FCC RF Test Report

APPLICANT	:	**Sonim Technologies, Inc.**
EQUIPMENT	:	**LTE Phone**
BRAND NAME	:	**Sonim**
MODEL NAME	:	**XP5800(PC2111)**
FCC ID	:	**WYPPC2100**
STANDARD	:	**FCC Part 15 Subpart E §15.407**
CLASSIFICATION	:	**(NII) Unlicensed National Information Infrastructure**

The product was received on Sep. 21, 2017 and testing was completed on Oct. 03, 2017. 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.

James Huang

Approved by: James Huang / Manager

TESTING
NVLAP LAB CODE 600155-0

Sporton International (Kunshan) Inc.

No.3-2 Ping-Xiang Rd, Kunshan Development Zone Kunshan City Jiangsu Province 215335 China

TABLE OF CONTENTS

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 Modification of EUT 6
1.6 Testing Location 7
1.7 Applicable Standards 7

2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST **8**

2.1 Carrier Frequency Channel 8
2.2 Test Mode 9
2.3 Connection Diagram of Test System 10
2.4 Support Unit used in test configuration and system 11
2.5 EUT Operation Test Setup 11
2.6 Measurement Results Explanation Example 11

3 TEST RESULT **12**

3.1 26dB & 99% Occupied Bandwidth Measurement 12
3.2 Maximum Conducted Output Power Measurement 14
3.3 Power Spectral Density Measurement 16
3.4 Unwanted Radiated Emission Measurement 19
3.5 AC Conducted Emission Measurement 25
3.6 Frequency Stability Measurement 29
3.7 Automatically Discontinue Transmission 30
3.8 Antenna Requirements 31

4 LIST OF MEASURING EQUIPMENTS **32**

5 UNCERTAINTY OF EVALUATION **33**

APPENDIX A. CONDUCTED TEST RESULTS

APPENDIX B. RADIATED SPURIOUS EMISSION

APPENDIX C. DUTY CYCLE PLOTS

APPENDIX D. SETUP PHOTOGRAPHS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR792101D	Rev. 01	Initial issue of report	Dec. 04, 2017

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	15.407(b) 15.209(a)	Pass	Under limit 0.79 dB at 5469.84 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 13.72 dB at 0.162 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

Sonim Technologies, Inc.
1825 S. Grant St., Suite 200., San Mateo, CA, 94402

1.2 Manufacturer

Sonim Technologies (Shenzhen) Limited
2nd Floor, No. 2 Building Phase B, Daqian Industrial park, Longchang Road, 67 District, Baoan, Shenzhen, P. R. China

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	LTE Phone
Brand Name	Sonim
Model Name	XP5800(PC2111)
FCC ID	WYPPC2100
EUT supports Radios application	CDMA/EV-DO/GSM/GPRS/EGPRS/WCDMA/HSPA/ DC-HSDPA/HSPA+(16QAM uplink is not supported)/LTE WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 5GHz 802.11a/n HT20/HT40 Bluetooth v3.0 + EDR/ v 4.0 LE/ v 4.2 LE
IMEI Code	Conducted: 001080001908574 Conduction: 001080001912444/001080001912451 Radiation: 001080001912568/001080001912576
HW Version	A
SW Version	5SA.0.0-00-7.1.2-00.25.01
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 ~ 5720 MHz
Maximum Output Power to Antenna	**<5180 MHz ~ 5240 MHz>** 802.11a : 17.04 dBm / 0.0506 W 802.11n HT20 : 16.39 dBm / 0.0436 W 802.11n HT40 : 14.91 dBm / 0.0310 W **<5260 MHz ~ 5320 MHz>** 802.11a : 16.83 dBm / 0.0482 W 802.11n HT20 : 16.10 dBm / 0.0407 W 802.11n HT40 : 14.95 dBm / 0.0313 W **<5500 MHz ~ 5720 MHz >** 802.11a : 16.59 dBm / 0.0456 W 802.11n HT20 : 15.53 dBm / 0.0357 W 802.11n HT40 : 14.46 dBm / 0.0279 W
99% Occupied Bandwidth	**5180 MHz ~ 5240 MHz>** 802.11a : 19.18 dBm 802.11n HT20 : 19.33 dBm 802.11n HT40 : 36.66 dBm **<5260 MHz ~ 5320 MHz>** 802.11a : 18.88 dBm 802.11n HT20 : 19.38 dBm 802.11n HT40 : 36.76 dBm **<5500 MHz ~ 5720 MHz >** 802.11a : 18.98 dBm 802.11n HT20 : 19.38 dBm 802.11n HT40 : 36.86 dBm
Antenna Gain / Gain	**<5180 MHz ~ 5240 MHz>** PIFA Antenna with gain 2.00 dBi **<5260 MHz ~ 5320 MHz >** PIFA Antenna with gain 2.00 dBi **<5500 MHz ~ 5720 MHz>** PIFA Antenna with gain 2.00 dBi
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)

1.5 Modification of EUT

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

1.6 Testing Location

Sporton Lab is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600155-0) and the FCC designation No is CN5013.

Test Site	Sporton International (Kunshan) Inc.			
Test Site Location	No.3-2 Ping-Xiang Rd, Kunshan Development Zone Kunshan City Jiangsu Province 215335 China TEL : +86-512-57900158 FAX : +86-512-57900958			
Test Site No.	**Sporton Site No.**			**FCC Test Firm Registration No.**
	TH01-KS	03CH02-KS	CO01-KS	630927

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

1.7 Applicable Standards

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

- FCC Part 15 Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04
- ANSI C63.10-2013

Remark:

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

2 Test Configuration of Equipment Under Test

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

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
	-	-	-	-

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5500-5720 MHz Band 3 (U-NII-2C)	100	5500	112	5560
	102*	5510	116	5580
	104	5520	132	5660
	-	-	134*	5670
	108	5540	136	5680
	110*	5550	140	5700

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

Note: The above Frequency and Channel in "*" 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

AC Conducted Emission	Mode 1 : GSM 850 Idle + Bluetooth Link + WLAN Link(5G) + USB Cable (Charging from Adapter)
Remark: For Radiated Test Cases, The tests were performance with Adapter, Earphone and USB Cable.	

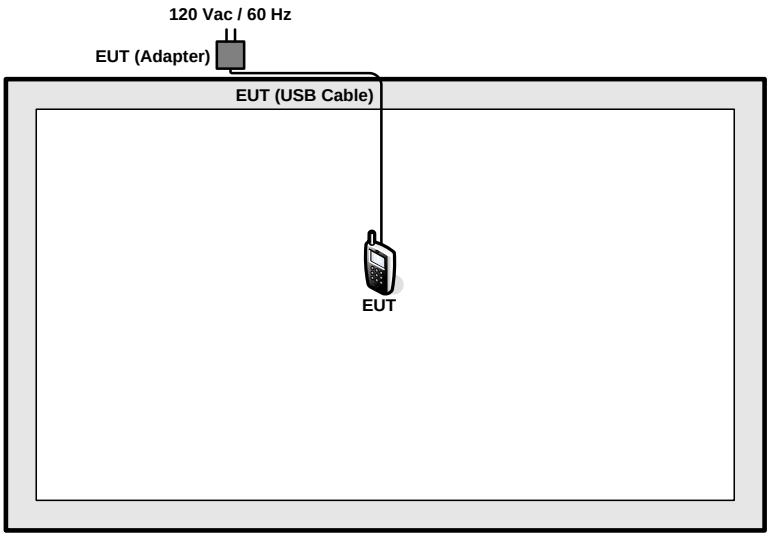
Ch. #		Band I：5180-5240 MHz	Band II：5260-5320 MHz	Band III：5500-5720MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

Ch. #		Band I：5180-5240 MHz	Band II：5260-5320 MHz	Band III：5500-5720MHz
		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		-	-	144

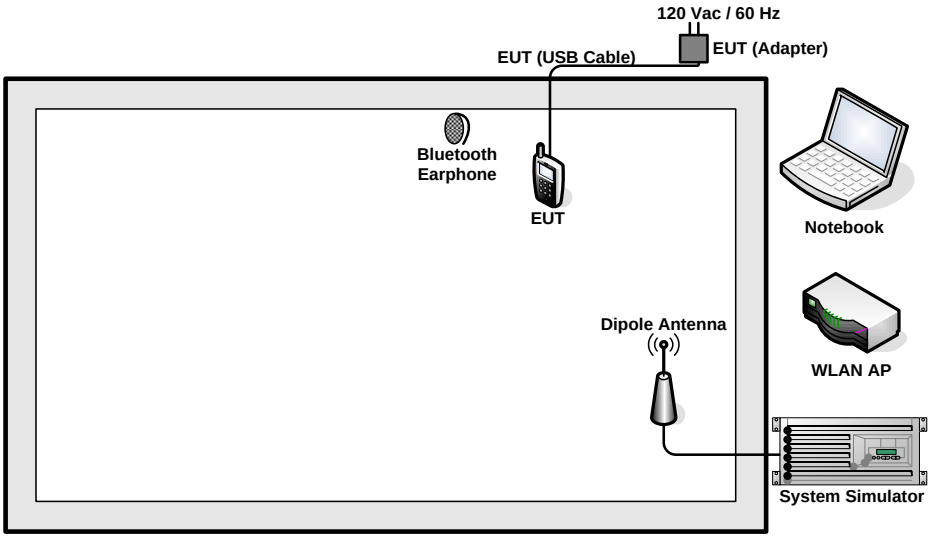
Ch. #		Band I：5180-5240 MHz	Band II：5260-5320 MHz	Band III：5500-5720MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle		-	-	142

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.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded,1.8m
2.	WLAN AP	D-link	DIR-855	KA2DIR855A2	N/A	Unshielded,1.8m
3.	Bluetooth Earphone	Lenovo	LBH308	N/A	N/A	N/A
4.	Notebook	Lenovo	G480	PRC4	N/A	shielded cable DC O/P 1.8m , Unshielded AC I/P cable 1.8m
5.	SD Card	Kingston	8GB	N/A	N/A	N/A

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 6.8 dB.

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

= 6.8 (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.

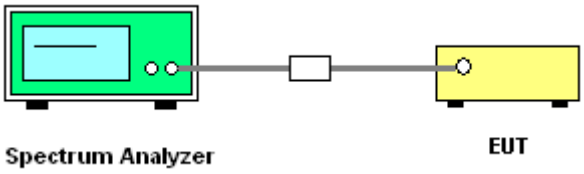
3.1.2 Measuring Instruments

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 v01r04. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1MHz and set the Video bandwidth (VBW) ≥ 3 * RBW.
8. Measure and record the results in the test report.

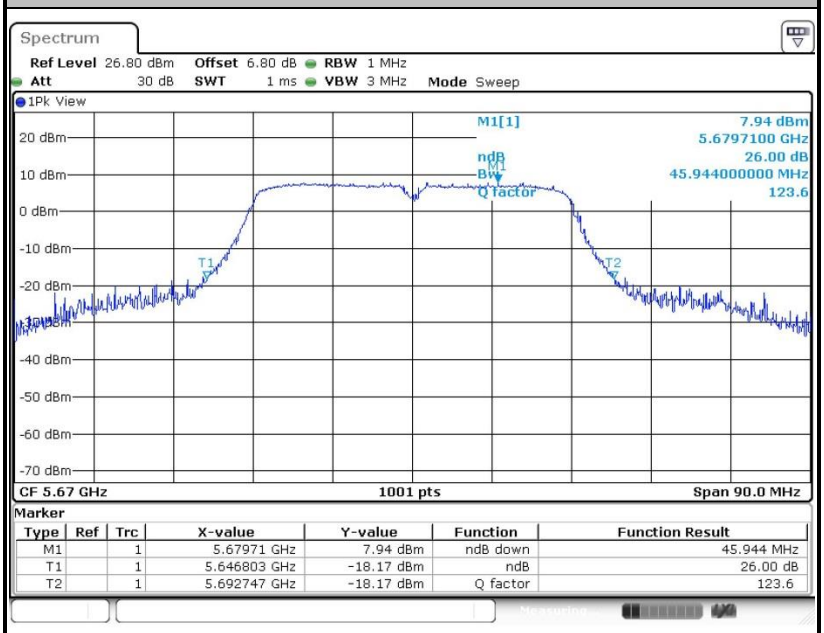
3.1.4 Test Setup



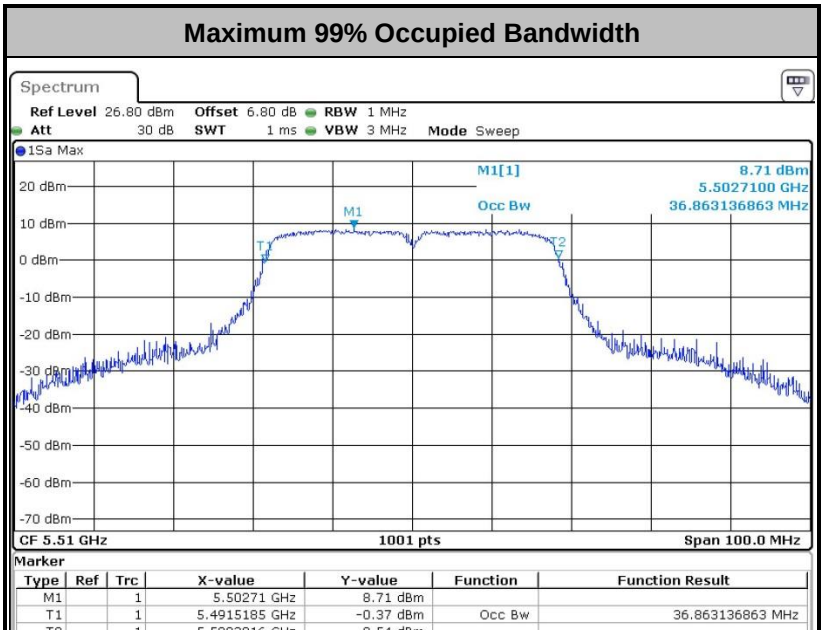
3.1.5 Test Result of 26dB & 99% Occupied Bandwidth Plots

Please refer to Appendix A.

Maximum 26dB Bandwidth



Maximum 99% Occupied Bandwidth



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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

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

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

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

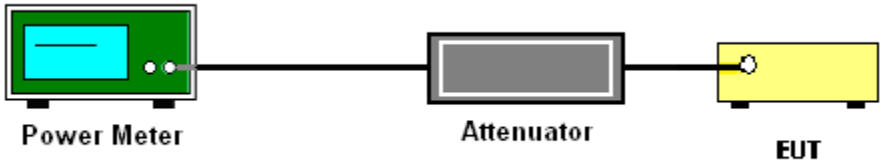
The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04.

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.

3.2.4 Test Setup

For normal channel:



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

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

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

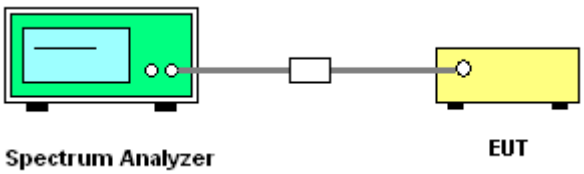
The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04. Section F) Maximum power spectral density.

 # 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 v01r04.
   - Measure the duty cycle.
   - Set span to encompass the entire emission bandwidth (EBW) of the signal.
   - Set RBW = 1 MHz.
   - Set VBW ≥ 3 MHz.
   - Number of points in sweep ≥ 2 Span / RBW.
   - Sweep time = auto.
   - Detector = RMS
   - Trace average at least 100 traces in power averaging mode.
   - Add 10 log(1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add 10 log(1/0.25) = 6 dB if the duty cycle is 25 percent.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.

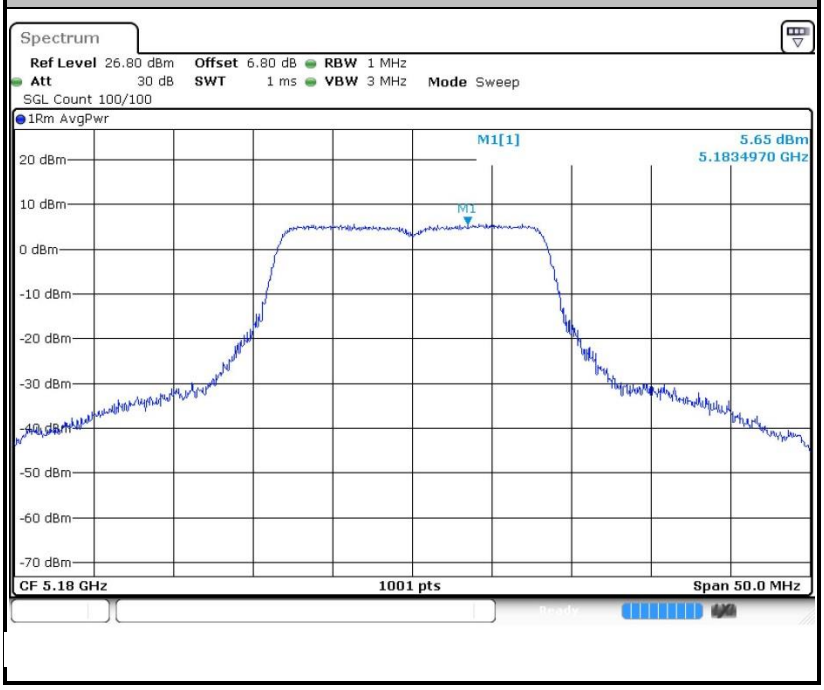
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Spectral Density(dBm/MHz)



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

3.4 Unwanted Radiated Emission Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

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 5470-5725MHz band: all emissions outside of the 5470-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

(2) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as below table

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

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

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

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

(3) KDB789033 D01 v01r04 G)2)c)

(i) Section 15.407(b)(1) to (b)(3) specify the unwanted emission limits for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.[3]

(ii) Section 15.407(b)(4) specifies the unwanted emission limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are in terms of a Peak detector. An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the devices using the alternative limit.[4]

Note 3: An out-of-band emission that complies with both the average and peak limits of Section 15.209 is not required to satisfy the -27 dBm/MHz peak emission limit.

Note 4: Only devices with antenna gains of 10 dBi or less may be approved using the emission limits specified in Section 15.247(d) till March 2, 2018; all other devices operating in this band must use the mask specified in Section 15.407(b)(4)(i).

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 v01r04. Section G) Unwanted emissions measurement.

   (1) Procedure for Unwanted Emissions Measurements Below 1000MHz

   - RBW = 120 kHz
   - VBW = 300 kHz
   - Detector = Peak
   - Trace mode = max hold

   (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz

   - RBW = 1 MHz
   - VBW ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

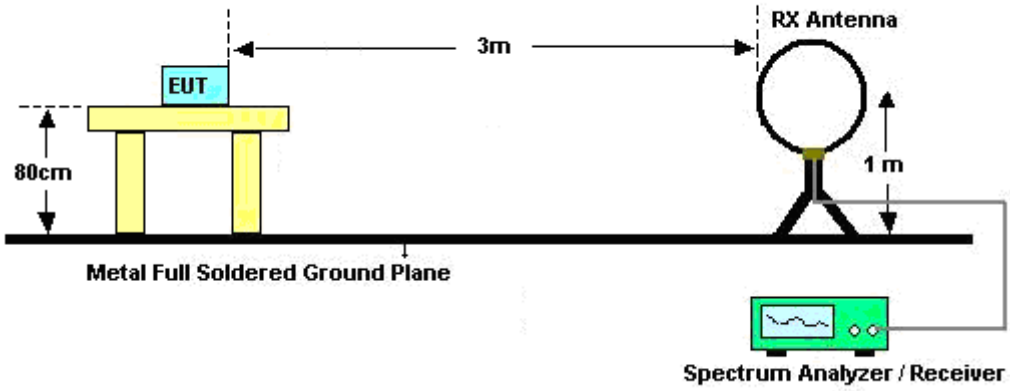
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

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

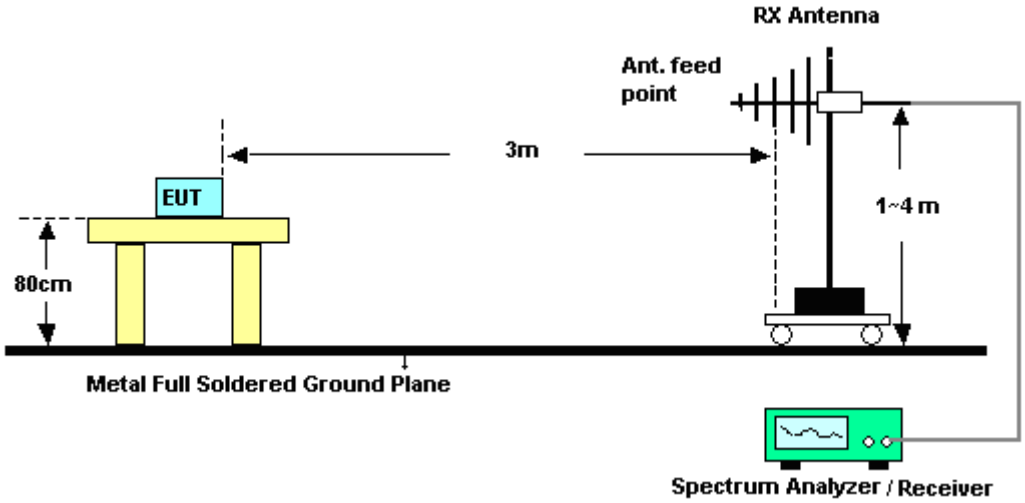
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.4.4 Test Setup

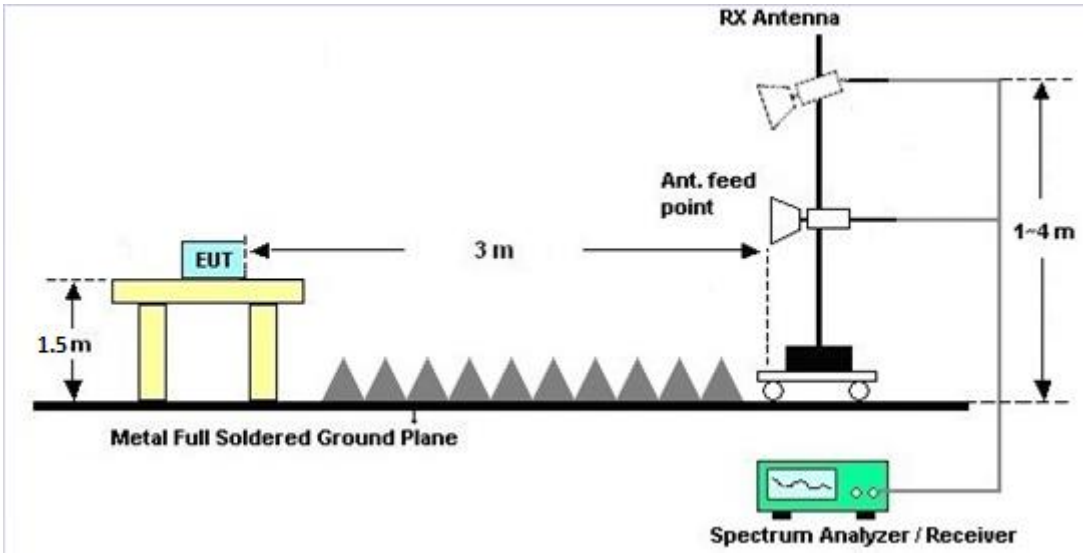
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.4.5 Test Results of Radiated Spurious 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 was not reported.

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B.

3.4.7 Duty Cycle

Please refer to Appendix C.

3.4.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix B.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

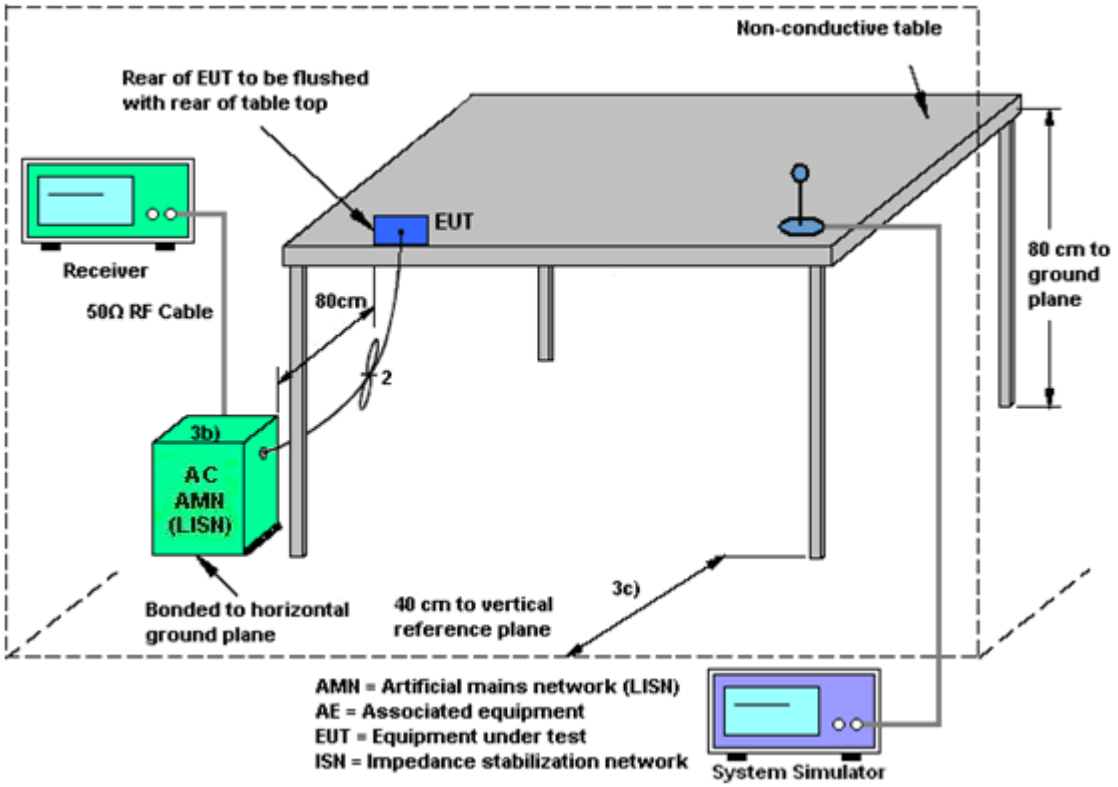
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

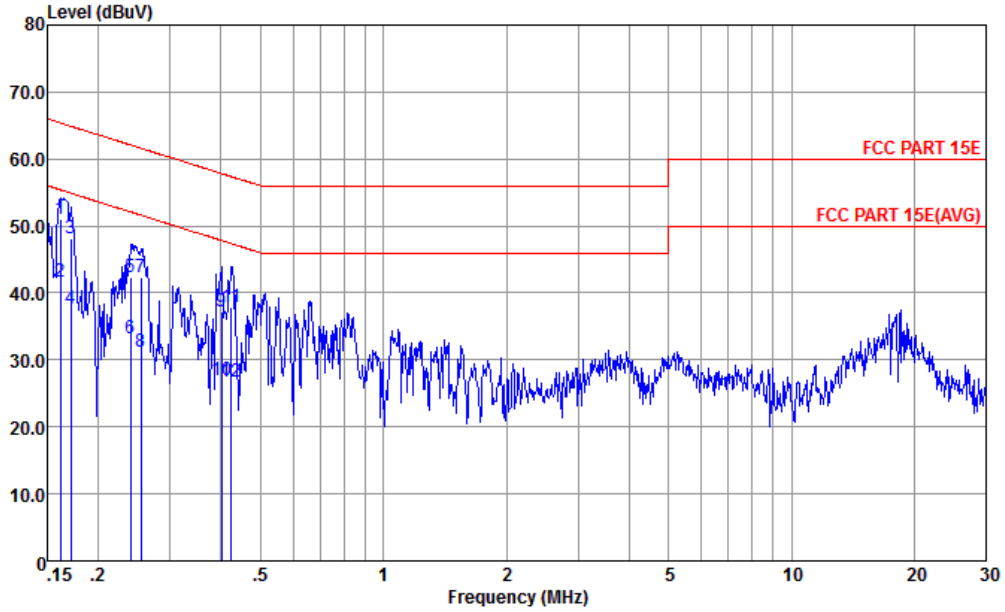
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.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

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

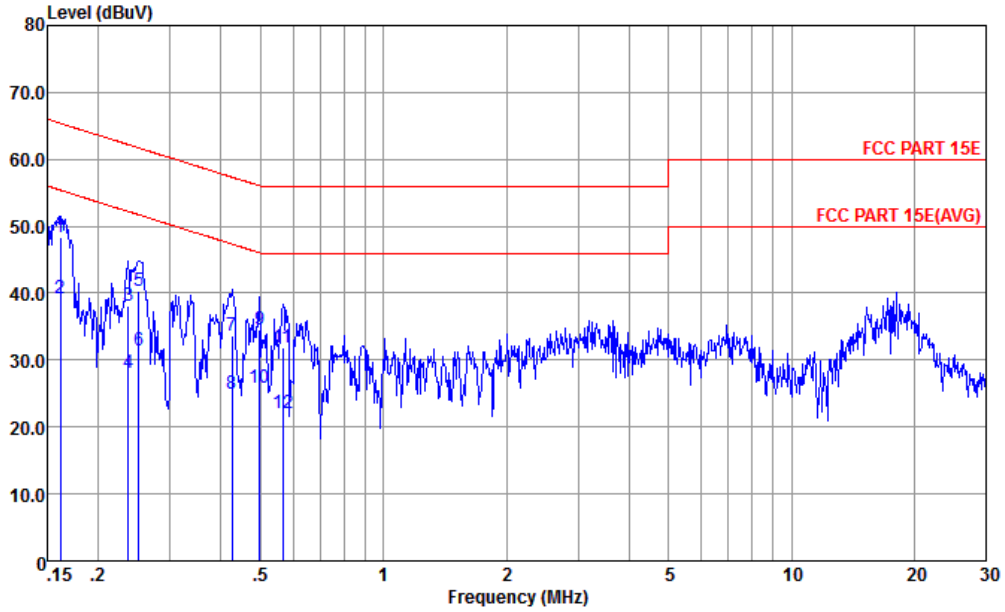
Test Mode :	Mode 1	**Temperature :**	22~24℃
Test Engineer :	Amos Zhang	**Relative Humidity :**	42~46%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Function Type :	GSM 850 Idle + Bluetooth Link + WLAN Link(5G) + USB Cable (Charging from Adapter)		



Site : CO01-KS
Condition : FCC PART 15E LISN-L-161017-060103 LINE

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.162	50.96	-14.42	65.38	39.90	0.48	10.58	QP
2 *	0.162	41.66	-13.72	55.38	30.60	0.48	10.58	Average
3	0.171	48.17	-16.73	64.90	37.20	0.42	10.55	QP
4	0.171	37.57	-17.33	54.90	26.60	0.42	10.55	Average
5	0.240	42.31	-19.77	62.08	31.60	0.27	10.44	QP
6	0.240	33.31	-18.77	52.08	22.60	0.27	10.44	Average
7	0.255	42.31	-19.29	61.60	31.60	0.27	10.44	QP
8	0.255	31.31	-20.29	51.60	20.60	0.27	10.44	Average
9	0.402	37.27	-20.54	57.81	26.60	0.27	10.40	QP
10	0.402	26.87	-20.94	47.81	16.20	0.27	10.40	Average
11	0.424	37.95	-19.42	57.37	27.30	0.27	10.38	QP
12	0.424	26.85	-20.52	47.37	16.20	0.27	10.38	Average

Test Mode :	Mode 1	**Temperature :**	22~24℃
Test Engineer :	Amos Zhang	**Relative Humidity :**	42~46%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Function Type :	GSM 850 Idle + Bluetooth Link + WLAN Link(5G) + USB Cable (Charging from Adapter)		



Site : CO01-KS
Condition : FCC PART 15E LISN-N-161017-060103 NEUTRAL

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.162	48.41	-16.97	65.38	37.49	0.34	10.58	QP
2	*	0.162	39.21	-16.17	55.38	28.29	0.34	10.58	Average
3		0.237	38.08	-24.14	62.22	27.30	0.34	10.44	QP
4		0.237	28.08	-24.14	52.22	17.30	0.34	10.44	Average
5		0.251	40.38	-21.35	61.73	29.60	0.34	10.44	QP
6		0.251	31.38	-20.35	51.73	20.60	0.34	10.44	Average
7		0.426	33.55	-23.78	57.33	22.80	0.37	10.38	QP
8		0.426	25.05	-22.28	47.33	14.30	0.37	10.38	Average
9		0.497	34.59	-21.46	56.05	23.90	0.38	10.31	QP
10		0.497	25.89	-20.16	46.05	15.20	0.38	10.31	Average
11		0.567	31.83	-24.17	56.00	21.20	0.38	10.25	QP
12		0.567	22.13	-23.87	46.00	11.50	0.38	10.25	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.

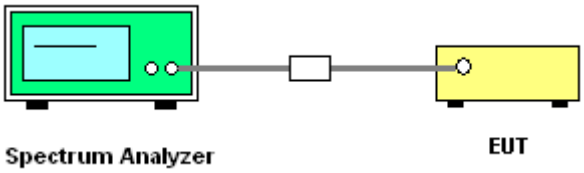
3.6.2 Measuring Instruments

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

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.8.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.8.3 Antenna Gain

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	Aug. 08, 2017	Oct. 03, 2017	Aug. 07, 2018	Conducted (TH01-KS)
Pulse Power Senor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 19, 2017	Oct. 03, 2017	Jan. 19, 2018	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 19, 2017	Oct. 03, 2017	Jan. 19, 2018	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	-40~+150°C	Oct.13, 2016	Oct. 03, 2017	Oct. 13, 2017	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Aug. 08, 2017	Oct. 03, 2017	Aug. 07, 2018	Radiation (03CH02-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz~44GHz, MAX 30dB	Apr. 18, 2017	Oct. 03, 2017	Apr. 17, 2018	Radiation (03CH02-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 23, 2016	Oct. 03, 2017	Nov.22, 2017	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6112D	23182	30MHz~2GHz	Jan. 22, 2017	Oct. 03, 2017	Jan. 21, 2018	Radiation (03CH02-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 22, 2016	Oct. 03, 2017	Oct. 21, 2017	Radiation (03CH02-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz~40GHz	Feb. 15, 2017	Oct. 03, 2017	Feb. 14, 2018	Radiation (03CH02-KS)
Amplifier	SONOMA	310N	187289	9kHz~1GHz	Aug. 07, 2017	Oct. 03, 2017	Aug. 06, 2018	Radiation (03CH02-KS)
high gain Amplifier	MITEQ	AMF-7D-0010 1800-30-10P	2012228	100MHz~18GHz	Apr. 18, 2017	Oct. 03, 2017	Apr. 17, 2018	Radiation (03CH02-KS)
Amplifier	Agilent	8449B	3008A02384	1GHz~26.5GHz	Oct. 13, 2016	Oct. 03, 2017	Oct. 12, 2017	Radiation (03CH02-KS)
Amplifier	MITEQ	TTA1840-35-HG	1887435	18GHz~40GHz	Oct. 13, 2016	Oct. 03, 2017	Oct. 12, 2017	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	Oct. 03, 2017	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Oct. 03, 2017	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Oct. 03, 2017	NCR	Radiation (03CH02-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 20, 2017	Sep. 28, 2017	Apr. 19, 2018	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 13, 2016	Sep. 28, 2017	Oct. 12, 2017	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 13, 2016	Sep. 28, 2017	Oct. 12, 2017	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 13, 2016	Sep. 28, 2017	Oct. 12, 2017	Conduction (CO01-KS)

5 Uncertainty of Evaluation

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.2 dB

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.7 dB

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.3 dB

Appendix A. Conducted Test Results

Report Number : FR792101D

Test Engineer:	Silent Hai	Temperature:	21~25	°C
Test Date:	2017/10/3	Relative Humidity:	51~55	%

Report Number : FR792101D

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	18.53	23.98	-	22.68		
11a	6Mbps	1	44	5220	19.18	24.68	-	22.83		
11a	6Mbps	1	48	5240	18.93	23.58	-	22.77		
HT20	MCS0	1	36	5180	19.03	23.83	-	22.79		
HT20	MCS0	1	44	5220	19.33	24.23	-	22.86		
HT20	MCS0	1	48	5240	19.23	24.08	-	22.84		
HT40	MCS0	1	38	5190	36.56	44.69	-	23.01		
HT40	MCS0	1	46	5230	36.66	44.87	-	23.01		

Report Number : FR792101D

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	0.58	16.89	24.00	2.00		Pass
11a	6Mbps	1	44	5220	0.58	17.04	24.00	2.00		Pass
11a	6Mbps	1	48	5240	0.58	16.80	24.00	2.00		Pass
HT20	MCS0	1	36	5180	0.62	16.08	24.00	2.00		Pass
HT20	MCS0	1	44	5220	0.62	16.39	24.00	2.00		Pass
HT20	MCS0	1	48	5240	0.62	16.14	24.00	2.00		Pass
HT40	MCS0	1	38	5190	0.64	14.76	24.00	2.00		Pass
HT40	MCS0	1	46	5230	0.64	14.91	24.00	2.00		Pass

Report Number : FR792101D

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	0.58	6.23	11.00	2.00		Pass
11a	6Mbps	1	44	5220	0.58	6.16	11.00	2.00		Pass
11a	6Mbps	1	48	5240	0.58	5.98	11.00	2.00		Pass
HT20	MCS0	1	36	5180	0.62	4.94	11.00	2.00		Pass
HT20	MCS0	1	44	5220	0.62	5.11	11.00	2.00		Pass
HT20	MCS0	1	48	5240	0.62	5.07	11.00	2.00		Pass
HT40	MCS0	1	38	5190	0.64	1.10	11.00	2.00		Pass
HT40	MCS0	1	46	5230	0.64	0.56	11.00	2.00		Pass

Report Number : FR792101D

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	18.83	23.83	23.75	29.75	23.98	
11a	6M bps	1	60	5300	18.88	23.78	23.76	29.76	23.98	
11a	6M bps	1	64	5320	18.68	23.53	23.71	29.71	23.98	
HT20	MCS 0	1	52	5260	19.38	24.18	23.87	29.87	23.98	
HT20	MCS 0	1	60	5300	19.38	23.93	23.87	29.87	23.98	
HT20	MCS 0	1	64	5320	19.23	23.98	23.84	29.84	23.98	
HT40	MCS 0	1	54	5270	36.66	44.33	23.98	30.00	23.98	
HT40	MCS 0	1	62	5310	36.76	44.42	23.98	30.00	23.98	

Report Number : FR792101D

TEST RESULTS DATA
Average Power Table

FCC Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)	EIRP Power Limit (dBm)	Pass/Fail
11a	6M bps	1	52	5260	0.58	16.83	23.98	2.00	26.99	Pass
11a	6M bps	1	60	5300	0.58	16.70	23.98	2.00	26.99	Pass
11a	6M bps	1	64	5320	0.58	16.45	23.98	2.00	26.99	Pass
HT20	MCS 0	1	52	5260	0.62	16.10	23.98	2.00	26.99	Pass
HT20	MCS 0	1	60	5300	0.62	16.05	23.98	2.00	26.99	Pass
HT20	MCS 0	1	64	5320	0.62	15.69	23.98	2.00	26.99	Pass
HT40	MCS 0	1	54	5270	0.64	14.95	23.98	2.00	26.99	Pass
HT40	MCS 0	1	62	5310	0.64	14.72	23.98	2.00	26.99	Pass

Report Number : FR792101D

TEST RESULTS DATA
Power Spectral Density

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)		Pass/Fail
11a	6M bps	1	52	5260	0.58	6.09	11.00	2.00		Pass
11a	6M bps	1	60	5300	0.58	5.79	11.00	2.00		Pass
11a	6M bps	1	64	5320	0.58	5.40	11.00	2.00		Pass
HT20	MCS 0	1	52	5260	0.62	4.95	11.00	2.00		Pass
HT20	MCS 0	1	60	5300	0.62	4.87	11.00	2.00		Pass
HT20	MCS 0	1	64	5320	0.62	4.31	11.00	2.00		Pass
HT40	MCS 0	1	54	5270	0.64	0.90	11.00	2.00		Pass
HT40	MCS 0	1	62	5310	0.64	0.61	11.00	2.00		Pass

Report Number : FR792101D

TEST RESULTS DATA
26dB and 99% OBW

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)	FCC 26dB Bandwidth Power Limit (dBm)	Note
11a	6M bps	1	100	5500	18.83	24.13	23.75	29.75	23.98	
11a	6M bps	1	116	5580	18.88	24.33	23.76	29.76	23.98	
11a	6M bps	1	140	5700	18.98	25.87	23.78	29.78	23.98	
11a	6M bps	1	144	5720	18.93	24.38	23.77	29.77	23.98	
HT20	MCS 0	1	100	5500	19.33	23.98	23.86	29.86	23.98	
HT20	MCS 0	1	116	5580	19.38	23.68	23.87	29.87	23.98	
HT20	MCS 0	1	140	5700	19.38	24.08	23.87	29.87	23.98	
HT20	MCS 0	1	144	5720	19.38	23.73	23.87	29.87	23.98	
HT40	MCS 0	1	102	5510	36.86	45.50	23.98	30.00	23.98	
HT40	MCS 0	1	110	5550	36.66	45.41	23.98	30.00	23.98	
HT40	MCS 0	1	134	5670	36.76	45.94	23.98	30.00	23.98	
HT40	MCS 0	1	142	5710	36.76	45.23	23.98	30.00	23.98	

Report Number : FR792101D

TEST RESULTS DATA
Average Power Table

FCC Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)	EIRP Power Limit (dBm)	Pass/Fail
11a	6M bps	1	100	5500	0.58	16.59	23.98	2.00	26.99	Pass
11a	6M bps	1	116	5580	0.58	16.05	23.98	2.00	26.99	Pass
11a	6M bps	1	140	5700	0.58	16.45	23.98	2.00	26.99	Pass
11a	6Mbps	1	144	5720	0.58	15.99	23.98	2.00	26.99	Pass
HT20	MCS 0	1	100	5500	0.62	15.53	23.98	2.00	26.99	Pass
HT20	MCS 0	1	116	5580	0.62	15.16	23.98	2.00	26.99	Pass
HT20	MCS 0	1	140	5700	0.62	15.29	23.98	2.00	26.99	Pass
HT20	MCS0	1	144	5720	0.62	14.96	23.98	2.00	26.99	Pass
HT40	MCS 0	1	102	5510	0.64	13.95	23.98	2.00	26.99	Pass
HT40	MCS 0	1	110	5550	0.64	14.46	23.98	2.00	26.99	Pass
HT40	MCS 0	1	134	5670	0.64	13.97	23.98	2.00	26.99	Pass
HT40	MCS0	1	142	5710	0.64	14.18	23.98	2.00	26.99	Pass

Report Number : FR792101D

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	0.58	5.41	11.00	2.00		Pass
11a	6M bps	1	116	5580	0.58	5.15	11.00	2.00		Pass
11a	6M bps	1	140	5700	0.58	5.34	11.00	2.00		Pass
11a	6Mbps	1	144	5720	0.58	5.78	11.00	2.00		Pass
HT20	MCS 0	1	100	5500	0.62	3.80	11.00	2.00		Pass
HT20	MCS 0	1	116	5580	0.62	3.64	11.00	2.00		Pass
HT20	MCS 0	1	140	5700	0.62	3.95	11.00	2.00		Pass
HT20	MCS0	1	144	5720	0.62	3.96	11.00	2.00		Pass
HT40	MCS 0	1	102	5510	0.64	0.41	11.00	2.00		Pass
HT40	MCS 0	1	110	5550	0.64	0.40	11.00	2.00		Pass
HT40	MCS 0	1	134	5670	0.64	-0.29	11.00	2.00		Pass
HT40	MCS0	1	142	5710	0.64	0.51	11.00	2.00		Pass

Report Number : FR792101D

TEST RESULTS DATA
Frequency Stability

Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	36	5180	5179.975	-0.025	-4.83	50	3.7	
11a	6Mbps	1	36	5180	5180.025	0.025	4.83	-30	3.7	
11a	6Mbps	1	36	5180	5179.975	-0.025	-4.83	20	4.2	
11a	6Mbps	1	36	5180	5179.975	-0.025	-4.83	20	3.5	
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	3.7	

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	64	5320	5319.950	-0.050	-9.40	50	3.7	
11a	6Mbps	1	64	5320	5320.025	0.025	4.70	-30	3.7	
11a	6Mbps	1	64	5320	5319.975	-0.025	-4.70	20	4.2	
11a	6Mbps	1	64	5320	5319.950	-0.050	-9.40	20	3.5	
11a	6Mbps	1	64	5320	5319.975	-0.025	-4.70	20	3.7	

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	100	5500	5499.975	-0.025	-4.55	50	3.7	
11a	6Mbps	1	100	5500	5500.050	0.050	9.09	-30	3.7	
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	4.2	
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	3.5	
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	3.7	

Appendix B. Radiated Spurious Emission

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5143.52	61.96	-12.04	74	53.12	35.11	7.77	34.04	100	100	P	H
		5127.68	46.66	-7.34	54	37.8	35.12	7.78	34.04	100	100	A	H
	*	5174	107.47	-	-	98.81	35.09	7.76	34.19	100	100	P	H
	*	5174	97.72	-	-	89.06	35.09	7.76	34.19	100	100	A	H
		5148	61.13	-12.87	74	52.37	35.11	7.77	34.12	100	138	P	V
		5149.9	47.98	-6.02	54	39.22	35.11	7.77	34.12	100	138	A	V
	*	5174	104.31	-	-	95.65	35.09	7.76	34.19	100	138	P	V
	*	5174	97.34	-	-	88.68	35.09	7.76	34.19	100	138	A	V
802.11a CH 44 5220MHz		5149.76	54.61	-19.39	74	45.85	35.11	7.77	34.12	100	100	P	H
		5129.44	42.51	-11.49	54	33.65	35.12	7.78	34.04	100	100	A	H
	*	5216	105.91	-	-	97.35	35.07	7.76	34.27	100	100	P	H
	*	5216	96.89	-	-	88.33	35.07	7.76	34.27	100	100	A	H
		5387.94	53.26	-20.74	74	45.16	34.96	7.93	34.79	100	100	P	H
		5392.8	40.97	-13.03	54	32.87	34.96	7.93	34.79	100	100	A	H
		5107.68	53.9	-20.1	74	44.93	35.14	7.8	33.97	100	143	P	V
		5101.44	42.23	-11.77	54	33.25	35.15	7.8	33.97	100	140	A	V
	*	5212	104.96	-	-	96.4	35.07	7.76	34.27	100	143	P	V
	*	5212	95.71	-	-	87.15	35.07	7.76	34.27	100	143	A	V
		5392.8	52.01	-21.99	74	43.91	34.96	7.93	34.79	100	143	P	V
		5397.48	40.82	-13.18	54	32.73	34.95	7.93	34.79	100	143	A	V

802.11a CH 48 5240MHz	*	5244	107.12	-	-	98.62	35.05	7.79	34.34	100	146	P	H
	*	5244	99.7	-	-	91.2	35.05	7.79	34.34	100	146	A	H
		5387.04	53.28	-20.72	74	45.18	34.96	7.93	34.79	100	146	P	H
		5389.74	43.58	-10.42	54	35.48	34.96	7.93	34.79	100	146	A	H
	*	5246	105.56	-	-	97.14	35.05	7.79	34.42	288	137	P	V
	*	5246	98.53	-	-	90.11	35.05	7.79	34.42	288	137	A	V
		5395.32	52.46	-21.54	74	44.37	34.95	7.93	34.79	288	137	P	V
		5386.86	43.4	-10.6	54	35.3	34.96	7.93	34.79	288	137	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a		10360	49.33	-24.67	74	65.77	38.4	11.31	66.15	100	0	P	H
CH 36		10360	54.32	-19.68	74	70.76	38.4	11.31	66.15	110	255	P	V
5180MHz	!	10360	51.58	-2.42	54	68.02	38.4	11.31	66.15	110	258	A	V
802.11a		10440	50.38	-23.62	74	66.66	38.45	11.37	66.1	300	360	P	H
CH 44		10440	53.86	-20.14	74	70.14	38.45	11.37	66.1	100	255	P	V
5220MHz	!	10440	50.83	-3.17	54	67.11	38.45	11.37	66.1	100	255	A	V
802.11a		10480	49.29	-24.71	74	65.46	38.49	11.41	66.07	100	0	P	H
CH 48		10480	53.69	-20.31	74	69.86	38.49	11.41	66.07	125	261	P	V
5240MHz	!	10480	50.52	-3.48	54	66.69	38.49	11.41	66.07	125	260	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		5148.96	62.99	-11.01	74	54.23	35.11	7.77	34.12	101	160	P	H
	!	5149.92	49.66	-4.34	54	40.9	35.11	7.77	34.12	101	160	A	H
	*	5174	106.14	-	-	97.48	35.09	7.76	34.19	101	160	P	H
	*	5174	98.87	-	-	90.21	35.09	7.76	34.19	101	160	A	H
		5149.76	64.15	-9.85	74	55.39	35.11	7.77	34.12	100	326	P	V
	!	5149.99	48.33	-5.67	54	39.57	35.11	7.77	34.12	100	326	A	V
	*	5176	103.84	-	-	95.18	35.09	7.76	34.19	100	326	P	V
	*	5176	97.09	-	-	88.43	35.09	7.76	34.19	100	326	A	V
802.11n HT20 CH 44 5220MHz		5125.44	53.88	-20.12	74	45.02	35.12	7.78	34.04	100	168	P	H
		5101.12	44.53	-9.47	54	35.55	35.15	7.8	33.97	100	168	A	H
	*	5226	106.76	-	-	98.28	35.06	7.76	34.34	100	168	P	H
	*	5226	99.93	-	-	91.45	35.06	7.76	34.34	100	168	A	H
		5388.66	52.73	-21.27	74	44.63	34.96	7.93	34.79	100	168	P	H
		5395.32	42.85	-11.15	54	34.76	34.95	7.93	34.79	100	168	A	H
		5136.64	53.52	-20.48	74	44.66	35.12	7.78	34.04	142	327	P	V
		5102.56	44.5	-9.5	54	35.52	35.15	7.8	33.97	142	327	A	V
	*	5216	103.89	-	-	95.33	35.07	7.76	34.27	142	327	P	V
	*	5216	96.53	-	-	87.97	35.07	7.76	34.27	142	327	A	V
		5356.26	51.76	-22.24	74	43.6	34.98	7.9	34.72	142	327	P	V
		5399.99	42.84	-11.16	54	34.83	34.95	7.93	34.87	142	327	A	V

802.11n HT20 CH 48 5240MHz	*	5248	106.28	-	-	97.86	35.05	7.79	34.42	101	162	P	H
	*	5248	97.73	-	-	89.31	35.05	7.79	34.42	101	162	A	H
		5396.4	52.35	-21.65	74	44.26	34.95	7.93	34.79	101	162	P	H
		5386.14	43.18	-10.82	54	35.08	34.96	7.93	34.79	101	162	A	H
	*	5244	103.39	-	-	94.89	35.05	7.79	34.34	111	328	P	V
	*	5244	95.86	-	-	87.36	35.05	7.79	34.34	111	328	A	V
		5395.14	52.01	-21.99	74	43.92	34.95	7.93	34.79	111	328	P	V
		5397.66	42.91	-11.09	54	34.82	34.95	7.93	34.79	111	328	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	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	49.91	-24.09	74	66.35	38.4	11.31	66.15	100	360	P	H
		10360	54.11	-19.89	74	70.55	38.4	11.31	66.15	100	256	P	V
	!	10360	50.97	-3.03	54	67.41	38.4	11.31	66.15	100	256	A	V
802.11n HT20 CH 44 5220MHz		10440	48.36	-25.64	74	64.64	38.45	11.37	66.1	300	360	P	H
		10440	53.72	-20.28	74	70	38.45	11.37	66.1	100	259	P	V
	!	10440	50.41	-3.59	54	66.69	38.45	11.37	66.1	100	259	A	V
802.11n HT20 CH 48 5240MHz		10480	48.47	-25.53	74	64.64	38.49	11.41	66.07	300	359	P	H
		10480	50.95	-23.05	74	67.12	38.49	11.41	66.07	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 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		5143.36	61.47	-12.53	74	52.63	35.11	7.77	34.04	100	145	P	H
	!	5149.99	51.77	-2.23	54	43.01	35.11	7.77	34.12	100	145	A	H
	*	5176	102.55	-	-	93.89	35.09	7.76	34.19	100	145	P	H
	*	5176	95.35	-	-	86.69	35.09	7.76	34.19	100	145	A	H
		5398.02	51.81	-22.19	74	43.72	34.95	7.93	34.79	100	145	P	H
		5391.72	43.05	-10.95	54	34.95	34.96	7.93	34.79	100	145	A	H
		5146.08	59.63	-14.37	74	50.87	35.11	7.77	34.12	100	299	P	V
	!	5149.99	50.22	-3.78	54	41.46	35.11	7.77	34.12	100	299	A	V
	*	5200	100.43	-	-	91.88	35.08	7.74	34.27	100	299	P	V
	*	5200	93.2	-	-	84.65	35.08	7.74	34.27	100	299	A	V
		5396.22	52.41	-21.59	74	44.32	34.95	7.93	34.79	100	299	P	V
		5395.14	42.97	-11.03	54	34.88	34.95	7.93	34.79	100	299	A	V
802.11n HT40 CH 46 5230MHz		5111.04	54.53	-19.47	74	45.56	35.14	7.8	33.97	100	145	P	H
		5127.04	45.32	-8.68	54	36.46	35.12	7.78	34.04	100	145	A	H
	*	5240	102.19	-	-	93.68	35.06	7.79	34.34	100	145	P	H
	*	5240	94.88	-	-	86.37	35.06	7.79	34.34	100	145	A	H
		5389.38	51.58	-22.42	74	43.48	34.96	7.93	34.79	100	145	P	H
		5390.28	42.96	-11.04	54	34.86	34.96	7.93	34.79	100	145	A	H
		5116	54.45	-19.55	74	45.5	35.14	7.78	33.97	304	137	P	V
		5100	44.57	-9.43	54	35.59	35.15	7.8	33.97	304	137	A	V
	*	5226	99.81	-	-	91.33	35.06	7.76	34.34	304	137	P	V
	*	5226	92.76	-	-	84.28	35.06	7.76	34.34	304	137	A	V
		5385.42	52.24	-21.76	74	44.14	34.96	7.93	34.79	304	137	P	V
		5389.74	42.91	-11.09	54	34.81	34.96	7.93	34.79	304	137	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		10380	48.86	-25.14	74	65.26	38.41	11.33	66.14	300	360	P	H
		10380	54.35	-19.65	74	70.75	38.41	11.33	66.14	107	257	P	V
	!	10380	51.23	-2.77	54	67.63	38.41	11.33	66.14	107	257	A	V
802.11n HT40 CH 46 5230MHz		10460	48.2	-25.8	74	64.44	38.46	11.39	66.09	100	0	P	H
		10460	53.88	-20.12	74	70.12	38.46	11.39	66.09	100	255	P	V
	!	10460	50.98	-3.02	54	67.22	38.46	11.39	66.09	105	256	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 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 52 5260MHz		5114.72	54.34	-19.66	74	45.37	35.14	7.8	33.97	168	165	P	H
		5109.6	45.02	-8.98	54	36.05	35.14	7.8	33.97	168	165	A	H
	*	5256	107.72	-	-	99.3	35.05	7.79	34.42	168	165	P	H
	*	5256	100.57	-	-	92.15	35.05	7.79	34.42	168	165	A	H
		5113.28	54.52	-19.48	74	45.55	35.14	7.8	33.97	162	356	P	V
		5100	44.74	-9.26	54	35.76	35.15	7.8	33.97	162	356	A	V
	*	5264	105.34	-	-	96.91	35.04	7.81	34.42	162	356	P	V
	*	5264	98.22	-	-	89.79	35.04	7.81	34.42	162	356	A	V
802.11a CH 60 5300MHz		5105.76	54.77	-19.23	74	45.8	35.14	7.8	33.97	126	166	P	H
		5100.48	45.67	-8.33	54	36.69	35.15	7.8	33.97	126	166	A	H
	*	5306	107.34	-	-	99.06	35.02	7.83	34.57	126	166	P	H
	*	5306	100	-	-	91.72	35.02	7.83	34.57	126	166	A	H
		5352.1	55.43	-18.57	74	47.29	34.98	7.88	34.72	126	166	P	H
		5352.4	46.97	-7.03	54	38.83	34.98	7.88	34.72	126	166	A	H
		5112	54.53	-19.47	74	45.56	35.14	7.8	33.97	300	122	P	V
		5101.6	45.18	-8.82	54	36.2	35.15	7.8	33.97	300	122	A	V
	*	5306	105.7	-	-	97.42	35.02	7.83	34.57	300	122	P	V
	*	5306	98.21	-	-	89.93	35.02	7.83	34.57	300	122	A	V
		5353.6	53.41	-20.59	74	45.27	34.98	7.88	34.72	300	122	P	V
		5352.5	45.42	-8.58	54	37.28	34.98	7.88	34.72	300	122	A	V

802.11a CH 64 5320MHz	*	5326	108.19	-	-	99.96	35.01	7.86	34.64	221	165	P	H
	*	5326	100.61	-	-	92.38	35.01	7.86	34.64	221	165	A	H
		5354.1	58.51	-15.49	74	50.37	34.98	7.88	34.72	221	165	P	H
		5350.2	46.84	-7.16	54	38.7	34.98	7.88	34.72	221	165	A	H
	*	5324	106.41	-	-	98.18	35.01	7.86	34.64	138	357	P	V
	*	5324	99.12	-	-	90.89	35.01	7.86	34.64	138	357	A	V
		5353.7	58.5	-15.5	74	50.36	34.98	7.88	34.72	138	357	P	V
		5372.5	46.44	-7.56	54	38.29	34.97	7.9	34.72	138	357	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a		10520	48.66	-25.34	74	64.73	38.52	11.45	66.04	100	360	P	H
CH 52		10520	53.08	-20.92	74	69.15	38.52	11.45	66.04	100	254	P	V
5260MHz	!	10520	50.18	-3.82	54	66.25	38.52	11.45	66.04	100	257	A	V
802.11a		10600	48.67	-25.33	74	64.55	38.59	11.51	65.98	100	0	P	H
CH 60		10600	53.36	-20.64	74	69.24	38.59	11.51	65.98	100	252	P	V
5300MHz	!	10600	50.26	-3.74	54	66.14	38.59	11.51	65.98	100	252	A	V
802.11a		10640	49.51	-24.49	74	65.31	38.61	11.55	65.96	100	360	P	H
CH 64		10640	53.1	-20.9	74	68.9	38.61	11.55	65.96	100	251	P	V
5320MHz	!	10640	49.96	-4.04	54	65.76	38.61	11.55	65.96	101	252	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		5111.04	53.7	-20.3	74	44.73	35.14	7.8	33.97	124	168	P	H
		5108.48	44.62	-9.38	54	35.65	35.14	7.8	33.97	124	168	A	H
	*	5254	104.9	-	-	96.48	35.05	7.79	34.42	124	168	P	H
	*	5254	97.93	-	-	89.51	35.05	7.79	34.42	124	168	A	H
		5145.6	53.88	-20.12	74	45.12	35.11	7.77	34.12	100	329	P	V
		5111.04	44.39	-9.61	54	35.42	35.14	7.8	33.97	100	329	A	V
	*	5256	103.88	-	-	95.46	35.05	7.79	34.42	100	329	P	V
	*	5256	96.75	-	-	88.33	35.05	7.79	34.42	100	329	A	V
802.11n HT20 CH 60 5300MHz		5115.52	53.9	-20.1	74	44.93	35.14	7.8	33.97	155	166	P	H
		5100.32	44.95	-9.05	54	35.97	35.15	7.8	33.97	155	166	A	H
	*	5306	105.52	-	-	97.24	35.02	7.83	34.57	155	166	P	H
	*	5306	98.19	-	-	89.91	35.02	7.83	34.57	155	166	A	H
		5351.8	53.8	-20.2	74	45.66	34.98	7.88	34.72	155	166	P	H
		5351.7	46.5	-7.5	54	38.36	34.98	7.88	34.72	155	166	A	H
		5137.92	53.77	-20.23	74	44.91	35.12	7.78	34.04	118	329	P	V
		5101.12	44.81	-9.19	54	35.83	35.15	7.8	33.97	118	329	A	V
	*	5306	103.94	-	-	95.66	35.02	7.83	34.57	118	329	P	V
	*	5306	96.45	-	-	88.17	35.02	7.83	34.57	118	329	A	V
		5351.8	53.18	-20.82	74	45.04	34.98	7.88	34.72	118	329	P	V
		5351.6	45.72	-8.28	54	37.58	34.98	7.88	34.72	118	329	A	V

802.11n HT20 CH 64 5320MHz	*	5326	104.92	-	-	96.69	35.01	7.86	34.64	133	163	P	H
	*	5326	97.53	-	-	89.3	35.01	7.86	34.64	133	163	A	H
		5351.5	57.28	-16.72	74	49.14	34.98	7.88	34.72	133	163	P	H
		5350.01	46.34	-7.66	54	38.2	34.98	7.88	34.72	133	163	A	H
	*	5324	103.94	-	-	95.71	35.01	7.86	34.64	100	330	P	V
	*	5324	96.44	-	-	88.21	35.01	7.86	34.64	100	330	A	V
		5351.6	54.47	-19.53	74	46.33	34.98	7.88	34.72	100	330	P	V
		5371.8	45.03	-8.97	54	36.88	34.97	7.9	34.72	100	330	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		10520	48.14	-25.86	74	64.21	38.52	11.45	66.04	300	360	P	H
		10520	50.89	-23.11	74	66.96	38.52	11.45	66.04	100	0	P	V
802.11n HT20 CH 60 5300MHz		10600	48.67	-25.33	74	64.55	38.59	11.51	65.98	300	360	P	H
		10600	50.95	-23.05	74	66.83	38.59	11.51	65.98	100	0	P	V
802.11n HT20 CH 64 5320MHz		10640	49.23	-24.77	74	65.03	38.61	11.55	65.96	300	360	P	H
		10640	50.8	-23.2	74	66.6	38.61	11.55	65.96	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		5140.32	53.69	-20.31	74	44.85	35.11	7.77	34.04	105	149	P	H
		5142.56	44.55	-9.45	54	35.71	35.11	7.77	34.04	105	149	A	H
	*	5258	102.03	-	-	93.61	35.05	7.79	34.42	105	149	P	H
	*	5258	94.62	-	-	86.2	35.05	7.79	34.42	105	149	A	H
		5371.7	53.31	-20.69	74	45.16	34.97	7.9	34.72	105	149	P	H
		5372.3	43.8	-10.2	54	35.65	34.97	7.9	34.72	105	149	A	H
		5116.64	53.86	-20.14	74	44.91	35.14	7.78	33.97	319	140	P	V
		5100.32	44.43	-9.57	54	35.45	35.15	7.8	33.97	319	140	A	V
	*	5266	100.81	-	-	92.38	35.04	7.81	34.42	319	140	P	V
	*	5266	92.57	-	-	84.14	35.04	7.81	34.42	319	140	A	V
		5350.5	52.54	-21.46	74	44.4	34.98	7.88	34.72	319	140	P	V
		5373.2	43.04	-10.96	54	34.89	34.97	7.9	34.72	319	140	A	V
802.11n HT40 CH 62 5310MHz		5104.64	55.26	-18.74	74	46.28	35.15	7.8	33.97	102	149	P	H
		5101.28	44.55	-9.45	54	35.57	35.15	7.8	33.97	102	149	A	H
	*	5320	101.95	-	-	93.65	35.01	7.86	34.57	102	149	P	H
	*	5320	94.86	-	-	86.56	35.01	7.86	34.57	102	149	A	H
		5352	62.15	-11.85	74	54.01	34.98	7.88	34.72	102	149	P	H
	!	5350.3	49.57	-4.43	54	41.43	34.98	7.88	34.72	102	149	A	H
		5124.96	54.34	-19.66	74	45.48	35.12	7.78	34.04	276	137	P	V
		5102.72	44.5	-9.5	54	35.52	35.15	7.8	33.97	276	137	A	V
	*	5322	100.59	-	-	92.29	35.01	7.86	34.57	276	137	P	V
	*	5322	93.08	-	-	84.78	35.01	7.86	34.57	276	137	A	V
		5351.7	61.59	-12.41	74	53.45	34.98	7.88	34.72	276	137	P	V
	!	5350.01	48.7	-5.3	54	40.56	34.98	7.88	34.72	276	137	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		10540	49.14	-24.86	74	65.17	38.53	11.47	66.03	100	0	P	H
		10540	50.43	-23.57	74	66.46	38.53	11.47	66.03	300	0	P	V
802.11n HT40 CH 62 5310MHz		10620	50.19	-23.81	74	66.03	38.6	11.53	65.97	100	360	P	H
		10620	53.27	-20.73	74	69.11	38.6	11.53	65.97	100	253	P	V
	!	10620	50.02	-3.98	54	65.86	38.6	11.53	65.97	105	260	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 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 100 5500MHz		5466.64	58.85	-15.15	74	51.01	34.91	7.94	35.01	271	171	P	H
	!	5447.6	49.35	-4.65	54	41.43	34.92	7.94	34.94	271	171	A	H
	*	5494	107.74	-	-	99.99	34.9	7.94	35.09	271	171	P	H
	*	5494	100.53	-	-	92.78	34.9	7.94	35.09	271	171	A	H
		5468.08	59.32	-14.68	74	51.48	34.91	7.94	35.01	183	2	P	V
	!	5447.76	48.52	-5.48	54	40.6	34.92	7.94	34.94	183	2	A	V
	*	5494	107.3	-	-	99.55	34.9	7.94	35.09	183	2	P	V
	*	5494	100.29	-	-	92.54	34.9	7.94	35.09	183	2	A	V
802.11a CH 116 5580MHz		5442.48	53.73	-20.27	74	45.8	34.93	7.94	34.94	203	207	P	H
		5442.16	44.7	-9.3	54	36.77	34.93	7.94	34.94	203	207	A	H
	*	5586	108.61	-	-	101.21	34.83	7.96	35.39	203	207	P	H
	*	5586	101.46	-	-	94.06	34.83	7.96	35.39	203	207	A	H
		5739.64	52.26	-21.74	74	45.97	34.71	8.19	36.61	203	207	P	H
		5726.76	42.95	-11.05	54	36.38	34.72	8.19	36.34	203	207	A	H
		5442.96	53.56	-20.44	74	45.63	34.93	7.94	34.94	124	2	P	V
		5439.44	44.5	-9.5	54	36.57	34.93	7.94	34.94	124	2	A	V
	*	5576	108.08	-	-	100.6	34.84	7.96	35.32	124	2	P	V
	*	5576	100.93	-	-	93.45	34.84	7.96	35.32	124	2	A	V
		5759.8	52.85	-21.15	74	46.81	34.69	8.23	36.88	124	2	P	V
		5730.44	42.45	-11.55	54	36.15	34.72	8.19	36.61	124	2	A	V

802.11a CH 140 5700MHz	*	5694	109.4	-	-	102.59	34.75	8.14	36.08	227	204	P	H
	*	5694	102.88	-	-	96.07	34.75	8.14	36.08	227	204	A	H
	!	5727.16	68.43	-5.57	74	61.86	34.72	8.19	36.34	227	204	P	H
	!	5725.01	52.89	-1.11	54	46.32	34.72	8.19	36.34	227	204	A	H
	*	5694	106.94	-	-	100.13	34.75	8.14	36.08	125	3	P	V
	*	5694	100.39	-	-	93.58	34.75	8.14	36.08	125	3	A	V
		5725.96	63.6	-10.4	74	57.03	34.72	8.19	36.34	125	3	P	V
	!	5725.01	50.17	-3.83	54	43.6	34.72	8.19	36.34	125	3	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a		11000	49.4	-24.6	74	64.35	38.9	11.85	65.7	100	0	P	H
CH 100		11000	53.32	-20.68	74	68.27	38.9	11.85	65.7	100	240	P	V
5500MHz	!	11000	50.29	-3.71	54	65.24	38.9	11.85	65.7	102	244	A	V
802.11a		11160	50.33	-23.67	74	65	39.03	11.88	65.58	300	0	P	H
CH 116		11160	54.01	-19.99	74	68.68	39.03	11.88	65.58	206	251	P	V
5580MHz	!	11160	50.47	-3.53	54	65.14	39.03	11.88	65.58	207	250	A	V
802.11a		11400	49.89	-24.11	74	64.16	39.22	11.92	65.41	300	360	P	H
CH 140		11400	53.33	-20.67	74	67.6	39.22	11.92	65.41	100	249	P	V
5700MHz	!	11400	50.43	-3.57	54	64.7	39.22	11.92	65.41	100	249	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 100 5500MHz		5455.28	57.29	-16.71	74	49.44	34.92	7.94	35.01	299	164	P	H
	!	5448.24	48.19	-5.81	54	40.27	34.92	7.94	34.94	299	164	A	H
	*	5496	106.79	-	-	99.04	34.9	7.94	35.09	299	164	P	H
	*	5496	99.77	-	-	92.02	34.9	7.94	35.09	299	164	A	H
		5468.88	57.13	-16.87	74	49.29	34.91	7.94	35.01	101	360	P	V
	!	5447.92	48.18	-5.82	54	40.26	34.92	7.94	34.94	101	360	A	V
	*	5508	106.29	-	-	98.62	34.89	7.95	35.17	101	360	P	V
	*	5508	98.43	-	-	90.76	34.89	7.95	35.17	101	360	A	V
802.11n HT20 CH 116 5580MHz		5390	53.45	-20.55	74	45.35	34.96	7.93	34.79	141	208	P	H
		5443.28	44.26	-9.74	54	36.33	34.93	7.94	34.94	141	208	A	H
	*	5574	107.65	-	-	100.17	34.84	7.96	35.32	141	208	P	H
	*	5574	100.87	-	-	93.39	34.84	7.96	35.32	141	208	A	H
		5745.64	52.63	-21.37	74	46.3	34.71	8.23	36.61	141	208	P	H
		5764.6	42.54	-11.46	54	36.46	34.69	8.27	36.88	141	208	A	H
		5430.8	53.79	-20.21	74	45.86	34.93	7.94	34.94	124	3	P	V
		5443.12	44.02	-9.98	54	36.09	34.93	7.94	34.94	124	3	A	V
	*	5574	105.69	-	-	98.21	34.84	7.96	35.32	124	3	P	V
	*	5574	98.68	-	-	91.2	34.84	7.96	35.32	124	3	A	V
		5745.32	52.32	-21.68	74	45.99	34.71	8.23	36.61	124	3	P	V
		5730.28	42.42	-11.58	54	36.12	34.72	8.19	36.61	124	3	A	V

802.11n HT20 CH 140 5700MHz	*	5694	107.76	-	-	100.95	34.75	8.14	36.08	286	211	P	H
	*	5694	100.72	-	-	93.91	34.75	8.14	36.08	286	211	A	H
		5726.28	67.52	-6.48	74	60.95	34.72	8.19	36.34	286	211	P	H
	!	5725.01	52.84	-1.16	54	46.27	34.72	8.19	36.34	286	211	A	H
	*	5692	105.62	-	-	98.81	34.75	8.14	36.08	132	2	P	V
	*	5692	98.33	-	-	91.52	34.75	8.14	36.08	132	2	A	V
		5725.08	61.11	-12.89	74	54.54	34.72	8.19	36.34	132	2	P	V
	!	5725.01	49.71	-4.29	54	43.14	34.72	8.19	36.34	132	2	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	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	49.01	-24.99	74	63.96	38.9	11.85	65.7	300	0	P	H
		11000	50.71	-23.29	74	65.66	38.9	11.85	65.7	100	360	P	V
802.11n HT20 CH 116 5580MHz		11160	49.66	-24.34	74	64.33	39.03	11.88	65.58	200	0	P	H
		11160	53.58	-20.42	74	68.25	39.03	11.88	65.58	100	250	P	V
	!	11160	50.35	-3.65	54	65.02	39.03	11.88	65.58	100	250	A	V
802.11n HT20 CH 140 5700MHz		11400	50.09	-23.91	74	64.36	39.22	11.92	65.41	300	360	P	H
		11400	54.53	-19.47	74	68.8	39.22	11.92	65.41	100	253	P	V
	!	11400	51.54	-2.46	54	65.81	39.22	11.92	65.41	100	253	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		5468.72	67.75	-6.25	74	59.91	34.91	7.94	35.01	293	207	P	H
	!	5469.84	53.21	-0.79	54	45.37	34.91	7.94	35.01	293	207	A	H
	*	5516	102.56	-	-	94.9	34.88	7.95	35.17	293	207	P	H
	*	5516	95.59	-	-	87.93	34.88	7.95	35.17	293	207	A	H
		5757.32	52.39	-21.61	74	46.35	34.69	8.23	36.88	293	207	P	H
		5748.52	42.31	-11.69	54	35.98	34.71	8.23	36.61	293	207	A	H
		5463.76	62.83	-11.17	74	54.99	34.91	7.94	35.01	146	1	P	V
	!	5469.99	52.63	-1.37	54	44.79	34.91	7.94	35.01	146	1	A	V
	*	5500	102.05	-	-	94.3	34.89	7.95	35.09	146	1	P	V
	*	5500	95.04	-	-	87.29	34.89	7.95	35.09	146	1	A	V
		5742.2	52.47	-21.53	74	46.14	34.71	8.23	36.61	146	1	P	V
		5733.16	42.38	-11.62	54	36.08	34.72	8.19	36.61	146	1	A	V
802.11n HT40 CH 110 5550MHz		5446.48	54.7	-19.3	74	46.78	34.92	7.94	34.94	287	206	P	H
		5447.12	45.31	-8.69	54	37.39	34.92	7.94	34.94	287	206	A	H
	*	5542	103.94	-	-	96.37	34.86	7.95	35.24	287	206	P	H
	*	5542	96.76	-	-	89.19	34.86	7.95	35.24	287	206	A	H
		5750.6	52.48	-21.52	74	46.15	34.71	8.23	36.61	287	206	P	H
		5738.52	42.53	-11.47	54	36.24	34.71	8.19	36.61	287	206	A	H
		5446.8	54.31	-19.69	74	46.39	34.92	7.94	34.94	109	1	P	V
		5447.44	45.4	-8.6	54	37.48	34.92	7.94	34.94	109	1	A	V
	*	5536	103.44	-	-	95.87	34.86	7.95	35.24	109	1	P	V
	*	5536	96.18	-	-	88.61	34.86	7.95	35.24	109	1	A	V
		5731.32	52.22	-21.78	74	45.92	34.72	8.19	36.61	109	1	P	V
		5735.8	42.44	-11.56	54	36.15	34.71	8.19	36.61	109	1	A	V

802.11n HT40 CH 134 5670MHz		5464.72	53.31	-20.69	74	45.47	34.91	7.94	35.01	201	203	P	H
		5465.36	43.62	-10.38	54	35.78	34.91	7.94	35.01	201	203	A	H
	*	5682	104.05	-	-	97.26	34.77	8.1	36.08	201	203	P	H
	*	5682	96.69	-	-	89.9	34.77	8.1	36.08	201	203	A	H
		5726.44	55.29	-18.71	74	48.72	34.72	8.19	36.34	201	203	P	H
		5725.16	44.01	-9.99	54	37.44	34.72	8.19	36.34	201	203	A	H
		5398.64	53.12	-20.88	74	45.03	34.95	7.93	34.79	106	2	P	V
		5463.28	43.66	-10.34	54	35.82	34.91	7.94	35.01	106	2	A	V
	*	5680	102.52	-	-	95.73	34.77	8.1	36.08	106	2	P	V
	*	5680	95.52	-	-	88.73	34.77	8.1	36.08	106	2	A	V
		5733.56	54.54	-19.46	74	48.24	34.72	8.19	36.61	106	2	P	V
		5726.76	43.1	-10.9	54	36.53	34.72	8.19	36.34	106	2	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	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	50.26	-23.74	74	65.18	38.91	11.86	65.69	300	360	P	H
		11020	54.32	-19.68	74	69.24	38.91	11.86	65.69	103	240	P	V
	!	11020	50.42	-3.58	54	65.34	38.91	11.86	65.69	103	240	A	V
802.11n HT40 CH 110 5550MHz		11100	49.34	-24.66	74	64.12	38.98	11.87	65.63	100	360	P	H
		11100	53.62	-20.38	74	68.4	38.98	11.87	65.63	100	242	P	V
	!	11100	50.2	-3.8	54	64.98	38.98	11.87	65.63	110	244	A	V
802.11n HT40 CH 134 5670MHz		11340	49.37	-24.63	74	63.75	39.17	11.91	65.46	300	360	P	H
		11340	53.64	-20.36	74	68.02	39.17	11.91	65.46	100	248	P	V
	!	11340	50.72	-3.28	54	65.1	39.17	11.91	65.46	100	249	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 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz	*	5714	108.56	-	-	102.02	34.74	8.14	36.34	297	202	P	H
	*	5714	101.69	-	-	95.15	34.74	8.14	36.34	297	202	A	H
	*	5718	106.09	-	-	99.52	34.72	8.19	36.34	122	3	P	V
	*	5718	99.28	-	-	92.71	34.72	8.19	36.34	122	3	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a		11440	50.43	-23.57	74	64.64	39.25	11.93	65.39	100	360	P	H
CH 144		11440	54.63	-19.37	74	68.84	39.25	11.93	65.39	100	252	P	V
5720MHz	!	11440	51.47	-2.53	54	65.68	39.25	11.93	65.39	100	252	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 Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n	*	5724	107.5	-	-	100.93	34.72	8.19	36.34	301	202	P	H
HT20	*	5724	100.32	-	-	93.75	34.72	8.19	36.34	301	202	A	H
CH 144	*	5714	106.06	-	-	99.52	34.74	8.14	36.34	127	3	P	V
5720MHz	*	5714	98.4	-	-	91.86	34.74	8.14	36.34	127	3	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 144 5720MHz		11440	49.91	-24.09	74	64.12	39.25	11.93	65.39	100	360	P	H
		11440	54.67	-19.33	74	68.88	39.25	11.93	65.39	100	252	P	V
	!	11440	51.38	-2.62	54	65.59	39.25	11.93	65.39	100	252	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n	*	5724	103.79	-	-	97.22	34.72	8.19	36.34	300	209	P	H
HT40	*	5724	96.63	-	-	90.06	34.72	8.19	36.34	300	209	A	H
CH 142	*	5698	103.41	-	-	96.6	34.75	8.14	36.08	132	1	P	V
5710MHz	*	5698	96.04	-	-	89.23	34.75	8.14	36.08	132	1	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		11420	50.14	-23.86	74	64.38	39.23	11.93	65.4	100	360	P	H
HT40		11420	54.97	-19.03	74	69.21	39.23	11.93	65.4	100	252	P	V
CH 142 5710MHz	!	11420	51.32	-2.68	54	65.56	39.23	11.93	65.4	100	252	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11n HT40 (LF @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 LF		35.82	32.75	-7.25	40	39.65	24.5	0.64	32.04	150	74	P	H
		64.92	30	-10	40	48.45	12.8	0.84	32.09	-	-	P	H
		187.14	33.36	-10.14	43.5	47.46	16.21	1.4	31.71	-	-	P	H
		196.84	30.95	-12.55	43.5	45.33	15.87	1.43	31.68	-	-	P	H
		416.06	29.71	-16.29	46	32.9	25.35	2.11	30.65	-	-	P	H
		711.91	27.65	-18.35	46	27.24	26.47	2.77	28.83	-	-	P	H
	!	38.73	36.67	-3.33	40	44.77	23.3	0.64	32.04	100	0	P	V
		65.89	28.45	-11.55	40	46.88	12.8	0.85	32.08	-	-	P	V
		187.14	28.87	-14.63	43.5	42.97	16.21	1.4	31.71	-	-	P	V
		378.23	31.25	-14.75	46	36.83	23.2	2.01	30.79	-	-	P	V
		418	32.68	-13.32	46	35.92	25.3	2.11	30.65	-	-	P	V
		523.73	28.78	-17.22	46	32.8	23.67	2.46	30.15	-	-	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 not under limit 6dB.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

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

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

1. Level(dBμV/m) =

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

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

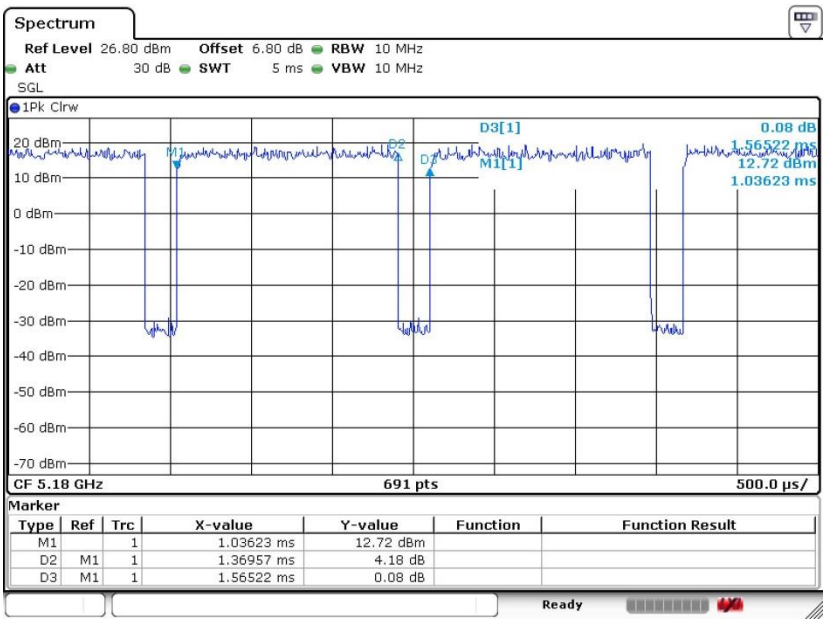
= -10.46(dB)

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

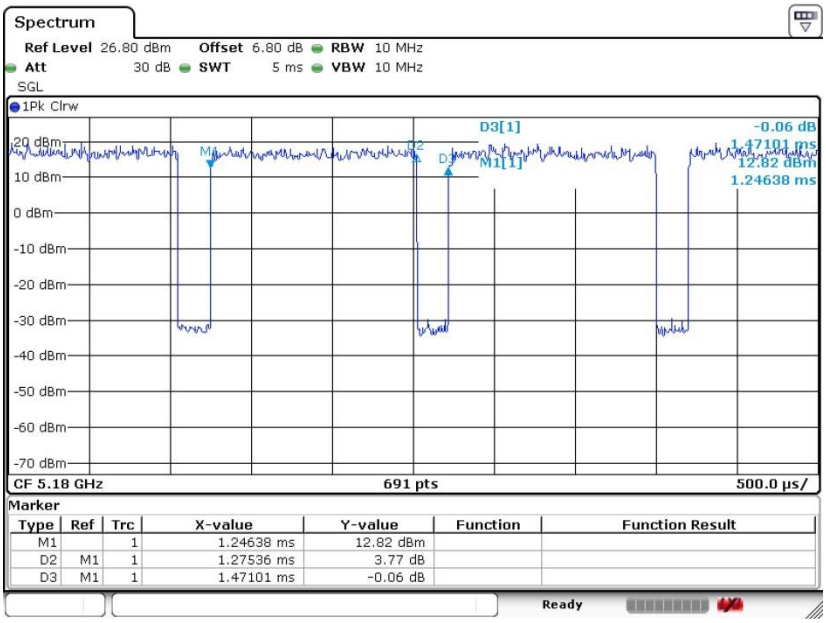
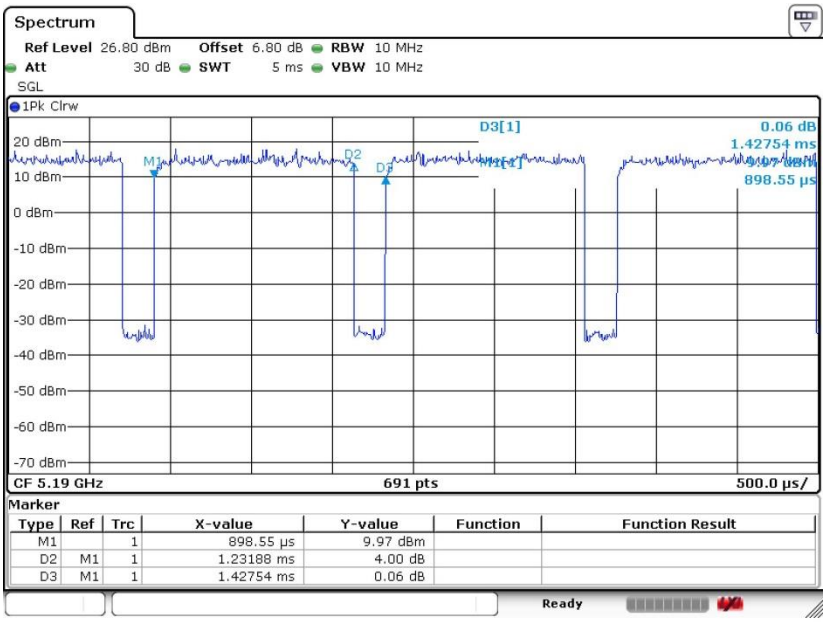
Appendix C. Duty Cycle Plots

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	87.50	1.370	0.730	1 kHz
802.11n HT20	86.70	1.275	0.784	1 kHz
802.11n HT40	86.29	1.232	0.812	1 kHz

802.11a



802.11n HT20



802.11n HT40