



# FCC RADIO TEST REPORT

**FCC ID** : 2AEM4-401217  
**Equipment** : eero PoE 6  
**Brand Name** : eero  
**Model Name** : T010001  
**Applicant** : eero LLC  
660 3rd Street,4th Floor,San Francisco,CA 94107-(415)738-7972  
**Manufacturer** : LUXSHARE-ICT(VIETNAM) LIMITED  
Lot E, Quang Chau industry park, Quang Chau village,Viet Yen district,Bac Giang province,Viet Nam  
**Standard** : FCC Part 15 Subpart E §15.407

The product was received on May 17, 2022 and testing was performed from May 25, 2022 to Jun. 30, 2022. We, Sporton International Inc. EMC & Wireless Communications Laboratory, 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 from Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

**Sporton International Inc. EMC & Wireless Communications Laboratory**

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)



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### History of this test report

Report No.	Version	Description	Issue Date
FR251805D	01	Initial issue of report	Jul. 21, 2022
FR251805D	02	Revise Product Feature and Appendix C	Jul. 27, 2022



### Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	6dB & 26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum Conducted Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	0.72 dB under the limit at 5648.000 MHz
3.5	15.207	AC Conducted Emission	Pass	2.02 dB under the limit at 0.393 MHz
3.6	15.203 15.407(a)	Antenna Requirement	Pass	-

**Declaration of Conformity:**

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to this report "Uncertainty of Evaluation".

**Comments and Explanations:**

The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.

**Reviewed by: Abi Lin**  
**Report Producer: Clio Lo**



# 1 General Description

## 1.1 Product Feature of Equipment Under Test

Bluetooth-LE, Wi-Fi 2.4GHz 802.11b/g/n/ax, Wi-Fi 5GHz 802.11a/n/ac/ax and Zigbee.

Product Feature	
Antenna Type	WLAN: <Ant. 1>: Stamping PIFA <Ant. 2>: Stamping PIFA Bluetooth-LE: FPC Dipole Zigbee: FPC Dipole

Antenna information		
5725 MHz ~ 5850 MHz	Peak Gain (dBi)	Ant. 1: 5.30 Ant. 2: 4.63

**Remark:** The EUT's information above is declared by manufacturer. Please refer to Comments and Explanations in report summary.

## 1.2 Modification of EUT

No modifications made to the EUT during the testing.



### 1.3 Testing Location

<b>Test Site</b>	Sporton International Inc. EMC & Wireless Communications Laboratory
<b>Test Site Location</b>	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
<b>Test Site No.</b>	<b>Sporton Site No.</b> TH02-HY, CO05-HY, 03CH07-HY

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

FCC designation No.: TW1190

### 1.4 Applicable Standards

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

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2013

**Remark:**

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.
3. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



## 2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in four orthogonal axis (X: flat, X: ceiling-mount, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and find X: flat plane as worst plane.
  
- 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)
5725-5850 MHz Band 4 (U-NII-3)	149	5745	157	5785
	151*	5755	159*	5795
	153	5765	161	5805
	155#	5775	165	5825

**Note:**

- 1. The above Frequency and Channel with "\*" are 802.11n HT40 and 802.11ac VHT40 and 802.11ax HE40.
- 2. The above Frequency and Channel with "#" are 802.11ac VHT80 and 802.11ax HE80.
- 3. The device not support 802.11ax partial RU.



## 2.2 Test Mode

The CDD mode is chosen as worst case configuration for all test cases due to higher power than SISO mode.

The 802.11n/ac mode has no higher power and PSD than 802.11ax mode, thus the 802.11ax mode is chosen as main test configuration, and the 802.11n/ac mode is verified the power.

The final test modes consider the modulation and the worst data rates as shown in the table below.

### MIMO Mode

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20 (Covered by HE20)	MCS0
802.11n HT40 (Covered by HE40)	MCS0
802.11ac VHT20 (Covered by HE20)	MCS0
802.11ac VHT40 (Covered by HE40)	MCS0
802.11ac VHT80 (Covered by HE80)	MCS0
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0

**Remark:** The conducted power level of each chain in MIMO mode is equal or higher than SISO mode.

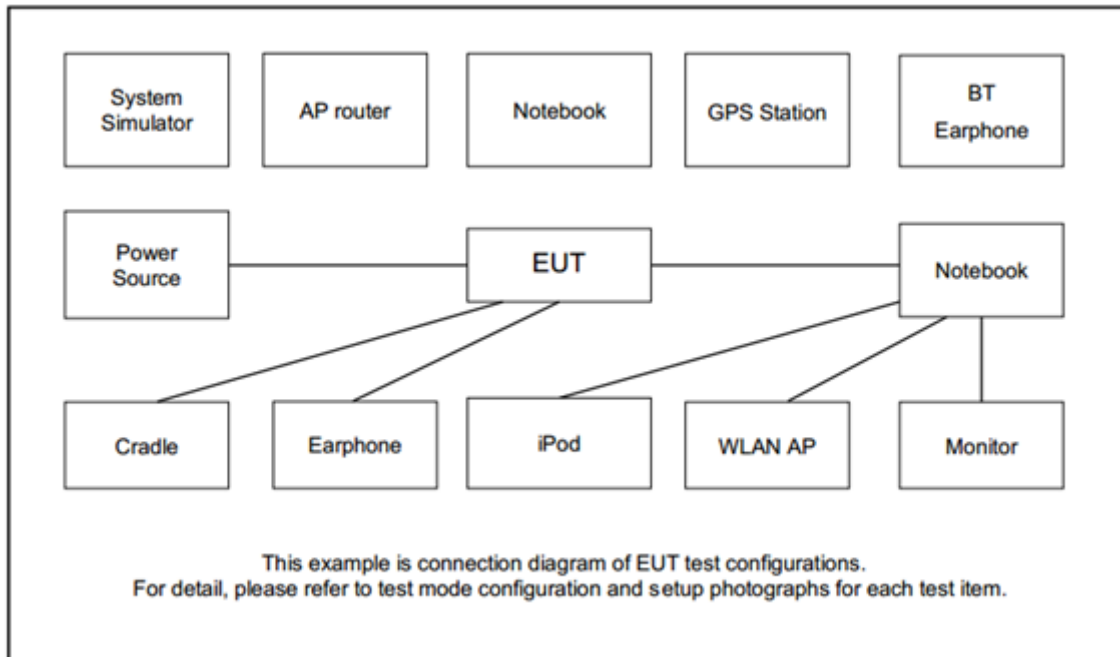
Test Cases	
AC Conducted Emission	Mode 1: WLAN (5GHz) Link + LAN1 Link + LAN2 Link + RJ45 Cable (Charging from POE Adapter)

Ch. #	Band IV : 5725-5850 MHz			
	802.11a	802.11ax HE20	802.11ax HE40	802.11ax HE80
L Low	149	149	151	-
M Middle	157	157	-	155
H High	165	165	159	-

**Remark:** For radiation spurious emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power.



### 2.3 Connection Diagram of Test System



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

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	POE Adapter	MITTS	POE-BTI-7556NT8	N/A	N/A	N/A
2.	Smart Things Button	N/A	IM6001-BTP01	N/A	N/A	N/A
3.	RJ45 cable	N/A	N/A	N/A	N/A	N/A
4.	Notebook	Dell	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	Notebook	Dell	E3340	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m



## 2.5 EUT Operation Test Setup

The RF test items, utility “QSPR V5.0-00188” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

## 2.6 Measurement Results Explanation Example

**For all conducted test items:**

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

*Offset = RF cable loss + attenuator factor.*

Following shows an offset computation example with cable loss 4.2 dB and 10 dB attenuator.

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\ &= 4.2 + 10 = 14.2 \text{ (dB)} \end{aligned}$$

### 3 Test Result

#### 3.1 6dB and 26dB and 99% Occupied Bandwidth Measurement

##### 3.1.1 Description of 6dB and 26dB and 99% Occupied Bandwidth

The minimum 6 dB bandwidth shall be at least 500 kHz.

26dB and 99% Occupied bandwidth are reporting only.

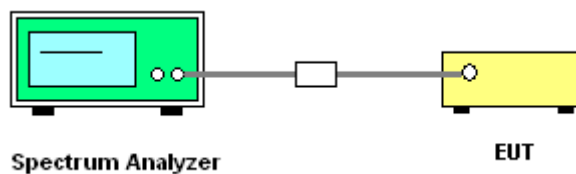
##### 3.1.2 Measuring Instruments

Please refer to the measuring equipment list in 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 for the band 5.725-5.85 GHz
2. Set RBW = 100 kHz.
3. Set the VBW  $\geq 3 \times$  RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 6 dB down from the peak of the emission.
7. Measure and record the results in the test report.

##### 3.1.4 Test Setup



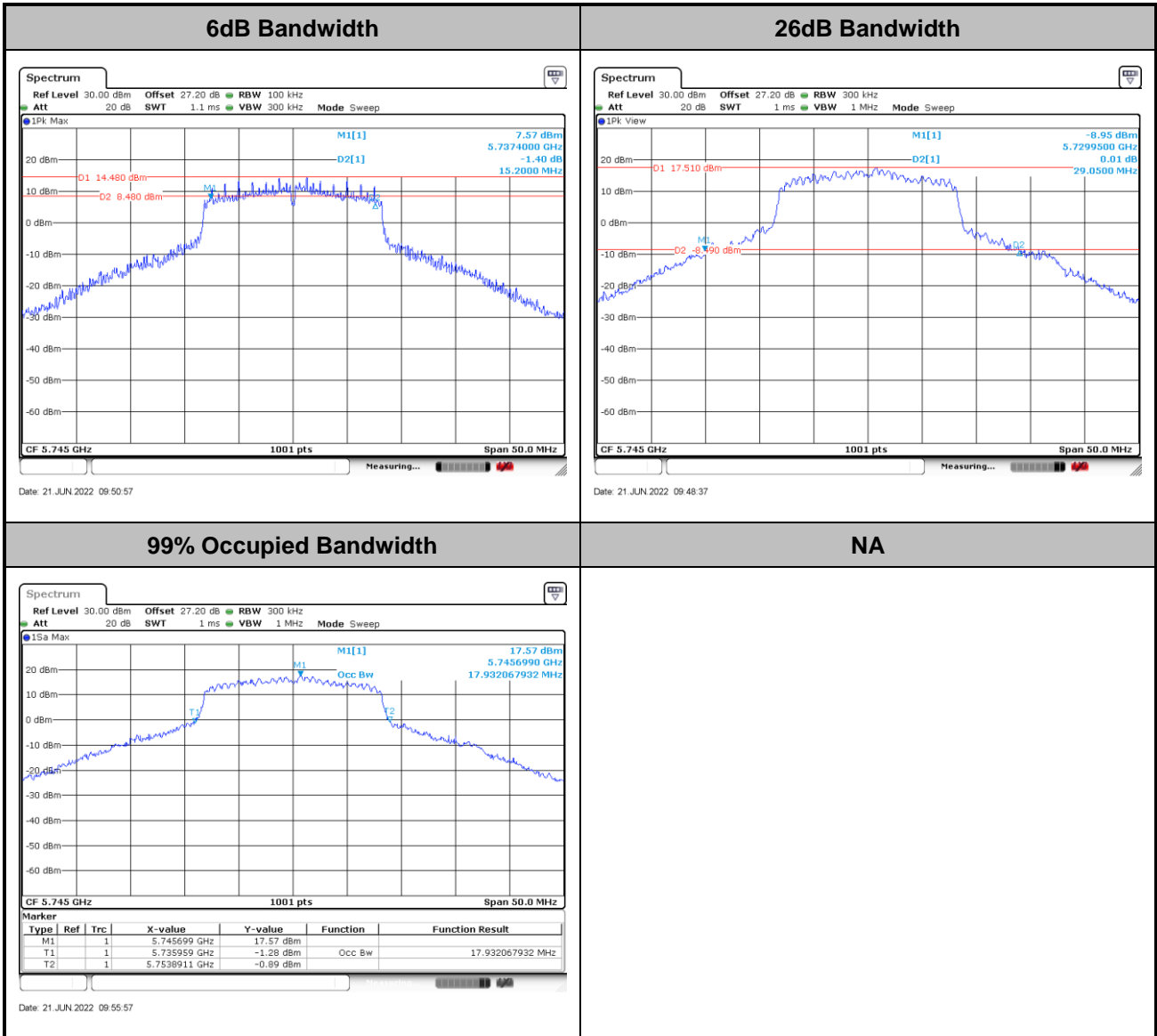
##### 3.1.5 Test Result of 6dB and 26dB and 99% Occupied Bandwidth

Please refer to Appendix A.



MIMO <Ant. 1+2>

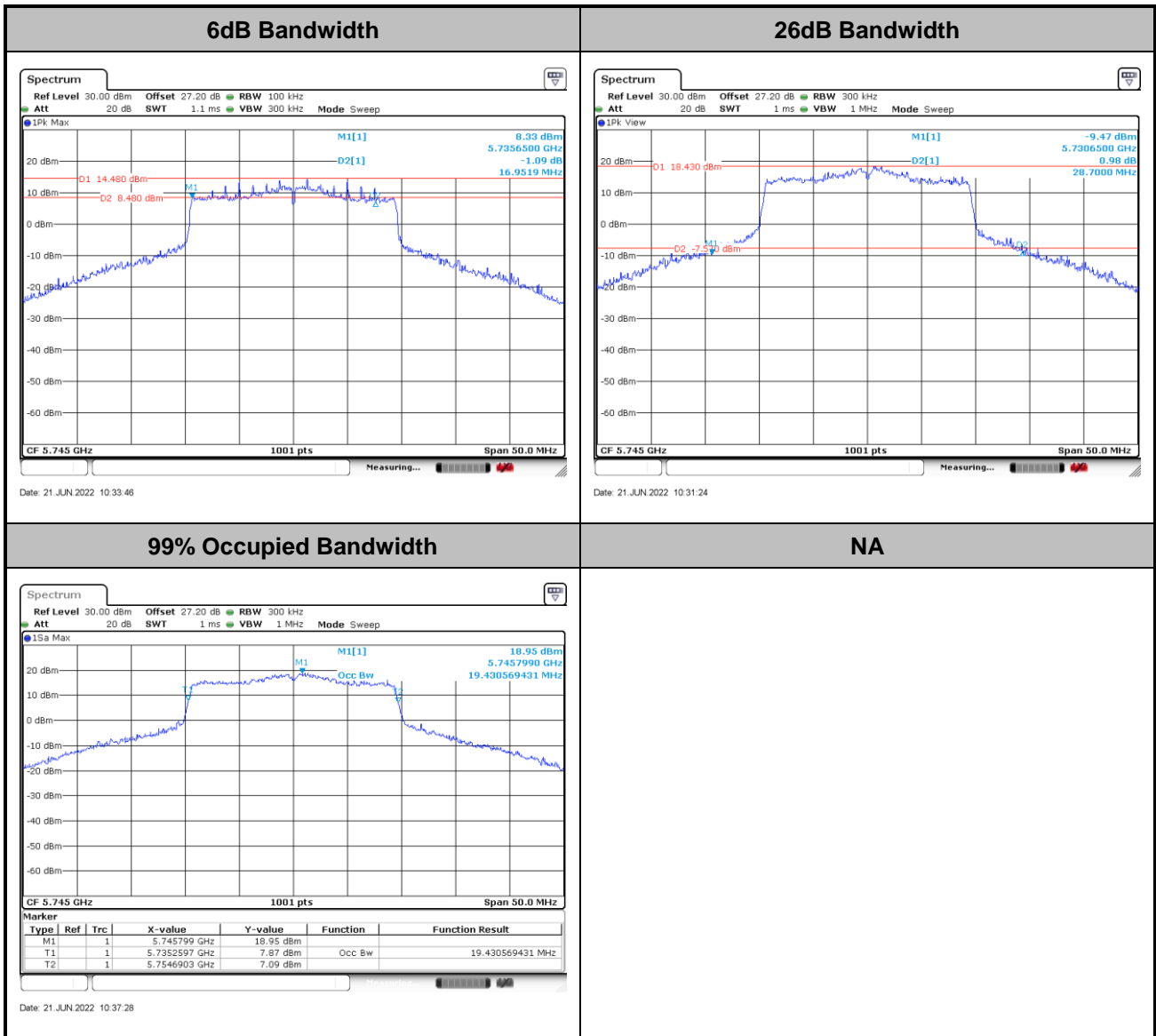
<802.11a>



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



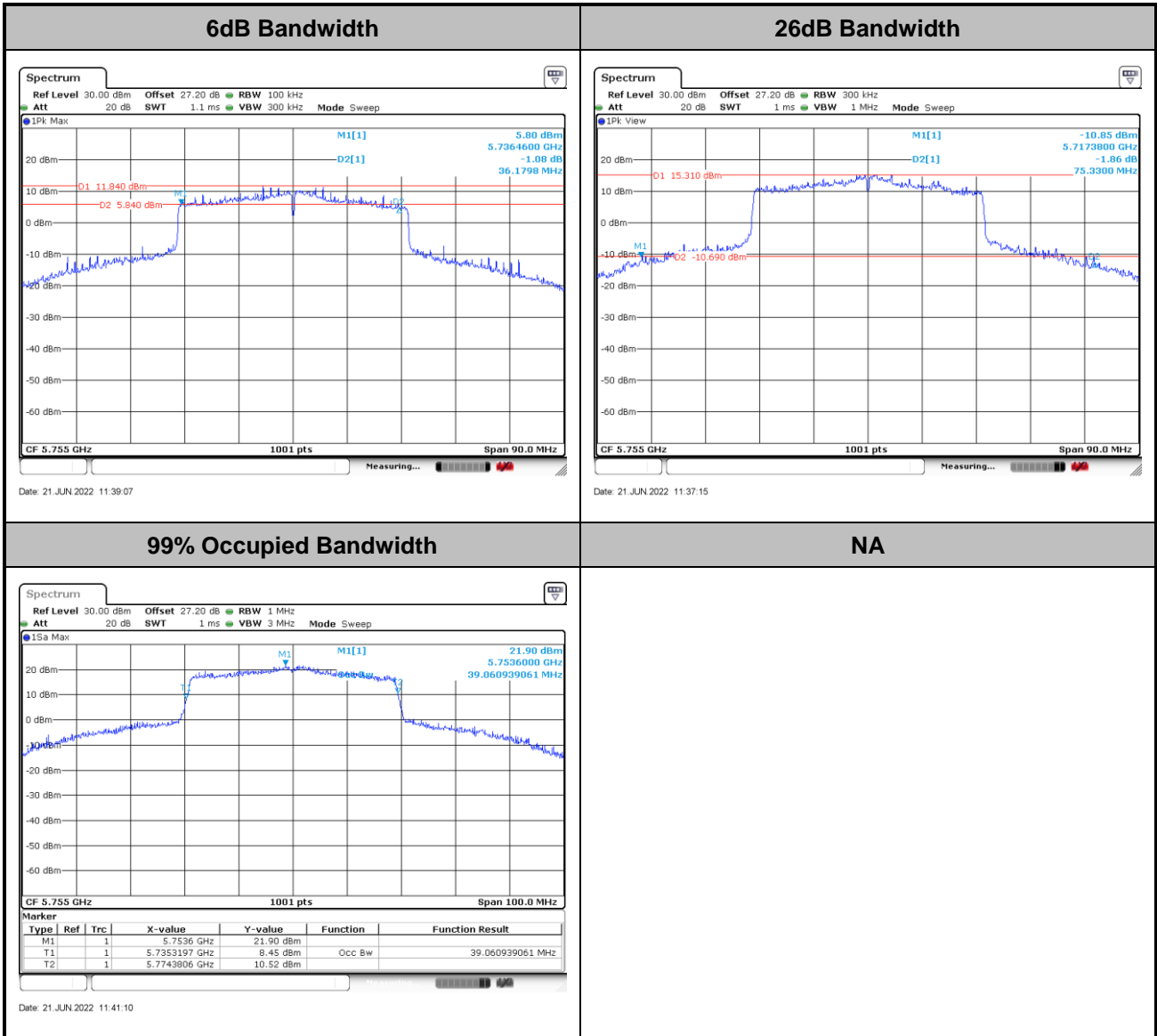
<802.11ax HE20>



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



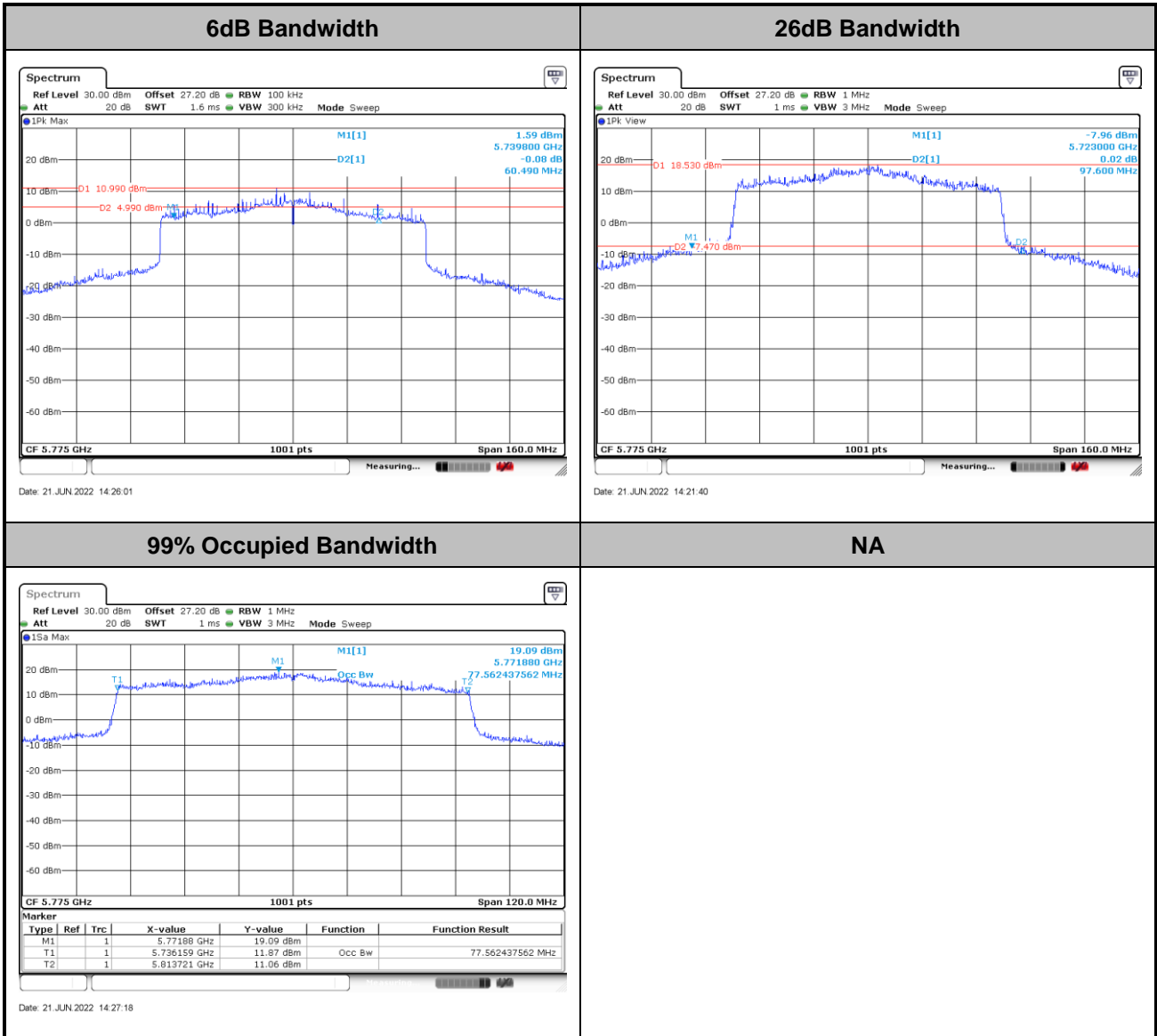
<802.11ax HE40>



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



<802.11ax HE80>



**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

For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

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.

### 3.2.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

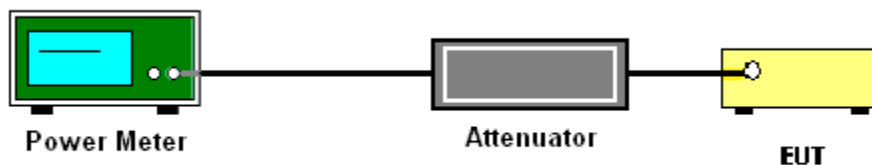
### 3.2.3 Test Procedures

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

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter.
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01

### 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

For the band 5.725–5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz 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

Please refer to the measuring equipment list in 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).

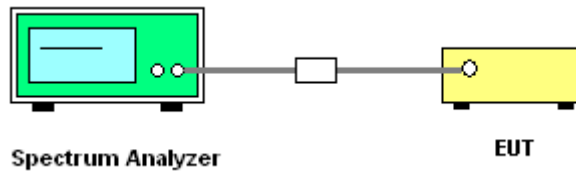
- Measure the duty cycle.
  - Set span to encompass the entire emission bandwidth (EBW) of the signal.
  - Set RBW = 300kHz.
  - Set VBW  $\geq$  1 MHz.
  - Add  $10 \log(500 \text{ kHz/RBW})$  to the measured result, whereas RBW (<500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement
  - Number of points in sweep  $\geq 2 \text{ Span} / \text{RBW}$ .
  - 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  $10 \log(1/0.25) = 6 \text{ dB}$  if the duty cycle is 25 percent.
1. The RF output of EUT is 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.

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

Method (c): Measure and add  $10 \log(N_{ANT})$  dB.

With this technique, spectrum measurements are performed at each output of the device, but rather than summing the spectra or the spectral peaks across the outputs, the quantity  $10 \log(N_{ANT})$  dB is added to each spectrum value before comparing to the emission limit. The addition of  $10 \log(N_{ANT})$  dB serves to apportion the emission limit among the  $N_{ANT}$  outputs so that each output is permitted to contribute no more than  $1/N_{ANT}^{th}$  of the PSD limit.

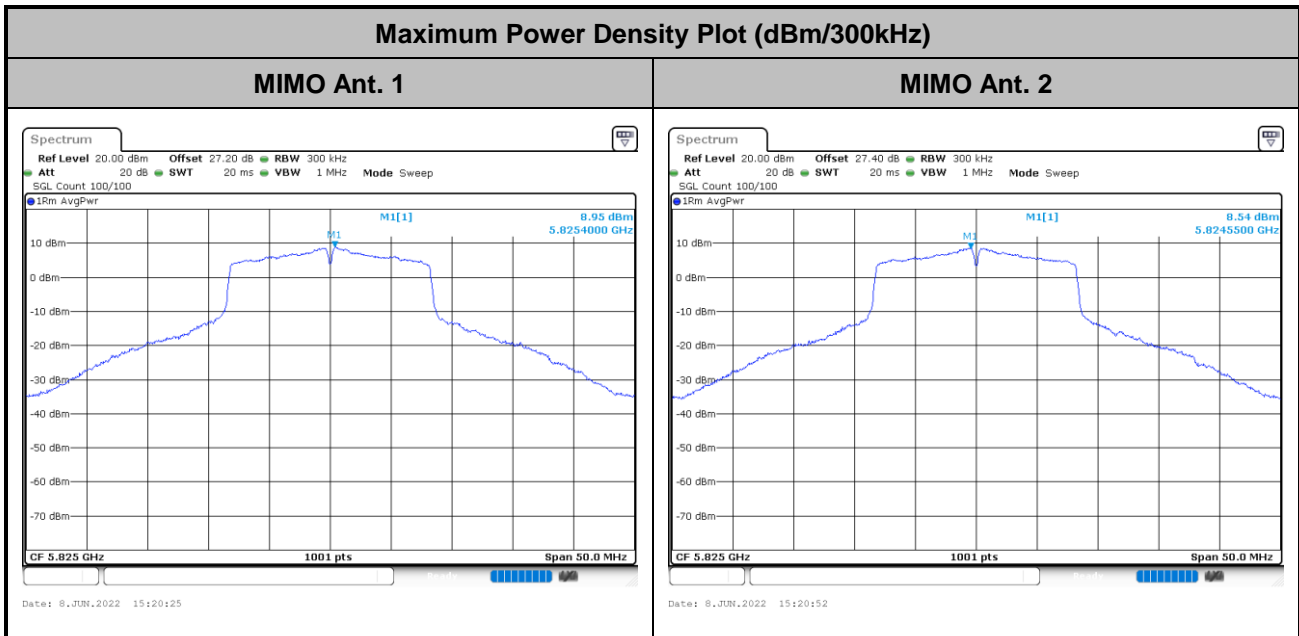
### 3.3.4 Test Setup



### 3.3.5 Test Result of Power Spectral Density

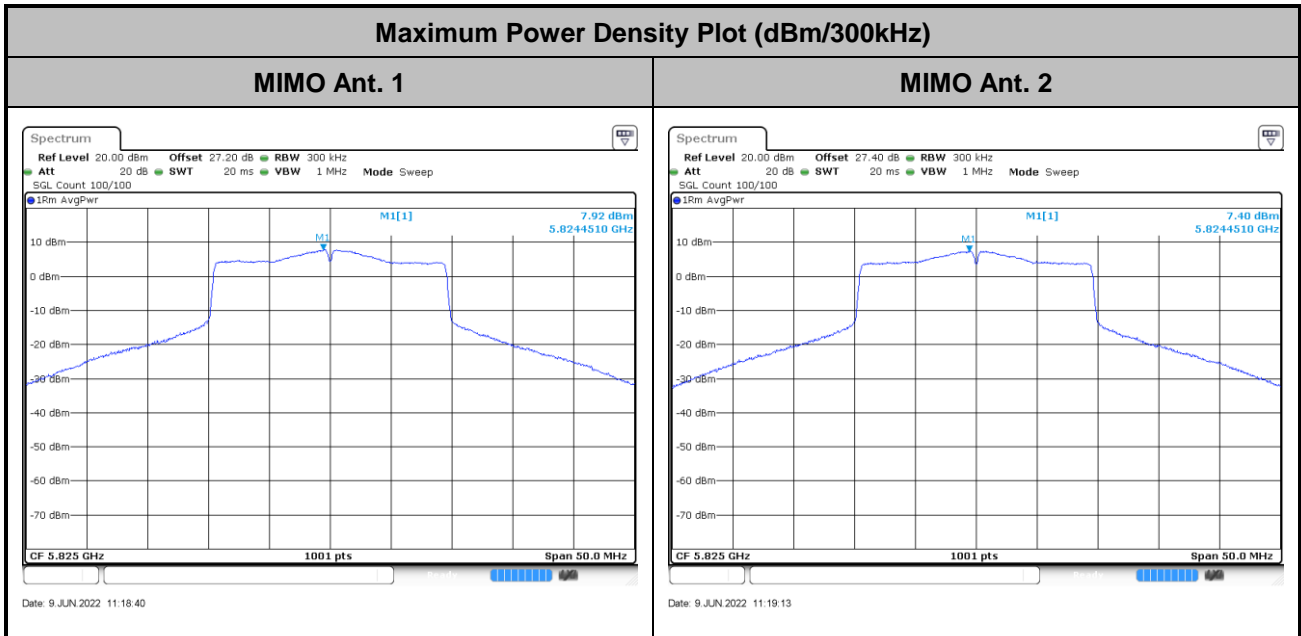
Please refer to Appendix A.

<802.11a>





<802.11ax HE20>



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



### 3.4 Unwanted Emissions Measurement

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

#### 3.4.1 Limit of Unwanted Emissions

(1) For transmitters operating in the 5.725-5.85 GHz band:

15.407(b)(4)(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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

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

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

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

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

(3) KDB789033 D02 v02r01 G)2)c)

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

(ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are based on the use of a peak detector.



### 3.4.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

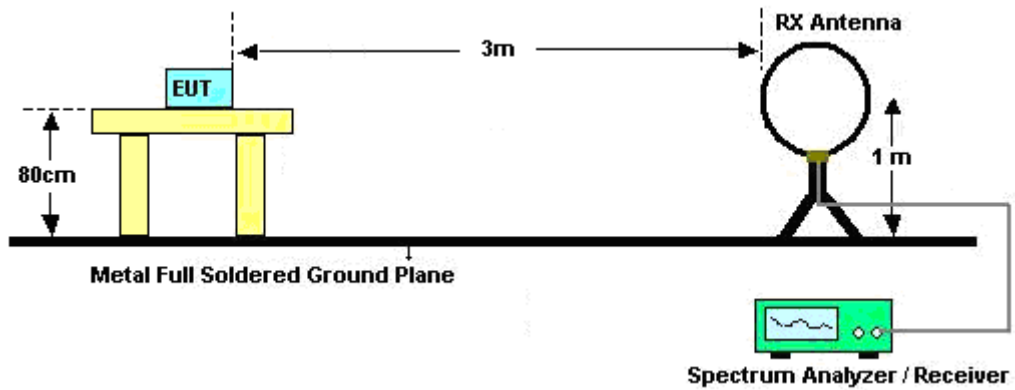
### 3.4.3 Test Procedures

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 1000 MHz
    - 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 1000 MHz
    - 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 is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is 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 is 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.

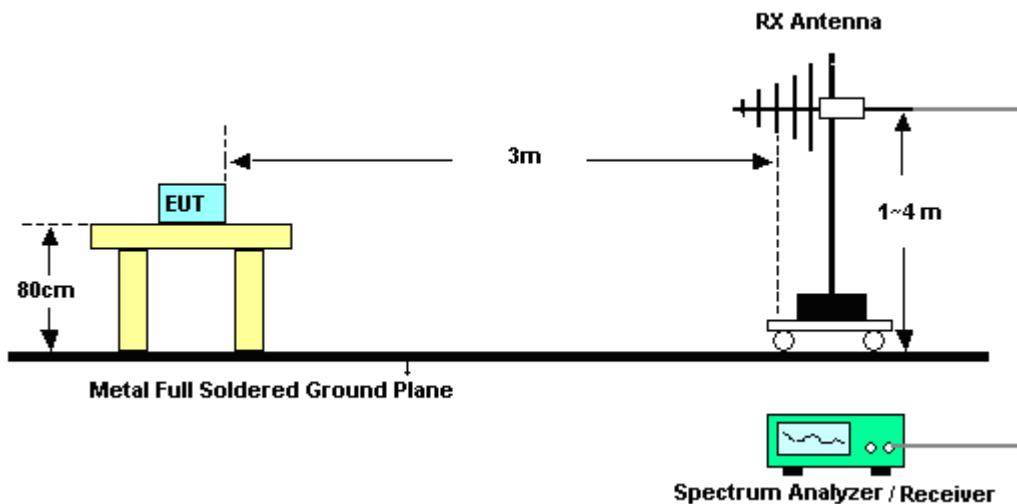
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as “-“.
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as “-“.

**3.4.4 Test Setup**

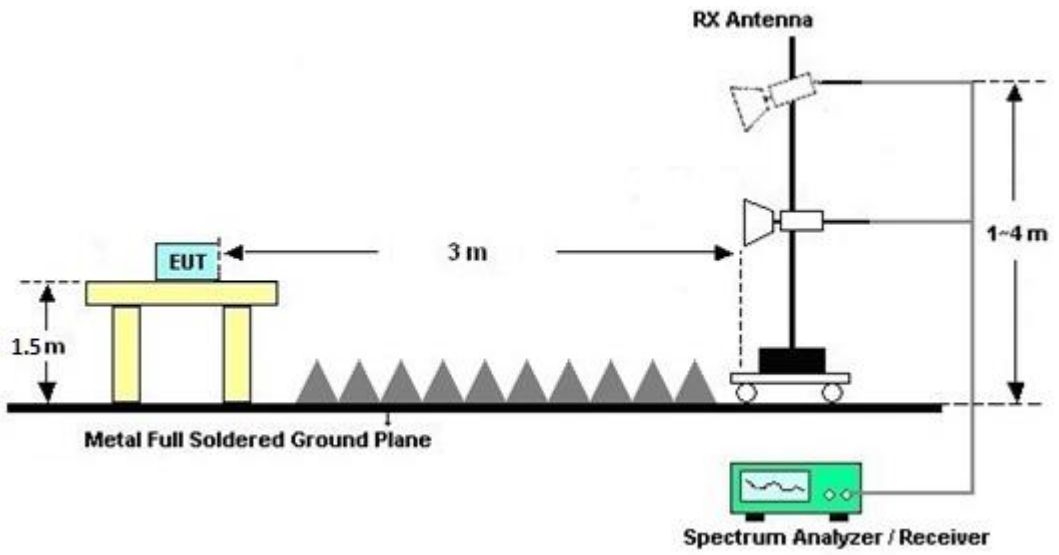
**For radiated emissions below 30MHz**



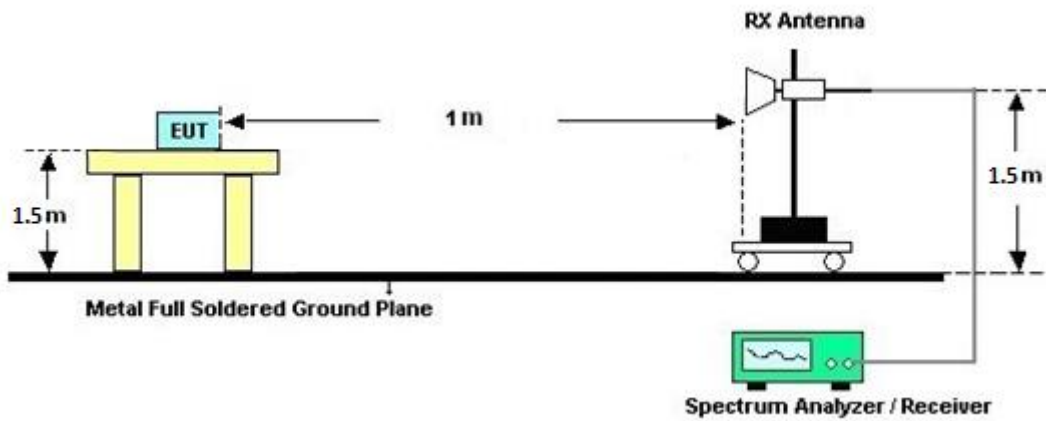
**For radiated emissions from 30MHz to 1GHz**



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz





### **3.4.5 Test Results of Radiated Emissions (9 kHz ~ 30 MHz)**

The low frequency, which starts from 9 kHz to 30 MHz, is pre-scanned and the result which is 20 dB lower than the limit line is not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

### **3.4.6 Test Result of Radiated Band Edges**

Please refer to Appendix C and D.

### **3.4.7 Duty Cycle**

Please refer to Appendix E.

### **3.4.8 Test Result of Unwanted Radiated Emission (30MHz ~ 10th Harmonic)**

Please refer to Appendix C and D.





### 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 (dB $\mu$ V)	
	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.

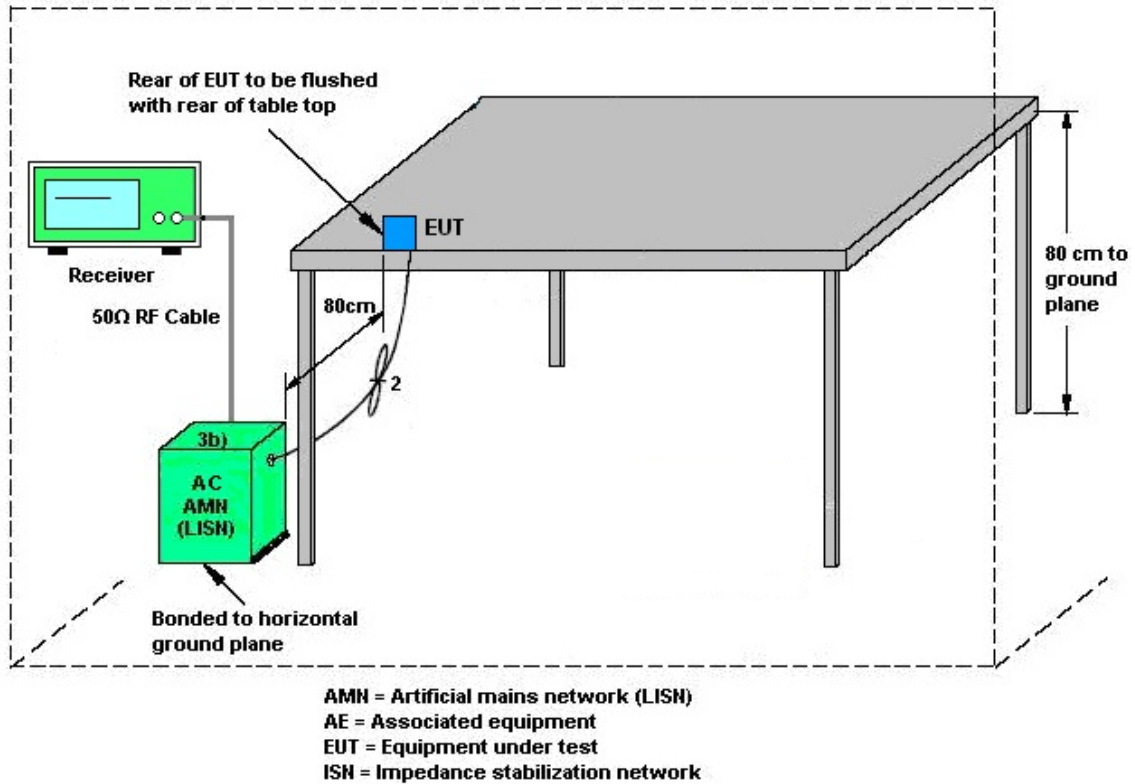
#### 3.5.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

#### 3.5.3 Test Procedures

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is 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 shall be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

### 3.5.4 Test Setup



### 3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

### 3.6 Antenna Requirements

#### 3.6.1 Standard Applicable

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

#### 3.6.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

#### 3.6.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For power measurements on IEEE 802.11 devices,

Directional gain =  $G_{ANT}$  + Array Gain, where Array Gain is as follows:

Array Gain = 0 dB (i.e., no array gain) for  $N_{ANT} \leq 4$ .

$G_{ANT}$  is set equal to the gain of the antenna having the highest gain.

For PSD measurements, the directional gain calculation follows F)2)f)ii) of KDB 662911 D01 v02r01.

$$DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

$N_{SS}$  = the number of independent spatial streams of data;

$N_{ANT}$  = the total number of antennas

$g_{j,k} = 10^{G_k/20}$  if the  $k$ th antenna is being fed by spatial stream  $j$ , or zero if it is not;  
 $G_k$  is the gain in dBi of the  $k$ th antenna.

As minimum  $N_{SS}=1$  is supported by EUT, the formula can be simplified as:

Directional gain =  $10 \cdot \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$  dBi

Where  $G_1, G_2, \dots, G_N$  denote single antenna gain.

For example: If a device has two antenna,  $G_{ANT1}= 3.6$ dBi;  $G_{ANT2}=4.2$ dBi

Directional gain of power measurement =  $\max(3.6, 4.2) + 0 = 4.2$  dBi

Directional gain of PSD measurement =  $10 \cdot \log[ (10^{3.6/20} + 10^{4.2/20})^2 / 2 ] = 6.92$  dBi



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

<CDD Modes>						
			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant. 1	Ant. 2	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
<b>Band IV</b>	5.30	4.63	5.30	7.98	0.00	1.98

Power Limit Reduction = DG(Power) – 6dBi, ( min = 0 )

PSD Limit Reduction = DG(PSD) – 6dBi, ( min = 0 )

Calculation example:

The DG for PSD is derived from formula is

$$10 \times \log \{ \{ [ 10^{(5.30 \text{ dBi} / 20)} + 10^{(4.63 \text{ dBi} / 20)} ] ^ 2 \} / 2 \}$$

$$= 7.98 \text{ dBi}$$



## 4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	35419 & 03	30MHz~1GHz	Apr. 24, 2022	May 25, 2022~Jun. 24, 2022	Apr. 23, 2023	Radiation (03CH07-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Feb. 09, 2022	May 25, 2022~Jun. 24, 2022	Feb. 08, 2023	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 03, 2021	May 25, 2022~Jun. 24, 2022	Dec. 02, 2022	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Jan. 07, 2022	May 25, 2022~Jun. 24, 2022	Jan. 06, 2023	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 21, 2022	May 25, 2022~Jun. 24, 2022	Apr. 20, 2023	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 04, 2021	May 25, 2022~Jun. 24, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Oct. 04, 2021	May 25, 2022~Jun. 24, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 23, 2021	May 25, 2022~Jun. 24, 2022	Jul. 22, 2022	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Jul. 22, 2021	May 25, 2022~Jun. 24, 2022	Jul. 21, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682/4	30MHz to 18GHz	Feb. 23, 2022	May 25, 2022~Jun. 24, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4	9kHz to 18GHz	Feb. 23, 2022	May 25, 2022~Jun. 24, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4	9kHz to 18GHz	Feb. 23, 2022	May 25, 2022~Jun. 24, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 17, 2021	May 25, 2022~Jun. 24, 2022	Sep. 16, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 23, 2022	May 25, 2022~Jun. 24, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	Apr. 14, 2022	May 25, 2022~Jun. 24, 2022	Apr. 13, 2023	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	May 25, 2022~Jun. 24, 2022	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	May 25, 2022~Jun. 24, 2022	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	May 25, 2022~Jun. 24, 2022	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	May 25, 2022~Jun. 24, 2022	N/A	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	May 25, 2022~Jun. 24, 2022	N/A	Radiation (03CH07-HY)
Hygrometer	TECEPEL	TR-32	HE17XB2495	N/A	Mar. 07, 2022	May 25, 2022~Jun. 24, 2022	Mar. 06, 2023	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA917025 1	18GHz~40GHz	Nov. 30, 2021	May 25, 2022~Jun. 24, 2022	Nov. 29, 2022	Radiation (03CH07-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jun. 30, 2022	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2021	Jun. 30, 2022	Nov. 30, 2022	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2021	Jun. 30, 2022	Nov. 16, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 03, 2021	Jun. 30, 2022	Dec. 02, 2022	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	Jun. 30, 2022	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-FN	00691	N/A	Jul. 28, 2021	Jun. 30, 2022	Jul. 27, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 30, 2021	Jun. 30, 2022	Dec. 29, 2022	Conduction (CO05-HY)
Hygrometer	TECPEL	TR-32	HE17XB2468	N/A	Mar. 18, 2022	Jun. 01, 2022~ Jun. 29, 2022	Mar. 17, 2023	Conducted (TH02-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO10	10MHz~6GHz	Dec. 16, 2021	Jun. 01, 2022~ Jun. 29, 2022	Dec. 15, 2022	Conducted (TH02-HY)
Signal Analyzer	Rohde & Schwarz	FSV30	103738	9kHz~30GHz	May 26, 2022	Jun. 01, 2022~ Jun. 29, 2022	May 25, 2023	Conducted (TH02-HY)
Switch Box & RF Cable	Burgeon	ETF058	EC1208381	N/A	Jun. 08, 2021	Jun. 01, 2022~ Jun. 06, 2022	Jun. 07, 2022	Conducted (TH02-HY)
Switch Box & RF Cable	Burgeon	ETF058	EC1208381	N/A	Jun. 06, 2022	Jun. 07, 2022~ Jun. 29, 2022	Jun. 05, 2023	Conducted (TH02-HY)



## 5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	3.1 dB
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### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.1 dB
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### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.8 dB
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### Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.0 dB
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**Appendix A. Test Result of Conducted Test Items**

Test Engineer:	Steve Chen	Temperature:	21~25	°C
Test Date:	2022/6/2 ~ 2022/6/29	Relative Humidity:	51~54	%



**TEST RESULTS DATA**  
**6dB and 26dB EBW and 99% OBW**

U-NII-3 MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	149	5745	17.93	18.03	29.05	29.90	15.20	15.20	0.5	Pass
11a	6Mbps	2	157	5785	17.68	17.73	29.10	29.60	15.20	15.20	0.5	Pass
11a	6Mbps	2	165	5825	17.78	17.93	30.20	29.90	15.20	15.20	0.5	Pass

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

U-NII-3 MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	149	5745	23.50	24.00	26.77	30.00		5.30		Pass
11a	6Mbps	2	157	5785	23.50	23.70	26.61	30.00		5.30		Pass
11a	6Mbps	2	165	5825	23.80	23.60	26.71	30.00		5.30		Pass
HT20	MCS0	2	149	5745	23.60	23.70	26.66	30.00		5.30		Pass
HT20	MCS0	2	157	5785	23.60	23.50	26.56	30.00		5.30		Pass
HT20	MCS0	2	165	5825	23.70	23.50	26.61	30.00		5.30		Pass
HT40	MCS0	2	151	5755	23.80	23.90	26.86	30.00		5.30		Pass
HT40	MCS0	2	159	5795	23.90	23.80	26.86	30.00		5.30		Pass
VHT20	MCS0	2	149	5745	23.80	23.70	26.76	30.00		5.30		Pass
VHT20	MCS0	2	157	5785	23.60	23.50	26.56	30.00		5.30		Pass
VHT20	MCS0	2	165	5825	23.70	23.50	26.61	30.00		5.30		Pass
VHT40	MCS0	2	151	5755	24.10	24.20	27.16	30.00		5.30		Pass
VHT40	MCS0	2	159	5795	24.20	24.20	27.21	30.00		5.30		Pass
VHT80	MCS0	2	155	5775	23.80	23.80	26.81	30.00		5.30		Pass

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

U-NII-3 MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density with Duty Factor (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	149	5745	0.30	0.26	2.22		11.38	11.38	14.39	28.02		7.98		Pass
11a	6Mbps	2	157	5785	0.30	0.26	2.22		11.33	11.19	14.34	28.02		7.98		Pass
11a	6Mbps	2	165	5825	0.30	0.26	2.22		11.47	11.01	14.48	28.02		7.98		Pass

**TEST RESULTS DATA**  
**6dB and 26dB EBW and 99% OBW**

U-NII-3 MIMO													
Mod.	Data Rate	N <sub>Tx</sub>	CH.	Freq. (MHz)	RU Config	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
						Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
HE20	MCS0	2	149	5745	Full	19.43	19.38	28.70	31.15	16.95	16.60	0.5	Pass
HE20	MCS0	2	157	5785	Full	19.38	19.23	29.75	29.15	17.88	16.35	0.5	Pass
HE20	MCS0	2	165	5825	Full	19.38	19.33	28.45	28.35	18.69	16.50	0.5	Pass
HE40	MCS0	2	151	5755	Full	39.06	39.06	75.33	64.17	36.18	36.99	0.5	Pass
HE40	MCS0	2	159	5795	Full	39.26	38.86	70.47	74.88	36.18	37.35	0.5	Pass
HE80	MCS0	2	155	5775	Full	77.56	77.44	97.60	111.36	60.49	61.77	0.5	Pass

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

U-NII-3 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
HE20	MCS0	2	149	5745	Full	23.80	23.80	26.81	30.00		5.30		Pass
HE20	MCS0	2	157	5785	Full	23.60	23.60	26.61	30.00		5.30		Pass
HE20	MCS0	2	165	5825	Full	23.80	23.50	26.66	30.00		5.30		Pass
HE40	MCS0	2	151	5755	Full	24.20	24.20	27.21	30.00		5.30		Pass
HE40	MCS0	2	159	5795	Full	24.30	24.20	27.26	30.00		5.30		Pass
HE80	MCS0	2	155	5775	Full	23.90	24.00	26.96	30.00		5.30		Pass

Note: Measured power (dBm) has offset with cable loss and duty factor.

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

U-NII-3 MIMO																	
Mod.	Data Rate	N <sub>TX</sub>	CH.	Freq. (MHz)	RU Config	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density with Duty Factor (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
						Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
HE20	MCS0	2	149	5745	Full	0.38	0.38	2.22	10.12	9.99	13.13	28.02	28.02	7.98	7.98	Pass	
HE20	MCS0	2	157	5785	Full	0.38	0.38	2.22	10.17	10.16	13.18	28.02	28.02	7.98	7.98	Pass	
HE20	MCS0	2	165	5825	Full	0.38	0.38	2.22	10.52	10.00	13.53	28.02	28.02	7.98	7.98	Pass	
HE40	MCS0	2	151	5755	Full	0.38	0.41	2.22	7.80	7.82	10.83	28.02	28.02	7.98	7.98	Pass	
HE40	MCS0	2	159	5795	Full	0.38	0.41	2.22	8.23	8.11	11.24	28.02	28.02	7.98	7.98	Pass	
HE80	MCS0	2	155	5775	Full	0.40	0.38	2.22	4.95	4.91	7.96	28.02	28.02	7.98	7.98	Pass	



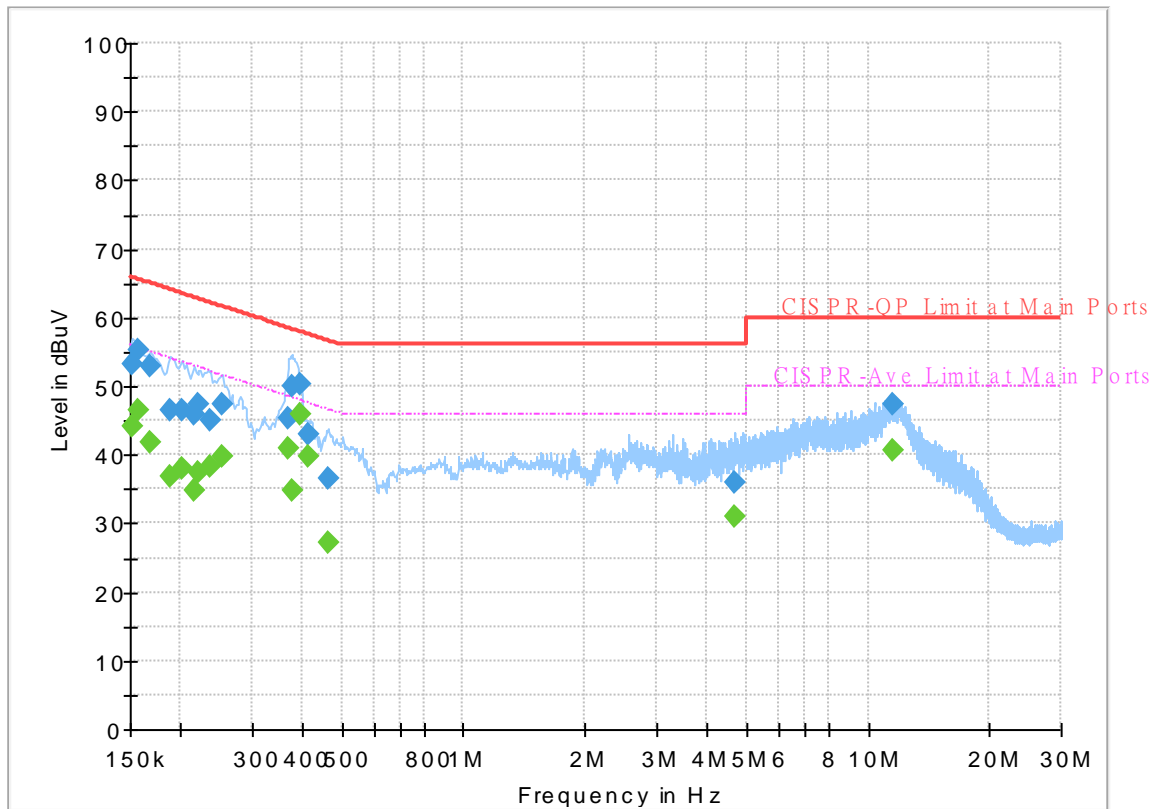
## Appendix B. AC Conducted Emission Test Results

Test Engineer :	Tom Lee	Temperature :	23~26°C
		Relative Humidity :	45~55%

# EUT Information

Report NO : 251805  
 Test Mode : Mode 1  
 Test Voltage : 120Vac/60Hz  
 Phase : Line

Full Spectrum



## Final\_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	44.04	55.88	11.84	L1	OFF	19.6
0.152250	53.20	---	65.88	12.68	L1	OFF	19.6
0.156750	---	46.40	55.63	9.23	L1	OFF	19.6
0.156750	55.27	---	65.63	10.36	L1	OFF	19.6
0.168000	---	41.95	55.06	13.11	L1	OFF	19.6
0.168000	52.81	---	65.06	12.25	L1	OFF	19.6
0.188250	---	36.72	54.11	17.39	L1	OFF	19.6
0.188250	46.44	---	64.11	17.67	L1	OFF	19.6
0.201750	---	38.02	53.54	15.52	L1	OFF	19.6
0.201750	46.61	---	63.54	16.93	L1	OFF	19.6
0.215250	---	34.69	53.00	18.31	L1	OFF	19.6
0.215250	45.91	---	63.00	17.09	L1	OFF	19.6
0.222000	---	37.31	52.74	15.43	L1	OFF	19.6
0.222000	47.29	---	62.74	15.45	L1	OFF	19.6
0.237750	---	38.18	52.17	13.99	L1	OFF	19.6
0.237750	45.06	---	62.17	17.11	L1	OFF	19.6
0.253500	---	39.75	51.64	11.89	L1	OFF	19.6
0.253500	47.27	---	61.64	14.37	L1	OFF	19.6
0.368250	---	41.05	48.54	7.49	L1	OFF	19.6
0.368250	45.47	---	58.54	13.07	L1	OFF	19.6
0.377250	---	34.79	48.34	13.55	L1	OFF	19.6

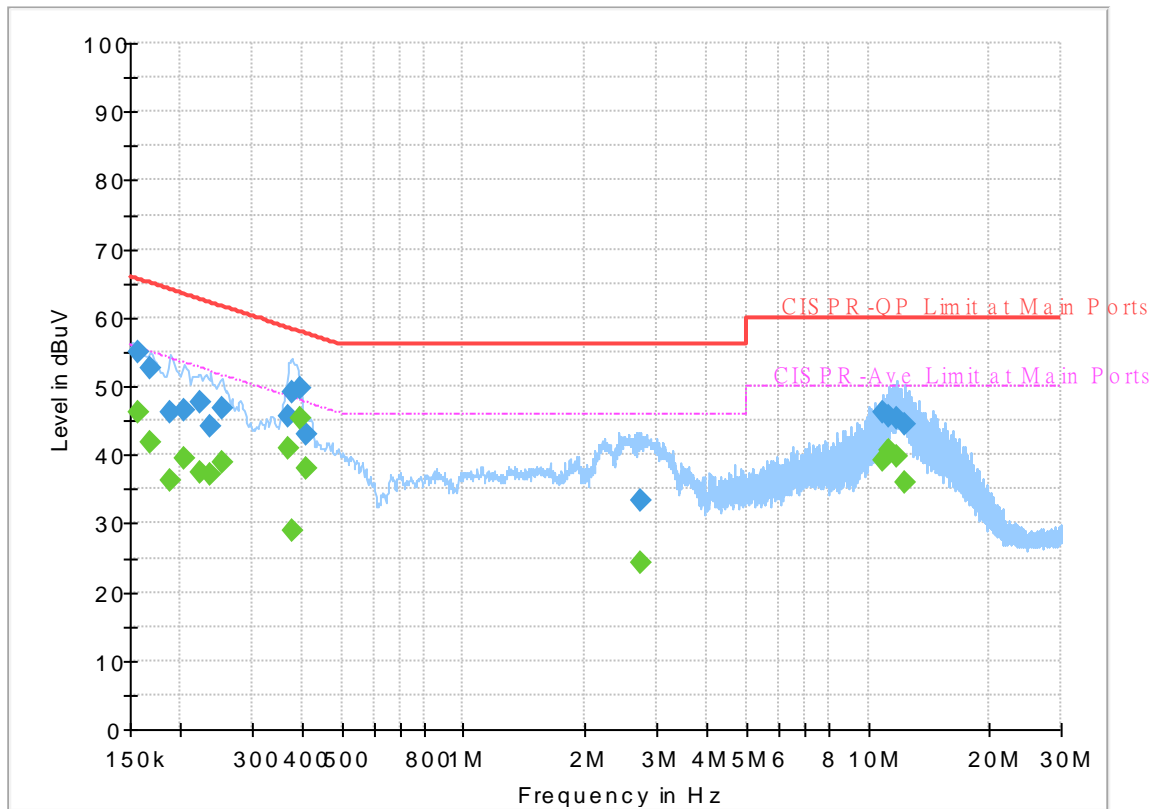


0.377250	50.07	---	58.34	8.27	L1	OFF	19.6
0.393000	---	45.98	48.00	2.02	L1	OFF	19.6
0.393000	50.32	---	58.00	7.68	L1	OFF	19.6
0.415500	---	39.63	47.54	7.91	L1	OFF	19.6
0.415500	42.90	---	57.54	14.64	L1	OFF	19.6
0.462750	---	27.05	46.64	19.59	L1	OFF	19.6
0.462750	36.56	---	56.64	20.08	L1	OFF	19.6
4.699500	---	31.01	46.00	14.99	L1	OFF	19.7
4.699500	36.10	---	56.00	19.90	L1	OFF	19.7
11.478750	---	40.52	50.00	9.48	L1	OFF	19.8
11.478750	47.29	---	60.00	12.71	L1	OFF	19.8

# EUT Information

Report NO : 251805  
 Test Mode : Mode 1  
 Test Voltage : 120Vac/60Hz  
 Phase : Neutral

Full Spectrum



## Final\_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.156750	---	46.22	55.63	9.41	N	OFF	19.6
0.156750	55.06	---	65.63	10.57	N	OFF	19.6
0.168000	---	41.71	55.06	13.35	N	OFF	19.6
0.168000	52.63	---	65.06	12.43	N	OFF	19.6
0.188250	---	36.35	54.11	17.76	N	OFF	19.6
0.188250	46.12	---	64.11	17.99	N	OFF	19.6
0.204000	---	39.41	53.45	14.04	N	OFF	19.6
0.204000	46.60	---	63.45	16.85	N	OFF	19.6
0.224250	---	37.36	52.66	15.30	N	OFF	19.6
0.224250	47.58	---	62.66	15.08	N	OFF	19.6
0.237750	---	37.15	52.17	15.02	N	OFF	19.6
0.237750	44.17	---	62.17	18.00	N	OFF	19.6
0.253500	---	38.93	51.64	12.71	N	OFF	19.6
0.253500	46.66	---	61.64	14.98	N	OFF	19.6
0.368250	---	40.84	48.54	7.70	N	OFF	19.6
0.368250	45.73	---	58.54	12.81	N	OFF	19.6
0.377250	---	28.99	48.34	19.35	N	OFF	19.6
0.377250	49.26	---	58.34	9.08	N	OFF	19.6
0.393000	---	45.31	48.00	2.69	N	OFF	19.6
0.393000	49.84	---	58.00	8.16	N	OFF	19.6
0.411000	---	37.97	47.63	9.66	N	OFF	19.6

0.411000	43.03	---	57.63	14.60	N	OFF	19.6
2.735250	---	24.28	46.00	21.72	N	OFF	19.6
2.735250	33.22	---	56.00	22.78	N	OFF	19.6
10.880250	---	39.17	50.00	10.83	N	OFF	19.8
10.880250	46.13	---	60.00	13.87	N	OFF	19.8
11.249250	---	40.74	50.00	9.26	N	OFF	19.8
11.249250	45.50	---	60.00	14.50	N	OFF	19.8
11.787000	---	39.64	50.00	10.36	N	OFF	19.8
11.787000	45.23	---	60.00	14.77	N	OFF	19.8
12.347250	---	35.97	50.00	14.03	N	OFF	19.8
12.347250	44.34	---	60.00	15.66	N	OFF	19.8



### Appendix C. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	23.6~27.5°C
		Relative Humidity :	55.6~61.8%

**Band 4 - 5725~5850MHz**  
**WIFI 802.11a (Band Edge @ 3m)**

WIFI Ant.	Note	Frequency ( MHz )	Level ( dBµV/m )	Margin ( 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 149 5745MHz		5642.2	50.12	-18.08	68.2	38.31	34.7	12.26	35.15	399	360	P	H	
		5696.2	52.01	-50.39	102.4	40.01	34.88	12.28	35.16	399	360	P	H	
		5717.2	66.06	-43.96	110.02	53.93	35	12.29	35.16	399	360	P	H	
		5724.8	77.28	-44.46	121.74	65.09	35.05	12.3	35.16	399	360	P	H	
	*	5745	114	-	-	101.69	35.17	12.31	35.17	399	360	P	H	
	*	5745	107.08	-	-	94.77	35.17	12.31	35.17	399	360	A	H	
														H
														H
			5647	51.87	-16.33	68.2	40.06	34.7	12.26	35.15	300	337	P	V
			5699.4	56.89	-47.87	104.76	44.87	34.9	12.28	35.16	300	337	P	V
			5717	71.06	-38.9	109.96	58.93	35	12.29	35.16	300	337	P	V
			5724.4	82.02	-38.81	120.83	69.83	35.05	12.3	35.16	300	337	P	V
	*		5745	119.91	-	-	107.6	35.17	12.31	35.17	300	337	P	V
	*		5745	113.33	-	-	101.02	35.17	12.31	35.17	300	337	A	V
														V
														V



WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBµV/m )	Margin ( 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 157 5785MHz		5643.2	49.48	-18.72	68.2	37.67	34.7	12.26	35.15	394	1	P	H	
		5674.4	50.17	-36.13	86.3	38.25	34.8	12.27	35.15	394	1	P	H	
		5707	50.16	-57	107.16	38.09	34.94	12.29	35.16	394	1	P	H	
		5724.8	51.1	-70.64	121.74	38.91	35.05	12.3	35.16	394	1	P	H	
	*	5785	114.04	-	-	101.69	35.2	12.32	35.17	394	1	P	H	
	*	5785	106.8	-	-	94.45	35.2	12.32	35.17	394	1	A	H	
		5853	49.84	-65.52	115.36	37.41	35.2	12.41	35.18	394	1	P	H	
		5874.8	49.77	-55.49	105.26	37.32	35.2	12.44	35.19	394	1	P	H	
		5900.6	51.25	-34.97	86.22	38.76	35.2	12.48	35.19	394	1	P	H	
		5949.2	50.03	-18.17	68.2	37.58	35.1	12.55	35.2	394	1	P	H	
														H
														H
			5600.6	51.88	-16.32	68.2	40.08	34.7	12.24	35.14	285	335	P	V
			5687	52.82	-42.79	95.61	40.85	34.85	12.28	35.16	285	335	P	V
			5718.2	52.75	-57.55	110.3	40.61	35.01	12.29	35.16	285	335	P	V
			5722.2	53.79	-62.03	115.82	41.63	35.03	12.29	35.16	285	335	P	V
	*		5785	120.23	-	-	107.88	35.2	12.32	35.17	285	335	P	V
	*		5785	113.08	-	-	100.73	35.2	12.32	35.17	285	335	A	V
			5853.4	52.22	-62.23	114.45	39.79	35.2	12.41	35.18	285	335	P	V
			5863.4	51.37	-57.08	108.45	38.94	35.2	12.42	35.19	285	335	P	V
			5877.8	51.78	-51.34	103.12	39.33	35.2	12.44	35.19	285	335	P	V
			5949.6	50.46	-17.74	68.2	38.01	35.1	12.55	35.2	285	335	P	V
													V	
													V	



WiFi Ant. 1+2	Note	Frequency ( MHz )	Level ( dBµV/m )	Margin ( 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 165 5825MHz	*	5825	113.38	-	-	100.99	35.2	12.37	35.18	323	39	P	H	
	*	5825	106.39	-	-	94	35.2	12.37	35.18	323	39	A	H	
		5850	69.86	-52.34	122.2	57.44	35.2	12.4	35.18	323	39	P	H	
		5855.2	66.16	-44.58	110.74	53.73	35.2	12.41	35.18	323	39	P	H	
		5875.4	55.73	-49.17	104.9	43.28	35.2	12.44	35.19	323	39	P	H	
		5931.8	52.34	-15.86	68.2	39.88	35.14	12.52	35.2	323	39	P	H	
														H
														H
	*	5825	119.88	-	-	107.49	35.2	12.37	35.18	399	253	P	V	
	*	5825	113.42	-	-	101.03	35.2	12.37	35.18	399	253	A	V	
		5850.8	76.41	-43.97	120.38	63.99	35.2	12.4	35.18	399	253	P	V	
		5856.2	72.01	-38.45	110.46	59.58	35.2	12.41	35.18	399	253	P	V	
		5876.2	59.94	-44.37	104.31	47.49	35.2	12.44	35.19	399	253	P	V	
		5927.4	52.24	-15.96	68.2	39.78	35.15	12.51	35.2	399	253	P	V	
														V
														V
													V	
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



**Band 4 5725~5850MHz**  
**WIFI 802.11a (Harmonic @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( 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 149 5745MHz		11490	44.87	-29.13	74	44.32	38.11	19.32	56.88	-	-	P	H	
		13270	47.18	-26.82	74	45.03	39.11	20.97	57.93	-	-	P	H	
		14491	47.79	-26.21	74	43.77	39.58	21.96	57.52	-	-	P	H	
		17235	51.75	-16.45	68.2	42.05	41.5	23.89	55.69	-	-	P	H	
		17879	51.94	-22.06	74	41.19	41.44	24.42	55.11	-	-	P	H	
		17879	41.67	-12.33	54	30.92	41.44	24.42	55.11	-	-	A	H	
														H
														H
														H
														H
														H
														H
														H
			11490	46.08	-27.92	74	45.53	38.11	19.32	56.88	-	-	P	V
			13369	47.9	-26.1	74	45.72	39.06	21.06	57.94	-	-	P	V
			14499	47.66	-26.34	74	43.61	39.6	21.97	57.52	-	-	P	V
			17235	57.72	-10.48	68.2	48.02	41.5	23.89	55.69	-	-	P	V
			17912	50.99	-23.01	74	40.22	41.41	24.45	55.09	-	-	P	V
		17912	41.52	-12.48	54	30.75	41.41	24.45	55.09	-	-	A	V	
													V	
													V	
													V	
													V	
													V	
													V	



WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( 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 157 5785MHz		11570	46.03	-27.97	74	45.15	38.24	19.39	56.75	-	-	P	H	
		13358	47.59	-26.41	74	45.4	39.08	21.05	57.94	-	-	P	H	
		14480	48.08	-25.92	74	44.09	39.56	21.96	57.53	-	-	P	H	
		14480	38.59	-15.41	54	34.6	39.56	21.96	57.53	-	-	A	H	
		17355	51.02	-17.18	68.2	41.09	41.44	23.99	55.5	-	-	P	H	
		17901	51.3	-22.7	74	40.57	41.4	24.43	55.1	-	-	P	H	
		17901	41.37	-12.63	54	30.64	41.4	24.43	55.1	-	-	A	H	
														H
														H
														H
														H
														H
														H
			11570	47.88	-26.12	74	47	38.24	19.39	56.75	-	-	P	V
			13347	47.2	-26.8	74	44.99	39.11	21.04	57.94	-	-	P	V
			14491	48.73	-25.27	74	44.71	39.58	21.96	57.52	-	-	P	V
			14491	38.51	-15.49	54	34.49	39.58	21.96	57.52	-	-	A	V
			17355	60.68	-7.52	68.2	50.75	41.44	23.99	55.5	-	-	P	V
			17736	51.2	-22.8	74	40.52	41.54	24.31	55.17	-	-	P	V
			17736	41.02	-12.98	54	30.34	41.54	24.31	55.17	-	-	A	V
													V	
													V	
													V	
													V	
													V	





WiFi Ant. 1+2	Note	Frequency ( MHz )	Level ( dBµV/m )	Margin ( 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 165 5825MHz		11650	45.66	-28.34	74	44.46	38.4	19.45	56.65	-	-	P	H	
		13358	47.42	-26.58	74	45.23	39.08	21.05	57.94	-	-	P	H	
		14499	47.93	-26.07	74	43.88	39.6	21.97	57.52	-	-	P	H	
		17475	50.23	-17.97	68.2	40.14	41.33	24.08	55.32	-	-	P	H	
		17769	52.24	-21.76	74	41.5	41.57	24.33	55.16	-	-	P	H	
		17769	42.09	-11.91	54	31.35	41.57	24.33	55.16	-	-	A	H	
														H
														H
														H
														H
														H
														H
			11650	49.25	-24.75	74	48.05	38.4	19.45	56.65	-	-	P	V
			13380	47.55	-26.45	74	45.38	39.04	21.07	57.94	-	-	P	V
			14491	47.96	-26.04	74	43.94	39.58	21.96	57.52	-	-	P	V
			17475	55.36	-12.84	68.2	45.27	41.33	24.08	55.32	-	-	P	V
			17714	52.26	-21.74	74	41.64	41.51	24.29	55.18	-	-	P	V
			17714	41.17	-12.83	54	30.55	41.51	24.29	55.18	-	-	A	V
													V	
													V	
													V	
													V	
													V	
													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> <li>The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.</li> <li>The emission level close to 18GHz is checked that the average emission level is noise floor only.</li> </ol>													



**Band 4 5725~5850MHz**  
**WIFI 802.11ax HE20\_Full (Band Edge @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( 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 149 5745MHz		5622.2	47.79	-20.41	68.2	35.98	34.7	12.25	35.14	367	181	P	H	
		5690	50.27	-47.56	97.83	38.29	34.86	12.28	35.16	367	181	P	H	
		5718	61.28	-48.96	110.24	49.14	35.01	12.29	35.16	367	181	P	H	
		5725	71.32	-50.88	122.2	59.13	35.05	12.3	35.16	367	181	P	H	
	*	5745	112.34	-	-	100.03	35.17	12.31	35.17	367	181	P	H	
	*	5745	104.03	-	-	91.72	35.17	12.31	35.17	367	181	A	H	
														H
														H
			5645.4	51.54	-16.66	68.2	39.73	34.7	12.26	35.15	392	253	P	V
			5699.2	60.31	-44.3	104.61	48.29	34.9	12.28	35.16	392	253	P	V
			5719.6	78.79	-31.9	110.69	66.64	35.02	12.29	35.16	392	253	P	V
			5725	85.33	-36.87	122.2	73.14	35.05	12.3	35.16	392	253	P	V
	*		5745	122.2	-	-	109.89	35.17	12.31	35.17	392	253	P	V
	*		5745	113.61	-	-	101.3	35.17	12.31	35.17	392	253	A	V
														V
														V



WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( 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)
		5603.6	49.05	-19.15	68.2	37.25	34.7	12.24	35.14	395	360	P	H
		5695.2	49.79	-51.87	101.66	37.79	34.88	12.28	35.16	395	360	P	H
		5712.2	49.93	-58.69	108.62	37.83	34.97	12.29	35.16	395	360	P	H
		5724.8	50.72	-71.02	121.74	38.53	35.05	12.3	35.16	395	360	P	H
	*	5785	115.55	-	-	103.2	35.2	12.32	35.17	395	360	P	H
	*	5785	106.38	-	-	94.03	35.2	12.32	35.17	395	360	A	H
		5855	48.77	-62.03	110.8	36.34	35.2	12.41	35.18	395	360	P	H
		5872.6	49.29	-56.58	105.87	36.84	35.2	12.44	35.19	395	360	P	H
		5899.4	50.93	-36.17	87.1	38.45	35.2	12.47	35.19	395	360	P	H
		5930.2	50.84	-17.36	68.2	38.38	35.14	12.52	35.2	395	360	P	H
<b>802.11ax</b>													H
<b>HE20 Full</b>													H
<b>CH 157</b>		5601.6	49.21	-18.99	68.2	37.41	34.7	12.24	35.14	314	246	P	V
<b>5785MHz</b>		5698	52.65	-51.08	103.73	40.64	34.89	12.28	35.16	314	246	P	V
		5719.8	54.72	-56.02	110.74	42.57	35.02	12.29	35.16	314	246	P	V
		5720.2	54.86	-56.4	111.26	42.71	35.02	12.29	35.16	314	246	P	V
	*	5785	122.72	-	-	110.37	35.2	12.32	35.17	314	246	P	V
	*	5785	112.96	-	-	100.61	35.2	12.32	35.17	314	246	A	V
		5850	52.13	-70.07	122.2	39.71	35.2	12.4	35.18	314	246	P	V
		5855.2	51.23	-59.51	110.74	38.8	35.2	12.41	35.18	314	246	P	V
		5877.4	52.01	-51.41	103.42	39.56	35.2	12.44	35.19	314	246	P	V
		5931.4	50.99	-17.21	68.2	38.53	35.14	12.52	35.2	314	246	P	V
													V
													V



WiFi Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( 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 165 5825MHz	*	5825	113.86	-	-	101.47	35.2	12.37	35.18	389	0	P	H	
	*	5825	104.99	-	-	92.6	35.2	12.37	35.18	389	0	A	H	
		5850.6	70.15	-50.68	120.83	57.73	35.2	12.4	35.18	389	0	P	H	
		5855	66.32	-44.48	110.8	53.89	35.2	12.41	35.18	389	0	P	H	
		5875.6	52.44	-52.31	104.75	39.99	35.2	12.44	35.19	389	0	P	H	
		5938	50.9	-17.3	68.2	38.45	35.12	12.53	35.2	389	0	P	H	
														H
														H
	*	5825	121.44	-	-	109.05	35.2	12.37	35.18	399	253	P	V	
	*	5825	112.59	-	-	100.2	35.2	12.37	35.18	399	253	A	V	
		5852.6	76.4	-39.87	116.27	63.97	35.2	12.41	35.18	399	253	P	V	
		5856	74.19	-36.33	110.52	61.76	35.2	12.41	35.18	399	253	P	V	
		5879.6	59.92	-41.86	101.78	47.46	35.2	12.45	35.19	399	253	P	V	
		5934.4	52.74	-15.46	68.2	40.29	35.13	12.52	35.2	399	253	P	V	
														V
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 4 5725~5850MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( 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 149 5745MHz		11490	45.65	-28.35	74	45.1	38.11	19.32	56.88	-	-	P	H	
		13336	47.76	-26.24	74	45.54	39.13	21.03	57.94	-	-	P	H	
		14499	48.89	-25.11	74	44.84	39.6	21.97	57.52	-	-	P	H	
		14499	38.56	-15.44	54	34.51	39.6	21.97	57.52	-	-	A	H	
		17235	51.03	-17.17	68.2	41.33	41.5	23.89	55.69	-	-	P	H	
		17747	51.91	-22.09	74	41.22	41.55	24.31	55.17	-	-	P	H	
		17747	41.38	-12.62	54	30.69	41.55	24.31	55.17	-	-	A	H	
														H
														H
														H
														H
														H
														H
														H
														H
			11490	46.86	-27.14	74	46.31	38.11	19.32	56.88	-	-	P	V
			13369	48.55	-25.45	74	46.37	39.06	21.06	57.94	-	-	P	V
			13369	38.22	-15.78	54	36.04	39.06	21.06	57.94	-	-	A	V
		14499	48.74	-25.26	74	44.69	39.6	21.97	57.52	-	-	P	V	
		14499	38.39	-15.61	54	34.34	39.6	21.97	57.52	-	-	A	V	
		17235	57.91	-10.29	68.2	48.21	41.5	23.89	55.69	-	-	P	V	
		17989	51.31	-22.69	74	40.37	41.49	24.51	55.06	-	-	P	V	
		17989	41.15	-12.85	54	30.21	41.49	24.51	55.06	-	-	A	V	
													V	
													V	
													V	
													V	



WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( 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 157 5785MHz		11570	46.05	-27.95	74	45.17	38.24	19.39	56.75	-	-	P	H	
		13336	48.26	-25.74	74	46.04	39.13	21.03	57.94	-	-	P	H	
		13336	37.87	-16.13	54	35.65	39.13	21.03	57.94	-	-	A	H	
		14499	49.08	-24.92	74	45.03	39.6	21.97	57.52	-	-	P	H	
		14499	38.74	-15.26	54	34.69	39.6	21.97	57.52	-	-	A	H	
		17355	53.09	-15.11	68.2	43.16	41.44	23.99	55.5	-	-	P	H	
		17791	51.75	-22.25	74	40.96	41.59	24.35	55.15	-	-	P	H	
		17791	41.63	-12.37	54	30.84	41.59	24.35	55.15	-	-	A	H	
														H
														H
														H
														H
			11570	48.85	-25.15	74	47.97	38.24	19.39	56.75	288	190	P	V
			11570	39.84	-14.16	54	38.96	38.24	19.39	56.75	288	190	A	V
			13358	47.92	-26.08	74	45.73	39.08	21.05	57.94	-	-	P	V
			14499	48.49	-25.51	74	44.44	39.6	21.97	57.52	-	-	P	V
			14499	38.17	-15.83	54	34.12	39.6	21.97	57.52	-	-	A	V
			17355	59.62	-8.58	68.2	49.69	41.44	23.99	55.5	-	-	P	V
			17758	52.64	-21.36	74	41.92	41.56	24.32	55.16	-	-	P	V
		17758	41.74	-12.26	54	31.02	41.56	24.32	55.16	-	-	A	V	
													V	
													V	
													V	
													V	



WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( 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 165 5825MHz		11650	47.27	-26.73	74	46.07	38.4	19.45	56.65	-	-	P	H	
		13314	48.65	-25.35	74	46.4	39.17	21.01	57.93	-	-	P	H	
		13314	38.34	-15.66	54	36.09	39.17	21.01	57.93	-	-	A	H	
		14499	47.81	-26.19	74	43.76	39.6	21.97	57.52	-	-	P	H	
		17475	50.92	-17.28	68.2	40.83	41.33	24.08	55.32	-	-	P	H	
		17813	51.89	-22.11	74	41.09	41.57	24.37	55.14	-	-	P	H	
		17813	41.48	-12.52	54	30.68	41.57	24.37	55.14	-	-	A	H	
														H
														H
														H
														H
														H
														H
			11650	52.34	-21.66	74	51.14	38.4	19.45	56.65	300	191	P	V
			11650	40.98	-13.02	54	39.78	38.4	19.45	56.65	300	191	A	V
			13380	47.57	-26.43	74	45.4	39.04	21.07	57.94	-	-	P	V
			14499	48.57	-25.43	74	44.52	39.6	21.97	57.52	-	-	P	V
			14499	38.25	-15.75	54	34.2	39.6	21.97	57.52	-	-	A	V
			17475	56.08	-12.12	68.2	45.99	41.33	24.08	55.32	-	-	P	V
		17912	51.62	-22.38	74	40.85	41.41	24.45	55.09	-	-	P	V	
		17912	41.21	-12.79	54	30.44	41.41	24.45	55.09	-	-	A	V	
													V	
													V	
													V	
													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> <li>The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.</li> <li>The emission level close to 18GHz is checked that the average emission level is noise floor only.</li> </ol>													



**Band 4 5725~5850MHz**  
**WIFI 802.11ax HE40\_Full (Band Edge @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( 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 )
		5650	54.5	-13.7	68.2	42.69	34.7	12.26	35.15	384	0	P	H
		5700	66.19	-39.01	105.2	54.17	34.9	12.28	35.16	384	0	P	H
		5719	84.67	-25.85	110.52	72.53	35.01	12.29	35.16	384	0	P	H
		5724	85.7	-34.22	119.92	73.52	35.04	12.3	35.16	384	0	P	H
	*	5755	112.87	-	-	100.53	35.2	12.31	35.17	384	0	P	H
	*	5755	104.94	-	-	92.6	35.2	12.31	35.17	384	0	A	H
		5850.2	56.99	-64.75	121.74	44.57	35.2	12.4	35.18	384	0	P	H
		5855.2	57.06	-53.68	110.74	44.63	35.2	12.41	35.18	384	0	P	H
		5907.6	53.31	-27.73	81.04	40.83	35.18	12.49	35.19	384	0	P	H
		5944.6	51.09	-17.11	68.2	38.64	35.11	12.54	35.2	384	0	P	H
<b>802.11ax</b>													H
<b>HE40 Full</b>													H
<b>CH 151</b>		5649.6	59.96	-8.24	68.2	48.15	34.7	12.26	35.15	348	211	P	V
<b>5755MHz</b>		5699.8	74.72	-30.33	105.05	62.7	34.9	12.28	35.16	348	211	P	V
		5717.6	91.08	-19.05	110.13	78.94	35.01	12.29	35.16	348	211	P	V
		5720.6	91.31	-20.86	112.17	79.16	35.02	12.29	35.16	348	211	P	V
	*	5755	120.71	-	-	108.37	35.2	12.31	35.17	373	240	P	V
	*	5755	111.84	-	-	99.5	35.2	12.31	35.17	373	240	A	V
		5853	61.82	-53.54	115.36	49.39	35.2	12.41	35.18	373	240	P	V
		5856.2	60.68	-49.78	110.46	48.25	35.2	12.41	35.18	373	240	P	V
		5877.8	55.72	-47.4	103.12	43.27	35.2	12.44	35.19	373	240	P	V
		5926.4	51.79	-16.41	68.2	39.33	35.15	12.51	35.2	373	240	P	V
													V
													V





WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBµV/m )	Margin ( 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)
		5640.6	51.01	-17.19	68.2	39.2	34.7	12.26	35.15	395	0	P	H
		5694.6	55.63	-45.59	101.22	43.63	34.88	12.28	35.16	395	0	P	H
		5715.8	63.14	-46.49	109.63	51.02	34.99	12.29	35.16	395	0	P	H
		5725	62.83	-59.37	122.2	50.64	35.05	12.3	35.16	395	0	P	H
	*	5795	112.26	-	-	99.9	35.2	12.33	35.17	395	0	P	H
	*	5795	103.65	-	-	91.29	35.2	12.33	35.17	395	0	A	H
		5855	63.41	-47.39	110.8	50.98	35.2	12.41	35.18	395	0	P	H
		5860.4	64.48	-44.81	109.29	52.05	35.2	12.42	35.19	395	0	P	H
		5878.2	60.26	-42.56	102.82	47.81	35.2	12.44	35.19	395	0	P	H
		5940	53.25	-14.95	68.2	40.8	35.12	12.53	35.2	395	0	P	H
802.11ax													H
HE40 Full													H
CH 159		5649.8	52.75	-15.45	68.2	40.94	34.7	12.26	35.15	346	253	P	V
5795MHz		5698.8	61.7	-42.62	104.32	49.68	34.9	12.28	35.16	346	253	P	V
		5718.8	68.91	-41.55	110.46	56.77	35.01	12.29	35.16	346	253	P	V
		5724.2	68.66	-51.72	120.38	56.47	35.05	12.3	35.16	346	253	P	V
	*	5795	119.05	-	-	106.69	35.2	12.33	35.17	346	253	P	V
	*	5795	110.37	-	-	98.01	35.2	12.33	35.17	346	253	A	V
		5854.8	70.85	-40.41	111.26	58.42	35.2	12.41	35.18	346	253	P	V
		5856	69.05	-41.47	110.52	56.62	35.2	12.41	35.18	346	253	P	V
		5876	64.69	-39.77	104.46	52.24	35.2	12.44	35.19	346	253	P	V
		5933.4	53.64	-14.56	68.2	41.19	35.13	12.52	35.2	346	253	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 4 5725~5850MHz**  
**WIFI 802.11ax HE40\_Full (Harmonic @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( 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 151 5755MHz		11510	45.27	-28.73	74	44.64	38.12	19.35	56.84	-	-	P	H	
		13402	47.46	-20.74	68.2	45.32	39	21.09	57.95	-	-	P	H	
		14480	47.99	-26.01	74	44	39.56	21.96	57.53	-	-	P	H	
		17265	50.2	-18	68.2	40.43	41.5	23.91	55.64	-	-	P	H	
		17780	51.09	-22.91	74	40.32	41.58	24.34	55.15	-	-	P	H	
		17780	41.19	-12.81	54	30.42	41.58	24.34	55.15	-	-	A	H	
														H
														H
														H
														H
														H
														H
														H
														H
														H
			11510	46.27	-27.73	74	45.64	38.12	19.35	56.84	-	-	P	V
			13347	47.7	-26.3	74	45.49	39.11	21.04	57.94	-	-	P	V
			14499	48.12	-25.88	74	44.07	39.6	21.97	57.52	-	-	P	V
		14499	38.24	-15.76	54	34.19	39.6	21.97	57.52	-	-	A	V	
		17265	54.35	-13.85	68.2	44.58	41.5	23.91	55.64	-	-	P	V	
		17780	51.14	-22.86	74	40.37	41.58	24.34	55.15	-	-	P	V	
		17780	41.44	-12.56	54	30.67	41.58	24.34	55.15	-	-	A	V	
													V	
													V	
													V	
													V	
													V	



WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBµV/m )	Margin ( 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 159 5795MHz		11590	46.04	-27.96	74	45.08	38.28	19.41	56.73	-	-	P	H	
		13248	47.26	-20.94	68.2	45.19	39.04	20.95	57.92	-	-	P	H	
		14499	47.8	-26.2	74	43.75	39.6	21.97	57.52	-	-	P	H	
		17385	50.08	-18.12	68.2	40.11	41.42	24.01	55.46	-	-	P	H	
		17780	51.44	-22.56	74	40.67	41.58	24.34	55.15	-	-	P	H	
		17780	41.52	-12.48	54	30.75	41.58	24.34	55.15	-	-	A	H	
														H
														H
														H
														H
														H
														H
														H
														H
			11590	46.93	-27.07	74	45.97	38.28	19.41	56.73	-	-	P	V
			13380	47.18	-26.82	74	45.01	39.04	21.07	57.94	-	-	P	V
			14480	49.15	-24.85	74	45.16	39.56	21.96	57.53	-	-	P	V
			14480	38.57	-15.43	54	34.58	39.56	21.96	57.53	-	-	A	V
			17385	55.23	-12.97	68.2	45.26	41.42	24.01	55.46	-	-	P	V
			17857	51.44	-22.56	74	40.67	41.49	24.4	55.12	-	-	P	V
			17857	41.48	-12.52	54	30.71	41.49	24.4	55.12	-	-	A	V
														V
													V	
													V	
													V	
													V	
													V	

**Remark**

- No other spurious found.
- All results are PASS against Peak and Average limit line.
- The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.
- The emission level close to 18GHz is checked that the average emission level is noise floor only.



**Band 4 5725~5850MHz**  
**WIFI 802.11ax HE80\_Full (Band Edge @ 3m)**

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( 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 )
		5650	58.99	-9.21	68.2	47.18	34.7	12.26	35.15	400	6	P	H
		5693.2	71.79	-28.4	100.19	59.8	34.87	12.28	35.16	400	6	P	H
		5714.6	78.13	-31.16	109.29	66.01	34.99	12.29	35.16	400	6	P	H
		5723	79.16	-38.48	117.64	66.98	35.04	12.3	35.16	400	6	P	H
	*	5775	108.95	-	-	96.6	35.2	12.32	35.17	400	6	P	H
	*	5775	100.37	-	-	88.02	35.2	12.32	35.17	400	6	A	H
		5854.4	71.6	-40.57	112.17	59.17	35.2	12.41	35.18	400	6	P	H
		5855.6	72.45	-38.18	110.63	60.02	35.2	12.41	35.18	400	6	P	H
		5875.6	63.26	-41.49	104.75	50.81	35.2	12.44	35.19	400	6	P	H
		5930.8	54.82	-13.38	68.2	42.36	35.14	12.52	35.2	400	6	P	H
<b>802.11ax</b>													H
<b>HE80 Full</b>													H
<b>CH 155</b>		5648	67.48	-0.72	68.2	55.67	34.7	12.26	35.15	370	215	P	V
<b>5775MHz</b>		5699.8	78.87	-26.18	105.05	66.85	34.9	12.28	35.16	370	215	P	V
		5718.4	85.44	-24.91	110.35	73.3	35.01	12.29	35.16	370	215	P	V
		5720.6	82.86	-29.31	112.17	70.71	35.02	12.29	35.16	370	215	P	V
	*	5775	116.29	-	-	103.94	35.2	12.32	35.17	370	215	P	V
	*	5775	106.82	-	-	94.47	35.2	12.32	35.17	370	215	A	V
		5851	76.17	-43.75	119.92	63.75	35.2	12.4	35.18	370	215	P	V
		5855	76.27	-34.53	110.8	63.84	35.2	12.41	35.18	370	215	P	V
		5875.4	67.93	-36.97	104.9	55.48	35.2	12.44	35.19	370	215	P	V
		5936	59.94	-8.26	68.2	47.48	35.13	12.53	35.2	370	215	P	V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ax HE80\_Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency ( MHz )	Level ( dBμV/m )	Margin ( 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 155 5775MHz		11550	45.7	-28.3	74	44.9	38.2	19.38	56.78	-	-	P	H	
		13380	47.71	-26.29	74	45.54	39.04	21.07	57.94	-	-	P	H	
		14499	48.38	-25.62	74	44.33	39.6	21.97	57.52	-	-	P	H	
		14499	38.58	-15.42	54	34.53	39.6	21.97	57.52	-	-	A	H	
		17325	49.76	-18.44	68.2	39.87	41.47	23.97	55.55	-	-	P	H	
		17736	51.19	-22.81	74	40.51	41.54	24.31	55.17	-	-	P	H	
		17736	41.31	-12.69	54	30.63	41.54	24.31	55.17	-	-	A	H	
														H
														H
														H
														H
														H
														H
														H
														H
			11550	45.71	-28.29	74	44.91	38.2	19.38	56.78	-	-	P	V
			13358	47.62	-26.38	74	45.43	39.08	21.05	57.94	-	-	P	V
			14499	48.11	-25.89	74	44.06	39.6	21.97	57.52	-	-	P	V
		14499	38.6	-15.4	54	34.55	39.6	21.97	57.52	-	-	A	V	
		17325	53.7	-14.5	68.2	43.81	41.47	23.97	55.55	-	-	P	V	
		17912	51.39	-22.61	74	40.62	41.41	24.45	55.09	-	-	P	V	
		17912	41.4	-12.6	54	30.63	41.41	24.45	55.09	-	-	A	V	
													V	
													V	
													V	
													V	
													V	
													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> <li>The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.</li> <li>The emission level close to 18GHz is checked that the average emission level is noise floor only.</li> </ol>													



Emission above 18GHz

5GHz WIFI 802.11ax HE80 Full (SHF @ 1m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					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 HE80 Full SHF		39978	45.93	-28.07	74	44.75	44.6	14.82	58.24	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
			39736	45.65	-28.35	74	45.07	44.58	14.73	58.73	-	-	P
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												



Emission below 1GHz

5GHz WIFI 802.11ax HE80 Full (LF @ 3m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant.					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 HE80 Full LF		30	24.86	-15.14	40	29.39	24.57	1.01	30.11	-	-	P	H	
		58.62	26.86	-13.14	40	43.81	11.8	1.29	30.04	-	-	P	H	
		125.04	33.03	-10.47	43.5	43.5	17.52	1.94	29.93	-	-	P	H	
		848.1	32.12	-13.88	46	27.44	28.62	5.13	29.07	-	-	P	H	
		907.6	32.45	-13.55	46	27.12	28.64	5.48	28.79	-	-	P	H	
		953.1	33.58	-12.42	46	26.2	30.46	5.56	28.64	-	-	P	H	
														H
														H
														H
														H
														H
														H
														H
			30	32.71	-7.29	40	37.24	24.57	1.01	30.11	100	6	Q	V
			57.81	31.61	-8.39	40	48.43	11.94	1.28	30.04	100	181	Q	V
			125.04	34.41	-9.09	43.5	44.88	17.52	1.94	29.93	-	-	P	V
			898.5	33.12	-12.88	46	27.89	28.61	5.44	28.82	-	-	P	V
			923.7	34.05	-11.95	46	28.25	29.02	5.51	28.73	-	-	P	V
			959.4	35.22	-10.78	46	27.46	30.8	5.58	28.62	-	-	P	V
														V
													V	
													V	
													V	
													V	
													V	
Remark	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against limit line.</li> <li>The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.</li> </ol>													



**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	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					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		11650	52.34	-21.66	74	51.14	38.4	19.45	56.65	300	191	P	V
HE20 Full													
CH 165		11650	40.98	-13.02	54	39.78	38.4	19.45	56.65	300	191	A	V
5825MHz													

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

**For Peak Limit @ 11650MHz:**

1. Level(dBμV/m)  
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)  
= 38.4(dB/m) + 19.45(dB) + 51.14(dBμV) – 56.65 (dB)  
= 52.34 (dBμV/m)
2. Margin dB  
= Level(dBμV/m) – Limit Line(dBμV/m)  
= 52.34(dBμV/m) – 74(dBμV/m)  
= -21.66 (dB)

**For Average Limit @ 11650MHz:**

1. Level(dBμV/m)  
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)  
=38.4(dB/m) + 19.45(dB) +39.78(dBμV) – 56.65 (dB)  
= 40.98 (dBμV/m)
2. Margin (dB)  
= Level(dBμV/m) – Limit Line(dBμV/m)  
= 40.98(dBμV/m) – 54(dBμV/m)  
= -13.02(dB)

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



## Appendix D. Radiated Spurious Emission Plots

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	23.6~27.5°C
		Relative Humidity :	55.6~61.8%

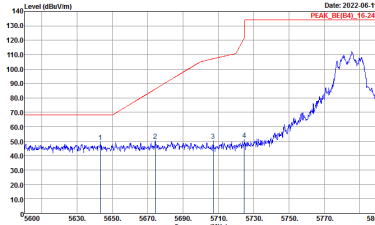
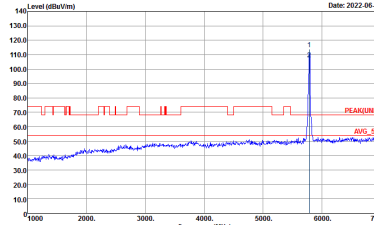
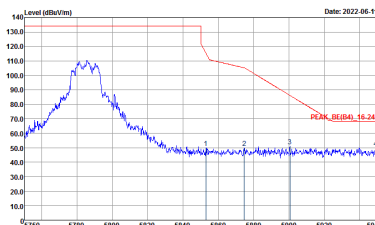
**Band 4 - 5725~5850MHz**  
**WIFI 802.11a (Band Edge @ 3m)**

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1+2	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL Reference : REFV:2000.000MHz VIEW:2000.000MHz SWF:Auto Detector : Peak Project : 251805 Mode : 39</p>	<p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF_ANT_00075962 HORIZONTAL Reference : REFV:2000.000MHz VIEW:2000.000MHz SWF:Auto Detector : Peak Project : 251805 Mode : 39</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1+2	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE(B4)_15-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>

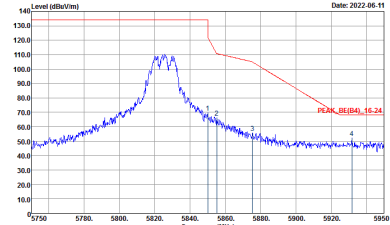
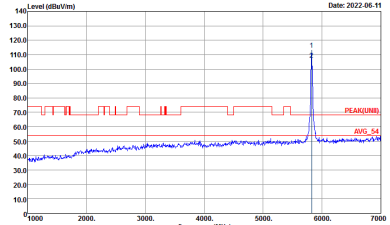


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1+2	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LIN1) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
1+2	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE(B4)_15-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(FUN1) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE(B4)_15-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1+2	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-4H          Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL          : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-4H          Condition : PEAK(LIN1) 3m HF_ANT_00075962 HORIZONTAL          : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
1+2	Vertical	Fundamental
Peak	<p>Site : 03CH07-4H Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-4H Condition : PEAK(FUN) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>

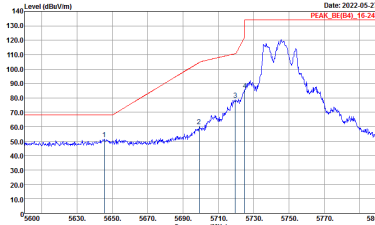
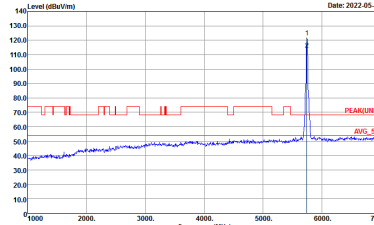


**Band 4 5725~5850MHz**  
**WIFI 802.11ax HE20 Full (Band Edge @ 3m)**

<b>WIFI</b>	<b>Band 4 5725~5850MHz Band Edge @ 3m</b>	
<b>ANT</b>	<b>802.11ax HE20 Full CH149 5745MHz</b>	
<b>1+2</b>	<b>Horizontal</b>	<b>Fundamental</b>
<b>Peak</b>	<p>Site : 03CH07-HY          Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL          : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY          Condition : PEAK(LN1) 3m HF_ANT_00075962 HORIZONTAL          : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>





WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
1+2	Vertical	Fundamental
Peak	 <p>Date: 2022-05-27 PEAK_BE(B4)_TC(3)</p> <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_15-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz; VBW:3000.000kHz; SWT:Auto</p>	 <p>Date: 2022-05-27 PEAK(LNB) AVG_51</p> <p>Site : 03CH07-HY Condition : PEAK(LNB) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz; VBW:3000.000kHz; SWT:Auto</p>

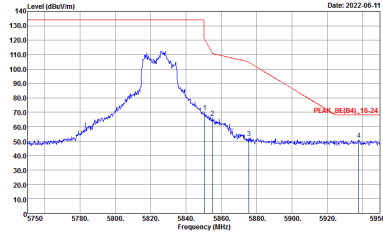
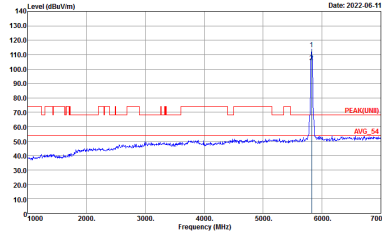


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
1+2	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE(B4)_15-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LNB) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
1+2	Vertical	Fundamental
Peak		
Peak		Left blank



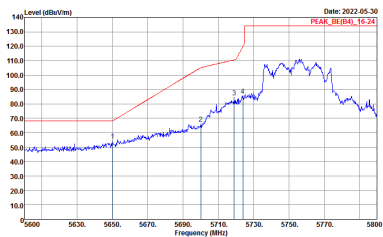
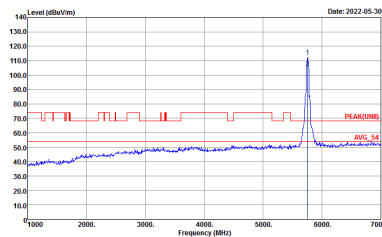
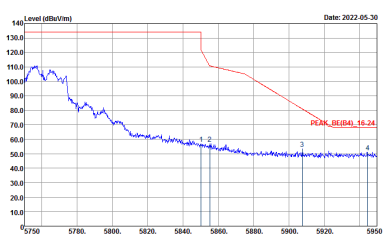
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
1+2	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-4H          Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL          : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-4H          Condition : PEAK(LIN) 3m HF_ANT_00075962 HORIZONTAL          : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



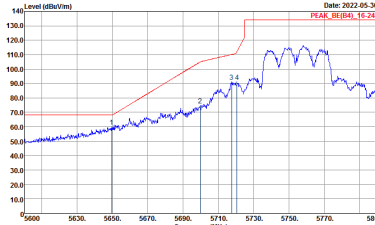
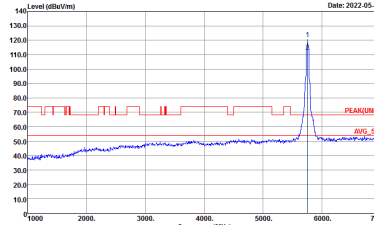
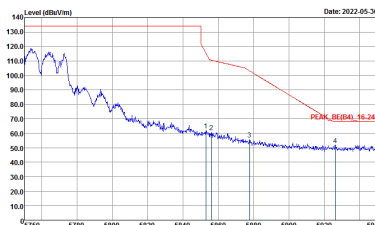
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
1+2	Vertical	Fundamental
Peak		



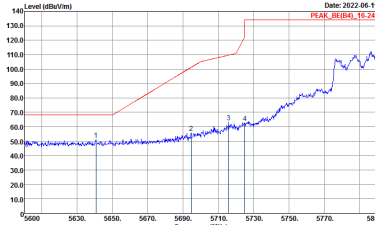
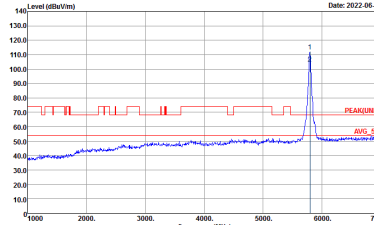
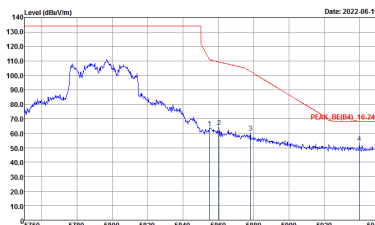
**Band 4 5725~5850MHz**  
**WIFI 802.11ax HE40 Full (Band Edge @ 3m)**

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
1+2	Horizontal	Fundamental
<p align="center"><b>Peak</b></p>	 <p>Site : 03CH07-HY            Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWFAuto</p>	 <p>Site : 03CH07-HY            Condition : PEAK(LNB) 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWFAuto</p>
<p align="center"><b>Peak</b></p>	 <p>Site : 03CH07-HY            Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWFAuto</p>	<p align="center"><b>Left blank</b></p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
1+2	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_15-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LIN1) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_15-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full HT40 CH159 5795MHz	
1+2	Horizontal	Fundamental
<p><b>Peak</b></p>	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LNB) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
<p><b>Peak</b></p>	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p><b>Left blank</b></p>





WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
1+2	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



**Band 4 5725~5850MHz**  
**WIFI 802.11ax HE80 Full (Band Edge @ 3m)**

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
1+2	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY            Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWFAuto</p>	<p>Site : 03CH07-HY            Condition : PEAK(LIN)1 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWFAuto</p>
Peak	<p>Site : 03CH07-HY            Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWFAuto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
1+2	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE(B4)_15-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LIN1) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE(B4)_15-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



Band 4 - 5725~5850MHz
WIFI 802.11a (Harmonic @ 3m)

Table with 2 columns: Horizontal and Vertical. Rows include: WIFI (Band 4 5725~5850MHz Harmonic @ 3m), ANT (802.11a CH149 5745MHz), 1+2 (Peak, Avg.), and two spectral plots showing Level (dBu/m) vs Frequency (MHz) for horizontal and vertical orientations.



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : 1-PEAK(UWB) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : 1-PEAK(UWB) 3m HF_ANT_00075962 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 09CH07-HY Condition : 1-PEAK(UWB) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 09CH07-HY Condition : 1-PEAK(UWB) 3m HF_ANT_00075962 VERTICAL</p>



Band 4 5725~5850MHz
WIFI 802.11ax HE20 Full (Harmonic @ 3m)

Table with 3 columns: WIFI, ANT, 1+2. It contains two spectral plots: Horizontal and Vertical. Each plot shows Level (dBuV/m) vs Frequency (MHz) with Peak and Avg markers. Includes site and condition details for each plot.



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : 1-PEAK(UWB) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : 1-PEAK(UWB) 3m HF_ANT_00075962 VERTICAL</p>





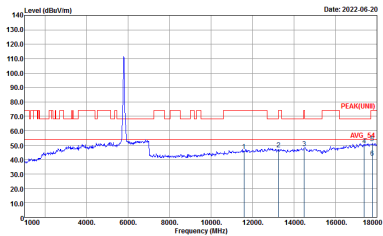
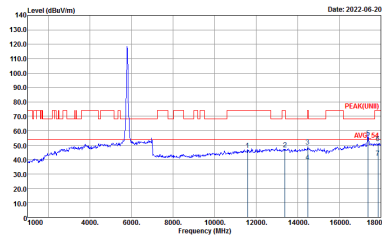
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : 1-PEAK(UWB) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : 1-PEAK(UWB) 3m HF_ANT_00075962 VERTICAL</p>



**Band 4 5725~5850MHz**  
**WIFI 802.11ax HE40 Full (Harmonic @ 3m)**

<b>WIFI</b>	<b>Band 4 5725~5850MHz Harmonic @ 3m</b>	
<b>ANT</b>	<b>802.11ax HE40 Full CH151 5755MHz</b>	
<b>1+2</b>	<b>Horizontal</b>	<b>Vertical</b>
<b>Peak</b> <b>Avg.</b>	<p>Site : 03CH07-HY          Condition : PEAK(LIN1) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY          Condition : PEAK(LIN1) 3m HF_ANT_00075962 VERTICAL</p>



<b>WIFI</b>	<b>Band 4 5725~5850MHz Harmonic @ 3m</b>	
<b>ANT</b>	<b>802.11ax HE40 Full CH159 5795MHz</b>	
<b>1+2</b>	<b>Horizontal</b>	<b>Vertical</b>
<p><b>Peak</b></p> <p><b>Avg.</b></p>	 <p>Site : 09CH07-HY Condition : 1-PEAK(UM) 3m HF_ANT_00075962 HORIZONTAL</p>	 <p>Site : 09CH07-HY Condition : 1-PEAK(UM) 3m HF_ANT_00075962 VERTICAL</p>



Band 4 5725~5850MHz  
WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : PEAK(LIN1) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : PEAK(LIN1) 3m HF_ANT_00075962 VERTICAL</p>



Emission above 18GHz  
 5GHz WIFI 802.11ax HE80 Full (SHF @ 1m)

WIFI	5GHz WIFI	
ANT	802.11ax HE80 Full SHF	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH67-HY            Condition : PEAK(UWII) 1m SHF-EHF_9170251 HORIZONTAL</p>	<p>Site : 03CH67-HY            Condition : PEAK(UWII) 1m SHF-EHF_9170251 VERTICAL</p>



Emission below 1GHz  
 5GHz WIFI 802.11ax HE80 Full (LF @ 3m)

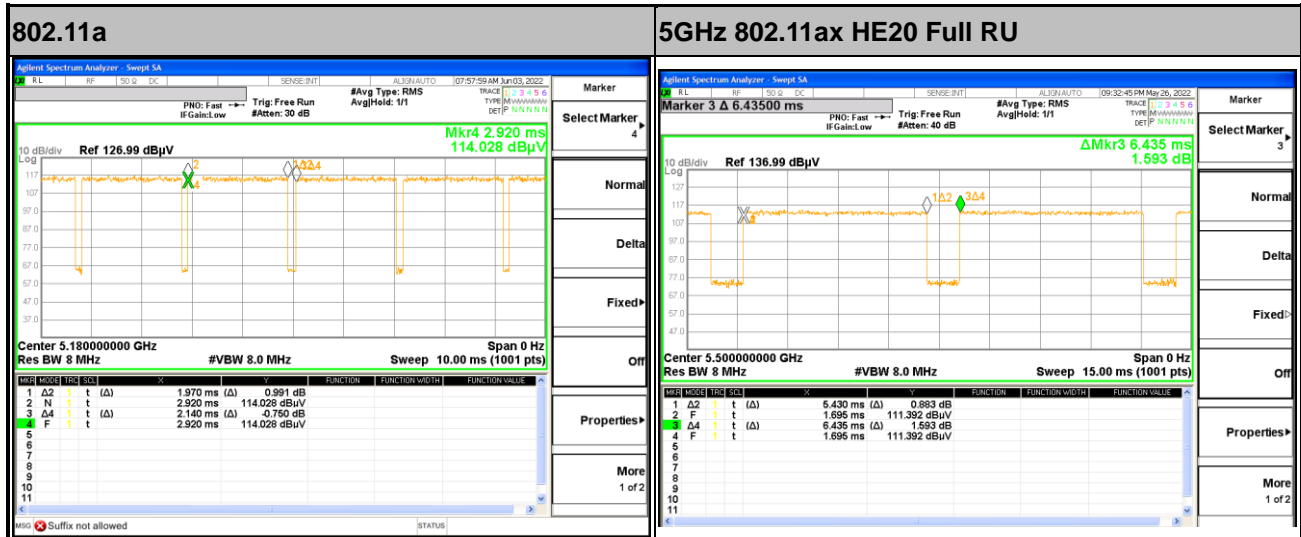
WIFI	5GHz WIFI	
ANT	802.11ax HE80 Full LF	
1+2	Horizontal	Vertical
QP / Peak	<p>Site : 03CH67-HY          Condition : QP-3m LF-ANT-35419(6) HORIZONTAL</p>	<p>Site : 03CH67-HY          Condition : QP-3m LF-ANT-35419(6) VERTICAL</p>



## Appendix E. Duty Cycle Plots

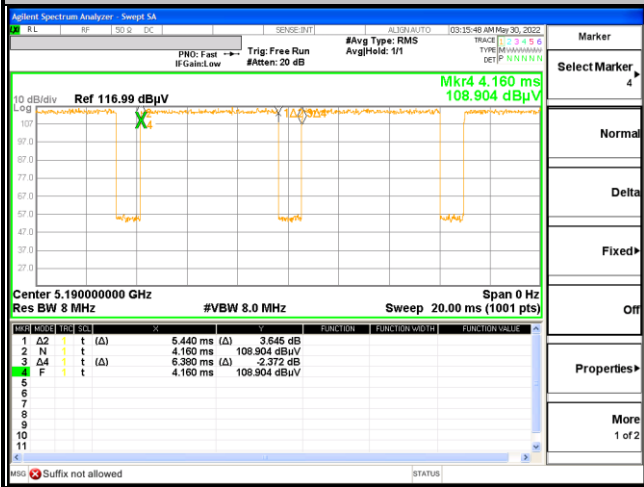
Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
1+2	802.11a	92.06	1970	0.51	1kHz
1+2	5GHz 802.11ax HE20 Full RU	84.38	5430	0.18	300Hz
1+2	5GHz 802.11ax HE40 Full RU	85.27	5440	0.18	300Hz
1+2	5GHz 802.11ax HE80 Full RU	91.58	5440	0.18	300Hz
1+2	5GHz 802.11ax HE160 Full RU	90.27	5430	0.18	300Hz

### MIMO <Ant. 1+2>

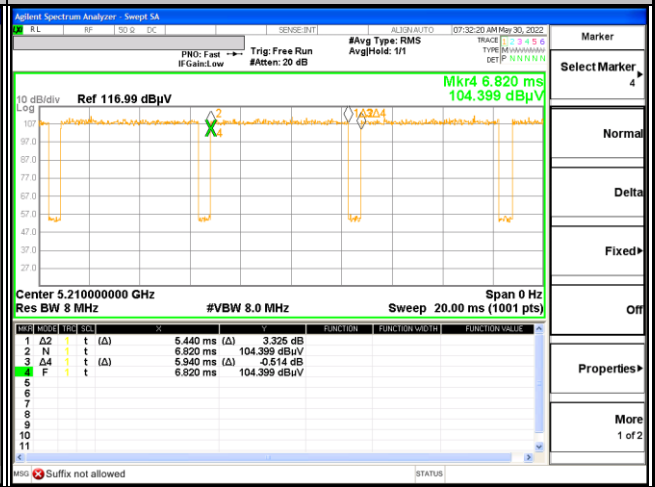




5GHz 802.11ax HE40 Full RU



5GHz 802.11ax HE80 Full RU



5GHz 802.11ax HE160 Full RU

