



# FCC RF Test Report

**APPLICANT** : HTC Corporation  
**EQUIPMENT** : Smartphone  
**MODEL NAME** : 2Q5V200  
**FCC ID** : NM82Q5V200  
**STANDARD** : FCC Part 15 Subpart E §15.407  
**CLASSIFICATION** : (NII) Unlicensed National Information Infrastructure

The product was received on Jan. 02, 2018 and testing was completed on Feb. 28, 2018. 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.

This report contains data that were produced under subcontract by Laboratory SPORTON INTERNATIONAL INC.

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.



Approved by: James Huang / Manager

**Sporton International (Kunshan) Inc.**  
**No.3-2 Ping-Xiang Rd, Kunshan Development Zone Kunshan City Jiangsu Province 215335**  
**China**



# TABLE OF CONTENTS

**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 ..... 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 ..... 12

2.4 Support Unit used in test configuration and system ..... 13

2.5 EUT Operation Test Setup ..... 13

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 ..... 19

3.4 Unwanted Radiated Emission Measurement ..... 22

3.5 AC Conducted Emission Measurement ..... 28

3.6 Automatically Discontinue Transmission ..... 33

3.7 Antenna Requirements ..... 34

**4 LIST OF MEASURING EQUIPMENTS ..... 35**

**5 UNCERTAINTY OF EVALUATION ..... 36**

**APPENDIX A. CONDUCTED TEST RESULTS**

**APPENDIX B. RADIATED SPURIOUS EMISSION**

**APPENDIX C. DUTY CYCLE PLOTS**

**APPENDIX D. SETUP PHOTOGRAPHS**





### 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 3.33 dB at 171.750 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 6.24 dB at 0.552 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.7	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-



# 1 General Description

## 1.1 Applicant

HTC Corporation

No. 88, Sec. 3, Zhongxing Rd. Xindian Dist., New Taipei City, Taiwan

## 1.2 Manufacturer

Shanghai Longcheer Technology Co.,Ltd

Building 1, No.401, Caobao Rd, Xuhui Dist, Shanghai, P.R.China

## 1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Smartphone
Model Name	2Q5V200
FCC ID	NM82Q5V200
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA /HSPA+/LTE WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 5GHz 802.11a/n HT20/HT40 Bluetooth v3.0+EDR/ Bluetooth v4.0 LE/
EUT Stage	Production Unit

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.



### 1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
<b>Tx/Rx Frequency Range</b>	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5720 MHz
<b>Maximum Output Power to Antenna</b>	<b>&lt;5180 MHz ~ 5240 MHz&gt;</b> 802.11a : 15.56 dBm / 0.0360 W 802.11n HT20 : 15.55 dBm / 0.0359 W 802.11n HT40 : 15.54 dBm / 0.0358 W <b>&lt;5260 MHz ~ 5320 MHz&gt;</b> 802.11a : 15.72 dBm / 0.0373 W 802.11n HT20 : 15.59 dBm / 0.0362 W 802.11n HT40 : 15.58 dBm / 0.0361 W <b>&lt;5500 MHz ~ 5720 MHz &gt;</b> 802.11a : 14.33 dBm / 0.0271 W 802.11n HT20 : 14.33 dBm / 0.0271 W 802.11n HT40 : 14.33 dBm / 0.0271 W
<b>99% Occupied Bandwidth</b>	<b>&lt;5180 MHz ~ 5240 MHz&gt;</b> 802.11a : 17.98 MHz 802.11n HT20 : 18.63 MHz 802.11n HT40 : 36.56 MHz <b>&lt;5260 MHz ~ 5320 MHz&gt;</b> 802.11a : 17.98 MHz 802.11n HT20 : 18.53 MHz 802.11n HT40 : 36.66 MHz <b>&lt;5500 MHz ~ 5720 MHz &gt;</b> 802.11a : 22.68 MHz 802.11n HT20 : 21.13 MHz 802.11n HT40 : 38.86 MHz
<b>Antenna Gain / Gain</b>	<b>&lt;5150 MHz ~ 5250 MHz&gt;</b> PIFA Antenna with gain -2.00 dBi <b>&lt;5250 MHz ~ 5350 MHz&gt;</b> PIFA Antenna with gain -2.00 dBi <b>&lt;5470 MHz ~ 5725 MHz&gt;</b> PIFA Antenna with gain -2.00 dBi
<b>Type of Modulation</b>	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 International (Kunshan) Inc. is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600155-0) and the FCC designation No. is CN5013.

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

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

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

<b>Test Site</b>	SPORTON INTERNATIONAL INC.		
<b>Test Site Location</b>	No. 52, Hwa Ya 1 <sup>st</sup> Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978		
<b>Test Site No.</b>	<b>Sporton Site No.</b>		
	03CH07-HY		

**Note:**

1. The test site complies with ANSI C63.4 2014 requirement.
2. Test data subcontracted: radiated emissions only in section 3.4 of this report



## 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 v02r01
- ♦ 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 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

<b>AC Conducted Emission</b>	Mode 1 : GSM850 Idle + Bluetooth Link + WLAN Link (5G) + USB Cable (Charging from Adapter) + Earphone
<b>Remark:</b> For Radiated Test Cases, The tests were performed with Earphone, Adapter and USB Cable.	



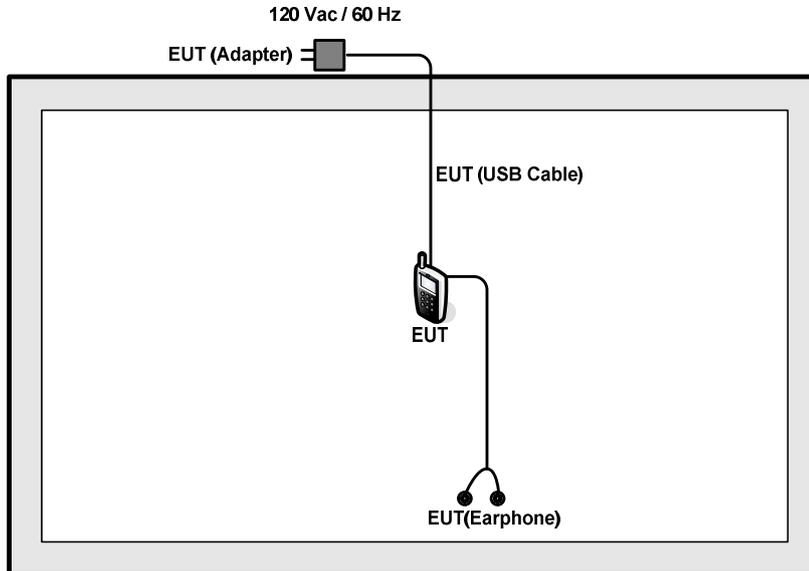
Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5720MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

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

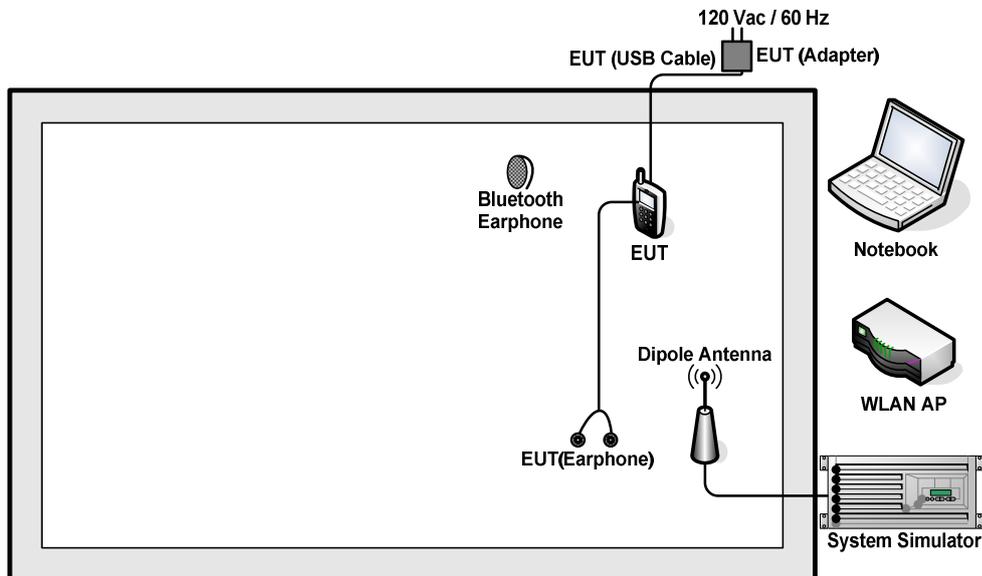
Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5720MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134

## 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	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	D-Link	DIR-855	KA2DIR855A2	N/A	Unshielded, 1.8 m
3.	Notebook	Lenovo	G480	PRC4	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
4.	Bluetooth Earphone	Lenovo	LBH308	N/A	N/A	N/A
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 WLAN AP 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 6.6 dB.

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)}. \\ &= 6.6(\text{dB}) \end{aligned}$$

### 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.

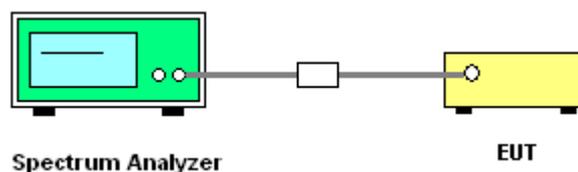
##### 3.1.2 Measuring Instruments

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 v02r01.  
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)  $\geq 3 * RBW$ .
8. Measure and record the results in the test report.

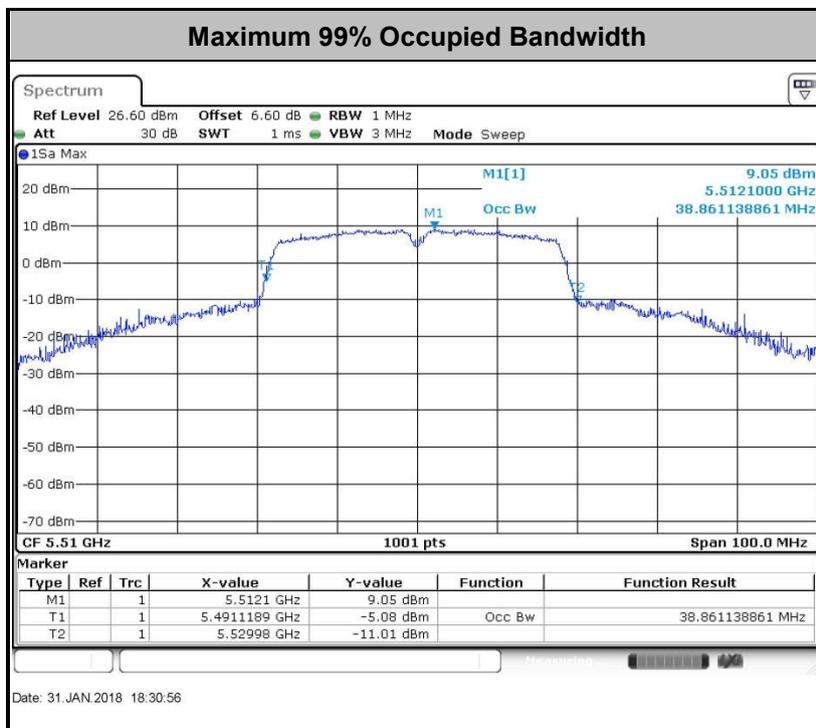
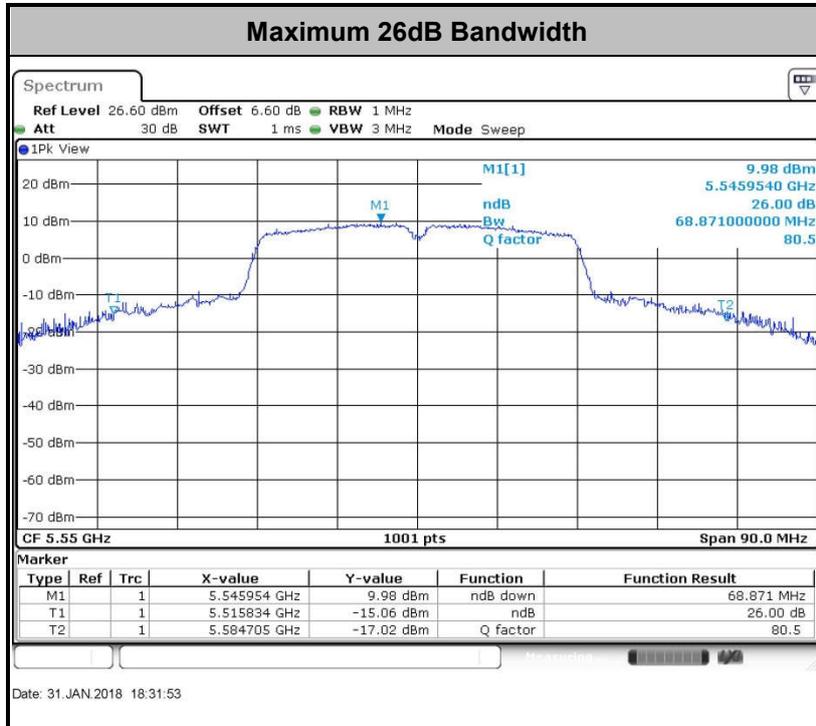
##### 3.1.4 Test Setup





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

Please refer to Appendix A.





## 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  $11 \text{ dBm} + 10 \log B$ , 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.

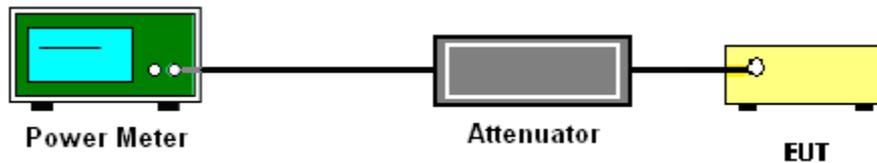
### 3.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

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



### 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

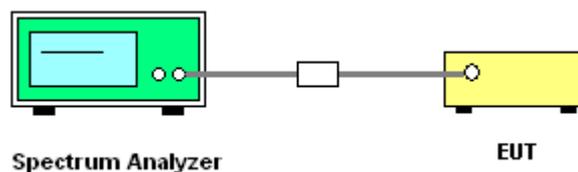
The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.  
Section F) Maximum power spectral density.

#### # 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 v02r01.
  - 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.

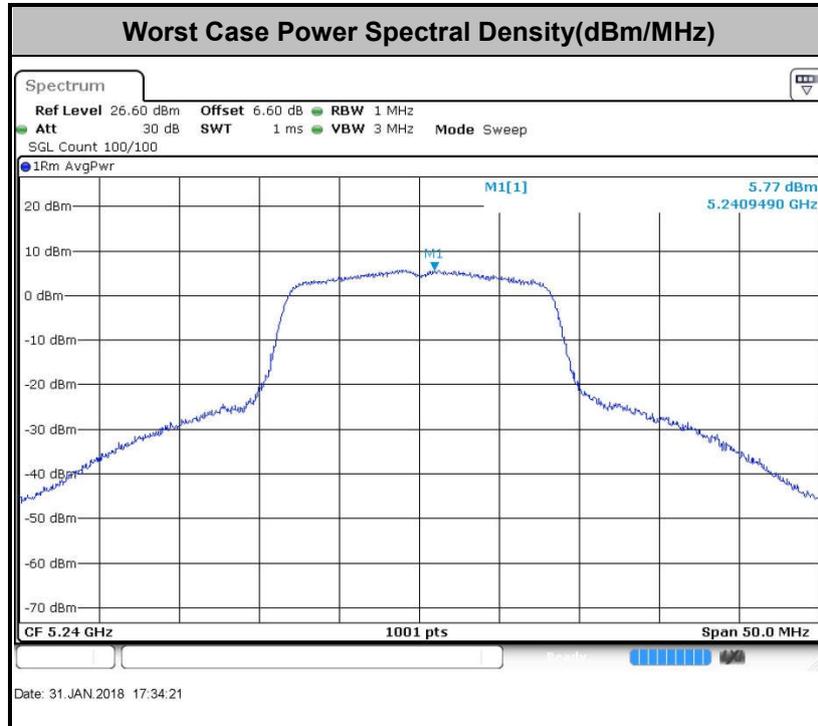
### 3.3.4 Test Setup





### 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 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.

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



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

(3) KDB789033 D01 v02r01 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.<sup>3</sup>
- (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.<sup>4</sup>

**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 v02r01. 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

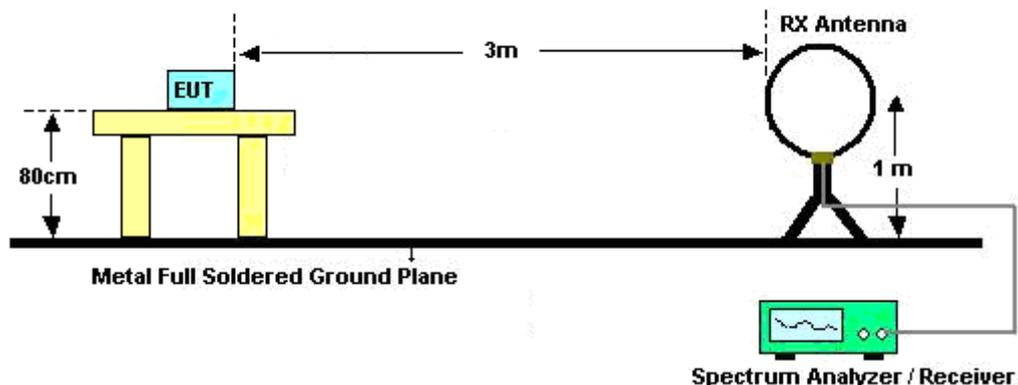
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- 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.

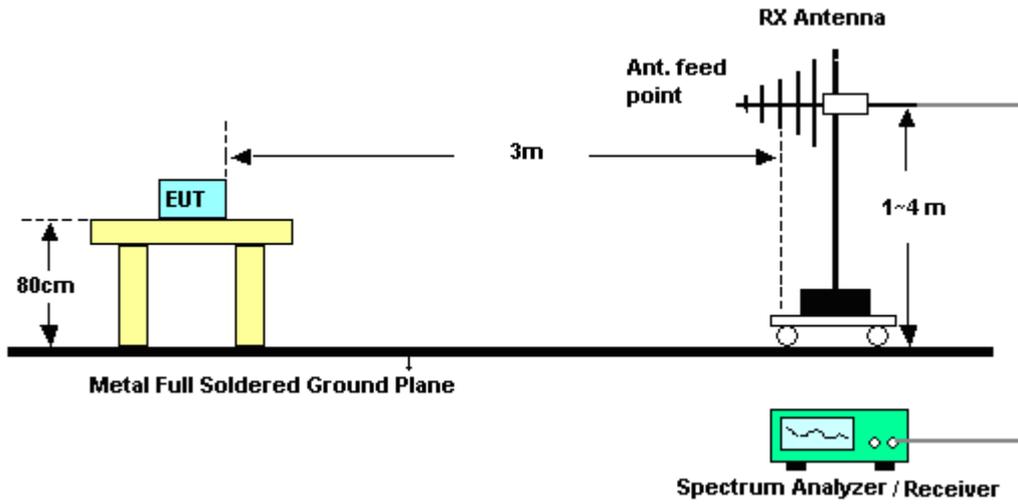
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

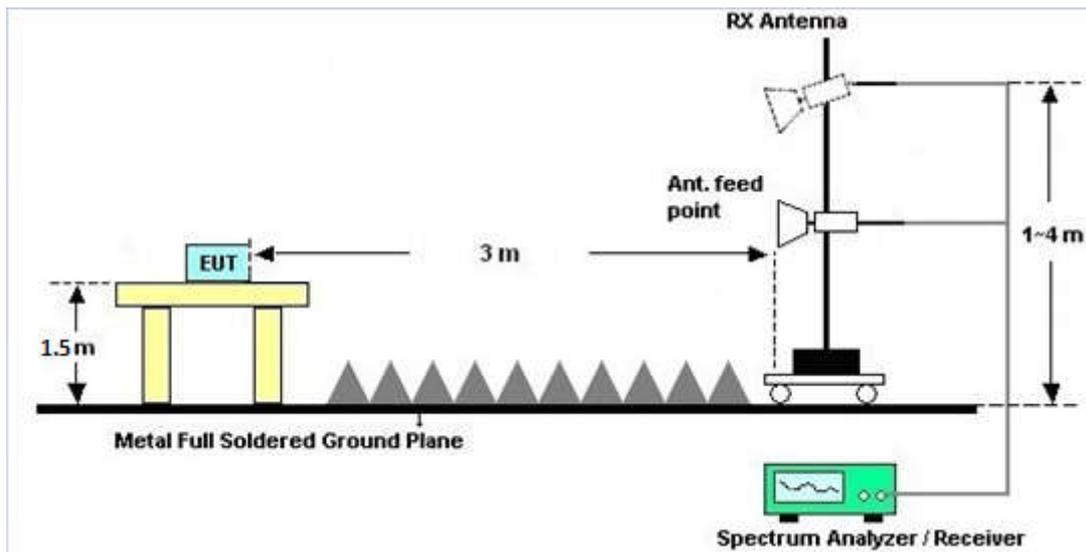
**For radiated emissions below 30MHz**



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz





### **3.4.5 Test Results of Radiated 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.

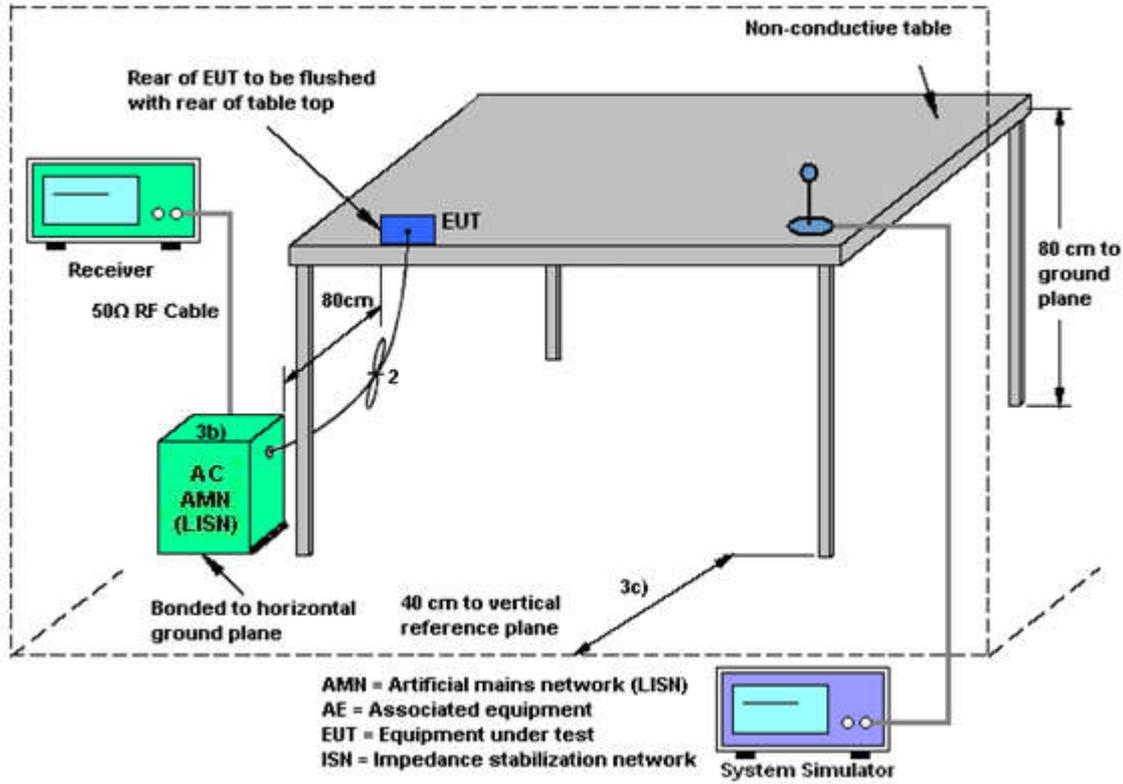
#### 3.5.2 Measuring Instruments

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.

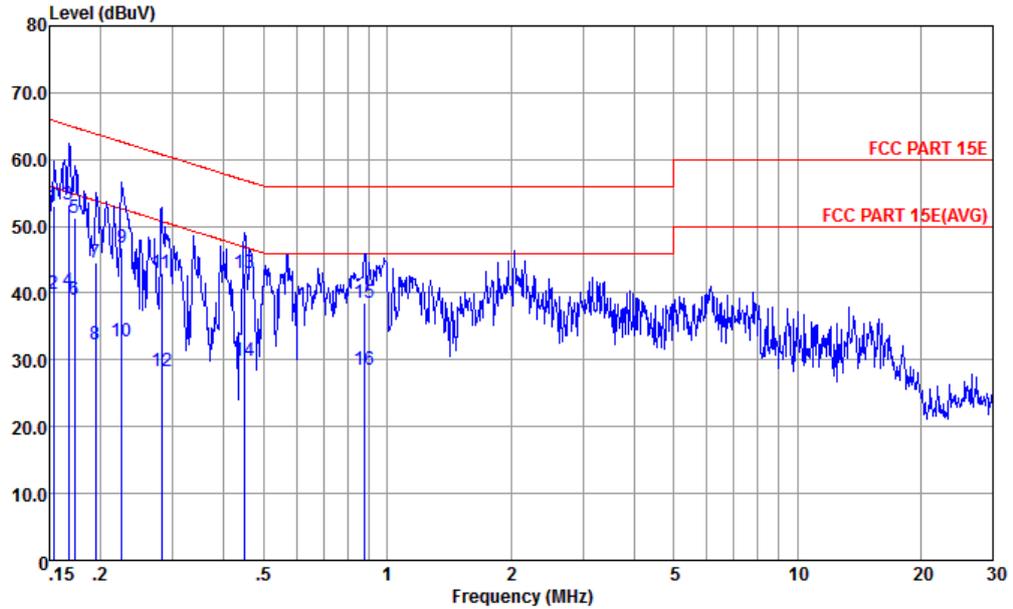
### 3.5.4 Test Setup





### 3.5.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	21~23°C
Test Engineer :	Amos Zhang	Relative Humidity :	42~44%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 Idle + Bluetooth Link + WLAN Link (5G) + USB Cable (Charging from Adapter) + Earphone		

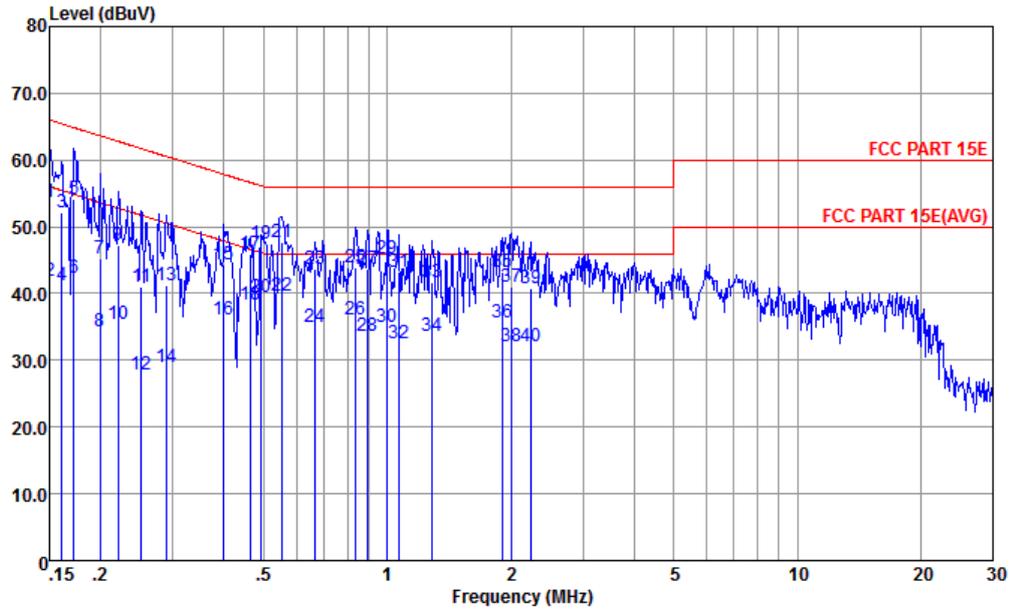


Site : CO01-KS  
 Condition : FCC PART 15E LISN-L-171013-060103 LINE

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.153	52.97	-12.85	65.82	42.20	0.16	10.61	QP
2	0.153	39.97	-15.85	55.82	29.20	0.16	10.61	Average
3 *	0.167	53.33	-11.79	65.12	42.60	0.17	10.56	QP
4	0.167	40.23	-14.89	55.12	29.50	0.17	10.56	Average
5	0.173	51.32	-13.49	64.81	40.60	0.18	10.54	QP
6	0.173	38.92	-15.89	54.81	28.20	0.18	10.54	Average
7	0.194	44.57	-19.27	63.84	33.90	0.20	10.47	QP
8	0.194	32.27	-21.57	53.84	21.60	0.20	10.47	Average
9	0.226	46.85	-15.76	62.61	36.19	0.21	10.45	QP
10	0.226	32.75	-19.86	52.61	22.09	0.21	10.45	Average
11	0.282	42.95	-17.81	60.76	32.30	0.22	10.43	QP
12	0.282	28.25	-22.51	50.76	17.60	0.22	10.43	Average
13	0.447	42.91	-14.02	56.93	32.30	0.25	10.36	QP
14	0.447	29.81	-17.12	46.93	19.20	0.25	10.36	Average
15	0.880	38.46	-17.54	56.00	28.10	0.26	10.10	QP
16	0.880	28.46	-17.54	46.00	18.10	0.26	10.10	Average



Test Mode :	Mode 1	Temperature :	21~23°C
Test Engineer :	Amos Zhang	Relative Humidity :	42~44%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Link + WLAN Link (5G) + USB Cable (Charging from Adapter) + Earphone		

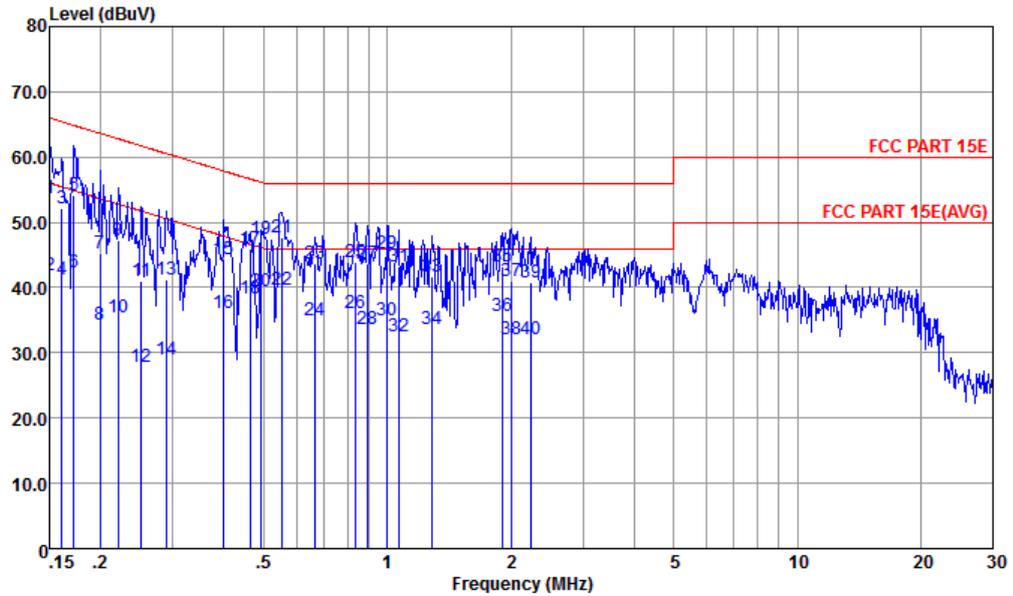


Site : CO01-KS  
 Condition : FCC PART 15E LISN-N-171013-060103 NEUTRAL

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.150	53.80	-12.20	66.00	42.90	0.28	10.62	QP
2	0.150	42.00	-14.00	56.00	31.10	0.28	10.62	Average
3	0.161	52.06	-13.37	65.43	41.20	0.28	10.58	QP
4	0.161	41.16	-14.27	55.43	30.30	0.28	10.58	Average
5	0.172	54.12	-10.74	64.86	43.30	0.28	10.54	QP
6	0.172	42.32	-12.54	54.86	31.50	0.28	10.54	Average
7	0.200	45.34	-18.28	63.62	34.60	0.28	10.46	QP
8	0.200	34.34	-19.28	53.62	23.60	0.28	10.46	Average
9	0.221	47.33	-15.46	62.79	36.60	0.28	10.45	QP
10	0.221	35.33	-17.46	52.79	24.60	0.28	10.45	Average
11	0.251	40.92	-20.81	61.73	30.20	0.28	10.44	QP
12	0.251	27.82	-23.91	51.73	17.10	0.28	10.44	Average
13	0.289	41.31	-19.23	60.54	30.60	0.28	10.43	QP
14	0.289	29.01	-21.53	50.54	18.30	0.28	10.43	Average
15	0.400	44.29	-13.57	57.86	33.59	0.29	10.41	QP
16	0.400	36.19	-11.67	47.86	25.49	0.29	10.41	Average
17	0.464	45.83	-10.80	56.63	35.20	0.29	10.34	QP



Test Mode :	Mode 1	Temperature :	21~23°C
Test Engineer :	Amos Zhang	Relative Humidity :	42~44%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + Bluetooth Link + WLAN Link (5G) + USB Cable (Charging from Adapter) + Earphone		



Site : CO01-KS  
 Condition : FCC PART 15E LISN-N-171013-060103 NEUTRAL

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
18	0.464	38.23	-8.40	46.63	27.60	0.29	10.34	Average
19	0.491	47.50	-8.64	56.14	36.90	0.29	10.31	QP
20	0.491	39.50	-6.64	46.14	28.90	0.29	10.31	Average
21	0.552	47.66	-8.34	56.00	37.11	0.29	10.26	QP
22 *	0.552	39.76	-6.24	46.00	29.21	0.29	10.26	Average
23	0.668	43.58	-12.42	56.00	33.10	0.30	10.18	QP
24	0.668	34.98	-11.02	46.00	24.50	0.30	10.18	Average
25	0.839	43.91	-12.09	56.00	33.50	0.31	10.10	QP
26	0.839	36.01	-9.99	46.00	25.60	0.31	10.10	Average
27	0.894	43.61	-12.39	56.00	33.20	0.31	10.10	QP
28	0.894	33.71	-12.29	46.00	23.30	0.31	10.10	Average
29	1.000	45.22	-10.78	56.00	34.80	0.31	10.11	QP
30	1.000	35.02	-10.98	46.00	24.60	0.31	10.11	Average
31	1.065	43.33	-12.67	56.00	32.90	0.31	10.12	QP
32	1.065	32.53	-13.47	46.00	22.10	0.31	10.12	Average
33	1.289	41.56	-14.44	56.00	31.10	0.31	10.15	QP
34	1.289	33.66	-12.34	46.00	23.20	0.31	10.15	Average
35	1.908	43.13	-12.87	56.00	32.60	0.32	10.21	QP
36	1.908	35.63	-10.37	46.00	25.10	0.32	10.21	Average
37	2.012	41.03	-14.97	56.00	30.50	0.32	10.21	QP
38	2.012	32.13	-13.87	46.00	21.60	0.32	10.21	Average
39	2.249	40.73	-15.27	56.00	30.20	0.32	10.21	QP
40	2.249	32.13	-13.87	46.00	21.60	0.32	10.21	Average



## **3.6 Automatically Discontinue Transmission**

### **3.6.1 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.

### **3.6.2 Measuring Instruments**

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

### **3.6.3 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.



## **3.7 Antenna Requirements**

### **3.7.1 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.

### **3.7.2 Antenna Anti-Replacement Construction**

An embedded-in antenna design is used.

### **3.7.3 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	Jan. 31, 2018	Aug. 07, 2018	Conducted (TH01-KS)
Pulse Power Sensor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 18, 2018	Jan. 31, 2018	Jan. 17, 2019	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 18, 2018	Jan. 31, 2018	Jan. 17, 2019	Conducted (TH01-KS)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	35419&03	30MHz to 1GHz	Dec. 18, 2017	Feb. 08, 2018~ Feb. 14, 2018	Dec. 17, 2018	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Aug. 23, 2017	Feb. 08, 2018~ Feb. 14, 2018	Aug. 22, 2018	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Nov. 10, 2017	Feb. 08, 2018~ Feb. 14, 2018	Nov. 09, 2019	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz ~ 18GHz	Apr. 25, 2017	Feb. 08, 2018~ Feb. 14, 2018	Apr. 24, 2018	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz-1GHz	Mar. 14, 2017	Feb. 08, 2018~ Feb. 14, 2018	Mar. 13, 2018	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~ 26.5GHz	Oct. 30, 2017	Feb. 08, 2018~ Feb. 14, 2018	Oct. 29, 2018	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9010A	MY53470118	10Hz~44GHz	Apr. 17, 2017	Feb. 08, 2018~ Feb. 14, 2018	Apr. 16, 2018	Radiation (03CH07-HY)
Controller	ChainTek	Chaintek 3000	N/A	Control Turn table	N/A	Feb. 08, 2018~ Feb. 14, 2018	N/A	Radiation (03CH07-HY)
Controller	Max-Full	MF7802	MF78020836 8	Control Ant Mast	N/A	Feb. 08, 2018~ Feb. 14, 2018	N/A	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Feb. 08, 2018~ Feb. 14, 2018	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Feb. 08, 2018~ Feb. 14, 2018	N/A	Radiation (03CH07-HY)
Amplifier	MITEQ	TTA1840-35-H G	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 18, 2017	Feb. 08, 2018~ Feb. 14, 2018	Jul. 17, 2018	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA917025 1	18GHz- 40GHz	Nov. 10, 2017	Feb. 08, 2018~ Feb. 14, 2018	Nov. 09, 2018	Radiation (03CH07-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290053	20Hz to 26.5GHz	Jan. 16, 2018	Feb. 08, 2018~ Feb. 14, 2018	Jan. 15, 2019	Radiation (03CH07-HY)
EMI Receiver	R&S	ESC17	100768	9kHz~7GHz;	Apr. 20, 2017	Feb. 28, 2018	Apr. 19, 2018	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 13, 2017	Feb. 28, 2018	Oct. 12, 2018	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 13, 2017	Feb. 28, 2018	Oct. 12, 2018	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP0000008 11	AC 0V~300V, 45Hz~1000Hz	Oct. 12, 2017	Feb. 28, 2018	Oct. 11, 2018	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
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### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.7 dB
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### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.5 dB
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### Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.2 dB
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## **Appendix A. Conducted Test Results**

Test Engineer:	Silent Hai	Temperature:	21~25	°C
Test Date:	2018/1/31	Relative Humidity:	51~55	%

**TEST RESULTS DATA**  
**26dB and 99% OBW**

Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)		
11a	6Mbps	1	36	5180	17.58	21.28	-	22.45		
11a	6Mbps	1	44	5220	17.88	22.73	-	22.52		
11a	6Mbps	1	48	5240	17.98	23.48	-	22.55		
HT20	MCS0	1	36	5180	18.48	22.63	-	22.67		
HT20	MCS0	1	44	5220	18.58	24.53	-	22.69		
HT20	MCS0	1	48	5240	18.63	27.12	-	22.70		
HT40	MCS0	1	38	5190	36.76	40.91	-	23.01		
HT40	MCS0	1	46	5230	36.56	43.16	-	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	97.56	15.14	24.00	-2.00		Pass
11a	6Mbps	1	44	5220	97.56	15.39	24.00	-2.00		Pass
11a	6Mbps	1	48	5240	97.56	15.56	24.00	-2.00		Pass
HT20	MCS0	1	36	5180	97.38	15.21	24.00	-2.00		Pass
HT20	MCS0	1	44	5220	97.38	15.53	24.00	-2.00		Pass
HT20	MCS0	1	48	5240	97.38	15.55	24.00	-2.00		Pass
HT40	MCS0	1	38	5190	94.92	10.04	24.00	-2.00		Pass
HT40	MCS0	1	46	5230	94.92	15.54	24.00	-2.00		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	0.11	5.27	11.00	-2.00		Pass
11a	6Mbps	1	44	5220	0.11	5.86	11.00	-2.00		Pass
11a	6Mbps	1	48	5240	0.11	5.88	11.00	-2.00		Pass
HT20	MCS0	1	36	5180	0.12	5.16	11.00	-2.00		Pass
HT20	MCS0	1	44	5220	0.12	5.83	11.00	-2.00		Pass
HT20	MCS0	1	48	5240	0.12	5.79	11.00	-2.00		Pass
HT40	MCS0	1	38	5190	0.23	-3.73	11.00	-2.00		Pass
HT40	MCS0	1	46	5230	0.23	2.40	11.00	-2.00		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	17.83	21.78	23.51	29.51	23.98	
11a	6M bps	1	60	5300	17.98	21.78	23.55	29.55	23.98	
11a	6M bps	1	64	5320	17.78	21.98	23.50	29.50	23.98	
HT20	MCS 0	1	52	5260	18.53	25.57	23.68	29.68	23.98	
HT20	MCS 0	1	60	5300	18.48	23.78	23.67	29.67	23.98	
HT20	MCS 0	1	64	5320	18.53	24.93	23.68	29.68	23.98	
HT40	MCS 0	1	54	5270	36.46	49.18	23.98	30.00	23.98	
HT40	MCS 0	1	62	5310	36.66	41.27	23.98	30.00	23.98	

**TEST RESULTS DATA**  
**Average Power Table**

FCC Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)	EIRP Power Limit (dBm)	Pass/Fail
11a	6M bps	1	52	5260	97.56	15.72	23.98	-2.00	26.99	Pass
11a	6M bps	1	60	5300	97.56	15.66	23.98	-2.00	26.99	Pass
11a	6M bps	1	64	5320	97.56	15.52	23.98	-2.00	26.99	Pass
HT20	MCS 0	1	52	5260	97.38	15.24	23.98	-2.00	26.99	Pass
HT20	MCS 0	1	60	5300	97.38	15.59	23.98	-2.00	26.99	Pass
HT20	MCS 0	1	64	5320	97.38	15.23	23.98	-2.00	26.99	Pass
HT40	MCS 0	1	54	5270	94.92	15.41	23.98	-2.00	26.99	Pass
HT40	MCS 0	1	62	5310	94.92	15.58	23.98	-2.00	26.99	Pass

**TEST RESULTS DATA**  
**Power Spectral Density**

Band II										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)		Pass/Fail
11a	6M bps	1	52	5260	0.11	5.61	11.00	-2.00		Pass
11a	6M bps	1	60	5300	0.11	5.52	11.00	-2.00		Pass
11a	6M bps	1	64	5320	0.11	5.82	11.00	-2.00		Pass
HT20	MCS 0	1	52	5260	0.12	5.50	11.00	-2.00		Pass
HT20	MCS 0	1	60	5300	0.12	5.38	11.00	-2.00		Pass
HT20	MCS 0	1	64	5320	0.12	5.55	11.00	-2.00		Pass
HT40	MCS 0	1	54	5270	0.23	2.27	11.00	-2.00		Pass
HT40	MCS 0	1	62	5310	0.23	2.26	11.00	-2.00		Pass

**TEST RESULTS DATA**  
**26dB and 99% OBW**

Band III										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)	FCC 26dB Bandwidth Power Limit (dBm)	Note
11a	6M bps	1	100	5500	22.68	34.37	23.98	30.00	23.98	
11a	6M bps	1	116	5580	19.08	31.52	23.81	29.81	23.98	
11a	6M bps	1	140	5700	18.08	26.67	23.57	29.57	23.98	
11a	6Mbps	1	144	5720	18.38	28.87	23.64	29.64	23.98	
HT20	MCS 0	1	100	5500	21.13	33.87	23.98	30.00	23.98	
HT20	MCS 0	1	116	5580	19.03	31.32	23.79	29.79	23.98	
HT20	MCS 0	1	140	5700	18.78	29.17	23.74	29.74	23.98	
HT20	MCS0	1	144	5720	19.13	29.47	23.82	29.82	23.98	
HT40	MCS 0	1	102	5510	38.86	65.99	23.98	30.00	23.98	
HT40	MCS 0	1	110	5550	38.06	68.87	23.98	30.00	23.98	
HT40	MCS 0	1	134	5670	36.86	63.30	23.98	30.00	23.98	
HT40	MCS0	1	142	5710	37.16	57.90	23.98	30.00	23.98	

**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	97.56	13.79	23.98	-2.00	26.99	Pass
11a	6M bps	1	116	5580	97.56	13.75	23.98	-2.00	26.99	Pass
11a	6M bps	1	140	5700	97.56	14.19	23.98	-2.00	26.99	Pass
11a	6Mbps	1	144	5720	97.56	14.33	23.98	-2.00	26.99	Pass
HT20	MCS 0	1	100	5500	97.38	13.75	23.98	-2.00	26.99	Pass
HT20	MCS 0	1	116	5580	97.38	13.30	23.98	-2.00	26.99	Pass
HT20	MCS 0	1	140	5700	97.38	14.28	23.98	-2.00	26.99	Pass
HT20	MCS0	1	144	5720	97.38	14.33	23.98	-2.00	26.99	Pass
HT40	MCS 0	1	102	5510	94.92	13.72	23.98	-2.00	26.99	Pass
HT40	MCS 0	1	110	5550	94.92	13.78	23.98	-2.00	26.99	Pass
HT40	MCS 0	1	134	5670	94.92	14.42	23.98	-2.00	26.99	Pass
HT40	MCS0	1	142	5710	94.92	14.33	23.98	-2.00	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	0.11	4.84	11.00	-2.00		Pass
11a	6M bps	1	116	5580	0.11	4.78	11.00	-2.00		Pass
11a	6M bps	1	140	5700	0.11	5.51	11.00	-2.00		Pass
11a	6Mbps	1	144	5720	0.11	5.44	11.00	-2.00		Pass
HT20	MCS 0	1	100	5500	0.12	4.41	11.00	-2.00		Pass
HT20	MCS 0	1	116	5580	0.12	4.47	11.00	-2.00		Pass
HT20	MCS 0	1	140	5700	0.12	5.19	11.00	-2.00		Pass
HT20	MCS0	1	144	5720	0.12	5.49	11.00	-2.00		Pass
HT40	MCS 0	1	102	5510	0.23	1.02	11.00	-2.00		Pass
HT40	MCS 0	1	110	5550	0.23	1.19	11.00	-2.00		Pass
HT40	MCS 0	1	134	5670	0.23	1.94	11.00	-2.00		Pass
HT40	MCS0	1	142	5710	0.23	1.92	11.00	-2.00		Pass



# Appendix B. Radiated Spurious Emission

## Band 1 - 5150~5250MHz WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	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 )
802.11a CH 36 5180MHz		5103.74	52.07	-21.93	74	40.55	34.34	12.32	35.14	265	38	P	H
		5149.24	44.42	-9.58	54	32.77	34.41	12.38	35.14	265	38	A	H
	*	5180	103.32	-	-	91.62	34.46	12.38	35.14	265	38	P	H
	*	5180	96.5	-	-	84.8	34.46	12.38	35.14	265	38	A	H
		5122.72	50.88	-23.12	74	39.31	34.39	12.32	35.14	242	84	P	V
		5149.76	43.3	-10.7	54	31.65	34.41	12.38	35.14	242	84	A	V
	*	5180	100.83	-	-	89.13	34.46	12.38	35.14	242	84	P	V
	*	5180	93.63	-	-	81.93	34.46	12.38	35.14	242	84	A	V
802.11a CH 44 5220MHz		5136.76	51.21	-22.79	74	39.64	34.39	12.32	35.14	269	31	P	H
		5140.14	43.6	-10.4	54	31.95	34.41	12.38	35.14	269	31	A	H
	*	5220	102.41	-	-	90.62	34.5	12.43	35.14	269	31	P	H
	*	5220	94.18	-	-	82.39	34.5	12.43	35.14	269	31	A	H
		5367.88	49.36	-24.64	74	37.22	34.71	12.58	35.15	269	31	P	H
		5417.16	41.38	-12.62	54	29.14	34.78	12.62	35.16	269	31	A	H
		5065.78	50.42	-23.58	74	38.99	34.29	12.27	35.13	280	98	P	V
		5139.88	42.62	-11.38	54	31.03	34.41	12.32	35.14	280	98	A	V
	*	5220	99.04	-	-	87.25	34.5	12.43	35.14	280	98	P	V
	*	5220	91.07	-	-	79.28	34.5	12.43	35.14	280	98	A	V
		5352.2	48.64	-25.36	74	36.52	34.69	12.58	35.15	280	98	P	V
		5457.2	41.31	-12.69	54	28.97	34.83	12.67	35.16	280	98	A	V



802.11a CH 48 5240MHz		5119.34	50.49	-23.51	74	38.95	34.36	12.32	35.14	200	34	P	H
		5087.62	42.4	-11.6	54	30.94	34.32	12.27	35.13	200	34	A	H
	*	5240	102.07	-	-	90.21	34.53	12.47	35.14	200	34	P	H
	*	5240	93.92	-	-	82.06	34.53	12.47	35.14	200	34	A	H
		5351.08	49.41	-24.59	74	37.29	34.69	12.58	35.15	200	34	P	H
		5458.32	41.43	-12.57	54	29.09	34.83	12.67	35.16	200	34	A	H
		5048.62	50.69	-23.31	74	39.34	34.27	12.21	35.13	277	97	P	V
		5143.26	41.68	-12.32	54	30.03	34.41	12.38	35.14	277	97	A	V
	*	5240	98.8	-	-	86.94	34.53	12.47	35.14	277	97	P	V
	*	5240	90.97	-	-	79.11	34.53	12.47	35.14	277	97	A	V
		5366.76	49.01	-24.99	74	36.87	34.71	12.58	35.15	277	97	P	V
		5456.36	41.32	-12.68	54	28.98	34.83	12.67	35.16	277	97	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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	42.46	-25.74	68.2	46.46	37.19	18.12	59.31	100	0	P	H
		15540	47.4	-26.6	74	41.82	40.43	22.02	56.87	100	0	P	H
		10360	42.3	-25.9	68.2	46.3	37.19	18.12	59.31	100	0	P	V
		15540	47.54	-26.46	74	41.96	40.43	22.02	56.87	100	0	P	V
802.11a CH 44 5220MHz		10440	42.9	-25.3	68.2	46.67	37.25	18.23	59.25	100	0	P	H
		15660	49.87	-24.13	74	44.02	40.52	22.11	56.78	100	0	P	H
		10440	43.45	-24.75	68.2	47.22	37.25	18.23	59.25	100	0	P	V
		15660	48.86	-25.14	74	43.01	40.52	22.11	56.78	100	0	P	V
802.11a CH 48 5240MHz		10480	43.24	-24.96	68.2	46.9	37.29	18.26	59.21	100	0	P	H
		15720	49.9	-24.1	74	43.9	40.58	22.14	56.72	100	0	P	H
		10480	44.42	-23.78	68.2	48.08	37.29	18.26	59.21	100	0	P	V
		15720	49.98	-24.02	74	43.98	40.58	22.14	56.72	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 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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11n HT20 CH 36 5180MHz		5123.5	51.62	-22.38	74	40.05	34.39	12.32	35.14	200	38	P	H
		5150	44.7	-9.3	54	33.05	34.41	12.38	35.14	200	38	A	H
	*	5180	102.52	-	-	90.82	34.46	12.38	35.14	200	38	P	H
	*	5180	95.27	-	-	83.57	34.46	12.38	35.14	200	38	A	H
		5149.76	51.03	-22.97	74	39.38	34.41	12.38	35.14	400	97	P	V
		5150	42.79	-11.21	54	31.14	34.41	12.38	35.14	400	97	A	V
	*	5180	100.29	-	-	88.59	34.46	12.38	35.14	400	97	P	V
	*	5180	93.03	-	-	81.33	34.46	12.38	35.14	400	97	A	V
802.11n HT20 CH 44 5220MHz		5113.1	51.33	-22.67	74	39.79	34.36	12.32	35.14	212	31	P	H
		5139.88	43.45	-10.55	54	31.86	34.41	12.32	35.14	212	31	A	H
	*	5220	100.81	-	-	89.02	34.5	12.43	35.14	212	31	P	H
	*	5220	93.18	-	-	81.39	34.5	12.43	35.14	212	31	A	H
		5446.28	49.2	-24.8	74	36.86	34.83	12.67	35.16	212	31	P	H
		5455.24	41.3	-12.7	54	28.96	34.83	12.67	35.16	212	31	A	H
		5121.94	50.72	-23.28	74	39.18	34.36	12.32	35.14	278	90	P	V
		5140.92	42.17	-11.83	54	30.52	34.41	12.38	35.14	278	90	A	V
	*	5220	98.78	-	-	86.99	34.5	12.43	35.14	278	90	P	V
	*	5220	90.27	-	-	78.48	34.5	12.43	35.14	278	90	A	V
		5443.2	50	-24	74	37.68	34.81	12.67	35.16	278	90	P	V
	5455.8	41.44	-12.56	54	29.1	34.83	12.67	35.16	278	90	A	V	



802.11n HT20 CH 48 5240MHz		5081.9	51.16	-22.84	74	39.7	34.32	12.27	35.13	206	30	P	H
		5088.4	42.27	-11.73	54	30.81	34.32	12.27	35.13	206	30	A	H
	*	5240	100.97	-	-	89.11	34.53	12.47	35.14	206	30	P	H
	*	5240	93.28	-	-	81.42	34.53	12.47	35.14	206	30	A	H
		5406.24	50.05	-23.95	74	37.83	34.76	12.62	35.16	206	30	P	H
		5406.8	41.3	-12.7	54	29.08	34.76	12.62	35.16	206	30	A	H
		5117.26	51.21	-22.79	74	39.67	34.36	12.32	35.14	277	98	P	V
		5087.62	41.84	-12.16	54	30.38	34.32	12.27	35.13	277	98	A	V
	*	5240	97.88	-	-	86.02	34.53	12.47	35.14	277	98	P	V
	*	5240	90.61	-	-	78.75	34.53	12.47	35.14	277	98	A	V
		5453.56	48.87	-25.13	74	36.53	34.83	12.67	35.16	277	98	P	V
		5457.48	41.31	-12.69	54	28.97	34.83	12.67	35.16	277	98	A	V
<b>Remark</b>	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 )	Path 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	41.93	-26.27	68.2	45.93	37.19	18.12	59.31	100	0	P	H
		15540	49.78	-24.22	74	44.2	40.43	22.02	56.87	100	0	P	H
		10360	41.29	-26.91	68.2	45.29	37.19	18.12	59.31	100	0	P	V
		15540	48.39	-25.61	74	42.81	40.43	22.02	56.87	100	0	P	V
802.11n HT20 CH 44 5220MHz		10440	42.89	-25.31	68.2	46.66	37.25	18.23	59.25	100	0	P	H
		15660	52.03	-21.97	74	46.18	40.52	22.11	56.78	100	0	P	H
		10440	43.53	-24.67	68.2	47.3	37.25	18.23	59.25	100	0	P	V
		15660	47.96	-26.04	74	42.11	40.52	22.11	56.78	100	0	P	V
802.11n HT20 CH 48 5240MHz		10480	43.35	-24.85	68.2	47.01	37.29	18.26	59.21	100	0	P	H
		15720	48.89	-25.11	74	42.89	40.58	22.14	56.72	100	0	P	H
		10480	43.97	-24.23	68.2	47.63	37.29	18.26	59.21	100	0	P	V
		15720	48.8	-25.2	74	42.8	40.58	22.14	56.72	100	0	P	V
<b>Remark</b>	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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11n HT40 CH 38 5190MHz		5148.2	53.92	-20.08	74	42.27	34.41	12.38	35.14	196	39	P	H
		5150	48.23	-5.77	54	36.58	34.41	12.38	35.14	196	39	A	H
	*	5190	96.08	-	-	84.33	34.46	12.43	35.14	196	39	P	H
	*	5190	88.96	-	-	77.21	34.46	12.43	35.14	196	39	A	H
		5436.76	49.29	-24.71	74	36.97	34.81	12.67	35.16	196	39	P	H
		5453.56	42.03	-11.97	54	29.69	34.83	12.67	35.16	196	39	A	H
		5149.24	51.92	-22.08	74	40.27	34.41	12.38	35.14	400	99	P	V
		5149.76	46.34	-7.66	54	34.69	34.41	12.38	35.14	400	99	A	V
	*	5190	93.63	-	-	81.88	34.46	12.43	35.14	400	99	P	V
	*	5190	85.62	-	-	73.87	34.46	12.43	35.14	400	99	A	V
		5412.68	49.04	-24.96	74	36.8	34.78	12.62	35.16	400	99	P	V
		5453.56	42.06	-11.94	54	29.72	34.83	12.67	35.16	400	99	A	V
802.11n HT40 CH 46 5230MHz		5017.68	50.8	-23.2	74	39.55	34.22	12.16	35.13	197	34	P	H
		5149.76	43.82	-10.18	54	32.17	34.41	12.38	35.14	197	34	A	H
	*	5230	99.99	-	-	88.13	34.53	12.47	35.14	197	34	P	H
	*	5230	93.67	-	-	81.81	34.53	12.47	35.14	197	34	A	H
		5430.32	49.48	-24.52	74	37.16	34.81	12.67	35.16	197	34	P	H
		5438.16	41.88	-12.12	54	29.56	34.81	12.67	35.16	197	34	A	H
		5113.1	49.95	-24.05	74	38.41	34.36	12.32	35.14	257	98	P	V
		5137.54	42.62	-11.38	54	31.05	34.39	12.32	35.14	257	98	A	V
	*	5230	96.9	-	-	85.04	34.53	12.47	35.14	257	98	P	V
	*	5230	89.73	-	-	77.87	34.53	12.47	35.14	257	98	A	V
	5451.6	48.98	-25.02	74	36.64	34.83	12.67	35.16	257	98	P	V	
	5441.8	42.1	-11.9	54	29.78	34.81	12.67	35.16	257	98	A	V	
<b>Remark</b>	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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38		10380	41.22	-26.98	68.2	45.17	37.21	18.13	59.29	100	0	P	H
		15570	43.81	-30.19	74	38.13	40.46	22.06	56.84	100	0	P	H
5190MHz		10380	41.51	-26.69	68.2	45.46	37.21	18.13	59.29	100	0	P	V
		15570	44.62	-29.38	74	38.94	40.46	22.06	56.84	100	0	P	V
802.11n HT40 CH 46		10460	43.99	-24.21	68.2	47.74	37.26	18.23	59.24	100	0	P	H
		15690	46.56	-27.44	74	40.64	40.55	22.12	56.75	100	0	P	H
5230MHz		10460	42.1	-26.1	68.2	45.85	37.26	18.23	59.24	100	0	P	V
		15690	46.48	-27.52	74	40.56	40.55	22.12	56.75	100	0	P	V
<b>Remark</b>	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	Level	Over	Limit	Read	Antenna	Path	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 )
802.11a CH 52 5260MHz		5107.45	50.85	-23.15	74	39.31	34.36	12.32	35.14	269	34	P	H
		5107.45	42.07	-11.93	54	30.53	34.36	12.32	35.14	269	34	A	H
	*	5260	100.48	-	-	88.59	34.57	12.47	35.15	269	34	P	H
	*	5260	92.86	-	-	80.97	34.57	12.47	35.15	269	34	A	H
		5442	49.14	-24.86	74	36.82	34.81	12.67	35.16	269	34	P	H
		5457.12	41.46	-12.54	54	29.12	34.83	12.67	35.16	269	34	A	H
		5040.25	49.9	-24.1	74	38.55	34.27	12.21	35.13	261	90	P	V
		5107.8	41.82	-12.18	54	30.28	34.36	12.32	35.14	261	90	A	V
	*	5260	98.42	-	-	86.53	34.57	12.47	35.15	261	90	P	V
	*	5260	90.14	-	-	78.25	34.57	12.47	35.15	261	90	A	V
		5459.76	50.15	-23.85	74	37.81	34.83	12.67	35.16	261	90	P	V
		5439.12	41.38	-12.62	54	29.06	34.81	12.67	35.16	261	90	A	V
802.11a CH 60 5300MHz		5021.7	50.26	-23.74	74	38.93	34.25	12.21	35.13	274	33	P	H
		5146.65	41.79	-12.21	54	30.14	34.41	12.38	35.14	274	33	A	H
	*	5300	99.01	-	-	87.03	34.62	12.51	35.15	274	33	P	H
	*	5300	91.52	-	-	79.54	34.62	12.51	35.15	274	33	A	H
		5380.08	49.86	-24.14	74	37.65	34.74	12.62	35.15	274	33	P	H
		5350.8	41.84	-12.16	54	29.72	34.69	12.58	35.15	274	33	A	H
		5010.15	50.57	-23.43	74	39.32	34.22	12.16	35.13	380	88	P	V
		5081.9	41.46	-12.54	54	30	34.32	12.27	35.13	380	88	A	V
	*	5300	96.67	-	-	84.69	34.62	12.51	35.15	380	88	P	V
	*	5300	88.84	-	-	76.86	34.62	12.51	35.15	380	88	A	V
		5370	49.11	-24.89	74	36.97	34.71	12.58	35.15	380	88	P	V
		5456.16	41.2	-12.8	54	28.86	34.83	12.67	35.16	380	88	A	V



802.11a CH 64 5320MHz	*	5320	99.23	-	-	87.2	34.64	12.54	35.15	265	34	P	H
	*	5320	91.16	-	-	79.13	34.64	12.54	35.15	265	34	A	H
		5367.68	49.77	-24.23	74	37.63	34.71	12.58	35.15	265	34	P	H
		5353.28	42.01	-11.99	54	29.89	34.69	12.58	35.15	265	34	A	H
	*	5320	97.09	-	-	85.06	34.64	12.54	35.15	326	334	P	V
	*	5320	89.07	-	-	77.04	34.64	12.54	35.15	326	334	A	V
		5366.88	49.91	-24.09	74	37.77	34.71	12.58	35.15	326	334	P	V
		5354.24	41.61	-12.39	54	29.49	34.69	12.58	35.15	326	334	A	V
Remark	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> </ol>												



**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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	43.03	-25.17	68.2	46.59	37.32	18.3	59.18	100	0	P	H
		15780	49.2	-24.8	74	43.12	40.62	22.14	56.68	100	0	P	H
		10520	43.56	-24.64	68.2	47.12	37.32	18.3	59.18	100	0	P	V
		15780	48.9	-25.1	74	42.82	40.62	22.14	56.68	100	0	P	V
802.11a CH 60 5300MHz		10600	44.47	-29.53	74	47.75	37.42	18.38	59.08	100	0	P	H
		15900	47.95	-26.05	74	41.53	40.72	22.28	56.58	100	0	P	H
		10600	44.02	-29.98	74	47.3	37.42	18.38	59.08	100	0	P	V
		15900	47.5	-26.5	74	41.08	40.72	22.28	56.58	100	0	P	V
802.11a CH 64 5320MHz		10640	45.22	-28.78	74	48.38	37.47	18.4	59.03	100	0	P	H
		15960	49.44	-24.56	74	42.83	40.77	22.37	56.53	100	0	P	H
		10640	44.42	-29.58	74	47.58	37.47	18.4	59.03	100	0	P	V
		15960	48.82	-25.18	74	42.21	40.77	22.37	56.53	100	0	P	V
<b>Remark</b>	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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11n HT20 CH 52 5260MHz		5043.75	49.98	-24.02	74	38.63	34.27	12.21	35.13	246	44	P	H
		5106.75	42.3	-11.7	54	30.76	34.36	12.32	35.14	246	44	A	H
	*	5260	100.18	-	-	88.29	34.57	12.47	35.15	246	44	P	H
	*	5260	92.72	-	-	80.83	34.57	12.47	35.15	246	44	A	H
		5391.36	49.86	-24.14	74	37.65	34.74	12.62	35.15	246	44	P	H
		5451.6	41.35	-12.65	54	29.01	34.83	12.67	35.16	246	44	A	H
		5121.1	50	-24	74	38.46	34.36	12.32	35.14	261	99	P	V
		5058.8	41.57	-12.43	54	30.2	34.29	12.21	35.13	261	99	A	V
	*	5260	97.48	-	-	85.59	34.57	12.47	35.15	261	99	P	V
	*	5260	89.06	-	-	77.17	34.57	12.47	35.15	261	99	A	V
		5449.2	49.17	-24.83	74	36.83	34.83	12.67	35.16	261	99	P	V
		5398.08	41.18	-12.82	54	28.95	34.76	12.62	35.15	261	99	A	V
802.11n HT20 CH 60 5300MHz		5080.85	50.1	-23.9	74	38.64	34.32	12.27	35.13	257	45	P	H
		5147.7	41.93	-12.07	54	30.28	34.41	12.38	35.14	257	45	A	H
	*	5300	99.45	-	-	87.47	34.62	12.51	35.15	257	45	P	H
	*	5300	91.62	-	-	79.64	34.62	12.51	35.15	257	45	A	H
		5391.6	49.53	-24.47	74	37.32	34.74	12.62	35.15	257	45	P	H
		5356.8	41.45	-12.55	54	29.33	34.69	12.58	35.15	257	45	A	H
		5144.9	49.91	-24.09	74	38.26	34.41	12.38	35.14	399	98	P	V
		5141.4	41.56	-12.44	54	29.91	34.41	12.38	35.14	399	98	A	V
	*	5300	96.91	-	-	84.93	34.62	12.51	35.15	399	98	P	V
	*	5300	89.13	-	-	77.15	34.62	12.51	35.15	399	98	A	V
	5398.08	49.51	-24.49	74	37.28	34.76	12.62	35.15	399	98	P	V	
	5451.84	41.38	-12.62	54	29.04	34.83	12.67	35.16	399	98	A	V	



802.11n HT20 CH 64 5320MHz	*	5320	97.85	-	-	85.82	34.64	12.54	35.15	217	32	P	H
	*	5320	90.26	-	-	78.23	34.64	12.54	35.15	217	32	A	H
		5369.92	49.41	-24.59	74	37.27	34.71	12.58	35.15	217	32	P	H
		5350.08	41.99	-12.01	54	29.87	34.69	12.58	35.15	217	32	A	H
	*	5320	95.32	-	-	83.29	34.64	12.54	35.15	311	316	P	V
	*	5320	87.73	-	-	75.7	34.64	12.54	35.15	311	316	A	V
		5366.72	48.58	-25.42	74	36.44	34.71	12.58	35.15	311	316	P	V
		5351.04	41.52	-12.48	54	29.4	34.69	12.58	35.15	311	316	A	V
Remark	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> </ol>												



Band 2 5250~5350MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

Table with 14 columns: WIFI Ant. 1, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include data for 802.11n HT20 CH 52 (5260MHz) and 802.11n HT20 CH 60 (5300MHz).

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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )	
802.11n HT40 CH 54 5270MHz		5116.9	50.63	-23.37	74	39.09	34.36	12.32	35.14	256	34	P	H	
		5120.4	42.85	-11.15	54	31.31	34.36	12.32	35.14	256	34	A	H	
	*	5270	97.95	-	-	86.02	34.57	12.51	35.15	256	34	P	H	
	*	5270	91.09	-	-	79.16	34.57	12.51	35.15	256	34	A	H	
		5440.8	49.32	-24.68	74	37	34.81	12.67	35.16	256	34	P	H	
		5443.68	42.11	-11.89	54	29.79	34.81	12.67	35.16	256	34	A	H	
		5095.2	50.31	-23.69	74	38.84	34.34	12.27	35.14	250	99	P	V	
		5122.85	42.73	-11.27	54	31.16	34.39	12.32	35.14	250	99	A	V	
	*	5270	95.68	-	-	83.75	34.57	12.51	35.15	250	99	P	V	
	*	5270	89.08	-	-	77.15	34.57	12.51	35.15	250	99	A	V	
		5374.56	50.15	-23.85	74	38.01	34.71	12.58	35.15	250	99	P	V	
		5452.32	42	-12	54	29.66	34.83	12.67	35.16	250	99	A	V	
	802.11n HT40 CH 62 5310MHz		5103.95	51	-23	74	39.48	34.34	12.32	35.14	276	28	P	H
			5140.35	42.62	-11.38	54	30.97	34.41	12.38	35.14	276	28	A	H
*		5310	96.9	-	-	84.87	34.64	12.54	35.15	276	28	P	H	
*		5310	89.96	-	-	77.93	34.64	12.54	35.15	276	28	A	H	
		5354.16	56.54	-17.46	74	44.42	34.69	12.58	35.15	276	28	P	H	
		5350.08	49.41	-4.59	54	37.29	34.69	12.58	35.15	276	28	A	H	
		5126	50.07	-23.93	74	38.5	34.39	12.32	35.14	257	98	P	V	
		5092.4	42.38	-11.62	54	30.9	34.34	12.27	35.13	257	98	A	V	
*		5310	93.34	-	-	81.31	34.64	12.54	35.15	257	98	P	V	
*		5310	86.29	-	-	74.26	34.64	12.54	35.15	257	98	A	V	
	5352	53.34	-20.66	74	41.22	34.69	12.58	35.15	257	98	P	V		
	5350.08	46.49	-7.51	54	34.37	34.69	12.58	35.15	257	98	A	V		
<b>Remark</b>	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)

Table with 14 columns: WIFI Ant. 1, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include data for 802.11n HT40 CH 54 at 5270MHz and 802.11n HT40 CH 62 at 5310MHz.

- 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	Level	Over	Limit	Read	Antenna	Path	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)
802.11a CH 100 5500MHz		5431.44	49.97	-24.03	74	37.65	34.81	12.67	35.16	233	81	P	H
		5461.52	48.83	-19.37	68.2	36.45	34.83	12.71	35.16	233	81	P	H
		5459.12	42.19	-11.81	54	29.85	34.83	12.67	35.16	233	81	A	H
	*	5500	100.53	-	-	88.08	34.9	12.71	35.16	233	81	P	H
	*	5500	94.89	-	-	82.44	34.9	12.71	35.16	233	81	A	H
		5432.88	50.28	-23.72	74	37.96	34.81	12.67	35.16	387	244	P	V
		5461.84	48.72	-19.48	68.2	36.34	34.83	12.71	35.16	387	244	P	V
		5459.12	41.14	-12.86	54	28.8	34.83	12.67	35.16	387	244	A	V
	*	5500	98.08	-	-	85.63	34.9	12.71	35.16	387	244	P	V
	*	5500	92.18	-	-	79.73	34.9	12.71	35.16	387	244	A	V
802.11a CH 116 5580MHz		5441.92	49.83	-24.17	74	37.51	34.81	12.67	35.16	218	151	P	H
		5468.8	48.75	-19.45	68.2	36.35	34.85	12.71	35.16	218	151	P	H
		5459.92	41.3	-12.7	54	28.96	34.83	12.67	35.16	218	151	A	H
	*	5580	104.42	-	-	91.8	35	12.8	35.18	218	151	P	H
	*	5580	96.32	-	-	83.7	35	12.8	35.18	218	151	A	H
		5746.1	50.38	-17.82	68.2	37.28	35.24	13.07	35.21	218	151	P	H
		5395.84	49.07	-24.93	74	36.84	34.76	12.62	35.15	309	91	P	V
		5469.04	49.12	-19.08	68.2	36.72	34.85	12.71	35.16	309	91	P	V
		5458.24	41.49	-12.51	54	29.15	34.83	12.67	35.16	309	91	A	V
	*	5580	103.76	-	-	91.14	35	12.8	35.18	309	91	P	V
	*	5580	95.63	-	-	83.01	35	12.8	35.18	309	91	A	V
		5729.09	50.92	-17.28	68.2	37.89	35.21	13.02	35.2	309	91	P	V



802.11a CH 140 5700MHz	*	5700	104.33	-	-	91.4	35.17	12.96	35.2	208	148	P	H
	*	5700	97.17	-	-	84.24	35.17	12.96	35.2	208	148	A	H
		5727.16	54.11	-14.09	68.2	41.08	35.21	13.02	35.2	208	148	P	H
	*	5700	105.25	-	-	92.32	35.17	12.96	35.2	310	87	P	V
	*	5700	97.61	-	-	84.68	35.17	12.96	35.2	310	87	A	V
		5725.88	54.01	-14.19	68.2	40.98	35.21	13.02	35.2	310	87	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 (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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	45.34	-28.66	74	47.59	37.9	18.45	58.6	100	0	P	H
		16500	47.73	-20.47	68.2	39.36	41.8	22.67	56.1	100	0	P	H
		11000	44.78	-29.22	74	47.03	37.9	18.45	58.6	100	0	P	V
		16500	48.53	-19.67	68.2	40.16	41.8	22.67	56.1	100	0	P	V
802.11a CH 116 5580MHz		11160	46.53	-27.47	74	47.92	38.07	18.71	58.17	100	0	P	H
		16740	49.66	-18.54	68.2	40.83	41.94	22.85	55.96	100	0	P	H
		11160	45.6	-28.4	74	46.99	38.07	18.71	58.17	100	0	P	V
		16740	49.98	-18.22	68.2	41.15	41.94	22.85	55.96	100	0	P	V
802.11a CH 140 5700MHz		11400	49.59	-24.41	74	50.03	38.3	18.82	57.56	100	0	P	H
		17100	49.91	-18.29	68.2	40.52	41.96	23.23	55.8	100	0	P	H
		11400	45.39	-28.61	74	45.83	38.3	18.82	57.56	100	0	P	V
		17100	49.26	-18.94	68.2	39.87	41.96	23.23	55.8	100	0	P	V
<b>Remark</b>	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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11n HT20 CH 100 5500MHz		5387.44	49.66	-24.34	74	37.45	34.74	12.62	35.15	208	146	P	H
		5468.4	49.23	-18.97	68.2	36.83	34.85	12.71	35.16	208	146	P	H
		5458.64	41.92	-12.08	54	29.58	34.83	12.67	35.16	208	146	A	H
	*	5500	101.03	-	-	88.58	34.9	12.71	35.16	208	146	P	H
	*	5500	94.5	-	-	82.05	34.9	12.71	35.16	208	146	A	H
		5415.76	50.09	-23.91	74	37.85	34.78	12.62	35.16	379	266	P	V
		5468.72	52.16	-16.04	68.2	39.76	34.85	12.71	35.16	379	266	P	V
		5457.2	41.6	-12.4	54	29.26	34.83	12.67	35.16	379	266	A	V
	*	5500	98.68	-	-	86.23	34.9	12.71	35.16	379	266	P	V
	*	5500	92.09	-	-	79.64	34.9	12.71	35.16	379	266	A	V
802.11n HT20 CH 116 5580MHz		5357.44	49.91	-24.09	74	37.79	34.69	12.58	35.15	216	146	P	H
		5466.16	48.71	-19.49	68.2	36.31	34.85	12.71	35.16	216	146	P	H
		5458	41.41	-12.59	54	29.07	34.83	12.67	35.16	216	146	A	H
	*	5580	104.99	-	-	92.37	35	12.8	35.18	216	146	P	H
	*	5580	98.17	-	-	85.55	35	12.8	35.18	216	146	A	H
		5752.715	51.13	-17.07	68.2	38.01	35.26	13.07	35.21	216	146	P	H
		5428.24	49.47	-24.53	74	37.18	34.78	12.67	35.16	387	82	P	V
		5464.24	48.99	-19.21	68.2	36.59	34.85	12.71	35.16	387	82	P	V
		5458.48	41.3	-12.7	54	28.96	34.83	12.67	35.16	387	82	A	V
	*	5580	103.94	-	-	91.32	35	12.8	35.18	387	82	P	V
	*	5580	97.46	-	-	84.84	35	12.8	35.18	387	82	A	V
		5731.61	50.52	-17.68	68.2	37.5	35.21	13.02	35.21	387	82	P	V



802.11n	*	5700	106.6	-	-	93.67	35.17	12.96	35.2	218	148	P	H
	*	5700	99.28	-	-	86.35	35.17	12.96	35.2	218	148	A	H
HT20		5725.4	58.11	-10.09	68.2	45.08	35.21	13.02	35.2	218	148	P	H
CH 140	*	5700	105.73	-	-	92.8	35.17	12.96	35.2	354	87	P	V
5700MHz	*	5700	99.09	-	-	86.16	35.17	12.96	35.2	354	87	A	V
		5726.12	59.81	-8.39	68.2	46.78	35.21	13.02	35.2	354	87	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 (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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20		11000	44.75	-29.25	74	47	37.9	18.45	58.6	100	0	P	H
		16500	51.8	-16.4	68.2	43.43	41.8	22.67	56.1	100	0	P	H
CH 100 5500MHz		11000	43.72	-30.28	74	45.97	37.9	18.45	58.6	100	0	P	V
		16500	49.47	-18.73	68.2	41.1	41.8	22.67	56.1	100	0	P	V
802.11n HT20 CH 116 5580MHz		11160	43.61	-30.39	74	45	38.07	18.71	58.17	100	0	P	H
		16740	51.42	-16.78	68.2	42.59	41.94	22.85	55.96	100	0	P	H
		11160	44.57	-29.43	74	45.96	38.07	18.71	58.17	100	0	P	V
		16740	48.54	-19.66	68.2	39.71	41.94	22.85	55.96	100	0	P	V
802.11n HT20 CH 140 5700MHz		11400	47.29	-26.71	74	47.73	38.3	18.82	57.56	100	0	P	H
		17100	50.75	-17.45	68.2	41.36	41.96	23.23	55.8	100	0	P	H
		11400	46.51	-27.49	74	46.95	38.3	18.82	57.56	100	0	P	V
		17100	48.63	-19.57	68.2	39.24	41.96	23.23	55.8	100	0	P	V
<b>Remark</b>	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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11n HT40 CH 102 5510MHz		5459.2	50.24	-23.76	74	37.9	34.83	12.67	35.16	210	144	P	H
		5465.92	56.74	-11.46	68.2	44.34	34.85	12.71	35.16	210	144	P	H
		5459.68	44.02	-9.98	54	31.68	34.83	12.67	35.16	210	144	A	H
	*	5510	98.7	-	-	86.21	34.9	12.76	35.17	210	144	P	H
	*	5510	92.31	-	-	79.82	34.9	12.76	35.17	210	144	A	H
		5740.745	50.5	-17.7	68.2	37.4	35.24	13.07	35.21	210	144	P	H
		5398	49.46	-24.54	74	37.23	34.76	12.62	35.15	398	254	P	V
		5468.08	51.31	-16.89	68.2	38.91	34.85	12.71	35.16	398	254	P	V
		5452.48	42.14	-11.86	54	29.8	34.83	12.67	35.16	398	254	A	V
	*	5510	95.62	-	-	83.13	34.9	12.76	35.17	398	254	P	V
	*	5510	89.24	-	-	76.75	34.9	12.76	35.17	398	254	A	V
		5759.96	54.69	-13.51	68.2	41.58	35.26	13.07	35.22	398	254	P	V
802.11n HT40 CH 110 5550MHz		5372.32	49.43	-24.57	74	37.29	34.71	12.58	35.15	207	144	P	H
		5470	48.4	-19.8	68.2	36	34.85	12.71	35.16	207	144	P	H
		5459.44	42.11	-11.89	54	29.77	34.83	12.67	35.16	207	144	A	H
	*	5550	101.01	-	-	88.41	34.97	12.8	35.17	207	144	P	H
	*	5550	94.11	-	-	81.51	34.97	12.8	35.17	207	144	A	H
		5752.715	50.75	-17.45	68.2	37.63	35.26	13.07	35.21	207	144	P	H
		5398.24	48.91	-25.09	74	36.68	34.76	12.62	35.15	374	94	P	V
		5467.84	48.3	-19.9	68.2	35.9	34.85	12.71	35.16	374	94	P	V
		5445.52	42.02	-11.98	54	29.68	34.83	12.67	35.16	374	94	A	V
	*	5550	99.63	-	-	87.03	34.97	12.8	35.17	374	94	P	V
	*	5550	92.58	-	-	79.98	34.97	12.8	35.17	374	94	A	V
		5759.96	52.49	-15.71	68.2	39.38	35.26	13.07	35.22	374	94	P	V



802.11n HT40 CH 134 5670MHz		5376.25	49.23	-24.77	74	37.09	34.71	12.58	35.15	204	149	P	H
		5461.3	47.56	-20.64	68.2	35.18	34.83	12.71	35.16	204	149	P	H
		5459.9	42.32	-11.68	54	29.98	34.83	12.67	35.16	204	149	A	H
	*	5670	103.21	-	-	90.3	35.14	12.96	35.19	204	149	P	H
	*	5670	96.66	-	-	83.75	35.14	12.96	35.19	204	149	A	H
		5729.3	59.1	-9.1	68.2	46.07	35.21	13.02	35.2	204	149	P	H
		5448.7	49.32	-24.68	74	36.98	34.83	12.67	35.16	371	94	P	V
		5466.9	48.88	-19.32	68.2	36.48	34.85	12.71	35.16	371	94	P	V
		5439.25	42.07	-11.93	54	29.75	34.81	12.67	35.16	371	94	A	V
	*	5670	102.7	-	-	89.79	35.14	12.96	35.19	371	94	P	V
	*	5670	95.38	-	-	82.47	35.14	12.96	35.19	371	94	A	V
		5732.275	56.04	-12.16	68.2	43.02	35.21	13.02	35.21	371	94	P	V
<b>Remark</b>	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 )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11n		11020	44.38	-29.62	74	46.56	37.92	18.46	58.56	100	0	P	H
HT40		16530	47.81	-20.39	68.2	39.37	41.82	22.7	56.08	100	0	P	H
CH 102		11020	42.75	-31.25	74	44.93	37.92	18.46	58.56	100	0	P	V
5510MHz		16530	47.68	-20.52	68.2	39.24	41.82	22.7	56.08	100	0	P	V
802.11n		11100	42.87	-31.13	74	44.62	38	18.59	58.34	100	0	P	H
HT40		16650	49.64	-18.56	68.2	40.96	41.89	22.8	56.01	100	0	P	H
CH 110		11100	42.69	-31.31	74	44.44	38	18.59	58.34	100	0	P	V
5550MHz		16650	49.12	-19.08	68.2	40.44	41.89	22.8	56.01	100	0	P	V
802.11n		11340	44.7	-29.3	74	45.41	38.23	18.79	57.73	100	0	P	H
HT40		17010	48.99	-19.21	68.2	39.62	42.08	23.09	55.8	100	0	P	H
CH 134		11340	43.81	-30.19	74	44.52	38.23	18.79	57.73	100	0	P	V
5670MHz		17010	48.32	-19.88	68.2	38.95	42.08	23.09	55.8	100	0	P	V
<b>Remark</b>	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	Level	Over	Limit	Read	Antenna	Path	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 )
802.11a CH 144 5720MHz	*	5720	106.3	-	-	93.27	35.21	13.02	35.2	208	143	P	H
	*	5720	99.38	-	-	86.35	35.21	13.02	35.2	208	143	A	H
	*	5720	105.84	-	-	92.81	35.21	13.02	35.2	351	76	P	V
	*	5720	99.04	-	-	86.01	35.21	13.02	35.2	351	76	A	V
<b>Remark</b>	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)

Table with 14 columns: WIFI Ant. 1, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include data for 802.11a CH 144 at 11440 and 17160 MHz, and a Remark section.



Band 3 - Straddle Channel
WIFI 802.11n HT20 (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 1, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include 802.11n, HT20, CH 144, 5720MHz and a Remark section.



Band 3 - Straddle Channel
WIFI 802.11n HT20 (Harmonic @ 3m)

Table with 14 columns: WIFI Ant. 1, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include data for 802.11n HT20 CH 144 at 11440 and 17160 MHz, and a Remark section.



Emission below 1GHz
WIFI 802.11n HT40 (LF @ 3m)

Table with 14 columns: WIFI, Note, Frequency, Level, Over, Limit, Read, Antenna, Path, Preamp, Ant, Table, Peak, Pol. It contains 11 rows of test data for 802.11n HT40 LF and a Remark section at the bottom.



Note symbol

*	<b>Fundamental Frequency</b> which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is <b>over limit</b> line.
P/A	<b>Peak</b> or <b>Average</b>
H/V	<b>Horizontal</b> or <b>Vertical</b>



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	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. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

**For Peak Limit @ 2390MHz:**

1. Level(dBμV/m)  
= Antenna Factor(dB/m) + Path 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) + Path 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)

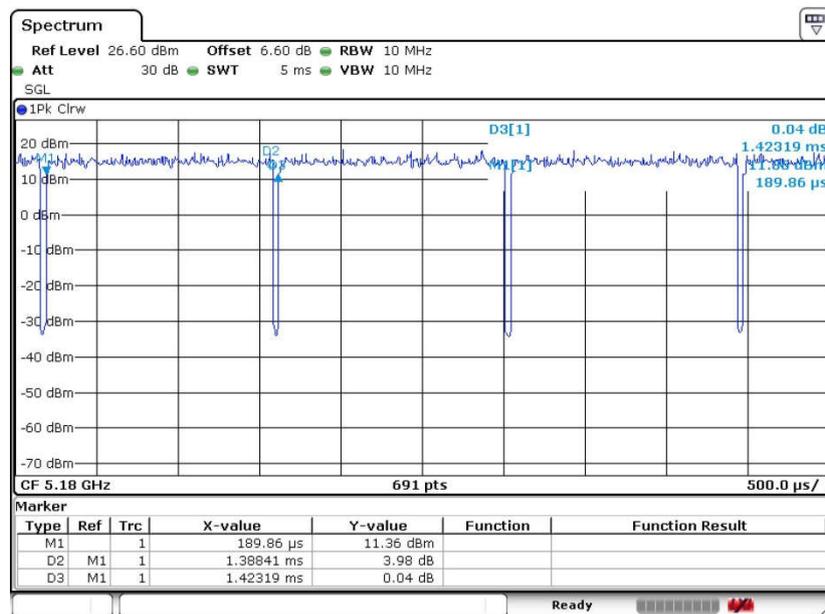
**Both peak and average measured complies with the limit line, so test result is “PASS”.**



### Appendix C. Duty Cycle Plots

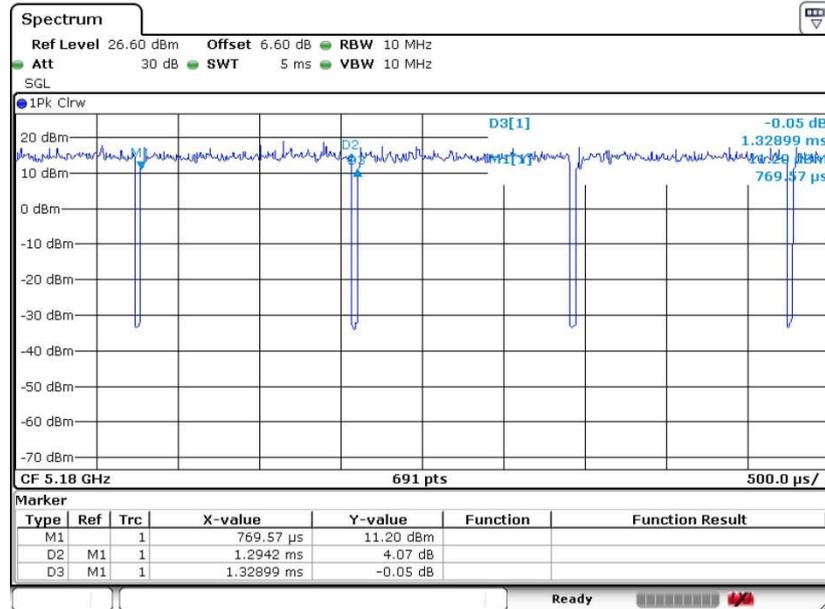
Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	97.56	1.388	0.720	1 kHz
802.11n HT20	97.38	1.294	0.773	1 kHz
802.11n HT40	94.92	0.649	1.540	3 kHz

#### 802.11a





802.11n HT20



802.11n HT40

