



FCC RADIO TEST REPORT

FCC ID : 2AFZZ12AG
Equipment : Mobile Phone
Brand Name : XIAOMI
Model Name : 22071212AG
Applicant : Xiaomi Communications Co., Ltd.
#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Manufacturer : Xiaomi Communications Co., Ltd.
#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Standard : FCC Part 15 Subpart E §15.407

The product was received on May 23, 2022 and testing was performed from Jun. 02, 2022 to Jun. 12, 2022. We, Sporton International Inc. Wensan 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. Wensan Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan



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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	7.96 dB under the limit at 98.870 MHz
3.5	15.207	AC Conducted Emission	Pass	22.67 dB under the limit at 11.850 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: Lewis Ho
Report Producer: Kaye Yang



1 General Description

1.1 Product Feature of Equipment Under Test

GSM/WCDMA/LTE/5G NR, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, NFC, and GNSS

Product Feature	
Sample 1	8G+128G
Sample 2	8G+256G
Antenna Type	WWAN: Fixed Internal Antenna WLAN: <Ant. 16>: PIFA Antenna <Ant. 17>: PIFA Antenna <Ant. 18>: PIFA Antenna Bluetooth: PIFA Antenna GPS/Glonass/BDS/Galileo/SBAS/QZSS/NavIC: PIFA Antenna NFC: Coil Antenna
Antenna information	
5725 MHz ~ 5850 MHz	Peak Gain (dBi) <Ant. 17>: -0.75 <Ant. 18>: -1.25

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

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No. TH05-HY, 03CH16-HY, CO07-HY

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

FCC designation No.: 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.



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 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 : Bluetooth Link + WLAN (5GHz) Link + MPEG4 + USB Cable 1 (Charging from AC Adapter) for Sample 1
Remark: For Radiated Test Cases, the tests were performed with USB Cable 1 and Sample 1.	

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

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

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Earphone	Sony	SBH20	PY7-RD0010	N/A	N/A
2.	WLAN AP	ASUS	RT-AC58U	N/A	N/A	Unshielded, 1.8m
3.	Notebook	Dell	P74G	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, make the EUT (SW: MIUI 13 Global 0.0.0) 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.

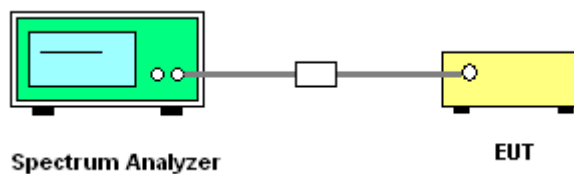
3.1.2 Measuring Instruments

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



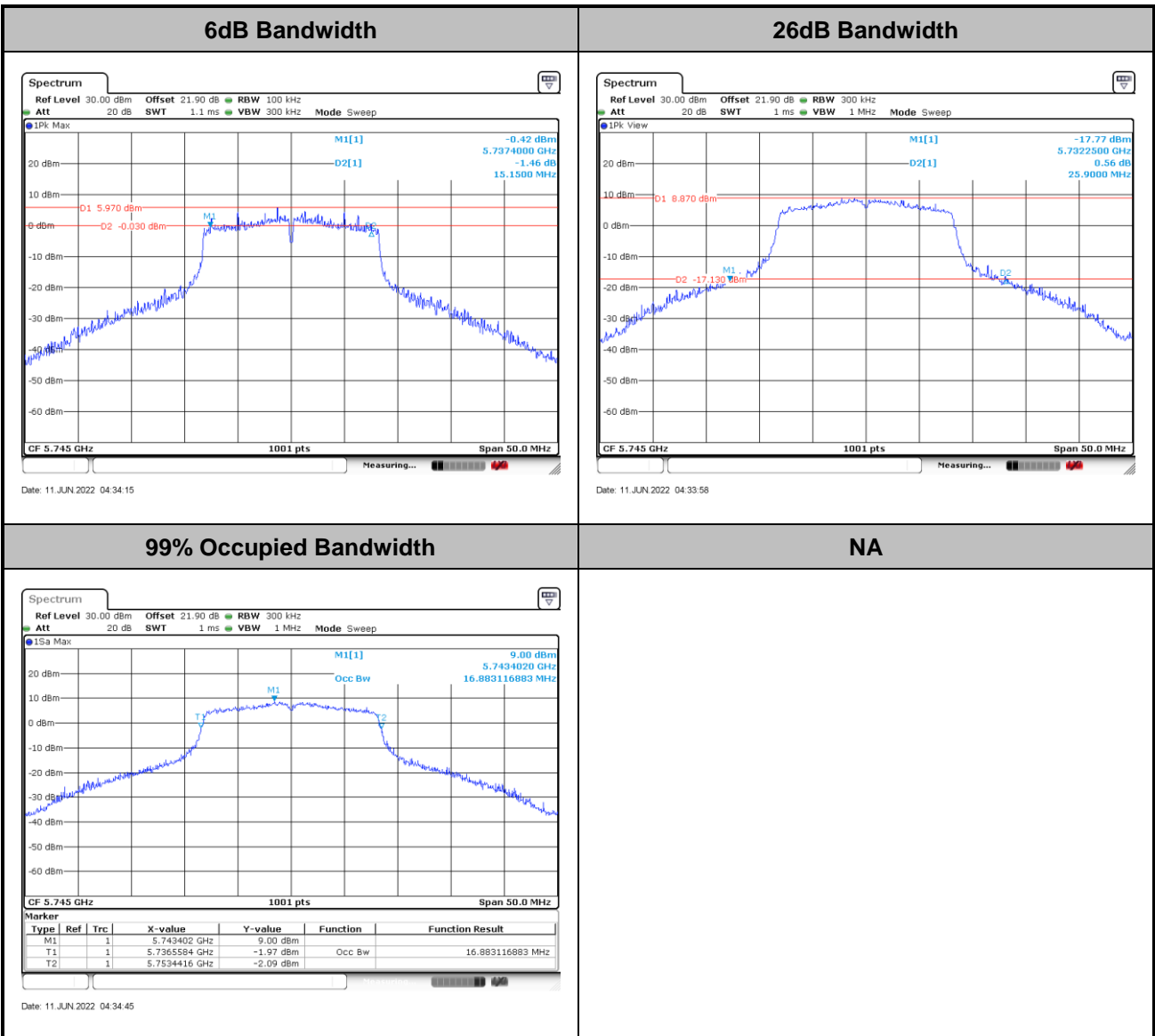
3.1.5 Test Result of 6dB and 26dB and 99% Occupied Bandwidth

Please refer to Appendix A.



MIMO <Ant.17+18>

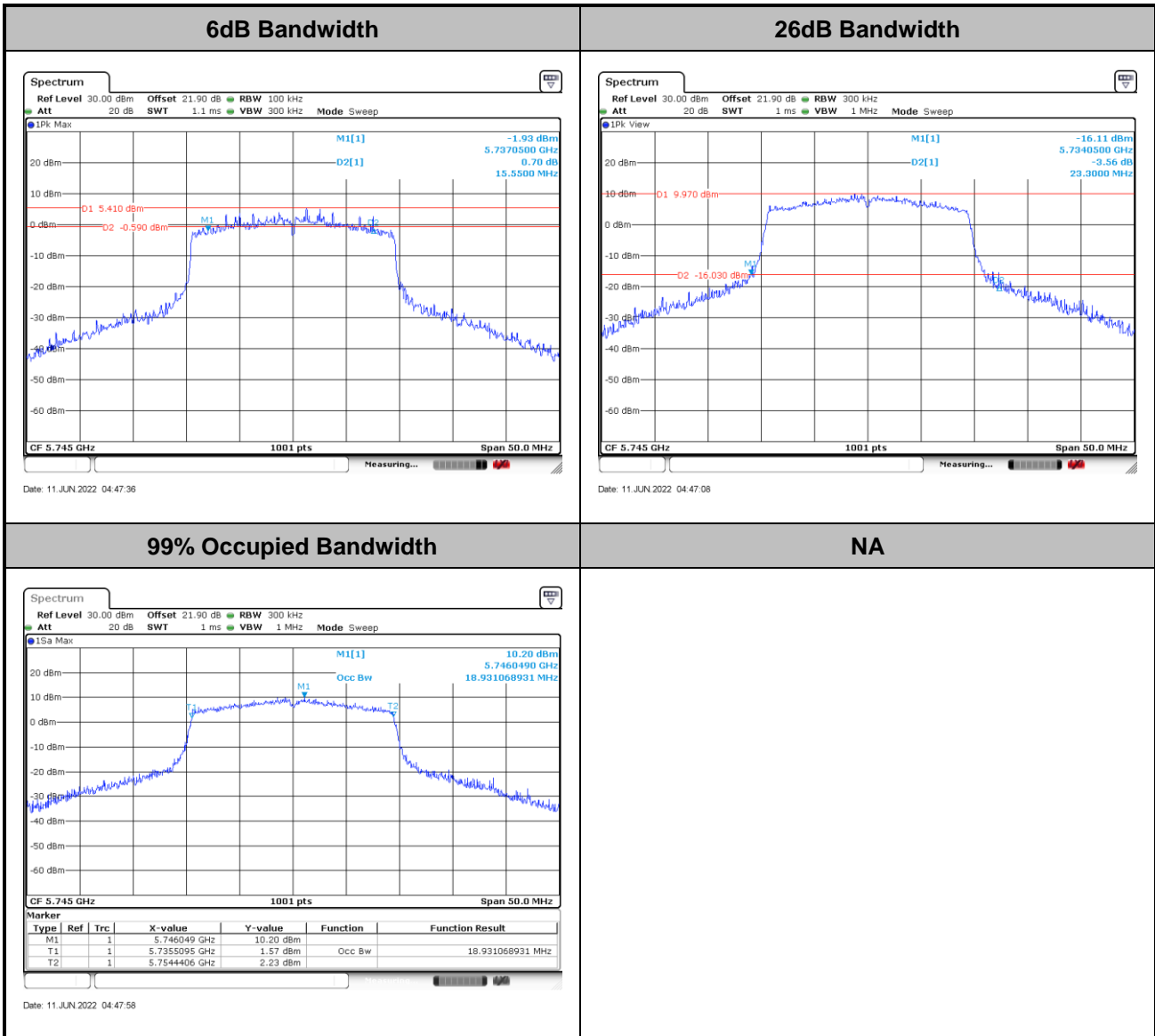
<802.11a>



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



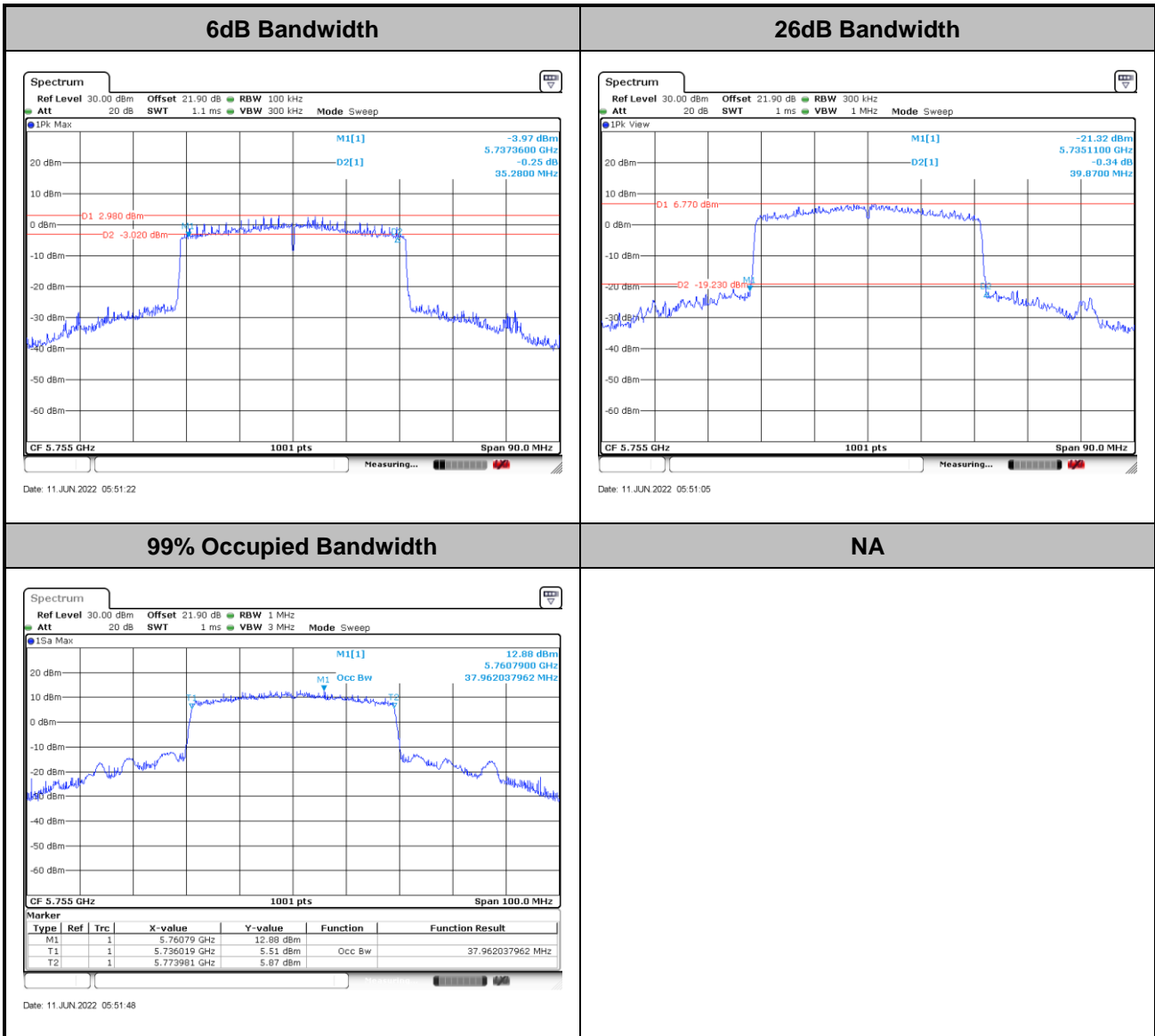
<802.11ax HE20>



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



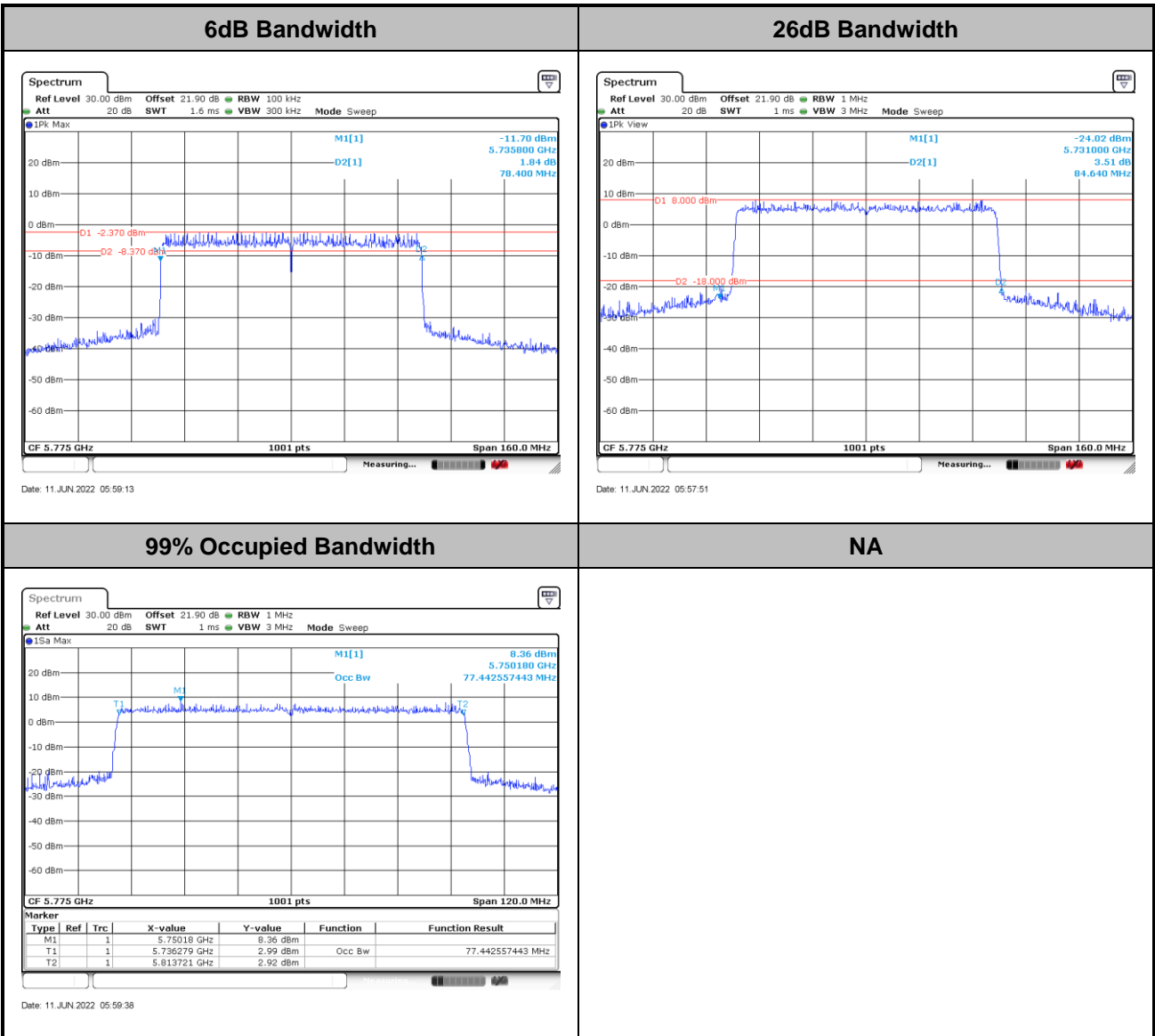
<802.11ax HE40>



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.

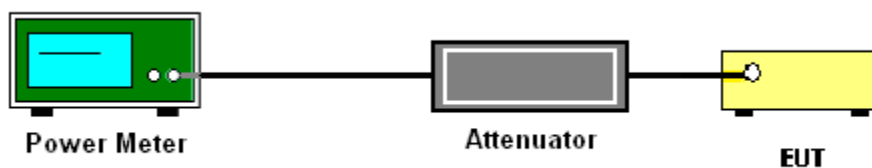
3.2.3 Test Procedures

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

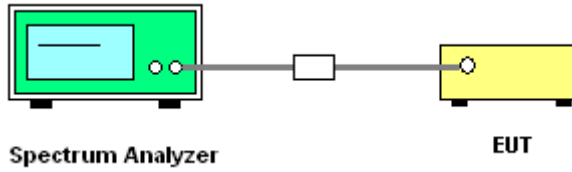
(power averaging (rms) detection with max hold):

- 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_{ANT} outputs so that each output is permitted to contribute no more than $1/N_{\text{ANT}}^{\text{th}}$ of the PSD limit.

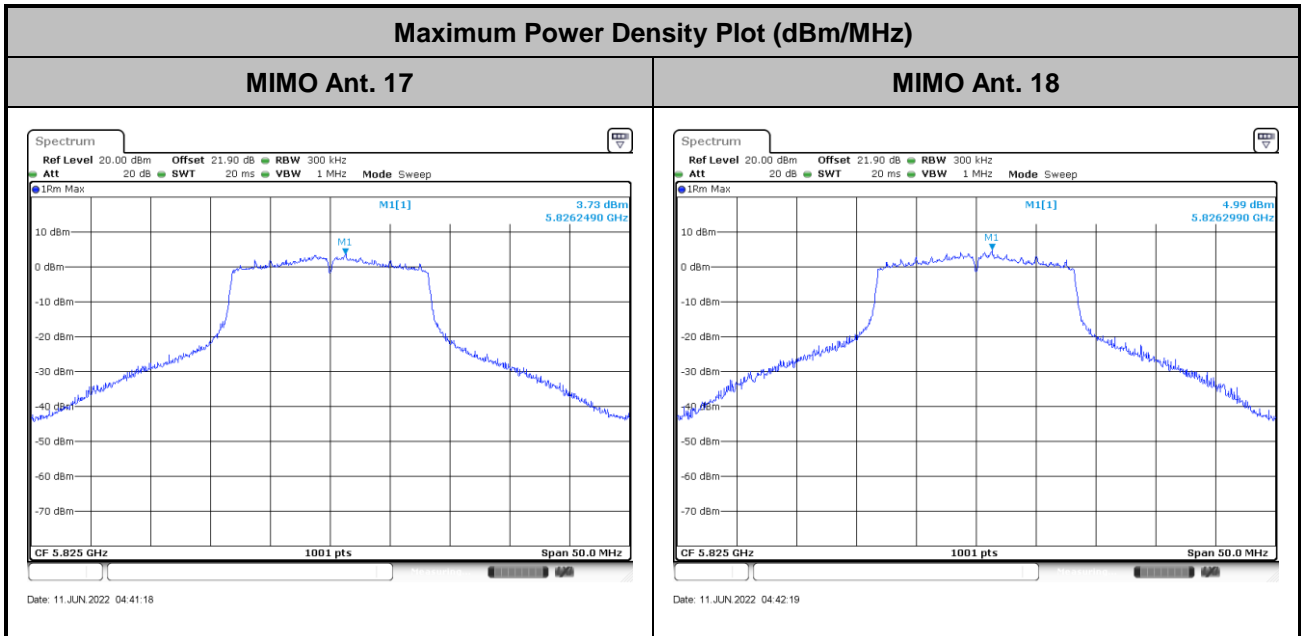
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

<802.11a>



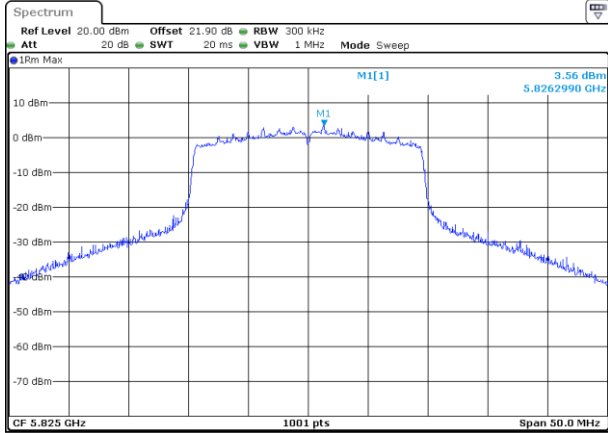


<802.11ax HE20>

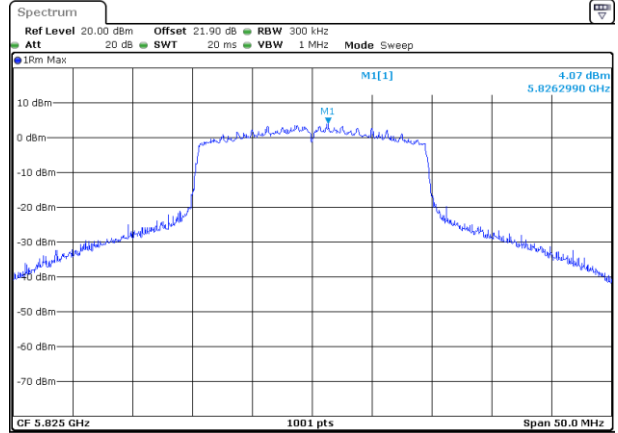
Maximum Power Density Plot (dBm/MHz)

MIMO Ant. 17

MIMO Ant. 18



Date: 11 JUN 2022 06:07:47



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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.

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

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

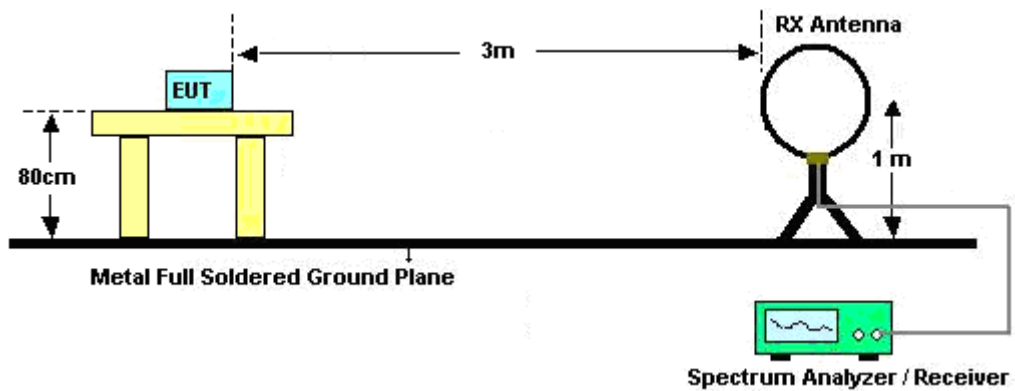
against QP limit line, the position is marked as “-“.

- Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies.

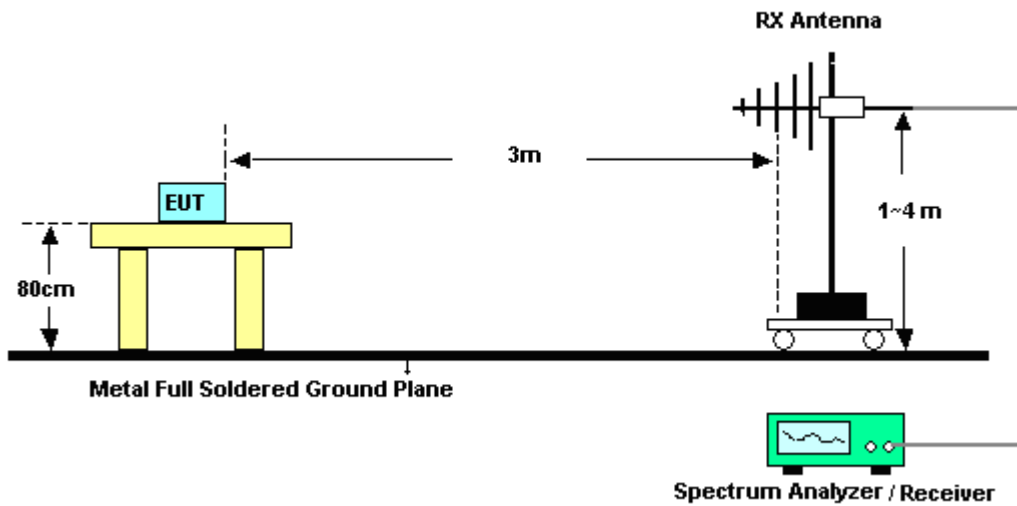
When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as “-“.

3.4.4 Test Setup

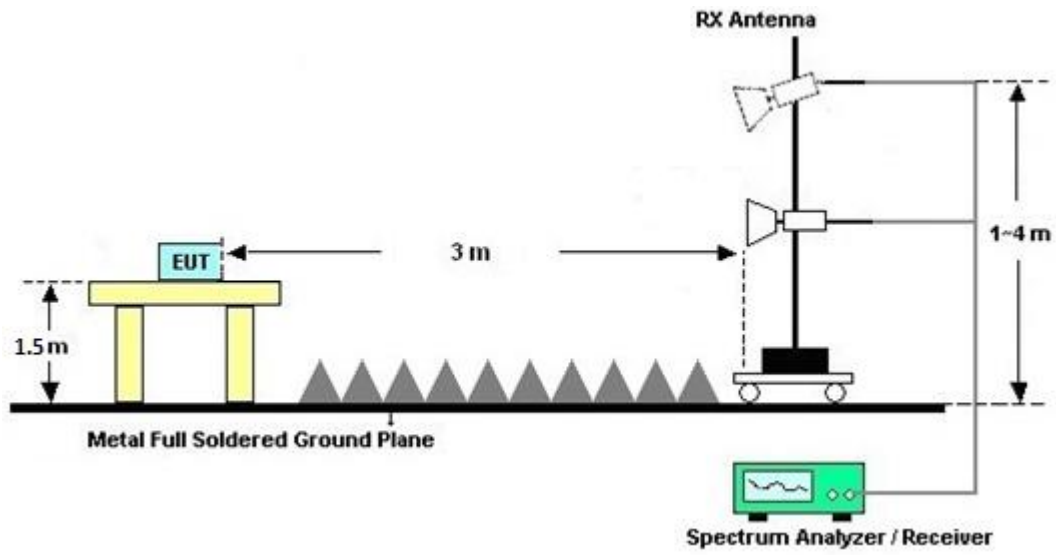
For radiated emissions below 30MHz



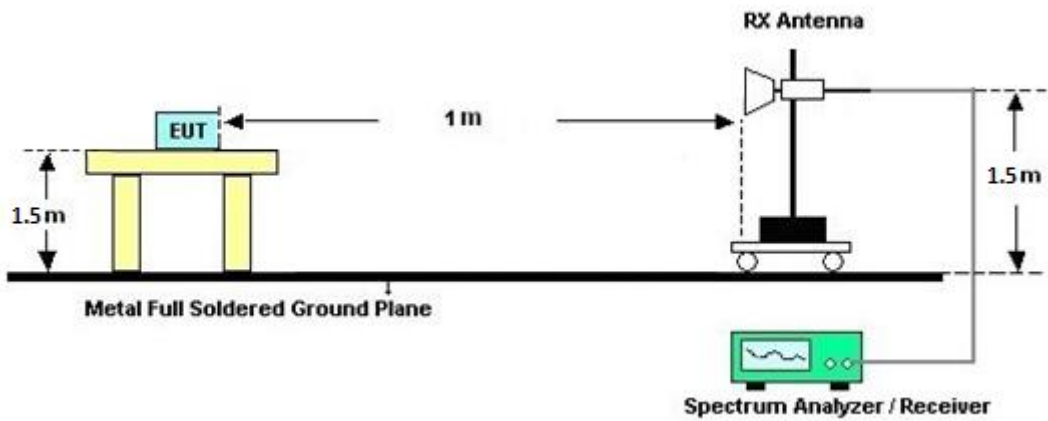
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz





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

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

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

3.4.6 Test Result of Radiated Band Edges

Please refer to Appendix C and D.

3.4.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.



3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

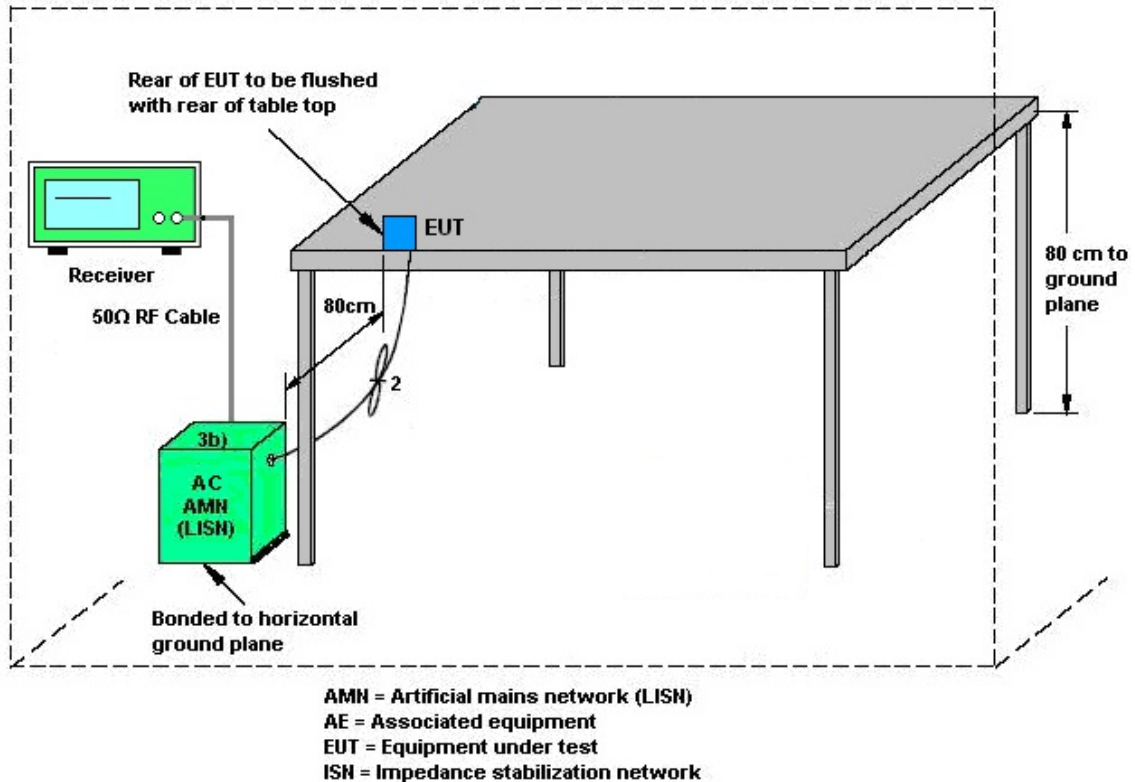
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN shall be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



3.6 Antenna Requirements

3.6.1 Standard Applicable

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

3.6.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.6.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For power measurements on IEEE 802.11 devices,

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

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

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

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

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

where

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

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

N_{ANT} = the total number of antennas

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

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

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

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

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

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

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



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

<CDD Modes>						
			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant. 17	Ant. 18	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
Band IV	-0.75	-1.25	-0.75	2.01	0.00	0.00

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

$$10 \times \log \left\{ \left[10^{(-0.75 \text{ dBi} / 20)} + 10^{(-1.25 \text{ dBi} / 20)} \right]^2 / 2 \right\}$$

= 2.01 dBi



4 List of Measuring Equipment

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	Jun. 02, 2022~ Jun. 12, 2022	Nov. 15, 2022	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO 12 (NO:113)	10MHz~6GHz	Dec. 16, 2021	Jun. 02, 2022~ Jun. 12, 2022	Dec. 15, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	Jun. 02, 2022~ Jun. 12, 2022	Aug. 29, 2022	Conducted (TH05-HY)
Switch Control Mainframe	E-IUSTRUMENT	ETF-1405-0	EC1900067 (BOX7)	N/A	Aug. 12, 2021	Jun. 02, 2022~ Jun. 12, 2022	Aug. 11, 2022	Conducted (TH05-HY)
AC Power Source	ACPOWER	AFC-11003G	F317040033	N/A	N/A	Jun. 02, 2022	N/A	Conduction (CO07-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jun. 02, 2022	N/A	Conduction (CO07-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	9561-F N00373	9kHz-200MHz	Oct. 29, 2021	Jun. 02, 2022	Oct. 28, 2022	Conduction (CO07-HY)
RF Cable	HUBER + SUHNER	RG 214/U	1358175	9kHz~30MHz	Mar. 16, 2022	Jun. 02, 2022	Mar. 15, 2023	Conduction (CO07-HY)
Two-Line V-Network	TESEQ	NNB 51	45051	N/A	Feb. 16, 2022	Jun. 02, 2022	Feb. 15, 2023	Conduction (CO07-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102317	9kHz~3.6GHz	Oct. 21, 2021	Jun. 02, 2022	Oct. 20, 2022	Conduction (CO07-HY)
EMI Test Receiver	Rohde & Schwarz	ESC17	100724	9kHz~7GHz	Feb. 24, 2022	Jun. 02, 2022	Feb. 23, 2023	Conduction (CO07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	May 13, 2022	Jun. 08, 2022~ Jun. 12, 2022	May 12, 2023	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N -06	47020 & 06	30MHz to 1GHz	Oct. 09, 2021	Jun. 08, 2022~ Jun. 12, 2022	Oct. 08, 2022	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1G~18GHz	Mar. 10, 2022	Jun. 08, 2022~ Jun. 12, 2022	Mar. 09, 2023	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	00993	18GHz ~40GHz	Nov. 30, 2021	Jun. 08, 2022~ Jun. 12, 2022	Nov. 29, 2022	Radiation (03CH16-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun. 22, 2021	Jun. 08, 2022~ Jun. 12, 2022	Jun. 21, 2022	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1G	Jul. 05, 2021	Jun. 08, 2022~ Jun. 12, 2022	Jul. 04, 2022	Radiation (03CH16-HY)
Preamplifier	EMEC	EM1G18G	060812	1GHz~18GHz	Dec. 27, 2021	Jun. 08, 2022~ Jun. 12, 2022	Dec. 26, 2022	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec. 09, 2021	Jun. 08, 2022~ Jun. 12, 2022	Dec. 08, 2022	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY57290111	3Hz~26.5GHz	Dec. 15, 2021	Jun. 08, 2022~ Jun. 12, 2022	Dec. 14, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11680/4P E	NA	Aug. 28, 2021	Jun. 08, 2022~ Jun. 12, 2022	Aug. 27, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11688/4P E	NA	Aug. 28, 2021	Jun. 08, 2022~ Jun. 12, 2022	Aug. 27, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	EC-A5-300-5 757	NA	Aug. 28, 2021	Jun. 08, 2022~ Jun. 12, 2022	Aug. 27, 2022	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Jun. 08, 2022~ Jun. 12, 2022	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Jun. 08, 2022~ Jun. 12, 2022	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Jun. 08, 2022~ Jun. 12, 2022	N/A	Radiation (03CH16-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.3 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.8 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.2 dB
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.8 dB
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	Hank Hsu	Temperature:	21~25	°C
Test Date:	2022/6/2~2022/6/12	Relative Humidity:	51~54	%

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

U-NII-3 MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
					Ant 17	Ant 18	Ant 17	Ant 18	Ant 17	Ant 18		
11a	6Mbps	2	149	5745	16.88	16.78	25.90	25.60	15.15	15.20	0.5	Pass
11a	6Mbps	2	157	5785	16.83	16.78	25.10	28.40	15.15	15.10	0.5	Pass
11a	6Mbps	2	165	5825	16.73	16.68	23.00	27.50	15.20	15.20	0.5	Pass

TEST RESULTS DATA
Average Power Table

U-NII-3 MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 17	Ant 18	SUM	Ant 17	Ant 18	Ant 17	Ant 18	
11a	6Mbps	2	149	5745	17.80	18.00	20.91	30.00		-0.75	Pass	
11a	6Mbps	2	157	5785	17.40	17.80	20.61	30.00		-0.75	Pass	
11a	6Mbps	2	165	5825	17.40	17.90	20.67	30.00		-0.75	Pass	
HT20	MCS0	2	149	5745	17.20	17.50	20.36	30.00		-0.75	Pass	
HT20	MCS0	2	157	5785	16.90	17.30	20.11	30.00		-0.75	Pass	
HT20	MCS0	2	165	5825	16.80	17.40	20.12	30.00		-0.75	Pass	
HT40	MCS0	2	151	5755	17.00	17.30	20.16	30.00		-0.75	Pass	
HT40	MCS0	2	159	5795	17.10	17.50	20.31	30.00		-0.75	Pass	
VHT20	MCS0	2	149	5745	17.30	17.60	20.46	30.00		-0.75	Pass	
VHT20	MCS0	2	157	5785	17.00	17.40	20.21	30.00		-0.75	Pass	
VHT20	MCS0	2	165	5825	16.90	17.50	20.22	30.00		-0.75	Pass	
VHT40	MCS0	2	151	5755	17.10	17.40	20.26	30.00		-0.75	Pass	
VHT40	MCS0	2	159	5795	17.20	17.60	20.41	30.00		-0.75	Pass	
VHT80	MCS0	2	155	5775	15.80	16.30	19.07	30.00		-0.75	Pass	

TEST RESULTS DATA
Power Spectral Density

U-NII-3 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 17	Ant 18	Ant 17	Ant 18	SUM	Ant 17	Ant 18	Ant 17	Ant 18	
11a	6Mbps	2	149	5745	2.22	6.70	6.70	9.71	30.00	30.00	2.01	2.01	Pass	
11a	6Mbps	2	157	5785	2.22	5.87	6.48	9.49	30.00	30.00	2.01	2.01	Pass	
11a	6Mbps	2	165	5825	2.22	5.95	7.21	10.22	30.00	30.00	2.01	2.01	Pass	

Note: PSD Sum = Max PSD(Ant. 1, Ant. 2) + 10 log (n)

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

U-NII-3 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 17	Ant 18	Ant 17	Ant 18	Ant 17	Ant 18		
HE20	MCS0	2	149	5745	Full	18.93	18.98	23.30	22.30	15.55	16.45	0.5	Pass
HE20	MCS0	2	157	5785	Full	18.93	18.98	22.15	23.60	15.50	16.95	0.5	Pass
HE20	MCS0	2	165	5825	Full	18.93	18.93	22.80	22.00	16.15	17.90	0.5	Pass
HE40	MCS0	2	151	5755	Full	37.96	37.96	39.87	43.65	35.28	35.28	0.5	Pass
HE40	MCS0	2	159	5795	Full	37.86	38.16	39.69	47.79	36.45	35.28	0.5	Pass
HE80	MCS0	2	155	5775	Full	77.44	77.44	84.64	83.20	78.40	77.92	0.5	Pass

TEST RESULTS DATA
Average Power Table

U-NII-3 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 17	Ant 18	SUM	Ant 17	Ant 18	Ant 17	Ant 18	
HE20	MCS0	2	149	5745	Full	17.40	17.70	20.56	30.00	30.00	-0.75	-0.75	Pass
HE20	MCS0	2	149	5745	26/0	9.50	9.90	12.71	30.00	30.00	-0.75	-0.75	Pass
HE20	MCS0	2	149	5745	52/37	12.60	12.80	15.71	30.00	30.00	-0.75	-0.75	Pass
HE20	MCS0	2	149	5745	106/53	15.10	15.40	18.26	30.00	30.00	-0.75	-0.75	Pass
HE20	MCS0	2	157	5785	Full	17.10	17.50	20.31	30.00	30.00	-0.75	-0.75	Pass
HE20	MCS0	2	157	5785	26/4	9.30	9.80	12.57	30.00	30.00	-0.75	-0.75	Pass
HE20	MCS0	2	157	5785	52/38	12.10	12.40	15.26	30.00	30.00	-0.75	-0.75	Pass
HE20	MCS0	2	157	5785	106/53	14.70	15.10	17.91	30.00	30.00	-0.75	-0.75	Pass
HE20	MCS0	2	165	5825	Full	17.00	17.60	20.32	30.00	30.00	-0.75	-0.75	Pass
HE20	MCS0	2	165	5825	26/8	9.30	10.00	12.67	30.00	30.00	-0.75	-0.75	Pass
HE20	MCS0	2	165	5825	52/40	12.00	12.60	15.32	30.00	30.00	-0.75	-0.75	Pass
HE20	MCS0	2	165	5825	106/54	14.60	15.20	17.92	30.00	30.00	-0.75	-0.75	Pass
HE40	MCS0	2	151	5755	Full	17.20	17.50	20.36	30.00	30.00	-0.75	-0.75	Pass
HE40	MCS0	2	159	5795	Full	17.40	17.80	20.61	30.00	30.00	-0.75	-0.75	Pass
HE80	MCS0	2	155	5775	Full	15.90	16.40	19.17	30.00	30.00	-0.75	-0.75	Pass

TEST RESULTS DATA
Power Spectral Density

U-NII-3 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 17	Ant 18	SUM	Ant 17	Ant 18	SUM	Ant 17	Ant 18	Ant 17	Ant 18	
HE20	MCS0	2	149	5745	Full	2.22	5.61	6.15	9.16	30.00	30.00	2.01	2.01	Pass		
HE20	MCS0	2	149	5745	26/0	2.22	5.14	5.70	8.71	30.00	30.00	2.01	2.01	Pass		
HE20	MCS0	2	149	5745	52/37	2.22	5.18	5.94	8.95	30.00	30.00	2.01	2.01	Pass		
HE20	MCS0	2	149	5745	106/53	2.22	5.12	5.77	8.78	30.00	30.00	2.01	2.01	Pass		
HE20	MCS0	2	157	5785	Full	2.22	5.70	5.96	8.97	30.00	30.00	2.01	2.01	Pass		
HE20	MCS0	2	157	5785	26/4	2.22	5.22	5.89	8.90	30.00	30.00	2.01	2.01	Pass		
HE20	MCS0	2	157	5785	52/38	2.22	5.43	5.64	8.65	30.00	30.00	2.01	2.01	Pass		
HE20	MCS0	2	157	5785	106/53	2.22	5.47	5.52	8.53	30.00	30.00	2.01	2.01	Pass		
HE20	MCS0	2	165	5825	Full	2.22	5.78	6.29	9.30	30.00	30.00	2.01	2.01	Pass		
HE20	MCS0	2	165	5825	26/8	2.22	5.45	6.20	9.21	30.00	30.00	2.01	2.01	Pass		
HE20	MCS0	2	165	5825	52/40	2.22	5.31	5.90	8.91	30.00	30.00	2.01	2.01	Pass		
HE20	MCS0	2	165	5825	106/54	2.22	5.64	6.02	9.03	30.00	30.00	2.01	2.01	Pass		
HE40	MCS0	2	151	5755	Full	2.22	2.74	3.58	6.59	30.00	30.00	2.01	2.01	Pass		
HE40	MCS0	2	159	5795	Full	2.22	2.76	3.31	6.32	30.00	30.00	2.01	2.01	Pass		
HE80	MCS0	2	155	5775	Full	2.22	-2.26	-1.28	1.73	30.00	30.00	2.01	2.01	Pass		

Note: PSD Sum = Max PSD(Ant. 1, Ant. 2) + 10 log (n)



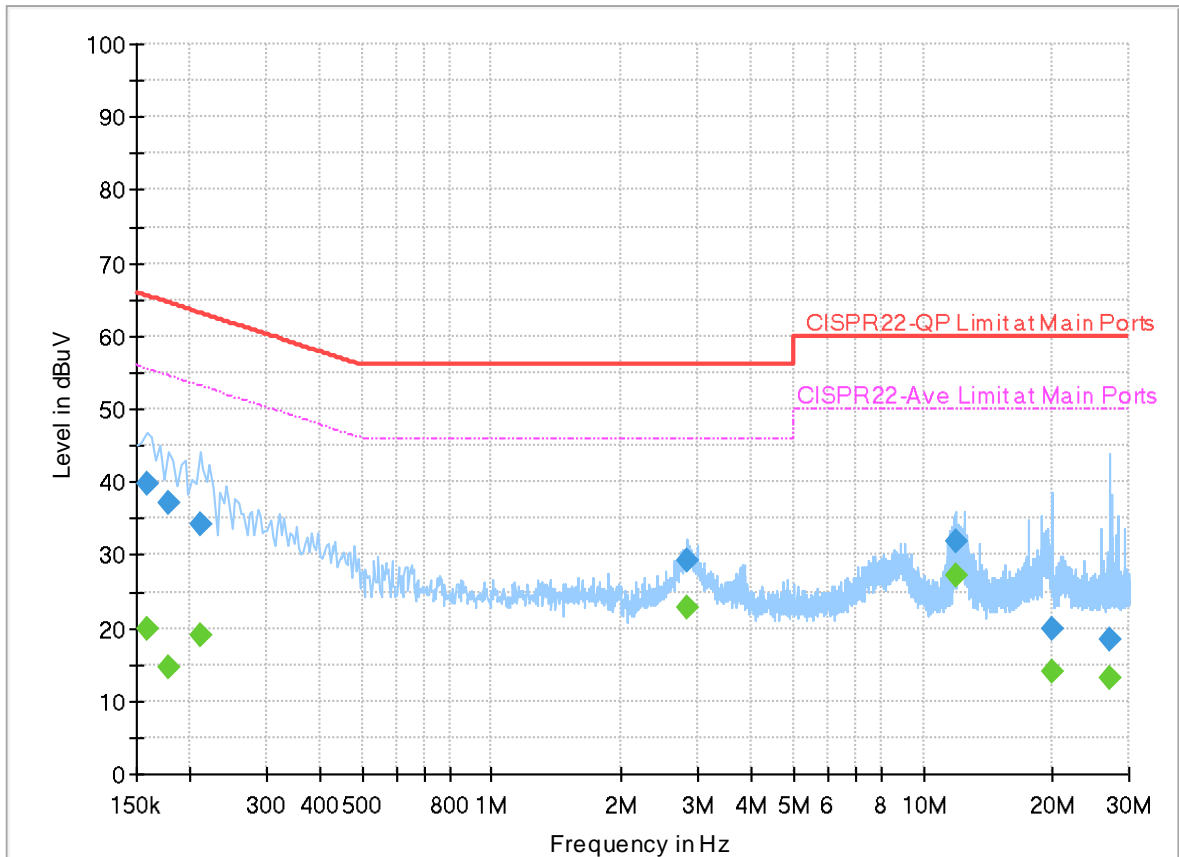
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Louis Chung	Temperature :	21.3~25.6°C
		Relative Humidity :	48.2~57.6%

EUT Information

Report NO : 251212
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



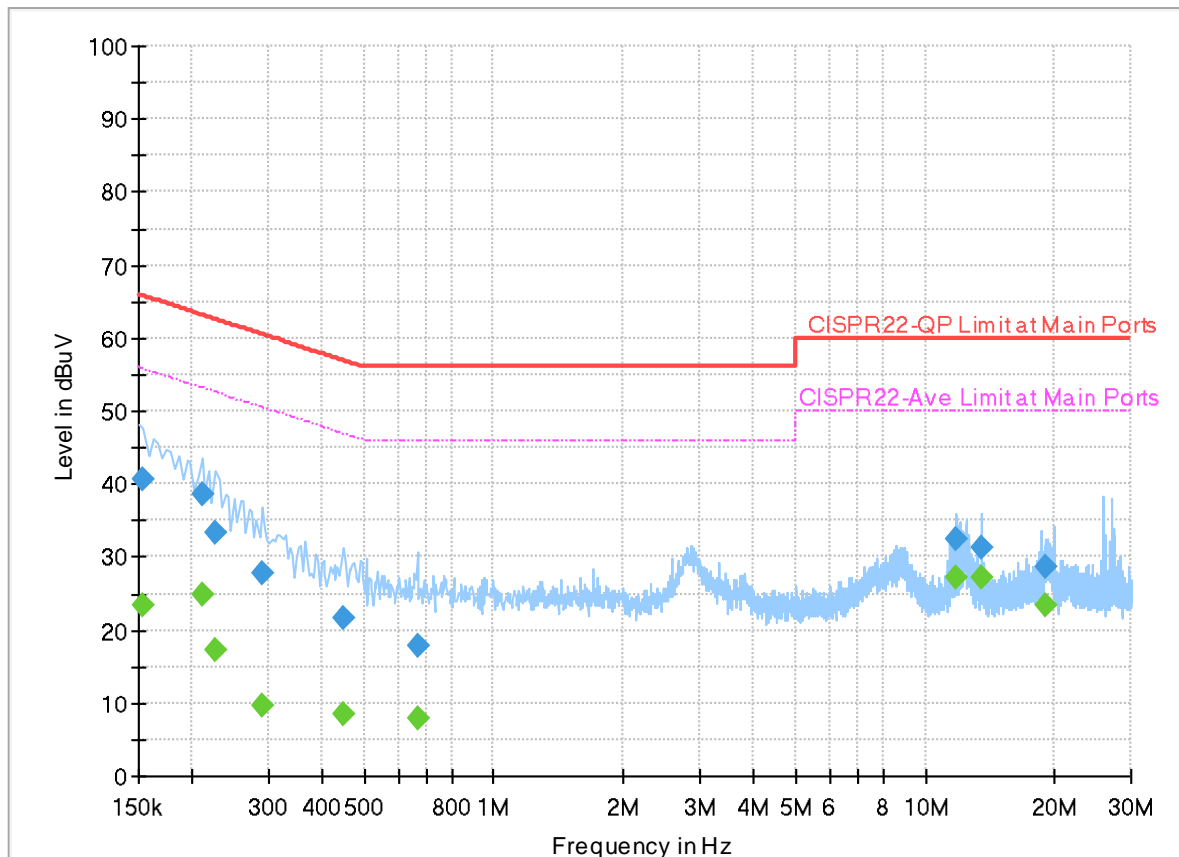
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.158000	---	19.93	55.57	35.64	L1	OFF	20.0
0.158000	39.65	---	65.57	25.92	L1	OFF	20.0
0.178000	---	14.69	54.58	39.89	L1	OFF	20.0
0.178000	37.05	---	64.58	27.53	L1	OFF	20.0
0.210000	---	19.00	53.21	34.21	L1	OFF	20.0
0.210000	34.08	---	63.21	29.13	L1	OFF	20.0
2.842000	---	22.90	46.00	23.10	L1	OFF	20.0
2.842000	29.38	---	56.00	26.62	L1	OFF	20.0
11.854000	---	27.14	50.00	22.86	L1	OFF	20.2
11.854000	31.97	---	60.00	28.03	L1	OFF	20.2
19.994000	---	14.17	50.00	35.83	L1	OFF	20.2
19.994000	19.78	---	60.00	40.22	L1	OFF	20.2
27.062000	---	13.27	50.00	36.73	L1	OFF	20.3
27.062000	18.46	---	60.00	41.54	L1	OFF	20.3

EUT Information

Report NO : 251212
 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)
0.154000	---	23.27	55.78	32.51	N	OFF	20.0
0.154000	40.58	---	65.78	25.20	N	OFF	20.0
0.210000	---	24.86	53.21	28.35	N	OFF	20.0
0.210000	38.57	---	63.21	24.64	N	OFF	20.0
0.226000	---	17.33	52.60	35.27	N	OFF	20.0
0.226000	33.37	---	62.60	29.23	N	OFF	20.0
0.290000	---	9.66	50.52	40.86	N	OFF	20.0
0.290000	27.68	---	60.52	32.84	N	OFF	20.0
0.446000	---	8.35	46.95	38.60	N	OFF	20.0
0.446000	21.70	---	56.95	35.25	N	OFF	20.0
0.666000	---	7.83	46.00	38.17	N	OFF	20.0
0.666000	17.91	---	56.00	38.09	N	OFF	20.0
11.850000	---	27.33	50.00	22.67	N	OFF	20.2
11.850000	32.33	---	60.00	27.67	N	OFF	20.2
13.562000	---	27.12	50.00	22.88	N	OFF	20.2
13.562000	31.15	---	60.00	28.85	N	OFF	20.2
19.126000	---	23.46	50.00	26.54	N	OFF	20.3
19.126000	28.67	---	60.00	31.33	N	OFF	20.3



Appendix C. Radiated Spurious Emission

Test Engineer :	Karl Hou, Steven Wu	Temperature :	20~25°C
		Relative Humidity :	50~65%

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

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 149 5745MHz		5636.2	56.86	-11.34	68.2	40.52	33.03	12.9	29.59	102	116	P	H	
		5698.8	59.09	-45.23	104.32	42.38	33.39	12.93	29.61	102	116	P	H	
		5713.6	63.09	-45.92	109.01	46.31	33.45	12.94	29.61	102	116	P	H	
		5725	71.7	-50.5	122.2	54.86	33.5	12.95	29.61	102	116	P	H	
	*	5745	116.05	-	-	99.12	33.58	12.96	29.61	102	116	P	H	
	*	5745	108.93	-	-	92	33.58	12.96	29.61	102	116	A	H	
														H
														H
			5647.6	54.75	-13.45	68.2	38.44	33	12.91	29.6	312	80	P	V
			5699.4	57.54	-47.22	104.76	40.82	33.4	12.93	29.61	312	80	P	V
			5719.6	61.81	-48.88	110.69	44.99	33.48	12.95	29.61	312	80	P	V
			5723.2	69.82	-48.28	118.1	52.99	33.49	12.95	29.61	312	80	P	V
	*		5745	112.44	-	-	95.51	33.58	12.96	29.61	312	80	P	V
	*		5745	105.27	-	-	88.34	33.58	12.96	29.61	312	80	A	V
													V	
													V	



WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5634.2	55.88	-12.32	68.2	39.54	33.03	12.9	29.59	102	115	P	H
		5685	55.49	-38.64	94.13	38.88	33.28	12.93	29.6	102	115	P	H
		5717.6	56.84	-53.29	110.13	40.04	33.47	12.94	29.61	102	115	P	H
		5721.4	57.36	-56.63	113.99	40.53	33.49	12.95	29.61	102	115	P	H
	*	5785	115.83	-	-	98.66	33.81	12.98	29.62	102	115	P	H
	*	5785	108.8	-	-	91.63	33.81	12.98	29.62	102	115	A	H
		5854	56.11	-56.97	113.08	38.81	34.12	12.81	29.63	102	115	P	H
		5874.6	56.35	-48.96	105.31	39.04	34.2	12.75	29.64	102	115	P	H
		5912.8	55.78	-21.42	77.2	38.5	34.3	12.62	29.64	102	115	P	H
		5931.2	55.61	-12.59	68.2	38.4	34.3	12.56	29.65	102	115	P	H
													H
													H
802.11a													
CH 157													
5785MHz		5632.4	55.25	-12.95	68.2	38.9	33.04	12.9	29.59	324	88	P	V
		5670.6	55.55	-27.93	83.48	39.07	33.16	12.92	29.6	324	88	P	V
		5709.2	55.3	-52.48	107.78	38.53	33.44	12.94	29.61	324	88	P	V
		5724.4	54.78	-66.05	120.83	37.94	33.5	12.95	29.61	324	88	P	V
	*	5785	111.87	-	-	94.7	33.81	12.98	29.62	324	88	P	V
	*	5785	104.64	-	-	87.47	33.81	12.98	29.62	324	88	A	V
		5853.2	54.04	-60.86	114.9	36.74	34.11	12.82	29.63	324	88	P	V
		5859.4	55.32	-54.25	109.57	38.01	34.14	12.8	29.63	324	88	P	V
		5892.4	56.75	-35.54	92.29	39.43	34.27	12.69	29.64	324	88	P	V
		5927.4	56.17	-12.03	68.2	38.94	34.3	12.58	29.65	324	88	P	V
													V
													V



WiFi Ant. 17+18	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 165 5825MHz	*	5825	116.45	-	-	99.17	34	12.91	29.63	100	115	P	H	
	*	5825	108.05	-	-	90.77	34	12.91	29.63	100	115	A	H	
		5850.4	61.79	-59.5	121.29	44.49	34.1	12.83	29.63	100	115	P	H	
		5859.2	60.04	-49.58	109.62	42.73	34.14	12.8	29.63	100	115	P	H	
		5886.6	57.98	-38.61	96.59	40.66	34.25	12.71	29.64	100	115	P	H	
		5938.6	56.01	-12.19	68.2	38.82	34.3	12.54	29.65	100	115	P	H	
														H
														H
	*	5825	111.98	-	-	94.7	34	12.91	29.63	353	83	P	V	
	*	5825	105.03	-	-	87.75	34	12.91	29.63	353	83	A	V	
		5851.6	58.48	-60.07	118.55	41.18	34.11	12.82	29.63	353	83	P	V	
		5861.8	57.76	-51.13	108.89	40.46	34.15	12.79	29.64	353	83	P	V	
		5880	56.84	-44.65	101.49	39.53	34.22	12.73	29.64	353	83	P	V	
		5930.8	55.72	-12.48	68.2	38.51	34.3	12.56	29.65	353	83	P	V	
														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 802.11a (Harmonic @ 3m)

WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11490	52.88	-21.12	74	60.67	39.2	19.23	66.22	100	349	P	H
		11490	42.02	-11.98	54	49.81	39.2	19.23	66.22	100	349	A	H
		14491	50.57	-23.43	74	53.34	40.89	21.75	65.41	-	-	P	H
		14491	40.74	-13.26	54	43.51	40.89	21.75	65.41	-	-	A	H
		17235	48.89	-19.31	68.2	51.47	38.47	25.11	66.16	-	-	P	H
		17956	54.25	-19.75	74	51.59	42.37	25.46	65.17	-	-	P	H
		17956	44.49	-9.51	54	41.83	42.37	25.46	65.17	-	-	A	H
													H
													H
													H
													H
													H
802.11a													H
CH 149													H
5745MHz		11490	50.85	-23.15	74	58.64	39.2	19.23	66.22	100	56	P	V
		11490	40.92	-13.08	54	48.71	39.2	19.23	66.22	100	56	A	V
		14491	51.16	-22.84	74	53.93	40.89	21.75	65.41	-	-	P	V
		14491	40.52	-13.48	54	43.29	40.89	21.75	65.41	-	-	A	V
		17235	49.18	-19.02	68.2	51.76	38.47	25.11	66.16	-	-	P	V
		17989	54.59	-19.41	74	51.76	42.47	25.48	65.12	-	-	P	V
		17989	44.05	-9.95	54	41.22	42.47	25.48	65.12	-	-	A	V
													V
													V
													V
													V
													V



WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 157 5785MHz		11570	47.94	-26.06	74	55.9	38.99	19.27	66.22	-	-	P	H	
		14491	50.21	-23.79	74	52.98	40.89	21.75	65.41	-	-	P	H	
		14491	39.64	-14.36	54	42.41	40.89	21.75	65.41	-	-	A	H	
		17355	48.38	-19.82	68.2	50.49	38.76	25.16	66.03	-	-	P	H	
		17956	54.58	-19.42	74	51.92	42.37	25.46	65.17	-	-	P	H	
		17956	44.48	-9.52	54	41.82	42.37	25.46	65.17	-	-	A	H	
														H
														H
														H
														H
														H
														H
			11570	50.36	-23.64	74	58.32	38.99	19.27	66.22	100	56	P	V
			11570	40.23	-13.77	54	48.19	38.99	19.27	66.22	100	56	A	V
			14491	50.41	-23.59	74	53.18	40.89	21.75	65.41	-	-	P	V
			14491	39.59	-14.41	54	42.36	40.89	21.75	65.41	-	-	A	V
			17355	48.59	-19.61	68.2	50.7	38.76	25.16	66.03	-	-	P	V
			17912	54.98	-19.02	74	52.55	42.24	25.43	65.24	-	-	P	V
			17912	44.14	-9.86	54	41.71	42.24	25.43	65.24	-	-	A	V
														V
													V	
													V	
													V	
													V	



WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 165 5825MHz		11650	47.71	-26.29	74	55.83	38.8	19.3	66.22	-	-	P	H	
		14491	51.6	-22.4	74	54.37	40.89	21.75	65.41	-	-	P	H	
		14491	39.68	-14.32	54	42.45	40.89	21.75	65.41	-	-	A	H	
		17475	49.61	-18.59	68.2	51.32	38.97	25.22	65.9	-	-	P	H	
		17978	54.95	-19.05	74	52.18	42.43	25.47	65.13	-	-	P	H	
		17978	43.94	-10.06	54	41.17	42.43	25.47	65.13	-	-	A	H	
														H
														H
														H
														H
														H
														H
			11650	47.95	-26.05	74	56.07	38.8	19.3	66.22	-	-	P	V
			14491	51.47	-22.53	74	54.24	40.89	21.75	65.41	-	-	P	V
			14491	39.96	-14.04	54	42.73	40.89	21.75	65.41	-	-	A	V
			17475	48.85	-19.35	68.2	50.56	38.97	25.22	65.9	-	-	P	V
			17967	54.81	-19.19	74	52.1	42.4	25.46	65.15	-	-	P	V
			17967	44.1	-9.9	54	41.39	42.4	25.46	65.15	-	-	A	V
														V
														V
													V	
													V	
													V	
													V	
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. The emission level close to 18GHz is checked that the average emission level is noise floor only. 													



Band 4 5725~5850MHz
WIFI 802.11ax HE20_Full (Band Edge @ 3m)

WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Full CH 149 5745MHz		5637.8	54.96	-13.24	68.2	38.63	33.02	12.9	29.59	100	117	P	H	
		5699.2	57.59	-47.02	104.61	40.88	33.39	12.93	29.61	100	117	P	H	
		5719.4	63.3	-47.33	110.63	46.48	33.48	12.95	29.61	100	117	P	H	
		5724.6	72.28	-49.01	121.29	55.44	33.5	12.95	29.61	100	117	P	H	
	*	5745	114.52	-	-	97.59	33.58	12.96	29.61	100	117	P	H	
	*	5745	105.43	-	-	88.5	33.58	12.96	29.61	100	117	A	H	
														H
														H
			5645	54.08	-14.12	68.2	37.77	33.01	12.9	29.6	312	77	P	V
			5700	56.02	-49.18	105.2	39.3	33.4	12.93	29.61	312	77	P	V
			5720	59.21	-51.59	110.8	42.39	33.48	12.95	29.61	312	77	P	V
			5724.4	68.59	-52.24	120.83	51.75	33.5	12.95	29.61	312	77	P	V
	*		5745	111.16	-	-	94.23	33.58	12.96	29.61	312	77	P	V
	*		5745	101.86	-	-	84.93	33.58	12.96	29.61	312	77	A	V
													V	
													V	



WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5647.6	53.76	-14.44	68.2	37.45	33	12.91	29.6	100	119	P	H
		5674.8	54.71	-31.88	86.59	38.19	33.2	12.92	29.6	100	119	P	H
		5712.4	55.92	-52.75	108.67	39.14	33.45	12.94	29.61	100	119	P	H
		5723.6	54.93	-64.08	119.01	38.1	33.49	12.95	29.61	100	119	P	H
	*	5785	114.42	-	-	97.25	33.81	12.98	29.62	100	119	P	H
	*	5785	104.82	-	-	87.65	33.81	12.98	29.62	100	119	A	H
		5852.8	54.37	-61.45	115.82	37.07	34.11	12.82	29.63	100	119	P	H
		5856	55.5	-55.02	110.52	38.2	34.12	12.81	29.63	100	119	P	H
		5887	55.45	-40.84	96.29	38.13	34.25	12.71	29.64	100	119	P	H
		5947.2	54.47	-13.73	68.2	37.31	34.3	12.51	29.65	100	119	P	H
802.11ax													H
HE20 Full													H
CH 157		5646.2	53.3	-14.9	68.2	36.98	33.01	12.91	29.6	377	79	P	V
5785MHz		5699.6	54.23	-50.68	104.91	37.51	33.4	12.93	29.61	377	79	P	V
		5719.2	53.84	-56.74	110.58	37.02	33.48	12.95	29.61	377	79	P	V
		5721	53.67	-59.41	113.08	36.85	33.48	12.95	29.61	377	79	P	V
	*	5785	110.61	-	-	93.44	33.81	12.98	29.62	377	79	P	V
	*	5785	101.31	-	-	84.14	33.81	12.98	29.62	377	79	A	V
		5850.6	54.34	-66.49	120.83	37.04	34.1	12.83	29.63	377	79	P	V
		5868.6	54.13	-52.86	106.99	36.83	34.17	12.77	29.64	377	79	P	V
		5883.8	54.89	-43.78	98.67	37.57	34.24	12.72	29.64	377	79	P	V
		5931.4	53.86	-14.34	68.2	36.65	34.3	12.56	29.65	377	79	P	V
													V
													V



WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Full CH 165 5825MHz	*	5825	113.19	-	-	95.91	34	12.91	29.63	100	118	P	H	
	*	5825	104.37	-	-	87.09	34	12.91	29.63	100	118	A	H	
		5850.4	64.34	-56.95	121.29	47.04	34.1	12.83	29.63	100	118	P	H	
		5856.8	59.79	-50.51	110.3	42.48	34.13	12.81	29.63	100	118	P	H	
		5883	57.12	-42.14	99.26	39.81	34.23	12.72	29.64	100	118	P	H	
		5939.4	54.67	-13.53	68.2	37.48	34.3	12.54	29.65	100	118	P	H	
														H
														H
	*	5825	111.08	-	-	93.8	34	12.91	29.63	354	83	83	P	V
	*	5825	101.4	-	-	84.12	34	12.91	29.63	354	83	83	A	V
		5851	58.68	-61.24	119.92	41.39	34.1	12.82	29.63	354	83	83	P	V
		5861.4	57.43	-51.58	109.01	40.13	34.15	12.79	29.64	354	83	83	P	V
		5875	56.7	-48.5	105.2	39.39	34.2	12.75	29.64	354	83	83	P	V
		5947.4	54.57	-13.63	68.2	37.41	34.3	12.51	29.65	354	83	83	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. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11490	47.73	-26.27	74	55.52	39.2	19.23	66.22	-	-	P	H
		14491	50.52	-23.48	74	53.29	40.89	21.75	65.41	-	-	P	H
		14491	40.88	-13.12	54	43.65	40.89	21.75	65.41	-	-	A	H
		17235	48.64	-19.56	68.2	51.22	38.47	25.11	66.16	-	-	P	H
		17967	54.49	-19.51	74	51.78	42.4	25.46	65.15	-	-	P	H
		17967	44.09	-9.91	54	41.38	42.4	25.46	65.15	-	-	A	H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 149		11490	47.78	-26.22	74	55.57	39.2	19.23	66.22	-	-	P	V
5745MHz		14491	50.4	-23.6	74	53.17	40.89	21.75	65.41	-	-	P	V
		14491	40.72	-13.28	54	43.49	40.89	21.75	65.41	-	-	A	V
		17235	48.96	-19.24	68.2	51.54	38.47	25.11	66.16	-	-	P	V
		17912	55.01	-18.99	74	52.58	42.24	25.43	65.24	-	-	P	V
		17912	43.69	-10.31	54	41.26	42.24	25.43	65.24	-	-	A	V
													V
													V
													V
													V
													V
													V
													V



WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11570	47.76	-26.24	74	55.72	38.99	19.27	66.22	-	-	P	H
		14491	50.6	-23.4	74	53.37	40.89	21.75	65.41	-	-	P	H
		14491	40.02	-13.98	54	42.79	40.89	21.75	65.41	-	-	A	H
		17355	48.53	-19.67	68.2	50.64	38.76	25.16	66.03	-	-	P	H
		17890	54.67	-19.33	74	52.42	42.1	25.42	65.27	-	-	P	H
		17890	43.9	-10.1	54	41.65	42.1	25.42	65.27	-	-	A	H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 157		11570	46.94	-27.06	74	54.9	38.99	19.27	66.22	-	-	P	V
5785MHz		14491	50.63	-23.37	74	53.4	40.89	21.75	65.41	-	-	P	V
		14491	39.91	-14.09	54	42.68	40.89	21.75	65.41	-	-	A	V
		17355	48.96	-19.24	68.2	51.07	38.76	25.16	66.03	-	-	P	V
		17978	54.56	-19.44	74	51.79	42.43	25.47	65.13	-	-	P	V
		17978	44.28	-9.72	54	41.51	42.43	25.47	65.13	-	-	A	V
													V
													V
													V
													V
													V
													V
													V



WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Full CH 165 5825MHZ		11650	47.84	-26.16	74	55.96	38.8	19.3	66.22	-	-	P	H	
		14491	51.22	-22.78	74	53.99	40.89	21.75	65.41	-	-	P	H	
		14491	40.52	-13.48	54	43.29	40.89	21.75	65.41	-	-	A	H	
		17475	49.1	-19.1	68.2	50.81	38.97	25.22	65.9	-	-	P	H	
		17978	55.01	-18.99	74	52.24	42.43	25.47	65.13	-	-	P	H	
		17978	44.29	-9.71	54	41.52	42.43	25.47	65.13	-	-	A	H	
														H
														H
														H
														H
														H
														H
			11650	47.35	-26.65	74	55.47	38.8	19.3	66.22	-	-	P	V
			14491	51.02	-22.98	74	53.79	40.89	21.75	65.41	-	-	P	V
			14491	40.6	-13.4	54	43.37	40.89	21.75	65.41	-	-	A	V
			17475	49.19	-19.01	68.2	50.9	38.97	25.22	65.9	-	-	P	V
			17945	54.68	-19.32	74	52.08	42.33	25.45	65.18	-	-	P	V
			17945	44.26	-9.74	54	41.66	42.33	25.45	65.18	-	-	A	V
													V	
													V	
													V	
													V	
													V	
													V	
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. The emission level close to 18GHz is checked that the average emission level is noise floor only. 													



**Band 4 5725~5850MHz
WIFI 802.11ax HE20_Partial 26 (Band Edge @ 3m)**

WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Partial 26/0 CH 149 5745MHz		5636.2	54.3	-13.9	68.2	37.96	33.03	12.9	29.59	100	118	P	H	
		5683.8	56.45	-36.8	93.25	39.85	33.27	12.93	29.6	100	118	P	H	
		5708.2	62.98	-44.52	107.5	46.22	33.43	12.94	29.61	100	118	P	H	
		5721.2	66.35	-47.19	113.54	49.53	33.48	12.95	29.61	100	118	P	H	
	*	5745	119.85	-	-	102.92	33.58	12.96	29.61	100	118	P	H	
	*	5745	112.29	-	-	95.36	33.58	12.96	29.61	100	118	A	H	
														H
														H
			5639.6	54.06	-14.14	68.2	37.74	33.02	12.9	29.6	383	69	P	V
			5656.8	54.14	-19.11	73.25	37.78	33.05	12.91	29.6	383	69	P	V
			5701.8	55.72	-49.98	105.7	38.98	33.41	12.94	29.61	383	69	P	V
			5724.8	57.7	-64.04	121.74	40.86	33.5	12.95	29.61	383	69	P	V
	*		5745	117.24	-	-	100.31	33.58	12.96	29.61	383	69	P	V
	*		5745	109.38	-	-	92.45	33.58	12.96	29.61	383	69	A	V
													V	
													V	



WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Partial 26/8 CH 165 5825MHz	*	5825	119.8	-	-	102.52	34	12.91	29.63	100	115	P	H	
	*	5825	112.58	-	-	95.3	34	12.91	29.63	100	115	A	H	
		5850.2	68.04	-53.7	121.74	50.74	34.1	12.83	29.63	100	115	P	H	
		5867	63	-44.44	107.44	45.7	34.17	12.77	29.64	100	115	P	H	
		5881.8	56.38	-43.77	100.15	39.07	34.23	12.72	29.64	100	115	P	H	
		5942.6	56.84	-11.36	68.2	39.66	34.3	12.53	29.65	100	115	P	H	
														H
														H
	*	5825	117.06	-	-	99.78	34	12.91	29.63	370	76	P	V	
	*	5825	109.72	-	-	92.44	34	12.91	29.63	370	76	A	V	
		5851.2	58.8	-60.66	119.46	41.51	34.1	12.82	29.63	370	76	P	V	
		5865.2	65.64	-42.3	107.94	48.34	34.16	12.78	29.64	370	76	P	V	
		5875.4	55.85	-49.05	104.9	38.55	34.2	12.74	29.64	370	76	P	V	
		5929.2	55.38	-12.82	68.2	38.16	34.3	12.57	29.65	370	76	P	V	
														V
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 4 5725~5850MHz
WIFI 802.11ax HE40_Full (Band Edge @ 3m)

WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5620.4	55.66	-12.54	68.2	39.3	33.06	12.89	29.59	100	116	P	H
		5699.4	60.17	-44.59	104.76	43.45	33.4	12.93	29.61	100	116	P	H
		5716.2	74.55	-35.19	109.74	57.76	33.46	12.94	29.61	100	116	P	H
		5722.2	75.91	-39.91	115.82	59.08	33.49	12.95	29.61	100	116	P	H
	*	5755	111.93	-	-	94.95	33.63	12.97	29.62	100	116	P	H
	*	5755	102.19	-	-	85.21	33.63	12.97	29.62	100	116	A	H
		5850.4	54.87	-66.42	121.29	37.57	34.1	12.83	29.63	100	116	P	H
		5875	54.92	-50.28	105.2	37.61	34.2	12.75	29.64	100	116	P	H
		5875	54.92	-50.28	105.2	37.61	34.2	12.75	29.64	100	116	P	H
		5934.6	54.2	-14	68.2	37	34.3	12.55	29.65	100	116	P	H
802.11ax													H
HE40 Full													H
CH 151		5637.2	53.16	-15.04	68.2	36.82	33.03	12.9	29.59	313	77	P	V
5755MHz		5698.4	56	-48.02	104.02	39.29	33.39	12.93	29.61	313	77	P	V
		5716.4	71.37	-38.42	109.79	54.57	33.47	12.94	29.61	313	77	P	V
		5723.4	73.6	-44.95	118.55	56.77	33.49	12.95	29.61	313	77	P	V
	*	5755	109.22	-	-	92.24	33.63	12.97	29.62	313	77	P	V
	*	5755	99.07	-	-	82.09	33.63	12.97	29.62	313	77	A	V
		5850.8	53.72	-66.66	120.38	36.43	34.1	12.82	29.63	313	77	P	V
		5864.8	55.24	-52.81	108.05	37.94	34.16	12.78	29.64	313	77	P	V
		5886	55.5	-41.53	97.03	38.19	34.24	12.71	29.64	313	77	P	V
		5939.6	54.73	-13.47	68.2	37.54	34.3	12.54	29.65	313	77	P	V
													V
													V



WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5619	53.12	-15.08	68.2	36.76	33.06	12.89	29.59	100	116	P	H
		5667.8	54.81	-26.6	81.41	38.35	33.14	12.92	29.6	100	116	P	H
		5717	56.97	-52.99	109.96	40.17	33.47	12.94	29.61	100	116	P	H
		5723.2	56.51	-61.59	118.1	39.68	33.49	12.95	29.61	100	116	P	H
	*	5795	111.55	-	-	94.31	33.87	12.99	29.62	100	116	P	H
	*	5795	101.78	-	-	84.54	33.87	12.99	29.62	100	116	A	H
		5851.4	57.79	-61.22	119.01	40.49	34.11	12.82	29.63	100	116	P	H
		5865.4	56.6	-51.29	107.89	39.3	34.16	12.78	29.64	100	116	P	H
		5919.2	55.04	-17.44	72.48	37.79	34.3	12.6	29.65	100	116	P	H
		5946.6	54.2	-14	68.2	37.04	34.3	12.51	29.65	100	116	P	H
802.11ax													H
HE40 Full													H
CH 159		5635.6	53.12	-15.08	68.2	36.78	33.03	12.9	29.59	321	83	P	V
5795MHz		5664.2	53.4	-25.34	78.74	36.97	33.11	12.92	29.6	321	83	P	V
		5717.8	54.82	-55.36	110.18	38.02	33.47	12.94	29.61	321	83	P	V
		5722.6	54.72	-62.01	116.73	37.89	33.49	12.95	29.61	321	83	P	V
	*	5795	107.68	-	-	90.44	33.87	12.99	29.62	321	83	P	V
	*	5795	98.2	-	-	80.96	33.87	12.99	29.62	321	83	A	V
		5855	55.16	-55.64	110.8	37.86	34.12	12.81	29.63	321	83	P	V
		5856.2	55.72	-54.74	110.46	38.42	34.12	12.81	29.63	321	83	P	V
		5905.8	55.6	-26.77	82.37	38.29	34.3	12.65	29.64	321	83	P	V
		5927.6	55.62	-12.58	68.2	38.39	34.3	12.58	29.65	321	83	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 HE80_Full (Band Edge @ 3m)

WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5640.4	58.51	-9.69	68.2	42.19	33.02	12.9	29.6	100	117	P	H
		5698.6	66.77	-37.4	104.17	50.06	33.39	12.93	29.61	100	117	P	H
		5716.6	70.49	-39.36	109.85	53.69	33.47	12.94	29.61	100	117	P	H
		5723.4	72.25	-46.3	118.55	55.42	33.49	12.95	29.61	100	117	P	H
	*	5775	107.24	-	-	90.13	33.75	12.98	29.62	100	117	P	H
	*	5775	98.72	-	-	81.61	33.75	12.98	29.62	100	117	A	H
		5850.4	63.77	-57.52	121.29	46.47	34.1	12.83	29.63	100	117	P	H
		5855.4	64.5	-46.19	110.69	47.2	34.12	12.81	29.63	100	117	P	H
		5877.4	57.77	-45.65	103.42	40.46	34.21	12.74	29.64	100	117	P	H
		5943	54.67	-13.53	68.2	37.49	34.3	12.53	29.65	100	117	P	H
802.11ax													H
HE80 Full													H
CH 155		5643.4	55.17	-13.03	68.2	38.86	33.01	12.9	29.6	360	85	P	V
5775MHz		5696.2	61.29	-41.11	102.4	44.6	33.37	12.93	29.61	360	85	P	V
		5718.4	67.18	-43.17	110.35	50.37	33.47	12.95	29.61	360	85	P	V
		5721.4	65.23	-48.76	113.99	48.4	33.49	12.95	29.61	360	85	P	V
	*	5775	103.22	-	-	86.11	33.75	12.98	29.62	360	85	P	V
	*	5775	94.86	-	-	77.75	33.75	12.98	29.62	360	85	A	V
		5850	59.5	-62.7	122.2	42.2	34.1	12.83	29.63	360	85	P	V
		5861.4	58.93	-50.08	109.01	41.63	34.15	12.79	29.64	360	85	P	V
		5883	56.85	-42.41	99.26	39.54	34.23	12.72	29.64	360	85	P	V
		5938.4	53.85	-14.35	68.2	36.66	34.3	12.54	29.65	360	85	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 HE80_Full (Harmonic @ 3m)

WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11550	47.91	-26.09	74	55.83	39.05	19.25	66.22	-	-	P	H
		14491	50.82	-23.18	74	53.59	40.89	21.75	65.41	-	-	P	H
		14491	40.63	-13.37	54	43.4	40.89	21.75	65.41	-	-	A	H
		17325	48.36	-19.84	68.2	50.61	38.67	25.14	66.06	-	-	P	H
		17967	55.24	-18.76	74	52.53	42.4	25.46	65.15	-	-	P	H
		17967	44.26	-9.74	54	41.55	42.4	25.46	65.15	-	-	A	H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE80 Full													H
CH 155		11550	47.88	-26.12	74	55.8	39.05	19.25	66.22	-	-	P	V
5775MHz		14491	50.64	-23.36	74	53.41	40.89	21.75	65.41	-	-	P	V
		14491	40.57	-13.43	54	43.34	40.89	21.75	65.41	-	-	A	V
		17325	48.88	-19.32	68.2	51.13	38.67	25.14	66.06	-	-	P	V
		17956	54.25	-19.75	74	51.59	42.37	25.46	65.17	-	-	P	V
		17956	44.08	-9.92	54	41.42	42.37	25.46	65.17	-	-	A	V
													V
													V
													V
													V
													V
													V
													V

Remark

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



Emission above 18GHz

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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
17+18		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
802.11ax HE80 Full SHF		19808	36.42	-37.58	74	57.2	37.73	-3.57	54.94	-	-	P	H	
		31572	39.49	-34.51	74	57.44	40.6	-1.98	56.57	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			23816	39.65	-34.35	74	57.57	38.8	-2.91	53.81	-	-	P	V
			36472	43.81	-30.19	74	60.9	42.65	-1.32	58.42	-	-	P	V
														V
														V
														V
														V
														V
														V
														V
													V	
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. 													



Note symbol

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



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
17+18		(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 @ 5650MHz:

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 :	Karl Hou, Steven Wu	Temperature :	20~25°C
		Relative Humidity :	50~65%

Note symbol

-L	Low channel location
-R	High channel location

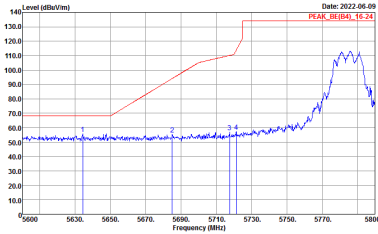
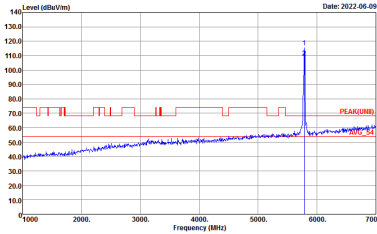
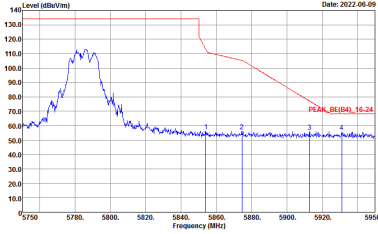
Band 4 - 5725~5850MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
17+18	Horizontal	Fundamental
Peak	<p>Site : 03CH16-HY Condition : PEAK_BE(84)_16-24 3m 91200_1522_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
17+18	Vertical	Fundamental
Peak	<p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH16-HY Condition : PEAK(LUNII) 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>

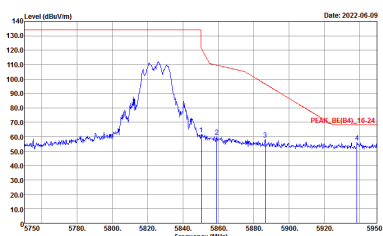
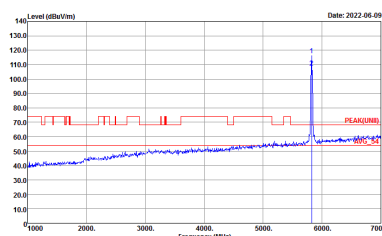


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
17+18	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNI) 3m 91200_1522_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Left blank</p>

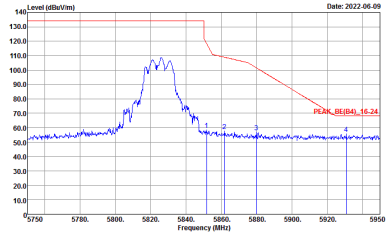
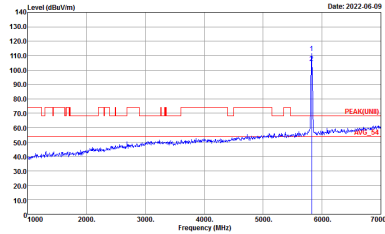


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
17+18	Vertical	Fundamental
Peak		
Peak		Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
17+18	Horizontal	Fundamental
Peak	 <p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII)_3m 91200_1522_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
17+18	Vertical	Fundamental
Peak	 <p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH16-HY Condition : PEAK(U)B 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>



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

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
17+18	Horizontal	Fundamental
Peak	<p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 HORIZONTAL -RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH16-HY Condition : PEAK(UNI) 3m 91200_1522_220310 HORIZONTAL -RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
17+18	Vertical	Fundamental
Peak	<p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH16-HY Condition : PEAK(UNB) 3m 91200_1522_220310 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	
17+18	Horizontal	Fundamental
<p>Peak</p>	<p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p>Peak</p>	<p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Left blank</p>

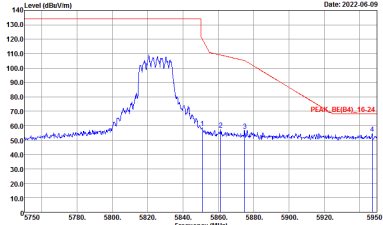
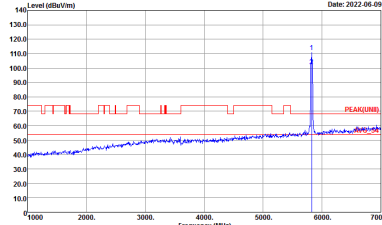


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
17+18	Vertical	Fundamental
<p>Peak</p>	<p>Date: 2022-06-09 PEAK_BE(B4)_16-24</p> <p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Date: 2022-06-09 PEAK(BB)</p> <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p>Peak</p>	<p>Date: 2022-06-09 PEAK_BE(B4)_16-24</p> <p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Left blank</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
17+18	Horizontal	Fundamental
Peak	<p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522_220310 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
17+18	Vertical	Fundamental
Peak	 <p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH16-HY Condition : PEAK(U)B 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>



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

Table with 2 columns: Horizontal and Fundamental. Row 1: WIFI Band 4 5725~5850MHz Band Edge @ 3m. Row 2: ANT 802.11ax HE20 Partial 26/0 CH149 5745MHz. Row 3: 17+18. Row 4: Peak. Each plot shows Level (dBuV/m) vs Frequency (MHz) with site and condition details.



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/0 CH149 5745MHz	
17+18	Vertical	Fundamental
Peak	<p>Date: 2022.06.09 PEAK_BE(B4)_TC-32</p> <p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Date: 2022.06.09 PEAK(BB)</p> <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522_220310 VERTICAL : 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	
17+18	Horizontal	Fundamental
Peak	<p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH16-HY Condition : PEAK(U)B 3m 91200_1522_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>



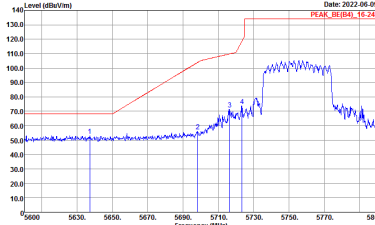
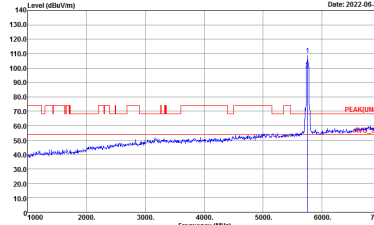
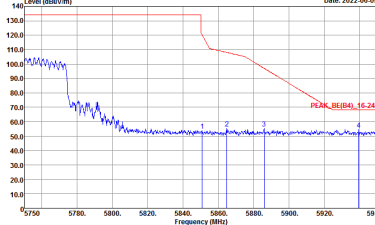
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/8 CH165 5825MHz	
17+18	Vertical	Fundamental
Peak	<p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH16-HY Condition : PEAK(LUNB) 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>



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

Table with 4 columns: WIFI, ANT, 17+18, and two sub-columns for Horizontal and Fundamental. It contains spectral analysis graphs and labels like 'Peak' and 'Left blank'.

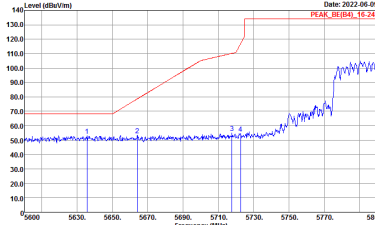
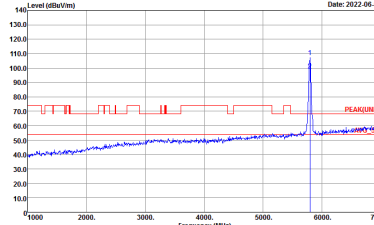
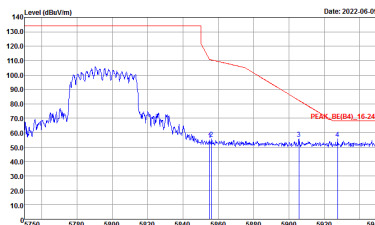


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
17+18	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Left blank</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full HT40 CH159 5795MHz	
17+18	Horizontal	Fundamental
<p>Peak</p>	<p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH16-HY Condition : PEAK(U)B 3m 91200_1522_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p>Peak</p>	<p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Left blank</p>



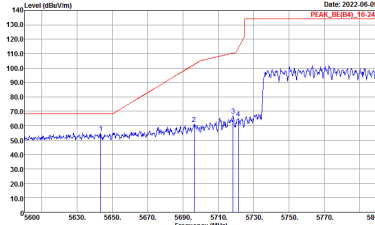
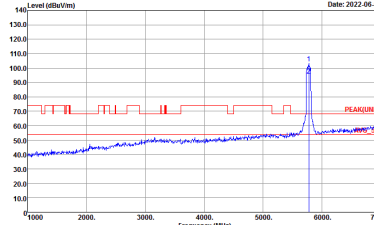
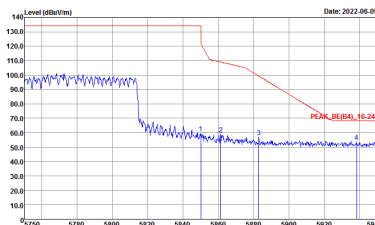
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
17+18	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Left blank</p>



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	
17+18	Horizontal	Fundamental
Peak	<p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWF:Auto</p>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522_220310 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWF:Auto</p>
Peak	<p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWF:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
17+18	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH16-HY Condition : PEAK(LINII) 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE(B4)_16-24 3m 91200_1522_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Left blank</p>



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

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522_220310 HORIZONTAL</p>	<p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522_220310 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522_220310 HORIZONTAL</p>	<p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522_220310 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH16-HY Condition : :PEAK(LNII) 3m 91200_1522_220310 HORIZONTAL</p>	<p>Site : 03CH16-HY Condition : :PEAK(LNII) 3m 91200_1522_220310 VERTICAL</p>



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

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH16-4Y Condition : PEAK(UNII) 3m 9120D_1522_220310 HORIZONTAL</p>	<p>Site : 03CH16-4Y Condition : PEAK(UNII) 3m 9120D_1522_220310 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH16-HY Condition : PEAK(LNII) 3m 91200_1522_220310 HORIZONTAL</p>	<p>Site : 03CH16-HY Condition : PEAK(LNII) 3m 91200_1522_220310 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH16-HY Condition : PEAK(LINE) 3m 91200_1522_220310 HORIZONTAL</p>	<p>Site : 03CH16-HY Condition : PEAK(LINE) 3m 91200_1522_220310 VERTICAL</p>



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

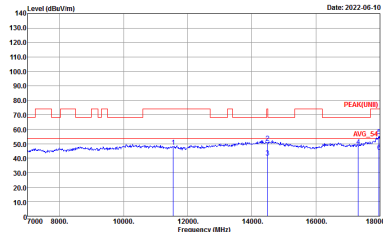
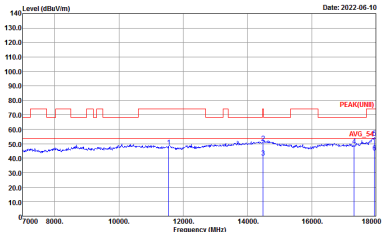
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH16-4Y Condition : PEAK(UNII) 3m 9120D_1522_220310 HORIZONTAL</p>	<p>Site : 03CH16-4Y Condition : PEAK(UNII) 3m 9120D_1522_220310 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH16-HY Condition : PEAK(LNII) 3m 91200_1522_220310 HORIZONTAL</p>	<p>Site : 03CH16-HY Condition : PEAK(LNII) 3m 91200_1522_220310 VERTICAL</p>



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

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
17+18	Horizontal	Vertical
Peak		
Avg.		



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

WIFI	5GHz WIFI	
ANT	802.11ax HE20 Full SHF	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH16-HY Condition : PEAK(UNII) 1m SHF ANT_9170_00993 HORIZONTAL</p>	<p>Site : 03CH16-HY Condition : PEAK(UNII) 1m SHF ANT_9170_00993 VERTICAL</p>



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

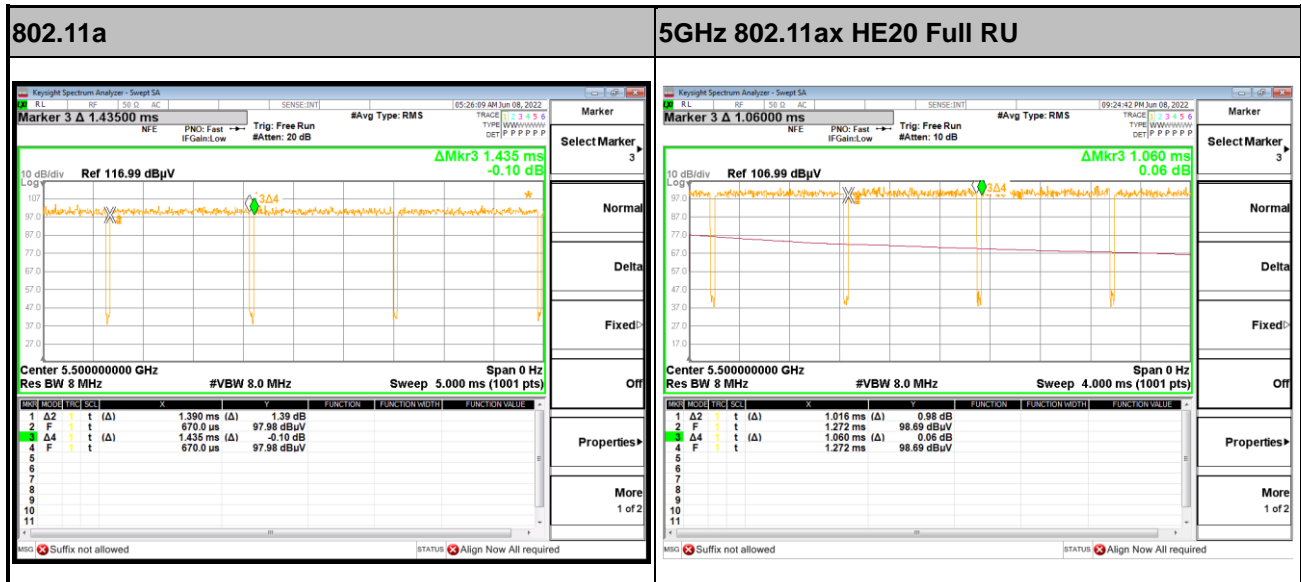
WIFI	5GHz WIFI	
ANT	802.11ax HE20 Full LF	
17+18	Horizontal	Vertical
QP / Peak	<p>Site : 03CH16-HY Condition : QP 3m BIL06_47020_211009 HORIZONTAL</p>	<p>Site : 03CH16-HY Condition : QP 3m BIL06_47020_211009 VERTICAL</p>



Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
17+18	802.11a	96.86	1390	0.72	1kHz
17+18	5GHz 802.11ax HE20 Full RU	95.85	1016	0.98	1kHz
17+18	5GHz 802.11ax HE20 26 RU	98.55	-	-	10Hz
17+18	5GHz 802.11ax HE40 Full RU	92.41	536	1.87	3kHz
17+18	5GHz 802.11ax HE80 Full RU	86.53	289	3.46	10kHz

MIMO <Ant. 17+18>

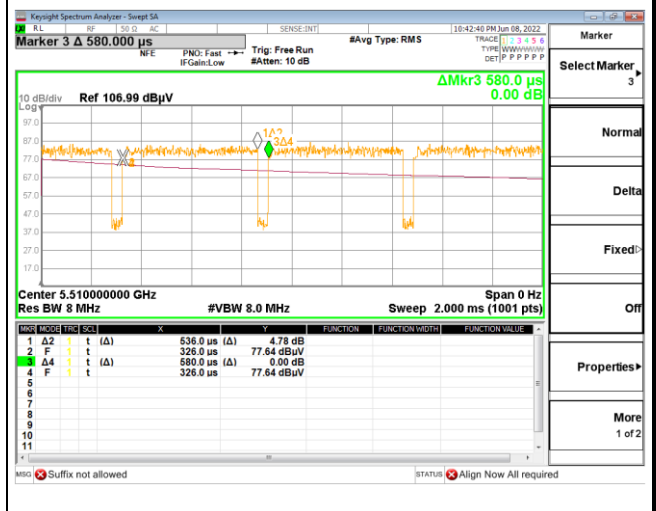




5GHz 802.11ax HE20 26 RU



5GHz 802.11ax HE40 Full RU



5GHz 802.11ax HE80 Full RU

