	32.89	3.61	33.27	107	9	Peak
2412	103.92	-	-	100.69	32.89	3.61	33.27	107	9	Average
4824	47.15	-26.85	74	40.53	35.17	5.25	33.8	115	210	Peak

Test Mode :	802.11b - Chain Port 0	Temperature :	22~23°C
Test Channel :	06	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2437	107.01	-	-	103.71	32.95	3.63	33.28	200	14	Peak
2437	102.46	-	-	99.16	32.95	3.63	33.28	200	14	Average
4874	47.75	-26.25	74	41.09	35.18	5.28	33.8	116	221	Peak
7312	50.59	-23.41	74	41.91	36.2	6.61	34.13	112	0	Peak

Test Mode :	802.11b - Chain Port 0	Temperature :	22~23°C
Test Channel :	06	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2437	107.74	-	-	104.44	32.95	3.63	33.28	100	5	Peak
2437	103.14	-	-	99.84	32.95	3.63	33.28	100	5	Average
4874	47.5	-26.5	74	40.84	35.18	5.28	33.8	100	0	Peak
7312	50.87	-23.13	74	42.19	36.2	6.61	34.13	120	23	Peak

Test Mode :	802.11b - Chain Port 0	Temperature :	22~23°C
Test Channel :	11	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2462	102.03	-	-	98.7	32.98	3.64	33.29	100	197	Peak
2462	97.2	-	-	93.87	32.98	3.64	33.29	100	197	Average
4924	47.25	-26.75	74	40.55	35.19	5.31	33.8	162	115	Peak
7386	50.68	-23.32	74	41.9	36.24	6.7	34.16	200	0	Peak

Test Mode :	802.11b - Chain Port 0	Temperature :	22~23°C
Test Channel :	11	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2462	108.03	-	-	104.7	32.98	3.64	33.29	104	5	Peak
2462	103.61	-	-	100.28	32.98	3.64	33.29	104	5	Average
4924	47.53	-26.47	74	40.83	35.19	5.31	33.8	162	145	Peak
7386	48.3	-25.7	74	39.52	36.24	6.7	34.16	100	196	Peak

Test Mode :	802.11g - Chain Port 0	Temperature :	22~23°C
Test Channel :	01	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2412	108.16	-	-	104.93	32.89	3.61	33.27	118	358	Peak
2412	96.84	-	-	93.61	32.89	3.61	33.27	118	358	Average
4824	46.37	-27.63	74	39.75	35.17	5.25	33.8	115	210	Peak

Test Mode :	802.11g - Chain Port 0	Temperature :	22~23°C
Test Channel :	01	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2412	105.67	-	-	102.44	32.89	3.61	33.27	100	0	Peak
2412	93.37	-	-	90.14	32.89	3.61	33.27	100	0	Average
4824	46.8	-27.2	74	40.18	35.17	5.25	33.8	100	0	Peak

Test Mode :	802.11g - Chain Port 0	Temperature :	22~23°C
Test Channel :	06	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2437	104.52	-	-	101.22	32.95	3.63	33.28	200	11	Peak
2437	93.23	-	-	89.93	32.95	3.63	33.28	200	11	Average
4874	47.81	-26.19	74	41.15	35.18	5.28	33.8	100	123	Peak
7312	49.07	-24.93	74	40.39	36.2	6.61	34.13	145	112	Peak

Test Mode :	802.11g - Chain Port 0	Temperature :	22~23°C
Test Channel :	06	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2437	106.64	-	-	103.34	32.95	3.63	33.28	100	10	Peak
2437	95.17	-	-	91.87	32.95	3.63	33.28	100	10	Average
4874	46.95	-27.05	74	40.29	35.18	5.28	33.8	100	200	Peak
7312	48.44	-25.56	74	39.76	36.2	6.61	34.13	163	22	Peak

Test Mode :	802.11g - Chain Port 0	Temperature :	22~23°C
Test Channel :	11	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2462	106	-	-	102.67	32.98	3.64	33.29	110	21	Peak
2462	94.21	-	-	90.88	32.98	3.64	33.29	110	21	Average
4924	48.51	-25.49	74	41.81	35.19	5.31	33.8	100	152	Peak
7386	49.68	-24.32	74	40.9	36.24	6.7	34.16	133	263	Peak

Test Mode :	802.11g - Chain Port 0	Temperature :	22~23°C
Test Channel :	11	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2462	106.38	-	-	103.05	32.98	3.64	33.29	105	11	Peak
2462	94.7	-	-	91.37	32.98	3.64	33.29	105	11	Average
4924	47.5	-26.5	74	40.8	35.19	5.31	33.8	100	159	Peak
7386	49.13	-24.87	74	40.35	36.24	6.7	34.16	177	48	Peak

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0	Temperature :	22~23°C
Test Channel :	01	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
32.91	21.17	-18.83	40	38.2	16.04	0.52	33.59	-	-	Peak
68.8	19.26	-20.74	40	46.8	5.28	0.77	33.59	-	-	Peak
128.94	26.04	-17.46	43.5	46.88	11.71	1.04	33.59	147	52	Peak
274.44	22.27	-23.73	46	41.64	12.5	1.54	33.41	-	-	Peak
560.59	19.23	-26.77	46	31.55	18.52	2.16	33	-	-	Peak
737.13	20.54	-25.46	46	31.11	19.78	2.45	32.8	-	-	Peak
2412	105.98	-	-	102.75	32.89	3.61	33.27	117	355	Peak
2412	93.85	-	-	90.62	32.89	3.61	33.27	117	355	Average
4824	46.79	-27.21	74	40.17	35.17	5.25	33.8	162	252	Peak

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0	Temperature :	22~23°C
Test Channel :	01	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
42.61	22.35	-17.65	40	44.88	10.48	0.62	33.63	-	-	Peak
128.94	27.48	-16.02	43.5	48.32	11.71	1.04	33.59	100	145	Peak
274.44	17.27	-28.73	46	36.64	12.5	1.54	33.41	-	-	Peak
511.12	18.62	-27.38	46	32.28	17.42	2.03	33.11	-	-	Peak
696.39	20.97	-25.03	46	32.19	19.28	2.38	32.88	-	-	Peak
819.58	22.89	-23.11	46	32.88	20.08	2.59	32.66	-	-	Peak
2412	103.63	-	-	100.4	32.89	3.61	33.27	100	3	Peak
2412	90.67	-	-	87.44	32.89	3.61	33.27	100	3	Average
4824	46.4	-27.6	74	39.78	35.17	5.25	33.8	144	74	Peak

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0	Temperature :	22~23°C
Test Channel :	06	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2437	103.71	-	-	100.41	32.95	3.63	33.28	200	13	Peak
2437	91.02	-	-	87.72	32.95	3.63	33.28	200	13	Average
4874	46.34	-27.66	74	39.68	35.18	5.28	33.8	100	226	Peak
7311	48.5	-25.5	74	39.82	36.2	6.61	34.13	100	185	Peak

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0	Temperature :	22~23°C
Test Channel :	06	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2437	104.56	-	-	101.26	32.95	3.63	33.28	102	10	Peak
2437	92.03	-	-	88.73	32.95	3.63	33.28	102	10	Average
4874	47.2	-26.8	74	40.54	35.18	5.28	33.8	102	320	Peak
7311	48.77	-25.23	74	40.09	36.2	6.61	34.13	100	41	Peak

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0	Temperature :	22~23°C
Test Channel :	11	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2462	104.88	-	-	101.55	32.98	3.64	33.29	200	75	Peak
2462	92.5	-	-	89.17	32.98	3.64	33.29	200	75	Average
4924	46.97	-27.03	74	40.27	35.19	5.31	33.8	166	256	Peak
7386	49.05	-24.95	74	40.27	36.24	6.7	34.16	118	45	Peak

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0	Temperature :	22~23°C
Test Channel :	11	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2462	103.76	-	-	100.43	32.98	3.64	33.29	104	6	Peak
2462	91.71	-	-	88.38	32.98	3.64	33.29	104	6	Average
4924	46.24	-27.76	74	39.54	35.19	5.31	33.8	100	330	Peak
7386	49.65	-24.35	74	40.87	36.24	6.7	34.16	166	59	Peak

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	01	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2412	108.99	-	-	105.76	32.89	3.61	33.27	117	355	Peak
2412	96.48	-	-	93.25	32.89	3.61	33.27	117	355	Average
4824	48.11	-25.89	74	41.49	35.17	5.25	33.8	100	316	Peak

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	01	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2412	103.41	-	-	100.18	32.89	3.61	33.27	178	360	Peak
2412	91.32	-	-	88.09	32.89	3.61	33.27	178	360	Average
4824	47.04	-26.96	74	40.42	35.17	5.25	33.8	166	95	Peak

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	06	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2437	110.45	-	-	107.15	32.95	3.63	33.28	117	360	Peak
2437	97.74	-	-	94.44	32.95	3.63	33.28	117	360	Average
4874	46.71	-27.29	74	40.05	35.18	5.28	33.8	100	230	Peak
7312	49.07	-24.93	74	40.39	36.2	6.61	34.13	106	62	Peak

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	06	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2437	105.79	-	-	102.49	32.95	3.63	33.28	152	7	Peak
2437	94.54	-	-	91.24	32.95	3.63	33.28	152	7	Average
4874	47.25	-26.75	74	40.59	35.18	5.28	33.8	185	220	Peak
7312	49.15	-24.85	74	40.47	36.2	6.61	34.13	162	200	Peak

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	11	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2462	110.76	-	-	107.43	32.98	3.64	33.29	137	310	Peak
2462	98.6	-	-	95.27	32.98	3.64	33.29	137	310	Average
4924	47.52	-26.48	74	40.82	35.19	5.31	33.8	100	0	Peak
7386	48.94	-25.06	74	40.16	36.24	6.7	34.16	152	211	Peak

Test Mode :	2.4GHz 802.11n HT20 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	11	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2462	104.98	-	-	101.65	32.98	3.64	33.29	104	11	Peak
2462	93.44	-	-	90.11	32.98	3.64	33.29	104	11	Average
4924	46.99	-27.01	74	40.29	35.19	5.31	33.8	166	232	Peak
7386	50.32	-23.68	74	41.54	36.24	6.7	34.16	145	110	Peak

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0	Temperature :	22~23°C
Test Channel :	03	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2422 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2422	102.72	-	-	99.46	32.92	3.62	33.28	118	357	Peak
2422	92.32	-	-	89.06	32.92	3.62	33.28	118	357	Average
4844	46.89	-27.11	74	40.25	35.18	5.26	33.8	100	0	Peak
7266	48.56	-25.44	74	39.92	36.19	6.56	34.11	100	166	Peak

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0	Temperature :	22~23°C
Test Channel :	03	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2422 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2422	99.31	-	-	96.05	32.92	3.62	33.28	103	5	Peak
2422	88.85	-	-	85.59	32.92	3.62	33.28	103	5	Average
4844	46.81	-27.19	74	40.17	35.18	5.26	33.8	200	105	Peak
7266	49.37	-24.63	74	40.73	36.19	6.56	34.11	162	85	Peak

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0	Temperature :	22~23°C
Test Channel :	06	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2437	100.26	-	-	96.96	32.95	3.63	33.28	200	12	Peak
2437	89.2	-	-	85.9	32.95	3.63	33.28	200	12	Average
4874	47.3	-26.7	74	40.64	35.18	5.28	33.8	100	162	Peak
7312	49.08	-24.92	74	40.4	36.2	6.61	34.13	163	296	Peak

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0	Temperature :	22~23°C
Test Channel :	06	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2437	100.22	-	-	96.92	32.95	3.63	33.28	100	10	Peak
2437	89.49	-	-	86.19	32.95	3.63	33.28	100	10	Average
4874	47.27	-26.73	74	40.61	35.18	5.28	33.8	166	258	Peak
7312	48.89	-25.11	74	40.21	36.2	6.61	34.13	200	360	Peak

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0	Temperature :	22~23°C
Test Channel :	09	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2452 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2452	104.62	-	-	101.32	32.95	3.63	33.28	109	86	Peak
2452	94.13	-	-	90.83	32.95	3.63	33.28	109	86	Average
4904	47.06	-26.94	74	40.37	35.19	5.3	33.8	100	263	Peak
7356	48.74	-25.26	74	40.01	36.22	6.66	34.15	166	100	Peak

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0	Temperature :	22~23°C
Test Channel :	09	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2452 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2452	100.41	-	-	97.11	32.95	3.63	33.28	102	8	Peak
2452	89.81	-	-	86.51	32.95	3.63	33.28	102	8	Average
4904	46.85	-27.15	74	40.16	35.19	5.3	33.8	166	291	Peak
7356	49.62	-24.38	74	40.89	36.22	6.66	34.15	133	147	Peak

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	03	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2422 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2422	105.19	-	-	101.93	32.92	3.62	33.28	119	355	Peak
2422	93.57	-	-	90.31	32.92	3.62	33.28	119	355	Average
4844	47.4	-26.6	74	40.76	35.18	5.26	33.8	115	85	Peak
7266	49.53	-24.47	74	40.89	36.19	6.56	34.11	133	246	Peak

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	03	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2422 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2422	99.55	-	-	96.29	32.92	3.62	33.28	100	0	Peak
2422	87.6	-	-	84.34	32.92	3.62	33.28	100	0	Average
4844	46.89	-27.11	74	40.25	35.18	5.26	33.8	100	88	Peak
7266	49.13	-24.87	74	40.49	36.19	6.56	34.11	139	45	Peak

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	06	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2437	102.35	-	-	99.05	32.95	3.63	33.28	113	0	Peak
2437	90.43	-	-	87.13	32.95	3.63	33.28	113	0	Average
4874	46.92	-27.08	74	40.26	35.18	5.28	33.8	100	230	Peak
7312	49.12	-24.88	74	40.44	36.2	6.61	34.13	132	215	Peak

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	06	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2437	99.24	-	-	95.94	32.95	3.63	33.28	182	9	Peak
2437	88.1	-	-	84.8	32.95	3.63	33.28	182	9	Average
4874	46.5	-27.5	74	39.84	35.18	5.28	33.8	132	264	Peak
7312	48.53	-25.47	74	39.85	36.2	6.61	34.13	152	0	Peak

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	09	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 2452 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2452	100.49	-	-	97.19	32.95	3.63	33.28	152	11	Peak
2452	89.15	-	-	85.85	32.95	3.63	33.28	152	11	Average
4904	47.36	-26.64	74	40.67	35.19	5.3	33.8	162	220	Peak
7356	49.49	-24.51	74	40.76	36.22	6.66	34.15	100	106	Peak

Test Mode :	2.4GHz 802.11n HT40 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	09	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 2452 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
2452	98.93	-	-	95.63	32.95	3.63	33.28	152	345	Peak
2452	87.85	-	-	84.55	32.95	3.63	33.28	152	345	Average
4904	47.54	-26.46	74	40.85	35.19	5.3	33.8	100	264	Peak
7356	49.99	-24.01	74	41.26	36.22	6.66	34.15	147	45	Peak

Test Mode :	802.11a - Chain Port 1	Temperature :	22~23°C
Test Channel :	149	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5146	56.71	-17.29	74	49.85	35.25	5.38	33.77	100	162	Peak
5146	44.71	-9.29	54	37.85	35.25	5.38	33.77	100	162	Average
5745	109.47	-	-	101.98	35.52	5.67	33.7	100	66	Peak
5745	96.88	-	-	89.39	35.52	5.67	33.7	100	66	Average
11490	34.81	-39.19	74	55.5	4.47	8.84	34	120	145	Peak

Test Mode :	802.11a - Chain Port 1	Temperature :	22~23°C
Test Channel :	149	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5404	56.61	-17.39	74	49.52	35.35	5.46	33.72	174	122	Peak
5404	43.66	-10.34	54	36.57	35.35	5.46	33.72	174	122	Average
5745	106.2	-	-	98.71	35.52	5.67	33.7	120	231	Peak
5745	95.24	-	-	87.75	35.52	5.67	33.7	120	231	Average
11490	37.31	-36.69	74	58	4.47	8.84	34	145	215	Peak

Test Mode :	802.11a - Chain Port 1	Temperature :	22~23°C
Test Channel :	157	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5132	57.51	-16.49	74	50.67	35.24	5.38	33.78	100	122	Peak
5132	43.52	-10.48	54	36.68	35.24	5.38	33.78	100	122	Average
5785	107.04	-	-	99.51	35.53	5.7	33.7	100	65	Peak
5785	95.46	-	-	87.93	35.53	5.7	33.7	100	65	Average
11570	33.74	-40.26	74	54.58	4.38	8.8	34.02	116	215	Peak

Test Mode :	802.11a - Chain Port 1	Temperature :	22~23°C
Test Channel :	157	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5785	105.61	-	-	98.08	35.53	5.7	33.7	121	223	Peak
5785	94.39	-	-	86.86	35.53	5.7	33.7	121	223	Average
11571	34.73	-39.27	74	55.57	4.38	8.8	34.02	112	41	Peak

Test Mode :	802.11a - Chain Port 1	Temperature :	22~23°C
Test Channel :	161	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 5805 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5130	57.48	-16.52	74	50.64	35.24	5.38	33.78	100	251	Peak
5130	45.2	-8.8	54	38.36	35.24	5.38	33.78	100	251	Average
5805	106.5	-	-	98.91	35.55	5.74	33.7	122	144	Peak
5805	94.5	-	-	86.91	35.55	5.74	33.7	122	144	Average
11610	33.28	-40.72	74	54.27	4.29	8.76	34.04	112	102	Peak

Test Mode :	802.11a - Chain Port 1	Temperature :	22~23°C
Test Channel :	161	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 5805 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5805	103.32	-	-	95.73	35.55	5.74	33.7	200	213	Peak
5805	92.36	-	-	84.77	35.55	5.74	33.7	200	213	Average
11607	36	-38	74	56.99	4.29	8.76	34.04	115	210	Peak

Test Mode :	5GHz 802.11n HT20 – Chain Port 0	Temperature :	22~23°C
Test Channel :	149	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5098	55.34	-18.66	74	48.52	35.23	5.37	33.78	100	84	Peak
5098	39.99	-14.01	54	33.17	35.23	5.37	33.78	100	84	Average
5450	54.27	-19.73	74	47.13	35.38	5.47	33.71	100	52	Peak
5450	44.66	-9.34	54	37.52	35.38	5.47	33.71	100	52	Average
5745	107.68	-	-	100.19	35.52	5.67	33.7	161	84	Peak
5745	96.7	-	-	89.21	35.52	5.67	33.7	161	84	Average
11490	35.65	-38.35	74	56.34	4.47	8.84	34	165	210	Peak

Test Mode :	5GHz 802.11n HT20 – Chain Port 0	Temperature :	22~23°C
Test Channel :	149	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5392	56.6	-17.4	74	49.53	35.34	5.45	33.72	100	184	Peak
5392	43.6	-10.4	54	36.53	35.34	5.45	33.72	100	184	Average
5745	104.44	-	-	96.95	35.52	5.67	33.7	100	230	Peak
5745	93.65	-	-	86.16	35.52	5.67	33.7	100	230	Average
11490	35.82	-38.18	74	56.51	4.47	8.84	34	112	100	Peak

Test Mode :	5GHz 802.11n HT20 – Chain Port 0	Temperature :	22~23°C
Test Channel :	157	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5132	56.47	-17.53	74	49.63	35.24	5.38	33.78	100	74	Peak
5132	44.8	-9.2	54	37.96	35.24	5.38	33.78	100	74	Average
5785	106.15	-	-	98.62	35.53	5.7	33.7	100	67	Peak
5785	94.81	-	-	87.28	35.53	5.7	33.7	100	67	Average
11571	34.51	-39.49	74	55.35	4.38	8.8	34.02	120	184	Peak

Test Mode :	5GHz 802.11n HT20 – Chain Port 0	Temperature :	22~23°C
Test Channel :	157	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5404	56.97	-17.03	74	49.88	35.35	5.46	33.72	103	26	Peak
5404	47.05	-6.95	54	39.96	35.35	5.46	33.72	103	26	Average
5785	104.18	-	-	96.65	35.53	5.7	33.7	100	221	Peak
5785	92.56	-	-	85.03	35.53	5.7	33.7	100	221	Average
11571	35.45	-38.55	74	56.29	4.38	8.8	34.02	122	102	Peak

Test Mode :	5GHz 802.11n HT20 – Chain Port 0	Temperature :	22~23°C
Test Channel :	161	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 5805 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5134	56.96	-17.04	74	50.12	35.24	5.38	33.78	100	147	Peak
5134	46.52	-7.48	54	39.68	35.24	5.38	33.78	100	147	Average
5805	105.71	-	-	98.12	35.55	5.74	33.7	157	66	Peak
5805	94.48	-	-	86.89	35.55	5.74	33.7	157	66	Average
11610	31.92	-42.08	74	52.91	4.29	8.76	34.04	165	210	Peak

Test Mode :	5GHz 802.11n HT20 – Chain Port 0	Temperature :	22~23°C
Test Channel :	161	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 5805 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5358	57.01	-16.99	74	49.97	35.32	5.45	33.73	184	100	Peak
5358	45.56	-8.44	54	38.52	35.32	5.45	33.73	184	100	Average
5805	102.53	-	-	94.94	35.55	5.74	33.7	100	192	Peak
5805	91.43	-	-	83.84	35.55	5.74	33.7	100	192	Average
11610	34.11	-39.89	74	55.1	4.29	8.76	34.04	100	141	Peak

Test Mode :	5GHz 802.11n HT20 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	149	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	5745 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
4586	60.65	-13.35	74	54.27	35.12	5.06	33.8	100	145	Peak
4586	40.54	-13.46	54	34.16	35.12	5.06	33.8	100	145	Average
5138	55.81	-18.19	74	48.97	35.24	5.38	33.78	100	87	Peak
5138	43.73	-10.27	54	36.89	35.24	5.38	33.78	100	87	Average
5745	109.52	-	-	102.03	35.52	5.67	33.7	100	16	Peak
5745	105.21	-	-	97.72	35.52	5.67	33.7	100	16	Average
11490	62.65	-11.35	74	83.34	4.47	8.84	34	159	331	Peak
11490	46.88	-7.12	54	67.57	4.47	8.84	34	159	331	Average

Test Mode :	5GHz 802.11n HT20 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	149	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	5745 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
4596	61.25	-12.75	74	54.85	35.13	5.07	33.8	100	196	Peak
4596	40.25	-13.75	54	33.85	35.13	5.07	33.8	100	196	Average
5454	61.25	-12.75	74	54.11	35.38	5.47	33.71	100	0	Peak
5454	49.52	-4.48	54	42.38	35.38	5.47	33.71	100	0	Average
5745	110.25	-	-	102.76	35.52	5.67	33.7	100	316	Peak
5745	98.65	-	-	91.16	35.52	5.67	33.7	100	316	Average
11490	61.46	-12.54	74	82.15	4.47	8.84	34	100	178	Peak
11490	40.56	-13.44	54	61.25	4.47	8.84	34	100	178	Average

Test Mode :	5GHz 802.11n HT20 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	157	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	5785 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
4618	60.15	-13.85	74	53.74	35.13	5.08	33.8	100	26	Peak
4618	42.94	-11.06	54	36.53	35.13	5.08	33.8	100	26	Average
5428	57.96	-16.04	74	50.85	35.36	5.46	33.71	100	332	Peak
5428	46.96	-7.04	54	39.85	35.36	5.46	33.71	100	332	Average
5785	109.32	-	-	101.79	35.53	5.7	33.7	100	7	Peak
5785	97.7	-	-	90.17	35.53	5.7	33.7	100	7	Average
11570	61.12	-12.88	74	81.96	4.38	8.8	34.02	151	327	Peak
11570	45.92	-8.08	54	66.76	4.38	8.8	34.02	151	327	Average

Test Mode :	5GHz 802.11n HT20 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	157	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	5785 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
4612	62.02	-11.98	74	55.62	35.13	5.07	33.8	100	110	Peak
4612	39.14	-14.86	54	32.74	35.13	5.07	33.8	100	110	Average
5456	61.52	-12.48	74	54.38	35.38	5.47	33.71	100	0	Peak
5456	50.12	-3.88	54	42.98	35.38	5.47	33.71	100	0	Average
5785	109.35	-	-	101.82	35.53	5.7	33.7	100	319	Peak
5785	97.02	-	-	89.49	35.53	5.7	33.7	100	319	Average
11570	60.71	-13.29	74	81.55	4.38	8.8	34.02	100	145	Peak
11570	42.4	-11.6	54	63.24	4.38	8.8	34.02	100	145	Average

Test Mode :	5GHz 802.11n HT20 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	161	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	5805 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
4650	57.65	-16.35	74	51.2	35.14	5.11	33.8	100	145	Peak
4650	42.6	-11.4	54	36.15	35.14	5.11	33.8	100	145	Average
5456	58.35	-15.65	74	51.21	35.38	5.47	33.71	100	45	Peak
5456	47.26	-6.74	54	40.12	35.38	5.47	33.71	100	45	Average
5805	108.7	-	-	101.11	35.55	5.74	33.7	100	7	Peak
5805	96.93	-	-	89.34	35.55	5.74	33.7	100	7	Average
11610	61.17	-12.83	74	82.16	4.29	8.76	34.04	100	0	Peak
11610	44.27	-9.73	54	65.26	4.29	8.76	34.04	100	0	Average

Test Mode :	5GHz 802.11n HT20 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	161	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 5805 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
4654	62.07	-11.93	74	55.62	35.14	5.11	33.8	100	109	Peak
4654	37.71	-16.29	54	31.26	35.14	5.11	33.8	100	109	Average
5440	61.99	-12.01	74	54.86	35.37	5.47	33.71	100	0	Peak
5440	50.68	-3.32	54	43.55	35.37	5.47	33.71	100	0	Average
5805	107.07	-	-	99.48	35.55	5.74	33.7	100	84	Peak
5805	94.12	-	-	86.53	35.55	5.74	33.7	100	84	Average
11607	50.34	-23.66	74	71.33	4.29	8.76	34.04	100	100	Peak

Test Mode :	5GHz 802.11n HT40 – Chain Port 1	Temperature :	22~23°C
Test Channel :	151	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 5755 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5442	61.48	-12.52	74	54.35	35.37	5.47	33.71	100	251	Peak
5442	48.11	-5.89	54	40.98	35.37	5.47	33.71	100	251	Average
5755	105.07	-	-	97.56	35.53	5.68	33.7	100	65	Peak
5755	93.71	-	-	86.2	35.53	5.68	33.7	100	65	Average
11508	38.48	-35.52	74	59.09	4.53	8.86	34	121	154	Peak

Test Mode :	5GHz 802.11n HT40 – Chain Port 1	Temperature :	22~23°C
Test Channel :	151	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 5755 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5420	54.83	-19.17	74	47.72	35.36	5.46	33.71	100	0	Peak
5420	41.64	-12.36	54	34.53	35.36	5.46	33.71	100	0	Average
5755	101.9	-	-	94.39	35.53	5.68	33.7	144	222	Peak
5755	90.89	-	-	83.38	35.53	5.68	33.7	144	222	Average
11508	38	-36	74	58.61	4.53	8.86	34	112	154	Peak

Test Mode :	5GHz 802.11n HT40 – Chain Port 1	Temperature :	22~23°C
Test Channel :	159	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	1. 5795 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5136	56.36	-17.64	74	49.52	35.24	5.38	33.78	100	258	Peak
5136	44.96	-9.04	54	38.12	35.24	5.38	33.78	100	258	Average
5795	105.57	-	-	98.01	35.54	5.72	33.7	159	84	Peak
5795	94.96	-	-	87.4	35.54	5.72	33.7	159	84	Average
11589	39.03	-34.97	74	59.94	4.34	8.78	34.03	102	32	Peak

Test Mode :	5GHz 802.11n HT40 – Chain Port 1	Temperature :	22~23°C
Test Channel :	159	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	1. 5795 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

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
5350	57.14	-16.86	74	50.1	35.32	5.45	33.73	100	125	Peak
5350	45.45	-8.55	54	38.41	35.32	5.45	33.73	100	125	Average
5795	101.58	-	-	94.02	35.54	5.72	33.7	139	208	Peak
5795	89.32	-	-	81.76	35.54	5.72	33.7	139	208	Average
11589	38.28	-35.72	74	59.19	4.34	8.78	34.03	100	120	Peak

Test Mode :	5GHz 802.11n HT40 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	151	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	5755 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
4592	57.86	-16.14	74	51.48	35.12	5.06	33.8	100	47	Peak
4592	38.93	-15.07	54	32.55	35.12	5.06	33.8	100	47	Average
5402	57.21	-16.79	74	50.12	35.35	5.46	33.72	100	21	Peak
5402	48.34	-5.66	54	41.25	35.35	5.46	33.72	100	21	Average
5755	106.44	-	-	98.93	35.53	5.68	33.7	121	83	Peak
5755	95.72	-	-	88.21	35.53	5.68	33.7	121	83	Average
11510	57.82	-16.18	74	78.43	4.53	8.86	34	100	140	Peak
11510	43.85	-10.15	54	64.46	4.53	8.86	34	100	140	Average

Test Mode :	5GHz 802.11n HT40 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	151	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	5755 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
4592	59.27	-14.73	74	52.89	35.12	5.06	33.8	120	104	Peak
4592	38.44	-15.56	54	32.06	35.12	5.06	33.8	120	104	Average
5456	61.5	-12.5	74	54.36	35.38	5.47	33.71	100	197	Peak
5456	50.85	-3.15	54	43.71	35.38	5.47	33.71	100	197	Average
5755	109.11	-	-	101.6	35.53	5.68	33.7	105	196	Peak
5755	97.25	-	-	89.74	35.53	5.68	33.7	105	196	Average
11510	58.76	-15.24	74	79.37	4.53	8.86	34	125	326	Peak
11510	44.67	-9.33	54	65.28	4.53	8.86	34	125	326	Average

Test Mode :	5GHz 802.11n HT40 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	159	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Horizontal
Remark :	5795 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
4620	56.74	-17.26	74	50.33	35.13	5.08	33.8	100	49	Peak
4620	37.25	-16.75	54	30.84	35.13	5.08	33.8	100	49	Average
5448	57.64	-16.36	74	50.5	35.38	5.47	33.71	100	265	Peak
5448	48.34	-5.66	54	41.2	35.38	5.47	33.71	100	265	Average
5795	105.87	-	-	98.31	35.54	5.72	33.7	100	165	Peak
5795	91.91	-	-	84.35	35.54	5.72	33.7	100	165	Average
11590	60.36	-13.64	74	81.27	4.34	8.78	34.03	162	297	Peak
11590	46.89	-7.11	54	67.8	4.34	8.78	34.03	162	297	Average

Test Mode :	5GHz 802.11n HT40 – Chain Port 0+1	Temperature :	22~23°C
Test Channel :	159	Relative Humidity :	40~41%
Test Engineer :	Jun Liu	Polarization :	Vertical
Remark :	5795 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
4662	57.57	-16.43	74	51.12	35.14	5.11	33.8	100	110	Peak
4662	37.87	-16.13	54	31.42	35.14	5.11	33.8	100	110	Average
5456	63.67	-10.33	74	56.53	35.38	5.47	33.71	100	193	Peak
5456	51.68	-2.32	54	44.54	35.38	5.47	33.71	100	193	Average
5795	109.06	-	-	101.5	35.54	5.72	33.7	104	197	Peak
5795	97.02	-	-	89.46	35.54	5.72	33.7	104	197	Average
11590	60.65	-13.35	74	81.56	4.34	8.78	34.03	100	319	Peak
11590	45.61	-8.39	54	66.52	4.34	8.78	34.03	100	319	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 (dBμV)	
	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.

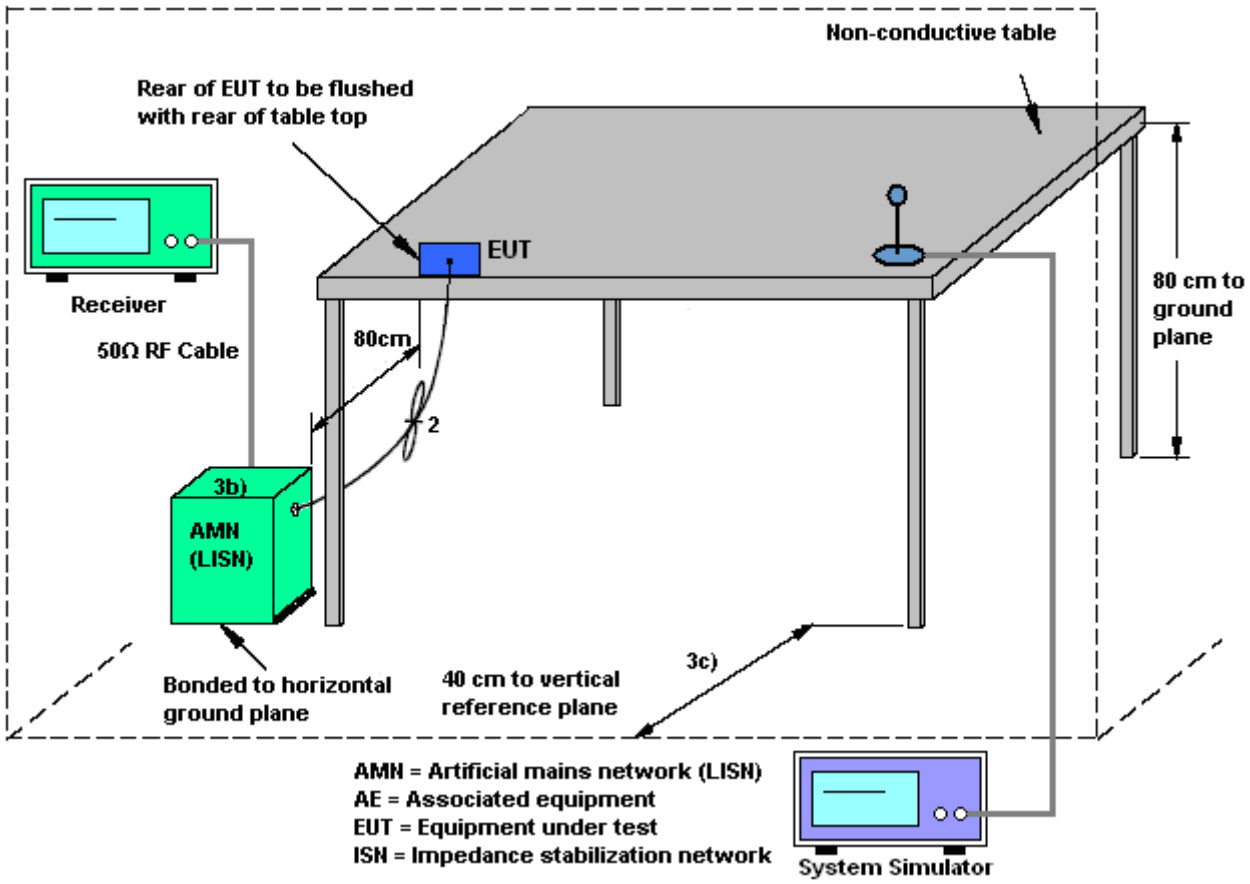
3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.6.3 Test Procedures

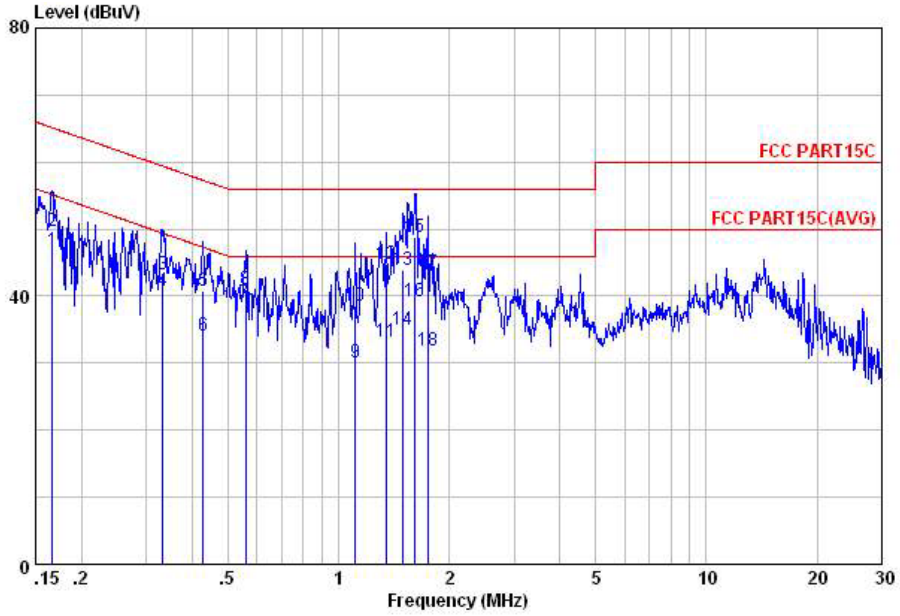
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. 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

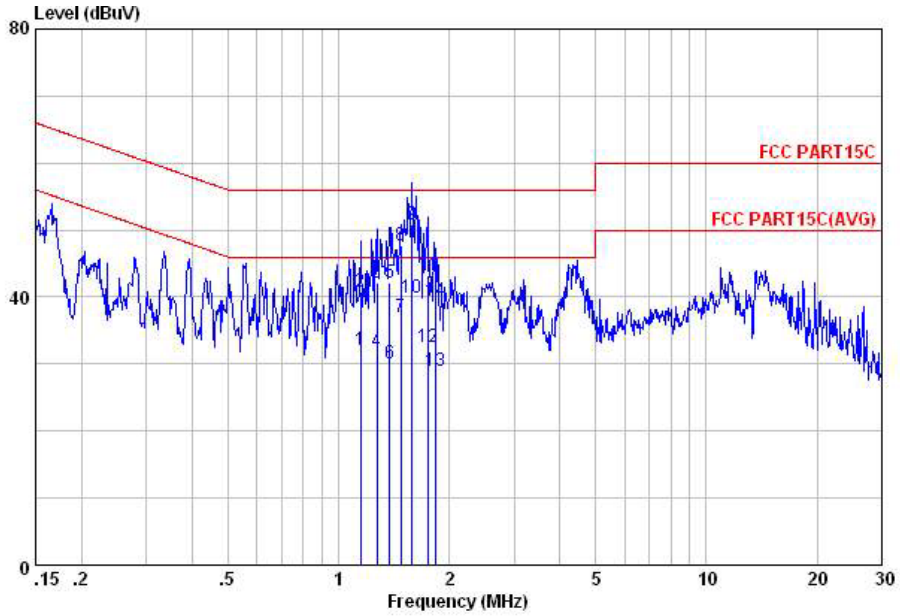
Test Mode :	Mode 2	Temperature :	22~24℃
Test Engineer :	Eligah Wang	Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	CDMA2000 BC0 Idle + WLAN 5GHz Link + Adapter		



Site : C001-KS
Condition: FCC PART15C LISN-L20130306 LINE

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.17	46.89	-8.23	55.12	34.60	1.64	10.65	Average
2	0.17	49.59	-15.53	65.12	37.30	1.64	10.65	QP
3	0.33	43.14	-16.26	59.40	32.30	0.50	10.34	QP
4	0.33	40.74	-8.66	49.40	29.90	0.50	10.34	Average
5	0.43	40.85	-16.44	57.29	30.29	0.28	10.28	QP
6	0.43	34.15	-13.14	47.29	23.59	0.28	10.28	Average
7	0.56	39.05	-6.95	46.00	28.60	0.20	10.25	Average
8	0.56	41.05	-14.95	56.00	30.60	0.20	10.25	QP
9	1.11	30.18	-15.82	46.00	19.90	0.10	10.18	Average
10	1.11	38.58	-17.42	56.00	28.30	0.10	10.18	QP
11	1.34	33.18	-12.82	46.00	22.90	0.10	10.18	Average
12	1.34	44.88	-11.12	56.00	34.60	0.10	10.18	QP
13	1.50	43.89	-12.11	56.00	33.60	0.10	10.19	QP
14	1.50	34.89	-11.11	46.00	24.60	0.10	10.19	Average
15	1.61	48.89	-7.11	56.00	38.60	0.10	10.19	QP
16	1.61	39.19	-6.81	46.00	28.90	0.10	10.19	Average
17	1.74	43.49	-12.51	56.00	33.20	0.10	10.19	QP
18	1.74	31.89	-14.11	46.00	21.60	0.10	10.19	Average

Test Mode :	Mode 2	Temperature :	22~24℃
Test Engineer :	Eligah Wang	Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	CDMA2000 BC0 Idle + WLAN 5GHz Link + Adapter		



Site : C001-KS
Condition: FCC PART15C LISN-N20130306 NEUTRAL

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	1.15	32.18	-13.82	46.00	21.90	0.10	10.18	Average
2	1.15	40.88	-15.12	56.00	30.60	0.10	10.18	QP
3	1.27	42.08	-13.92	56.00	31.80	0.10	10.18	QP
4	1.27	31.88	-14.12	46.00	21.60	0.10	10.18	Average
5	1.37	42.08	-13.92	56.00	31.80	0.10	10.18	QP
6	1.37	30.18	-15.82	46.00	19.90	0.10	10.18	Average
7	1.48	36.89	-9.11	46.00	26.60	0.10	10.19	Average
8	1.48	47.59	-8.41	56.00	37.30	0.10	10.19	QP
9	1.59	50.89	-5.11	56.00	40.60	0.10	10.19	QP
10	1.59	39.89	-6.11	46.00	29.60	0.10	10.19	Average
11	1.74	43.19	-12.81	56.00	32.90	0.10	10.19	QP
12	1.74	32.59	-13.41	46.00	22.30	0.10	10.19	Average
13	1.83	28.89	-17.11	46.00	18.60	0.10	10.19	Average
14	1.83	39.49	-16.51	56.00	29.20	0.10	10.19	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 Anti-Replacement Construction

Non-standard antenna connector is used.

3.7.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

For CDD transmissions, directional gain is calculated as

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k / 20}$ if the kth antenna is being fed by spatial stream j, or zero if it is not;

G_k is the gain in dBi of the kth antenna.

The EUT supports CDD mode.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain “DG” is calculated as following table.

			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant. 0	Ant. 1	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
2.4 GHz	2.89	3.61	6.27	6.27	0.27	0.27
5 GHz	0.68	1.02	3.86	3.86	0.00	0.00

Power Limit Reduction = DG(Power) – 6dBi, (min = 0)

PSD Limit Reduction = DG(PSD) – 6dBi, (min = 0)

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. 28, 2013	May 31, 2014~ Jun. 02, 2014	Dec. 27, 2014	Conducted (TH01-KS)
Spectrum Analyzer	R&S	FSV30	101338	9kHz~30GHz	Jun. 17, 2013	May 31, 2014~ Jun. 02, 2014	Jun. 16, 2014	Conducted (TH01-KS)
Pulse Power Sensor	Anritsu	MA2411B	0917070	30MHz~40GHz	Feb. 27, 2014	May 31, 2014~ Jun. 02, 2014	Feb. 26, 2015	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Feb. 27, 2014	May 31, 2014~ Jun. 02, 2014	Feb. 26, 2015	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESCI	100534	9kHz~3GHz	Nov. 05, 2013	May 30, 2014	Nov. 04, 2014	Radiation (03CH01-KS)
Spectrum Analyzer	R&S	FSP30	101399	9kHz~30GHz	May 22, 2014	May 30, 2014	May 21, 2015	Radiation (03CH01-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Oct. 09, 2013	May 30, 2014	Oct. 08, 2014	Radiation (03CH01-KS)
Bilog Antenna	SCHAFFNER	CBL6112D	23182	25MHz~2GHz	Jan. 08, 2014	May 30, 2014	Jan. 07, 2015	Radiation (03CH01-KS)
Double Ridge Horn Antenna	EMCO	3117	00075959	1GHz~18GHz	Jan. 08, 2014	May 30, 2014	Jan. 07, 2015	Radiation (03CH01-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz~40GHz	Mar. 10, 2014	May 30, 2014	Mar. 09, 2015	Radiation (03CH01-KS)
Active Horn Antenna	com-power	AHA-118	701030	1GHz~18GHz	Nov. 18, 2013	May 30, 2014	Nov. 17, 2014	Radiation (03CH01-KS)
Amplifier	com-power	PA-103A	161073	1MHz~1GHz	May 04, 2014	May 30, 2014	May 03, 2015	Radiation (03CH01-KS)
Amplifier	Agilent	8449B	3008A02371	1GHz~26.5GHz	Dec.10, 2013	May 30, 2014	Dec. 09, 2014	Radiation (03CH01-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	May 30, 2014	NCR	Radiation (03CH01-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	May 30, 2014	NCR	Radiation (03CH01-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz	May 22, 2014	May 30, 2014	May 21, 2015	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Dec. 10, 2013	May 30, 2014	Dec. 09, 2014	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Dec. 10, 2013	May 30, 2014	Dec. 09, 2014	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Dec. 10, 2013	May 30, 2014	Dec. 09, 2014	Conduction (CO01-KS)

5 Uncertainty of Evaluation

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

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**