



# FCC RF Test Report

**APPLICANT** : Motorola Mobility LLC  
**EQUIPMENT** : Mobile Cellular Phone  
**BRAND NAME** : Motorola  
**MODEL NAME** : XT2171-1  
**FCC ID** : IHDT56ZX3  
**STANDARD** : FCC Part 15 Subpart E §15.407  
**CLASSIFICATION** : (NII) Unlicensed National Information Infrastructure  
**TEST DATE(S)** : Sep. 04, 2021 ~ Sep. 26, 2021

We, Sporton International (Shenzhen) 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 (Shenzhen) Inc., the test report shall not be reproduced except in full.

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Approved by: Eric Shih / Manager



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People's Republic of China**



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### SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	2.1049 & 15.403(i)	26dB & 99% Bandwidth	-	Report only	-
3.2	15.407(a)	Maximum Conducted Output Power	≤ 24 dBm	Pass	-
3.3	15.407(a)	Power Spectral Density	≤ 11 dBm	Pass	-
3.4	15.407(b)	Unwanted Emissions	15.407(b) & 15.209(a)	Pass	Under limit 2.51 dB at 5450.320 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 8.01 dB at 10.73 MHz
3.6	15.203 & 15.407(a)	Antenna Requirement	15.203 & 15.407(a)	Pass	-

<b>Declaration of Conformity:</b>
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
<b>Comments and Explanations:</b>
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.



# 1 General Description

## 1.1 Applicant

Motorola Mobility LLC  
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.2 Manufacturer

Motorola Mobility LLC  
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2171-1
FCC ID	IHDT56ZX3
IMEI Code	Conducted: 351368590021339/351368590021347 Conduction:351368590018715/351368590018723 Radiation: 351368590018871/351368590018889
HW Version	DVT2
SW Version	RRYA31.Q3-23
EUT Stage	Identical Prototype

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

## 1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5700 MHz
Maximum Output Power to Antenna	<p>&lt;5180 MHz ~ 5240 MHz&gt;</p> <p>802.11a : 17.25 dBm / 0.0531 W 802.11n HT20 : 17.16 dBm / 0.0520 W 802.11n HT40 : 16.51 dBm / 0.0448 W 802.11ac VHT20 : 16.74 dBm / 0.0472 W 802.11ac VHT40 : 16.49 dBm / 0.0446 W 802.11ac VHT80 : 15.33 dBm / 0.0341 W</p> <p>&lt;5260 MHz ~ 5320 MHz&gt;</p> <p>802.11a : 17.13 dBm / 0.0516 W 802.11n HT20 : 16.97 dBm / 0.0498 W 802.11n HT40 : 16.50 dBm / 0.0447 W 802.11ac VHT20 : 16.65 dBm / 0.0462 W 802.11ac VHT40 : 16.49 dBm / 0.0446 W 802.11ac VHT80 : 13.67 dBm / 0.0233 W</p> <p>&lt;5500 MHz ~ 5700 MHz &gt;</p>



	802.11a : 17.44 dBm / 0.0555 W 802.11n HT20 : 17.25 dBm / 0.0531 W 802.11n HT40 : 16.27 dBm / 0.0424 W 802.11ac VHT20 : 16.75 dBm / 0.0473 W 802.11ac VHT40 : 16.22 dBm / 0.0419 W 802.11ac VHT80 : 11.89 dBm / 0.0155 W
<b>99% Occupied Bandwidth</b>	<5180 MHz ~ 5240 MHz> 802.11a : 17.88 MHz 802.11n HT20 : 18.93 MHz 802.11n HT40 : 36.66 MHz 802.11ac VHT80 : 75.64 MHz <5260 MHz ~ 5320 MHz> 802.11a : 17.88 MHz 802.11n HT20 : 18.93 MHz 802.11n HT40 : 36.56 MHz 802.11ac VHT80 : 75.76 MHz <5500 MHz ~ 5700 MHz > 802.11a : 17.98 MHz 802.11n HT20 : 18.88 MHz 802.11n HT40 : 36.66 MHz 802.11ac VHT80 : 75.64 MHz
<b>Antenna Type / Gain</b>	<5150 MHz ~ 5250 MHz> PIFA Antenna with gain -6.40 dBi <5250 MHz ~ 5350 MHz> PIFA Antenna with gain -5.90 dBi <5470 MHz ~ 5725 MHz> PIFA Antenna with gain -5.70 dBi
<b>Type of Modulation</b>	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)

**Note:**

1. WLAN operation in 5600 MHz ~ 5650 MHz is notched.
2. Note: For 802.11n HT20 / ac VHT20 and 802.11n HT40 / ac VHT40 mode, the whole testing have assessed only 802.11n HT20/HT40 by referring to their maximum conducted power.

### 1.5 Modification of EUT

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



## 1.6 Testing Location

Sporton International (Shenzhen) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

<b>Test Firm</b>	Sporton International (Shenzhen) Inc.		
<b>Test Site Location</b>	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC Designation No.</b>	<b>FCC Test Firm Registration No.</b>
	CO01-SZ TH01-SZ	CN1256	421272

<b>Test Firm</b>	Sporton International (Shenzhen) Inc.		
<b>Test Site Location</b>	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City Guangdong Province China 518103 TEL: +86-755-33202398		
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC Designation No.</b>	<b>FCC Test Firm Registration No.</b>
	03CH01-SZ	CN1256	421272

## 1.7 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH01-SZ	AUDIX	E3	6.2009-8-24
2.	CO01-SZ	AUDIX	E3	6.120613b

## 1.8 Applicable Standards

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

- ♦ 47 CFR 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.

### 1.9 Specification of Accessory

Specification of Accessory			
AC Adapter 1(US)	Brand Name	Motorola (Chenyang)	Model Name MC-101
AC Adapter 1(EU)	Brand Name	Motorola (Chenyang)	Model Name MC-102
AC Adapter 1(UK)	Brand Name	Motorola (Chenyang)	Model Name MC-103
AC Adapter 1(AU)	Brand Name	Motorola (Chenyang)	Model Name MC-105
AC Adapter 2(US)	Brand Name	Motorola (Salcomp)	Model Name MC-101
AC Adapter 2(EU)	Brand Name	Motorola (Salcomp)	Model Name MC-102
AC Adapter 2(UK)	Brand Name	Motorola (Salcomp)	Model Name MC-103
AC Adapter 2(AU)	Brand Name	Motorola (Salcomp)	Model Name MC-105
AC Adapter 3(US)	Brand Name	Motorola(Aohai)	Model Name MC-101
AC Adapter 3(EU)	Brand Name	Motorola(Aohai)	Model Name MC-102
AC Adapter 3(UK)	Brand Name	Motorola(Aohai)	Model Name MC-103
AC Adapter 3(AU)	Brand Name	Motorola (Aohai)	Model Name MC-105
AC Adapter 4(US)	Brand Name	Motorola (Chenyang)	Model Name MC-201
AC Adapter 4(AR)	Brand Name	Motorola (Chenyang)	Model Name MC-206
AC Adapter 5(US)	Brand Name	Motorola (Acbel)	Model Name MC-201
AC Adapter 5(AR)	Brand Name	Motorola (Acbel)	Model Name MC-206
AC Adapter 5(CHILE)	Brand Name	Motorola (Acbel)	Model Name MC-209
AC Adapter 6(IN)	Brand Name	Motorola (Chenyang)	Model Name MC-204
AC Adapter 7(IN)	Brand Name	Motorola (Aohai)	Model Name MC-204
AC Adapter 8(BR Local build)	Brand Name	Motorola (Salcomp)	Model Name MC-207
AC Adapter 9(BR Local build)	Brand Name	Motorola (Flex)	Model Name MC-207
AC Adapter 10(US)	Brand Name	Motorola(Chenyang)	Model Name MC-201
Battery	Brand Name	Motorola (ATL)	Model Name JK50
Earphone 1	Brand Name	Motorola (Juwei)	Model Name MH202(JWEP1182-T03H)
Earphone 2	Brand Name	Motorola (New Leader)	Model Name MH202(NLD-EM313A-11SF)
Earphone 3	Brand Name	Motorola (Juwei)	Model Name MH191(JWEP1209-T03H)
Earphone 4	Brand Name	Motorola (New Leader)	Model Name MH191(NLD-EM313A-21SF)
USB Cable 1	Brand Name	Motorola (Chuanyitong)	Model Name 88806-024
USB Cable 2	Brand Name	Motorola (SUNTOPS)	Model Name 336258
USB Cable 3	Brand Name	Motorola (I SHENG)	Model Name SC18C28955





## 2 Test Configuration of Equipment Under Test

- a. 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: conduction emission (150 kHz to 30 MHz), radiation 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 (Z plane) were recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

### 2.1 Carrier Frequency and Channel

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

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

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470-5725 MHz U-NII-2C	100	5500	112	5560
	102*	5510	116	5580
	104	5520	132	5660
	106 <sup>#</sup>	5530	134*	5670
	108	5540	136	5680
	110*	5550	140	5700

**Note:**

1. The above Frequency and Channel in "\*" were 802.11n HT40 and 802.11ac VHT40.
2. The above Frequency and Channel in "<sup>#</sup>" were 802.11ac VHT80.



## 2.2 Test Mode

Final test modes are considering the modulation and worse data rates as below table.

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

<b>Simultaneous transmission</b>
LTE B13 Link + Wifi 5G 11ac CH106 Tx

Test Cases	
<b>AC Conducted Emission</b>	Mode 1 : GSM850 Idle + Bluetooth Link + WLAN(5G)Link + USB Cable 1(Charging from Adapter 8) + Battery + Earphone1
<b>Remark:</b> 1. For Radiated Test Cases, The tests were performance with Adapter 1, Battery, Earphone 1, USB Cable 1	



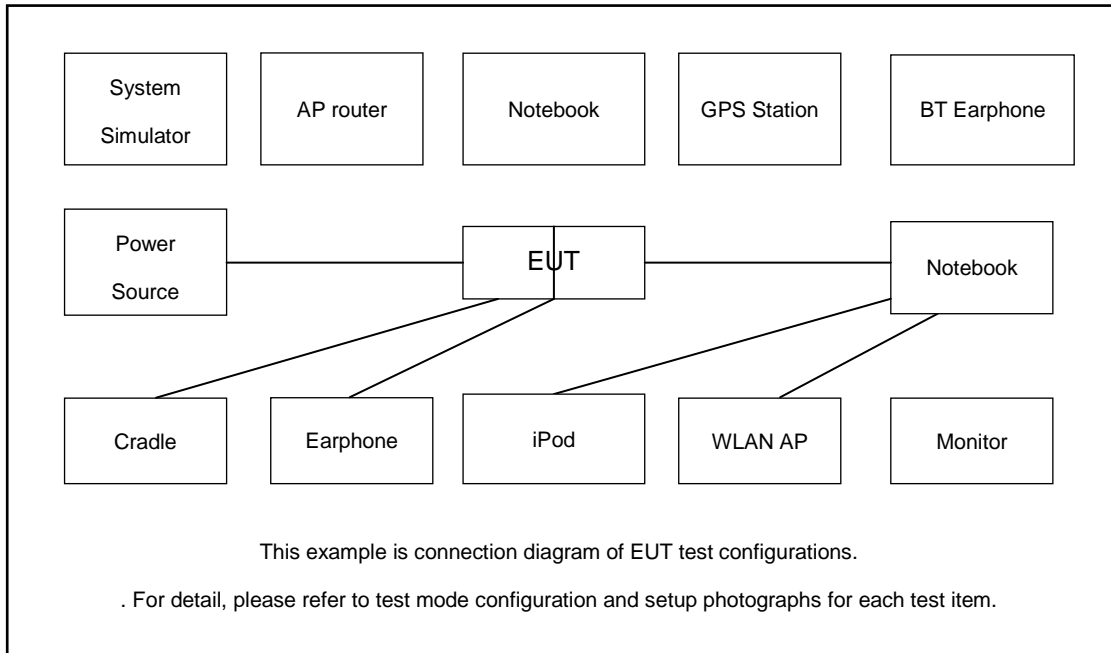
Ch. #		U-NII-1 : 5150-5250 MHz	U-NII-2A : 5250-5350 MHz	U-NII-2C : 5470-5725MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

Ch. #		U-NII-1 : 5150-5250 MHz	U-NII-2A : 5250-5350 MHz	U-NII-2C : 5470-5725MHz
		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. #		U-NII-1 : 5150-5250 MHz	U-NII-2A : 5250-5350 MHz	U-NII-2C : 5470-5725MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134

Ch. #		U-NII-1 : 5150-5250 MHz	U-NII-2A : 5250-5350 MHz	U-NII-2C : 5470-5725MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	-
M	Middle	42	58	106
H	High	-	-	-

### 2.3 Connection Diagram of Test System



### 2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Base Station(LTE)	Anritsu	MT8820C	N/A	N/A	Unshielded,1.8m
2.	WLAN AP	Dlink	DIR-820L	KA2IR820LA1	N/A	Unshielded,1.8m
3.	NOTE BOOK	Lenovo	E540	FCC DoC	NOTE BOOK	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Bluetooth Earphone	Samsung	EO-MG900	PYAHS-107W	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 continuous transmit/receive.

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

## 2.6 Measurement Results Explanation Example

**For all conducted test items:**

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor 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 and attenuator factor.

*Offset = RF cable loss + attenuator factor.*

Following shows an offset computation example with cable loss 5.0 dB and 20dB attenuator.

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\ &= 5.0 + 20 = 25.0 \text{ (dB)} \end{aligned}$$

### 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.

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

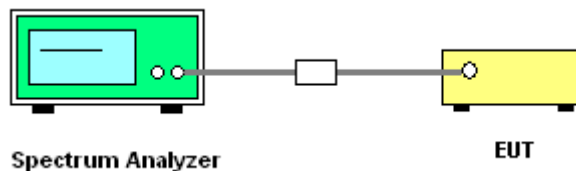
##### 3.1.2 Measuring Instruments

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.

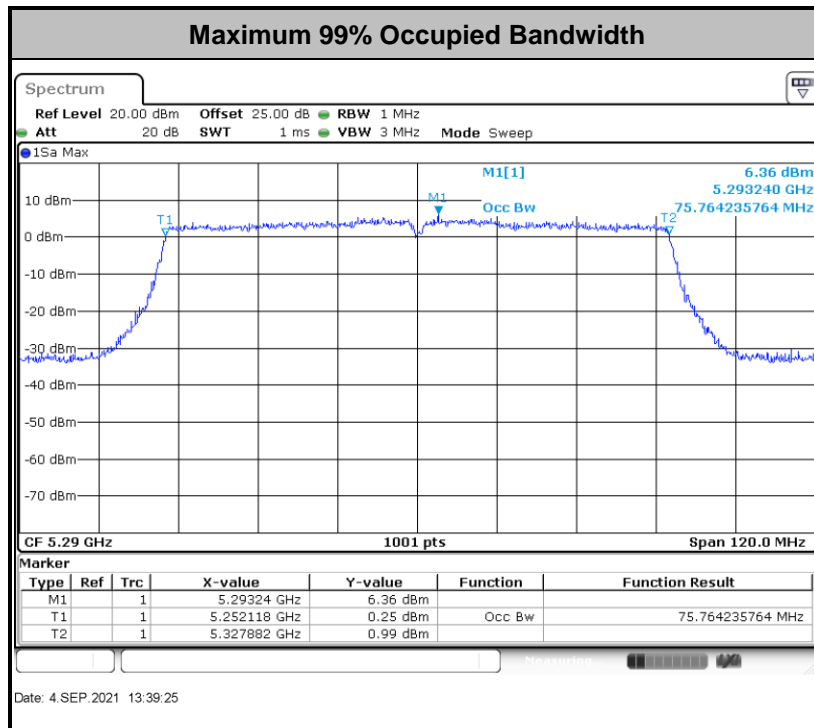
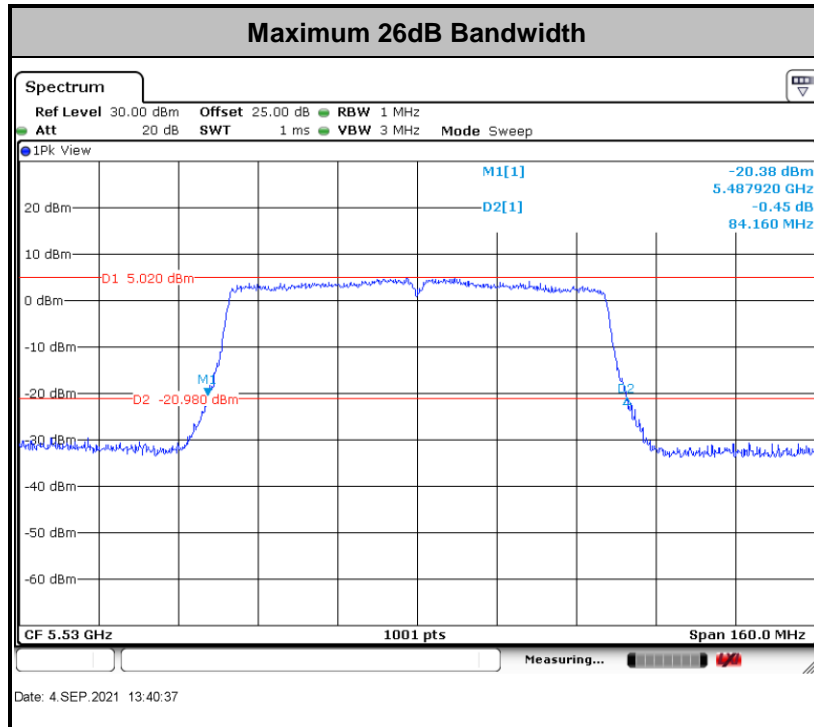
##### 3.1.4 Test Setup





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

Please refer to Appendix A.



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



## 3.2 Maximum Conducted Output Power Measurement

### 3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

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

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

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

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.



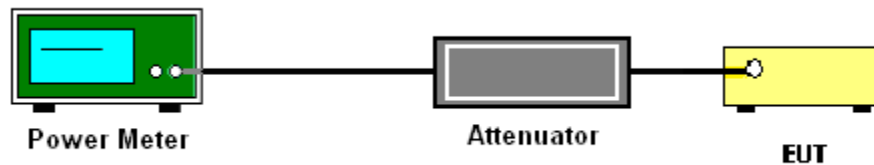
### 3.2.3 Test Procedures

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.

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

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

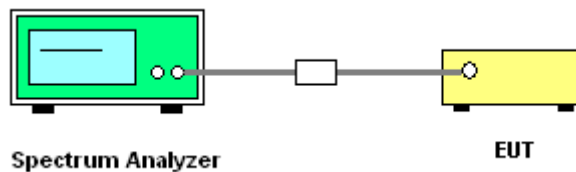
The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.  
Section F) Maximum power spectral density.

#### # Method SA-2 #

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

- 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.
1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
  2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.

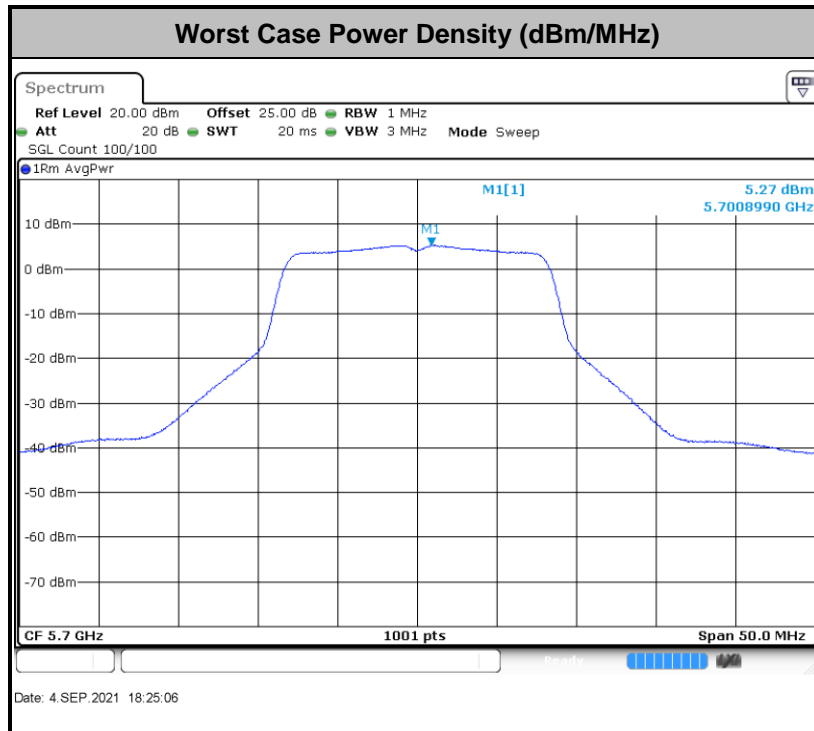
### 3.3.4 Test Setup





### 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 Emissions 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 5470-5725 MHz band: all emissions outside of the 5470-5725 MHz 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



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

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

$$EIRP = E_{Meas} + 20\log (d_{Meas}) - 104.7$$

where

EIRP is the equivalent isotropically radiated power, in dBm

$E_{Meas}$  is the field strength of the emission at the measurement distance, in dBμV/m

$d_{Meas}$  is the measurement distance, in m

(3) ANSI C63.10-2013 clause 12.7.3 note 97

As specified by regulatory requirements, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit. However, an out-of-band emission that complies with both the average and peak general regulatory limits is not required to satisfy the peak emission limit.

### 3.4.2 Measuring Instruments

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

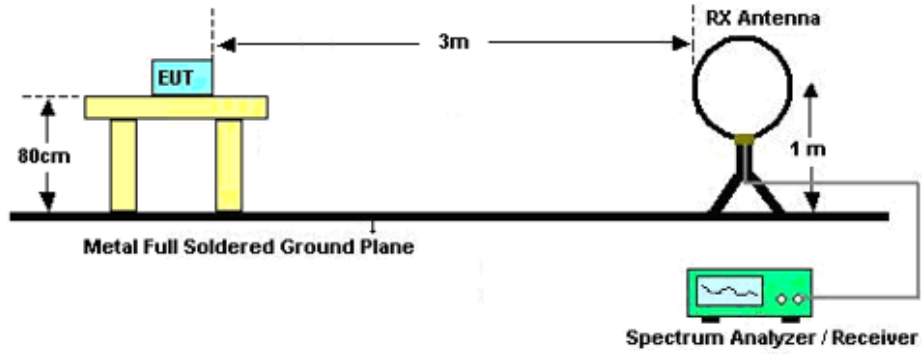


### 3.4.3 Test Procedures

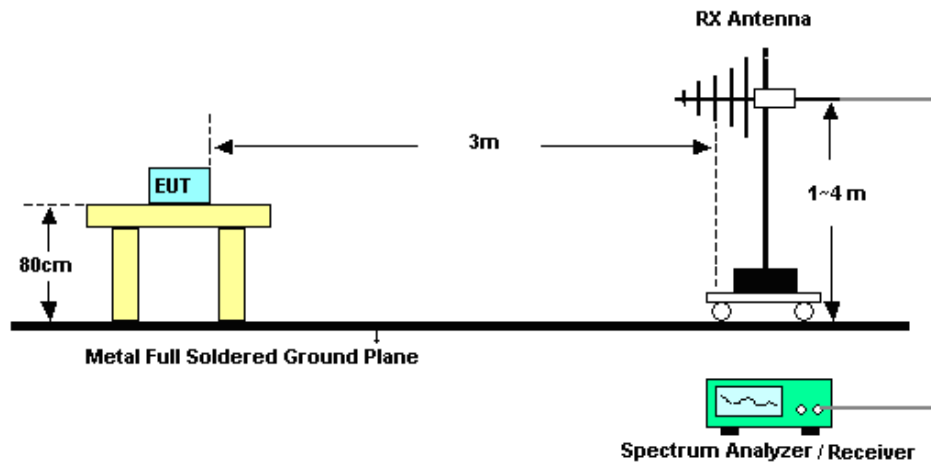
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.
  - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
    - RBW = 120 kHz
    - VBW = 300 kHz
    - Detector = Peak
    - Trace mode = max hold
  - (2) Procedure 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 peak 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

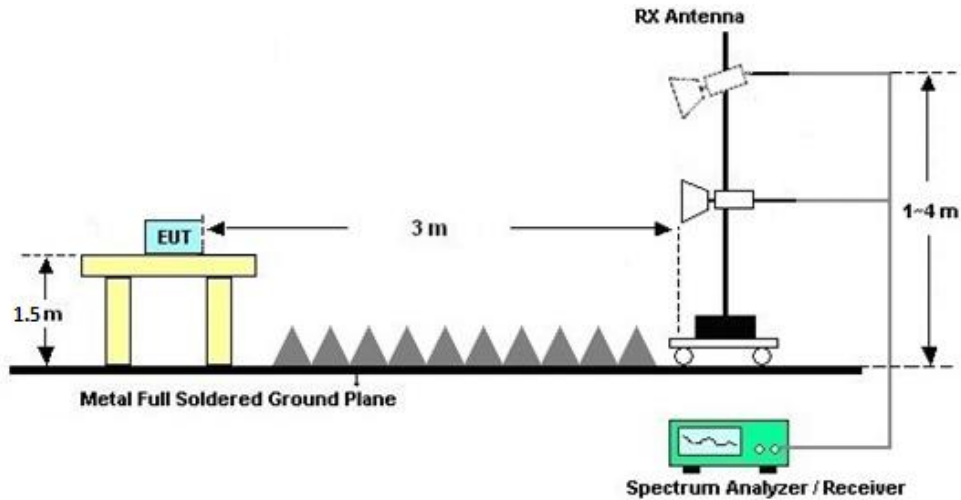


For radiated emissions from 30MHz to 1GHz





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.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

### 3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C.

### 3.4.7 Duty Cycle

Please refer to Appendix D.

### 3.4.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic or 40GHz, whichever is lower)

Please refer to Appendix C.



### 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

Please refer to Appendix B.



## **3.6 Antenna Requirements**

### **3.6.1 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.

### **3.6.2 Antenna Anti-Replacement Construction**

An embedded-in antenna design is used.

### **3.6.3 Antenna Gain**

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



## 4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Receiver	R&S	ESR7	101630	9kHz~7GHz;	Mar. 07, 2021	Sep. 11, 2021	Mar. 06, 2022	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2 LISN	00103912	9kHz~30MHz	Dec. 25, 2020	Sep. 11, 2021	Dec. 24, 2021	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Oct. 15, 2020	Sep. 11, 2021	Oct. 14, 2021	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Jul. 21, 2021	Sep. 11, 2021	Jul. 20, 2022	Conduction (CO01-SZ)
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 08, 2021	Sep. 04, 2021	Apr. 07, 2022	Conducted (TH01-SZ)
Pulse Power Sensor	Anritsu	MA2411B	1207253	30MHz~40GHz	Dec. 25, 2020	Sep. 04, 2021	Dec. 24, 2021	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1218010	50MHz Bandwidth	Dec. 25, 2020	Sep. 04, 2021	Dec. 24, 2021	Conducted (TH01-SZ)
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Dec. 03, 2020	Sep. 26, 2021	Dec. 02, 2021	Radiation (03CH01-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 21, 2021	Sep. 26, 2021	Jul. 20, 2022	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 22, 2020	Sep. 26, 2021	Jun. 21, 2022	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Jul. 15, 2021	Sep. 26, 2021	Jul. 14, 2022	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 25, 2021	Sep. 26, 2021	Jul. 24, 2022	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18GHz-40GHz	Apr. 11, 2021	Sep. 26, 2021	Apr. 10, 2022	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~300MHz	Apr. 07, 2021	Sep. 26, 2021	Apr. 06, 2022	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-0010 1800-30-10P-R	1943528	1GHz~18GHz	Oct. 16, 2020	Sep. 26, 2021	Oct. 15, 2021	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 16, 2020	Sep. 26, 2021	Oct. 15, 2021	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 21, 2021	Sep. 26, 2021	Jul. 20, 2022	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Sep. 26, 2021	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Sep. 26, 2021	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Sep. 26, 2021	NCR	Radiation (03CH01-SZ)

NCR: No Calibration Required



## 5 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.2dB
---	-------

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.2dB
---	-------

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.0dB
---	-------

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.3dB
---	-------

----- THE END -----



## Appendix A. Conducted Test Results

**Appendix A. Test Result of Conducted Test Items**

Test Engineer:	Ma Jie	Temperature:	21~25	°C
Test Date:	2021/9/4	Relative Humidity:	51~54	%



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

Band I										
Mod.	Data Rate	Ntx	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	IC 99% Bandwidth Power Limit (dBm)	IC 99% Bandwidth EIRP Limit (dBm)		
11a	6Mbps	1	36	5180	17.78	25.05	-	22.50		
11a	6Mbps	1	44	5220	17.88	24.65	-	22.52		
11a	6Mbps	1	48	5240	17.83	24.75	-	22.51		
HT20	MCS0	1	36	5180	18.88	25.40	-	22.76		
HT20	MCS0	1	44	5220	18.88	25.65	-	22.76		
HT20	MCS0	1	48	5240	18.93	26.25	-	22.77		
HT40	MCS0	1	38	5190	36.66	42.03	-	23.01		
HT40	MCS0	1	46	5230	36.56	41.94	-	23.01		
VHT80	MCS0	1	42	5210	75.64	84.32	-	23.01		

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

FCC Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)		Pass/Fail
11a	6Mbps	1	36	5180	0.09	17.25	24.00	-6.40		Pass
11a	6Mbps	1	44	5220	0.09	16.83	24.00	-6.40		Pass
11a	6Mbps	1	48	5240	0.09	16.87	24.00	-6.40		Pass
HT20	MCS0	1	36	5180	0.10	17.16	24.00	-6.40		Pass
HT20	MCS0	1	44	5220	0.10	16.81	24.00	-6.40		Pass
HT20	MCS0	1	48	5240	0.10	16.61	24.00	-6.40		Pass
HT40	MCS0	1	38	5190	0.16	16.51	24.00	-6.40		Pass
HT40	MCS0	1	46	5230	0.16	16.25	24.00	-6.40		Pass
VHT20	MCS0	1	36	5180	0.29	16.74	24.00	-6.40		Pass
VHT20	MCS0	1	44	5220	0.29	16.56	24.00	-6.40		Pass
VHT20	MCS0	1	48	5240	0.29	16.51	24.00	-6.40		Pass
VHT40	MCS0	1	38	5190	0.61	16.49	24.00	-6.40		Pass
VHT40	MCS0	1	46	5230	0.61	16.23	24.00	-6.40		Pass
VHT80	MCS0	1	42	5210	0.19	15.33	24.00	-6.40		Pass

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

FCC Band I										
Mod.	Data Rate	N <sub>TX</sub>	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	0.09	5.22	11.00	-6.40		Pass
11a	6Mbps	1	44	5220	0.09	4.75	11.00	-6.40		Pass
11a	6Mbps	1	48	5240	0.09	4.57	11.00	-6.40		Pass
HT20	MCS0	1	36	5180	0.10	4.90	11.00	-6.40		Pass
HT20	MCS0	1	44	5220	0.10	4.41	11.00	-6.40		Pass
HT20	MCS0	1	48	5240	0.10	4.26	11.00	-6.40		Pass
HT40	MCS0	1	38	5190	0.16	1.36	11.00	-6.40		Pass
HT40	MCS0	1	46	5230	0.16	0.94	11.00	-6.40		Pass
VHT80	MCS0	1	42	5210	0.19	-2.76	11.00	-6.40		Pass

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

Band II										
Mod.	Data Rate	N <sub>TX</sub>	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	24.75	23.51	29.51	23.98	
11a	6M bps	1	60	5300	17.88	24.95	23.52	29.52	23.98	
11a	6M bps	1	64	5320	17.83	24.90	23.51	29.51	23.98	
HT20	MCS 0	1	52	5260	18.88	25.50	23.76	29.76	23.98	
HT20	MCS 0	1	60	5300	18.93	26.40	23.77	29.77	23.98	
HT20	MCS 0	1	64	5320	18.93	26.40	23.77	29.77	23.98	
HT40	MCS 0	1	54	5270	36.56	42.48	23.98	30.00	23.98	
HT40	MCS 0	1	62	5310	36.56	42.30	23.98	30.00	23.98	
VHT80	MCS 0	1	58	5290	75.76	84.16	23.98	30.00	23.98	

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

FCC Band II										
Mod.	Data Rate	N <sub>TX</sub>	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	0.09	17.13	23.98	-5.90	26.99	Pass
11a	6M bps	1	60	5300	0.09	16.84	23.98	-5.90	26.99	Pass
11a	6M bps	1	64	5320	0.09	16.90	23.98	-5.90	26.99	Pass
HT20	MCS 0	1	52	5260	0.10	16.97	23.98	-5.90	26.99	Pass
HT20	MCS 0	1	60	5300	0.10	16.73	23.98	-5.90	26.99	Pass
HT20	MCS 0	1	64	5320	0.10	16.77	23.98	-5.90	26.99	Pass
HT40	MCS 0	1	54	5270	0.16	16.50	23.98	-5.90	26.99	Pass
HT40	MCS 0	1	62	5310	0.16	16.21	23.98	-5.90	26.99	Pass
VHT20	MCS 0	1	52	5260	0.29	16.65	23.98	-5.90	26.99	Pass
VHT20	MCS 0	1	60	5300	0.29	16.47	23.98	-5.90	26.99	Pass
VHT20	MCS 0	1	64	5320	0.29	16.55	23.98	-5.90	26.99	Pass
VHT40	MCS 0	1	54	5270	0.61	16.49	23.98	-5.90	26.99	Pass
VHT40	MCS 0	1	62	5310	0.61	16.18	23.98	-5.90	26.99	Pass
VHT80	MCS 0	1	58	5290	0.19	13.67	23.98	-5.90	26.99	Pass

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

Band II										
Mod.	Data Rate	N <sub>TX</sub>	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	0.09	4.83	11.00	-5.90		Pass
11a	6M bps	1	60	5300	0.09	4.39	11.00	-5.90		Pass
11a	6M bps	1	64	5320	0.09	4.45	11.00	-5.90		Pass
HT20	MCS 0	1	52	5260	0.10	4.41	11.00	-5.90		Pass
HT20	MCS 0	1	60	5300	0.10	4.15	11.00	-5.90		Pass
HT20	MCS 0	1	64	5320	0.10	4.26	11.00	-5.90		Pass
HT40	MCS 0	1	54	5270	0.16	1.05	11.00	-5.90		Pass
HT40	MCS 0	1	62	5310	0.16	0.68	11.00	-5.90		Pass
VHT80	MCS 0	1	58	5290	0.19	-3.42	11.00	-5.90		Pass

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

Band III										
Mod.	Data Rate	N <sub>TX</sub>	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	17.78	25.05	23.50	29.50	23.98	
11a	6M bps	1	116	5580	17.98	25.05	23.55	29.55	23.98	
11a	6M bps	1	140	5700	17.78	24.50	23.50	29.50	23.98	
HT20	MCS 0	1	100	5500	18.83	26.80	23.75	29.75	23.98	
HT20	MCS 0	1	116	5580	18.88	25.80	23.76	29.76	23.98	
HT20	MCS 0	1	140	5700	18.88	26.35	23.76	29.76	23.98	
HT40	MCS 0	1	102	5510	36.66	42.03	23.98	30.00	23.98	
HT40	MCS 0	1	110	5550	36.56	42.12	23.98	30.00	23.98	
HT40	MCS 0	1	134	5670	36.56	42.39	23.98	30.00	23.98	
VHT80	MCS 0	1	106	5530	75.64	84.16	23.98	30.00	23.98	

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

FCC Band III										
Mod.	Data Rate	N <sub>TX</sub>	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	0.09	16.55	23.98	-5.70	26.99	Pass
11a	6M bps	1	116	5580	0.09	16.36	23.98	-5.70	26.99	Pass
11a	6M bps	1	140	5700	0.09	17.44	23.98	-5.70	26.99	Pass
HT20	MCS 0	1	100	5500	0.10	16.45	23.98	-5.70	26.99	Pass
HT20	MCS 0	1	116	5580	0.10	16.25	23.98	-5.70	26.99	Pass
HT20	MCS 0	1	140	5700	0.10	17.25	23.98	-5.70	26.99	Pass
HT40	MCS 0	1	102	5510	0.16	16.10	23.98	-5.70	26.99	Pass
HT40	MCS 0	1	110	5550	0.16	15.77	23.98	-5.70	26.99	Pass
HT40	MCS 0	1	134	5670	0.16	16.27	23.98	-5.70	26.99	Pass
VHT20	MCS 0	1	100	5500	0.29	16.20	23.98	-5.70	26.99	Pass
VHT20	MCS 0	1	116	5580	0.29	15.76	23.98	-5.70	26.99	Pass
VHT20	MCS 0	1	140	5700	0.29	16.75	23.98	-5.70	26.99	Pass
VHT40	MCS 0	1	102	5510	0.61	16.07	23.98	-5.70	26.99	Pass
VHT40	MCS 0	1	110	5550	0.61	15.73	23.98	-5.70	26.99	Pass
VHT40	MCS 0	1	134	5670	0.61	16.22	23.98	-5.70	26.99	Pass
VHT80	MCS 0	1	106	5530	0.19	11.89	23.98	-5.70	26.99	Pass



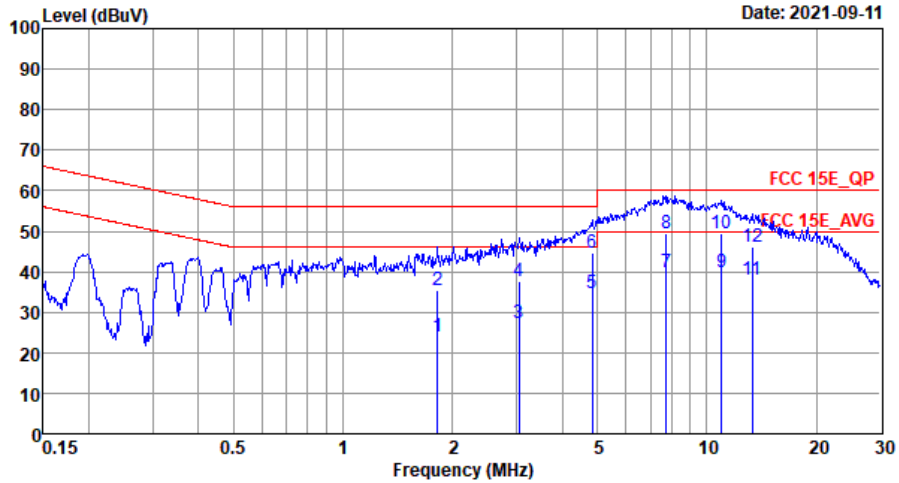
**TEST RESULTS DATA**  
**Power Spectral Density**

Band III										
Mod.	Data Rate	N <sub>TX</sub>	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	0.09	4.14	11.00	-5.70		Pass
11a	6M bps	1	116	5580	0.09	3.61	11.00	-5.70		Pass
11a	6M bps	1	140	5700	0.09	5.36	11.00	-5.70		Pass
HT20	MCS 0	1	100	5500	0.10	3.92	11.00	-5.70		Pass
HT20	MCS 0	1	116	5580	0.10	3.46	11.00	-5.70		Pass
HT20	MCS 0	1	140	5700	0.10	4.65	11.00	-5.70		Pass
HT40	MCS 0	1	102	5510	0.16	0.64	11.00	-5.70		Pass
HT40	MCS 0	1	110	5550	0.16	0.04	11.00	-5.70		Pass
HT40	MCS 0	1	134	5670	0.16	0.65	11.00	-5.70		Pass
VHT80	MCS 0	1	106	5530	0.19	-4.07	11.00	-5.70		Pass



## Appendix B. AC Conducted Emission Test Results

Test Engineer :	Yu Qiang	Temperature :	22~25°C
		Relative Humidity :	50~55%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

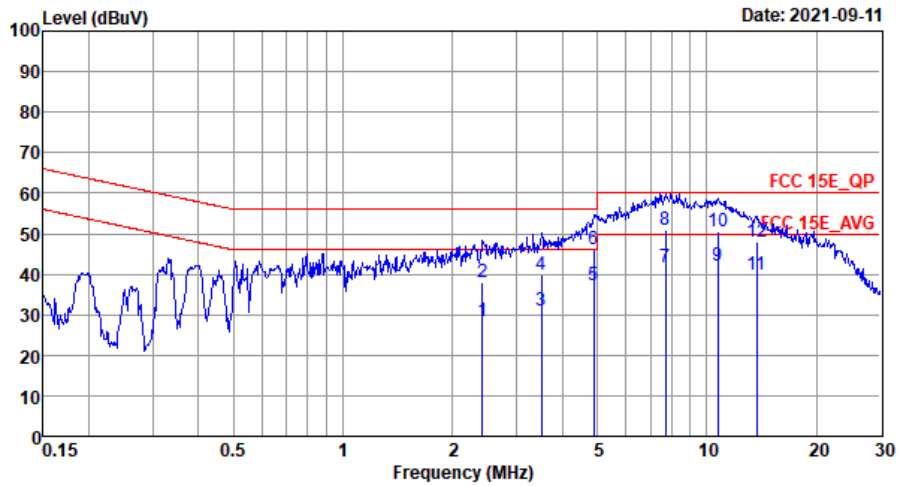


Site : CO01-SZ  
 Condition: FCC 15E QP LISN 20201030 L LINE

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	1.82	24.07	-21.93	46.00	13.90	0.09	10.08	Average
2	1.82	35.27	-20.73	56.00	25.10	0.09	10.08	QP
3	3.04	27.25	-18.75	46.00	16.99	0.07	10.19	Average
4	3.04	37.75	-18.25	56.00	27.49	0.07	10.19	QP
5	4.85	34.61	-11.39	46.00	24.31	0.01	10.29	Average
6	4.85	44.51	-11.49	56.00	34.21	0.01	10.29	QP
7	7.73	39.73	-10.27	50.00	29.40	0.15	10.18	Average
8	7.73	49.63	-10.37	60.00	39.30	0.15	10.18	QP
9 *	10.96	40.01	-9.99	50.00	29.50	0.36	10.15	Average
10	10.96	49.31	-10.69	60.00	38.80	0.36	10.15	QP
11	13.34	37.98	-12.02	50.00	27.31	0.43	10.24	Average
12	13.34	46.28	-13.72	60.00	35.61	0.43	10.24	QP



Test Engineer :	Yu Qiang	Temperature :	22~25°C
		Relative Humidity :	50~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-SZ  
 Condition: FCC 15E\_QP LISN\_20201030\_N NEUTRAL

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	2.42	28.31	-17.69	46.00	18.10	0.08	10.13	Average
2	2.42	37.91	-18.09	56.00	27.70	0.08	10.13	QP
3	3.51	30.87	-15.13	46.00	20.60	0.05	10.22	Average
4	3.51	39.97	-16.03	56.00	29.70	0.05	10.22	QP
5	4.90	37.21	-8.79	46.00	26.90	0.01	10.30	Average
6	4.90	46.31	-9.69	56.00	36.00	0.01	10.30	QP
7	7.69	41.83	-8.17	50.00	31.51	0.14	10.18	Average
8	7.69	50.83	-9.17	60.00	40.51	0.14	10.18	QP
9 *	10.73	41.99	-8.01	50.00	31.50	0.35	10.14	Average
10	10.73	50.49	-9.51	60.00	40.00	0.35	10.14	QP
11	13.70	40.00	-10.00	50.00	29.30	0.44	10.26	Average
12	13.70	48.10	-11.90	60.00	37.40	0.44	10.26	QP

Note:

- Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
- Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)



### Appendix C. 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		5090.48	50.96	-23.04	74	40	31.34	12.14	32.52	345	291	P	H
		5148.2	42.72	-11.28	54	31.74	31.36	12.15	32.53	345	291	A	H
		5180	102.47	-	-	91.47	31.38	12.16	32.54	345	291	P	H
		5180	96.31	-	-	85.31	31.38	12.16	32.54	345	291	A	H
		5128.7	50.83	-23.17	74	39.85	31.36	12.15	32.53	343	261	P	V
		5150	43.49	-10.51	54	32.51	31.36	12.15	32.53	343	261	A	V
		5180	104.31	-	-	93.31	31.38	12.16	32.54	343	261	P	V
		5180	97.79	-	-	86.79	31.38	12.16	32.54	343	261	A	V
802.11a CH 44 5220MHz		5088.92	50.41	-23.59	74	39.46	31.34	12.13	32.52	359	324	P	H
		5127.66	41.74	-12.26	54	30.76	31.36	12.15	32.53	359	324	A	H
		5220	105.24	-	-	94.22	31.4	12.17	32.55	359	324	P	H
		5220	98.71	-	-	87.69	31.4	12.17	32.55	359	324	A	H
		5409.12	48.71	-25.29	74	37.58	31.49	12.22	32.58	359	324	P	H
		5356.8	40.35	-13.65	54	29.25	31.46	12.21	32.57	359	324	A	H
		5081.38	50.34	-23.66	74	39.4	31.33	12.13	32.52	350	263	P	V
		5147.42	41.9	-12.1	54	30.92	31.36	12.15	32.53	350	263	A	V
		5220	106.08	-	-	95.06	31.4	12.17	32.55	350	263	P	V
		5220	99.96	-	-	88.94	31.4	12.17	32.55	350	263	A	V
		5372.4	50.09	-23.91	74	38.98	31.47	12.21	32.57	350	263	P	V
	5351.28	40.7	-13.3	54	29.6	31.46	12.21	32.57	350	263	A	V	



<b>802.11a</b> <b>CH 48</b> <b>5240MHz</b>		5134.94	50.77	-23.23	74	39.79	31.36	12.15	32.53	355	324	P	H
		5119.86	41.83	-12.17	54	30.87	31.35	12.14	32.53	355	324	A	H
		5240	105.74	-	-	94.7	31.41	12.18	32.55	355	324	P	H
		5240	99.68	-	-	88.64	31.41	12.18	32.55	355	324	A	H
		5419.92	48.71	-25.29	74	37.57	31.49	12.23	32.58	355	324	P	H
		5356.8	40.51	-13.49	54	29.41	31.46	12.21	32.57	355	324	A	H
		5116.74	50.29	-23.71	74	39.33	31.35	12.14	32.53	350	261	P	V
		5150	42.1	-11.9	54	31.12	31.36	12.15	32.53	350	261	A	V
		5240	108.26	-	-	97.22	31.41	12.18	32.55	350	261	P	V
		5240	101.73	-	-	90.69	31.41	12.18	32.55	350	261	A	V
		5352.24	48.86	-25.14	74	37.76	31.46	12.21	32.57	350	261	P	V
		5357.76	40.71	-13.29	54	29.61	31.46	12.21	32.57	350	261	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	50.59	-17.71	68.3	27.6	39.84	15.31	32.16	-	-	P	H
		15540	49.55	-24.45	74	26.76	38.85	17.76	33.82	-	-	P	H
		10360	48.23	-20.07	68.3	25.24	39.84	15.31	32.16	-	-	P	V
		15540	48.38	-25.62	74	25.59	38.85	17.76	33.82	-	-	P	V
802.11a CH 44 5220MHz		10440	47.95	-20.35	68.3	24.83	39.93	15.32	32.13	-	-	P	H
		15660	48.85	-25.15	74	26.63	38.32	17.83	33.93	-	-	P	H
		10440	48.36	-19.94	68.3	25.24	39.93	15.32	32.13	-	-	P	V
		15660	48.96	-25.04	74	26.74	38.32	17.83	33.93	-	-	P	V
802.11a CH 48 5240MHz		10480	47.9	-20.4	68.3	24.7	39.99	15.32	32.11	-	-	P	H
		15720	48.89	-25.11	74	26.98	38.01	17.87	33.97	-	-	P	H
		10480	48.24	-20.06	68.3	25.04	39.99	15.32	32.11	-	-	P	V
		15720	48.85	-25.15	74	26.94	38.01	17.87	33.97	-	-	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 )	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		5134.68	50.2	-23.8	74	39.22	31.36	12.15	32.53	340	289	P	H
		5150	42.73	-11.27	54	31.75	31.36	12.15	32.53	340	289	A	H
		5180	103.32	-	-	92.32	31.38	12.16	32.54	340	289	P	H
		5180	97.16	-	-	86.16	31.38	12.16	32.54	340	289	A	H
		5103.48	51.47	-22.53	74	40.51	31.34	12.14	32.52	361	261	P	V
		5150	42.91	-11.09	54	31.93	31.36	12.15	32.53	361	261	A	V
		5180	105.2	-	-	94.2	31.38	12.16	32.54	361	261	P	V
802.11n HT20 CH 44 5220MHz		5100.88	51.11	-22.89	74	40.15	31.34	12.14	32.52	356	324	P	H
		5147.68	41.69	-12.31	54	30.71	31.36	12.15	32.53	356	324	A	H
		5220	104.05	-	-	93.03	31.4	12.17	32.55	356	324	P	H
		5220	97.61	-	-	86.59	31.4	12.17	32.55	356	324	A	H
		5453.52	48.76	-25.24	74	37.6	31.51	12.24	32.59	356	324	P	H
		5455.92	40.19	-13.81	54	29.03	31.51	12.24	32.59	356	324	A	H
		5149.76	51.54	-22.46	74	40.56	31.36	12.15	32.53	354	254	P	V
		5143.52	41.81	-12.19	54	30.83	31.36	12.15	32.53	354	254	A	V
		5220	106.9	-	-	95.88	31.4	12.17	32.55	354	254	P	V
		5220	100.81	-	-	89.79	31.4	12.17	32.55	354	254	A	V
		5390.4	48.73	-25.27	74	37.61	31.48	12.22	32.58	354	254	P	V
		5352.96	40.6	-13.4	54	29.5	31.46	12.21	32.57	354	254	A	V



<b>802.11n</b> <b>HT20</b> <b>CH 48</b> <b>5240MHz</b>		5125.06	50.79	-23.21	74	39.81	31.36	12.15	32.53	336	323	P	H
		5120.12	41.78	-12.22	54	30.82	31.35	12.14	32.53	336	323	A	H
		5240	105.32	-	-	94.28	31.41	12.18	32.55	336	323	P	H
		5240	98.73	-	-	87.69	31.41	12.18	32.55	336	323	A	H
		5355.36	47.85	-26.15	74	36.75	31.46	12.21	32.57	336	323	P	H
		5356.8	40.3	-13.7	54	29.2	31.46	12.21	32.57	336	323	A	H
		5143.26	50.2	-23.8	74	39.22	31.36	12.15	32.53	397	357	P	V
		5112.58	41.67	-12.33	54	30.7	31.35	12.14	32.52	397	357	A	V
		5240	103.81	-	-	92.77	31.41	12.18	32.55	397	357	P	V
		5240	97.63	-	-	86.59	31.41	12.18	32.55	397	357	A	V
		5388.72	49.3	-24.7	74	38.18	31.48	12.22	32.58	397	357	P	V
	5390.88	40.19	-13.81	54	29.07	31.48	12.22	32.58	397	357	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 )	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	49.33	-18.97	68.3	47.68	37.39	15.31	51.05	-	-	P	H
		15540	48.85	-25.15	74	43.67	40.08	17.76	52.66	-	-	P	H
		10360	49.73	-18.57	68.3	48.08	37.39	15.31	51.05	-	-	P	V
		15540	49.04	-24.96	74	43.86	40.08	17.76	52.66	-	-	P	V
802.11n HT20 CH 44 5220MHz		10440	49.7	-18.6	68.3	48.02	37.42	15.32	51.06	-	-	P	H
		15660	50.68	-23.32	74	45.53	40.14	17.8	52.79	-	-	P	H
		10440	49.79	-18.51	68.3	48.11	37.42	15.32	51.06	-	-	P	V
		15660	50.42	-23.58	74	45.27	40.14	17.8	52.79	-	-	P	V
802.11n HT20 CH 48 5240MHz		10480	48.81	-19.49	68.3	47.09	37.49	15.32	51.09	-	-	P	H
		15720	49.21	-24.79	74	44.09	40.25	17.87	53	-	-	P	H
		10480	49.02	-19.28	68.3	47.3	37.49	15.32	51.09	-	-	P	V
		15720	48.63	-25.37	74	43.51	40.25	17.87	53	-	-	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		5136.5	52.95	-21.05	74	41.97	31.36	12.15	32.53	222	289	P	H
		5148.2	44	-10	54	33.02	31.36	12.15	32.53	222	289	A	H
		5190	101.75	-	-	90.75	31.38	12.16	32.54	222	289	P	H
		5190	91.17	-	-	80.17	31.38	12.16	32.54	222	289	A	H
		5437.04	49.48	-24.52	74	38.34	31.5	12.23	32.59	222	289	P	H
		5360.88	41.23	-12.77	54	30.12	31.47	12.21	32.57	222	289	A	H
		5148.46	53.87	-20.13	74	40.25	34	12.15	32.53	117	156	P	V
		5145.86	46.05	-7.95	54	32.43	34	12.15	32.53	117	156	A	V
		5190	100.65	-	-	86.9	34.13	12.16	32.54	117	156	P	V
		5190	94.55	-	-	80.8	34.13	12.16	32.54	117	156	A	V
		5428.08	52.62	-21.38	74	38.58	34.4	12.23	32.59	117	156	P	V
		5414.64	43.86	-10.14	54	29.81	34.4	12.23	32.58	117	156	A	V
802.11n HT40 CH 46 5230MHz		5147.16	51.18	-22.82	74	40.2	31.36	12.15	32.53	228	328	P	H
		5147.68	43.2	-10.8	54	32.22	31.36	12.15	32.53	228	328	A	H
		5230	102.53	-	-	91.5	31.41	12.17	32.55	228	328	P	H
		5230	96.37	-	-	85.34	31.41	12.17	32.55	228	328	A	H
		5384.4	48.57	-25.43	74	37.45	31.48	12.22	32.58	228	328	P	H
		5355.36	42	-12	54	30.9	31.46	12.21	32.57	228	328	A	H
		5078.78	50.47	-23.53	74	39.53	31.33	12.13	32.52	261	257	P	V
		5148.46	42.9	-11.1	54	31.92	31.36	12.15	32.53	261	257	A	V
		5230	102.08	-	-	91.05	31.41	12.17	32.55	261	257	P	V
		5230	95.82	-	-	84.79	31.41	12.17	32.55	261	257	A	V
	5451.84	48.79	-25.21	74	37.63	31.51	12.24	32.59	261	257	P	V	
	5365.44	41.74	-12.26	54	30.63	31.47	12.21	32.57	261	257	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 1 5150~5250MHz**  
**WIFI 802.11n 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	49.06	-19.24	68.3	47.38	37.41	15.32	51.05	-	-	P	H
		15570	49.54	-24.46	74	44.37	40.11	17.78	52.72	-	-	P	H
		10380	47.95	-20.35	68.3	46.27	37.41	15.32	51.05	-	-	P	V
		15570	48.75	-25.25	74	43.58	40.11	17.78	52.72	-	-	P	V
802.11n HT40 CH 46 5230MHz		10460	49.14	-19.16	68.3	47.44	37.46	15.32	51.08	-	-	P	H
		15690	48.19	-25.81	74	43.06	40.22	17.85	52.94	-	-	P	H
		10460	48.32	-19.98	68.3	46.62	37.46	15.32	51.08	-	-	P	V
		15690	49.53	-24.47	74	44.4	40.22	17.85	52.94	-	-	P	V
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												
	3.												



Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (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), Cable Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include data for 802.11ac VHT80 CH 42 5210MHz and a Remark section.



Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (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)
802.11ac		10420	49.48	-18.82	68.3	47.8	37.43	15.32	51.07	-	-	P	H
VHT80		15630	49.69	-24.31	74	44.55	40.17	17.82	52.85	-	-	P	H
CH 42		10420	49.08	-19.22	68.3	47.4	37.43	15.32	51.07	-	-	P	V
5210MHz		15630	48.94	-25.06	74	43.8	40.17	17.82	52.85	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 2 - 5250~5350MHz**  
**WIFI 802.11a (Band Edge @ 3m)**

WIFI	Note	Frequency	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 )
802.11a CH 52 5260MHz		5042.64	49.88	-24.12	74	38.95	31.32	12.12	32.51	354	325	P	H
		5133.9	41.79	-12.21	54	30.81	31.36	12.15	32.53	354	325	A	H
		5260	106.59	-	-	95.54	31.42	12.18	32.55	354	325	P	H
		5260	100.47	-	-	89.42	31.42	12.18	32.55	354	325	A	H
		5367.12	48.39	-25.61	74	37.28	31.47	12.21	32.57	354	325	P	H
		5359.92	40.53	-13.47	54	29.43	31.46	12.21	32.57	354	325	A	H
		5109.46	50.58	-23.42	74	39.61	31.35	12.14	32.52	367	263	P	V
		5124.02	41.59	-12.41	54	30.62	31.36	12.14	32.53	367	263	A	V
		5260	107.89	-	-	96.84	31.42	12.18	32.55	367	263	P	V
		5260	101.62	-	-	90.57	31.42	12.18	32.55	367	263	A	V
		5376.24	48.94	-25.06	74	37.83	31.47	12.22	32.58	367	263	P	V
		5352.96	41.2	-12.8	54	30.1	31.46	12.21	32.57	367	263	A	V
802.11a CH 60 5300MHz		5046.55	51.18	-22.82	74	40.25	31.32	12.12	32.51	347	326	P	H
		5114.45	41.58	-12.42	54	30.61	31.35	12.14	32.52	347	326	A	H
		5300	106.77	-	-	95.7	31.44	12.19	32.56	347	326	P	H
		5300	100.61	-	-	89.54	31.44	12.19	32.56	347	326	A	H
		5350.08	50.59	-23.41	74	39.49	31.46	12.21	32.57	347	326	P	H
		5350.08	42.04	-11.96	54	30.94	31.46	12.21	32.57	347	326	A	H
		5121.45	51.73	-22.27	74	40.77	31.35	12.14	32.53	359	262	P	V
		5114.1	41.51	-12.49	54	30.54	31.35	12.14	32.52	359	262	A	V
		5300	109.15	-	-	98.08	31.44	12.19	32.56	359	262	P	V
		5300	100.93	-	-	89.86	31.44	12.19	32.56	359	262	A	V
		5352.72	51.72	-22.28	74	40.62	31.46	12.21	32.57	359	262	P	V
		5352.48	44.23	-9.77	54	33.13	31.46	12.21	32.57	359	262	A	V



<b>802.11a</b> <b>CH 64</b> <b>5320MHz</b>	5320	105.37	-	-	94.28	31.45	12.2	32.56	365	347	P	H
	5320	98.94	-	-	87.85	31.45	12.2	32.56	365	347	A	H
	5353.12	52.01	-21.99	74	40.91	31.46	12.21	32.57	365	347	P	H
	5351.04	44.11	-9.89	54	33.01	31.46	12.21	32.57	365	347	A	H
	5320	110.18	-	-	99.09	31.45	12.2	32.56	356	264	P	V
	5320	103.72	-	-	92.63	31.45	12.2	32.56	356	264	A	V
	5350.24	57.49	-16.51	74	46.39	31.46	12.21	32.57	356	264	P	V
	5350.88	48.69	-5.31	54	37.59	31.46	12.21	32.57	356	264	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 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	48.56	-19.74	68.3	25.26	40.03	15.37	32.1	-	-	P	H
		15780	49.08	-24.92	74	27.42	37.79	17.9	34.03	-	-	P	H
		10520	48.93	-19.37	68.3	25.63	40.03	15.37	32.1	-	-	P	V
		15780	49.43	-24.57	74	27.77	37.79	17.9	34.03	-	-	P	V
802.11a CH 60 5300MHz		10600	48.45	-25.55	74	46.5	37.56	15.55	51.16	-	-	P	H
		15900	48.46	-25.54	74	43.39	40.41	17.97	53.31	-	-	P	H
		10600	49.05	-24.95	74	47.1	37.56	15.55	51.16	-	-	P	V
		15900	50.06	-23.94	74	44.99	40.41	17.97	53.31	-	-	P	V
802.11a CH 64 5320MHz		10640	48.7	-25.3	74	24.95	40.17	15.65	32.07	-	-	P	H
		15960	48.58	-25.42	74	27.8	36.95	18.01	34.18	-	-	P	H
		10640	48.08	-25.92	74	24.33	40.17	15.65	32.07	-	-	P	V
		15960	48.32	-25.68	74	27.54	36.95	18.01	34.18	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												





Band 2 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	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		5107.38	51.44	-22.56	74	40.47	31.35	12.14	32.52	335	323	P	H
		5109.46	41.64	-12.36	54	30.67	31.35	12.14	32.52	335	323	A	H
		5260	105.44	-	-	94.39	31.42	12.18	32.55	335	323	P	H
		5260	99.01	-	-	87.96	31.42	12.18	32.55	335	323	A	H
		5357.28	49	-25	74	37.9	31.46	12.21	32.57	335	323	P	H
		5352	40.66	-13.34	54	29.56	31.46	12.21	32.57	335	323	A	H
		5060.58	50.1	-23.9	74	39.16	31.32	12.13	32.51	329	261	P	V
		5122.2	41.5	-12.5	54	30.54	31.35	12.14	32.53	329	261	A	V
		5260	107.77	-	-	96.72	31.42	12.18	32.55	329	261	P	V
		5260	101.59	-	-	90.54	31.42	12.18	32.55	329	261	A	V
		5356.56	49.41	-24.59	74	38.31	31.46	12.21	32.57	329	261	P	V
		5357.28	41.48	-12.52	54	30.38	31.46	12.21	32.57	329	261	A	V
802.11n HT20 CH 60 5300MHz		5145.25	51.82	-22.18	74	40.84	31.36	12.15	32.53	235	312	P	H
		5129.5	41.62	-12.38	54	30.64	31.36	12.15	32.53	235	312	A	H
		5300	109.2	-	-	98.13	31.44	12.19	32.56	235	312	P	H
		5300	100.95	-	-	89.88	31.44	12.19	32.56	235	312	A	H
		5353.44	52.07	-21.93	74	40.97	31.46	12.21	32.57	235	312	P	H
		5350.8	43.07	-10.93	54	31.97	31.46	12.21	32.57	235	312	A	H
		5038.15	49.77	-24.23	74	38.84	31.32	12.12	32.51	232	52	P	V
		5096.25	41.62	-12.38	54	30.66	31.34	12.14	32.52	232	52	A	V
		5300	109.75	-	-	98.68	31.44	12.19	32.56	232	52	P	V
		5300	101.29	-	-	90.22	31.44	12.19	32.56	232	52	A	V
	5358	50.99	-23.01	74	39.89	31.46	12.21	32.57	232	52	P	V	
	5353.2	43.18	-10.82	54	32.08	31.46	12.21	32.57	232	52	A	V	



<b>802.11n</b>  <b>HT20</b>  <b>CH 64</b>  <b>5320MHz</b>		5320	107.82	-	-	96.73	31.45	12.2	32.56	235	325	P	H
		5320	100.63	-	-	89.54	31.45	12.2	32.56	235	325	A	H
		5350.72	53.99	-20.01	74	42.89	31.46	12.21	32.57	235	325	P	H
		5350.56	47.27	-6.73	54	36.17	31.46	12.21	32.57	235	325	A	H
		5320	107.21	-	-	96.12	31.45	12.2	32.56	240	49	P	V
		5320	100.48	-	-	89.39	31.45	12.2	32.56	240	49	A	V
		5350.24	54.29	-19.71	74	43.19	31.46	12.21	32.57	240	49	P	V
		5350.24	46.76	-7.24	54	35.66	31.46	12.21	32.57	240	49	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 HT20 (Harmonic @ 3m)**

WIFI Ant.	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		10520	49.35	-18.95	68.3	47.58	37.51	15.37	51.11	-	-	P	H
		15780	48.52	-25.48	74	43.42	40.3	17.9	53.1	-	-	P	H
5260MHz		10520	48.94	-19.36	68.3	47.17	37.51	15.37	51.11	-	-	P	V
		15780	49.67	-24.33	74	44.57	40.3	17.9	53.1	-	-	P	V
802.11n HT20 CH 60		10600	49.97	-24.03	74	48.02	37.56	15.55	51.16	-	-	P	H
		15900	49.47	-24.53	74	44.4	40.41	17.97	53.31	-	-	P	H
		10600	49.45	-24.55	74	47.5	37.56	15.55	51.16	-	-	P	V
		15900	48.97	-25.03	74	43.9	40.41	17.97	53.31	-	-	P	V
802.11n HT20 CH 64		10640	49.72	-24.28	74	47.67	37.58	15.65	51.18	-	-	P	H
		15960	48.44	-25.56	74	43.4	40.47	18.01	53.44	-	-	P	H
		10640	49.5	-24.5	74	47.45	37.58	15.65	51.18	-	-	P	V
		15960	49.97	-24.03	74	44.93	40.47	18.01	53.44	-	-	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 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		5133	50.75	-23.25	74	39.77	31.36	12.15	32.53	251	285	P	H
		5136.5	42.75	-11.25	54	31.77	31.36	12.15	32.53	251	285	A	H
		5270	106.19	-	-	95.13	31.42	12.19	32.55	251	285	P	H
		5270	100.02	-	-	88.96	31.42	12.19	32.55	251	285	A	H
		5352.48	52.07	-21.93	74	40.97	31.46	12.21	32.57	251	285	P	H
		5350.08	44.95	-9.05	54	33.85	31.46	12.21	32.57	251	285	A	H
		5073.5	50.49	-23.51	74	39.55	31.33	12.13	32.52	273	258	P	V
		5115.85	42.66	-11.34	54	31.7	31.35	12.14	32.53	273	258	A	V
		5270	103.17	-	-	92.11	31.42	12.19	32.55	273	258	P	V
		5270	96.84	-	-	85.78	31.42	12.19	32.55	273	258	A	V
		5351.04	50.18	-23.82	74	39.08	31.46	12.21	32.57	273	258	P	V
		5352.72	44	-10	54	32.9	31.46	12.21	32.57	273	258	A	V
802.11n HT40 CH 62 5310MHz		5053.9	51.33	-22.67	74	40.39	31.32	12.13	32.51	238	284	P	H
		5040.6	42.48	-11.52	54	31.55	31.32	12.12	32.51	238	284	A	H
		5310	105.9	-	-	94.81	31.45	12.2	32.56	238	284	P	H
		5310	99.83	-	-	88.74	31.45	12.2	32.56	238	284	A	H
		5355.84	55.05	-18.95	74	43.95	31.46	12.21	32.57	238	284	P	H
		5356.32	47.43	-6.57	54	36.33	31.46	12.21	32.57	238	284	A	H
		5084	51.43	-22.57	74	40.49	31.33	12.13	32.52	252	257	P	V
		5124.95	42.63	-11.37	54	31.66	31.36	12.14	32.53	252	257	A	V
		5310	104.19	-	-	93.1	31.45	12.2	32.56	252	257	P	V
		5310	97.97	-	-	86.88	31.45	12.2	32.56	252	257	A	V
	5353.44	54.15	-19.85	74	43.05	31.46	12.21	32.57	252	257	P	V	
	5352.72	46.29	-7.71	54	35.19	31.46	12.21	32.57	252	257	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	48.99	-19.31	68.3	47.18	37.52	15.41	51.12	-	-	P	H
		15810	48.39	-25.61	74	43.3	40.33	17.92	53.16	-	-	P	H
		10540	48.45	-19.85	68.3	46.64	37.52	15.41	51.12	-	-	P	V
		15810	49.33	-24.67	74	44.24	40.33	17.92	53.16	-	-	P	V
802.11n HT40 CH 62 5310MHz		10620	49.41	-24.59	74	47.41	37.57	15.6	51.17	-	-	P	H
		15930	50.18	-23.82	74	45.13	40.44	17.99	53.38	-	-	P	H
		10620	49.75	-24.25	74	47.75	37.57	15.6	51.17	-	-	P	V
		15930	49.54	-24.46	74	44.49	40.44	17.99	53.38	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 2 5250~5350MHz**  
**WIFI 802.11ac VHT80 (Band Edge @ 3m)**

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ac VHT80 CH 58 5290MHz		5101.5	49.89	-24.11	74	38.93	31.34	12.14	32.52	235	284	P	H
		5127.4	42.4	-11.6	54	31.42	31.36	12.15	32.53	235	284	A	H
		5290	99.48	-	-	88.42	31.43	12.19	32.56	235	284	P	H
		5290	93.44	-	-	82.38	31.43	12.19	32.56	235	284	A	H
		5378.64	57.23	-16.77	74	46.11	31.48	12.22	32.58	235	284	P	H
		5369.52	49.93	-4.07	54	38.82	31.47	12.21	32.57	235	284	A	H
		5133.35	50.15	-23.85	74	39.17	31.36	12.15	32.53	248	257	P	V
		5105.7	42.29	-11.71	54	31.32	31.35	12.14	32.52	248	257	A	V
		5290	98.19	-	-	87.13	31.43	12.19	32.56	248	257	P	V
		5290	92.16	-	-	81.1	31.43	12.19	32.56	248	257	A	V
		5376.24	55.16	-18.84	74	44.05	31.47	12.22	32.58	248	257	P	V
	5382.48	48.41	-5.59	54	37.29	31.48	12.22	32.58	248	257	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Band 2 5250~5350MHz**  
**WIFI 802.11ac VHT80 (Harmonic @ 3m)**

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ac VHT80 CH 58 5290MHz		10580	49.8	-18.5	68.3	47.89	37.55	15.51	51.15	-	-	P	H
		15870	48.5	-25.5	74	43.44	40.39	17.95	53.28	-	-	P	H
		10580	49.23	-19.07	68.3	47.32	37.55	15.51	51.15	-	-	P	V
		15870	47.67	-26.33	74	42.61	40.39	17.95	53.28	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 3 - 5470~5725MHz**  
**WIFI 802.11a (Band Edge @ 3m)**

WIFI	Note	Frequency	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 )
802.11a CH 100 5500MHz		5455.76	51.7	-22.3	74	40.54	31.51	12.24	32.59	229	348	P	H
		5466.48	52.09	-16.21	68.3	40.92	31.52	12.24	32.59	229	348	P	H
		5458.16	43.74	-10.26	54	32.58	31.51	12.24	32.59	229	348	A	H
		5500	106.15	-	-	94.96	31.54	12.25	32.6	229	348	P	H
		5500	99.73	-	-	88.54	31.54	12.25	32.6	229	348	A	H
		5453.84	53.41	-20.59	74	42.25	31.51	12.24	32.59	352	265	P	V
		5465.84	55.88	-12.42	68.3	44.71	31.52	12.24	32.59	352	265	P	V
		5459.44	46.25	-7.75	54	35.09	31.51	12.24	32.59	352	265	A	V
		5500	110.34	-	-	99.15	31.54	12.25	32.6	352	265	P	V
		5500	103.67	-	-	92.48	31.54	12.25	32.6	352	265	A	V
802.11a CH 116 5580MHz		5372.08	48.67	-25.33	74	37.56	31.47	12.21	32.57	387	324	P	H
		5463.04	47.98	-20.32	68.3	36.81	31.52	12.24	32.59	387	324	P	H
		5443.84	40.33	-13.67	54	29.19	31.5	12.23	32.59	387	324	A	H
		5580	104.8	-	-	93.56	31.57	12.27	32.6	387	324	P	H
		5580	98.77	-	-	87.53	31.57	12.27	32.6	387	324	A	H
		5763.11	49.45	-18.85	68.3	37.72	32.03	12.3	32.6	387	324	P	H
		5423.92	49.94	-24.06	74	38.8	31.49	12.23	32.58	262	258	P	V
		5466.16	48.4	-19.9	68.3	37.23	31.52	12.24	32.59	262	258	P	V
		5459.68	40.76	-13.24	54	29.6	31.51	12.24	32.59	262	258	A	V
		5580	107.47	-	-	96.23	31.57	12.27	32.6	262	258	P	V
		5580	100.82	-	-	89.58	31.57	12.27	32.6	262	258	A	V
	5757.125	49.57	-18.73	68.3	37.84	32.03	12.3	32.6	262	258	P	V	



802.11a CH 140 5700MHz	5700	104.76	-	-	93.29	31.78	12.29	32.6	319	323	P	H
	5700	98.68	-	-	87.21	31.78	12.29	32.6	319	323	A	H
	5727.24	55.97	-12.33	68.3	44.36	31.91	12.3	32.6	319	323	P	H
	5700	107.96	-	-	96.49	31.78	12.29	32.6	335	255	P	V
	5700	101.71	-	-	90.24	31.78	12.29	32.6	335	255	A	V
	5725	62.43	-5.87	68.3	50.82	31.91	12.3	32.6	335	255	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 )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11a CH 100 5500MHz		11000	50.03	-23.97	74	24.95	40.59	16.49	32	-	-	P	H
		16500	50.7	-17.6	68.3	27.96	38.94	18.2	34.4	-	-	P	H
		11000	50.77	-23.23	74	25.69	40.59	16.49	32	-	-	P	V
		16500	51.16	-17.14	68.3	28.42	38.94	18.2	34.4	-	-	P	V
802.11a CH 116 5580MHz		11160	51.56	-22.44	74	26.29	40.8	16.5	32.03	-	-	P	H
		16740	49.08	-19.22	68.3	25.32	39.93	18.28	34.45	-	-	P	H
		11160	50.97	-23.03	74	25.7	40.8	16.5	32.03	-	-	P	V
		16740	49.85	-18.45	68.3	26.09	39.93	18.28	34.45	-	-	P	V
802.11a CH 140 5700MHz		11400	51.48	-22.52	74	25.96	41.08	16.52	32.08	-	-	P	H
		17100	50.88	-17.42	68.3	25.35	41.6	18.41	34.48	-	-	P	H
		11400	49.83	-24.17	74	24.31	41.08	16.52	32.08	-	-	P	V
		17100	51.44	-16.86	68.3	25.91	41.6	18.41	34.48	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

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), Cable 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 100 (5500MHz) and 802.11n HT20 CH 116 (5580MHz).





802.11n HT20 CH 140 5700MHz	5700	104.03	-	-	92.56	31.78	12.29	32.6	229	323	P	H
	5700	94.68	-	-	83.21	31.78	12.29	32.6	229	323	A	H
	5725.8	59.59	-8.71	68.3	47.98	31.91	12.3	32.6	229	323	P	H
	5700	105.9	-	-	94.43	31.78	12.29	32.6	260	272	P	V
	5700	97.46	-	-	85.99	31.78	12.29	32.6	260	272	A	V
	5725.56	63.45	-4.85	68.3	51.84	31.91	12.3	32.6	260	272	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 )	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	49.95	-24.05	74	47.06	37.8	16.49	51.4	-	-	P	H
		16500	49.99	-18.31	68.3	43.18	41.31	18.2	52.7	-	-	P	H
802.11n HT20 CH 116 5580MHz		11000	50.49	-23.51	74	47.6	37.8	16.49	51.4	-	-	P	V
		16500	49.83	-18.47	68.3	43.02	41.31	18.2	52.7	-	-	P	V
802.11n HT20 CH 140 5700MHz		11160	50.08	-23.92	74	46.91	37.94	16.5	51.27	-	-	P	H
		16740	48.36	-19.94	68.3	41.52	41.69	18.28	53.13	-	-	P	H
802.11n HT20 CH 140 5700MHz		11160	49.93	-24.07	74	46.76	37.94	16.5	51.27	-	-	P	V
		16740	48.28	-20.02	68.3	41.44	41.69	18.28	53.13	-	-	P	V
802.11n HT20 CH 140 5700MHz		11400	49.37	-24.63	74	45.8	38.13	16.52	51.08	-	-	P	H
		17100	48.47	-19.83	68.3	41.58	42	18.41	53.52	-	-	P	H
802.11n HT20 CH 140 5700MHz		11400	49.96	-24.04	74	46.39	38.13	16.52	51.08	-	-	P	V
		17100	49.61	-18.69	68.3	42.72	42	18.41	53.52	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

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), Cable 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 102 (5510MHz) and 802.11n HT40 CH 110 (5550MHz).



<b>802.11n</b> <b>HT40</b> <b>CH 134</b> <b>5670MHz</b>		5459.55	48.27	-25.73	74	37.11	31.51	12.24	32.59	231	283	P	H
		5466.55	48.28	-20.02	68.3	37.11	31.52	12.24	32.59	231	283	P	H
		5458.85	41.12	-12.88	54	29.96	31.51	12.24	32.59	231	283	A	H
		5670	100.58	-	-	89.18	31.72	12.28	32.6	231	283	P	H
		5670	94.51	-	-	83.11	31.72	12.28	32.6	231	283	A	H
		5724.925	56.43	-11.87	68.3	44.83	31.91	12.29	32.6	231	283	P	H
		5365.05	48.94	-25.06	74	37.83	31.47	12.21	32.57	250	268	P	V
		5464.1	47.4	-20.9	68.3	36.23	31.52	12.24	32.59	250	268	P	V
		5412.65	41.07	-12.93	54	29.93	31.49	12.23	32.58	250	268	A	V
		5670	103.26	-	-	91.86	31.72	12.28	32.6	250	268	P	V
		5670	97.1	-	-	85.7	31.72	12.28	32.6	250	268	A	V
		5727.375	58.48	-9.82	68.3	46.87	31.91	12.3	32.6	250	268	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 )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11n HT40 CH 102		11020	50.87	-23.13	74	47.96	37.81	16.49	51.39	-	-	P	H
		16530	50.26	-18.04	68.3	43.44	41.37	18.21	52.76	-	-	P	H
5510MHz		11020	51.38	-22.62	74	48.47	37.81	16.49	51.39	-	-	P	V
		16530	50.1	-18.2	68.3	43.28	41.37	18.21	52.76	-	-	P	V
802.11n HT40 CH 110		11100	51.88	-22.12	74	48.82	37.88	16.5	51.32	-	-	P	H
		16650	50.83	-17.47	68.3	44	41.56	18.25	52.98	-	-	P	H
		11100	51.08	-22.92	74	48.02	37.88	16.5	51.32	-	-	P	V
		16650	49.76	-18.54	68.3	42.93	41.56	18.25	52.98	-	-	P	V
802.11n HT40 CH 134		11340	51	-23	74	47.54	38.07	16.52	51.13	-	-	P	H
		17010	48.97	-19.33	68.3	42.11	42.08	18.37	53.59	-	-	P	H
		11340	49.97	-24.03	74	46.51	38.07	16.52	51.13	-	-	P	V
		17010	50.59	-17.71	68.3	43.73	42.08	18.37	53.59	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ac VHT80 CH 106 5530MHz		5459.92	56.72	-17.28	74	42.67	34.4	12.24	32.59	278	287	P	H
		5460.16	56.86	-11.44	68.3	42.81	34.4	12.24	32.59	278	287	P	H
		5459.44	48.76	-5.24	54	34.71	34.4	12.24	32.59	278	287	A	H
		5530	96.11	-	-	82.08	34.37	12.26	32.6	278	287	P	H
		5530	90.04	-	-	76.01	34.37	12.26	32.6	278	287	A	H
		5764.685	51.68	-16.62	68.3	37.41	34.57	12.3	32.6	278	287	P	H
		5456.32	57.17	-16.83	74	46.01	31.51	12.24	32.59	275	270	P	V
		5464.96	57.7	-10.6	68.3	46.53	31.52	12.24	32.59	275	270	P	V
		5450.32	51.49	-2.51	54	40.33	31.51	12.24	32.59	275	270	A	V
		5530	100.96	-	-	89.76	31.54	12.26	32.6	275	270	P	V
		5530	94.89	-	-	83.69	31.54	12.26	32.6	275	270	A	V
		5751.455	49.58	-18.72	68.3	37.91	31.97	12.3	32.6	275	270	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Band 3 5470~5725MHz**  
**WIFI 802.11ac VHT80 (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 )
802.11ac VHT80 CH 106 5530MHz		11060	51.52	-22.48	74	48.53	37.85	16.49	51.35	-	-	P	H
		16590	50.71	-17.59	68.3	43.89	41.45	18.23	52.86	-	-	P	H
		11060	51.19	-22.81	74	48.2	37.85	16.49	51.35	-	-	P	V
		16590	49.14	-19.16	68.3	42.32	41.45	18.23	52.86	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

WiFi 802.11ac VHT80 (LF @ 3m)

WiFi	Note	Frequency	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 )
802.11ac VHT80 LF		30.97	23.29	-16.71	40	30.45	24.7	0.54	32.4	-	-	P	H
		155.13	24.41	-19.09	43.5	38.43	16.9	1.27	32.19	-	-	P	H
		277.35	31.51	-14.49	46	42.89	18.64	1.73	31.75	-	-	P	H
		636.25	28.76	-17.24	46	30.48	26.42	2.63	30.77	-	-	P	H
		794.36	31.01	-14.99	46	31.04	28.32	2.93	31.28	-	-	P	H
		967.99	32.98	-21.02	54	29.74	31.3	3.26	31.32	-	-	P	H
		48.43	30.67	-9.33	40	46.88	15.5	0.69	32.4	-	-	P	V
		158.04	25.27	-18.23	43.5	39.47	16.7	1.28	32.18	-	-	P	V
		291.9	28.29	-17.71	46	39.09	19.14	1.78	31.72	-	-	P	V
		568.35	27.78	-18.22	46	29.79	26.32	2.5	30.83	-	-	P	V
		729.37	30.56	-15.44	46	31.05	27.67	2.81	30.97	-	-	P	V
	964.11	33.39	-20.61	54	30.21	31.28	3.25	31.35	-	-	P	V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



### Simultaneous transmission

#### Band 3 - 5470~5725MHz

#### WIFI 802.11ac VHT80 (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 )
802.11ac VHT80 CH 106 5530MHz & LTE Band13	*	5397.52	53.6	-20.4	74	39.56	34.4	12.22	32.58	211	88	P	H
	*	5466.16	54.17	-14.13	68.3	40.12	34.4	12.24	32.59	211	88	P	H
		5454.88	47.18	-6.82	54	33.13	34.4	12.24	32.59	211	88	A	H
		5530	96.69	-	-	82.66	34.37	12.26	32.6	211	88	P	H
		5530	90.56	-	-	76.53	34.37	12.26	32.6	211	88	A	H
		5742.005	51.81	-16.49	68.3	37.61	34.5	12.3	32.6	211	88	P	H
	*	5381.2	53.75	-20.25	74	39.71	34.4	12.22	32.58	281	351	P	V
	*	5461.6	52.13	-16.17	68.3	38.08	34.4	12.24	32.59	281	351	P	V
		5458.72	45.87	-8.13	54	31.82	34.4	12.24	32.59	281	351	A	V
		5530	96.97	-	-	82.94	34.37	12.26	32.6	281	351	P	V
		5530	90.7	-	-	76.67	34.37	12.26	32.6	281	351	A	V
	5728.46	51.97	-16.33	68.3	37.8	34.47	12.3	32.6	281	351	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 3 - 5470~5725MHz**

**WIFI 802.11ac VHT80 (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 )
802.11ac VHT80 CH 106 5530MHz & LTE Band13		1559.5	44.71	-29.29	74	41.34	27.93	8.56	33.12	-	-	P	H
		2339.25	48.11	-25.89	74	39.13	32.1	9.58	32.7	-	-	P	H
		3119	50.89	-17.41	68.3	39.74	32.85	10.75	32.45	-	-	P	H
		11060	50.82	-23.18	74	47.83	37.85	16.49	51.35	-	-	P	H
		16590	51.1	-17.2	68.3	44.28	41.45	18.23	52.86	-	-	P	H
		1559.5	43.59	-30.41	74	40.22	27.93	8.56	33.12	-	-	P	V
		2339.25	49.23	-24.77	74	40.25	32.1	9.58	32.7	-	-	P	V
		3119	50.66	-17.64	68.3	39.51	32.85	10.75	32.45	-	-	P	V
		11060	50.41	-23.59	74	47.42	37.85	16.49	51.35	-	-	P	V
		16590	51.28	-17.02	68.3	44.46	41.45	18.23	52.86	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**2.4GHz 2400~2483.5MHz**

**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 or Average</b>
H/V	<b>Horizontal or Vertical</b>



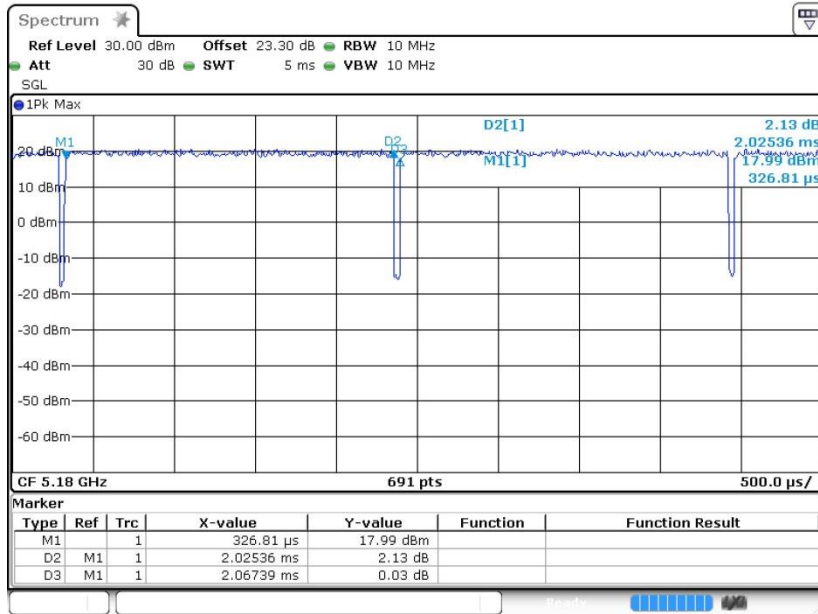


## Appendix D. Duty Cycle Plots

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	97.97	2.03	0.49	1KHz
802.11n HT20	97.78	1.88	0.53	1KHz
802.11n HT40	96.40	0.93	1.07	3KHz
802.11ac VHT80	95.78	0.86	1.17	3KHz

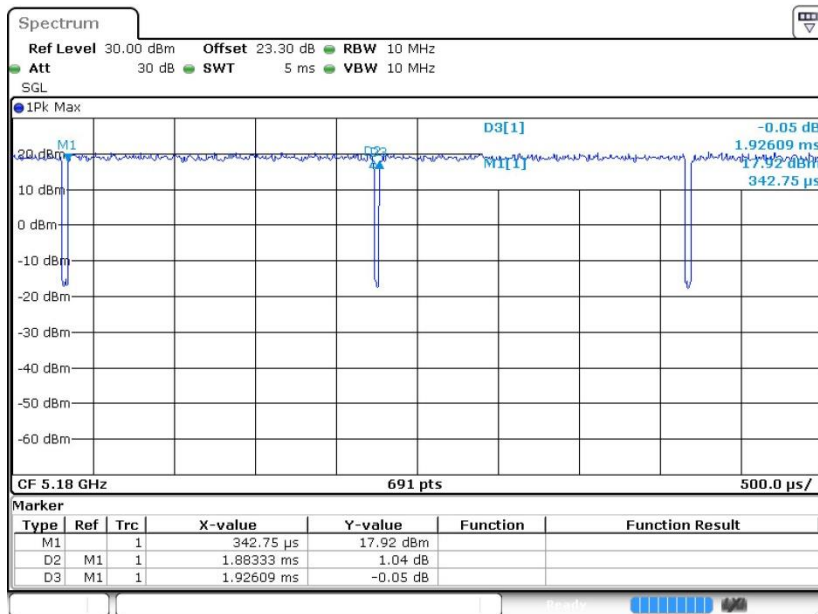


802.11a



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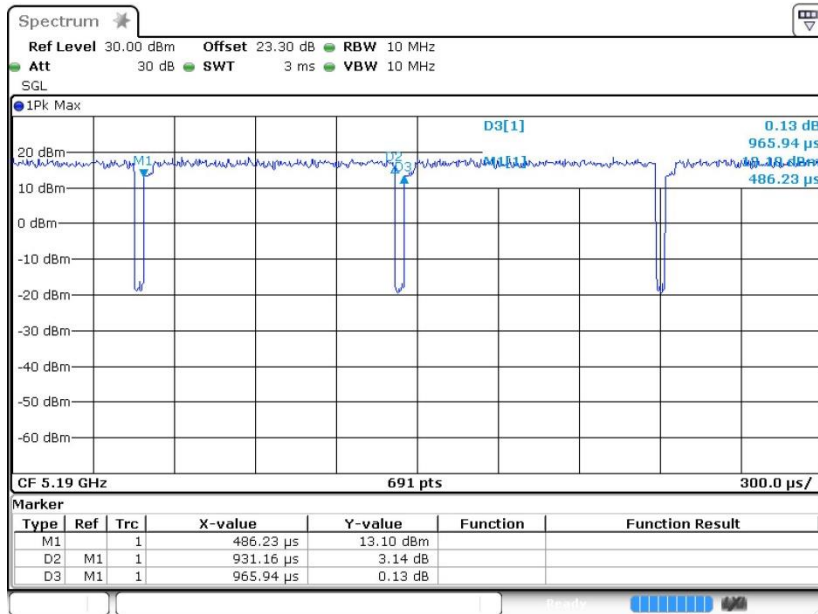
802.11n HT20



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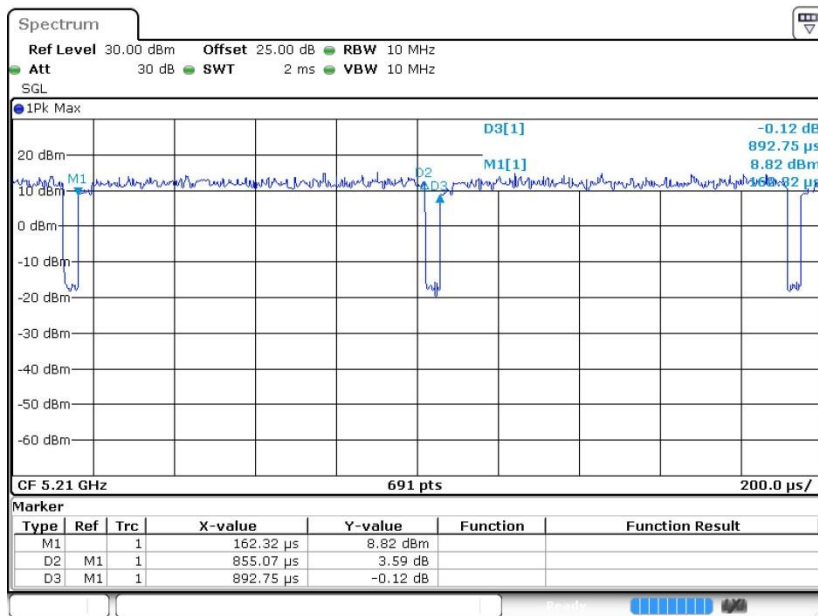


802.11n HT40



Date: 2.SEP.2021 09:26:01

802.11ac VHT80



Date: 4.SEP.2021 10:22:20