FCC RADIO TEST REPORT

FCC ID	:	**2AFZZ122G**
Equipment	:	**Mobile Phone**
Brand Name	:	**Xiaomi**
Model Name	:	**2201122G**
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 Nov. 15, 2021 and testing was performed from Nov. 16, 2021 to Dec. 28, 2021. 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

Table of Contents

History of this test report **3**
Summary of Test Result **4**
1 General Description **5**
1.1 Product Feature of Equipment Under Test 5
1.2 Modification of EUT 5
1.3 Testing Location 6
1.4 Applicable Standards 6
2 Test Configuration of Equipment Under Test **7**
2.1 Carrier Frequency and Channel 7
2.2 Test Mode 8
2.3 Connection Diagram of Test System 10
2.4 Support Unit used in test configuration and system 10
2.5 EUT Operation Test Setup 11
2.6 Measurement Results Explanation Example 11
3 Test Result **12**
3.1 6dB and 26dB and 99% Occupied Bandwidth Measurement 12
3.2 Maximum Conducted Output Power Measurement 17
3.3 Power Spectral Density Measurement 18
3.4 Unwanted Emissions Measurement 21
3.5 AC Conducted Emission Measurement 25
3.6 Antenna Requirements 27
4 List of Measuring Equipment **28**
5 Uncertainty of Evaluation **30**
Appendix A. Conducted Test Results
Appendix B. AC Conducted Emission Test Result
Appendix C. Radiated Spurious Emission
Appendix D. Radiated Spurious Emission Plots
Appendix E. Duty Cycle Plots
Appendix F. Setup Photographs

History of this test report

Report No.	Version	Description	Issue Date
FR1N1013C	01	Initial issue of report	Dec. 28, 2021

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	6.04 dB under the limit at 30.000 MHz
3.5	15.207	AC Conducted Emission	Pass	21.68 dB under the limit at 2.695 MHz
3.6	15.203 15.407(a)	Antenna Requirement	Pass	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
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: Keven Cheng

Report Producer: Celery Wei

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, Wi-Fi 6GHz 802.11ax, NFC, GNSS and WPC/WPT.

Product Specification is subject to this standard	
Sample 1	1st source (refer to the PED)
Sample 2	2nd source (refer to the PED)
Antenna Type	WWAN: PIFA Antenna **WLAN 2.4GHz:** <Ant. 16>: PIFA Antenna <Ant. 18>: PIFA Antenna **WLAN 5GHz:** <Ant. 17>: PIFA Antenna <Ant. 18>: PIFA Antenna **WLAN 6GHz:** <Ant. 17>: PIFA Antenna <Ant. 18>: PIFA Antenna **Bluetooth:** <Ant. 16>: PIFA Antenna <Ant. 18>: PIFA Antenna GPS / Glonass / BDS / Galileo / SBAS / QZSS: PIFA Antenna NFC: Planar Antenna WPC/WPT: Coil Antenna

Antenna information		
5725 MHz ~ 5850 MHz	Peak Gain (dBi)	Ant. 17: -1.6 Ant. 18: -4.2

Remark: The above EUT's information 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. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	**Sporton Site No.**
	TH02-HY, CO05-HY, 03CH07-HY

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

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 WPC Charging Mode, and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and find <Sample 1>: Z plane and WPC Charging Mode ; <Sample 2>: 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 final test modes consider the modulation and the worst data rates as shown in the table below.

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

MIMO Mode

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

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

<Sample 1>

Ch. #		Band IV：5725-5850 MHz			
		802.11a	802.11ac VHT20	802.11ac VHT40	802.11ac VHT80
L	Low	149	149	151	-
M	Middle	157	157	-	155
H	High	165	165	159	-

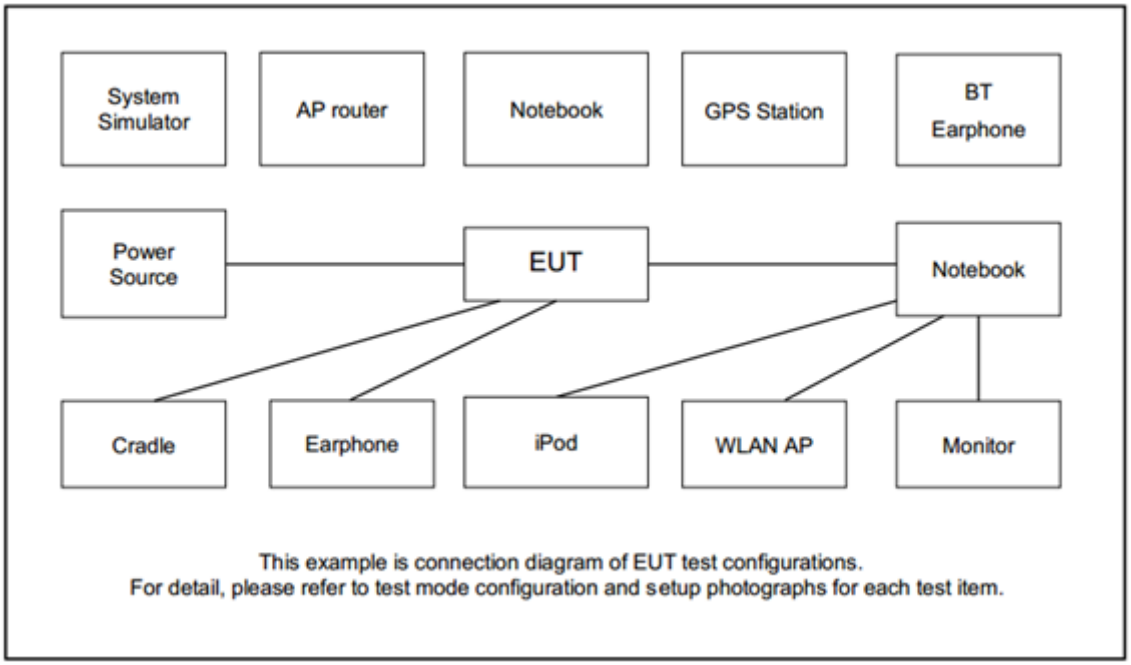
Ch. #		Band IV：5725-5850 MHz
		802.11ax HE20
L	Low	149
M	Middle	-
H	High	165

<Sample 2>

Ch. #		Band IV：5725-5850 MHz
		802.11ac VHT40
L	Low	151
M	Middle	-
H	High	-

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 Ericsson	MW600	PY7DDA-2029	N/A	N/A
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
3.	Notebook	DELL	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Wireless Charger	MI	MDY-12-EN	N/A	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, EUT (SW: SKQ1.211006.001) 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.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 4.2 + 10 = 14.2 (dB)

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.

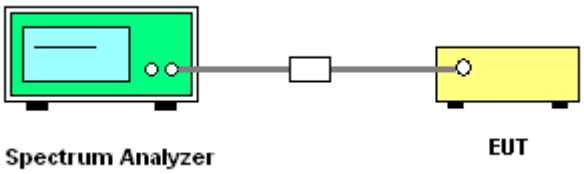
3.1.2 Measuring Instruments

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 ≥ 3 x 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.

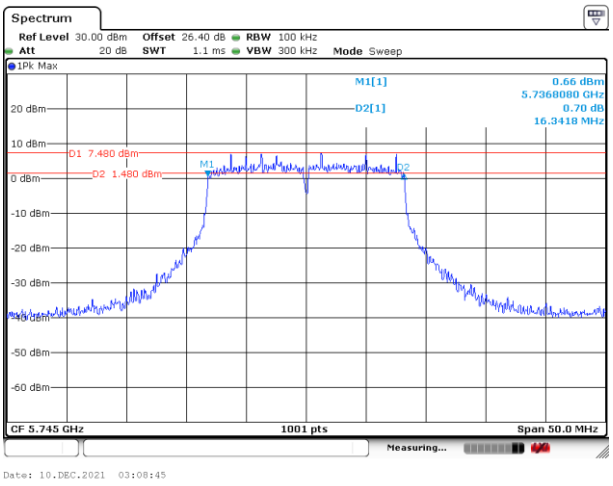
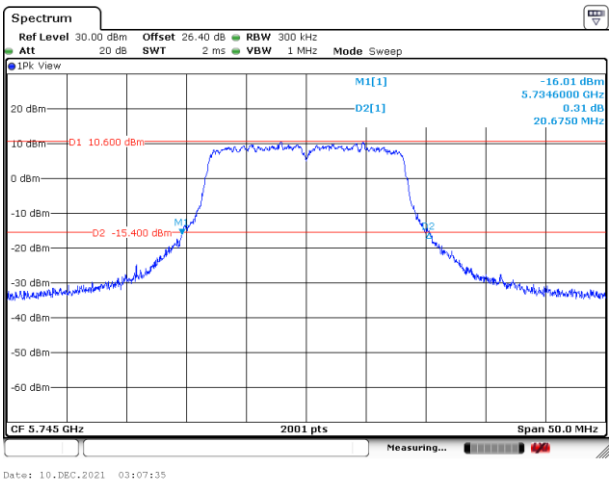
3.1.4 Test Setup



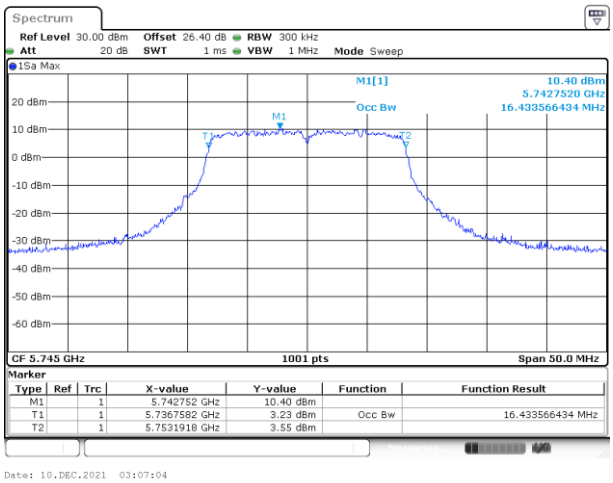
3.1.5 Test Result of 6dB and 26dB and 99% Occupied Bandwidth

Please refer to Appendix A.

<802.11a>

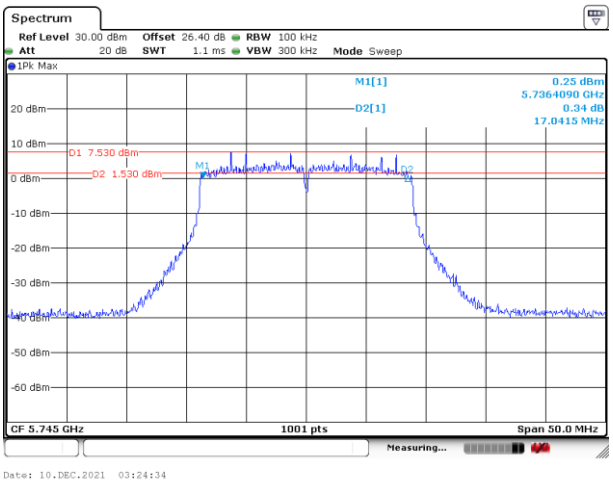
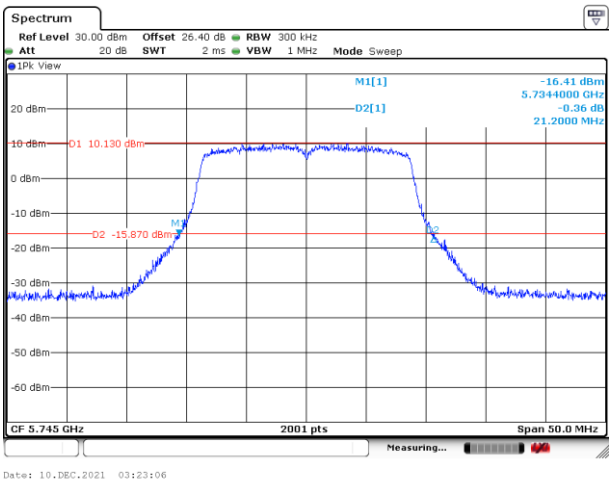
6dB Bandwidth	26dB Bandwidth
	

99% Occupied Bandwidth

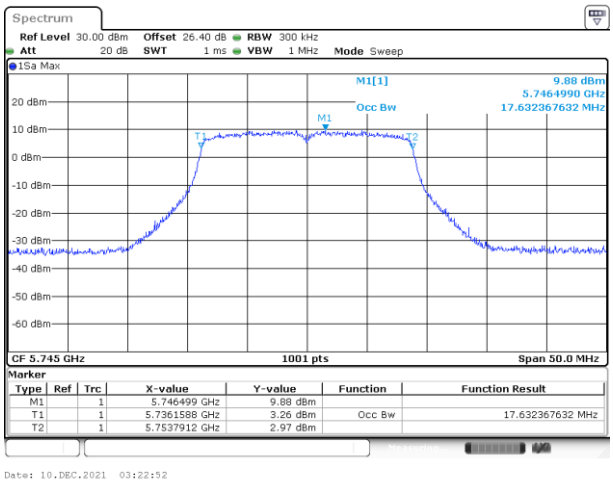


Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ac VHT20>

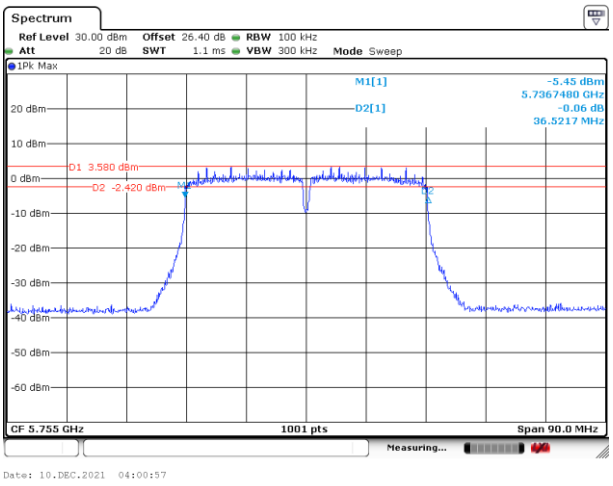
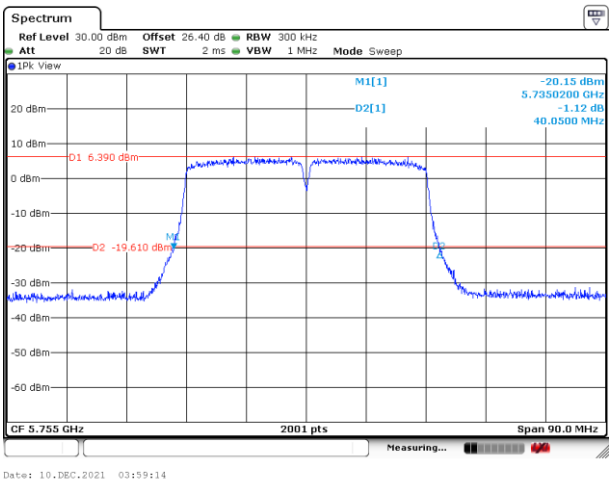
6dB Bandwidth	26dB Bandwidth
	

99% Occupied Bandwidth

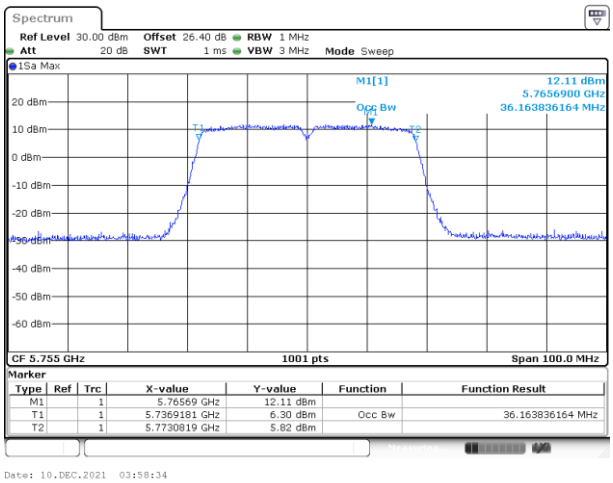


Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ac VHT40>

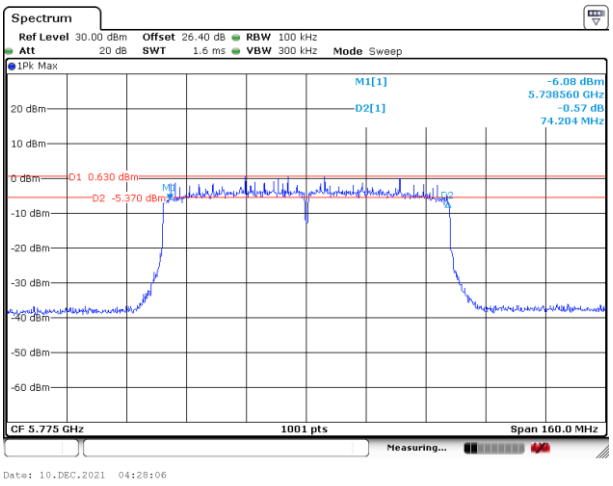
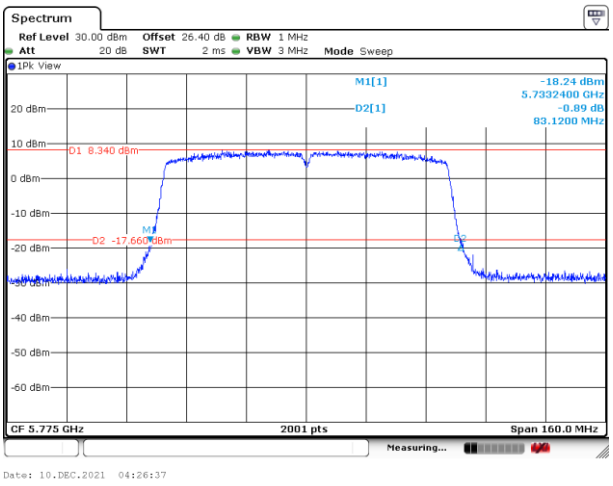
6dB Bandwidth	26dB Bandwidth
	

99% Occupied Bandwidth

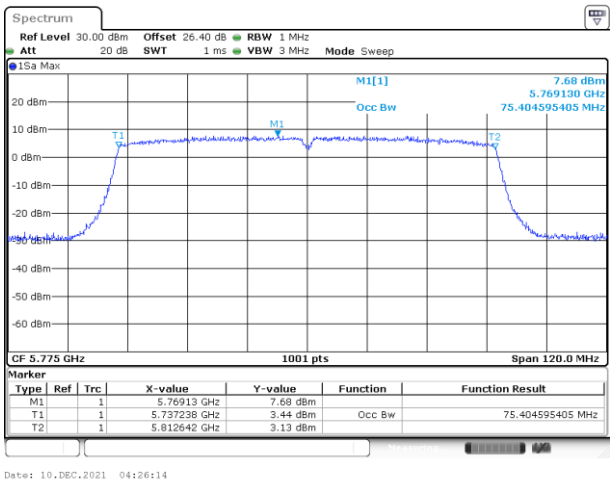


Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ac VHT80>

6dB Bandwidth	26dB Bandwidth
	

99% Occupied Bandwidth



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.

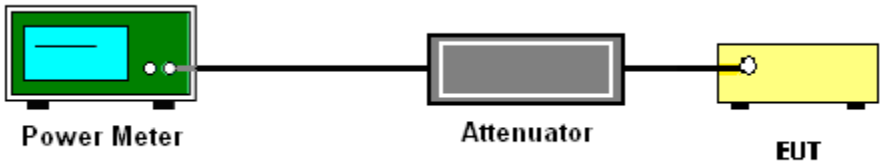
3.2.3 Test Procedures

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.

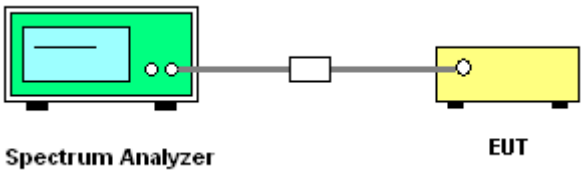
 # Method SA-3 #

(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 ≥ 1 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Add 10 log (500 kHz/RBW) to the measured result, whereas RBW (<500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement
- Sweep time ≤ (number of points in sweep) × 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_{ANT}) dB.
   With this technique, spectrum measurements are performed at each output of the device, but rather than summing the spectra or the spectral peaks across the outputs, the quantity 10 log(N_{ANT}) dB is added to each spectrum value before comparing to the emission limit. The addition of 10 log(N_{ANT}) dB serves to apportion the emission limit among the N_{ANT} outputs so that each output is permitted to contribute no more than $1/N_{ANT}$ th of the PSD limit.

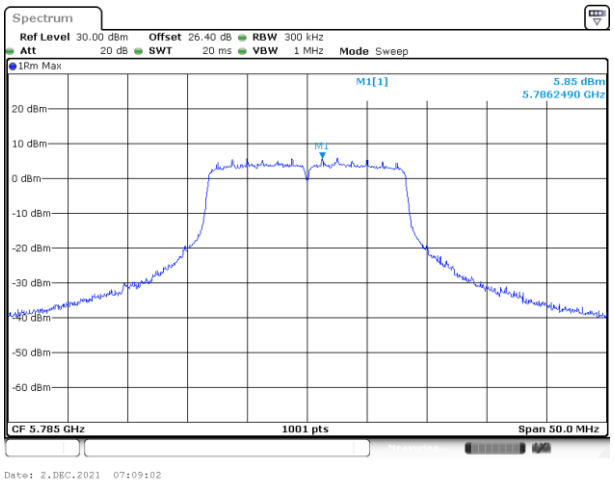
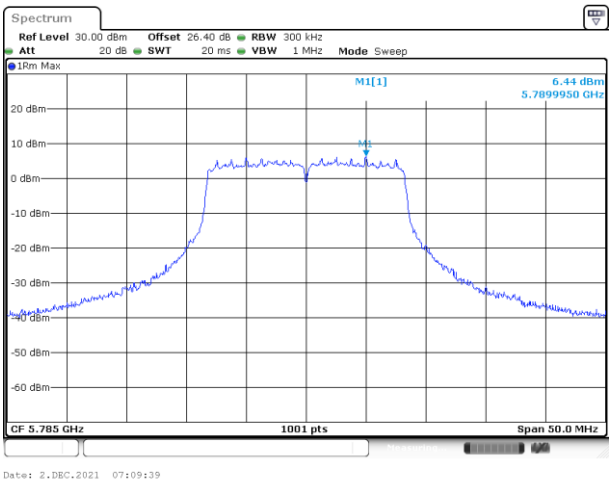
3.3.4 Test Setup



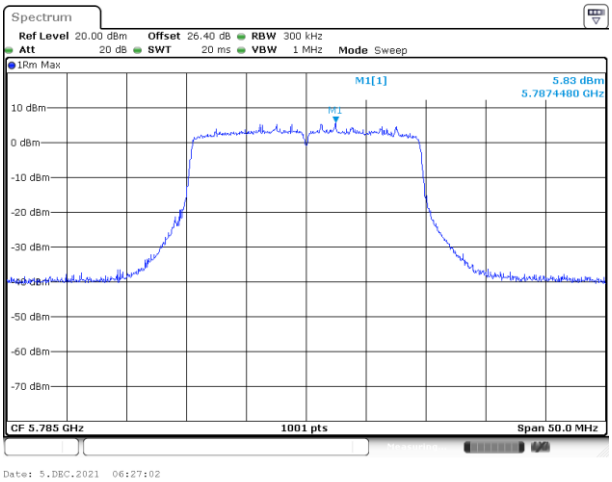
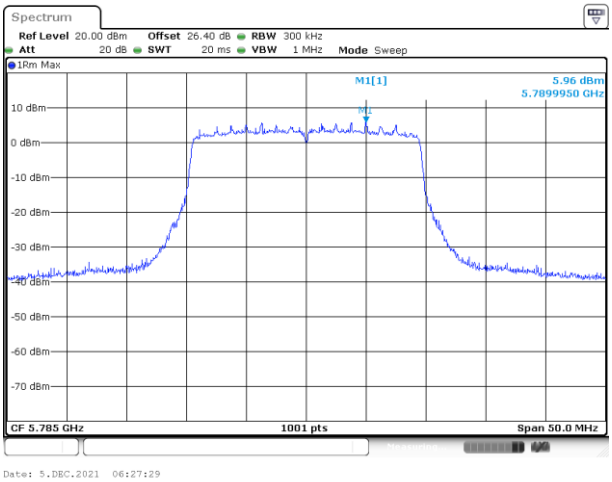
3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

<802.11a Mode>

Worst Case Power Density (dBm/MHz)	
MIMO Ant. 17	**MIMO Ant. 18**
	

<802.11ax mode>

Worst Case Power Density (dBm/MHz)	
MIMO Ant. 17	**MIMO Ant. 18**
	

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.

$$E=\frac{1000000\sqrt{30P}}{3}$$ μV/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 ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

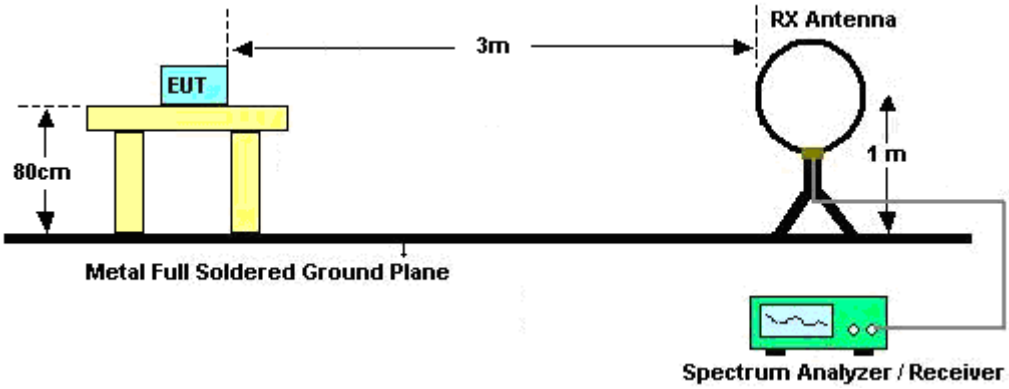
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz

   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 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.

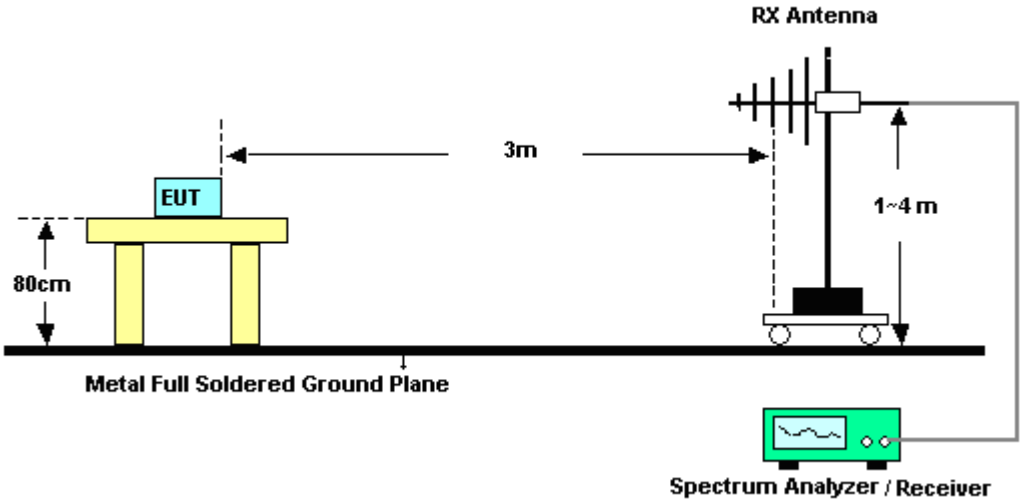
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit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

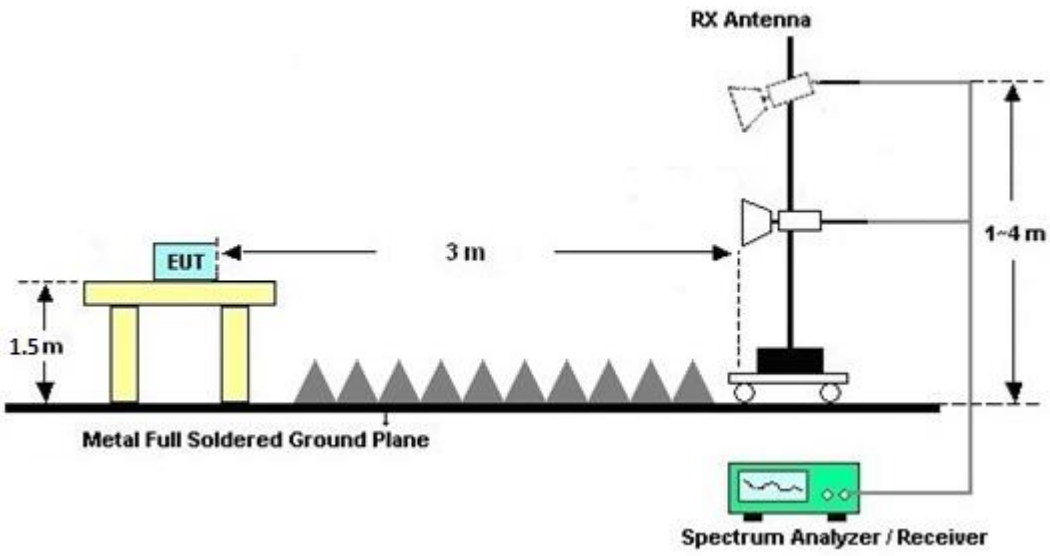
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated test above 1GHz



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.

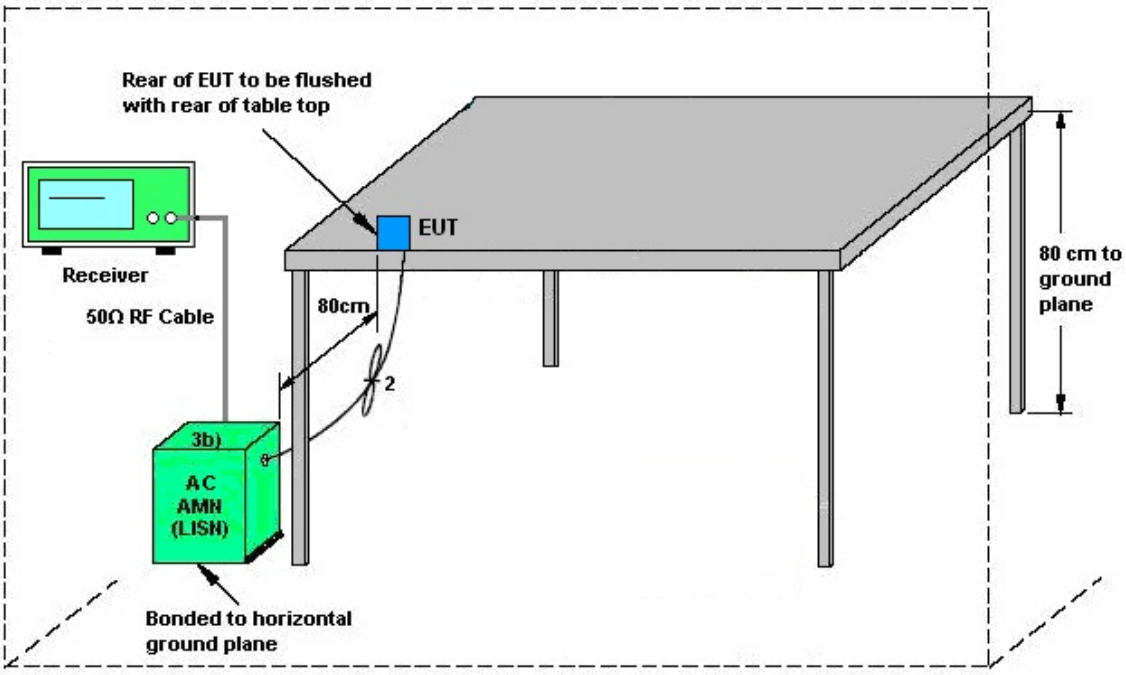
3.5.2 Measuring Instruments

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



AMN = Artificial mains network (LISN)
AE = Associated equipment
EUT = Equipment under test
ISN = Impedance stabilization network

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 CDD transmissions, directional gain is calculated as

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

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(N_{ANT}/N_{SS}=1) dB.

For power measurements on IEEE 802.11 devices,

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

Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e., F)2)f)i).

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

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

The directional gain “DG” is calculated as following table.

<CDD Modes>

	Ant. 17 (dBi)	Ant. 18 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band IV	-1.60	-4.20	-1.60	0.21	0.00	0.00

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

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

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	35419 & 03	30MHz~1GHz	Apr. 28, 2021	Nov. 28, 2021~ Dec. 28, 2021	Apr. 27, 2022	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 01, 2020	Nov. 28, 2021~ Nov. 29, 2021	Nov. 30, 2021	Radiation (03CH07-HY)
Horn Antenna	ESCO	3117	00066584	1GHz~18GHz	Oct. 25, 2021	Nov. 30, 2021~ Dec. 28, 2021	Oct. 24, 2022	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Jan. 04, 2021	Nov. 28, 2021~ Dec. 28, 2021	Jan. 03, 2022	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 22, 2021	Nov. 28, 2021~ Dec. 28, 2021	Apr. 21, 2022	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 04, 2021	Nov. 28, 2021~ Dec. 28, 2021	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Oct. 04, 2021	Nov. 28, 2021~ Dec. 28, 2021	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 23, 2021	Nov. 28, 2021~ Dec. 28, 2021	Jul. 22, 2022	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Jul. 22, 2021	Nov. 28, 2021~ Dec. 28, 2021	Jul. 21, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682-4	30MHz to 18GHz	Feb. 24, 2021	Nov. 28, 2021~ Dec. 28, 2021	Feb. 23, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971-4	9kHz to 18GHz	Feb. 24, 2021	Nov. 28, 2021~ Dec. 28, 2021	Feb. 23, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655-4	9kHz to 18GHz	Feb. 24, 2021	Nov. 28, 2021~ Dec. 28, 2021	Feb. 23, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2,80 1606/2	18GHz~40GHz	Feb. 24, 2021	Nov. 28, 2021~ Dec. 28, 2021	Feb. 23, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 17, 2021	Nov. 28, 2021~ Dec. 28, 2021	Sep. 16, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	Apr. 03, 2021	Nov. 28, 2021~ Dec. 28, 2021	Apr. 02, 2022	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	Nov. 28, 2021~ Dec. 28, 2021	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	Nov. 28, 2021~ Dec. 28, 2021	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Nov. 28, 2021~ Dec. 28, 2021	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Nov. 28, 2021~ Dec. 28, 2021	N/A	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	Nov. 28, 2021~ Dec. 28, 2021	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	Mar. 09, 2021	Nov. 28, 2021~ Dec. 28, 2021	Mar. 08, 2022	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA9170	BBHA917098 0	18GHz-40GHz	Jan. 11, 2021	Nov. 28, 2021~ Dec. 28, 2021	Jan. 10, 2022	Radiation (03CH07-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Nov. 22, 2021	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 30, 2020	Nov. 22, 2021	Nov. 29, 2021	Conduction (CO05-HY)
Hygrometer	TECPEL	DTM-303A	TP201973	N/A	Oct. 22, 2021	Nov. 22, 2021	Oct. 21, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 01, 2020	Nov. 22, 2021	Nov. 30, 2021	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Nov. 22, 2021	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Jul. 28, 2021	Nov. 22, 2021	Jul. 27, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 31, 2020	Nov. 22, 2021	Dec. 30, 2021	Conduction (CO05-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 15, 2021	Nov. 16, 2021~ Dec. 10, 2021	Nov. 14, 2022	Conducted (TH02-HY)
Power Sensor	DARE	RPR3006W	13I00030SNO31(NO:182)	10MHz~6GHz	Dec. 30, 2020	Nov. 16, 2021~ Dec. 10, 2021	Dec. 29, 2021	Conducted (TH02-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	Nov. 16, 2021~ Dec. 10, 2021	Aug. 29, 2022	Conducted (TH02-HY)
Switch Box & RF Cable	EM Electronics	EMSW18SE	SW191204(BOX8)	N/A	Jan. 07, 2021	Nov. 16, 2021~ Dec. 10, 2021	Jan. 06, 2022	Conducted (TH02-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.1 dB

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.1 dB

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.8 dB

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.0 dB

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Derek Hsu/Shiming Liu	Temperature:	22.1~25.9	°C
Test Date:	2021/11/16~2021/12/10	Relative Humidity:	50.9~53.5	%

Report Number : FR1N1013C

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 17	Ant 18	Ant 17	Ant 18	Ant 17	Ant 18		
11a	6Mbps	2	149	5745	16.43	16.48	20.68	20.53	16.34	16.39	0.5	Pass
11a	6Mbps	2	157	5785	16.43	16.48	20.70	20.58	16.39	16.39	0.5	Pass
11a	6Mbps	2	165	5825	16.43	16.48	20.78	20.63	16.14	15.84	0.5	Pass
VHT20	MCS0	2	149	5745	17.63	17.58	21.20	20.98	17.04	16.84	0.5	Pass
VHT20	MCS0	2	157	5785	17.63	17.58	21.33	21.15	16.89	17.59	0.5	Pass
VHT20	MCS0	2	165	5825	17.63	17.63	21.28	20.80	16.99	16.64	0.5	Pass
VHT40	MCS0	2	151	5755	36.16	36.16	40.05	40.10	36.52	36.16	0.5	Pass
VHT40	MCS0	2	159	5795	36.16	36.16	39.83	39.69	35.98	36.52	0.5	Pass
VHT80	MCS0	2	155	5775	75.40	75.28	83.12	82.56	74.20	74.84	0.5	Pass

Report Number : FR1N1013C

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 17	Ant 18	SUM	Ant 17	Ant 18	Ant 17	Ant 18	
11a	6Mbps	2	149	5745	18.50	18.60	21.56	30.00		-1.60		Pass
11a	6Mbps	2	157	5785	18.80	19.00	21.91	30.00		-1.60		Pass
11a	6Mbps	2	165	5825	18.80	18.70	21.76	30.00		-1.60		Pass
HT20	MCS0	2	149	5745	18.20	18.30	21.26	30.00		-1.60		Pass
HT20	MCS0	2	157	5785	18.50	18.70	21.61	30.00		-1.60		Pass
HT20	MCS0	2	165	5825	18.50	18.40	21.46	30.00		-1.60		Pass
HT40	MCS0	2	151	5755	17.80	18.20	21.01	30.00		-1.60		Pass
HT40	MCS0	2	159	5795	18.00	18.20	21.11	30.00		-1.60		Pass
VHT20	MCS0	2	149	5745	18.30	18.50	21.41	30.00		-1.60		Pass
VHT20	MCS0	2	157	5785	18.70	18.80	21.76	30.00		-1.60		Pass
VHT20	MCS0	2	165	5825	18.70	18.50	21.61	30.00		-1.60		Pass
VHT40	MCS0	2	151	5755	17.80	18.30	21.07	30.00		-1.60		Pass
VHT40	MCS0	2	159	5795	18.10	18.20	21.16	30.00		-1.60		Pass
VHT80	MCS0	2	155	5775	16.50	17.00	19.77	30.00		-1.60		Pass

Report Number : FR1N1013C

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 17	Ant 18	Ant 17	Ant 18	SUM	Ant 17	Ant 18	Ant 17	Ant 18	
11a	6Mbps	2	149	5745	2.22		7.45	7.92	10.93	30.00		0.21		Pass
11a	6Mbps	2	157	5785	2.22		8.07	8.66	11.67	30.00		0.21		Pass
11a	6Mbps	2	165	5825	2.22		8.13	7.99	11.14	30.00		0.21		Pass
VHT20	MCS0	2	149	5745	2.22		7.75	7.89	10.90	30.00		0.21		Pass
VHT20	MCS0	2	157	5785	2.22		8.14	8.20	11.21	30.00		0.21		Pass
VHT20	MCS0	2	165	5825	2.22		8.24	7.53	11.25	30.00		0.21		Pass
VHT40	MCS0	2	151	5755	2.22		3.45	4.12	7.13	30.00		0.21		Pass
VHT40	MCS0	2	159	5795	2.22		3.88	3.70	6.89	30.00		0.21		Pass
VHT80	MCS0	2	155	5775	2.22		0.39	1.18	4.19	30.00		0.21		Pass

Note: PSD Sum = Max PSD(Ant. 17, Ant. 18) + 10 log (n)

Report Number : FR1N1013C

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 17	Ant 18	SUM	Ant 17	Ant 18	Ant 17	Ant 18	
HE20	MCS0	2	149	5745	Full	18.20	18.40	21.31	30.00		-1.60		Pass
HE20	MCS0	2	149	5745	26/0	10.70	11.10	13.91	30.00		-1.60		Pass
HE20	MCS0	2	149	5745	52/37	13.40	13.90	16.67	30.00		-1.60		Pass
HE20	MCS0	2	149	5745	106/53	16.50	16.90	19.71	30.00		-1.60		Pass
HE20	MCS0	2	157	5785	Full	18.60	18.80	21.71	30.00		-1.60		Pass
HE20	MCS0	2	157	5785	26/4	11.90	11.90	14.91	30.00		-1.60		Pass
HE20	MCS0	2	157	5785	52/38	14.10	14.40	17.26	30.00		-1.60		Pass
HE20	MCS0	2	157	5785	106/53	17.10	17.30	20.21	30.00		-1.60		Pass
HE20	MCS0	2	165	5825	Full	18.60	18.50	21.56	30.00		-1.60		Pass
HE20	MCS0	2	165	5825	26/8	11.20	11.30	14.26	30.00		-1.60		Pass
HE20	MCS0	2	165	5825	52/40	14.00	14.10	17.06	30.00		-1.60		Pass
HE20	MCS0	2	165	5825	106/54	16.90	17.20	20.06	30.00		-1.60		Pass
HE40	MCS0	2	151	5755	Full	17.50	18.00	20.77	30.00		-1.60		Pass
HE40	MCS0	2	159	5795	Full	17.70	17.80	20.76	30.00		-1.60		Pass
HE80	MCS0	2	155	5775	Full	15.50	16.00	18.77	30.00		-1.60		Pass

Report Number : FR1N1013C

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 17	Ant 18	Ant 17	Ant 18	SUM	Ant 17	Ant 18	Ant 17	Ant 18	
HE20	MCS0	2	149	5745	Full	2.22		7.53	7.75	10.76	30.00		0.21		Pass
HE20	MCS0	2	149	5745	26/0	2.22		7.30	7.71	10.72	30.00		0.21		Pass
HE20	MCS0	2	149	5745	52/37	2.22		7.20	7.40	10.41	30.00		0.21		Pass
HE20	MCS0	2	149	5745	106/53	2.22		7.30	7.41	10.42	30.00		0.21		Pass
HE20	MCS0	2	157	5785	Full	2.22		8.05	8.18	11.19	30.00		0.21		Pass
HE20	MCS0	2	157	5785	26/4	2.22		7.95	8.04	11.05	30.00		0.21		Pass
HE20	MCS0	2	157	5785	52/38	2.22		7.61	8.01	11.02	30.00		0.21		Pass
HE20	MCS0	2	157	5785	106/53	2.22		7.51	7.95	10.96	30.00		0.21		Pass
HE20	MCS0	2	165	5825	Full	2.22		7.94	7.83	10.95	30.00		0.21		Pass
HE20	MCS0	2	165	5825	26/8	2.22		7.62	7.72	10.73	30.00		0.21		Pass
HE20	MCS0	2	165	5825	52/40	2.22		7.49	7.76	10.77	30.00		0.21		Pass
HE20	MCS0	2	165	5825	106/54	2.22		7.65	7.56	10.66	30.00		0.21		Pass
HE40	MCS0	2	151	5755	Full	2.22		3.24	3.61	6.62	30.00		0.21		Pass
HE40	MCS0	2	159	5795	Full	2.22		3.53	3.57	6.58	30.00		0.21		Pass
HE80	MCS0	2	155	5775	Full	2.22		-1.25	-1.04	1.97	30.00		0.21		Pass

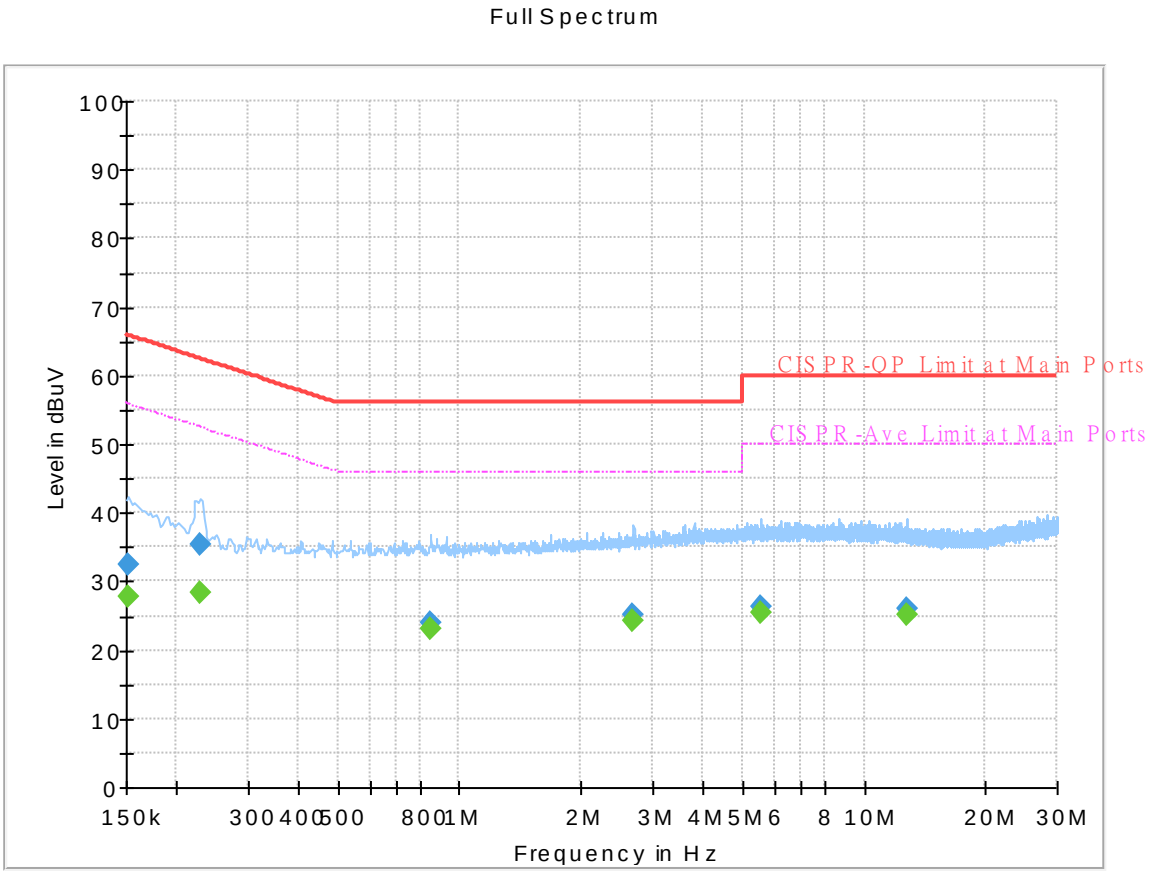
Note: PSD Sum = Max PSD(Ant. 17, Ant. 18) + 10 log (n)

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Tom Lee	**Temperature :**	23~26℃
		Relative Humidity :	45~55%

EUT Information

Report NO :	1N1013
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

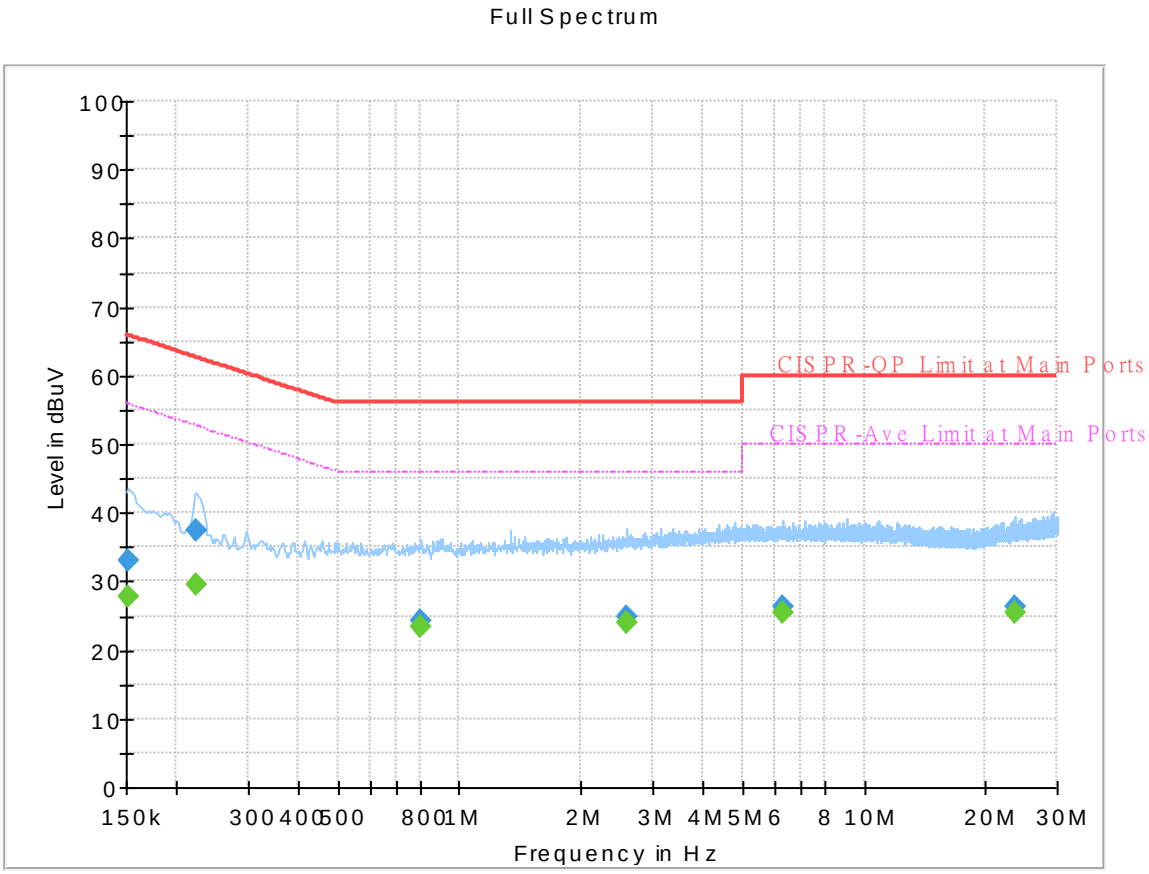


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	27.68	55.88	28.20	L1	OFF	19.7
0.152250	32.38	---	65.88	33.50	L1	OFF	19.7
0.228750	---	28.46	52.50	24.04	L1	OFF	19.7
0.228750	35.47	---	62.50	27.03	L1	OFF	19.7
0.849750	---	23.20	46.00	22.80	L1	OFF	20.1
0.849750	24.06	---	56.00	31.94	L1	OFF	20.1
2.694750	---	24.32	46.00	21.68	L1	OFF	20.1
2.694750	25.09	---	56.00	30.91	L1	OFF	20.1
5.554500	---	25.42	50.00	24.58	L1	OFF	20.0
5.554500	26.38	---	60.00	33.62	L1	OFF	20.0
12.738750	---	25.13	50.00	24.87	L1	OFF	20.3
12.738750	26.01	---	60.00	33.99	L1	OFF	20.3

EUT Information

Report NO :	1N1013
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	27.80	55.88	28.08	N	OFF	19.7
0.152250	32.94	---	65.88	32.94	N	OFF	19.7
0.224250	---	29.48	52.66	23.18	N	OFF	19.7
0.224250	37.40	---	62.66	25.26	N	OFF	19.7
0.802500	---	23.33	46.00	22.67	N	OFF	20.1
0.802500	24.36	---	56.00	31.64	N	OFF	20.1
2.600250	---	24.09	46.00	21.91	N	OFF	20.1
2.600250	24.95	---	56.00	31.05	N	OFF	20.1
6.328500	---	25.47	50.00	24.53	N	OFF	20.1
6.328500	26.36	---	60.00	33.64	N	OFF	20.1
23.730000	---	25.56	50.00	24.44	N	OFF	20.7
23.730000	26.32	---	60.00	33.68	N	OFF	20.7

Appendix C. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	22.3~24.9°C
		Relative Humidity :	53.8~61.4%

<Sample 1>

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
17+18		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5617.6	47.88	-20.32	68.2	35.79	34.93	12.3	35.14	100	67	P	H
		5652.2	48.29	-21.55	69.84	36.3	34.81	12.33	35.15	100	67	P	H
		5719.4	57.06	-53.57	110.63	44.82	35	12.4	35.16	100	67	P	H
		5725	65.82	-56.38	122.2	53.58	35	12.4	35.16	100	67	P	H
	*	5745	111.82	-	-	99.57	35	12.42	35.17	100	67	P	H
	*	5745	104.36	-	-	92.11	35	12.42	35.17	100	67	A	H
													H
													H
		5638.8	48.18	-20.02	68.2	36.17	34.84	12.32	35.15	100	113	P	V
		5674.2	50.5	-35.65	86.15	38.4	34.9	12.35	35.15	100	113	P	V
		5718.8	58.46	-52	110.46	46.22	35	12.4	35.16	100	113	P	V
		5725	68.27	-53.93	122.2	56.03	35	12.4	35.16	100	113	P	V
	*	5745	111.38	-	-	99.13	35	12.42	35.17	100	113	P	V
	*	5745	103.86	-	-	91.61	35	12.42	35.17	100	113	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)
802.11a CH 157 5785MHz		5611.8	49.53	-18.67	68.2	37.43	34.95	12.29	35.14	100	66	P	H
		5666	49.88	-30.2	80.08	37.82	34.86	12.35	35.15	100	66	P	H
		5717.2	50.02	-60	110.02	37.78	35	12.4	35.16	100	66	P	H
		5722.8	48.47	-68.71	117.18	36.23	35	12.4	35.16	100	66	P	H
	*	5785	111.75	-	-	99.6	34.86	12.46	35.17	100	66	P	H
	*	5785	104.45	-	-	92.3	34.86	12.46	35.17	100	66	A	H
		5852.4	50.03	-66.7	116.73	37.89	34.81	12.51	35.18	100	66	P	H
		5874.8	49.04	-56.22	105.26	36.8	34.9	12.53	35.19	100	66	P	H
		5909.6	50.78	-28.78	79.56	38.41	35.02	12.55	35.2	100	66	P	H
		5947.2	50.57	-17.63	68.2	38.1	35.09	12.58	35.2	100	66	P	H
													H
													H
		5609.4	49.17	-19.03	68.2	37.06	34.96	12.29	35.14	100	88	P	V
		5655	48.8	-23.11	71.91	36.79	34.82	12.34	35.15	100	88	P	V
		5703.4	48.82	-57.33	106.15	36.6	35	12.38	35.16	100	88	P	V
		5720.8	49.13	-63.49	112.62	36.89	35	12.4	35.16	100	88	P	V
	*	5785	112.55	-	-	100.4	34.86	12.46	35.17	100	88	P	V
	*	5785	104.05	-	-	91.9	34.86	12.46	35.17	100	88	A	V
		5853.4	48.95	-65.5	114.45	36.81	34.81	12.51	35.18	100	88	P	V
		5860.4	50.22	-59.07	109.29	38.05	34.84	12.52	35.19	100	88	P	V
		5920	49.27	-22.62	71.89	36.87	35.04	12.56	35.2	100	88	P	V
		5948	49.48	-18.72	68.2	37	35.1	12.58	35.2	100	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)
	*	5825	112.89	-	-	100.77	34.8	12.5	35.18	100	116	P	H
	*	5825	105.32	-	-	93.2	34.8	12.5	35.18	100	116	A	H
		5850.2	65.09	-56.65	121.74	52.96	34.8	12.51	35.18	100	116	P	H
		5855	63.73	-47.07	110.8	51.57	34.82	12.52	35.18	100	116	P	H
		5888	51.54	-44.01	95.55	39.24	34.95	12.54	35.19	100	116	P	H
		5938.2	50.13	-18.07	68.2	37.68	35.08	12.57	35.2	100	116	P	H
													H
802.11a													H
CH 165	*	5825	110.58	-	-	98.46	34.8	12.5	35.18	100	89	P	V
5825MHz	*	5825	102.62	-	-	90.5	34.8	12.5	35.18	100	89	A	V
		5850.6	60.84	-59.99	120.83	48.71	34.8	12.51	35.18	100	89	P	V
		5858.2	57.93	-51.97	109.9	45.77	34.83	12.52	35.19	100	89	P	V
		5916.2	50.27	-24.42	74.69	37.88	35.03	12.56	35.2	100	89	P	V
		5941	49.5	-18.7	68.2	37.05	35.08	12.57	35.2	100	89	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)
802.11a CH 149 5745MHz		11490	44.61	-29.39	74	44.27	38.38	19.5	57.54	-	-	P	H
		17235	51.4	-16.8	68.2	40.78	42.2	24.93	56.51	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		11490	45.98	-28.02	74	45.64	38.38	19.5	57.54	-	-	P	V
		17235	51.26	-16.94	68.2	40.64	42.2	24.93	56.51	-	-	P	V
													V
													V
													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)
802.11a CH 157 5785MHz		11570	45.61	-28.39	74	44.91	38.54	19.57	57.41	-	-	P	H
		17355	52.32	-15.88	68.2	41.52	42.15	25.05	56.4	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		11570	45.01	-28.99	74	44.31	38.54	19.57	57.41	-	-	P	V
		17355	52.03	-16.17	68.2	41.23	42.15	25.05	56.4	-	-	P	V
													V
													V
													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)
802.11a CH 165 5825MHz		11650	46.78	-27.22	74	45.77	38.65	19.64	57.28	-	-	P	H
		17475	52.6	-15.6	68.2	41.57	42.17	25.16	56.3	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		11650	46.03	-27.97	74	45.02	38.65	19.64	57.28	-	-	P	V
		17475	51.61	-16.59	68.2	40.58	42.17	25.16	56.3	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													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 802.11ac VHT20 (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)
		5612.8	49.71	-18.49	68.2	37.61	34.95	12.29	35.14	100	66	P	H
		5697.2	53.33	-49.81	103.14	41.12	34.99	12.38	35.16	100	66	P	H
		5718.8	60.75	-49.71	110.46	48.51	35	12.4	35.16	100	66	P	H
		5724.2	61.47	-58.91	120.38	49.23	35	12.4	35.16	100	66	P	H
	*	5745	110.34	-	-	98.09	35	12.42	35.17	100	66	P	H
	*	5745	102.44	-	-	90.19	35	12.42	35.17	100	66	A	H
802.11ac													H
VHT20													H
CH 149		5620.6	48.57	-19.63	68.2	36.49	34.92	12.3	35.14	100	96	P	V
5745MHz		5697.8	51.29	-52.29	103.58	39.08	34.99	12.38	35.16	100	96	P	V
		5713.2	61.13	-47.77	108.9	48.9	35	12.39	35.16	100	96	P	V
		5723	63.89	-53.75	117.64	51.65	35	12.4	35.16	100	96	P	V
	*	5745	110.17	-	-	97.92	35	12.42	35.17	100	96	P	V
	*	5745	102.36	-	-	90.11	35	12.42	35.17	100	96	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)
		5600.8	49.56	-18.64	68.2	37.42	35	12.28	35.14	100	117	P	H
		5693.8	50.48	-50.15	100.63	38.29	34.98	12.37	35.16	100	117	P	H
		5715	51.38	-58.02	109.4	39.15	35	12.39	35.16	100	117	P	H
		5723.6	51.79	-67.22	119.01	39.55	35	12.4	35.16	100	117	P	H
	*	5785	111.81	-	-	99.66	34.86	12.46	35.17	100	117	P	H
	*	5785	104.16	-	-	92.01	34.86	12.46	35.17	100	117	A	H
		5852.2	50.22	-66.96	117.18	38.08	34.81	12.51	35.18	100	117	P	H
		5858.4	49.87	-59.98	109.85	37.71	34.83	12.52	35.19	100	117	P	H
		5900.8	50.07	-36	86.07	37.71	35	12.55	35.19	100	117	P	H
		5942	49.42	-18.78	68.2	36.97	35.08	12.57	35.2	100	117	P	H
802.11ac													H
VHT20													H
CH 157		5639	48.89	-19.31	68.2	36.88	34.84	12.32	35.15	100	104	P	V
5785MHz		5698.4	48.16	-55.86	104.02	35.95	34.99	12.38	35.16	100	104	P	V
		5710.6	49.36	-58.81	108.17	37.13	35	12.39	35.16	100	104	P	V
		5721.4	52.71	-61.28	113.99	40.47	35	12.4	35.16	100	104	P	V
	*	5785	111.52	-	-	99.37	34.86	12.46	35.17	100	104	P	V
	*	5785	102.35	-	-	90.2	34.86	12.46	35.17	100	104	A	V
		5854.2	49.83	-62.79	112.62	37.67	34.82	12.52	35.18	100	104	P	V
		5872.4	50.14	-55.79	105.93	37.91	34.89	12.53	35.19	100	104	P	V
		5918.6	49.33	-23.59	72.92	36.93	35.04	12.56	35.2	100	104	P	V
		5933	49.38	-18.82	68.2	36.94	35.07	12.57	35.2	100	104	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)
	*	5825	111.99	-	-	99.87	34.8	12.5	35.18	100	111	P	H
	*	5825	103.52	-	-	91.4	34.8	12.5	35.18	100	111	A	H
		5853.4	64.87	-49.58	114.45	52.73	34.81	12.51	35.18	100	111	P	H
		5855.8	62.35	-48.23	110.58	50.19	34.82	12.52	35.18	100	111	P	H
		5882.4	53.15	-46.55	99.7	40.88	34.93	12.53	35.19	100	111	P	H
		5926.8	48.48	-19.72	68.2	36.07	35.05	12.56	35.2	100	111	P	H
802.11ac													H
VHT20													H
CH 165	*	5825	110.18	-	-	98.06	34.8	12.5	35.18	100	104	P	V
5825MHz	*	5825	101.32	-	-	89.2	34.8	12.5	35.18	100	104	A	V
		5851.4	62.76	-56.25	119.01	50.62	34.81	12.51	35.18	100	104	P	V
		5861.8	57.77	-51.12	108.89	45.59	34.85	12.52	35.19	100	104	P	V
		5875.4	55.09	-49.81	104.9	42.85	34.9	12.53	35.19	100	104	P	V
		5929.6	49.13	-19.07	68.2	36.71	35.06	12.56	35.2	100	104	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 802.11ac VHT20 (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	45.81	-28.19	74	45.47	38.38	19.5	57.54	-	-	P	H
		17235	51.65	-16.55	68.2	41.03	42.2	24.93	56.51	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ac													H
VHT20													H
CH 149		11490	46.35	-27.65	74	46.01	38.38	19.5	57.54	-	-	P	V
5745MHz		17235	52.77	-15.43	68.2	42.15	42.2	24.93	56.51	-	-	P	V
													V
													V
													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	46.35	-27.65	74	45.65	38.54	19.57	57.41	-	-	P	H
		17355	51.82	-16.38	68.2	41.02	42.15	25.05	56.4	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ac													H
VHT20													H
CH 157		11570	46.16	-27.84	74	45.46	38.54	19.57	57.41	-	-	P	V
5785MHz		17355	53.56	-14.64	68.2	42.76	42.15	25.05	56.4	-	-	P	V
													V
													V
													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)
		11650	46.59	-27.41	74	45.58	38.65	19.64	57.28	-	-	P	H
		17475	51.36	-16.84	68.2	40.33	42.17	25.16	56.3	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ac													H
VHT20													H
CH 165		11650	46.74	-27.26	74	45.73	38.65	19.64	57.28	-	-	P	V
5825MHz		17475	52.07	-16.13	68.2	41.04	42.17	25.16	56.3	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													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 802.11ac VHT40 (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)
		5640.6	56.32	-11.88	68.2	44.31	34.84	12.32	35.15	100	120	P	H
		5695	61.4	-40.11	101.51	49.2	34.98	12.38	35.16	100	120	P	H
		5714.4	66.45	-42.78	109.23	54.22	35	12.39	35.16	100	120	P	H
		5721	68.42	-44.66	113.08	56.18	35	12.4	35.16	100	120	P	H
	*	5755	108.85	-	-	96.61	34.98	12.43	35.17	100	120	P	H
	*	5755	101.48	-	-	89.24	34.98	12.43	35.17	100	120	A	H
		5850.8	53.15	-67.23	120.38	41.02	34.8	12.51	35.18	100	120	P	H
		5857.8	54.34	-55.67	110.01	42.18	34.83	12.52	35.19	100	120	P	H
		5875.6	53.85	-50.9	104.75	41.61	34.9	12.53	35.19	100	120	P	H
		5926.4	50.94	-17.26	68.2	38.53	35.05	12.56	35.2	100	120	P	H
802.11ac													H
VHT40													H
CH 151		5641.2	52.05	-16.15	68.2	40.04	34.84	12.32	35.15	100	98	P	V
5755MHz		5698.8	58.7	-45.62	104.32	46.48	35	12.38	35.16	100	98	P	V
		5715.8	64.81	-44.82	109.63	52.57	35	12.4	35.16	100	98	P	V
		5724	63.89	-56.03	119.92	51.65	35	12.4	35.16	100	98	P	V
	*	5755	107.15	-	-	94.91	34.98	12.43	35.17	100	98	P	V
	*	5755	99.05	-	-	86.81	34.98	12.43	35.17	100	98	A	V
		5853.4	51.99	-62.46	114.45	39.85	34.81	12.51	35.18	100	98	P	V
		5869.4	52.04	-54.73	106.77	39.82	34.88	12.53	35.19	100	98	P	V
		5883.2	53.04	-46.07	99.11	40.77	34.93	12.53	35.19	100	98	P	V
		5925	51.49	-16.71	68.2	39.08	35.05	12.56	35.2	100	98	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)
		5625	52.99	-15.21	68.2	40.93	34.9	12.3	35.14	100	121	P	H
		5684	57.69	-35.71	93.4	45.55	34.94	12.36	35.16	100	121	P	H
		5719.2	59.93	-50.65	110.58	47.69	35	12.4	35.16	100	121	P	H
		5720.6	60.21	-51.96	112.17	47.97	35	12.4	35.16	100	121	P	H
	*	5795	109.17	-	-	97.05	34.82	12.47	35.17	100	121	P	H
	*	5795	101.32	-	-	89.2	34.82	12.47	35.17	100	121	A	H
		5852	62.15	-55.49	117.64	50.01	34.81	12.51	35.18	100	121	P	H
		5855.8	62.1	-48.48	110.58	49.94	34.82	12.52	35.18	100	121	P	H
		5881	58.27	-42.47	100.74	46.01	34.92	12.53	35.19	100	121	P	H
		5925	54.37	-13.83	68.2	41.96	35.05	12.56	35.2	100	121	P	H
802.11ac													H
VHT40													H
CH 159		5620.2	52.06	-16.14	68.2	39.98	34.92	12.3	35.14	100	96	P	V
5795MHz		5693.8	54.97	-45.66	100.63	42.78	34.98	12.37	35.16	100	96	P	V
		5712.6	57.89	-50.84	108.73	45.66	35	12.39	35.16	100	96	P	V
		5720.4	55.81	-55.9	111.71	43.57	35	12.4	35.16	100	96	P	V
	*	5795	107.32	-	-	95.2	34.82	12.47	35.17	100	96	P	V
	*	5795	98.92	-	-	86.8	34.82	12.47	35.17	100	96	A	V
		5853.8	57.5	-56.04	113.54	45.35	34.82	12.51	35.18	100	96	P	V
		5856	59.41	-51.11	110.52	47.25	34.82	12.52	35.18	100	96	P	V
		5888.8	55.55	-39.41	94.96	43.24	34.96	12.54	35.19	100	96	P	V
		5938	52.8	-15.4	68.2	40.35	35.08	12.57	35.2	100	96	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 802.11ac VHT40 (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)
		11510	46.38	-27.62	74	45.93	38.42	19.53	57.5	-	-	P	H
		17265	51.42	-16.78	68.2	40.74	42.2	24.96	56.48	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ac													H
VHT40													H
CH 151		11510	45.54	-28.46	74	45.09	38.42	19.53	57.5	-	-	P	V
5755MHz		17265	51.66	-16.54	68.2	40.98	42.2	24.96	56.48	-	-	P	V
													V
													V
													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)
		11590	46.5	-27.5	74	45.7	38.58	19.59	57.37	-	-	P	H
		17385	52.45	-15.75	68.2	41.64	42.11	25.08	56.38	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ac													H
VHT40													H
CH 159		11590	46.96	-27.04	74	46.16	38.58	19.59	57.37	-	-	P	V
5795MHz		17385	52.12	-16.08	68.2	41.31	42.11	25.08	56.38	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													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 802.11ac VHT80 (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)
		5643	54.24	-13.96	68.2	42.24	34.83	12.32	35.15	100	117	P	H
		5698.2	59.67	-44.2	103.87	47.46	34.99	12.38	35.16	100	117	P	H
		5719	59.09	-51.43	110.52	46.85	35	12.4	35.16	100	117	P	H
		5724.4	57.81	-63.02	120.83	45.57	35	12.4	35.16	100	117	P	H
	*	5775	104.67	-	-	92.49	34.9	12.45	35.17	100	117	P	H
	*	5775	96.53	-	-	84.35	34.9	12.45	35.17	100	117	A	H
		5852.6	58.09	-58.18	116.27	45.95	34.81	12.51	35.18	100	117	P	H
		5856	57.08	-53.44	110.52	44.92	34.82	12.52	35.18	100	117	P	H
		5884	54.25	-44.27	98.52	41.97	34.94	12.53	35.19	100	117	P	H
		5929	52.22	-15.98	68.2	39.8	35.06	12.56	35.2	100	117	P	H
802.11ac													H
VHT80													H
CH 155		5636	50.56	-17.64	68.2	38.53	34.86	12.32	35.15	100	95	P	V
5775MHz		5698	54.3	-49.43	103.73	42.09	34.99	12.38	35.16	100	95	P	V
		5703.6	60.59	-45.62	106.21	48.37	35	12.38	35.16	100	95	P	V
		5723.2	57.87	-60.23	118.1	45.63	35	12.4	35.16	100	95	P	V
	*	5775	103.35	-	-	91.17	34.9	12.45	35.17	100	95	P	V
	*	5775	94.29	-	-	82.11	34.9	12.45	35.17	100	95	A	V
		5854.8	57.42	-53.84	111.26	45.26	34.82	12.52	35.18	100	95	P	V
		5860.2	55.59	-53.75	109.34	43.42	34.84	12.52	35.19	100	95	P	V
		5875	54.16	-51.04	105.2	41.92	34.9	12.53	35.19	100	95	P	V
		5934	50.95	-17.25	68.2	38.51	35.07	12.57	35.2	100	95	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 802.11ac VHT80 (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	46.23	-27.77	74	45.61	38.5	19.56	57.44	-	-	P	H
		17325	52.2	-16	68.2	41.44	42.17	25.02	56.43	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
i802.11ac													H
VHT80													H
CH 155		11550	46.19	-27.81	74	45.57	38.5	19.56	57.44	-	-	P	V
5775MHz		17325	51.16	-17.04	68.2	40.4	42.17	25.02	56.43	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													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_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		5600.8	50.5	-17.7	68.2	38.36	35	12.28	35.14	233	116	P	H
		5691.8	48.96	-50.19	99.15	36.78	34.97	12.37	35.16	233	116	P	H
		5720	49.17	-61.63	110.8	36.93	35	12.4	35.16	233	116	P	H
		5724.4	50.41	-70.42	120.83	38.17	35	12.4	35.16	233	116	P	H
	*	5745	114.81	-	-	102.56	35	12.42	35.17	233	116	P	H
	*	5745	107.08	-	-	94.83	35	12.42	35.17	233	116	A	H
													H
													H
		5611.8	49.63	-18.57	68.2	37.53	34.95	12.29	35.14	100	335	P	V
		5662.2	49.19	-28.07	77.26	37.15	34.85	12.34	35.15	100	335	P	V
		5707.2	48.96	-58.26	107.22	36.73	35	12.39	35.16	100	335	P	V
		5721	47.85	-65.23	113.08	35.61	35	12.4	35.16	100	335	P	V
	*	5745	111.16	-	-	98.91	35	12.42	35.17	100	335	P	V
	*	5745	103.66	-	-	91.41	35	12.42	35.17	100	335	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	115.61	-	-	103.49	34.8	12.5	35.18	100	117	P	H
	*	5825	107.62	-	-	95.5	34.8	12.5	35.18	100	117	A	H
		5852.8	51.12	-64.7	115.82	38.98	34.81	12.51	35.18	100	117	P	H
		5867.2	50.42	-56.96	107.38	38.22	34.87	12.52	35.19	100	117	P	H
		5905.2	50.31	-32.5	82.81	37.94	35.01	12.55	35.19	100	117	P	H
		5939.4	50.1	-18.1	68.2	37.65	35.08	12.57	35.2	100	117	P	H
													H
													H
	*	5825	115.18	-	-	103.06	34.8	12.5	35.18	100	103	P	V
	*	5825	106.41	-	-	94.29	34.8	12.5	35.18	100	103	A	V
		5852.6	50.03	-66.24	116.27	37.89	34.81	12.51	35.18	100	103	P	V
		5859	49.81	-59.87	109.68	37.64	34.84	12.52	35.19	100	103	P	V
		5891.6	51.16	-41.72	92.88	38.84	34.97	12.54	35.19	100	103	P	V
		5937.6	49.65	-18.55	68.2	37.2	35.08	12.57	35.2	100	103	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

5GHz WIFI 802.11ac VHT40 (LF @ 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)
5GHz 802.11ac VHT40 LF		30.27	22.76	-17.24	40	27.51	24.37	0.91	30.03	-	-	P	H
		50.79	17.84	-22.16	40	32.61	13.95	1.29	30.01	-	-	P	H
		190.11	30.75	-12.75	43.5	43.58	14.83	2.31	29.97	-	-	P	H
		778.8	29.44	-16.56	46	26.96	27.77	4.34	29.63	-	-	P	H
		864.9	30.47	-15.53	46	26.07	28.93	4.62	29.15	-	-	P	H
		956.6	32.31	-13.69	46	25.46	30.63	4.9	28.68	-	-	P	H
													H
													H
													H
													H
													H
													H
		30	29.31	-10.69	40	33.87	24.57	0.9	30.03	-	-	P	V
		37.83	22.73	-17.27	40	31.02	20.61	1.12	30.02	-	-	P	V
		189.57	22.92	-20.58	43.5	35.77	14.82	2.3	29.97	-	-	P	V
		748.7	28.43	-17.57	46	26.27	27.59	4.25	29.68	-	-	P	V
		857.9	30.53	-15.47	46	26.28	28.83	4.62	29.2	-	-	P	V
		957.3	32.56	-13.44	46	25.67	30.67	4.9	28.68	-	-	P	V
													V
													V
													V
													V
													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.												

<EUT with WPC Charging Mode>

Band 4 - 5725~5850MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
17+18		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 CH 151 5755MHz		5646	49.55	-18.65	68.2	37.55	34.82	12.33	35.15	184	357	P	H
		5693.8	53.12	-47.51	100.63	40.93	34.98	12.37	35.16	184	357	P	H
		5714.4	56.66	-52.57	109.23	44.43	35	12.39	35.16	184	357	P	H
		5724.8	55.97	-65.77	121.74	43.73	35	12.4	35.16	184	357	P	H
	*	5755	104.53	-	-	92.29	34.98	12.43	35.17	184	357	P	H
	*	5755	97.04	-	-	84.8	34.98	12.43	35.17	184	357	A	H
		5851.8	49.86	-68.24	118.1	37.72	34.81	12.51	35.18	184	357	P	H
		5857.4	50.68	-59.45	110.13	38.51	34.83	12.52	35.18	184	357	P	H
		5899	50.21	-37.19	87.4	37.86	35	12.54	35.19	184	357	P	H
		5927	49.15	-19.05	68.2	36.74	35.05	12.56	35.2	184	357	P	H
													H
													H
		5650	48.66	-19.54	68.2	36.68	34.8	12.33	35.15	221	316	P	V
		5700	54.21	-50.99	105.2	41.99	35	12.38	35.16	221	316	P	V
		5718.8	59.58	-50.88	110.46	47.34	35	12.4	35.16	221	316	P	V
		5720.4	58.22	-53.49	111.71	45.98	35	12.4	35.16	221	316	P	V
	*	5755	104.09	-	-	91.85	34.98	12.43	35.17	221	316	P	V
	*	5755	96.19	-	-	83.95	34.98	12.43	35.17	221	316	A	V
		5850.8	49.96	-70.42	120.38	37.83	34.8	12.51	35.18	221	316	P	V
		5869	50.51	-56.37	106.88	38.3	34.88	12.52	35.19	221	316	P	V
		5889.8	50.04	-44.18	94.22	37.73	34.96	12.54	35.19	221	316	P	V
		5944.6	49.26	-18.94	68.2	36.8	35.09	12.57	35.2	221	316	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 802.11ac VHT40 (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)
		11510	45.05	-28.95	74	44.6	38.42	19.53	57.5	-	-	P	H
		17265	50.02	-18.18	68.2	39.34	42.2	24.96	56.48	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ac													H
VHT40													H
CH 151		11510	44.03	-29.97	74	43.58	38.42	19.53	57.5	-	-	P	V
5755MHz		17265	50.62	-17.58	68.2	39.94	42.2	24.96	56.48	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													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.

Emission below 1GHz

5GHz WIFI 802.11ac VHT40 (LF @ 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)
5GHz 802.11ac VHT40 LF		30	21.42	-18.58	40	25.98	24.57	0.9	30.03	-	-	P	H
		92.91	26.57	-16.93	43.5	39.79	15.13	1.64	29.99	-	-	P	H
		187.95	30.08	-13.42	43.5	42.98	14.78	2.29	29.97	-	-	P	H
		741.7	28.63	-17.37	46	26.63	27.46	4.24	29.7	-	-	P	H
		858.6	30.09	-15.91	46	25.83	28.83	4.62	29.19	-	-	P	H
		951	31.93	-14.07	46	25.4	30.36	4.87	28.7	-	-	P	H
													H
													H
													H
													H
													H
													H
		30.54	29.65	-10.35	40	34.59	24.17	0.92	30.03	-	-	P	V
		40.26	28.5	-11.5	40	38.12	19.26	1.14	30.02	-	-	P	V
		64.29	26.97	-13.03	40	43.79	11.77	1.41	30	-	-	P	V
		766.9	29.14	-16.86	46	26.75	27.74	4.3	29.65	-	-	P	V
		863.5	30.52	-15.48	46	26.16	28.9	4.62	29.16	-	-	P	V
		958.7	32.49	-13.51	46	25.52	30.75	4.9	28.68	-	-	P	V
													V
													V
													V
													V
													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.

<Sample 2>

Band 4 - 5725~5850MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
17+18		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5641.6	49.7	-18.5	68.2	37.7	34.83	12.32	35.15	100	118	P	H
		5699	55.65	-48.81	104.46	43.43	35	12.38	35.16	100	118	P	H
		5718.8	65.13	-45.33	110.46	52.89	35	12.4	35.16	100	118	P	H
		5723	66.26	-51.38	117.64	54.02	35	12.4	35.16	100	118	P	H
	*	5755	107.62	-	-	95.38	34.98	12.43	35.17	100	118	P	H
	*	5755	100.84	-	-	88.6	34.98	12.43	35.17	100	118	A	H
		5853.8	50.06	-63.48	113.54	37.91	34.82	12.51	35.18	100	118	P	H
		5864	50.89	-57.39	108.28	38.7	34.86	12.52	35.19	100	118	P	H
		5917.4	50.44	-23.36	73.8	38.05	35.03	12.56	35.2	100	118	P	H
		5927.6	49.83	-18.37	68.2	37.41	35.06	12.56	35.2	100	118	P	H
802.11ac													H
VHT40													H
CH 151		5605.6	48.22	-19.98	68.2	36.09	34.98	12.29	35.14	293	78	P	V
5755MHz		5698.8	52.51	-51.81	104.32	40.29	35	12.38	35.16	293	78	P	V
		5717.2	64.84	-45.18	110.02	52.6	35	12.4	35.16	293	78	P	V
		5723.6	65.68	-53.33	119.01	53.44	35	12.4	35.16	293	78	P	V
	*	5755	105.15	-	-	92.91	34.98	12.43	35.17	293	78	P	V
	*	5755	97.75	-	-	85.51	34.98	12.43	35.17	293	78	A	V
		5851.6	48.7	-69.85	118.55	36.56	34.81	12.51	35.18	293	78	P	V
		5868.8	49.08	-57.85	106.93	36.87	34.88	12.52	35.19	293	78	P	V
		5892.6	49.21	-42.93	92.14	36.89	34.97	12.54	35.19	293	78	P	V
		5933.4	49.89	-18.31	68.2	37.45	35.07	12.57	35.2	293	78	P	V
													V
													V

Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (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)
		11510	45.9	-28.1	74	45.45	38.42	19.53	57.5	-	-	P	H
		17265	49.88	-18.32	68.2	39.2	42.2	24.96	56.48	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ac													H
VHT40													H
CH 151		11510	44.95	-29.05	74	44.5	38.42	19.53	57.5	-	-	P	V
5755MHz		17265	50.05	-18.15	68.2	39.37	42.2	24.96	56.48	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													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.

Emission below 1GHz

5GHz WIFI 802.11ac VHT40 (LF @ 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)
5GHz 802.11ac VHT40 LF		30	29.43	-10.57	40	33.99	24.57	0.9	30.03	-	-	P	H
		47.01	28.97	-11.03	40	42.18	15.57	1.23	30.01	-	-	P	H
		186.87	31.05	-12.45	43.5	43.95	14.78	2.29	29.97	-	-	P	H
		785.8	29.3	-16.7	46	26.7	27.85	4.36	29.61	-	-	P	H
		864.9	31.15	-14.85	46	26.75	28.93	4.62	29.15	-	-	P	H
		956.6	32.39	-13.61	46	25.54	30.63	4.9	28.68	-	-	P	H
													H
													H
													H
													H
													H
													H
		30	33.96	-6.04	40	38.52	24.57	0.9	30.03	-	-	P	V
		47.01	28.52	-11.48	40	41.73	15.57	1.23	30.01	-	-	P	V
		82.92	28.85	-11.15	40	43.53	13.75	1.57	30	-	-	P	V
		782.3	29.57	-16.43	46	27.03	27.81	4.35	29.62	-	-	P	V
		861.4	32.29	-13.71	46	27.98	28.86	4.62	29.17	-	-	P	V
		957.3	33.15	-12.85	46	26.26	30.67	4.9	28.68	-	-	P	V
													V
													V
													V
													V
													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.												

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	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

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)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

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

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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

Appendix D. Radiated Spurious Emission Plots

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	**Temperature :**	22.3~24.9°C
		Relative Humidity :	53.8~61.4%

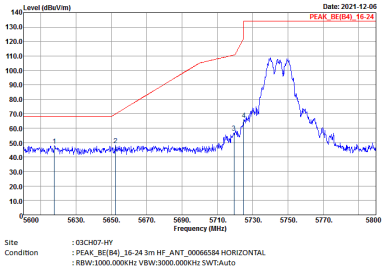
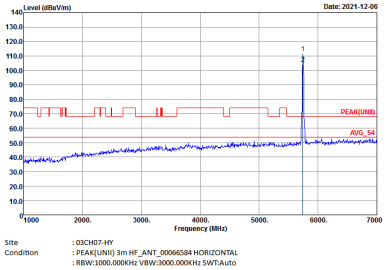
Note symbol

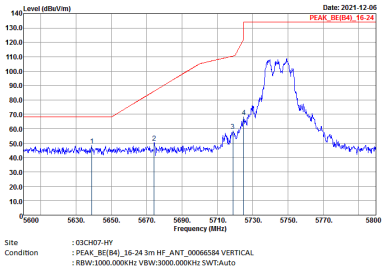
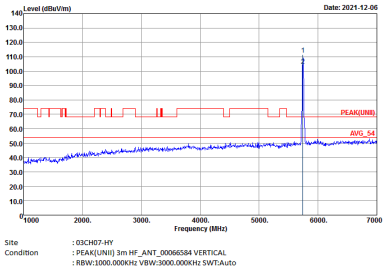
-L	**Low channel location**
-R	**High channel location**

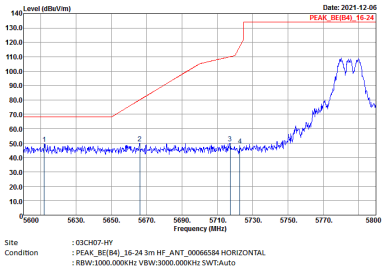
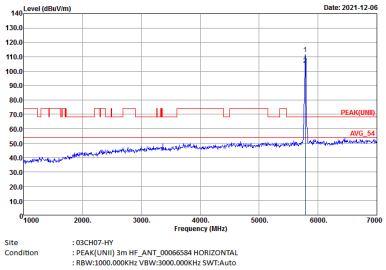
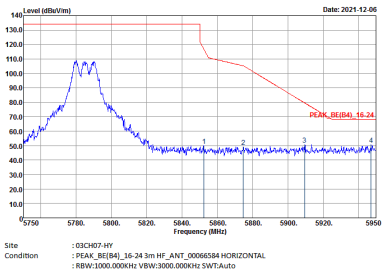
<Sample 1>

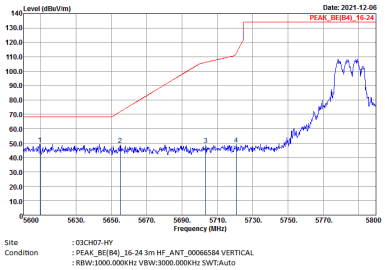
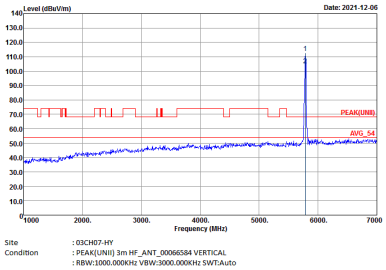
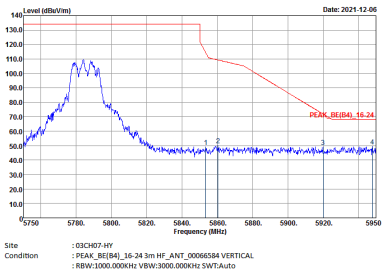
Band 4 - 5725~5850MHz

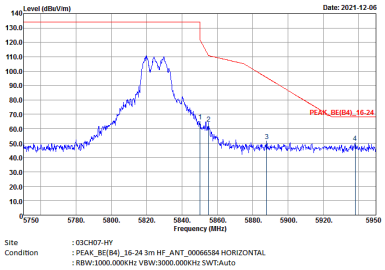
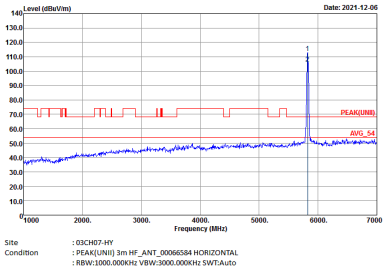
WIFI 802.11a (Band Edge @ 3m)

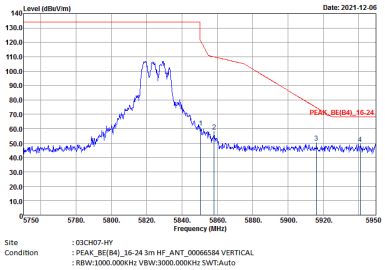
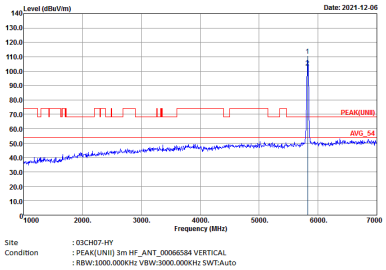
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
17+18	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
17+18	Vertical	Fundamental
Peak		

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

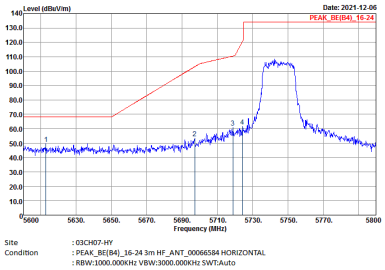
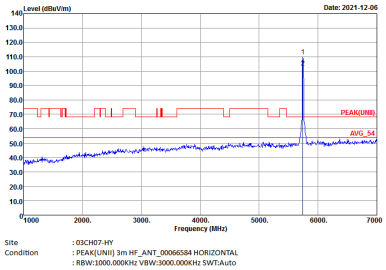
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
17+18	Vertical	Fundamental
Peak		
Peak		Left blank

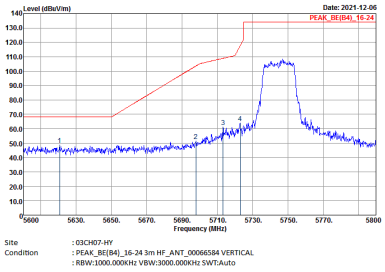
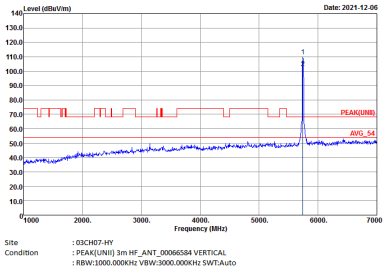
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
17+18	Horizontal	Fundamental
Peak		

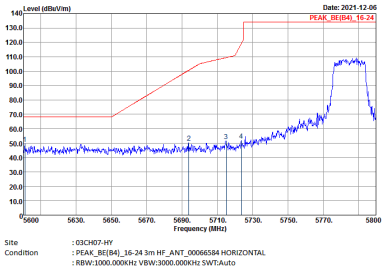
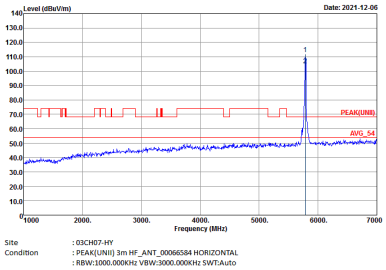
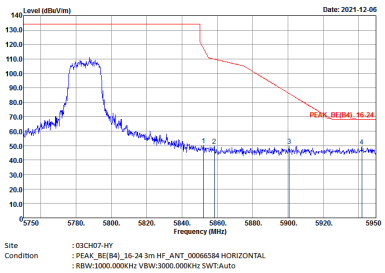
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
17+18	Vertical	Fundamental
Peak		

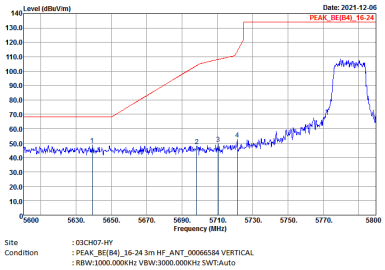
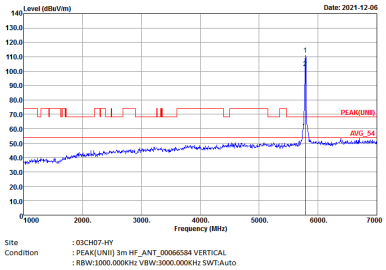
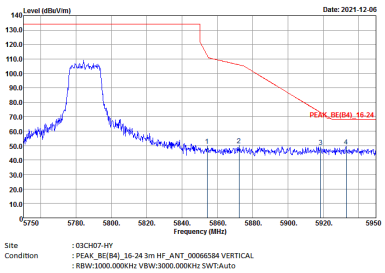
Band 4 5725~5850MHz

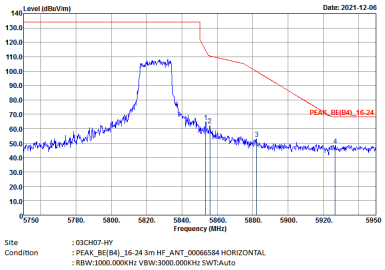
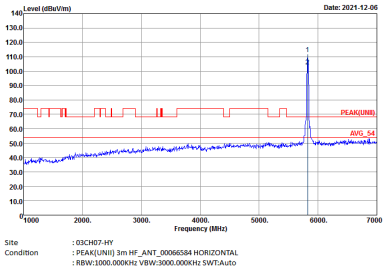
WIFI 802.11ac VHT20 (Band Edge @ 3m)

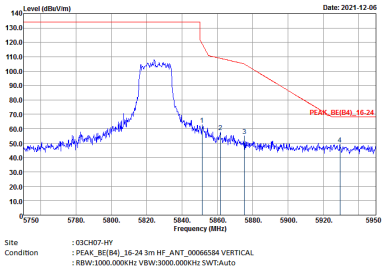
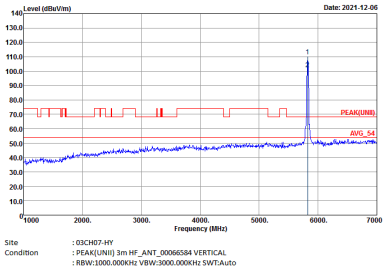
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
17+18	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
17+18	Vertical	Fundamental
Peak Avg.		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
17+18	Horizontal	Fundamental
Peak		
Peak		Left blank

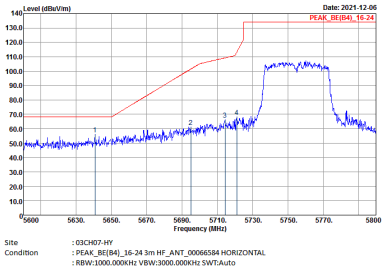
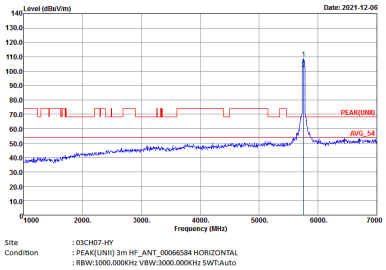
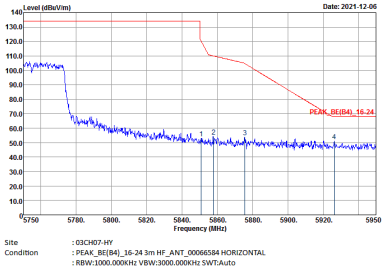
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
17+18	Vertical	Fundamental
Peak		
Peak		Left blank

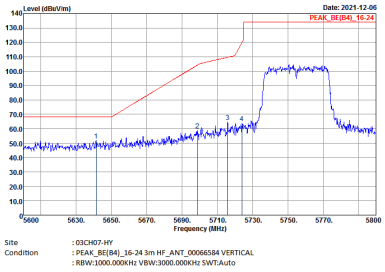
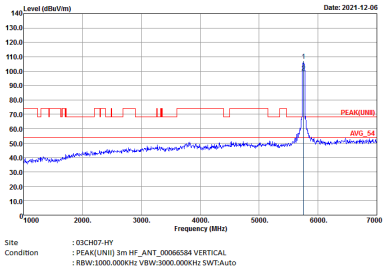
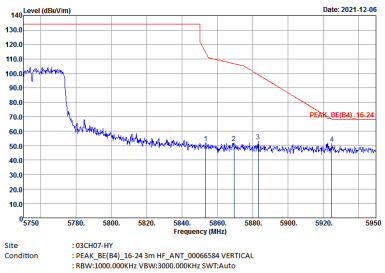
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
17+18	Horizontal	Fundamental
Peak		

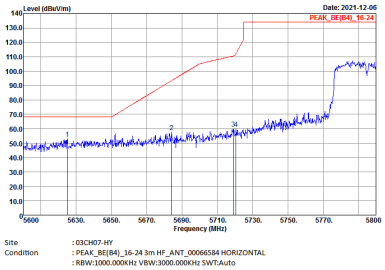
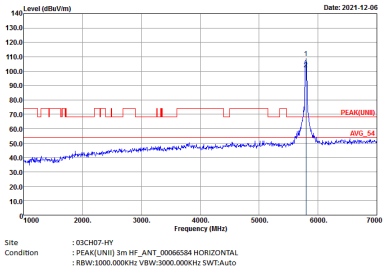
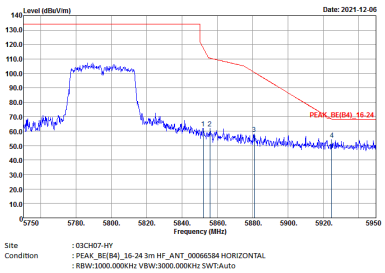
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
17+18	Vertical	Fundamental
Peak Avg.		

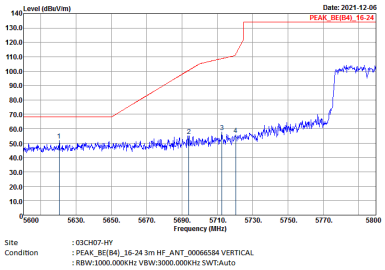
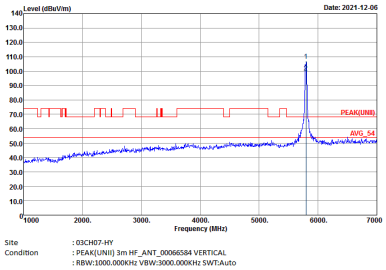
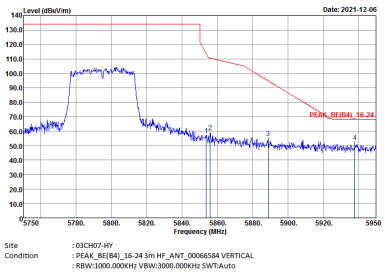
Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
17+18	Horizontal	Fundamental
Peak		
Peak		Left blank

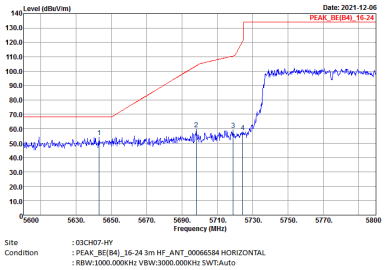
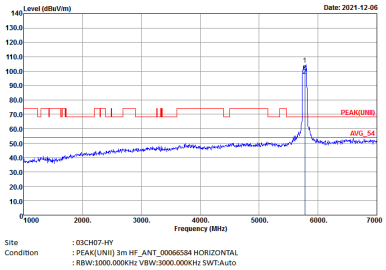
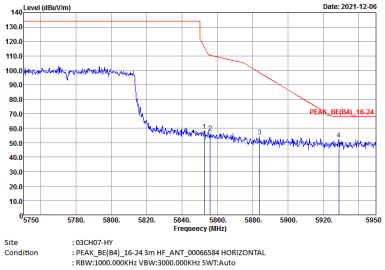
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
17+18	Vertical	Fundamental
Peak		
Peak		Left blank

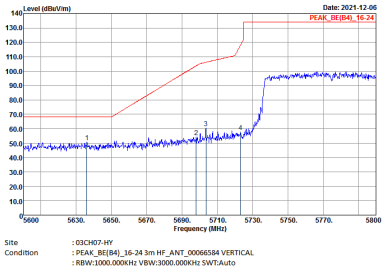
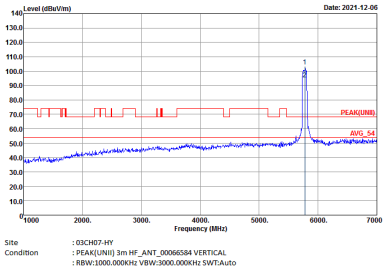
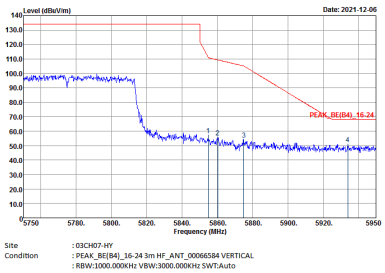
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
17+18	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
17+18	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 5725~5850MHz

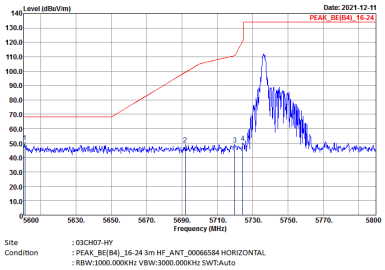
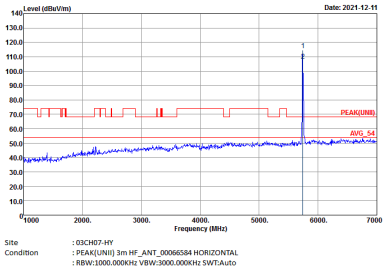
WIFI 802.11ac VHT80 (Band Edge @ 3m)

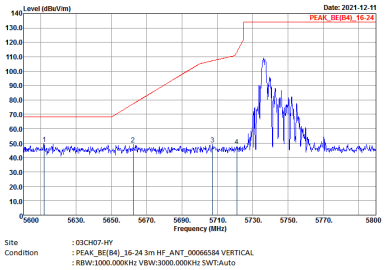
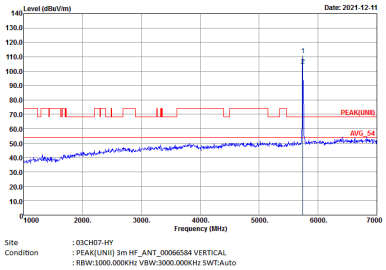
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
17+18	Horizontal	Fundamental
Peak		
Peak		Left blank

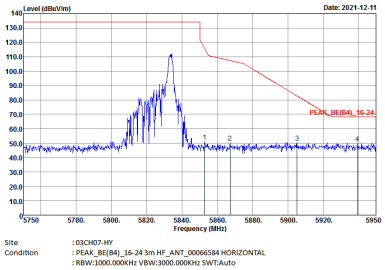
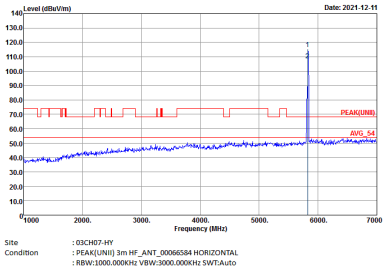
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
17+18	Vertical	Fundamental
Peak		
Peak		Left blank

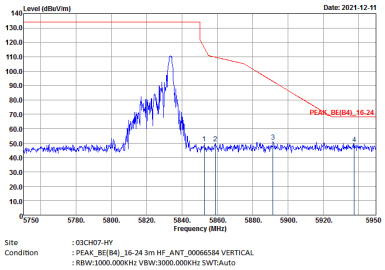
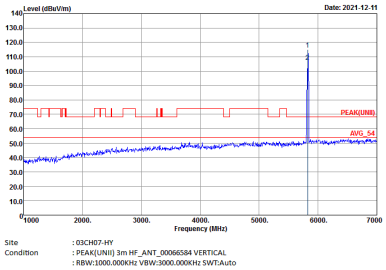
Band 4 - 5725~5850MHz

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	
17+18	Horizontal	Fundamental
Peak		

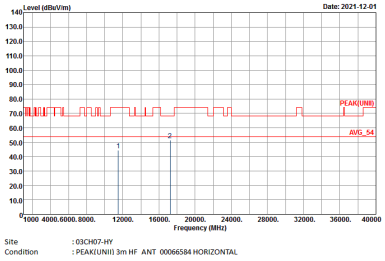
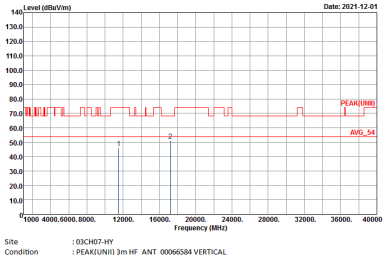
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/0 CH149 5745MHz	
17+18	Vertical	Fundamental
Peak		

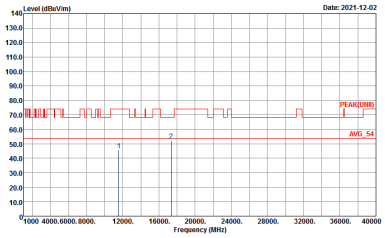
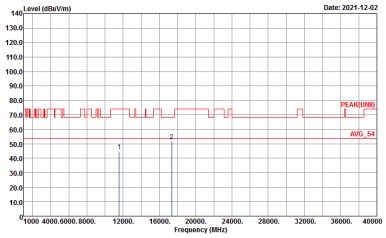
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/8 CH165 5825MHz	
17+18	Horizontal	Fundamental
Peak		

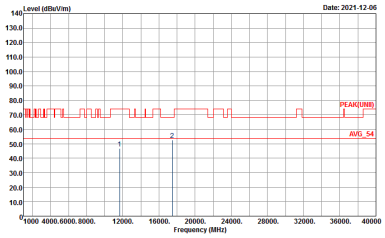
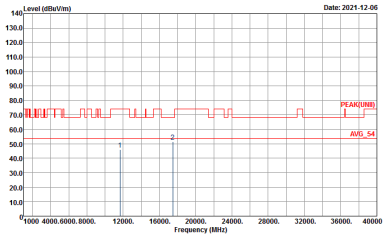
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/8 CH165 5825MHz	
17+18	Vertical	Fundamental
Peak		

Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

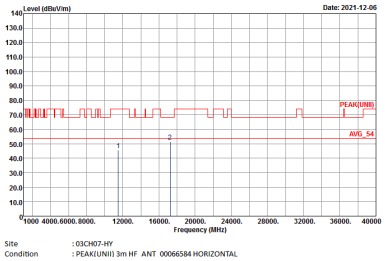
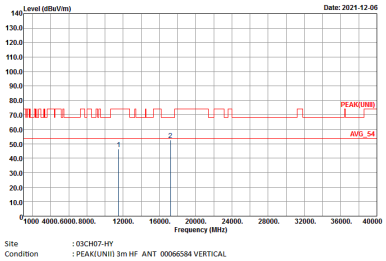
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
17+18	Horizontal	Vertical
Peak Avg.		

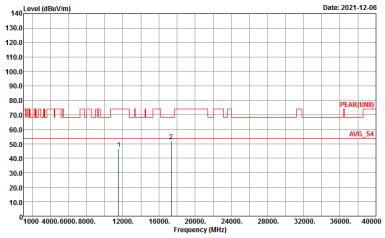
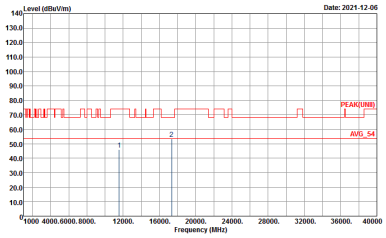
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
17+18	Horizontal	Vertical
Peak Avg.	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF ANT 00066584 HORIZONTAL	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF ANT 00066584 VERTICAL

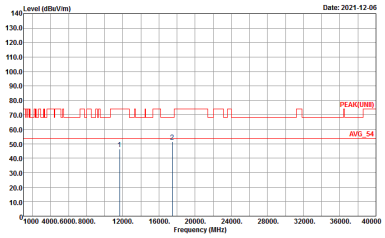
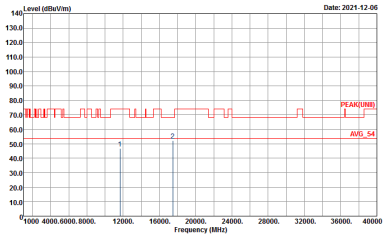
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
17+18	Horizontal	Vertical
Peak Avg.	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF ANT 00066584 HORIZONTAL	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF ANT 00066584 VERTICAL

Band 4 5725~5850MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

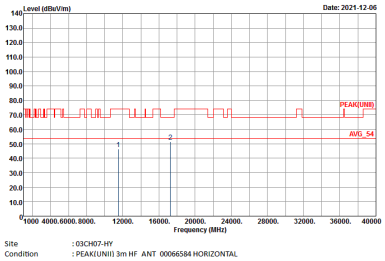
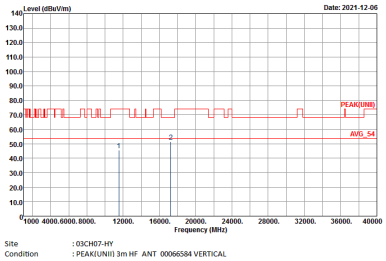
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
17+18	Horizontal	Vertical
Peak Avg.		

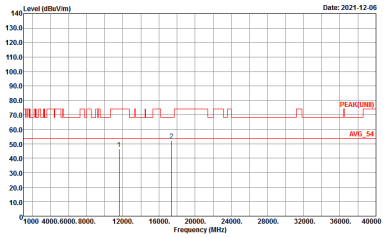
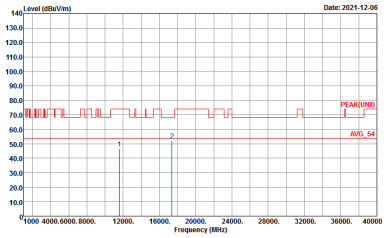
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
17+18	Horizontal	Vertical
Peak Avg.	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF ANT 00066584 HORIZONTAL	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF ANT 00066584 VERTICAL

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
17+18	Horizontal	Vertical
Peak Avg.	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF ANT 00066584 HORIZONTAL	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF ANT 00066584 VERTICAL

Band 4 5725~5850MHz

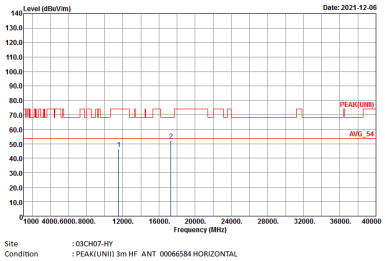
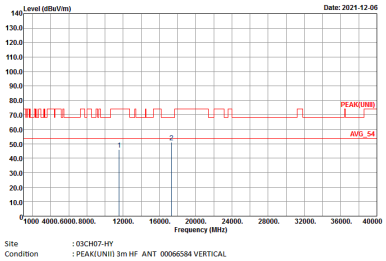
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
17+18	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
17+18	Horizontal	Vertical
Peak Avg.	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF ANT 00066584 HORIZONTAL	 Site : 03CH07-HY Condition : PEAK(UNII) 3m HF ANT 00066584 VERTICAL

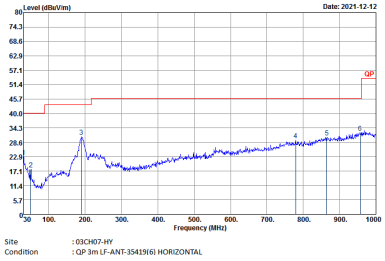
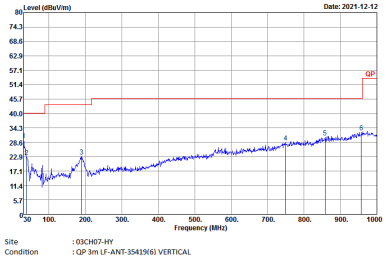
Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
17+18	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

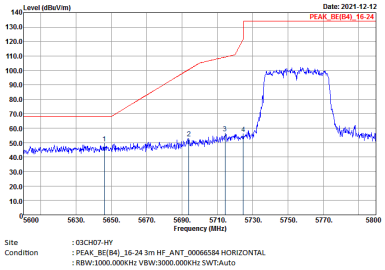
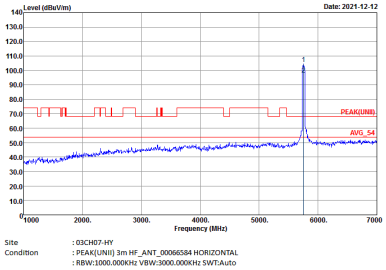
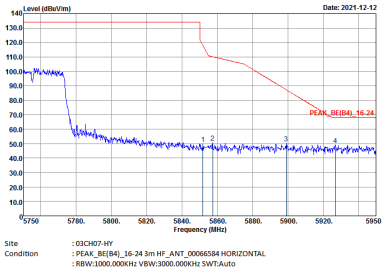
5GHz WIFI 802.11ac VHT40 (LF @ 3m)

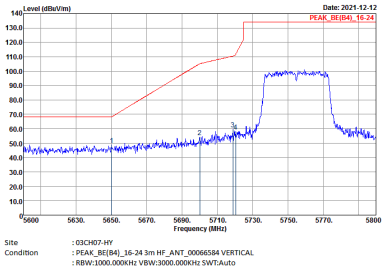
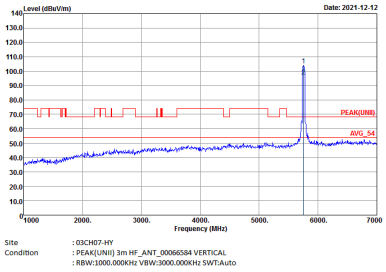
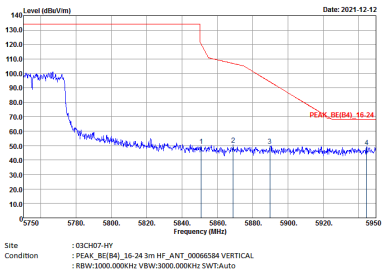
WIFI	5GHz WIFI	
ANT	802.11ac VHT40 LF	
17+18	Horizontal	Vertical
QP / Peak		

<EUT with WPC Charging Mode>

Band 4 - 5725~5850MHz

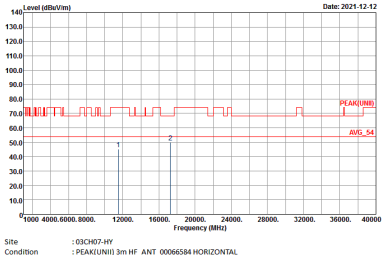
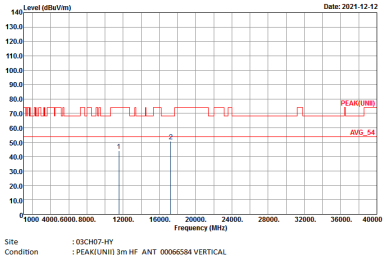
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
17+18	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
17+18	Vertical	Fundamental
Peak		
Peak		Left blank

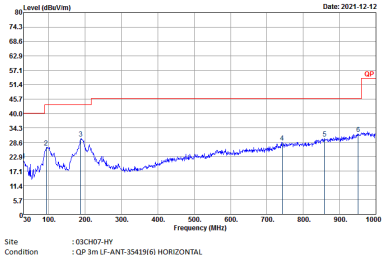
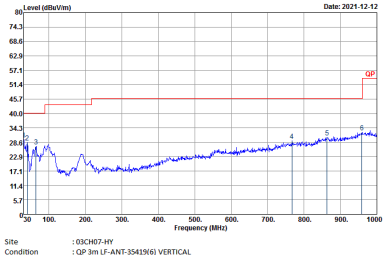
Band 4 - 5725~5850MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
17+18	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

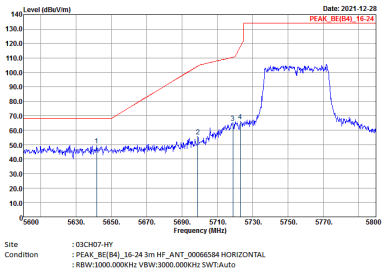
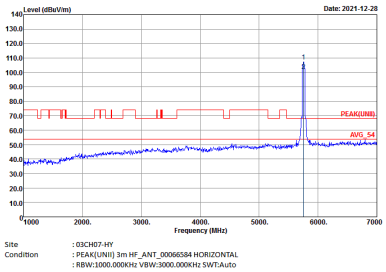
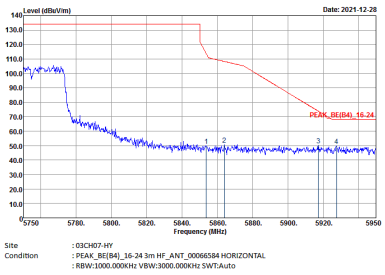
5GHz WIFI 802.11ac VHT40 (LF @ 3m)

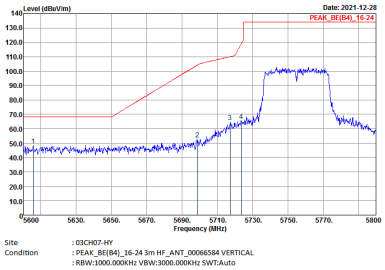
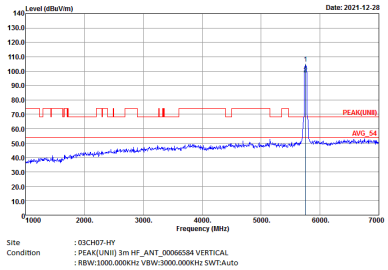
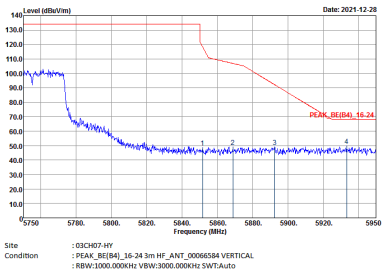
WIFI	5GHz WIFI	
ANT	802.11ac VHT40 LF	
17+18	Horizontal	Vertical
QP / Peak		

<Sample 2>

Band 4 - 5725~5850MHz

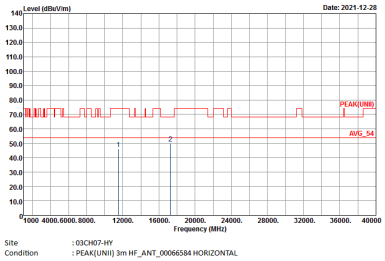
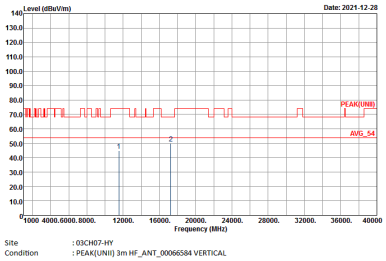
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
17+18	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
17+18	Vertical	Fundamental
Peak		
Peak		Left blank

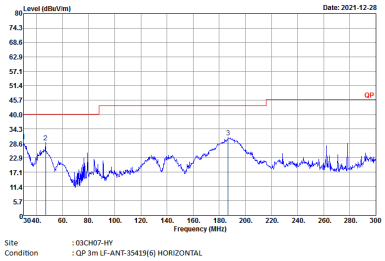
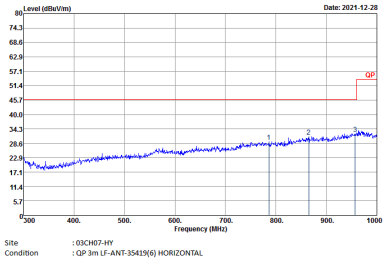
Band 4 - 5725~5850MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
17+18	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

5GHz WIFI 802.11ac VHT40 (LF @ 3m)

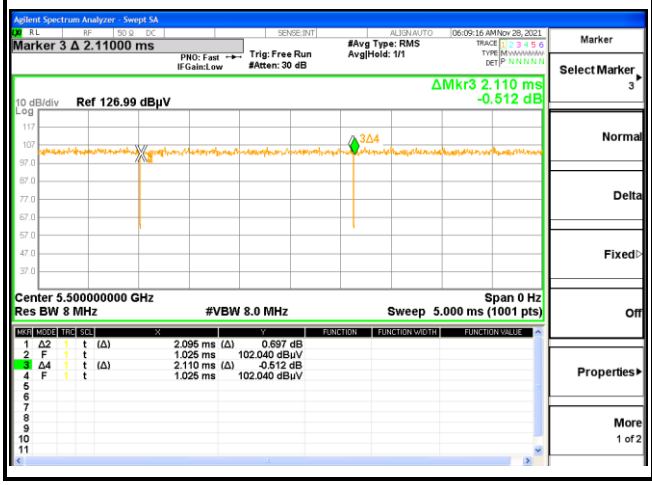
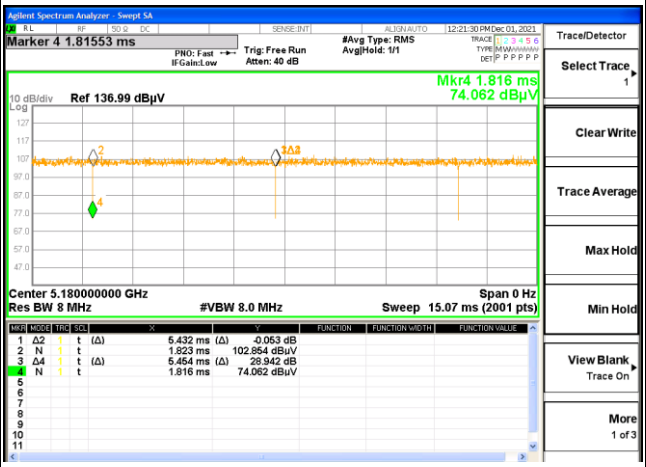
WIFI	5GHz WIFI	
ANT	802.11ac VHT40 LF	
17+18	Horizontal	Vertical
QP / Peak		

Appendix E. Duty Cycle Plots

<Sample 1>

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
17+18	802.11a	99.29	-	-	10Hz
17+18	5GHz 802.11ac VHT20	99.60	-	-	10Hz
17+18	5GHz 802.11ac VHT40	99.03	-	-	10Hz
17+18	5GHz 802.11ac VHT80	99.45	-	-	10Hz
17+18	5GHz 802.11ax HE20 26 RU	98.96	-	-	10Hz

MIMO <Ant. 17+18>

802.11a	802.11ac VHT20
	

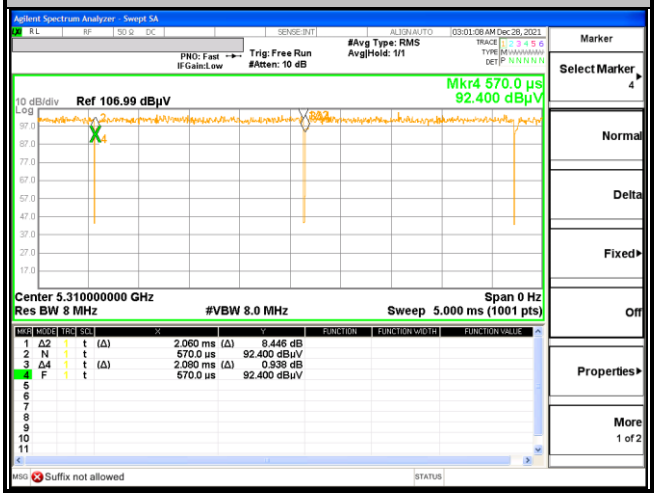
802.11ac VHT40

802.11ac VHT80

802.11ax HE20 26 RU

<Sample 2>

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
17+18	5GHz 802.11ac VHT40	99.04	-	-	10Hz

MIMO <Ant. 17+18>

802.11ac VHT40