



FCC RF Test Report

APPLICANT : Lenovo (Shanghai) Electronics Technology Co., Ltd.
EQUIPMENT : Portable Tablet Computer
BRAND NAME : Lenovo
MODEL NAME : Lenovo YT-X703X
FCC ID : O57YTX703X
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The product was received on Jul. 04, 2016 and testing was completed on Jul. 31, 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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TABLE OF CONTENTS

REVISION HISTORY.....	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Applicant.....	5
1.2 Manufacturer.....	5
1.3 Product Feature of Equipment Under Test.....	5
1.4 Product Specification of Equipment Under Test.....	6
1.5 Component List.....	7
1.6 Modification of EUT	7
1.7 Testing Location	8
1.8 Applicable Standards.....	8
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	9
2.1 Carrier Frequency Channel	9
2.2 Test Mode.....	10
2.3 Connection Diagram of Test System.....	13
2.4 Support Unit used in test configuration and system	14
2.5 EUT Operation Test Setup	14
2.6 Measurement Results Explanation Example.....	14
3 TEST RESULT	15
3.1 26dB & 99% Occupied Bandwidth Measurement	15
3.2 Maximum Conducted Output Power Measurement	17
3.3 Power Spectral Density Measurement	22
3.4 Unwanted Radiated Emission Measurement	25
3.5 AC Conducted Emission Measurement.....	30
3.6 Frequency Stability Measurement.....	34
3.7 Automatically Discontinue Transmission	35
3.8 Antenna Requirements	36
4 LIST OF MEASURING EQUIPMENTS.....	37
5 UNCERTAINTY OF EVALUATION	38
APPENDIX A. CONDUCTED TEST RESULTS	
APPENDIX B. RADIATED TEST RESULTS	
APPENDIX C. DUTY CYCLE PLOTS	
APPENDIX D. SETUP PHOTOGRAPHS	



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR670415D	Rev. 01	Initial issue of report	Aug. 05, 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 2.86 dB at 11060.000 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 9.61 dB at 0.600 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 YT-X703X
FCC ID	O57YTX703X
EUT supports Radios application	GPRS/EGPRS/WCDMA/HSPA/ HSPA+(16QAM uplink is not supported)/LTE/ WLAN 2.4GHz 802.11b/g/n HT20/HT40/ WLAN 5GHz 802.11a/n HT20/HT40/ WLAN 5GHz 802.11ac VHT20/VHT40/VHT80/ Bluetooth v3.0+EDR/ Bluetooth v4.0 LE/
IMEI Code	Conducted: 861688030009815 Radiation: 861688030009773 Conduction: N/A
HW Version	Lenovo Tablet YT-X703X
SW Version	YT-X703X_160914
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 Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5700 MHz
Maximum Output Power to Antenna	<5180 MHz ~ 5240 MHz> 802.11a : 11.36 dBm / 0.0137 W 802.11n HT20 : 10.30 dBm / 0.0107 W 802.11n HT40 : 10.14 dBm / 0.0103 W 802.11ac VHT20 : 10.10 dBm / 0.0102 W 802.11ac VHT40 : 10.23 dBm / 0.0105 W 802.11ac VHT80 : 10.10 dBm / 0.0102 W <5260 MHz ~ 5320 MHz> 802.11a : 10.95 dBm / 0.0124 W 802.11n HT20 : 9.67 dBm / 0.0093 W 802.11n HT40 : 9.49 dBm / 0.0089 W 802.11ac VHT20 : 9.77 dBm / 0.0095 W 802.11ac VHT40 : 9.85 dBm / 0.0097 W 802.11ac VHT80 : 9.73 dBm / 0.0094 W <5500 MHz ~ 5700 MHz> 802.11a : 11.06 dBm / 0.0128 W 802.11n HT20 : 9.57 dBm / 0.0091 W 802.11n HT40 : 9.73 dBm / 0.0094 W 802.11ac VHT20 : 9.64 dBm / 0.0092 W 802.11ac VHT40 : 10.14 dBm / 0.0103 W 802.11ac VHT80 : 10.19 dBm / 0.0104 W
99% Occupied Bandwidth	<5180 MHz ~ 5240 MHz> 802.11a : 18.58 MHz 802.11n HT20 : 19.23 MHz 802.11n HT40 : 36.56 MHz 802.11ac VHT20 : 19.28 MHz 802.11ac VHT40 : 36.66 MHz 802.11ac VHT80 : 74.81 MHz <5260 MHz ~ 5320 MHz> 802.11a : 18.73 MHz 802.11n HT20 : 19.33 MHz 802.11n HT40 : 36.86 MHz 802.11ac VHT20 : 19.23 MHz 802.11ac VHT40 : 36.76 MHz 802.11ac VHT80 : 74.81 MHz <5500 MHz ~ 5700 MHz> 802.11a : 18.58 MHz 802.11n HT20 : 19.28 MHz 802.11n HT40 : 36.86 MHz 802.11ac VHT20 : 19.28 MHz 802.11ac VHT40 : 36.86 MHz 802.11ac VHT80 : 74.81 MHz

Antenna Type	PIFA Antenna
Antenna Gain	<5180 MHz ~ 5240 MHz> : 1.90 dBi <5260 MHz ~ 5320 MHz> : 2.07 dBi <5500 MHz ~ 5700 MHz> : 1.69 dBi
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)

1.5 Component List

Note: there are two types of EUT, the details refer the following table. According to the difference, we evaluate it is not affect RF performance, so only choose sample 1 to perform RF test.

Component	Sample 1	Sample 2
Battery	Sunwoda: L16D3K31 3.75 Vdc, 9300 mAh	SCUD: L16D3K31 3.75 Vdc, 9300 mAh
Rear Camera	Qtech: F5695AK	AVC: CCBFL05006
LCM+TP ASM	Ofilm : AUO 10.1 WQXGA IPS+10.1 inch GFF Direct bounding + S7813	GIS : Innolux 10.1 WQXGA IPS+10.1 inch GFF Direct bounding + S7813
DRAM	Samsung: K3QF4F40BM-FGCF	Hynix: H9CKNNNDATMUPR-NUH
EMMC	Samsung: KLMCG4JENB-B041	Toshiba: THGBMFG8C2LBAIL

1.6 Modification of EUT

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

1.7 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.

1.8 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 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 four orthogonal panels, X, Y, Z and laptop. The worst cases were recorded in this report.

2.1 Carrier Frequency Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5180-5240 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)
5260-5320 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)
5500-5700 MHz Band 3 (U-NII-2C)	100	5500	116	5580
	102	5510	132	5660
	104	5520	134	5670
	108	5540	136	5680
	110	5550	140	5700
	112	5560		

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.

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 : GPRS850 Idle + Bluetooth Link + WLAN (5GHz) Link + Earphone + USB Cable (Charging from Adapter 12V) + Battery 1 + Earphone for Sample 1 Mode 2 : GPRS850 Idle + Bluetooth Link + WLAN (5GHz) Link + Earphone + USB Cable (Charging from Adapter 5.2V) + Battery 2 + Earphone for Sample 2
Remark: - For Radiated TCs, the tests were performed with adapter, earphone, USB cable and battery 1 for Sample 1. - The worst case of conducted emission is mode 2; only the test data of it was reported.	



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

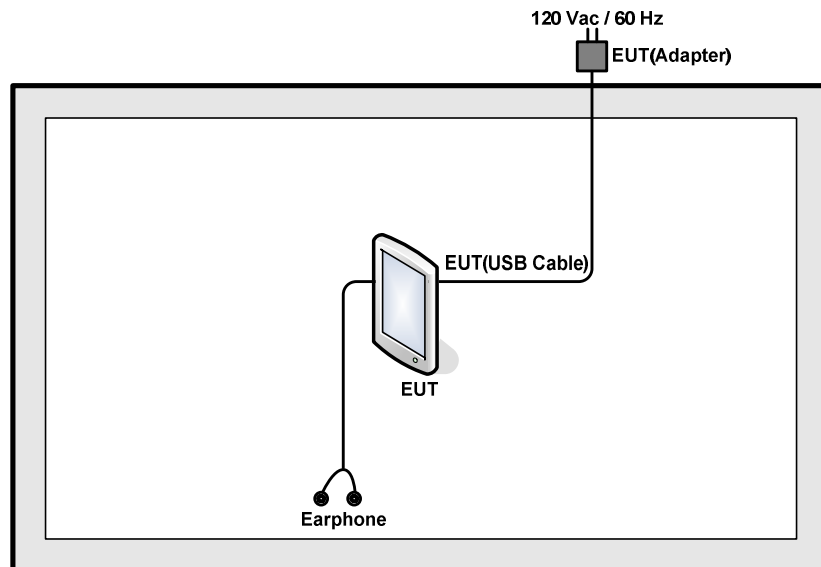


Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11ac VHT40	802.11ac VHT40	802.11ac VHT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle Channel		-	-	142

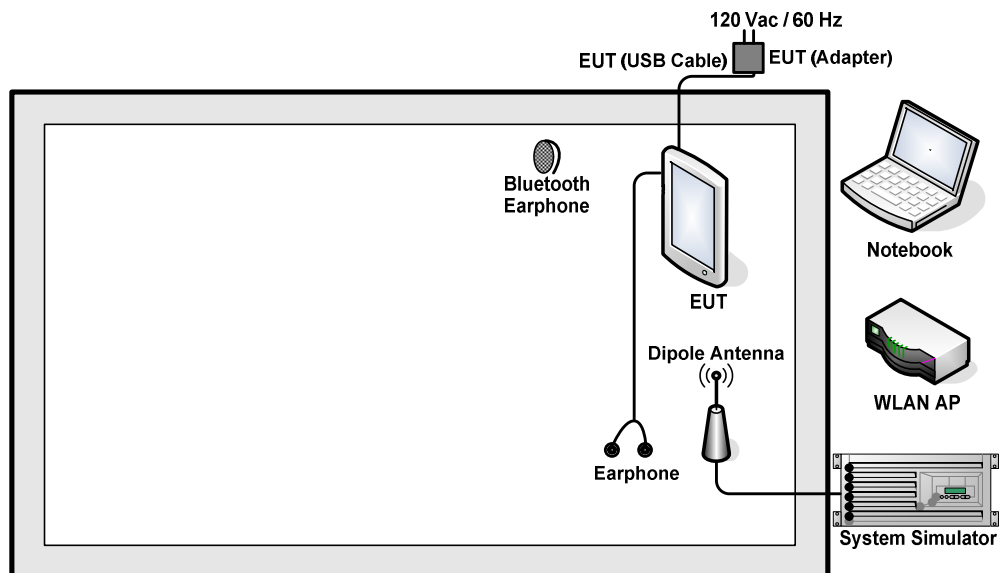
Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	106
M	Middle	42	58	-
H	High	-	-	122
Straddle Channel		-	-	138

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.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
4.	Bluetooth Earphone	Lenovo	LBH505	N/A	N/A	N/A
5.	Earphone	Lenovo	LH102	N/A	Unshielded, 1.2 m	N/A
6.	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 6.5 dB.

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

= 6.5 (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.

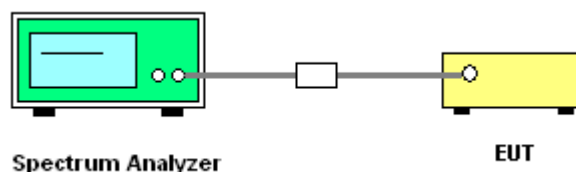
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

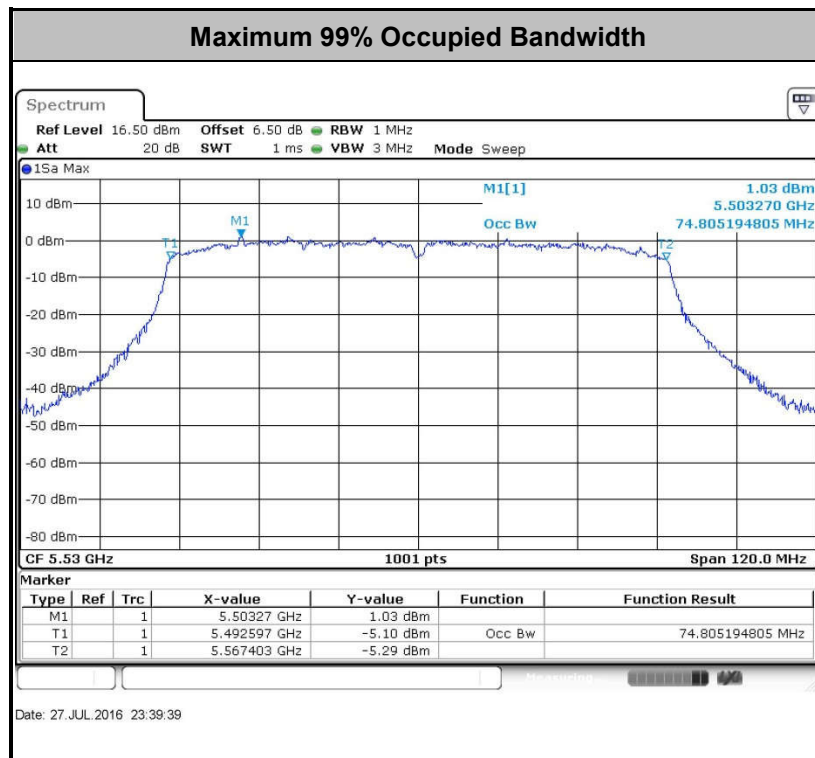
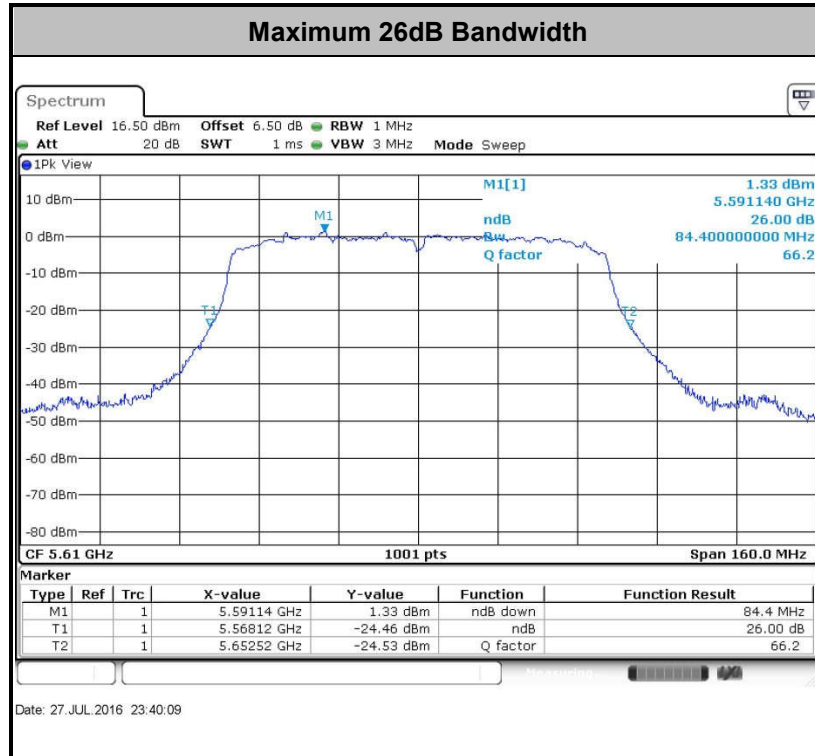
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r02. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB 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) $\geq 3 * \text{RBW}$.
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 Plots

Please refer to Appendix A.



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 $11 \text{ dBm} + 10 \log B$, 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):

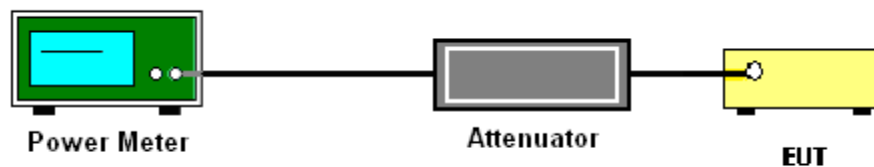
1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, $10 \log(1/x)$, where x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

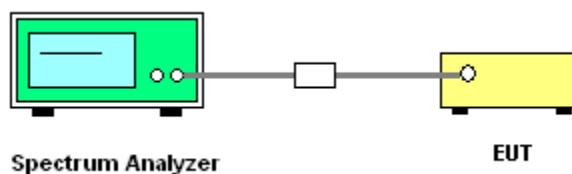
Compute power by integrating the spectrum across the 99% occupied bandwidth of the signal using the instrument's band power measurement function.

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.

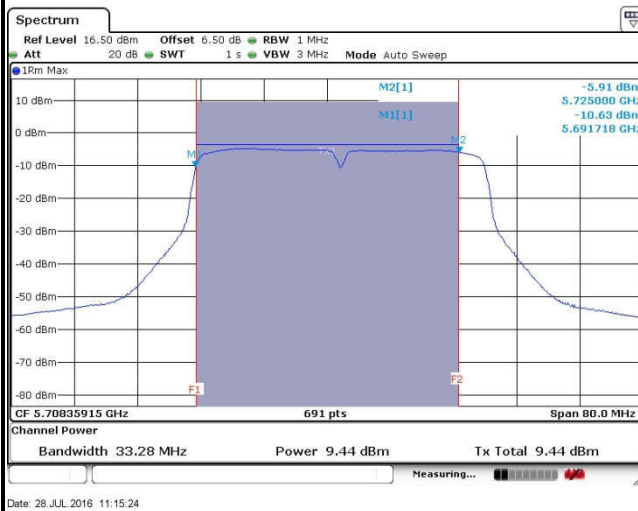




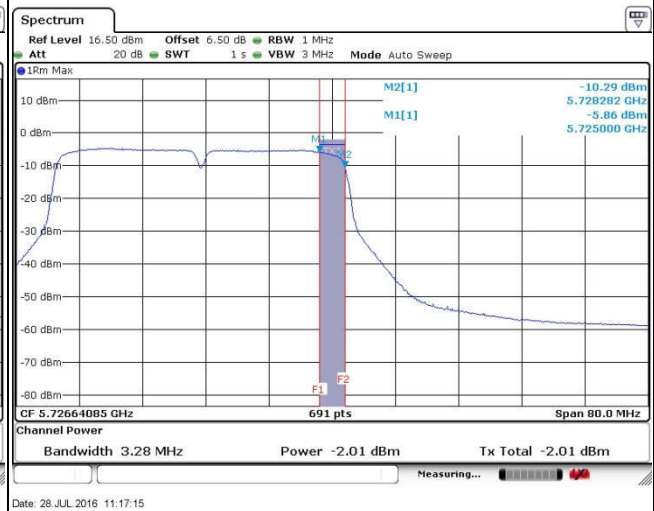
Maximum Straddle Channel Power

802.11n-HT40

NII-2C Band



NII-3 Band

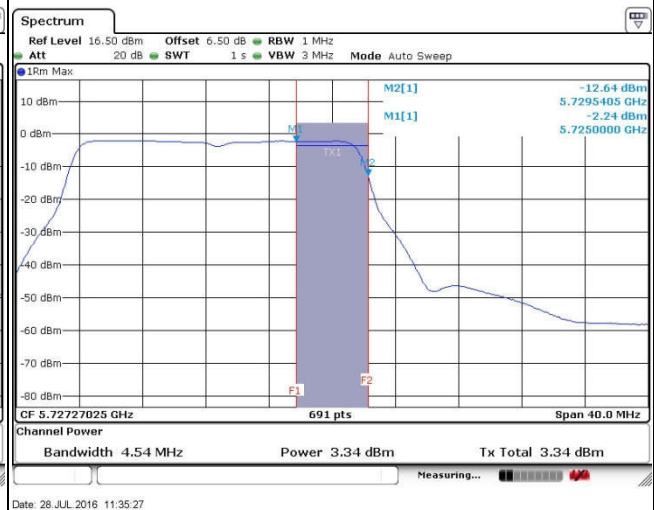


802.11ac VHT20

NII-2C Band



NII-3 Band

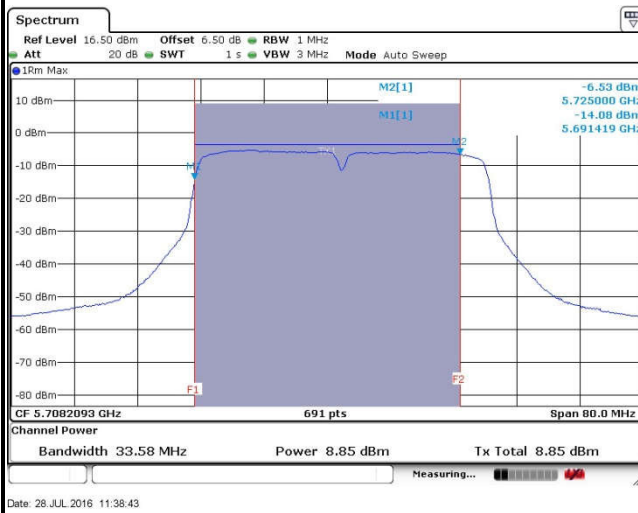




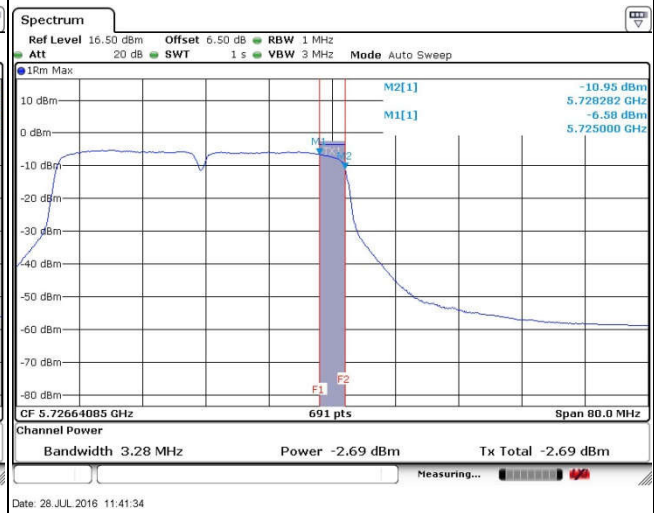
Maximum Straddle Channel Power

802.11ac VHT40

NII-2C Band

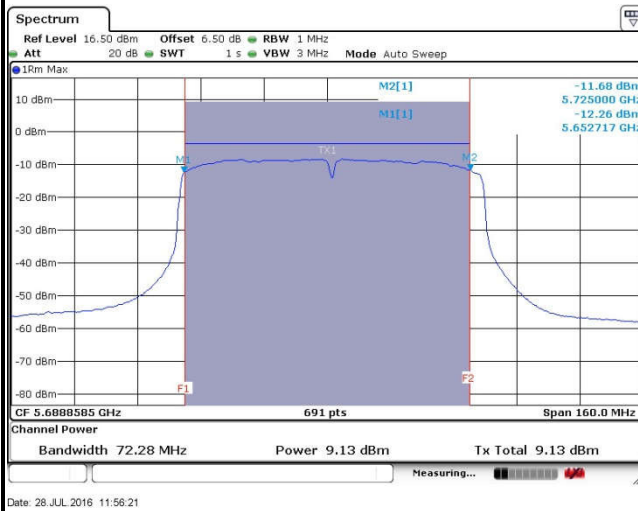


NII-3 Band

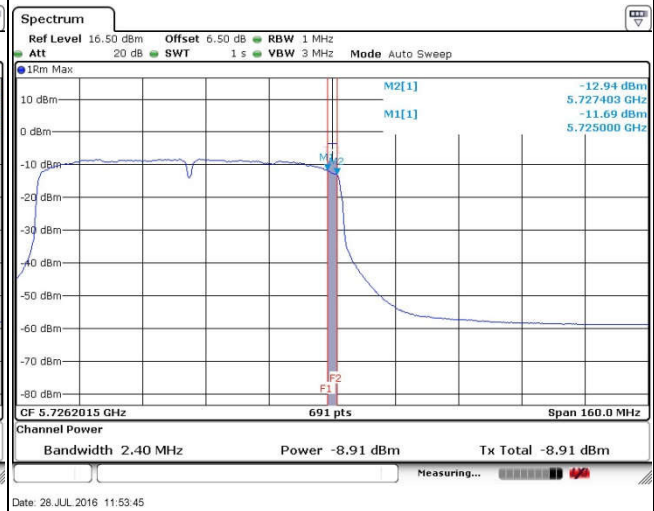


802.11ac VHT80

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.

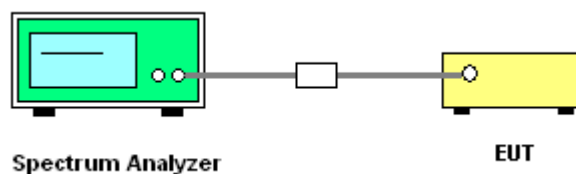
Section F) Maximum power spectral density.

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 $\geq$ 3 MHz.
 - Number of points in sweep $\geq$ 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.

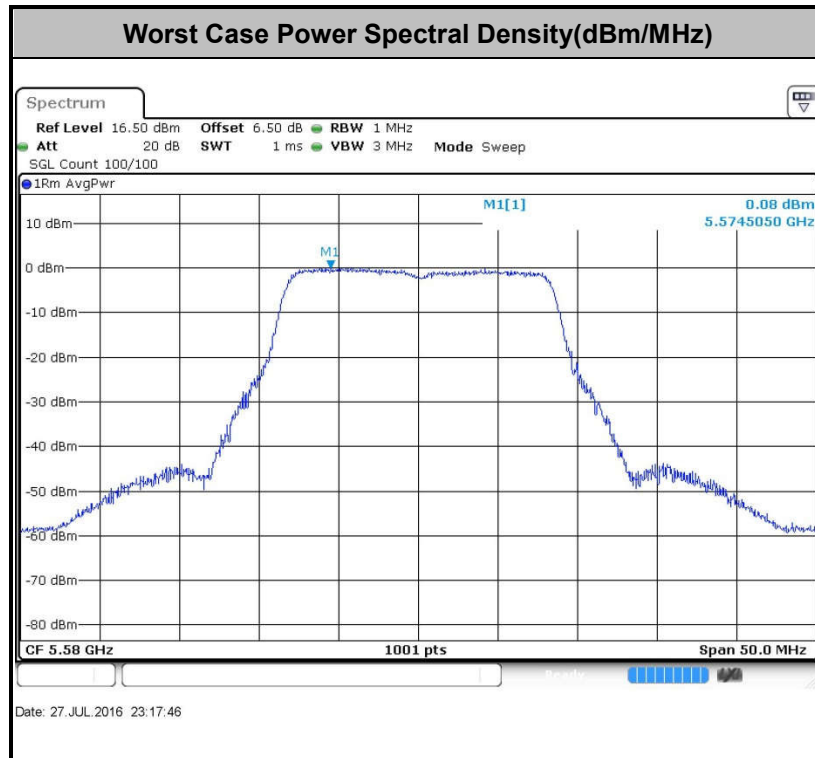
3.3.4 Test Setup





3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



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

3.4 Unwanted Radiated Emission 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.

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

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 $\geq$ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

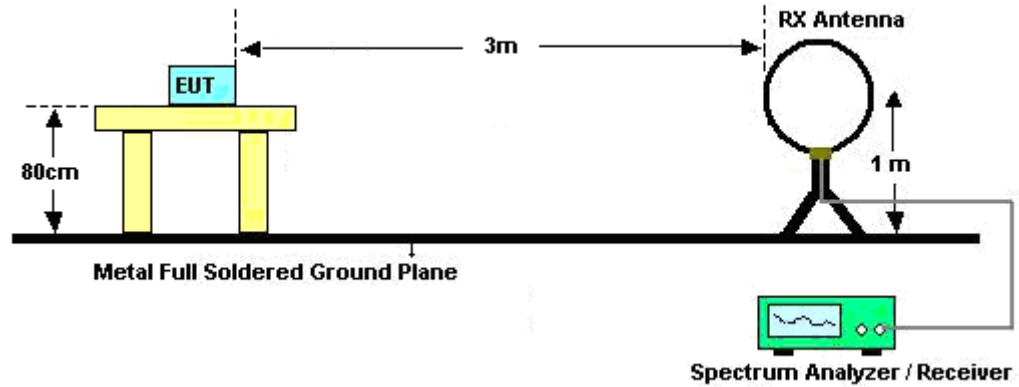
- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.



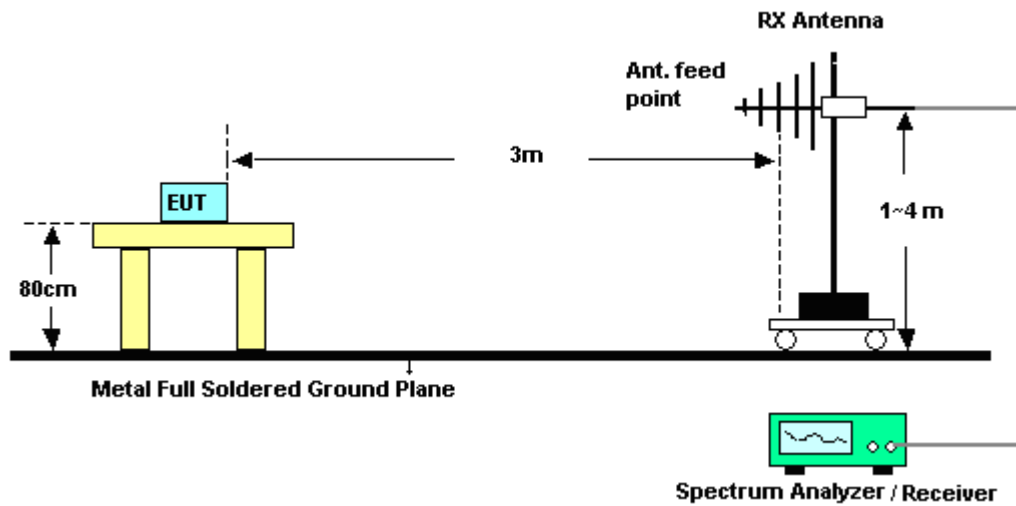
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband 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

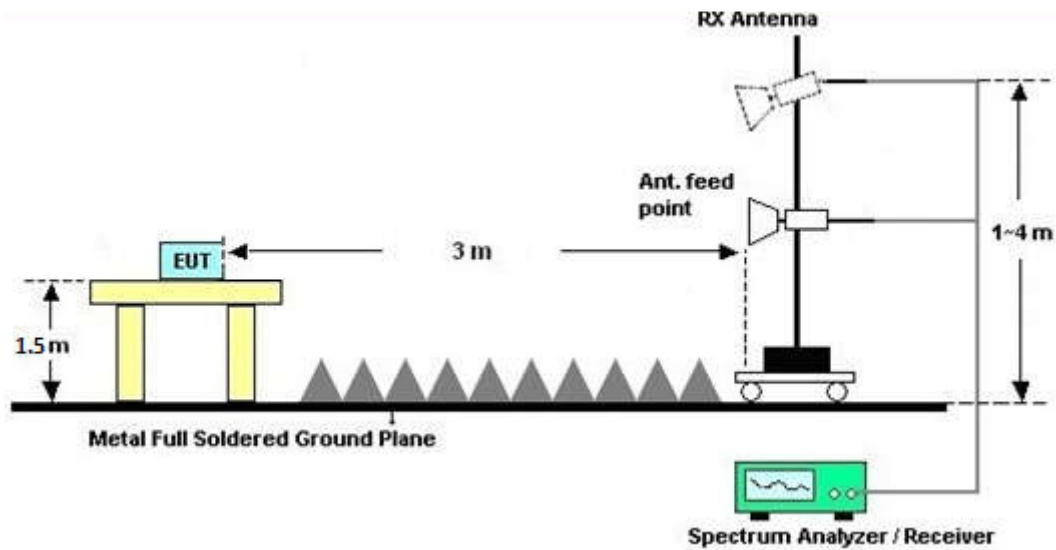
For radiated emissions below 30MHz



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 (dB μ V)	
	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.

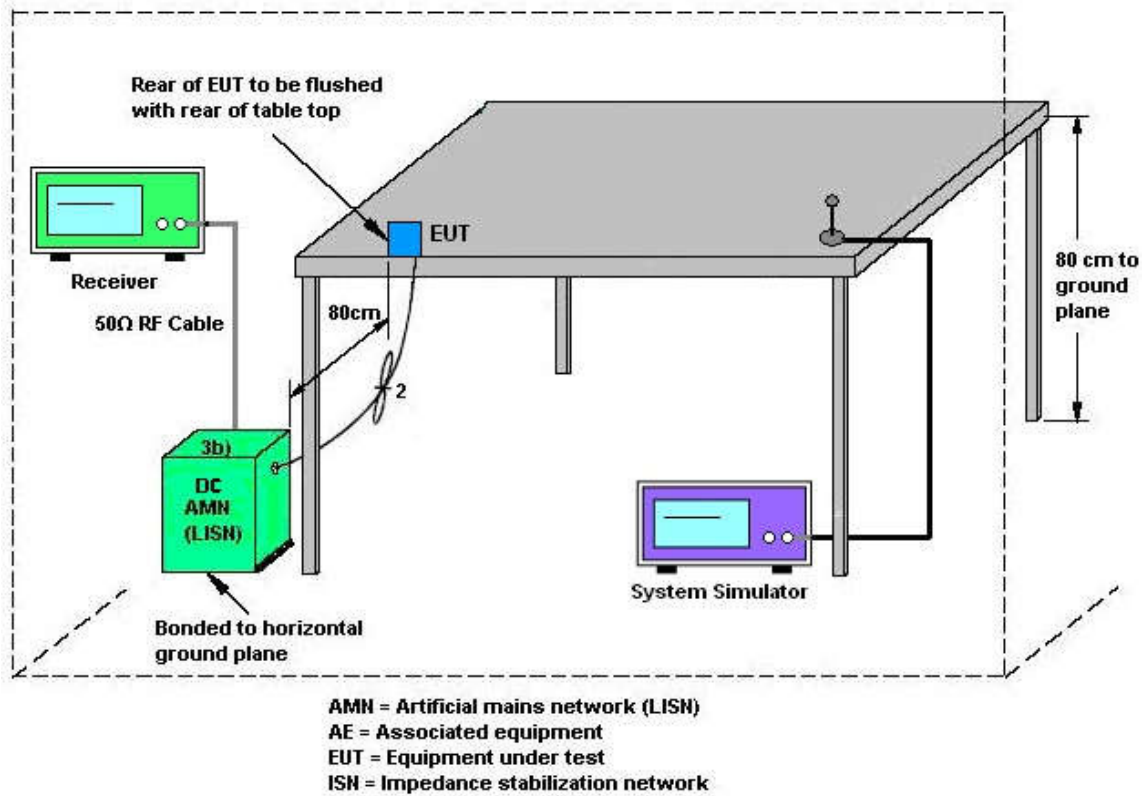
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

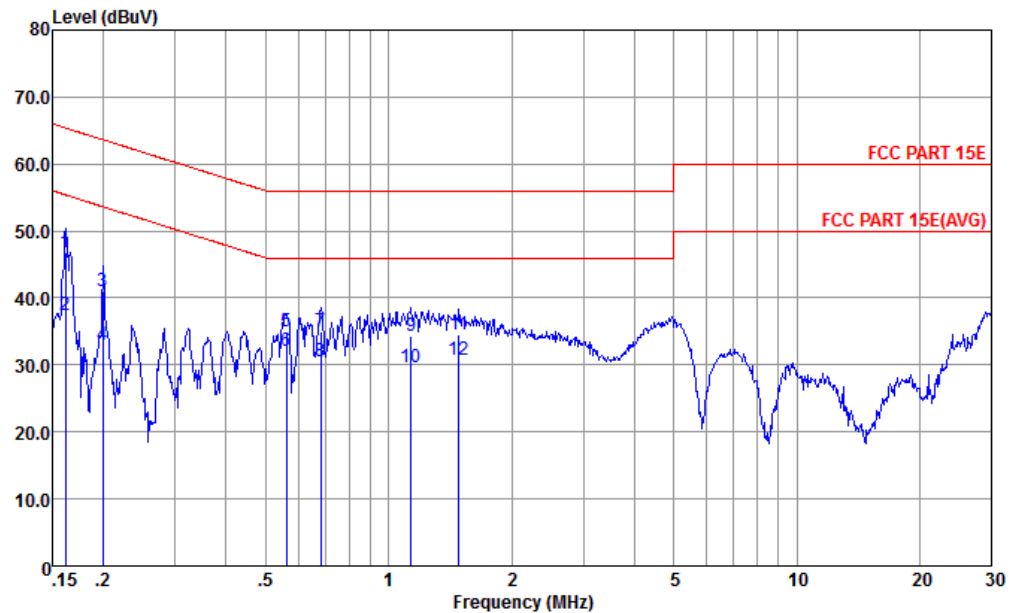
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
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



3.5.5 Test Result of AC Conducted Emission

Test Mode :	Mode 2	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	44~47%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GPRS850 Idle + Bluetooth Link + WLAN (5GHz) Link + Earphone + USB Cable (Charging from Adapter 5.2V) + Battery 2 + Earphone for Sample 2		

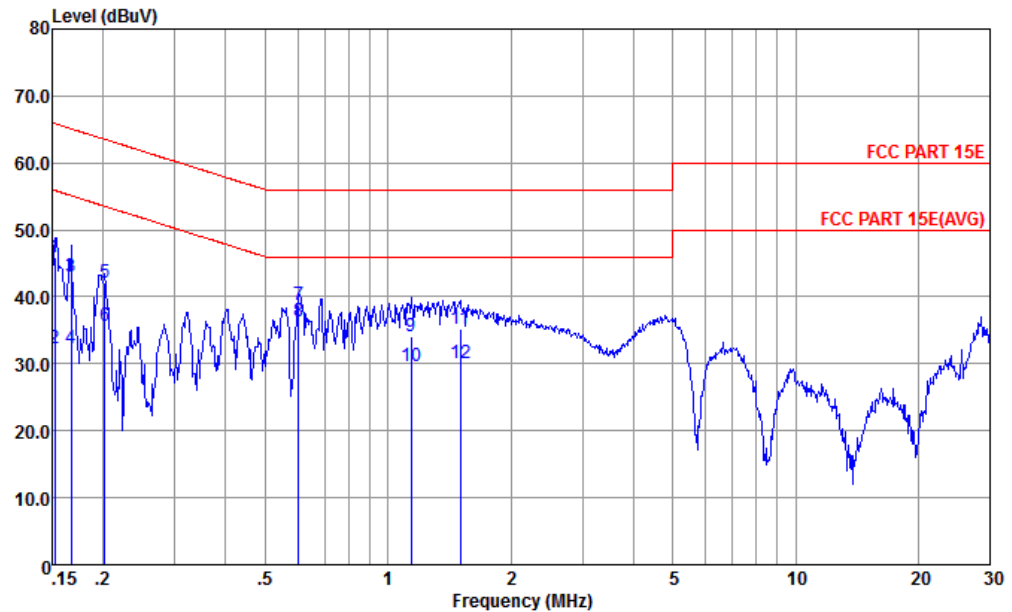


Site : CO01-KS
Condition : FCC PART 15E LISN-L-20151024 LINE
mode : Mode 2

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.16	46.86	-18.52	65.38	36.30	0.45	10.11	QP
2	0.16	37.46	-17.92	55.38	26.90	0.45	10.11	Average
3	0.20	40.95	-22.67	63.62	30.60	0.22	10.13	QP
4	0.20	32.95	-20.67	53.62	22.60	0.22	10.13	Average
5	0.56	34.99	-21.01	56.00	24.60	0.23	10.16	QP
6 *	0.56	31.99	-14.01	46.00	21.60	0.23	10.16	Average
7	0.68	34.99	-21.01	56.00	24.60	0.24	10.15	QP
8	0.68	30.49	-15.51	46.00	20.10	0.24	10.15	Average
9	1.14	34.27	-21.73	56.00	23.89	0.24	10.14	QP
10	1.14	29.67	-16.33	46.00	19.29	0.24	10.14	Average
11	1.49	34.65	-21.35	56.00	24.30	0.21	10.14	QP
12	1.49	30.65	-15.35	46.00	20.30	0.21	10.14	Average



Test Mode :	Mode 2	Temperature :	22~24℃
Test Engineer :	Amos Zhang	Relative Humidity :	44~47%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GPRS850 Idle + Bluetooth Link + WLAN (5GHz) Link + Earphone + USB Cable (Charging from Adapter 5.2V) + Battery 2 + Earphone for Sample 2		



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

mode : Mode 2
: #46

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15	46.01	-19.86	65.87	35.60	0.30	10.11	QP
2	0.15	32.31	-23.56	55.87	21.90	0.30	10.11	Average
3	0.17	43.02	-22.10	65.12	32.60	0.30	10.12	QP
4	0.17	32.32	-22.80	55.12	21.90	0.30	10.12	Average
5	0.20	42.04	-21.50	63.54	31.60	0.31	10.13	QP
6	0.20	35.64	-17.90	53.54	25.20	0.31	10.13	Average
7	0.60	38.79	-17.21	56.00	28.30	0.33	10.16	QP
8 *	0.60	36.39	-9.61	46.00	25.90	0.33	10.16	Average
9	1.14	34.11	-21.89	56.00	23.60	0.37	10.14	QP
10	1.14	29.61	-16.39	46.00	19.10	0.37	10.14	Average
11	1.50	35.31	-20.69	56.00	24.79	0.38	10.14	QP
12	1.50	30.11	-15.89	46.00	19.59	0.38	10.14	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.

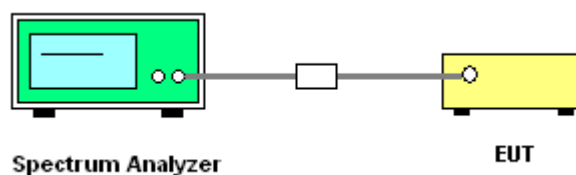
3.6.2 Measuring Instruments

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

Non-standard antenna connector is used.

3.8.3 Antenna Gain

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



4 List of Measuring Equipments

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	Jul. 27, 2016~ Jul. 28, 2016	Sep. 09, 2016	Conducted (TH01-KS)
Pulse Power Sensor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 20, 2016	Jul. 27, 2016~ Jul. 28, 2016	Jan. 19, 2017	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 20, 2016	Jul. 27, 2016~ Jul. 28, 2016	Jan. 19, 2017	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	-40~+150°C	Oct. 24, 2015	Jul. 27, 2016~ Jul. 28, 2016	Oct. 23, 2016	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Sep. 10, 2015	Jul. 29, 2016~ Jul. 31, 2016	Sep. 09, 2016	Radiation (03CH03-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz~44GHz	Apr. 22, 2016	Jul. 29, 2016~ Jul. 31, 2016	Apr. 21, 2017	Radiation (03CH03-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 07, 2015	Jul. 29, 2016~ Jul. 31, 2016	Nov. 06, 2016	Radiation (03CH03-KS)
Bilog Antenna	TeseQ	CBL6112D	35406	25MHz-2GHz	Apr. 16, 2016	Jul. 29, 2016~ Jul. 31, 2016	Apr. 15, 2017	Radiation (03CH03-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1356	1GHz~18GHz	Apr. 16, 2016	Jul. 29, 2016~ Jul. 31, 2016	Apr. 15, 2017	Radiation (03CH03-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz ~40GHz	Mar. 03, 2016	Jul. 29, 2016~ Jul. 31, 2016	Mar. 02, 2017	Radiation (03CH03-KS)
Amplifier	Burgeon	BPA-530	102212	0.01MHz-3000M Hz	Aug. 10, 2015	Jul. 29, 2016~ Jul. 31, 2016	Aug. 09, 2016	Radiation (03CH03-KS)
Amplifier	MITEQ	TTA1840 -35-HG	1887435	18~40GHz	Aug. 27, 2015	Jul. 29, 2016~ Jul. 31, 2016	Aug. 26, 2016	Radiation (03CH03-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Oct. 24, 2015	Jul. 29, 2016~ Jul. 31, 2016	Oct. 23, 2016	Radiation (03CH03-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jul. 29, 2016~ Jul. 31, 2016	NCR	Radiation (03CH03-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jul. 29, 2016~ Jul. 31, 2016	NCR	Radiation (03CH03-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jul. 29, 2016~ Jul. 31, 2016	NCR	Radiation (03CH03-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Sep. 10, 2015	Jul. 25, 2016	Sep. 09, 2016	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 24, 2015	Jul. 25, 2016	Oct. 23, 2016	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 24, 2015	Jul. 25, 2016	Oct. 23, 2016	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP0000008 11	AC 0V~300V, 45Hz~1000Hz	Oct. 24, 2015	Jul. 25, 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% ($U = 2Uc(y)$)	2.3dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.5dB
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Uncertainty of Radiated Emission Measurement (1GHz ~ 18GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.5dB
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Uncertainty of Radiated Emission Measurement (18GHz ~ 40GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.6dB
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Appendix A. Conducted Test Results

Test Engineer:	Ivan Zhang	Temperature:	21~25	°C
Test Date:	2016/7/27~2016/7/28	Relative Humidity:	51~54	%

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)		
11a	6Mbps	1	36	5180	18.28	23.48	-	22.62		
11a	6Mbps	1	44	5220	18.58	23.58	-	22.69		
11a	6Mbps	1	48	5240	18.43	23.93	-	22.66		
HT20	MCS0	1	36	5180	18.98	23.73	-	22.78		
HT20	MCS0	1	44	5220	19.23	23.88	-	22.84		
HT20	MCS0	1	48	5240	19.18	24.03	-	22.83		
HT40	MCS0	1	38	5190	36.46	44.51	-	23.01		
HT40	MCS0	1	46	5230	36.56	44.60	-	23.01		
VHT20	MCS0	1	36	5180	19.13	23.73	-	22.82		
VHT20	MCS0	1	44	5220	19.18	23.93	-	22.83		
VHT20	MCS0	1	48	5240	19.28	23.93	-	22.85		
VHT40	MCS0	1	38	5190	36.66	44.42	-	23.01		
VHT40	MCS0	1	46	5230	36.66	44.78	-	23.01		
VHT80	MCS0	1	42	5210	74.81	84.08	-	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
11a	6Mbps	1	36	5180	0.20	11.36	24.00	1.90		Pass
11a	6Mbps	1	44	5220	0.20	10.80	24.00	1.90		Pass
11a	6Mbps	1	48	5240	0.20	10.62	24.00	1.90		Pass
HT20	MCS0	1	36	5180	0.62	10.30	24.00	1.90		Pass
HT20	MCS0	1	44	5220	0.62	9.60	24.00	1.90		Pass
HT20	MCS0	1	48	5240	0.62	9.58	24.00	1.90		Pass
HT40	MCS0	1	38	5190	1.18	10.14	24.00	1.90		Pass
HT40	MCS0	1	46	5230	1.18	9.73	24.00	1.90		Pass
VHT20	MCS0	1	36	5180	0.79	10.10	24.00	1.90		Pass
VHT20	MCS0	1	44	5220	0.79	9.48	24.00	1.90		Pass
VHT20	MCS0	1	48	5240	0.79	9.78	24.00	1.90		Pass
VHT40	MCS0	1	38	5190	1.49	10.23	24.00	1.90		Pass
VHT40	MCS0	1	46	5230	1.49	10.04	24.00	1.90		Pass
VHT80	MCS0	1	42	5210	2.58	10.10	24.00	1.90		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
11a	6Mbps	1	36	5180	0.20	0.09	11.00	1.90		Pass
11a	6Mbps	1	44	5220	0.20	-0.05	11.00	1.90		Pass
11a	6Mbps	1	48	5240	0.20	-0.17	11.00	1.90		Pass
HT20	MCS0	1	36	5180	0.62	-0.60	11.00	1.90		Pass
HT20	MCS0	1	44	5220	0.62	-1.26	11.00	1.90		Pass
HT20	MCS0	1	48	5240	0.62	-1.61	11.00	1.90		Pass
HT40	MCS0	1	38	5190	1.18	-3.24	11.00	1.90		Pass
HT40	MCS0	1	46	5230	1.18	-3.93	11.00	1.90		Pass
VHT20	MCS0	1	36	5180	0.79	-0.90	11.00	1.90		Pass
VHT20	MCS0	1	44	5220	0.79	-1.63	11.00	1.90		Pass
VHT20	MCS0	1	48	5240	0.79	-1.50	11.00	1.90		Pass
VHT40	MCS0	1	38	5190	1.49	-3.52	11.00	1.90		Pass
VHT40	MCS0	1	46	5230	1.49	-3.95	11.00	1.90		Pass
VHT80	MCS0	1	42	5210	2.58	-6.11	11.00	1.90		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
11a	6M bps	1	52	5260	18.48	23.58	23.67	29.67	23.98	
11a	6M bps	1	60	5300	18.53	23.83	23.68	29.68	23.98	
11a	6M bps	1	64	5320	18.73	23.68	23.73	29.73	23.98	
HT20	MCS 0	1	52	5260	19.28	23.98	23.85	29.85	23.98	
HT20	MCS 0	1	60	5300	19.18	23.98	23.83	29.83	23.98	
HT20	MCS 0	1	64	5320	19.33	23.98	23.86	29.86	23.98	
HT40	MCS 0	1	54	5270	36.56	44.06	23.98	30.00	23.98	
HT40	MCS 0	1	62	5310	36.86	44.06	23.98	30.00	23.98	
VHT20	MCS 0	1	52	5260	19.23	23.88	23.84	29.84	23.98	
VHT20	MCS 0	1	60	5300	19.13	23.88	23.82	29.82	23.98	
VHT20	MCS 0	1	64	5320	19.18	24.03	23.83	29.83	23.98	
VHT40	MCS 0	1	54	5270	36.56	44.51	23.98	30.00	23.98	
VHT40	MCS 0	1	62	5310	36.76	44.78	23.98	30.00	23.98	
VHT80	MCS 0	1	58	5290	74.81	84.08	23.98	30.00	23.98	

TEST RESULTS DATA
Average Power Table

FCC Band II										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)	EIRP Power Limit (dBm)	Pass/Fail
11a	6M bps	1	52	5260	0.20	10.67	23.98	2.07	26.99	Pass
11a	6M bps	1	60	5300	0.20	10.71	23.98	2.07	26.99	Pass
11a	6M bps	1	64	5320	0.20	10.95	23.98	2.07	26.99	Pass
HT20	MCS 0	1	52	5260	0.62	9.51	23.98	2.07	26.99	Pass
HT20	MCS 0	1	60	5300	0.62	9.54	23.98	2.07	26.99	Pass
HT20	MCS 0	1	64	5320	0.62	9.67	23.98	2.07	26.99	Pass
HT40	MCS 0	1	54	5270	1.18	9.34	23.98	2.07	26.99	Pass
HT40	MCS 0	1	62	5310	1.18	9.49	23.98	2.07	26.99	Pass
VHT20	MCS 0	1	52	5260	0.79	9.77	23.98	2.07	26.99	Pass
VHT20	MCS 0	1	60	5300	0.79	9.61	23.98	2.07	26.99	Pass
VHT20	MCS 0	1	64	5320	0.79	9.67	23.98	2.07	26.99	Pass
VHT40	MCS 0	1	54	5270	1.49	9.80	23.98	2.07	26.99	Pass
VHT40	MCS 0	1	62	5310	1.49	9.85	23.98	2.07	26.99	Pass
VHT80	MCS 0	1	58	5290	2.58	9.73	23.98	2.07	26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band II										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)		Pass/Fail
11a	6M bps	1	52	5260	0.20	-0.39	11.00	2.07		Pass
11a	6M bps	1	60	5300	0.20	-0.54	11.00	2.07		Pass
11a	6M bps	1	64	5320	0.20	-0.23	11.00	2.07		Pass
HT20	MCS 0	1	52	5260	0.62	-1.60	11.00	2.07		Pass
HT20	MCS 0	1	60	5300	0.62	-1.85	11.00	2.07		Pass
HT20	MCS 0	1	64	5320	0.62	-1.46	11.00	2.07		Pass
HT40	MCS 0	1	54	5270	1.18	-4.33	11.00	2.07		Pass
HT40	MCS 0	1	62	5310	1.18	-3.66	11.00	2.07		Pass
VHT20	MCS 0	1	52	5260	0.79	-0.88	11.00	2.07		Pass
VHT20	MCS 0	1	60	5300	0.79	-1.33	11.00	2.07		Pass
VHT20	MCS 0	1	64	5320	0.79	-1.31	11.00	2.07		Pass
VHT40	MCS 0	1	54	5270	1.49	-3.96	11.00	2.07		Pass
VHT40	MCS 0	1	62	5310	1.49	-3.69	11.00	2.07		Pass
VHT80	MCS 0	1	58	5290	2.58	-6.91	11.00	2.07		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III										
Mod.	Data Rate	N _{TX}	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
11a	6M bps	1	100	5500	18.48	23.427	23.67	29.67	23.98	
11a	6M bps	1	116	5580	18.58	23.626	23.69	29.69	23.98	
11a	6M bps	1	140	5700	18.58	23.277	23.69	29.69	23.98	
HT20	MCS 0	1	100	5500	19.18	23.976	23.83	29.83	23.98	
HT20	MCS 0	1	116	5580	19.18	23.826	23.83	29.83	23.98	
HT20	MCS 0	1	140	5700	19.28	23.626	23.85	29.85	23.98	
HT40	MCS 0	1	102	5510	36.86	44.505	23.98	30.00	23.98	
HT40	MCS 0	1	110	5550	36.76	44.955	23.98	30.00	23.98	
HT40	MCS 0	1	134	5670	36.66	44.865	23.98	30.00	23.98	
VHT20	MCS 0	1	100	5500	19.18	23.876	23.83	29.83	23.98	
VHT20	MCS 0	1	116	5580	19.28	23.876	23.85	29.85	23.98	
VHT20	MCS 0	1	140	5700	19.23	23.876	23.84	29.84	23.98	
VHT40	MCS 0	1	102	5510	36.86	44.685	23.98	30.00	23.98	
VHT40	MCS 0	1	110	5550	36.86	44.865	23.98	30.00	23.98	
VHT40	MCS 0	1	134	5670	36.76	44.505	23.98	30.00	23.98	
VHT80	MCS 0	1	106	5530	74.81	83.76	23.98	30.00	23.98	
VHT80	MCS 0	1	122	5610	74.69	84.4	23.98	30.00	23.98	

TEST RESULTS DATA
Average Power Table

FCC Band III										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)	EIRP Power Limit (dBm)	Pass/Fail
11a	6M bps	1	100	5500	0.20	10.65	23.98	1.69	26.99	Pass
11a	6M bps	1	116	5580	0.20	11.06	23.98	1.69	26.99	Pass
11a	6M bps	1	140	5700	0.20	10.97	23.98	1.69	26.99	Pass
HT20	MCS 0	1	100	5500	9.00	9.46	23.98	1.69	26.99	Pass
HT20	MCS 0	1	116	5580	9.00	9.57	23.98	1.69	26.99	Pass
HT20	MCS 0	1	140	5700	9.00	9.45	23.98	1.69	26.99	Pass
HT40	MCS 0	1	102	5510	1.18	9.73	23.98	1.69	26.99	Pass
HT40	MCS 0	1	110	5550	1.18	9.60	23.98	1.69	26.99	Pass
HT40	MCS 0	1	134	5670	1.18	9.37	23.98	1.69	26.99	Pass
VHT20	MCS 0	1	100	5500	0.79	9.41	23.98	1.69	26.99	Pass
VHT20	MCS 0	1	116	5580	0.79	9.51	23.98	1.69	26.99	Pass
VHT20	MCS 0	1	140	5700	0.79	9.64	23.98	1.69	26.99	Pass
VHT40	MCS 0	1	102	5510	1.49	10.14	23.98	1.69	26.99	Pass
VHT40	MCS 0	1	110	5550	1.49	9.94	23.98	1.69	26.99	Pass
VHT40	MCS 0	1	134	5670	1.49	9.60	23.98	1.69	26.99	Pass
VHT80	MCS 0	1	106	5530	2.58	9.96	23.98	1.69	26.99	Pass
VHT80	MCS 0	1	122	5610	2.58	10.19	23.98	1.69	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
11a	6M bps	1	100	5500	0.20	-0.46	11.00	1.69		Pass
11a	6M bps	1	116	5580	0.20	0.28	11.00	1.69		Pass
11a	6M bps	1	140	5700	0.20	-0.61	11.00	1.69		Pass
HT20	MCS 0	1	100	5500	0.62	-2.01	11.00	1.69		Pass
HT20	MCS 0	1	116	5580	0.62	-1.43	11.00	1.69		Pass
HT20	MCS 0	1	140	5700	0.62	-1.62	11.00	1.69		Pass
HT40	MCS 0	1	102	5510	1.18	-3.79	11.00	1.69		Pass
HT40	MCS 0	1	110	5550	1.18	-3.71	11.00	1.69		Pass
HT40	MCS 0	1	134	5670	1.18	-4.38	11.00	1.69		Pass
VHT20	MCS 0	1	100	5500	0.79	-1.77	11.00	1.69		Pass
VHT20	MCS 0	1	116	5580	0.79	-1.09	11.00	1.69		Pass
VHT20	MCS 0	1	140	5700	0.79	-1.62	11.00	1.69		Pass
VHT40	MCS 0	1	102	5510	1.49	-4.05	11.00	1.69		Pass
VHT40	MCS 0	1	110	5550	1.49	-3.86	11.00	1.69		Pass
VHT40	MCS 0	1	134	5670	1.49	-3.88	11.00	1.69		Pass
VHT80	MCS 0	1	106	5530	2.58	-6.91	11.00	1.69		Pass
VHT80	MCS 0	1	122	5610	2.58	-7.12	11.00	1.69		Pass

TEST RESULTS DATA
26dB and 99% OBW

Straddle Channel											
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)	6DB Bandwidth (MHz)	Emission Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)	FCC 26dB Bandwidth Power Limit (dBm)	Note
11a	6Mbps	1	144	5720	18.48	16.36	23.63	-	-	-	
				NII-2C	14.2408	13.15	16.788	22.54	28.54	23.25	
				NII-3	4.2408	3.21	6.838	30.00	36.02	-	
HT20	MCS0	1	144	5720	19.28	17.60	23.83	-	-	-	
				NII-2C	14.6404	13.77	16.938	22.66	28.66	23.29	
				NII-3	4.6404	3.83	6.888	30.00	36.02	-	
HT40	MCS0	1	142	5710	36.56	35.48	45.14	-	-	-	
				NII-2C	33.2817	32.86	37.747	23.98	30.00	23.98	
				NII-3	3.2817	2.62	7.388	30.00	36.02	-	
VHT20	MCS0	1	144	5720	19.23	17.58	23.88	-	-	-	
				NII-2C	14.6903	13.77	16.938	22.67	28.67	23.29	
				NII-3	4.5405	3.81	6.938	30.00	36.02	-	
VHT40	MCS0	1	142	5710	36.86	35.32	44.69	-	-	-	
				NII-2C	33.5814	32.70	37.657	23.98	30.00	23.98	
				NII-3	3.2817	2.62	7.028	30.00	36.02	-	
VHT80	MCS0	1	138	5690	74.69	75.05	84.24	-	-	-	
				NII-2C	72.283	72.48	76.24	23.98	30.00	23.98	
				NII-3	2.403	2.56	8	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
11a	6Mbps	1	144	5720	0.20	11.42	-	1.69		Pass
				NII-2C	0.20	10.41	23.25	1.69		Pass
				NII-3	0.20	4.61	30.00	1.69		Pass
HT20	MCS0	1	144	5720	0.62	9.94	-	1.69		Pass
				NII-2C	0.62	8.84	23.29	1.69		Pass
				NII-3	0.62	3.44	30.00	1.69		Pass
HT40	MCS0	1	142	5710	1.18	9.74	-	1.69		Pass
				NII-2C	1.18	9.44	23.98	1.69		Pass
				NII-3	1.18	-2.01	30.00	1.69		Pass
VHT20	MCS0	1	144	5720	0.79	9.84	-	1.69		Pass
				NII-2C	0.79	8.74	23.29	1.69		Pass
				NII-3	0.79	3.34	30.00	1.69		Pass
VHT40	MCS0	1	142	5710	1.49	9.14	-	1.69		Pass
				NII-2C	1.49	8.85	23.98	1.69		Pass
				NII-3	1.49	-2.69	30.00	1.69		Pass
VHT80	MCS0	1	138	5690	2.58	9.20	-	1.69		Pass
				NII-2C	2.58	9.13	23.98	1.69		Pass
				NII-3	2.58	-8.91	30.00	1.69		Pass

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
11a	6Mbps	1	144	NII-2C	0.20	-0.37	11.00	1.69		Pass
				NII-3	0.20	-0.37	30.00	1.69		Pass
HT20	MCS0	1	144	NII-2C	0.62	-1.57	11.00	1.69		Pass
				NII-3	0.62	-1.57	30.00	1.69		Pass
HT40	MCS0	1	142	NII-2C	1.18	-3.69	11.00	1.69		Pass
				NII-3	1.18	-3.69	30.00	1.69		Pass
VHT20	MCS0	1	144	NII-2C	0.79	-1.76	11.00	1.69		Pass
				NII-3	0.79	-1.76	30.00	1.69		Pass
VHT40	MCS0	1	142	NII-2C	1.49	-4.17	11.00	1.69		Pass
				NII-3	1.49	-4.17	30.00	1.69		Pass
VHT80	MCS0	1	138	NII-2C	2.58	-7.68	11.00	1.69		Pass
				NII-3	2.58	-7.68	30.00	1.69		Pass

TEST RESULTS DATA
Frequency Stability

Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	20	3.6	
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	20	4.2	
11a	6Mbps	1	36	5180	5180.025	0.025	4.83	20	3.75	
11a	6Mbps	1	36	5180	5180.075	0.075	14.48	-30	3.75	
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	50	3.75	

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	52	5260	5260.025	0.025	4.75	20	3.6	
11a	6Mbps	1	52	5260	5260.025	0.025	4.75	20	4.2	
11a	6Mbps	1	52	5260	5260.025	0.025	4.75	20	3.75	
11a	6Mbps	1	52	5260	5260.075	0.075	14.26	-30	3.75	
11a	6Mbps	1	52	5260	5260.025	0.025	4.75	50	3.75	

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	20	3.6	
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	20	4.2	
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	20	3.75	
11a	6Mbps	1	100	5500	5500.075	0.075	13.64	-30	3.75	
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	50	3.75	



Appendix B. Radiated Spurious Emission

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5127.52	49.08	-24.92	74	45.87	31.84	7.91	36.54	100	263	P	H
		5127.68	40.97	-13.03	54	37.76	31.84	7.91	36.54	100	263	A	H
	*	5186	98.92	-	-	95.64	31.85	7.94	36.51	100	263	P	H
	*	5174	92.31	-	-	89.03	31.85	7.94	36.51	100	263	A	H
		5128.48	47.48	-26.52	74	44.27	31.84	7.91	36.54	284	277	P	V
		5127.36	39.37	-14.63	54	36.16	31.84	7.91	36.54	284	277	A	V
	*	5186	96.89	-	-	93.61	31.85	7.94	36.51	284	277	P	V
	*	5186	89.73	-	-	86.45	31.85	7.94	36.51	284	277	A	V
802.11a CH 44 5220MHz	*	5216	99.43	-	-	96.08	31.86	7.99	36.5	100	276	P	H
	*	5216	92	-	-	88.65	31.86	7.99	36.5	100	276	A	H
	*	5214	97	-	-	93.65	31.86	7.99	36.5	300	11	P	V
	*	5214	89.93	-	-	86.58	31.86	7.99	36.5	300	11	A	V
802.11a CH 48 5240MHz	*	5244	97.4	-	-	93.94	31.88	8.08	36.5	105	281	P	H
	*	5234	90.06	-	-	86.65	31.87	8.04	36.5	105	281	A	H
		5369.58	45.5	-28.5	74	41.7	31.91	8.39	36.5	105	281	P	H
		5398.74	36.08	-17.92	54	32.18	31.92	8.48	36.5	105	281	A	H
	*	5246	97.05	-	-	93.59	31.88	8.08	36.5	283	257	P	V
	*	5244	89.82	-	-	86.36	31.88	8.08	36.5	283	257	A	V
		5384.16	45.27	-28.73	74	41.42	31.92	8.43	36.5	283	257	P	V
		5398.02	36.13	-17.87	54	32.23	31.92	8.48	36.5	283	257	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	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	44.46	-29.54	74	55.59	38.02	8.1	57.25	100	360	P	H
		10360	47.93	-26.07	74	59.06	38.02	8.1	57.25	100	0	P	V
802.11a CH 44 5220MHz		10440	43.86	-30.14	74	54.7	38.06	8.22	57.12	100	360	P	H
		10440	46.84	-27.16	74	57.68	38.06	8.22	57.12	100	0	P	V
802.11a CH 48 5240MHz		10480	44.22	-29.78	74	54.84	38.09	8.31	57.02	100	0	P	H
		10480	47.94	-26.06	74	58.56	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 HT20 (Band Edge @ 3m)

WIFI	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		5128	50.15	-23.85	74	46.94	31.84	7.91	36.54	291	242	P	H
		5128.32	42.29	-11.71	54	39.08	31.84	7.91	36.54	291	242	A	H
	*	5174	100.06	-	-	96.78	31.85	7.94	36.51	291	242	P	H
	*	5172	92.9	-	-	89.64	31.85	7.93	36.52	291	242	A	H
		5128.32	49.16	-24.84	74	45.95	31.84	7.91	36.54	100	336	P	V
		5128.32	41.82	-12.18	54	38.61	31.84	7.91	36.54	100	336	A	V
	*	5182	99.93	-	-	96.65	31.85	7.94	36.51	100	336	P	V
	*	5186	92.68	-	-	89.4	31.85	7.94	36.51	100	336	A	V
802.11n HT20 CH 44 5220MHz	*	5224	99.41	-	-	96.06	31.86	7.99	36.5	288	239	P	H
	*	5224	91.88	-	-	88.53	31.86	7.99	36.5	288	239	A	H
	*	5214	98.72	-	-	95.37	31.86	7.99	36.5	100	336	P	V
	*	5224	91.34	-	-	87.99	31.86	7.99	36.5	100	336	A	V
802.11n HT20 CH 48 5240MHz	*	5238	98.82	-	-	95.41	31.87	8.04	36.5	286	242	P	H
	*	5244	91.47	-	-	88.01	31.88	8.08	36.5	286	242	A	H
		5382.36	45.26	-28.74	74	41.41	31.92	8.43	36.5	286	242	P	H
		5384.16	35.99	-18.01	54	32.14	31.92	8.43	36.5	286	242	A	H
	*	5234	97.83	-	-	94.42	31.87	8.04	36.5	100	333	P	V
	*	5236	90.4	-	-	86.99	31.87	8.04	36.5	100	333	A	V
		5369.58	45.26	-28.74	74	41.46	31.91	8.39	36.5	100	333	P	V
		5399.1	36.05	-17.95	54	32.15	31.92	8.48	36.5	100	333	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	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	45.6	-28.4	74	56.73	38.02	8.1	57.25	100	360	P	H
		10360	45.38	-28.62	74	56.51	38.02	8.1	57.25	100	360	P	V
802.11n HT20 CH 44 5220MHz		10440	43.48	-30.52	74	54.32	38.06	8.22	57.12	100	360	P	H
		10440	43.97	-30.03	74	54.81	38.06	8.22	57.12	100	360	P	V
802.11n HT20 CH 48 5240MHz		10480	43.59	-30.41	74	54.21	38.09	8.31	57.02	100	360	P	H
		10480	44.65	-29.35	74	55.27	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	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		5145.76	47.35	-26.65	74	44.12	31.84	7.92	36.53	100	325	P	H
		5149.76	39.04	-14.96	54	35.81	31.84	7.92	36.53	100	325	A	H
	*	5192	93.58	-	-	90.27	31.86	7.95	36.5	100	325	P	H
	*	5188	86.77	-	-	83.49	31.85	7.94	36.51	100	325	A	H
		5149.28	50.35	-23.65	74	47.12	31.84	7.92	36.53	100	32	P	V
		5150.00	40.97	-13.03	54	37.74	31.84	7.92	36.53	100	32	A	V
	*	5180	99.28	-	-	96	31.85	7.94	36.51	100	32	P	V
	*	5180	92.33	-	-	89.05	31.85	7.94	36.51	100	32	A	V
802.11n HT40 CH 46 5230MHz	*	5242	92.4	-	-	88.94	31.88	8.08	36.5	100	149	P	H
	*	5232	85.35	-	-	81.94	31.87	8.04	36.5	100	149	A	H
		5383.98	45.13	-28.87	74	41.28	31.92	8.43	36.5	100	149	P	H
		5379.3	36.06	-17.94	54	32.21	31.92	8.43	36.5	100	149	A	H
	*	5220	96.6	-	-	93.25	31.86	7.99	36.5	100	34	P	V
	*	5220	89.32	-	-	85.97	31.86	7.99	36.5	100	34	A	V
		5364	45.07	-28.93	74	41.27	31.91	8.39	36.5	100	34	P	V
		5367.06	36.21	-17.79	54	32.41	31.91	8.39	36.5	100	34	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	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		10380	45.42	-28.58	74	56.48	38.03	8.13	57.22	100	0	P	H
CH 38 5190MHz		10380	48.68	-25.32	74	59.74	38.03	8.13	57.22	100	0	P	V
802.11n HT40		10460	44.84	-29.16	74	55.6	38.07	8.25	57.08	100	360	P	H
CH 46 5230MHz		10460	48.07	-25.93	74	58.83	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	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		5128.32	46.45	-27.55	74	43.24	31.84	7.91	36.54	101	238	P	H
		5128.32	39.13	-14.87	54	35.92	31.84	7.91	36.54	101	238	A	H
	*	5186	95.13	-	-	91.85	31.85	7.94	36.51	101	238	P	H
	*	5188	88.27	-	-	84.99	31.85	7.94	36.51	101	238	A	H
		5128.16	49.04	-24.96	74	45.83	31.84	7.91	36.54	261	320	P	V
		5128.32	41.74	-12.26	54	38.53	31.84	7.91	36.54	261	320	A	V
	*	5176	99.75	-	-	96.47	31.85	7.94	36.51	261	320	P	V
	*	5184	92.96	-	-	89.68	31.85	7.94	36.51	261	320	A	V
802.11ac VHT20 CH 44 5220MHz	*	5222	93.11	-	-	89.76	31.86	7.99	36.5	100	236	P	H
	*	5226	86.7	-	-	83.29	31.87	8.04	36.5	100	236	A	H
	*	5218	99.35	-	-	96	31.86	7.99	36.5	262	319	P	V
	*	5214	92.13	-	-	88.78	31.86	7.99	36.5	262	319	A	V
802.11ac VHT20 CH 48 5240MHz	*	5234	93.57	-	-	90.16	31.87	8.04	36.5	100	235	P	H
	*	5232	86.25	-	-	82.84	31.87	8.04	36.5	100	235	A	H
		5394.96	45.54	-28.46	74	41.64	31.92	8.48	36.5	100	235	P	H
		5398.38	35.86	-18.14	54	31.96	31.92	8.48	36.5	100	235	A	H
	*	5248	98.44	-	-	94.98	31.88	8.08	36.5	100	342	P	V
	*	5244	90.77	-	-	87.31	31.88	8.08	36.5	100	342	A	V
		5386.14	45.7	-28.3	74	41.85	31.92	8.43	36.5	100	342	P	V
		5385.6	35.83	-18.17	54	31.98	31.92	8.43	36.5	100	342	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	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	47.47	-26.53	74	58.6	38.02	8.1	57.25	100	360	P	H
		10360	45.37	-28.63	74	56.5	38.02	8.1	57.25	100	0	P	V
802.11ac VHT20 CH 44 5220MHz		10440	46.28	-27.72	74	57.12	38.06	8.22	57.12	100	360	P	H
		10440	45.91	-28.09	74	56.75	38.06	8.22	57.12	100	0	P	V
802.11ac VHT20 CH 48 5240MHz		10480	46.13	-27.87	74	56.75	38.09	8.31	57.02	100	0	P	H
		10480	45.19	-28.81	74	55.81	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	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	*	5180	92.34	-	-	89.06	31.85	7.94	36.51	100	353	P	H
	*	5188	85.45	-	-	82.17	31.85	7.94	36.51	100	353	A	H
		5127.04	46.33	-27.67	74	43.12	31.84	7.91	36.54	100	353	P	H
		5148.96	38.06	-15.94	54	34.83	31.84	7.92	36.53	100	353	A	H
	*	5200	97.31	-	-	94	31.86	7.95	36.5	100	34	P	V
	*	5198	90.44	-	-	87.13	31.86	7.95	36.5	100	34	A	V
		5146.72	51.34	-22.66	74	48.11	31.84	7.92	36.53	100	34	P	V
		5148.96	40.07	-13.93	54	36.84	31.84	7.92	36.53	100	34	A	V
802.11ac VHT40 CH 46 5230MHz	*	5226	91.93	-	-	88.52	31.87	8.04	36.5	100	132	P	H
	*	5242	84.76	-	-	81.3	31.88	8.08	36.5	100	132	A	H
		5400	46.07	-27.93	74	42.17	31.92	8.48	36.5	100	132	P	H
		5395.68	36.15	-17.85	54	32.25	31.92	8.48	36.5	100	132	A	H
	*	5242	96.03	-	-	92.57	31.88	8.08	36.5	100	348	P	V
	*	5244	88.43	-	-	84.97	31.88	8.08	36.5	100	348	A	V
		5350.5	45.08	-28.92	74	41.33	31.91	8.34	36.5	100	348	P	V
		5364	36.3	-17.7	54	32.5	31.91	8.39	36.5	100	348	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	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	47.27	-26.73	74	58.33	38.03	8.13	57.22	100	360	P	H
		10380	48.39	-25.61	74	59.45	38.03	8.13	57.22	100	0	P	V
802.11ac VHT40 CH 46 5230MHz		10460	45.86	-28.14	74	56.62	38.07	8.25	57.08	100	360	P	H
		10460	46.74	-27.26	74	57.5	38.07	8.25	57.08	100	0	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	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		5138.5	51.26	-22.74	74	48.05	31.84	7.91	36.54	100	11	P	H
		5149.7	43.45	-10.55	54	40.22	31.84	7.92	36.53	100	11	A	H
	*	5190	94.74	-	-	91.46	31.85	7.94	36.51	100	11	P	H
	*	5214	87.79	-	-	84.44	31.86	7.99	36.5	100	11	A	H
		5356.4	45.9	-28.1	74	42.15	31.91	8.34	36.5	100	11	P	H
		5397.35	38.26	-15.74	54	34.36	31.92	8.48	36.5	100	11	A	H
		5145.05	49.84	-24.16	74	46.61	31.84	7.92	36.53	100	266	P	V
		5149.45	41.5	-12.5	54	38.27	31.84	7.92	36.53	100	266	A	V
	*	5236	91.83	-	-	88.42	31.87	8.04	36.5	100	266	P	V
	*	5232	85.23	-	-	81.82	31.87	8.04	36.5	100	266	A	V
		5396.05	45.63	-28.37	74	41.73	31.92	8.48	36.5	100	266	P	V
		5384.35	38.74	-15.26	54	34.89	31.92	8.43	36.5	100	266	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	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		10420	47.19	-26.81	74	58.1	38.05	8.19	57.15	100	0	P	H
CH 42 5210MHz		10420	46.28	-27.72	74	57.19	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 802.11a (Band Edge @ 3m)

WIFI	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		5115.2	46.04	-27.96	74	42.85	31.83	7.91	36.55	100	282	P	H
		5106.24	36.61	-17.39	54	33.42	31.83	7.91	36.55	100	282	A	H
	*	5256	97.71	-	-	94.25	31.88	8.08	36.5	100	282	P	H
	*	5252	90.47	-	-	87.01	31.88	8.08	36.5	100	282	A	H
		5107.04	46.74	-27.26	74	43.55	31.83	7.91	36.55	301	21	P	V
		5104.32	36.63	-17.37	54	33.46	31.83	7.9	36.56	301	21	A	V
	*	5266	96.63	-	-	93.13	31.88	8.12	36.5	301	21	P	V
	*	5268	89.61	-	-	86.11	31.88	8.12	36.5	301	21	A	V
802.11a CH 60 5300MHz	*	5294	98.72	-	-	95.12	31.89	8.21	36.5	297	317	P	H
	*	5304	91.23	-	-	87.63	31.89	8.21	36.5	297	317	A	H
	*	5304	96.46	-	-	92.86	31.89	8.21	36.5	329	17	P	V
	*	5294	89.02	-	-	85.42	31.89	8.21	36.5	329	17	A	V
802.11a CH 64 5320MHz	*	5324	96.26	-	-	92.6	31.9	8.26	36.5	114	197	P	H
	*	5324	88.87	-	-	85.21	31.9	8.26	36.5	114	197	A	H
		5372.7	45.98	-28.02	74	42.18	31.91	8.39	36.5	114	197	P	H
		5372.4	38.05	-15.95	54	34.25	31.91	8.39	36.5	114	197	A	H
	*	5314	95.67	-	-	92.01	31.9	8.26	36.5	276	360	P	V
	*	5312	88.08	-	-	84.42	31.9	8.26	36.5	276	360	A	V
		5373.1	45.57	-28.43	74	41.77	31.91	8.39	36.5	276	360	P	V
		5372.8	37.72	-16.28	54	33.92	31.91	8.39	36.5	276	360	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	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	44.83	-29.17	74	55.3	38.11	8.37	56.95	100	0	P	H
		10520	47.43	-26.57	74	57.9	38.11	8.37	56.95	100	360	P	V
802.11a CH 60 5300MHz		10600	43.45	-30.55	74	53.54	38.16	8.53	56.78	100	360	P	H
		10600	46.86	-27.14	74	56.95	38.16	8.53	56.78	100	0	P	V
802.11a CH 64 5320MHz		10640	44.27	-29.73	74	54.21	38.18	8.59	56.71	100	0	P	H
		10640	46.54	-27.46	74	56.48	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 HT20 (Band Edge @ 3m)

WIFI	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		5116.8	46.25	-27.75	74	43.06	31.83	7.91	36.55	285	239	P	H
		5113.76	36.67	-17.33	54	33.48	31.83	7.91	36.55	285	239	A	H
	*	5256	98.74	-	-	95.28	31.88	8.08	36.5	285	239	P	H
	*	5256	91.22	-	-	87.76	31.88	8.08	36.5	285	239	A	H
		5126.88	46.52	-27.48	74	43.31	31.84	7.91	36.54	100	332	P	V
		5107.52	36.51	-17.49	54	33.32	31.83	7.91	36.55	100	332	A	V
	*	5266	97.29	-	-	93.79	31.88	8.12	36.5	100	332	P	V
	*	5266	90.39	-	-	86.89	31.88	8.12	36.5	100	332	A	V
802.11n HT20 CH 60 5300MHz	*	5302	95.91	-	-	92.31	31.89	8.21	36.5	100	240	P	H
	*	5296	88.91	-	-	85.31	31.89	8.21	36.5	100	240	A	H
	*	5304	97.08	-	-	93.48	31.89	8.21	36.5	100	334	P	V
	*	5296	89.81	-	-	86.21	31.89	8.21	36.5	100	334	A	V
802.11n HT20 CH 64 5320MHz	*	5326	93.3	-	-	89.64	31.9	8.26	36.5	100	156	P	H
	*	5328	86.09	-	-	82.39	31.9	8.3	36.5	100	156	A	H
		5392.1	45.81	-28.19	74	41.96	31.92	8.43	36.5	100	156	P	H
		5371.5	37.95	-16.05	54	34.15	31.91	8.39	36.5	100	156	A	H
	*	5326	97.25	-	-	93.59	31.9	8.26	36.5	100	333	P	V
	*	5324	89.89	-	-	86.23	31.9	8.26	36.5	100	333	A	V
		5373.6	47.62	-26.38	74	43.82	31.91	8.39	36.5	100	333	P	V
		5371.7	39.52	-14.48	54	35.72	31.91	8.39	36.5	100	333	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	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		10520	44.73	-29.27	74	55.2	38.11	8.37	56.95	100	360	P	H
CH 52 5260MHz		10520	45.65	-28.35	74	56.12	38.11	8.37	56.95	100	360	P	V
802.11n HT20		10600	40.94	-33.06	74	51.03	38.16	8.53	56.78	100	360	P	H
CH 60 5300MHz		10600	45.8	-28.2	74	55.89	38.16	8.53	56.78	100	360	P	V
802.11n HT20		10640	42.35	-31.65	74	52.29	38.18	8.59	56.71	100	360	P	H
CH 64 5320MHz		10640	47.69	-26.31	74	57.63	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	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		5115.36	45.84	-28.16	74	42.65	31.83	7.91	36.55	100	193	P	H
		5111.2	37.35	-16.65	54	34.16	31.83	7.91	36.55	100	193	A	H
	*	5278	90.62	-	-	87.06	31.89	8.17	36.5	100	193	P	H
	*	5274	82.95	-	-	79.45	31.88	8.12	36.5	100	193	A	H
		5113.12	46.72	-27.28	74	43.53	31.83	7.91	36.55	100	33	P	V
		5116.64	37.67	-16.33	54	34.48	31.83	7.91	36.55	100	33	A	V
	*	5256	96.65	-	-	93.19	31.88	8.08	36.5	100	33	P	V
	*	5258	89.55	-	-	86.09	31.88	8.08	36.5	100	33	A	V
802.11n HT40 CH 62 5310MHz	*	5320	89.27	-	-	85.61	31.9	8.26	36.5	100	169	P	H
	*	5320	81.94	-	-	78.28	31.9	8.26	36.5	100	169	A	H
		5351.58	45.41	-28.59	74	41.66	31.91	8.34	36.5	100	169	P	H
		5350	36.37	-17.63	54	32.62	31.91	8.34	36.5	100	169	A	H
	*	5302	96.97	-	-	93.37	31.89	8.21	36.5	100	30	P	V
	*	5300	89.79	-	-	86.19	31.89	8.21	36.5	100	30	A	V
		5353.2	48.71	-25.29	74	44.96	31.91	8.34	36.5	100	30	P	V
		5350	38.49	-15.51	54	34.74	31.91	8.34	36.5	100	30	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	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		10540	44.51	-29.49	74	54.9	38.12	8.41	56.92	100	360	P	H
CH 54 5270MHz		10540	49.53	-24.47	74	59.92	38.12	8.41	56.92	100	360	P	V
802.11n HT40		10620	44.71	-29.29	74	54.73	38.17	8.56	56.75	100	360	P	H
CH 62 5310MHz		10620	49.3	-24.7	74	59.32	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	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	*	5266	93.22	-	-	89.72	31.88	8.12	36.5	100	228	P	H
	*	5264	85.83	-	-	82.33	31.88	8.12	36.5	100	228	A	H
		5113.6	45.71	-28.29	74	42.52	31.83	7.91	36.55	100	228	P	H
		5101.12	37.57	-16.43	54	34.4	31.83	7.9	36.56	100	228	A	H
	*	5264	97.49	-	-	93.99	31.88	8.12	36.5	100	315	P	V
	*	5268	90.38	-	-	86.88	31.88	8.12	36.5	100	315	A	V
		5135.36	46.3	-27.7	74	43.09	31.84	7.91	36.54	100	315	P	V
		5125.28	37.28	-16.72	54	34.07	31.84	7.91	36.54	100	315	A	V
802.11ac VHT20 CH 60 5300MHz	*	5294	93.17	-	-	89.57	31.89	8.21	36.5	321	80	P	H
	*	5296	86.07	-	-	82.47	31.89	8.21	36.5	321	80	A	H
		5304	100.51	-	-	96.91	31.89	8.21	36.5	100	345	P	V
		5294	93.79	-	-	90.19	31.89	8.21	36.5	100	345	A	V
802.11ac VHT20 CH 64 5320MHz	*	5322	91.26	-	-	87.6	31.9	8.26	36.5	100	196	P	H
	*	5328	84.55	-	-	80.85	31.9	8.3	36.5	100	196	A	H
		5361.1	46.01	-27.99	74	42.21	31.91	8.39	36.5	100	196	P	H
		5371.5	38.06	-15.94	54	34.26	31.91	8.39	36.5	100	196	A	H
	*	5324	99.94	-	-	96.28	31.9	8.26	36.5	100	343	P	V
	*	5324	92.66	-	-	89	31.9	8.26	36.5	100	343	A	V
		5371.4	49.62	-24.38	74	45.82	31.91	8.39	36.5	100	343	P	V
		5371.6	41.41	-12.59	54	37.61	31.91	8.39	36.5	100	343	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	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	45.23	-28.77	74	55.7	38.11	8.37	56.95	100	0	P	H
		10520	44.39	-29.61	74	54.86	38.11	8.37	56.95	100	360	P	V
802.11ac VHT20 CH 60 5300MHz		10600	44.76	-29.24	74	54.85	38.16	8.53	56.78	100	0	P	H
		10600	45.45	-28.55	74	55.54	38.16	8.53	56.78	100	360	P	V
802.11ac VHT20 CH 64 5320MHz		10640	45.57	-28.43	74	55.51	38.18	8.59	56.71	100	0	P	H
		10640	45.54	-28.46	74	55.48	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	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		5125.92	46.25	-27.75	74	43.04	31.84	7.91	36.54	100	117	P	H
		5105.28	37.22	-16.78	54	34.05	31.83	7.9	36.56	100	117	A	H
	*	5262	91.91	-	-	88.41	31.88	8.12	36.5	100	117	P	H
	*	5260	84.69	-	-	81.19	31.88	8.12	36.5	100	117	A	H
		5146.24	46.65	-27.35	74	43.42	31.84	7.92	36.53	100	355	P	V
		5142.88	37.41	-16.59	54	34.18	31.84	7.92	36.53	100	355	A	V
	*	5282	95.75	-	-	92.19	31.89	8.17	36.5	100	355	P	V
	*	5282	88.63	-	-	85.07	31.89	8.17	36.5	100	355	A	V
802.11ac VHT40 CH 62 5310MHz	*	5320	90.37	-	-	86.71	31.9	8.26	36.5	100	0	P	H
	*	5322	82.98	-	-	79.32	31.9	8.26	36.5	100	0	A	H
		5361.5	46.19	-27.81	74	42.39	31.91	8.39	36.5	100	0	P	H
		5350.7	36.53	-17.47	54	32.78	31.91	8.34	36.5	100	0	A	H
	*	5296	94.75	-	-	91.15	31.89	8.21	36.5	100	354	P	V
	*	5298	87.63	-	-	84.03	31.89	8.21	36.5	100	354	A	V
		5350	47.35	-26.65	74	43.6	31.91	8.34	36.5	100	354	P	V
		5350.1	37.82	-16.18	54	34.07	31.91	8.34	36.5	100	354	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	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		10540	45.83	-28.17	74	56.22	38.12	8.41	56.92	100	0	P	H
CH 54 5270MHz		10540	49.26	-24.74	74	59.65	38.12	8.41	56.92	100	360	P	V
802.11ac VHT40		10620	45.2	-28.8	74	55.22	38.17	8.56	56.75	100	0	P	H
CH 62 5310MHz		10620	48.83	-25.17	74	58.85	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	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		5124.7	46.22	-27.78	74	43.01	31.84	7.91	36.54	100	9	P	H
		5111.05	38.52	-15.48	54	35.33	31.83	7.91	36.55	100	9	A	H
	*	5270	94.3	-	-	90.8	31.88	8.12	36.5	100	9	P	H
	*	5294	86.68	-	-	83.08	31.89	8.21	36.5	100	9	A	H
		5359.1	49.7	-24.3	74	45.95	31.91	8.34	36.5	100	9	P	H
		5351.1	40.88	-13.12	54	37.13	31.91	8.34	36.5	100	9	A	H
		5113.7	46.78	-27.22	74	43.59	31.83	7.91	36.55	100	267	P	V
		5115.85	38.37	-15.63	54	35.18	31.83	7.91	36.55	100	267	A	V
	*	5274	90.59	-	-	87.09	31.88	8.12	36.5	100	267	P	V
	*	5294	83.87	-	-	80.27	31.89	8.21	36.5	100	267	A	V
		5353.35	47.8	-26.2	74	44.05	31.91	8.34	36.5	100	267	P	V
		5350.75	39.84	-14.16	54	36.09	31.91	8.34	36.5	100	267	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	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		10580	48.74	-25.26	74	58.9	38.15	8.5	56.81	100	360	P	H
CH 58 5290MHz		10580	44.68	-29.32	74	54.84	38.15	8.5	56.81	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	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		5447.76	48.86	-25.14	74	44.96	31.94	8.38	36.42	115	6	P	H
		5447.76	41.08	-12.92	54	37.18	31.94	8.38	36.42	115	6	A	H
	*	5494	99.93	-	-	96.04	31.95	8.32	36.38	115	6	P	H
	*	5494	92.64	-	-	88.75	31.95	8.32	36.38	115	6	A	H
		5447.6	47.61	-26.39	74	43.71	31.94	8.38	36.42	292	14	P	V
		5447.6	40.6	-13.4	54	36.7	31.94	8.38	36.42	292	14	A	V
	*	5494	98.53	-	-	94.64	31.95	8.32	36.38	292	14	P	V
	*	5506	91.45	-	-	87.55	31.96	8.29	36.35	292	14	A	V
802.11a CH 116 5580MHz	*	5584	99.38	-	-	95.5	31.98	8.13	36.23	132	6	P	H
	*	5584	92.49	-	-	88.61	31.98	8.13	36.23	132	6	A	H
	*	5576	99.22	-	-	95.33	31.98	8.16	36.25	295	15	P	V
	*	5586	92.14	-	-	88.26	31.98	8.13	36.23	295	15	A	V
802.11a CH 140 5700MHz	*	5696	98.69	-	-	94.67	32.02	8.25	36.25	100	352	P	H
	*	5694	91.53	-	-	87.51	32.02	8.25	36.25	100	352	A	H
		5752.92	47.63	-26.37	74	43.51	32.05	8.37	36.3	100	352	P	H
		5752.2	39.62	-14.38	54	35.5	32.05	8.37	36.3	100	352	A	H
	*	5708	97.64	-	-	93.6	32.03	8.28	36.27	255	0	P	V
	*	5694	90.71	-	-	86.69	32.02	8.25	36.25	255	0	A	V
		5752.92	47.99	-26.01	74	43.87	32.05	8.37	36.3	255	0	P	V
		5752.6	39.42	-14.58	54	35.3	32.05	8.37	36.3	255	0	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	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	49.38	-24.62	74	57.74	38.4	9.24	56	100	360	P	H
		11000	49.48	-24.52	74	57.84	38.4	9.24	56	100	0	P	V
802.11a CH 116 5580MHz		11160	46.61	-27.39	74	54.93	38.47	9.55	56.34	100	0	P	H
		11160	49.88	-24.12	74	58.2	38.47	9.55	56.34	100	360	P	V
802.11a CH 140 5700MHz		11400	46.36	-27.64	74	54.63	38.56	9.98	56.81	100	0	P	H
		11400	45.55	-28.45	74	53.82	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 - 5470~5725MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	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		5447.12	48.57	-25.43	74	44.67	31.94	8.38	36.42	100	239	P	H
		5448.24	40.57	-13.43	54	36.67	31.94	8.38	36.42	100	239	A	H
	*	5504	98.74	-	-	94.84	31.96	8.29	36.35	100	239	P	H
	*	5508	91.7	-	-	87.8	31.96	8.29	36.35	100	239	A	H
		5447.28	48.5	-25.5	74	44.6	31.94	8.38	36.42	100	360	P	V
		5448.24	40.73	-13.27	54	36.83	31.94	8.38	36.42	100	360	A	V
	*	5496	97.93	-	-	94.04	31.95	8.32	36.38	100	360	P	V
	*	5496	90.69	-	-	86.8	31.95	8.32	36.38	100	360	A	V
802.11n HT20 CH 116 5580MHz	*	5578	99.7	-	-	95.81	31.98	8.16	36.25	100	238	P	H
	*	5584	92.72	-	-	88.84	31.98	8.13	36.23	100	238	A	H
	*	5576	97.93	-	-	94.04	31.98	8.16	36.25	100	285	P	V
	*	5574	90.7	-	-	86.81	31.98	8.16	36.25	100	285	A	V
802.11n HT20 CH 140 5700MHz	*	5694	98.39	-	-	94.37	32.02	8.25	36.25	100	237	P	H
	*	5692	91.14	-	-	87.12	32.02	8.25	36.25	100	237	A	H
		5751.8	48.09	-25.91	74	43.97	32.05	8.37	36.3	100	237	P	H
		5751.64	39.6	-14.4	54	35.48	32.05	8.37	36.3	100	237	A	H
	*	5706	96.93	-	-	92.89	32.03	8.28	36.27	100	280	P	V
	*	5706	89.3	-	-	85.26	32.03	8.28	36.27	100	280	A	V
		5751.72	47.66	-26.34	74	43.54	32.05	8.37	36.3	100	280	P	V
		5751.88	38.99	-15.01	54	34.87	32.05	8.37	36.3	100	280	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	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	42.44	-31.56	74	50.8	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
802.11n HT20 CH 116 5580MHz		11160	43.91	-30.09	74	52.23	38.47	9.55	56.34	100	360	P	H
		11160	46.15	-27.85	74	54.47	38.47	9.55	56.34	100	360	P	V
802.11n HT20 CH 140 5700MHz		11400	43.61	-30.39	74	51.88	38.56	9.98	56.81	100	360	P	H
		11400	44.36	-29.64	74	52.63	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	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		5457.04	46.13	-27.87	74	42.23	31.94	8.38	36.42	100	223	P	H
		5468.88	37.3	-16.7	54	33.4	31.95	8.35	36.4	100	223	A	H
	*	5522	90.93	-	-	87.04	31.96	8.26	36.33	100	223	P	H
	*	5522	83.79	-	-	79.9	31.96	8.26	36.33	100	223	A	H
		5464.4	47.04	-26.96	74	43.14	31.95	8.35	36.4	216	33	P	V
		5469.84	39.21	-14.79	54	35.31	31.95	8.35	36.4	216	33	A	V
	*	5522	98.41	-	-	94.52	31.96	8.26	36.33	216	33	P	V
	*	5522	91.18	-	-	87.29	31.96	8.26	36.33	216	33	A	V
802.11n HT40 CH 110 5550MHz	*	5562	93.93	-	-	90.04	31.97	8.2	36.28	100	201	P	H
	*	5562	85.78	-	-	81.89	31.97	8.2	36.28	100	201	A	H
	*	5542	99.44	-	-	95.54	31.97	8.23	36.3	224	33	P	V
	*	5562	92.34	-	-	88.45	31.97	8.2	36.28	224	33	A	V
802.11n HT40 CH 134 5670MHz	*	5660	92.05	-	-	88.08	32.01	8.19	36.23	100	329	P	H
	*	5674	85.36	-	-	82.16	32.02	7.42	36.24	100	329	A	H
		5745.24	46.37	-27.63	74	42.27	32.05	8.34	36.29	100	329	P	H
		5745.16	37.58	-16.42	54	33.48	32.05	8.34	36.29	100	329	A	H
	*	5658	96.6	-	-	92.63	32.01	8.19	36.23	100	119	P	V
	*	5658	90.12	-	-	86.15	32.01	8.19	36.23	100	119	A	V
		5725.56	46.7	-27.3	74	42.63	32.04	8.31	36.28	100	119	P	V
		5728.44	37.72	-16.28	54	33.65	32.04	8.31	36.28	100	119	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	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		11020	48.78	-25.22	74	57.13	38.41	9.27	56.03	100	360	P	H
		11020	49.13	-24.87	74	57.48	38.41	9.27	56.03	100	360	P	V
802.11n HT40 CH 110 5550MHz		11100	47.71	-26.29	74	56.04	38.44	9.43	56.2	100	360	P	H
		11100	49.92	-24.08	74	58.25	38.44	9.43	56.2	100	360	P	V
802.11n HT40 CH 134 5670MHz		11340	47.41	-26.59	74	55.7	38.53	9.86	56.68	100	0	P	H
		11340	49.35	-24.65	74	57.64	38.53	9.86	56.68	200	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	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		5447.6	48.66	-25.34	74	44.76	31.94	8.38	36.42	319	74	P	H
		5447.92	39.62	-14.38	54	35.72	31.94	8.38	36.42	319	74	A	H
	*	5498	95.2	-	-	91.3	31.96	8.29	36.35	319	74	P	H
	*	5496	88.7	-	-	84.81	31.95	8.32	36.38	319	74	A	H
		5447.44	49.27	-24.73	74	45.37	31.94	8.38	36.42	100	337	P	V
		5447.6	42.01	-11.99	54	38.11	31.94	8.38	36.42	100	337	A	V
	*	5508	100.22	-	-	96.32	31.96	8.29	36.35	100	337	P	V
	*	5506	93.37	-	-	89.47	31.96	8.29	36.35	100	337	A	V
802.11ac VHT20 CH 116 5580MHz	*	5588	95.16	-	-	91.28	31.98	8.13	36.23	389	115	P	H
	*	5574	88.4	-	-	84.51	31.98	8.16	36.25	389	115	A	H
	*	5588	101.18	-	-	97.3	31.98	8.13	36.23	100	338	P	V
	*	5588	94.4	-	-	90.52	31.98	8.13	36.23	100	338	A	V
802.11ac VHT20 CH 140 5700MHz	*	5694	95.35	-	-	91.33	32.02	8.25	36.25	303	74	P	H
	*	5692	88.57	-	-	84.55	32.02	8.25	36.25	303	74	A	H
		5756.04	46.67	-27.33	74	42.55	32.05	8.37	36.3	303	74	P	H
		5751.72	38.94	-15.06	54	34.82	32.05	8.37	36.3	303	74	A	H
	*	5694	99.22	-	-	95.2	32.02	8.25	36.25	100	1	P	V
	*	5692	92.56	-	-	88.54	32.02	8.25	36.25	100	1	A	V
		5751.56	50.52	-23.48	74	46.4	32.05	8.37	36.3	100	1	P	V
		5752.04	41.52	-12.48	54	37.4	32.05	8.37	36.3	100	1	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	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		11000	47.81	-26.19	74	56.17	38.4	9.24	56	100	0	P	H
CH 100 5500MHz		11000	49.22	-24.78	74	57.58	38.4	9.24	56	100	360	P	V
802.11ac VHT20		11160	45.62	-28.38	74	53.94	38.47	9.55	56.34	100	0	P	H
CH 116 5580MHz		11160	46.03	-27.97	74	54.35	38.47	9.55	56.34	100	360	P	V
802.11ac VHT20		11400	47.67	-26.33	74	55.94	38.56	9.98	56.81	100	0	P	H
CH 140 5700MHz		11400	47.16	-26.84	74	55.43	38.56	9.98	56.81	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 802.11ac VHT40 (Band Edge @ 3m)

WIFI	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		5466.48	45.93	-28.07	74	42.03	31.95	8.35	36.4	100	0	P	H
		5468.56	37.74	-16.26	54	33.84	31.95	8.35	36.4	100	0	A	H
	*	5520	91.12	-	-	87.23	31.96	8.26	36.33	100	0	P	H
	*	5508	84.43	-	-	80.53	31.96	8.29	36.35	100	0	A	H
		5469.04	49.91	-24.09	74	46.01	31.95	8.35	36.4	185	48	P	V
		5468.88	39.41	-14.59	54	35.51	31.95	8.35	36.4	185	48	A	V
	*	5498	97.25	-	-	93.35	31.96	8.29	36.35	185	48	P	V
	*	5500	90.36	-	-	86.46	31.96	8.29	36.35	185	48	A	V
802.11ac VHT40 CH 110 5550MHz	*	5542	92.55	-	-	88.65	31.97	8.23	36.3	100	350	P	H
	*	5538	85.41	-	-	81.51	31.97	8.23	36.3	100	350	A	H
	*	5562	96.97	-	-	93.08	31.97	8.2	36.28	164	47	P	V
	*	5558	90.22	-	-	86.33	31.97	8.2	36.28	164	47	A	V
802.11ac VHT40 CH 134 5670MHz	*	5658	91.02	-	-	87.05	32.01	8.19	36.23	100	360	P	H
	*	5658	84.04	-	-	80.07	32.01	8.19	36.23	100	360	A	H
		5738.12	46.1	-27.9	74	42	32.05	8.34	36.29	100	360	P	H
		5758.04	37.16	-16.84	54	33.04	32.05	8.37	36.3	100	360	A	H
	*	5664	95.16	-	-	91.19	32.01	8.19	36.23	100	100	P	V
	*	5660	87.98	-	-	84.01	32.01	8.19	36.23	100	100	A	V
		5739.88	47.93	-26.07	74	43.83	32.05	8.34	36.29	100	100	P	V
		5727	37.27	-16.73	54	33.2	32.04	8.31	36.28	100	100	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	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		11020	47.66	-26.34	74	56.01	38.41	9.27	56.03	100	0	P	H
CH 102 5510MHz		11020	50.57	-23.43	74	58.92	38.41	9.27	56.03	100	0	P	V
802.11ac VHT40		11100	48.92	-25.08	74	57.25	38.44	9.43	56.2	100	0	P	H
CH 110 5550MHz		11100	50.44	-23.56	74	58.77	38.44	9.43	56.2	100	0	P	V
802.11ac VHT40		11340	46.19	-27.81	74	54.48	38.53	9.86	56.68	100	0	P	H
CH 134 5670MHz		11340	48.3	-25.7	74	56.59	38.53	9.86	56.68	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 802.11ac VHT80 (Band Edge @ 3m)

WIFI	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		5462.8	49.54	-24.46	74	45.64	31.95	8.35	36.4	100	8	P	H
		5464.88	40	-14	54	36.1	31.95	8.35	36.4	100	8	A	H
	*	5554	93.39	-	-	89.5	31.97	8.2	36.28	100	8	P	H
	*	5534	86.78	-	-	82.88	31.97	8.23	36.3	100	8	A	H
		5763.8	46.62	-27.38	74	42.5	32.05	8.37	36.3	100	8	P	H
		5754.44	38.95	-15.05	54	34.83	32.05	8.37	36.3	100	8	A	H
		5462.96	49.19	-24.81	74	45.29	31.95	8.35	36.4	100	270	P	V
		5468.88	40.51	-13.49	54	36.61	31.95	8.35	36.4	100	270	A	V
	*	5510	94.72	-	-	90.82	31.96	8.29	36.35	100	270	P	V
	*	5534	87.79	-	-	83.89	31.97	8.23	36.3	100	270	A	V
		5764.44	46.28	-27.72	74	42.16	32.05	8.37	36.3	100	270	P	V
		5749.48	38.64	-15.36	54	34.54	32.05	8.34	36.29	100	270	A	V
802.11ac VHT80 CH 122 5610MHz		5436.56	47.36	-26.64	74	43.46	31.94	8.41	36.45	317	244	P	H
		5454.48	39.27	-14.73	54	35.37	31.94	8.38	36.42	317	244	A	H
	*	5634	93.88	-	-	89.94	32	8.16	36.22	317	244	P	H
	*	5598	87.27	-	-	83.39	31.98	8.13	36.23	317	244	A	H
		5761.4	45.97	-28.03	74	41.85	32.05	8.37	36.3	317	244	P	H
		5748.28	38.7	-15.3	54	34.6	32.05	8.34	36.29	317	244	A	H
		5465.36	45.52	-28.48	74	41.62	31.95	8.35	36.4	100	270	P	V
		5417.36	38.43	-15.57	54	34.53	31.93	8.44	36.47	100	270	A	V
	*	5614	94.83	-	-	90.94	31.99	8.1	36.2	100	270	P	V
	*	5614	88.47	-	-	84.58	31.99	8.1	36.2	100	270	A	V
		5763.24	46.2	-27.8	74	42.08	32.05	8.37	36.3	100	270	P	V
		5742.52	38.95	-15.05	54	34.85	32.05	8.34	36.29	100	270	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	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	54.24	-19.76	74	62.59	38.43	9.36	56.14	100	0	P	H
	!	11060	51.14	-2.86	54	59.49	38.43	9.36	56.14	100	0	A	H
		11060	46.6	-27.4	74	54.95	38.43	9.36	56.14	100	360	P	V
802.11ac VHT80 CH 122 5610MHz		11220	49.78	-24.22	74	58.09	38.49	9.64	56.44	100	360	P	H
		11220	47.73	-26.27	74	56.04	38.49	9.64	56.44	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 802.11a (Band Edge @ 3m)

WIFI	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	*	5716	99.25	-	-	95.21	32.03	8.28	36.27	100	348	P	H
	*	5716	92.23	-	-	88.19	32.03	8.28	36.27	100	348	A	H
	*	5726	94.45	-	-	90.38	32.04	8.31	36.28	100	84	P	V
	*	5724	87.47	-	-	83.4	32.04	8.31	36.28	100	84	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	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		11440	47.02	-26.98	74	55.29	38.57	10.04	56.88	100	360	P	H
CH 144		11440	52.77	-21.23	74	61.04	38.57	10.04	56.88	100	0	P	V
5720MHz		11440	46.46	-7.54	54	54.73	38.57	10.04	56.88	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 802.11n HT20 (Band Edge @ 3m)**

WIFI	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	*	5716	95.44	-	-	91.4	32.03	8.28	36.27	100	204	P	H
HT20	*	5724	88.32	-	-	84.25	32.04	8.31	36.28	100	204	A	H
CH 144	*	5716	98.45	-	-	94.41	32.03	8.28	36.27	284	264	P	V
5720MHz	*	5712	91.37	-	-	87.33	32.03	8.28	36.27	284	264	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	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		11440	47.52	-26.48	74	55.79	38.57	10.04	56.88	100	0	P	H
CH 144 5720MHz		11440	49.06	-24.94	74	57.33	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	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		5698	89.71	-	-	85.69	32.02	8.25	36.25	100	225	P	H
HT40		5696	82.38	-	-	78.36	32.02	8.25	36.25	100	225	A	H
CH 142		5700	94.26	-	-	90.24	32.02	8.25	36.25	100	328	P	V
5710MHz		5696	87.16	-	-	83.14	32.02	8.25	36.25	100	328	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	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		11420	49.01	-24.99	74	57.28	38.57	10.01	56.85	100	360	P	H
CH 142 5710MHz		11420	49.51	-24.49	74	57.78	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 VHT20 (Band Edge @ 3m)**

WIFI	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	*	5714	95	-	-	90.96	32.03	8.28	36.27	268	195	P	H
VHT20	*	5714	88.24	-	-	84.2	32.03	8.28	36.27	268	195	A	H
CH 144	*	5728	98.04	-	-	93.97	32.04	8.31	36.28	268	215	P	V
5720MHz	*	5724	91.08	-	-	87.01	32.04	8.31	36.28	268	215	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	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		11440	48.79	-25.21	74	57.06	38.57	10.04	56.88	100	0	P	H
CH 144 5720MHz		11440	49.61	-24.39	74	57.88	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	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	*	5698	92.81	-	-	88.79	32.02	8.25	36.25	274	68	P	H
VHT40	*	5698	85.98	-	-	81.96	32.02	8.25	36.25	274	68	A	H
CH 142	*	5708	95.96	-	-	91.92	32.03	8.28	36.27	266	206	P	V
5710MHz	*	5700	88.05	-	-	84.03	32.02	8.25	36.25	266	206	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	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		11420	47.99	-26.01	74	56.26	38.57	10.01	56.85	100	0	P	H
CH 142 5710MHz		11420	47.21	-26.79	74	55.48	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 VHT80 (Band Edge @ 3m)**

WIFI	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	*	5672	90.66	-	-	86.66	32.02	8.22	36.24	100	214	P	H
VHT80	*	5670	83.67	-	-	79.67	32.02	8.22	36.24	100	214	A	H
CH 138	*	5670	91.81	-	-	87.81	32.02	8.22	36.24	130	276	P	V
5690MHz	*	5670	84.66	-	-	80.66	32.02	8.22	36.24	130	276	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	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		11380	48.42	-25.58	74	56.7	38.55	9.95	56.78	100	360	P	H
CH 138 5690MHz		11380	45.13	-28.87	74	53.41	38.55	9.95	56.78	100	0	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	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		34.85	26.03	-13.97	40	39.88	17.9	0.71	32.46	-	-	P	H
		44.55	24.87	-15.13	40	43.84	12.8	0.83	32.6	-	-	P	H
		143.49	25.94	-17.56	43.5	43.21	13.71	1.45	32.43	-	-	P	H
		159.98	30.92	-12.58	43.5	48.61	13.19	1.53	32.41	-	-	P	H
		246.31	38.96	-7.04	46	56.68	13.01	1.73	32.46	100	214	P	H
		283.17	35.2	-10.8	46	51	14.33	2	32.13	-	-	P	H
		31.94	32.76	-7.24	40	46.31	18.32	0.68	32.55	100	12	P	V
		44.55	32.39	-7.61	40	51.36	12.8	0.83	32.6	-	-	P	V
		60.07	24.88	-15.12	40	49.67	6.8	0.92	32.51	-	-	P	V
		157.07	25.51	-17.99	43.5	43.04	13.37	1.52	32.42	-	-	P	V
		249.22	27.25	-18.75	46	44.83	13.15	1.73	32.46	-	-	P	V
		285.11	29.64	-16.36	46	45.38	14.4	2.02	32.16	-	-	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		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		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)

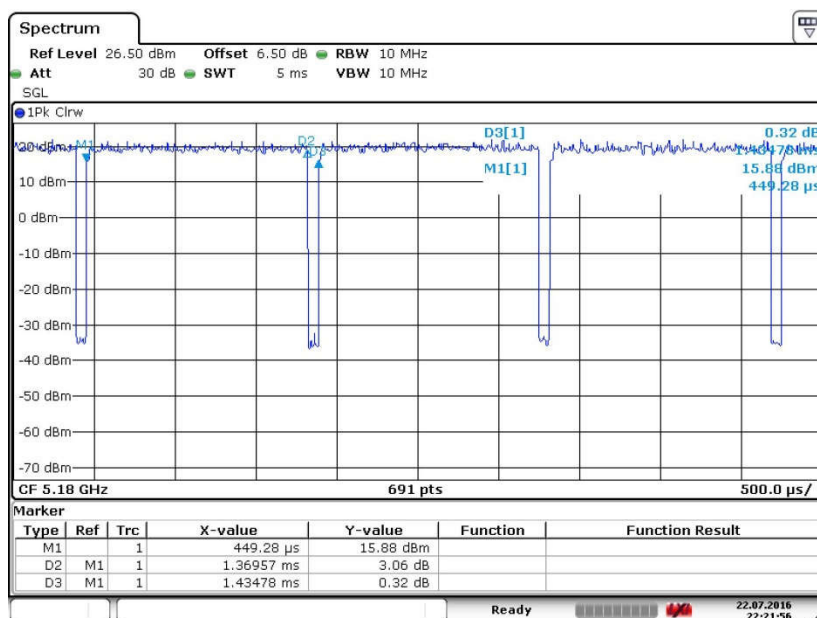
= -10.46(dB)

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

Appendix C. Duty Cycle Plots

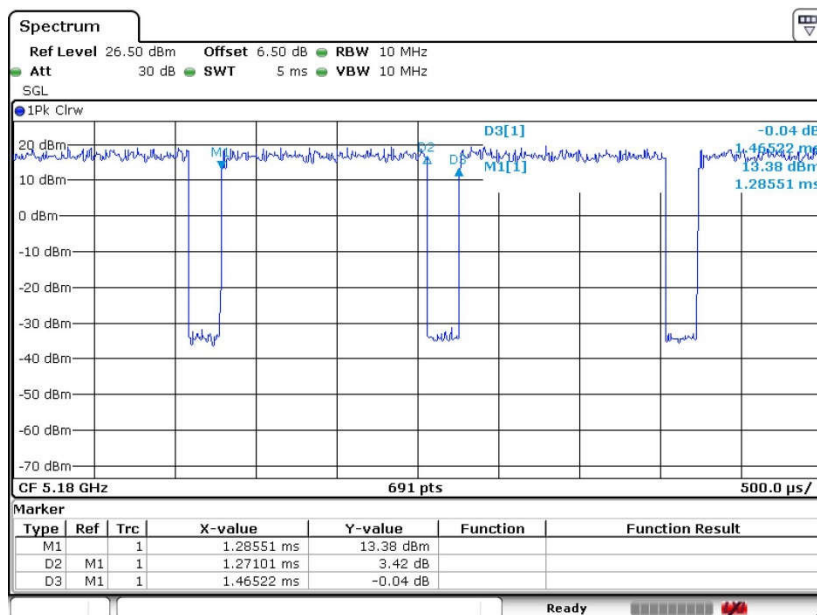
Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	95.46	1.37	0.73	1kHz
802.11n HT20	86.75	1.27	0.79	1kHz
802.11n HT40	76.17	0.64	1.56	3kHz
802.11ac VHT20	83.37	0.97	1.03	3kHz
802.11ac VHT40	70.92	0.49	2.04	3kHz
802.11ac VHT80	55.16	0.25	4.04	10kHz

802.11a

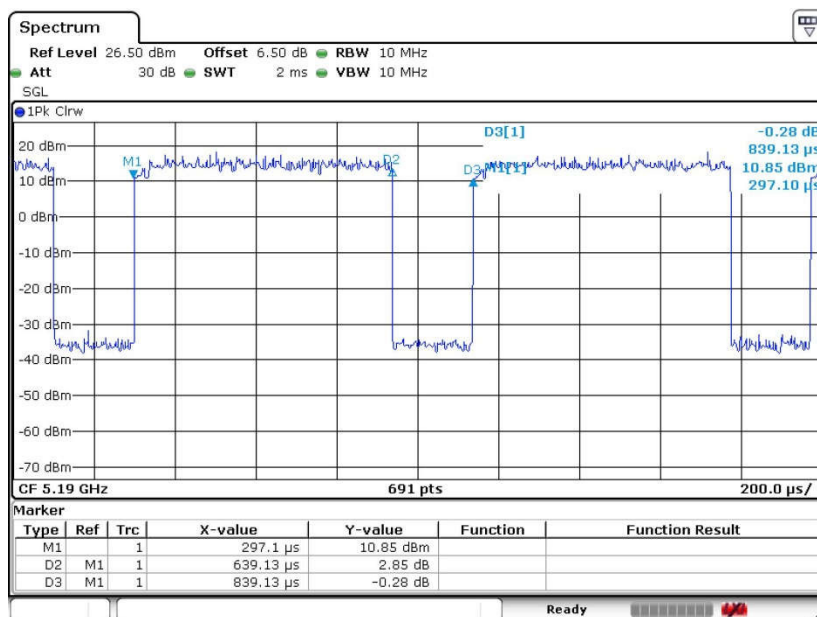




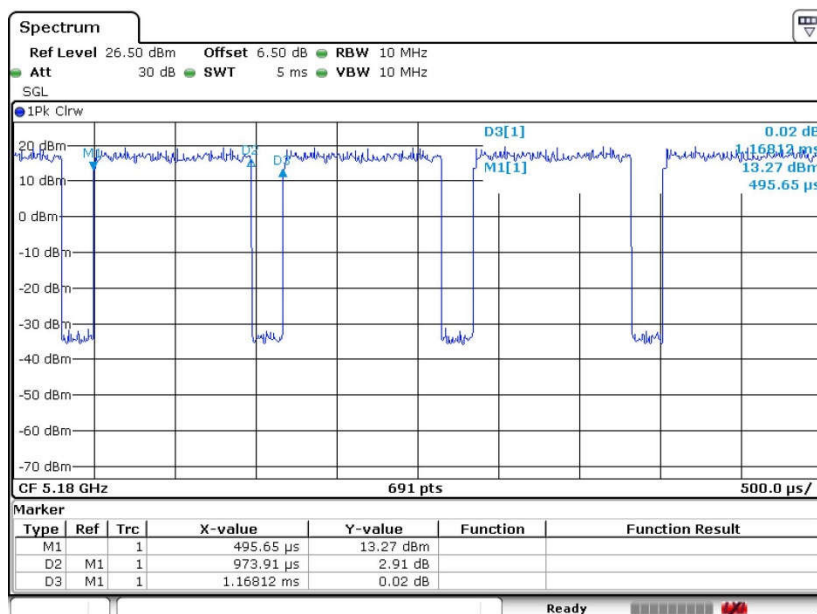
802.11n HT20



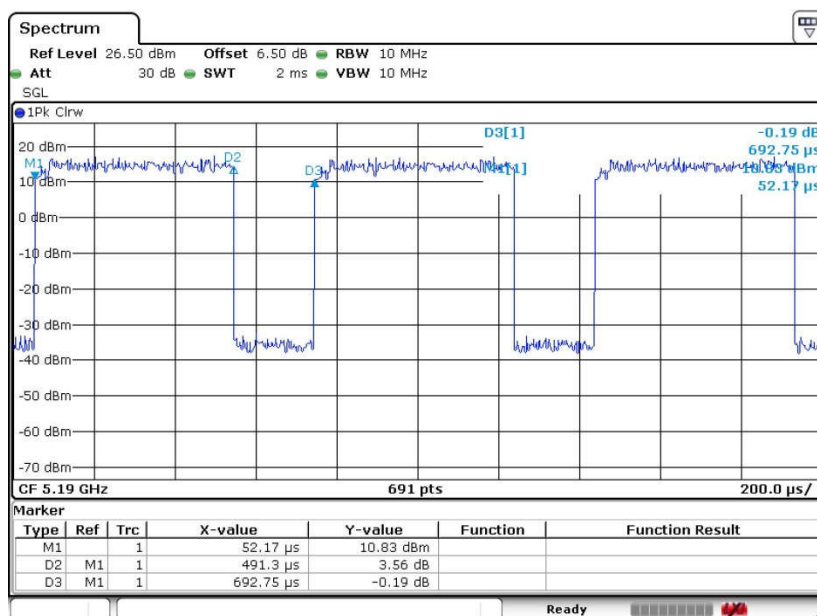
802.11n HT40



802.11ac VHT20



802.11ac VH40



802.11ac VHT80

