



# FCC RADIO TEST REPORT

**FCC ID** : PKRISGM3000A  
**Equipment** : M3000A  
**Brand Name** : Inseego  
**Model Name** : M3000A  
**Marketing Name** : M3000  
**Applicant** : Inseego Corp.  
9710 Scranton Road Suite 200, San Diego,, CA 92121  
**Manufacturer** : Inseego Corp.  
9710 Scranton Road Suite 200, San Diego,, CA 92121  
**Standard** : FCC Part 15 Subpart E §15.407

The product was received on Mar. 29, 2022 and testing was performed from Apr. 13, 2022 to Jun. 01, 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.

*Louis Wu*

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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## 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	7.62 dB under the limit at 30.000 MHz
3.5	15.207	AC Conducted Emission	Pass	7.69 dB under the limit at 11.020 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: William Chen**

**Report Producer: Lucy Wu**



# 1 General Description

## 1.1 Product Feature of Equipment Under Test

3G-WCDMA, 4G-LTE, 5G-FR1 & FR2, Wi-Fi 2.4GHz 802.11b/g/n/ax, Wi-Fi 5GHz 802.11a/n/ac/ax and GNSS.

Product Feature	
<b>Antenna Type</b>	WWAN: Fixed Internal Antenna WLAN <Ant. 0>: Internal Antenna <Ant. 1>: Internal Antenna GPS / Glonass / BDS / Galileo: Internal Antenna

Antenna information		
<b>5725 MHz ~ 5850 MHz</b>	Peak Gain (dBi)	Ant. 0: 3.9 Ant. 1: 6.4

**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> CO05-HY, 03CH07-HY

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

<b>Test Site</b>	Sporton International Inc. Wensan Laboratory
<b>Test Site Location</b>	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
<b>Test Site No.</b>	<b>Sporton Site No.</b> TH05-HY (TAF Code: 3786)
<b>Remark</b>	The Conducted test item subcontracted to Sporton International Inc. Wensan Laboratory.

FCC designation No.: TW1190 and TW3786

### 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 three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and find X 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.



## 2.2 Test Mode

The 802.11ax mode is investigated among different tones, full resource units (RU), partial resource units. The partial RU has no higher power and PSD than full RU's, thus the full RU is chosen as main test configuration.

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

Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + LAN Link + USB Cable (Charging from Adapter)

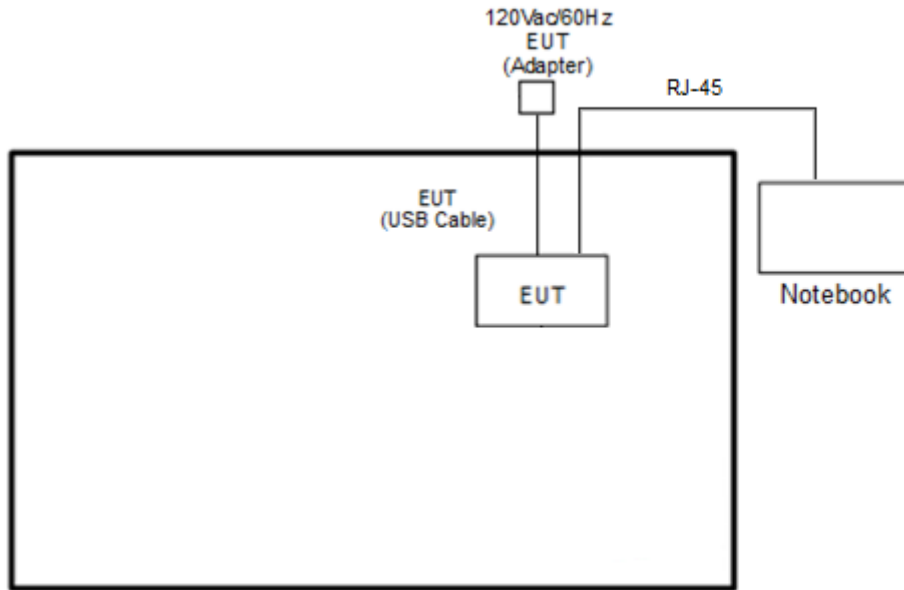
Ch. #	Band IV : 5725-5850 MHz			
	802.11a	802.11ax HE20	802.11ax HE40	802.11ac VHT80
L Low	149	149	151	-
M Middle	157	157	-	155
H High	165	165	159	-

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

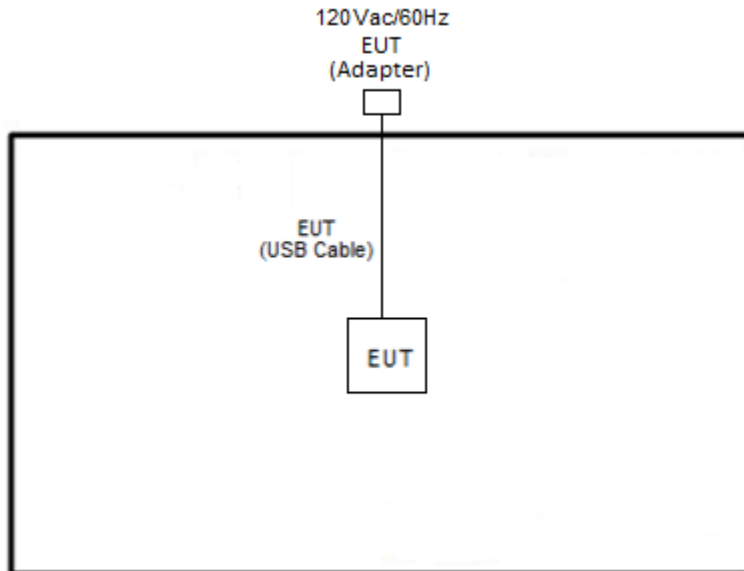


## 2.3 Connection Diagram of Test System

<AC Conducted Emission Mode>



<WLAN Tx Mode>





## 2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	DELL	Latitude 3400	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 "QRCT 4.0.00195.0" 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.

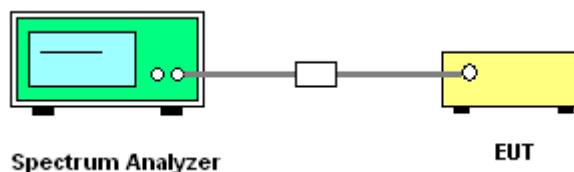
##### 3.1.2 Measuring Instruments

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

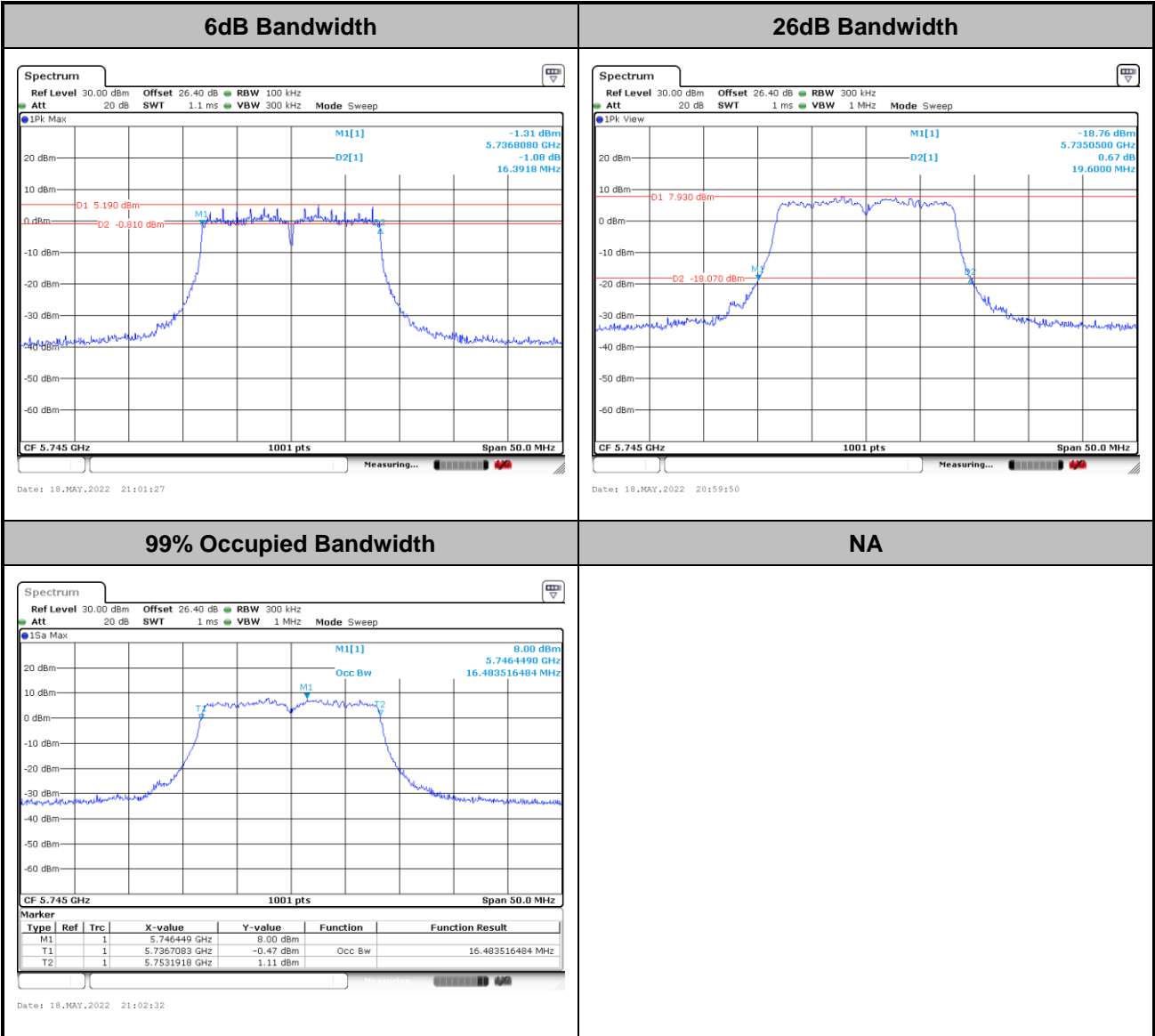
Please refer to Appendix A.



MIMO <Ant. 0+1>

<CDD Modes>

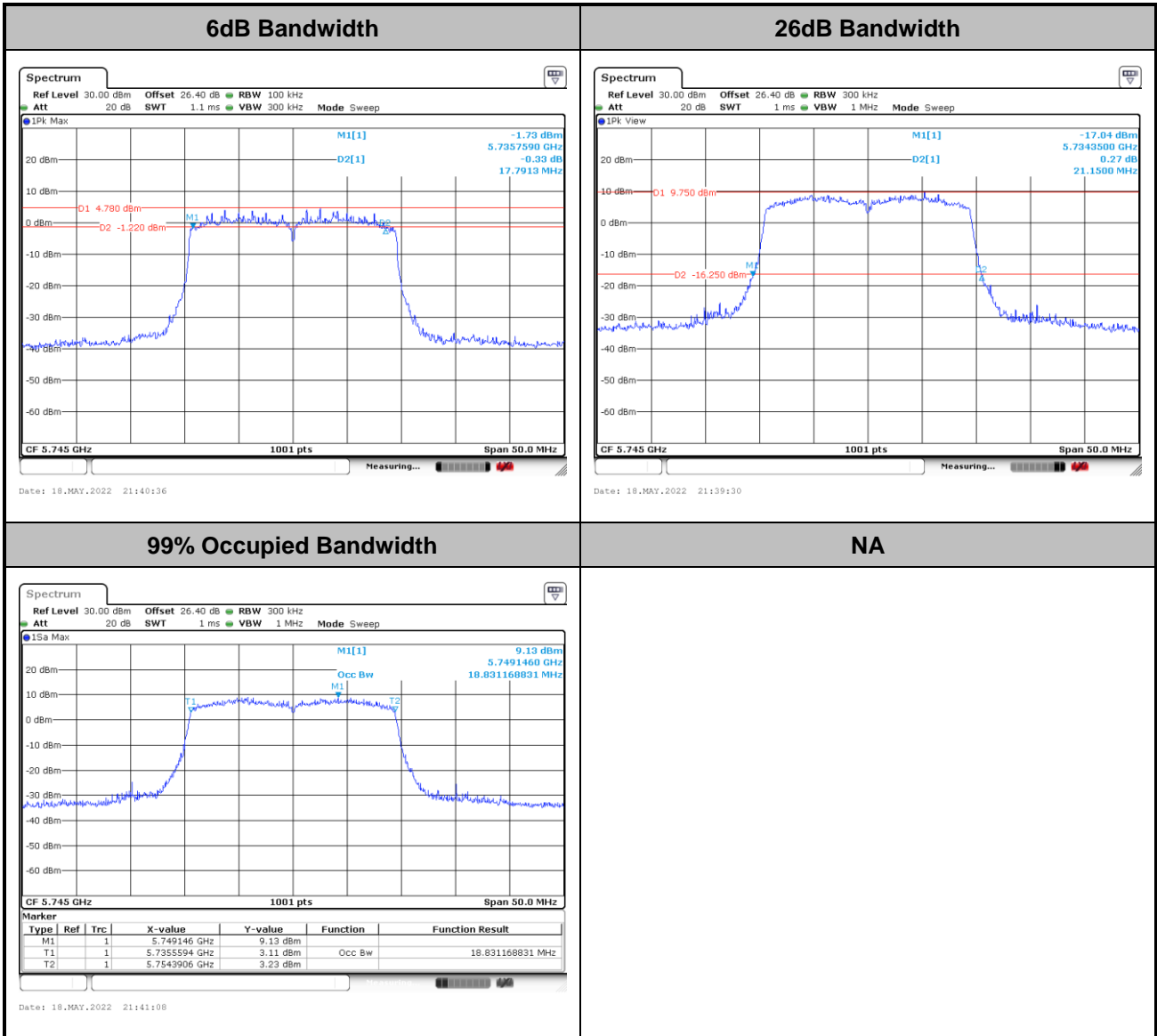
<802.11a>



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



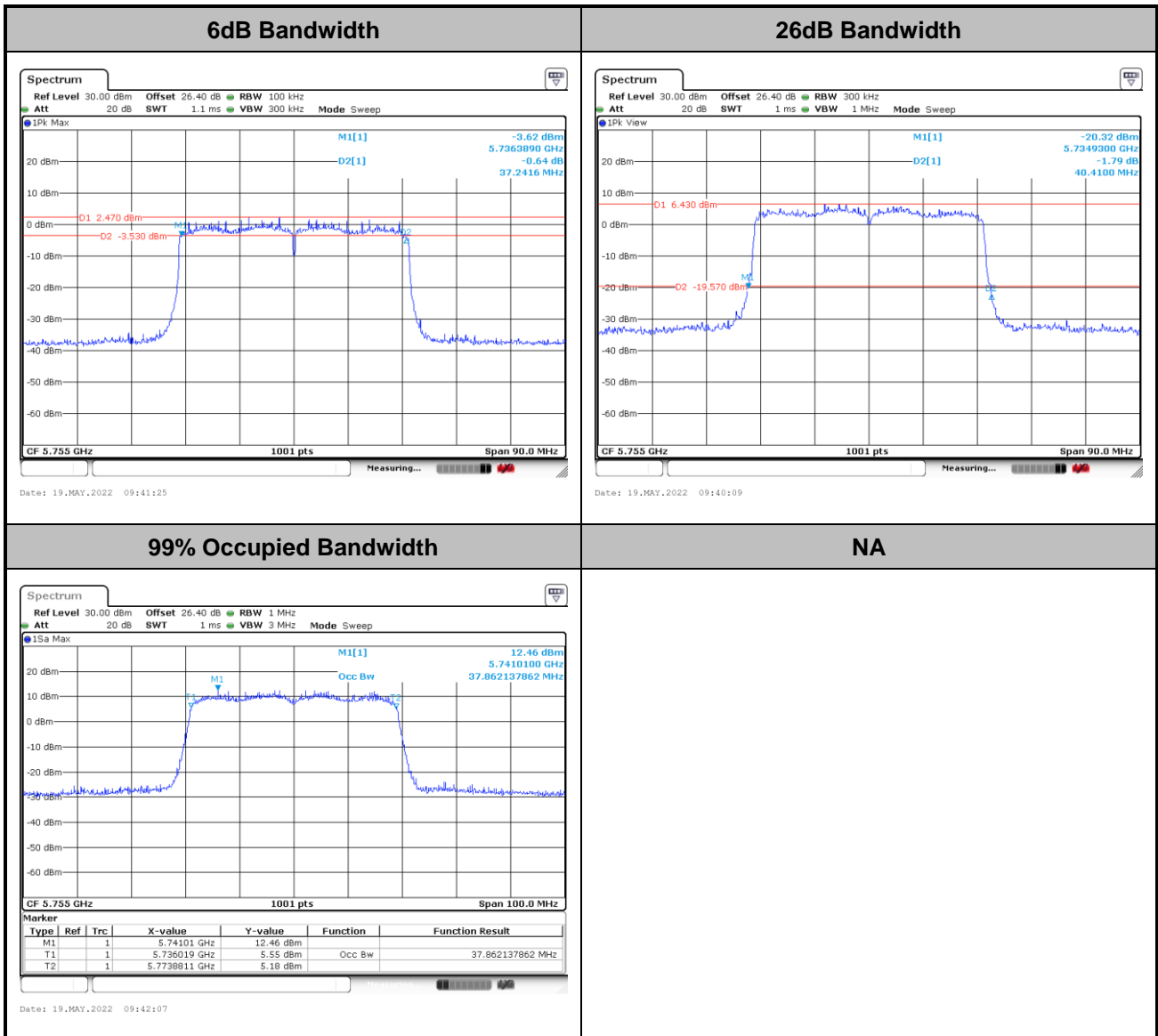
<802.11ax HE20>



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



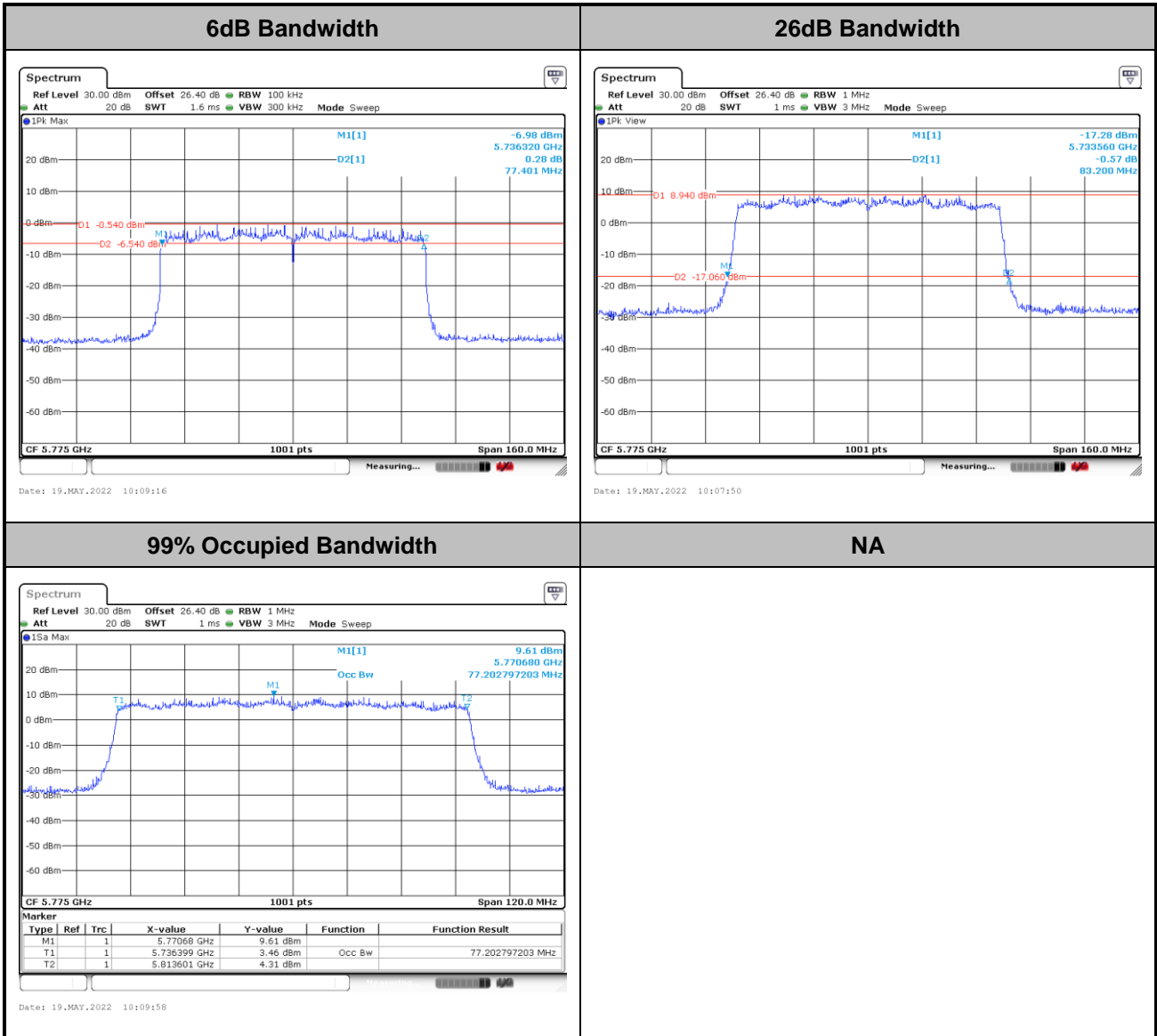
<802.11ax HE40>



**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.

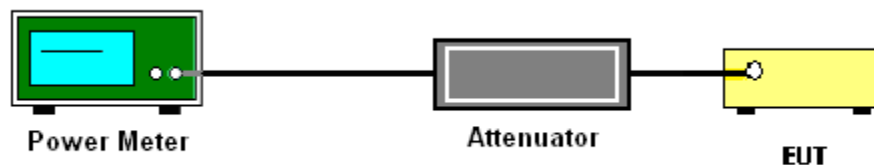
### 3.2.3 Test Procedures

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-3 #

(power averaging (rms) detection with max hold):

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
  - Set RBW = 300 kHz.
  - Set VBW  $\geq$  1 MHz.
  - Number of points in sweep  $\geq$  2 Span / RBW.
  - Add  $10 \log(500 \text{ kHz/RBW})$  to the measured result, whereas RBW ( $<500 \text{ kHz}$ ) is the reduced resolution bandwidth of the spectrum analyzer set during measurement
  - Sweep time  $\leq$  (number of points in sweep)  $\times$  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.  
Detector = power averaging (rms).
  - Trace mode = max hold.
  - Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
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.
  3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Method (c): Measure and add  $10 \log(N_{\text{ANT}})$  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  $10 \log(N_{\text{ANT}})$  dB is added to each spectrum value before comparing to the emission limit. The addition of  $10 \log(N_{\text{ANT}})$  dB serves to apportion the emission limit among the  $N_{\text{ANT}}$  outputs so that each output is permitted to contribute no more than  $1/N_{\text{ANT}}^{\text{th}}$  of the PSD limit.



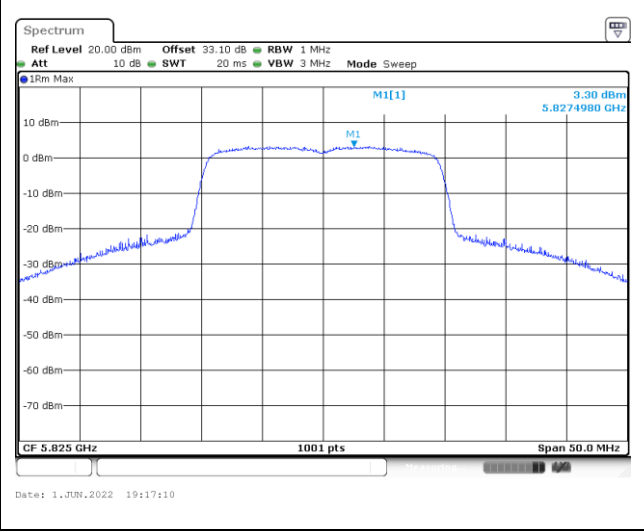
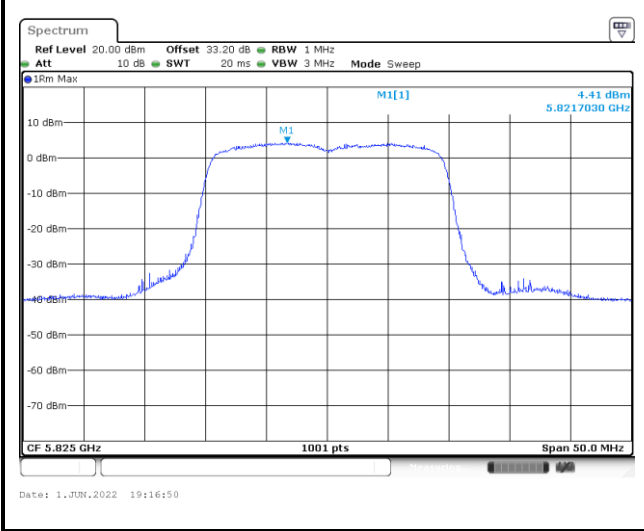


<802.11ax Mode>

Maximum Power Density Plot (dBm/MHz)

MIMO Ant. 0

MIMO Ant. 1





### 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.

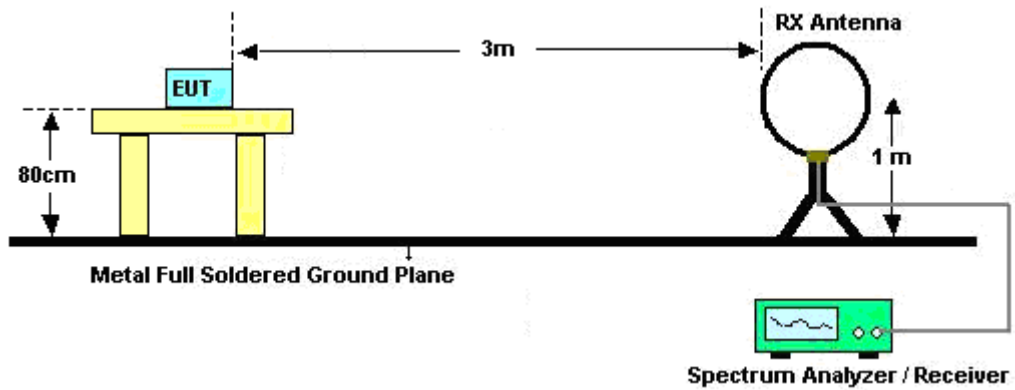
### 3.4.3 Test Procedures

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.

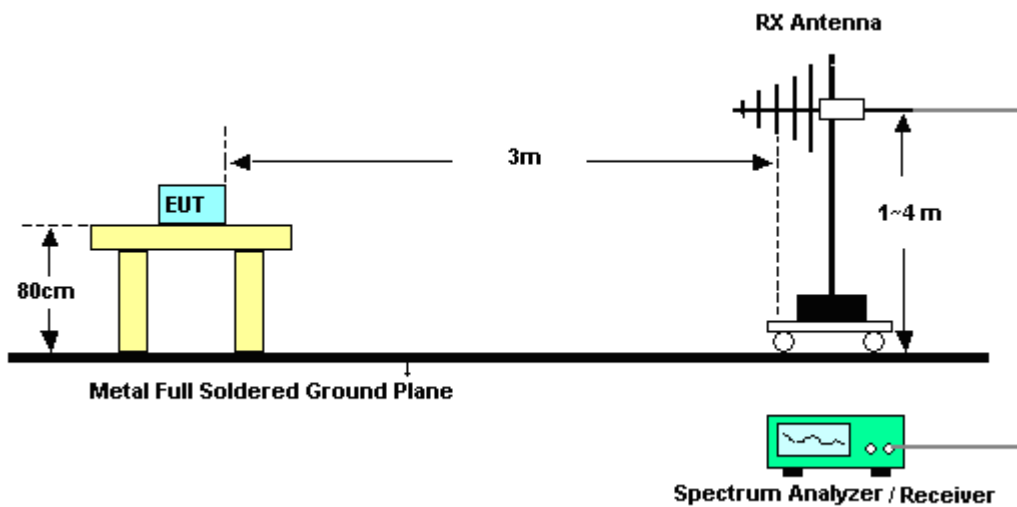
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit 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**

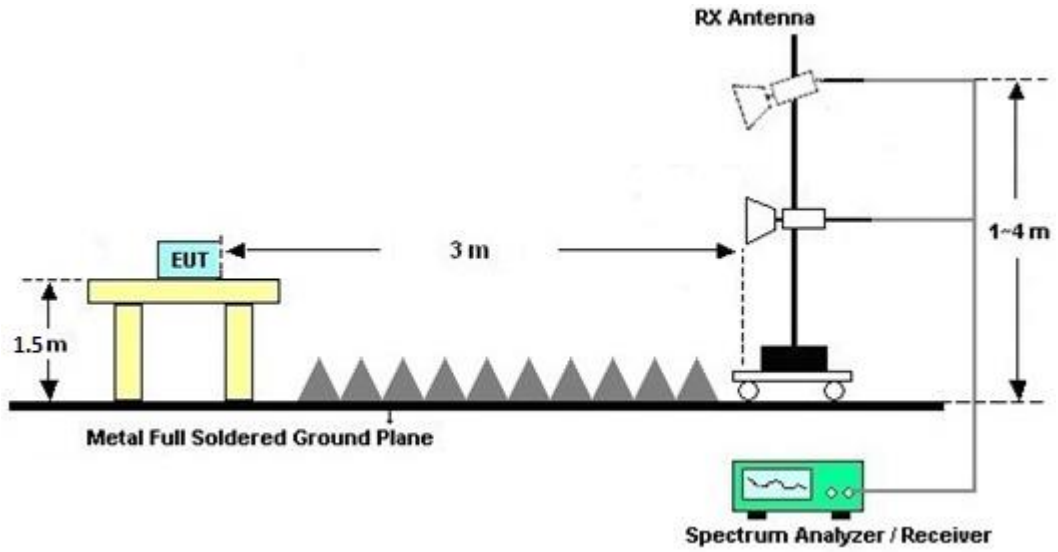
**For radiated emissions below 30MHz**



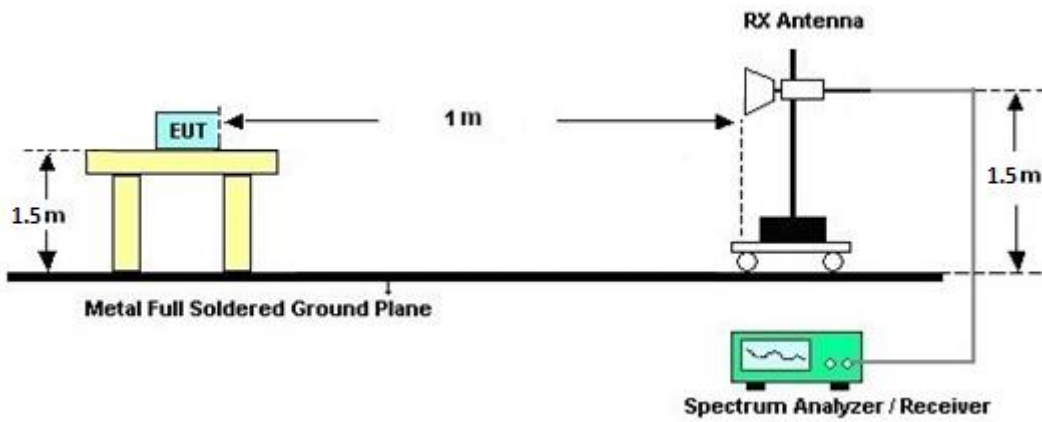
**For radiated emissions from 30MHz to 1GHz**



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 (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

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:

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

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 =  $10 \cdot \log \left[ \left( 10^{3.6/20} + 10^{4.2/20} \right)^2 / 2 \right] = 6.92$  dBi



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

<CDD Modes>						
			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant. 0	Ant. 1	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
Band IV	3.90	6.40	6.40	8.25	0.40	2.25

$$Power\ Limit\ Reduction = DG(Power) - 6dBi, (min = 0)$$

$$PSD\ Limit\ Reduction = DG(PSD) - 6dBi, (min = 0)$$

Calculation example:

The DG for PSD is derived from formula is

$$10 \times \log \left\{ \left[ 10^{(3.90\text{ dBi} / 20)} + 10^{(6.40\text{ dBi} / 20)} \right]^2 \right\} / 2$$

$$= -8.25\text{ dBi}$$



## 4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Jan. 07, 2022	Apr. 29, 2022~ May 13, 2022	Jan. 06, 2023	Radiation (03CH07-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	35419 & 03	30MHz~1GHz	Apr. 24, 2022	Apr. 29, 2022~ May 13, 2022	Apr. 23, 2023	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 03, 2021	Apr. 29, 2022~ May 13, 2022	Dec. 02, 2022	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA917025 1	18GHz~40GHz	Nov. 30, 2021	Apr. 29, 2022~ May 13, 2022	Nov. 29, 2022	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 21, 2022	Apr. 29, 2022~ May 13, 2022	Apr. 20, 2023	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 04, 2021	Apr. 29, 2022~ May 13, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Oct. 04, 2021	Apr. 29, 2022~ May 13, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 23, 2021	Apr. 29, 2022~ May 13, 2022	Jul. 22, 2022	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Jul. 22, 2021	Apr. 29, 2022~ May 13, 2022	Jul. 21, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682/4	30MHz to 18GHz	Feb. 23, 2022	Apr. 29, 2022~ May 13, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4	9kHz to 18GHz	Feb. 23, 2022	Apr. 29, 2022~ May 13, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4	9kHz to 18GHz	Feb. 23, 2022	Apr. 29, 2022~ May 13, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 17, 2021	Apr. 29, 2022~ May 13, 2022	Sep. 16, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 23, 2022	Apr. 29, 2022~ May 13, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	Apr. 14, 2022	Apr. 29, 2022~ May 13, 2022	Apr. 13, 2023	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Apr. 29, 2022~ May 13, 2022	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Apr. 29, 2022~ May 13, 2022	N/A	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	Apr. 29, 2022~ May 13, 2022	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB1148	N/A	Oct. 25, 2021	Apr. 29, 2022~ May 13, 2022	Oct. 24, 2022	Radiation (03CH07-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECEPEL	DTM-303A	TP201996	N/A	Nov. 16, 2021	Apr. 13, 2022~ Jun. 01, 2022	Nov. 15, 2022	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO 12 (NO:113)	10MHz~6GHz	Dec. 16, 2021	Apr. 13, 2022~ Jun. 01, 2022	Dec. 15, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	Apr. 13, 2022~ Jun. 01, 2022	Aug. 29, 2022	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	May 05, 2022	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2021	May 05, 2022	Nov. 30, 2022	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2021	May 05, 2022	Nov. 16, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 03, 2021	May 05, 2022	Dec. 02, 2022	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	May 05, 2022	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Jul. 28, 2021	May 05, 2022	Jul. 27, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 30, 2021	May 05, 2022	Dec. 29, 2022	Conduction (CO05-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:	Mina Liu/Jacob Yu	Temperature:	21~25	°C
Test Date:	2022/4/13~2022/06/01	Relative Humidity:	51~54	%



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

Band IV 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 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	2	149	5745	16.48	18.63	19.60	36.10	16.39	16.34	0.5	Pass
11a	6Mbps	2	157	5785	16.48	20.93	19.65	37.50	16.39	16.14	0.5	Pass
11a	6Mbps	2	165	5825	16.48	18.63	19.55	36.65	16.39	16.34	0.5	Pass

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

Band IV MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	2	149	5745	15.20	13.70	17.52	29.60		6.40		Pass
11a	6Mbps	2	157	5785	15.00	14.00	17.54	29.60		6.40		Pass
11a	6Mbps	2	165	5825	15.00	14.00	17.54	29.60		6.40		Pass
HT20	MCS0	2	149	5745	15.10	13.80	17.51	29.60		6.40		Pass
HT20	MCS0	2	157	5785	15.00	13.80	17.45	29.60		6.40		Pass
HT20	MCS0	2	165	5825	14.90	13.80	17.40	29.60		6.40		Pass
HT40	MCS0	2	151	5755	15.00	13.80	17.45	29.60		6.40		Pass
HT40	MCS0	2	159	5795	14.80	13.80	17.34	29.60		6.40		Pass
VHT20	MCS0	2	149	5745	15.20	13.90	17.61	29.60		6.40		Pass
VHT20	MCS0	2	157	5785	15.10	13.90	17.55	29.60		6.40		Pass
VHT20	MCS0	2	165	5825	15.00	13.90	17.50	29.60		6.40		Pass
VHT40	MCS0	2	151	5755	15.10	13.90	17.55	29.60		6.40		Pass
VHT40	MCS0	2	159	5795	14.90	13.90	17.44	29.60		6.40		Pass
VHT80	MCS0	2	155	5775	15.00	13.90	17.50	29.60		6.40		Pass

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

Band IV MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	10log (500kHz /RBW) Factor (dB)		Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					Ant 0	Ant 1	Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	2	149	5745	2.22		6.48	5.42	9.49	27.75		8.25		Pass
11a	6Mbps	2	157	5785	2.22		6.59	5.70	9.60	27.75		8.25		Pass
11a	6Mbps	2	165	5825	2.22		6.32	5.69	9.33	27.75		8.25		Pass

**Note:** PSD Sum = Max PSD(Ant. 0, Ant. 1) + 10 log (n)

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

Band IV MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
						Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1		
HE20	MCS0	2	149	5745	Full	18.83	19.53	21.15	40.70	17.79	18.54	0.5	Pass
HE20	MCS0	2	157	5785	Full	18.83	20.48	21.35	41.40	18.89	18.64	0.5	Pass
HE20	MCS0	2	165	5825	Full	18.93	19.83	21.40	39.00	18.49	18.74	0.5	Pass
HE40	MCS0	2	151	5755	Full	37.86	39.16	40.41	77.58	37.24	38.14	0.5	Pass
HE40	MCS0	2	159	5795	Full	37.86	42.96	40.50	80.17	37.96	38.05	0.5	Pass
HE80	MCS0	2	155	5775	Full	77.20	77.92	83.20	150.31	77.40	76.76	0.5	Pass

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

Band IV MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
HE20	MCS0	2	149	5745	Full	15.30	14.00	17.71	29.60		6.40		Pass
HE20	MCS0	2	149	5745	26/0	6.20	6.90	9.57	29.60		6.40		Pass
HE20	MCS0	2	149	5745	52/37	9.00	9.00	12.01	29.60		6.40		Pass
HE20	MCS0	2	149	5745	106/53	11.90	10.90	14.44	29.60		6.40		Pass
HE20	MCS0	2	157	5785	Full	15.20	14.00	17.65	29.60		6.40		Pass
HE20	MCS0	2	157	5785	26/4	6.30	7.10	9.73	29.60		6.40		Pass
HE20	MCS0	2	157	5785	52/38	9.00	8.90	11.96	29.60		6.40		Pass
HE20	MCS0	2	157	5785	106/53	11.60	11.20	14.41	29.60		6.40		Pass
HE20	MCS0	2	165	5825	Full	15.10	14.00	17.60	29.60		6.40		Pass
HE20	MCS0	2	165	5825	26/8	7.00	6.80	9.91	29.60		6.40		Pass
HE20	MCS0	2	165	5825	52/40	9.20	9.10	12.16	29.60		6.40		Pass
HE20	MCS0	2	165	5825	106/54	12.00	11.20	14.63	29.60		6.40		Pass
HE40	MCS0	2	151	5755	Full	15.20	14.00	17.65	29.60		6.40		Pass
HE40	MCS0	2	151	5755	242/61	12.60	11.80	15.23	29.60		6.40		Pass
HE40	MCS0	2	159	5795	Full	15.00	14.00	17.54	29.60		6.40		Pass
HE40	MCS0	2	159	5795	242/62	12.30	12.20	15.26	29.60		6.40		Pass
HE80	MCS0	2	155	5775	Full	15.10	14.00	17.60	29.60		6.40		Pass
HE80	MCS0	2	155	5775	484/65	12.80	11.90	15.38	29.60		6.40		Pass
HE80	MCS0	2	155	5775	484/66	12.40	11.90	15.17	29.60		6.40		Pass

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

Band IV MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	10log (500kHz /RBW) Factor (dB)		Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
						Ant 0	Ant 1	Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
HE20	MCS0	2	149	5745	Full	2.22	2.22	6.59	5.22	9.60	27.75	27.75	8.25	8.25	Pass
HE20	MCS0	2	149	5745	26/0	2.22	2.22	6.33	5.82	9.34	27.75	27.75	8.25	8.25	Pass
HE20	MCS0	2	149	5745	52/37	2.22	2.22	6.07	5.90	9.08	27.75	27.75	8.25	8.25	Pass
HE20	MCS0	2	149	5745	106/53	2.22	2.22	6.27	5.10	9.28	27.75	27.75	8.25	8.25	Pass
HE20	MCS0	2	157	5785	Full	2.22	2.22	6.61	5.58	9.62	27.75	27.75	8.25	8.25	Pass
HE20	MCS0	2	157	5785	26/4	2.22	2.22	5.32	6.25	9.26	27.75	27.75	8.25	8.25	Pass
HE20	MCS0	2	157	5785	52/38	2.22	2.22	6.15	6.17	9.18	27.75	27.75	8.25	8.25	Pass
HE20	MCS0	2	157	5785	106/53	2.22	2.22	6.13	6.08	9.14	27.75	27.75	8.25	8.25	Pass
HE20	MCS0	2	165	5825	Full	2.22	2.22	6.63	5.52	9.64	27.75	27.75	8.25	8.25	Pass
HE20	MCS0	2	165	5825	26/8	2.22	2.22	6.61	6.34	9.62	27.75	27.75	8.25	8.25	Pass
HE20	MCS0	2	165	5825	52/40	2.22	2.22	6.13	5.81	9.14	27.75	27.75	8.25	8.25	Pass
HE20	MCS0	2	165	5825	106/54	2.22	2.22	6.31	6.31	9.32	27.75	27.75	8.25	8.25	Pass
HE40	MCS0	2	151	5755	Full	2.22	2.22	3.83	2.61	6.84	27.75	27.75	8.25	8.25	Pass
HE40	MCS0	2	151	5755	242/61	2.22	2.22	3.51	2.38	6.52	27.75	27.75	8.25	8.25	Pass
HE40	MCS0	2	159	5795	Full	2.22	2.22	3.98	3.16	6.99	27.75	27.75	8.25	8.25	Pass
HE40	MCS0	2	159	5795	242/62	2.22	2.22	3.42	2.88	6.43	27.75	27.75	8.25	8.25	Pass
HE80	MCS0	2	155	5775	Full	2.22	2.22	0.80	-0.23	3.81	27.75	27.75	8.25	8.25	Pass
HE80	MCS0	2	155	5775	484/65	2.22	2.22	0.64	-0.38	3.65	27.75	27.75	8.25	8.25	Pass
HE80	MCS0	2	155	5775	484/66	2.22	2.22	0.54	-0.27	3.55	27.75	27.75	8.25	8.25	Pass

Note: PSD Sum = Max PSD(Ant. 0, Ant. 1) + 10 log (n)



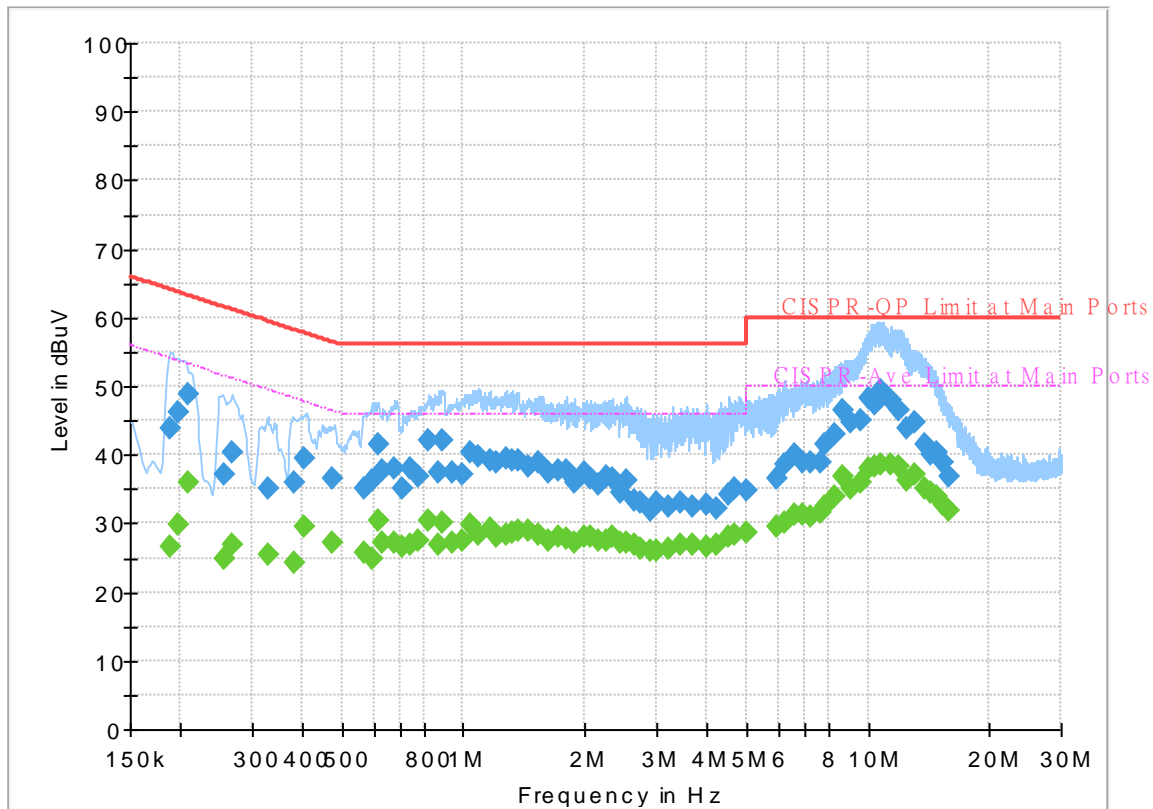
## Appendix B. AC Conducted Emission Test Results

Test Engineer :	Calvin Wang	Temperature :	23~26°C
		Relative Humidity :	45~55%

# EUT Information

Report NO : 1D2414  
 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)
0.188250	---	26.51	54.11	27.60	L1	OFF	19.6
0.188250	43.81	---	64.11	20.30	L1	OFF	19.6
0.197250	---	29.89	53.73	23.84	L1	OFF	19.6
0.197250	46.08	---	63.73	17.65	L1	OFF	19.6
0.208500	---	36.03	53.27	17.24	L1	OFF	19.6
0.208500	48.76	---	63.27	14.51	L1	OFF	19.6
0.255750	---	24.74	51.57	26.83	L1	OFF	19.6
0.255750	36.99	---	61.57	24.58	L1	OFF	19.6
0.267000	---	26.93	51.21	24.28	L1	OFF	19.6
0.267000	40.48	---	61.21	20.73	L1	OFF	19.6
0.327750	---	25.43	49.51	24.08	L1	OFF	19.6
0.327750	35.19	---	59.51	24.32	L1	OFF	19.6
0.384000	---	24.15	48.19	24.04	L1	OFF	19.6
0.384000	36.03	---	58.19	22.16	L1	OFF	19.6
0.404250	---	29.53	47.77	18.24	L1	OFF	19.6
0.404250	39.38	---	57.77	18.39	L1	OFF	19.6
0.471750	---	27.26	46.48	19.22	L1	OFF	19.6
0.471750	36.62	---	56.48	19.86	L1	OFF	19.6
0.570750	---	25.66	46.00	20.34	L1	OFF	19.6
0.570750	35.02	---	56.00	20.98	L1	OFF	19.6
0.593250	---	24.73	46.00	21.27	L1	OFF	19.6



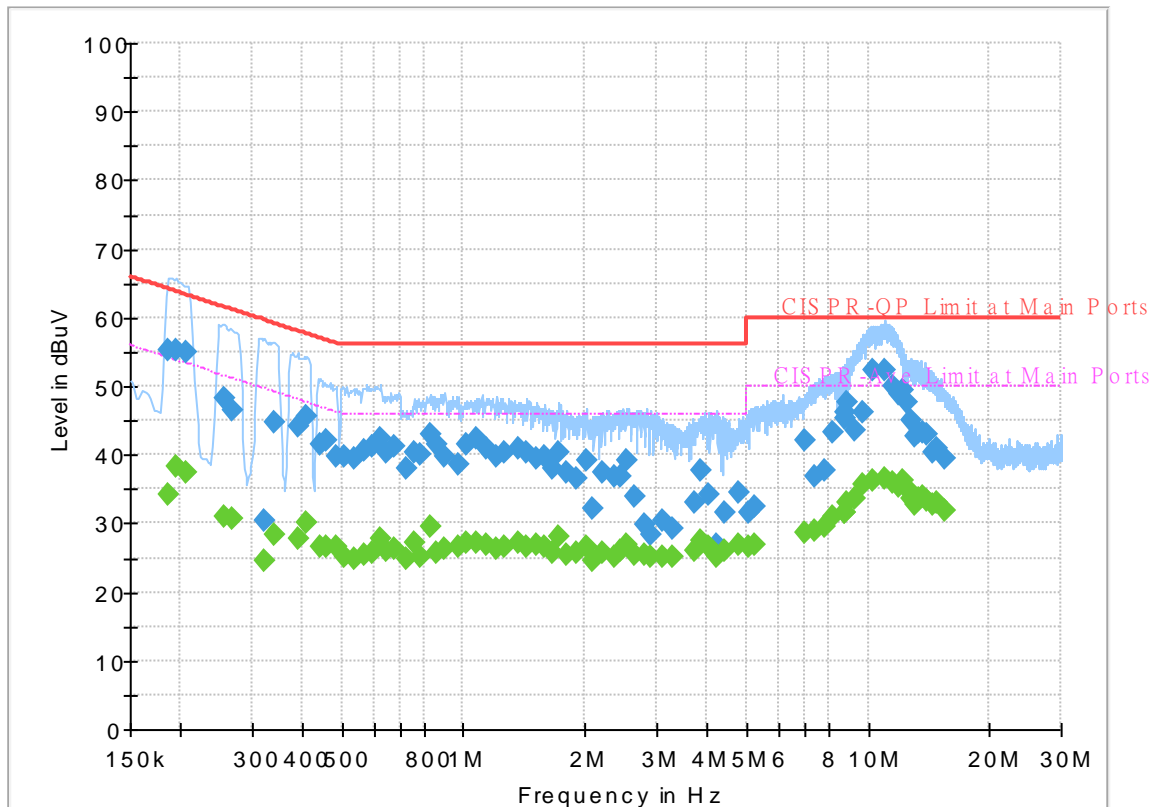
0.593250	36.34	---	56.00	19.66	L1	OFF	19.6
0.615750	---	30.51	46.00	15.49	L1	OFF	19.6
0.615750	41.48	---	56.00	14.52	L1	OFF	19.6
0.633750	---	27.25	46.00	18.75	L1	OFF	19.6
0.633750	37.73	---	56.00	18.27	L1	OFF	19.6
0.674250	---	27.05	46.00	18.95	L1	OFF	19.6
0.674250	37.95	---	56.00	18.05	L1	OFF	19.6
0.710250	---	26.56	46.00	19.44	L1	OFF	19.6
0.710250	35.05	---	56.00	20.95	L1	OFF	19.6
0.741750	---	27.01	46.00	18.99	L1	OFF	19.6
0.741750	37.92	---	56.00	18.08	L1	OFF	19.6
0.777750	---	27.40	46.00	18.60	L1	OFF	19.6
0.777750	36.89	---	56.00	19.11	L1	OFF	19.6
0.822750	---	30.32	46.00	15.68	L1	OFF	19.6
0.822750	41.97	---	56.00	14.03	L1	OFF	19.6
0.870000	---	26.95	46.00	19.05	L1	OFF	19.6
0.870000	37.53	---	56.00	18.47	L1	OFF	19.6
0.890250	---	30.21	46.00	15.79	L1	OFF	19.6
0.890250	42.13	---	56.00	13.87	L1	OFF	19.6
0.935250	---	27.21	46.00	18.79	L1	OFF	19.6
0.935250	37.46	---	56.00	18.54	L1	OFF	19.6
0.991500	---	27.50	46.00	18.50	L1	OFF	19.6
0.991500	37.08	---	56.00	18.92	L1	OFF	19.6
1.036500	---	29.84	46.00	16.16	L1	OFF	19.7
1.036500	40.24	---	56.00	15.76	L1	OFF	19.7
1.086000	---	28.50	46.00	17.50	L1	OFF	19.7
1.086000	39.85	---	56.00	16.15	L1	OFF	19.7
1.160250	---	29.10	46.00	16.90	L1	OFF	19.7
1.160250	39.15	---	56.00	16.85	L1	OFF	19.7
1.212000	---	28.20	46.00	17.80	L1	OFF	19.7
1.212000	38.99	---	56.00	17.01	L1	OFF	19.7
1.279500	---	28.44	46.00	17.56	L1	OFF	19.7
1.279500	39.45	---	56.00	16.55	L1	OFF	19.7
1.326750	---	28.80	46.00	17.20	L1	OFF	19.7
1.326750	39.06	---	56.00	16.94	L1	OFF	19.7
1.369500	---	29.07	46.00	16.93	L1	OFF	19.7
1.369500	39.23	---	56.00	16.77	L1	OFF	19.7
1.446000	---	28.96	46.00	17.04	L1	OFF	19.7
1.446000	38.19	---	56.00	17.81	L1	OFF	19.7
1.527000	---	28.46	46.00	17.54	L1	OFF	19.7
1.527000	38.83	---	56.00	17.17	L1	OFF	19.7
1.617000	---	27.53	46.00	18.47	L1	OFF	19.7
1.617000	37.36	---	56.00	18.64	L1	OFF	19.7
1.709250	---	28.08	46.00	17.92	L1	OFF	19.7
1.709250	37.77	---	56.00	18.23	L1	OFF	19.7
1.792500	---	27.85	46.00	18.15	L1	OFF	19.7
1.792500	37.59	---	56.00	18.41	L1	OFF	19.7
1.884750	---	27.18	46.00	18.82	L1	OFF	19.7
1.884750	35.97	---	56.00	20.03	L1	OFF	19.7
1.990500	---	27.93	46.00	18.07	L1	OFF	19.7
1.990500	37.44	---	56.00	18.56	L1	OFF	19.7
2.053500	---	28.03	46.00	17.97	L1	OFF	19.7
2.053500	36.59	---	56.00	19.41	L1	OFF	19.7
2.154750	---	27.59	46.00	18.41	L1	OFF	19.7
2.154750	35.70	---	56.00	20.30	L1	OFF	19.7
2.256000	---	27.56	46.00	18.44	L1	OFF	19.7
2.256000	36.79	---	56.00	19.21	L1	OFF	19.7
2.330250	---	28.01	46.00	17.99	L1	OFF	19.7
2.330250	36.67	---	56.00	19.33	L1	OFF	19.7
2.438250	---	27.19	46.00	18.81	L1	OFF	19.7
2.438250	34.57	---	56.00	21.43	L1	OFF	19.7
2.535000	---	27.16	46.00	18.84	L1	OFF	19.7
2.535000	36.27	---	56.00	19.73	L1	OFF	19.7
2.654250	---	26.92	46.00	19.08	L1	OFF	19.7
2.654250	33.31	---	56.00	22.69	L1	OFF	19.7
2.742000	---	26.33	46.00	19.67	L1	OFF	19.7
2.742000	32.93	---	56.00	23.07	L1	OFF	19.7
2.899500	---	26.13	46.00	19.87	L1	OFF	19.7
2.899500	31.91	---	56.00	24.09	L1	OFF	19.7
3.018750	---	26.11	46.00	19.89	L1	OFF	19.7
3.018750	32.93	---	56.00	23.07	L1	OFF	19.7

3.210000	---	26.45	46.00	19.55	L1	OFF	19.7
3.210000	32.48	---	56.00	23.52	L1	OFF	19.7
3.450750	---	26.80	46.00	19.20	L1	OFF	19.8
3.450750	33.02	---	56.00	22.98	L1	OFF	19.8
3.678000	---	26.76	46.00	19.24	L1	OFF	19.8
3.678000	32.56	---	56.00	23.44	L1	OFF	19.8
3.977250	---	26.54	46.00	19.46	L1	OFF	19.8
3.977250	32.71	---	56.00	23.29	L1	OFF	19.8
4.211250	---	26.95	46.00	19.05	L1	OFF	19.8
4.211250	32.27	---	56.00	23.73	L1	OFF	19.8
4.512750	---	28.14	46.00	17.86	L1	OFF	19.8
4.512750	34.12	---	56.00	21.88	L1	OFF	19.8
4.681500	---	28.43	46.00	17.57	L1	OFF	19.8
4.681500	35.04	---	56.00	20.96	L1	OFF	19.8
5.005500	---	28.62	50.00	21.38	L1	OFF	19.8
5.005500	34.89	---	60.00	25.11	L1	OFF	19.8
5.964000	---	29.59	50.00	20.41	L1	OFF	19.9
5.964000	36.68	---	60.00	23.32	L1	OFF	19.9
6.240750	---	30.26	50.00	19.74	L1	OFF	19.9
6.240750	38.47	---	60.00	21.53	L1	OFF	19.9
6.600750	---	31.17	50.00	18.83	L1	OFF	19.9
6.600750	40.16	---	60.00	19.84	L1	OFF	19.9
6.920250	---	31.17	50.00	18.83	L1	OFF	19.9
6.920250	38.85	---	60.00	21.15	L1	OFF	19.9
7.260000	---	30.93	50.00	19.07	L1	OFF	19.9
7.260000	38.86	---	60.00	21.14	L1	OFF	19.9
7.633500	---	31.55	50.00	18.45	L1	OFF	20.0
7.633500	38.96	---	60.00	21.04	L1	OFF	20.0
7.833750	---	32.47	50.00	17.53	L1	OFF	20.0
7.833750	41.43	---	60.00	18.57	L1	OFF	20.0
8.304000	---	33.83	50.00	16.17	L1	OFF	20.0
8.304000	42.92	---	60.00	17.08	L1	OFF	20.0
8.688750	---	36.78	50.00	13.22	L1	OFF	20.0
8.688750	46.49	---	60.00	13.51	L1	OFF	20.0
9.091500	---	35.23	50.00	14.77	L1	OFF	20.0
9.091500	44.87	---	60.00	15.13	L1	OFF	20.0
9.604500	---	36.03	50.00	13.97	L1	OFF	20.1
9.604500	45.06	---	60.00	14.94	L1	OFF	20.1
10.014000	---	38.13	50.00	11.87	L1	OFF	20.1
10.014000	48.21	---	60.00	11.79	L1	OFF	20.1
10.340250	---	38.31	50.00	11.69	L1	OFF	20.1
10.340250	47.40	---	60.00	12.60	L1	OFF	20.1
10.792500	---	38.52	50.00	11.48	L1	OFF	20.1
10.792500	49.34	---	60.00	10.66	L1	OFF	20.1
11.415750	---	38.59	50.00	11.41	L1	OFF	20.1
11.415750	48.01	---	60.00	11.99	L1	OFF	20.1
11.926500	---	38.20	50.00	11.80	L1	OFF	20.1
11.926500	46.40	---	60.00	13.60	L1	OFF	20.1
12.464250	---	36.27	50.00	13.73	L1	OFF	20.2
12.464250	43.82	---	60.00	16.18	L1	OFF	20.2
13.080750	---	37.02	50.00	12.98	L1	OFF	20.2
13.080750	44.71	---	60.00	15.29	L1	OFF	20.2
13.807500	---	35.13	50.00	14.87	L1	OFF	20.2
13.807500	41.45	---	60.00	18.55	L1	OFF	20.2
14.259750	---	34.48	50.00	15.52	L1	OFF	20.2
14.259750	40.09	---	60.00	19.91	L1	OFF	20.2
14.847000	---	34.02	50.00	15.98	L1	OFF	20.3
14.847000	40.38	---	60.00	19.62	L1	OFF	20.3
15.290250	---	32.85	50.00	17.15	L1	OFF	20.3
15.290250	38.90	---	60.00	21.10	L1	OFF	20.3
15.834750	---	31.76	50.00	18.24	L1	OFF	20.3
15.834750	36.77	---	60.00	23.23	L1	OFF	20.3

## EUT Information

Report NO : 1D2414  
 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)
0.186000	---	34.08	54.21	20.13	N	OFF	19.6
0.186000	55.29	---	64.21	8.92	N	OFF	19.6
0.195000	---	38.16	53.82	15.66	N	OFF	19.6
0.195000	55.16	---	63.82	8.66	N	OFF	19.6
0.206250	---	37.32	53.36	16.04	N	OFF	19.6
0.206250	54.88	---	63.36	8.48	N	OFF	19.6
0.255750	---	31.05	51.57	20.52	N	OFF	19.6
0.255750	48.23	---	61.57	13.34	N	OFF	19.6
0.269250	---	30.57	51.14	20.57	N	OFF	19.6
0.269250	46.50	---	61.14	14.64	N	OFF	19.6
0.323250	---	24.48	49.62	25.14	N	OFF	19.6
0.323250	30.36	---	59.62	29.26	N	OFF	19.6
0.339000	---	28.38	49.23	20.85	N	OFF	19.6
0.339000	44.80	---	59.23	14.43	N	OFF	19.6
0.388500	---	27.68	48.10	20.42	N	OFF	19.6
0.388500	44.13	---	58.10	13.97	N	OFF	19.6
0.411000	---	30.01	47.63	17.62	N	OFF	19.6
0.411000	45.67	---	57.63	11.96	N	OFF	19.6
0.442500	---	26.63	47.02	20.39	N	OFF	19.6
0.442500	41.44	---	57.02	15.58	N	OFF	19.6
0.460500	---	26.68	46.68	20.00	N	OFF	19.6

0.460500	42.03	---	56.68	14.65	N	OFF	19.6
0.485250	---	26.46	46.25	19.79	N	OFF	19.6
0.485250	39.90	---	56.25	16.35	N	OFF	19.6
0.510000	---	25.15	46.00	20.85	N	OFF	19.6
0.510000	39.66	---	56.00	16.34	N	OFF	19.6
0.534750	---	24.96	46.00	21.04	N	OFF	19.6
0.534750	39.59	---	56.00	16.41	N	OFF	19.6
0.566250	---	25.53	46.00	20.47	N	OFF	19.6
0.566250	40.54	---	56.00	15.46	N	OFF	19.6
0.597750	---	25.79	46.00	20.21	N	OFF	19.6
0.597750	41.21	---	56.00	14.79	N	OFF	19.6
0.622500	---	27.81	46.00	18.19	N	OFF	19.6
0.622500	42.31	---	56.00	13.69	N	OFF	19.6
0.645000	---	25.98	46.00	20.02	N	OFF	19.6
0.645000	40.41	---	56.00	15.59	N	OFF	19.6
0.676500	---	26.22	46.00	19.78	N	OFF	19.6
0.676500	41.22	---	56.00	14.78	N	OFF	19.6
0.723750	---	24.81	46.00	21.19	N	OFF	19.6
0.723750	38.07	---	56.00	17.93	N	OFF	19.6
0.753000	---	27.26	46.00	18.74	N	OFF	19.6
0.753000	40.30	---	56.00	15.70	N	OFF	19.6
0.784500	---	25.13	46.00	20.87	N	OFF	19.6
0.784500	40.03	---	56.00	15.97	N	OFF	19.6
0.825000	---	29.45	46.00	16.55	N	OFF	19.6
0.825000	42.84	---	56.00	13.16	N	OFF	19.6
0.856500	---	25.81	46.00	20.19	N	OFF	19.6
0.856500	41.48	---	56.00	14.52	N	OFF	19.6
0.901500	---	26.44	46.00	19.56	N	OFF	19.6
0.901500	39.80	---	56.00	16.20	N	OFF	19.6
0.969000	---	26.68	46.00	19.32	N	OFF	19.6
0.969000	38.59	---	56.00	17.41	N	OFF	19.6
1.023000	---	27.14	46.00	18.86	N	OFF	19.6
1.023000	41.47	---	56.00	14.53	N	OFF	19.6
1.077000	---	27.18	46.00	18.82	N	OFF	19.6
1.077000	42.29	---	56.00	13.71	N	OFF	19.6
1.135500	---	26.92	46.00	19.08	N	OFF	19.6
1.135500	41.05	---	56.00	14.95	N	OFF	19.6
1.200750	---	26.41	46.00	19.59	N	OFF	19.6
1.200750	39.67	---	56.00	16.33	N	OFF	19.6
1.266000	---	26.56	46.00	19.44	N	OFF	19.6
1.266000	40.49	---	56.00	15.51	N	OFF	19.6
1.365000	---	27.30	46.00	18.70	N	OFF	19.7
1.365000	40.88	---	56.00	15.12	N	OFF	19.7
1.432500	---	26.72	46.00	19.28	N	OFF	19.7
1.432500	40.27	---	56.00	15.73	N	OFF	19.7
1.520250	---	26.93	46.00	19.07	N	OFF	19.7
1.520250	39.55	---	56.00	16.45	N	OFF	19.7
1.592250	---	26.54	46.00	19.46	N	OFF	19.7
1.592250	39.80	---	56.00	16.20	N	OFF	19.7
1.662000	---	25.82	46.00	20.18	N	OFF	19.7
1.662000	37.87	---	56.00	18.13	N	OFF	19.7
1.718250	---	27.99	46.00	18.01	N	OFF	19.7
1.718250	40.36	---	56.00	15.64	N	OFF	19.7
1.799250	---	25.45	46.00	20.55	N	OFF	19.7
1.799250	37.49	---	56.00	18.51	N	OFF	19.7
1.907250	---	25.61	46.00	20.39	N	OFF	19.7
1.907250	36.49	---	56.00	19.51	N	OFF	19.7
2.008500	---	26.62	46.00	19.38	N	OFF	19.7
2.008500	39.10	---	56.00	16.90	N	OFF	19.7
2.080500	---	24.61	46.00	21.39	N	OFF	19.7
2.080500	32.26	---	56.00	23.74	N	OFF	19.7
2.217750	---	25.83	46.00	20.17	N	OFF	19.7
2.217750	37.38	---	56.00	18.62	N	OFF	19.7
2.350500	---	25.29	46.00	20.71	N	OFF	19.7
2.350500	36.90	---	56.00	19.10	N	OFF	19.7
2.451750	---	26.08	46.00	19.92	N	OFF	19.7
2.451750	36.99	---	56.00	19.01	N	OFF	19.7
2.541750	---	26.88	46.00	19.12	N	OFF	19.7
2.541750	39.19	---	56.00	16.81	N	OFF	19.7
2.643000	---	25.37	46.00	20.63	N	OFF	19.7
2.643000	33.79	---	56.00	22.21	N	OFF	19.7

2.798250	---	25.45	46.00	20.55	N	OFF	19.7
2.798250	29.71	---	56.00	26.29	N	OFF	19.7
2.910750	---	25.27	46.00	20.73	N	OFF	19.7
2.910750	28.38	---	56.00	27.62	N	OFF	19.7
3.111000	---	25.06	46.00	20.94	N	OFF	19.7
3.111000	30.50	---	56.00	25.50	N	OFF	19.7
3.288750	---	25.19	46.00	20.81	N	OFF	19.7
3.288750	29.23	---	56.00	26.77	N	OFF	19.7
3.729750	---	26.06	46.00	19.94	N	OFF	19.8
3.729750	33.12	---	56.00	22.88	N	OFF	19.8
3.864750	---	27.40	46.00	18.60	N	OFF	19.8
3.864750	37.62	---	56.00	18.38	N	OFF	19.8
4.053750	---	26.52	46.00	19.48	N	OFF	19.8
4.053750	34.09	---	56.00	21.91	N	OFF	19.8
4.227000	---	25.10	46.00	20.90	N	OFF	19.8
4.227000	26.96	---	56.00	29.04	N	OFF	19.8
4.438500	---	26.05	46.00	19.95	N	OFF	19.8
4.438500	31.51	---	56.00	24.49	N	OFF	19.8
4.807500	---	26.98	46.00	19.02	N	OFF	19.8
4.807500	34.56	---	56.00	21.44	N	OFF	19.8
5.046000	---	26.59	50.00	23.41	N	OFF	19.8
5.046000	31.44	---	60.00	28.56	N	OFF	19.8
5.253000	---	26.77	50.00	23.23	N	OFF	19.8
5.253000	32.48	---	60.00	27.52	N	OFF	19.8
6.992250	---	28.77	50.00	21.23	N	OFF	19.9
6.992250	42.24	---	60.00	17.76	N	OFF	19.9
7.386000	---	28.93	50.00	21.07	N	OFF	19.9
7.386000	36.73	---	60.00	23.27	N	OFF	19.9
7.811250	---	29.59	50.00	20.41	N	OFF	20.0
7.811250	37.86	---	60.00	22.14	N	OFF	20.0
8.175750	---	30.89	50.00	19.11	N	OFF	20.0
8.175750	43.40	---	60.00	16.60	N	OFF	20.0
8.733750	---	31.58	50.00	18.42	N	OFF	20.0
8.733750	46.05	---	60.00	13.95	N	OFF	20.0
8.803500	---	31.46	50.00	18.54	N	OFF	20.0
8.803500	45.27	---	60.00	14.73	N	OFF	20.0
8.859750	---	33.06	50.00	16.94	N	OFF	20.0
8.859750	47.63	---	60.00	12.37	N	OFF	20.0
9.282750	---	33.54	50.00	16.46	N	OFF	20.0
9.282750	43.65	---	60.00	16.35	N	OFF	20.0
9.757500	---	35.53	50.00	14.47	N	OFF	20.1
9.757500	46.09	---	60.00	13.91	N	OFF	20.1
10.322250	---	36.33	50.00	13.67	N	OFF	20.1
10.322250	52.21	---	60.00	7.79	N	OFF	20.1
11.019750	---	36.61	50.00	13.39	N	OFF	20.1
11.019750	52.31	---	60.00	7.69	N	OFF	20.1
11.499000	---	36.09	50.00	13.91	N	OFF	20.1
11.499000	49.93	---	60.00	10.07	N	OFF	20.1
11.917500	---	35.47	50.00	14.53	N	OFF	20.1
11.917500	48.97	---	60.00	11.03	N	OFF	20.1
12.165000	---	36.22	50.00	13.78	N	OFF	20.2
12.165000	49.27	---	60.00	10.73	N	OFF	20.2
12.486750	---	35.03	50.00	14.97	N	OFF	20.2
12.486750	47.59	---	60.00	12.41	N	OFF	20.2
12.750000	---	33.53	50.00	16.47	N	OFF	20.2
12.750000	45.00	---	60.00	15.00	N	OFF	20.2
13.060500	---	32.72	50.00	17.28	N	OFF	20.2
13.060500	42.81	---	60.00	17.19	N	OFF	20.2
13.382250	---	33.59	50.00	16.41	N	OFF	20.2
13.382250	43.16	---	60.00	16.84	N	OFF	20.2
13.677000	---	34.06	50.00	15.94	N	OFF	20.2
13.677000	43.24	---	60.00	16.76	N	OFF	20.2
14.032500	---	33.21	50.00	16.79	N	OFF	20.2
14.032500	42.96	---	60.00	17.04	N	OFF	20.2
14.433000	---	32.83	50.00	17.17	N	OFF	20.2
14.433000	40.30	---	60.00	19.70	N	OFF	20.2
14.826750	---	33.09	50.00	16.91	N	OFF	20.3
14.826750	40.86	---	60.00	19.14	N	OFF	20.3
15.564750	---	31.80	50.00	18.20	N	OFF	20.3
15.564750	39.42	---	60.00	20.58	N	OFF	20.3



### Appendix C. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	20~26.9°C
		Relative Humidity :	54.1~67.6%

**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		5622.6	48.44	-19.76	68.2	36.63	34.7	12.25	35.14	100	289	P	H	
		5674.4	49.32	-36.98	86.3	37.4	34.8	12.27	35.15	100	289	P	H	
		5720	60	-50.8	110.8	47.85	35.02	12.29	35.16	100	289	P	H	
		5724.6	71.15	-50.14	121.29	58.96	35.05	12.3	35.16	100	289	P	H	
	*	5745	109.22	-	-	96.91	35.17	12.31	35.17	100	289	P	H	
	*	5745	102.05	-	-	89.74	35.17	12.31	35.17	100	289	A	H	
														H
														H
			5649.4	48.6	-19.6	68.2	36.79	34.7	12.26	35.15	100	258	P	V
			5673.6	49.13	-36.57	85.7	37.22	34.79	12.27	35.15	100	258	P	V
			5719.8	57.72	-53.02	110.74	45.57	35.02	12.29	35.16	100	258	P	V
			5725	68.17	-54.03	122.2	55.98	35.05	12.3	35.16	100	258	P	V
	*	5745	108.4	-	-	96.09	35.17	12.31	35.17	100	258	P	V	
	*	5745	101.51	-	-	89.2	35.17	12.31	35.17	100	258	A	V	
														V
														V



WIFI Ant. 0+1	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	49.11	-19.09	68.2	37.3	34.7	12.26	35.15	100	20	P	H	
		5678	49.51	-39.45	88.96	37.57	34.81	12.28	35.15	100	20	P	H	
		5718.8	49.1	-61.36	110.46	36.96	35.01	12.29	35.16	100	20	P	H	
		5722	47.98	-67.38	115.36	35.82	35.03	12.29	35.16	100	20	P	H	
	*	5785	110.86	-	-	98.51	35.2	12.32	35.17	100	20	P	H	
	*	5785	103.82	-	-	91.47	35.2	12.32	35.17	100	20	A	H	
		5852	48.95	-68.69	117.64	36.52	35.2	12.41	35.18	100	20	P	H	
		5873	50.42	-55.34	105.76	37.97	35.2	12.44	35.19	100	20	P	H	
		5890	50.37	-43.7	94.07	37.9	35.2	12.46	35.19	100	20	P	H	
		5933	51.16	-17.04	68.2	38.71	35.13	12.52	35.2	100	20	P	H	
														H
														H
			5601.6	48.48	-19.72	68.2	36.68	34.7	12.24	35.14	100	258	P	V
			5656.6	49.1	-24	73.1	37.25	34.73	12.27	35.15	100	258	P	V
			5706.2	47.94	-59	106.94	35.87	34.94	12.29	35.16	100	258	P	V
			5724.2	49.01	-71.37	120.38	36.82	35.05	12.3	35.16	100	258	P	V
	*		5785	109.84	-	-	97.49	35.2	12.32	35.17	100	258	P	V
	*		5785	102.02	-	-	89.67	35.2	12.32	35.17	100	258	A	V
			5851	49.18	-70.74	119.92	36.76	35.2	12.4	35.18	100	258	P	V
			5871.8	50.13	-55.96	106.09	37.69	35.2	12.43	35.19	100	258	P	V
		5887.2	49.82	-46.32	96.14	37.35	35.2	12.46	35.19	100	258	P	V	
		5946	49.47	-18.73	68.2	37.02	35.11	12.54	35.2	100	258	P	V	
													V	
													V	



WiFi Ant. 0+1	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	109.35	-	-	96.96	35.2	12.37	35.18	100	250	P	H	
	*	5825	102.2	-	-	89.81	35.2	12.37	35.18	100	250	A	H	
		5852	61.14	-56.5	117.64	48.71	35.2	12.41	35.18	100	250	P	H	
		5855.2	57.09	-53.65	110.74	44.66	35.2	12.41	35.18	100	250	P	H	
		5912.4	50.6	-26.89	77.49	38.13	35.18	12.49	35.2	100	250	P	H	
		5944.8	49.76	-18.44	68.2	37.31	35.11	12.54	35.2	100	250	P	H	
														H
														H
	*	5825	109.25	-	-	96.86	35.2	12.37	35.18	100	258	258	P	V
	*	5825	102	-	-	89.61	35.2	12.37	35.18	100	258	258	A	V
		5851.6	60.86	-57.69	118.55	48.44	35.2	12.4	35.18	100	258	258	P	V
		5856	60.6	-49.92	110.52	48.17	35.2	12.41	35.18	100	258	258	P	V
		5921.8	50.7	-19.86	70.56	38.23	35.16	12.51	35.2	100	258	258	P	V
		5938.8	50.88	-17.32	68.2	38.43	35.12	12.53	35.2	100	258	258	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. 0+1	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	45.37	-28.63	74	44.82	38.11	19.32	56.88	-	-	P	H	
		13347	47.26	-26.74	74	45.05	39.11	21.04	57.94	-	-	P	H	
		15426	47.82	-26.18	74	42.18	40.05	22.53	56.94	-	-	P	H	
		15866	48.93	-25.07	74	41.52	40.83	22.79	56.21	-	-	P	H	
		17235	52.11	-16.09	68.2	42.41	41.5	23.89	55.69	-	-	P	H	
														H
														H
														H
														H
														H
														H
														H
														H
														H
														H
			11490	45.44	-28.56	74	44.89	38.11	19.32	56.88	-	-	P	V
			13347	47.38	-26.62	74	45.17	39.11	21.04	57.94	-	-	P	V
			15569	46.84	-27.16	74	40.72	40.2	22.62	56.7	-	-	P	V
		15932	48.2	-25.8	74	40.53	40.93	22.84	56.1	-	-	P	V	
		17235	51.25	-16.95	68.2	41.55	41.5	23.89	55.69	-	-	P	V	
													V	
													V	
													V	
													V	
													V	
													V	
													V	



WIFI Ant. 0+1	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	46.04	-27.96	74	45.16	38.24	19.39	56.75	-	-	P	H	
		13347	47.74	-26.26	74	45.53	39.11	21.04	57.94	-	-	P	H	
		15613	47.75	-26.25	74	41.5	40.23	22.64	56.62	-	-	P	H	
		16053	48.35	-25.65	74	40.35	41.11	22.91	56.02	-	-	P	H	
		17355	53.15	-15.05	68.2	43.22	41.44	23.99	55.5	-	-	P	H	
														H
														H
														H
														H
														H
														H
														H
			11570	45.37	-28.63	74	44.49	38.24	19.39	56.75	-	-	P	V
			13358	47.45	-26.55	74	45.26	39.08	21.05	57.94	-	-	P	V
			15437	47.26	-26.74	74	41.58	40.07	22.53	56.92	-	-	P	V
			15932	47.88	-26.12	74	40.21	40.93	22.84	56.1	-	-	P	V
			17355	54.1	-14.1	68.2	44.17	41.44	23.99	55.5	-	-	P	V
														V
													V	
													V	
													V	
													V	
													V	



WIFI Ant. 0+1	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 )	
<b>802.11a</b>		11650	46.08	-27.92	74	44.88	38.4	19.45	56.65	-	-	P	H	
		13369	48.03	-25.97	74	45.85	39.06	21.06	57.94	-	-	P	H	
		15536	46.62	-27.38	74	40.58	40.2	22.59	56.75	-	-	P	H	
		15910	48.81	-25.19	74	41.22	40.91	22.82	56.14	-	-	P	H	
		17475	51.45	-16.75	68.2	41.36	41.33	24.08	55.32	-	-	P	H	
														H
														H
														H
														H
														H
														H
	<b>CH 165</b>													H
														H
														H
													H	
													H	
													H	
														V
														V
														V
														V
<b>5825MHz</b>													V	
													V	

**Remark**

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.



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

WIFI Ant. 0+1	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		5646.8	50.03	-18.17	68.2	38.22	34.7	12.26	35.15	100	291	P	H	
		5697.8	52.45	-51.13	103.58	40.44	34.89	12.28	35.16	100	291	P	H	
		5720	64.87	-45.93	110.8	52.72	35.02	12.29	35.16	100	291	P	H	
		5724.8	75.1	-46.64	121.74	62.91	35.05	12.3	35.16	100	291	P	H	
	*	5745	111.05	-	-	98.74	35.17	12.31	35.17	100	291	P	H	
	*	5745	102.19	-	-	89.88	35.17	12.31	35.17	100	291	A	H	
														H
														H
			5649.4	48.12	-20.08	68.2	36.31	34.7	12.26	35.15	100	258	P	V
			5699.8	50.29	-54.76	105.05	38.27	34.9	12.28	35.16	100	258	P	V
			5719.6	65.74	-44.95	110.69	53.59	35.02	12.29	35.16	100	258	P	V
			5724.8	75.22	-46.52	121.74	63.03	35.05	12.3	35.16	100	258	P	V
	*		5740	110.85	-	-	98.58	35.14	12.3	35.17	100	258	P	V
	*		5740	101.73	-	-	89.46	35.14	12.3	35.17	100	258	A	V
														V
														V



WIFI Ant. 0+1	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)
		5627.2	48.2	-20	68.2	36.39	34.7	12.25	35.14	100	250	P	H
		5695.2	48.35	-53.31	101.66	36.35	34.88	12.28	35.16	100	250	P	H
		5712.6	48.68	-60.05	108.73	36.57	34.98	12.29	35.16	100	250	P	H
		5721.2	48.72	-64.82	113.54	36.56	35.03	12.29	35.16	100	250	P	H
	*	5785	109.5	-	-	97.15	35.2	12.32	35.17	100	250	P	H
	*	5785	100.54	-	-	88.19	35.2	12.32	35.17	100	250	A	H
		5854.6	48.36	-63.35	111.71	35.93	35.2	12.41	35.18	100	250	P	H
		5867.2	49.79	-57.59	107.38	37.35	35.2	12.43	35.19	100	250	P	H
		5923.4	49.9	-19.48	69.38	37.44	35.15	12.51	35.2	100	250	P	H
		5941.6	50.4	-17.8	68.2	37.94	35.12	12.54	35.2	100	250	P	H
<b>802.11ax</b>													H
<b>HE20 Full</b>													H
<b>CH 157</b>		5649.4	49.28	-18.92	68.2	37.47	34.7	12.26	35.15	100	258	P	V
<b>5785MHz</b>		5653	48.8	-21.63	70.43	36.98	34.71	12.26	35.15	100	258	P	V
		5704.8	48.57	-57.98	106.55	36.51	34.93	12.29	35.16	100	258	P	V
		5724.4	48.57	-72.26	120.83	36.38	35.05	12.3	35.16	100	258	P	V
	*	5785	110.4	-	-	98.05	35.2	12.32	35.17	100	258	P	V
	*	5785	101.68	-	-	89.33	35.2	12.32	35.17	100	258	A	V
		5852.6	49.43	-66.84	116.27	37	35.2	12.41	35.18	100	258	P	V
		5862	49.42	-59.42	108.84	36.99	35.2	12.42	35.19	100	258	P	V
		5899.6	51.95	-35.01	86.96	39.47	35.2	12.47	35.19	100	258	P	V
		5949.4	49.59	-18.61	68.2	37.14	35.1	12.55	35.2	100	258	P	V
													V
													V



WiFi Ant. 0+1	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	110.56	-	-	98.17	35.2	12.37	35.18	100	250	P	H	
	*	5825	101.8	-	-	89.41	35.2	12.37	35.18	100	250	A	H	
		5850.2	67.62	-54.12	121.74	55.2	35.2	12.4	35.18	100	250	P	H	
		5855.4	59.14	-51.55	110.69	46.71	35.2	12.41	35.18	100	250	P	H	
		5922.4	50.59	-19.53	70.12	38.12	35.16	12.51	35.2	100	250	P	H	
		5925.4	50.08	-18.12	68.2	37.62	35.15	12.51	35.2	100	250	P	H	
														H
														H
	*	5825	110.15	-	-	97.76	35.2	12.37	35.18	100	259	259	P	V
	*	5825	101.4	-	-	89.01	35.2	12.37	35.18	100	259	259	A	V
		5850	66.79	-55.41	122.2	54.37	35.2	12.4	35.18	100	259	259	P	V
		5857.2	59	-51.18	110.18	46.57	35.2	12.41	35.18	100	259	259	P	V
		5875	52.59	-52.61	105.2	40.14	35.2	12.44	35.19	100	259	259	P	V
		5948	50.33	-17.87	68.2	37.89	35.1	12.54	35.2	100	259	259	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. 0+1	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	45.44	-28.56	74	44.89	38.11	19.32	56.88	-	-	P	H	
		13369	47.24	-26.76	74	45.06	39.06	21.06	57.94	-	-	P	H	
		15613	47.25	-26.75	74	41	40.23	22.64	56.62	-	-	P	H	
		16020	47.93	-26.07	74	40	41.04	22.89	56	-	-	P	H	
		17235	51.57	-16.63	68.2	41.87	41.5	23.89	55.69	-	-	P	H	
														H
														H
														H
														H
														H
														H
														H
														H
														H
														H
														H
			11490	45.45	-28.55	74	44.9	38.11	19.32	56.88	-	-	P	V
			13303	46.4	-27.6	74	44.14	39.19	21	57.93	-	-	P	V
		15701	48.33	-25.67	74	41.72	40.4	22.69	56.48	-	-	P	V	
		15954	48.5	-25.5	74	40.77	40.95	22.85	56.07	-	-	P	V	
		17235	52.24	-15.96	68.2	42.54	41.5	23.89	55.69	-	-	P	V	
													V	
													V	
													V	
													V	
													V	
													V	
													V	



WiFi Ant. 0+1	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 )
		11570	45.93	-28.07	74	45.05	38.24	19.39	56.75	-	-	P	H
		13303	47.46	-26.54	74	45.2	39.19	21	57.93	-	-	P	H
		15580	47.12	-26.88	74	40.98	40.2	22.62	56.68	-	-	P	H
		16053	48.56	-25.44	74	40.56	41.11	22.91	56.02	-	-	P	H
		17355	52.36	-15.84	68.2	42.43	41.44	23.99	55.5	-	-	P	H
													H
													H
													H
													H
													H
													H
<b>802.11ax</b>													H
<b>HE20 Full</b>													H
<b>CH 157</b>		11570	45.46	-28.54	74	44.58	38.24	19.39	56.75	-	-	P	V
<b>5785MHz</b>		13347	48.03	-25.97	74	45.82	39.11	21.04	57.94	-	-	P	V
		15536	46.5	-27.5	74	40.46	40.2	22.59	56.75	-	-	P	V
		16042	48.44	-25.56	74	40.48	41.08	22.9	56.02	-	-	P	V
		17355	52.31	-15.89	68.2	42.38	41.44	23.99	55.5	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V





WIFI Ant. 0+1	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	45.79	-28.21	74	44.59	38.4	19.45	56.65	-	-	P	H	
		13380	47.57	-26.43	74	45.4	39.04	21.07	57.94	-	-	P	H	
		15613	47.39	-26.61	74	41.14	40.23	22.64	56.62	-	-	P	H	
		16086	48.52	-25.48	74	40.46	41.17	22.94	56.05	-	-	P	H	
		17475	51.68	-16.52	68.2	41.59	41.33	24.08	55.32	-	-	P	H	
														H
														H
														H
														H
														H
														H
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														H
														H
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													V	
													V	
													V	
Remark	<p>1. No other spurious found.</p> <p>2. All results are PASS against Peak and Average limit line.</p> <p>3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.</p>													



**Band 4 5725~5850MHz**  
**WIFI 802.11ax HE20\_Partial 26 (Band Edge @ 3m)**

WIFI Ant. 0+1	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 Partial 26/0 CH 149 5745MHz		5626.4	49.68	-18.52	68.2	37.87	34.7	12.25	35.14	241	26	P	H	
		5696.4	49.65	-52.9	102.55	37.64	34.89	12.28	35.16	241	26	P	H	
		5717.8	57.07	-53.11	110.18	44.93	35.01	12.29	35.16	241	26	P	H	
		5723.2	71.13	-46.97	118.1	58.95	35.04	12.3	35.16	241	26	P	H	
	*	5745	117.55	-	-	105.24	35.17	12.31	35.17	241	26	P	H	
	*	5745	110.91	-	-	98.6	35.17	12.31	35.17	241	26	A	H	
														H
														H
			5621.8	48.28	-19.92	68.2	36.47	34.7	12.25	35.14	100	104	P	V
			5671.8	49.64	-34.73	84.37	37.73	34.79	12.27	35.15	100	104	P	V
			5719.6	55.84	-54.85	110.69	43.69	35.02	12.29	35.16	100	104	P	V
			5721.6	53.92	-60.53	114.45	41.76	35.03	12.29	35.16	100	104	P	V
	*		5745	115.04	-	-	102.73	35.17	12.31	35.17	100	104	P	V
	*		5745	107.61	-	-	95.3	35.17	12.31	35.17	100	104	A	V
													V	
													V	



WIFI Ant. 0+1	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 Partial 26/8 CH 165 5825MHz	*	5825	118.03	-	-	105.64	35.2	12.37	35.18	100	157	P	H	
	*	5825	111.29	-	-	98.9	35.2	12.37	35.18	100	157	A	H	
		5853.8	64.06	-49.48	113.54	51.63	35.2	12.41	35.18	100	157	P	H	
		5857.8	61.24	-48.77	110.01	48.82	35.2	12.41	35.19	100	157	P	H	
		5888.6	51.65	-43.45	95.1	39.18	35.2	12.46	35.19	100	157	P	H	
		5937.6	50.45	-17.75	68.2	38	35.12	12.53	35.2	100	157	P	H	
														H
														H
	*	5825	116.47	-	-	104.08	35.2	12.37	35.18	101	304	P	V	
	*	5825	109.49	-	-	97.1	35.2	12.37	35.18	101	304	A	V	
		5852.8	50.76	-65.06	115.82	38.33	35.2	12.41	35.18	101	304	P	V	
		5861.4	54.77	-54.24	109.01	42.34	35.2	12.42	35.19	101	304	P	V	
		5881.2	51.25	-49.34	100.59	38.79	35.2	12.45	35.19	101	304	P	V	
		5927	50.94	-17.26	68.2	38.48	35.15	12.51	35.2	101	304	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 HE40\_Full (Band Edge @ 3m)**

WIFI Ant. 0+1	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 )
		5623.8	49.75	-18.45	68.2	37.94	34.7	12.25	35.14	100	252	P	H
		5699	56.62	-47.84	104.46	44.6	34.9	12.28	35.16	100	252	P	H
		5719	71.76	-38.76	110.52	59.62	35.01	12.29	35.16	100	252	P	H
		5721	73.88	-39.2	113.08	61.72	35.03	12.29	35.16	100	252	P	H
	*	5755	106.79	-	-	94.45	35.2	12.31	35.17	100	252	P	H
	*	5755	99	-	-	86.66	35.2	12.31	35.17	100	252	A	H
		5853.6	50.8	-63.19	113.99	38.37	35.2	12.41	35.18	100	252	P	H
		5866	51.61	-56.11	107.72	39.17	35.2	12.43	35.19	100	252	P	H
		5894.6	50.6	-40.06	90.66	38.12	35.2	12.47	35.19	100	252	P	H
		5944.2	49.99	-18.21	68.2	37.54	35.11	12.54	35.2	100	252	P	H
<b>802.11ax</b>													H
<b>HE40 Full</b>													H
<b>CH 151</b>		5630.8	48.95	-19.25	68.2	37.15	34.7	12.25	35.15	100	302	P	V
<b>5755MHz</b>		5699.2	54.92	-49.69	104.61	42.9	34.9	12.28	35.16	100	302	P	V
		5716	68	-41.68	109.68	55.87	35	12.29	35.16	100	302	P	V
		5721.6	70.94	-43.51	114.45	58.78	35.03	12.29	35.16	100	302	P	V
	*	5755	106.77	-	-	94.43	35.2	12.31	35.17	100	302	P	V
	*	5755	97.49	-	-	85.15	35.2	12.31	35.17	100	302	A	V
		5850	49.02	-73.18	122.2	36.6	35.2	12.4	35.18	100	302	P	V
		5871.4	51.58	-54.63	106.21	39.14	35.2	12.43	35.19	100	302	P	V
		5879	51.71	-50.52	102.23	39.26	35.2	12.44	35.19	100	302	P	V
		5943.4	49.43	-18.77	68.2	36.98	35.11	12.54	35.2	100	302	P	V
													V
													V



WIFI Ant. 0+1	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)
		5647.6	49.22	-18.98	68.2	37.41	34.7	12.26	35.15	100	251	P	H
		5698.2	51	-52.87	103.87	38.99	34.89	12.28	35.16	100	251	P	H
		5719.6	51.58	-59.11	110.69	39.43	35.02	12.29	35.16	100	251	P	H
		5721.2	55.11	-58.43	113.54	42.95	35.03	12.29	35.16	100	251	P	H
	*	5795	108.25	-	-	95.89	35.2	12.33	35.17	100	251	P	H
	*	5795	99.01	-	-	86.65	35.2	12.33	35.17	100	251	A	H
		5852.2	57.54	-59.64	117.18	45.11	35.2	12.41	35.18	100	251	P	H
		5863	55.49	-53.07	108.56	43.06	35.2	12.42	35.19	100	251	P	H
		5875.2	53.2	-51.85	105.05	40.75	35.2	12.44	35.19	100	251	P	H
		5927.4	50.7	-17.5	68.2	38.24	35.15	12.51	35.2	100	251	P	H
802.11ax													H
HE40 Full													H
CH 159		5641.6	48.82	-19.38	68.2	37.01	34.7	12.26	35.15	100	258	P	V
5795MHz		5650.4	50.1	-18.4	68.5	38.29	34.7	12.26	35.15	100	258	P	V
		5717.2	52.66	-57.36	110.02	40.53	35	12.29	35.16	100	258	P	V
		5724.4	55.2	-65.63	120.83	43.01	35.05	12.3	35.16	100	258	P	V
	*	5795	107.58	-	-	95.22	35.2	12.33	35.17	100	258	P	V
	*	5795	99.14	-	-	86.78	35.2	12.33	35.17	100	258	A	V
		5850.4	58.29	-63	121.29	45.87	35.2	12.4	35.18	100	258	P	V
		5858	56.44	-53.52	109.96	44.02	35.2	12.41	35.19	100	258	P	V
		5890	53.98	-40.09	94.07	41.51	35.2	12.46	35.19	100	258	P	V
		5935.8	50.45	-17.75	68.2	37.99	35.13	12.53	35.2	100	258	P	V
													V
													V
Remark	<ol style="list-style-type: none"> <li>No other spurious found.</li> <li>All results are PASS against Peak and Average limit line.</li> </ol>												



Band 4 5725~5850MHz

WIFI 802.11ax HE40\_Full (Harmonic @ 3m)

WIFI Ant. 0+1	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	45.08	-28.92	74	44.45	38.12	19.35	56.84	-	-	P	H	
		13358	47	-27	74	44.81	39.08	21.05	57.94	-	-	P	H	
		15470	46.15	-27.85	74	40.32	40.14	22.55	56.86	-	-	P	H	
		15932	47.93	-26.07	74	40.26	40.93	22.84	56.1	-	-	P	H	
		17265	50.67	-17.53	68.2	40.9	41.5	23.91	55.64	-	-	P	H	
														H
														H
														H
														H
														H
														H
														H
														H
														H
														H
														H
			11510	45.25	-28.75	74	44.62	38.12	19.35	56.84	-	-	P	V
			13314	47.55	-26.45	74	45.3	39.17	21.01	57.93	-	-	P	V
		15602	47.4	-26.6	74	41.21	40.2	22.63	56.64	-	-	P	V	
		16075	48.84	-25.16	74	40.8	41.15	22.93	56.04	-	-	P	V	
		17265	50.44	-17.76	68.2	40.67	41.5	23.91	55.64	-	-	P	V	
													V	
													V	
													V	
													V	
													V	
													V	
													V	
													V	



WIFI Ant. 0+1	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	45.49	-28.51	74	44.53	38.28	19.41	56.73	-	-	P	H	
		13314	46.86	-27.14	74	44.61	39.17	21.01	57.93	-	-	P	H	
		15536	45.74	-28.26	74	39.7	40.2	22.59	56.75	-	-	P	H	
		16097	47.98	-26.02	74	39.88	41.19	22.96	56.05	-	-	P	H	
		17385	50.7	-17.5	68.2	40.73	41.42	24.01	55.46	-	-	P	H	
														H
														H
														H
														H
														H
														H
			11590	45.82	-28.18	74	44.86	38.28	19.41	56.73	-	-	P	V
			13358	48.6	-25.4	74	46.41	39.08	21.05	57.94	-	-	P	V
			15569	47.09	-26.91	74	40.97	40.2	22.62	56.7	-	-	P	V
			16130	47.72	-26.28	74	39.61	41.2	22.98	56.07	-	-	P	V
			17385	51.47	-16.73	68.2	41.5	41.42	24.01	55.46	-	-	P	V
														V
														V
													V	
													V	
													V	
													V	
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.													



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

WIFI Ant. 0+1	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 )
		5637.6	55.81	-12.39	68.2	44	34.7	12.26	35.15	100	251	P	H
		5695.8	69.23	-32.87	102.1	57.23	34.88	12.28	35.16	100	251	P	H
		5709.8	74.42	-33.53	107.95	62.33	34.96	12.29	35.16	100	251	P	H
		5721.2	74.26	-39.28	113.54	62.1	35.03	12.29	35.16	100	251	P	H
	*	5775	105.39	-	-	93.04	35.2	12.32	35.17	100	251	P	H
	*	5775	96.42	-	-	84.07	35.2	12.32	35.17	100	251	A	H
		5850	70.82	-51.38	122.2	58.4	35.2	12.4	35.18	100	251	P	H
		5857	68.56	-41.68	110.24	56.13	35.2	12.41	35.18	100	251	P	H
		5877	60.47	-43.24	103.71	48.02	35.2	12.44	35.19	100	251	P	H
		5925.6	53.07	-15.13	68.2	40.61	35.15	12.51	35.2	100	251	P	H
<b>802.11ax</b>													H
<b>HE80 Full</b>													H
<b>CH 155</b>		5645	55.62	-12.58	68.2	43.81	34.7	12.26	35.15	100	259	P	V
<b>5775MHz</b>		5685.2	68.79	-25.49	94.28	56.83	34.84	12.28	35.16	100	259	P	V
		5712	73.28	-35.28	108.56	61.18	34.97	12.29	35.16	100	259	P	V
		5724.2	73.29	-47.09	120.38	61.1	35.05	12.3	35.16	100	259	P	V
	*	5775	104.61	-	-	92.26	35.2	12.32	35.17	100	259	P	V
	*	5775	96.28	-	-	83.93	35.2	12.32	35.17	100	259	A	V
		5851.2	71.96	-47.5	119.46	59.54	35.2	12.4	35.18	100	259	P	V
		5856.4	67.41	-43	110.41	54.98	35.2	12.41	35.18	100	259	P	V
		5875	61.54	-43.66	105.2	49.09	35.2	12.44	35.19	100	259	P	V
		5927.6	52.42	-15.78	68.2	39.96	35.14	12.52	35.2	100	259	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. 0+1	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	45.24	-28.76	74	44.44	38.2	19.38	56.78	-	-	P	H	
		13325	46.27	-27.73	74	44.04	39.15	21.02	57.94	-	-	P	H	
		15437	47.52	-26.48	74	41.84	40.07	22.53	56.92	-	-	P	H	
		15899	47.63	-26.37	74	40.08	40.9	22.81	56.16	-	-	P	H	
		17325	50.46	-17.74	68.2	40.57	41.47	23.97	55.55	-	-	P	H	
														H
														H
														H
														H
														H
														H
														H
														V
			11550	44.54	-29.46	74	43.74	38.2	19.38	56.78	-	-	P	V
			13347	46.46	-27.54	74	44.25	39.11	21.04	57.94	-	-	P	V
			15580	47.02	-26.98	74	40.88	40.2	22.62	56.68	-	-	P	V
			16031	48.65	-25.35	74	40.71	41.06	22.89	56.01	-	-	P	V
			17325	50.26	-17.94	68.2	40.37	41.47	23.97	55.55	-	-	P	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> </ol>													



Emission above 1GHz

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.	
0+1		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11ax HE80 Full SHF		39868	40.73	-33.27	74	39.81	44.6	14.78	58.46	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
			39472	40.21	-33.79	74	40.45	44.4	14.62	59.26	-	-	P
													V
													V
													V
													V
													V
													V
													V
													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 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> </ol>												



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.		
0+1		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )	
802.11ax HE80 Full LF		32.16	22.59	-17.41	40	28.44	23.26	0.99	30.1	-	-	P	H	
		93.45	33.32	-10.18	43.5	46.41	15.19	1.72	30	-	-	P	H	
		172.83	29.58	-13.92	43.5	41.64	15.43	2.37	29.86	-	-	P	H	
		753.6	30.45	-15.55	46	27.39	27.68	4.8	29.42	-	-	P	H	
		860	33.02	-12.98	46	28.01	28.83	5.19	29.01	-	-	P	H	
		958.7	33.7	-12.3	46	25.99	30.75	5.58	28.62	-	-	P	H	
														H
														H
														H
														H
														H
														H
			30	32.38	-7.62	40	36.91	24.57	1.01	30.11	-	-	P	V
			57.54	25.04	-14.96	40	41.79	12.01	1.28	30.04	-	-	P	V
			91.02	31.4	-12.1	43.5	45	14.73	1.7	30.03	-	-	P	V
			835.5	32	-14	46	27.92	28.1	5.1	29.12	-	-	P	V
			892.2	32.49	-13.51	46	27.27	28.67	5.4	28.85	-	-	P	V
			952.4	33.98	-12.02	46	26.63	30.43	5.56	28.64	-	-	P	V
														V
														V
													V	
													V	
													V	

**Remark**

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



**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.	
0+1		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
802.11a CH 149 5745MHz		5650	55.45	-12.75	68.2	54.51	32.22	4.58	35.86	103	308	P	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) – 68.2(dBμV/m)  
= -12.75 (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 :	20~26.9°C
		Relative Humidity :	54.1~67.6%

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

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
0+1	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>



<b>WIFI</b>	<b>Band 4 5725~5850MHz Band Edge @ 3m</b>	
<b>ANT</b>	<b>802.11a CH149 5745MHz</b>	
<b>0+1</b>	<b>Vertical</b>	<b>Fundamental</b>
<b>Peak</b>	<p>Site : 09CH07-HY Condition : PEAK_RE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz; VBW:3000.000kHz; SWT:Auto</p>	<p>Site : 09CH07-HY Condition : PEAK(FUNB)_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	
0+1	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(LIN) 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	
0+1	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY          Condition : PEAK_BE(B4)_16-24 3m HF_ANT_0007962 VERTICAL          : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY          Condition : PEAK(LNB) 3m HF_ANT_0007962 VERTICAL          : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	<p>Site : 03CH07-HY          Condition : PEAK_BE(B4)_16-24 3m HF_ANT_0007962 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	
0+1	Horizontal	Fundamental
Peak		



<b>WIFI</b>	<b>Band 4 5725~5850MHz Band Edge @ 3m</b>	
<b>ANT</b>	<b>802.11a CH165 5825MHz</b>	
<b>0+1</b>	<b>Vertical</b>	<b>Fundamental</b>
<b>Peak</b>	<p>Site : 09CH07-HY Condition : PEAK_B4(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 09CH07-HY Condition : PEAK(FUNB) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



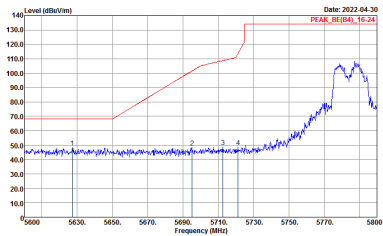
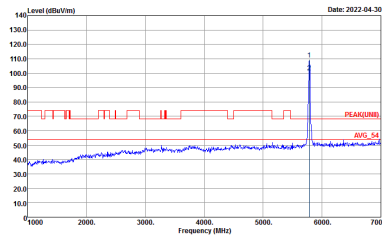
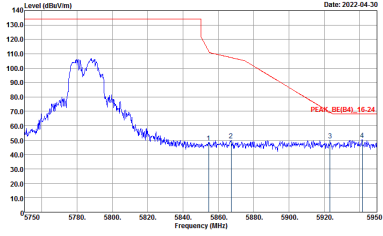
**Band 4 5725~5850MHz**  
**WIFI 802.11ax HE20 Full (Band Edge @ 3m)**

<b>WIFI</b>	<b>Band 4 5725~5850MHz Band Edge @ 3m</b>	
<b>ANT</b>	<b>802.11ax HE20 Full CH149 5745MHz</b>	
<b>0+1</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 SWTA:Auto</p>	<p>Site : 03CH07-HY          Condition : PEAK(LIN) 3m HF_ANT_00075962 HORIZONTAL          : RBW:1000.000kHz VBW:3000.000kHz SWTA:Auto</p>



<b>WIFI</b>	<b>Band 4 5725~5850MHz Band Edge @ 3m</b>	
<b>ANT</b>	<b>802.11ax HE20 Full CH149 5745MHz</b>	
<b>0+1</b>	<b>Vertical</b>	<b>Fundamental</b>
<b>Peak</b>	<p>Site : 09CH07-HY Condition : PEAK_RE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 09CH07-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	802.11ax HE20 Full CH157 5785MHz	
0+1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY          Condition : PEAK_BE(B4)_16-24 3m HF_ANT_0007962 HORIZONTAL          : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY          Condition : PEAK(LNB) 3m HF_ANT_0007962 HORIZONTAL          : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	 <p>Site : 03CH07-HY          Condition : PEAK_BE(B4)_16-24 3m HF_ANT_0007962 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	
0+1	Vertical	Fundamental
Peak		
Peak		Left blank



<b>WIFI</b>	<b>Band 4 5725~5850MHz Band Edge @ 3m</b>	
<b>ANT</b>	<b>802.11ax HE20 Full CH165 5825MHz</b>	
<b>0+1</b>	<b>Horizontal</b>	<b>Fundamental</b>
<b>Peak</b>	<p>Site : 09SCH07-HY Condition : PEAK, REF#4], 16-24 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000kHz, VBW:3000.000kHz, SWT:Auto</p>	<p>Site : 09SCH07-HY Condition : PEAK(LINE) 3m HF_ANT_00075962 HORIZONTAL RBW:1000.000kHz, VBW:3000.000kHz, SWT:Auto</p>





<b>WIFI</b>	<b>Band 4 5725~5850MHz Band Edge @ 3m</b>	
<b>ANT</b>	<b>802.11ax HE20 Full CH165 5825MHz</b>	
<b>0+1</b>	<b>Vertical</b>	<b>Fundamental</b>
<b>Peak</b>	<p>Site : 09SCH07-HY Condition : PEAK_BI(B4)_16-24 3m Hf_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 09SCH07-HY Condition : PEAK(LINB) 3m Hf_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



**Band 4 5725~5850MHz**  
**WIFI 802.11ax HE20 Partial 26 (Band Edge @ 3m)**

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/0 CH149 5745MHz	
0+1	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:3000.000kHz VBW:3000.000kHz SWTAuto</p>	<p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF_ANT_00075962 HORIZONTAL : RBW:3000.000kHz VBW:3000.000kHz SWTAuto</p>



<b>WIFI</b>	<b>Band 4 5725~5850MHz Band Edge @ 3m</b>	
<b>ANT</b>	<b>802.11ax HE20 Partial 26/0 CH149 5745MHz</b>	
<b>0+1</b>	<b>Vertical</b>	<b>Fundamental</b>
<b>Peak</b>	<p>Date: 2022-05-13 PEAK_RE(B4)_16-24</p> <p>Site : 09SCH07-HY Condition : PEAK_RE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz; VBW:3000.000kHz; SWT:Auto</p>	<p>Date: 2022-05-13 PEAK(LINB)</p> <p>Site : 09SCH07-HY Condition : PEAK(LINB) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz; VBW:3000.000kHz; SWT:Auto</p>



<b>WIFI</b>	<b>Band 4 5725~5850MHz Band Edge @ 3m</b>	
<b>ANT</b>	<b>802.11ax HE20 Partial 26/8 CH165 5825MHz</b>	
<b>0+1</b>	<b>Horizontal</b>	<b>Fundamental</b>
<b>Peak</b>	<p>Site : 09SCH07-HY Condition : PEAK_B4(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 09SCH07-HY Condition : PEAK(LINB) 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 Partial 26/8 CH165 5825MHz	
0+1	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	
0+1	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY            Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWTA:Auto</p>	<p>Site : 03CH07-HY            Condition : PEAK(LIN) 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWTA:Auto</p>
Peak	<p>Site : 03CH07-HY            Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWTA:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
0+1	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY            Condition : PEAK_BE(B4)_16-24 3m HF_ANT_0007962 VERTICAL            : RBW:1000.000kHz; VBW:3000.000kHz; SWT:Auto</p>	<p>Site : 03CH07-HY            Condition : PEAK(LNB) 3m HF_ANT_0007962 VERTICAL            : RBW:1000.000kHz; VBW:3000.000kHz; SWT:Auto</p>
Peak	<p>Site : 03CH07-HY            Condition : PEAK_BE(B4)_16-24 3m HF_ANT_0007962 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	
0+1	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(LIN) 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 HE40 Full CH159 5795MHz	
0+1	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY          Condition : PEAK_BE(B4)_16-24 3m HF_ANT_0007962 VERTICAL          : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY          Condition : PEAK(LIN) 3m HF_ANT_0007962 VERTICAL          : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	<p>Site : 03CH07-HY          Condition : PEAK_BE(B4)_16-24 3m HF_ANT_0007962 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	
0+1	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY            Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWTA:Auto</p>	<p>Site : 03CH07-HY            Condition : PEAK(LIN) 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWTA:Auto</p>
Peak	<p>Site : 03CH07-HY            Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL            : RBW:1000.000kHz VBW:3000.000kHz SWTA:Auto</p>	Left blank



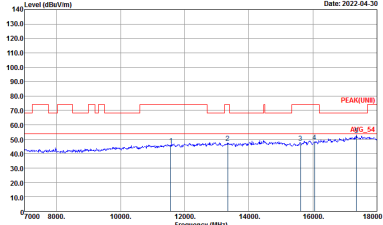
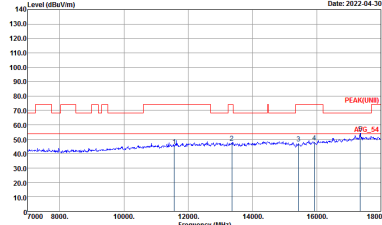
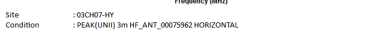
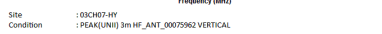
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
0+1	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY          Condition : PEAK_BE(B4)_16-24 3m HF_ANT_0007962 VERTICAL          : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY          Condition : PEAK(LIN) 3m HF_ANT_0007962 VERTICAL          : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	<p>Site : 03CH07-HY          Condition : PEAK_BE(B4)_16-24 3m HF_ANT_0007962 VERTICAL          : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



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

<b>WIFI</b>	<b>Band 4 5725~5850MHz Harmonic @ 3m</b>	
<b>ANT</b>	<b>802.11a CH149 5745MHz</b>	
<b>0+1</b>	<b>Horizontal</b>	<b>Vertical</b>
<b>Peak Avg.</b>	<p>Site : 03CH07-HY          Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY          Condition : PEAK(UNII) 3m HF_ANT_00075962 VERTICAL</p>



<b>WIFI</b>	<b>Band 4 5725~5850MHz Harmonic @ 3m</b>	
<b>ANT</b>	<b>802.11a CH157 5785MHz</b>	
<b>0+1</b>	<b>Horizontal</b>	<b>Vertical</b>
<b>Peak</b>	 <p>Site Condition : 03CH07-HY : PEAK(LIN1) 3m HF_ANT_00075962 HORIZONTAL</p>	 <p>Site Condition : 03CH07-HY : PEAK(LIN1) 3m HF_ANT_00075962 VERTICAL</p>
<b>Avg.</b>		



<b>WIFI</b>	<b>Band 4 5725~5850MHz Harmonic @ 3m</b>	
<b>ANT</b>	<b>802.11a CH165 5825MHz</b>	
<b>0+1</b>	<b>Horizontal</b>	<b>Vertical</b>
<b>Peak</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>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>



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

<b>WIFI</b>	<b>Band 4 5725~5850MHz Harmonic @ 3m</b>	
<b>ANT</b>	<b>802.11ax HE20 Full CH149 5745MHz</b>	
<b>0+1</b>	<b>Horizontal</b>	<b>Vertical</b>
<b>Peak Avg.</b>	<p>Site : 03CN07-4Y          Condition : PEAK(AVG) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CN07-4Y          Condition : PEAK(AVG) 3m HF_ANT_00075962 VERTICAL</p>



<b>WIFI</b>	<b>Band 4 5725~5850MHz Harmonic @ 3m</b>	
<b>ANT</b>	<b>802.11ax HE20 Full CH157 5785MHz</b>	
<b>0+1</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>





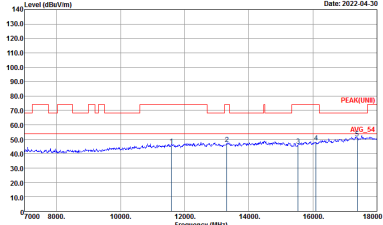
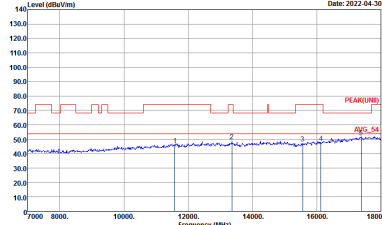
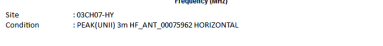

<b>WIFI</b>	<b>Band 4 5725~5850MHz Harmonic @ 3m</b>	
<b>ANT</b>	<b>802.11ax HE20 Full CH165 5825MHz</b>	
<b>0+1</b>	<b>Horizontal</b>	<b>Vertical</b>
<b>Peak</b> <b>Avg.</b>	<p>Site : 03CH07-HY Condition : PEAK(UNIT) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : PEAK(UNIT) 3m HF_ANT_00075962 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>0+1</b>	<b>Horizontal</b>	<b>Vertical</b>
<b>Peak Avg.</b>	<p>Site : 03CK07-4Y          Condition : PEAK(UNII) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CK07-4Y          Condition : PEAK(UNII) 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>0+1</b>	<b>Horizontal</b>	<b>Vertical</b>
<b>Peak</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>Avg.</b>		



**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	
0+1	Horizontal	Vertical
<b>Peak Avg.</b>	<p>Site : 03CK07-4Y Condition : PEAK(UNI) 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CK07-4Y Condition : PEAK(UNI) 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	
0+1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : PEAK(LIN1) 1m SHF-EHF_9170251 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : PEAK(LIN1) 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	
0+1	Horizontal	Vertical
QP / Peak	<p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419(6) VERTICAL</p>

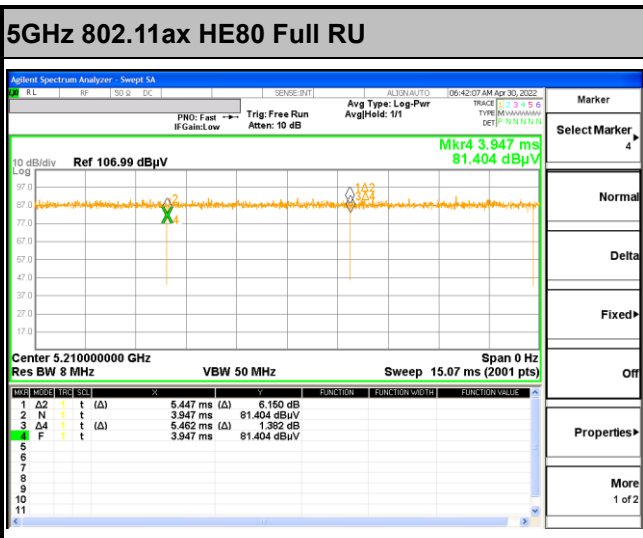
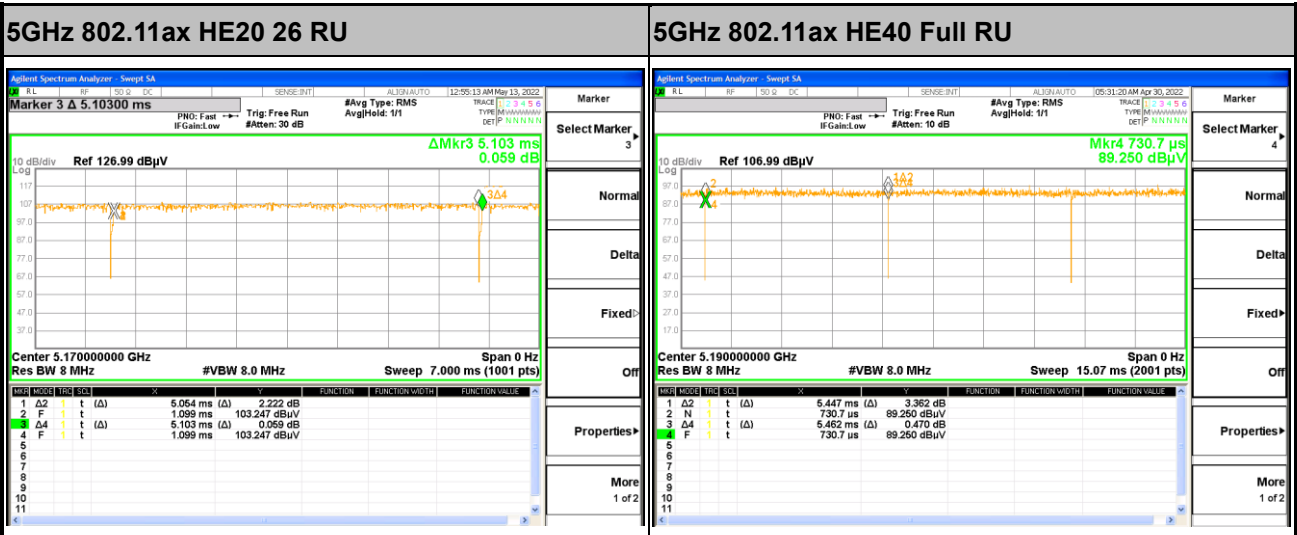
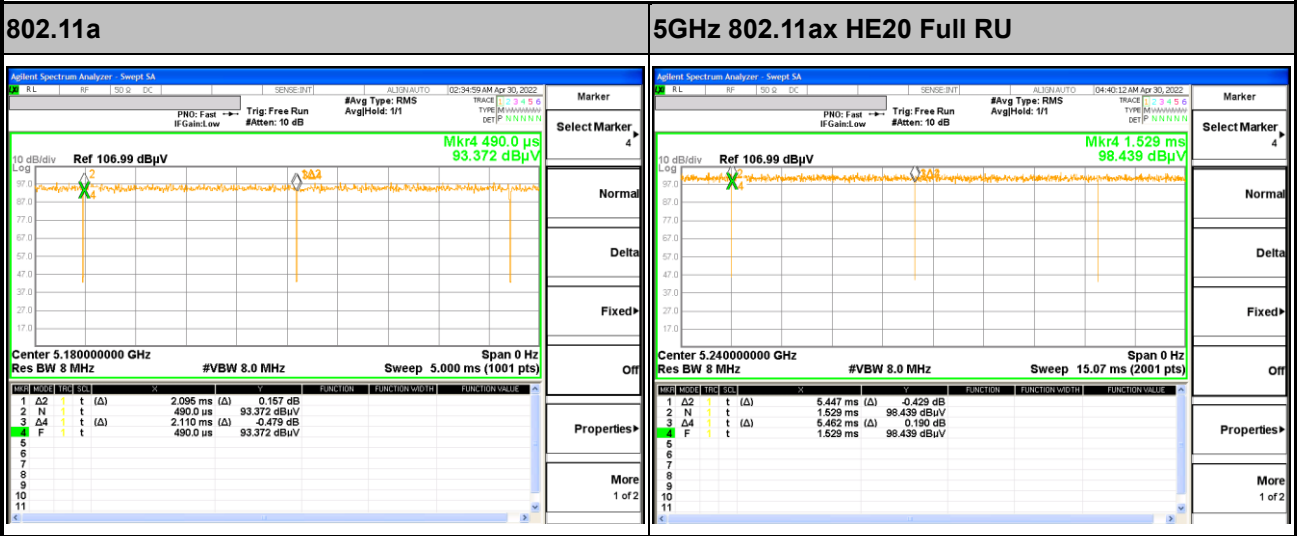


## Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
0+1	802.11a	99.29	-	-	10Hz
0+1	5GHz 802.11ax HE20 Full RU	99.73	-	-	10Hz
0+1	5GHz 802.11ax HE20 26 RU	99.04	-	-	10Hz
0+1	5GHz 802.11ax HE40 Full RU	99.73	-	-	10Hz
0+1	5GHz 802.11ax HE80 Full RU	99.73	-	-	10Hz



MIMO <Ant. 0+1>





## Appendix F. Setup Photographs

### <Conducted Emission>

Remote View





Rear View



<Radiated Emission>

X Plane

LF



HF



SHF



————THE END————