



# FCC RF Test Report

**APPLICANT** : Shenzhen Tinno Mobile Technology Corp.  
**EQUIPMENT** : Smart Phone  
**MODEL NAME** : U626AA  
**FCC ID** : XD6U626AA  
**STANDARD** : FCC Part 15 Subpart E §15.407  
**CLASSIFICATION** : (NII) Unlicensed National Information Infrastructure  
**TEST DATE(S)** : Dec. 19, 2021 ~ Feb. 08, 2022

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

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager



**Sporton International Inc. (ShenZhen)**

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055

People's Republic of China



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### REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR1N0415D	Rev. 01	Initial issue of report	Feb. 10, 2022



### 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 0.68 dB at 5350.080 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 8.34 dB at 0.630 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

**Shenzhen Tinno Mobile Technology Corp.**

TINNO Building, No.33, Xiandong Rd, Xili, Nanshan District, Shenzhen, Guangdong Province,PRC

## 1.2 Manufacturer

**Shenzhen Tinno Mobile Technology Corp.**

TINNO Building, No.33, Xiandong Rd, Xili, Nanshan District, Shenzhen, Guangdong Province,PRC

## 1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Smart Phone
Model Name	U626AA
IMEI Code	Conducted: 866289050008905 Conduction: 866289050019084 Radiation: 866289050019076/866289050019043
FCC ID	XD6U626AA
HW Version	V1.0
SW Version	U626AAV01.02.10
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	
<b>Tx/Rx Frequency Range</b>	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5700 MHz
<b>Maximum Output Power to Antenna</b>	<p><b>&lt;5180 MHz ~ 5240 MHz&gt;</b>  802.11a : 15.96 dBm / 0.0394 W  802.11n HT20 : 15.95 dBm / 0.0394 W  802.11n HT40 : 15.82 dBm / 0.0382 W  802.11ac VHT20 : 15.88 dBm / 0.0387 W  802.11ac VHT40 : 15.61 dBm / 0.0364 W  802.11ac VHT80 : 14.26 dBm / 0.0267 W</p> <p><b>&lt;5260 MHz ~ 5320 MHz&gt;</b>  802.11a : 15.98 dBm / 0.0396 W  802.11n HT20 : 15.98 dBm / 0.0396 W  802.11n HT40 : 15.88 dBm / 0.0387 W  802.11ac VHT20 : 15.96 dBm / 0.0394 W  802.11ac VHT40 : 15.84 dBm / 0.0384 W  802.11ac VHT80 : 14.34 dBm / 0.0272 W</p> <p><b>&lt;5500 MHz ~ 5700 MHz &gt;</b>  802.11a : 15.98 dBm / 0.0396 W  802.11n HT20 : 15.96 dBm / 0.0394 W  802.11n HT40 : 15.87 dBm / 0.0386 W  802.11ac VHT20 : 15.91 dBm / 0.0390 W  802.11ac VHT40 : 15.84 dBm / 0.0384 W  802.11ac VHT80 : 14.32 dBm / 0.0270 W</p>
<b>99% Occupied Bandwidth</b>	802.11a : 16.78 MHz 802.11n HT20 : 17.88 MHz 802.11n HT40 : 36.96 MHz 802.11ac VHT80 : 75.28 MHz
<b>Antenna Type / Gain</b>	<p><b>&lt;5180 MHz ~ 5240 MHz &gt;</b>  FPC Antenna with gain -1.80 dBi</p> <p><b>&lt;5260 MHz ~ 5320 MHz &gt;</b>  FPC Antenna with gain -1.80 dBi</p> <p><b>&lt;5500 MHz ~ 5700 MHz &gt;</b>  FPC Antenna with gain -1.80 dBi</p>
<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 Inc. (Shenzhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

<b>Test Firm</b>	Sporton International Inc. (Shenzhen)		
<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 Inc. (Shenzhen)		
<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>
	03CH02-SZ	CN1256	421272

### 1.7 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH02-SZ	AUDIX	E3	6.2009-8-24a
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.





## 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 (Y 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)
5180-5240 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)
5260-5320 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)
5500-5700 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

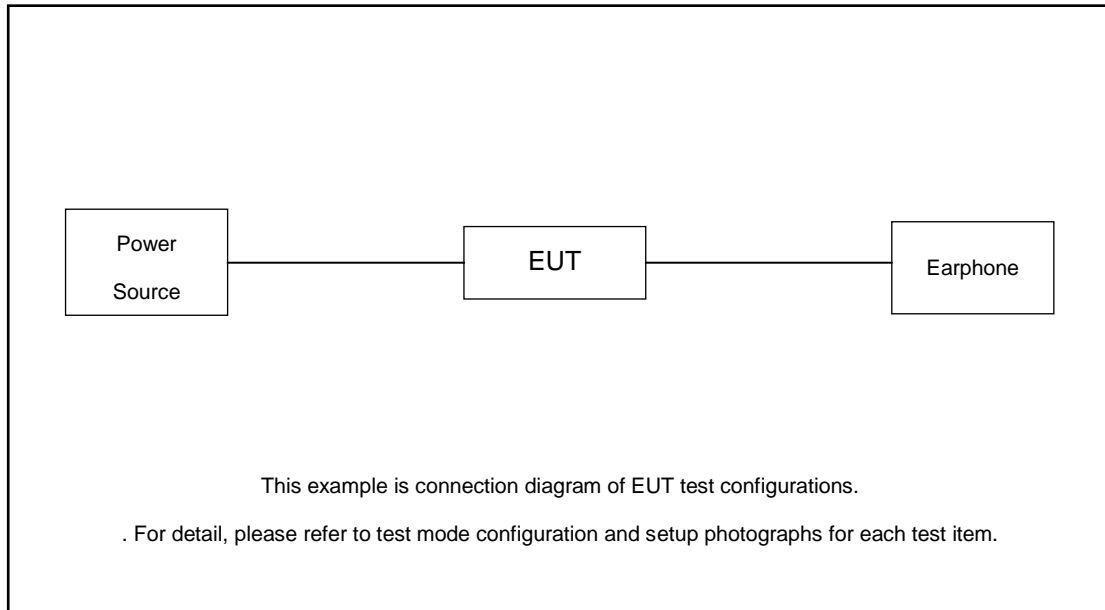
Final test modes are considering the modulation and worse data rates as below table.

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

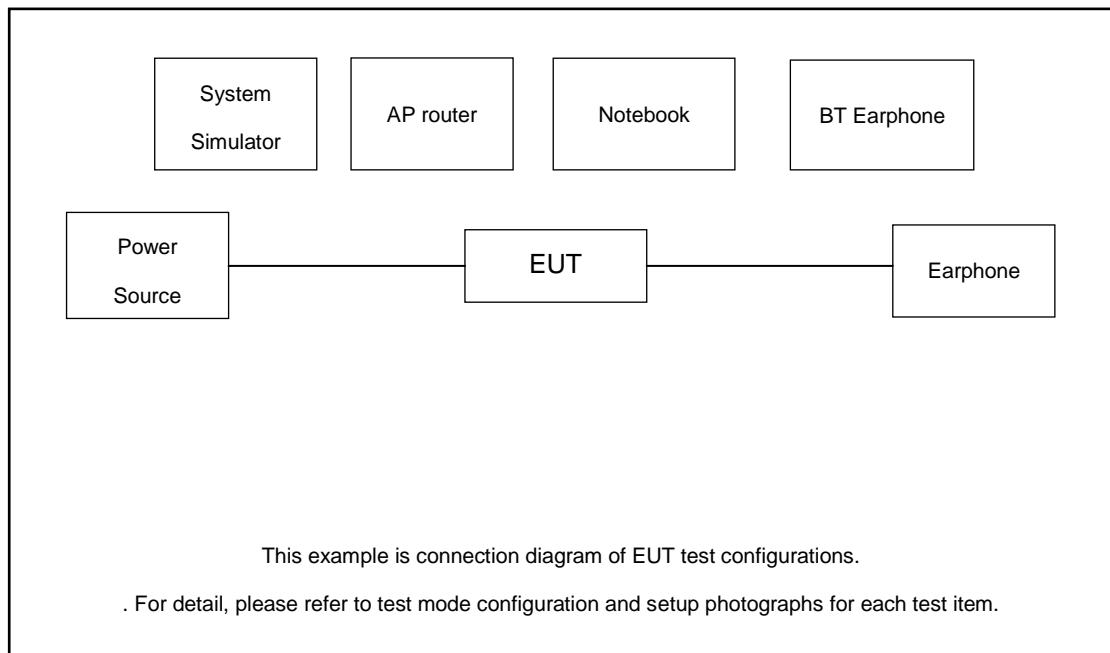
Test Cases	
<b>AC Conducted Emission</b>	Mode 1 : LTE Band 5 Idle + Bluetooth Link + WLAN Link(5GHz) + USB Cable1(Charging from Adapter) + Earphone + Battery
<b>Remark:</b>	
1. For Radiated Test Cases, The tests were performed with Adapter, Battery, Earphone, and USB Cable 1.	

## 2.3 Connection Diagram of Test System

< Radiated Emission >



< AC Conducted Emission >





### 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	Anritsu	MT8820C	N/A	N/A	Unshielded,1.8m
2.	WLAN AP	D-Link	DIR-820L	KA2IR820LA1	N/A	Unshielded,1.8m
3.	Notebook	Lenovo	E540	FCC DoC	N/A	AC I/P : Unshielded, 1.2m DC O/P : Shielded, 1.8m
4.	Bluetooth Earphone	Samsung	EO-MG900	N/A	N/A	N/A
5.	Earphone	MOTO	N/A	N/A	Unshielded,1.2m	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.

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.

$$\text{Offset} = \text{RF cable loss} + \text{attenuator factor}.$$

Following shows an offset computation example with cable loss 2.80 dB and 10dB attenuator.

$$\begin{aligned} \text{Offset}(dB) &= \text{RF cable loss}(dB) + \text{attenuator factor}(dB). \\ &= 2.80 + 10 = 12.80 \text{ (dB)} \end{aligned}$$

### 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.

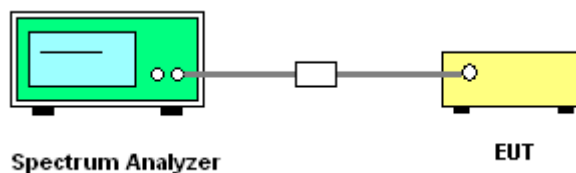
##### 3.1.2 Measuring Instruments

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 1% to 5% of the OBW and set the Video bandwidth (VBW)  $\geq 3 * RBW$ .
8. Measure and record the results in the test report.

##### 3.1.4 Test Setup

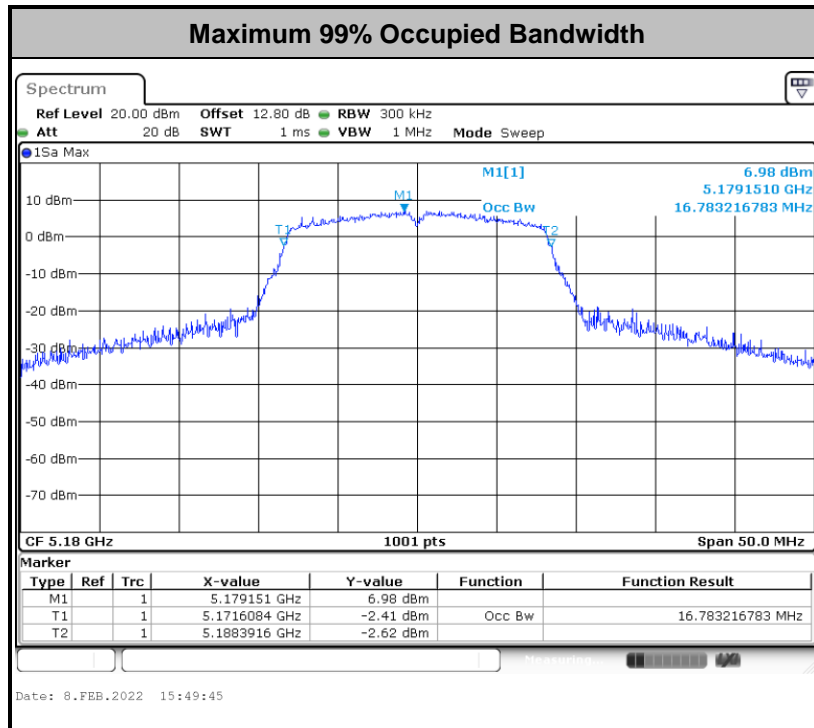
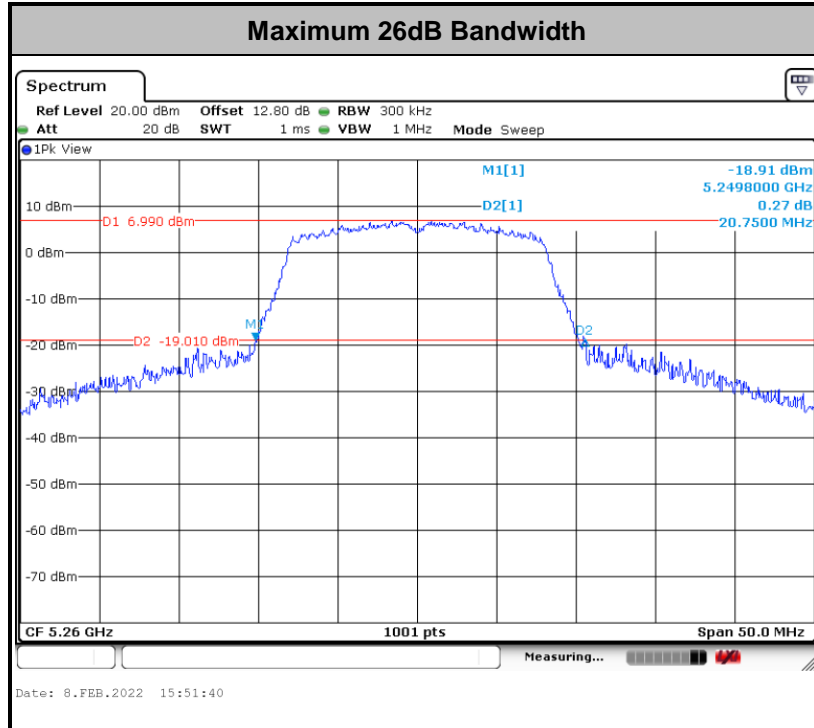




### 3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

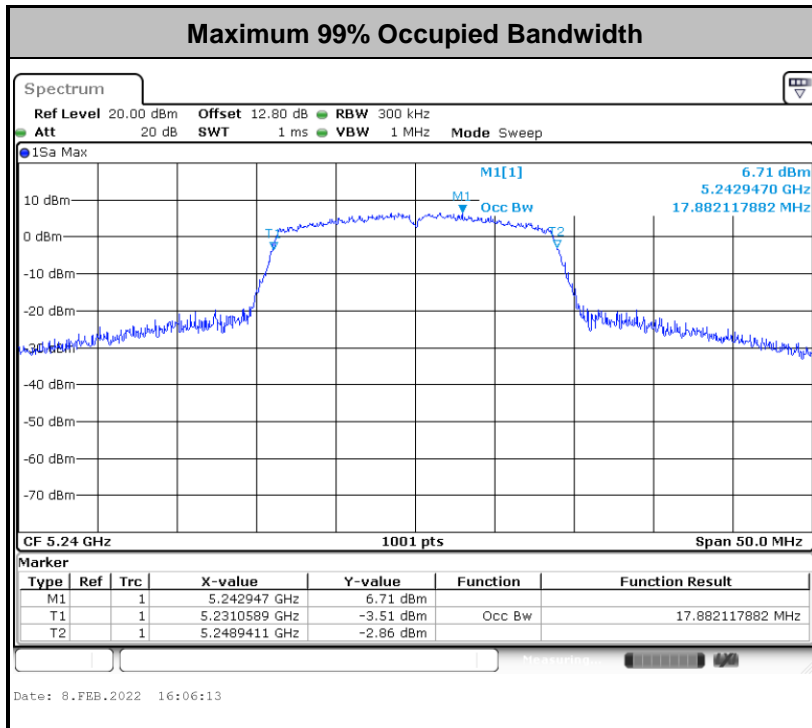
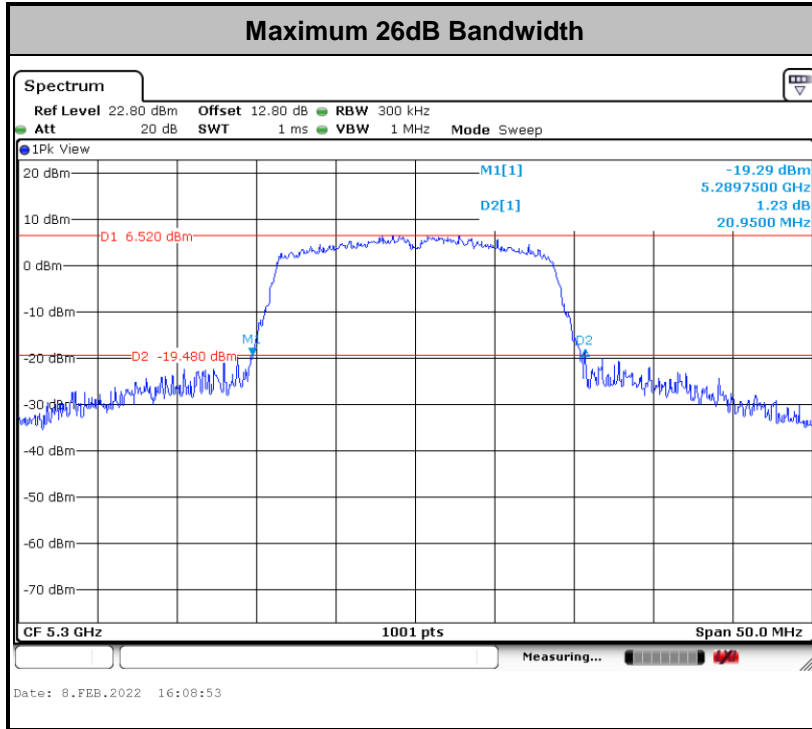
Please refer to Appendix A.

11a



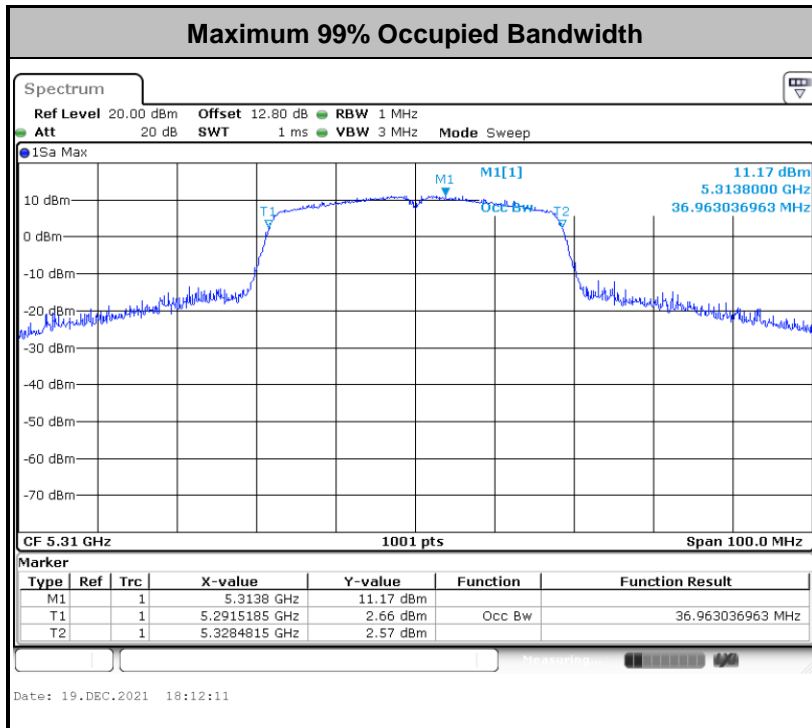
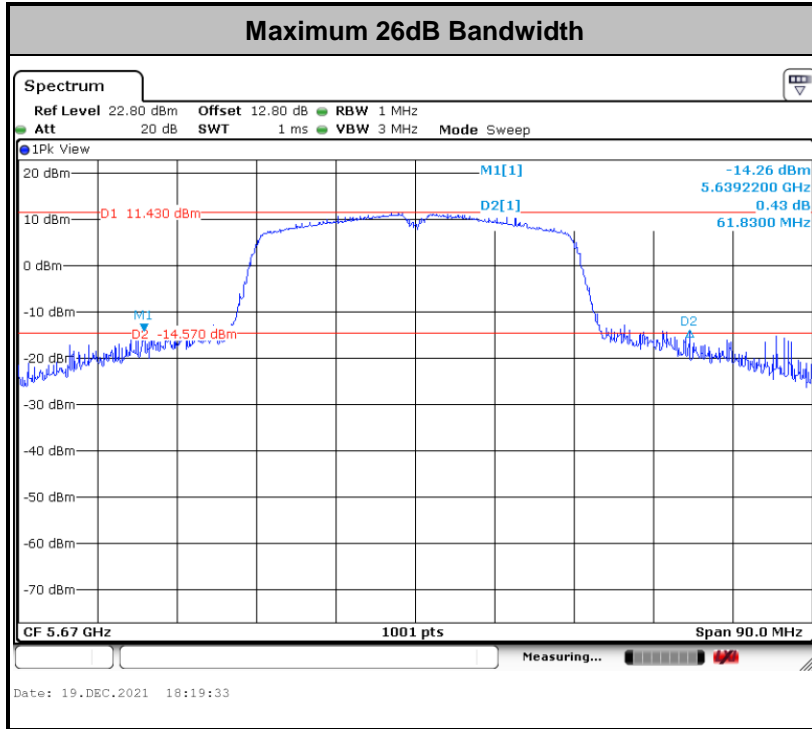


11n HT20





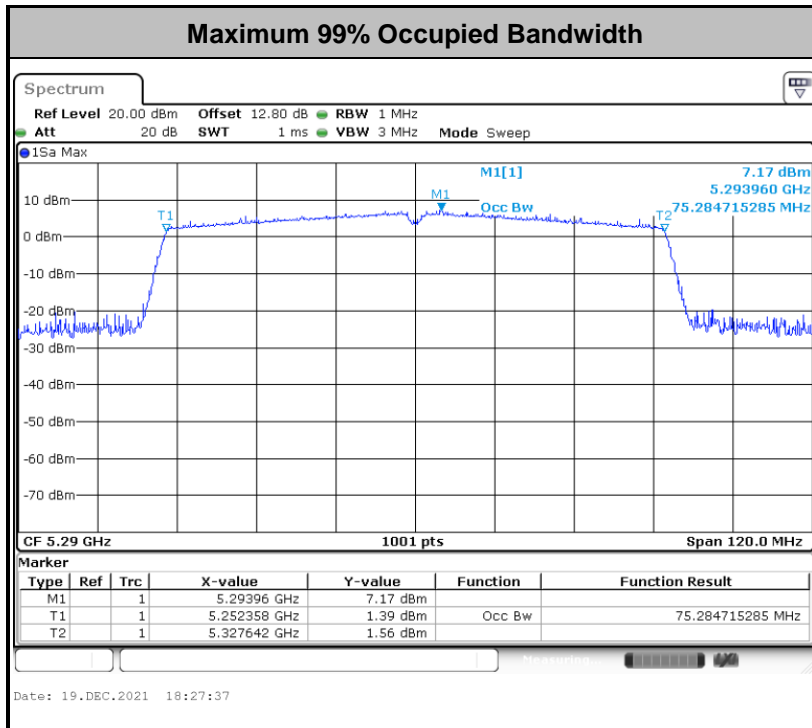
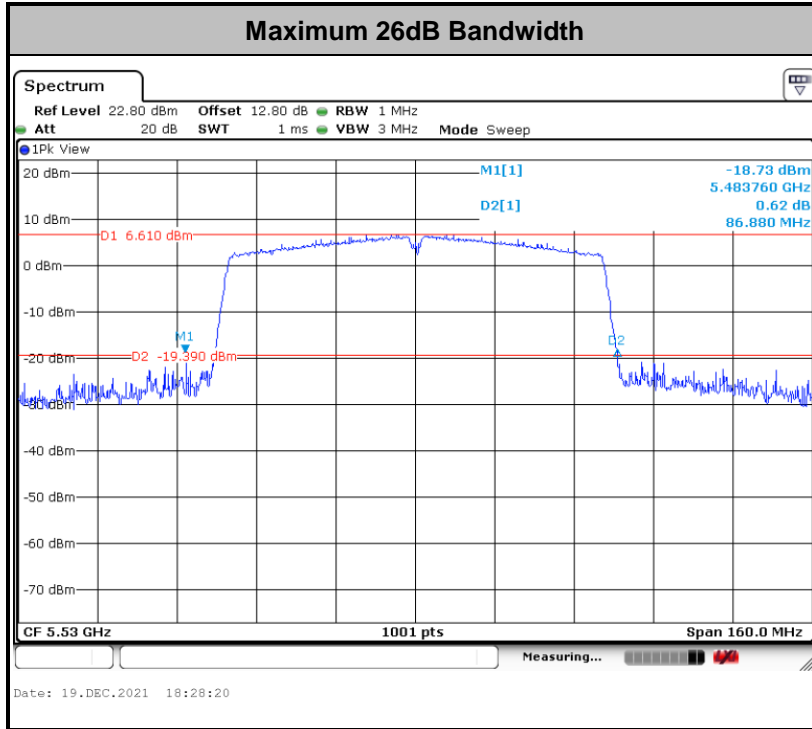
11n HT40







11ac VHT80



**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  $11 + 10 \log B$ , dBm, where B is the 26 dB emission bandwidth in megahertz.

For the 5.47–5.6 GHz and 5.65–5.725 GHz band, the maximum conducted output power shall not exceed 250 mW or  $11 + 10 \log_{10} B$ , dBm, whichever power is less. The maximum e.i.r.p. shall not exceed 1.0 W or  $17 + 10 \log_{10} B$ , dBm, whichever is less. B is the 99% 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.

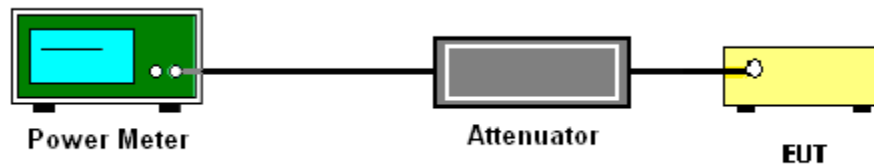
### 3.2.3 Test Procedures

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

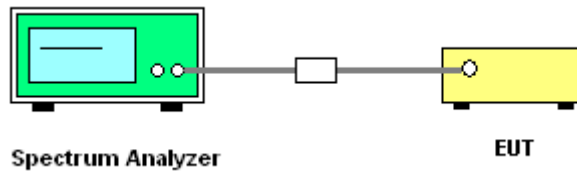
The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section F) Maximum power spectral density.

**# Method SA-2 #**

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

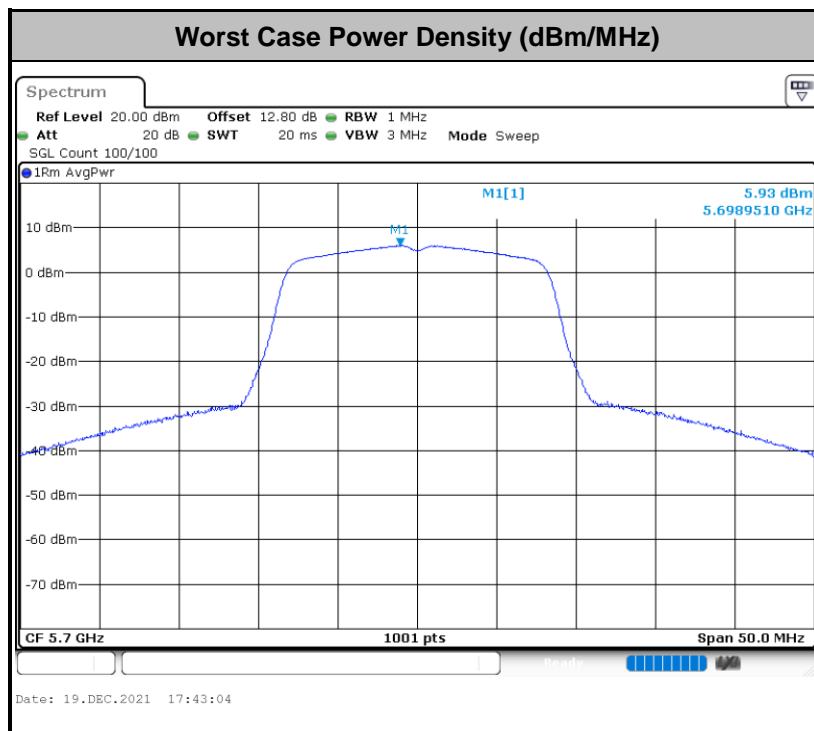
- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW  $\geq$  3 MHz.
- Number of points in sweep  $\geq$  2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add  $10 \log(1/x)$ , 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.
- The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
- 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<sub>Meas</sub> is the field strength of the emission at the measurement distance, in dBμV/m

d<sub>Meas</sub> 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.



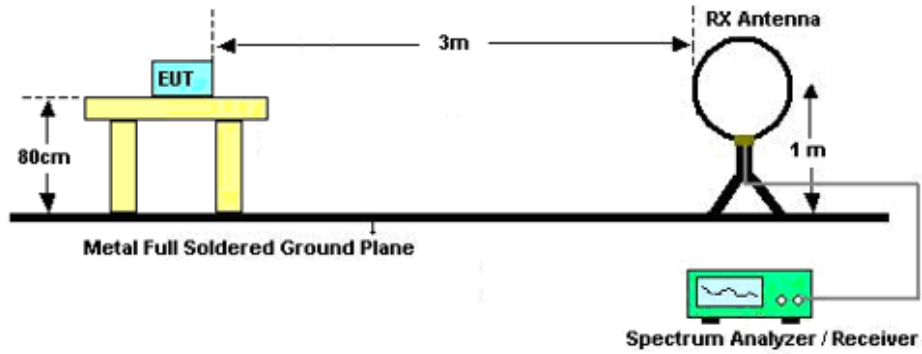
### 3.4.3 Test Procedures

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.

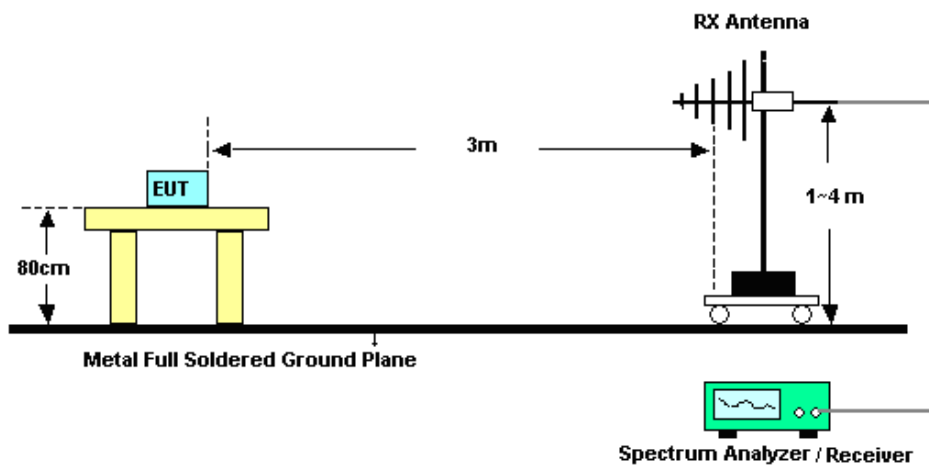


### 3.4.4 Test Setup

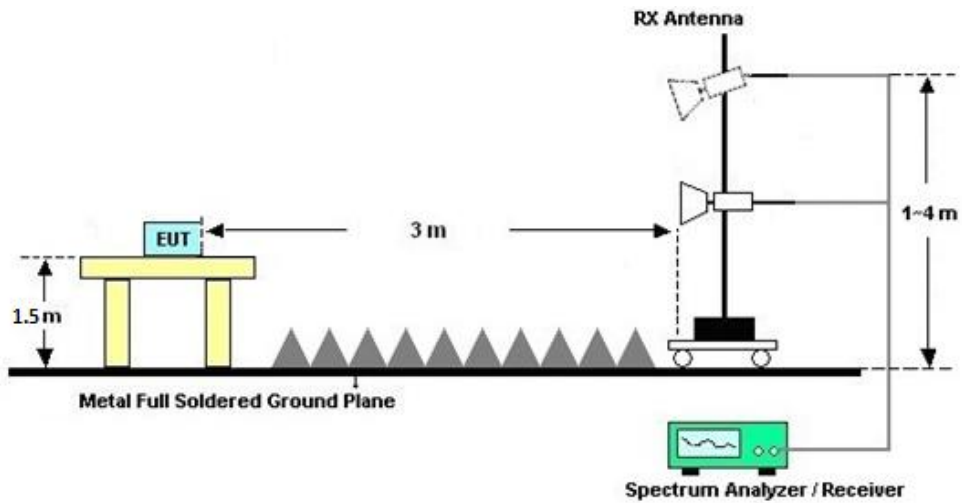
For radiated emissions below 30MHz



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.

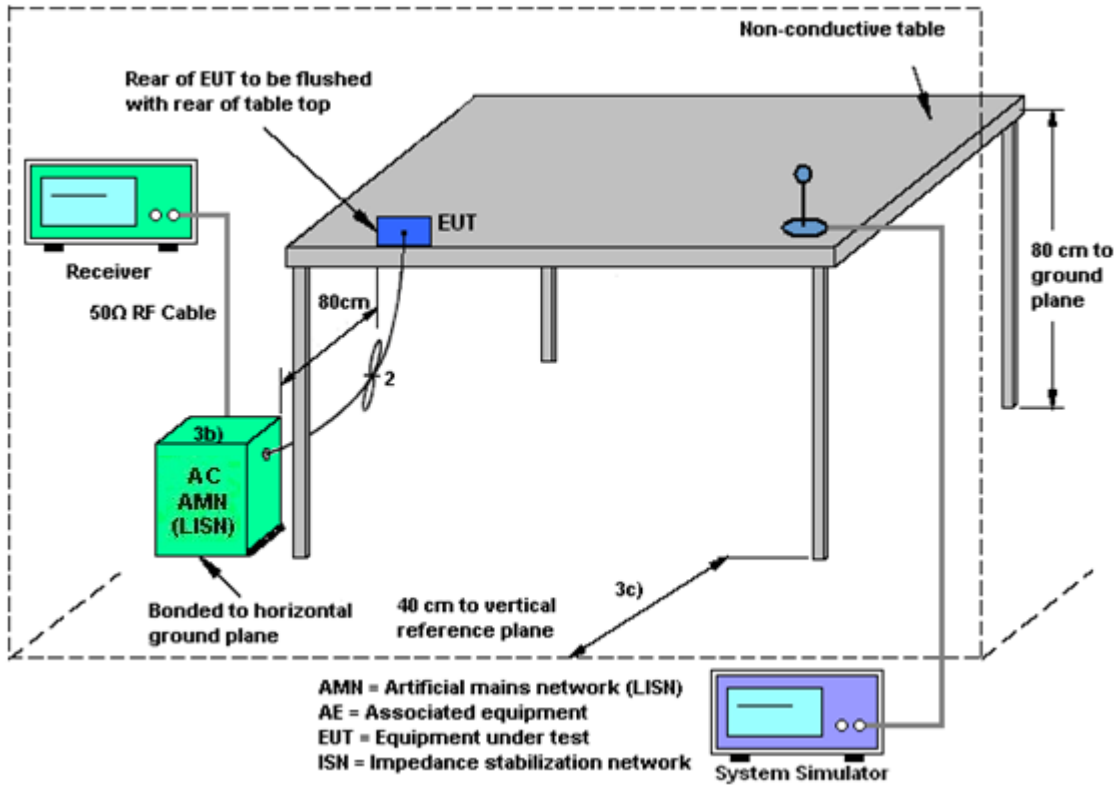
#### 3.5.2 Measuring Instruments

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
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 08, 2021	Dec. 19, 2021~ Feb. 08, 2022	Apr. 07, 2022	Conducted (TH01-SZ)
Pulse Power Sensor	Anritsu	MA2411B	1207253	30MHz~40GHz	Dec. 25, 2020	Dec. 19, 2021	Dec. 24, 2021	Conducted (TH01-SZ)
Pulse Power Sensor	Anritsu	MA2411B	1339473	30MHz~40GHz	Dec. 28, 2021	Feb. 08, 2022	Dec. 27, 2022	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1218010	50MHz Bandwidth	Dec. 25, 2020	Dec. 19, 2021	Dec. 24, 2021	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1542004	50MHz Bandwidth	Dec. 28, 2021	Feb. 08, 2022	Dec. 27, 2022	Conducted (TH01-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY551502 13	10Hz~44GHz	Jul. 13, 2021	Jan. 13, 2022 ~Jan. 20, 2022	Jul. 12, 2022	Radiation (03CH02-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 22, 2021	Jan. 13, 2022 ~Jan. 20, 2022	Jun. 21, 2022	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Jul. 15, 2021	Jan. 13, 2022 ~Jan. 20, 2022	Jul. 14, 2022	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 25, 2021	Jan. 13, 2022 ~Jan. 20, 2022	Jul. 24, 2022	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 13, 2021	Jan. 13, 2022 ~Jan. 20, 2022	Jul. 12, 2022	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 11, 2021	Jan. 13, 2022 ~Jan. 20, 2022	Apr. 10, 2022	Radiation (03CH02-SZ)
LF Amplifier	Burgeon	BPA-530	102211	0.01~3000Mhz	Oct. 22, 2021	Jan. 13, 2022 ~Jan. 20, 2022	Oct. 21, 2022	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	AMF-7D-001 01800-30-10 P-R	1943528	1GHz~18GHz	Oct. 22, 2021	Jan. 13, 2022 ~Jan. 20, 2022	Oct. 21, 2022	Radiation (03CH02-SZ)
HF Amplifier	KEYSIGHT	83017A	MY532701 05	0.5GHz~26.5Ghz	Oct. 22, 2021	Jan. 13, 2022 ~Jan. 20, 2022	Oct. 21, 2022	Radiation (03CH02-SZ)
AC Power Source	Chroma	61601	61601000 2470	N/A	NCR	Jan. 13, 2022 ~Jan. 20, 2022	NCR	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	Jan. 13, 2022 ~Jan. 20, 2022	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Jan. 13, 2022 ~Jan. 20, 2022	NCR	Radiation (03CH02-SZ)
EMI Receiver	R&S	ESR7	101630	9kHz~7GHz;	Mar. 08, 2021	Jan. 11, 2022	Mar. 07, 2022	Conduction (CO01-SZ)
AC LISN	R&S	ENV216	100063	9kHz~30MHz	Sep. 01, 2021	Jan. 11, 2022	Aug. 31, 2022	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Oct. 28, 2021	Jan. 11, 2022	Oct. 27, 2022	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	61602000 0891	100Vac~250Vac	Jul. 14, 2021	Jan. 11, 2022	Jul. 13, 2022	Conduction (CO01-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))	1.34dB
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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))	5.0dB
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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))	5.1dB
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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))	5.1dB
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----- 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:	2021/12/19~2022/2/8	Relative Humidity:	51~54	%

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

U-NII-1										
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)		
11a	6Mbps	1	36	5180	16.78	20.50	-	22.25		
11a	6Mbps	1	44	5220	16.78	20.35	-	22.25		
11a	6Mbps	1	48	5240	16.78	20.40	-	22.25		
HT20	MCS0	1	36	5180	17.78	20.80	-	22.50		
HT20	MCS0	1	44	5220	17.78	20.80	-	22.50		
HT20	MCS0	1	48	5240	17.88	20.70	-	22.52		
HT40	MCS0	1	38	5190	36.56	55.71	-	23.01		
HT40	MCS0	1	46	5230	36.76	49.86	-	23.01		
VHT80	MCS0	1	42	5210	75.16	80.96	-	23.01		

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

U-NII-1										
Mod.	Data Rate	N <sub>Tx</sub>	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)		Pass/Fail
11a	6Mbps	1	36	5180	0.00	15.88	24.00	-1.80		Pass
11a	6Mbps	1	44	5220	0.00	15.96	24.00	-1.80		Pass
11a	6Mbps	1	48	5240	0.00	15.93	24.00	-1.80		Pass
HT20	MCS0	1	36	5180	0.00	15.95	24.00	-1.80		Pass
HT20	MCS0	1	44	5220	0.00	15.88	24.00	-1.80		Pass
HT20	MCS0	1	48	5240	0.00	15.83	24.00	-1.80		Pass
HT40	MCS0	1	38	5190	0.00	15.13	24.00	-1.80		Pass
HT40	MCS0	1	46	5230	0.00	15.82	24.00	-1.80		Pass
VHT20	MCS0	1	36	5180	0.00	15.88	24.00	-1.80		Pass
VHT20	MCS0	1	44	5220	0.00	15.86	24.00	-1.80		Pass
VHT20	MCS0	1	48	5240	0.00	15.80	24.00	-1.80		Pass
VHT40	MCS0	1	38	5190	0.00	15.10	24.00	-1.80		Pass
VHT40	MCS0	1	46	5230	0.00	15.61	24.00	-1.80		Pass
VHT80	MCS0	1	42	5210	0.00	14.26	24.00	-1.80		Pass

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

U-NII-1										
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	0.00	5.68	11.00	-1.80		Pass
11a	6Mbps	1	44	5220	0.00	5.74	11.00	-1.80		Pass
11a	6Mbps	1	48	5240	0.00	5.74	11.00	-1.80		Pass
HT20	MCS0	1	36	5180	0.00	5.38	11.00	-1.80		Pass
HT20	MCS0	1	44	5220	0.00	5.54	11.00	-1.80		Pass
HT20	MCS0	1	48	5240	0.00	5.23	11.00	-1.80		Pass
HT40	MCS0	1	38	5190	0.00	2.09	11.00	-1.80		Pass
HT40	MCS0	1	46	5230	0.00	2.37	11.00	-1.80		Pass
VHT80	MCS0	1	42	5210	0.00	-2.17	11.00	-1.80		Pass

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

U-NII-2A										
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	16.73	20.75	23.24	29.24	23.98	
11a	6M bps	1	60	5300	16.78	20.40	23.25	29.25	23.98	
11a	6M bps	1	64	5320	16.78	20.35	23.25	29.25	23.98	
HT20	MCS 0	1	52	5260	17.78	20.65	23.50	29.50	23.98	
HT20	MCS 0	1	60	5300	17.78	20.95	23.50	29.50	23.98	
HT20	MCS 0	1	64	5320	17.78	20.45	23.50	29.50	23.98	
HT40	MCS 0	1	54	5270	36.76	52.38	23.98	30.00	23.98	
HT40	MCS 0	1	62	5310	36.96	57.42	23.98	30.00	23.98	
VHT80	MCS 0	1	58	5290	75.28	86.72	23.98	30.00	23.98	

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

U-NII-2A										
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	0.00	15.98	23.98	-1.80	26.99	Pass
11a	6M bps	1	60	5300	0.00	15.97	23.98	-1.80	26.99	Pass
11a	6M bps	1	64	5320	0.00	15.95	23.98	-1.80	26.99	Pass
HT20	MCS 0	1	52	5260	0.00	15.91	23.98	-1.80	26.99	Pass
HT20	MCS 0	1	60	5300	0.00	15.97	23.98	-1.80	26.99	Pass
HT20	MCS 0	1	64	5320	0.00	15.98	23.98	-1.80	26.99	Pass
HT40	MCS 0	1	54	5270	0.00	15.88	23.98	-1.80	26.99	Pass
HT40	MCS 0	1	62	5310	0.00	15.37	23.98	-1.80	26.99	Pass
VHT20	MCS 0	1	52	5260	0.00	15.89	23.98	-1.80	26.99	Pass
VHT20	MCS 0	1	60	5300	0.00	15.95	23.98	-1.80	26.99	Pass
VHT20	MCS 0	1	64	5320	0.00	15.96	23.98	-1.80	26.99	Pass
VHT40	MCS 0	1	54	5270	0.00	15.84	23.98	-1.80	26.99	Pass
VHT40	MCS 0	1	62	5310	0.00	15.32	23.98	-1.80	26.99	Pass
VHT80	MCS 0	1	58	5290	0.00	14.34	23.98	-1.80	26.99	Pass

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

U-NII-2A										
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	0.00	5.77	11.00	-1.80		Pass
11a	6M bps	1	60	5300	0.00	5.78	11.00	-1.80		Pass
11a	6M bps	1	64	5320	0.00	5.44	11.00	-1.80		Pass
HT20	MCS 0	1	52	5260	0.00	5.49	11.00	-1.80		Pass
HT20	MCS 0	1	60	5300	0.00	4.98	11.00	-1.80		Pass
HT20	MCS 0	1	64	5320	0.00	5.74	11.00	-1.80		Pass
HT40	MCS 0	1	54	5270	0.00	2.51	11.00	-1.80		Pass
HT40	MCS 0	1	62	5310	0.00	2.52	11.00	-1.80		Pass
VHT80	MCS 0	1	58	5290	0.00	-1.93	11.00	-1.80		Pass

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

U-NII-2C											
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	16.78	20.15	23.25	29.25	23.98		
11a	6M bps	1	116	5580	16.73	20.60	23.24	29.24	23.98		
11a	6M bps	1	140	5700	16.73	20.50	23.24	29.24	23.98		
HT20	MCS 0	1	100	5500	17.78	20.45	23.50	29.50	23.98		
HT20	MCS 0	1	116	5580	17.78	20.65	23.50	29.50	23.98		
HT20	MCS 0	1	140	5700	17.83	20.65	23.51	29.51	23.98		
HT40	MCS 0	1	102	5510	36.56	61.38	23.98	30.00	23.98		
HT40	MCS 0	1	110	5550	36.96	50.13	23.98	30.00	23.98		
HT40	MCS 0	1	134	5670	36.86	61.83	23.98	30.00	23.98		
VHT80	MCS 0	1	106	5530	75.16	86.88	23.98	30.00	23.98		



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

U-NII-2C										
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	0.00	15.97	23.98	-1.80	26.99	Pass
11a	6M bps	1	116	5580	0.00	15.94	23.98	-1.80	26.99	Pass
11a	6M bps	1	140	5700	0.00	15.98	23.98	-1.80	26.99	Pass
HT20	MCS 0	1	100	5500	0.00	15.94	23.98	-1.80	26.99	Pass
HT20	MCS 0	1	116	5580	0.00	15.96	23.98	-1.80	26.99	Pass
HT20	MCS 0	1	140	5700	0.00	15.94	23.98	-1.80	26.99	Pass
HT40	MCS 0	1	102	5510	0.00	15.75	23.98	-1.80	26.99	Pass
HT40	MCS 0	1	110	5550	0.00	15.87	23.98	-1.80	26.99	Pass
HT40	MCS 0	1	134	5670	0.00	15.84	23.98	-1.80	26.99	Pass
VHT20	MCS 0	1	100	5500	0.00	15.91	23.98	-1.80	26.99	Pass
VHT20	MCS 0	1	116	5580	0.00	15.87	23.98	-1.80	26.99	Pass
VHT20	MCS 0	1	140	5700	0.00	15.91	23.98	-1.80	26.99	Pass
VHT40	MCS 0	1	102	5510	0.00	15.72	23.98	-1.80	26.99	Pass
VHT40	MCS 0	1	110	5550	0.00	15.84	23.98	-1.80	26.99	Pass
VHT40	MCS 0	1	134	5670	0.00	15.80	23.98	-1.80	26.99	Pass
VHT80	MCS 0	1	106	5530	0.00	14.32	23.98	-1.80	26.99	Pass

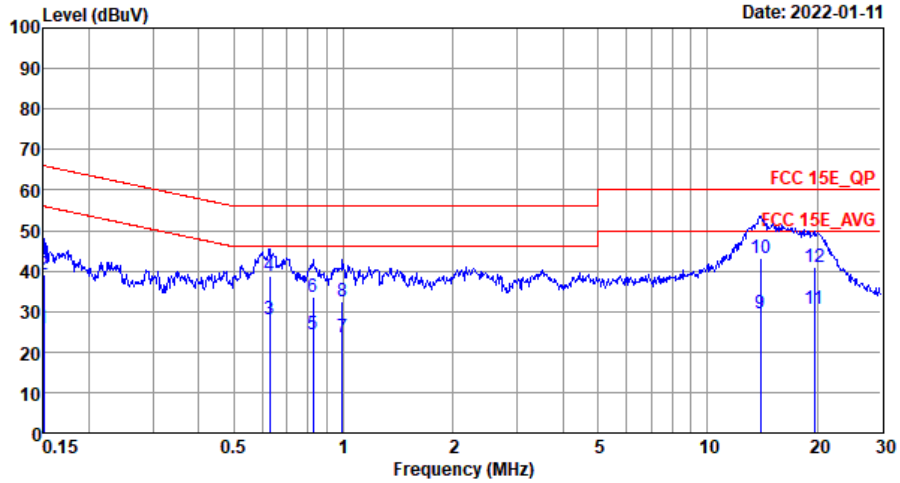
**TEST RESULTS DATA**  
**Power Spectral Density**

U-NII-2C										
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	0.00	5.87	11.00	-1.80		Pass
11a	6M bps	1	116	5580	0.00	5.87	11.00	-1.80		Pass
11a	6M bps	1	140	5700	0.00	5.93	11.00	-1.80		Pass
HT20	MCS 0	1	100	5500	0.00	5.53	11.00	-1.80		Pass
HT20	MCS 0	1	116	5580	0.00	5.61	11.00	-1.80		Pass
HT20	MCS 0	1	140	5700	0.00	5.64	11.00	-1.80		Pass
HT40	MCS 0	1	102	5510	0.00	2.67	11.00	-1.80		Pass
HT40	MCS 0	1	110	5550	0.00	2.86	11.00	-1.80		Pass
HT40	MCS 0	1	134	5670	0.00	2.61	11.00	-1.80		Pass



## Appendix B. AC Conducted Emission Test Results

Test Engineer :	Xie YuQiang	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.		

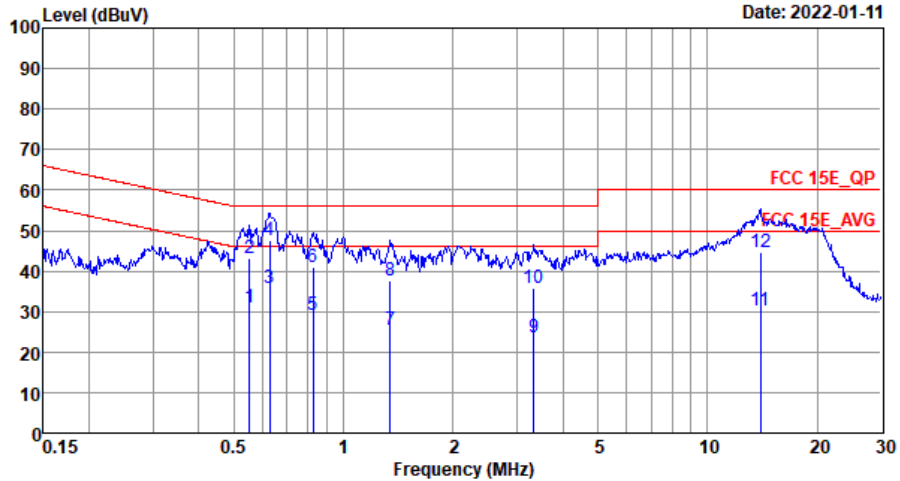


Site : CO01-SZ  
 Condition: FCC 15E\_QP LISN\_20210901\_L LINE

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15	25.75	-30.25	56.00	4.70	10.20	10.85	Average
2	0.15	39.05	-26.95	66.00	18.00	10.20	10.85	QP
3	0.63	28.05	-17.95	46.00	6.60	10.12	11.33	Average
4	0.63	38.65	-17.35	56.00	17.20	10.12	11.33	QP
5	0.83	24.49	-21.51	46.00	3.70	10.11	10.68	Average
6	0.83	33.69	-22.31	56.00	12.90	10.11	10.68	QP
7	0.99	23.47	-22.53	46.00	3.10	10.12	10.25	Average
8	0.99	32.57	-23.43	56.00	12.20	10.12	10.25	QP
9	13.99	29.69	-20.31	50.00	9.50	9.86	10.33	Average
10 *	13.99	43.19	-16.81	60.00	23.00	9.86	10.33	QP
11	19.64	30.63	-19.37	50.00	10.40	9.87	10.36	Average
12	19.64	41.13	-18.87	60.00	20.90	9.87	10.36	QP



Test Engineer :	Xie YuQiang	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\_20210901\_N NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.55	30.93	-15.07	46.00	9.10	10.22	11.61	Average
2	0.55	43.23	-12.77	56.00	21.40	10.22	11.61	QP
3	0.63	35.66	-10.34	46.00	14.10	10.23	11.33	Average
4 *	0.63	47.66	-8.34	56.00	26.10	10.23	11.33	QP
5	0.83	29.10	-16.90	46.00	8.20	10.22	10.68	Average
6	0.83	41.10	-14.90	56.00	20.20	10.22	10.68	QP
7	1.34	25.38	-20.62	46.00	4.91	10.24	10.23	Average
8	1.34	37.78	-18.22	56.00	17.31	10.24	10.23	QP
9	3.33	23.68	-22.32	46.00	3.30	10.14	10.24	Average
10	3.33	35.68	-20.32	56.00	15.30	10.14	10.24	QP
11	13.99	30.22	-19.78	50.00	10.00	9.89	10.33	Average
12	13.99	44.62	-15.38	60.00	24.40	9.89	10.33	QP

Note:

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



# Appendix C. Radiated Spurious Emission

## 5150~5250MHz

### WIFI 802.11a (Band Edge @ 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 )
802.11a CH 36 5180MHz		5143.52	62.01	-11.99	74	48.55	34	10.06	30.6	176	64	P	H
		5149.76	49.17	-4.83	54	35.76	34	10.06	30.65	176	64	A	H
	*	5180	107.29	-	-	93.89	34	10.09	30.69	176	64	P	H
		5180	99.41	-	-	86.01	34	10.09	30.69	176	64	A	H
		5147.68	55.06	-18.94	74	41.65	34	10.06	30.65	104	246	P	V
		5149.76	44.59	-9.41	54	31.18	34	10.06	30.65	104	246	A	V
	*	5180	103.28	-	-	89.88	34	10.09	30.69	104	246	P	V
		5180	95.28	-	-	81.88	34	10.09	30.69	104	246	A	V
802.11a CH 44 5220MHz		5117.78	53.74	-20.26	74	40.31	33.93	10.06	30.56	220	54	P	H
		5150	43.41	-10.59	54	30	34	10.06	30.65	220	54	A	H
	*	5220	106.51	-	-	93.08	34.03	10.13	30.73	220	54	P	H
		5220	98.54	-	-	85.11	34.03	10.13	30.73	220	54	A	H
		5430.72	52.4	-21.6	74	38.37	34.2	10.38	30.55	220	54	P	H
		5351.76	42.26	-11.74	54	28.28	34.2	10.3	30.52	220	54	A	H
		5103.22	52.84	-21.16	74	39.48	33.9	10.02	30.56	124	273	P	V
		5142.74	42.49	-11.51	54	29.03	34	10.06	30.6	124	273	A	V
	*	5220	101.66	-	-	88.23	34.03	10.13	30.73	124	273	P	V
		5220	94.66	-	-	81.23	34.03	10.13	30.73	124	273	A	V
		5353.68	52.07	-21.93	74	38.09	34.2	10.3	30.52	124	273	P	V
		5454	41.46	-12.54	54	27.44	34.2	10.38	30.56	124	273	A	V



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 )
802.11a CH 48 5240MHz		5070.46	53.45	-20.55	74	40.22	33.83	9.99	30.59	227	54	P	H
		5149.5	43	-11	54	29.59	34	10.06	30.65	227	54	A	H
	*	5240	106.71	-	-	93.14	34.07	10.17	30.67	227	54	P	H
		5240	98.67	-	-	85.1	34.07	10.17	30.67	227	54	A	H
		5450.16	52.83	-21.17	74	38.81	34.2	10.38	30.56	227	54	P	H
		5352.24	42.38	-11.62	54	28.4	34.2	10.3	30.52	227	54	A	H
		5066.04	52.83	-21.17	74	39.64	33.83	9.99	30.63	125	287	P	V
		5112.84	42.4	-11.6	54	29.01	33.93	10.02	30.56	125	287	A	V
	*	5240	101.91	-	-	88.34	34.07	10.17	30.67	125	287	P	V
		5240	94.57	-	-	81	34.07	10.17	30.67	125	287	A	V
		5438.4	51.52	-22.48	74	37.49	34.2	10.38	30.55	125	287	P	V
		5460	41.47	-12.53	54	27.45	34.2	10.38	30.56	125	287	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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	48.28	-20.02	68.3	58.49	37.22	11.56	58.99	-	-	P	H
		15540	50.56	-23.44	74	54.64	40.13	14.74	58.95	-	-	P	H
		10360	47.14	-21.16	68.3	57.35	37.22	11.56	58.99	-	-	P	V
		15540	50.33	-23.67	74	54.41	40.13	14.74	58.95	-	-	P	V
802.11a CH 44 5220MHz		10440	48.38	-19.92	68.3	58.43	37.26	11.61	58.92	-	-	P	H
		15660	50.02	-23.98	74	54.09	40.22	14.78	59.07	-	-	P	H
		10440	47.59	-20.71	68.3	57.64	37.26	11.61	58.92	-	-	P	V
		15660	50.31	-23.69	74	54.38	40.22	14.78	59.07	-	-	P	V
802.11a CH 48 5240MHz		10480	47.34	-20.96	68.3	57.3	37.29	11.61	58.86	-	-	P	H
		15720	50.87	-23.13	74	54.97	40.28	14.74	59.12	-	-	P	H
		10480	47.71	-20.59	68.3	57.67	37.29	11.61	58.86	-	-	P	V
		15720	50.76	-23.24	74	54.86	40.28	14.74	59.12	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**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 5180MH z		5149.76	60.88	-13.12	74	47.47	34	10.06	30.65	194	70	P	H
		5150	48.65	-5.35	54	35.24	34	10.06	30.65	194	70	A	H
	*	5180	107.05	-	-	93.65	34	10.09	30.69	194	70	P	H
		5180	98.05	-	-	84.65	34	10.09	30.69	194	70	A	H
		5147.94	56.92	-17.08	74	43.51	34	10.06	30.65	123	304	P	V
		5150	45.93	-8.07	54	32.52	34	10.06	30.65	123	304	A	V
	*	5182	103.35	-	-	89.95	34	10.09	30.69	123	304	P	V
802.11n HT20 CH 44 5220MH z		5182	95.84	-	-	82.44	34	10.09	30.69	123	304	A	V
		5145.34	53.65	-20.35	74	40.24	34	10.06	30.65	179	71	P	H
		5150	44.09	-9.91	54	30.68	34	10.06	30.65	179	71	A	H
	*	5220	107.36	-	-	93.93	34.03	10.13	30.73	179	71	P	H
		5220	98.76	-	-	85.33	34.03	10.13	30.73	179	71	A	H
		5424	51.56	-22.44	74	37.55	34.2	10.34	30.53	179	71	P	H
		5350.8	42.22	-11.78	54	28.24	34.2	10.3	30.52	179	71	A	H
		5141.44	52.49	-21.51	74	39.03	34	10.06	30.6	165	276	P	V
		5149.76	42.76	-11.24	54	29.35	34	10.06	30.65	165	276	A	V
	*	5220	103.79	-	-	90.36	34.03	10.13	30.73	165	276	P	V
		5220	95.69	-	-	82.26	34.03	10.13	30.73	165	276	A	V
802.11n HT20 CH 48 5240MH z		5434.56	52.75	-21.25	74	38.72	34.2	10.38	30.55	165	276	P	V
		5352.24	41.48	-12.52	54	27.5	34.2	10.3	30.52	165	276	A	V
		5075.92	53.37	-20.63	74	40.07	33.87	10.02	30.59	178	66	P	H
		5149.76	43.61	-10.39	54	30.2	34	10.06	30.65	178	66	A	H
	*	5240	107.88	-	-	94.31	34.07	10.17	30.67	178	66	P	H
		5240	99.87	-	-	86.3	34.07	10.17	30.67	178	66	A	H
		5357.28	51.97	-22.03	74	37.99	34.2	10.3	30.52	178	66	P	H
		5351.76	42.9	-11.1	54	28.92	34.2	10.3	30.52	178	66	A	H
		5128.44	53.77	-20.23	74	40.34	33.97	10.06	30.6	166	292	P	V
		5138.58	42.57	-11.43	54	29.14	33.97	10.06	30.6	166	292	A	V
	*	5240	102.66	-	-	89.09	34.07	10.17	30.67	166	292	P	V
	5240	95.11	-	-	81.54	34.07	10.17	30.67	166	292	A	V	
	5417.52	51.12	-22.88	74	37.11	34.2	10.34	30.53	166	292	P	V	
	5351.52	41.58	-12.42	54	27.6	34.2	10.3	30.52	166	292	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												





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		10360	48.58	-19.72	68.3	58.79	37.22	11.56	58.99	-	-	P	H
HT20		15540	50.86	-23.14	74	54.94	40.13	14.74	58.95	-	-	P	H
CH 36		10360	47.51	-20.79	68.3	57.72	37.22	11.56	58.99	-	-	P	V
5180MHz		15540	50.23	-23.77	74	54.31	40.13	14.74	58.95	-	-	P	V
802.11n		10440	48.83	-19.47	68.3	58.88	37.26	11.61	58.92	-	-	P	H
HT20		15660	50.94	-23.06	74	55.01	40.22	14.78	59.07	-	-	P	H
CH 44		10440	47.98	-20.32	68.3	58.03	37.26	11.61	58.92	-	-	P	V
5220MHz		15660	50.88	-23.12	74	54.95	40.22	14.78	59.07	-	-	P	V
802.11n		10480	48.86	-19.44	68.3	58.82	37.29	11.61	58.86	-	-	P	H
HT20		15720	50.74	-23.26	74	54.84	40.28	14.74	59.12	-	-	P	H
CH 48		10480	49.06	-19.24	68.3	59.02	37.29	11.61	58.86	-	-	P	V
5240MHz		15720	50.36	-23.64	74	54.46	40.28	14.74	59.12	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**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		5148.46	63.66	-10.34	74	50.25	34	10.06	30.65	237	48	P	H
		5150	52.69	-1.31	54	39.28	34	10.06	30.65	237	48	A	H
		5190	104.93	-	-	91.53	34	10.09	30.69	237	48	P	H
		5190	95.52	-	-	82.12	34	10.09	30.69	237	48	A	H
		5458.88	52.89	-21.11	74	38.87	34.2	10.38	30.56	237	48	P	H
		5354.44	42.43	-11.57	54	28.45	34.2	10.3	30.52	237	48	A	H
		5147.94	59.04	-14.96	74	45.63	34	10.06	30.65	157	288	A	V
		5150	47.39	-6.61	54	33.98	34	10.06	30.65	157	288	P	V
		5190	98.9	-	-	85.5	34	10.09	30.69	157	288	A	V
		5190	91.74	-	-	78.34	34	10.09	30.69	157	288	P	V
		5377.68	51.78	-22.22	74	37.81	34.2	10.3	30.53	157	288	A	V
		5459.72	41.47	-12.53	54	27.45	34.2	10.38	30.56	157	288	P	V
802.11n HT40 CH 46 5230MHz		5140.66	54.89	-19.11	74	41.43	34	10.06	30.6	238	46	P	H
		5150	45.49	-8.51	54	32.08	34	10.06	30.65	238	46	A	H
	*	5230	105.31	-	-	91.78	34.07	10.13	30.67	238	46	P	H
		5230	96.41	-	-	82.88	34.07	10.13	30.67	238	46	A	H
		5375.76	52.23	-21.77	74	38.26	34.2	10.3	30.53	238	46	P	H
		5351.76	43.1	-10.9	54	29.12	34.2	10.3	30.52	238	46	A	H
		5149.5	53.99	-20.01	74	40.58	34	10.06	30.65	164	295	P	V
		5150	43.47	-10.53	54	30.06	34	10.06	30.65	164	295	A	V
	*	5230	101.17	-	-	87.64	34.07	10.13	30.67	164	295	P	V
	*	5230	94.74	-	-	81.21	34.07	10.13	30.67	164	295	A	V
	5358.48	52.24	-21.76	74	38.26	34.2	10.3	30.52	164	295	P	V	
	5350.8	41.81	-12.19	54	27.83	34.2	10.3	30.52	164	295	A	V	

**Remark**  
 1. No other spurious found.  
 2. All results are PASS against Peak and Average limit line.



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		10380	48.16	-20.14	68.3	58.32	37.23	11.59	58.98	-	-	P	H
HT40		15570	50.77	-23.23	74	54.79	40.16	14.79	58.97	-	-	P	H
CH 38		10380	49.28	-19.02	68.3	59.44	37.23	11.59	58.98	-	-	P	V
5190MHz		15570	50.33	-23.67	74	54.35	40.16	14.79	58.97	-	-	P	V
802.11n		10640	47.73	-26.27	74	57.12	37.47	11.83	58.69	-	-	P	H
HT40		15960	50.99	-23.01	74	54.98	40.47	14.89	59.35	-	-	P	H
CH 46		10640	47.68	-26.32	74	57.07	37.47	11.83	58.69	-	-	P	V
5230MHz		15960	50.6	-23.4	74	54.59	40.47	14.89	59.35	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5150~5250MHz

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 42 5210MHz		5141.96	61.48	-12.52	74	48.02	34	10.06	30.6	243	10	P	H
		5150	50.25	-3.75	54	36.84	34	10.06	30.65	243	10	A	H
		5210	98.86	-	-	85.43	34.03	10.13	30.73	243	10	P	H
		5210	91.69	-	-	78.26	34.03	10.13	30.73	243	10	A	H
		5375.28	52.58	-21.42	74	38.61	34.2	10.3	30.53	243	10	P	H
		5350.8	42.98	-11.02	54	29	34.2	10.3	30.52	243	10	A	H
		5143.52	56.79	-17.21	74	43.33	34	10.06	30.6	213	323	P	V
		5149.76	46.7	-7.3	54	33.29	34	10.06	30.65	213	323	A	V
		5210	93.19	-	-	79.76	34.03	10.13	30.73	213	323	P	V
		5210	85.66	-	-	72.23	34.03	10.13	30.73	213	323	A	V
		5441.04	52.16	-21.84	74	38.13	34.2	10.38	30.55	213	323	P	V
		5350.32	41.52	-12.48	54	27.54	34.2	10.3	30.52	213	323	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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 VHT80 CH 42 5210MHz		10420	49.44	-18.86	68.3	59.52	37.25	11.61	58.94	-	-	P	H
		15630	51.29	-22.71	74	55.31	40.21	14.8	59.03	-	-	P	H
		10420	49.06	-19.24	68.3	59.14	37.25	11.61	58.94	-	-	P	V
		15630	50.84	-23.16	74	54.86	40.21	14.8	59.03	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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 z		5108.42	53.23	-20.77	74	39.84	33.93	10.02	30.56	231	53	P	H
		5139.1	42.73	-11.27	54	29.3	33.97	10.06	30.6	231	53	A	H
	*	5260	106.97	-	-	93.29	34.13	10.17	30.62	231	53	P	H
		5260	98.97	-	-	85.29	34.13	10.17	30.62	231	53	A	H
		5362.56	51.58	-22.42	74	37.6	34.2	10.3	30.52	231	53	P	H
		5351.52	42.85	-11.15	54	28.87	34.2	10.3	30.52	231	53	A	H
		5100.1	51.52	-22.48	74	38.16	33.9	10.02	30.56	129	262	P	V
		5091	42.35	-11.65	54	29.02	33.9	10.02	30.59	129	262	A	V
	*	5260	101.08	-	-	87.4	34.13	10.17	30.62	129	262	P	V
		5260	93.9	-	-	80.22	34.13	10.17	30.62	129	262	A	V
802.11a CH 60 5300MHZ z		5427.12	50.55	-23.45	74	36.52	34.2	10.38	30.55	129	262	P	V
		5460	41.46	-12.54	54	27.44	34.2	10.38	30.56	129	262	A	V
		5098	52.19	-21.81	74	38.83	33.9	10.02	30.56	229	54	P	H
		5131.25	42.89	-11.11	54	29.46	33.97	10.06	30.6	229	54	A	H
	*	5300	106.6	-	-	92.7	34.2	10.21	30.51	229	54	P	H
		5300	98.23	-	-	84.33	34.2	10.21	30.51	229	54	A	H
		5357.28	52.34	-21.66	74	38.36	34.2	10.3	30.52	229	54	P	H
		5350.32	43.76	-10.24	54	29.78	34.2	10.3	30.52	229	54	A	H
		5082.6	51.86	-22.14	74	38.56	33.87	10.02	30.59	133	296	P	V
		5093.1	42.51	-11.49	54	29.15	33.9	10.02	30.56	133	296	A	V
802.11a CH 64 5320MHZ z	*	5300	102.3	-	-	88.4	34.2	10.21	30.51	133	296	P	V
		5300	95.12	-	-	81.22	34.2	10.21	30.51	133	296	A	V
		5450.64	51.14	-22.86	74	37.12	34.2	10.38	30.56	133	296	P	V
		5350.08	41.91	-12.09	54	27.93	34.2	10.3	30.52	133	296	A	V
	*	5320	107.16	-	-	93.21	34.2	10.26	30.51	212	44	P	H
		5320	99.28	-	-	85.33	34.2	10.26	30.51	212	44	A	H
		5352.8	60.31	-13.69	74	46.33	34.2	10.3	30.52	212	44	P	H
		5350.08	49.84	-4.16	54	35.86	34.2	10.3	30.52	212	44	A	H
	5320	100.53	-	-	86.58	34.2	10.26	30.51	104	289	P	V	
	5320	92.54	-	-	78.59	34.2	10.26	30.51	104	289	A	V	
	5350.72	53.68	-20.32	74	39.7	34.2	10.3	30.52	104	289	P	V	
	5350.08	43.17	-10.83	54	29.19	34.2	10.3	30.52	104	289	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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	47.66	-20.64	68.3	57.51	37.32	11.65	58.82	-	-	P	H
		15780	50.52	-23.48	74	54.6	40.32	14.78	59.18	-	-	P	H
		10520	47.74	-20.56	68.3	57.59	37.32	11.65	58.82	-	-	P	V
		15780	50.06	-23.94	74	54.14	40.32	14.78	59.18	-	-	P	V
802.11a CH 60 5300MHz		10600	47.21	-26.79	74	56.66	37.42	11.86	58.73	-	-	P	H
		15900	50.43	-23.57	74	54.45	40.42	14.86	59.3	-	-	P	H
		10600	47.47	-26.53	74	56.92	37.42	11.86	58.73	-	-	P	V
		15900	49.78	-24.22	74	53.8	40.42	14.86	59.3	-	-	P	V
802.11a CH 64 5320MHz		10640	48.18	-25.82	74	57.57	37.47	11.83	58.69	-	-	P	H
		15960	50.15	-23.85	74	54.14	40.47	14.89	59.35	-	-	P	H
		10640	47.18	-26.82	74	56.57	37.47	11.83	58.69	-	-	P	V
		15960	50.12	-23.88	74	54.11	40.47	14.89	59.35	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**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 )	Preamplifier Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		5118.56	52.51	-21.49	74	39.12	33.93	10.06	30.6	194	66	P	H
		5150	43.11	-10.89	54	29.7	34	10.06	30.65	194	66	A	H
	*	5260	107.63	-	-	93.95	34.13	10.17	30.62	194	66	P	H
		5260	100.96	-	-	87.28	34.13	10.17	30.62	194	66	A	H
		5359.68	52.43	-21.57	74	38.45	34.2	10.3	30.52	194	66	P	H
		5350.08	43.38	-10.62	54	29.4	34.2	10.3	30.52	194	66	A	H
		5101.92	52.61	-21.39	74	39.25	33.9	10.02	30.56	136	304	P	V
		5139.36	42.39	-11.61	54	28.96	33.97	10.06	30.6	136	304	A	V
	*	5260	102.11	-	-	88.43	34.13	10.17	30.62	136	304	P	V
		5260	95.11	-	-	81.43	34.13	10.17	30.62	136	304	A	V
	5441.52	50.5	-23.5	74	36.47	34.2	10.38	30.55	136	304	P	V	
	5350.08	41.55	-12.45	54	27.57	34.2	10.3	30.52	136	304	A	V	
802.11n HT20 CH 60 5300MHz		5126.35	52.81	-21.19	74	39.38	33.97	10.06	30.6	180	64	P	H
		5136.15	42.99	-11.01	54	29.56	33.97	10.06	30.6	180	64	A	H
	*	5300	107.56	-	-	93.66	34.2	10.21	30.51	180	64	P	H
		5300	99.56	-	-	85.66	34.2	10.21	30.51	180	64	A	H
		5365.44	55.04	-18.96	74	41.06	34.2	10.3	30.52	180	64	P	H
		5350.32	45.25	-8.75	54	31.27	34.2	10.3	30.52	180	64	A	H
		5063	52.96	-21.04	74	39.77	33.83	9.99	30.63	171	282	P	V
		5115.85	42.55	-11.45	54	29.12	33.93	10.06	30.56	171	282	A	V
	*	5300	101.65	-	-	87.75	34.2	10.21	30.51	171	282	P	V
	5300	93.73	-	-	79.83	34.2	10.21	30.51	171	282	A	V	
	5372.16	50.79	-23.21	74	36.81	34.2	10.3	30.52	171	282	P	V	
	5350.32	42.22	-11.78	54	28.24	34.2	10.3	30.52	171	282	A	V	
802.11n HT20 CH 64 5320MHz	*	5320	108.57	-	-	94.62	34.2	10.26	30.51	182	66	P	H
		5320	101.28	-	-	87.33	34.2	10.26	30.51	182	66	A	H
		5351.36	59.44	-14.56	74	45.46	34.2	10.3	30.52	182	66	P	H
		5350.08	49.53	-4.47	54	35.55	34.2	10.3	30.52	182	66	A	H
	*	5320	102.35	-	-	88.4	34.2	10.26	30.51	127	303	P	V
		5320	95.06	-	-	81.11	34.2	10.26	30.51	127	303	A	V
		5352.32	53.24	-20.76	74	39.26	34.2	10.3	30.52	127	303	P	V
	5350.08	44.64	-9.36	54	30.66	34.2	10.3	30.52	127	303	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5250~5350MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11n		10520	48.46	-19.84	68.3	58.31	37.32	11.65	58.82	-	-	P	H
HT20		15780	50.22	-23.78	74	54.3	40.32	14.78	59.18	-	-	P	H
CH 52		10520	48.66	-19.64	68.3	58.51	37.32	11.65	58.82	-	-	P	V
5260MHz		15780	50.12	-23.88	74	54.2	40.32	14.78	59.18	-	-	P	V
802.11n		10600	47.53	-26.47	74	56.98	37.42	11.86	58.73	-	-	P	H
HT20		15900	50.13	-23.87	74	54.15	40.42	14.86	59.3	-	-	P	H
CH 60		10600	48.1	-25.9	74	57.55	37.42	11.86	58.73	-	-	P	V
5300MHz		15900	50.91	-23.09	74	54.93	40.42	14.86	59.3	-	-	P	V
802.11n		10640	48.12	-25.88	74	57.51	37.47	11.83	58.69	-	-	P	H
HT20		15960	50.02	-23.98	74	54.01	40.47	14.89	59.35	-	-	P	H
CH 64		10640	48.39	-25.61	74	57.78	37.47	11.83	58.69	-	-	P	V
5320MHz		15960	50.55	-23.45	74	54.54	40.47	14.89	59.35	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												





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		5069.65	53.73	-20.27	74	40.5	33.83	9.99	30.59	246	48	P	H
		5139.3	43.23	-10.77	54	29.8	33.97	10.06	30.6	246	48	A	H
	*	5270	103.86	-	-	90.18	34.13	10.17	30.62	246	48	P	H
		5270	96.02	-	-	82.34	34.13	10.17	30.62	246	48	A	H
		5395.2	53.59	-20.41	74	39.58	34.2	10.34	30.53	246	48	P	H
		5350.56	44.81	-9.19	54	30.83	34.2	10.3	30.52	246	48	A	H
		5049.35	53.84	-20.16	74	40.68	33.8	9.99	30.63	164	294	P	V
		5139.3	42.76	-11.24	54	29.33	33.97	10.06	30.6	164	294	A	V
	*	5270	101.54	-	-	87.86	34.13	10.17	30.62	164	294	P	V
		5270	93.56	-	-	79.88	34.13	10.17	30.62	164	294	A	V
		5363.04	51.66	-22.34	74	37.68	34.2	10.3	30.52	164	294	P	V
		5350.08	42.56	-11.44	54	28.58	34.2	10.3	30.52	164	294	A	V
802.11n HT40 CH 62 5310MHz		5125.3	52.23	-21.77	74	38.8	33.97	10.06	30.6	231	50	P	H
		5138.25	42.92	-11.08	54	29.49	33.97	10.06	30.6	231	50	A	H
	*	5310	104.52	-	-	90.57	34.2	10.26	30.51	231	50	P	H
		5310	96.39	-	-	82.44	34.2	10.26	30.51	231	50	A	H
		5351.28	63.3	-10.7	74	49.32	34.2	10.3	30.52	231	50	P	H
		5350.08	53.32	-0.68	54	39.34	34.2	10.3	30.52	231	50	A	H
		5051.1	51.35	-22.65	74	38.19	33.8	9.99	30.63	127	299	P	V
		5113.4	42.49	-11.51	54	29.1	33.93	10.02	30.56	127	299	A	V
	*	5310	99.86	-	-	85.91	34.2	10.26	30.51	127	299	P	V
		5310	91.28	-	-	77.33	34.2	10.26	30.51	127	299	A	V
	5353.44	59.28	-14.72	74	45.3	34.2	10.3	30.52	127	299	P	V	
	5350.08	48.39	-5.61	54	34.41	34.2	10.3	30.52	127	299	A	V	

**Remark**  
 1. No other spurious found.  
 2. All results are PASS against Peak and Average limit line.



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		10540	49.13	-19.17	68.3	58.9	37.34	11.69	58.8	-	-	P	H
		15810	50.16	-23.84	74	54.2	40.35	14.81	59.2	-	-	P	H
CH 54 5270MHz		10540	49.12	-19.18	68.3	58.89	37.34	11.69	58.8	-	-	P	V
		15810	50.62	-23.38	74	54.66	40.35	14.81	59.2	-	-	P	V
802.11n HT40 CH 62		10620	48.23	-25.77	74	57.65	37.44	11.85	58.71	-	-	P	H
		15930	50.56	-23.44	74	54.57	40.44	14.88	59.33	-	-	P	H
		10620	47.84	-26.16	74	57.26	37.44	11.85	58.71	-	-	P	V
5310MHz		15930	50.8	-23.2	74	54.81	40.44	14.88	59.33	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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		5094.15	52.18	-21.82	74	38.82	33.9	10.02	30.56	251	360	P	H
		5150	43.01	-10.99	54	29.6	34	10.06	30.65	251	360	A	H
		5290	100.14	-	-	86.33	34.17	10.21	30.57	251	360	P	H
		5290	93.08	-	-	79.27	34.17	10.21	30.57	251	360	A	H
		5379.36	62.25	-11.75	74	48.28	34.2	10.3	30.53	251	360	P	H
		5350.32	50.83	-3.17	54	36.85	34.2	10.3	30.52	251	360	A	H
		5100.45	53.57	-20.43	74	40.21	33.9	10.02	30.56	112	300	P	V
		5134.75	42.62	-11.38	54	29.19	33.97	10.06	30.6	112	300	A	V
		5290	93.86	-	-	80.05	34.17	10.21	30.57	112	300	P	V
		5290	87.08	-	-	73.27	34.17	10.21	30.57	112	300	A	V
		5363.28	57.95	-16.05	74	43.97	34.2	10.3	30.52	112	300	P	V
	5358.24	45.83	-8.17	54	31.85	34.2	10.3	30.52	112	300	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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	48.92	-19.38	68.3	58.45	37.4	11.82	58.75	-	-	P	H
		15870	50.57	-23.43	74	54.59	40.4	14.85	59.27	-	-	P	H
		10580	48.41	-19.89	68.3	57.94	37.4	11.82	58.75	-	-	P	V
		15870	50.03	-23.97	74	54.05	40.4	14.85	59.27	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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		5459.92	54.01	-19.99	74	39.99	34.2	10.38	30.56	173	60	P	H
		5469.84	55.51	-12.79	68.3	41.44	34.2	10.43	30.56	173	60	P	H
		5460	45.7	-8.3	54	31.68	34.2	10.38	30.56	173	60	A	H
	*	5500	107.54	-	-	93.49	34.2	10.43	30.58	173	60	P	H
		5500	99.49	-	-	85.44	34.2	10.43	30.58	173	60	A	H
		5427.76	51.19	-22.81	74	37.16	34.2	10.38	30.55	104	258	P	V
		5468.08	53.9	-14.4	68.3	39.83	34.2	10.43	30.56	104	258	P	V
		5460	42.79	-11.21	54	28.77	34.2	10.38	30.56	104	258	A	V
	*	5500	102.73	-	-	88.68	34.2	10.43	30.58	104	258	P	V
		5500	95.04	-	-	80.99	34.2	10.43	30.58	104	258	A	V
802.11a CH 116 5580MHz		5424.64	51.14	-22.86	74	37.15	34.2	10.34	30.55	231	54	P	H
		5462.56	51.95	-16.35	68.3	37.93	34.2	10.38	30.56	231	54	P	H
		5459.92	43.02	-10.98	54	29	34.2	10.38	30.56	231	54	A	H
	*	5580	108.71	-	-	94.31	34.23	10.52	30.35	231	54	P	H
		5580	101.61	-	-	87.21	34.23	10.52	30.35	231	54	A	H
		5725.94	51.55	-16.75	68.3	36.86	34.57	10.61	30.49	231	54	P	H
		5452.96	50.83	-23.17	74	36.81	34.2	10.38	30.56	193	300	P	V
		5460.88	50.62	-17.68	68.3	36.6	34.2	10.38	30.56	193	300	P	V
		5459.68	42.14	-11.86	54	28.12	34.2	10.38	30.56	193	300	A	V
	*	5580	102.69	-	-	88.29	34.23	10.52	30.35	193	300	P	V
	5580	95.62	-	-	81.22	34.23	10.52	30.35	193	300	A	V	
	5750.51	53.07	-15.23	68.3	38.29	34.6	10.62	30.44	193	300	P	V	
802.11a CH 140 5700MHz	*	5700	110.18	-	-	95.6	34.5	10.61	30.53	215	52	P	H
		5700	101.94	-	-	87.36	34.5	10.61	30.53	215	52	A	H
		5726.36	65.74	-2.56	68.3	51.05	34.57	10.61	30.49	215	52	P	H
	*	5700	100.27	-	-	85.69	34.5	10.61	30.53	112	251	P	V
		5700	92.91	-	-	78.33	34.5	10.61	30.53	112	251	A	V
		5725.16	57.33	-10.97	68.3	42.64	34.57	10.61	30.49	112	251	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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	47.97	-26.03	74	56.36	37.9	12.01	58.3	-	-	P	H
		16500	57.19	-11.11	68.3	59.19	41.57	15.27	58.84	-	-	P	H
		11000	48.24	-25.76	74	56.63	37.9	12.01	58.3	-	-	P	V
		16500	52.53	-15.77	68.3	54.53	41.57	15.27	58.84	-	-	P	V
802.11a CH 116 5580MHz		11160	48.02	-25.98	74	55.98	38.05	12.1	58.11	-	-	P	H
		16740	56.42	-11.88	68.3	57.52	42.07	15.41	58.58	-	-	P	H
		11160	48.05	-25.95	74	56.01	38.05	12.1	58.11	-	-	P	V
		16740	56.99	-11.31	68.3	58.09	42.07	15.41	58.58	-	-	P	V
802.11a CH 140 5700MHz		11400	49.07	-24.93	74	56.46	38.27	12.19	57.85	-	-	P	H
		17100	59.2	-9.1	68.3	59.45	42.46	15.45	58.16	-	-	P	H
		11400	49.24	-24.76	74	56.63	38.27	12.19	57.85	-	-	P	V
		17100	59.8	-8.5	68.3	60.05	42.46	15.45	58.16	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5470~5725MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Cable Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 100 5500MHz		5458.32	57.39	-16.61	74	43.37	34.2	10.38	30.56	157	66	P	H
		5469.52	61.68	-6.62	68.3	47.61	34.2	10.43	30.56	157	66	P	H
		5460	48.43	-5.57	54	34.41	34.2	10.38	30.56	157	66	A	H
	*	5500	109.01	-	-	94.96	34.2	10.43	30.58	157	66	P	H
		5500	101.04	-	-	86.99	34.2	10.43	30.58	157	66	A	H
		5457.36	53.53	-20.47	74	39.51	34.2	10.38	30.56	144	283	P	V
		5468.72	60.34	-7.96	68.3	46.27	34.2	10.43	30.56	144	283	P	V
		5460	44.59	-9.41	54	30.57	34.2	10.38	30.56	144	283	A	V
	*	5500	102.49	-	-	88.44	34.2	10.43	30.58	144	283	P	V
		5500	95.5	-	-	81.45	34.2	10.43	30.58	144	283	A	V
802.11n HT20 CH 116 5580MHz		5357.92	51.47	-22.53	74	37.49	34.2	10.3	30.52	159	66	P	H
		5465.68	51.63	-16.67	68.3	37.56	34.2	10.43	30.56	159	66	P	H
		5459.68	42.84	-11.16	54	28.82	34.2	10.38	30.56	159	66	A	H
	*	5580	109.16	-	-	94.76	34.23	10.52	30.35	159	66	P	H
		5580	102.28	-	-	87.88	34.23	10.52	30.35	159	66	A	H
		5752.715	52.55	-15.75	68.3	37.74	34.63	10.62	30.44	159	66	P	H
		5422.96	50.42	-23.58	74	36.41	34.2	10.34	30.53	188	298	P	V
		5469.52	50.78	-17.52	68.3	36.71	34.2	10.43	30.56	188	298	P	V
		5459.68	41.78	-12.22	54	27.76	34.2	10.38	30.56	188	298	A	V
	*	5580	103.6	-	-	89.2	34.23	10.52	30.35	188	298	P	V
	5580	95.62	-	-	81.22	34.23	10.52	30.35	188	298	A	V	
	5724.995	51.47	-16.83	68.3	36.78	34.57	10.61	30.49	188	298	P	V	
802.11n HT20 CH 140 5700MHz		5700	107.99	-	-	93.41	34.5	10.61	30.53	204	60	P	H
		5700	100.02	-	-	85.44	34.5	10.61	30.53	204	60	A	H
	*	5725.16	67.38	-0.92	68.3	52.69	34.57	10.61	30.49	204	60	P	H
		5700	99.96	-	-	85.38	34.5	10.61	30.53	163	282	P	V
		5700	92.02	-	-	77.44	34.5	10.61	30.53	163	282	A	V
	*	5726.44	60.02	-8.28	68.3	45.33	34.57	10.61	30.49	163	282	P	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												



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		11000	48.13	-25.87	74	56.52	37.9	12.01	58.3	-	-	P	H
		16500	53.8	-14.5	68.3	55.8	41.57	15.27	58.84	-	-	P	H
CH 100 5500MHz		11000	47.64	-26.36	74	56.03	37.9	12.01	58.3	-	-	P	V
		16500	56.11	-12.19	68.3	58.11	41.57	15.27	58.84	-	-	P	V
802.11n HT20		11160	48.74	-25.26	74	56.7	38.05	12.1	58.11	-	-	P	H
		16740	53.35	-14.95	68.3	54.45	42.07	15.41	58.58	-	-	P	H
CH 116 5580MHz		11160	48.53	-25.47	74	56.49	38.05	12.1	58.11	-	-	P	V
		16740	54.17	-14.13	68.3	55.27	42.07	15.41	58.58	-	-	P	V
802.11n HT20		11400	49.54	-24.46	74	56.93	38.27	12.19	57.85	-	-	P	H
		17100	55.03	-13.27	68.3	55.28	42.46	15.45	58.16	-	-	P	H
CH 140 5700MHz		11400	49.35	-24.65	74	56.74	38.27	12.19	57.85	-	-	P	V
		17100	54.6	-13.7	68.3	54.85	42.46	15.45	58.16	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5470~5725MHz

WIFI 802.11n HT40 (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)
802.11n HT40 CH 102 5510MHz		5458	61.24	-12.76	74	47.22	34.2	10.38	30.56	228	47	P	H
		5469.52	67.35	-0.95	68.3	53.28	34.2	10.43	30.56	228	47	P	H
		5459.92	52.18	-1.82	54	38.16	34.2	10.38	30.56	228	47	A	H
	*	5510	106.14	-	-	91.99	34.2	10.47	30.52	228	47	P	H
		5510	97.92	-	-	83.77	34.2	10.47	30.52	228	47	A	H
		5735.075	53.38	-14.92	68.3	38.61	34.6	10.61	30.44	228	47	P	H
		5459.2	57.07	-16.93	74	43.05	34.2	10.38	30.56	193	294	P	V
		5469.52	60.81	-7.49	68.3	46.74	34.2	10.43	30.56	193	294	P	V
		5459.92	47.02	-6.98	54	33	34.2	10.38	30.56	193	294	A	V
	*	5510	99.69	-	-	85.54	34.2	10.47	30.52	193	294	P	V
	5510	93.16	-	-	79.01	34.2	10.47	30.52	193	294	A	V	
	5736.02	51.3	-17	68.3	36.53	34.6	10.61	30.44	193	294	P	V	
802.11n HT40 CH 110 5550MHz		5439.52	53.02	-20.98	74	38.99	34.2	10.38	30.55	220	48	P	H
		5461.6	54.21	-14.09	68.3	40.19	34.2	10.38	30.56	220	48	P	H
		5459.92	44.92	-9.08	54	30.9	34.2	10.38	30.56	220	48	A	H
	*	5550	108.19	-	-	93.94	34.2	10.52	30.47	220	48	P	H
		5550	100.13	-	-	85.88	34.2	10.52	30.47	220	48	A	H
		5752.4	51.85	-16.45	68.3	37.04	34.63	10.62	30.44	220	48	P	H
		5456.56	51.77	-22.23	74	37.75	34.2	10.38	30.56	176	268	P	V
		5466.16	51.32	-16.98	68.3	37.25	34.2	10.43	30.56	176	268	P	V
		5458.72	42.25	-11.75	54	28.23	34.2	10.38	30.56	176	268	A	V
	*	5550	99.79	-	-	85.54	34.2	10.52	30.47	176	268	P	V
	5550	91.9	-	-	77.65	34.2	10.52	30.47	176	268	A	V	
	5749.25	52.83	-15.47	68.3	38.05	34.6	10.62	30.44	176	268	P	V	
802.11n HT40 CH 134 5670MHz		5409.85	51.93	-22.07	74	37.92	34.2	10.34	30.53	228	49	P	H
		5465.85	51.22	-17.08	68.3	37.15	34.2	10.43	30.56	228	49	P	H
		5459.9	42.28	-11.72	54	28.26	34.2	10.38	30.56	228	49	A	H
	*	5670	106.43	-	-	91.93	34.4	10.59	30.49	228	49	P	H
		5670	97.73	-	-	83.23	34.4	10.59	30.49	228	49	A	H
		5728.25	60.03	-8.27	68.3	45.34	34.57	10.61	30.49	228	49	P	H
		5457.45	50.27	-23.73	74	36.25	34.2	10.38	30.56	173	310	P	V
		5467.6	50.27	-18.03	68.3	36.2	34.2	10.43	30.56	173	310	P	V
		5459.9	41.59	-12.41	54	27.57	34.2	10.38	30.56	173	310	A	V
	*	5670	99.47	-	-	84.97	34.4	10.59	30.49	173	310	P	V
	5670	91.84	-	-	77.34	34.4	10.59	30.49	173	310	A	V	
	5733.15	54.89	-13.41	68.3	40.15	34.57	10.61	30.44	173	310	P	V	

**Remark**  
 1. No other spurious found.  
 2. All results are PASS against Peak and Average limit line.





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		11020	47.4	-26.6	74	55.72	37.92	12.04	58.28	-	-	P	H
HT40		16530	50.93	-17.37	68.3	52.83	41.64	15.26	58.8	-	-	P	H
CH 102		11020	48	-26	74	56.32	37.92	12.04	58.28	-	-	P	V
5510MHz		16530	50.98	-17.32	68.3	52.88	41.64	15.26	58.8	-	-	P	V
802.11n		11100	48.05	-25.95	74	56.08	37.99	12.17	58.19	-	-	P	H
HT40		16650	50.97	-17.33	68.3	52.47	41.89	15.28	58.67	-	-	P	H
CH 110		11100	48.03	-25.97	74	56.06	37.99	12.17	58.19	-	-	P	V
5550MHz		16650	50.1	-18.2	68.3	51.6	41.89	15.28	58.67	-	-	P	V
802.11n		11340	48.74	-25.26	74	56.12	38.21	12.34	57.93	-	-	P	H
HT40		17010	50.31	-17.99	68.3	50.42	42.58	15.59	58.28	-	-	P	H
CH 134		11340	49.3	-24.7	74	56.68	38.21	12.34	57.93	-	-	P	V
5670MHz		17010	50.37	-17.93	68.3	50.48	42.58	15.59	58.28	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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		5434.96	58.78	-15.22	74	44.75	34.2	10.38	30.55	144	325	P	H
		5464.72	61.91	-6.39	68.3	47.89	34.2	10.38	30.56	144	325	P	H
		5458.24	49.46	-4.54	54	35.44	34.2	10.38	30.56	144	325	A	H
		5530	100.32	-	-	86.12	34.2	10.47	30.47	144	325	P	H
		5530	93.47	-	-	79.27	34.2	10.47	30.47	144	325	A	H
		5742.005	51.48	-16.82	68.3	36.7	34.6	10.62	30.44	144	325	P	H
		5458.72	53.79	-20.21	74	39.77	34.2	10.38	30.56	114	247	P	V
		5465.44	55.2	-13.1	68.3	41.18	34.2	10.38	30.56	114	247	P	V
		5458.48	43.87	-10.13	54	29.85	34.2	10.38	30.56	114	247	A	V
		5530	92.35	-	-	78.15	34.2	10.47	30.47	114	247	P	V
	5530	85.47	-	-	71.27	34.2	10.47	30.47	114	247	A	V	
	5727.2	51.95	-16.35	68.3	37.26	34.57	10.61	30.49	114	247	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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	48.06	-25.94	74	56.21	37.96	12.12	58.23	-	-	P	H
		16590	50.46	-17.84	68.3	52.21	41.75	15.25	58.75	-	-	P	H
		11060	48.48	-25.52	74	56.63	37.96	12.12	58.23	-	-	P	V
		16590	50.13	-18.17	68.3	51.88	41.75	15.25	58.75	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

Table with 14 columns: WIFI, Note, Frequency, Level, Over, Limit, Read, Antenna, Cable, Preamp, Ant, Table, Peak, Pol. It contains 12 rows of test data for 802.11n HT40 LF and a Remark section at the bottom.



Co-location

802.11n HT40 CH62 + LTE Band 30 Link (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 CH62 5310MHz & LTE Band30 Link		5051.8	51.24	-22.76	74	38.91	33.8	9.16	30.63	158	50	P	H
		5116.55	41.73	-12.27	54	29.08	33.93	9.28	30.56	158	50	A	H
	*	5310	101.25	-----	-----	87.78	34.2	9.78	30.51	158	50	P	H
		5310	93.79	-----	-----	80.32	34.2	9.78	30.51	158	50	A	H
		5352	62.44	-11.56	74	48.96	34.2	9.8	30.52	158	50	P	H
		5350.08	53.21	-0.79	54	39.73	34.2	9.8	30.52	158	50	A	H
		5008.4	52.48	-21.52	74	40.29	33.8	9.09	30.7	190	264	P	V
		5088.55	41.66	-12.34	54	29.1	33.9	9.25	30.59	190	264	A	V
	*	5310	97.82	-----	-----	84.35	34.2	9.78	30.51	190	264	P	V
		5310	90.73	-----	-----	77.26	34.2	9.78	30.51	190	264	A	V
		5352.96	58.86	-15.14	74	45.38	34.2	9.8	30.52	190	264	P	V
		5350.08	48.34	-5.66	54	34.86	34.2	9.8	30.52	190	264	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



802.11n HT40 CH62 + LTE Band30 Link (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		6916.5	44.76	-23.54	68.3	29.28	35.58	11.28	31.38	-	-	P	H
HT40 CH62		9222	52.74	-15.56	68.3	64.61	36.42	10.8	59.09	-	-	P	H
5310MHz & LTE		10620	47.51	-26.49	74	56.93	37.44	11.85	58.71	-	-	P	H
Band30		6916.5	48.48	-19.82	68.3	33	35.58	11.28	31.38	-	-	P	V
Link		9222	53.02	-15.28	68.3	64.89	36.42	10.8	59.09	-	-	P	V
Link		10620	48.23	-25.77	74	57.65	37.44	11.85	58.71	-	-	P	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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>



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

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

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

**For Peak Limit @ 2390MHz:**

- Level(dBμV/m)  
= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)  
= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)  
= 55.45 (dBμV/m)
- Over Limit(dB)  
= Level(dBμV/m) – Limit Line(dBμV/m)  
= 55.45(dBμV/m) – 74(dBμV/m)  
= -18.55(dB)

**For Average Limit @ 2390MHz:**

- Level(dBμV/m)  
= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)  
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)  
= 43.54 (dBμV/m)
- Over Limit(dB)  
= Level(dBμV/m) – Limit Line(dBμV/m)  
= 43.54(dBμV/m) – 54(dBμV/m)  
= -10.46(dB)

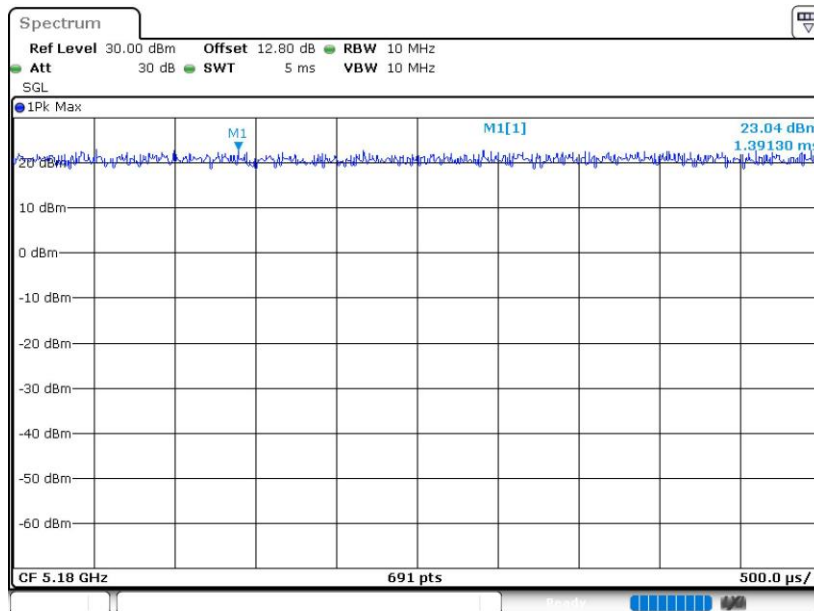
Both peak and average measured complies with the limit line, so test result is “PASS”.



### Appendix D. Duty Cycle Plots

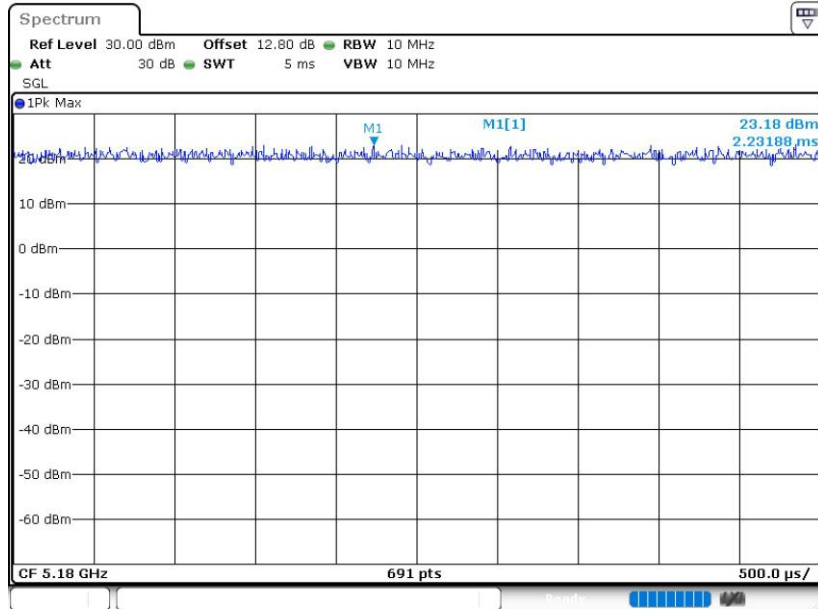
Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	100	-	-	10Hz
802.11n HT20	100	-	-	10Hz
802.11n HT40	100	-	-	10Hz
802.11ac VHT80	100	-	-	10Hz

#### 802.11a

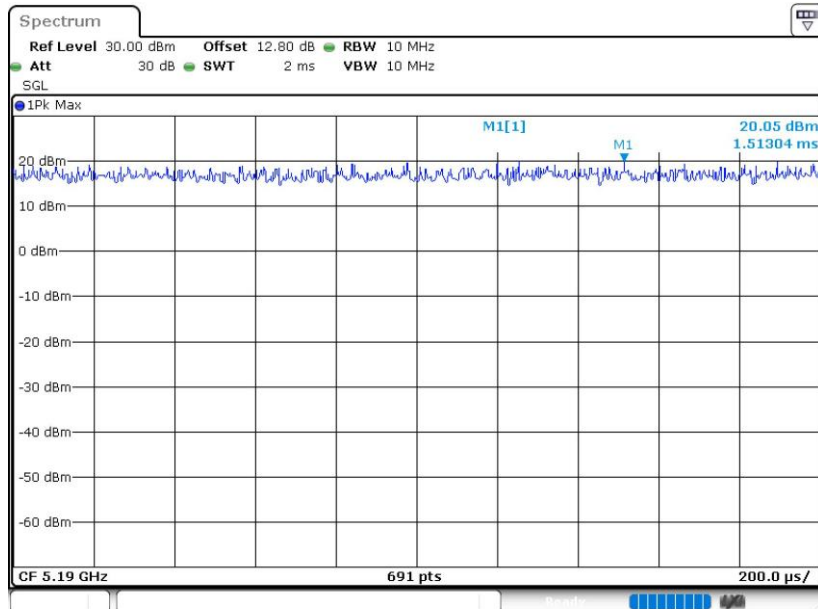




### 802.11n HT20



### 802.11n HT40







802.11ac VHT80

