FCC RF Test Report

APPLICANT	:	Lenovo(Shanghai) Electronics Technology Co., Ltd.
EQUIPMENT	:	Portable Tablet Computer
BRAND NAME	:	Lenovo
MODEL NAME	:	Lenovo YB1-X90L
FCC ID	:	O57YB1X90L
STANDARD	:	FCC Part 15 Subpart E §15.407
CLASSIFICATION	:	(NII) Unlicensed National Information Infrastructure

The product was received on Jun. 20, 2016 and testing was completed on Aug. 11, 2016. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

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Prepared by: James Huang / Manager

Jones Tsai

Approved by: Jones Tsai / Manager

Testing Laboratory 2627

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

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR662015D	Rev. 01	Initial issue of report	Aug. 17, 2016

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	2.1049 15.403(i)	26dB & 99% Bandwidth	-	Pass	-
3.2	15.407(a)	Maximum Conducted Output Power	FCC ≤24 dBm (depend on band)	Pass	-
3.3	15.407(a)	Power Spectral Density	FCC ≤11 dBm (depend on band)	Pass	-
3.4	15.407(b)	Unwanted Emissions	≤ -17, -27 dBm (depend on band)&15.209(a)	Pass	Under limit 3.05 dB at 5437.520 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 5.38 dB at 5.870 MHz
3.6	15.407(g)	Frequency Stability	Within Operation Band	Pass	-
3.7	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.8	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-

1 General Description

1.1 Applicant

Lenovo(Shanghai) Electronics Technology Co., Ltd.
NO.68 BUILDING, 199 FENJU RD, China (Shanghai) Pilot Free Trade Zone, 200131, CHINA

1.2 Manufacturer

Lenovo PC HK Limited
23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong Kong

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Portable Tablet Computer
Brand Name	Lenovo
Model Name	Lenovo YB1-X90L
FCC ID	O57YB1X90L
EUT supports Radios application	GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/ HSPA+(16QAM uplink is not supported)/LTE/ WLAN2.4GHz 802.11b/g/n HT20/ WLAN5GHz 802.11a/n HT20/HT40/ WLAN5GHz 802.11ac VHT20/VHT40/VHT80/ Bluetooth v3.0+EDR/Bluetooth v4.0 LE
IMEI Code	Conducted: 868672020019995 Radiation: 868672020020027 Conduction: 868672020020035
HW Version	Lenovo YB1-X90L
SW Version	YB1-X90L_160707
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

Standards-related Product Specification	
Tx/Rx Channel Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5700 MHz
Maximum Output Power	**<5180 MHz ~ 5240 MHz>** 802.11a : 16.45 dBm / 0.0442 W 802.11n HT20 : 19.06 dBm / 0.0805 W 802.11n HT40 : 14.81 dBm / 0.0303 W 802.11ac VHT20 : 18.61 dBm / 0.0726 W 802.11ac VHT40 : 14.93 dBm / 0.0311 W 802.11ac VHT80 : 13.26 dBm / 0.0212 W **<5260 MHz ~ 5320 MHz>** 802.11a : 16.42 dBm / 0.0439 W 802.11n HT20 : 19.87 dBm / 0.0971 W 802.11n HT40 : 17.57 dBm / 0.0571 W 802.11ac VHT20 : 18.59 dBm / 0.0723 W 802.11ac VHT40 : 18.98 dBm / 0.0791 W 802.11ac VHT80 : 17.20 dBm / 0.0525 W **<5500 MHz ~ 5700 MHz>** 802.11a : 15.92 dBm / 0.0391 W 802.11n HT20 : 19.75 dBm / 0.0944 W 802.11n HT40 : 16.24 dBm / 0.0421 W 802.11ac VHT20 : 17.78 dBm / 0.0600 W 802.11ac VHT40 : 16.20 dBm / 0.0417 W 802.11ac VHT80 : 15.62 dBm / 0.0365 W
99% Occupied Bandwidth	**<5180 MHz ~ 5240 MHz>** 802.11a : 18.63 MHz 802.11n HT20 : 19.13 MHz 802.11n HT40 : 36.86 MHz 802.11ac VHT20: 19.23 MHz 802.11ac VHT40 : 36.76 MHz 802.11ac VHT80 : 75.88 MHz **<5260 MHz ~ 5320 MHz>** 802.11a : 18.58 MHz 802.11n HT20 : 19.23 MHz 802.11n HT40 : 36.66 MHz 802.11ac VHT20: 19.28 MHz 802.11ac VHT40 : 36.86 MHz 802.11ac VHT80 : 76.00 MHz **<5500 MHz ~ 5700 MHz>** 802.11a : 18.63 MHz 802.11n HT20 : 19.28 MHz 802.11n HT40 : 36.76 MHz 802.11ac VHT20: 19.18 MHz 802.11ac VHT40 : 36.76 MHz 802.11ac VHT80 : 76.00 MHz

<table>
<tr><td>Antenna Type</td><td>PIFA Antenna</td></tr>
<tr><td>Antenna Gain</td><td><5180 MHz ~ 5240 MHz>:
Chain Port 1 : 0.63 dBi
Chain Port 2 : 0.30 dBi
<5260 MHz ~ 5320 MHz>:
Chain Port 1 : 1.20 dBi
Chain Port 2 : 0.60 dBi
<5500 MHz ~ 5700 MHz>:
Chain Port 1 : 0.09 dBi
Chain Port 2 : -0.30 dBi</td></tr>
<tr><td>Type of Modulation</td><td>802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)
802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)</td></tr>
<tr><td>Antenna Function Description</td><td><table>
<tr><td></td><td>Chain Port 1</td><td>Chain Port 2</td></tr>
<tr><td>802.11 a</td><td>V</td><td>V</td></tr>
<tr><td>802.11 n/ac SISO</td><td>V</td><td>V</td></tr>
<tr><td>802.11 n/ac 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 Location

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.			
Test Site Location	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958			
Test Site No.	Sporton Site No.			FCC Registration No.
	TH01-KS	CO01-KS	03CH03-KS	306251

Note: The test site complies with ANSI C63.4 2014 requirement.

1.7 Applicable Standards

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

- FCC Part 15 Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- FCC KDB 644545 D03 Guidance for IEEE 802 11ac New Rules v01
- ANSI C63.10-2013

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). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X/Y plane) were recorded in this report.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5150-5250 MHz Band 1 (U-NII-1)	36	5180	44	5220
	38	**5190**	**46**	**5230**
	40	5200	48	5240
	42	5210		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz Band 2 (U-NII-2A)	52	5260	60	5300
	54	**5270**	**62**	**5310**
	56	5280	64	5320
	58	5290		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470-5725 MHz Band 3 (U-NII-2C)	100	5500	120	5600
	102	**5510**	122	5610
	104	5520	124	5620
	106	5530	**126**	**5630**
	108	5540	128	5640
	110	**5550**	132	5660
	112	5560	**134**	**5670**
	116	5580	136	5680
	118	**5590**	140	5700

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
Straddle Channel	144	5720	**142**	**5710**
	138	5690		

Note: The above Frequency and Channel in boldface were 802.11n HT40.

2.2 Test Mode

Final test mode of conducted test items and radiated spurious emissions are considering the modulation and worse data rates as below table.

MIMO Antenna

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + Earphone + USB Cable (Charging from Adapter)
Remark: For Radiated TCs, the tests were performed with adapter, earphone and USB cable.	

Ch. #		Band I：5180-5240 MHz	Band II：5260-5320 MHz	Band III：5500-5700MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle Channel		-	-	144

Ch. #		Band I：5180-5240 MHz	Band II：5260-5320 MHz	Band III：5500-5700MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle Channel		-	-	144

Ch. #		Band I：5180-5240 MHz	Band II：5260-5320 MHz	Band III：5500-5700MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle Channel		-	-	142

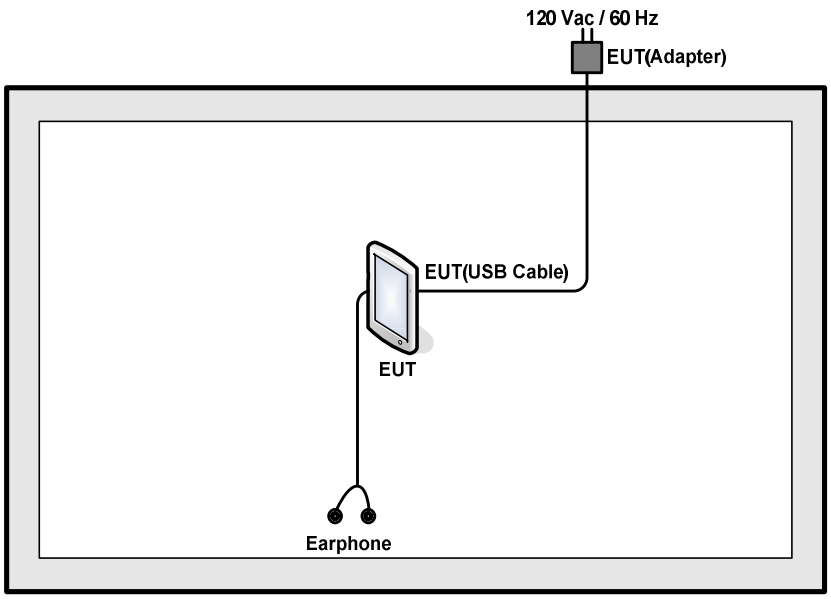
Ch. #		Band I：5180-5240 MHz	Band II：5260-5320 MHz	Band III：5500-5700MHz
		802.11ac VHT20	802.11ac VHT20	802.11ac VHT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle Channel		-	-	144

Ch. #		Band I：5180-5240 MHz	Band II：5260-5320 MHz	Band III：5500-5700MHz
		802.11ac VHT40	802.11ac VHT40	802.11ac VHT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle Channel		-	-	142

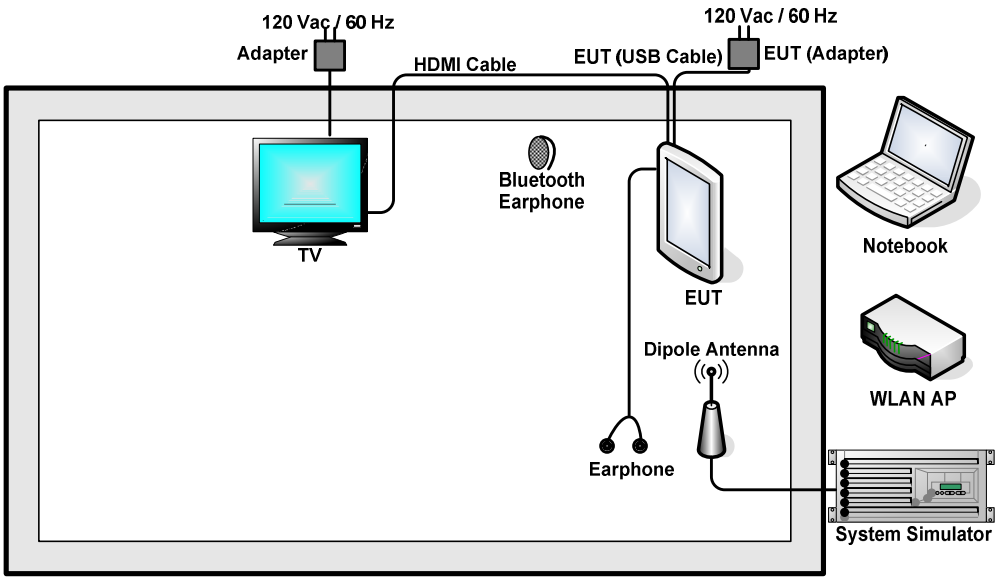
Ch. #		Band I：5180-5240 MHz	Band II：5260-5320 MHz	Band III：5500-5700MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	106
M	Middle	42	58	-
H	High	-	-	122
Straddle Channel		-	-	138

2.3 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	Lenovo	G480	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
2.	WLAN AP	LINKSYS	WRT600N	Q87-WRT600NV11	N/A	Unshielded, 1.8 m
3.	WLAN AP	D-link	DIR-855	KA2DIR855A2	N/A	Unshielded, 1.8 m
4.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
5.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
6.	Bluetooth Earphone	Lenovo	LBH308	N/A	N/A	N/A
7.	Bluetooth Earphone	Nokia	BH-102	PYAHS-107W	N/A	N/A
8.	Earphone	Lenovo	LH102	N/A	N/A	Unshielded, 1.2 m
9.	TV	Sony	KLV32V300A	FCC Doc	N/A	Unshielded, 1.8 m
10.	HDMI Cable	N/A	N/A	N/A	N/A	N/A
11.	DC Power Supply	GW INSTEK	GPD-2303S	N/A	N/A	Unshielded, 1.8 m

2.5 EUT Operation Test Setup

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

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

2.6 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 7.0 dB.

Offset (dB) = RF cable loss(dB).
= 7.0 (dB)

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

For Straddle Channel, U-NII procedures were applied for operations in the frequency band in accordance with FCC KDB 644545 D03.

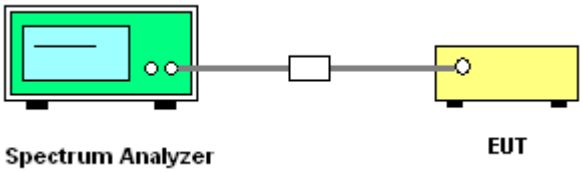
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1MHz and set the Video bandwidth (VBW) ≥ 3 * RBW.
8. Measure and record the results in the test report.

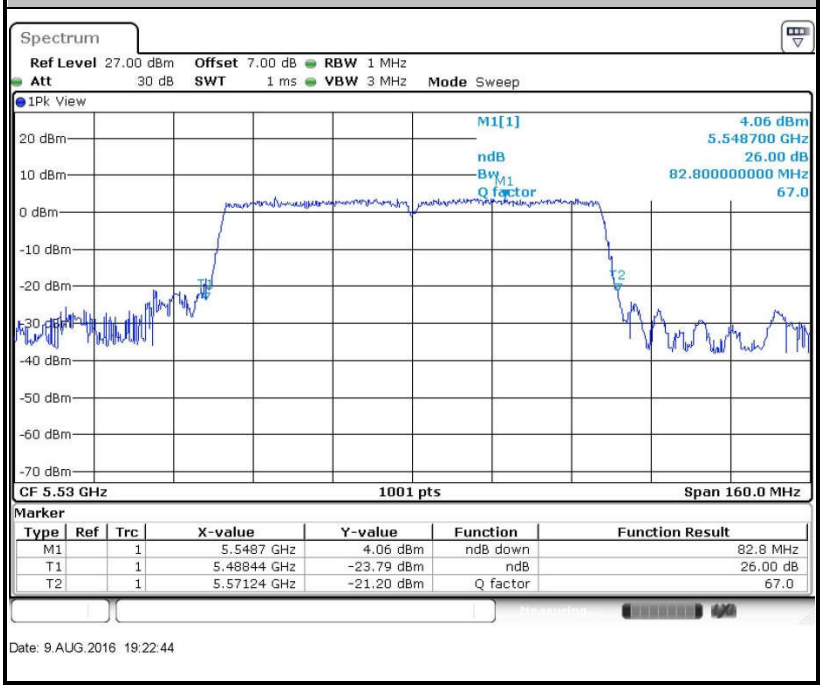
3.1.4 Test Setup



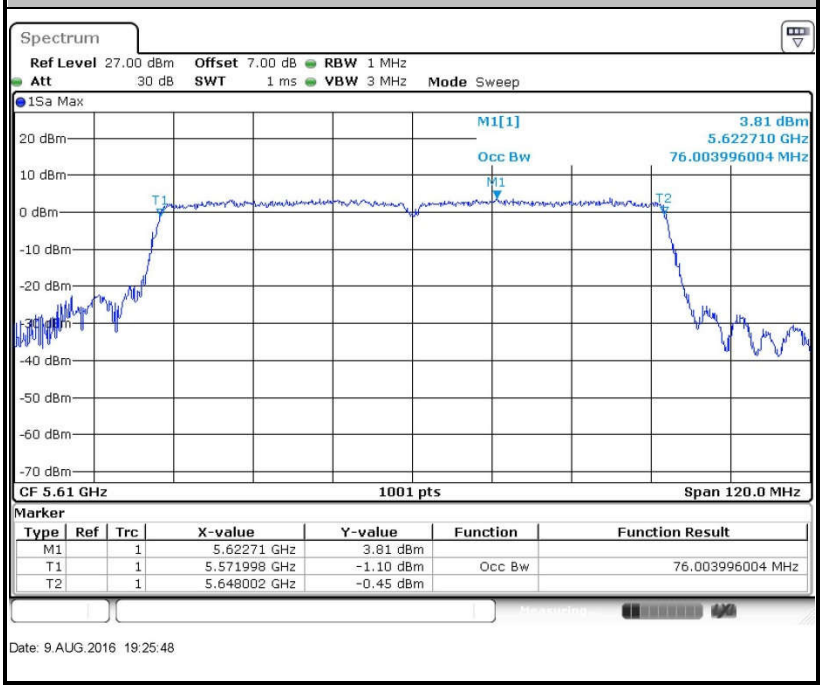
3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

Maximum 26dB Bandwidth



Maximum 99% Occupied Bandwidth



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW.

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz.

For Straddle Channel, U-NII procedures and limits were applied for operations in the frequency band in accordance with FCC KDB 644545 D03.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02.

Method PM (Measurement using an RF average power meter):

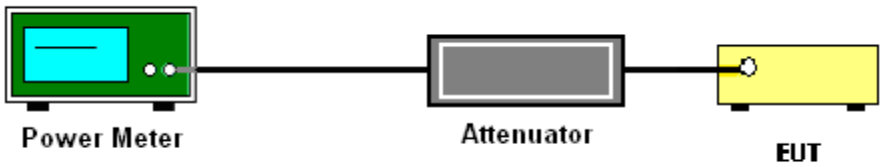
1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, 10 log(1/x), where x is the duty cycle.

For straddle channel, the testing follows Method SA-3 (RMS detection with max hold) of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02.

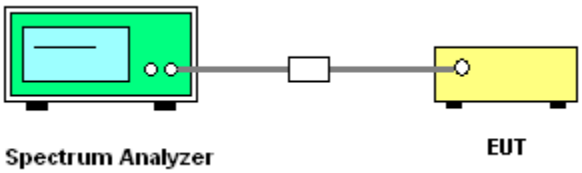
Compute power by integrating the spectrum across the 99% occupied bandwidth of the signal using the instrument's band power measurement function.

3.2.4 Test Setup

For normal channel:



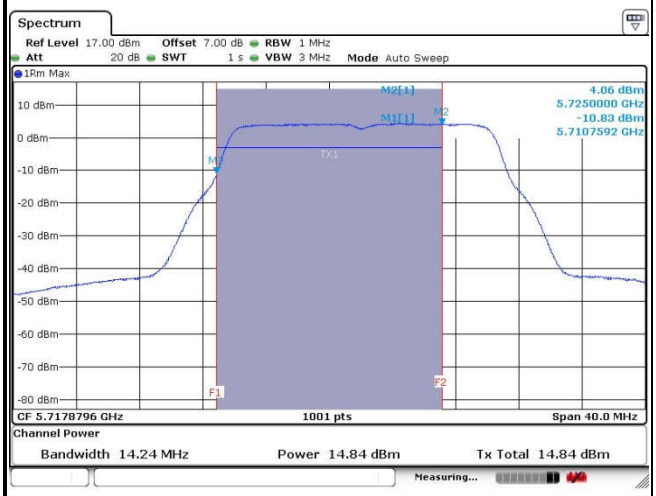
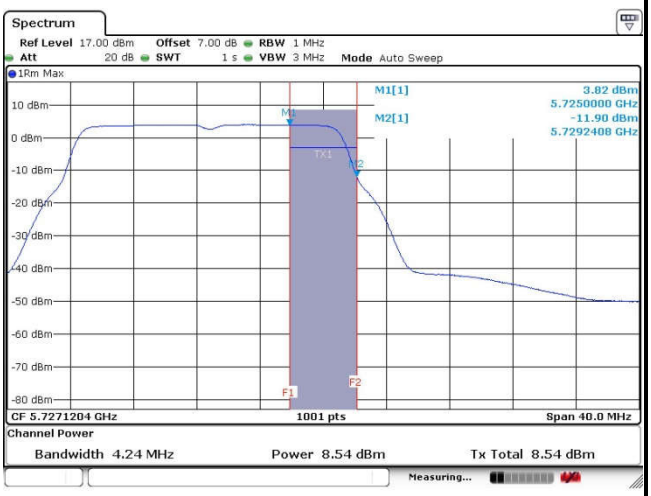
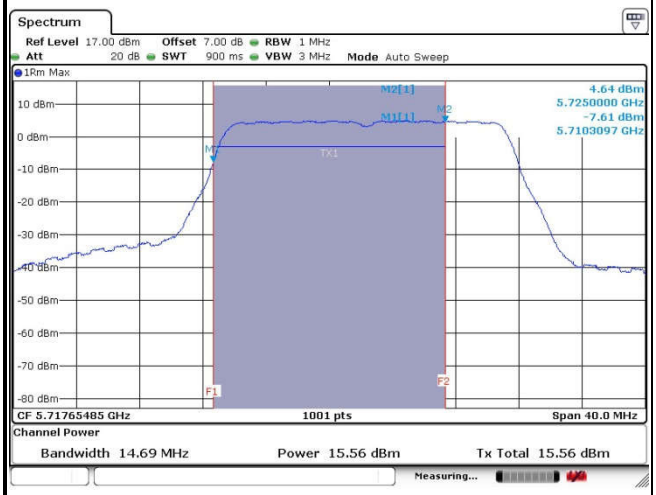
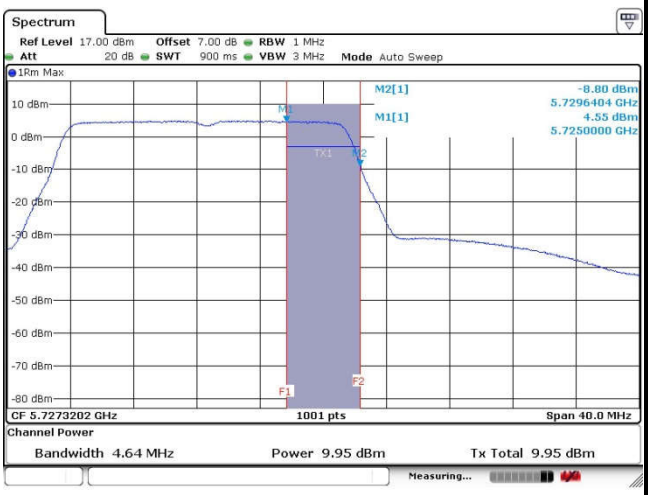
For straddle channel:

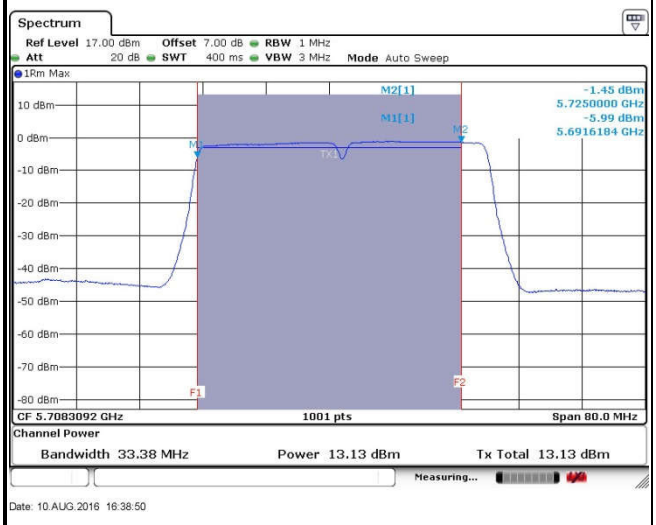
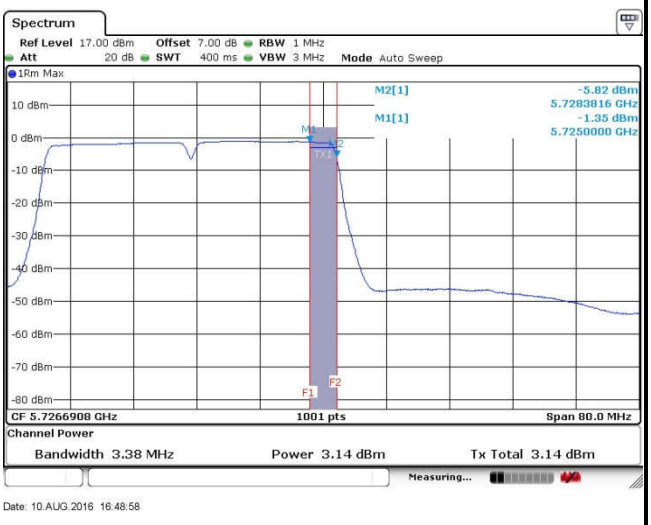
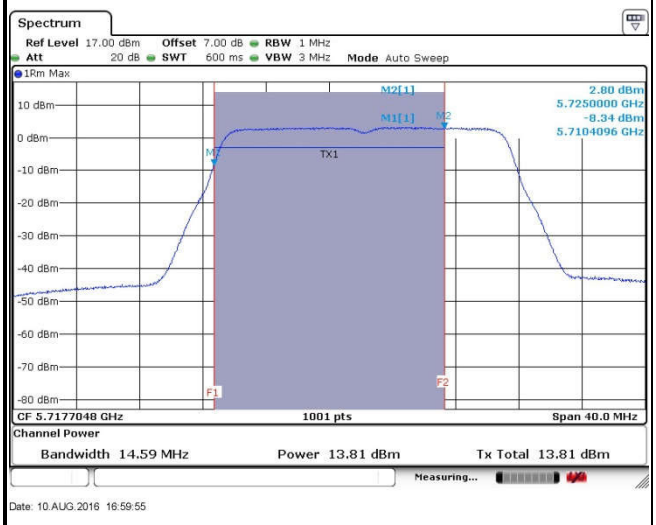
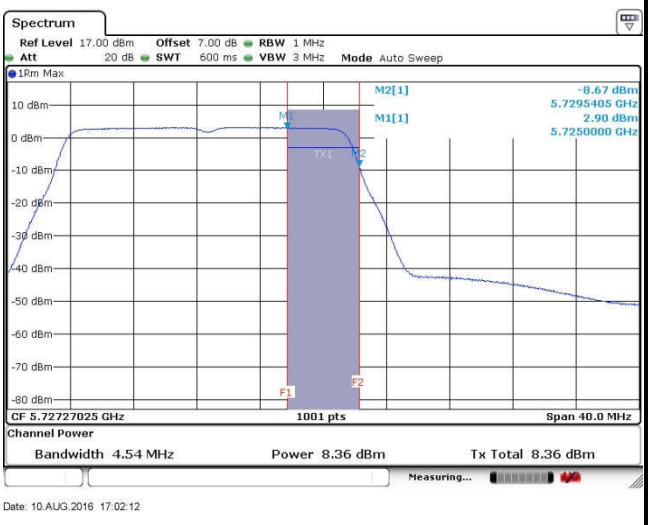


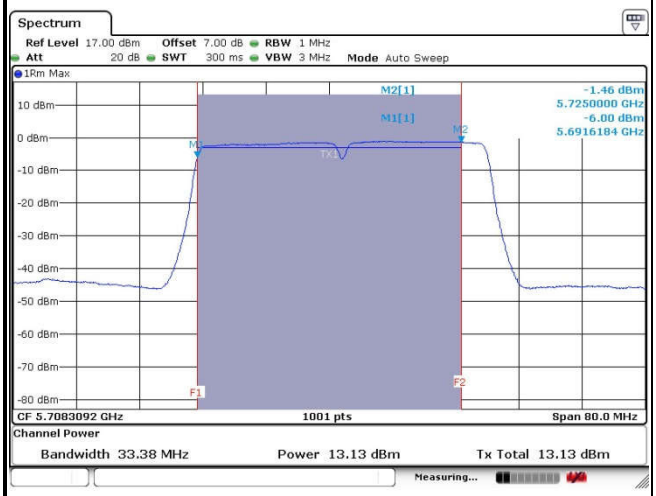
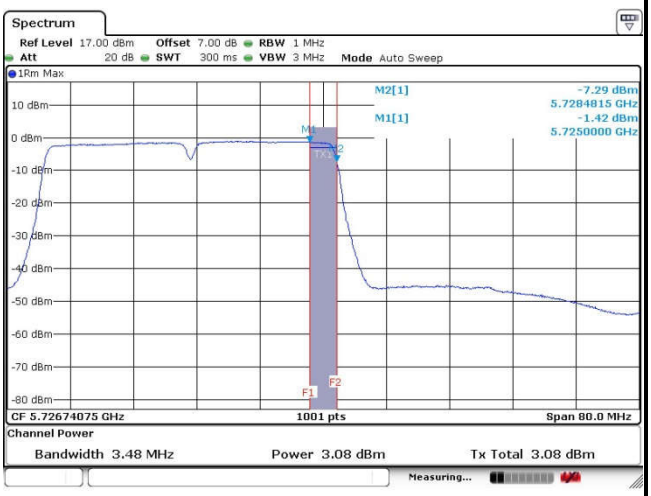
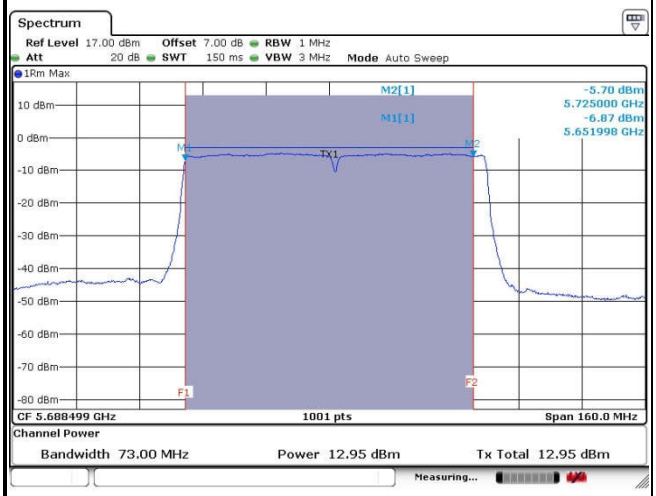
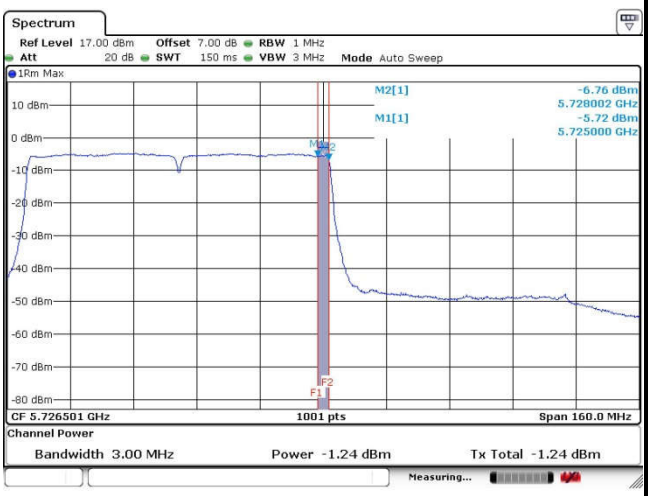
3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

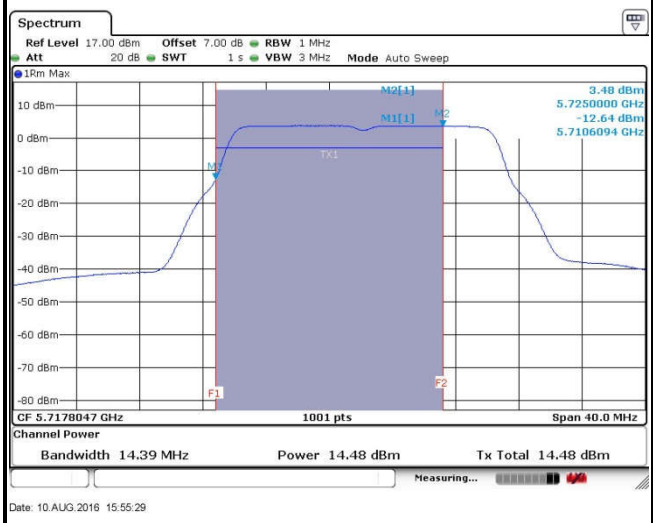
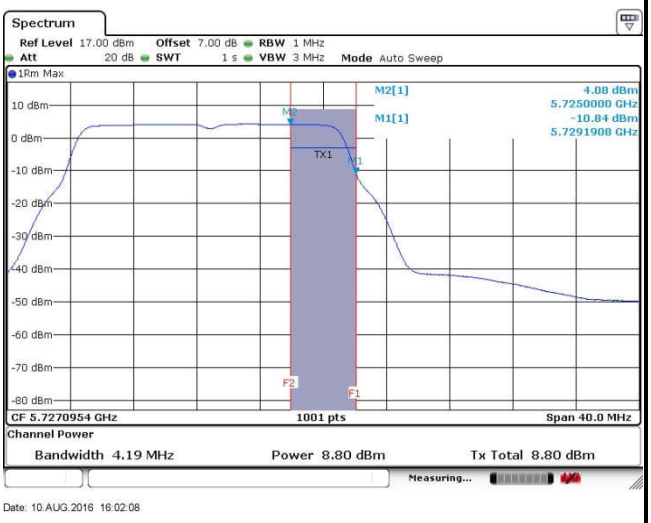
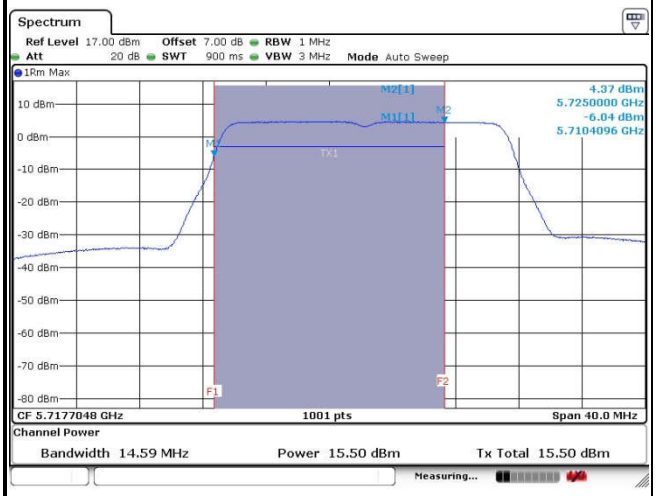
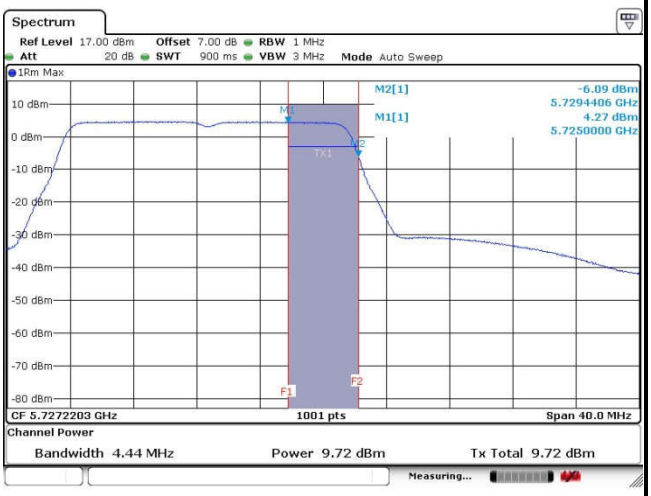
Chain Port 1

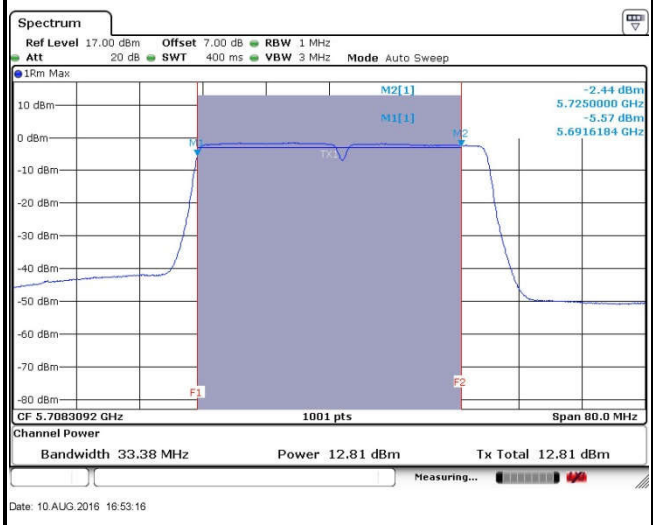
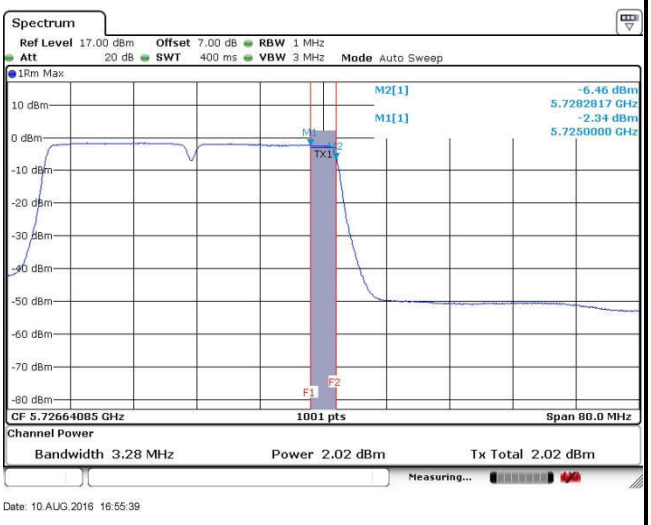
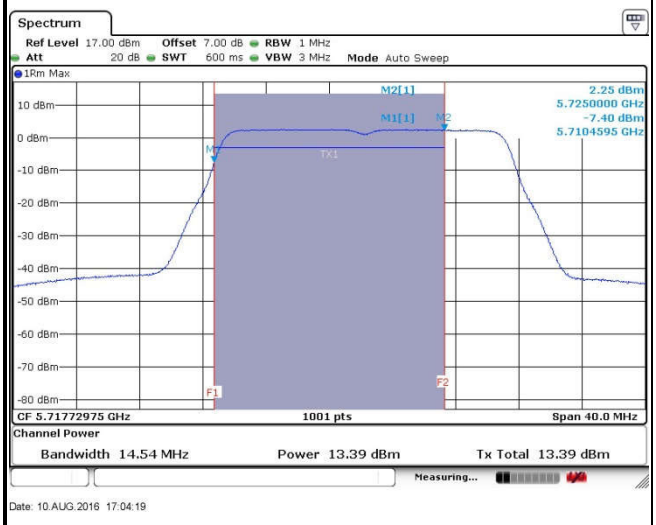
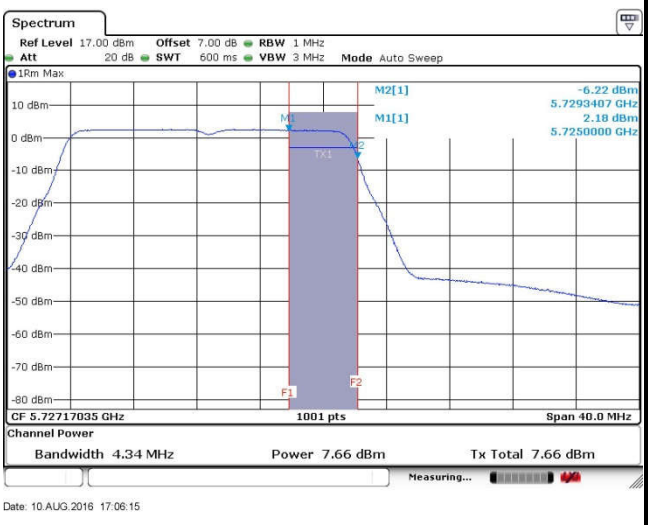
Maximum Straddle Channel Power	
802.11a	
NII-2C Band	NII-3 Band
	
802.11n-HT20	
NII-2C Band	NII-3 Band
	

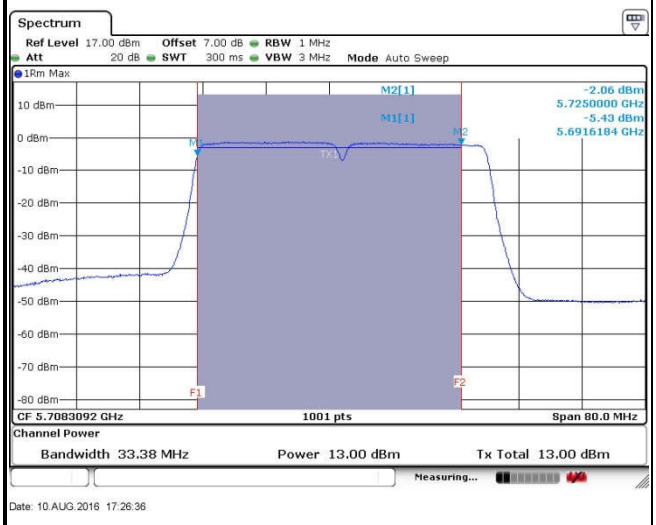
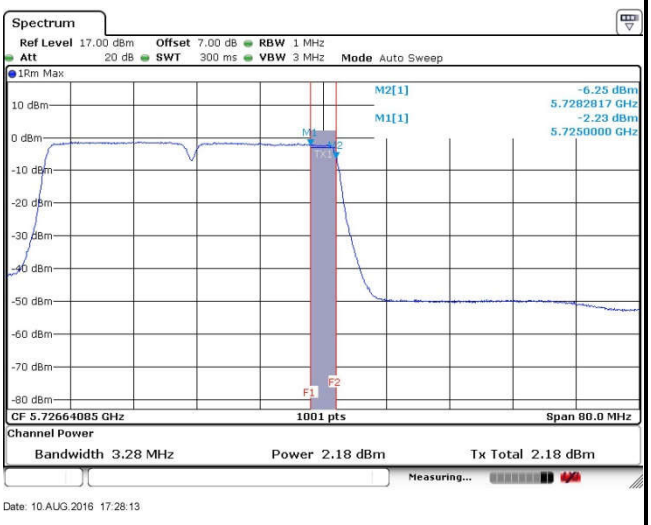
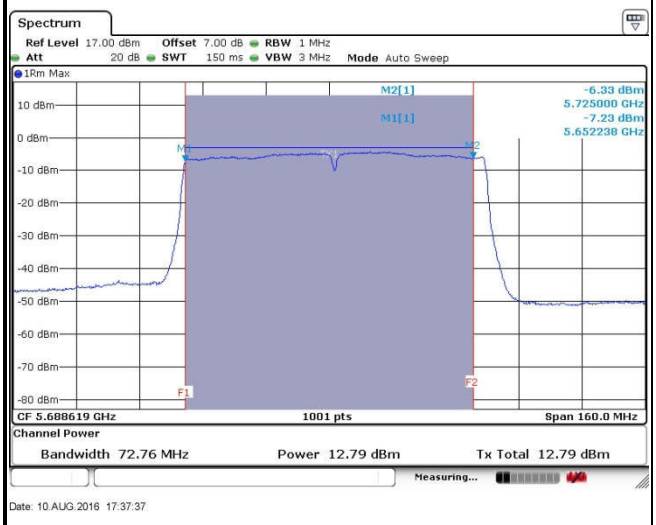
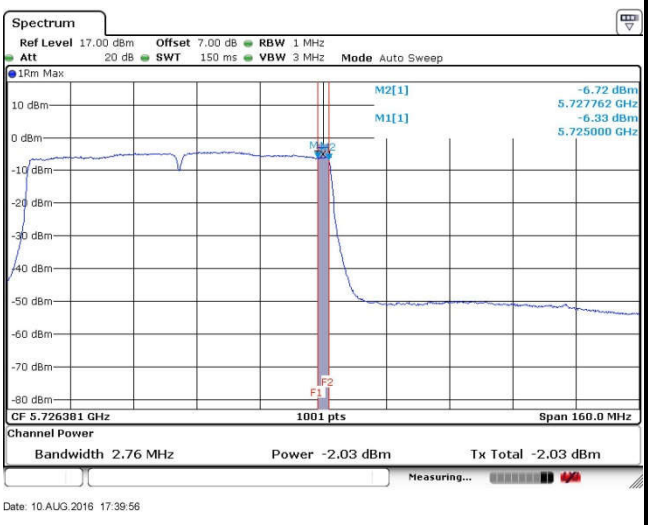
Maximum Straddle Channel Power	
802.11n-HT40	
NII-2C Band	NII-3 Band
	
802.11ac VHT20	
NII-2C Band	NII-3 Band
	

Maximum Straddle Channel Power	
802.11ac VHT40	
NII-2C Band	NII-3 Band
	
802.11ac VHT80	
NII-2C Band	NII-3 Band
	

Chain Port 2

Maximum Straddle Channel Power	
802.11a	
NII-2C Band	NII-3 Band
	
802.11n-HT20	
NII-2C Band	NII-3 Band
	

Maximum Straddle Channel Power	
802.11n-HT40	
NII-2C Band	NII-3 Band
	
802.11ac VHT20	
NII-2C Band	NII-3 Band
	

Maximum Straddle Channel Power	
802.11ac VHT40	
NII-2C Band	NII-3 Band
	
802.11ac VHT80	
NII-2C Band	NII-3 Band
	

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band.

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For Straddle Channel, U-NII procedures and limits were applied for operations in the frequency band in accordance with FCC KDB 644545 D03.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02. Section F) Maximum power spectral density.

 # Method SA-2 #

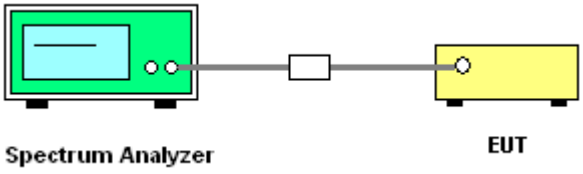
(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

1. The testing follows Method SA-2 of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02.
   - Measure the duty cycle.
   - Set span to encompass the entire emission bandwidth (EBW) of the signal.
   - Set RBW = 1 MHz.
   - Set VBW ≥ 3 MHz.
   - Number of points in sweep ≥ 2 Span / RBW.
   - Sweep time = auto.
   - Detector = RMS
   - Trace average at least 100 traces in power averaging mode.
   - Add 10 log(1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add 10 log(1/0.25) = 6 dB if the duty cycle is 25 percent.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
4. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

   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.

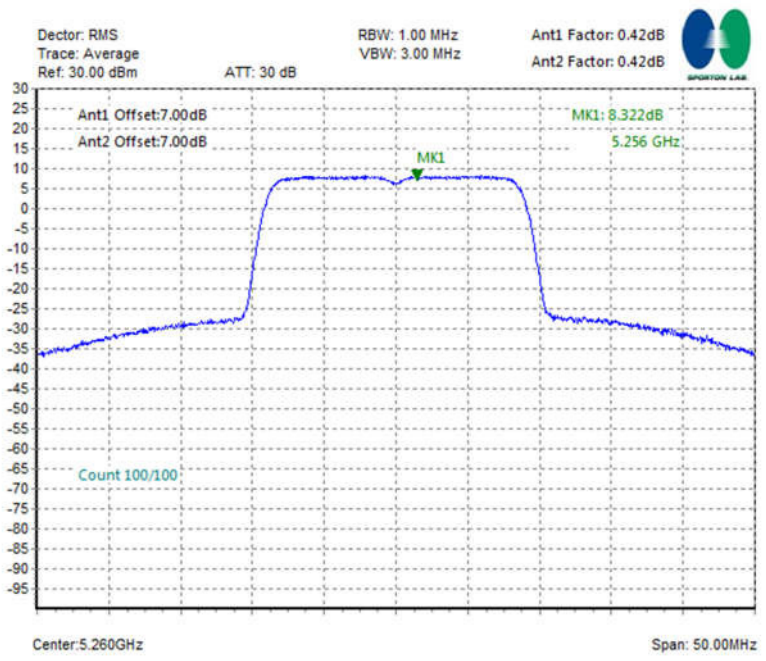
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/MHz)



Note: Average Power Density (dB) = Measured value+ Duty Factor

3.4 Unwanted Emissions Measurement

This section as specified in FCC Part 15.407(b) is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement. The unwanted emissions shall comply with 15.407(b)(1) to (6), and restricted bands per FCC Part15.205.

3.4.1 Limit of Unwanted Emissions

(1) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of –27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

(2) Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table,

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

Note: The following formula is used to convert the EIRP to field strength.

$$E=\frac{1000000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts)

EIRP (dBm)	Field Strength at 3m (dBμV/m)
-17	78.3
- 27	68.3

(3) KDB789033 D02 v01r02 G)2)c) As specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in 15.407(b)(4)). However, an out-of-band emission that complies with

both the average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit.

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 789033 D02 General UNII Test Procedures New Rules v01r02. Section G) Unwanted emissions measurement.

   (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
   - RBW = 120 kHz
   - VBW = 300 kHz
   - Detector = Peak
   - Trace mode = max hold

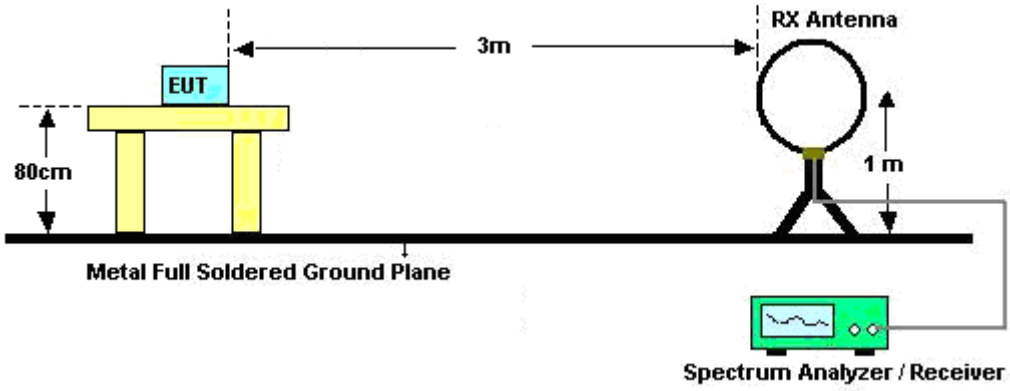
   (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
   - RBW = 1 MHz
   - VBW ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
   - RBW = 1 MHz
   - 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.
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.

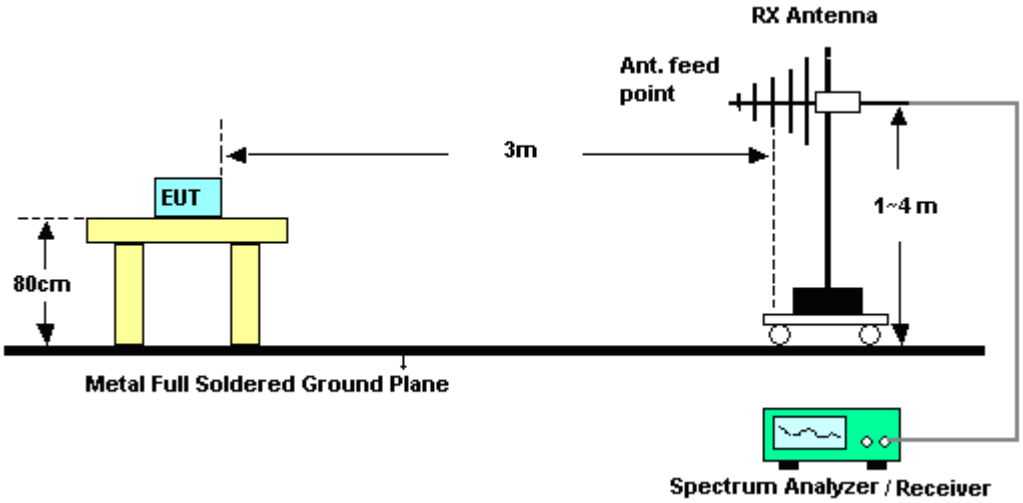
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.4.4 Test Setup

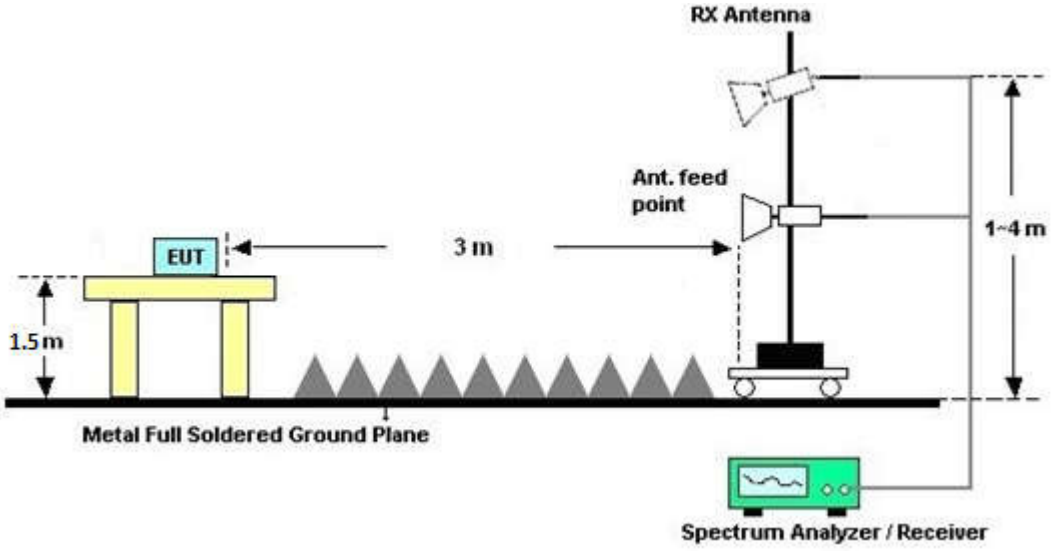
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

3.4.6 Test Result of Radiated Band Edges

Please refer to Appendix B.

3.4.7 Duty Cycle

Please refer to Appendix C.

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

Please refer to Appendix B.

3.5 AC Conducted Emission Measurement

3.5.1 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.

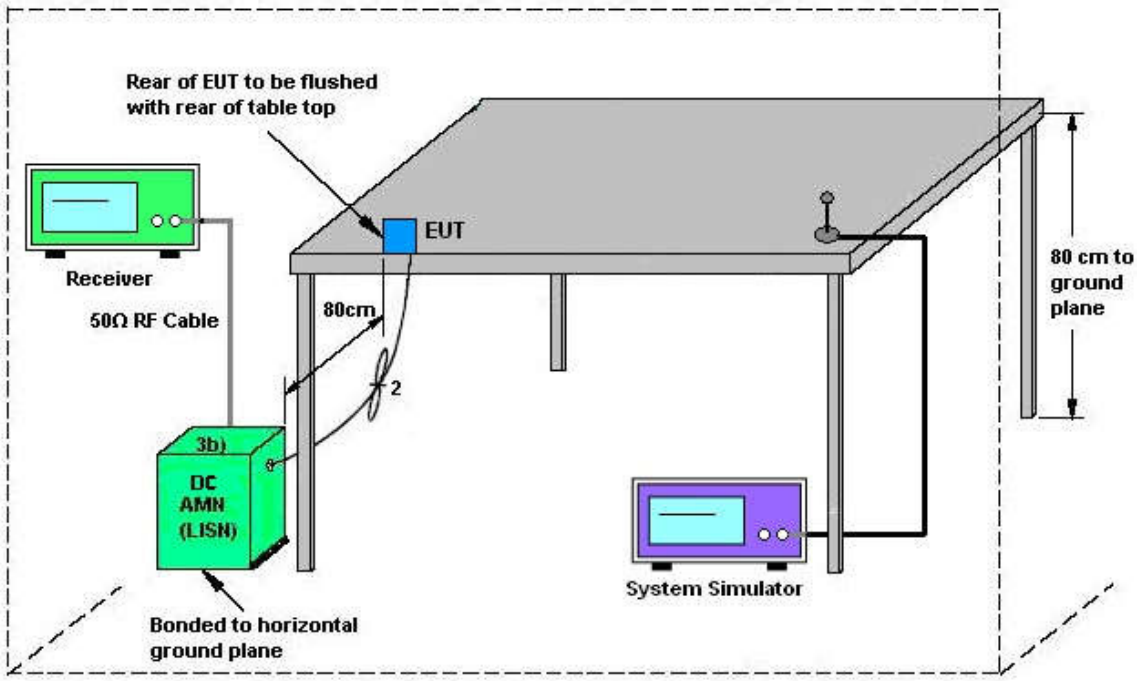
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room 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.

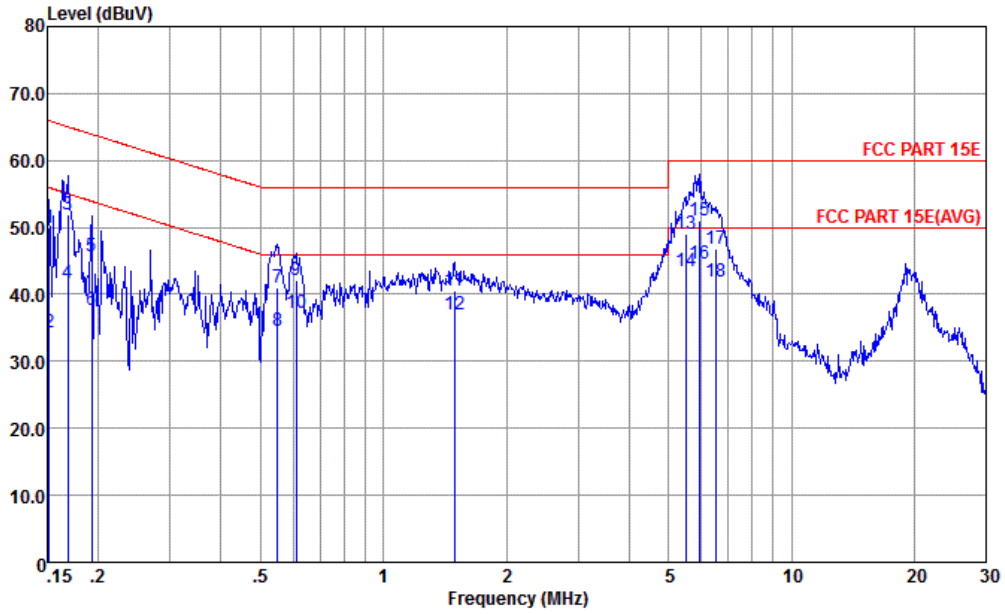
3.5.4 Test Setup



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

3.5.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	**Temperature :**	22~24℃
Test Engineer :	Amos Zhang	**Relative Humidity :**	44~47%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Function Type :	GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + Earphone + USB Cable (Charging from Adapter)		

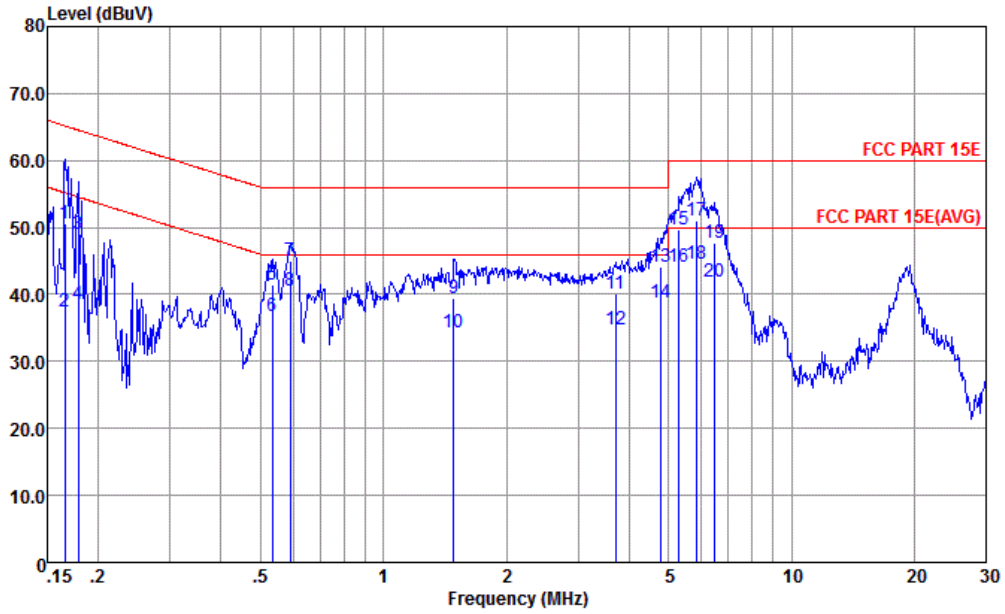


Site : CO01-KS
Condition : FCC PART 15E LISN-L-20151024 LINE

mode : Mode 1
: 868672020020035 #3

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15	49.93	-15.98	65.91	39.30	0.52	10.11	QP
2	0.15	34.23	-21.68	55.91	23.60	0.52	10.11	Average
3	0.17	51.83	-13.20	65.03	41.30	0.41	10.12	QP
4	0.17	41.73	-13.30	55.03	31.20	0.41	10.12	Average
5	0.19	45.58	-18.35	63.93	35.20	0.26	10.12	QP
6	0.19	37.68	-16.25	53.93	27.30	0.26	10.12	Average
7	0.55	40.99	-15.01	56.00	30.60	0.23	10.16	QP
8	0.55	34.59	-11.41	46.00	24.20	0.23	10.16	Average
9	0.61	42.19	-13.81	56.00	31.79	0.24	10.16	QP
10	0.61	37.29	-8.71	46.00	26.89	0.24	10.16	Average
11	1.50	40.65	-15.35	56.00	30.30	0.21	10.14	QP
12	1.50	36.95	-9.05	46.00	26.60	0.21	10.14	Average
13	5.51	48.99	-11.01	60.00	38.60	0.20	10.19	QP
14	5.51	43.49	-6.51	50.00	33.10	0.20	10.19	Average
15	5.96	51.01	-8.99	60.00	40.60	0.21	10.20	QP
16 *	5.96	44.61	-5.39	50.00	34.20	0.21	10.20	Average
17	6.56	46.73	-13.27	60.00	36.30	0.22	10.21	QP
18	6.56	41.93	-8.07	50.00	31.50	0.22	10.21	Average

Test Mode :	Mode 1	**Temperature :**	22~24℃
Test Engineer :	Amos Zhang	**Relative Humidity :**	44~47%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Function Type :	GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + Earphone + USB Cable (Charging from Adapter)		



Site : CO01-KS
Condition : FCC PART 15E LISN-N-20151024 NEUTRAL

mode : Mode 1
: 868672020020035 #3

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.17	50.62	-14.54	65.16	40.20	0.30	10.12	QP
2		0.17	37.52	-17.64	55.16	27.10	0.30	10.12	Average
3		0.18	49.03	-15.52	64.55	38.60	0.31	10.12	QP
4		0.18	38.53	-16.02	54.55	28.10	0.31	10.12	Average
5		0.53	41.39	-14.61	56.00	30.91	0.32	10.16	QP
6		0.53	36.79	-9.21	46.00	26.31	0.32	10.16	Average
7		0.59	45.09	-10.91	56.00	34.60	0.33	10.16	QP
8		0.59	40.59	-5.41	46.00	30.10	0.33	10.16	Average
9		1.49	39.41	-16.59	56.00	28.89	0.38	10.14	QP
10		1.49	34.31	-11.69	46.00	23.79	0.38	10.14	Average
11		3.70	40.13	-15.87	56.00	29.60	0.37	10.16	QP
12		3.70	34.73	-11.27	46.00	24.20	0.37	10.16	Average
13		4.77	44.14	-11.86	56.00	33.60	0.36	10.18	QP
14		4.77	38.84	-7.16	46.00	28.30	0.36	10.18	Average
15		5.30	49.64	-10.36	60.00	39.10	0.35	10.19	QP
16		5.30	44.14	-5.86	50.00	33.60	0.35	10.19	Average
17		5.87	51.02	-8.98	60.00	40.49	0.33	10.20	QP
18	*	5.87	44.62	-5.38	50.00	34.09	0.33	10.20	Average
19		6.45	47.61	-12.39	60.00	37.09	0.31	10.21	QP
20		6.45	41.81	-8.19	50.00	31.29	0.31	10.21	Average

3.6 Frequency Stability Measurement

3.6.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

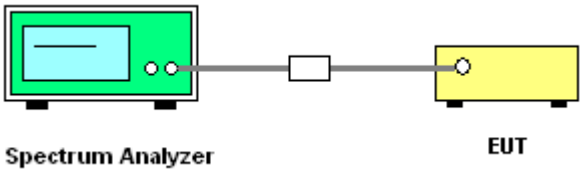
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

1. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
2. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
3. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

3.6.4 Test Setup



3.6.5 Test Result of Frequency Stability

Please refer to Appendix A.

3.7 Automatically Discontinue Transmission

3.7.1 Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

3.7.2 Measuring Instruments

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

3.7.3 Test Result of Automatically Discontinue Transmission

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

3.8 Antenna Requirements

3.8.1 Standard Applicable

According to FCC 47 CFR Section 15.407(a)(1)(2) ,if transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.8.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.8.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(N_{ANT}/N_{SS}=1) dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain;

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.

	Chain Port 0 Ant 1 (dBi)	Chain Port 1 Ant 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
5.2G Band	0.63	0.30	0.63	3.48	0.00	0.00
5.3G Band	1.20	0.60	1.20	3.92	0.00	0.00
5.5G Band	0.09	-0.30	0.09	2.91	0.00	0.00

Power limit reduction = Composite gain – 6dBi, (min = 0)

PSD limit reduction = Composite gain + PSD Array gain – 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	FSV40	101040	10Hz~40GHz	Sep. 10, 2015	Aug. 09, 2016~ Aug. 10, 2016	Sep. 09, 2016	Conducted (TH01-KS)
Pulse Power Senor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 20, 2016	Aug. 09, 2016~ Aug. 10, 2016	Jan. 19, 2017	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 20, 2016	Aug. 09, 2016~ Aug. 10, 2016	Jan. 19, 2017	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	-40~+150°C	Oct. 24, 2015	Aug. 09, 2016~ Aug. 10, 2016	Oct. 23, 2016	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Sep. 10, 2015	Jul. 05, 2016~ Aug. 11, 2016	Sep. 09, 2016	Radiation (03CH03-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz~44GHz	Apr. 22, 2016	Jul. 05, 2016~ Aug. 11, 2016	Apr. 21, 2017	Radiation (03CH03-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 07, 2015	Jul. 05, 2016~ Aug. 11, 2016	Nov. 06, 2016	Radiation (03CH03-KS)
Bilog Antenna	TeseQ	CBL6112D	35406	25MHz-2GHz	Apr. 16, 2016	Jul. 05, 2016~ Aug. 11, 2016	Apr. 15, 2017	Radiation (03CH03-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1356	1GHz~18GHz	Apr. 16, 2016	Jul. 05, 2016~ Aug. 11, 2016	Apr. 15, 2017	Radiation (03CH03-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz ~40GHz	Mar. 03, 2016	Jul. 05, 2016~ Aug. 11, 2016	Mar. 02, 2017	Radiation (03CH03-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Jun. 09, 2016	Jul. 05, 2016~ Aug. 11, 2016	Jun. 08, 2017	Radiation (03CH03-KS)
Amplifier	MITEQ	TTA1840 -35-HG	1887435	18~40GHz	Aug. 27, 2015	Jul. 05, 2016~ Aug. 11, 2016	Aug. 26, 2016	Radiation (03CH03-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Oct. 24, 2015	Jul. 05, 2016~ Aug. 11, 2016	Oct. 23, 2016	Radiation (03CH03-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jul. 05, 2016~ Aug. 11, 2016	NCR	Radiation (03CH03-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jul. 05, 2016~ Aug. 11, 2016	NCR	Radiation (03CH03-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jul. 05, 2016~ Aug. 11, 2016	NCR	Radiation (03CH03-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Sep. 10, 2015	Jul. 09, 2016	Sep. 09, 2016	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 24, 2015	Jul. 09, 2016	Oct. 23, 2016	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 24, 2015	Jul. 09, 2016	Oct. 23, 2016	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP0000008 11	AC 0V~300V, 45Hz~1000Hz	Oct. 24, 2015	Jul. 09, 2016	Oct. 23, 2016	Conduction (CO01-KS)

NCR: No Calibration Required

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.3

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.5dB

Uncertainty of Radiated Emission Measurement (1GHz ~ 18GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.5dB

Uncertainty of Radiated Emission Measurement (18GHz ~ 40GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.6dB

Appendix A. Conducted Test Results

Test Engineer:	Ivan Zhang	Temperature:	24~25	°C
Test Date:	2016/8/09~2016/8/10	Relative Humidity:	54~55	%

TEST RESULTS DATA
26dB and 99% OBW

Band I														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)			Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	18.63	18.43	22.78	22.58	-		22.70	22.66		
11a	6Mbps	1	44	5220	18.48	18.48	22.73	22.83	-		22.67	22.67		
11a	6Mbps	1	48	5240	17.33	17.33	20.03	20.03	-		22.39	22.39		
HT20	MCS8	2	36	5180	19.13	18.93	22.98	22.68	-		22.77			
HT20	MCS8	2	44	5220	19.13	18.93	22.83	22.73	-		22.77			
HT20	MCS8	2	48	5240	17.83	17.88	20.43	20.28	-		22.51			
HT40	MCS8	2	38	5190	36.86	36.56	40.91	40.73	-		23.01			
HT40	MCS8	2	46	5230	36.66	36.56	40.82	40.73	-		23.01			
VHT20	MCS0	2	36	5180	19.23	18.88	22.73	22.78	-		22.76			
VHT20	MCS0	2	44	5220	19.23	18.88	22.98	22.83	-		22.76			
VHT20	MCS0	2	48	5240	17.78	17.88	20.48	20.23	-		22.50			
VHT40	MCS0	2	38	5190	36.76	36.56	41.00	40.64	-		23.01			
VHT40	MCS0	2	46	5230	36.66	36.56	40.91	40.73	-		23.01			
VHT80	MCS0	2	42	5210	75.88	75.52	82.16	81.36	-		23.01			

TEST RESULTS DATA
Average Power Table

FCC Band I															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)			Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	0.28	0.29	15.73	15.27		24.00	24.00	0.63	0.30		Pass
11a	6Mbps	1	44	5220	0.28	0.29	16.10	15.70		24.00	24.00	0.63	0.30		Pass
11a	6Mbps	1	48	5240	0.28	0.29	16.45	15.88		24.00	24.00	0.63	0.30		Pass
HT20	MCS8	2	36	5180	0.42	0.42	15.78	15.63	18.72	24.00		0.63			Pass
HT20	MCS8	2	44	5220	0.42	0.42	15.65	15.23	18.46	24.00		0.63			Pass
HT20	MCS8	2	48	5240	0.42	0.42	15.99	16.10	19.06	24.00		0.63			Pass
HT40	MCS8	2	38	5190	0.80	0.79	11.49	11.80	14.66	24.00		0.63			Pass
HT40	MCS8	2	46	5230	0.80	0.79	11.69	11.90	14.81	24.00		0.63			Pass
VHT20	MCS0	2	36	5180	0.58	0.62	14.98	15.14	18.07	24.00		0.63			Pass
VHT20	MCS0	2	44	5220	0.58	0.62	15.02	15.44	18.25	24.00		0.63			Pass
VHT20	MCS0	2	48	5240	0.58	0.62	15.37	15.82	18.61	24.00		0.63			Pass
VHT40	MCS0	2	38	5190	1.06	1.07	11.63	12.05	14.85	24.00		0.63			Pass
VHT40	MCS0	2	46	5230	1.06	1.07	11.74	12.09	14.93	24.00		0.63			Pass
VHT80	MCS0	2	42	5210	1.82	1.83	10.20	10.30	13.26	24.00		0.63			Pass

TEST RESULTS DATA
Power Spectral Density

FCC Band I															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	0.28	0.29	4.17	-		11.00	11.00	0.63	0.30		Pass
11a	6Mbps	1	44	5220	0.28	0.29	4.90	-		11.00	11.00	0.63	0.30		Pass
11a	6Mbps	1	48	5240	0.28	0.29	5.00	-		11.00	11.00	0.63	0.30		Pass
HT20	MCS8	2	36	5180	0.42	0.42			6.92	11.00		3.48			Pass
HT20	MCS8	2	44	5220	0.42	0.42			7.61	11.00		3.48			Pass
HT20	MCS8	2	48	5240	0.42	0.42			7.59	11.00		3.48			Pass
HT40	MCS8	2	38	5190	0.80	0.79			0.43	11.00		3.48			Pass
HT40	MCS8	2	46	5230	0.80	0.79			0.59	11.00		3.48			Pass
VHT20	MCS0	2	36	5180	0.58	0.62			6.91	11.00		3.48			Pass
VHT20	MCS0	2	44	5220	0.58	0.62			7.14	11.00		3.48			Pass
VHT20	MCS0	2	48	5240	0.58	0.62			7.39	11.00		3.48			Pass
VHT40	MCS0	2	38	5190	1.06	1.07			0.44	11.00		3.48			Pass
VHT40	MCS0	2	46	5230	1.06	1.07			1.07	11.00		3.48			Pass
VHT80	MCS0	2	42	5210	1.82	1.83			-3.92	11.00		3.48			Pass

TEST RESULTS DATA
26dB and 99% OBW

Band II															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	52	5260	17.33	17.33	20.08	19.98	23.39	23.39	29.39	29.39	23.98	23.98	
11a	6Mbps	1	60	5300	18.53	18.58	22.83	22.83	23.68	23.69	29.68	29.69	23.98	23.98	
11a	6Mbps	1	64	5320	18.48	18.58	22.78	22.93	23.67	23.69	29.67	29.69	23.98	23.98	
HT20	MCS8	2	52	5260	17.83	17.93	20.38	20.23	23.51		29.51		23.98		
HT20	MCS8	2	60	5300	19.23	19.03	22.68	22.73	23.79		29.79		23.98		
HT20	MCS8	2	64	5320	19.18	18.98	22.93	22.78	23.78		29.78		23.98		
HT40	MCS8	2	54	5270	36.66	36.56	41.09	40.64	23.98		30.00		23.98		
HT40	MCS8	2	62	5310	36.66	36.56	41.27	40.73	23.98		30.00		23.98		
VHT20	MCS0	2	52	5260	17.78	17.83	20.38	20.23	23.50		29.50		23.98		
VHT20	MCS0	2	60	5300	19.18	18.98	23.13	22.88	23.78		29.78		23.98		
VHT20	MCS0	2	64	5320	19.28	18.98	23.03	22.78	23.78		29.78		23.98		
VHT40	MCS0	2	54	5270	36.86	36.56	40.91	40.73	23.98		30.00		23.98		
VHT40	MCS0	2	62	5310	36.76	36.66	41.00	40.82	23.98		30.00		23.98		
VHT80	MCS0	2	58	5290	76.00	75.76	82.64	81.52	23.98		30.00		23.98		

TEST RESULTS DATA
Average Power Table

FCC Band II															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	52	5260	0.28	0.29	16.01	16.42		23.98	23.98	1.20	0.60	26.99	Pass
11a	6Mbps	1	60	5300	0.28	0.29	16.16	16.30		23.98	23.98	1.20	0.60	26.99	Pass
11a	6Mbps	1	64	5320	0.28	0.29	16.26	16.04		23.98	23.98	1.20	0.60	26.99	Pass
HT20	MCS8	2	52	5260	0.42	0.42	16.73	16.44	19.60	23.98		1.20		26.99	Pass
HT20	MCS8	2	60	5300	0.42	0.42	17.02	16.68	19.87	23.98		1.20		26.99	Pass
HT20	MCS8	2	64	5320	0.42	0.42	16.80	15.98	19.42	23.98		1.20		26.99	Pass
HT40	MCS8	2	54	5270	0.80	0.79	14.42	14.53	17.49	23.98		1.20		26.99	Pass
HT40	MCS8	2	62	5310	0.80	0.79	14.51	14.60	17.57	23.98		1.20		26.99	Pass
VHT20	MCS0	2	52	5260	0.58	0.62	14.87	15.18	18.04	23.98		1.20		26.99	Pass
VHT20	MCS0	2	60	5300	0.58	0.62	15.37	15.78	18.59	23.98		1.20		26.99	Pass
VHT20	MCS0	2	64	5320	0.58	0.62	15.07	15.53	18.32	23.98		1.20		26.99	Pass
VHT40	MCS0	2	54	5270	1.06	1.07	15.50	15.91	18.72	23.98		1.20		26.99	Pass
VHT40	MCS0	2	62	5310	1.06	1.07	15.71	16.21	18.98	23.98		1.20		26.99	Pass
VHT80	MCS0	2	58	5290	1.82	1.83	14.14	14.24	17.20	23.98		1.20		26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band II															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	52	5260	0.28	0.29	-	5.54		11.00	11.00	1.20	0.60		Pass
11a	6Mbps	1	60	5300	0.28	0.29	-	5.26		11.00	11.00	1.20	0.60		Pass
11a	6Mbps	1	64	5320	0.28	0.29	-	5.01		11.00	11.00	1.20	0.60		Pass
HT20	MCS8	2	52	5260	0.42	0.42			8.32	11.00		3.92			Pass
HT20	MCS8	2	60	5300	0.42	0.42			8.04	11.00		3.92			Pass
HT20	MCS8	2	64	5320	0.42	0.42			8.01	11.00		3.92			Pass
HT40	MCS8	2	54	5270	0.80	0.79			3.56	11.00		3.92			Pass
HT40	MCS8	2	62	5310	0.80	0.79			4.05	11.00		3.92			Pass
VHT20	MCS0	2	52	5260	0.58	0.62			7.14	11.00		3.92			Pass
VHT20	MCS0	2	60	5300	0.58	0.62			7.15	11.00		3.92			Pass
VHT20	MCS0	2	64	5320	0.58	0.62			6.80	11.00		3.92			Pass
VHT40	MCS0	2	54	5270	1.06	1.07			4.65	11.00		3.92			Pass
VHT40	MCS0	2	62	5310	1.06	1.07			4.40	11.00		3.92			Pass
VHT80	MCS0	2	58	5290	1.82	1.83			0.64	11.00		3.92			Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	100	5500	18.53	18.58	22.63	22.88	23.68	23.69	29.68	29.69	23.98	23.98	
11a	6Mbps	1	116	5580	17.33	17.33	20.03	20.08	23.39	23.39	29.39	29.39	23.98	23.98	
11a	6Mbps	1	140	5700	18.63	18.53	22.83	22.78	23.70	23.68	29.70	29.68	23.98	23.98	
HT20	MCS8	2	100	5500	19.28	19.03	22.93	22.78	23.79		29.79		23.98		
HT20	MCS8	2	116	5580	17.78	17.98	20.43	20.23	23.50		29.50		23.98		
HT20	MCS8	2	140	5700	19.23	18.98	22.93	22.78	23.78		29.78		23.98		
HT40	MCS8	2	102	5510	36.76	36.66	41.18	40.91	23.98		30.00		23.98		
HT40	MCS8	2	110	5550	36.66	36.66	41.09	40.82	23.98		30.00		23.98		
HT40	MCS8	2	134	5670	36.76	36.66	41.09	40.82	23.98		30.00		23.98		
VHT20	MCS0	2	100	5500	19.13	19.08	22.83	22.78	23.81		29.81		23.98		
VHT20	MCS0	2	116	5580	17.78	17.88	20.38	20.23	23.50		29.50		23.98		
VHT20	MCS0	2	140	5700	19.18	18.83	23.03	22.78	23.75		29.75		23.98		
VHT40	MCS0	2	102	5510	36.76	36.56	41.09	41.00	23.98		30.00		23.98		
VHT40	MCS0	2	110	5550	36.76	36.66	41.09	40.82	23.98		30.00		23.98		
VHT40	MCS0	2	134	5670	36.76	36.56	41.09	41.18	23.98		30.00		23.98		
VHT80	MCS0	2	106	5530	75.88	75.64	82.80	81.36	23.98		30.00		23.98		
VHT80	MCS0	2	122	5610	76.00	75.64	82.32	81.84	23.98		30.00		23.98		

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TEST RESULTS DATA
Average Power Table

FCC Band III															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	100	5500	0.28	0.29	15.57	15.66		23.98	23.98	0.09	-0.30	26.99	Pass
11a	6Mbps	1	116	5580	0.28	0.29	15.92	15.83		23.98	23.98	0.09	-0.30	26.99	Pass
11a	6Mbps	1	140	5700	0.28	0.29	15.54	15.08		23.98	23.98	0.09	-0.30	26.99	Pass
HT20	MCS8	2	100	5500	0.42	0.42	16.90	16.57	19.75	23.98		0.09		26.99	Pass
HT20	MCS8	2	116	5580	0.42	0.42	16.82	16.53	19.69	23.98		0.09		26.99	Pass
HT20	MCS8	2	140	5700	0.42	0.42	16.66	16.26	19.48	23.98		0.09		26.99	Pass
HT40	MCS8	2	102	5510	0.80	0.79	13.05	13.14	16.11	23.98		0.09		26.99	Pass
HT40	MCS8	2	110	5550	0.80	0.79	13.26	13.20	16.24	23.98		0.09		26.99	Pass
HT40	MCS8	2	134	5670	0.80	0.79	13.01	12.67	15.85	23.98		0.09		26.99	Pass
VHT20	MCS0	2	100	5500	0.58	0.62	14.77	14.76	17.78	23.98		0.09		26.99	Pass
VHT20	MCS0	2	116	5580	0.58	0.62	14.65	14.51	17.59	23.98		0.09		26.99	Pass
VHT20	MCS0	2	140	5700	0.58	0.62	14.57	14.29	17.44	23.98		0.09		26.99	Pass
VHT40	MCS0	2	102	5510	1.06	1.07	13.24	13.14	16.20	23.98		0.09		26.99	Pass
VHT40	MCS0	2	110	5550	1.06	1.07	13.21	13.01	16.12	23.98		0.09		26.99	Pass
VHT40	MCS0	2	134	5670	1.06	1.07	12.81	12.63	15.73	23.98		0.09		26.99	Pass
VHT80	MCS0	2	106	5530	1.82	1.83	12.57	12.65	15.62	23.98		0.09		26.99	Pass
VHT80	MCS0	2	122	5610	1.82	1.83	12.49	12.42	15.46	23.98		0.09		26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band III																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	100	5500	0.28	0.29	4.95	-		11.00	11.00	0.09	-0.30		Pass
11a	6Mbps	1	116	5580	0.28	0.29	4.88	-		11.00	11.00	0.09	-0.30		Pass
11a	6Mbps	1	140	5700	0.28	0.29	4.53	-		11.00	11.00	0.09	-0.30		Pass
HT20	MCS8	2	100	5500	0.42	0.42			8.31	11.00		2.91			Pass
HT20	MCS8	2	116	5580	0.42	0.42			8.29	11.00		2.91			Pass
HT20	MCS8	2	140	5700	0.42	0.42			7.98	11.00		2.91			Pass
HT40	MCS8	2	102	5510	0.80	0.79			1.95	11.00		2.91			Pass
HT40	MCS8	2	110	5550	0.80	0.79			1.98	11.00		2.91			Pass
HT40	MCS8	2	134	5670	0.80	0.79			1.58	11.00		2.91			Pass
VHT20	MCS0	2	100	5500	0.58	0.62			6.20	11.00		2.91			Pass
VHT20	MCS0	2	116	5580	0.58	0.62			6.57	11.00		2.91			Pass
VHT20	MCS0	2	140	5700	0.58	0.62			6.32	11.00		2.91			Pass
VHT40	MCS0	2	102	5510	1.06	1.07			2.04	11.00		2.91			Pass
VHT40	MCS0	2	110	5550	1.06	1.07			2.10	11.00		2.91			Pass
VHT40	MCS0	2	134	5670	1.06	1.07			1.64	11.00		2.91			Pass
VHT80	MCS0	2	106	5530	1.82	1.83			-1.10	11.00		2.91			Pass
VHT80	MCS0	2	122	5610	1.82	1.83			-0.95	11.00		2.91			Pass

TEST RESULTS DATA
26dB and 99% OBW

Straddle Channel																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Emission Bandwidth (MHz)		6 dB Emission Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	1	144	5720	16.34	16.32	18.48	18.58	22.83	22.83	-	-	-	-	-	-
				NII-2C	13.21	13.21	14.24	14.39	16.44	16.49	22.21	22.21	28.21	28.21	22.54	22.58
				NII-3	3.13	3.11	4.24	4.19	6.39	6.34	30.00	30.00	36.02	36.02	-	-
HT20	MCS0	2	144	5720	17.60	17.58	19.33	19.03	23.03	22.88	-		-		-	
				NII-2C	13.85	13.85	14.69	14.59	16.49	16.44	22.41		28.41		22.64	
				NII-3	3.751	3.731	4.64	4.441	6.538	6.439	30.00		36.02		-	
HT40	MCS0	2	142	5710	36.28	36.32	36.76	36.66	41.09	40.82	-		-		-	
				NII-2C	33.18	33.22	33.38	33.38	35.5	35.5	23.98		30.00		23.98	
				NII-3	3.102	3.102	3.382	3.282	5.589	5.32	30.00		36.02		-	
VHT20	MCS0	2	144	5720	17.56	17.60	19.13	18.88	22.83	22.88	-		-		-	
				NII-2C	13.83	13.85	14.59	14.54	16.44	16.49	22.41		28.41		22.63	
				NII-3	3.731	3.751	4.541	4.341	6.389	6.389	30.00		36.02		-	
VHT40	MCS0	2	142	5710	36.28	36.28	36.86	36.66	41.09	40.82	-		-		-	
				NII-2C	33.18	33.22	33.38	33.38	35.5	35.41	23.98		30.00		23.98	
				NII-3	3.102	3.062	3.482	3.282	5.589	5.41	30.00		36.02		-	
VHT80	MCS0	2	138	5690	76.32	76.32	76.00	75.52	82.32	81.52	-		-		-	
				NII-2C	73.2	73.2	73	72.76	76.08	75.76	23.98		30.00		23.98	
				NII-3	3.122	3.122	3.002	2.762	6.24	5.76	30.00		36.02		-	

TEST RESULTS DATA
Average Power Table

FCC Straddle Channel															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)			Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	144	5720	0.28	0.29	15.75	15.52		-	-	0.09	-0.30		-
				NII-2C	0.28	0.29	14.84	14.48		22.54	22.58	0.09	-0.30		Pass
				NII-3	0.28	0.29	8.54	8.80		-	-	0.09	-0.30		Pass
HT20	MCS0	2	144	5720	0.42	0.42	16.61	16.52	19.58	-		0.09			-
				NII-2C	0.42	0.42	15.56	15.50	18.54	22.64		0.09			Pass
				NII-3	0.42	0.42	9.95	9.72	12.85	-		0.09			Pass
HT40	MCS0	2	142	5710	0.80	0.79	13.54	13.16	16.37	-		0.09			-
				NII-2C	0.80	0.79	13.13	12.81	15.98	23.98		0.09			Pass
				NII-3	0.80	0.79	3.14	2.02	5.63	-		0.09			Pass
VHT20	MCS0	2	144	5720	0.58	0.62	14.90	14.42	17.68	-		0.09			-
				NII-2C	0.58	0.62	13.81	13.39	16.62	22.63		0.09			Pass
				NII-3	0.58	0.62	8.36	7.66	11.03	-		0.09			Pass
VHT40	MCS0	2	142	5710	1.06	1.07	13.54	13.35	16.45	-		0.09			-
				NII-2C	1.06	1.07	13.13	13.00	16.08	23.98		0.09			Pass
				NII-3	1.06	1.07	3.08	2.18	5.66	-		0.09			Pass
VHT80	MCS0	2	138	5690	1.82	1.83	13.11	12.93	16.03	-		0.09			-
				NII-2C	1.82	1.83	12.95	12.79	15.88	23.98		0.09			Pass
				NII-3	1.82	1.83	-1.24	-2.03	1.39	-		0.09			Pass

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TEST RESULTS DATA
Power Spectral Density

Straddle Channel																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	144	NII-2C	0.28	0.29	4.60	4.46		11.00	11.00	0.09	-0.30		Pass
				NII-3	0.28	0.29	4.60	4.46		30.00	30.00	0.09	-0.30		Pass
HT20	MCS0	2	144	NII-2C	0.42	0.42			7.94	11.00		2.91			Pass
				NII-3	0.42	0.42			7.94	30.00		2.91			Pass
HT40	MCS0	2	142	NII-2C	0.80	0.79			1.73	11.00		2.91			Pass
				NII-3	0.80	0.79			1.73	30.00		2.91			Pass
VHT20	MCS0	2	144	NII-2C	0.58	0.62			5.87	11.00		2.91			Pass
				NII-3	0.58	0.62			5.87	30.00		2.91			Pass
VHT40	MCS0	2	142	NII-2C	1.06	1.07			1.71	11.00		2.91			Pass
				NII-3	1.06	1.07			1.71	30.00		2.91			Pass
VHT80	MCS0	2	138	NII-2C	1.82	1.83			-1.98	11.00		2.91			Pass
				NII-3	1.82	1.83			-1.98	30.00		2.91			Pass

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TEST RESULTS DATA
Frequency Stability

Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	36	5180	5179.975	-0.025	-4.83	20	3.6	
11a	6Mbps	1	36	5180	5179.975	-0.025	-4.83	20	4.35	
11a	6Mbps	1	36	5180	5179.950	-0.050	-9.65	20	3.8	
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	-30	3.8	
11a	6Mbps	1	36	5180	5179.950	-0.050	-9.65	50	3.8	

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	64	5320	5319.950	-0.050	-9.40	20	3.6	
11a	6Mbps	1	64	5320	5319.950	-0.050	-9.40	20	4.35	
11a	6Mbps	1	64	5320	5319.950	-0.050	-9.40	20	3.8	
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	-30	3.8	
11a	6Mbps	1	64	5320	5319.950	-0.050	-9.40	50	3.8	

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	100	5500	5499.975	-0.025	-4.55	20	3.6	
11a	6Mbps	1	100	5500	5499.975	-0.025	-4.55	20	4.35	
11a	6Mbps	1	100	5500	5499.950	-0.050	-9.09	20	3.8	
11a	6Mbps	1	100	5500	5500.025	0.025	4.55	-30	3.8	
11a	6Mbps	1	100	5500	5499.950	-0.050	-9.09	50	3.8	

Appendix B. Radiated Spurious Emission

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		5149.6	55.66	-18.34	74	52.43	31.84	7.92	36.53	100	10	P	H
		5149.92	45.44	-8.56	54	42.21	31.84	7.92	36.53	100	10	A	H
	*	5184	105.22	-	-	101.94	31.85	7.94	36.51	100	10	P	H
	*	5182	97.8	-	-	94.52	31.85	7.94	36.51	100	10	A	H
		5148.96	49.33	-24.67	74	46.1	31.84	7.92	36.53	100	156	P	V
		5146.88	39.32	-14.68	54	36.09	31.84	7.92	36.53	100	156	A	V
	*	5184	96.82	-	-	93.54	31.85	7.94	36.51	100	156	P	V
	*	5174	89.85	-	-	86.57	31.85	7.94	36.51	100	156	A	V
802.11a CH 44 5220MHz	*	5224	106.42	-	-	103.07	31.86	7.99	36.5	100	11	P	H
	*	5222	99.15	-	-	95.8	31.86	7.99	36.5	100	11	A	H
	*	5218	98.49	-	-	95.14	31.86	7.99	36.5	100	158	P	V
	*	5218	91.2	-	-	87.85	31.86	7.99	36.5	100	158	A	V
802.11a CH 48 5240MHz	*	5234	106.72	-	-	103.31	31.87	8.04	36.5	100	11	P	H
	*	5246	99.52	-	-	96.06	31.88	8.08	36.5	100	11	A	H
		5352.84	46.85	-27.15	74	43.1	31.91	8.34	36.5	100	11	P	H
		5355.72	37.87	-16.13	54	34.12	31.91	8.34	36.5	100	11	A	H
	*	5244	99.42	-	-	95.96	31.88	8.08	36.5	100	160	P	V
	*	5246	92.42	-	-	88.96	31.88	8.08	36.5	100	160	A	V
		5377.5	46.19	-27.81	74	42.34	31.92	8.43	36.5	100	160	P	V
		5353.92	36.62	-17.38	54	32.87	31.91	8.34	36.5	100	160	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	45.51	-28.49	74	56.64	38.02	8.1	57.25	100	360	P	H
		10360	45.02	-28.98	74	56.15	38.02	8.1	57.25	100	0	P	V
802.11a CH 44 5220MHz		10440	44.15	-29.85	74	54.99	38.06	8.22	57.12	100	360	P	H
		10440	43.65	-30.35	74	54.49	38.06	8.22	57.12	100	0	P	V
802.11a CH 48 5240MHz		10480	43.64	-30.36	74	54.26	38.09	8.31	57.02	100	360	P	H
		10480	43.22	-30.78	74	53.84	38.09	8.31	57.02	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		5142.88	46.57	-27.43	74	43.34	31.84	7.92	36.53	100	11	P	H
		5145.92	37.53	-16.47	54	34.3	31.84	7.92	36.53	100	11	A	H
	*	5266	106.98	-	-	103.48	31.88	8.12	36.5	100	11	P	H
	*	5262	99.47	-	-	95.97	31.88	8.12	36.5	100	11	A	H
		5100.16	46.2	-27.8	74	43.03	31.83	7.9	36.56	100	161	P	V
		5134.72	36.77	-17.23	54	33.56	31.84	7.91	36.54	100	161	A	V
	*	5264	99.9	-	-	96.4	31.88	8.12	36.5	100	161	P	V
	*	5266	92.12	-	-	88.62	31.88	8.12	36.5	100	161	A	V
802.11a CH 60 5300MHz	*	5304	105.03	-	-	101.43	31.89	8.21	36.5	100	6	P	H
	*	5298	98.34	-	-	94.74	31.89	8.21	36.5	100	6	A	H
	*	5298	99.59	-	-	95.99	31.89	8.21	36.5	103	161	P	V
	*	5296	92.25	-	-	88.65	31.89	8.21	36.5	103	161	A	V
802.11a CH 64 5320MHz	*	5314	105.04	-	-	101.38	31.9	8.26	36.5	103	1	P	H
	*	5316	97.51	-	-	93.85	31.9	8.26	36.5	103	1	A	H
		5350	53.12	-20.88	74	49.37	31.91	8.34	36.5	103	1	P	H
		5350.2	43.98	-10.02	54	40.23	31.91	8.34	36.5	103	1	A	H
	*	5324	98.91	-	-	95.25	31.9	8.26	36.5	100	157	P	V
	*	5318	91.46	-	-	87.8	31.9	8.26	36.5	100	157	A	V
		5355.5	49.05	-24.95	74	45.3	31.91	8.34	36.5	100	157	P	V
		5350.2	40.28	-13.72	54	36.53	31.91	8.34	36.5	100	157	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	43.99	-30.01	74	54.46	38.11	8.37	56.95	100	360	P	H
		10520	45.09	-28.91	74	55.56	38.11	8.37	56.95	100	0	P	V
802.11a CH 60 5300MHz		10600	42.45	-31.55	74	52.54	38.16	8.53	56.78	100	0	P	H
		10600	44.04	-29.96	74	54.13	38.16	8.53	56.78	100	360	P	V
802.11a CH 64 5320MHz		10640	44.32	-29.68	74	54.26	38.18	8.59	56.71	100	360	P	H
		10640	43.46	-30.54	74	53.4	38.18	8.59	56.71	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		5468.88	52.09	-21.91	74	48.19	31.95	8.35	36.4	112	1	P	H
		5470	41.74	-12.26	54	37.84	31.95	8.35	36.4	112	1	A	H
	*	5498	100.17	-	-	96.27	31.96	8.29	36.35	112	1	P	H
	*	5498	92.92	-	-	89.02	31.96	8.29	36.35	112	1	A	H
		5463.12	45.96	-28.04	74	42.06	31.95	8.35	36.4	100	165	P	V
		5470	37.58	-16.42	54	33.68	31.95	8.35	36.4	100	165	A	V
	*	5496	94.45	-	-	90.56	31.95	8.32	36.38	100	165	P	V
	*	5498	87.26	-	-	83.36	31.96	8.29	36.35	100	165	A	V
802.11a CH 116 5580MHz	*	5584	103.06	-	-	99.18	31.98	8.13	36.23	164	0	P	H
	*	5578	95.69	-	-	91.8	31.98	8.16	36.25	164	0	A	H
	*	5576	98.01	-	-	94.12	31.98	8.16	36.25	358	157	P	V
	*	5574	90.46	-	-	86.57	31.98	8.16	36.25	358	157	A	V
802.11a CH 140 5700MHz	*	5702	103.28	-	-	99.24	32.03	8.28	36.27	164	2	P	H
	*	5694	96.12	-	-	92.1	32.02	8.25	36.25	164	2	A	H
		5727.24	54.01	-19.99	74	49.94	32.04	8.31	36.28	164	2	P	H
		5725.08	44.01	-9.99	54	39.94	32.04	8.31	36.28	164	2	A	H
	*	5700	95.9	-	-	91.88	32.02	8.25	36.25	106	176	P	V
	*	5698	88.17	-	-	84.15	32.02	8.25	36.25	106	176	A	V
		5729.24	47.98	-26.02	74	43.91	32.04	8.31	36.28	106	176	P	V
		5725.4	38.52	-15.48	54	34.45	32.04	8.31	36.28	106	176	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	46.91	-27.09	74	55.27	38.4	9.24	56	100	360	P	H
		11000	47.02	-26.98	74	55.38	38.4	9.24	56	100	0	P	V
802.11a CH 116 5580MHz		11160	46.71	-27.29	74	55.03	38.47	9.55	56.34	100	360	P	H
		11160	46.08	-27.92	74	54.4	38.47	9.55	56.34	100	360	P	V
802.11a CH 140 5700MHz		11400	44.77	-29.23	74	53.04	38.56	9.98	56.81	100	360	P	H
		11400	44.29	-29.71	74	52.56	38.56	9.98	56.81	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz	*	5724	103.31	-	-	99.24	32.04	8.31	36.28	100	358	P	H
	*	5716	95.95	-	-	91.91	32.03	8.28	36.27	100	358	A	H
	*	5718	97.13	-	-	93.06	32.04	8.31	36.28	303	282	P	V
	*	5714	90.04	-	-	86	32.03	8.28	36.27	303	282	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 144 5720MHz		11440	44.46	-29.54	74	52.73	38.57	10.04	56.88	100	0	P	H
		11440	44.29	-29.71	74	52.56	38.57	10.04	56.88	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		5122.88	48.44	-25.56	74	45.23	31.84	7.91	36.54	274	238	P	H
		5147.84	38.29	-15.71	54	35.06	31.84	7.92	36.53	274	238	A	H
	*	5184	95.48	-	-	92.2	31.85	7.94	36.51	274	238	P	H
	*	5182	87.97	-	-	84.69	31.85	7.94	36.51	274	238	A	H
		5149.44	53.32	-20.68	74	50.09	31.84	7.92	36.53	275	236	P	V
		5148.32	43.65	-10.35	54	40.42	31.84	7.92	36.53	275	236	A	V
	*	5176	103.54	-	-	100.26	31.85	7.94	36.51	275	236	P	V
	*	5182	96.23	-	-	92.95	31.85	7.94	36.51	275	236	A	V
802.11a CH 44 5220MHz	*	5226	93.73	-	-	90.32	31.87	8.04	36.5	260	215	P	H
	*	5218	86.57	-	-	83.22	31.86	7.99	36.5	260	215	A	H
	*	5226	102.9	-	-	99.49	31.87	8.04	36.5	307	244	P	V
	*	5222	95.82	-	-	92.47	31.86	7.99	36.5	307	244	A	V
802.11a CH 48 5240MHz	*	5234	95.63	-	-	92.22	31.87	8.04	36.5	293	213	P	H
	*	5234	88.27	-	-	84.86	31.87	8.04	36.5	293	213	A	H
		5382.36	45.4	-28.6	74	41.55	31.92	8.43	36.5	293	213	P	H
		5398.02	36.37	-17.63	54	32.47	31.92	8.48	36.5	293	213	A	H
	*	5242	103.65	-	-	100.19	31.88	8.08	36.5	301	249	P	V
	*	5246	96.48	-	-	93.02	31.88	8.08	36.5	301	249	A	V
		5369.94	46.96	-27.04	74	43.16	31.91	8.39	36.5	301	249	P	V
		5352.48	37.54	-16.46	54	33.79	31.91	8.34	36.5	301	249	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	43.81	-30.19	74	54.94	38.02	8.1	57.25	100	360	P	H
		10360	43.89	-30.11	74	55.02	38.02	8.1	57.25	100	0	P	V
802.11a CH 44 5220MHz		10440	42.64	-31.36	74	53.48	38.06	8.22	57.12	100	360	P	H
		10440	42.73	-31.27	74	53.57	38.06	8.22	57.12	100	0	P	V
802.11a CH 48 5240MHz		10480	43.19	-30.81	74	53.81	38.09	8.31	57.02	100	360	P	H
		10480	44.02	-29.98	74	54.64	38.09	8.31	57.02	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		5140.64	46.33	-27.67	74	43.1	31.84	7.92	36.53	268	73	P	H
		5108	36.56	-17.44	54	33.37	31.83	7.91	36.55	268	73	A	H
	*	5266	93.97	-	-	90.47	31.88	8.12	36.5	268	73	P	H
	*	5266	86.34	-	-	82.84	31.88	8.12	36.5	268	73	A	H
		5149.92	47.22	-26.78	74	43.99	31.84	7.92	36.53	315	228	P	V
		5106.72	37.55	-16.45	54	34.36	31.83	7.91	36.55	315	228	A	V
	*	5264	103.76	-	-	100.26	31.88	8.12	36.5	315	228	P	V
	*	5264	96.15	-	-	92.65	31.88	8.12	36.5	315	228	A	V
802.11a CH 60 5300MHz	*	5296	95.4	-	-	91.8	31.89	8.21	36.5	244	70	P	H
	*	5296	87.7	-	-	84.1	31.89	8.21	36.5	244	70	A	H
	*	5302	100.63	-	-	97.03	31.89	8.21	36.5	144	339	P	V
	*	5296	93.28	-	-	89.68	31.89	8.21	36.5	144	339	A	V
802.11a CH 64 5320MHz	*	5322	93.95	-	-	90.29	31.9	8.26	36.5	293	241	P	H
	*	5322	85.89	-	-	82.23	31.9	8.26	36.5	293	241	A	H
		5362.5	46.73	-27.27	74	42.93	31.91	8.39	36.5	293	241	P	H
		5350	37.26	-16.74	54	33.51	31.91	8.34	36.5	293	241	A	H
	*	5324	100.34	-	-	96.68	31.9	8.26	36.5	144	340	P	V
	*	5318	92.69	-	-	89.03	31.9	8.26	36.5	144	340	A	V
		5350.7	49.63	-24.37	74	45.88	31.91	8.34	36.5	144	340	P	V
		5351.1	40.48	-13.52	54	36.73	31.91	8.34	36.5	144	340	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	43.98	-30.02	74	54.45	38.11	8.37	56.95	100	360	P	H
		10520	43.69	-30.31	74	54.16	38.11	8.37	56.95	100	360	P	V
802.11a CH 60 5300MHz		10600	42.42	-31.58	74	52.51	38.16	8.53	56.78	100	360	P	H
		10600	42.25	-31.75	74	52.34	38.16	8.53	56.78	100	0	P	V
802.11a CH 64 5320MHz		10640	42.96	-31.04	74	52.9	38.18	8.59	56.71	100	360	P	H
		10640	43.53	-30.47	74	53.47	38.18	8.59	56.71	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		5440.88	46.44	-27.56	74	42.54	31.94	8.41	36.45	312	237	P	H
		5469.68	37.31	-16.69	54	33.41	31.95	8.35	36.4	312	237	A	H
	*	5498	93.01	-	-	89.11	31.96	8.29	36.35	312	237	P	H
	*	5498	85.61	-	-	81.71	31.96	8.29	36.35	312	237	A	H
		5464.08	49.46	-24.54	74	45.56	31.95	8.35	36.4	105	0	P	V
		5468.24	39.99	-14.01	54	36.09	31.95	8.35	36.4	105	0	A	V
	*	5496	98.42	-	-	94.53	31.95	8.32	36.38	105	0	P	V
	*	5498	91.15	-	-	87.25	31.96	8.29	36.35	105	0	A	V
802.11a CH 116 5580MHz	*	5582	93.41	-	-	89.53	31.98	8.13	36.23	100	202	P	H
	*	5584	85.75	-	-	81.87	31.98	8.13	36.23	100	202	A	H
	*	5578	96.21	-	-	92.32	31.98	8.16	36.25	106	13	P	V
	*	5574	88.69	-	-	84.8	31.98	8.16	36.25	106	13	A	V
802.11a CH 140 5700MHz	*	5698	92.34	-	-	88.32	32.02	8.25	36.25	205	201	P	H
	*	5702	85.03	-	-	80.99	32.03	8.28	36.27	205	201	A	H
		5732.92	47	-27	74	42.93	32.04	8.31	36.28	205	201	P	H
		5726.44	37.65	-16.35	54	33.58	32.04	8.31	36.28	205	201	A	H
	*	5698	94.46	-	-	90.44	32.02	8.25	36.25	100	334	P	V
	*	5694	87.24	-	-	83.22	32.02	8.25	36.25	100	334	A	V
		5727.4	48.5	-25.5	74	44.43	32.04	8.31	36.28	100	334	P	V
		5725.08	38.34	-15.66	54	34.27	32.04	8.31	36.28	100	334	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	46.24	-27.76	74	54.6	38.4	9.24	56	100	360	P	H
		11000	45.86	-28.14	74	54.22	38.4	9.24	56	100	360	P	V
802.11a CH 116 5580MHz		11160	45.88	-28.12	74	54.2	38.47	9.55	56.34	100	360	P	H
		11160	45.54	-28.46	74	53.86	38.47	9.55	56.34	100	360	P	V
802.11a CH 140 5700MHz		11400	43.98	-30.02	74	52.25	38.56	9.98	56.81	100	360	P	H
		11400	44.55	-29.45	74	52.82	38.56	9.98	56.81	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 144 5720MHz	*	5714	91.28	-	-	87.24	32.03	8.28	36.27	100	168	P	H
	*	5716	83.59	-	-	79.55	32.03	8.28	36.27	100	168	A	H
	*	5716	96.68	-	-	92.64	32.03	8.28	36.27	100	0	P	V
	*	5724	89.16	-	-	85.09	32.04	8.31	36.28	100	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 144 5720MHz		11440	45.84	-28.16	74	54.11	38.57	10.04	56.88	100	0	P	H
		11440	43.92	-30.08	74	52.19	38.57	10.04	56.88	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 - 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		5147.52	49.48	-24.52	74	46.25	31.84	7.92	36.53	299	241	P	H
		5150	40.39	-13.61	54	37.16	31.84	7.92	36.53	299	241	A	H
	*	5178	99.66	-	-	96.38	31.85	7.94	36.51	299	241	P	H
	*	5184	92.08	-	-	88.8	31.85	7.94	36.51	299	241	A	H
		5138.56	57.44	-16.56	74	54.23	31.84	7.91	36.54	300	248	P	V
		5149.44	48.83	-5.17	54	45.6	31.84	7.92	36.53	300	248	A	V
	*	5186	109.48	-	-	106.2	31.85	7.94	36.51	300	248	P	V
	*	5174	101.06	-	-	97.78	31.85	7.94	36.51	300	248	A	V
802.11n HT20 CH 44 5220MHz	*	5226	100.51	-	-	97.1	31.87	8.04	36.5	274	213	P	H
	*	5226	93.79	-	-	90.38	31.87	8.04	36.5	274	213	A	H
	*	5216	109.13	-	-	105.78	31.86	7.99	36.5	269	244	P	V
	*	5224	101.15	-	-	97.8	31.86	7.99	36.5	269	244	A	V
802.11n HT20 CH 48 5240MHz	*	5246	100.76	-	-	97.3	31.88	8.08	36.5	283	213	P	H
	*	5242	93.34	-	-	89.88	31.88	8.08	36.5	283	213	A	H
		5374.98	46.85	-27.15	74	43.05	31.91	8.39	36.5	283	213	P	H
		5390.82	37.18	-16.82	54	33.33	31.92	8.43	36.5	283	213	A	H
	*	5244	108.08	-	-	104.62	31.88	8.08	36.5	301	246	P	V
	*	5246	100.86	-	-	97.4	31.88	8.08	36.5	301	246	A	V
		5355.36	47.18	-26.82	74	43.43	31.91	8.34	36.5	301	246	P	V
		5354.82	38.99	-15.01	54	35.24	31.91	8.34	36.5	301	246	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		10360	45.16	-28.84	74	56.29	38.02	8.1	57.25	100	360	P	H
		10360	45.56	-28.44	74	56.69	38.02	8.1	57.25	100	360	P	V
802.11n HT20 CH 44 5220MHz		10440	43.4	-30.6	74	54.24	38.06	8.22	57.12	100	360	P	H
		10440	43.9	-30.1	74	54.74	38.06	8.22	57.12	100	0	P	V
802.11n HT20 CH 48 5240MHz		10480	44.03	-29.97	74	54.65	38.09	8.31	57.02	100	0	P	H
		10480	44.8	-29.2	74	55.42	38.09	8.31	57.02	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		5149.28	59.47	-14.53	74	56.24	31.84	7.92	36.53	100	18	P	H
		5149.6	50.73	-3.27	54	47.5	31.84	7.92	36.53	100	18	A	H
	*	5196	101.62	-	-	98.31	31.86	7.95	36.5	100	18	P	H
	*	5198	93.78	-	-	90.47	31.86	7.95	36.5	100	18	A	H
		5146.4	51.69	-22.31	74	48.46	31.84	7.92	36.53	388	107	P	V
		5149.76	42.5	-11.5	54	39.27	31.84	7.92	36.53	388	107	A	V
	*	5182	93.03	-	-	89.75	31.85	7.94	36.51	388	107	P	V
	*	5184	85.56	-	-	82.28	31.85	7.94	36.51	388	107	A	V
802.11n HT40 CH 46 5230MHz	*	5226	101.94	-	-	98.53	31.87	8.04	36.5	100	22	P	H
	*	5238	93.71	-	-	90.3	31.87	8.04	36.5	100	22	A	H
		5369.94	46.64	-27.36	74	42.84	31.91	8.39	36.5	100	22	P	H
		5379.3	37.74	-16.26	54	33.89	31.92	8.43	36.5	100	22	A	H
	*	5222	94.77	-	-	91.42	31.86	7.99	36.5	389	158	P	V
		5226	87.14	-	-	83.73	31.87	8.04	36.5	389	158	A	V
		5393.52	45.37	-28.63	74	41.52	31.92	8.43	36.5	389	158	P	V
		5399.1	36.86	-17.14	54	32.96	31.92	8.48	36.5	389	158	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		10380	43.45	-30.55	74	54.51	38.03	8.13	57.22	100	360	P	H
		10380	43.41	-30.59	74	54.47	38.03	8.13	57.22	100	360	P	V
802.11n HT40 CH 46 5230MHz		10460	41.59	-32.41	74	52.35	38.07	8.25	57.08	100	360	P	H
		10460	42.9	-31.1	74	53.66	38.07	8.25	57.08	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 36 5180MHz		5149.28	48.13	-25.87	74	44.9	31.84	7.92	36.53	281	126	P	H
		5148.8	39.89	-14.11	54	36.66	31.84	7.92	36.53	281	126	A	H
	*	5184	99.04	-	-	95.76	31.85	7.94	36.51	281	126	P	H
	*	5178	91.09	-	-	87.81	31.85	7.94	36.51	281	126	A	H
		5148.96	59.5	-14.5	74	56.27	31.84	7.92	36.53	295	263	P	V
		5148.64	47.26	-6.74	54	44.03	31.84	7.92	36.53	295	263	A	V
	*	5184	106.86	-	-	103.58	31.85	7.94	36.51	295	263	P	V
	*	5178	99.91	-	-	96.63	31.85	7.94	36.51	295	263	A	V
802.11ac VHT20 CH 44 5220MHz	*	5228	99.2	-	-	95.79	31.87	8.04	36.5	285	73	P	H
	*	5222	91.7	-	-	88.35	31.86	7.99	36.5	285	73	A	H
	*	5220	106.57	-	-	103.22	31.86	7.99	36.5	327	246	P	V
	*	5218	99.41	-	-	96.06	31.86	7.99	36.5	327	246	A	V
802.11ac VHT20 CH 48 5240MHz	*	5246	99.42	-	-	95.96	31.88	8.08	36.5	327	76	P	H
	*	5238	92.33	-	-	88.92	31.87	8.04	36.5	327	76	A	H
		5394.24	46.03	-27.97	74	42.18	31.92	8.43	36.5	327	76	P	H
		5350.5	37.32	-16.68	54	33.57	31.91	8.34	36.5	327	76	A	H
	*	5242	106.86	-	-	103.4	31.88	8.08	36.5	300	253	P	V
	*	5238	100.16	-	-	96.75	31.87	8.04	36.5	300	253	A	V
		5354.64	46.82	-27.18	74	43.07	31.91	8.34	36.5	300	253	P	V
		5351.94	38.62	-15.38	54	34.87	31.91	8.34	36.5	300	253	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 36 5180MHz		10360	43.09	-30.91	74	54.22	38.02	8.1	57.25	100	360	P	H
		10360	42.83	-31.17	74	53.96	38.02	8.1	57.25	100	360	P	V
802.11ac VHT20 CH 44 5220MHz		10440	43.46	-30.54	74	54.3	38.06	8.22	57.12	100	360	P	H
		10440	42.96	-31.04	74	53.8	38.06	8.22	57.12	100	360	P	V
802.11ac VHT20 CH 48 5240MHz		10480	42.17	-31.83	74	52.79	38.09	8.31	57.02	100	360	P	H
		10480	42.64	-31.36	74	53.26	38.09	8.31	57.02	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 38 5190MHz		5149.76	60.4	-13.6	74	57.17	31.84	7.92	36.53	100	18	P	H
		5148.8	50.8	-3.2	54	47.57	31.84	7.92	36.53	100	18	A	H
	*	5186	101.81	-	-	98.53	31.85	7.94	36.51	100	18	P	H
	*	5198	94.03	-	-	90.72	31.86	7.95	36.5	100	18	A	H
		5146.24	49.32	-24.68	74	46.09	31.84	7.92	36.53	100	161	P	V
		5148.96	40.5	-13.5	54	37.27	31.84	7.92	36.53	100	161	A	V
	*	5194	89.94	-	-	86.63	31.86	7.95	36.5	100	161	P	V
	*	5196	83.13	-	-	79.82	31.86	7.95	36.5	100	161	A	V
802.11ac VHT40 CH 46 5230MHz	*	5222	101.79	-	-	98.44	31.86	7.99	36.5	100	19	P	H
	*	5238	93.91	-	-	90.5	31.87	8.04	36.5	100	19	A	H
		5390.64	46.17	-27.83	74	42.32	31.92	8.43	36.5	100	19	P	H
		5356.98	37.72	-16.28	54	33.97	31.91	8.34	36.5	100	19	A	H
	*	5238	92.7	-	-	89.29	31.87	8.04	36.5	100	161	P	V
	*	5244	85.13	-	-	81.67	31.88	8.08	36.5	100	161	A	V
		5376.78	45.63	-28.37	74	41.83	31.91	8.39	36.5	100	161	P	V
		5353.2	36.74	-17.26	54	32.99	31.91	8.34	36.5	100	161	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 38 5190MHz		10380	42.64	-31.36	74	53.7	38.03	8.13	57.22	100	360	P	H
		10380	43.67	-30.33	74	54.73	38.03	8.13	57.22	100	360	P	V
802.11ac VHT40 CH 46 5230MHz		10460	44.49	-29.51	74	55.25	38.07	8.25	57.08	100	360	P	H
		10460	41.95	-32.05	74	52.71	38.07	8.25	57.08	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5148.45	50.37	-23.63	74	47.14	31.84	7.92	36.53	275	326	P	H
		5117.05	40.83	-13.17	54	37.64	31.83	7.91	36.55	275	326	A	H
	*	5222	86.77	-	-	83.42	31.86	7.99	36.5	275	326	P	H
	*	5222	80.48	-	-	77.13	31.86	7.99	36.5	275	326	A	H
		5368.6	46.52	-27.48	74	42.72	31.91	8.39	36.5	275	326	P	H
		5380.35	37.76	-16.24	54	33.91	31.92	8.43	36.5	275	326	A	H
		5147.4	58.79	-15.21	74	55.56	31.84	7.92	36.53	287	237	P	V
		5146.3	48.87	-5.13	54	45.64	31.84	7.92	36.53	287	237	A	V
	*	5216	97.48	-	-	94.13	31.86	7.99	36.5	287	237	P	V
	*	5194	91	-	-	87.69	31.86	7.95	36.5	287	237	A	V
		5381.6	47.3	-26.7	74	43.45	31.92	8.43	36.5	287	237	P	V
		5357.55	39.12	-14.88	54	35.37	31.91	8.34	36.5	287	237	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		10420	42.81	-31.19	74	53.72	38.05	8.19	57.15	100	360	P	H
VHT80 CH 42 5210MHz		10420	44.25	-29.75	74	55.16	38.05	8.19	57.15	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 - 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		5132.96	46.46	-27.54	74	43.25	31.84	7.91	36.54	285	209	P	H
		5106.88	37.76	-16.24	54	34.57	31.83	7.91	36.55	285	209	A	H
	*	5256	102.21	-	-	98.75	31.88	8.08	36.5	285	209	P	H
	*	5264	94.54	-	-	91.04	31.88	8.12	36.5	285	209	A	H
		5143.84	47.92	-26.08	74	44.69	31.84	7.92	36.53	322	252	P	V
		5142.24	39.44	-14.56	54	36.21	31.84	7.92	36.53	322	252	A	V
	*	5266	109.33	-	-	105.83	31.88	8.12	36.5	322	252	P	V
	*	5264	101.59	-	-	98.09	31.88	8.12	36.5	322	252	A	V
802.11n HT20 CH 60 5300MHz	*	5294	100.8	-	-	97.2	31.89	8.21	36.5	299	72	P	H
	*	5296	93.43	-	-	89.83	31.89	8.21	36.5	299	72	A	H
	*	5298	108.51	-	-	104.91	31.89	8.21	36.5	301	252	P	V
	*	5298	100.76	-	-	97.16	31.89	8.21	36.5	301	252	A	V
802.11n HT20 CH 64 5320MHz	*	5324	99.67	-	-	96.01	31.9	8.26	36.5	299	210	P	H
	*	5324	92.6	-	-	88.94	31.9	8.26	36.5	299	210	A	H
		5350.4	53.7	-20.3	74	49.95	31.91	8.34	36.5	299	210	P	H
		5351.4	44.29	-9.71	54	40.54	31.91	8.34	36.5	299	210	A	H
	*	5326	108.01	-	-	104.35	31.9	8.26	36.5	300	259	P	V
	*	5318	99.71	-	-	96.05	31.9	8.26	36.5	300	259	A	V
		5352.1	60.67	-13.33	74	56.92	31.91	8.34	36.5	300	259	P	V
		5350.3	49.99	-4.01	54	46.24	31.91	8.34	36.5	300	259	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		10520	43.76	-30.24	74	54.23	38.11	8.37	56.95	100	0	P	H
		10520	43.73	-30.27	74	54.2	38.11	8.37	56.95	100	360	P	V
802.11n HT20 CH 60 5300MHz		10600	42.29	-31.71	74	52.38	38.16	8.53	56.78	100	360	P	H
		10600	42.72	-31.28	74	52.81	38.16	8.53	56.78	100	0	P	V
802.11n HT20 CH 64 5320MHz		10640	44.21	-29.79	74	54.15	38.18	8.59	56.71	100	0	P	H
		10640	43.84	-30.16	74	53.78	38.18	8.59	56.71	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		5121.6	48.11	-25.89	74	44.92	31.83	7.91	36.55	100	11	P	H
		5113.76	38.65	-15.35	54	35.46	31.83	7.91	36.55	100	11	A	H
	*	5276	104.94	-	-	101.38	31.89	8.17	36.5	100	11	P	H
	*	5274	96.48	-	-	92.98	31.88	8.12	36.5	100	11	A	H
		5116.32	45.8	-28.2	74	42.61	31.83	7.91	36.55	100	162	P	V
		5103.2	37.19	-16.81	54	34.02	31.83	7.9	36.56	100	162	A	V
	*	5278	95.71	-	-	92.15	31.89	8.17	36.5	100	162	P	V
	*	5278	87.86	-	-	84.3	31.89	8.17	36.5	100	162	A	V
802.11n HT40 CH 62 5310MHz	*	5296	103.68	-	-	100.08	31.89	8.21	36.5	100	12	P	H
	*	5304	95.47	-	-	91.87	31.89	8.21	36.5	100	12	A	H
		5351.6	56.87	-17.13	74	53.12	31.91	8.34	36.5	100	12	P	H
		5352.1	47.48	-6.52	54	43.73	31.91	8.34	36.5	100	12	A	H
	*	5296	95.05	-	-	91.45	31.89	8.21	36.5	100	167	P	V
	*	5300	87.73	-	-	84.13	31.89	8.21	36.5	100	167	A	V
		5351.4	53.9	-20.1	74	50.15	31.91	8.34	36.5	100	167	P	V
		5351.6	41.45	-12.55	54	37.7	31.91	8.34	36.5	100	167	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		10540	42.31	-31.69	74	52.7	38.12	8.41	56.92	100	360	P	H
		10540	42.93	-31.07	74	53.32	38.12	8.41	56.92	100	360	P	V
802.11n HT40 CH 62 5310MHz		10620	42.23	-31.77	74	52.25	38.17	8.56	56.75	100	360	P	H
		10620	42.66	-31.34	74	52.68	38.17	8.56	56.75	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 52 5260MHz		5101.28	45.93	-28.07	74	42.76	31.83	7.9	36.56	295	75	P	H
		5111.2	37.34	-16.66	54	34.15	31.83	7.91	36.55	295	75	A	H
	*	5262	99.77	-	-	96.27	31.88	8.12	36.5	295	75	P	H
	*	5258	92.68	-	-	89.22	31.88	8.08	36.5	295	75	A	H
		5109.92	47.94	-26.06	74	44.75	31.83	7.91	36.55	322	256	P	V
		5112.96	38.64	-15.36	54	35.45	31.83	7.91	36.55	322	256	A	V
	*	5268	106.77	-	-	103.27	31.88	8.12	36.5	322	256	P	V
	*	5254	99.61	-	-	96.15	31.88	8.08	36.5	322	256	A	V
802.11ac VHT20 CH 60 5300MHz	*	5302	98.34	-	-	94.74	31.89	8.21	36.5	300	74	P	H
	*	5298	91.66	-	-	88.06	31.89	8.21	36.5	300	74	A	H
	*	5306	107.43	-	-	103.83	31.89	8.21	36.5	266	237	P	V
	*	5298	99.99	-	-	96.39	31.89	8.21	36.5	266	237	A	V
802.11ac VHT20 CH 64 5320MHz	*	5318	99.42	-	-	95.76	31.9	8.26	36.5	274	72	P	H
	*	5322	91.96	-	-	88.3	31.9	8.26	36.5	274	72	A	H
		5360.22	48.43	-25.57	74	44.68	31.91	8.34	36.5	274	72	P	H
		5350.32	40.2	-13.8	54	36.45	31.91	8.34	36.5	274	72	A	H
	*	5324	106.31	-	-	102.65	31.9	8.26	36.5	302	239	P	V
	*	5314	98.65	-	-	94.99	31.9	8.26	36.5	302	239	A	V
		5350.5	53.63	-20.37	74	49.88	31.91	8.34	36.5	302	239	P	V
		5351	44.86	-9.14	54	41.11	31.91	8.34	36.5	302	239	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 52 5260MHz		10520	43.86	-30.14	74	54.33	38.11	8.37	56.95	100	360	P	H
		10520	43.84	-30.16	74	54.31	38.11	8.37	56.95	100	360	P	V
802.11ac VHT20 CH 60 5300MHz		10600	43.67	-30.33	74	53.76	38.16	8.53	56.78	100	360	P	H
		10600	41.93	-32.07	74	52.02	38.16	8.53	56.78	100	360	P	V
802.11ac VHT20 CH 64 5320MHz		10640	43.05	-30.95	74	52.99	38.18	8.59	56.71	100	360	P	H
		10640	44.04	-29.96	74	53.98	38.18	8.59	56.71	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 54 5270MHz		5119.84	47.31	-26.69	74	44.12	31.83	7.91	36.55	100	10	P	H
		5109.6	38.83	-15.17	54	35.64	31.83	7.91	36.55	100	10	A	H
	*	5268	104.78	-	-	101.28	31.88	8.12	36.5	100	10	P	H
	*	5278	97.97	-	-	94.41	31.89	8.17	36.5	100	10	A	H
		5104.96	46.67	-27.33	74	43.5	31.83	7.9	36.56	100	159	P	V
		5102.56	37.31	-16.69	54	34.14	31.83	7.9	36.56	100	159	A	V
	*	5276	97.09	-	-	93.53	31.89	8.17	36.5	100	159	P	V
	*	5278	89.67	-	-	86.11	31.89	8.17	36.5	100	159	A	V
802.11ac VHT40 CH 62 5310MHz	*	5314	104.15	-	-	100.49	31.9	8.26	36.5	340	24	P	H
	*	5314	96.2	-	-	92.54	31.9	8.26	36.5	340	24	A	H
		5350.5	62.35	-11.65	74	58.6	31.91	8.34	36.5	340	24	P	H
		5350	50.19	-3.81	54	46.44	31.91	8.34	36.5	100	24	P	H
	*	5312	96.81	-	-	93.15	31.9	8.26	36.5	100	160	P	V
	*	5318	89.08	-	-	85.42	31.9	8.26	36.5	100	160	A	V
		5350.4	57.01	-16.99	74	53.26	31.91	8.34	36.5	100	160	P	V
		5350.3	44.41	-9.59	54	40.66	31.91	8.34	36.5	100	160	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 54 5270MHz		10540	43.97	-30.03	74	54.36	38.12	8.41	56.92	100	360	P	H
		10540	41.71	-32.29	74	52.1	38.12	8.41	56.92	100	360	P	V
802.11ac VHT40 CH 62 5310MHz		10620	42.19	-31.81	74	52.21	38.17	8.56	56.75	100	360	P	H
		10620	43.64	-30.36	74	53.66	38.17	8.56	56.75	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5107.55	47.13	-26.87	74	43.94	31.83	7.91	36.55	297	330	P	H
		5143.05	38.45	-15.55	54	35.22	31.84	7.92	36.53	297	330	A	H
	*	5310	90.37	-	-	86.71	31.9	8.26	36.5	297	330	P	H
	*	5308	84.32	-	-	80.72	31.89	8.21	36.5	297	330	A	H
		5362.85	55.85	-18.15	74	52.05	31.91	8.39	36.5	297	330	P	H
		5362.5	43.01	-10.99	54	39.21	31.91	8.39	36.5	297	330	A	H
	*	5296	100.6	-	-	97	31.89	8.21	36.5	209	249	P	V
	*	5274	94.88	-	-	91.38	31.88	8.12	36.5	209	249	A	V
		5147.85	49.87	-24.13	74	46.64	31.84	7.92	36.53	209	249	P	V
		5137.55	42.41	-11.59	54	39.2	31.84	7.91	36.54	209	249	A	V
		5363.4	62.11	-11.89	74	58.31	31.91	8.39	36.5	209	249	P	V
		5387.4	50.53	-3.47	54	46.68	31.92	8.43	36.5	100	263	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		10580	43.28	-30.72	74	53.44	38.15	8.5	56.81	100	360	P	H
VHT80 CH 58 5290MHz		10580	42.43	-31.57	74	52.59	38.15	8.5	56.81	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 100 5500MHz		5468.56	53.62	-20.38	74	49.72	31.95	8.35	36.4	300	208	P	H
		5469.84	43.23	-10.77	54	39.33	31.95	8.35	36.4	300	208	A	H
	*	5496	100.02	-	-	96.13	31.95	8.32	36.38	300	208	P	H
	*	5504	91.82	-	-	87.92	31.96	8.29	36.35	300	208	A	H
		5469.04	58.05	-15.95	74	54.15	31.95	8.35	36.4	299	232	P	V
		5469.68	48.31	-5.69	54	44.41	31.95	8.35	36.4	299	232	A	V
	*	5502	106.19	-	-	102.29	31.96	8.29	36.35	299	232	P	V
	*	5496	97.53	-	-	93.64	31.95	8.32	36.38	299	232	A	V
802.11n HT20 CH 116 5580MHz	*	5572	99.56	-	-	95.67	31.98	8.16	36.25	298	234	P	H
	*	5574	92.44	-	-	88.55	31.98	8.16	36.25	298	234	A	H
	*	5582	105.67	-	-	101.79	31.98	8.13	36.23	272	249	P	V
	*	5576	98.07	-	-	94.18	31.98	8.16	36.25	272	249	A	V
802.11n HT20 CH 140 5700MHz	*	5698	100.26	-	-	96.24	32.02	8.25	36.25	299	122	P	H
	*	5696	92.27	-	-	88.25	32.02	8.25	36.25	299	122	A	H
		5725.4	56.59	-17.41	74	52.52	32.04	8.31	36.28	299	122	P	H
		5725.48	43.23	-10.77	54	39.16	32.04	8.31	36.28	299	122	A	H
	*	5706	104.86	-	-	100.82	32.03	8.28	36.27	100	259	P	V
	*	5702	97.44	-	-	93.4	32.03	8.28	36.27	100	259	A	V
		5725.8	60.4	-13.6	74	56.33	32.04	8.31	36.28	100	259	P	V
		5725.8	47.63	-6.37	54	43.56	32.04	8.31	36.28	100	259	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 100 5500MHz		11000	46.58	-27.42	74	54.94	38.4	9.24	56	100	360	P	H
		11000	45.79	-28.21	74	54.15	38.4	9.24	56	100	0	P	V
802.11n HT20 CH 116 5580MHz		11160	45.02	-28.98	74	53.34	38.47	9.55	56.34	100	0	P	H
		11160	44.93	-29.07	74	53.25	38.47	9.55	56.34	100	360	P	V
802.11n HT20 CH 140 5700MHz		11400	44.62	-29.38	74	52.89	38.56	9.98	56.81	100	360	P	H
		11400	45.59	-28.41	74	53.86	38.56	9.98	56.81	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		5463.44	58.85	-15.15	74	54.95	31.95	8.35	36.4	100	26	P	H
		5469.84	49.97	-4.03	54	46.07	31.95	8.35	36.4	100	26	A	H
	*	5502	98.84	-	-	94.94	31.96	8.29	36.35	100	26	P	H
	*	5514	91.52	-	-	87.63	31.96	8.26	36.33	100	26	A	H
		5468.72	50.45	-23.55	74	46.55	31.95	8.35	36.4	100	92	P	V
		5470	41.87	-12.13	54	37.97	31.95	8.35	36.4	100	92	A	V
	*	5516	92.49	-	-	88.6	31.96	8.26	36.33	100	92	P	V
	*	5516	84.63	-	-	80.74	31.96	8.26	36.33	100	92	A	V
802.11n HT40 CH 110 5550MHz	*	5536	97.73	-	-	93.83	31.97	8.23	36.3	100	360	P	H
	*	5558	90.11	-	-	86.22	31.97	8.2	36.28	100	360	A	H
	*	5560	92.5	-	-	88.61	31.97	8.2	36.28	100	95	P	V
	*	5564	84.59	-	-	80.7	31.97	8.2	36.28	100	95	A	V
802.11n HT40 CH 134 5670MHz	*	5664	98.72	-	-	94.75	32.01	8.19	36.23	100	358	P	H
	*	5666	91.26	-	-	87.29	32.01	8.19	36.23	100	358	A	H
		5728.28	52.43	-21.57	74	48.36	32.04	8.31	36.28	100	358	P	H
		5727.24	43.27	-10.73	54	39.2	32.04	8.31	36.28	100	358	A	H
	*	5676	90.79	-	-	86.79	32.02	8.22	36.24	100	90	P	V
	*	5676	83.67	-	-	79.67	32.02	8.22	36.24	100	90	A	V
		5730.04	46.8	-27.2	74	42.73	32.04	8.31	36.28	100	90	P	V
		5728.04	37.84	-16.16	54	33.77	32.04	8.31	36.28	100	90	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		11020	45.36	-28.64	74	53.71	38.41	9.27	56.03	100	360	P	H
HT40 CH 102 5510MHz		11020	46.62	-27.38	74	54.97	38.41	9.27	56.03	100	360	P	V
802.11n		11100	45.68	-28.32	74	54.01	38.44	9.43	56.2	100	360	P	H
HT40 CH 110 5550MHz		11100	46.13	-27.87	74	54.46	38.44	9.43	56.2	100	360	P	V
802.11n		11340	43.9	-30.1	74	52.19	38.53	9.86	56.68	100	360	P	H
HT40 CH 134 5670MHz		11340	44.49	-29.51	74	52.78	38.53	9.86	56.68	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 100 5500MHz		5466	47.77	-26.23	74	43.87	31.95	8.35	36.4	309	216	P	H
		5465.84	39.09	-14.91	54	35.19	31.95	8.35	36.4	309	216	A	H
	*	5498	96.44	-	-	92.54	31.96	8.29	36.35	309	216	P	H
	*	5498	89.22	-	-	85.32	31.96	8.29	36.35	309	216	A	H
		5469.2	53.31	-20.69	74	49.41	31.95	8.35	36.4	308	233	P	V
		5469.52	43.65	-10.35	54	39.75	31.95	8.35	36.4	308	233	A	V
	*	5502	105.57	-	-	101.67	31.96	8.29	36.35	308	233	P	V
	*	5494	96.07	-	-	92.18	31.95	8.32	36.38	308	233	A	V
802.11ac VHT20 CH 116 5580MHz	*	5586	98.92	-	-	95.04	31.98	8.13	36.23	351	70	P	H
	*	5574	90.73	-	-	86.84	31.98	8.16	36.25	351	70	A	H
	*	5576	103.79	-	-	99.9	31.98	8.16	36.25	289	259	P	V
	*	5586	95.97	-	-	92.09	31.98	8.13	36.23	289	259	A	V
802.11ac VHT20 CH 140 5700MHz	*	5702	97.55	-	-	93.51	32.03	8.28	36.27	307	73	P	H
	*	5694	90.69	-	-	86.67	32.02	8.25	36.25	307	73	A	H
		5725.56	47.92	-26.08	74	43.85	32.04	8.31	36.28	307	73	P	H
		5726.2	39.63	-14.37	54	35.56	32.04	8.31	36.28	307	73	A	H
	*	5696	103.09	-	-	99.07	32.02	8.25	36.25	158	284	P	V
	*	5694	95.87	-	-	91.85	32.02	8.25	36.25	158	284	A	V
		5733.72	52.91	-21.09	74	48.84	32.04	8.31	36.28	158	284	P	V
		5725.32	45.04	-8.96	54	40.97	32.04	8.31	36.28	158	284	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 100 5500MHz		11000	45.19	-28.81	74	53.55	38.4	9.24	56	100	360	P	H
		11000	46.72	-27.28	74	55.08	38.4	9.24	56	100	360	P	V
802.11ac VHT20 CH 116 5580MHz		11160	45.47	-28.53	74	53.79	38.47	9.55	56.34	100	360	P	H
		11160	44.71	-29.29	74	53.03	38.47	9.55	56.34	100	360	P	V
802.11ac VHT20 CH 140 5700MHz		11400	44.43	-29.57	74	52.7	38.56	9.98	56.81	100	360	P	H
		11400	43.75	-30.25	74	52.02	38.56	9.98	56.81	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 102 5510MHz		5466.64	59.39	-14.61	74	55.49	31.95	8.35	36.4	136	23	P	H
		5469.2	50.38	-3.62	54	46.48	31.95	8.35	36.4	100	17	P	H
	*	5504	99.3	-	-	95.4	31.96	8.29	36.35	136	23	P	H
	*	5506	92.07	-	-	88.17	31.96	8.29	36.35	136	23	A	H
		5465.2	50.02	-23.98	74	46.12	31.95	8.35	36.4	100	82	P	V
		5469.68	42.75	-11.25	54	38.85	31.95	8.35	36.4	100	82	A	V
	*	5498	92.01	-	-	88.11	31.96	8.29	36.35	100	82	P	V
	*	5516	85.75	-	-	81.86	31.96	8.26	36.33	100	82	A	V
802.11ac VHT40 CH 110 5550MHz	*	5562	98.78	-	-	94.89	31.97	8.2	36.28	142	15	P	H
	*	5542	93.32	-	-	89.42	31.97	8.23	36.3	142	15	A	H
	*	5534	92.96	-	-	89.06	31.97	8.23	36.3	100	82	P	V
	*	5554	86.32	-	-	82.43	31.97	8.2	36.28	100	82	A	V
802.11ac VHT40 CH 134 5670MHz	*	5676	98.64	-	-	94.64	32.02	8.22	36.24	100	350	P	H
	*	5674	93.4	-	-	89.4	32.02	8.22	36.24	100	350	A	H
		5726.6	51.15	-22.85	74	47.08	32.04	8.31	36.28	100	350	P	H
		5727.72	45.35	-8.65	54	41.28	32.04	8.31	36.28	100	350	A	H
	*	5672	92.6	-	-	88.6	32.02	8.22	36.24	362	157	P	V
	*	5674	87.65	-	-	83.65	32.02	8.22	36.24	362	157	A	V
		5726.04	48.61	-25.39	74	44.54	32.04	8.31	36.28	362	157	P	V
		5727.4	40.87	-13.13	54	36.8	32.04	8.31	36.28	362	157	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 102 5510MHz		11020	46.41	-27.59	74	54.76	38.41	9.27	56.03	100	360	P	H
		11020	44.86	-29.14	74	53.21	38.41	9.27	56.03	100	360	P	V
802.11ac VHT40 CH 110 5550MHz		11100	45.89	-28.11	74	54.22	38.44	9.43	56.2	100	360	P	H
		11100	45.74	-28.26	74	54.07	38.44	9.43	56.2	100	360	P	V
802.11ac VHT40 CH 134 5670MHz		11340	43.96	-30.04	74	52.25	38.53	9.86	56.68	100	360	P	H
		11340	43.56	-30.44	74	51.85	38.53	9.86	56.68	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 5470~5725MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5468.88	54.73	-19.27	74	50.83	31.95	8.35	36.4	100	165	P	H
		5434.32	44.61	-9.39	54	40.71	31.94	8.41	36.45	100	165	A	H
	*	5556	90.16	-	-	86.27	31.97	8.2	36.28	100	165	P	H
	*	5536	84.12	-	-	80.22	31.97	8.23	36.3	100	165	A	H
		5747.8	47.17	-26.83	74	43.07	32.05	8.34	36.29	100	165	P	H
		5757.32	38.57	-15.43	54	34.45	32.05	8.37	36.3	100	165	A	H
		5441.52	60.99	-13.01	74	57.09	31.94	8.41	36.45	294	290	P	V
		5437.52	50.95	-3.05	54	47.05	31.94	8.41	36.45	294	290	A	V
	*	5522	95.88	-	-	91.99	31.96	8.26	36.33	294	290	P	V
	*	5528	89.6	-	-	85.71	31.96	8.26	36.33	294	290	A	V
		5727.72	46.75	-27.25	74	42.68	32.04	8.31	36.28	294	290	P	V
		5737.72	39.03	-14.97	54	34.93	32.05	8.34	36.29	294	290	A	V
802.11ac VHT80 CH 122 5610MHz		5443.92	46.49	-27.51	74	42.59	31.94	8.41	36.45	335	183	P	H
		5453.84	39.64	-14.36	54	35.74	31.94	8.38	36.42	335	183	A	H
	*	5616	89.57	-	-	85.66	31.99	8.13	36.21	335	183	P	H
	*	5634	84.28	-	-	80.34	32	8.16	36.22	335	183	A	H
		5739.16	47.13	-26.87	74	43.03	32.05	8.34	36.29	335	183	P	H
		5727.56	39.3	-14.7	54	35.23	32.04	8.31	36.28	335	183	A	H
		5460.08	50.89	-23.11	74	46.99	31.94	8.38	36.42	294	259	P	V
		5456.88	41.2	-12.8	54	37.3	31.94	8.38	36.42	294	259	A	V
	*	5624	95.62	-	-	91.71	31.99	8.13	36.21	294	259	P	V
	*	5598	89.37	-	-	85.49	31.98	8.13	36.23	294	259	A	V
		5727.48	50.45	-23.55	74	46.38	32.04	8.31	36.28	294	259	P	V
		5728.04	41.34	-12.66	54	37.27	32.04	8.31	36.28	294	259	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 5470~5725MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		11060	45.77	-28.23	74	54.12	38.43	9.36	56.14	100	360	P	H
		11060	45.12	-28.88	74	53.47	38.43	9.36	56.14	100	360	P	V
802.11ac VHT80 CH 122 5610MHz		11220	43.47	-30.53	74	51.78	38.49	9.64	56.44	100	360	P	H
		11220	43.47	-30.53	74	51.78	38.49	9.64	56.44	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 144 5720MHz	*	5718	96.47	-	-	92.4	32.04	8.31	36.28	100	182	P	H
	*	5722	89.09	-	-	85.02	32.04	8.31	36.28	100	182	A	H
	*	5712	104.43	-	-	100.39	32.03	8.28	36.27	125	279	P	V
	*	5718	97.04	-	-	92.97	32.04	8.31	36.28	125	279	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		11440	43.98	-30.02	74	52.25	38.57	10.04	56.88	100	0	P	H
HT20 CH 144 5720MHz		11440	44.39	-29.61	74	52.66	38.57	10.04	56.88	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n	*	5702	98.35	-	-	94.31	32.03	8.28	36.27	136	360	P	H
HT40	*	5704	91.22	-	-	87.18	32.03	8.28	36.27	136	360	A	H
CH 142	*	5702	92.97	-	-	88.93	32.03	8.28	36.27	301	285	P	V
5710MHz	*	5706	85.77	-	-	81.73	32.03	8.28	36.27	301	285	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		11420	44.27	-29.73	74	52.54	38.57	10.01	56.85	100	0	P	H
HT40 CH 142 5710MHz		11420	44.69	-29.31	74	52.96	38.57	10.01	56.85	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac	*	5722	98.56	-	-	94.49	32.04	8.31	36.28	297	203	P	H
VHT20	*	5718	90.59	-	-	86.52	32.04	8.31	36.28	297	203	A	H
CH 144	*	5714	102.44	-	-	98.4	32.03	8.28	36.27	289	262	P	V
5720MHz	*	5714	95.23	-	-	91.19	32.03	8.28	36.27	289	262	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		11440	45.05	-28.95	74	53.32	38.57	10.04	56.88	100	360	P	H
VHT20 CH 144 5720MHz		11440	44.52	-29.48	74	52.79	38.57	10.04	56.88	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac	*	5696	98.35	-	-	94.33	32.02	8.25	36.25	100	356	P	H
VHT40	*	5716	91.28	-	-	87.24	32.03	8.28	36.27	100	356	A	H
CH 142	*	5702	92.61	-	-	88.57	32.03	8.28	36.27	100	141	P	V
5710MHz	*	5706	84.94	-	-	80.9	32.03	8.28	36.27	100	141	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		11420	44.61	-29.39	74	52.88	38.57	10.01	56.85	100	360	P	H
VHT40 CH 142 5710MHz		11420	43.27	-30.73	74	51.54	38.57	10.01	56.85	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac	*	5702	94.78	-	-	90.74	32.03	8.28	36.27	100	344	P	H
VHT80	*	5674	89.16	-	-	85.16	32.02	8.22	36.24	100	344	A	H
CH 138	*	5702	94.78	-	-	90.74	32.03	8.28	36.27	100	344	P	V
5690MHz	*	5674	89.16	-	-	85.16	32.02	8.22	36.24	100	344	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		11380	44.26	-29.74	74	52.54	38.55	9.95	56.78	100	0	P	H
VHT80 CH 138 5690MHz		11380	44.26	-29.74	74	52.54	38.55	9.95	56.78	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11ac VHT80 (LF @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 LF		35.82	29.92	-10.08	40	43.39	17.16	0.72	31.35	-	-	P	H
		137.67	31.77	-11.73	43.5	48.26	13.62	1.42	31.53	-	-	P	H
		170.65	39.22	-4.28	43.5	56.65	12.52	1.58	31.53	100	0	P	H
		234.67	37.27	-8.73	46	54.57	12.43	1.73	31.46	-	-	P	H
		286.08	35.78	-10.22	46	50.72	14.43	2.02	31.39	-	-	P	H
		468.44	35.84	-10.16	46	46.66	17.73	2.7	31.25	-	-	p	H
		35.82	36.83	-3.17	40	50.3	17.16	0.72	31.35	100	360	P	V
		44.55	34.09	-5.91	40	51.89	12.8	0.83	31.43	-	-	P	V
		84.32	33.55	-6.45	40	53.99	10.02	1.11	31.57	-	-	P	V
		150.28	39.91	-3.59	43.5	56.18	13.8	1.48	31.55	-	-	P	V
		171.62	40.17	-3.33	43.5	57.65	12.46	1.59	31.53	-	-	P	V
		468.44	41.72	-4.28	46	52.54	17.73	2.7	31.25	-	-	p	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is **over limit** line.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Level(dBμV/m) =

Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

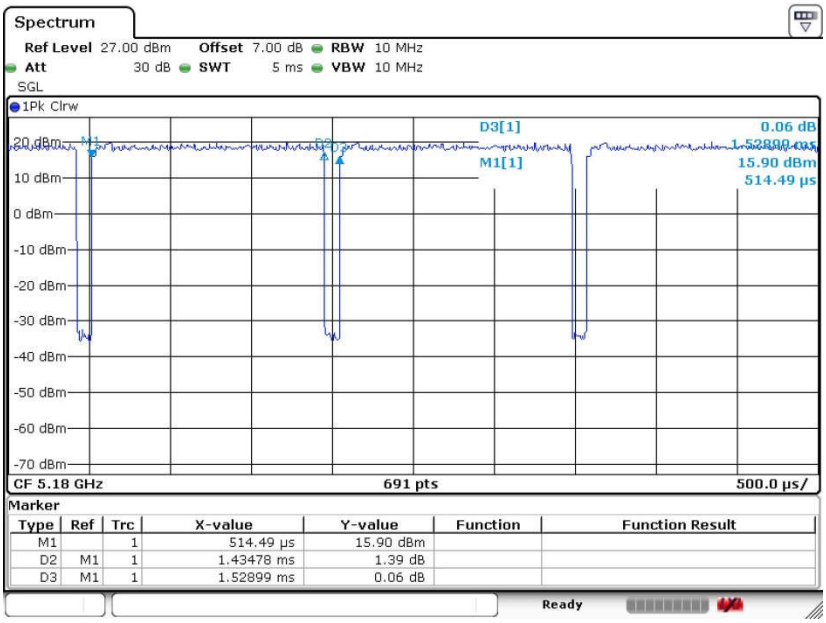
= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is "PASS".

Appendix C. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
1	802.11a	93.84	1.43	0.70	1kHz
2	802.11a	93.46	1.43	0.70	1kHz
1+2	802.11n HT20	90.78	0.98	1.02	3kHz
1+2	802.11n HT40	83.29	0.50	2.01	3kHz
1+2	802.11ac VHT20	86.73	0.69	1.45	3kHz
1+2	802.11ac VHT40	78.30	0.36	2.77	3kHz
1+2	802.11ac VHT80	65.67	0.19	5.23	10kHz

802.11a Antenna 1



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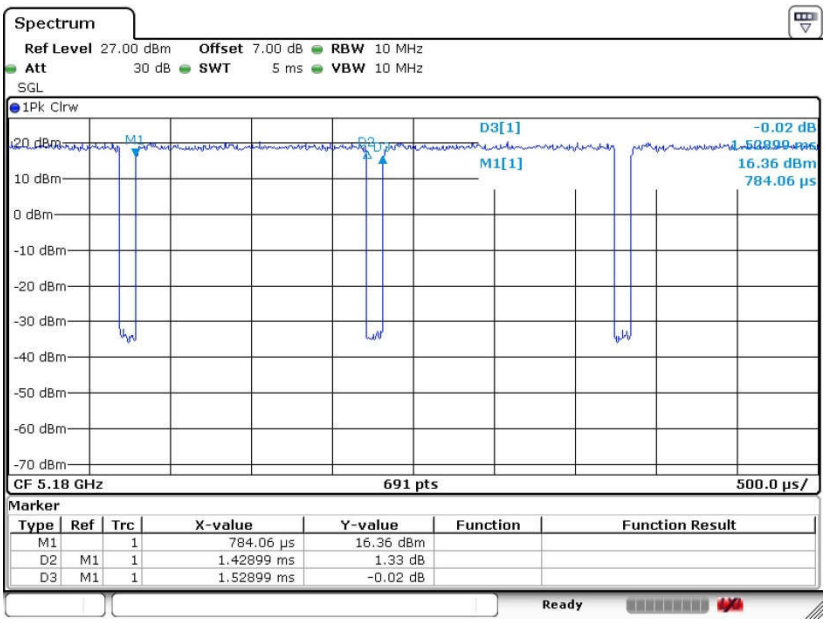
802.11a Antenna 1



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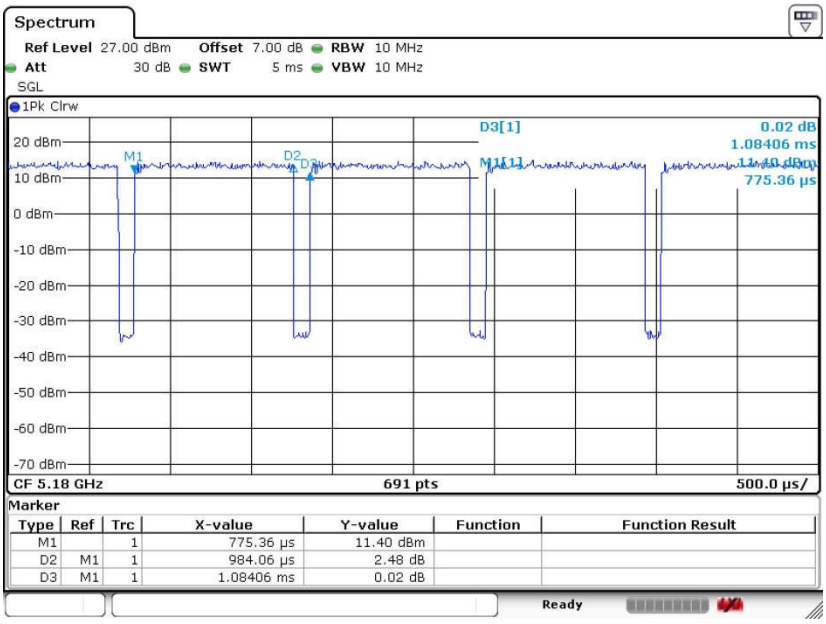
802.11n HT20 Antenna 1+2



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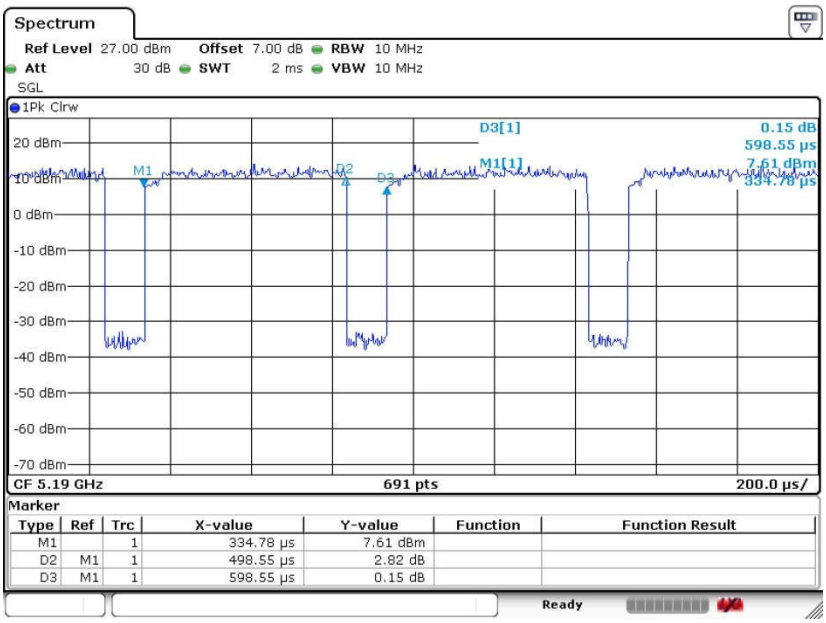
802.11n HT40 Antenna 1+2



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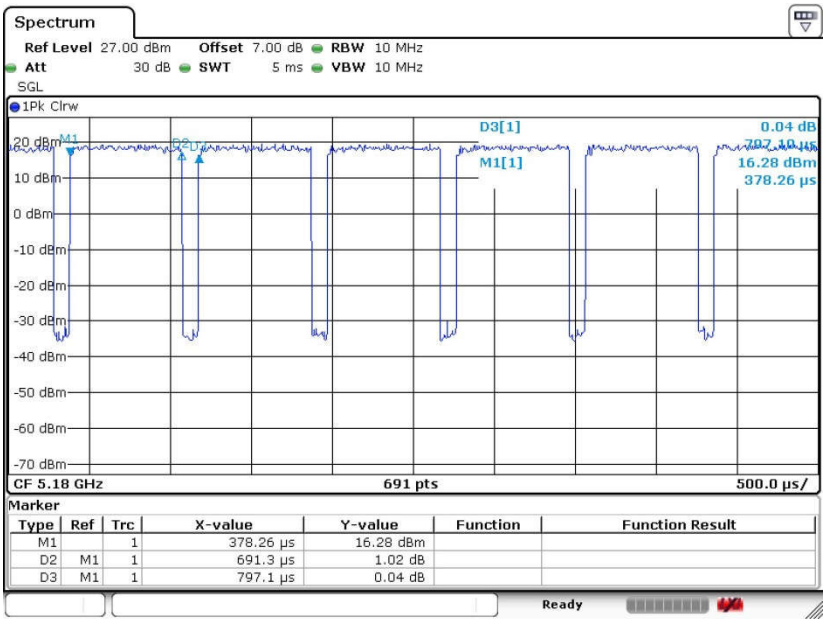
802.11ac VHT20 Antenna 1+2



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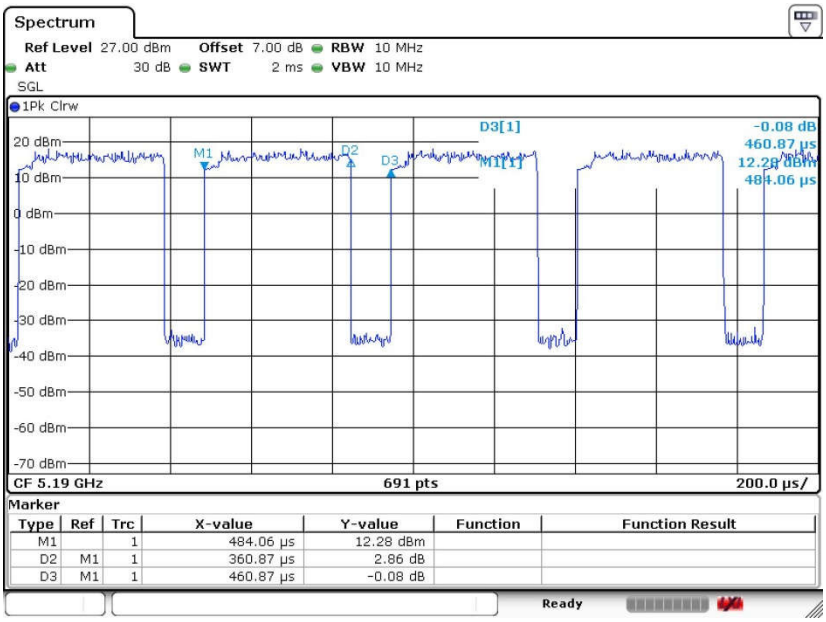
802.11ac VH40 Antenna 1+2



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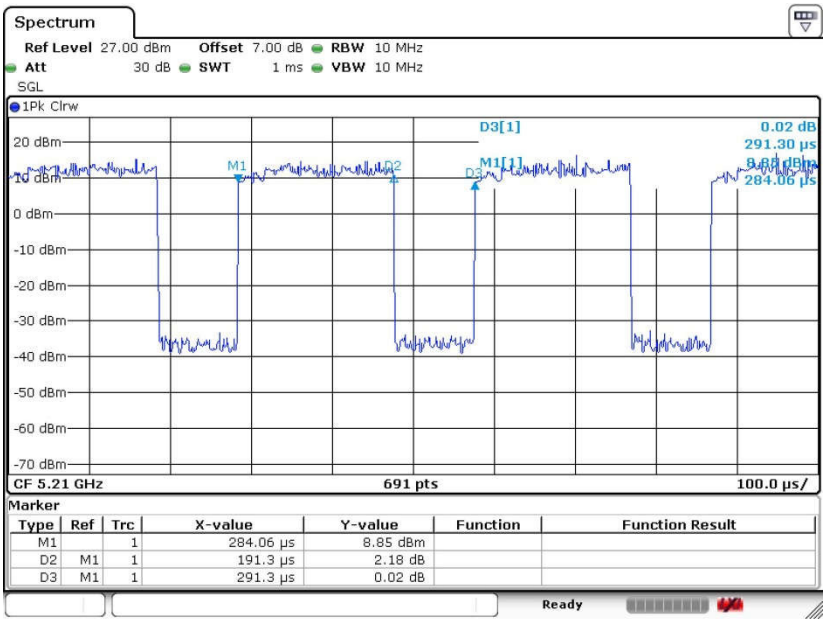
802.11ac VHT80 Antenna 1+2



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