



FCC RADIO TEST REPORT

FCC ID : MSQAI2202
Equipment : ASUS Phone(Mobile Phone)
Brand Name : ASUS
Model Name : ASUS_AI2202
Marketing Name : ZENFONE 9
Applicant : ASUSTeK COMPUTER INC.
1F., No. 15, Lide Rd., Beitou Dist.,
Taipei City 112, Taiwan
Manufacturer : ASUSTeK COMPUTER INC.
1F., No. 15, Lide Rd., Beitou Dist.,
Taipei City 112, Taiwan
Standard : FCC Part 15 Subpart E §15.407

The product was received on May 03, 2022 and testing was performed from May 28, 2022 to Jul. 13, 2022. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

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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History of this test report

Report No.	Version	Description	Issue Date
FR210409E	01	Initial issue of report	Jul. 21, 2022



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	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	2.16 dB under the limit at 5149.260 MHz
3.5	15.207	AC Conducted Emission	Pass	15.91 dB under the limit at 9.476 MHz
3.6	15.203 15.407(a)	Antenna Requirement	Pass	-

Declaration of Conformity:

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

Comments and Explanations:

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

Reviewed by: Avis Chuang

Report Producer: Michelle Chen



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/ac/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, Wi-Fi 6GHz 802.11a/n/ac/ax, NFC, and GNSS.

Product Feature	
Antenna Type	WWAN: PIFA Antenna WLAN <Ant. 7>: PIFA Antenna <Ant. 8>: PIFA Antenna Bluetooth <Ant. 7>: PIFA Antenna <Ant. 8>: PIFA Antenna GPS / Glonass / BDS / Galileo / SBAS: PIFA Antenna NFC: Loop Antenna

Antenna information		
5150 MHz ~ 5250 MHz	Peak Gain (dBi)	Ant. 7: -2.02 Ant. 8: -3.98
5250 MHz ~ 5350 MHz	Peak Gain (dBi)	Ant. 7: -2.02 Ant. 8: -3.98
5470 MHz ~ 5725 MHz	Peak Gain (dBi)	Ant. 7: -0.78 Ant. 8: -1.70

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

1.2 Modification of EUT

No modifications made to the EUT during the testing.



1.3 Testing Location

Test Site	Sporton International Inc. 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.
3. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and find Y 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)
5150-5250 MHz Band 1 (U-NII-1)	36	5180	44	5220
	38*	5190	46*	5230
	40	5200	48	5240
	42#	5210		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz Band 2 (U-NII-2A)	52	5260	60	5300
	54*	5270	62*	5310
	56	5280	64	5320
	58#	5290		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470-5725 MHz Band 3 (U-NII-2C)	100	5500	112	5560
	102*	5510	116	5580
	104	5520	132	5660
	106#	5530	134*	5670
	108	5540	136	5680
	110*	5550	140	5700



Frequency Band	Channel	Freq. (MHz)
5150-5350 MHz	50@	5250
5470-5725 MHz	114@	5570

Note:

1. The above Frequency and Channel with "*" are 802.11n HT40 and 802.11ac VHT40 and 802.11ax HE40.
2. The above Frequency and Channel with "#" are 802.11ac VHT80 and 802.11ax HE80.
3. The above Frequency and Channel with "@" are 802.11ac VHT160 and 802.11ax HE160.



2.2 Test Mode

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

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

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

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

MIMO Mode

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20 (Covered by HE20)	MCS0
802.11n HT40 (Covered by HE40)	MCS0
802.11ac VHT20 (Covered by HE20)	MCS0
802.11ac VHT40 (Covered by HE40)	MCS0
802.11ac VHT80 (Covered by HE80)	MCS0
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0
802.11ax HE160	MCS0

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

Test Cases	
AC Conducted Emission	Mode 1 : GSM850 Idle + Bluetooth Link + WLAN (5GHz) Link + Camera (Front) + NFC On + USB Cable 1 (Charging from Adapter 1) + SIM 1
Remark: For Radiated Test Cases, the tests were performed with Adapter 1 and USB Cable 1.	



Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ax HE20	802.11ax HE20	802.11ax HE20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

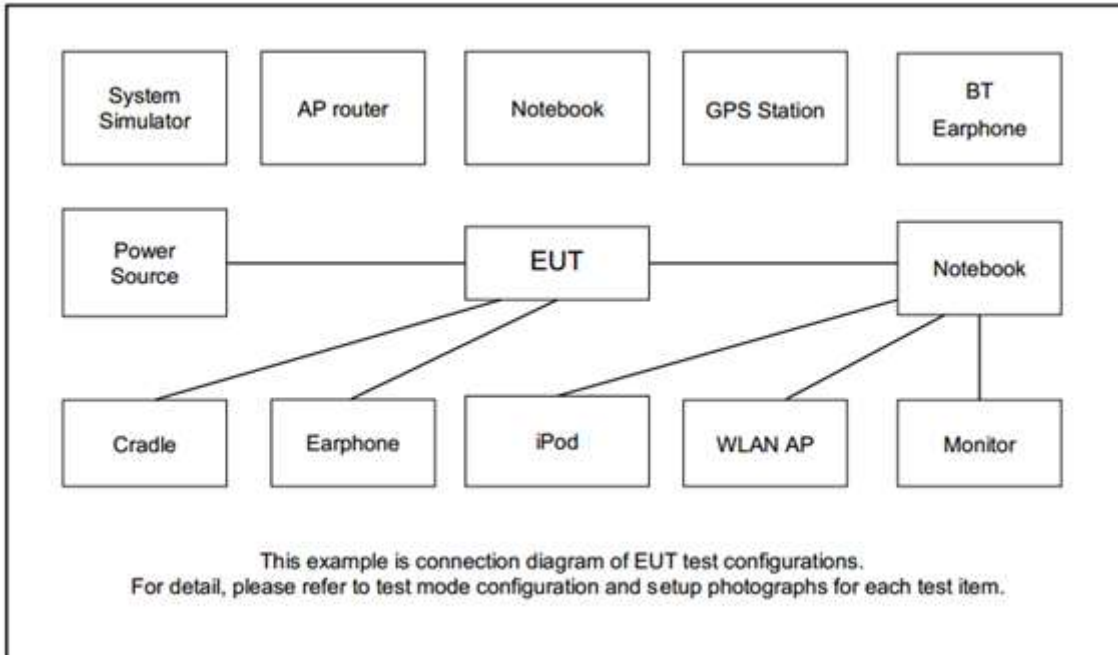
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ax HE40	802.11ax HE40	802.11ax HE40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ax HE80	802.11ax HE80	802.11ax HE80
L	Low	-	-	106
M	Middle	42	58	-
H	High	-	-	-

BW160	5150-5350 MHz		
	802.11ax HE160		
Ch. #	50		

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.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	Bluetooth Earphone	Sony Ericsson	MW600	PY700A2029	N/A	N/A
3.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8m
4.	Notebook	Dell	Latitude 3400	FCC DoC	N/A	AC I/P : Unshielded, 1.2m DC O/P : Shielded, 1.8m
5.	Earphone	ASUS	EA010B	N/A	N/A	N/A



2.5 EUT Operation Test Setup

The RF test items, utility “QRCT 4.0.00193.0” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

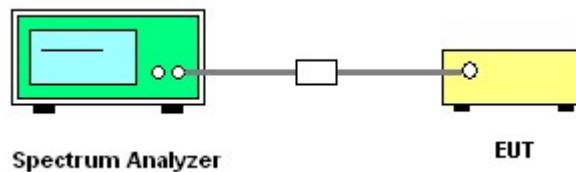
3.1.2 Measuring Instruments

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
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) $\geq 3 * RBW$.
8. Measure and record the results in the test report.

3.1.4 Test Setup



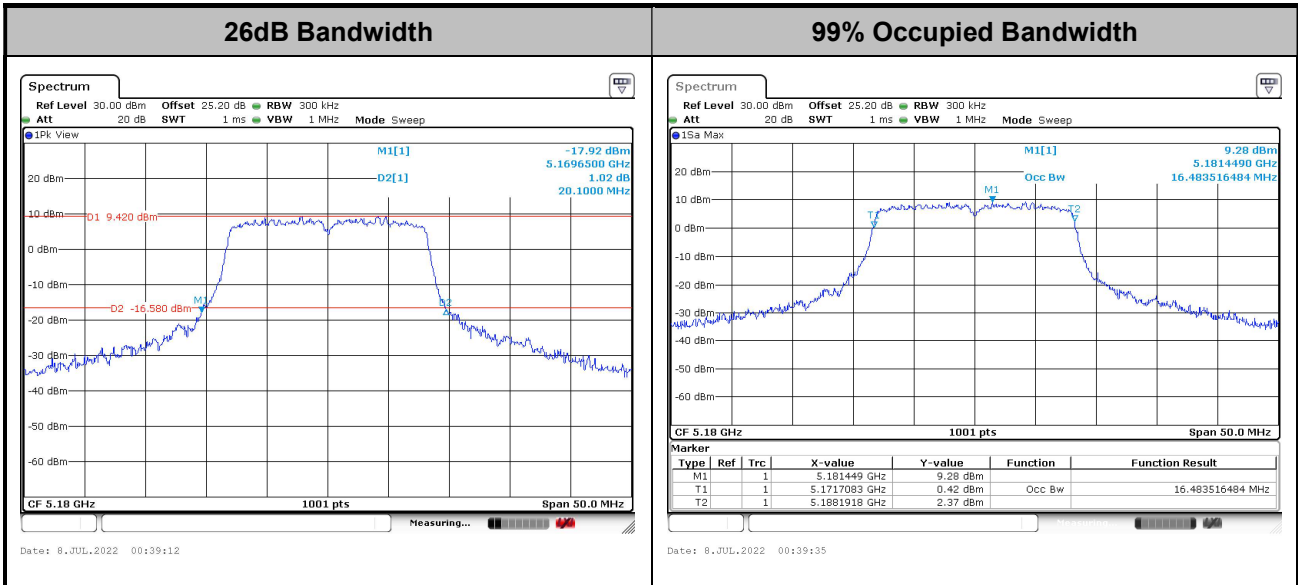
3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.



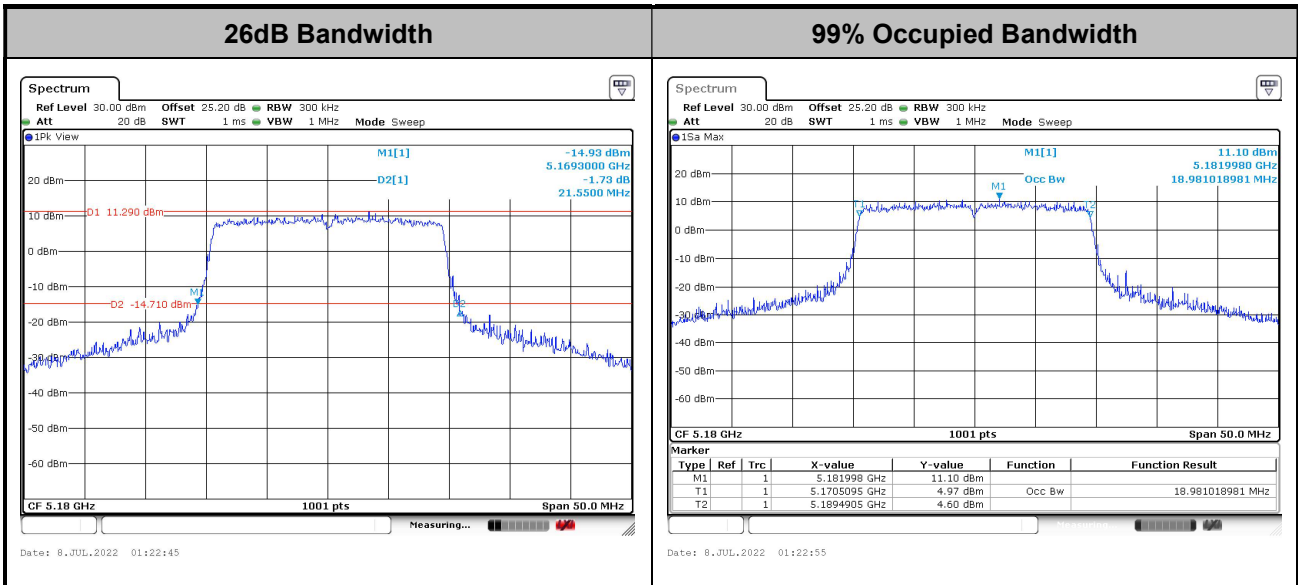
MIMO <Ant. 7+8>

<802.11a>



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

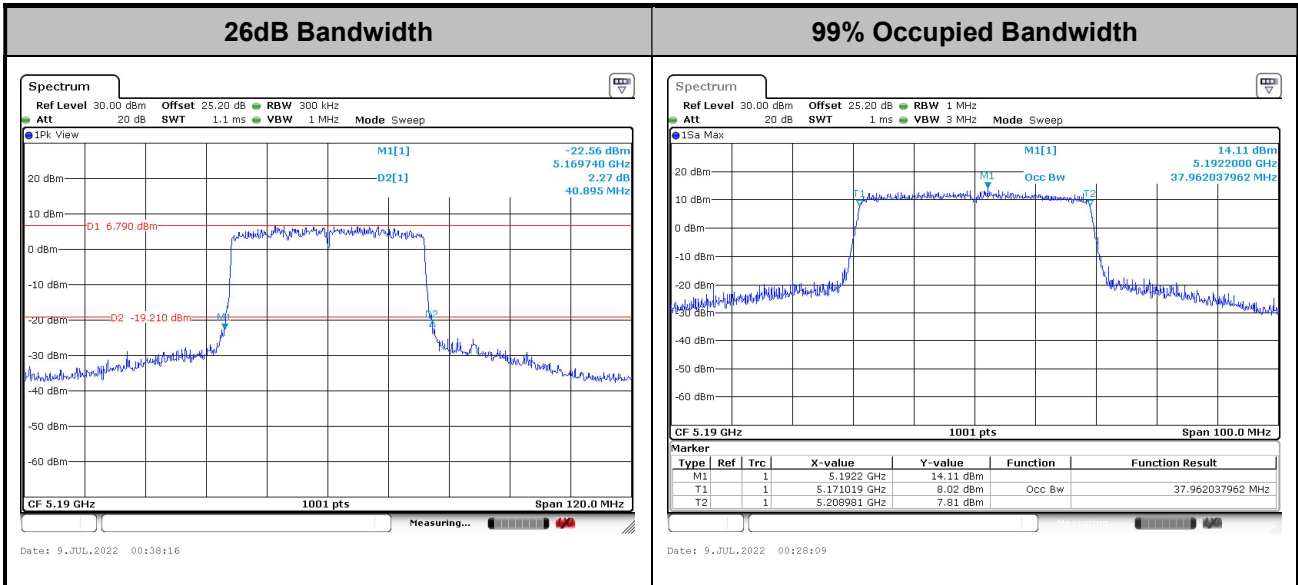
<802.11ax HE20>



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

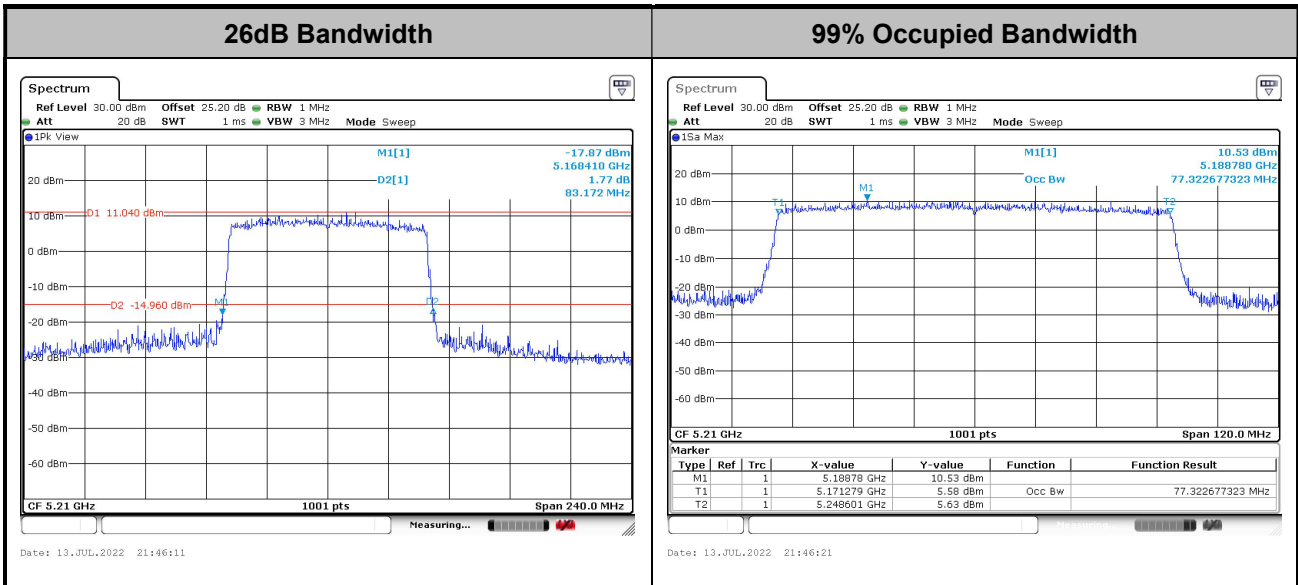


<802.11ax HE40>



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

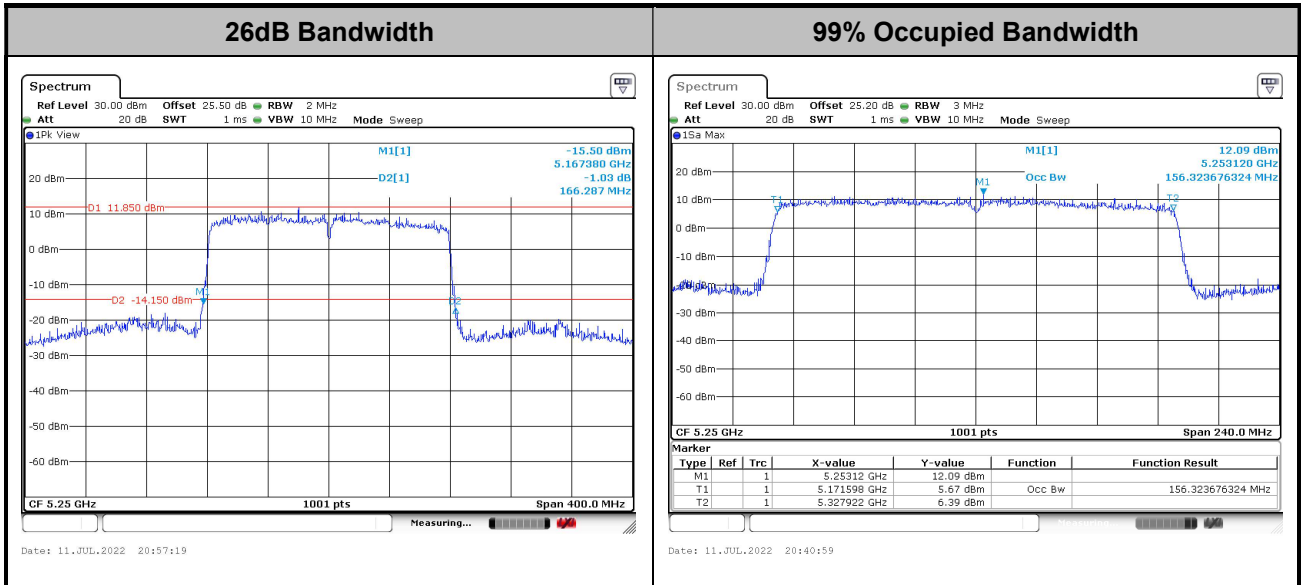
<802.11ax HE80>



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



<802.11ax HE160>



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

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

■ For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

For the 5.25–5.725 GHz bands:

■ The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

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.

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

3.2.2 Measuring Instruments

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

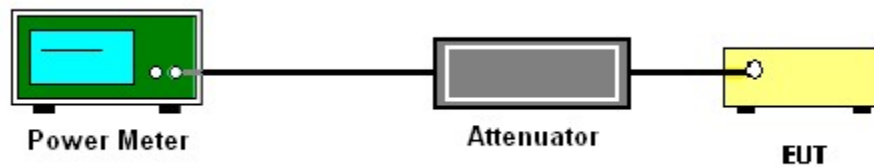
3.2.3 Test Procedures

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

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz band. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1.0 MHz band.

For the 5.25–5.725 GHz bands:

The maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz 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

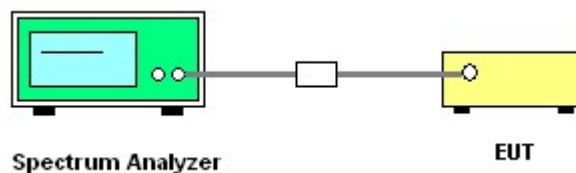
(power averaging (rms) detection with max hold):

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW \geq 3 MHz.
 - Number of points in sweep \geq 2 Span / RBW.
 - 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 (a): Measure and sum the spectra across the outputs.

The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points; the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

3.3.4 Test Setup



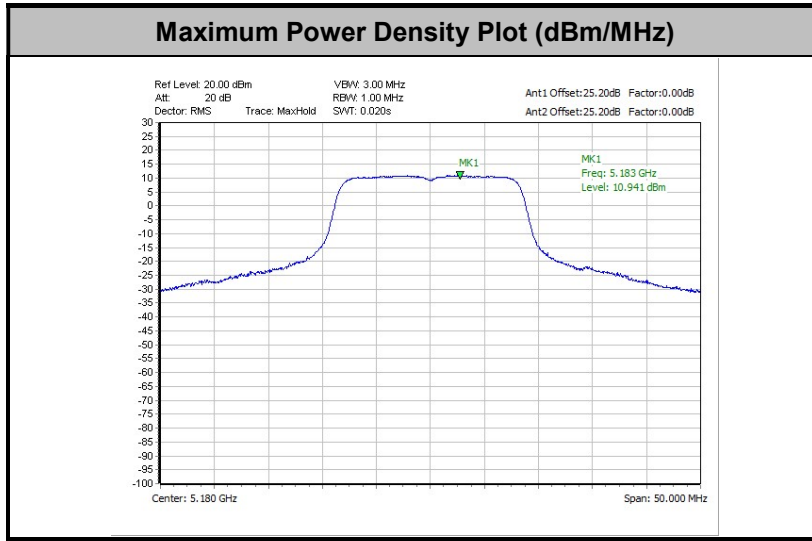
3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

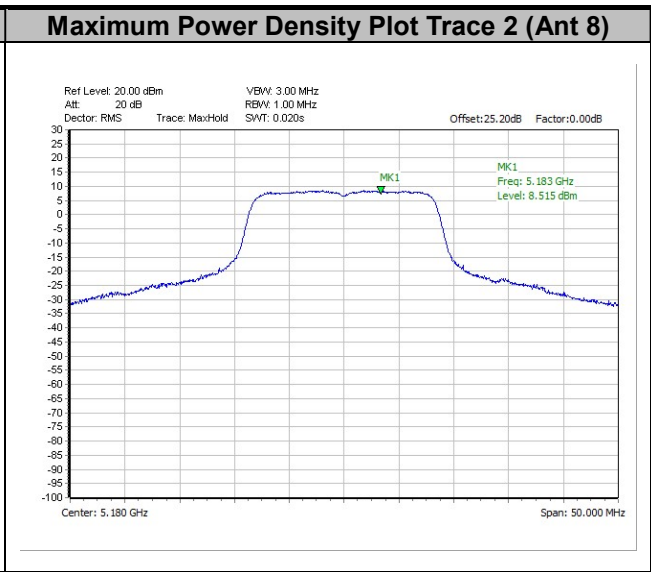
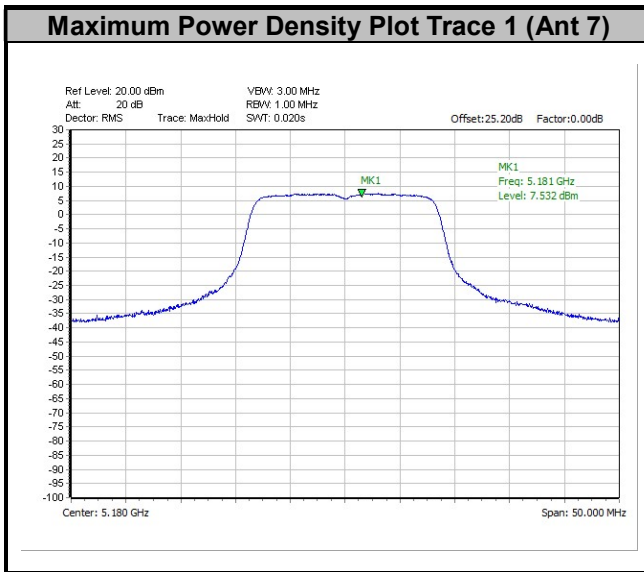


MIMO <Ant. 7+8>

<802.11a>

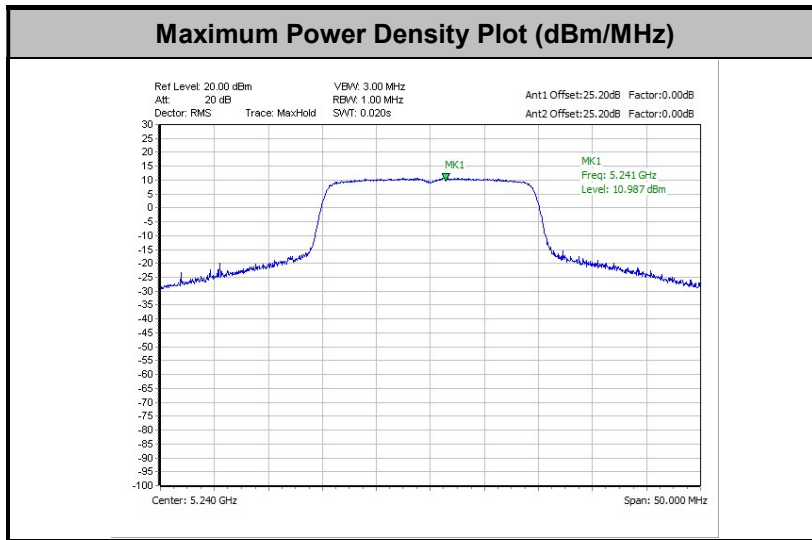


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

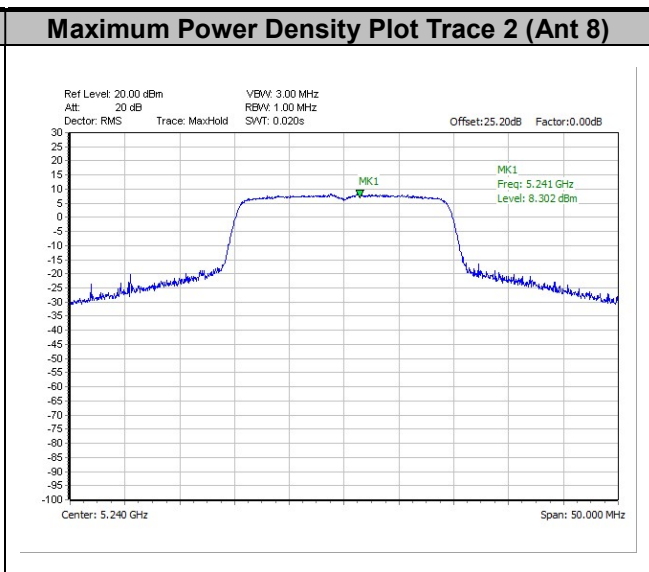
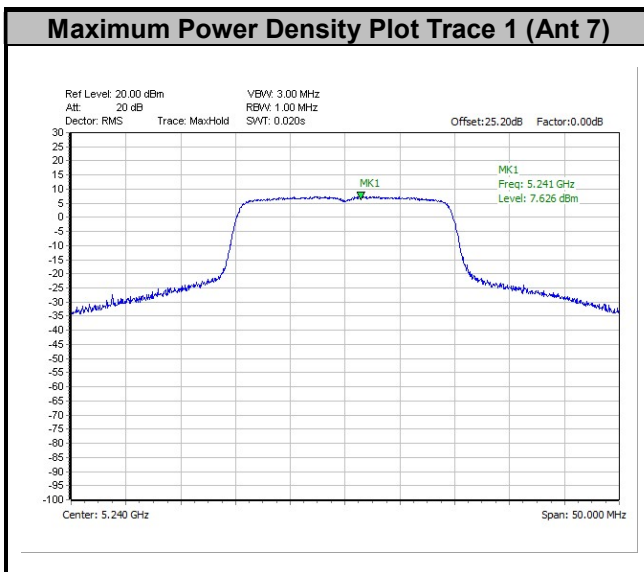




<802.11ax HE20>

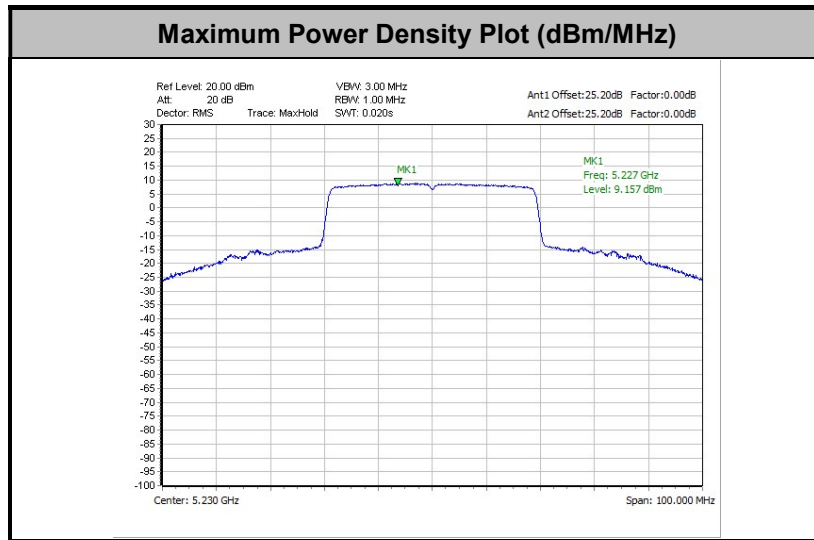


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

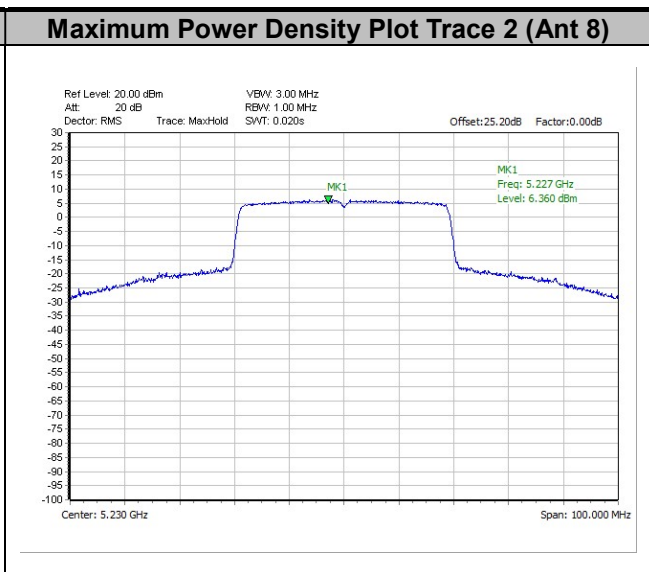
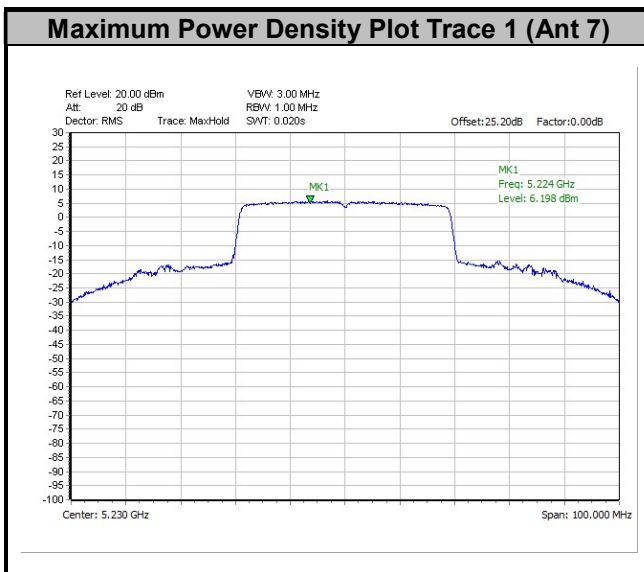




<802.11ax HE40>

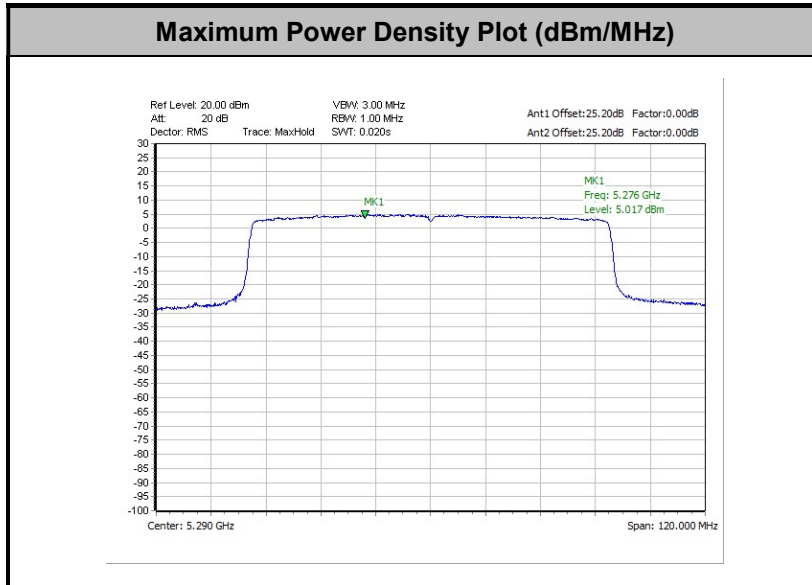


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

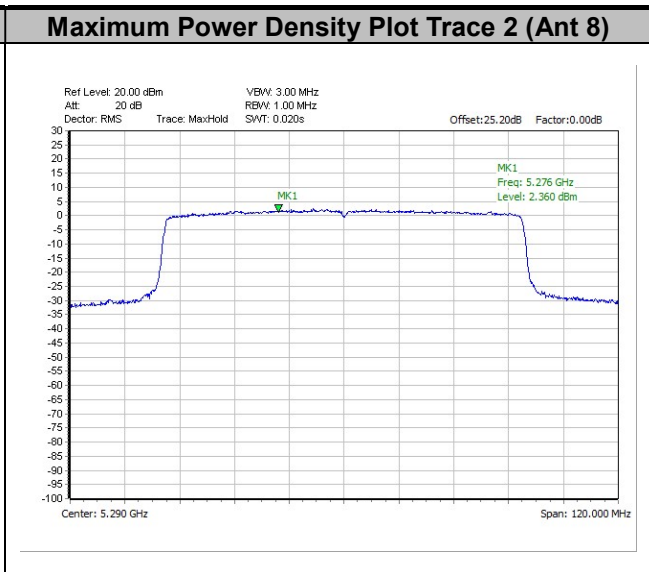
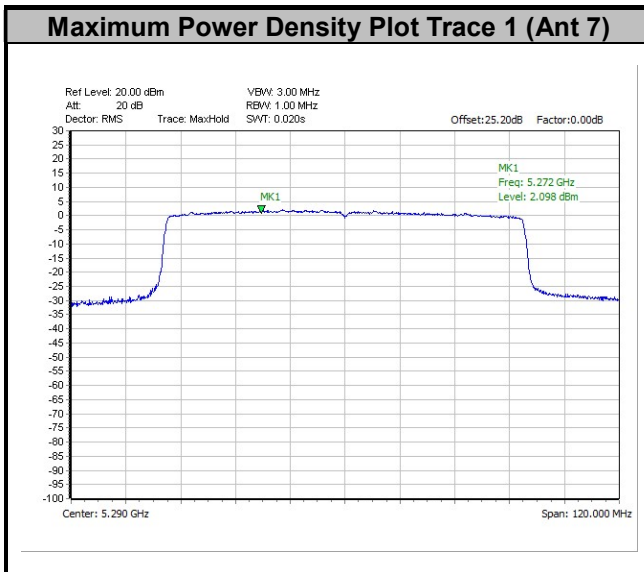




<802.11ax HE80>

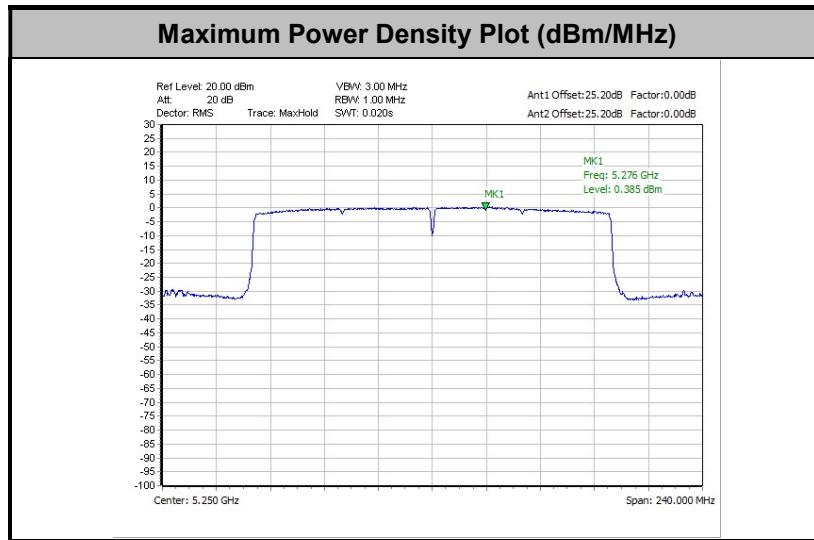


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

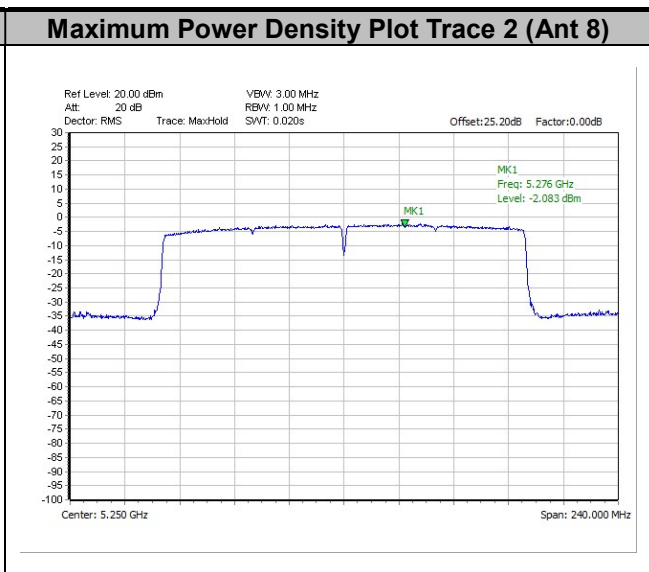
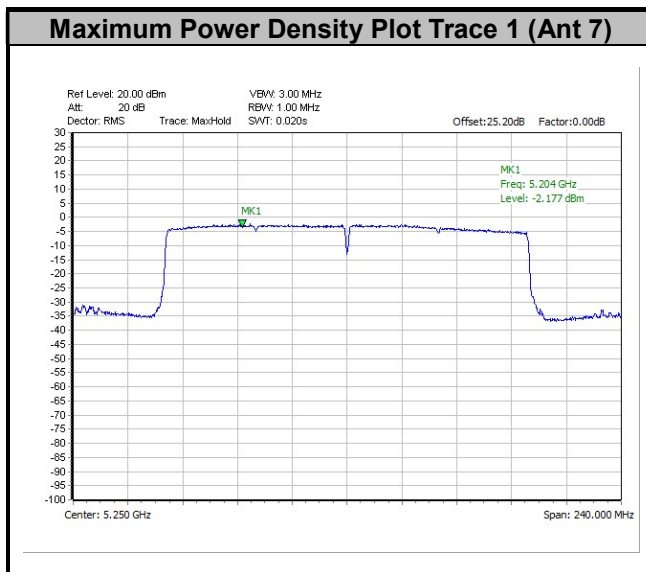




<802.11ax HE160>



Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.





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 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

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

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

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

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



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

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

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

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

3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 1000 MHz

- RBW = 120 kHz
- VBW = 300 kHz
- Detector = Peak
- Trace mode = max hold

(2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz

- RBW = 1 MHz
- VBW ≥ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

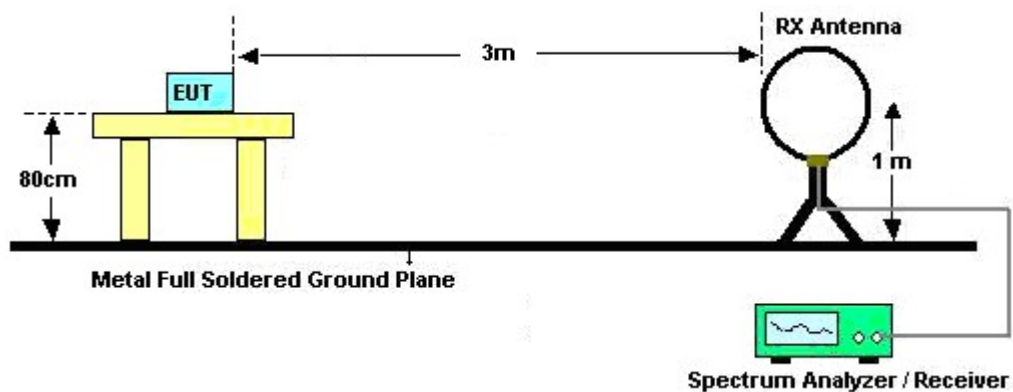
(3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz

- 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.

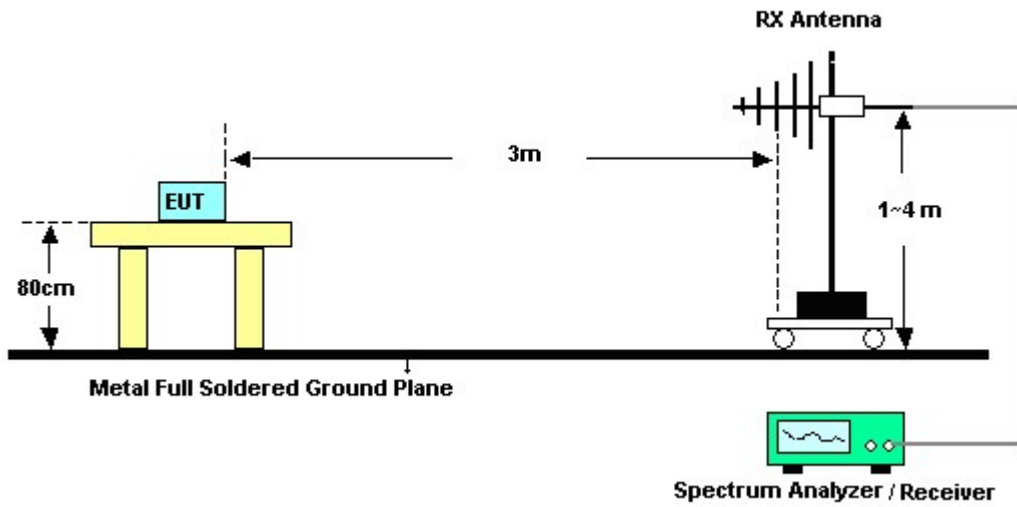
2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna 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

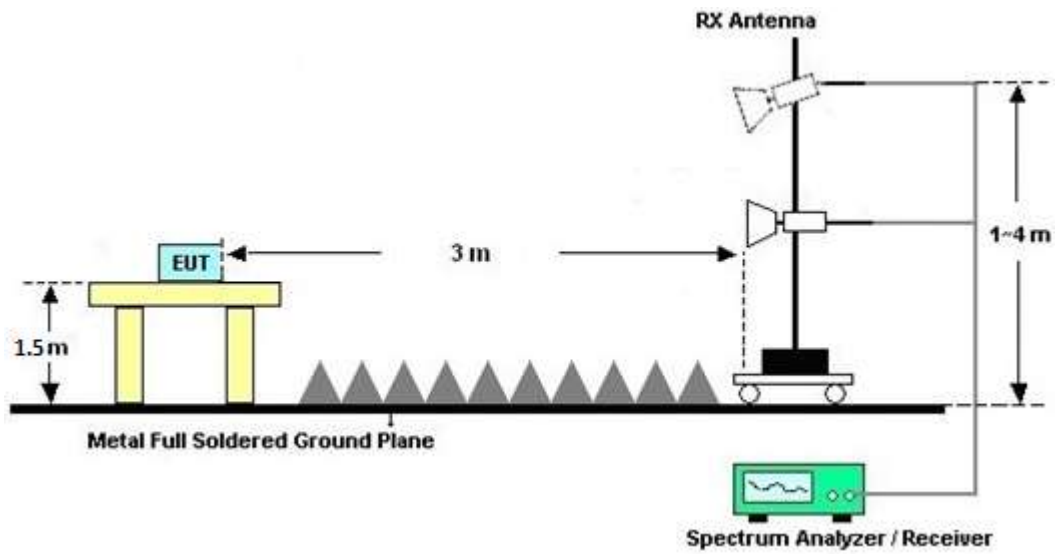
For radiated emissions below 30MHz



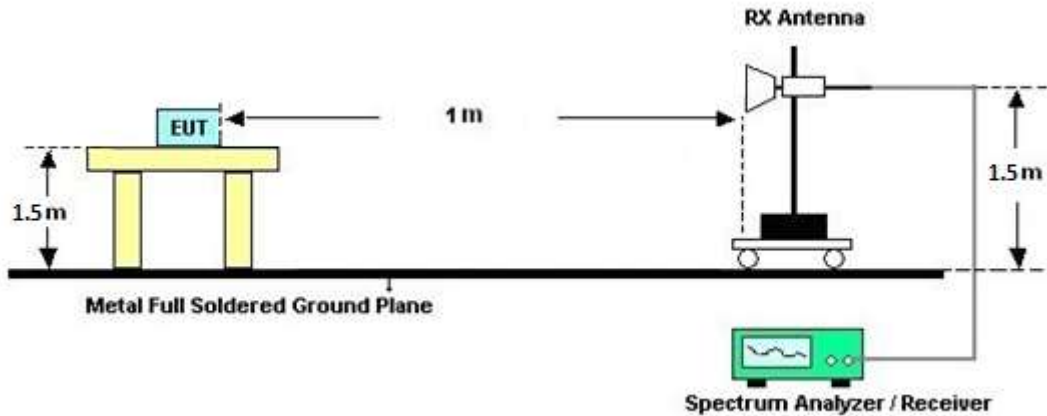
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



3.4.5 Test Results of Radiated Spurious 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 Spurious at 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 Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix C and D.



3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

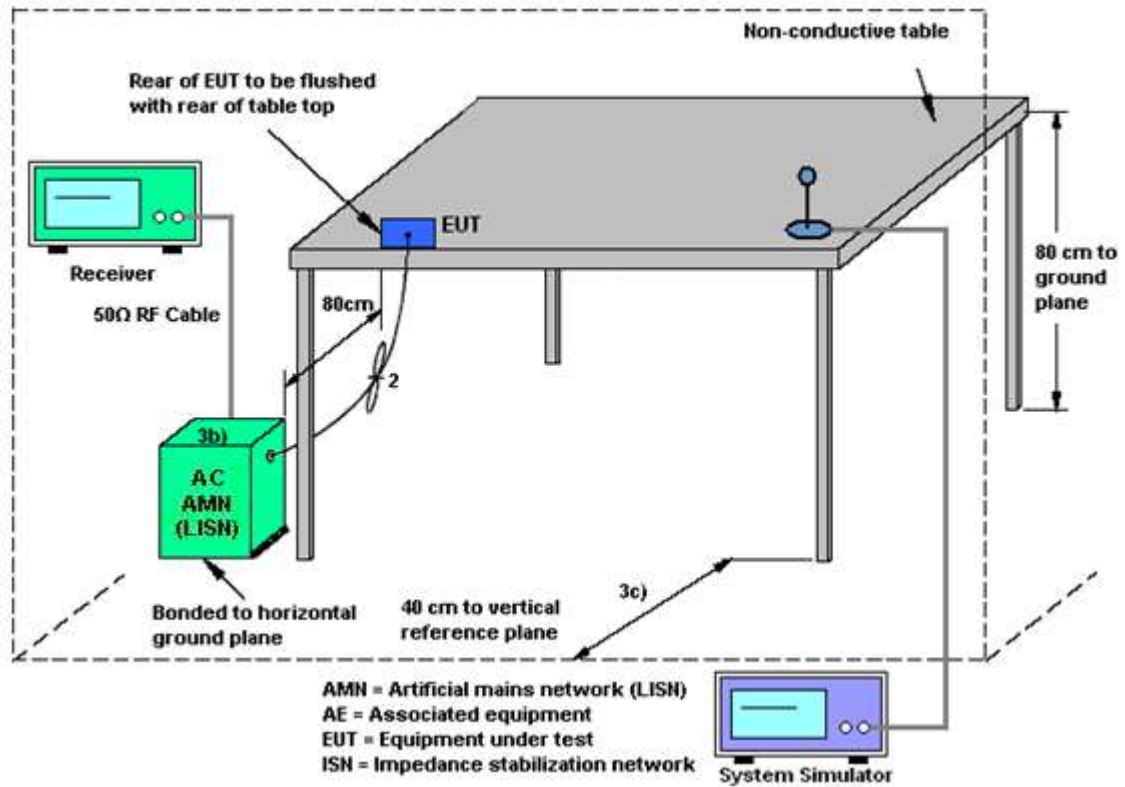
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.6 Antenna Requirements

3.6.1 Standard Applicable

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

3.6.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.6.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For power measurements on IEEE 802.11 devices,

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

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

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

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

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

where

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

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

N_{ANT} = the total number of antennas

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

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

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

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

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

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

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



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

<CDD Modes>						
			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant. 7	Ant. 8	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
Band I	-2.02	-3.98	-2.02	0.07	0.00	0.00
Band II	-2.02	-3.98	-2.02	0.07	0.00	0.00
Band III	-0.78	-1.70	-0.78	1.78	0.00	0.00

Power limit reduction = Composite gain – 6dBi, (min = 0)

PSD limit reduction = Composite gain + PSD Array gain – 6dBi, (min = 0)

Calculation example:

The DG for PSD is derived from formula is

$$10 \times \log \left\{ \left[10^{(-2.02 \text{ dBi} / 20)} + 10^{(-3.98 \text{ dBi} / 20)} \right]^2 / 2 \right\}$$

= 0.07 dBi



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECEPEL	DTM-303A	TP201996	N/A	Nov. 16, 2021	May 28, 2022~ Jul.13, 2022	Nov. 15, 2022	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO 12 (NO:113)	10MHz~6GHz	Dec. 16, 2021	May 28, 2022~ Jul.13, 2022	Dec. 15, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	May 28, 2022~ Jul.13, 2022	Aug. 29, 2022	Conducted (TH05-HY)
Switch Control Mainframe	E-IUSTRUMENT	ETF-1405-0	EC1900067 (BOX7)	N/A	Aug. 12, 2021	May 28, 2022~ Jul.13, 2022	Aug. 11, 2022	Conducted (TH05-HY)
EMI Test Receiver	Keysight	N9010B	MY60241055	10Hz~44GHz	Jul. 12, 2021	Jun. 23, 2022~ Jul. 02, 2022	Jul. 11, 2022	Radiation (03CH20-HY)
Preamplifier	COM-POWER	PAM-103	18020201	1MHz-1000MHz	Jan. 03, 2022	Jun. 23, 2022~ Jul. 02, 2022	Jan. 02, 2023	Radiation (03CH20-HY)
Amplifier	EMCI	EMC118A45S E	980792	N/A	Nov. 15, 2021	Jun. 23, 2022~ Jul. 02, 2022	Nov. 14, 2022	Radiation (03CH20-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 24, 2021	Jun. 23, 2022~ Jul. 02, 2022	Dec. 23, 2022	Radiation (03CH20-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-02360	1GHz~18GHz	Nov. 02, 2021	Jun. 23, 2022~ Jul. 02, 2022	Nov. 01, 2022	Radiation (03CH20-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00994	18GHz-40GHz	Nov. 04, 2021	Jun. 23, 2022~ Jul. 02, 2022	Nov. 03, 2022	Radiation (03CH20-HY)
Hygrometer	TECEPEL	DTM-303B	TP200728	N/A	Mar. 22, 2022	Jun. 23, 2022~ Jul. 02, 2022	Mar. 21, 2023	Radiation (03CH20-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	519229/2,804 015/2,804027 /2	N/A	Jan. 19, 2022	Jun. 23, 2022~ Jul. 02, 2022	Jan. 18, 2023	Radiation (03CH20-HY)
Software	Audix	E3 6.2009-8-24	RK-002156	N/A	N/A	Jun. 23, 2022~ Jul. 02, 2022	N/A	Radiation (03CH20-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jun. 23, 2022~ Jul. 02, 2022	N/A	Radiation (03CH20-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jun. 23, 2022~ Jul. 02, 2022	N/A	Radiation (03CH20-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Jun. 23, 2022~ Jul. 02, 2022	N/A	Radiation (03CH20-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	May 29, 2022	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2021	May 29, 2022	Nov. 30, 2022	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2021	May 29, 2022	Nov. 16, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 03, 2021	May 29, 2022	Dec. 02, 2022	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	May 29, 2022	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Jul. 28, 2021	May 29, 2022	Jul. 27, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 30, 2021	May 29, 2022	Dec. 29, 2022	Conduction (CO05-HY)



5 Uncertainty of Evaluation

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

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.9 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:	Ching Chen/Junyu Jhou	Temperature:	21~25	°C
Test Date:	2022/05/28-2022/07/13	Relative Humidity:	51~54	%

TEST RESULTS DATA
26dB and 99% OBW

U-NII-1 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		Note
					Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	
11a	6Mbps	2	36	5180	16.48	16.48	20.10	21.90	-	-	22.17	22.17	
11a	6Mbps	2	44	5220	16.48	16.48	20.15	20.50	-	-	22.17	22.17	
11a	6Mbps	2	48	5240	16.48	16.48	20.35	20.60	-	-	22.17	22.17	

TEST RESULTS DATA
Average Power Table

FCC U-NII-1 MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 7	Ant 8	SUM	Ant 7	Ant 8	Ant 7	Ant 8	
11a	6Mbps	2	36	5180	17.70	18.50	21.13	24.00		-2.02		Pass
11a	6Mbps	2	44	5220	18.10	18.60	21.37	24.00		-2.02		Pass
11a	6Mbps	2	48	5240	18.20	18.20	21.21	24.00		-2.02		Pass
HT20	MCS0	2	36	5180	18.40	19.00	21.72	24.00		-2.02		Pass
HT20	MCS0	2	44	5220	19.50	19.50	22.51	24.00		-2.02		Pass
HT20	MCS0	2	48	5240	19.70	19.50	22.61	24.00		-2.02		Pass
HT40	MCS0	2	38	5190	17.80	18.20	21.01	24.00		-2.02		Pass
HT40	MCS0	2	46	5230	19.60	19.50	22.56	24.00		-2.02		Pass
VHT20	MCS0	2	36	5180	18.40	19.00	21.72	24.00		-2.02		Pass
VHT20	MCS0	2	44	5220	19.50	19.50	22.51	24.00		-2.02		Pass
VHT20	MCS0	2	48	5240	19.70	19.50	22.61	24.00		-2.02		Pass
VHT40	MCS0	2	38	5190	17.80	18.20	21.01	24.00		-2.02		Pass
VHT40	MCS0	2	46	5230	19.60	19.50	22.56	24.00		-2.02		Pass
VHT80	MCS0	2	42	5210	17.20	17.30	20.26	24.00		-2.02		Pass
VHT160	MCS0	2	50	5250	16.70	17.00	19.86	24.00		-2.02		Pass

TEST RESULTS DATA
Power Spectral Density

FCC U-NII-1 MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 7	Ant 8	SUM	Ant 7	Ant 8	Ant 7	Ant 8	
11a	6Mbps	2	36	5180			10.94	11.00		0.07	Pass	
11a	6Mbps	2	44	5220			10.94	11.00		0.07	Pass	
11a	6Mbps	2	48	5240			10.90	11.00		0.07	Pass	

TEST RESULTS DATA
26dB and 99% OBW

U-NII-2A MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	
11a	6Mbps	2	52	5260	16.48	16.43	20.25	20.00	23.16		29.16		23.98		
11a	6Mbps	2	60	5300	16.48	16.43	20.75	19.90	23.16		29.16		23.98		
11a	6Mbps	2	64	5320	16.53	16.38	21.05	19.25	23.14		29.14		23.84		

TEST RESULTS DATA
Average Power Table

FCC U-NII-2A MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 7	Ant 8	SUM	Ant 7	Ant 8	Ant 7	Ant 8		
11a	6Mbps	2	52	5260	18.20	18.20	21.21	23.98		-2.02	26.99	Pass	
11a	6Mbps	2	60	5300	18.30	18.40	21.36	23.98		-2.02	26.99	Pass	
11a	6Mbps	2	64	5320	18.30	18.20	21.26	23.84		-2.02	26.99	Pass	
HT20	MCS0	2	52	5260	19.50	19.50	22.51	23.98		-2.02	26.99	Pass	
HT20	MCS0	2	60	5300	19.60	19.80	22.71	23.98		-2.02	26.99	Pass	
HT20	MCS0	2	64	5320	19.00	19.10	22.06	23.98		-2.02	26.99	Pass	
HT40	MCS0	2	54	5270	19.50	19.50	22.51	23.98		-2.02	26.99	Pass	
HT40	MCS0	2	62	5310	18.40	18.20	21.31	23.98		-2.02	26.99	Pass	
VHT20	MCS0	2	52	5260	19.50	19.50	22.51	23.98		-2.02	26.99	Pass	
VHT20	MCS0	2	60	5300	19.60	19.80	22.71	23.98		-2.02	26.99	Pass	
VHT20	MCS0	2	64	5320	19.00	19.10	22.06	23.98		-2.02	26.99	Pass	
VHT40	MCS0	2	54	5270	19.50	19.50	22.51	23.98		-2.02	26.99	Pass	
VHT40	MCS0	2	62	5310	18.40	18.20	21.31	23.98		-2.02	26.99	Pass	
VHT80	MCS0	2	58	5290	18.10	18.20	21.16	23.98		-2.02	26.99	Pass	
VHT160	MCS0	2	50	5250	16.70	17.00	19.86	23.98		-2.02	26.99	Pass	

TEST RESULTS DATA
Power Spectral Density

U-NII-2A MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 7	Ant 8	SUM	Ant 7	Ant 8	Ant 7	Ant 8	
11a	6Mbps	2	52	5260			10.69	11.00	0.07		Pass	
11a	6Mbps	2	60	5300			10.55	11.00	0.07		Pass	
11a	6Mbps	2	64	5320			10.70	11.00	0.07		Pass	

TEST RESULTS DATA
26dB and 99% OBW

U-NII-2C MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8
11a	6Mbps	2	100	5500	16.48	16.38	19.85	19.35	23.14	23.14	29.14	23.87	----	----		
11a	6Mbps	2	116	5580	16.43	16.38	19.55	19.45	23.14	23.14	29.14	23.89	----	----		
11a	6Mbps	2	140	5700	16.48	16.43	19.80	19.75	23.16	23.16	29.16	23.96	----	----		

TEST RESULTS DATA
Average Power Table

FCC U-NII-2C MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 7	Ant 8	SUM	Ant 7	Ant 8	Ant 7	Ant 8		
11a	6Mbps	2	100	5500	18.70	17.60	21.20	23.87		-0.78		26.99	Pass
11a	6Mbps	2	116	5580	18.70	17.40	21.11	23.89		-0.78		26.99	Pass
11a	6Mbps	2	140	5700	18.50	18.30	21.41	23.96		-0.78		26.99	Pass
HT20	MCS0	2	100	5500	19.60	18.70	22.18	23.98		-0.78		26.99	Pass
HT20	MCS0	2	116	5580	19.90	18.90	22.44	23.98		-0.78		26.99	Pass
HT20	MCS0	2	140	5700	18.90	18.50	21.71	23.98		-0.78		26.99	Pass
HT40	MCS0	2	102	5510	19.30	18.10	21.75	23.98		-0.78		26.99	Pass
HT40	MCS0	2	110	5550	19.80	18.30	22.12	23.98		-0.78		26.99	Pass
HT40	MCS0	2	134	5670	19.60	18.50	22.10	23.98		-0.78		26.99	Pass
VHT20	MCS0	2	100	5500	19.60	18.70	22.18	23.98		-0.78		26.99	Pass
VHT20	MCS0	2	116	5580	19.90	18.90	22.44	23.98		-0.78		26.99	Pass
VHT20	MCS0	2	140	5700	18.90	18.50	21.71	23.98		-0.78		26.99	Pass
VHT40	MCS0	2	102	5510	19.30	18.10	21.75	23.98		-0.78		26.99	Pass
VHT40	MCS0	2	110	5550	19.80	18.30	22.12	23.98		-0.78		26.99	Pass
VHT40	MCS0	2	134	5670	19.60	18.50	22.10	23.98		-0.78		26.99	Pass
VHT80	MCS0	2	106	5530	18.80	17.60	21.25	23.98		-0.78		26.99	Pass

TEST RESULTS DATA
Power Spectral Density

U-NII-2C MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 7	Ant 8	SUM	Ant 7	Ant 8	Ant 7	Ant 8	
11a	6Mbps	2	100	5500			10.87	11.00	1.78		Pass	
11a	6Mbps	2	116	5580			10.60	11.00	1.78		Pass	
11a	6Mbps	2	140	5700			10.88	11.00	1.78		Pass	

TEST RESULTS DATA
26dB and 99% OBW

U-NII-1 MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		Note
						Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	
HE20	MCS0	2	36	5180	Full	18.98	19.08	21.55	22.95	-	-	22.78	-	
HE20	MCS0	2	44	5220	Full	19.03	19.03	21.85	23.80	-	-	22.79	-	
HE20	MCS0	2	48	5240	Full	18.98	19.03	22.75	25.10	-	-	22.78	-	
HE40	MCS0	2	38	5190	Full	37.96	38.06	40.90	40.49	-	-	23.01	-	
HE40	MCS0	2	46	5230	Full	38.36	38.36	65.51	62.47	-	-	23.01	-	
HE80	MCS0	2	42	5210	Full	77.32	77.20	83.17	82.93	-	-	23.01	-	
HE160	MCS0	2	50	5250	Full	156.32	156.32	166.29	165.57	-	-	23.01	-	

TEST RESULTS DATA
Average Power Table

FCC U-NII-1 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 7	Ant 8	SUM	Ant 7	Ant 8	Ant 7	Ant 8	
HE20	MCS0	2	36	5180	Full	18.00	18.50	21.27	24.00		-2.02		Pass
HE20	MCS0	2	36	5180	26/0	9.40	9.80	12.61	24.00		-2.02		Pass
HE20	MCS0	2	36	5180	52/37	12.70	13.00	15.86	24.00		-2.02		Pass
HE20	MCS0	2	36	5180	106/53	14.90	15.40	18.17	24.00		-2.02		Pass
HE20	MCS0	2	36	5180	242/61	17.90	18.20	21.06	24.00		-2.02		Pass
HE20	MCS0	2	44	5220	Full	18.10	18.10	21.11	24.00		-2.02		Pass
HE20	MCS0	2	44	5220	26/4	9.60	10.10	12.87	24.00		-2.02		Pass
HE20	MCS0	2	44	5220	52/39	11.50	12.20	14.87	24.00		-2.02		Pass
HE20	MCS0	2	44	5220	106/53	14.80	15.10	17.96	24.00		-2.02		Pass
HE20	MCS0	2	44	5220	242/61	17.80	18.00	20.91	24.00		-2.02		Pass
HE20	MCS0	2	48	5240	Full	17.80	18.20	21.01	24.00		-2.02		Pass
HE20	MCS0	2	48	5240	26/8	9.40	9.80	12.61	24.00		-2.02		Pass
HE20	MCS0	2	48	5240	52/40	12.50	12.70	15.61	24.00		-2.02		Pass
HE20	MCS0	2	48	5240	106/54	15.50	15.80	18.66	24.00		-2.02		Pass
HE20	MCS0	2	48	5240	242/61	17.60	17.90	20.76	24.00		-2.02		Pass
HE40	MCS0	2	38	5190	Full	17.90	18.30	21.11	24.00		-2.02		Pass
HE40	MCS0	2	38	5190	242/61	15.70	15.90	18.81	24.00		-2.02		Pass
HE40	MCS0	2	38	5190	484/65	16.10	16.60	19.37	24.00		-2.02		Pass
HE40	MCS0	2	46	5230	Full	19.70	19.60	22.66	24.00		-2.02		Pass
HE40	MCS0	2	46	5230	242/62	16.40	17.00	19.72	24.00		-2.02		Pass
HE40	MCS0	2	46	5230	484/65	19.10	19.50	22.31	24.00		-2.02		Pass
HE80	MCS0	2	42	5210	Full	17.30	17.40	20.36	24.00		-2.02		Pass
HE80	MCS0	2	42	5210	484/65	15.70	15.40	18.56	24.00		-2.02		Pass
HE80	MCS0	2	42	5210	996/67	15.30	15.50	18.41	24.00		-2.02		Pass
HE160	MCS0	2	50	5250	Full	16.80	17.10	19.96	24.00		-2.02		Pass
HE160	MCS0	2	50	5250	996/67	14.70	13.80	17.28	24.00		-2.02		Pass
HE160	MCS0	2	50	5250	996/67	12.50	13.30	15.93	24.00		-2.02		Pass
HE160	MCS0	2	50	5250	1992/68	13.50	13.50	16.51	24.00		-2.02		Pass

TEST RESULTS DATA
Power Spectral Density

FCC U-NII-1 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
						Ant 7	Ant 8	SUM	Ant 7	Ant 8	Ant 7	Ant 8	
HE20	MCS0	2	36	5180	Full			10.83	11.00	0.07		Pass	
HE20	MCS0	2	36	5180	26/0			10.63	11.00	0.07		Pass	
HE20	MCS0	2	36	5180	52/37			10.82	11.00	0.07		Pass	
HE20	MCS0	2	36	5180	106/53			10.34	11.00	0.07		Pass	
HE20	MCS0	2	36	5180	242/61			10.19	11.00	0.07		Pass	
HE20	MCS0	2	44	5220	Full			10.51	11.00	0.07		Pass	
HE20	MCS0	2	44	5220	26/4			10.10	11.00	0.07		Pass	
HE20	MCS0	2	44	5220	52/39			10.04	11.00	0.07		Pass	
HE20	MCS0	2	44	5220	106/53			10.11	11.00	0.07		Pass	
HE20	MCS0	2	44	5220	242/61			9.94	11.00	0.07		Pass	
HE20	MCS0	2	48	5240	Full			10.99	11.00	0.07		Pass	
HE20	MCS0	2	48	5240	26/8			10.90	11.00	0.07		Pass	
HE20	MCS0	2	48	5240	52/40			10.75	11.00	0.07		Pass	
HE20	MCS0	2	48	5240	106/54			10.84	11.00	0.07		Pass	
HE20	MCS0	2	48	5240	242/61			9.72	11.00	0.07		Pass	
HE40	MCS0	2	38	5190	Full			7.69	11.00	0.07		Pass	
HE40	MCS0	2	38	5190	242/61			7.61	11.00	0.07		Pass	
HE40	MCS0	2	38	5190	484/65			5.44	11.00	0.07		Pass	
HE40	MCS0	2	46	5230	Full			9.16	11.00	0.07		Pass	
HE40	MCS0	2	46	5230	242/62			8.69	11.00	0.07		Pass	
HE40	MCS0	2	46	5230	484/65			8.68	11.00	0.07		Pass	
HE80	MCS0	2	42	5210	Full			4.14	11.00	0.07		Pass	
HE80	MCS0	2	42	5210	484/65			3.97	11.00	0.07		Pass	
HE80	MCS0	2	42	5210	996/67			1.22	11.00	0.07		Pass	
HE160	MCS0	2	50	5250	Full			0.39	11.00	0.07		Pass	
HE160	MCS0	2	50	5250	996/67			0.05	11.00	0.07		Pass	
HE160	MCS0	2	50	5250	996/S67			-0.97	11.00	0.07		Pass	
HE160	MCS0	2	50	5250	1992/68			-3.84	11.00	0.07		Pass	

TEST RESULTS DATA
26dB and 99% OBW

U-NII-2A MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
						Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	
HE20	MCS0	2	52	5260	Full	19.03	18.98	24.00	21.85	23.78	29.78	23.98				
HE20	MCS0	2	60	5300	Full	19.03	19.03	24.50	22.50	23.79	29.79	23.98				
HE20	MCS0	2	64	5320	Full	19.03	18.98	23.50	21.70	23.78	29.78	23.98				
HE40	MCS0	2	54	5270	Full	38.56	38.46	65.69	60.74	23.98	30.00	23.98				
HE40	MCS0	2	62	5310	Full	38.36	38.06	45.20	40.40	23.98	30.00	23.98				
HE80	MCS0	2	58	5290	Full	77.44	77.32	83.89	83.49	23.98	30.00	23.98				
HE160	MCS0	2	50	5250	Full	156.32	156.32	166.29	165.57	23.98	30.00	23.98				

TEST RESULTS DATA
Average Power Table

FCC U-NII-2A MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 7	Ant 8	SUM	Ant 7	Ant 8	Ant 7	Ant 8		
HE20	MCS0	2	52	5260	Full	17.60	17.90	20.76	23.98		-2.02		26.99	Pass
HE20	MCS0	2	52	5260	26/0	9.40	9.00	12.21	23.98		-2.02		26.99	Pass
HE20	MCS0	2	52	5260	52/37	12.20	12.20	15.21	23.98		-2.02		26.99	Pass
HE20	MCS0	2	52	5260	106/53	15.00	14.70	17.86	23.98		-2.02		26.99	Pass
HE20	MCS0	2	52	5260	242/61	17.50	17.60	20.56	23.98		-2.02		26.99	Pass
HE20	MCS0	2	60	5300	Full	18.40	18.60	21.51	23.98		-2.02		26.99	Pass
HE20	MCS0	2	60	5300	26/4	10.20	10.50	13.36	23.98		-2.02		26.99	Pass
HE20	MCS0	2	60	5300	52/39	12.40	12.60	15.51	23.98		-2.02		26.99	Pass
HE20	MCS0	2	60	5300	106/54	15.20	15.60	18.41	23.98		-2.02		26.99	Pass
HE20	MCS0	2	60	5300	242/61	17.90	18.30	21.11	23.98		-2.02		26.99	Pass
HE20	MCS0	2	64	5320	Full	18.10	18.10	21.11	23.98		-2.02		26.99	Pass
HE20	MCS0	2	64	5320	26/8	9.20	9.50	12.36	23.98		-2.02		26.99	Pass
HE20	MCS0	2	64	5320	52/40	12.30	12.40	15.36	23.98		-2.02		26.99	Pass
HE20	MCS0	2	64	5320	106/54	14.90	15.20	18.06	23.98		-2.02		26.99	Pass
HE20	MCS0	2	64	5320	242/61	17.90	18.00	20.96	23.98		-2.02		26.99	Pass
HE40	MCS0	2	54	5270	Full	19.60	19.60	22.61	23.98		-2.02		26.99	Pass
HE40	MCS0	2	54	5270	242/61	17.10	16.60	19.87	23.98		-2.02		26.99	Pass
HE40	MCS0	2	54	5270	484/65	19.30	19.50	22.41	23.98		-2.02		26.99	Pass
HE40	MCS0	2	62	5310	Full	18.50	18.30	21.41	23.98		-2.02		26.99	Pass
HE40	MCS0	2	62	5310	242/62	15.30	15.70	18.51	23.98		-2.02		26.99	Pass
HE40	MCS0	2	62	5310	484/65	16.90	16.90	19.91	23.98		-2.02		26.99	Pass
HE80	MCS0	2	58	5290	Full	18.20	18.30	21.26	23.98		-2.02		26.99	Pass
HE80	MCS0	2	58	5290	484/66	15.40	15.70	18.56	23.98		-2.02		26.99	Pass
HE80	MCS0	2	58	5290	996/67	15.30	15.30	18.31	23.98		-2.02		26.99	Pass
HE160	MCS0	2	50	5250	Full	16.80	17.10	19.96	23.98		-2.02		26.99	Pass
HE160	MCS0	2	50	5250	996/67	14.70	13.80	17.28	23.98		-2.02		26.99	Pass
HE160	MCS0	2	50	5250	996/S67	12.50	13.30	15.93	23.98		-2.02		26.99	Pass
HE160	MCS0	2	50	5250	1992/68	13.50	13.50	16.51	23.98		-2.02		26.99	Pass

TEST RESULTS DATA
Power Spectral Density

U-NII-2A MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
						Ant 7	Ant 8	SUM	Ant 7	Ant 8	Ant 7	Ant 8	
HE20	MCS0	2	52	5260	Full			10.64	11.00	0.07		Pass	
HE20	MCS0	2	52	5260	26/0			10.33	11.00	0.07		Pass	
HE20	MCS0	2	52	5260	52/37			10.28	11.00	0.07		Pass	
HE20	MCS0	2	52	5260	106/53			10.22	11.00	0.07		Pass	
HE20	MCS0	2	52	5260	242/61			9.63	11.00	0.07		Pass	
HE20	MCS0	2	60	5300	Full			10.92	11.00	0.07		Pass	
HE20	MCS0	2	60	5300	26/4			10.51	11.00	0.07		Pass	
HE20	MCS0	2	60	5300	52/39			10.66	11.00	0.07		Pass	
HE20	MCS0	2	60	5300	106/54			10.63	11.00	0.07		Pass	
HE20	MCS0	2	60	5300	242/61			10.14	11.00	0.07		Pass	
HE20	MCS0	2	64	5320	Full			10.94	11.00	0.07		Pass	
HE20	MCS0	2	64	5320	26/8			10.75	11.00	0.07		Pass	
HE20	MCS0	2	64	5320	52/40			10.65	11.00	0.07		Pass	
HE20	MCS0	2	64	5320	106/54			10.68	11.00	0.07		Pass	
HE20	MCS0	2	64	5320	242/61			10.47	11.00	0.07		Pass	
HE40	MCS0	2	54	5270	Full			9.12	11.00	0.07		Pass	
HE40	MCS0	2	54	5270	242/61			8.77	11.00	0.07		Pass	
HE40	MCS0	2	54	5270	484/65			8.58	11.00	0.07		Pass	
HE40	MCS0	2	62	5310	Full			7.57	11.00	0.07		Pass	
HE40	MCS0	2	62	5310	242/62			7.50	11.00	0.07		Pass	
HE40	MCS0	2	62	5310	484/65			5.69	11.00	0.07		Pass	
HE80	MCS0	2	58	5290	Full			5.02	11.00	0.07		Pass	
HE80	MCS0	2	58	5290	484/66			4.63	11.00	0.07		Pass	
HE80	MCS0	2	58	5290	996/67			1.16	11.00	0.07		Pass	
HE160	MCS0	2	50	5250	Full			0.39	11.00	0.07		Pass	
HE160	MCS0	2	50	5250	996/67			0.05	11.00	0.07		Pass	
HE160	MCS0	2	50	5250	996/S67			-0.97	11.00	0.07		Pass	
HE160	MCS0	2	50	5250	1992/68			-3.84	11.00	0.07		Pass	

TEST RESULTS DATA
26dB and 99% OBW

U-NII-2C MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
						Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8	Ant 7	Ant 8
HE20	MCS0	2	100	5500	Full	18.93	18.93	21.85	21.30	23.77		29.77		23.98	----	----	
HE20	MCS0	2	116	5580	Full	18.98	18.98	21.75	21.40	23.78		29.78		23.98	----	----	
HE20	MCS0	2	140	5700	Full	18.98	19.03	21.25	22.40	23.78		29.78		23.98	----	----	
HE40	MCS0	2	102	5510	Full	37.96	37.96	40.10	40.58	23.98		30.00		23.98	----	----	
HE40	MCS0	2	110	5550	Full	38.06	37.96	40.40	40.49	23.98		30.00		23.98	----	----	
HE40	MCS0	2	134	5670	Full	38.06	38.06	40.79	40.70	23.98		30.00		23.98	----	----	
HE80	MCS0	2	106	5530	Full	77.20	77.20	82.77	82.37	23.98		30.00		23.98	----	----	

TEST RESULTS DATA
Average Power Table

FCC U-NII-2C MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 7	Ant 8	SUM	Ant 7	Ant 8	Ant 7	Ant 8		
HE20	MCS0	2	100	5500	Full	18.20	17.20	20.74	23.98		-0.78	26.99	Pass	
HE20	MCS0	2	100	5500	26/0	9.80	9.00	12.43	23.98		-0.78	26.99	Pass	
HE20	MCS0	2	100	5500	52/37	12.40	11.30	14.90	23.98		-0.78	26.99	Pass	
HE20	MCS0	2	100	5500	106/53	15.60	14.50	18.10	23.98		-0.78	26.99	Pass	
HE20	MCS0	2	100	5500	242/61	17.90	17.00	20.48	23.98		-0.78	26.99	Pass	
HE20	MCS0	2	116	5580	Full	18.50	17.70	21.13	23.98		-0.78	26.99	Pass	
HE20	MCS0	2	116	5580	26/4	10.60	9.60	13.14	23.98		-0.78	26.99	Pass	
HE20	MCS0	2	116	5580	52/38	12.50	11.20	14.91	23.98		-0.78	26.99	Pass	
HE20	MCS0	2	116	5580	106/53	15.80	14.70	18.30	23.98		-0.78	26.99	Pass	
HE20	MCS0	2	116	5580	242/61	18.40	17.50	20.98	23.98		-0.78	26.99	Pass	
HE20	MCS0	2	140	5700	Full	18.50	18.10	21.31	23.98		-0.78	26.99	Pass	
HE20	MCS0	2	140	5700	26/8	9.30	9.00	12.16	23.98		-0.78	26.99	Pass	
HE20	MCS0	2	140	5700	52/40	12.40	12.20	15.31	23.98		-0.78	26.99	Pass	
HE20	MCS0	2	140	5700	106/54	15.50	15.00	18.27	23.98		-0.78	26.99	Pass	
HE20	MCS0	2	140	5700	242/61	17.00	16.60	19.81	23.98		-0.78	26.99	Pass	
HE40	MCS0	2	102	5510	Full	19.40	18.20	21.85	23.98		-0.78	26.99	Pass	
HE40	MCS0	2	102	5510	242/61	17.10	15.90	19.55	23.98		-0.78	26.99	Pass	
HE40	MCS0	2	102	5510	484/65	17.10	16.00	19.60	23.98		-0.78	26.99	Pass	
HE40	MCS0	2	110	5550	Full	19.90	18.40	22.22	23.98		-0.78	26.99	Pass	
HE40	MCS0	2	110	5550	242/61	17.10	15.40	19.34	23.98		-0.78	26.99	Pass	
HE40	MCS0	2	110	5550	484/65	19.60	18.30	22.01	23.98		-0.78	26.99	Pass	
HE40	MCS0	2	134	5670	Full	19.70	18.60	22.20	23.98		-0.78	26.99	Pass	
HE40	MCS0	2	134	5670	242/62	17.30	16.50	19.93	23.98		-0.78	26.99	Pass	
HE40	MCS0	2	134	5670	484/65	19.00	18.40	21.72	23.98		-0.78	26.99	Pass	
HE80	MCS0	2	106	5530	Full	18.90	17.70	21.35	23.98		-0.78	26.99	Pass	
HE80	MCS0	2	106	5530	484/65	15.90	14.20	18.14	23.98		-0.78	26.99	Pass	
HE80	MCS0	2	106	5530	996/67	16.70	15.10	18.98	23.98		-0.78	26.99	Pass	

TEST RESULTS DATA
Power Spectral Density

U-NII-2C MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
						Ant 7	Ant 8	SUM	Ant 7	Ant 8	Ant 7	Ant 8	
HE20	MCS0	2	100	5500	Full			10.61	11.00	1.78		Pass	
HE20	MCS0	2	100	5500	26/0			10.56	11.00	1.78		Pass	
HE20	MCS0	2	100	5500	52/37			10.32	11.00	1.78		Pass	
HE20	MCS0	2	100	5500	106/53			10.37	11.00	1.78		Pass	
HE20	MCS0	2	100	5500	242/61			9.71	11.00	1.78		Pass	
HE20	MCS0	2	116	5580	Full			10.95	11.00	1.78		Pass	
HE20	MCS0	2	116	5580	26/4			10.48	11.00	1.78		Pass	
HE20	MCS0	2	116	5580	52/38			10.42	11.00	1.78		Pass	
HE20	MCS0	2	116	5580	106/53			10.54	11.00	1.78		Pass	
HE20	MCS0	2	116	5580	242/61			10.11	11.00	1.78		Pass	
HE20	MCS0	2	140	5700	Full			10.77	11.00	1.78		Pass	
HE20	MCS0	2	140	5700	26/8			10.50	11.00	1.78		Pass	
HE20	MCS0	2	140	5700	52/40			10.69	11.00	1.78		Pass	
HE20	MCS0	2	140	5700	106/54			10.71	11.00	1.78		Pass	
HE20	MCS0	2	140	5700	242/61			8.88	11.00	1.78		Pass	
HE40	MCS0	2	102	5510	Full			8.44	11.00	1.78		Pass	
HE40	MCS0	2	102	5510	242/61			8.25	11.00	1.78		Pass	
HE40	MCS0	2	102	5510	484/65			5.44	11.00	1.78		Pass	
HE40	MCS0	2	110	5550	Full			8.35	11.00	1.78		Pass	
HE40	MCS0	2	110	5550	242/61			8.07	11.00	1.78		Pass	
HE40	MCS0	2	110	5550	484/65			8.08	11.00	1.78		Pass	
HE40	MCS0	2	134	5670	Full			8.74	11.00	1.78		Pass	
HE40	MCS0	2	134	5670	242/62			8.68	11.00	1.78		Pass	
HE40	MCS0	2	134	5670	484/65			7.52	11.00	1.78		Pass	
HE80	MCS0	2	106	5530	Full			4.90	11.00	1.78		Pass	
HE80	MCS0	2	106	5530	484/65			3.83	11.00	1.78		Pass	
HE80	MCS0	2	106	5530	996/67			1.90	11.00	1.78		Pass	



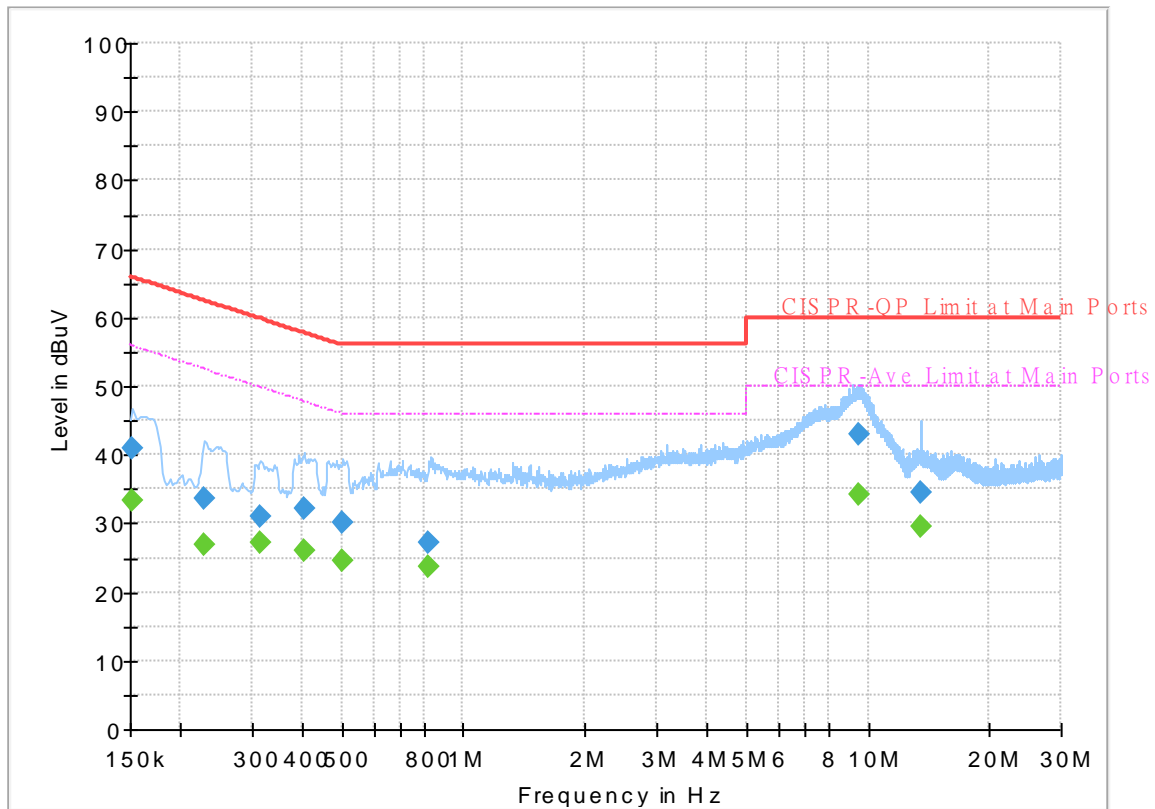
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Howard Huang	Temperature :	23~26°C
		Relative Humidity :	45~55%

EUT Information

Report NO : 210409
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



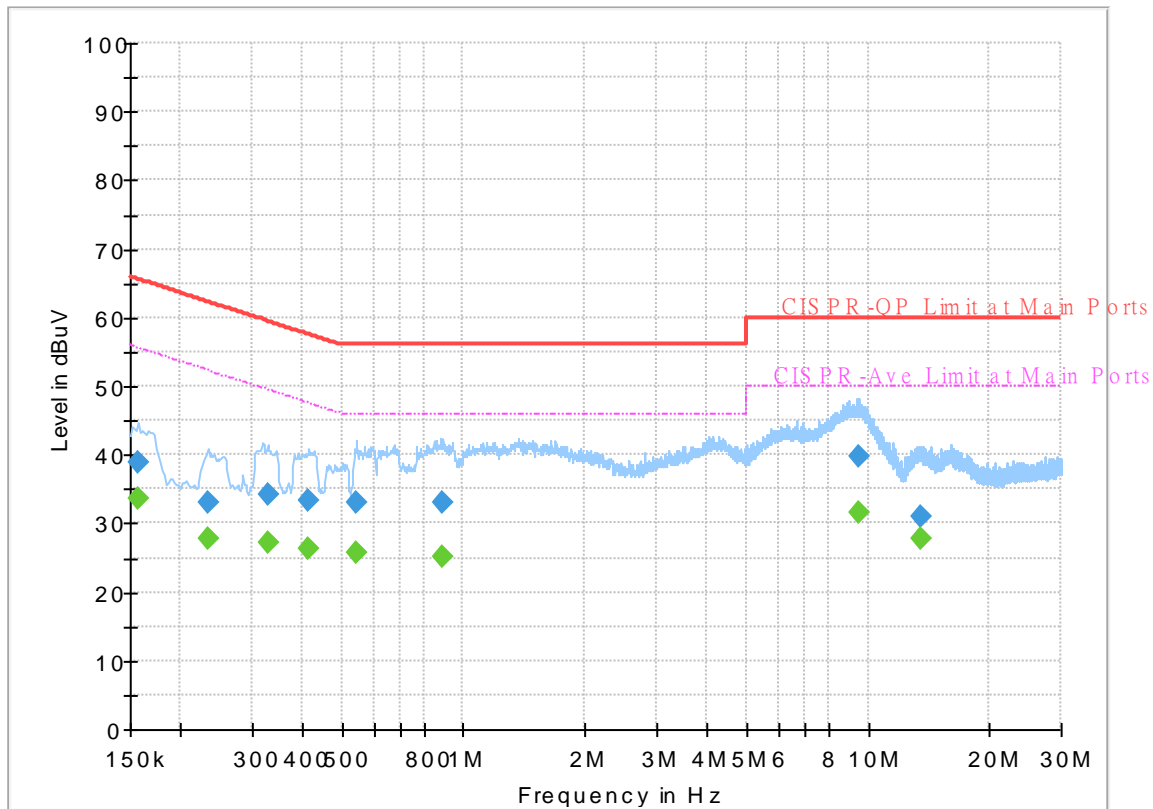
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	33.35	55.88	22.53	L1	OFF	19.6
0.152250	40.95	---	65.88	24.93	L1	OFF	19.6
0.228750	---	26.76	52.50	25.74	L1	OFF	19.6
0.228750	33.52	---	62.50	28.98	L1	OFF	19.6
0.314250	---	27.10	49.86	22.76	L1	OFF	19.6
0.314250	30.97	---	59.86	28.89	L1	OFF	19.6
0.404250	---	25.91	47.77	21.86	L1	OFF	19.6
0.404250	32.07	---	57.77	25.70	L1	OFF	19.6
0.503250	---	24.70	46.00	21.30	L1	OFF	19.6
0.503250	30.19	---	56.00	25.81	L1	OFF	19.6
0.822750	---	23.75	46.00	22.25	L1	OFF	19.6
0.822750	27.13	---	56.00	28.87	L1	OFF	19.6
9.476250	---	34.09	50.00	15.91	L1	OFF	20.0
9.476250	43.07	---	60.00	16.93	L1	OFF	20.0
13.560000	---	29.43	50.00	20.57	L1	OFF	20.2
13.560000	34.56	---	60.00	25.44	L1	OFF	20.2

EUT Information

Report NO : 210409
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.156750	---	33.53	55.63	22.10	N	OFF	19.6
0.156750	38.87	---	65.63	26.76	N	OFF	19.6
0.233250	---	27.92	52.33	24.41	N	OFF	19.6
0.233250	33.17	---	62.33	29.16	N	OFF	19.6
0.327750	---	27.33	49.51	22.18	N	OFF	19.6
0.327750	34.10	---	59.51	25.41	N	OFF	19.6
0.415500	---	26.31	47.54	21.23	N	OFF	19.6
0.415500	33.33	---	57.54	24.21	N	OFF	19.6
0.543750	---	25.79	46.00	20.21	N	OFF	19.6
0.543750	33.17	---	56.00	22.83	N	OFF	19.6
0.890250	---	25.06	46.00	20.94	N	OFF	19.6
0.890250	33.19	---	56.00	22.81	N	OFF	19.6
9.476250	---	31.69	50.00	18.31	N	OFF	20.0
9.476250	39.68	---	60.00	20.32	N	OFF	20.0
13.560000	---	27.63	50.00	22.37	N	OFF	20.2
13.560000	30.99	---	60.00	29.01	N	OFF	20.2



Appendix C. Radiated Spurious Emission

Test Engineer :	JC Liang, Bill Chang and Nick Yu	Temperature :	19~22°C
		Relative Humidity :	61~66%



Band 1 - 5150~5250MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
7+8		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
802.11a CH 36 5180MHz		5148.72	61.97	-12.03	74	54.06	32.9	12.75	37.74	210	309	P	H	
		5150	49.97	-4.03	54	42.05	32.9	12.76	37.74	210	309	A	H	
	*	5180	110.06	-	-	102.04	32.96	12.81	37.75	210	309	P	H	
	*	5180	103.12	-	-	95.1	32.96	12.81	37.75	210	309	A	H	
													H	
													H	
			5149.5	57.86	-16.14	74	49.95	32.9	12.75	37.74	160	215	P	V
			5150	45.31	-8.69	54	37.39	32.9	12.76	37.74	160	215	A	V
	*		5180	102.41	-	-	94.39	32.96	12.81	37.75	160	215	P	V
	*		5180	94.51	-	-	86.49	32.96	12.81	37.75	160	215	A	V
														V
														V
802.11a CH 44 5220MHz		5148.98	56.61	-17.39	74	48.7	32.9	12.75	37.74	102	298	P	H	
		5150	44.29	-9.71	54	36.37	32.9	12.76	37.74	102	298	A	H	
	*	5220	110.32	-	-	102.24	32.96	12.89	37.77	102	298	P	H	
	*	5220	103.18	-	-	95.1	32.96	12.89	37.77	102	298	A	H	
			5441.52	46.76	-27.24	74	38.32	32.98	13.31	37.85	102	298	P	H
			5460	36.85	-17.15	54	28.39	32.98	13.34	37.86	102	298	A	H
			5144.82	53.81	-20.19	74	45.89	32.91	12.75	37.74	299	70	P	V
			5149.76	41.29	-12.71	54	33.38	32.9	12.75	37.74	299	70	A	V
	*		5220	105.69	-	-	97.61	32.96	12.89	37.77	299	70	P	V
	*		5220	98.37	-	-	90.29	32.96	12.89	37.77	299	70	A	V
			5437.6	46.85	-27.15	74	38.41	32.98	13.31	37.85	299	70	P	V
			5456.08	36.73	-17.27	54	28.26	32.99	13.33	37.85	299	70	A	V



802.11a CH 48 5240MHz		5077.22	48.86	-25.14	74	41.01	32.95	12.62	37.72	103	298	P	H
		5148.98	38.12	-15.88	54	30.21	32.9	12.75	37.74	103	298	A	H
	*	5240	110.55	-	-	102.48	32.92	12.93	37.78	103	298	P	H
	*	5240	103.33	-	-	95.26	32.92	12.93	37.78	103	298	A	H
		5416.32	47.06	-26.94	74	38.69	32.93	13.28	37.84	103	298	P	H
		5398.12	36.89	-17.11	54	28.57	32.89	13.26	37.83	103	298	A	H
		5088.66	49.56	-24.44	74	41.66	32.98	12.64	37.72	305	68	P	V
		5093.08	37.36	-16.64	54	29.44	32.99	12.65	37.72	305	68	A	V
	*	5240	106.85	-	-	98.78	32.92	12.93	37.78	305	68	P	V
	*	5240	99.68	-	-	91.61	32.92	12.93	37.78	305	68	A	V
		5441.52	46.81	-27.19	74	38.37	32.98	13.31	37.85	305	68	P	V
		5459.44	36.74	-17.26	54	28.28	32.98	13.34	37.86	305	68	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10360	50.25	-17.95	68.2	34.17	38.78	18.91	41.61	-	-	P	H
		12115	52.01	-21.99	74	35.48	39.19	20.43	43.09	-	-	P	H
		12115	41.86	-12.14	54	25.33	39.19	20.43	43.09	-	-	A	H
		13380	53.22	-20.78	74	34.7	40.12	21.57	43.17	-	-	P	H
		13380	42.57	-11.43	54	24.05	40.12	21.57	43.17	-	-	A	H
		15540	50.87	-23.13	74	34.33	38.22	23.1	44.78	202	25	P	H
		15540	40.91	-13.09	54	24.37	38.22	23.1	44.78	202	25	A	H
		17956	56.03	-17.97	74	34.58	42.24	24.65	45.44	-	-	P	H
		17956	47.11	-6.89	54	25.66	42.24	24.65	45.44	-	-	A	H
													H
													H
													H
802.11a													
CH 36													
5180MHz		10360	49.56	-18.64	68.2	33.48	38.78	18.91	41.61	-	-	P	V
		11950	52.24	-21.76	74	35.94	39	20.29	42.99	-	-	P	V
		11950	42.13	-11.87	54	25.83	39	20.29	42.99	-	-	A	V
		13281	52.79	-21.21	74	34.63	39.82	21.49	43.15	-	-	P	V
		13281	42.48	-11.52	54	24.32	39.82	21.49	43.15	-	-	A	V
		15540	50.22	-23.78	74	33.68	38.22	23.1	44.78	297	310	P	V
		15540	40.57	-13.43	54	24.03	38.22	23.1	44.78	297	310	A	V
		17956	56.82	-17.18	74	35.37	42.24	24.65	45.44	-	-	P	V
		17956	47.36	-6.64	54	25.91	42.24	24.65	45.44	-	-	A	V
													V
													V
													V



WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10440	49.26	-18.94	68.2	33.22	38.74	18.99	41.69	-	-	P	H
		12643	52.11	-21.89	74	35.07	39.34	20.94	43.24	-	-	P	H
		12643	42.45	-11.55	54	25.41	39.34	20.94	43.24	-	-	A	H
		13251	52.32	-21.68	74	34.15	39.85	21.47	43.15	-	-	P	H
		13251	42.6	-11.4	54	24.43	39.85	21.47	43.15	-	-	A	H
		15660	50.52	-23.48	74	34.09	37.92	23.18	44.67	198	9	P	H
		15660	41.76	-12.24	54	25.33	37.92	23.18	44.67	198	9	A	H
		17934	56.01	-17.99	74	34.69	42.1	24.64	45.42			P	H
		17934	46.21	-7.79	54	24.89	42.1	24.64	45.42			A	H
													H
													H
													H
802.11a													
CH 44													
5220MHz		10440	49.53	-18.67	68.2	33.49	38.74	18.99	41.69	-	-	P	V
		12643	52.17	-21.83	74	35.13	39.34	20.94	43.24	-	-	P	V
		12643	41.66	-12.34	54	24.62	39.34	20.94	43.24	-	-	A	V
		13314	53.81	-20.19	74	35.59	39.86	21.52	43.16	-	-	P	V
		13314	43.36	-10.64	54	25.14	39.86	21.52	43.16	-	-	A	V
		15660	49.8	-24.2	74	33.37	37.92	23.18	44.67	100	68	P	V
		15660	40.45	-13.55	54	24.02	37.92	23.18	44.67	100	68	A	V
		17989	56.12	-17.88	74	34.48	42.43	24.67	45.46	-	-	P	V
		17989	46.71	-7.29	54	25.07	42.43	24.67	45.46	-	-	A	V
													V
													V
													V



WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10480	49.44	-18.76	68.2	33.35	38.78	19.03	41.72	-	-	P	H
		10927	52.16	-21.84	74	35.45	38.9	19.48	41.67	-	-	P	H
		10927	41.38	-12.62	54	24.67	38.9	19.48	41.67	-	-	A	H
		13281	53.44	-20.56	74	35.28	39.82	21.49	43.15	-	-	P	H
		13281	43.3	-10.7	54	25.14	39.82	21.49	43.15	-	-	A	H
		15720	50.02	-23.98	74	33.61	37.8	23.22	44.61	298	302	P	H
		15720	41.62	-12.38	54	25.21	37.8	23.22	44.61	298	302	A	H
		17956	55.31	-18.69	74	33.86	42.24	24.65	45.44	-	-	P	H
		17956	46.79	-7.21	54	25.34	42.24	24.65	45.44	-	-	A	H
													H
													H
													H
802.11a													
CH 48													
5240MHz		10480	49.8	-18.4	68.2	33.71	38.78	19.03	41.72	-	-	P	V
		10817	51.72	-22.28	74	34.97	39.07	19.37	41.69	-	-	P	V
		10817	40.81	-13.19	54	24.06	39.07	19.37	41.69	-	-	A	V
		13369	53.33	-20.67	74	34.85	40.08	21.57	43.17	-	-	P	V
		13369	43.59	-10.41	54	25.11	40.08	21.57	43.17	-	-	A	V
		15720	49.68	-24.32	74	33.27	37.8	23.22	44.61	100	14	P	V
		15720	41.43	-12.57	54	25.02	37.8	23.22	44.61	100	14	A	V
		17989	56.06	-17.94	74	34.42	42.43	24.67	45.46	-	-	P	V
		17989	47.09	-6.91	54	25.45	42.43	24.67	45.46	-	-	A	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 1 5150~5250MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)**

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Full CH 36 5180MHz		5150	65	-9	74	57.08	32.9	12.76	37.74	100	298	P	H	
		5150	49.47	-4.53	54	41.55	32.9	12.76	37.74	100	298	A	H	
	*	5180	109.37	-	-	101.35	32.96	12.81	37.75	100	298	P	H	
	*	5180	101.66	-	-	93.64	32.96	12.81	37.75	100	298	A	H	
													H	
														H
			5149.76	62.87	-11.13	74	54.96	32.9	12.75	37.74	298	70	P	V
			5150	47.8	-6.2	54	39.88	32.9	12.76	37.74	298	70	A	V
	*		5180	105.99	-	-	97.97	32.96	12.81	37.75	298	70	P	V
	*		5180	97.84	-	-	89.82	32.96	12.81	37.75	298	70	A	V
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 1 5150~5250MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10440	49.45	-18.75	68.2	33.41	38.74	18.99	41.69	-	-	P	H
		11048	52.04	-21.96	74	35.26	38.95	19.59	41.76	-	-	P	H
		11048	41.9	-12.1	54	25.12	38.95	19.59	41.76	-	-	A	H
		13347	53.24	-20.76	74	34.86	39.99	21.55	43.16	-	-	P	H
		13347	43.24	-10.76	54	24.86	39.99	21.55	43.16	-	-	A	H
		15660	50.19	-23.81	74	33.76	37.92	23.18	44.67	101	359	P	H
		15660	41.74	-12.26	54	25.31	37.92	23.18	44.67	101	359	A	H
		17956	55.89	-18.11	74	34.44	42.24	24.65	45.44	-	-	P	H
		17956	46.47	-7.53	54	25.02	42.24	24.65	45.44	-	-	A	H
													H
													H
													H
802.11ax													
HE20 Full													
CH 44													
5220MHz		10440	50.17	-18.03	68.2	34.13	38.74	18.99	41.69	-	-	P	V
		11389	52.88	-21.12	74	36.09	39.38	19.85	42.44	-	-	P	V
		11389	42.61	-11.39	54	25.82	39.38	19.85	42.44	-	-	A	V
		13369	52.66	-21.34	74	34.18	40.08	21.57	43.17	-	-	P	V
		13369	42.83	-11.17	54	24.35	40.08	21.57	43.17	-	-	A	V
		15660	50.45	-23.55	74	34.02	37.92	23.18	44.67	295	90	P	V
		15660	41.86	-12.14	54	25.43	37.92	23.18	44.67	295	90	A	V
		17989	55.68	-18.32	74	34.04	42.43	24.67	45.46	-	-	P	V
		17989	46.76	-7.24	54	25.12	42.43	24.67	45.46	-	-	A	V
													V
													V
													V

Remark	<ol style="list-style-type: none"> 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.
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Band 1 5150~5250MHz
WIFI 802.11ax HE20 Partial 242 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Partial 242/61 CH 36 5180MHz		5149.24	61.59	-12.41	74	53.68	32.9	12.75	37.74	100	298	P	H	
		5150	51.6	-2.4	54	43.68	32.9	12.76	37.74	100	298	A	H	
	*	5180	111.57	43.37	-	-	32.96	12.81	37.75	100	298	P	H	
	*	5180	101.3	47.3	-	-	32.96	12.81	37.75	100	298	A	H	
													H	
													H	
			5144.04	51.85	-22.15	74	43.94	32.91	12.74	37.74	272	281	P	V
			5146.38	40.29	-13.71	54	32.37	32.91	12.75	37.74	272	281	A	V
	*		5180	100.93	32.73	-	-	32.96	12.81	37.75	272	281	P	V
	*		5180	90.93	36.93	-	-	32.96	12.81	37.75	272	281	A	V
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



**Band 1 5150~5250MHz
WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)**

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Partial 106/53 CH 36 5180MHz		5149.76	61.27	-12.73	74	53.36	32.9	12.75	37.74	100	300	P	H	
		5150	42.78	-11.22	54	34.86	32.9	12.76	37.74	100	300	A	H	
	*	5180	114.5	-	-	106.48	32.96	12.81	37.75	100	300	P	H	
	*	5180	105.46	-	-	97.44	32.96	12.81	37.75	100	300	A	H	
													H	
														H
			5150	51.68	-22.32	74	43.76	32.9	12.76	37.74	301	10	P	V
			5150	38.24	-15.76	54	30.32	32.9	12.76	37.74	301	10	A	V
	*		5180	109.27	-	-	101.25	32.96	12.81	37.75	301	10	P	V
	*		5180	100.67	-	-	92.65	32.96	12.81	37.75	301	10	A	V
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 1 5150~5250MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 38 5190MHz		5149.5	65.34	-8.66	74	57.43	32.9	12.75	37.74	179	308	P	H
		5149.76	50.99	-3.01	54	43.08	32.9	12.75	37.74	179	308	A	H
	*	5190	106.96	-	-	98.91	32.98	12.83	37.76	179	308	P	H
	*	5190	97.61	-	-	89.56	32.98	12.83	37.76	179	308	A	H
		5436.48	47.67	-26.33	74	39.24	32.97	13.31	37.85	179	308	P	H
		5459.72	36.94	-17.06	54	28.48	32.98	13.34	37.86	179	308	A	H
		5149.24	61.86	-12.14	74	53.95	32.9	12.75	37.74	299	67	P	V
		5148.98	48.28	-5.72	54	40.37	32.9	12.75	37.74	299	67	A	V
	*	5190	102.83	-	-	94.78	32.98	12.83	37.76	299	67	P	V
	*	5190	93.81	-	-	85.76	32.98	12.83	37.76	299	67	A	V
		5448.24	47.61	-26.39	74	39.14	33	13.32	37.85	299	67	P	V
		5459.72	36.84	-17.16	54	28.38	32.98	13.34	37.86	299	67	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10460	50.01	-18.19	68.2	33.94	38.76	19.01	41.7	-	-	P	H
		12555	51.5	-22.5	74	34.72	39.21	20.85	43.28	-	-	P	H
		12555	41.04	-12.96	54	24.26	39.21	20.85	43.28	-	-	A	H
		13369	52.76	-21.24	74	34.28	40.08	21.57	43.17	-	-	P	H
		13369	43	-11	54	24.52	40.08	21.57	43.17	-	-	A	H
		15690	49.7	-24.3	74	33.31	37.83	23.2	44.64	400	142	P	H
		15690	41.47	-12.53	54	25.08	37.83	23.2	44.64	400	142	A	H
		17989	55.91	-18.09	74	34.27	42.43	24.67	45.46	-	-	P	H
		17989	46.68	-7.32	54	25.04	42.43	24.67	45.46	-	-	A	H
													H
													H
802.11ax													H
HE40 Full													H
CH 46													
5230MHz		10460	49.81	-18.39	68.2	33.74	38.76	19.01	41.7	-	-	P	V
		10663	51.82	-22.18	74	35.22	39.1	19.21	41.71	-	-	P	V
		10663	40.9	-13.1	54	24.3	39.1	19.21	41.71	-	-	A	V
		13259	53.12	-20.88	74	34.96	39.84	21.47	43.15	-	-	P	V
		13259	43.48	-10.52	54	25.32	39.84	21.47	43.15	-	-	A	V
		15690	50.1	-23.9	74	33.71	37.83	23.2	44.64	302	214	P	V
		15690	41.62	-12.38	54	25.23	37.83	23.2	44.64	302	214	A	V
		17934	55.63	-18.37	74	34.31	42.1	24.64	45.42	-	-	P	V
		17934	46.44	-7.56	54	25.12	42.1	24.64	45.42	-	-	A	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.
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Band 1 5150~5250MHz
WIFI 802.11ax HE40 Partial 484 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Partial 454/65 CH 38 5190MHz		5145.86	65.5	-8.5	74	57.58	32.91	12.75	37.74	100	301	P	H
		5149.76	49.66	-4.34	54	41.75	32.9	12.75	37.74	100	301	A	H
	*	5190	106.33	-	-	98.28	32.98	12.83	37.76	100	301	P	H
	*	5190	96.22	-	-	88.17	32.98	12.83	37.76	100	301	A	H
		5444.6	47.88	-26.12	74	39.42	32.99	13.32	37.85	100	301	P	H
		5459.72	36.88	-17.12	54	28.42	32.98	13.34	37.86	100	301	A	H
		5149.5	61.73	-12.27	74	53.82	32.9	12.75	37.74	300	70	P	V
		5148.72	46.89	-7.11	54	38.98	32.9	12.75	37.74	300	70	A	V
	*	5190	100.49	-	-	92.44	32.98	12.83	37.76	300	70	P	V
	*	5190	91.52	-	-	83.47	32.98	12.83	37.76	300	70	A	V
	5422.48	46.83	-27.17	74	38.44	32.94	13.29	37.84	300	70	P	V	
	5459.44	36.78	-17.22	54	28.32	32.98	13.34	37.86	300	70	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ax HE40 Partial 242 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Partial 242/61 CH 38 5190MHz		5145.6	70.75	-3.25	74	62.83	32.91	12.75	37.74	100	298	P	H
		5149.5	51.19	-2.81	54	43.28	32.9	12.75	37.74	100	298	A	H
	*	5190	110.61	-	-	102.56	32.98	12.83	37.76	100	298	P	H
	*	5190	101.39	-	-	93.34	32.98	12.83	37.76	100	298	A	H
		5426.4	47.35	-26.65	74	38.95	32.95	13.29	37.84	100	298	P	H
		5459.16	37.01	-16.99	54	28.55	32.98	13.34	37.86	100	298	A	H
		5149.24	66.31	-7.69	74	58.4	32.9	12.75	37.74	300	70	P	V
		5149.5	47.54	-6.46	54	39.63	32.9	12.75	37.74	300	70	A	V
	*	5190	106.43	-	-	98.38	32.98	12.83	37.76	300	70	P	V
	*	5190	96.85	-	-	88.8	32.98	12.83	37.76	300	70	A	V
	5451.6	47.13	-26.87	74	38.65	33	13.33	37.85	300	70	P	V	
	5455.8	36.77	-17.23	54	28.3	32.99	13.33	37.85	300	70	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 7+8, Note, Frequency (MHz), Level (dBµV/m), Margin (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test results for frequencies 5139.62, 5150, 5210, 5358.34, 5350.02, 5147.94, 5149.5, 5210, 5210, 5350.02, 5350.28.

Remark
1. No other spurious found.
2. All results are PASS against Peak and Average limit line.



Band 1 5150~5250MHz
WIFI 802.11ax HE80 Partial 996 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Partial 996/67 CH 42 5210MHz		5149.94	65.32	-8.68	74	57.41	32.9	12.75	37.74	100	296	P	H
		5149.26	51.84	-2.16	54	43.93	32.9	12.75	37.74	100	296	A	H
	*	5210	101.79	-	-	93.71	32.98	12.87	37.77	100	296	P	H
	*	5210	92.95	-	-	84.87	32.98	12.87	37.77	100	296	A	H
		5427.24	45.8	-28.2	74	37.39	32.95	13.3	37.84	100	296	P	H
		5350.54	38.53	-15.47	54	30.49	32.7	13.16	37.82	100	296	A	H
		5149.94	60.38	-13.62	74	52.47	32.9	12.75	37.74	300	68	P	V
		5149.26	48.49	-5.51	54	40.58	32.9	12.75	37.74	300	68	A	V
	*	5210	97.63	-	-	89.55	32.98	12.87	37.77	300	68	P	V
	*	5210	88.54	-	-	80.46	32.98	12.87	37.77	300	68	A	V
	5427.24	47.09	-26.91	74	38.68	32.95	13.3	37.84	300	68	P	V	
	5457.92	38.06	-15.94	54	29.59	32.98	13.34	37.85	300	68	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ax HE80 Partial 484 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Partial 484/65 CH 42 5210MHz		5149.5	69.35	-4.65	74	61.44	32.9	12.75	37.74	100	298	P	H
		5149.76	50.17	-3.83	54	42.26	32.9	12.75	37.74	100	298	A	H
	*	5210	106.6	-	-	98.52	32.98	12.87	37.77	100	298	P	H
	*	5210	96.18	-	-	88.1	32.98	12.87	37.77	100	298	A	H
		5457.76	46.51	-27.49	74	38.04	32.98	13.34	37.85	100	298	P	H
		5458.88	36.81	-17.19	54	28.35	32.98	13.34	37.86	100	298	A	H
		5144.04	61.84	-12.16	74	53.93	32.91	12.74	37.74	300	70	P	V
		5149.5	46.19	-7.81	54	38.28	32.9	12.75	37.74	300	70	A	V
	*	5210	101.29	-	-	93.21	32.98	12.87	37.77	300	70	P	V
	*	5210	91.27	-	-	83.19	32.98	12.87	37.77	300	70	A	V
	5460	45.99	-28.01	74	37.53	32.98	13.34	37.86	300	70	P	V	
	5460	36.57	-17.43	54	28.11	32.98	13.34	37.86	300	70	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 50 5250MHz		5125.06	62.89	-11.11	74	54.97	32.95	12.71	37.74	100	299	P	H
		5140.66	50.35	-3.65	54	42.43	32.92	12.74	37.74	100	299	A	H
	*	5250	102.7	-	-	94.63	32.9	12.95	37.78	100	299	P	H
	*	5250	92.29	-	-	84.22	32.9	12.95	37.78	100	299	A	H
		5369	62.88	-11.12	74	54.72	32.78	13.2	37.82	100	299	P	H
		5358.92	50.88	-3.12	54	42.78	32.74	13.18	37.82	100	299	A	H
		5113.88	53.83	-20.17	74	45.9	32.97	12.69	37.73	290	68	P	V
		5148.98	44.47	-9.53	54	36.56	32.9	12.75	37.74	290	68	A	V
	*	5250	97.29	-	-	89.22	32.9	12.95	37.78	290	68	P	V
	*	5250	87.29	-	-	79.22	32.9	12.95	37.78	290	68	A	V
		5359.76	55.99	-18.01	74	47.89	32.74	13.18	37.82	290	68	P	V
		5359.2	47	-7	54	38.9	32.74	13.18	37.82	290	68	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ax HE160 Partial 1922 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Partial 1922/68 CH 50 5250MHz		5124.1	62.61	-11.39	74	54.68	32.95	12.71	37.73	222	298	P	H
		5124.1	50.28	-3.72	54	42.35	32.95	12.71	37.73	222	298	A	H
	*	5250	97.49	-	-	89.42	32.9	12.95	37.78	222	298	P	H
	*	5250	88.81	-	-	80.74	32.9	12.95	37.78	222	298	A	H
		5395	58.48	-15.52	74	50.18	32.88	13.25	37.83	222	298	P	H
		5394.74	47.59	-6.41	54	39.29	32.88	13.25	37.83	222	298	A	H
		5124.1	58.82	-15.18	74	50.89	32.95	12.71	37.73	298	69	P	V
		5123.76	46.26	-7.74	54	38.33	32.95	12.71	37.73	298	69	A	V
	*	5250	91.62	-	-	83.55	32.9	12.95	37.78	298	69	P	V
	*	5250	83.34	-	-	75.27	32.9	12.95	37.78	298	69	A	V
		5404.36	52.4	-21.6	74	44.06	32.91	13.27	37.84	298	69	P	V
		5394.74	42.31	-11.69	54	34.01	32.88	13.25	37.83	298	69	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ax HE160 Partial 996 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Partial 996/67 CH 50 5250MHz		5125.58	68.1	-5.9	74	60.18	32.95	12.71	37.74	220	305	P	H
		5148.72	51.04	-2.96	54	43.13	32.9	12.75	37.74	220	305	A	H
	*	5250	102.89	-	-	94.82	32.9	12.95	37.78	220	305	P	H
	*	5250	93.49	-	-	85.42	32.9	12.95	37.78	220	305	A	H
		5415.02	60.94	-13.06	74	52.57	32.93	13.28	37.84	220	305	P	H
		5394.74	46.2	-7.8	54	37.9	32.88	13.25	37.83	220	305	A	H
		5128.18	67.21	-6.79	74	59.3	32.94	12.71	37.74	300	67	P	V
		5148.46	46.57	-7.43	54	38.66	32.9	12.75	37.74	300	67	A	V
	*	5250	98.24	-	-	90.17	32.9	12.95	37.78	300	67	P	V
	*	5250	88.81	-	-	80.74	32.9	12.95	37.78	300	67	A	V
		5405.66	62.95	-11.05	74	54.61	32.91	13.27	37.84	300	67	P	V
		5398.64	43.49	-10.51	54	35.17	32.89	13.26	37.83	300	67	A	V
802.11ax HE160 Partial 996/S67 CH 50 5250MHz		5124.1	62.53	-11.47	74	54.6	32.95	12.71	37.73	204	304	P	H
		5125.12	50.94	-3.06	54	43.02	32.95	12.71	37.74	204	304	A	H
	*	5250	98.84	-	-	90.77	32.9	12.95	37.78	204	304	P	H
	*	5250	91.58	-	-	83.51	32.9	12.95	37.78	204	304	A	H
		5394.48	59.98	-14.02	74	51.68	32.88	13.25	37.83	204	304	P	H
		5394.74	47.9	-6.1	54	39.6	32.88	13.25	37.83	204	304	A	H
		5128.52	55.4	-18.6	74	47.49	32.94	12.71	37.74	300	66	P	V
		5123.76	45.07	-8.93	54	37.14	32.95	12.71	37.73	300	66	A	V
	*	5250	94.99	-	-	86.92	32.9	12.95	37.78	300	66	P	V
	*	5250	86.79	-	-	78.72	32.9	12.95	37.78	300	66	A	V
	5394.74	55.98	-18.02	74	47.68	32.88	13.25	37.83	300	66	P	V	
	5398.64	44.97	-9.03	54	36.65	32.89	13.26	37.83	300	66	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		5125.8	48.39	-25.61	74	40.47	32.95	12.71	37.74	276	297	P	H
		5149.94	38.1	-15.9	54	30.19	32.9	12.75	37.74	276	297	A	H
	*	5260	111.35	-	-	103.26	32.9	12.97	37.78	276	297	P	H
	*	5260	104.26	-	-	96.17	32.9	12.97	37.78	276	297	A	H
		5364.24	49.06	-24.94	74	40.93	32.76	13.19	37.82	276	297	P	H
		5350.08	37.89	-16.11	54	29.85	32.7	13.16	37.82	276	297	A	H
		5108.12	48.46	-25.54	74	40.53	32.98	12.68	37.73	302	68	P	V
		5102	37.57	-16.43	54	29.64	33	12.66	37.73	302	68	A	V
	*	5260	107.27	-	-	99.18	32.9	12.97	37.78	302	68	P	V
	*	5260	100.26	-	-	92.17	32.9	12.97	37.78	302	68	A	V
		5453.04	46.88	-27.12	74	38.41	32.99	13.33	37.85	302	68	P	V
		5454.72	36.79	-17.21	54	28.32	32.99	13.33	37.85	302	68	A	V
802.11a CH 60 5300MHz		5076.84	47.07	-26.93	74	39.22	32.95	12.62	37.72	104	294	P	H
		5143.14	37.74	-16.26	54	29.83	32.91	12.74	37.74	104	294	A	H
	*	5300	111.42	-	-	103.26	32.9	13.06	37.8	104	294	P	H
	*	5300	104	-	-	95.84	32.9	13.06	37.8	104	294	A	H
		5352.96	53.98	-20.02	74	45.93	32.71	13.16	37.82	104	294	P	H
		5350.08	43.52	-10.48	54	35.48	32.7	13.16	37.82	104	294	A	H
		5106.42	47.18	-26.82	74	39.25	32.99	12.67	37.73	300	67	P	V
		5092.14	37.49	-16.51	54	29.58	32.98	12.65	37.72	300	67	A	V
	*	5300	107.04	-	-	98.88	32.9	13.06	37.8	300	67	P	V
	*	5300	99.9	-	-	91.74	32.9	13.06	37.8	300	67	A	V
		5372.4	50.57	-23.43	74	42.4	32.79	13.2	37.82	300	67	P	V
		5350.08	40.35	-13.65	54	32.31	32.7	13.16	37.82	300	67	A	V



802.11a CH 64 5320MHz	*	5320	110.49	-	-	102.38	32.82	13.1	37.81	262	298	P	H
	*	5320	102.98	-	-	94.87	32.82	13.1	37.81	262	298	A	H
		5355.68	59.65	-14.35	74	51.58	32.72	13.17	37.82	262	298	P	H
		5350.08	48.27	-5.73	54	40.23	32.7	13.16	37.82	262	298	A	H
													H
													H
	*	5320	105.4	-	-	97.29	32.82	13.1	37.81	310	65	P	V
	*	5320	98.26	-	-	90.15	32.82	13.1	37.81	310	65	A	V
		5359.68	54.81	-19.19	74	46.71	32.74	13.18	37.82	310	65	P	V
		5350.08	44.11	-9.89	54	36.07	32.7	13.16	37.82	310	65	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10520	49.88	-18.32	68.2	33.69	38.86	19.07	41.74	-	-	P	H
		11125	51.81	-22.19	74	35.04	39.03	19.65	41.91	-	-	P	H
		11125	41.59	-12.41	54	24.82	39.03	19.65	41.91	-	-	A	H
		13314	52.49	-21.51	74	34.27	39.86	21.52	43.16	-	-	P	H
		13314	43.24	-10.76	54	25.02	39.86	21.52	43.16	-	-	A	H
		15780	50.28	-23.72	74	33.78	37.8	23.25	44.55	298	51	P	H
		15780	41.62	-12.38	54	25.12	37.8	23.25	44.55	298	51	A	H
		17956	56.17	-17.83	74	34.72	42.24	24.65	45.44	-	-	P	H
		17956	47.44	-6.56	54	25.99	42.24	24.65	45.44	-	-	A	H
													H
													H
													H
802.11a													
CH 52													
5260MHz		10520	49.94	-18.26	68.2	33.75	38.86	19.07	41.74	-	-	P	V
		11158	51.71	-22.29	74	34.95	39.06	19.68	41.98	-	-	P	V
		11158	41.8	-12.2	54	25.04	39.06	19.68	41.98	-	-	A	V
		13303	52.55	-21.45	74	34.38	39.81	21.51	43.15	-	-	P	V
		13303	43.05	-10.95	54	24.88	39.81	21.51	43.15	-	-	A	V
		15780	50.42	-23.58	74	33.92	37.8	23.25	44.55	298	325	P	V
		15780	41.53	-12.47	54	25.03	37.8	23.25	44.55	298	325	A	V
		17945	55.81	-18.19	74	34.42	42.17	24.65	45.43	-	-	P	V
		17945	46.84	-7.16	54	25.45	42.17	24.65	45.43	-	-	A	V
													V
													V
													V



WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10600	51.12	-22.88	74	34.59	39.1	19.15	41.72	198	295	P	H
		10600	42.25	-11.75	54	25.72	39.1	19.15	41.72	198	295	P	H
		11224	52.33	-21.67	74	35.6	39.12	19.72	42.11	-	-	A	H
		11224	42.17	-11.83	54	25.44	39.12	19.72	42.11	-	-	P	H
		13336	52.7	-21.3	74	34.38	39.94	21.54	43.16	-	-	A	H
		13336	42.38	-11.62	54	24.06	39.94	21.54	43.16	-	-	P	H
		15900	50.37	-23.63	74	33.59	37.9	23.32	44.44	105	169	A	H
		15900	41.66	-12.34	54	24.88	37.9	23.32	44.44	105	169	P	H
		17989	55.83	-18.17	74	34.19	42.43	24.67	45.46	-	-	A	H
		17989	47.07	-6.93	54	25.43	42.43	24.67	45.46	-	-		H
													H
													H
802.11a													
CH 60													
5300MHz		10600	50.43	-23.57	74	33.9	39.1	19.15	41.72	303	287	P	V
		10600	41.64	-12.36	54	25.11	39.1	19.15	41.72	303	287	P	V
		12632	52.19	-21.81	74	35.18	39.33	20.93	43.25	-	-	A	V
		12632	42.13	-11.87	54	25.12	39.33	20.93	43.25	-	-	P	V
		13303	52.9	-21.1	74	34.73	39.81	21.51	43.15	-	-	A	V
		13303	42.5	-11.5	54	24.33	39.81	21.51	43.15	-	-	P	V
		15900	50.07	-23.93	74	33.29	37.9	23.32	44.44	202	296	A	V
		15900	41.6	-12.4	54	24.82	37.9	23.32	44.44	202	296	P	V
		17967	56.07	-17.93	74	34.56	42.3	24.66	45.45	-	-	A	V
		17967	46.05	-7.95	54	24.54	42.3	24.66	45.45	-	-		V
													V
													V



WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 64 5320MHz		10640	50.62	-23.38	74	34.05	39.1	19.19	41.72	285	270	P	H	
		10640	42.39	-11.61	54	25.82	39.1	19.19	41.72	285	270	A	H	
		11598	52.81	-21.19	74	36.52	39	20.02	42.73	-	-	P	H	
		11598	40.52	-13.48	54	24.23	39	20.02	42.73	-	-	A	H	
		13325	52.84	-21.16	74	34.57	39.9	21.53	43.16	-	-	P	H	
		13325	42.6	-11.4	54	24.33	39.9	21.53	43.16	-	-	A	H	
		15960	50.13	-23.87	74	33.19	37.96	23.36	44.38	300	42	P	H	
		15960	42.87	-11.13	54	25.93	37.96	23.36	44.38	300	42	A	H	
		17978	55.43	-18.57	74	33.84	42.37	24.67	45.45	-	-	P	H	
		17978	46.8	-7.2	54	25.21	42.37	24.67	45.45	-	-	A	H	
														H
														H
			10640	50.07	-23.93	74	33.5	39.1	19.19	41.72	100	285	P	V
			10640	42.69	-11.31	54	26.12	39.1	19.19	41.72	100	285	A	V
			12016	51.86	-22.14	74	35.43	39.12	20.35	43.04	-	-	P	V
			12016	40.65	-13.35	54	24.22	39.12	20.35	43.04	-	-	A	V
			13358	52.78	-21.22	74	34.35	40.03	21.56	43.16	-	-	P	V
			13358	42.59	-11.41	54	24.16	40.03	21.56	43.16	-	-	A	V
			15960	50.1	-23.9	74	33.16	37.96	23.36	44.38	108	273	P	V
			15960	42.78	-11.22	54	25.84	37.96	23.36	44.38	108	273	A	V
		17989	55.52	-18.48	74	33.88	42.43	24.67	45.46	-	-	P	V	
		17989	47.02	-6.98	54	25.38	42.43	24.67	45.46	-	-	A	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 2 5250~5350MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 64 5320MHz	*	5320	112.49	-	-	104.38	32.82	13.1	37.81	272	301	P	H
	*	5320	102.63	-	-	94.52	32.82	13.1	37.81	272	301	A	H
		5350.24	65.99	-8.01	74	57.95	32.7	13.16	37.82	272	301	P	H
		5350.08	49.14	-4.86	54	41.1	32.7	13.16	37.82	272	301	A	H
													H
													H
	*	5320	108.46	-	-	100.35	32.82	13.1	37.81	263	57	P	V
	*	5320	99.03	-	-	90.92	32.82	13.1	37.81	263	57	A	V
		5350.72	58.51	-15.49	74	50.47	32.7	13.16	37.82	263	57	P	V
		5350.08	46.26	-7.74	54	38.22	32.7	13.16	37.82	263	57	A	V
												V	
												V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10600	50.25	-23.75	74	33.72	39.1	19.15	41.72	288	270	P	H
		10600	42.7	-11.3	54	26.17	39.1	19.15	41.72	288	270	A	H
		12588	52.94	-21.06	74	36.04	39.28	20.88	43.26	-	-	P	H
		12588	41	-13	54	24.1	39.28	20.88	43.26	-	-	A	H
		13358	53.38	-20.62	74	34.95	40.03	21.56	43.16	-	-	P	H
		13358	42.67	-11.33	54	24.24	40.03	21.56	43.16	-	-	A	H
		15900	49.71	-24.29	74	32.93	37.9	23.32	44.44	250	320	P	H
		15900	43.93	-10.07	54	27.15	37.9	23.32	44.44	250	320	A	H
		17934	55.87	-18.13	74	34.55	42.1	24.64	45.42	-	-	P	H
		17934	46.65	-7.35	54	25.33	42.1	24.64	45.42	-	-	A	H
													H
													H
802.11ax													
HE20 Full													
CH 60		10600	49.91	-24.09	74	33.38	39.1	19.15	41.72	300	28	P	V
5300MHz		10600	42.75	-11.25	54	26.22	39.1	19.15	41.72	300	28	A	V
		12379	51.83	-22.17	74	35.35	39.02	20.69	43.23	-	-	P	V
		12379	40.68	-13.32	54	24.2	39.02	20.69	43.23	-	-	A	V
		13380	52.58	-21.42	74	34.06	40.12	21.57	43.17	-	-	P	V
		13380	42.75	-11.25	54	24.23	40.12	21.57	43.17	-	-	A	V
		15900	50.19	-23.81	74	33.41	37.9	23.32	44.44	288	42	P	V
		15900	42.93	-11.07	54	26.15	37.9	23.32	44.44	288	42	A	V
		17978	55.97	-18.03	74	34.38	42.37	24.67	45.45	-	-	P	V
		17978	46.85	-7.15	54	25.26	42.37	24.67	45.45	-	-	A	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.
	4. The emission level close to 18GHz is checked that the average emission level is noise floor only.



Band 2 5250~5350MHz
WIFI 802.11ax HE20 Partial 242 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 242/61 CH 64 5320MHz	*	5320	110.67	-	-	102.56	32.82	13.1	37.81	100	301	P	H
	*	5320	102.51	-	-	94.4	32.82	13.1	37.81	100	301	A	H
		5350.24	63.01	-10.99	74	54.97	32.7	13.16	37.82	100	301	P	H
		5350.08	50.7	-3.3	54	42.66	32.7	13.16	37.82	100	301	A	H
													H
													H
	*	5320	105.74	-	-	97.63	32.82	13.1	37.81	289	66	P	V
	*	5320	97.35	-	-	89.24	32.82	13.1	37.81	289	66	A	V
		5350.24	59.32	-14.68	74	51.28	32.7	13.16	37.82	289	66	P	V
		5350.08	46.8	-7.2	54	38.76	32.7	13.16	37.82	289	66	A	V
												V	
												V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 2 5250~5350MHz
WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)**

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 106/53 CH 64 5320MHz	*	5320	114.46	-	-	106.35	32.82	13.1	37.81	100	296	P	H
	*	5320	106.17	-	-	98.06	32.82	13.1	37.81	100	296	A	H
		5350.08	65.86	-8.14	74	57.82	32.7	13.16	37.82	100	296	P	H
		5350.08	43.07	-10.93	54	35.03	32.7	13.16	37.82	100	296	A	H
													H
													H
	*	5320	110.58	-	-	102.47	32.82	13.1	37.81	308	59	P	V
	*	5320	102.8	-	-	94.69	32.82	13.1	37.81	308	59	A	V
		5350.08	61.66	-12.34	74	53.62	32.7	13.16	37.82	308	59	P	V
		5350.08	40.36	-13.64	54	32.32	32.7	13.16	37.82	308	59	A	V
												V	
												V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 62 5310MHz		5121.38	47.01	-26.99	74	39.08	32.96	12.7	37.73	264	299	P	H
		5149.26	37.99	-16.01	54	30.08	32.9	12.75	37.74	264	299	A	H
	*	5310	108.45	-	-	100.31	32.86	13.08	37.8	264	299	P	H
	*	5310	99.35	-	-	91.21	32.86	13.08	37.8	264	299	A	H
		5350.08	58.31	-15.69	74	50.27	32.7	13.16	37.82	264	299	P	H
		5350.08	50.82	-3.18	54	42.78	32.7	13.16	37.82	264	299	A	H
		5129.54	47.52	-26.48	74	39.6	32.94	12.72	37.74	304	46	P	V
		5085.68	37.52	-16.48	54	29.64	32.97	12.63	37.72	304	46	A	V
	*	5310	102.42	-	-	94.28	32.86	13.08	37.8	304	46	P	V
	*	5310	93.99	-	-	85.85	32.86	13.08	37.8	304	46	A	V
	5350.08	53.39	-20.61	74	45.35	32.7	13.16	37.82	304	46	P	V	
	5350.08	46.23	-7.77	54	38.19	32.7	13.16	37.82	304	46	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10540	49.25	-18.95	68.2	32.97	38.92	19.09	41.73	-	-	P	H
		11411	51.98	-22.02	74	35.22	39.37	19.87	42.48	-	-	P	H
		11411	40.88	-13.12	54	24.12	39.37	19.87	42.48	-	-	A	H
		13388	53.94	-20.06	74	35.39	40.15	21.57	43.17	-	-	P	H
		13388	42.7	-11.3	54	24.15	40.15	21.57	43.17	-	-	A	H
		15810	50.1	-23.9	74	33.54	37.81	23.27	44.52	147	333	P	H
		15810	42.94	-11.06	54	26.38	37.81	23.27	44.52	147	333	A	H
		17967	55.57	-18.43	74	34.06	42.3	24.66	45.45	-	-	P	H
		17967	46.74	-7.26	54	25.23	42.3	24.66	45.45	-	-	A	H
													H
													H
													H
802.11ax													
HE40 Full													
CH 54													
5270MHz		10540	49.09	-19.11	68.2	32.81	38.92	19.09	41.73	-	-	P	V
		11400	51.55	-22.45	74	34.75	39.4	19.86	42.46	-	-	P	V
		11400	41.05	-12.95	54	24.25	39.4	19.86	42.46	-	-	A	V
		13358	52.98	-21.02	74	34.55	40.03	21.56	43.16	-	-	P	V
		13358	42.57	-11.43	54	24.14	40.03	21.56	43.16	-	-	A	V
		15810	51.29	-22.71	74	34.73	37.81	23.27	44.52	288	9	P	V
		15810	42.78	-11.22	54	26.22	37.81	23.27	44.52	288	9	A	V
		17967	55.55	-18.45	74	34.04	42.3	24.66	45.45	-	-	P	V
		17967	46.83	-7.17	54	25.32	42.3	24.66	45.45	-	-	A	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.
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Band 2 5250~5350MHz
WIFI 802.11ax HE40 Partial 484 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Partial 484/65 CH 62 5310MHz		5103.36	48.97	-25.03	74	41.04	32.99	12.67	37.73	352	307	P	H
		5093.5	37.57	-16.43	54	29.65	32.99	12.65	37.72	352	307	A	H
	*	5310	105.84	-	-	97.7	32.86	13.08	37.8	352	307	P	H
	*	5310	97.14	-	-	89	32.86	13.08	37.8	352	307	A	H
		5350.08	65.17	-8.83	74	57.13	32.7	13.16	37.82	352	307	P	H
		5350.08	51.7	-2.3	54	43.66	32.7	13.16	37.82	352	307	A	H
		5099.28	48.17	-25.83	74	40.24	33	12.66	37.73	253	61	P	V
		5093.84	37.52	-16.48	54	29.6	32.99	12.65	37.72	253	61	A	V
	*	5310	103.18	-	-	95.04	32.86	13.08	37.8	253	61	P	V
	*	5310	94.66	-	-	86.52	32.86	13.08	37.8	253	61	A	V
	5352.72	66.51	-7.49	74	58.46	32.71	13.16	37.82	253	61	P	V	
	5351.04	47.53	-6.47	54	39.49	32.7	13.16	37.82	253	61	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11ax HE40 Partial 242 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Partial 242/62 CH 62 5310MHz		5145.18	49.72	-24.28	74	41.8	32.91	12.75	37.74	104	298	P	H
		5149.94	37.95	-16.05	54	30.04	32.9	12.75	37.74	104	298	A	H
	*	5310	108.96	-	-	100.82	32.86	13.08	37.8	104	298	P	H
	*	5310	100.84	-	-	92.7	32.86	13.08	37.8	104	298	A	H
		5350.32	71.28	-2.72	74	63.24	32.7	13.16	37.82	104	298	P	H
		5350.08	50.56	-3.44	54	42.52	32.7	13.16	37.82	104	298	A	H
		5101.32	49.49	-24.51	74	41.56	33	12.66	37.73	200	63	P	V
		5089.42	37.52	-16.48	54	29.62	32.98	12.64	37.72	200	63	A	V
	*	5310	104.15	-	-	96.01	32.86	13.08	37.8	200	63	P	V
	*	5310	96.21	-	-	88.07	32.86	13.08	37.8	200	63	A	V
	5350.08	66.85	-7.15	74	58.81	32.7	13.16	37.82	200	63	P	V	
	5350.08	45.9	-8.1	54	37.86	32.7	13.16	37.82	200	63	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 7+8, Note, Frequency (MHz), Level (dBµV/m), Margin (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test results for 802.11ax HE80 Full CH 58 5290MHz and a Remark section.



Band 2 5250~5350MHz
WIFI 802.11ax HE80 Partial 996 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Partial 996/67 CH 58 5290MHz		5093.6	48.51	-25.49	74	40.59	32.99	12.65	37.72	197	311	P	H
		5149.4	39.73	-14.27	54	31.82	32.9	12.75	37.74	197	311	A	H
	*	5290	100.08	-	-	91.94	32.9	13.03	37.79	197	311	P	H
	*	5290	92.47	-	-	84.33	32.9	13.03	37.79	197	311	A	H
		5360.16	62.96	-11.04	74	54.86	32.74	13.18	37.82	197	311	P	H
		5374.8	50.19	-3.81	54	42	32.8	13.21	37.82	197	311	A	H
		5054	48.65	-25.35	74	40.88	32.91	12.57	37.71	301	353	P	V
		5108.9	39.22	-14.78	54	31.29	32.98	12.68	37.73	301	353	A	V
	*	5290	98.33	-	-	90.19	32.9	13.03	37.79	301	353	P	V
	*	5290	89.22	-	-	81.08	32.9	13.03	37.79	301	353	A	V
	5366.88	60.2	-13.8	74	52.06	32.77	13.19	37.82	301	353	P	V	
	5372.16	47.33	-6.67	54	39.16	32.79	13.2	37.82	301	353	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11ax HE80 Partial 484 (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 7+8, Note, Frequency (MHz), Level (dBµV/m), Margin (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test results for frequencies 5120.3, 5145.2, 5290, 5376.48, 5351.52, 5050.4, 5093, 5290, 5290, 5354.16, 5350.08. A Remark section at the bottom states: 1. No other spurious found. 2. All results are PASS against Peak and Average limit line.



Band 3 - 5470~5725MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 100 5500MHz		5456.24	53.82	-20.18	74	45.35	32.99	13.33	37.85	259	302	P	H	
		5468.88	58.29	-9.91	68.2	49.84	32.96	13.35	37.86	259	302	P	H	
		5460	42.52	-11.48	54	34.06	32.98	13.34	37.86	259	302	A	H	
	*	5500	111.28	-	-	102.86	32.9	13.39	37.87	259	302	P	H	
	*	5500	104.04	-	-	95.62	32.9	13.39	37.87	259	302	A	H	
														H
			5456.08	52.11	-21.89	74	43.64	32.99	13.33	37.85	250	59	P	V
			5469.68	56.84	-11.36	68.2	48.39	32.96	13.35	37.86	250	59	P	V
			5460	39.46	-14.54	54	31	32.98	13.34	37.86	250	59	A	V
	*		5500	106.98	-	-	98.56	32.9	13.39	37.87	250	59	P	V
	*		5500	99.64	-	-	91.22	32.9	13.39	37.87	250	59	A	V
														V
802.11a CH 116 5580MHz		5439.04	46.71	-27.29	74	38.27	32.98	13.31	37.85	254	305	P	H	
		5468.32	46.78	-21.42	68.2	38.33	32.96	13.35	37.86	254	305	P	H	
		5459.2	37.07	-16.93	54	28.61	32.98	13.34	37.86	254	305	A	H	
	*	5580	111.57	-	-	102.89	33.08	13.49	37.89	254	305	P	H	
	*	5580	104.51	-	-	95.83	33.08	13.49	37.89	254	305	A	H	
			5759.645	47.15	-21.05	68.2	37.66	33.84	13.58	37.93	254	305	P	H
			5457.76	45.99	-28.01	74	37.52	32.98	13.34	37.85	255	60	P	V
			5465.44	47.01	-21.19	68.2	38.55	32.97	13.35	37.86	255	60	P	V
			5459.68	36.5	-17.5	54	28.04	32.98	13.34	37.86	255	60	A	V
	*		5580	107.81	-	-	99.13	33.08	13.49	37.89	255	60	P	V
	*		5580	100.36	-	-	91.68	33.08	13.49	37.89	255	60	A	V
			5760.905	46.85	-21.35	68.2	37.36	33.84	13.58	37.93	255	60	P	V



802.11a CH 140 5700MHz	*	5700	113.39	-	-	104.34	33.4	13.56	37.91	256	307	P	H
	*	5700	106.2	-	-	97.15	33.4	13.56	37.91	256	307	A	H
		5725.64	65.43	-2.77	68.2	56.17	33.61	13.57	37.92	256	307	P	H
													H
													H
													H
	*	5700	107.32	-	-	98.27	33.4	13.56	37.91	250	80	P	V
	*	5700	100.15	-	-	91.1	33.4	13.56	37.91	250	80	A	V
		5725.4	60.22	-7.98	68.2	50.97	33.6	13.57	37.92	250	80	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 100 5500MHz		11000	51.14	-22.86	74	34.35	38.9	19.55	41.66	100	277	P	H	
		11000	42.92	-11.08	54	26.13	38.9	19.55	41.66	100	277	A	H	
		12643	51.82	-22.18	74	34.78	39.34	20.94	43.24	-	-	P	H	
		12643	41.25	-12.75	54	24.21	39.34	20.94	43.24	-	-	A	H	
		13270	52.69	-21.31	74	34.53	39.83	21.48	43.15	-	-	P	H	
		13270	42.32	-11.68	54	24.16	39.83	21.48	43.15	-	-	A	H	
		16500	50.79	-17.41	68.2	32.85	38.6	23.72	44.38	-	-	P	H	
		17956	56.11	-17.89	74	34.66	42.24	24.65	45.44	-	-	P	H	
		17956	46.79	-7.21	54	25.34	42.24	24.65	45.44	-	-	A	H	
														H
														H
														H
			11000	50.17	-23.83	74	33.38	38.9	19.55	41.66	311	24	P	V
			11000	42.93	-11.07	54	26.14	38.9	19.55	41.66	311	24	A	V
			12082	52.75	-21.25	74	36.23	39.18	20.41	43.07	-	-	P	V
			12082	40.65	-13.35	54	24.13	39.18	20.41	43.07	-	-	A	V
			13255	52.87	-21.13	74	34.7	39.85	21.47	43.15	-	-	P	V
			13255	42.35	-11.65	54	24.18	39.85	21.47	43.15	-	-	A	V
			16500	50.96	-17.24	68.2	33.02	38.6	23.72	44.38	-	-	P	V
			17934	55.75	-18.25	74	34.43	42.1	24.64	45.42	-	-	P	V
		17934	46.53	-7.47	54	25.21	42.1	24.64	45.42	-	-	A	V	
													V	
													V	
													V	



WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11160	49.79	-24.21	74	33.03	39.06	19.68	41.98	100	59	P	H
		11160	39.63	-14.37	54	22.87	39.06	19.68	41.98	100	59	A	H
		13380	52.76	-21.24	74	34.24	40.12	21.57	43.17	-	-	P	H
		13380	42.41	-11.59	54	23.89	40.12	21.57	43.17	-	-	A	H
		14480	52.39	-21.61	74	34.09	40.1	22.39	44.19	-	-	P	H
		14480	42.28	-11.72	54	23.98	40.1	22.39	44.19	-	-	A	H
		16740	52.32	-15.88	68.2	34.4	38.44	23.88	44.4	-	-	P	H
		17978	55.68	-18.32	74	34.09	42.37	24.67	45.45	-	-	P	H
		17978	45.37	-8.63	54	23.78	42.37	24.67	45.45	-	-	A	H
													H
													H
													H
802.11a													
CH 116													
5580MHz		11160	49.56	-24.44	74	32.8	39.06	19.68	41.98	100	231	P	V
		11160	39.28	-14.72	54	22.52	39.06	19.68	41.98	100	231	A	V
		13399	52.9	-21.1	74	34.29	40.2	21.58	43.17	-	-	P	V
		13399	42.57	-11.43	54	23.96	40.2	21.58	43.17	-	-	A	V
		14491	52.99	-21.01	74	34.68	40.1	22.4	44.19	-	-	P	V
		14491	42.67	-11.33	54	24.36	40.1	22.4	44.19	-	-	A	V
		16740	50.79	-17.41	68.2	32.87	38.44	23.88	44.4	-	-	P	V
		17967	55.08	-18.92	74	33.57	42.3	24.66	45.45	-	-	P	V
		17967	44.79	-9.21	54	23.28	42.3	24.66	45.45	-	-	A	V
													V
													V
													V



WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11400	51.4	-22.6	74	34.6	39.4	19.86	42.46	100	288	P	H
		11400	42.97	-11.03	54	26.17	39.4	19.86	42.46	100	288	A	H
		12511	51.43	-22.57	74	34.8	39.12	20.81	43.3	-	-	P	H
		12511	40.76	-13.24	54	24.13	39.12	20.81	43.3	-	-	A	H
		13336	52.82	-21.18	74	34.5	39.94	21.54	43.16	-	-	P	H
		13336	42.54	-11.46	54	24.22	39.94	21.54	43.16	-	-	A	H
		17100	50.88	-17.32	68.2	33.33	38	24.11	44.56	-	-	P	H
		17989	55.51	-18.49	74	33.87	42.43	24.67	45.46	-	-	P	H
		17989	46.87	-7.13	54	25.23	42.43	24.67	45.46	-	-	A	H
													H
													H
													H
802.11a													
CH 140													
5700MHz		11400	50.6	-23.4	74	33.8	39.4	19.86	42.46	305	25	P	V
		11400	42.68	-11.32	54	25.88	39.4	19.86	42.46	305	25	A	V
		12676	51.48	-22.52	74	34.36	39.38	20.97	43.23	-	-	P	V
		12676	41.28	-12.72	54	24.16	39.38	20.97	43.23	-	-	A	V
		13358	53.05	-20.95	74	34.62	40.03	21.56	43.16	-	-	P	V
		13358	42.68	-11.32	54	24.25	40.03	21.56	43.16	-	-	A	V
		17100	51.74	-16.46	68.2	34.19	38	24.11	44.56	-	-	P	V
		17945	55.97	-18.03	74	34.58	42.17	24.65	45.43	-	-	P	V
		17945	46.62	-7.38	54	25.23	42.17	24.65	45.43	-	-	A	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 3 - 5470~5725MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 100 5500MHz		5457.52	61.05	-12.95	74	52.59	32.98	13.33	37.85	260	307	P	H
		5469.84	65.53	-2.67	68.2	57.08	32.96	13.35	37.86	260	307	P	H
		5460	45.32	-8.68	54	36.86	32.98	13.34	37.86	260	307	A	H
	*	5500	114.63	-	-	106.21	32.9	13.39	37.87	260	307	P	H
	*	5500	103.87	-	-	95.45	32.9	13.39	37.87	260	307	A	H
		5451.28	57.79	-16.21	74	49.31	33	13.33	37.85	291	34	P	V
		5467.92	62.19	-6.01	68.2	53.74	32.96	13.35	37.86	291	34	P	V
		5460	41.85	-12.15	54	33.39	32.98	13.34	37.86	291	34	A	V
	*	5500	109.51	-	-	101.09	32.9	13.39	37.87	291	34	P	V
	*	5500	98.78	-	-	90.36	32.9	13.39	37.87	291	34	A	V
													V
													V
802.11ax HE20 Full CH 140 5700MHz	*	5700	113.99	-	-	104.94	33.4	13.56	37.91	262	307	P	H
	*	5700	104.94	-	-	95.89	33.4	13.56	37.91	262	307	A	H
		5728.44	63.86	-4.34	68.2	54.58	33.63	13.57	37.92	262	307	P	H
													H
													H
													H
	*	5700	110.89	-	-	101.84	33.4	13.56	37.91	298	61	P	V
	*	5700	100.26	-	-	91.21	33.4	13.56	37.91	298	61	A	V
		5725	62.1	-6.1	68.2	52.85	33.6	13.57	37.92	298	61	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz
WIFI 802.11ax HE20 (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11160	50.34	-23.66	74	33.58	39.06	19.68	41.98	214	310	P	H
		11160	42.96	-11.04	54	26.2	39.06	19.68	41.98	214	310	A	H
		12544	51.46	-22.54	74	34.71	39.19	20.84	43.28	-	-	P	H
		12544	40.86	-13.14	54	24.11	39.19	20.84	43.28	-	-	A	H
		13358	53.07	-20.93	74	34.64	40.03	21.56	43.16	-	-	P	H
		13358	42.65	-11.35	54	24.22	40.03	21.56	43.16	-	-	A	H
		16740	51.95	-16.25	68.2	34.03	38.44	23.88	44.4	-	-	P	H
		17934	55.66	-18.34	74	34.34	42.1	24.64	45.42	-	-	P	H
		17934	46.65	-7.35	54	25.33	42.1	24.64	45.42	-	-	A	H
													H
													H
802.11ax HE20 Full													H
CH 116		11160	50.74	-23.26	74	33.98	39.06	19.68	41.98	328	41	P	V
5580MHz		11160	42.86	-11.14	54	26.1	39.06	19.68	41.98	328	41	A	V
		12489	51.57	-22.43	74	34.98	39.09	20.79	43.29	-	-	P	V
		12489	40.7	-13.3	54	24.11	39.09	20.79	43.29	-	-	A	V
		13391	52.41	-21.59	74	33.85	40.16	21.57	43.17	-	-	P	V
		13391	42.7	-11.3	54	24.14	40.16	21.57	43.17	-	-	A	V
		16740	51	-17.2	68.2	33.08	38.44	23.88	44.4	-	-	P	V
		17945	55.74	-18.26	74	34.35	42.17	24.65	45.43	-	-	P	V
		17945	46.59	-7.41	54	25.2	42.17	24.65	45.43	-	-	A	V
													V
													V
													V

Remark

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



Band 3 5470~5725MHz
WIFI 802.11ax HE20 Partial 242 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Partial 242/61 CH 100 5260MHz		5458.16	60.81	-13.19	74	52.34	32.98	13.34	37.85	265	306	P	H	
		5461.04	64.88	-3.32	68.2	56.42	32.98	13.34	37.86	265	306	A	H	
		5460	44.69	-9.31	54	36.23	32.98	13.34	37.86	265	306	P	H	
	*	5500	112.12	-	-	103.7	32.9	13.39	37.87	265	306	A	H	
	*	5500	104.11	-	-	95.69	32.9	13.39	37.87	265	306	P	H	
														H
			5459.76	59.13	-14.87	74	50.67	32.98	13.34	37.86	298	43	P	V
			5468.88	61.27	-6.93	68.2	52.82	32.96	13.35	37.86	298	43	A	V
			5459.92	40.62	-13.38	54	32.16	32.98	13.34	37.86	298	43	P	V
		*	5500	106.15	-	-	97.73	32.9	13.39	37.87	298	43	A	V
	*	5500	98.11	-	-	89.69	32.9	13.39	37.87	298	43	P	V	
													V	
802.11ax HE20 Partial 242/61 CH 140 5700MHz		5700	109.99	-	-	100.94	33.4	13.56	37.91	100	342	P	H	
		5700	99.56	-	-	90.51	33.4	13.56	37.91	100	342	A	H	
		5725	63.81	-4.39	68.2	54.56	33.6	13.57	37.92	100	342	P	H	
														H
														H
														H
		*	5700	108.8	-	-	99.75	33.4	13.56	37.91	366	74	P	V
		*	5700	99.4	-	-	90.35	33.4	13.56	37.91	366	74	A	V
			5725	63.79	-4.41	68.2	54.54	33.6	13.57	37.92	366	74	P	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 3 5470~5725MHz
WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Partial 106/53 CH 100 5500MHz		5454	50.33	-23.67	74	41.86	32.99	13.33	37.85	197	300	P	H	
		5469.84	63.73	-4.47	68.2	55.28	32.96	13.35	37.86	197	300	P	H	
		5446	41.4	-12.6	54	32.94	32.99	13.32	37.85	197	300	A	H	
	*	5500	116.63	-	-	108.21	32.9	13.39	37.87	197	300	P	H	
	*	5500	107.61	-	-	99.19	32.9	13.39	37.87	197	300	A	H	
														H
			5442.32	48.2	-25.8	74	39.75	32.98	13.32	37.85	304	77	P	V
			5469.04	54.08	-14.12	68.2	45.63	32.96	13.35	37.86	304	77	P	V
			5445.36	38.97	-15.03	54	30.51	32.99	13.32	37.85	304	77	A	V
		*	5500	113.82	-	-	105.4	32.9	13.39	37.87	304	77	P	V
	*	5500	104.21	-	-	95.79	32.9	13.39	37.87	304	77	A	V	
													V	
802.11ax HE20 Partial 106/53 CH 140 5700MHz	*	5700	115.09	-	-	106.04	33.4	13.56	37.91	171	313	P	H	
	*	5700	106.17	-	-	97.12	33.4	13.56	37.91	171	313	A	H	
			5729.88	65.05	-3.15	68.2	55.76	33.64	13.57	37.92	171	313	P	H
														H
														H
														H
		*	5700	114.82	-	-	105.77	33.4	13.56	37.91	362	77	P	V
		*	5700	106.3	-	-	97.25	33.4	13.56	37.91	362	77	A	V
				5733.88	58.48	-9.72	68.2	49.16	33.67	37.92	362	77	P	V
														V
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 3 5470~5725MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 102 5510MHz		5449.12	59.29	-14.71	74	50.82	33	13.32	37.85	261	301	P	H
		5470	64.2	-4	68.2	55.75	32.96	13.35	37.86	261	301	P	H
		5459.92	47.08	-6.92	54	38.62	32.98	13.34	37.86	261	301	A	H
	*	5510	110.03	-	-	101.6	32.9	13.4	37.87	261	301	P	H
	*	5510	100.15	-	-	91.72	32.9	13.4	37.87	261	301	A	H
		5746.1	48.71	-19.49	68.2	39.28	33.77	13.58	37.92	261	301	P	H
		5457.28	56.81	-17.19	74	48.34	32.99	13.33	37.85	244	59	P	V
		5470	61.28	-6.92	68.2	52.83	32.96	13.35	37.86	244	59	P	V
		5459.92	42.21	-11.79	54	33.75	32.98	13.34	37.86	244	59	A	V
	*	5510	106.2	-	-	97.77	32.9	13.4	37.87	244	59	P	V
	*	5510	95.6	-	-	87.17	32.9	13.4	37.87	244	59	A	V
	5755.235	47.2	-21	68.2	37.73	33.82	13.58	37.93	244	59	P	V	
802.11ax HE40 Full CH 134 5670MHz		5426.3	45.8	-28.2	74	37.4	32.95	13.29	37.84	248	313	P	H
		5463.05	45.68	-22.52	68.2	37.23	32.97	13.34	37.86	248	313	P	H
		5457.8	36.8	-17.2	54	28.33	32.98	13.34	37.85	248	313	A	H
	*	5670	110.12	-	-	101.2	33.28	13.55	37.91	248	313	P	H
	*	5670	101.38	-	-	92.46	33.28	13.55	37.91	248	313	A	H
		5728.6	55.71	-12.49	68.2	46.43	33.63	13.57	37.92	248	313	P	H
		5458.5	45.96	-28.04	74	37.5	32.98	13.34	37.86	300	78	P	V
		5469.7	45.93	-22.27	68.2	37.48	32.96	13.35	37.86	300	78	P	V
		5459.9	36.53	-17.47	54	28.07	32.98	13.34	37.86	300	78	A	V
	*	5670	107.76	-	-	98.84	33.28	13.55	37.91	300	78	P	V
	*	5670	98	-	-	89.08	33.28	13.55	37.91	300	78	A	V
	5727.025	51.35	-16.85	68.2	42.08	33.62	13.57	37.92	300	78	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11100	49.97	-24.03	74	33.2	39	19.63	41.86	100	273	P	H
		11100	42.65	-11.35	54	25.88	39	19.63	41.86	100	273	A	H
		12665	51.98	-22.02	74	34.88	39.37	20.96	43.23	-	-	P	H
		12665	41.26	-12.74	54	24.16	39.37	20.96	43.23	-	-	A	H
		13281	52.51	-21.49	74	34.35	39.82	21.49	43.15	-	-	P	H
		13281	42.51	-11.49	54	24.35	39.82	21.49	43.15	-	-	A	H
		16650	51.2	-17	68.2	33.27	38.5	23.82	44.39	-	-	P	H
		18000	55.67	-18.33	74	33.96	42.5	24.68	45.47	-	-	P	H
		18000	46.88	-7.12	54	25.17	42.5	24.68	45.47	-	-	A	H
													H
													H
													H
802.11ax													
HE40 Full													
CH 110		11100	49.64	-24.36	74	32.87	39	19.63	41.86	321	24	P	V
5550MHz		11100	42.69	-11.31	54	25.92	39	19.63	41.86	321	24	A	V
		12390	51.52	-22.48	74	35.05	39.01	20.7	43.24	-	-	P	V
		12390	40.58	-13.42	54	24.11	39.01	20.7	43.24	-	-	A	V
		13380	52.86	-21.14	74	34.34	40.12	21.57	43.17	-	-	P	V
		13380	42.66	-11.34	54	24.14	40.12	21.57	43.17	-	-	A	V
		16650	51.65	-16.55	68.2	33.72	38.5	23.82	44.39	-	-	P	V
		17978	55.63	-18.37	74	34.04	42.37	24.67	45.45	-	-	P	V
		17978	46.9	-7.1	54	25.31	42.37	24.67	45.45	-	-	A	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.
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Band 3 5470~5725MHz
WIFI 802.11ax HE40 Partial 484 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Partial 484/65 CH 102 5510MHz		5458.48	59.83	-14.17	74	51.37	32.98	13.34	37.86	261	304	P	H
		5469.04	65.23	-2.97	68.2	56.78	32.96	13.35	37.86	261	304	P	H
		5459.92	46.27	-7.73	54	37.81	32.98	13.34	37.86	261	304	A	H
	*	5510	106.93	-	-	98.5	32.9	13.4	37.87	261	304	P	H
	*	5510	97.9	-	-	89.47	32.9	13.4	37.87	261	304	A	H
		5742.32	48.26	-19.94	68.2	38.86	33.74	13.58	37.92	261	304	P	H
		5458.72	55.03	-18.97	74	46.57	32.98	13.34	37.86	368	77	P	V
		5468.32	63.11	-5.09	68.2	54.66	32.96	13.35	37.86	368	77	P	V
		5458.24	40.77	-13.23	54	32.3	32.98	13.34	37.85	368	77	A	V
	*	5510	104.29	-	-	95.86	32.9	13.4	37.87	368	77	P	V
	*	5510	95.75	-	-	87.32	32.9	13.4	37.87	368	77	A	V
		5757.755	47.28	-20.92	68.2	37.8	33.83	13.58	37.93	368	77	P	V
802.11ax HE40 Partial 484/65 CH 134 5670MHz		5445.2	47.86	-26.14	74	39.4	32.99	13.32	37.85	250	304	P	H
		5466.55	47.91	-20.29	68.2	39.45	32.97	13.35	37.86	250	304	P	H
		5457.45	37.33	-16.67	54	28.86	32.99	13.33	37.85	250	304	A	H
	*	5670	110.3	-	-	101.38	33.28	13.55	37.91	250	304	P	H
	*	5670	101.9	-	-	92.98	33.28	13.55	37.91	250	304	A	H
		5725.45	65.38	-2.82	68.2	56.13	33.6	13.57	37.92	250	304	P	H
		5431.9	47.71	-26.29	74	39.3	32.96	13.3	37.85	344	78	P	V
		5469.7	46.72	-21.48	68.2	38.27	32.96	13.35	37.86	344	78	P	V
		5459.2	36.91	-17.09	54	28.45	32.98	13.34	37.86	344	78	A	V
	*	5670	106.8	-	-	97.88	33.28	13.55	37.91	344	78	P	V
*	5670	98.99	-	-	90.07	33.28	13.55	37.91	344	78	A	V	
	5725	64.01	-4.19	68.2	54.76	33.6	13.57	37.92	344	78	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz
WIFI 802.11ax HE40 Partial 242 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Partial 242/61 CH 102 5510MHz		5455.12	56.14	-17.86	74	47.67	32.99	13.33	37.85	276	309	P	H
		5470	65.03	-3.17	68.2	56.58	32.96	13.35	37.86	276	309	P	H
		5455.12	39.96	-14.04	54	31.49	32.99	13.33	37.85	276	309	A	H
	*	5510	108.5	-	-	100.07	32.9	13.4	37.87	276	309	P	H
	*	5510	100.88	-	-	92.45	32.9	13.4	37.87	276	309	A	H
		5748.305	47.34	-20.86	68.2	37.89	33.79	13.58	37.92	276	309	P	H
		5458.72	54.89	-19.11	74	46.43	32.98	13.34	37.86	373	78	P	V
		5467.6	59.59	-8.61	68.2	51.14	32.96	13.35	37.86	373	78	P	V
		5455.12	38.12	-15.88	54	29.65	32.99	13.33	37.85	373	78	A	V
	*	5510	106.69	-	-	98.26	32.9	13.4	37.87	373	78	P	V
	*	5510	98.03	-	-	89.6	32.9	13.4	37.87	373	78	A	V
		5742.32	47.4	-20.8	68.2	38	33.74	13.58	37.92	373	78	P	V
802.11ax HE40 Partial 242/62 CH 134 5670MHz		5457.45	48.58	-25.42	74	40.11	32.99	13.33	37.85	200	300	P	H
		5465.5	49.37	-18.83	68.2	40.91	32.97	13.35	37.86	200	300	P	H
		5458.5	37.69	-16.31	54	29.23	32.98	13.34	37.86	200	300	A	H
	*	5670	112.65	-	-	103.73	33.28	13.55	37.91	200	300	P	H
	*	5670	104.92	-	-	96	33.28	13.55	37.91	200	300	A	H
		5725.8	65.37	-2.83	68.2	56.11	33.61	13.57	37.92	200	300	P	H
		5423.15	47.5	-26.5	74	39.1	32.95	13.29	37.84	264	64	P	V
		5465.85	47.17	-21.03	68.2	38.71	32.97	13.35	37.86	264	64	P	V
		5457.45	37.2	-16.8	54	28.73	32.99	13.33	37.85	264	64	A	V
	*	5670	109.62	-	-	100.7	33.28	13.55	37.91	264	64	P	V
*	5670	101.11	-	-	92.19	33.28	13.55	37.91	264	64	A	V	
	5742.6	58.72	-9.48	68.2	49.32	33.74	13.58	37.92	264	64	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 7+8, Note, Frequency (MHz), Level (dBµV/m), Margin (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include test results for 802.11ax HE80 Full CH 106 5530MHz and a Remark section.



Band 3 5470~5725MHz
WIFI 802.11ax HE80 Partial 996 (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 7+8, Note, Frequency (MHz), Level (dBµV/m), Margin (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include frequency measurements and a Remark section.



Band 3 5470~5725MHz
WIFI 802.11ax HE80 Partial 484 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Partial 484/65 CH 106 5530MHz		5439.28	57.22	-16.78	74	48.78	32.98	13.31	37.85	279	307	P	H
		5470	63.4	-4.8	68.2	54.95	32.96	13.35	37.86	279	307	P	H
		5459.92	41.89	-12.11	54	33.43	32.98	13.34	37.86	279	307	A	H
	*	5530	106.13	-	-	97.68	32.9	13.43	37.88	279	307	P	H
	*	5530	96	-	-	87.55	32.9	13.43	37.88	279	307	A	H
		5732.555	47.65	-20.55	68.2	38.34	33.66	13.57	37.92	279	307	P	H
		5458.96	55.42	-18.58	74	46.96	32.98	13.34	37.86	296	39	P	V
		5469.76	62.56	-5.64	68.2	54.11	32.96	13.35	37.86	296	39	P	V
		5458.72	39.86	-14.14	54	31.4	32.98	13.34	37.86	296	39	A	V
	*	5530	101.08	-	-	92.63	32.9	13.43	37.88	296	39	P	V
	*	5530	92.37	-	-	83.92	32.9	13.43	37.88	296	39	A	V
		5728.145	47.26	-20.94	68.2	37.98	33.63	13.57	37.92	296	39	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission above 18GHz

WIFI 802. 11ax HE80 Partial 996 (SHF @ 1m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
7+8		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
802.11ax HE80 Partial 996/67 SHF		38724	53.82	-20.18	74	39.95	43.1	25.88	55.11	-	-		H	
		38724	41.91	-12.09	54	28.04	43.1	25.88	55.11	-	-		H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			38702	54.52	-19.48	74	40.66	43.1	25.88	55.12	-	-		V
			38702	41.69	-12.31	54	27.83	43.1	25.88	55.12	-	-		V
													V	
													V	
													V	
													V	
													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.													



Emission below 1GHz

WIFI 802.11ax HE80 Full (LF @ 3m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
7+8		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
802.11ax HE80 Partial 996/67 LF		30	23.27	-16.73	40	33.38	24.37	1.18	35.66	30	23.27		H	
		107.6	27.53	-15.97	43.5	44.16	16.8	2.09	35.52	107.6	27.53		H	
		220.12	25.4	-20.6	46	42.67	15.18	2.89	35.34	220.12	25.4		H	
		561.56	28.21	-17.79	46	32.21	25.92	4.52	34.44	561.56	28.21		H	
		807.94	31.47	-14.53	46	32.15	27.5	5.45	33.63	807.94	31.47		H	
		909.79	34.04	-11.96	46	32.31	28.91	5.91	33.09	909.79	34.04		H	
														H
														H
														H
														H
														H
														H
			31.94	31.97	-8.03	40	42.93	23.49	1.21	35.66	31.94	31.97		V
			85.29	23.09	-16.91	40	42.86	13.92	1.9	35.59	85.29	23.09		V
			106.63	22.83	-20.67	43.5	39.54	16.72	2.09	35.52	106.63	22.83		V
			633.34	28.96	-17.04	46	32.31	26.11	4.77	34.23	633.34	28.96		V
			861.29	33.49	-12.51	46	32.22	28.86	5.69	33.28	861.29	33.49		V
			970.9	35.62	-18.38	54	31.87	30.65	6.02	32.92	970.9	35.62		V
													V	
													V	
													V	
													V	
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.													



Note symbol

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



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

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
7+8													
802.11a		5150	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 36													
5180MHz		5150	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 @ 5150MHz:

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 @ 5150MHz:

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

Test Engineer :	JC Liang, Bill Chang and Nick Yu	Temperature :	19~22°C
		Relative Humidity :	61~66%

Note symbol

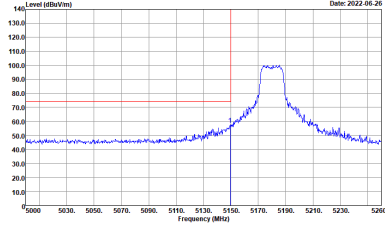
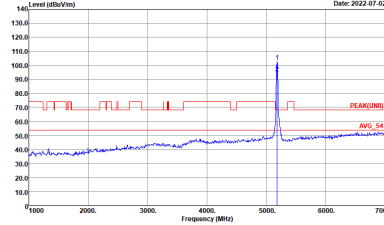
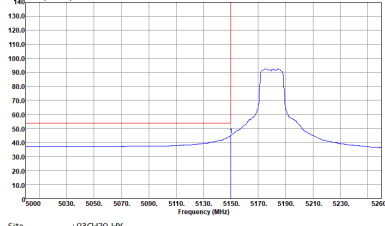
-L	Low channel location
-R	High channel location



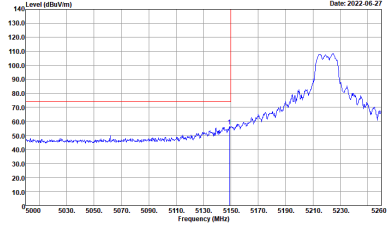
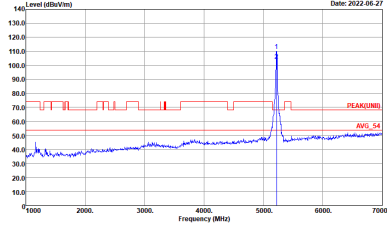
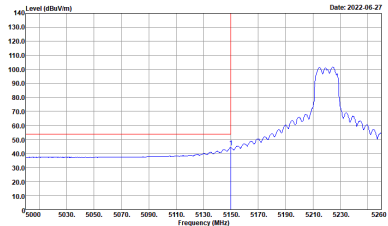
Band 1 - 5150~5250MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
7+8	Horizontal	Fundamental
Peak	<p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH20-HY Condition : PEAK(FUNDE) 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	<p>Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000kHz VBW:0.010MHz SWT:Auto</p>	Left blank

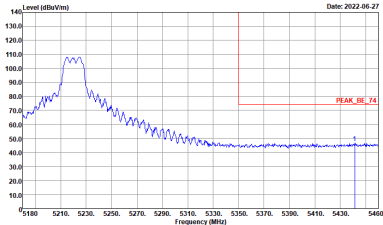
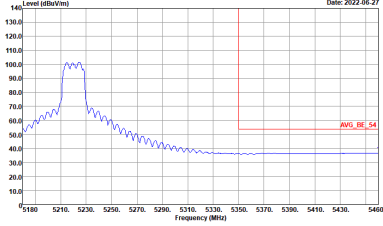


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
7+8	Vertical	Fundamental
Peak	 <p>Site : 03CH20-1FV Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH20-1FV Condition : PEAK(UNII) 3m 91200_02360_211102 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Site : 03CH20-1FV Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:1000.000kHz VBW:0.010MHz SWT:Auto</p>	Left blank

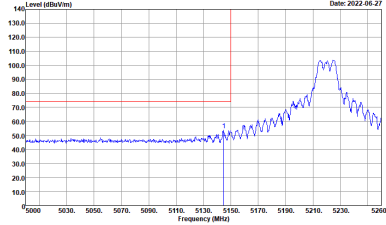
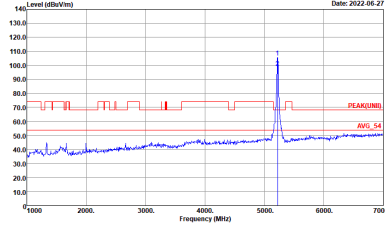
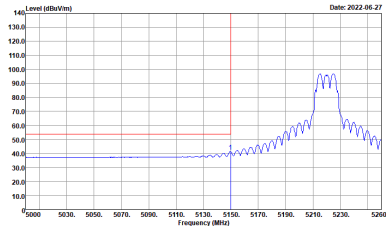


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
7+8	Horizontal	Fundamental
Peak	 <p>Site : 03CH20-1FV Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH20-1FV Condition : PEAK(UNII) 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Site : 03CH20-1FV Condition : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000kHz VBW:0.010MHz SWT:Auto</p>	Left blank

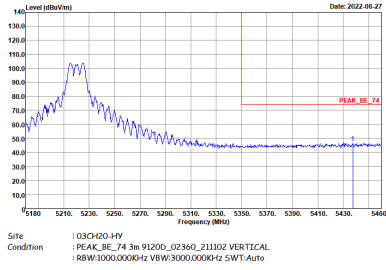
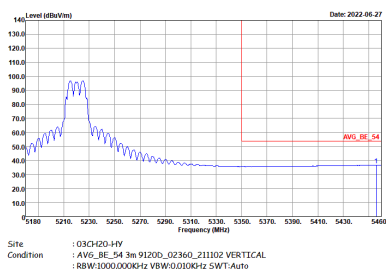


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
7+8	Horizontal	Fundamental
Peak	 <p>Site : 03CH20-11V Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank
Avg.	 <p>Site : 03CH20-11V Condition : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.000kHz VBW:0.0100Hz SWT:Auto</p>	Left blank

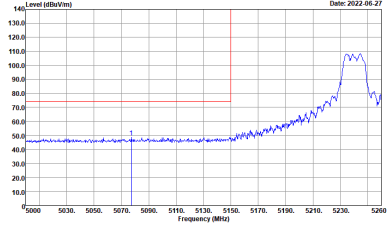
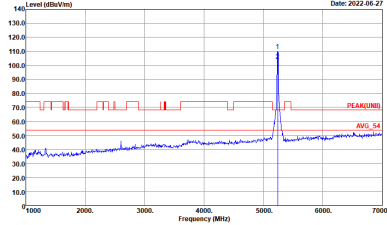
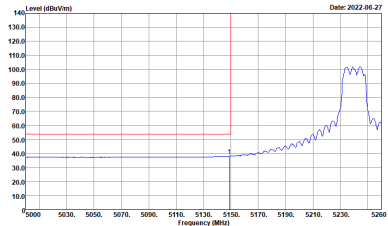


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
7+8	Vertical	Fundamental
Peak	 <p>Site : 03CH20-1FY Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH20-1FY Condition : PEAK(UNII) 3m 91200_02360_211102 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Site : 03CH20-1FY Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
7+8	Vertical	Fundamental
Peak	 <p>Site : 03CH20-11V Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank
Avg.	 <p>Site : 03CH20-11V Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:1000.000kHz VBW:0.010MHz SWT:Auto</p>	Left blank

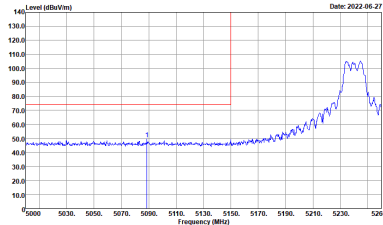
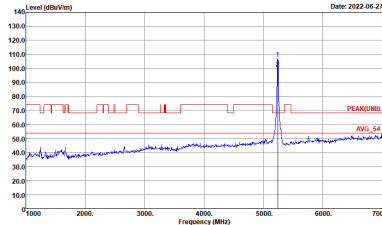
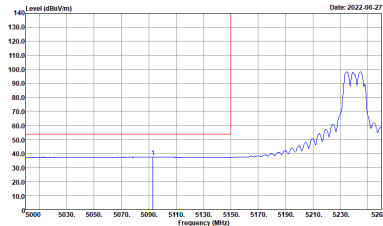


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
7+8	Horizontal	Fundamental
Peak	 <p>Date: 2022-06-27</p> <p>Site : 03CH20-1FV Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto</p>	 <p>Date: 2022-06-27</p> <p>Site : 03CH20-1FV Condition : PEAK(UNII) 3m 91200_02360_211102 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto</p>
Avg.	 <p>Date: 2022-06-27</p> <p>Site : 03CH20-1FV Condition : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.0000kHz VBW:0.01000kHz SWT:Auto</p>	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
7+8	Horizontal	Fundamental
Peak	<p>Site : 03CH20-11Y Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto</p>	Left blank
Avg.	<p>Site : 03CH20-11Y Condition : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto</p>	Left blank



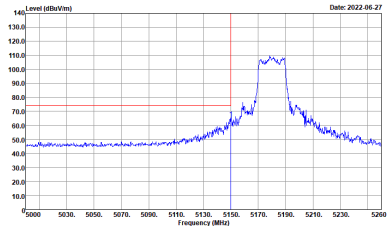
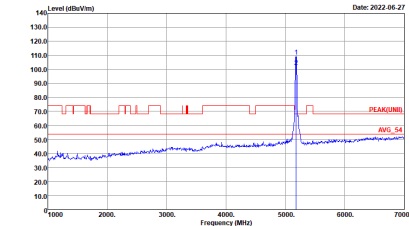
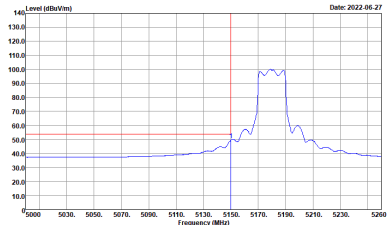
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
7+8	Vertical	Fundamental
Peak	 <p>Site : 03CH20-1FY Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH20-1FY Condition : PEAK(UNII) 3m 91200_02360_211102 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Site : 03CH20-1FY Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:1000.000kHz VBW:0.010MHz SWT:Auto</p>	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
7+8	Vertical	Fundamental
Peak	<p>Site : 03CH20-11V Condition : PEAK_BE_74 3m 91200_02360_211102 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank
Avg.	<p>Site : 03CH20-11V Condition : AVG_BE_54 3m 91200_02360_211102 VERTICAL : RBW:1000.000kHz VBW:0.010MHz SWT:Auto</p>	Left blank



Band 1 5150~5250MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH36 5180MHz	
7+8	Horizontal	Fundamental
Peak	 <p>Site : 03CH20-HY Condition : PEAK_BE_74 3m 91200_02360_211102 HORIZONTAL : RBW:3000.0000Hz VBW:3000.0000Hz SWT:Auto</p>	 <p>Site : 03CH20-HY Condition : PEAK(UNL) 3m 91200_02360_211102 HORIZONTAL : RBW:3000.0000Hz VBW:3000.0000Hz SWT:Auto</p>
Avg.	 <p>Site : 03CH20-HY Condition : AVG_BE_54 3m 91200_02360_211102 HORIZONTAL : RBW:3000.0000Hz VBW:0.0100Hz SWT:Auto</p>	Left blank