



# FCC RF Test Report

**APPLICANT** : Motorola Mobility LLC  
**EQUIPMENT** : Mobile Cellular Phone  
**BRAND NAME** : Motorola  
**MODEL NAME** : XT2125-4  
**FCC ID** : IHDT56ZR1  
**STANDARD** : FCC Part 15 Subpart E §15.407  
**CLASSIFICATION** : (NII) Unlicensed National Information Infrastructure

The product was received on Nov. 02, 2020 and testing was completed on Dec. 12, 2020. We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (Kunshan) Inc., the test report shall not be reproduced except in full.

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Reviewed by: Jason Jia / Supervisor

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**Sporton International (Kunshan) Inc.**

**No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300  
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	-	Pass	-
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 3.03 dB at 5149.950 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 3.69 dB at 11.683 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.7	15.203 & 15.407(a)	Antenna Requirement	N/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	XT2125-4
FCC ID	IHDT56ZR1
EUT supports Radios application	CDMA/GSM/WCDMA/LTE/5G NR/GNSS/NFC WLAN 2.4GHz 802.11b/g/n HT20 WLAN 2.4GHz 802.11ax HE20 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 WLAN 5GHz 802.11ax HE20/HE40/HE80 Bluetooth BR / EDR / LE
IMEI Code	Conducted :N/A Conduction: 350019820013734/350019820013742 Radiation: 354001150012839/354001150012847
HW Version	DVT
SW Version	RRT31.32
EUT Stage	Identical Prototype

**Remark:**

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. There are two types of EUT, please refer the product equality declaration exhibit submitted. According to the difference, we choose the sample 1 to full test.



### 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;MIMO Ant. 1+2&gt;</b></p> <p><b>&lt;5180 MHz ~ 5240 MHz&gt;</b>  802.11a : 20.53 dBm / 0.1130 W  802.11n HT20 : 20.43 dBm / 0.1104 W  802.11n HT40 : 20.35 dBm / 0.1084 W  802.11ac VHT20 : 20.48 dBm / 0.1117 W  802.11ac VHT40 : 20.39 dBm / 0.1094 W  802.11ac VHT80 : 14.23 dBm / 0.0265 W  802.11ax HE20 : 20.45 dBm / 0.1109 W  802.11ax HE40 : 20.62 dBm / 0.1153 W  802.11ax HE80 : 17.12 dBm / 0.0515 W</p> <p><b>&lt;5260 MHz ~ 5320 MHz&gt;</b>  802.11a : 20.36 dBm / 0.1086 W  802.11n HT20 : 20.20 dBm / 0.1047 W  802.11n HT40 : 20.37 dBm / 0.1089 W  802.11ac VHT20 : 20.24 dBm / 0.1057 W  802.11ac VHT40 : 20.38 dBm / 0.1091 W  802.11ac VHT80 : 15.12 dBm / 0.0325 W  802.11ax HE20 : 20.30 dBm / 0.1072 W  802.11ax HE 40 : 20.36 dBm / 0.1086 W  802.11ax HE 80 : 13.83 dBm / 0.0242 W</p> <p><b>&lt;5500 MHz ~ 5700 MHz &gt;</b>  802.11a : 20.80 dBm / 0.1202 W  802.11n HT20 : 20.62 dBm / 0.1153 W  802.11n HT40 : 20.39 dBm / 0.1094 W  802.11ac VHT20 : 20.65 dBm / 0.1161 W  802.11ac VHT40 : 20.41 dBm / 0.1099 W  802.11ac VHT80 : 17.34 dBm / 0.0542 W  802.11ax HE20 : 20.77 dBm / 0.1194 W  802.11ax HE 40 : 20.52 dBm / 0.1127 W  802.11ax HE 80 : 16.99 dBm / 0.0500 W</p>
<b>99% Occupied Bandwidth</b>	<p><b>&lt;MIMO Ant. 1+2&gt;</b></p> <p><b>&lt;5180 MHz ~ 5240 MHz&gt;</b>  802.11a : 16.98 MHz  802.11ac VHT20 : 18.03 MHz  802.11ac VHT40 : 36.16 MHz  802.11ac VHT80 : 75.52 MHz  802.11ax HE20 : 19.43 MHz  802.11ax HE 40 : 37.96 MHz  802.11ax HE 80 : 77.20 MHz</p> <p><b>&lt;5260 MHz ~ 5320 MHz&gt;</b>  802.11a : 16.93 MHz  802.11ac VHT20 : 18.03 MHz  802.11ac VHT40 : 36.16 MHz  802.11ac VHT80 : 75.40 MHz  802.11ax HE20 : 19.43 MHz  802.11ax HE 40 : 37.96 MHz  802.11ax HE 80 : 77.20 MHz</p>



	<b>&lt;5500 MHz ~ 5700 MHz &gt;</b> 802.11a : 16.93 MHz 802.11ac VHT20 : 18.08 MHz 802.11ac VHT40 : 36.26 MHz 802.11ac VHT80 : 75.40 MHz 802.11ax HE20 : 19.53 MHz 802.11ax HE 40 : 37.96 MHz 802.11ax HE 80 : 77.20 MHz		
<b>Antenna Type / Gain</b>	<b>&lt;5150 MHz ~ 5250 MHz&gt;</b> <Ant. 1> : PIFA Antenna with gain -5.7 dBi <Ant. 2> : PIFA Antenna with gain -6.1 dBi <b>&lt;5250 MHz ~ 5350 MHz&gt;</b> <Ant. 1> : PIFA Antenna with gain -6.2 dBi <Ant. 2> : PIFA Antenna with gain -5.6 dBi <b>&lt;5470 MHz ~ 5725 MHz&gt;</b> <Ant. 1> : PIFA Antenna with gain -6.6 dBi <Ant. 2> : PIFA Antenna with gain -6.7 dBi		
<b>Type of Modulation</b>	802.11a/n/ac/ax : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM)		
<b>Antenna Function Description</b>		<b>Ant. 1</b>	<b>Ant. 2</b>
	802.11 a/n/ac/ax SISO	V	V
	802.11 a/n/ac/ax MIMO	V	

**Note:**

1. WLAN operation in 5600 MHz ~ 5650 MHz is notched.
2. For 802.11n HT20 / ac VHT20 and 802.11n HT40 / ac VHT40 mode, the whole testing have assessed only 802.11ac VHT20/ VHT40 by referring to their maximum conducted power.
3. For 802.11ax mode, Partial RU combinations were verified for conducted power/PSD/ Radiated Band Edges which is lower conducted power than full RU mode.
4. This device does not support channel puncturing.

### 1.5 Modification of EUT

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



### 1.6 Testing Location

Sporton International (Kunshan) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

<b>Test Firm</b>	Sporton International (Kunshan) Inc.		
<b>Test Site Location</b>	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People’s Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC Designation No.</b>	<b>FCC Test Firm Registration No.</b>
	CO01-KS 03CH06-KS TH01-KS	CN1257	314309

### 1.7 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH06-KS	AUDIX	E3	6.2009-8-24al
2.	CO01-KS	AUDIX	E3	6.2009-8-24

### 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.
- FCC KDB 662911 D01 Multiple Transmitter Output 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-201
AC Adapter 1(EU)	Brand Name	Motorola (Chenyang)	Model Name	MC-202
AC Adapter 1(UK)	Brand Name	Motorola (Chenyang)	Model Name	MC-203
AC Adapter 1(IN)	Brand Name	Motorola (Chenyang)	Model Name	MC-204
AC Adapter 1(AU)	Brand Name	Motorola (Chenyang)	Model Name	MC-205
AC Adapter 1(AR)	Brand Name	Motorola (Chenyang)	Model Name	MC-206
AC Adapter 1(BR)	Brand Name	Motorola (Chenyang)	Model Name	MC-207
AC Adapter 2(US)	Brand Name	Motorola (Acbel)	Model Name	MC-201
AC Adapter 2(EU)	Brand Name	Motorola (Acbel)	Model Name	MC-202
AC Adapter 2(UK)	Brand Name	Motorola (Acbel)	Model Name	MC-203
AC Adapter 2(AU)	Brand Name	Motorola (Acbel)	Model Name	MC-205
AC Adapter 2(AR)	Brand Name	Motorola (Acbel)	Model Name	MC-206
AC Adapter 2(CHILE)	Brand Name	Motorola (Acbel)	Model Name	MC-209
AC Adapter 3(BR)	Brand Name	Motorola (Dynalf)	Model Name	MC-207
AC Adapter 4(BR)	Brand Name	Motorola (Salcomp)	Model Name	MC-207
Battery 1	Brand Name	Motorola (ATL)	Model Name	LZ50
Battery 2	Brand Name	Motorola (SCUD)	Model Name	LZ50
Earphone 1	Brand Name	Motorola (Lyand)	Model Name	MH191
Earphone 2	Brand Name	Motorola(Lianchuang)	Model Name	MH191
Earphone 3	Brand Name	Motorola (Lyand)	Model Name	MH181
Earphone 4	Brand Name	Motorola (Cosonic)	Model Name	MH181
USB Cable 1	Brand Name	Motorola (Saibao)	Model Name	SC18C24367
USB Cable 2	Brand Name	Motorola (Luxshare)	Model Name	SC18C24368
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 (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 Band 1 (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 Band 2 (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 Band 3 (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 and 802.11ax HE40
2. The above Frequency and Channel in "<sup>#</sup>" were 802.11ac VHT80 and 802.11ax HE80



## 2.2 Test Mode

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

### MIMO Mode

Modulation	Data Rate
802.11a	6 Mbps
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE 80	MCS0

Test Cases	
<b>AC Conducted Emission</b>	Mode 1 : GSM 850 Idle + Bluetooth Link + WLAN Link (5G) + USB Cable1(Charging from Adapter 4) + Earphone4
<b>Remark:</b> For Radiated Test Cases, The tests were performed with Adapter 1, USB Cable1 and Earphone 1.	



Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11ac VHT20	802.11ac VHT20	802.11ac VHT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

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

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

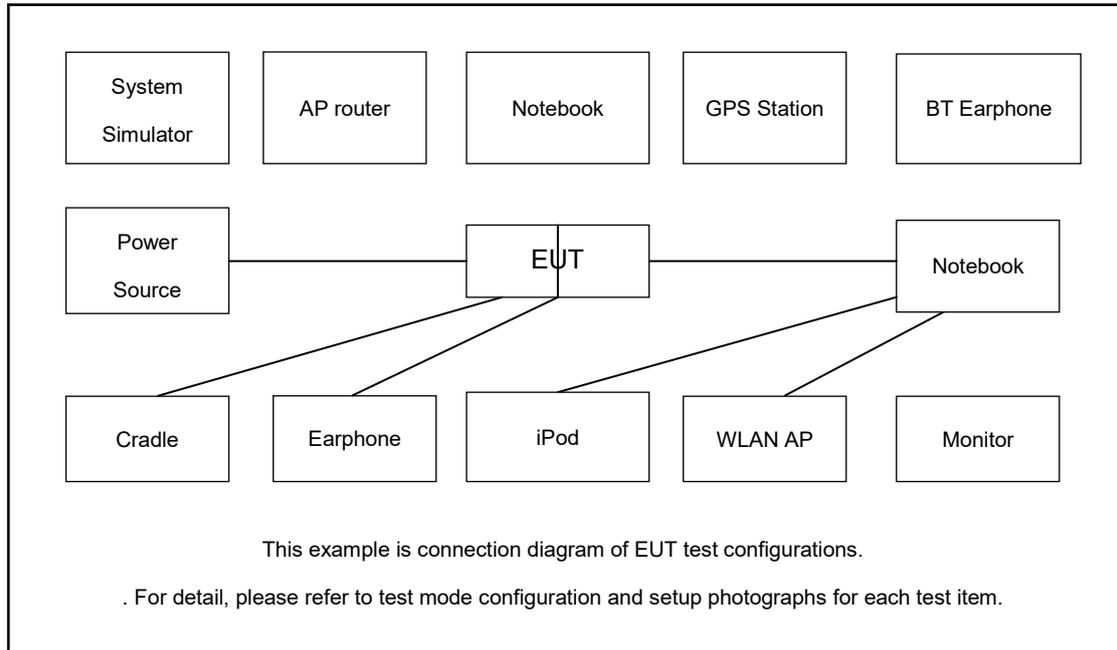


Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11ax HE20	8 802.11ax HE20	802.11ax HE20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11ax HE40	802.11ax HE40	802.11ax HE40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134

Ch. #		Band I : 5180-5240 MHz	Band II : 5260-5320 MHz	Band III : 5500-5700MHz
		802.11ax HE80	802.11ax HE80	802.11ax HE80
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	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8m
2.	Notebook	Lenovo	G480	QDS-BRCM1050I	N/A	shielded cable DC O/P 1.8m , Unshielded AC I/P cable 1.8m
3.	WLAN AP	D-link	DIR-655	KA21R655B1	N/A	Unshielded, 1.8m
4.	Bluetooth Earphone	Lenovo	LBH308	N/A	N/A	N/A



## 2.5 EUT Operation Test Setup

For WLAN RF test items, an engineering test program was provided and enabled to make EUT 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 between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss.

*Offset = RF cable loss*

Following shows an offset computation example with cable loss 7.2 dB.

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)}. \\ &= 7.2 \text{ (dB)} \end{aligned}$$

### 3 Test Result

#### 3.1 26dB & 99% Occupied Bandwidth Measurement

##### 3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

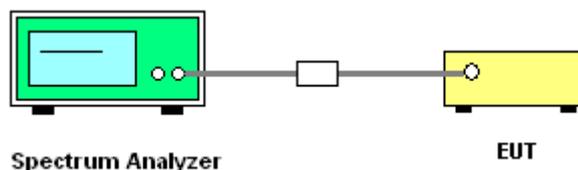
##### 3.1.2 Measuring Instruments

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

##### 3.1.3 Test Procedures

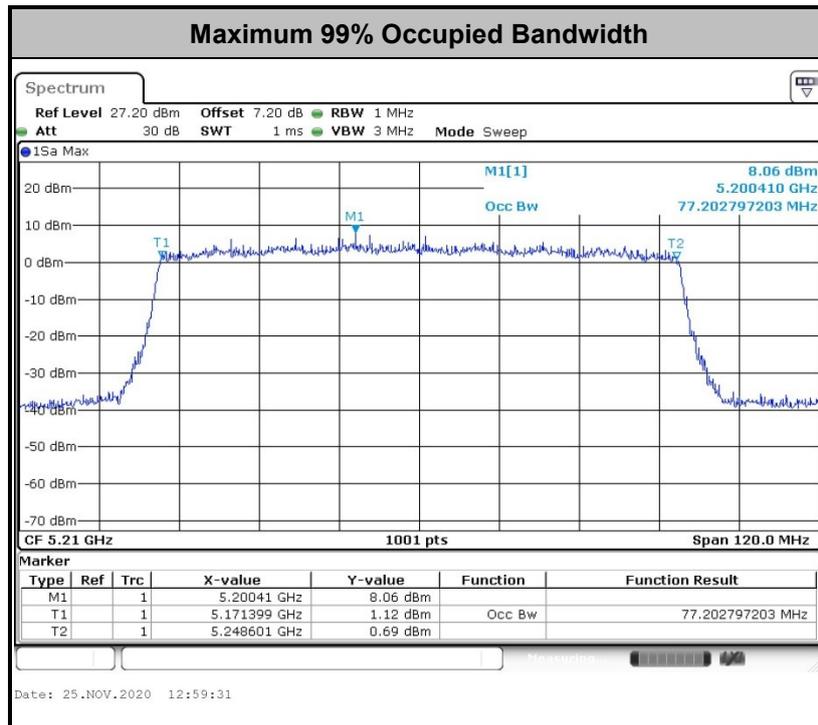
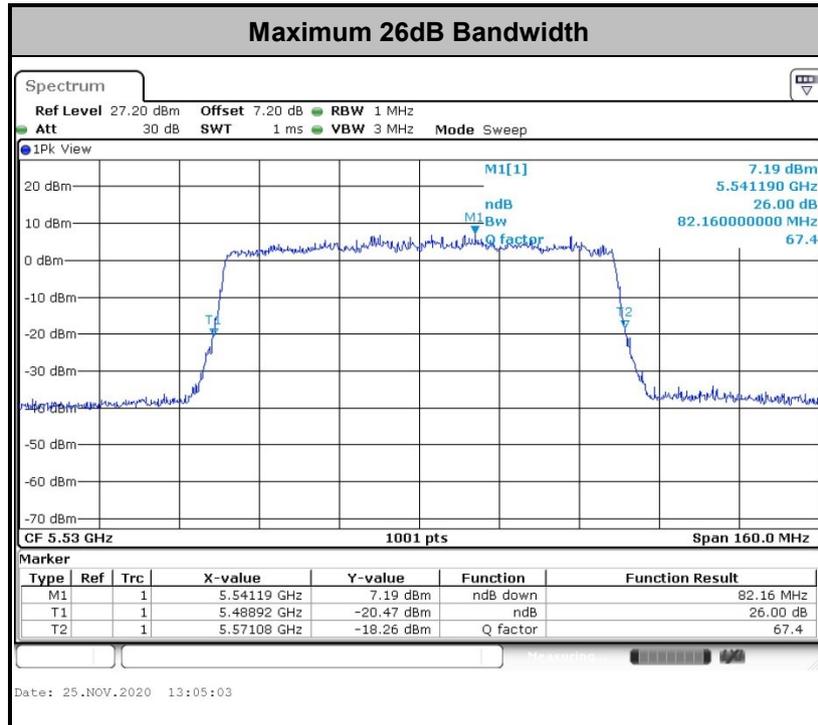
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1MHz and set the Video bandwidth (VBW)  $\geq 3 * RBW$ .
8. Measure and record the results in the test report.

##### 3.1.4 Test Setup



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

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

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

### 3.2.2 Measuring Instruments

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

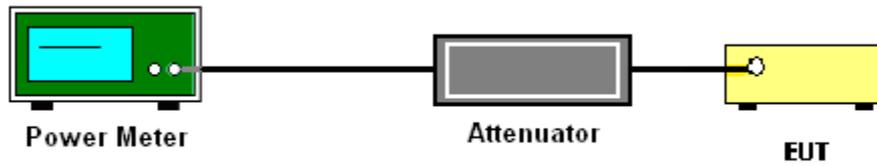
### 3.2.3 Test Procedures

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

Method PM (Measurement using an RF average power meter):

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

### 3.2.4 Test Setup



### 3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.



### 3.3 Power Spectral Density Measurement

#### 3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band.

For the 5.25–5.720 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).

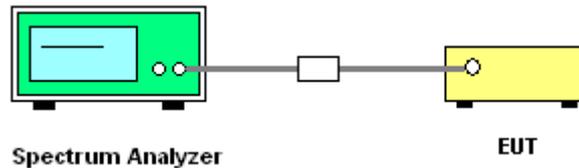
- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW  $\geq$  3 MHz.
- Number of points in sweep  $\geq$  2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add  $10 \log(1/x)$ , 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.

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. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Method (a): Measure and sum the spectra across the outputs.

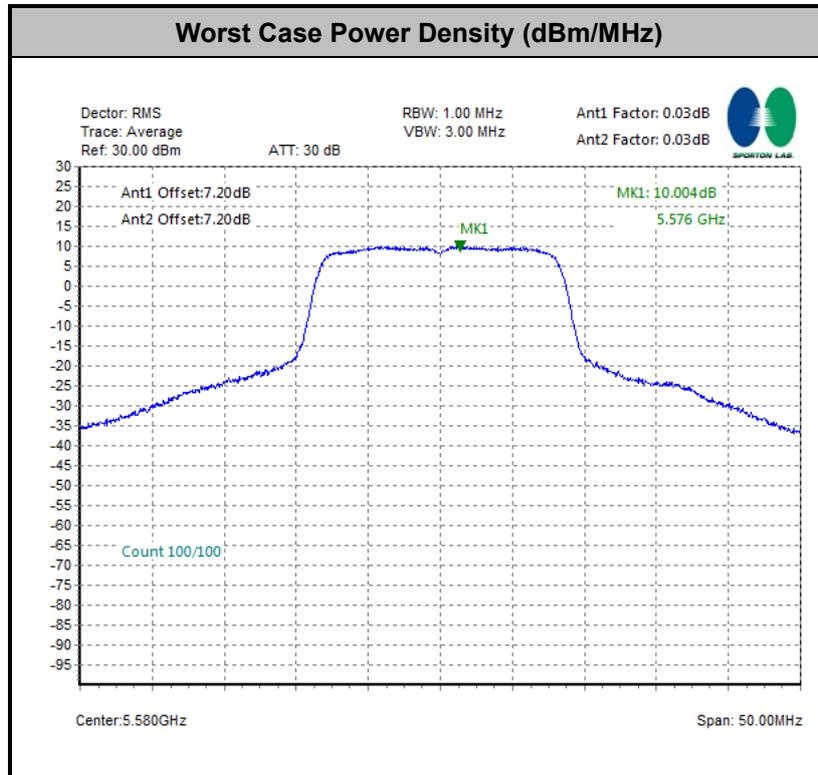
The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points, the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

### 3.3.4 Test Setup



### 3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.





### 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 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

- (2) Unwanted spurious emissions fallen in restricted bands 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

### 3.4.2 Measuring Instruments

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

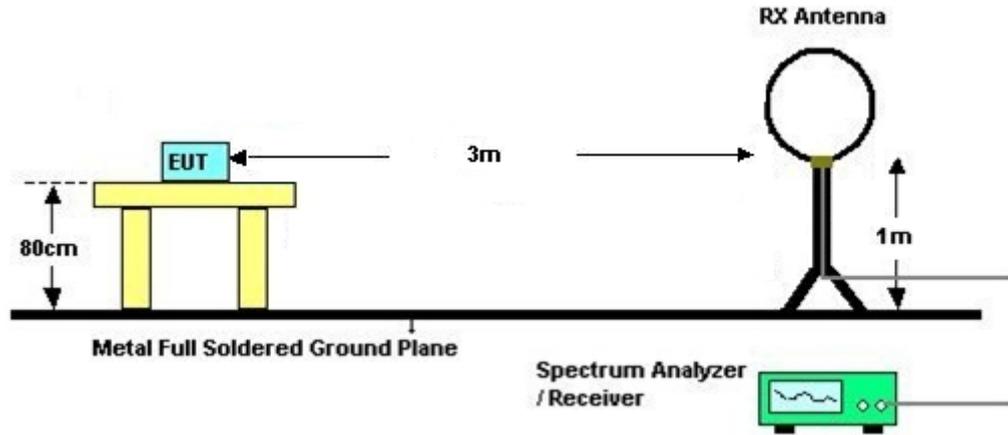


### 3.4.3 Test Procedures

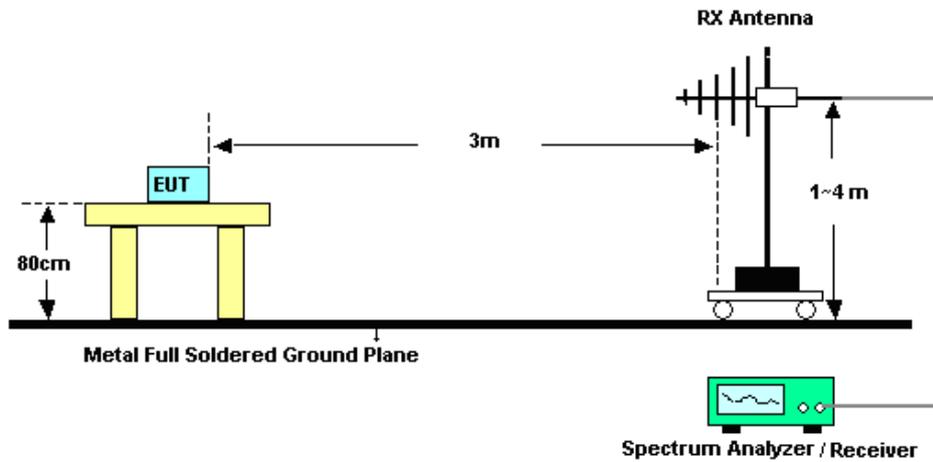
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.
  - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
    - RBW = 120 kHz
    - VBW = 300 kHz
    - Detector = Peak
    - Trace mode = max hold
  - (2) Procedure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

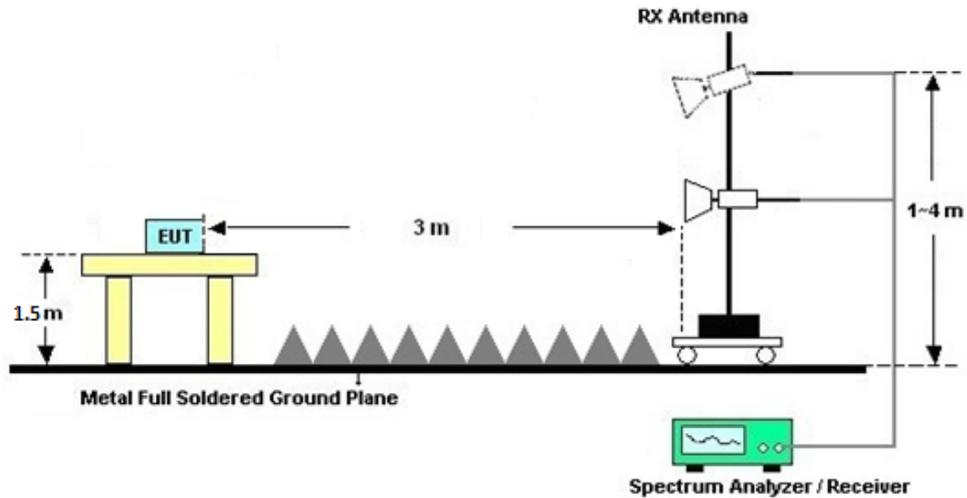
For radiated emissions below 30MHz



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.

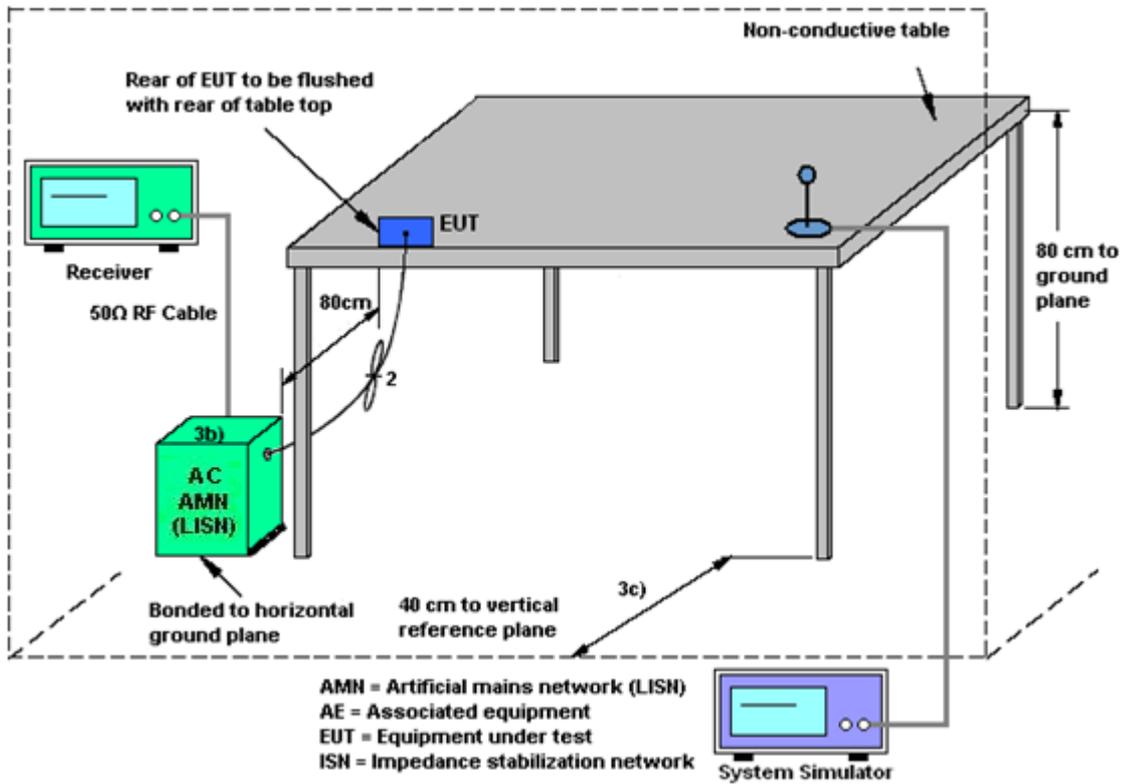
#### 3.5.2 Measuring Instruments

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 Automatically Discontinue Transmission**

### **3.6.1 Limit of Automatically Discontinue Transmission**

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

### **3.6.2 Measuring Instruments**

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

### **3.6.3 Test Result of Automatically Discontinue Transmission**

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.



### 3.7 Antenna Requirements

#### 3.7.1 Standard Applicable

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

#### 3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

#### 3.7.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain "DG" is calculated as following table.

	Ant. 1 (dBi)	Ant. 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band I	-5.70	-6.10	-5.70	-5.70	0.00	0.00
Band II	-6.20	-5.60	-5.60	-5.60	0.00	0.00
Band III	-6.60	-6.70	-6.60	-6.60	0.00	0.00

Power limit reduction = Composite gain – 6dBi, ( min = 0 )

PSD limit reduction = Composite gain + PSD Array gain – 6dBi, ( min = 0 )



## 4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Nov. 01, 2020	Nov. 25, 2020	Oct. 31, 2021	Conducted (TH01-KS)
Pulse Power Sensor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 15, 2020	Nov. 25, 2020	Jan. 14, 2021	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 08, 2020	Nov. 25, 2020	Jan. 07, 2021	Conducted (TH01-KS)
EMI Test Receiver	Keysight	N9038A	MY56400004	3Hz~8.5GHz; Max 30dBm	Oct. 17, 2020	Dec. 12, 2020	Oct. 16, 2021	Radiation (03CH06-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz~44GHz	Apr. 14, 2020	Dec. 12, 2020	Apr. 13, 2021	Radiation (03CH06-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 01, 2020	Dec. 12, 2020	Oct. 31, 2021	Radiation (03CH06-KS)
Bilog Antenna	TeseQ	CBL6111D	49921	30MHz~1GHz	May 29, 2020	Dec. 12, 2020	May 28, 2021	Radiation (03CH06-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00218652	1GHz~18GHz	Apr. 27, 2020	Dec. 12, 2020	Apr. 26, 2021	Radiation (03CH06-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Jun. 05, 2020	Dec. 12, 2020	Jun. 04, 2021	Radiation (03CH06-KS)
Amplifier	SONOMA	310N	187289	9KHz ~1GHZ	Apr. 14, 2020	Dec. 12, 2020	Apr. 13, 2021	Radiation (03CH06-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 08, 2020	Dec. 12, 2020	Jan. 07, 2021	Radiation (03CH06-KS)
high gain Amplifier	MITEQ	AMF-7D-00101800-30-10P	2025788	1Ghz-18Ghz	Jan. 02, 2020	Dec. 12, 2020	Jan. 01, 2021	Radiation (03CH06-KS)
Amplifier	Keysight	83017A	MY53270203	500MHz~26.5GHz	Apr. 15, 2020	Dec. 12, 2020	Apr. 14, 2021	Radiation (03CH06-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Dec. 12, 2020	NCR	Radiation (03CH06-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Dec. 12, 2020	NCR	Radiation (03CH06-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Dec. 12, 2020	NCR	Radiation (03CH06-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 14, 2020	Nov. 12, 2020	Apr. 13, 2021	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 17, 2020	Nov. 12, 2020	Oct. 16, 2021	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	Oct. 27, 2020	Nov. 12, 2020	Oct. 26, 2021	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP00000811	AC 0V~300V, 45Hz~1000Hz	Oct. 17, 2020	Nov. 12, 2020	Oct. 16, 2021	Conduction (CO01-KS)

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))	2.9dB
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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))	5.0dB
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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))	5.0dB
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## **Appendix A. Conducted Test Results**

**A1. Conducted Test Results**

Test Engineer:	Rise liu	Temperature:	21~25	°C
Test Date:	2020/11/25	Relative Humidity:	51~54	%

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

Band I MIMO													
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)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	36	5180	16.83	16.98	20.43	20.58	-	-	22.26		
11a	6Mbps	2	44	5220	16.78	16.88	20.18	20.48	-	-	22.25		
11a	6Mbps	2	48	5240	16.73	16.88	20.13	20.28	-	-	22.24		
VHT20	MCS0	2	36	5180	18.03	17.93	21.13	21.13	-	-	22.54		
VHT20	MCS0	2	44	5220	17.98	17.98	21.13	21.48	-	-	22.55		
VHT20	MCS0	2	48	5240	18.03	17.93	21.13	21.33	-	-	22.54		
VHT40	MCS0	2	38	5190	36.06	36.06	40.37	40.46	-	-	23.01		
VHT40	MCS0	2	46	5230	36.16	36.16	40.28	40.46	-	-	23.01		
VHT80	MCS0	2	42	5210	75.40	75.52	82.16	81.84	-	-	23.01		

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

FCC Band I MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	36	5180	0.03	0.03	15.92	17.30	19.67	24.00		-5.70	Pass	
11a	6Mbps	2	44	5220	0.03	0.03	16.84	18.10	20.53	24.00		-5.70	Pass	
11a	6Mbps	2	48	5240	0.03	0.03	16.65	18.02	20.40	24.00		-5.70	Pass	
HT20	MCS0	2	36	5180	0.00	0.00	16.82	17.94	20.43	24.00		-5.70	Pass	
HT20	MCS0	2	44	5220	0.00	0.00	16.44	17.87	20.22	24.00		-5.70	Pass	
HT20	MCS0	2	48	5240	0.00	0.00	16.30	17.79	20.12	24.00		-5.70	Pass	
HT40	MCS0	2	38	5190	0.00	0.00	14.53	15.52	18.06	24.00		-5.70	Pass	
HT40	MCS0	2	46	5230	0.00	0.00	16.77	17.85	20.35	24.00		-5.70	Pass	
VHT20	MCS0	2	36	5180	0.00	0.00	16.88	17.98	20.48	24.00		-5.70	Pass	
VHT20	MCS0	2	44	5220	0.00	0.00	16.48	17.89	20.25	24.00		-5.70	Pass	
VHT20	MCS0	2	48	5240	0.00	0.00	16.33	17.84	20.16	24.00		-5.70	Pass	
VHT40	MCS0	2	38	5190	0.00	0.00	14.61	15.59	18.14	24.00		-5.70	Pass	
VHT40	MCS0	2	46	5230	0.00	0.00	16.81	17.88	20.39	24.00		-5.70	Pass	
VHT80	MCS0	2	42	5210	0.00	0.00	10.62	11.75	14.23	24.00		-5.70	Pass	

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

FCC Band I MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	36	5180	0.03	0.03			8.33	11.00				Pass
11a	6Mbps	2	44	5220	0.03	0.03			9.79	11.00				Pass
11a	6Mbps	2	48	5240	0.03	0.03			9.46	11.00				Pass
VHT20	MCS0	2	36	5180	0.00	0.00			8.78	11.00				Pass
VHT20	MCS0	2	44	5220	0.00	0.00			9.34	11.00				Pass
VHT20	MCS0	2	48	5240	0.00	0.00			9.44	11.00				Pass
VHT40	MCS0	2	38	5190	0.00	0.00			3.75	11.00				Pass
VHT40	MCS0	2	46	5230	0.00	0.00			6.35	11.00				Pass
VHT80	MCS0	2	42	5210	0.00	0.00			-3.15	11.00				Pass

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

Band II MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	52	5260	16.73	16.93	20.08	20.53	23.24		29.24		23.98		
11a	6Mbps	2	60	5300	16.73	16.93	19.78	20.43	23.24		29.24		23.96		
11a	6Mbps	2	64	5320	16.73	16.88	20.33	20.68	23.24		29.24		23.98		
VHT20	MCS0	2	52	5260	18.03	17.98	21.23	21.38	23.55		29.55		23.98		
VHT20	MCS0	2	60	5300	18.03	17.98	20.98	21.33	23.55		29.55		23.98		
VHT20	MCS0	2	64	5320	18.03	17.93	21.18	21.38	23.54		29.54		23.98		
VHT40	MCS0	2	54	5270	36.06	36.06	40.19	40.73	23.98		30.00		23.98		
VHT40	MCS0	2	62	5310	36.16	36.16	40.28	40.46	23.98		30.00		23.98		
VHT80	MCS0	2	58	5290	75.40	75.40	81.84	82.00	23.98		30.00		23.98		

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

FCC Band II MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	52	5260	0.03	0.03	16.55	18.03	20.36	23.98		-5.60	26.99	Pass	
11a	6Mbps	2	60	5300	0.03	0.03	16.52	17.92	20.29	23.96		-5.60	26.99	Pass	
11a	6Mbps	2	64	5320	0.03	0.03	15.81	17.52	19.76	23.98		-5.60	26.99	Pass	
HT20	MCS0	2	52	5260	0.00	0.00	16.09	17.89	20.09	23.98		-5.60	26.99	Pass	
HT20	MCS0	2	60	5300	0.00	0.00	16.04	17.83	20.04	23.98		-5.60	26.99	Pass	
HT20	MCS0	2	64	5320	0.00	0.00	16.17	18.01	20.20	23.98		-5.60	26.99	Pass	
HT40	MCS0	2	54	5270	0.00	0.00	16.62	18.00	20.37	23.98		-5.60	26.99	Pass	
HT40	MCS0	2	62	5310	0.00	0.00	13.67	15.46	17.67	23.98		-5.60	26.99	Pass	
VHT20	MCS0	2	52	5260	0.00	0.00	16.12	17.91	20.12	23.98		-5.60	26.99	Pass	
VHT20	MCS0	2	60	5300	0.00	0.00	16.09	17.85	20.07	23.98		-5.60	26.99	Pass	
VHT20	MCS0	2	64	5320	0.00	0.00	16.19	18.07	20.24	23.98		-5.60	26.99	Pass	
VHT40	MCS0	2	54	5270	0.00	0.00	16.63	18.01	20.38	23.98		-5.60	26.99	Pass	
VHT40	MCS0	2	62	5310	0.00	0.00	13.76	15.54	17.75	23.98		-5.60	26.99	Pass	
VHT80	MCS0	2	58	5290	0.00	0.00	11.42	12.71	15.12	23.98		-5.60	26.99	Pass	

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

Band II MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	52	5260	0.03	0.03			9.43	11.00				Pass
11a	6Mbps	2	60	5300	0.03	0.03			9.25	11.00				Pass
11a	6Mbps	2	64	5320	0.03	0.03			8.38	11.00				Pass
VHT20	MCS0	2	52	5260	0.00	0.00			9.37	11.00				Pass
VHT20	MCS0	2	60	5300	0.00	0.00			9.37	11.00				Pass
VHT20	MCS0	2	64	5320	0.00	0.00			9.47	11.00				Pass
VHT40	MCS0	2	54	5270	0.00	0.00			6.33	11.00				Pass
VHT40	MCS0	2	62	5310	0.00	0.00			3.14	11.00				Pass
VHT80	MCS0	2	58	5290	0.00	0.00			-2.67	11.00				Pass

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

Band III MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	2	100	5500	16.93	16.83	20.18	20.28	23.26		29.26		23.98		----	----
11a	6Mbps	2	116	5580	16.93	16.83	20.03	20.18	23.26		29.26		23.98		----	----
11a	6Mbps	2	140	5700	16.88	16.88	20.68	20.38	23.27		29.27		23.98		----	----
VHT20	MCS0	2	100	5500	18.03	17.98	21.43	21.08	23.55		29.55		23.98		----	----
VHT20	MCS0	2	116	5580	18.08	17.93	21.38	21.18	23.54		29.54		23.98		----	----
VHT20	MCS0	2	140	5700	17.98	17.98	21.53	21.33	23.55		29.55		23.98		----	----
VHT40	MCS0	2	102	5510	36.16	36.16	40.55	40.37	23.98		30.00		23.98		----	----
VHT40	MCS0	2	110	5550	36.26	36.16	40.73	40.37	23.98		30.00		23.98		----	----
VHT40	MCS0	2	134	5670	36.06	36.06	40.46	40.46	23.98		30.00		23.98		----	----
VHT80	MCS0	2	106	5530	75.40	75.40	82.00	81.68	23.98		30.00		23.98		----	----

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

FCC Band III MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	100	5500	0.03	0.03	18.09	17.41	20.77	23.98		-6.60		26.99	Pass
11a	6Mbps	2	116	5580	0.03	0.03	18.12	17.44	20.80	23.98		-6.60		26.99	Pass
11a	6Mbps	2	140	5700	0.03	0.03	16.52	15.73	19.15	23.98		-6.60		26.99	Pass
HT20	MCS0	2	100	5500	0.00	0.00	17.88	17.19	20.56	23.98		-6.60		26.99	Pass
HT20	MCS0	2	116	5580	0.00	0.00	18.02	17.16	20.62	23.98		-6.60		26.99	Pass
HT20	MCS0	2	140	5700	0.00	0.00	16.25	15.53	18.92	23.98		-6.60		26.99	Pass
HT40	MCS0	2	102	5510	0.00	0.00	15.85	14.72	18.33	23.98		-6.60		26.99	Pass
HT40	MCS0	2	110	5550	0.00	0.00	17.77	16.95	20.39	23.98		-6.60		26.99	Pass
HT40	MCS0	2	134	5670	0.00	0.00	15.95	15.03	18.52	23.98		-6.60		26.99	Pass
VHT20	MCS0	2	100	5500	0.00	0.00	17.89	17.21	20.57	23.98		-6.60		26.99	Pass
VHT20	MCS0	2	116	5580	0.00	0.00	18.05	17.19	20.65	23.98		-6.60		26.99	Pass
VHT20	MCS0	2	140	5700	0.00	0.00	16.31	15.62	18.99	23.98		-6.60		26.99	Pass
VHT40	MCS0	2	102	5510	0.00	0.00	15.91	14.81	18.41	23.98		-6.60		26.99	Pass
VHT40	MCS0	2	110	5550	0.00	0.00	17.79	16.98	20.41	23.98		-6.60		26.99	Pass
VHT40	MCS0	2	134	5670	0.00	0.00	16.08	15.14	18.65	23.98		-6.60		26.99	Pass
VHT80	MCS0	2	106	5530	0.00	0.00	14.65	13.99	17.34	23.98		-6.60		26.99	Pass

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

Band III MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	100	5500	0.03	0.03			9.96	11.00			-6.60	Pass
11a	6Mbps	2	116	5580	0.03	0.03			10.00	11.00			-6.60	Pass
11a	6Mbps	2	140	5700	0.03	0.03			7.58	11.00			-6.60	Pass
VHT20	MCS0	2	100	5500	0.00	0.00			9.78	11.00			-6.60	Pass
VHT20	MCS0	2	116	5580	0.00	0.00			9.89	11.00			-6.60	Pass
VHT20	MCS0	2	140	5700	0.00	0.00			7.27	11.00			-6.60	Pass
VHT40	MCS0	2	102	5510	0.00	0.00			3.82	11.00			-6.60	Pass
VHT40	MCS0	2	110	5550	0.00	0.00			6.71	11.00			-6.60	Pass
VHT40	MCS0	2	134	5670	0.00	0.00			3.86	11.00			-6.60	Pass
VHT80	MCS0	2	106	5530	0.00	0.00			-0.31	11.00			-6.60	Pass

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

Band 1 MIMO														
Mod.	Data Rate	N <sub>Tx</sub>	CH.	Freq. (MHz)	RU Config.	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		Note
						Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
HE20	MCS0	2	36	5180	Full	19.38	19.38	22.03	21.78	-	-	22.87		
HE20	MCS0	2	44	5220	Full	19.43	19.38	22.08	21.98	-	-	22.87		
HE20	MCS0	2	48	5240	Full	19.38	19.28	22.03	22.03	-	-	22.85		
HE40	MCS0	2	38	5190	Full	37.86	37.96	40.91	41.27	-	-	23.01		
HE40	MCS0	2	46	5230	Full	37.96	37.96	41.18	41.27	-	-	23.01		
HE80	MCS0	2	42	5210	Full	77.20	77.20	82.16	82.00	-	-	23.01		

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

FCC Band I MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
HE20	MCS0	2	36	5180	Full	0.00	0.00	16.06	17.22	19.69	24.00		-5.70	Pass	
HE20	MCS0	2	36	5180	26/0	0.00	0.00	6.31	8.58	10.60	24.00		-5.70	Pass	
HE20	MCS0	2	36	5180	52/37	0.00	0.00	9.67	11.05	13.42	24.00		-5.70	Pass	
HE20	MCS0	2	36	5180	106/53	0.00	0.00	12.85	14.21	16.59	24.00		-5.70	Pass	
HE20	MCS0	2	44	5220	Full	0.00	0.00	16.82	17.98	20.45	24.00		-5.70	Pass	
HE20	MCS0	2	48	5240	Full	0.00	0.00	16.65	17.92	20.34	24.00		-5.70	Pass	
HE20	MCS0	2	48	5240	26/8	0.00	0.00	7.65	9.53	11.70	24.00		-5.70	Pass	
HE20	MCS0	2	48	5240	52/40	0.00	0.00	10.36	12.08	14.31	24.00		-5.70	Pass	
HE20	MCS0	2	48	5240	106/54	0.00	0.00	13.30	15.26	17.40	24.00		-5.70	Pass	
HE40	MCS0	2	38	5190	Full	0.00	0.00	15.32	16.12	18.75	24.00		-5.70	Pass	
HE40	MCS0	2	38	5190	242/61	0.00	0.00	11.41	12.52	15.01	24.00		-5.70	Pass	
HE40	MCS0	2	46	5230	Full	0.00	0.00	17.03	18.12	20.62	24.00		-5.70	Pass	
HE40	MCS0	2	46	5230	242/62	0.00	0.00	14.12	15.56	17.91	24.00		-5.70	Pass	
HE80	MCS0	2	42	5210	Full	0.00	0.00	13.41	14.72	17.12	24.00		-5.70	Pass	
HE80	MCS0	2	42	5210	484/65	0.00	0.00	10.56	12.44	14.61	24.00		-5.70	Pass	

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

FCC Band I MIMO																
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail	
						Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
HE20	MCS0	2	36	5180	Full	0.00	0.00			8.10		11.00			-5.70	Pass
HE20	MCS0	2	36	5180	26/0	0.00	0.00			7.90		11.00			-5.70	Pass
HE20	MCS0	2	36	5180	52/37	0.00	0.00			8.03		11.00			-5.70	Pass
HE20	MCS0	2	36	5180	106/53	0.00	0.00			8.07		11.00			-5.70	Pass
HE20	MCS0	2	44	5220	Full	0.00	0.00			9.50		11.00			-5.70	Pass
HE20	MCS0	2	48	5240	Full	0.00	0.00			9.13		11.00			-5.70	Pass
HE20	MCS0	2	48	5240	26/8	0.00	0.00			8.88		11.00			-5.70	Pass
HE20	MCS0	2	48	5240	52/40	0.00	0.00			8.87		11.00			-5.70	Pass
HE20	MCS0	2	48	5240	106/54	0.00	0.00			8.86		11.00			-5.70	Pass
HE40	MCS0	2	38	5190	Full	0.00	0.00			4.32		11.00			-5.70	Pass
HE40	MCS0	2	38	5190	242/61	0.00	0.00			4.07		11.00			-5.70	Pass
HE40	MCS0	2	46	5230	Full	0.00	0.00			6.47		11.00			-5.70	Pass
HE40	MCS0	2	46	5230	242/62	0.00	0.00			6.02		11.00			-5.70	Pass
HE80	MCS0	2	42	5210	Full	0.00	0.00			-0.29		11.00			-5.70	Pass
HE80	MCS0	2	42	5210	484/65	0.00	0.00			-0.37		11.00			-5.70	Pass

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

Band II MIMO																
Mod.	Data Rate	N <sub>Tx</sub>	CH.	Freq. (MHz)	RU Config.	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
						Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
HE20	MCS0	2	52	5260	Full	19.38	19.28	21.88	22.18	23.85	23.85	29.85	29.85	23.98		
HE20	MCS0	2	60	5300	Full	19.43	19.28	21.98	22.13	23.85	23.85	29.85	29.85	23.98		
HE20	MCS0	2	64	5320	Full	19.38	19.33	22.78	22.18	23.86	23.86	29.86	29.86	23.98		
HE40	MCS0	2	54	5270	Full	37.96	37.76	41.09	41.36	23.98	23.98	30.00	30.00	23.98		
HE40	MCS0	2	62	5310	Full	37.86	37.86	41.09	41.00	23.98	23.98	30.00	30.00	23.98		
HE80	MCS0	2	58	5290	Full	77.08	77.20	82.00	81.36	23.98	23.98	30.00	30.00	23.98		

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

FCC Band II MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
HE20	MCS0	2	52	5260	Full	0.00	0.00	16.37	18.05	20.30	23.98		-5.60	26.99	Pass	
HE20	MCS0	2	52	5260	26/0	0.00	0.00	7.10	9.32	11.36	23.98		-5.60	26.99	Pass	
HE20	MCS0	2	52	5260	52/37	0.00	0.00	10.22	12.14	14.30	23.98		-5.60	26.99	Pass	
HE20	MCS0	2	52	5260	106/53	0.00	0.00	13.52	15.34	17.53	23.98		-5.60	26.99	Pass	
HE20	MCS0	2	60	5300	Full	0.00	0.00	16.25	17.95	20.19	23.98		-5.60	26.99	Pass	
HE20	MCS0	2	64	5320	Full	0.00	0.00	15.74	17.71	19.85	23.98		-5.60	26.99	Pass	
HE20	MCS0	2	64	5320	26/8	0.00	0.00	6.36	8.24	10.41	23.98		-5.60	26.99	Pass	
HE20	MCS0	2	64	5320	52/40	0.00	0.00	9.10	11.17	13.27	23.98		-5.60	26.99	Pass	
HE20	MCS0	2	64	5320	106/54	0.00	0.00	11.88	14.03	16.10	23.98		-5.60	26.99	Pass	
HE40	MCS0	2	54	5270	Full	0.00	0.00	16.55	18.02	20.36	23.98		-5.60	26.99	Pass	
HE40	MCS0	2	54	5270	242/61	0.00	0.00	13.62	15.51	17.68	23.98		-5.60	26.99	Pass	
HE40	MCS0	2	62	5310	Full	0.00	0.00	13.98	15.61	17.88	23.98		-5.60	26.99	Pass	
HE40	MCS0	2	62	5310	242/62	0.00	0.00	10.41	12.73	14.73	23.98		-5.60	26.99	Pass	
HE80	MCS0	2	58	5290	Full	0.00	0.00	9.98	11.53	13.83	23.98		-5.60	26.99	Pass	
HE80	MCS0	2	58	5290	484/66	0.00	0.00	6.54	8.34	10.54	23.98		-5.60	26.99	Pass	

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

Band II MIMO															
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
						Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
HE20	MCS0	2	52	5260	Full	0.00	0.00			9.12	11.00	-5.60			Pass
HE20	MCS0	2	52	5260	26/0	0.00	0.00			8.53	11.00	-5.60			Pass
HE20	MCS0	2	52	5260	52/37	0.00	0.00			9.05	11.00	-5.60			Pass
HE20	MCS0	2	52	5260	106/53	0.00	0.00			8.99	11.00	-5.60			Pass
HE20	MCS0	2	60	5300	Full	0.00	0.00			9.32	11.00	-5.60			Pass
HE20	MCS0	2	64	5320	Full	0.00	0.00			7.84	11.00	-5.60			Pass
HE20	MCS0	2	64	5320	26/8	0.00	0.00			7.46	11.00	-5.60			Pass
HE20	MCS0	2	64	5320	52/40	0.00	0.00			7.69	11.00	-5.60			Pass
HE20	MCS0	2	64	5320	106/54	0.00	0.00			7.45	11.00	-5.60			Pass
HE40	MCS0	2	54	5270	Full	0.00	0.00			6.35	11.00	-5.60			Pass
HE40	MCS0	2	54	5270	242/61	0.00	0.00			5.82	11.00	-5.60			Pass
HE40	MCS0	2	62	5310	Full	0.00	0.00			3.18	11.00	-5.60			Pass
HE40	MCS0	2	62	5310	242/62	0.00	0.00			2.80	11.00	-5.60			Pass
HE80	MCS0	2	58	5290	Full	0.00	0.00			-3.91	11.00	-5.60			Pass
HE80	MCS0	2	58	5290	484/66	0.00	0.00			-4.09	11.00	-5.60			Pass

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

Band III MIMO																	
Mod.	Data Rate	N <sub>Tx</sub>	CH.	Freq. (MHz)	RU Config.	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
						Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
HE20	MCS0	2	100	5500	Full	19.43	19.28	21.88	22.08	23.85	23.85	29.85	29.85	23.98	23.98	----	----
HE20	MCS0	2	116	5580	Full	19.53	19.28	22.03	22.08	23.85	23.85	29.85	29.85	23.98	23.98	----	----
HE20	MCS0	2	140	5700	Full	19.23	19.28	22.08	21.88	23.84	23.84	29.84	29.84	23.98	23.98	----	----
HE40	MCS0	2	102	5510	Full	37.96	37.96	41.27	41.36	23.98	23.98	30.00	30.00	23.98	23.98	----	----
HE40	MCS0	2	110	5550	Full	37.96	37.86	41.36	41.09	23.98	23.98	30.00	30.00	23.98	23.98	----	----
HE40	MCS0	2	134	5670	Full	37.96	37.76	41.09	41.00	23.98	23.98	30.00	30.00	23.98	23.98	----	----
HE80	MCS0	2	106	5530	Full	77.20	77.20	81.84	82.16	23.98	23.98	30.00	30.00	23.98	23.98	----	----

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

FCC Band III MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
HE20	MCS0	2	100	5500	Full	0.00	0.00	17.02	16.41	19.74	23.98		-6.60	26.99	Pass	
HE20	MCS0	2	100	5500	26/0	0.00	0.00	7.74	7.54	10.65	23.98		-6.60	26.99	Pass	
HE20	MCS0	2	100	5500	52/37	0.00	0.00	10.57	10.40	13.50	23.98		-6.60	26.99	Pass	
HE20	MCS0	2	100	5500	106/53	0.00	0.00	13.84	13.61	16.74	23.98		-6.60	26.99	Pass	
HE20	MCS0	2	116	5580	Full	0.00	0.00	18.11	17.38	20.77	23.98		-6.60	26.99	Pass	
HE20	MCS0	2	140	5700	Full	0.00	0.00	15.53	14.76	18.17	23.98		-6.60	26.99	Pass	
HE20	MCS0	2	140	5700	26/8	0.00	0.00	5.86	5.75	8.82	23.98		-6.60	26.99	Pass	
HE20	MCS0	2	140	5700	52/40	0.00	0.00	8.21	8.53	11.38	23.98		-6.60	26.99	Pass	
HE20	MCS0	2	140	5700	106/54	0.00	0.00	10.75	11.07	13.92	23.98		-6.60	26.99	Pass	
HE40	MCS0	2	102	5510	Full	0.00	0.00	15.02	13.99	17.55	23.98		-6.60	26.99	Pass	
HE40	MCS0	2	102	5510	242/61	0.00	0.00	10.98	11.01	14.01	23.98		-6.60	26.99	Pass	
HE40	MCS0	2	110	5550	Full	0.00	0.00	17.87	17.12	20.52	23.98		-6.60	26.99	Pass	
HE40	MCS0	2	134	5670	Full	0.00	0.00	15.51	14.71	18.14	23.98		-6.60	26.99	Pass	
HE40	MCS0	2	134	5670	242/62	0.00	0.00	11.56	11.88	14.73	23.98		-6.60	26.99	Pass	
HE80	MCS0	2	106	5530	Full	0.00	0.00	14.51	13.38	16.99	23.98		-6.60	26.99	Pass	
HE80	MCS0	2	106	5530	484/65	0.00	0.00	9.86	10.05	12.97	23.98		-6.60	26.99	Pass	

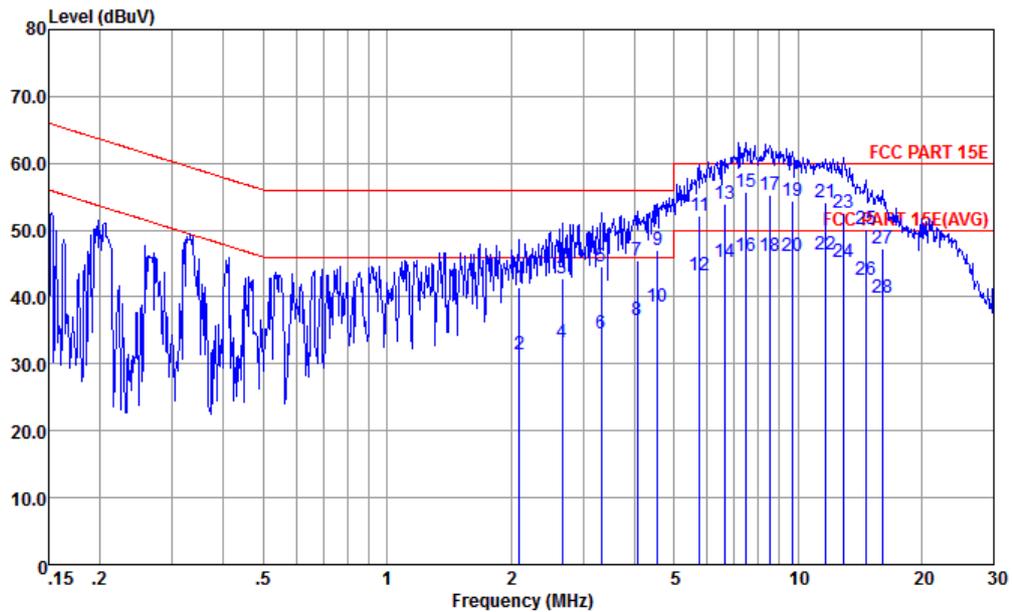
**TEST RESULTS DATA**  
**Power Spectral Density**

Band III MIMO																
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail	
						Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
HE20	MCS0	2	100	5500	Full	0.00	0.00			8.10		11.00			-6.60	Pass
HE20	MCS0	2	100	5500	26/0	0.00	0.00			7.68		11.00			-6.60	Pass
HE20	MCS0	2	100	5500	52/37	0.00	0.00			7.88		11.00			-6.60	Pass
HE20	MCS0	2	100	5500	106/53	0.00	0.00			8.00		11.00			-6.60	Pass
HE20	MCS0	2	116	5580	Full	0.00	0.00			9.58		11.00			-6.60	Pass
HE20	MCS0	2	140	5700	Full	0.00	0.00			6.23		11.00			-6.60	Pass
HE20	MCS0	2	140	5700	26/8	0.00	0.00			5.86		11.00			-6.60	Pass
HE20	MCS0	2	140	5700	52/40	0.00	0.00			5.88		11.00			-6.60	Pass
HE20	MCS0	2	140	5700	106/54	0.00	0.00			6.22		11.00			-6.60	Pass
HE40	MCS0	2	102	5510	Full	0.00	0.00			3.05		11.00			-6.60	Pass
HE40	MCS0	2	102	5510	242/61	0.00	0.00			2.53		11.00			-6.60	Pass
HE40	MCS0	2	110	5550	Full	0.00	0.00			6.53		11.00			-6.60	Pass
HE40	MCS0	2	134	5670	Full	0.00	0.00			3.16		11.00			-6.60	Pass
HE40	MCS0	2	134	5670	242/62	0.00	0.00			2.76		11.00			-6.60	Pass
HE80	MCS0	2	106	5530	Full	0.00	0.00			-0.90		11.00			-6.60	Pass
HE80	MCS0	2	106	5530	484/65	0.00	0.00			-1.03		11.00			-6.60	Pass



## Appendix B. AC Conducted Emission Test Results

Test Engineer :	Amos Zhang	Temperature :	25.3 ~ 26.2°C
		Relative Humidity :	38 ~ 40 %
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

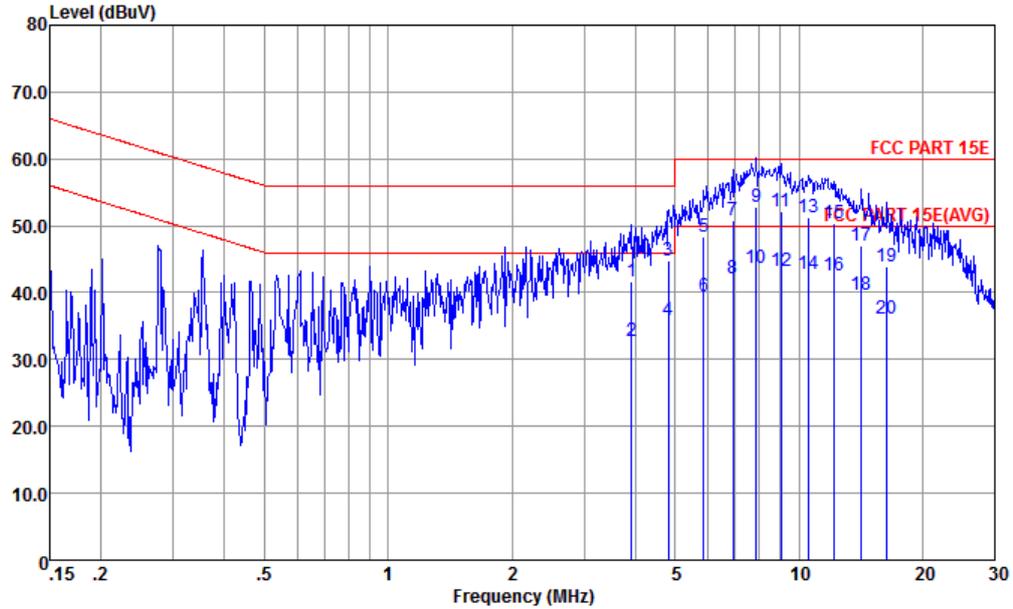


Site : CO01-KS  
 Condition : FCC PART 15E TWO-LISN-CN02-L LINE

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	2.099	41.48	-14.52	56.00	21.30	9.95	10.23	QP
2	2.099	31.38	-14.62	46.00	11.20	9.95	10.23	Average
3	2.664	42.86	-13.14	56.00	22.59	10.03	10.24	QP
4	2.664	33.16	-12.84	46.00	12.89	10.03	10.24	Average
5	3.328	44.54	-11.46	56.00	24.19	10.10	10.25	QP
6	3.328	34.64	-11.36	46.00	14.29	10.10	10.25	Average
7	4.070	45.52	-10.48	56.00	25.10	10.17	10.25	QP
8	4.070	36.62	-9.38	46.00	16.20	10.17	10.25	Average
9	4.549	47.07	-8.93	56.00	26.60	10.21	10.26	QP
10	4.549	38.57	-7.43	46.00	18.10	10.21	10.26	Average
11	5.774	52.19	-7.81	60.00	31.61	10.30	10.28	QP
12	5.774	43.19	-6.81	50.00	22.61	10.30	10.28	Average
13	6.627	53.96	-6.04	60.00	33.30	10.36	10.30	QP
14	6.627	45.26	-4.74	50.00	24.60	10.36	10.30	Average
15	7.486	55.82	-4.18	60.00	35.10	10.41	10.31	QP
16	7.486	46.22	-3.78	50.00	25.50	10.41	10.31	Average
17	8.546	55.37	-4.63	60.00	34.60	10.45	10.32	QP
18	8.546	46.07	-3.93	50.00	25.30	10.45	10.32	Average
19	9.705	54.33	-5.67	60.00	33.50	10.49	10.34	QP
20	9.705	46.03	-3.97	50.00	25.20	10.49	10.34	Average
21	11.683	54.21	-5.79	60.00	33.20	10.65	10.36	QP
22 *	11.683	46.31	-3.69	50.00	25.30	10.65	10.36	Average
23	12.920	52.62	-7.38	60.00	31.49	10.75	10.38	QP
24	12.920	45.22	-4.78	50.00	24.09	10.75	10.38	Average
25	14.672	50.07	-9.93	60.00	28.80	10.88	10.39	QP
26	14.672	42.47	-7.53	50.00	21.20	10.88	10.39	Average
27	16.140	47.29	-12.71	60.00	25.90	10.97	10.42	QP
28	16.140	39.99	-10.01	50.00	18.60	10.97	10.42	Average



Test Engineer :	Amos Zhang	Temperature :	25.3 ~ 26.2°C
		Relative Humidity :	38 ~ 40 %
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS  
 Condition : FCC PART 15E TWO-LISN-CN02-N NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	3.922	41.62	-14.38	56.00	21.20	10.17	10.25	QP
2	3.922	32.72	-13.28	46.00	12.30	10.17	10.25	Average
3	4.822	44.71	-11.29	56.00	24.20	10.24	10.27	QP
4	4.822	35.81	-10.19	46.00	15.30	10.24	10.27	Average
5	5.867	48.25	-11.75	60.00	27.64	10.33	10.28	QP
6	5.867	39.52	-10.48	50.00	18.91	10.33	10.28	Average
7	6.914	50.91	-9.09	60.00	30.20	10.41	10.30	QP
8	6.914	42.01	-7.99	50.00	21.30	10.41	10.30	Average
9	7.893	52.88	-7.12	60.00	32.10	10.46	10.32	QP
10 *	7.893	43.68	-6.32	50.00	22.90	10.46	10.32	Average
11	9.059	52.04	-7.96	60.00	31.20	10.51	10.33	QP
12	9.059	43.14	-6.86	50.00	22.30	10.51	10.33	Average
13	10.564	51.26	-8.74	60.00	30.30	10.61	10.35	QP
14	10.564	42.86	-7.14	50.00	21.90	10.61	10.35	Average
15	12.188	50.46	-9.54	60.00	29.30	10.79	10.37	QP
16	12.188	42.46	-7.54	50.00	21.30	10.79	10.37	Average
17	14.213	46.97	-13.03	60.00	25.60	10.98	10.39	QP
18	14.213	39.67	-10.33	50.00	18.30	10.98	10.39	Average
19	16.398	43.80	-16.20	60.00	22.20	11.17	10.43	QP
20	16.398	36.20	-13.80	50.00	14.60	11.17	10.43	Average

Note:

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



## 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	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11a CH 36 5180MHz		5149.95	58.45	-15.55	74	45.35	35.33	11.09	33.32	123	2	P	H
		5149.98	48.86	-5.14	54	35.76	35.33	11.09	33.32	123	2	A	H
	*	5176	113.02	-	-	99.86	35.36	11.12	33.32	123	2	P	H
		5176	105.4	-	-	92.24	35.36	11.12	33.32	123	2	A	H
		5148.8	58.58	-15.42	74	45.48	35.33	11.09	33.32	100	12	P	V
		5149.98	48.11	-5.89	54	35.01	35.33	11.09	33.32	100	12	A	V
	*	5182	109.07	-	-	95.91	35.36	11.12	33.32	100	12	P	V
		5182	101.58	-	-	88.42	35.36	11.12	33.32	100	12	A	V

### Band 1 5150~5250MHz

#### WIFI 802.11a (Harmonic @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11a CH 36 5180MHz		10360	45.08	-23.22	68.3	51.68	39.6	15.88	62.08	300	0	P	H
		10360	45.35	-22.95	68.3	51.95	39.6	15.88	62.08	100	360	P	V
802.11a CH 44 5220MHz		10440	45.05	-23.25	68.3	51.53	39.63	15.94	62.05	300	0	P	H
		10440	45.97	-22.33	68.3	52.45	39.63	15.94	62.05	100	360	P	V
802.11a CH 48 5240MHz		10480	45.49	-22.81	68.3	51.87	39.66	15.98	62.02	300	0	P	H
		10480	45.64	-22.66	68.3	52.02	39.66	15.98	62.02	100	360	P	V

<b>Remark</b>	1. No other spurious found.
	2. All results are PASS against Peak and Average limit line.



**Band 1 5150~5250MHz**

**WIFI 802.11ac VHT20 (Band Edge @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 36 5180MHz		5144.96	58.93	-15.07	74	45.83	35.33	11.09	33.32	232	0	P	H
		5146.4	48.41	-5.59	54	35.31	35.33	11.09	33.32	232	0	A	H
		5182	114.08	-	-	100.92	35.36	11.12	33.32	232	0	P	H
		5182	106	-	-	92.84	35.36	11.12	33.32	232	0	A	H
		5148.8	58.51	-15.49	74	45.41	35.33	11.09	33.32	107	26	P	V
		5149.6	48.22	-5.78	54	35.12	35.33	11.09	33.32	107	26	A	V
		5176	108.01	-	-	94.85	35.36	11.12	33.32	107	26	P	V
		5176	100.78	-	-	87.62	35.36	11.12	33.32	107	26	A	V

**Band 1 5150~5250MHz**

**WIFI 802.11ac VHT20 (Harmonic @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 36 5180MHz		10360	44.95	-23.35	68.3	51.55	39.6	15.88	62.08	300	0	P	H
		10360	44.78	-23.52	68.3	51.38	39.6	15.88	62.08	100	360	P	V
802.11ac VHT20 CH 44 5220MHz		10440	46.29	-22.01	68.3	52.77	39.63	15.94	62.05	300	0	P	H
		10440	45.83	-22.47	68.3	52.31	39.63	15.94	62.05	100	360	P	V
802.11ac VHT20 CH 48 5240MHz		10480	46.14	-22.16	68.3	52.52	39.66	15.98	62.02	300	0	P	H
		10480	46.16	-22.14	68.3	52.54	39.66	15.98	62.02	100	360	P	V

**Remark**

- No other spurious found.
- All results are PASS against Peak and Average limit line.



Band 1 5150~5250MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include frequencies like 5144.16, 5145.44, 5194, 5194, 5384.52, 5397.84, 5148.96, 5150, 5200, 5200, 5355, 5397.66.



Band 1 5150~5250MHz
WIFI 802.11ac VHT40 (Harmonic @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include data for 802.11ac VHT40 CH 38 5190MHz and CH 46 5230MHz, plus a Remark section.



**Band 1 5150~5250MHz**  
**WIFI 802.11ac VHT80 (Band Edge @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5147.68	60.59	-13.41	74	47.49	35.33	11.09	33.32	196	360	P	H
		5150	50.1	-3.9	54	37	35.33	11.09	33.32	196	360	A	H
	*	5224	103.2	-	-	89.97	35.39	11.16	33.32	196	360	P	H
		5224	95.64	-	-	82.41	35.39	11.16	33.32	196	360	A	H
		5356.98	53.69	-20.31	74	40.21	35.52	11.28	33.32	196	360	P	H
		5396.04	43.76	-10.24	54	30.17	35.57	11.33	33.31	196	360	A	H
		5142.24	57.42	-16.58	74	44.32	35.33	11.09	33.32	100	13	P	V
		5149.76	47.92	-6.08	54	34.82	35.33	11.09	33.32	100	13	A	V
	*	5218	98.48	-	-	85.25	35.39	11.16	33.32	100	13	P	V
		5218	90.96	-	-	77.73	35.39	11.16	33.32	100	13	A	V
	5386.5	53.69	-20.31	74	40.13	35.56	11.31	33.31	100	13	P	V	
	5399.28	43.65	-10.35	54	30.06	35.57	11.33	33.31	100	13	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 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80		10418.42	45.83	-22.47	68.3	52.35	39.62	15.92	62.06	300	0	P	H
CH 42 5210MHz		10418.42	46.27	-22.03	68.3	52.79	39.62	15.92	62.06	100	360	P	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 - 5150~5250MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test results for 802.11ax HE20 Full CH 36 5180MHz and a Remark section.



Band 1 5150~5250MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full		10358.36	45.49	-22.81	68.3	52.13	39.59	15.86	62.09	300	0	p	H
CH 36 5180MHz		10358.36	45.42	-22.88	68.3	52.06	39.59	15.86	62.09	100	360	p	V
802.11ax HE20 Full		10438.44	45.98	-22.32	68.3	52.46	39.63	15.94	62.05	100	360	p	H
CH 44 5220MHz		10438.44	45.38	-22.92	68.3	51.86	39.63	15.94	62.05	100	360	p	V
802.11ax HE20 Full		10478.47	44.88	-23.42	68.3	51.26	39.66	15.98	62.02	100	360	p	H
CH 48 5240MHz		10478.47	45.23	-23.07	68.3	51.61	39.66	15.98	62.02	100	360	p	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ax HE20 Partial 26 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 26/0 CH 36 5180MHz		5149.9	55.71	-18.29	74	42.61	35.33	11.09	33.32	103	358	P	H
		5114.08	44.33	-9.67	54	31.31	35.3	11.05	33.33	103	358	A	H
		5170	114.4	-	-	101.27	35.35	11.1	33.32	103	358	P	H
		5170	106.56	-	-	93.43	35.35	11.1	33.32	103	358	A	H
		5106.4	54.61	-19.39	74	41.59	35.3	11.05	33.33	184	345	P	V
		5114.24	44.16	-9.84	54	31.14	35.3	11.05	33.33	184	345	A	V
		5170	106.65	-	-	93.52	35.35	11.1	33.32	184	345	P	V
		5170	96.67	-	-	83.54	35.35	11.1	33.32	184	345	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 26/0 CH 48 5240MHz		5373	53.75	-20.25	74	40.23	35.54	11.3	33.32	104	2	P	H
		5398.74	43.64	-10.36	54	30.05	35.57	11.33	33.31	104	2	A	H
		5248	113.31	-	-	100.01	35.43	11.19	33.32	104	2	P	H
		5248	107.49	-	-	94.19	35.43	11.19	33.32	104	2	A	H
		5365.26	54.84	-19.16	74	41.32	35.54	11.3	33.32	176	22	P	V
		5397.48	43.59	-10.41	54	30	35.57	11.33	33.31	176	22	A	V
		5248	110.48	-	-	97.18	35.43	11.19	33.32	176	22	P	V
		5248	103.34	-	-	90.04	35.43	11.19	33.32	176	22	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 802.11ax HE20 Partial 52 (Band Edge @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 52/37 CH 36 5180MHz		5108.64	54.39	-19.61	74	41.37	35.3	11.05	33.33	106	1	P	H
		5150	44.39	-9.61	54	31.29	35.33	11.09	33.32	106	1	A	H
		5176	113.34	-	-	100.18	35.36	11.12	33.32	106	1	P	H
		5176	106.28	-	-	93.12	35.36	11.12	33.32	106	1	A	H
		5101.44	54.51	-19.49	74	41.53	35.28	11.03	33.33	198	24	P	V
		5115.04	44.12	-9.88	54	31.1	35.3	11.05	33.33	198	24	A	V
		5176	106.96	-	-	93.8	35.36	11.12	33.32	198	24	P	V
		5176	99.66	-	-	86.5	35.36	11.12	33.32	198	24	A	V
<b>Remark</b>	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> </ol>												



WiFi Ant. 1+2	Note	Frequency ( MHz )	Level ( dBµV/m )	Over Limit ( dB )	Limit Line ( dBµV/m )	Read Level (dBµV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 52/37 CH 48 5240MHz		5356.08	54.79	-19.21	74	41.31	35.52	11.28	33.32	101	1	P	H
		5400	43.97	-10.03	54	30.38	35.57	11.33	33.31	101	1	A	H
		5248	115.26	-	-	101.96	35.43	11.19	33.32	101	1	P	H
		5248	107.43	-	-	94.13	35.43	11.19	33.32	101	1	A	H
		5375.34	54.47	-19.53	74	40.94	35.54	11.3	33.31	180	24	P	V
		5399.82	43.85	-10.15	54	30.26	35.57	11.33	33.31	180	24	A	V
		5248	110.64	-	-	97.34	35.43	11.19	33.32	180	24	P	V
		5248	103.16	-	-	89.86	35.43	11.19	33.32	180	24	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 1 5150~5250MHz**  
**WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 106/53 CH 36 5180MHz		5144.16	55.53	-18.47	74	42.43	35.33	11.09	33.32	102	0	P	H
		5150	44.5	-9.5	54	31.4	35.33	11.09	33.32	102	0	A	H
		5176	113.85	-	-	100.69	35.36	11.12	33.32	102	0	P	H
		5176	104.19	-	-	91.03	35.36	11.12	33.32	102	0	A	H
		5148.32	55.92	-18.08	74	42.82	35.33	11.09	33.32	183	23	P	V
		5113.12	44.11	-9.89	54	31.09	35.3	11.05	33.33	183	23	A	V
		5176	109.09	-	-	95.93	35.36	11.12	33.32	286	310	P	V
		5176	100.28	-	-	87.12	35.36	11.12	33.32	286	310	A	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBµV/m )	Over Limit ( dB )	Limit Line ( dBµV/m )	Read Level (dBµV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 106/54 CH 48 5240MHz		5388.12	53.86	-20.14	74	40.3	35.56	11.31	33.31	100	359	P	H
		5396.04	43.89	-10.11	54	30.3	35.57	11.33	33.31	100	359	A	H
		5242	115.22	-	-	101.92	35.43	11.19	33.32	100	359	P	H
		5242	107.77	-	-	94.47	35.43	11.19	33.32	100	359	A	H
		5385.96	53.49	-20.51	74	39.93	35.56	11.31	33.31	163	24	P	V
		5399.82	43.77	-10.23	54	30.18	35.57	11.33	33.31	163	24	A	V
		5248	113.25	-	-	99.95	35.43	11.19	33.32	163	24	P	V
		5248	103.36	-	-	90.06	35.43	11.19	33.32	163	24	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include frequency measurements for 802.11ax HE40 Full CH 38 5190MHz and a Remark section.



Band 1 5150~5250MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full		10378.38	45.31	-22.99	68.3	51.88	39.61	15.89	62.07	100	360	P	H
CH 38 5190MHz		10378.38	44.45	-23.85	68.3	51.02	39.61	15.89	62.07	100	360	P	V
802.11ax HE40 Full		10458.46	45.33	-22.97	68.3	51.78	39.64	15.95	62.04	100	360	P	H
CH 46 5230MHz		10458.46	45.99	-22.31	68.3	52.44	39.64	15.95	62.04	100	360	P	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ax HE40 Partial 242 (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include frequency data for 802.11ax HE40 Partial 242/61 CH 38 5190MHz and a Remark section.



WiFi Ant. 1+2	Note	Frequency ( MHz )	Level ( dBµV/m )	Over Limit ( dB )	Limit Line ( dBµV/m )	Read Level (dBµV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Partial 242/62 CH 46 5230MHz		5118.72	57.19	-16.81	74	44.17	35.3	11.05	33.33	100	343	P	H
		5149.92	44.39	-9.61	54	31.29	35.33	11.09	33.32	100	343	A	H
		5248	112.95	-	-	99.65	35.43	11.19	33.32	100	343	P	H
		5248	105.53	-	-	92.23	35.43	11.19	33.32	100	343	A	H
		5367.42	53.07	-20.93	74	39.55	35.54	11.3	33.32	100	343	P	H
		5393.34	43.77	-10.23	54	30.21	35.56	11.31	33.31	100	343	A	H
		5149.6	54.88	-19.12	74	41.78	35.33	11.09	33.32	156	24	P	V
		5114.08	44.06	-9.94	54	31.04	35.3	11.05	33.33	156	24	A	V
		5242	109.21	-	-	95.91	35.43	11.19	33.32	156	24	P	V
		5242	100.13	-	-	86.83	35.43	11.19	33.32	156	24	A	V
	5391.18	53.52	-20.48	74	39.96	35.56	11.31	33.31	156	24	P	V	
	5393.88	43.62	-10.38	54	30.06	35.56	11.31	33.31	156	24	A	V	

**Remark**

- No other spurious found.
- All results are PASS against Peak and Average limit line.



Band 1 5150~5250MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test results for frequencies like 5137.28, 5148.32, 5212, 5380.38, 5378.4, 5142.56, 5149.6, 5218, 5353.38, 5394.24.

Remark

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



Band 1 5150~5250MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full		10418.42	45.48	-22.82	68.3	52	39.62	15.92	62.06	300	0	P	H
CH 42 5210MHz		10418.42	47.33	-20.97	68.3	53.85	39.62	15.92	62.06	100	360	P	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ax HE80 Partial 484 (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test results for frequencies like 5146.72, 5149.76, 5200, 5352.3, 5399.82, 5144.32, 5149.98, 5206, 5382.18, 5397.12.

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)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test results for 802.11a CH 64 5320MHz and a Remark section.



Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	45.68	-22.62	68.3	52	39.68	16.01	62.01	300	0	P	H
		10520	45.56	-22.74	68.3	51.88	39.68	16.01	62.01	100	360	P	V
802.11a CH 60 5300MHz		10600	45.64	-28.36	74	51.81	39.72	16.08	61.97	300	0	P	H
		10600	48.09	-25.91	74	54.26	39.72	16.08	61.97	100	360	P	V
802.11a CH 64 5320MHz		10640	45.71	-28.29	74	51.81	39.74	16.11	61.95	300	0	P	H
		10640	45.21	-28.79	74	51.31	39.74	16.11	61.95	100	360	P	V

**Remark**

- No other spurious found.
- All results are PASS against Peak and Average limit line.



Band 2 5250~5350MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include frequencies 5352.1, 5350, 5326, 5326, 5350.2, 5350, 5320, 5320.

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



Band 2 5250~5350MHz
WIFI 802.11ac VHT20 (Harmonic @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test results for channels 52, 60, and 64.



**Band 2 5250~5350MHz**  
**WIFI 802.11ac VHT40 (Band Edge @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 62 5310MHz		5138.72	53.89	-20.11	74	40.83	35.31	11.07	33.32	200	360	P	H
		5149.98	44.47	-9.53	54	31.37	35.33	11.09	33.32	200	360	A	H
	*	5302	110.05	-	-	96.65	35.48	11.24	33.32	200	360	P	H
		5302	102.57	-	-	89.17	35.48	11.24	33.32	200	360	A	H
		5350.3	59.55	-14.45	74	46.07	35.52	11.28	33.32	200	360	P	H
		5350.12	50.14	-3.86	54	36.66	35.52	11.28	33.32	200	360	A	H
		5136.16	54.38	-19.62	74	41.32	35.31	11.07	33.32	135	14	P	V
		5112.96	44.1	-9.9	54	31.08	35.3	11.05	33.33	135	14	A	V
	*	5308	105.08	-	-	91.68	35.48	11.24	33.32	135	14	P	V
		5308	98.33	-	-	84.93	35.48	11.24	33.32	135	14	A	V
	5350.9	62.54	-11.46	74	49.06	35.52	11.28	33.32	135	14	P	V	
	5350.12	50.45	-3.55	54	36.97	35.52	11.28	33.32	135	14	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 802.11ac VHT40 (Harmonic @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include data for 802.11ac VHT40 CH 54 (5270MHz) and CH 62 (5310MHz).



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

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5111.84	54.83	-19.17	74	41.81	35.3	11.05	33.33	113	0	P	H
		5116.64	44.36	-9.64	54	31.34	35.3	11.05	33.33	113	0	A	H
	*	5284	104.62	-	-	91.26	35.46	11.22	33.32	113	0	P	H
		5284	96.97	-	-	83.61	35.46	11.22	33.32	113	0	A	H
		5361.3	61.18	-12.82	74	47.66	35.54	11.3	33.32	113	0	P	H
		5350.1	50.51	-3.49	54	37.03	35.52	11.28	33.32	113	0	A	H
		5117.92	55	-19	74	41.98	35.3	11.05	33.33	100	22	P	V
		5110.56	44.22	-9.78	54	31.2	35.3	11.05	33.33	100	22	A	V
	*	5296	100.74	-	-	87.34	35.48	11.24	33.32	100	22	P	V
		5296	93	-	-	79.6	35.48	11.24	33.32	100	22	A	V
	5351.8	58.64	-15.36	74	45.16	35.52	11.28	33.32	100	22	P	V	
	5350.4	48.56	-5.44	54	35.08	35.52	11.28	33.32	100	22	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 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80		10580	46.29	-22.01	68.3	52.49	39.71	16.07	61.98	300	0	P	H
CH 58 5290MHz		10580	46.67	-21.63	68.3	52.87	39.71	16.07	61.98	100	360	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 802.11ax HE20 Full (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test data for 802.11ax HE20 Full CH 64 5320MHz and a Remark section.



Band 2 5250~5350MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full		10518.52	44.57	-23.73	68.3	50.89	39.68	16.01	62.01	100	360	P	H
CH 52 5260MHz		10518.52	45.04	-23.26	68.3	51.36	39.68	16.01	62.01	100	360	P	V
802.11ax HE20 Full		10600	46.49	-27.51	74	52.66	39.72	16.08	61.97	300	0	P	H
CH 60 5300MHz		10600	45.14	-28.86	74	51.31	39.72	16.08	61.97	100	360	P	V
802.11ax HE20 Full		10638.63	45.69	-28.31	74	51.79	39.74	16.11	61.95	100	360	P	H
CH 64 5320MHz		10638.63	46.03	-27.97	74	52.13	39.74	16.11	61.95	100	360	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 802.11ax HE20 Partial 26 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 26/4 CH 52 5260MHz		5101.76	54.84	-19.16	74	41.86	35.28	11.03	33.33	107	2	P	H
		5114.88	44.24	-9.76	54	31.22	35.3	11.05	33.33	107	2	A	H
		5254	114.21	-	-	100.91	35.43	11.19	33.32	107	2	P	H
		5254	107.52	-	-	94.22	35.43	11.19	33.32	107	2	A	H
		5124.32	54.84	-19.16	74	41.79	35.31	11.07	33.33	183	25	P	V
		5114.88	44.13	-9.87	54	31.11	35.3	11.05	33.33	183	25	A	V
		5254	110.88	-	-	97.58	35.43	11.19	33.32	183	25	P	V
		5254	103.29	-	-	89.99	35.43	11.19	33.32	183	25	A	V
802.11ax HE20 Partial 26/8 CH 64 5320MHz		5394	54.16	-19.84	74	40.6	35.56	11.31	33.31	101	1	P	H
		5350.4	43.88	-10.12	54	30.4	35.52	11.28	33.32	101	1	A	H
		5326	113.49	-	-	100.07	35.49	11.25	33.32	101	1	P	H
		5326	106.74	-	-	93.32	35.49	11.25	33.32	101	1	A	H
		5399	53.94	-20.06	74	40.35	35.57	11.33	33.31	170	24	P	V
		5350.1	43.68	-10.32	54	30.2	35.52	11.28	33.32	170	24	A	V
		5326	110.39	-	-	96.97	35.49	11.25	33.32	170	24	P	V
		5326	103.84	-	-	90.42	35.49	11.25	33.32	170	24	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11ax HE20 Partial 52 (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test data for 802.11ax HE20 Partial 52/37 CH 52 5260MHz and a Remark section.



WiFi Ant. 1+2	Note	Frequency ( MHz )	Level ( dBµV/m )	Over Limit ( dB )	Limit Line ( dBµV/m )	Read Level (dBµV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 52/40 CH 64 5320MHz		5350.1	57.19	-16.81	74	43.71	35.52	11.28	33.32	100	2	P	H
		5350	43.99	-10.01	54	30.51	35.52	11.28	33.32	100	2	A	H
		5326	114	-	-	100.58	35.49	11.25	33.32	100	2	P	H
		5326	103.9	-	-	90.48	35.49	11.25	33.32	100	2	A	H
		5352.8	53.82	-20.18	74	40.34	35.52	11.28	33.32	171	24	P	V
		5350	43.79	-10.21	54	30.31	35.52	11.28	33.32	171	24	A	V
		5326	112.53	-	-	99.11	35.49	11.25	33.32	171	24	P	V
		5326	104.32	-	-	90.9	35.49	11.25	33.32	171	24	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 802.11ax HE20 Partial 106 (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include data for 802.11ax HE20 Partial 106/53 CH 52 5260MHz and a Remark section.



WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBµV/m )	Over Limit ( dB )	Limit Line ( dBµV/m )	Read Level (dBµV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 106/54 CH 64 5320MHz		5351.9	64.47	-9.53	74	50.99	35.52	11.28	33.32	100	1	P	H
		5350	44.38	-9.62	54	30.9	35.52	11.28	33.32	100	1	A	H
		5326	114.35	-	-	100.93	35.49	11.25	33.32	100	1	P	H
		5326	106.38	-	-	92.96	35.49	11.25	33.32	100	1	A	H
		5354.2	61.72	-12.28	74	48.24	35.52	11.28	33.32	174	25	P	V
		5350	43.95	-10.05	54	30.47	35.52	11.28	33.32	174	25	A	V
		5326	111.9	-	-	98.48	35.49	11.25	33.32	174	25	P	V
		5326	103.74	-	-	90.32	35.49	11.25	33.32	174	25	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 802.11ax HE40 Full (Band Edge @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 62 5310MHz		5130.24	55.02	-18.98	74	41.96	35.31	11.07	33.32	234	360	P	H
		5149.76	44.39	-9.61	54	31.29	35.33	11.09	33.32	234	360	A	H
		5308	111.44	-	-	98.04	35.48	11.24	33.32	234	360	P	H
		5308	102.42	-	-	89.02	35.48	11.24	33.32	234	360	A	H
		5355.2	62.01	-11.99	74	48.53	35.52	11.28	33.32	234	360	P	H
		5350.1	50.41	-3.59	54	36.93	35.52	11.28	33.32	234	360	A	H
		5139.04	54.35	-19.65	74	41.29	35.31	11.07	33.32	112	15	P	V
		5114.56	44.16	-9.84	54	31.14	35.3	11.05	33.33	112	15	A	V
		5308	106.16	-	-	92.76	35.48	11.24	33.32	112	15	P	V
		5308	97.95	-	-	84.55	35.48	11.24	33.32	112	15	A	V
		5350.5	60.88	-13.12	74	47.4	35.52	11.28	33.32	112	15	P	V
		5350.12	50.03	-3.97	54	36.55	35.52	11.28	33.32	112	15	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 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ax HE40 Full		10538.54	45.9	-22.4	68.3	52.19	39.69	16.02	62	300	0	P	H
CH 54 5270MHz		10538.54	44.5	-23.8	68.3	50.79	39.69	16.02	62	100	360	P	V
802.11ax HE40 Full		10618.62	45.7	-28.3	74	51.83	39.73	16.1	61.96	300	0	P	H
CH 62 5310MHz		10618.62	45.15	-28.85	74	51.28	39.73	16.1	61.96	100	360	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 802.11ax HE40 Partial 242 (Band Edge @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Partial 242/61 CH 54 5270MHz		5130.08	54.98	-19.02	74	41.92	35.31	11.07	33.32	105	342	P	H
		5114.4	44.79	-9.21	54	31.77	35.3	11.05	33.33	105	342	A	H
		5266	115.66	-	-	102.34	35.44	11.2	33.32	105	342	P	H
		5266	105.9	-	-	92.58	35.44	11.2	33.32	105	342	A	H
		5369.2	57.1	-16.9	74	43.58	35.54	11.3	33.32	105	342	P	H
		5350.7	43.86	-10.14	54	30.38	35.52	11.28	33.32	105	342	A	H
		5107.84	54.36	-19.64	74	41.34	35.3	11.05	33.33	118	25	P	V
		5113.76	44.12	-9.88	54	31.1	35.3	11.05	33.33	118	25	A	V
		5260	109.51	-	-	96.19	35.44	11.2	33.32	118	25	P	V
		5260	100.93	-	-	87.61	35.44	11.2	33.32	118	25	A	V
		5350.5	60.28	-13.72	74	46.8	35.52	11.28	33.32	118	25	P	V
		5351.4	43.61	-10.39	54	30.13	35.52	11.28	33.32	118	25	A	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WiFi Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Partial 242/62 CH 62 5310MHz		5134.88	54.5	-19.5	74	41.44	35.31	11.07	33.32	100	341	P	H
		5109.44	44.16	-9.84	54	31.14	35.3	11.05	33.33	100	341	A	H
		5314	111.92	-	-	98.5	35.49	11.25	33.32	100	341	P	H
		5314	103.05	-	-	89.63	35.49	11.25	33.32	100	341	A	H
		5355.5	66.77	-7.23	74	53.29	35.52	11.28	33.32	100	341	P	H
		5351.1	49.63	-4.37	54	36.15	35.52	11.28	33.32	100	341	A	H
		5121.76	54.31	-19.69	74	41.29	35.3	11.05	33.33	126	25	P	V
		5111.2	44.02	-9.98	54	31	35.3	11.05	33.33	126	25	A	V
		5326	107.8	-	-	94.38	35.49	11.25	33.32	126	25	P	V
		5326	99.13	-	-	85.71	35.49	11.25	33.32	126	25	A	V
	5362	63.98	-10.02	74	50.46	35.54	11.3	33.32	126	25	P	V	
	5350.6	49.26	-4.74	54	35.78	35.52	11.28	33.32	126	25	A	V	

**Remark**

- No other spurious found.
- All results are PASS against Peak and Average limit line.



**Band 2 5250~5350MHz**  
**WIFI 802.11ax HE80 Full (Band Edge @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 58 5290MHz		5115.2	54.93	-19.07	74	41.91	35.3	11.05	33.33	117	2	P	H
		5107.84	44.47	-9.53	54	31.45	35.3	11.05	33.33	117	2	A	H
		5266	105.3	-	-	91.98	35.44	11.2	33.32	117	2	P	H
		5266	96.66	-	-	83.34	35.44	11.2	33.32	117	2	A	H
		5350.12	61.37	-12.63	74	47.89	35.52	11.28	33.32	117	2	P	H
		5350.3	50.58	-3.42	54	37.1	35.52	11.28	33.32	117	2	A	H
		5101.6	55.39	-18.61	74	42.41	35.28	11.03	33.33	100	12	P	V
		5114.08	44.71	-9.29	54	31.69	35.3	11.05	33.33	100	12	A	V
		5302	103.31	-	-	89.91	35.48	11.24	33.32	100	12	P	V
		5302	93.06	-	-	79.66	35.48	11.24	33.32	100	12	A	V
		5354.8	58.37	-15.63	74	44.89	35.52	11.28	33.32	100	12	P	V
	5350.3	48.37	-5.63	54	34.89	35.52	11.28	33.32	100	12	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 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full		10578.58	46.74	-21.56	68.3	52.96	39.71	16.05	61.98	300	0	P	H
CH 58 5290MHz		10578.58	45.56	-22.74	68.3	51.78	39.71	16.05	61.98	100	360	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 802.11ax HE80 Partial 484 (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test results for frequencies like 5129.28, 5111.84, 5290, 5352, 5350, 5114.24, 5112, 5308, 5389.2, 5350.

Remark

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



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

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		5457.68	57.75	-16.25	74	44.05	35.62	11.39	33.31	219	5	P	H
		5469.52	64.69	-3.61	68.3	50.95	35.64	11.41	33.31	219	5	P	H
		5458.16	46	-8	54	32.3	35.62	11.39	33.31	219	5	A	H
	*	5500	115.58	-	-	101.77	35.67	11.45	33.31	219	5	P	H
		5500	107.94	-	-	94.13	35.67	11.45	33.31	219	5	A	H
		5458.48	54.26	-19.74	74	40.56	35.62	11.39	33.31	100	15	P	V
		5470	65.18	-3.12	68.3	51.44	35.64	11.41	33.31	100	15	P	V
		5458.8	44.63	-9.37	54	30.93	35.62	11.39	33.31	100	15	A	V
	*	5506	110.58	-	-	96.77	35.67	11.45	33.31	100	15	P	V
		5506	103.13	-	-	89.32	35.67	11.45	33.31	100	15	A	V
802.11a CH 140 5700MHz		5727.24	63.59	-4.71	68.3	49.45	35.84	11.68	33.38	190	4	P	H
	*	5692	112.41	-	-	98.31	35.82	11.65	33.37	190	4	P	H
		5692	105.34	-	-	91.24	35.82	11.65	33.37	190	4	A	H
		5726.36	61.92	-6.38	68.3	47.78	35.84	11.68	33.38	153	11	P	V
	*	5698	109.72	-	-	95.62	35.82	11.65	33.37	153	11	P	V
		5698	102.05	-	-	87.95	35.82	11.65	33.37	153	11	A	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 802.11a (Harmonic @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100		11000	46.2	-27.8	74	51.64	39.93	16.42	61.79	300	0	P	H
		5500MHz	11000	45.99	-28.01	74	51.43	39.93	61.79	100	360	P	V
802.11a CH 116		11160	45.91	-28.09	74	51.16	40.02	16.57	61.84	300	0	P	H
		5580MHz	11160	45.41	-28.59	74	50.66	40.02	61.84	100	360	P	V
802.11a CH 140		11400	45.48	-28.52	74	50.45	40.15	16.79	61.91	300	0	P	H
		5700MHz	11400	46.06	-27.94	74	51.03	40.15	61.91	100	360	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 802.11ac VHT20 (Band Edge @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ac VHT20 CH 100 5500MHz		5458.64	55.26	-18.74	74	41.56	35.62	11.39	33.31	174	0	P	H
		5469.84	62.56	-5.74	68.3	48.82	35.64	11.41	33.31	174	0	P	H
		5460	45.2	-8.8	54	31.5	35.62	11.39	33.31	174	0	A	H
	*	5506	115.15	-	-	101.34	35.67	11.45	33.31	174	0	P	H
		5506	107.61	-	-	93.8	35.67	11.45	33.31	174	0	A	H
		5453.52	54.61	-19.39	74	40.91	35.62	11.39	33.31	122	360	P	V
		5467.92	59.35	-8.95	68.3	45.61	35.64	11.41	33.31	122	360	P	V
		5459.76	44.3	-9.7	54	30.6	35.62	11.39	33.31	122	360	A	V
	*	5500	110.12	-	-	96.31	35.67	11.45	33.31	122	360	P	V
	5500	102.83	-	-	89.02	35.67	11.45	33.31	122	360	A	V	
802.11ac VHT20 CH 140 5700MHz		5725.96	62.67	-5.63	68.3	48.53	35.84	11.68	33.38	165	360	P	H
	*	5704	113.03	-	-	98.91	35.83	11.66	33.37	165	360	P	H
		5704	105.64	-	-	91.52	35.83	11.66	33.37	165	360	A	H
		5732.44	57.77	-10.53	68.3	43.63	35.84	11.68	33.38	147	27	P	V
	*	5704	109.81	-	-	95.69	35.83	11.66	33.37	147	27	P	V
	5704	102.64	-	-	88.52	35.83	11.66	33.37	147	27	A	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 802.11ac VHT20 (Harmonic @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 100 5500MHz		10999	46.22	-27.78	74	51.66	39.93	16.42	61.79	300	0	P	H
802.11ac VHT20 CH 116 5580MHz		11159.16	46.11	-27.89	74	51.36	40.02	16.57	61.84	300	0	P	H
802.11ac VHT20 CH 140 5700MHz		11399.39	46.76	-27.24	74	51.73	40.15	16.79	61.91	300	0	P	H
802.11ac VHT20 CH 140 5700MHz		11399.39	46.45	-27.55	74	51.42	40.15	16.79	61.91	100	360	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 802.11ac VHT40 (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test data for 802.11ac VHT40 CH 102 (5510MHz) and CH 134 (5670MHz).

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



Band 3 - 5470~5725MHz
WIFI 802.11ac VHT40 (Harmonic @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test results for channels 102, 110, and 134.



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

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5456.88	60.15	-13.85	74	46.45	35.62	11.39	33.31	225	353	P	H
		5461.84	63.1	-5.2	68.3	49.4	35.62	11.39	33.31	225	353	P	H
		5459.76	50.19	-3.81	54	36.49	35.62	11.39	33.31	225	353	A	H
	*	5524	106.67	-	-	92.83	35.69	11.47	33.32	225	353	P	H
		5524	99.12	-	-	85.28	35.69	11.47	33.32	225	353	A	H
		5759.64	54.64	-13.66	68.3	40.48	35.85	11.71	33.4	225	353	P	H
		5458.32	56.32	-17.68	74	42.62	35.62	11.39	33.31	100	7	P	V
		5466.8	59.05	-9.25	68.3	45.31	35.64	11.41	33.31	100	7	P	V
		5459.44	46.97	-7.03	54	33.27	35.62	11.39	33.31	100	7	A	V
	*	5530	102.64	-	-	88.8	35.69	11.47	33.32	100	7	P	V
		5530	94.4	-	-	80.56	35.69	11.47	33.32	100	7	A	V
		5736.76	54.73	-13.57	68.3	40.57	35.85	11.69	33.38	100	7	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 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80		11059.05	47.28	-26.72	74	52.64	39.97	16.48	61.81	300	0	P	H
CH 106 5530MHz		11059.05	46.68	-27.32	74	52.04	39.97	16.48	61.81	100	360	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 802.11ax HE20 Full (Band Edge @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ax HE20 Full CH 100 5500MHz		5454.96	54.41	-19.59	74	40.71	35.62	11.39	33.31	234	0	P	H
		5465.36	63.53	-4.77	68.3	49.79	35.64	11.41	33.31	234	0	P	H
		5456.72	44.72	-9.28	54	31.02	35.62	11.39	33.31	234	0	A	H
		5494	114.32	-	-	100.55	35.65	11.43	33.31	234	0	P	H
		5494	106.68	-	-	92.91	35.65	11.43	33.31	234	0	A	H
		5438.16	54.11	-19.89	74	40.44	35.61	11.37	33.31	101	15	P	V
		5469.68	59.2	-9.1	68.3	45.46	35.64	11.41	33.31	101	15	P	V
		5458.8	44.29	-9.71	54	30.59	35.62	11.39	33.31	101	15	A	V
		5500	109.87	-	-	96.06	35.67	11.45	33.31	101	15	P	V
	5500	102.46	-	-	88.65	35.67	11.45	33.31	101	15	A	V	
802.11ax HE20 Full CH 140 5700MHz		5725.4	62.66	-5.64	68.3	48.52	35.84	11.68	33.38	181	0	P	H
		5704	114.07	-	-	99.95	35.83	11.66	33.37	181	0	P	H
		5704	105.36	-	-	91.24	35.83	11.66	33.37	181	0	A	H
		5727.88	57.69	-10.61	68.3	43.55	35.84	11.68	33.38	145	0	P	V
		5698	109.59	-	-	95.49	35.82	11.65	33.37	145	0	P	V
	5698	100.95	-	-	86.85	35.82	11.65	33.37	145	0	A	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 802.11ax HE20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full		10999	45.87	-28.13	74	51.31	39.93	16.42	61.79	100	360	P	H
CH 100		10999	46.27	-27.73	74	51.71	39.93	16.42	61.79	100	360	P	V
5500MHz													
802.11ax HE20 Full		11159.16	46.46	-27.54	74	51.71	40.02	16.57	61.84	300	0	P	H
CH 116		11159.16	45.76	-28.24	74	51.01	40.02	16.57	61.84	100	360	P	V
5580MHz													
802.11ax HE20 Full		11399.39	45.23	-28.77	74	50.2	40.15	16.79	61.91	100	360	P	H
CH 140		11399.39	46.17	-27.83	74	51.14	40.15	16.79	61.91	100	360	P	V
5700MHz													
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ax HE20 Partial 26 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ax HE20 Partial 26/0 CH 100 5260MHz		5378.16	54.03	-19.97	74	40.47	35.56	11.31	33.31	100	1	P	H
		5469.52	53.98	-14.32	68.3	40.24	35.64	11.41	33.31	100	1	P	H
		5457.2	44.25	-9.75	54	30.55	35.62	11.39	33.31	100	1	A	H
		5494	113.93	-	-	100.16	35.65	11.43	33.31	100	1	P	H
		5494	105.99	-	-	92.22	35.65	11.43	33.31	100	1	A	H
		5423.76	54.35	-19.65	74	40.72	35.59	11.35	33.31	165	23	P	V
		5463.28	53.28	-15.02	68.3	39.54	35.64	11.41	33.31	165	23	P	V
		5457.52	44.03	-9.97	54	30.33	35.62	11.39	33.31	165	23	A	V
		5494	110.69	-	-	96.92	35.65	11.43	33.31	165	23	P	V
		5494	104.62	-	-	90.85	35.65	11.43	33.31	165	23	A	V
802.11ax HE20 Partial 26/8 CH 140 5700MHz		5760.12	54.8	-13.5	68.3	40.64	35.85	11.71	33.4	103	1	P	H
		5710	110.61	-	-	96.5	35.83	11.66	33.38	103	1	P	H
		5710	103.36	-	-	89.25	35.83	11.66	33.38	103	1	A	H
		5753.08	54.87	-13.43	68.3	40.7	35.85	11.71	33.39	112	26	P	V
		5710	111.49	-	-	97.38	35.83	11.66	33.38	112	26	P	V
		5710	105.07	-	-	90.96	35.83	11.66	33.38	112	26	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ax HE20 Partial 52 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 52/37 CH 100 5500MHz		5421.2	55.4	-18.6	74	41.77	35.59	11.35	33.31	100	2	P	H
		5469.68	56.42	-11.88	68.3	42.68	35.64	11.41	33.31	100	2	P	H
		5459.92	44.37	-9.63	54	30.67	35.62	11.39	33.31	100	2	A	H
		5494	116.64	-	-	102.87	35.65	11.43	33.31	100	2	P	H
		5494	108.34	-	-	94.57	35.65	11.43	33.31	100	2	A	H
		5417.68	54.12	-19.88	74	40.49	35.59	11.35	33.31	156	24	P	V
		5462.32	53.42	-14.88	68.3	39.72	35.62	11.39	33.31	156	24	P	V
		5454.64	44.18	-9.82	54	30.48	35.62	11.39	33.31	156	24	A	V
		5494	113.76	-	-	99.99	35.65	11.43	33.31	156	24	P	V
	5494	106.45	-	-	92.68	35.65	11.43	33.31	156	24	A	V	
802.11ax HE20 Partial 52/40 CH 140 5700MHz		5725.4	54.66	-13.64	68.3	40.52	35.84	11.68	33.38	102	1	P	H
		5710	110.61	-	-	96.5	35.83	11.66	33.38	102	1	P	H
		5710	101.81	-	-	87.7	35.83	11.66	33.38	102	1	A	H
		5757.96	54.71	-13.59	68.3	40.54	35.85	11.71	33.39	114	22	P	V
		5704	111.22	-	-	97.1	35.83	11.66	33.37	114	22	P	V
		5704	101.03	-	-	86.91	35.83	11.66	33.37	114	22	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 106/53 CH 100 5500MHz		5421.68	54.46	-19.54	74	40.83	35.59	11.35	33.31	101	1	P	H
		5467.6	56.28	-12.02	68.3	42.54	35.64	11.41	33.31	101	1	P	H
		5458.8	44.41	-9.59	54	30.71	35.62	11.39	33.31	101	1	A	H
		5494	114.96	-	-	101.19	35.65	11.43	33.31	101	1	P	H
		5494	106.71	-	-	92.94	35.65	11.43	33.31	101	1	A	H
		5438.32	54.59	-19.41	74	40.92	35.61	11.37	33.31	166	27	P	V
		5468.24	54.29	-14.01	68.3	40.55	35.64	11.41	33.31	166	27	P	V
		5457.68	44.19	-9.81	54	30.49	35.62	11.39	33.31	166	27	A	V
		5494	112.65	-	-	98.88	35.65	11.43	33.31	166	27	P	V
	5494	105.06	-	-	91.29	35.65	11.43	33.31	166	27	A	V	
802.11ax HE20 Partial 106/54 CH 140 5700MHz		5730.04	58.97	-9.33	68.3	44.83	35.84	11.68	33.38	100	346	P	H
		5710	112.2	-	-	98.09	35.83	11.66	33.38	100	346	P	H
		5710	104.18	-	-	90.07	35.83	11.66	33.38	100	346	A	H
		5729.16	55.84	-12.46	68.3	41.7	35.84	11.68	33.38	151	16	P	V
		5704	112.61	-	-	98.49	35.83	11.66	33.37	151	16	P	V
		5704	103.76	-	-	89.64	35.83	11.66	33.37	151	16	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 3 5470~5725MHz**  
**WIFI 802.11ax HE40 Full (Band Edge @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ax HE40 Full CH 102 5510MHz		5457.84	64.28	-9.72	74	50.58	35.62	11.39	33.31	219	360	P	H
		5463.92	63.04	-5.26	68.3	49.3	35.64	11.41	33.31	219	360	P	H
		5455.76	46.86	-7.14	54	33.16	35.62	11.39	33.31	219	360	A	H
		5518	113.63	-	-	99.79	35.69	11.47	33.32	219	360	P	H
		5518	103.67	-	-	89.83	35.69	11.47	33.32	219	360	A	H
		5747.96	54.59	-13.71	68.3	40.44	35.85	11.69	33.39	219	360	P	H
		5352.72	54.71	-19.29	74	41.23	35.52	11.28	33.32	113	15	P	V
		5468.72	60.33	-7.97	68.3	46.59	35.64	11.41	33.31	113	15	P	V
		5459.92	45.9	-8.1	54	32.2	35.62	11.39	33.31	113	15	A	V
		5500	107.72	-	-	93.91	35.67	11.45	33.31	113	15	P	V
		5500	96.96	-	-	83.15	35.67	11.45	33.31	113	15	A	V
		5759.88	54.84	-13.46	68.3	40.68	35.85	11.71	33.4	113	15	P	V
802.11ax HE40 Full CH 134 5670MHz		5449.2	55.49	-18.51	74	41.79	35.62	11.39	33.31	184	360	P	H
		5464.4	54.51	-13.79	68.3	40.77	35.64	11.41	33.31	184	360	P	H
		5454.64	44.82	-9.18	54	31.12	35.62	11.39	33.31	184	360	A	H
		5674	112.33	-	-	98.25	35.82	11.63	33.37	184	360	P	H
		5674	104.16	-	-	90.08	35.82	11.63	33.37	184	360	A	H
		5725.08	64.42	-3.88	68.3	50.28	35.84	11.68	33.38	184	360	P	H
		5427.92	55.33	-18.67	74	41.7	35.59	11.35	33.31	109	7	P	V
		5462.8	54.7	-13.6	68.3	40.96	35.64	11.41	33.31	109	7	P	V
		5456.72	44.68	-9.32	54	30.98	35.62	11.39	33.31	109	7	A	V
		5668	107.7	-	-	93.61	35.82	11.63	33.36	109	7	P	V
	5668	100.12	-	-	86.03	35.82	11.63	33.36	109	7	A	V	
	5727.08	57.26	-11.04	68.3	43.12	35.84	11.68	33.38	109	7	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 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ax HE40 Full		11019.02	46.21	-27.79	74	51.63	39.94	16.44	61.8	300	0	P	H
CH 102		11019.02	46.33	-27.67	74	51.75	39.94	16.44	61.8	100	360	P	V
5510MHz													
802.11ax HE40 Full		11099.1	46.66	-27.34	74	51.99	39.98	16.51	61.82	300	0	P	H
CH 110		11099.1	47.52	-26.48	74	52.85	39.98	16.51	61.82	100	360	P	V
5550MHz													
802.11ax HE40 Full		11339.33	46.21	-27.79	74	51.26	40.11	16.73	61.89	300	0	P	H
CH 134		11339.33	46.59	-27.41	74	51.64	40.11	16.73	61.89	100	360	P	V
5670MHz													
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 3 5470~5725MHz**  
**WIFI 802.11ax HE40 Partial 242 (Band Edge @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11ax HE40 Partial 242/61 CH 102 5510MHz		5459.92	64.57	-9.43	74	50.87	35.62	11.39	33.31	100	342	P	H
		5465.2	64.9	-3.4	68.3	51.16	35.64	11.41	33.31	100	342	P	H
		5459.28	44.74	-9.26	54	31.04	35.62	11.39	33.31	100	342	A	H
		5494	111.04	-	-	97.27	35.65	11.43	33.31	100	342	P	H
		5494	103.53	-	-	89.76	35.65	11.43	33.31	100	342	A	H
		5760.12	55.02	-13.28	68.3	40.86	35.85	11.71	33.4	100	342	P	H
		5454.64	58.93	-15.07	74	45.23	35.62	11.39	33.31	142	18	P	V
		5464.88	63.94	-4.36	68.3	50.2	35.64	11.41	33.31	142	18	P	V
		5458.96	44.35	-9.65	54	30.65	35.62	11.39	33.31	142	18	A	V
		5506	107.1	-	-	93.29	35.67	11.45	33.31	142	18	P	V
		5506	99.42	-	-	85.61	35.67	11.45	33.31	142	18	A	V
		5754.6	54.47	-13.83	68.3	40.3	35.85	11.71	33.39	142	18	P	V
802.11ax HE40 Partial 242/62 CH 134 5670MHz		5447.6	54.79	-19.21	74	41.09	35.62	11.39	33.31	100	344	P	H
		5469.68	54.31	-13.99	68.3	40.57	35.64	11.41	33.31	100	344	P	H
		5455.92	44.13	-9.87	54	30.43	35.62	11.39	33.31	100	344	A	H
		5674	108.37	-	-	94.29	35.82	11.63	33.37	100	344	P	H
		5674	100.52	-	-	86.44	35.82	11.63	33.37	100	344	A	H
		5727.96	63.88	-4.42	68.3	49.74	35.84	11.68	33.38	100	344	P	H
		5374.16	54.69	-19.31	74	41.16	35.54	11.3	33.31	137	16	P	V
		5462	53.32	-14.98	68.3	39.62	35.62	11.39	33.31	137	16	P	V
		5459.92	44.03	-9.97	54	30.33	35.62	11.39	33.31	137	16	A	V
		5686	109.2	-	-	95.1	35.82	11.65	33.37	137	16	P	V
	5686	100.57	-	-	86.47	35.82	11.65	33.37	137	16	A	V	
	5725.08	63.32	-4.98	68.3	49.18	35.84	11.68	33.38	137	16	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 802.11ax HE80 Full (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test data for 802.11ax HE80 Full and CH 106 5530MHz, and a Remark section.



Band 3 5470~5725MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full		11059.05	47.99	-26.01	74	53.35	39.97	16.48	61.81	300	0	P	H
CH 106 5530MHz		11059.05	47.72	-26.28	74	53.08	39.97	16.48	61.81	100	360	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 802.11ax HE80 Partial 484 (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 1+2, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test data for frequencies 5414, 5469.84, 5459.98, 5506, 5506, 5746.84, 5453.68, 5469.36, 5459.44, 5524, 5524, 5734.6.

Remark

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



**Emission below 1GHz  
5GHz WIFI 802.11ax20 (LF)**

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
5GHz 802.11ax 20 LF		31.94	19.03	-20.97	40	26.33	24.04	0.86	32.2	-	-	P	H
		173.56	21.27	-22.23	43.5	35.6	15.48	2.29	32.1	-	-	P	H
		210.42	24.3	-19.2	43.5	38.69	15.2	2.53	32.12	100	360	P	H
		233.7	24.31	-21.69	46	36.97	16.84	2.67	32.17	-	-	P	H
		310.33	26.14	-19.86	46	35.68	19.5	3.08	32.12	-	-	P	H
		893.3	26.67	-19.33	46	24.57	29.13	5.2	32.23	-	-	P	H
		31.94	28.96	-11.04	40	36.26	24.04	0.86	32.2	100	0	P	V
		54.25	26.35	-13.65	40	43.88	13.4	1.27	32.2	-	-	P	V
		174.53	19.96	-23.54	43.5	34.33	15.43	2.3	32.1	-	-	P	V
		211.39	21.56	-21.94	43.5	35.94	15.21	2.53	32.12	-	-	P	V
		839.95	26.62	-19.38	46	24.89	29.08	5.03	32.38	-	-	P	V
	939.86	28.74	-17.26	46	24.99	30.63	5.32	32.2	-	-	P	V	
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against limit line.												



Co-location (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	(dBμV)	( dB/m )	( dB )	( dB )	( cm )	( deg )	(P/A)	(H/V)
802.11ax		5149.6	64.88	-9.12	74	51.78	35.33	11.09	33.32	150	169	P	H
HE20 Full		5149.92	50.59	-3.41	54	37.49	35.33	11.09	33.32	150	169	A	H
CH 36		5182	114.51	-	-	101.35	35.36	11.12	33.32	150	169	P	H
5180MHz+		5182	106.38	-	-	93.22	35.36	11.12	33.32	150	169	A	H
Bluetooth		5149.6	62.01	-11.99	74	48.91	35.33	11.09	33.32	120	204	P	V
worse		5149.98	48.32	-5.68	54	35.22	35.33	11.09	33.32	120	204	A	V
mode+		5182	108.28	-	-	95.12	35.36	11.12	33.32	120	204	P	V
WWAN													
worse		5182	100.41	-	-	87.25	35.36	11.12	33.32	120	204	A	V
mode													
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Co-location (Harmonic @ 3m)

WiFi Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 36 5180MHz+ Bluetooth		10358.36	44.64	-23.66	68.3	51.28	39.59	15.86	62.09	300	0	P	H
worse mode+ WWAN worse mode		10358.36	44.3	-24	68.3	50.94	39.59	15.86	62.09	100	360	P	V



**Note symbol**

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



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

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

**For Peak Limit @ 2390MHz:**

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

**For Average Limit @ 2390MHz:**

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

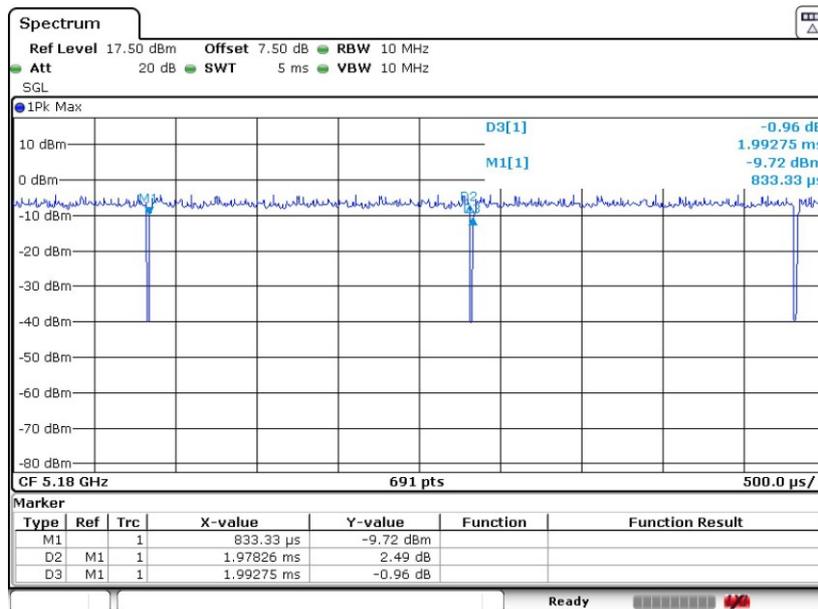
**Both peak and average measured complies with the limit line, so test result is “PASS”.**



## Appendix D. Duty Cycle Plots

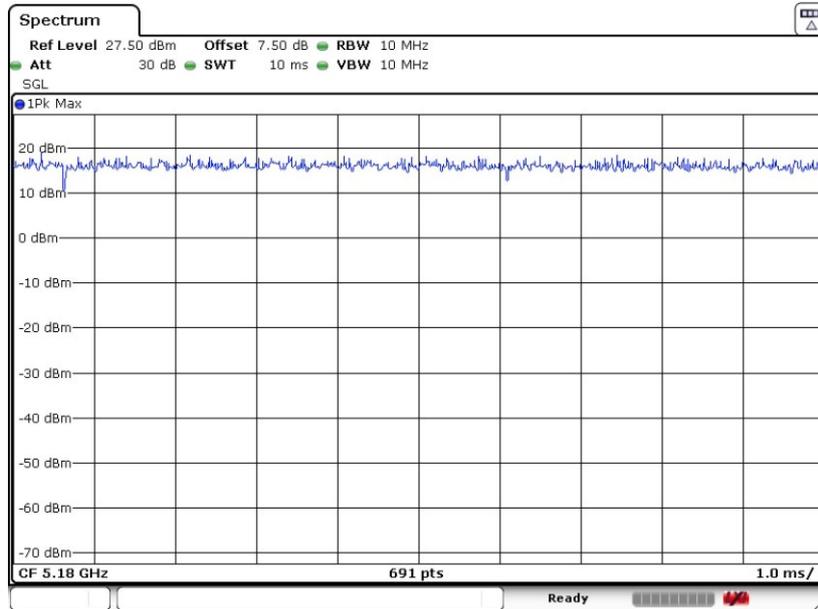
Antenna	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
1+2	802.11a	99.27	-	-	10Hz
1+2	802.11ac VHT20	100	-	-	10Hz
1+2	802.11ac VHT40	100	-	-	10Hz
1+2	802.11ac VHT80	100	-	-	10Hz
1+2	802.11ax HE20	100	-	-	10Hz
1+2	802.11ax HE40	100	-	-	10Hz
1+2	802.11ax HE80	100	-	-	10Hz

### 802.11a

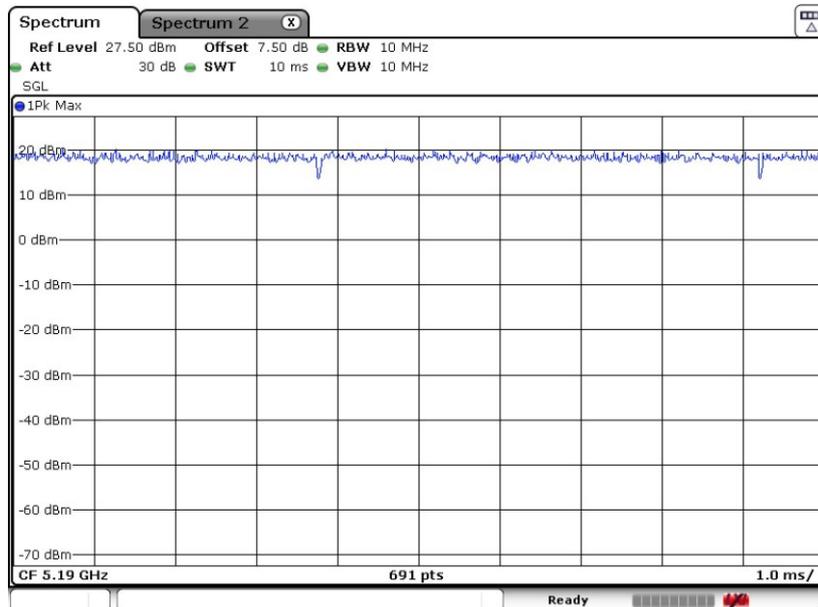




### 802.11ac VHT20

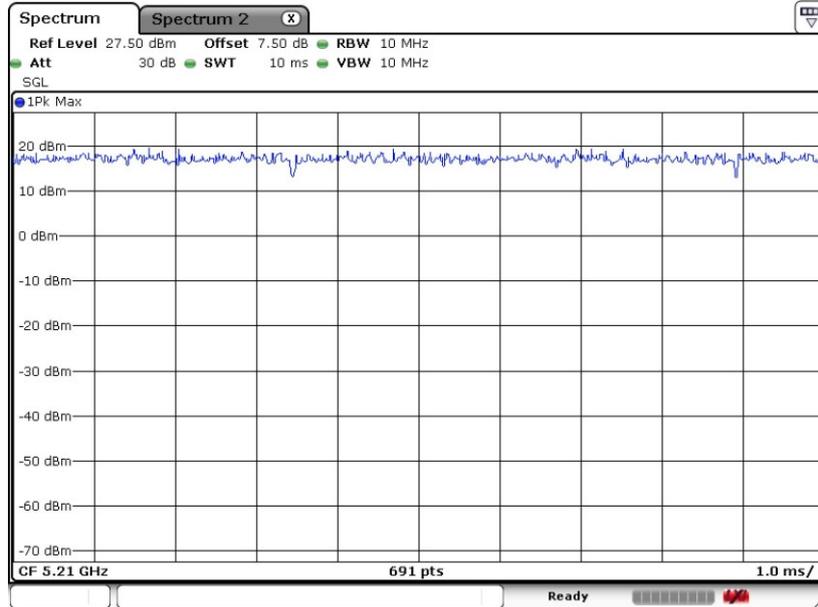


### 802.11ac VHT40

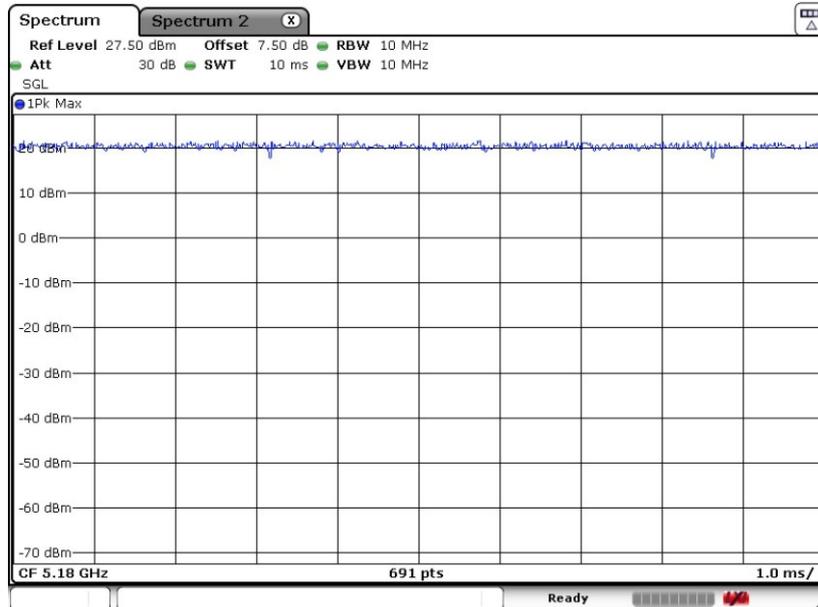




### 802.11ac VHT80

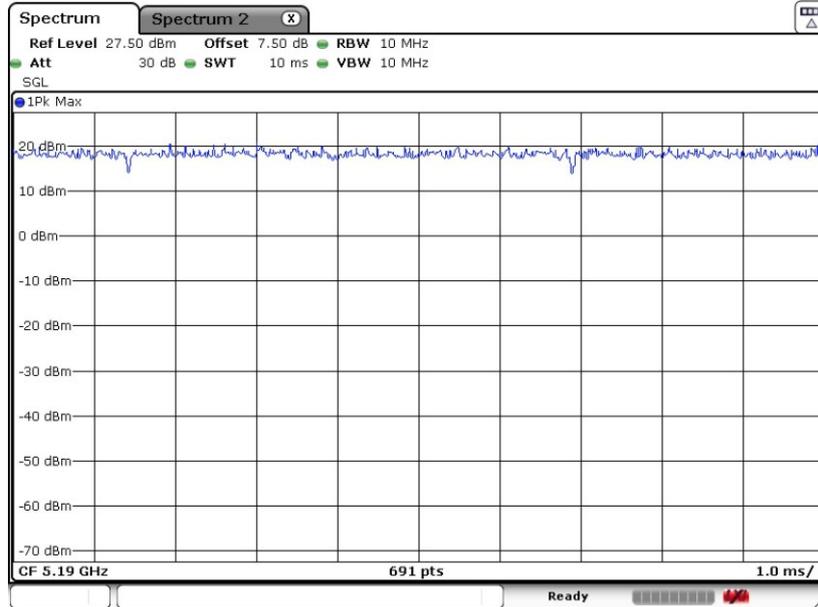


### 802.11ax HE20





### 802.11ax HE40



### 802.11ax HE80

