



FCC RADIO TEST REPORT

FCC ID : 2AFZZ123G
Equipment : Mobile Phone
Brand Name : XIAOMI
Model Name : 2201123G
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. 19, 2021 to Dec. 08, 2021. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Louis Wu

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)



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Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	6dB & 26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum Conducted Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	6.61 dB under the limit at 30.970 MHz
3.5	15.207	AC Conducted Emission	Pass	15.73 dB under the limit at 2.567 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: Lewis Ho
Report Producer: Cindy Liu



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, WPC/WPT, and GNSS.

Product Specification is subject to this standard	
Sample 1	EMMC 8G + 256GB
Sample 2	EMMC 12G + 256GB
Sample 3	EMMC 8G + 128GB
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: -0.4 Ant. 18: -4.5

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 (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No. CO05-HY (TAF Code: 1190)
Remark	The Conducted Emission test item subcontracted to Sporton International Inc. EMC & Wireless Communications Laboratory

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

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No. TH05-HY; 03CH20-HY

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

FCC designation No.: TW1190 and TW3786

1.4 Applicable Standards

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

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

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.



2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and find X plane and WPC Mode 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.

MIMO Mode

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

Note:

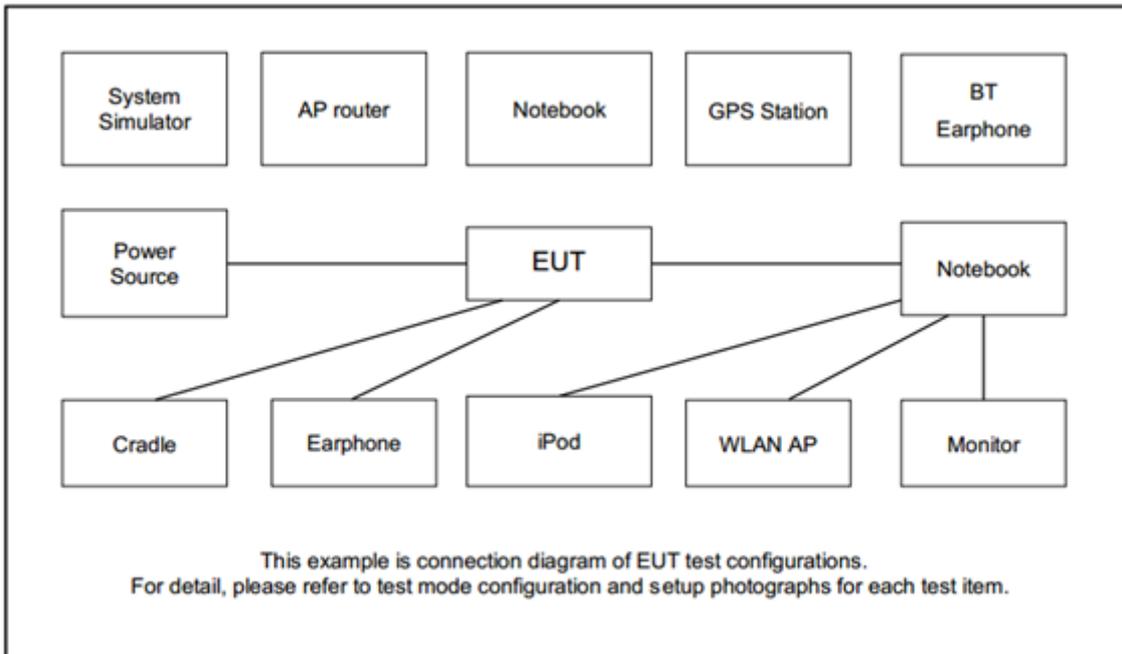
1. Since the verify power, the smaller power can be covered by the higher power. The SISO Mode is covered by MIMO Mode.
2. For 802.11ax, since the verify power& PSD, the smaller power can be covered by the higher power. The Partial RU is covered by Full RU.

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

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

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

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
3.	WPC	YU-live	K8	N/A	N/A	N/A
4.	Notebook	Dell	Latitude5310	FCC DoC	N/A	AC I/P : Unshielded, 1.2m DC O/P : Shielded, 1.8m
5.	Notebook	Dell	Latitude 3400	FCC DoC	N/A	AC I/P : Unshielded, 1.2m DC O/P : Shielded, 1.8m

2.5 EUT Operation Test Setup

The WLAN Tx test items, EUT (SW: MIUI13) get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

The Partial RU test items, utility “QSPR Version 5.0-00188” was installed in EUT which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.



2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

3 Test Result

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

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

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

26dB and 99% Occupied bandwidth are reporting only.

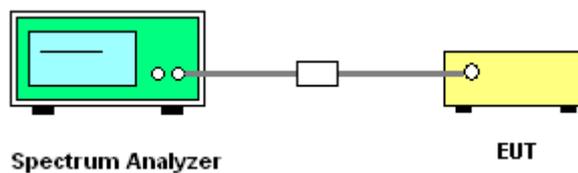
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth for the band 5.725-5.85 GHz
2. Set RBW = 100 kHz.
3. Set the VBW $\geq 3 \times$ RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 6 dB down from the peak of the emission.
7. Measure and record the results in the test report.

3.1.4 Test Setup

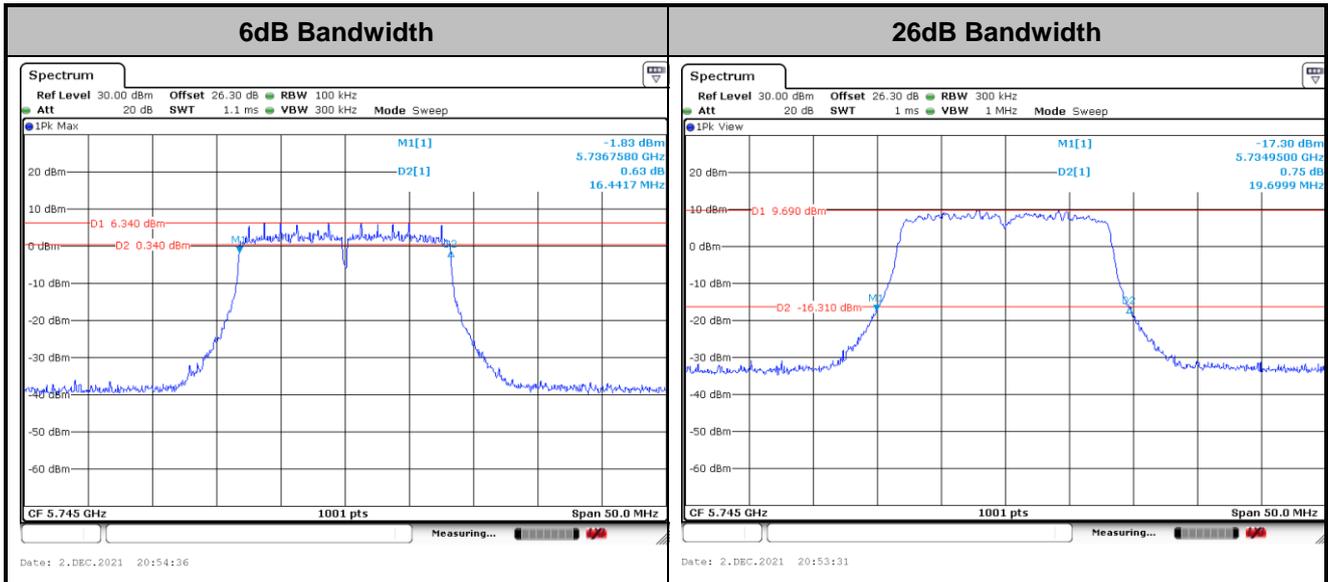


3.1.5 Test Result of 6dB and 26dB and 99% Occupied Bandwidth

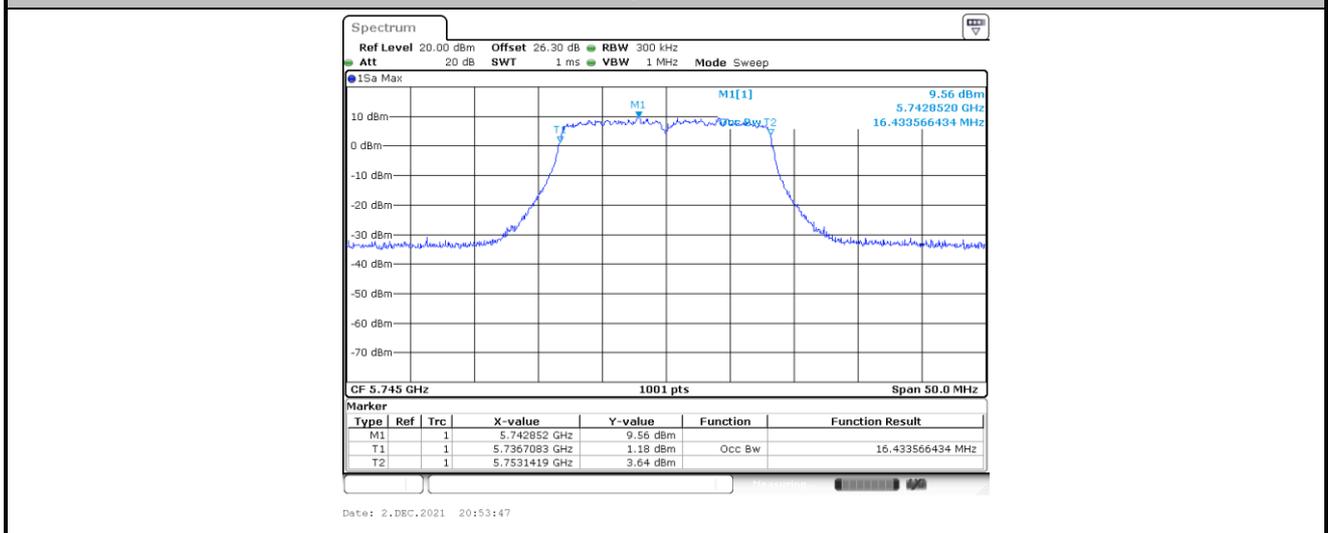
Please refer to Appendix A.



<802.11a>



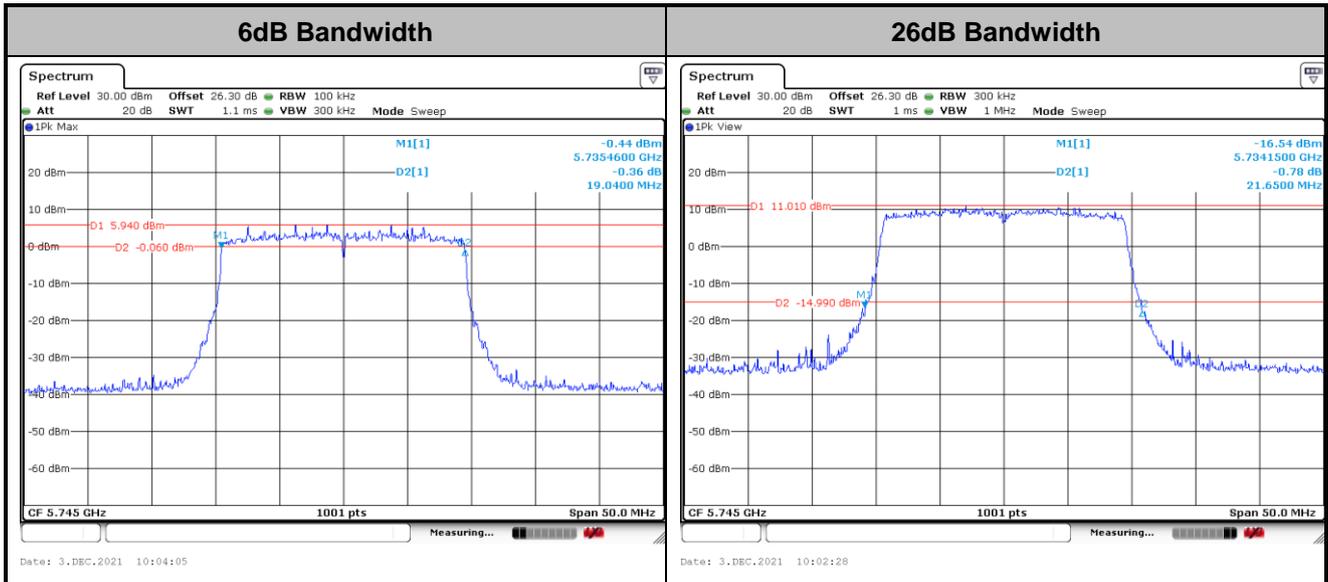
99% Occupied Bandwidth



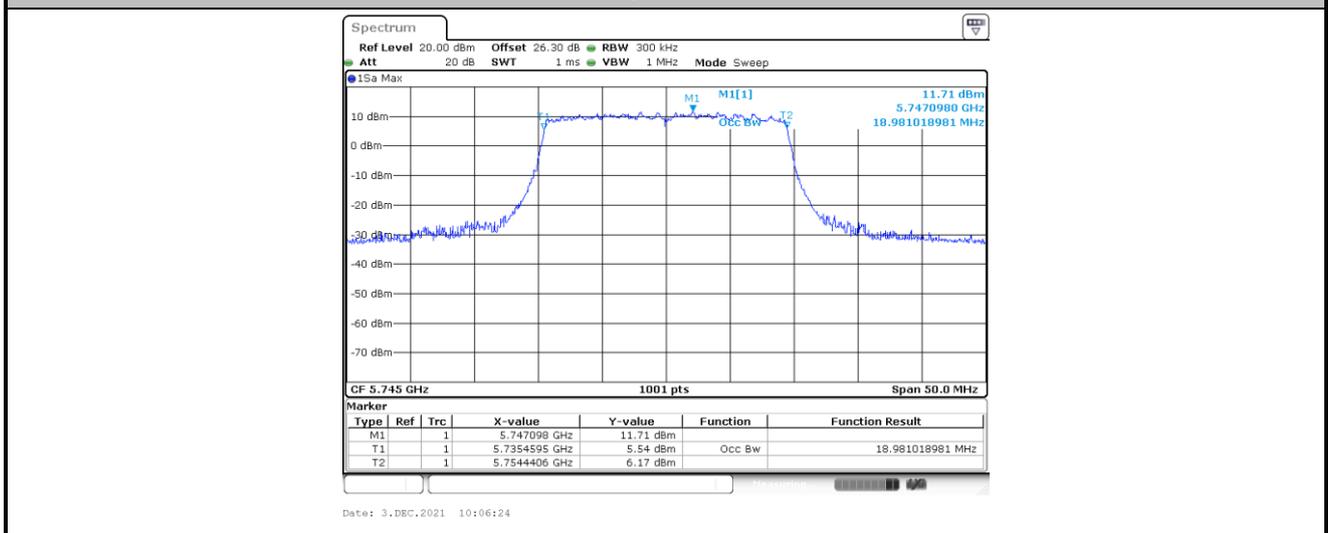
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



<802.11ax HE20>



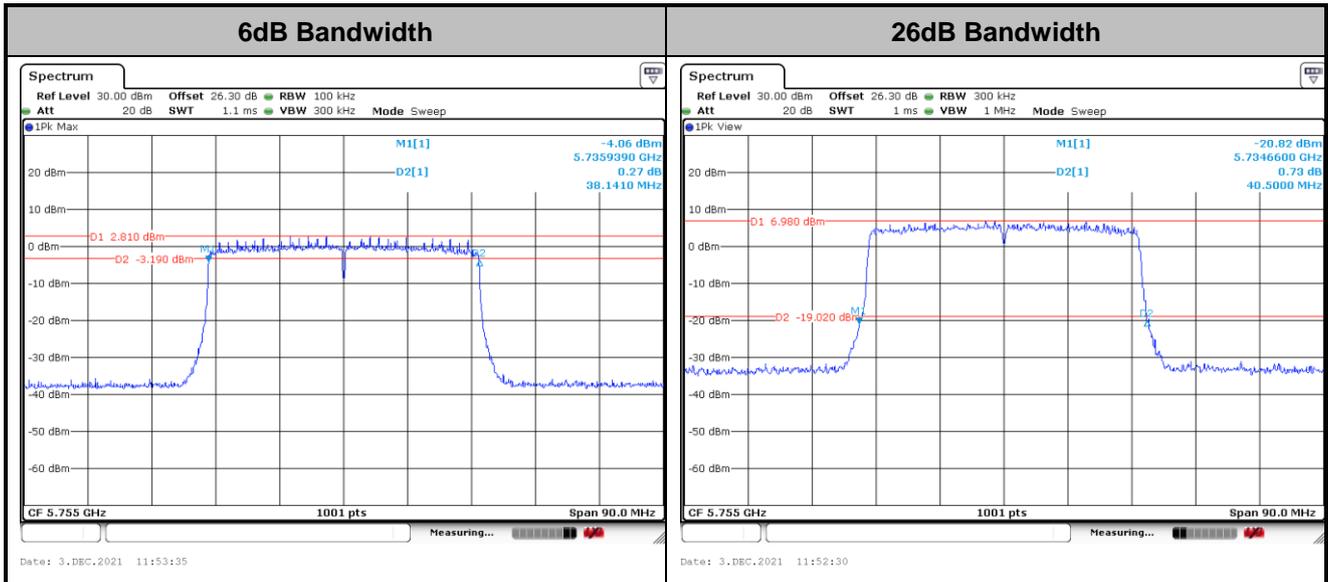
99% Occupied Bandwidth



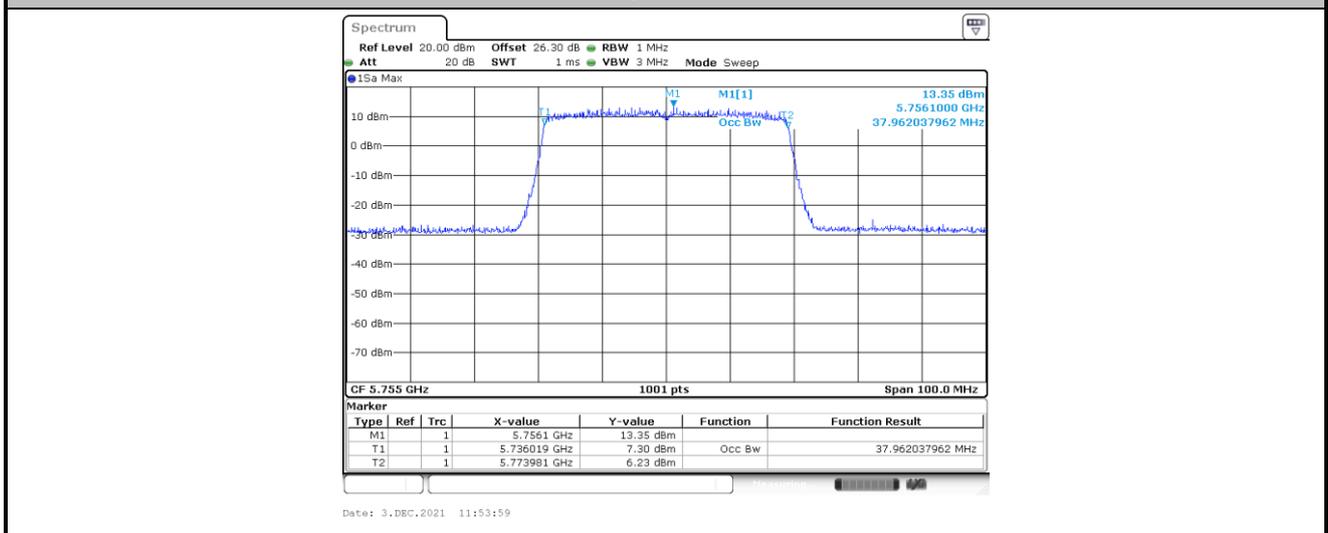
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



<802.11ax HE40>



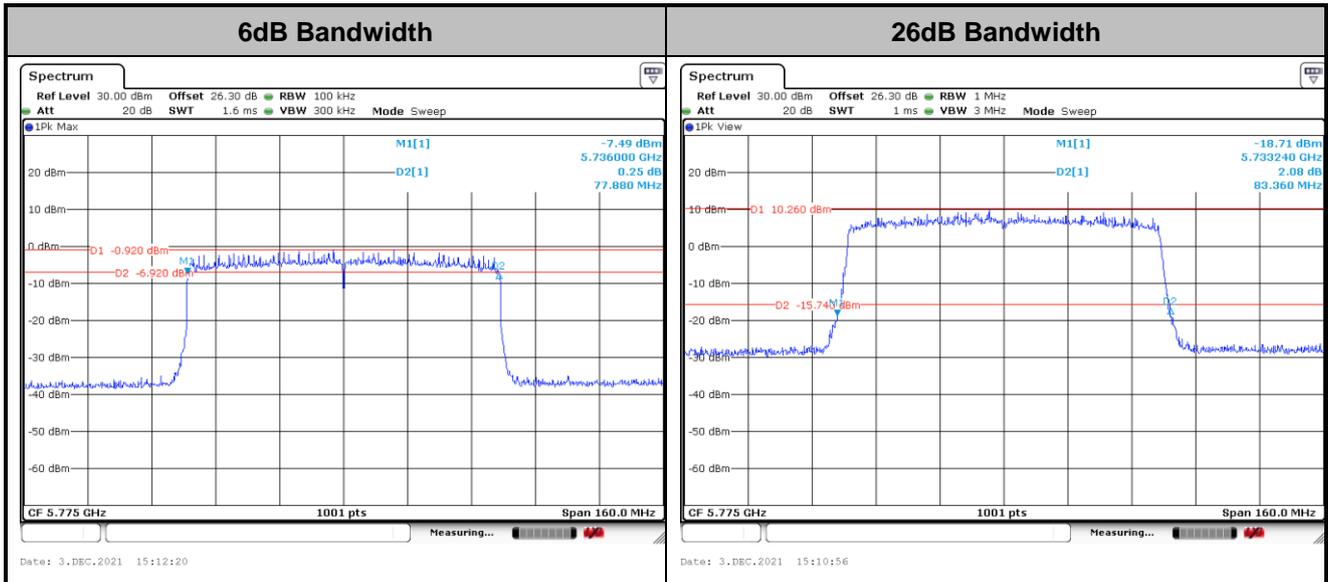
99% Occupied Bandwidth



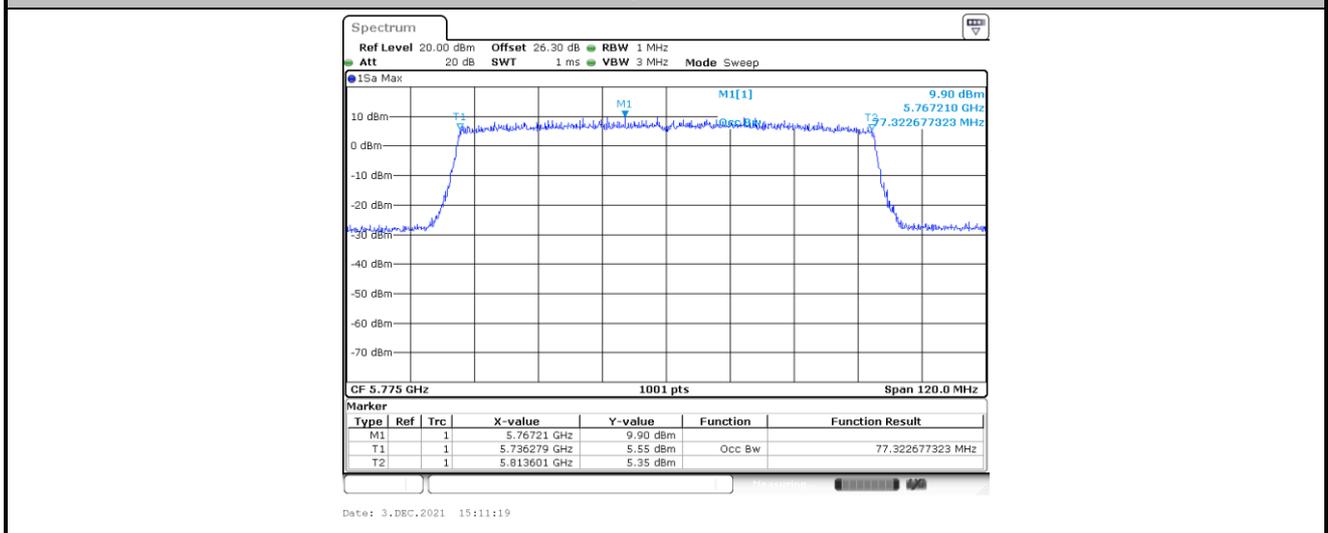
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



<802.11ax HE80>



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.

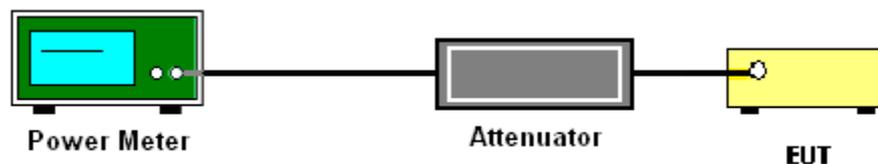
3.2.3 Test Procedures

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):

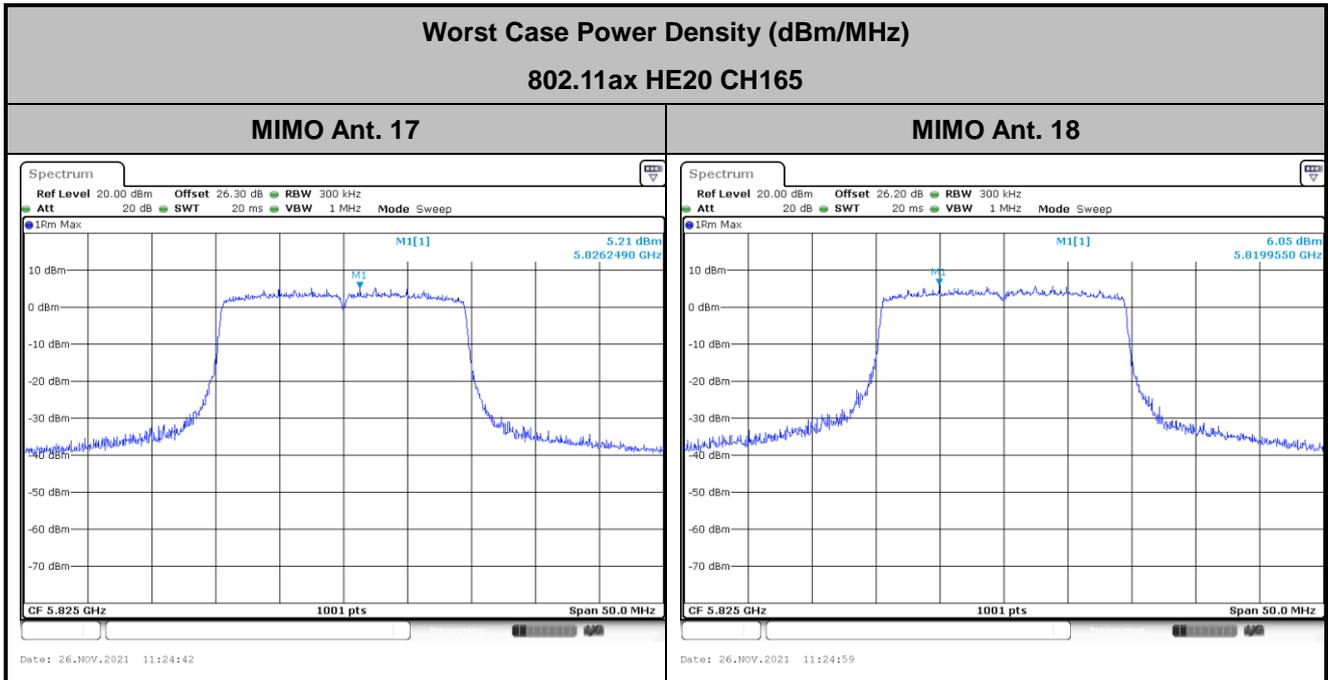
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 300 kHz.
 - Set VBW \geq 1 MHz.
 - Number of points in sweep \geq 2 Span / RBW.
 - Add $10 \log(500 \text{ kHz/RBW})$ to the measured result, whereas RBW ($<500 \text{ kHz}$) is the reduced resolution bandwidth of the spectrum analyzer set during measurement
 - Sweep time \leq (number of points in sweep) \times T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Detector = power averaging (rms).
 - Trace mode = max hold.
 - Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
1. The RF output of EUT is connected to the spectrum analyzer by a low loss cable.
 2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
 3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

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

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



<802.11ax mode>





3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

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

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

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

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

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

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

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

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

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

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



3.4.2 Measuring Instruments

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

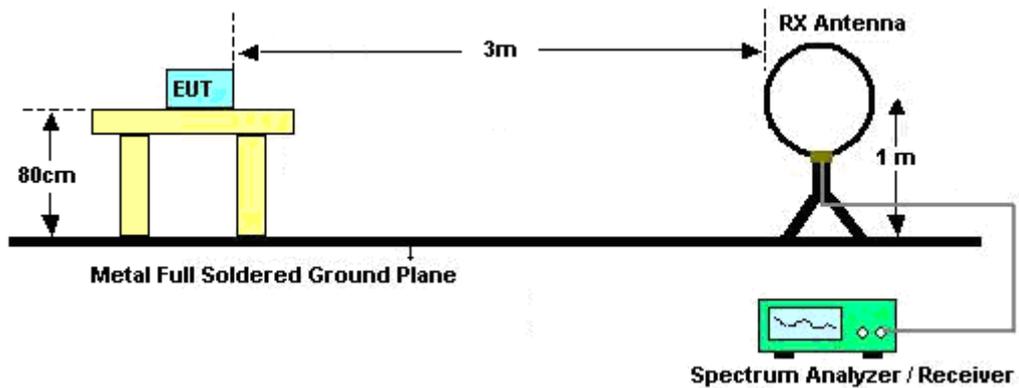
3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000 MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW \geq 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - (3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW \geq 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT is arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.

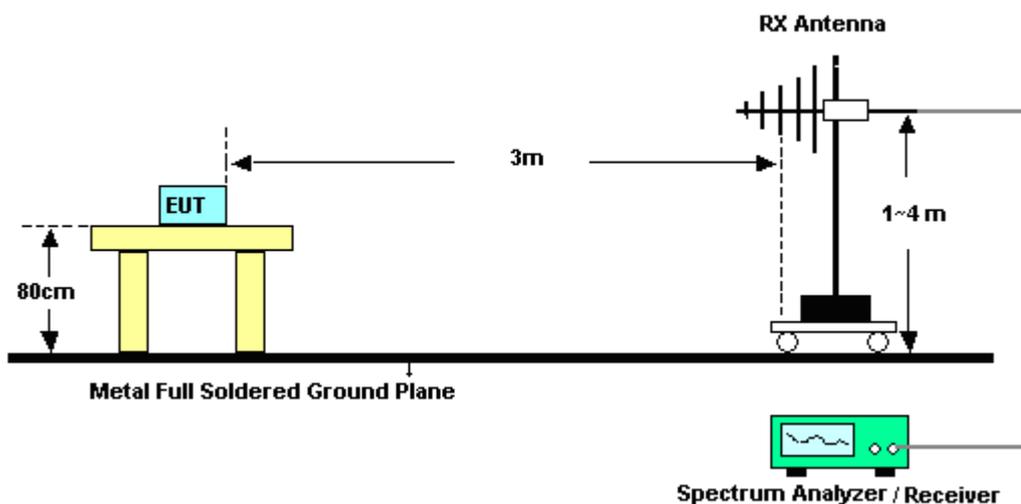
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit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

3.4.4 Test Setup

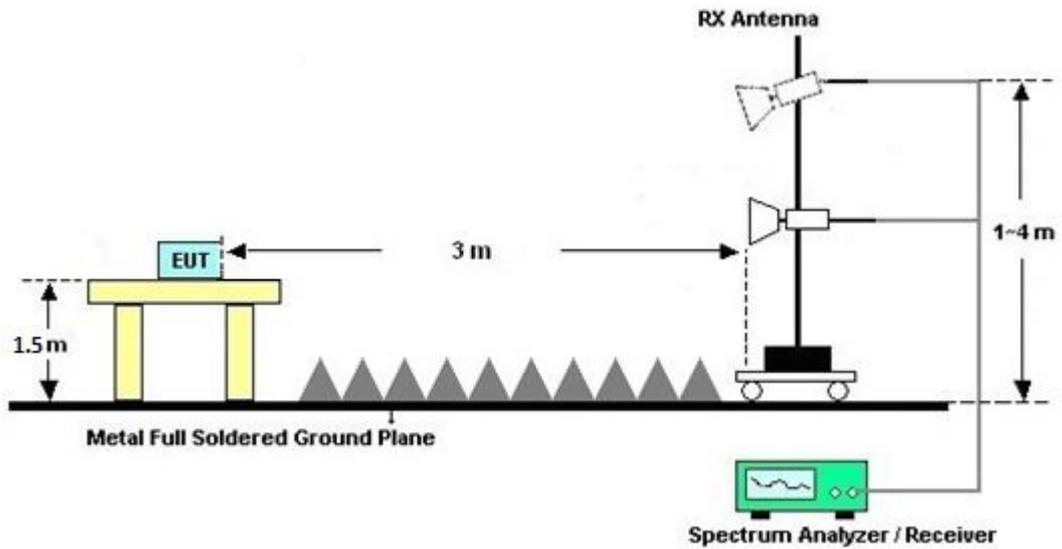
For radiated emissions below 30MHz



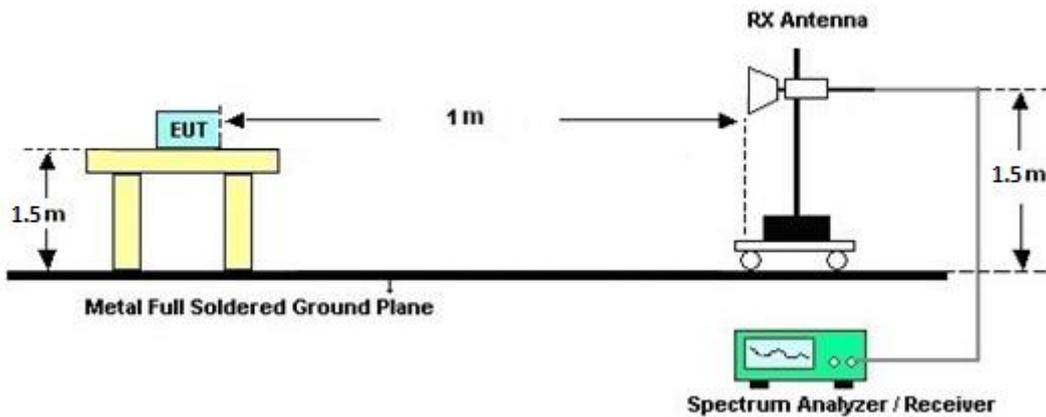
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



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

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

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



3.4.6 Test Result of Radiated Band Edges

Please refer to Appendix C and D.

3.4.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.



3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

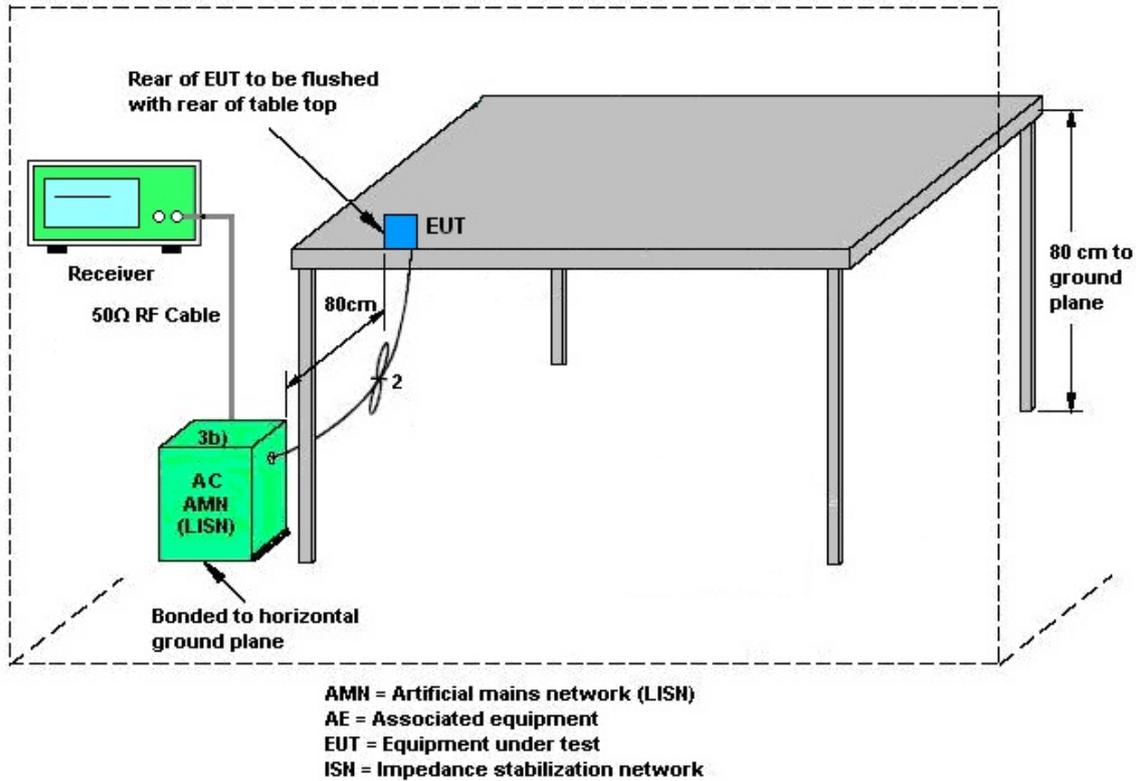
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



3.6 Antenna Requirements

3.6.1 Standard Applicable

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

3.6.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.6.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For 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>						
			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant. 17	Ant. 18	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
Band IV	-0.40	-4.50	-0.40	0.80	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
EMI Test Receiver	Keysight	N9010B	MY60241055	10Hz~44GHz	Jul. 12, 2021	Nov. 22, 2021~Dec. 08, 2021	Jul. 11, 2022	Radiation (03CH20-HY)
Preamplifier	COM-POWER	PAM-103	18020201	1MHz-1000MHz	Jan. 04, 2021	Nov. 22, 2021~Dec. 08, 2021	Jan. 03, 2022	Radiation (03CH20-HY)
Amplifier	EMCI	EMC118A45SE	980792	N/A	Nov. 15, 2021	Nov. 22, 2021~Dec. 08, 2021	Nov. 14, 2022	Radiation (03CH20-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun. 22, 2021	Nov. 22, 2021~Dec. 08, 2021	Jun. 21, 2022	Radiation (03CH20-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Jan. 04, 2021	Nov. 22, 2021~Dec. 08, 2021	Jan. 03, 2022	Radiation (03CH20-HY)
Bilog Antenna	TESEQ	CBL 6111D&00802N1 D01N-06	55606 & 08	30MHz~1GHz	Oct. 17, 2021	Nov. 22, 2021~Dec. 08, 2021	Oct. 16, 2022	Radiation (03CH20-HY)
Horn Antenna	SCHWARZECK	BBHA 9120 D	9120D-02294	1GHz~18GHz	Jun. 23, 2021	Nov. 22, 2021~Dec. 08, 2021	Jun. 22, 2022	Radiation (03CH20-HY)
SHF-EHF Horn Antenna	SCHWARZECK	BBHA9170	00991	18GHz-40GHz	May 12, 2021	Nov. 22, 2021~Dec. 08, 2021	May 11, 2022	Radiation (03CH20-HY)
Hygrometer	TECEP	DTM-303B	TP200728	N/A	Mar. 09, 2021	Nov. 22, 2021~Dec. 08, 2021	Mar. 08, 2022	Radiation (03CH20-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	519229/2,804015/2,804027/2	N/A	Jan. 20, 2021	Nov. 22, 2021~Dec. 08, 2021	Jan. 19, 2022	Radiation (03CH20-HY)
1.53GHz Low Pass Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN27	N/A	May 25, 2021	Nov. 22, 2021~Dec. 08, 2021	May 24, 2022	Radiation (03CH20-HY)
Filter	Wainwright	WHKX12-2700-3000-18000-60ST	SN8	N/A	Mar. 26, 2021	Nov. 22, 2021~Dec. 08, 2021	Mar. 25, 2022	Radiation (03CH20-HY)
Filter	Wainwright	WHKX8-6090-7000-18000-40SS	SN99	N/A	Nov. 04, 2021	Nov. 22, 2021~Dec. 08, 2021	Nov. 03, 2022	Radiation (03CH20-HY)
Filter	Wainwright	WRCQV14-5425-5825-6525-6925-60SS	SN2	N/A	Jan. 08, 2021	Nov. 22, 2021~Dec. 08, 2021	Jan. 07, 2022	Radiation (03CH20-HY)
Filter	Wainwright	WRCQV14-6025-6425-7125-7525-60SS	SN1	N/A	Jan. 08, 2021	Nov. 22, 2021~Dec. 08, 2021	Jan. 07, 2022	Radiation (03CH20-HY)
Filter	Wainwright	WHW2-7100-10000-18000-40CC	SN3	N/A	May 25, 2021	Nov. 22, 2021~Dec. 08, 2021	May 24, 2022	Radiation (03CH20-HY)
Software	Audix	E3 6.2009-8-24	RK-002156	N/A	N/A	Nov. 22, 2021~Dec. 08, 2021	N/A	Radiation (03CH20-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Nov. 22, 2021~Dec. 08, 2021	N/A	Radiation (03CH20-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Nov. 22, 2021~Dec. 08, 2021	N/A	Radiation (03CH20-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Nov. 22, 2021~Dec. 08, 2021	N/A	Radiation (03CH20-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Nov. 19, 2021	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 30, 2020	Nov. 19, 2021	Nov. 29, 2021	Conduction (CO05-HY)
Hygrometer	TECEP	DTM-303A	TP201973	N/A	Oct. 22, 2021	Nov. 19, 2021	Oct. 21, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 01, 2020	Nov. 19, 2021	Nov. 30, 2021	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Nov. 19, 2021	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZECK	VTSD 9561-F N	00691	N/A	Jul. 28, 2021	Nov. 19, 2021	Jul. 27, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 31, 2020	Nov. 19, 2021	Dec. 30, 2021	Conduction (CO05-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 16, 2021	Nov. 24, 2021~ Dec. 06, 2021	Nov. 15, 2022	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	13I00030SNO 31(NO:182)	10MHz~6GHz	Dec. 30, 2020	Nov. 24, 2021~ Dec. 06, 2021	Dec. 29, 2021	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	Nov. 24, 2021~ Dec. 06, 2021	Aug. 29, 2022	Conducted (TH05-HY)
Switch Box & RF Cable	EM Electronics	EMSW18SE	SW191204(B OX8)	N/A	Jan. 07, 2021	Nov. 24, 2021~ Dec. 06, 2021	Jan. 06, 2022	Conducted (TH05-HY)



5 Uncertainty of Evaluation

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

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.9 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.7 dB
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	Jacob Yu	Temperature:	22.2~24.1	°C
Test Date:	2021/11/24-2021/12/6	Relative Humidity:	48.2~52.2	%

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	16.43	19.70	19.54	16.44	16.44	0.5	Pass
11a	6Mbps	2	157	5785	16.43	16.43	19.65	19.89	16.39	16.43	0.5	Pass
11a	6Mbps	2	165	5825	16.43	16.43	19.60	19.50	16.40	16.38	0.5	Pass

TEST RESULTS DATA
Average Power Table

Band IV MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 17	Ant 18	SUM	Ant 17	Ant 18	Ant 17	Ant 18	
11a	6Mbps	2	149	5745	18.50	19.40	21.98	30.00	30.00	-0.40	Pass	
11a	6Mbps	2	157	5785	18.90	19.80	22.38	30.00	30.00	-0.40	Pass	
11a	6Mbps	2	165	5825	19.20	19.80	22.52	30.00	30.00	-0.40	Pass	
HT20	MCS0	2	149	5745	18.30	19.20	21.78	30.00	30.00	-0.40	Pass	
HT20	MCS0	2	157	5785	18.60	19.50	22.08	30.00	30.00	-0.40	Pass	
HT20	MCS0	2	165	5825	19.00	19.60	22.32	30.00	30.00	-0.40	Pass	
HT40	MCS0	2	151	5755	17.40	18.30	20.88	30.00	30.00	-0.40	Pass	
HT40	MCS0	2	159	5795	17.80	18.40	21.12	30.00	30.00	-0.40	Pass	
VHT20	MCS0	2	149	5745	18.10	19.10	21.64	30.00	30.00	-0.40	Pass	
VHT20	MCS0	2	157	5785	18.40	19.40	21.94	30.00	30.00	-0.40	Pass	
VHT20	MCS0	2	165	5825	18.80	19.50	22.17	30.00	30.00	-0.40	Pass	
VHT40	MCS0	2	151	5755	17.30	18.20	20.78	30.00	30.00	-0.40	Pass	
VHT40	MCS0	2	159	5795	17.70	18.30	21.02	30.00	30.00	-0.40	Pass	
VHT80	MCS0	2	155	5775	16.40	17.30	19.88	30.00	30.00	-0.40	Pass	

TEST RESULTS DATA
Power Spectral Density

Band IV MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	10log (500kHz /RBW) Factor (dB)		Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					Ant 17	Ant 18	Ant 17	Ant 18	SUM	Ant 17	Ant 18	Ant 17	Ant 18	
11a	6Mbps	2	149	5745	2.22	6.65	7.88	10.89	30.00	30.00	0.80	0.80	Pass	
11a	6Mbps	2	157	5785	2.22	7.28	8.32	11.33	30.00	30.00	0.80	0.80	Pass	
11a	6Mbps	2	165	5825	2.22	7.95	8.52	11.53	30.00	30.00	0.80	0.80	Pass	

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

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

Band IV MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
						Ant 17	Ant 18	Ant 17	Ant 18	Ant 17	Ant 18		
HE20	MCS0	2	149	5745	Full	18.98	18.93	21.65	22.24	19.04	18.94	0.5	Pass
HE20	MCS0	2	157	5785	Full	18.93	18.93	21.44	23.00	18.99	18.94	0.5	Pass
HE20	MCS0	2	165	5825	Full	18.98	18.93	21.30	21.95	18.84	18.89	0.5	Pass
HE40	MCS0	2	151	5755	Full	37.96	37.96	40.50	40.39	38.14	37.78	0.5	Pass
HE40	MCS0	2	159	5795	Full	37.96	37.96	40.41	40.32	38.23	37.78	0.5	Pass
HE80	MCS0	2	155	5775	Full	77.32	77.20	83.36	82.40	77.88	77.88	0.5	Pass

TEST RESULTS DATA
Average Power Table

Band IV MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 17	Ant 18	SUM	Ant 17	Ant 18	Ant 17	Ant 18	
HE20	MCS0	2	149	5745	Full	18.40	19.30	21.88	30.00	30.00	-0.40	-0.40	Pass
HE20	MCS0	2	149	5745	26/0	10.90	11.80	14.38	30.00	30.00	-0.40	-0.40	Pass
HE20	MCS0	2	149	5745	52/37	13.50	14.40	16.98	30.00	30.00	-0.40	-0.40	Pass
HE20	MCS0	2	149	5745	106/53	16.20	17.10	19.68	30.00	30.00	-0.40	-0.40	Pass
HE20	MCS0	2	157	5785	Full	18.70	19.60	22.18	30.00	30.00	-0.40	-0.40	Pass
HE20	MCS0	2	157	5785	26/4	11.30	12.20	14.78	30.00	30.00	-0.40	-0.40	Pass
HE20	MCS0	2	157	5785	52/38	14.40	15.30	17.88	30.00	30.00	-0.40	-0.40	Pass
HE20	MCS0	2	157	5785	106/53	16.90	17.80	20.38	30.00	30.00	-0.40	-0.40	Pass
HE20	MCS0	2	165	5825	Full	19.10	19.70	22.42	30.00	30.00	-0.40	-0.40	Pass
HE20	MCS0	2	165	5825	26/8	11.40	12.30	14.88	30.00	30.00	-0.40	-0.40	Pass
HE20	MCS0	2	165	5825	52/40	14.10	14.60	17.37	30.00	30.00	-0.40	-0.40	Pass
HE20	MCS0	2	165	5825	106/54	16.90	17.80	20.38	30.00	30.00	-0.40	-0.40	Pass
HE40	MCS0	2	151	5755	Full	17.50	18.40	20.98	30.00	30.00	-0.40	-0.40	Pass
HE40	MCS0	2	159	5795	Full	17.90	18.50	21.22	30.00	30.00	-0.40	-0.40	Pass
HE80	MCS0	2	155	5775	Full	16.50	17.40	19.98	30.00	30.00	-0.40	-0.40	Pass

TEST RESULTS DATA
Power Spectral Density

Band IV MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	10log (500kHz /RBW) Factor (dB)			Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
						Ant 17	Ant 18	SUM	Ant 17	Ant 18	SUM	Ant 17	Ant 18	Ant 17	Ant 18	
HE20	MCS0	2	149	5745	Full	2.22	6.81	7.91	10.92	30.00	30.00	0.80	0.80	Pass		
HE20	MCS0	2	149	5745	26/0	2.22	6.79	7.56	10.57	30.00	30.00	0.80	0.80	Pass		
HE20	MCS0	2	149	5745	52/37	2.22	6.67	7.54	10.55	30.00	30.00	0.80	0.80	Pass		
HE20	MCS0	2	149	5745	106/53	2.22	6.45	7.38	10.39	30.00	30.00	0.80	0.80	Pass		
HE20	MCS0	2	157	5785	Full	2.22	7.23	8.17	11.18	30.00	30.00	0.80	0.80	Pass		
HE20	MCS0	2	157	5785	26/4	2.22	6.99	8.11	11.12	30.00	30.00	0.80	0.80	Pass		
HE20	MCS0	2	157	5785	52/38	2.22	7.20	8.13	11.14	30.00	30.00	0.80	0.80	Pass		
HE20	MCS0	2	157	5785	106/53	2.22	7.02	8.16	11.17	30.00	30.00	0.80	0.80	Pass		
HE20	MCS0	2	165	5825	Full	2.22	7.43	8.27	11.28	30.00	30.00	0.80	0.80	Pass		
HE20	MCS0	2	165	5825	26/8	2.22	7.14	8.18	11.19	30.00	30.00	0.80	0.80	Pass		
HE20	MCS0	2	165	5825	52/40	2.22	7.13	7.51	10.52	30.00	30.00	0.80	0.80	Pass		
HE20	MCS0	2	165	5825	106/54	2.22	7.31	7.91	10.92	30.00	30.00	0.80	0.80	Pass		
HE40	MCS0	2	151	5755	Full	2.22	2.51	4.50	7.51	30.00	30.00	0.80	0.80	Pass		
HE40	MCS0	2	159	5795	Full	2.22	3.22	3.83	6.84	30.00	30.00	0.80	0.80	Pass		
HE80	MCS0	2	155	5775	Full	2.22	-1.15	-0.15	2.86	30.00	30.00	0.80	0.80	Pass		

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



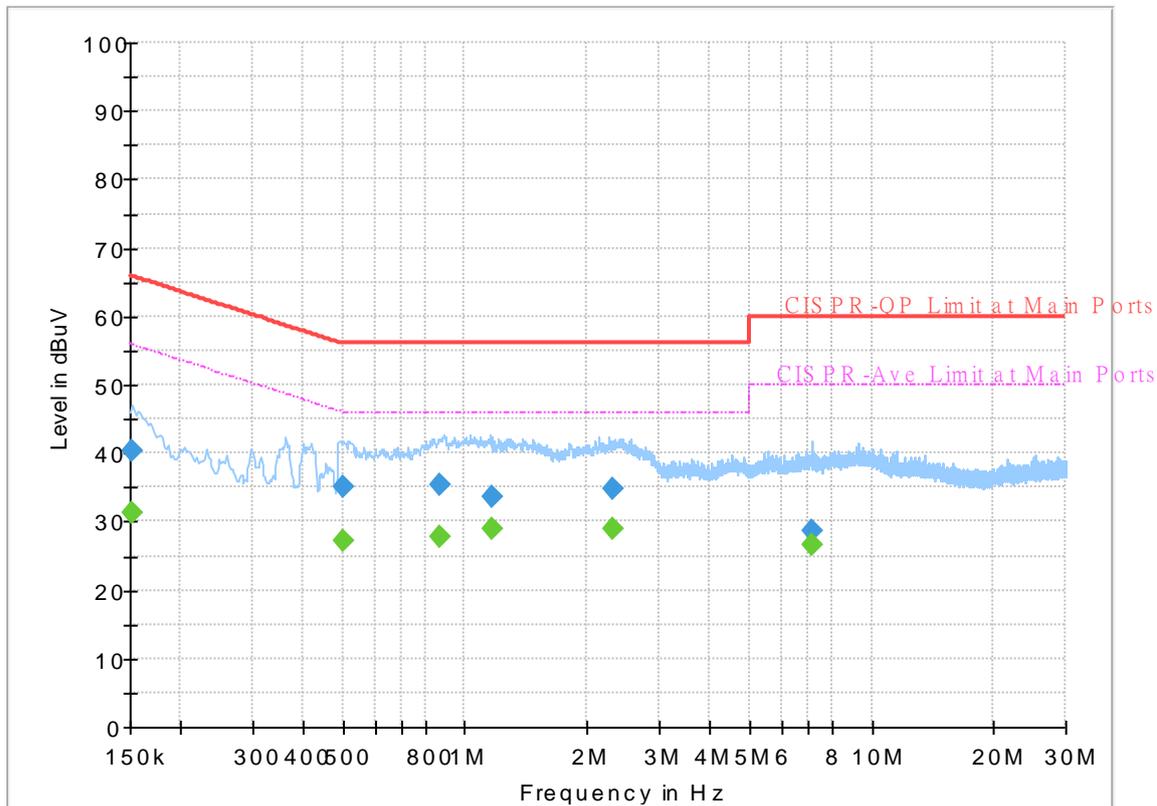
Appendix B. AC Conducted Emission Test Results

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

EUT Information

Report NO : 1N0901
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



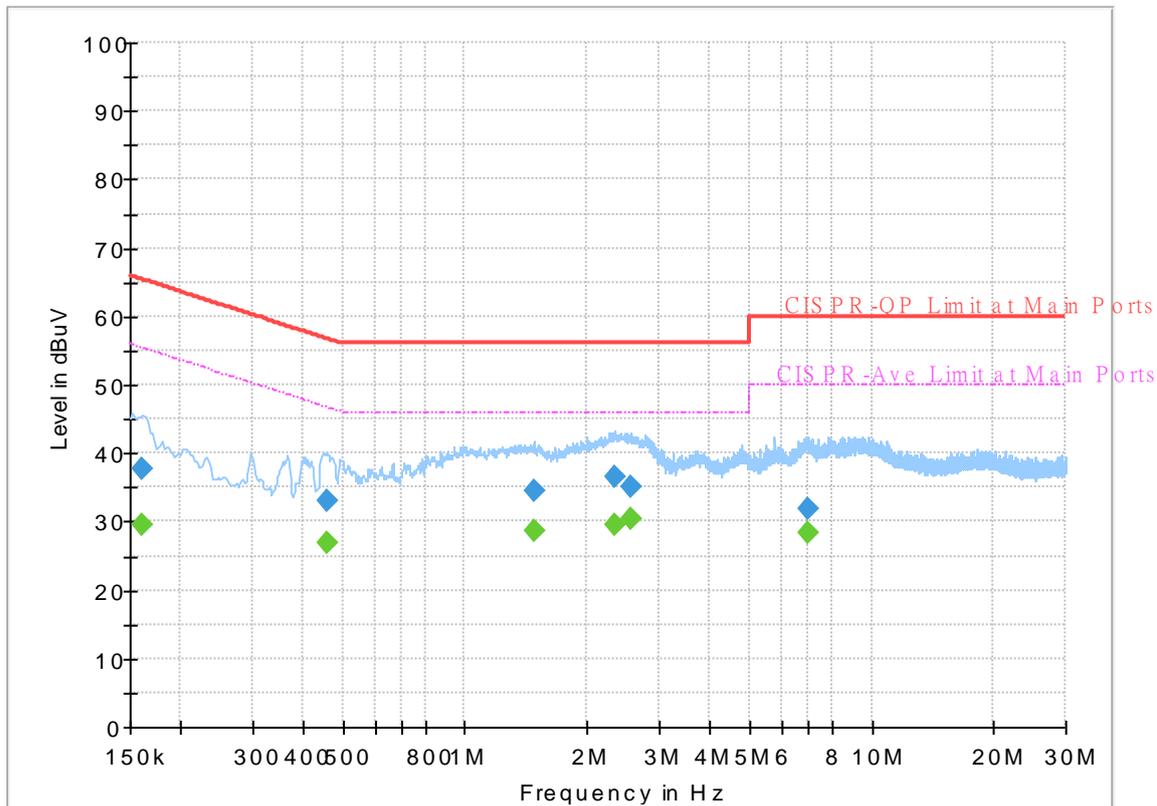
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	31.23	55.88	24.65	L1	OFF	19.7
0.152250	40.45	---	65.88	25.43	L1	OFF	19.7
0.501000	---	27.20	46.00	18.80	L1	OFF	19.8
0.501000	34.98	---	56.00	21.02	L1	OFF	19.8
0.863250	---	27.80	46.00	18.20	L1	OFF	20.1
0.863250	35.46	---	56.00	20.54	L1	OFF	20.1
1.167000	---	29.05	46.00	16.95	L1	OFF	20.2
1.167000	33.62	---	56.00	22.38	L1	OFF	20.2
2.307750	---	29.04	46.00	16.96	L1	OFF	20.1
2.307750	34.70	---	56.00	21.30	L1	OFF	20.1
7.152000	---	26.72	50.00	23.28	L1	OFF	20.1
7.152000	28.65	---	60.00	31.35	L1	OFF	20.1

EUT Information

Report NO : 1N0901
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161250	---	29.66	55.40	25.74	N	OFF	19.7
0.161250	37.78	---	65.40	27.62	N	OFF	19.7
0.456000	---	27.01	46.77	19.76	N	OFF	19.8
0.456000	33.09	---	56.77	23.68	N	OFF	19.8
1.475250	---	28.61	46.00	17.39	N	OFF	20.2
1.475250	34.44	---	56.00	21.56	N	OFF	20.2
2.330250	---	29.66	46.00	16.34	N	OFF	20.1
2.330250	36.41	---	56.00	19.59	N	OFF	20.1
2.566500	---	30.27	46.00	15.73	N	OFF	20.1
2.566500	34.95	---	56.00	21.05	N	OFF	20.1
6.983250	---	28.40	50.00	21.60	N	OFF	20.1
6.983250	31.80	---	60.00	28.20	N	OFF	20.1



Appendix C. Radiated Spurious Emission

Test Engineer :	Bill Chang, JC Liang and Nick Yu	Temperature :	18~20°C
		Relative Humidity :	65~68%

Band 4 - 5725~5850MHz
WIFI 802.11a (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)	
802.11a CH 149 5745MHz		5649.8	47.52	-20.68	68.2	39.11	33.2	13.11	37.9	100	117	P	H	
		5695.2	51.74	-49.92	101.66	42.93	33.56	13.16	37.91	100	117	P	H	
		5717.4	58.14	-51.93	110.07	49.17	33.7	13.19	37.92	100	117	P	H	
		5724.8	60.22	-61.52	121.74	51.19	33.75	13.2	37.92	100	117	P	H	
	*	5745	112.39	-	-	103.22	33.87	13.22	37.92	100	117	P	H	
	*	5745	104.79	-	-	95.62	33.87	13.22	37.92	100	117	A	H	
														H
														H
			5628.6	46.15	-22.05	68.2	37.76	33.2	13.09	37.9	300	76	P	V
			5699.8	47.51	-57.54	105.05	38.65	33.6	13.17	37.91	300	76	P	V
			5712.6	52.19	-56.54	108.73	43.25	33.68	13.18	37.92	300	76	P	V
			5723.8	54.07	-65.39	119.46	45.05	33.74	13.2	37.92	300	76	P	V
	*		5745	108.9	-	-	99.73	33.87	13.22	37.92	300	76	P	V
	*		5745	101.41	-	-	92.24	33.87	13.22	37.92	300	76	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)
		5623.25	46.58	-21.62	68.2	38.19	33.2	13.09	37.9	100	118	P	H
		5694.75	46.99	-54.34	101.33	38.18	33.56	13.16	37.91	100	118	P	H
		5701.25	47.99	-57.56	105.55	39.12	33.61	13.17	37.91	100	118	P	H
		5725	49.43	-72.77	122.2	40.4	33.75	13.2	37.92	100	118	P	H
	*	5785	112.96	-	-	103.66	33.97	13.26	37.93	100	118	P	H
	*	5785	104.98	-	-	95.68	33.97	13.26	37.93	100	118	A	H
		5854.25	48.47	-64.04	112.51	38.96	34.11	13.35	37.95	100	118	P	H
		5862	48.27	-60.57	108.84	38.75	34.12	13.35	37.95	100	118	P	H
		5903	47.15	-37.29	84.44	37.5	34.21	13.4	37.96	100	118	P	H
		5939.25	46.8	-21.4	68.2	37.04	34.28	13.45	37.97	100	118	P	H
													H
													H
802.11a													
CH 157													
5785MHz		5618	45.91	-22.29	68.2	37.53	33.2	13.08	37.9	300	78	P	V
		5699.5	46.89	-57.94	104.83	38.03	33.6	13.17	37.91	300	78	P	V
		5717.5	47.08	-63.02	110.1	38.11	33.7	13.19	37.92	300	78	P	V
		5720	45.53	-65.27	110.8	36.54	33.72	13.19	37.92	300	78	P	V
	*	5785	109.34	-	-	100.04	33.97	13.26	37.93	300	78	P	V
	*	5785	101.94	-	-	92.64	33.97	13.26	37.93	300	78	A	V
		5854	45.24	-67.84	113.08	35.74	34.11	13.34	37.95	300	78	P	V
		5857.5	47.19	-62.91	110.1	37.68	34.11	13.35	37.95	300	78	P	V
		5877.25	46.65	-56.88	103.53	37.08	34.15	13.37	37.95	300	78	P	V
		5926.75	46.74	-21.46	68.2	37.02	34.25	13.43	37.96	300	78	P	V
													V
													V



WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 165 5825MHz	*	5825	112.43	-	-	103.01	34.05	13.31	37.94	100	118	P	H	
	*	5825	104.89	-	-	95.47	34.05	13.31	37.94	100	118	A	H	
		5852.8	54.57	-61.25	115.82	45.07	34.11	13.34	37.95	100	118	P	H	
		5858	55.64	-54.32	109.96	46.12	34.12	13.35	37.95	100	118	P	H	
		5895.4	50.08	-39.99	90.07	40.46	34.19	13.39	37.96	100	118	P	H	
		5933.4	46.88	-21.32	68.2	37.14	34.27	13.44	37.97	100	118	P	H	
														H
														H
	*	5825	109.22	-	-	99.8	34.05	13.31	37.94	306	76	P	V	
	*	5825	101.97	-	-	92.55	34.05	13.31	37.94	306	76	A	V	
		5854.6	52.93	-58.78	111.71	43.42	34.11	13.35	37.95	306	76	P	V	
		5857.8	50.91	-59.1	110.01	41.39	34.12	13.35	37.95	306	76	P	V	
		5898.6	47.62	-40.08	87.7	37.98	34.2	13.4	37.96	306	76	P	V	
		5925.2	47.44	-20.76	68.2	37.72	34.25	13.43	37.96	306	76	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	50.02	-23.98	74	34.44	38.92	19.3	42.64	100	211	P	H	
		11490	39.8	-14.2	54	24.22	38.92	19.3	42.64	100	211	A	H	
		17235	50.28	-17.92	68.2	32.85	38.03	24.14	44.74	-	-	P	H	
													H	
													H	
													H	
			11490	49.04	-24.96	74	33.46	38.92	19.3	42.64	285	22	P	V
			11490	40.32	-13.68	54	24.74	38.92	19.3	42.64	285	22	A	V
			17235	52.41	-15.79	68.2	34.98	38.03	24.14	44.74	-	-	P	V
														V
														V
	802.11a CH 157 5785MHz		11570	49.13	-24.87	74	33.73	38.76	19.35	42.71	100	33	P	H
		11570	41.62	-12.38	54	26.22	38.76	19.35	42.71	100	33	A	H	
		17355	51.35	-16.85	68.2	33.88	38.21	24.17	44.91	-	-	P	H	
													H	
													H	
													H	
			11570	49.5	-24.5	74	34.1	38.76	19.35	42.71	352	66	P	V
			11570	40.98	-13.02	54	25.58	38.76	19.35	42.71	352	66	A	V
			17355	50.91	-17.29	68.2	33.44	38.21	24.17	44.91	-	-	P	V
														V
														V



WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 165 5825MHz		11650	49.36	-24.64	74	34.08	38.65	19.4	42.77	100	325	P	H	
		11650	40.62	-13.38	54	25.34	38.65	19.4	42.77	100	325	A	H	
		17475	51.01	-17.19	68.2	33.5	38.38	24.21	45.08	-	-	P	H	
													H	
													H	
													H	
			11650	49.32	-24.68	74	34.04	38.65	19.4	42.77	100	138	P	V
			11650	40.66	-13.34	54	25.38	38.65	19.4	42.77	100	138	A	V
			17475	51.18	-17.02	68.2	33.67	38.38	24.21	45.08	-	-	P	V
														V
														V
														V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. The emission level close to 18GHz is checked that the average emission level is noise floor only. 													



Band 4 5725~5850MHz

WIFI 802.11ax HE20_Full (Band Edge @ 3m)

WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Full CH 149 5745MHz		5646.8	48.1	-20.1	68.2	39.69	33.2	13.11	37.9	100	118	P	H	
		5697.65	57.57	-45.9	103.47	48.73	33.58	13.17	37.91	100	118	P	H	
		5719.025	65.56	-44.97	110.53	56.58	33.71	13.19	37.92	100	118	P	H	
		5722.625	70.19	-46.6	116.79	61.18	33.74	13.19	37.92	100	118	P	H	
	*	5745	111.77	-	-	102.6	33.87	13.22	37.92	100	118	P	H	
	*	5745	102.18	-	-	93.01	33.87	13.22	37.92	100	118	A	H	
														H
														H
			5641.625	47.49	-20.71	68.2	39.08	33.2	13.11	37.9	297	74	P	V
			5691.125	51.18	-47.48	98.66	42.4	33.53	13.16	37.91	297	74	P	V
			5715.425	55.85	-53.67	109.52	46.89	33.69	13.19	37.92	297	74	P	V
			5723.525	59.26	-59.58	118.84	50.24	33.74	13.2	37.92	297	74	P	V
	*		5745	108.3	-	-	99.13	33.87	13.22	37.92	297	74	P	V
	*		5745	98.39	-	-	89.22	33.87	13.22	37.92	297	74	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)
		5608	47.74	-20.46	68.2	39.36	33.2	13.07	37.89	100	119	P	H
		5678	47.08	-41.88	88.96	38.42	33.42	13.15	37.91	100	119	P	H
		5716.75	49.3	-60.59	109.89	40.33	33.7	13.19	37.92	100	119	P	H
		5724.5	49.45	-71.61	121.06	40.42	33.75	13.2	37.92	100	119	P	H
	*	5785	111.09	-	-	101.79	33.97	13.26	37.93	100	119	P	H
	*	5785	100.78	-	-	91.48	33.97	13.26	37.93	100	119	A	H
		5850.25	49.08	-72.55	121.63	39.59	34.1	13.34	37.95	100	119	P	H
		5867.25	48.91	-58.46	107.37	39.37	34.13	13.36	37.95	100	119	P	H
		5881	48.76	-51.98	100.74	39.17	34.16	13.38	37.95	100	119	P	H
		5925.5	47.99	-20.21	68.2	38.27	34.25	13.43	37.96	100	119	P	H
802.11ax													H
HE20 Full													H
CH 157		5608.25	47.36	-20.84	68.2	38.98	33.2	13.07	37.89	273	69	P	V
5785MHz		5661	47.18	-29.19	76.37	38.67	33.29	13.13	37.91	273	69	P	V
		5719	48.21	-62.31	110.52	39.23	33.71	13.19	37.92	273	69	P	V
		5722.25	47.06	-68.87	115.93	38.06	33.73	13.19	37.92	273	69	P	V
	*	5785	108.16	-	-	98.86	33.97	13.26	37.93	273	69	P	V
	*	5785	97.57	-	-	88.27	33.97	13.26	37.93	273	69	A	V
		5850.5	48.25	-72.81	121.06	38.76	34.1	13.34	37.95	273	69	P	V
		5862.25	49.85	-58.92	108.77	40.33	34.12	13.35	37.95	273	69	P	V
		5897.5	48.63	-39.88	88.51	39	34.19	13.4	37.96	273	69	P	V
		5947	47.22	-20.98	68.2	37.44	34.29	13.46	37.97	273	69	P	V
													V
													V



WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Full CH 165 5825MHz	*	5825	110.63	-	-	101.21	34.05	13.31	37.94	100	118	P	H	
	*	5825	100.61	-	-	91.19	34.05	13.31	37.94	100	118	A	H	
		5850.37	57.97	-63.39	121.36	48.48	34.1	13.34	37.95	100	118	P	H	
		5855.29	55.11	-55.61	110.72	45.6	34.11	13.35	37.95	100	118	P	H	
		5880.3	50.01	-51.25	101.26	40.42	34.16	13.38	37.95	100	118	P	H	
		5947.95	48.41	-19.79	68.2	38.62	34.3	13.46	37.97	100	118	P	H	
														H
														H
	*	5825	108.27	-	-	98.85	34.05	13.31	37.94	323	78	P	V	
	*	5825	97	-	-	87.58	34.05	13.31	37.94	323	78	A	V	
		5850.165	55.05	-66.77	121.82	45.56	34.1	13.34	37.95	323	78	P	V	
		5856.52	60.7	-49.67	110.37	51.19	34.11	13.35	37.95	323	78	P	V	
		5882.145	49.24	-50.65	99.89	39.65	34.16	13.38	37.95	323	78	P	V	
		5932.985	47.27	-20.93	68.2	37.53	34.27	13.44	37.97	323	78	P	V	
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 4 5725~5850MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Full CH 149 5745MHz		11490	49.84	-24.16	74	34.26	38.92	19.3	42.64	100	147	P	H	
		11490	40.23	-13.77	54	24.65	38.92	19.3	42.64	100	147	A	H	
		17235	50.31	-17.89	68.2	32.88	38.03	24.14	44.74	-	-	P	H	
													H	
													H	
													H	
														H
														H
														H
														H
802.11ax HE20 Full CH 157 5785MHz		11570	49.35	-24.65	74	33.95	38.76	19.35	42.71	100	155	P	H	
		11570	39.91	-14.09	54	24.51	38.76	19.35	42.71	100	155	A	H	
		17355	50.72	-17.48	68.2	33.25	38.21	24.17	44.91	-	-	P	H	
													H	
													H	
													H	
														H
														H
														H
														H



WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Full CH 165 5825MHz		11650	49.15	-24.85	74	33.87	38.65	19.4	42.77	148	157	P	H	
		11650	39.51	-14.49	54	24.23	38.65	19.4	42.77	148	157	A	H	
		17475	51.39	-16.81	68.2	33.88	38.38	24.21	45.08	-	-	P	H	
													H	
													H	
													H	
														H
														H
														H
														H
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. 4. The emission level close to 18GHz is checked that the average emission level is noise floor only.													



Band 4 5725~5850MHz

WIFI 802.11ax HE20_Partial 26 (Band Edge @ 3m)

WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Partial 26/0 CH 149 5745MHz		5643.65	48.86	-19.34	68.2	40.45	33.2	13.11	37.9	206	301	P	H	
		5668.175	52.41	-29.28	81.69	43.84	33.35	13.13	37.91	206	301	P	H	
		5719.925	71.2	-39.58	110.78	62.21	33.72	13.19	37.92	206	301	P	H	
		5724.875	74.44	-47.48	121.92	65.41	33.75	13.2	37.92	206	301	P	H	
	*	5745	120.33	-	-	111.16	33.87	13.22	37.92	206	301	P	H	
	*	5745	112.47	-	-	103.3	33.87	13.22	37.92	206	301	A	H	
														H
														H
			5644.775	47.01	-21.19	68.2	38.6	33.2	13.11	37.9	390	38	P	V
			5699.675	49.06	-55.9	104.96	40.2	33.6	13.17	37.91	390	38	P	V
			5719.7	67.33	-43.39	110.72	58.34	33.72	13.19	37.92	390	38	P	V
			5725.1	69.41	-64.79	134.2	60.38	33.75	13.2	37.92	390	38	P	V
	*		5745	118.13	-	-	108.96	33.87	13.22	37.92	390	38	P	V
	*		5745	109.18	-	-	100.01	33.87	13.22	37.92	390	38	A	V
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



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	121.56	-	-	112.14	34.05	13.31	37.94	100	116	P	H	
	*	5825	113.83	-	-	104.41	34.05	13.31	37.94	100	116	A	H	
		5850.575	68.01	-52.88	120.89	58.52	34.1	13.34	37.95	100	116	P	H	
		5858.16	63.5	-46.41	109.91	53.98	34.12	13.35	37.95	100	116	P	H	
		5901.825	53.73	-31.58	85.31	44.09	34.2	13.4	37.96	100	116	P	H	
		5926.835	49.45	-18.75	68.2	39.73	34.25	13.43	37.96	100	116	P	H	
														H
														H
	*	5825	119.1	-	-	109.68	34.05	13.31	37.94	289	63	P	V	
	*	5825	111.2	-	-	101.78	34.05	13.31	37.94	289	63	A	V	
		5851.6	66.43	-52.12	118.55	56.94	34.1	13.34	37.95	289	63	P	V	
		5858.775	58.43	-51.31	109.74	48.91	34.12	13.35	37.95	289	63	P	V	
		5901.62	52.86	-32.6	85.46	43.22	34.2	13.4	37.96	289	63	P	V	
		5938.93	49.23	-18.97	68.2	39.47	34.28	13.45	37.97	289	63	P	V	
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 4 5725~5850MHz

WIFI 802.11ax HE40_Full (Band Edge @ 3m)

WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5645.25	48.74	-19.46	68.2	40.33	33.2	13.11	37.9	100	118	P	H
		5696	52.03	-50.22	102.25	43.2	33.57	13.17	37.91	100	118	P	H
		5720	62.2	-48.6	110.8	53.21	33.72	13.19	37.92	100	118	P	H
		5722.25	62.19	-53.74	115.93	53.19	33.73	13.19	37.92	100	118	P	H
	*	5755	108.39	-	-	99.18	33.91	13.23	37.93	100	118	P	H
	*	5755	97.3	-	-	88.09	33.91	13.23	37.93	100	118	A	H
		5851	48.72	-71.2	119.92	39.23	34.1	13.34	37.95	100	118	P	H
		5871	50.03	-56.29	106.32	40.47	34.14	13.37	37.95	100	118	P	H
		5880.75	49.03	-51.9	100.93	39.44	34.16	13.38	37.95	100	118	P	H
		5932	49.68	-18.52	68.2	39.95	34.26	13.44	37.97	100	118	P	H
802.11ax													H
HE40 Full													H
CH 151		5634.25	47.7	-20.5	68.2	39.3	33.2	13.1	37.9	259	69	P	V
5755MHz		5684	49.8	-43.6	93.4	41.09	33.47	13.15	37.91	259	69	P	V
		5719.5	56.32	-54.34	110.66	47.33	33.72	13.19	37.92	259	69	P	V
		5721.25	60.88	-52.77	113.65	51.88	33.73	13.19	37.92	259	69	P	V
	*	5755	105.92	-	-	96.71	33.91	13.23	37.93	259	69	P	V
	*	5755	95.62	-	-	86.41	33.91	13.23	37.93	259	69	A	V
		5855	47.47	-63.33	110.8	37.96	34.11	13.35	37.95	259	69	P	V
		5871.75	49.47	-56.64	106.11	39.91	34.14	13.37	37.95	259	69	P	V
		5901.75	48.9	-36.47	85.37	39.26	34.2	13.4	37.96	259	69	P	V
		5940.25	48.21	-19.99	68.2	38.45	34.28	13.45	37.97	259	69	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)
		5629.25	47.3	-20.9	68.2	38.91	33.2	13.09	37.9	100	118	P	H
		5699	48.34	-56.12	104.46	39.49	33.59	13.17	37.91	100	118	P	H
		5700	48.69	-56.51	105.2	39.83	33.6	13.17	37.91	100	118	P	H
		5724.25	48.9	-71.59	120.49	39.87	33.75	13.2	37.92	100	118	P	H
	*	5795	108.44	-	-	99.11	33.99	13.27	37.93	100	118	P	H
	*	5795	98.59	-	-	89.26	33.99	13.27	37.93	100	118	A	H
		5853.25	53.74	-61.05	114.79	44.24	34.11	13.34	37.95	100	118	P	H
		5855	51.06	-59.74	110.8	41.55	34.11	13.35	37.95	100	118	P	H
		5882.75	50.85	-48.59	99.44	41.25	34.17	13.38	37.95	100	118	P	H
		5936	49.08	-19.12	68.2	39.34	34.27	13.44	37.97	100	118	P	H
802.11ax													H
HE40 Full													H
CH 159		5617.5	48.16	-20.04	68.2	39.78	33.2	13.08	37.9	254	67	P	V
5795MHz		5676	48.56	-38.92	87.48	39.92	33.41	13.14	37.91	254	67	P	V
		5702.25	49.35	-56.48	105.83	40.48	33.61	13.17	37.91	254	67	P	V
		5724.75	49.84	-71.79	121.63	40.81	33.75	13.2	37.92	254	67	P	V
	*	5795	105.77	-	-	96.44	33.99	13.27	37.93	254	67	P	V
	*	5795	95.12	-	-	85.79	33.99	13.27	37.93	254	67	A	V
		5850.75	49.65	-70.84	120.49	40.16	34.1	13.34	37.95	254	67	P	V
		5858.5	49.52	-60.3	109.82	40	34.12	13.35	37.95	254	67	P	V
		5897.5	49.36	-39.15	88.51	39.73	34.19	13.4	37.96	254	67	P	V
		5937.75	48.33	-19.87	68.2	38.57	34.28	13.45	37.97	254	67	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ax HE40_Full (Harmonic @ 3m)

WIFI Ant. 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 HE40 Full CH 151 5755MHz		11510	48.52	-25.48	74	33	38.88	19.31	42.67	100	114	P	H	
		11510	40.65	-13.35	54	25.13	38.88	19.31	42.67	100	114	A	H	
		17265	50.86	-17.34	68.2	33.44	38.06	24.15	44.79	-	-	P	H	
													H	
													H	
													H	
			11510	49.16	-24.84	74	33.64	38.88	19.31	42.67	258	31	P	V
			11510	40.55	-13.45	54	25.03	38.88	19.31	42.67	258	31	A	V
			17265	50.43	-17.77	68.2	33.01	38.06	24.15	44.79	-	-	P	V
														V
														V
	802.11ax HE40 Full CH 159 5795MHz		11590	48.66	-25.34	74	33.31	38.72	19.36	42.73	114	158	P	H
		11590	39.74	-14.26	54	24.39	38.72	19.36	42.73	114	158	A	H	
		17385	51	-17.2	68.2	33.5	38.27	24.18	44.95	-	-	P	H	
													H	
													H	
													H	
			11590	49.12	-24.88	74	33.77	38.72	19.36	42.73	312	128	P	V
			11590	39.62	-14.38	54	24.27	38.72	19.36	42.73	312	128	A	V
			17385	50.56	-17.64	68.2	33.06	38.27	24.18	44.95	-	-	P	V
														V
														V
														V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. The emission level close to 18GHz is checked that the average emission level is noise floor only. 													



Band 4 5725~5850MHz

WIFI 802.11ax HE80_Full (Band Edge @ 3m)

WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5631.75	48.49	-19.71	68.2	40.1	33.2	13.09	37.9	101	117	P	H
		5695.5	52.74	-49.14	101.88	43.92	33.56	13.17	37.91	101	117	P	H
		5715.25	56.63	-52.84	109.47	47.67	33.69	13.19	37.92	101	117	P	H
		5724	55.39	-64.53	119.92	46.37	33.74	13.2	37.92	101	117	P	H
	*	5775	103.83	-	-	94.56	33.95	13.25	37.93	101	117	P	H
	*	5775	93.07	-	-	83.8	33.95	13.25	37.93	101	117	A	H
		5851	56.99	-62.93	119.92	47.5	34.1	13.34	37.95	101	117	P	H
		5858.25	57.18	-52.71	109.89	47.66	34.12	13.35	37.95	101	117	P	H
		5875.5	51.73	-53.1	104.83	42.16	34.15	13.37	37.95	101	117	P	H
		5939.25	49.86	-18.34	68.2	40.1	34.28	13.45	37.97	101	117	P	H
802.11ax													H
HE80 Full													H
CH 155		5636.25	47.09	-21.11	68.2	38.69	33.2	13.1	37.9	258	67	P	V
5775MHz		5699.75	50.67	-54.35	105.02	41.81	33.6	13.17	37.91	258	67	P	V
		5717.75	51.54	-58.63	110.17	42.56	33.71	13.19	37.92	258	67	P	V
		5723.25	53.11	-65.1	118.21	44.09	33.74	13.2	37.92	258	67	P	V
	*	5775	100.97	-	-	91.7	33.95	13.25	37.93	258	67	P	V
	*	5775	91.48	-	-	82.21	33.95	13.25	37.93	258	67	A	V
		5852.5	52.85	-63.65	116.5	43.36	34.1	13.34	37.95	258	67	P	V
		5859.5	50.78	-58.76	109.54	41.26	34.12	13.35	37.95	258	67	P	V
		5917	48.88	-25.22	74.1	39.19	34.23	13.42	37.96	258	67	P	V
		5935.75	48.07	-20.13	68.2	38.33	34.27	13.44	37.97	258	67	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11ax HE80_Full (Harmonic @ 3m)

WIFI Ant. 17+18	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE80 Full CH 155 5775MHz		11550	48.92	-25.08	74	33.48	38.8	19.34	42.7	100	244	P	H	
		11550	39.76	-14.24	54	24.32	38.8	19.34	42.7	100	244	A	H	
		17325	50.6	-17.6	68.2	33.16	38.15	24.16	44.87	-	-	P	H	
													H	
													H	
													H	
			11550	49.21	-24.79	74	33.77	38.8	19.34	42.7	285	317	P	V
			11550	39.81	-14.19	54	24.37	38.8	19.34	42.7	285	317	A	V
			17325	50.75	-17.45	68.2	33.31	38.15	24.16	44.87	-	-	P	V
														V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. The emission level close to 18GHz is checked that the average emission level is noise floor only. 													



Emission below 1GHz
5GHz WIFI 802.11a (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)
		30.97	22.49	-17.51	40	33.34	23.9	0.97	35.72	-	-	P	H
		183.26	22.11	-21.39	43.5	40.52	14.76	2.34	35.51	-	-	P	H
		204.6	24.2	-19.3	43.5	42.13	15.06	2.48	35.47	-	-	P	H
		287.05	29.73	-16.27	46	42.93	19.12	2.96	35.28	-	-	P	H
		808.91	31.64	-14.36	46	32.73	27.49	5.1	33.68	-	-	P	H
		946.65	34.47	-11.53	46	31.72	30.31	5.6	33.16	-	-	P	H
													H
													H
													H
													H
													H
													H
802.11a LF		30.97	33.39	-6.61	40	44.24	23.9	0.97	35.72	-	-	P	V
		44.55	33.22	-6.78	40	50.97	16.86	1.11	35.72	-	-	P	V
		166.77	23.93	-19.57	43.5	41.51	15.72	2.24	35.54	-	-	P	V
		746.83	32.49	-13.51	46	33.9	27.67	4.82	33.9	-	-	P	V
		848.68	32.84	-13.16	46	32.36	28.74	5.27	33.53	-	-	P	V
		946.65	34.41	-11.59	46	31.66	30.31	5.6	33.16	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												



<EUT with WPC Charging Mode>

Band 4 - 5725~5850MHz
WIFI 802.11a (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)
		5610.5	46.57	-21.63	68.2	38.19	33.2	13.07	37.89	189	34	P	H
		5669	47.88	-34.42	82.3	39.3	33.35	13.14	37.91	189	34	P	H
		5705.25	48.14	-58.53	106.67	39.25	33.63	13.18	37.92	189	34	P	H
		5724	47.68	-72.24	119.92	38.66	33.74	13.2	37.92	189	34	P	H
	*	5785	110.72	-	-	101.42	33.97	13.26	37.93	189	34	P	H
	*	5785	103.2	-	-	93.9	33.97	13.26	37.93	189	34	A	H
		5854	46.46	-66.62	113.08	36.96	34.11	13.34	37.95	189	34	P	H
		5857.5	47.18	-62.92	110.1	37.67	34.11	13.35	37.95	189	34	P	H
		5911	47.86	-30.67	78.53	38.19	34.22	13.41	37.96	189	34	P	H
		5937.25	47.37	-20.83	68.2	37.63	34.27	13.44	37.97	189	34	P	H
													H
													H
802.11a													
CH 157													
5785MHz		5626	46.26	-21.94	68.2	37.87	33.2	13.09	37.9	192	3	P	V
		5685.75	46.84	-47.85	94.69	38.11	33.49	13.15	37.91	192	3	P	V
		5701.5	46.65	-58.97	105.62	37.78	33.61	13.17	37.91	192	3	P	V
		5723.75	47.51	-71.84	119.35	38.49	33.74	13.2	37.92	192	3	P	V
	*	5785	109.92	-	-	100.62	33.97	13.26	37.93	192	3	P	V
	*	5785	102.53	-	-	93.23	33.97	13.26	37.93	192	3	A	V
		5853	47.05	-68.31	115.36	37.55	34.11	13.34	37.95	192	3	P	V
		5872.5	47.64	-58.26	105.9	38.07	34.15	13.37	37.95	192	3	P	V
		5905.5	48.02	-34.57	82.59	38.36	34.21	13.41	37.96	192	3	P	V
		5943.5	48.43	-19.77	68.2	38.66	34.29	13.45	37.97	192	3	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 802.11a (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 157 5785MHz		11570	49.32	-24.68	74	33.92	38.76	18.98	42.71	147	223	P	H	
		11570	39.69	-14.31	54	24.29	38.76	18.98	42.71	147	223	A	H	
		17355	50.95	-17.25	68.2	33.48	38.21	23.7	44.91			P	H	
													H	
													H	
													H	
			11570	49.07	-24.93	74	33.67	38.76	18.98	42.71	312	311	P	V
			11570	39.66	-14.34	54	24.26	38.76	18.98	42.71	312	311	A	V
			17355	52.3	-15.9	68.2	34.83	38.21	23.7	44.91			P	V
														V
														V
														V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. The emission level close to 18GHz is checked that the average emission level is noise floor only. 													



Emission below 1GHz
5GHz WIFI 802.11a (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)
		97.9	27.69	-15.81	43.5	45.99	15.63	1.65	35.65	-	-	P	H
		209.45	28.23	-15.27	43.5	46.09	15.1	2.44	35.46	-	-	P	H
		287.05	28.39	-17.61	46	41.59	19.12	2.87	35.28	-	-	P	H
		334.58	29.99	-16.01	46	42	19.95	3.11	35.15	-	-	P	H
		743.92	30.21	-15.79	46	31.66	27.65	4.63	33.91	-	-	P	H
		993.21	34.7	-19.3	54	31.82	30.07	5.38	32.98	-	-	P	H
													H
													H
													H
													H
													H
													H
802.11a LF		30.97	30.69	-9.31	40	41.54	23.9	0.96	35.72	146	155	QP	V
		210.42	27.21	-16.29	43.5	45.07	15.09	2.45	35.46	-	-	P	V
		334.58	28.02	-17.98	46	40.03	19.95	3.11	35.15	-	-	P	V
		430.61	27.97	-18.03	46	36.38	22.85	3.53	34.89	-	-	P	V
		746.83	35.9	-10.1	46	37.31	27.67	4.64	33.9	-	-	P	V
		931.13	33.73	-12.27	46	31.95	29.44	5.19	33.23	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												



Note symbol

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



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

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

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 :	Bill Chang, JC Liang and Nick Yu	Temperature :	18~20°C
		Relative Humidity :	65~68%

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

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
17+18	Horizontal	Fundamental
Peak	<p>Site Condition : 03CH20-HY : PEAK_BE(B4)_16-24 3m 9120D_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SW1:Auto</p>	<p>Site Condition : 03CH20-HY : PEAK(UN1) 3m 9120D_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SW1:Auto</p>



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	<p>Site : 03CH20-HY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH20-HY Condition : PEAK(UN1) 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	<p>Site : 03CH20-HY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



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



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
17+18	Horizontal	Fundamental
Peak	<p>Site : 03CH20-1FY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH20-1FY Condition : PEAK(UNIT) 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
17+18	Vertical	Fundamental
Peak	<p>Site : 03CH20-1FY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH20-1FY Condition : PEAK(UN1) 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



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

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
17+18	Horizontal	Fundamental
Peak	<p>Site : 03CH20-14V Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH20-14V Condition : PEAK(UNIT)_1 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
17+18	Vertical	Fundamental
Peak	<p>Site : 03CH20-1FY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH20-1FY Condition : PEAK(UNIT) 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>

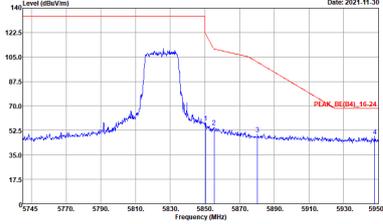
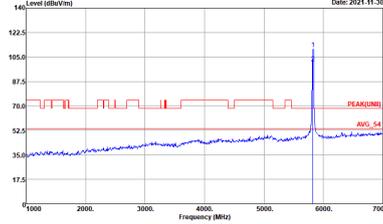


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
17+18	Horizontal	Fundamental
Peak	<p>Site : 03CH20-HY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH20-HY Condition : PEAK(UNL) 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	<p>Site : 03CH20-HY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank

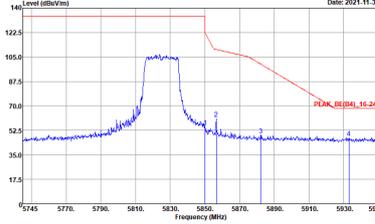
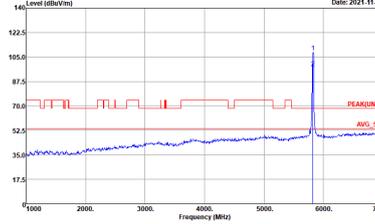


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
17+18	Vertical	Fundamental
Peak		
Peak		Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
17+18	Horizontal	Fundamental
Peak	 <p>Site : 03CH00-11Y Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH00-11Y Condition : PEAK(UNIT) 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
17+18	Vertical	Fundamental
Peak	 <p>Site : 03CH00-11V Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH00-11V Condition : PEAK(UNIT) 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



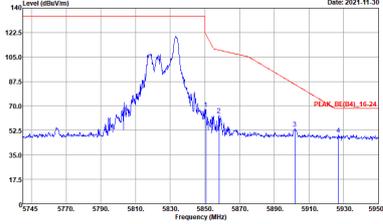
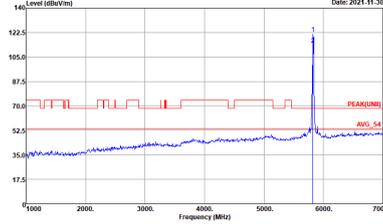
Band 4 5725~5850MHz
WIFI 802.11ax HE20 Partial 26 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/0 CH149 5745MHz	
17+18	Horizontal	Fundamental
Peak	<p>Site : 03CH03-11V Condition : PEAK_BE(B4)_16_24 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH03-11V Condition : PEAK(UN1)_3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>

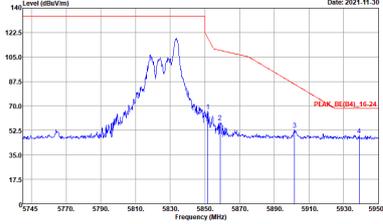
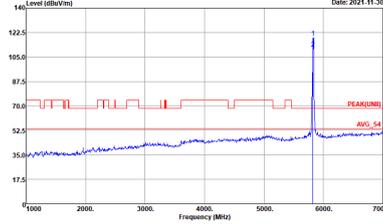


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/0 CH149 5745MHz	
17+18	Vertical	Fundamental
Peak	<p>Site : 03CH00-11V Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH00-11V Condition : PEAK(UNIT) 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



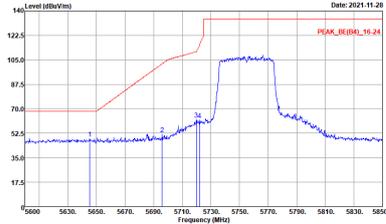
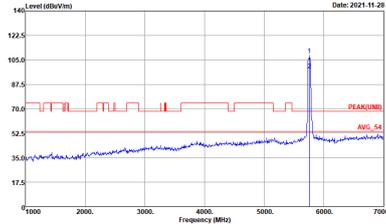
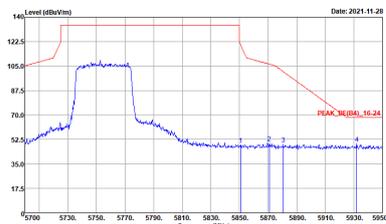
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/8 CH165 5825MHz	
17+18	Horizontal	Fundamental
Peak	 <p>Site : 03CH00-11Y Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH00-11Y Condition : PEAK(UNIT) 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/8 CH165 5825MHz	
17+18	Vertical	Fundamental
Peak	 <p>Site : 03CH03-11Y Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH03-11Y Condition : PEAK(UNIT) 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



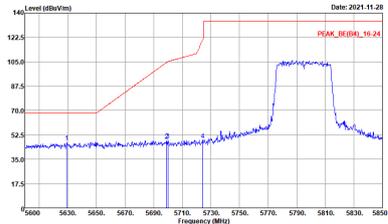
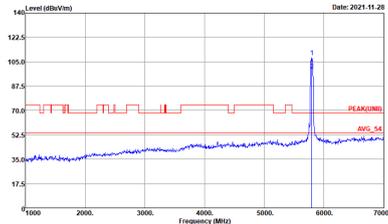
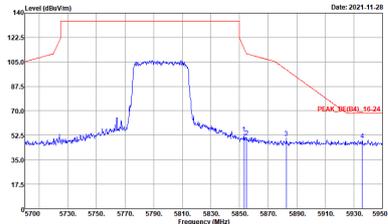
Band 4 5725~5850MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
17+18	Horizontal	Fundamental
Peak	 <p>Site : 03CH20-HY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 HORIZONTAL : RBW:3000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH20-HY Condition : PEAK(UNT1) 3m 91200_02294_1110622 HORIZONTAL : RBW:3000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	 <p>Site : 03CH20-HY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 HORIZONTAL : RBW:3000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
17+18	Vertical	Fundamental
Peak	<p>Site : 03CH20-1HY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH20-1HY Condition : PEAK(UNL) 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	<p>Site : 03CH20-1HY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full HT40 CH159 5795MHz	
17+18	Horizontal	Fundamental
Peak	 <p>Site : 03CH20-HY Condition : PEAK_BE(B4)_16.24 3m 91200_02294_1110622 HORIZONTAL : RBW:3000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH20-HY Condition : PEAK(UNL) 3m 91200_02294_1110622 HORIZONTAL : RBW:3000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	 <p>Site : 03CH20-HY Condition : PEAK_BE(B4)_16.24 3m 91200_02294_1110622 HORIZONTAL Detector : Peak Project : IN0901 Setting : 18</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
17+18	Vertical	Fundamental
Peak		
Peak		Left blank



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

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
17+18	Horizontal	Fundamental
Peak	<p>Site : 03CH20-HY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 HORIZONTAL : RBW:3000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH20-HY Condition : PEAK(UN1) 3m 91200_02294_1110622 HORIZONTAL : RBW:3000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	<p>Site : 03CH20-HY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 HORIZONTAL : RBW:3000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
17+18	Vertical	Fundamental
Peak	<p>Site : 03CH20-14Y Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH20-14Y Condition : PEAK(UNIT) 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	<p>Site : 03CH20-14Y Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



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

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH20-14Y Condition : PEAK(UN11) 3m 91200_02294_1110622 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH20-14Y Condition : PEAK(UN11) 3m 91200_02294_1110622 VERTICAL Detector : Peak</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH20-1FY Condition : PEAK(UNII) 3m 91200_02294_1110622 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH20-1FY Condition : PEAK(UNII) 3m 91200_02294_1110622 VERTICAL Detector : Peak</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH20-1FY Condition : PEAK(UNII) 3m 91200_02294_1110622 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH20-1FY Condition : PEAK(UNII) 3m 91200_02294_1110622 VERTICAL Detector : Peak</p>



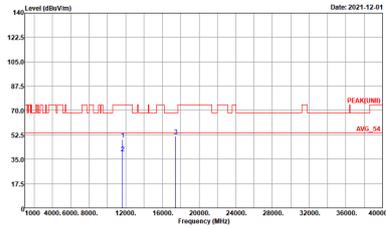
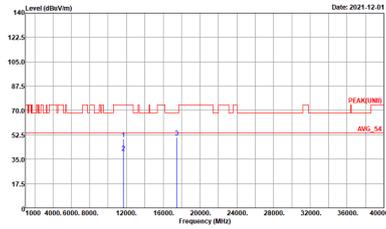
Band 4 5725~5850MHz
WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH20-14Y Condition : PEAK(UN11) 3m 91200_02294_1110622 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH20-14Y Condition : PEAK(UN11) 3m 91200_02294_1110622 VERTICAL Detector : Peak</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH20-1FY Condition : PEAK(UNII) 3m 91200_02294_1110622 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH20-1FY Condition : PEAK(UNII) 3m 91200_02294_1110622 VERTICAL Detector : Peak</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
17+18	Horizontal	Vertical
Peak Avg.	 <p>Site : 03CH20-1FY Condition : PEAK(UNII) 3m 91200_02294_1110622 HORIZONTAL Detector : Peak</p>	 <p>Site : 03CH20-1FY Condition : PEAK(UNII) 3m 91200_02294_1110622 VERTICAL Detector : Peak</p>



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

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH20-14Y Condition : PEAK(UN11) 3m 91200_02294_1110622 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH20-14Y Condition : PEAK(UN11) 3m 91200_02294_1110622 VERTICAL Detector : Peak</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH20-1FY Condition : PEAK(UNII) 3m 91200_02294_1110622 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH20-1FY Condition : PEAK(UNII) 3m 91200_02294_1110622 VERTICAL Detector : Peak</p>



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

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH20-14Y Condition : PEAK(UN11) 3m 91200_02294_1110622 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH20-14Y Condition : PEAK(UN11) 3m 91200_02294_1110622 VERTICAL Detector : Peak</p>



Emission below 1GHz
5GHz WIFI 802.11a (LF @ 3m)

WIFI	5GHz WIFI	
ANT	802.11a LF	
17+18	Horizontal	Vertical
QP / Peak	<p>Site : 03CH03-11Y Condition : QP 3m LF_55606&08_1101017 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH03-11Y Condition : QP 3m LF_55606&08_1101017 VERTICAL Detector : Peak</p>



<EUT with WPC Charging Mode>

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

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
17+18	Horizontal	Fundamental
Peak	<p>Site : 03CH20-HY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH20-HY Condition : PEAK(UNII) 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Peak	<p>Site : 03CH20-HY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
17+18	Vertical	Fundamental
Peak	<p>Site : 03CH20-HY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	<p>Site : 03CH20-HY Condition : PEAK(UNII) 3m 91200_02294_1110622 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Peak	<p>Site : 03CH20-HY Condition : PEAK_BE(B4)_16-24 3m 91200_02294_1110622 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	Left blank



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

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
17+18	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH20-HY Condition : PEAK(UMI) 3m 91200_02294_1110622 HORIZONTAL Detector : Peak</p>	<p>Site : 03CH20-HY Condition : PEAK(UMI) 3m 91200_02294_1110622 VERTICAL Detector : Peak</p>



Emission below 1GHz
5GHz WIFI 802.11a (LF @ 3m)

WIFI	5GHz WIFI	
ANT	802.11a LF	
17+18	Horizontal	Vertical
QP / Peak	<p>Site : 03CH20-14F Condition : QP 3m LF_55606408_1101017 HORIZONTAL : RBW:120.000KHz VBW:300.000KHz SWT:0.500sec</p>	<p>Site : 03CH20-14F Condition : QP 3m LF_55606408_1101017 VERTICAL : RBW:120.000KHz VBW:300.000KHz SWT:0.500sec</p>



Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
17+18	802.11a	99.19	-	-	10Hz
17+18	5GHz 802.11ax HE20 Full RU	99.52	-	-	10Hz
17+18	5GHz 802.11ax HE40 Full RU	99.15	-	-	10Hz
17+18	5GHz 802.11ax HE80 Full RU	99.12	-	-	10Hz

MIMO <Ant. 17+18>

