FCC RADIO TEST REPORT

FCC ID	:	**A4RGG3HH**
Equipment	:	**Wireless Device**
Model Name	:	**GG3HH**
Applicant	:	**Google LLC** **1600 Amphitheatre Parkway,** **Mountain View, California, 94043 USA**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on Jan. 29, 2024 and testing was performed from Feb. 08, 2024 to Mar. 15, 2024. 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

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History of this test report

Report No.	Version	Description	Issue Date
FR412915G	01	Initial issue of report	Apr. 23, 2024
FR412915G	02	Revise section 3.3.5 This report is an updated version, replacing the report issued on Apr. 23, 2024.	Apr. 29, 2024

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.407(e)	6dB & 26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum E.I.R.P Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	3.58 dB under the limit at 17595.00 MHz
3.5	15.207	AC Conducted Emission	Pass	17.50 dB under the limit at 0.15 MHz
3.6	15.203	Antenna Requirement	Pass	-

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty".
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: William Chen

Report Producer: Clio Lo

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs Bluetooth, BLE, BLE (CH2-76), Wi-Fi 2.4GHz 802.11b/g/n/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, NFC, GNSS and UWB. **Antenna Type** WLAN: PIFA Antenna

EUT Information List	
S/N	**Performed Test Item**
1JE6501069905054120 22D5	RF Conducted Measurement
41151JEAVW000G	Radiated Spurious Emission
41311JEAVW005E	Conducted Emission

Antenna information		
5850 MHz ~ 5895 MHz	Peak Gain (dBi)	-1.4

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

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	TH05-HY, CO07-HY, 03CH15-HY

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

FCC designation No.: TW3786

1.4 Applicable Standards

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

- FCC Part 15 Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- FCC KDB 414788 D01 Radiated Test Site v01r01.
- FCC KDB 291074 D02 EMC Measurement v01
- ANSI C63.10-2013

Remark:

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

2 Test Configuration of Equipment Under Test

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

b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

Frequency Band	Bandwidth	Channel	Frequency (MHz)	Note
5850-5895 MHz (U-NII-4)	20 MHz	169	5845	Straddle
		173	5865	
		177	5885	
	40 MHz	167	5835	Straddle
		175	5875	
	80 MHz	171	5855	Straddle

Note: The channel noted with “straddle” spans 5.725-5.850 GHz and 5.850-5.895 GHz.

2.2 Test Mode

This device support 26/52/106/242/484/996-tone RU.

The PSD of partial RU is reduced to be smaller than full RU according to TCB workshop interim guidance Oct. 2022.

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 partial RU modes in HE40/HE80 are covered by modes in HE20 because the power setting is identical

The 242-tone RU is covered by 20MHz channel, 484-tone RU is covered by 40MHz channel and 996-tone RU is covered by 80MHz channel.

The final test modes include the worst data rates for each modulation shown in the table below.

Single Mode

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

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

Ch. #		RF test channel of UNII-4 and UNII-3 &-4 span channels	
		802.11a	802.11n HT20
L	Low	169	169
M	Middle	173	173
H	High	177	177

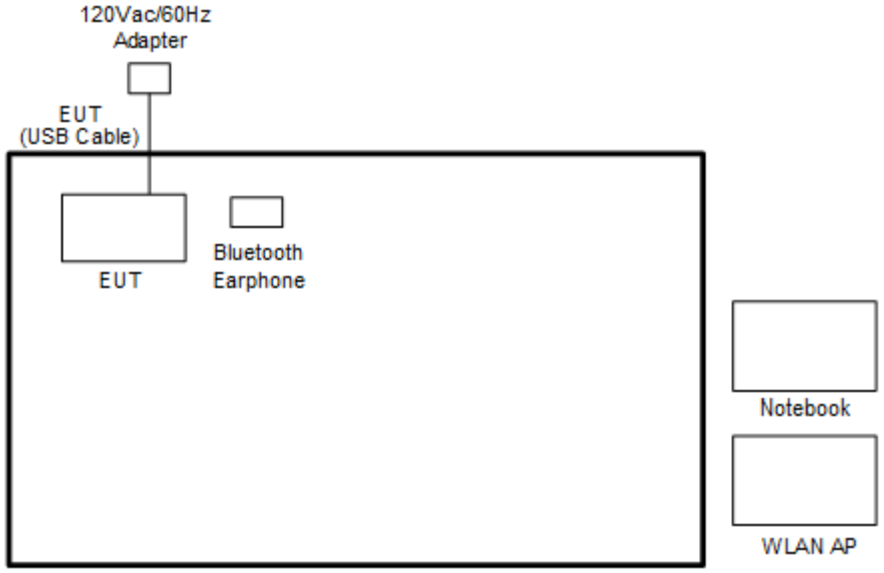
Ch. #		RF test channel of UNII-4 and UNII-3 &-4 span channels		
		802.11ac VHT20	802.11ac VHT40	802.11ac VHT80
L	Low	169	167	-
M	Middle	173	-	171
H	High	177	175	-

Ch. #		RF test channel of UNII-4 and UNII-3 &-4 span channels		
		802.11ax HE20	802.11ax HE40	802.11ax HE80
L	Low	169	167	-
M	Middle	173	-	171
H	High	177	175	-

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

2.3 Connection Diagram of Test System

<AC Conducted Emission Mode>



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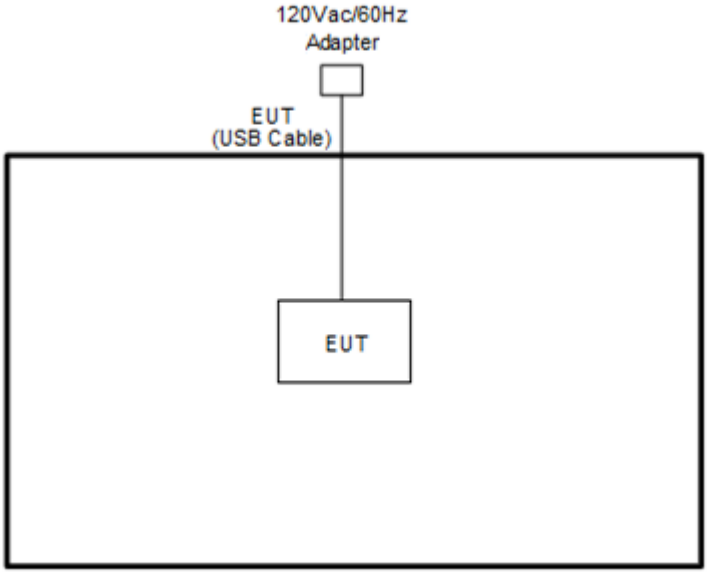


2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Earphone	Sony	SBH20	PY7-RD0010	N/A	N/A
2.	WLAN AP	ASUS	RT-AC52	MSQ-RTAC4A00	N/A	Unshielded, 1.8 m
3.	Notebook	DELL	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	AC Adapter	Chicony	G9BR1	N/A	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “CMD” 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.

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

= 4.2 + 10 = 14.2 (dB)

3 Test Result

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

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

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

26dB and 99% Occupied bandwidth are reporting only.

3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

The testing follows FCC KDB 291074 D02 EMC Measurement v01 Section 2.11 Minimum Emission bandwidth

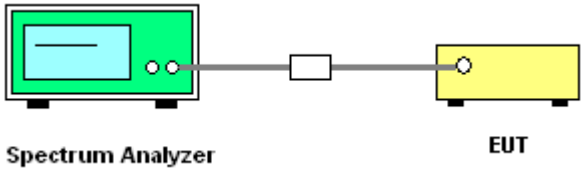
1. Set RBW = 100 kHz.
2. Set the VBW ≥ 3 x RBW.
3. Detector = Peak.
4. Trace mode = max hold
5. Measure the maximum width of the emission that is 6 dB down from the peak of the emission.
6. Measure and record the results in the test report.

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

Section C) Emission bandwidth

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW.
3. Detector = Peak.
4. Trace mode = max hold
5. 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%.
6. 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) ≥ 3 * RBW.

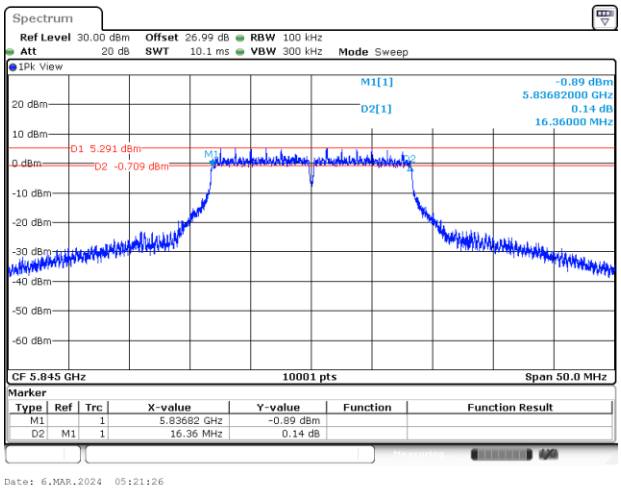
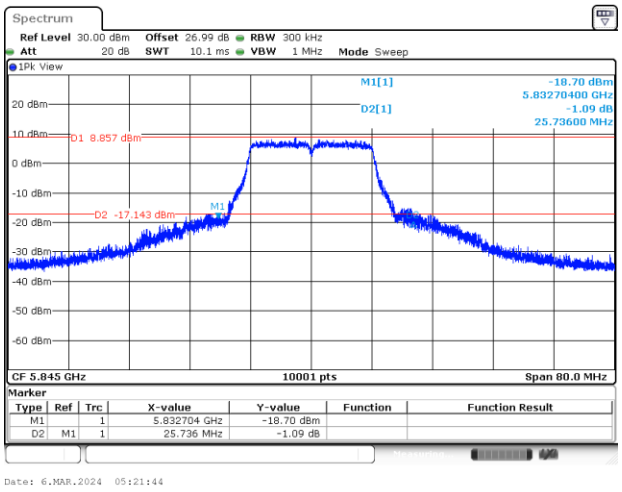
3.1.4 Test Setup



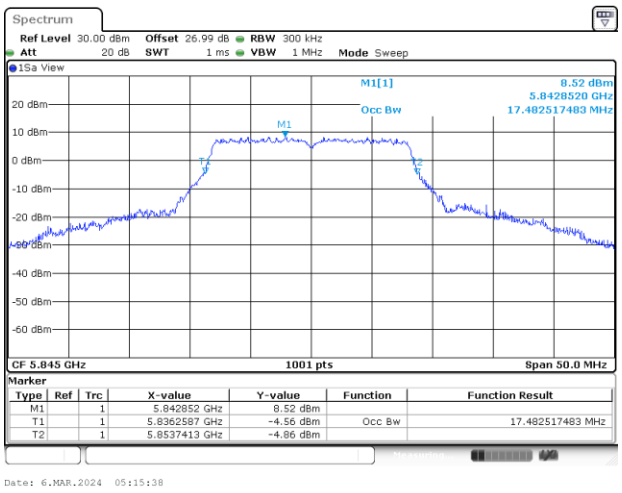
3.1.5 Test Result of 6dB and 26dB and 99% Occupied Bandwidth

Please refer to Appendix A.

<802.11a>

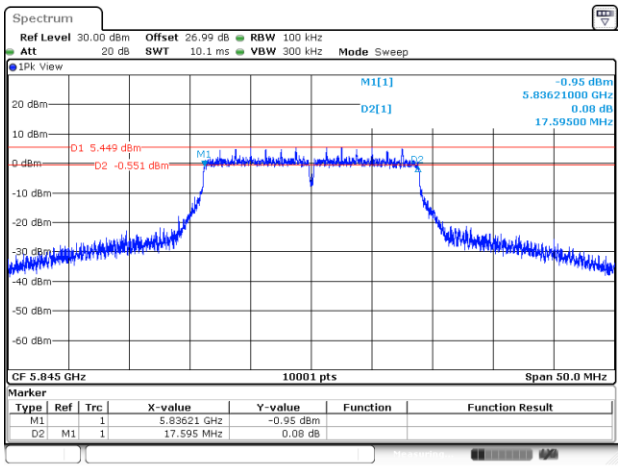
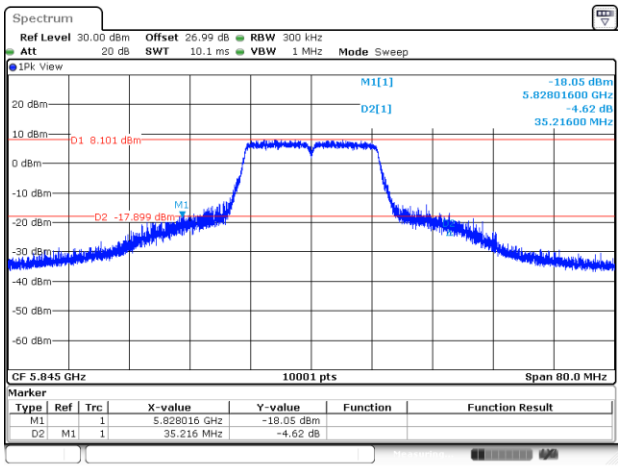
6dB Bandwidth	26dB Bandwidth
	

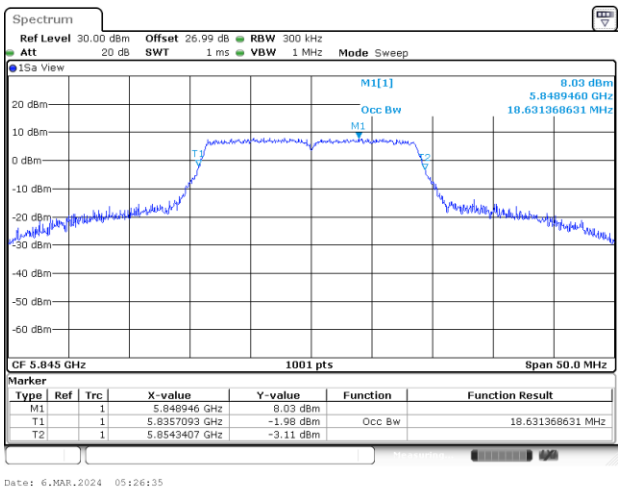
Occupied Bandwidth



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

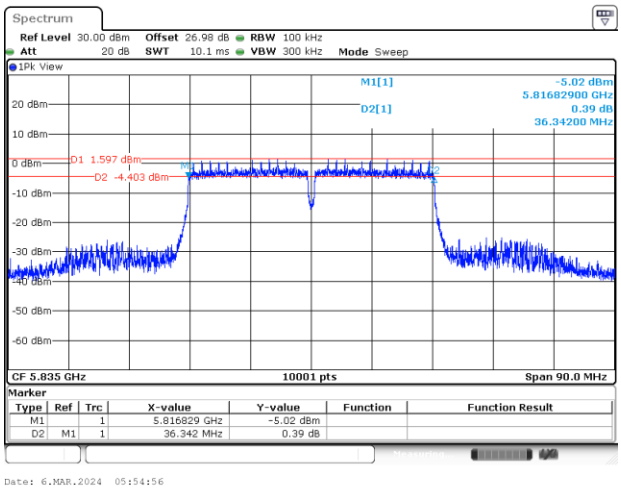
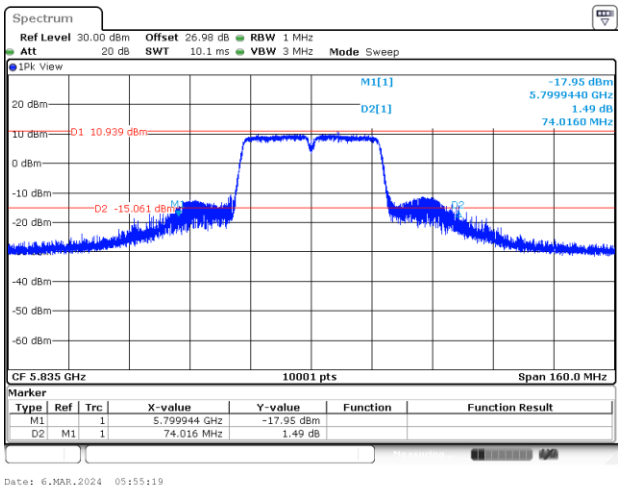
<802.11n HT20>

6dB Bandwidth	26dB Bandwidth
	

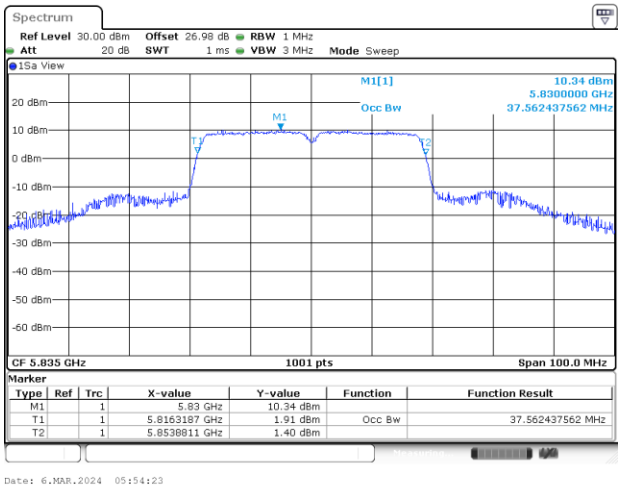
Occupied Bandwidth


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

<802.11n HT40>

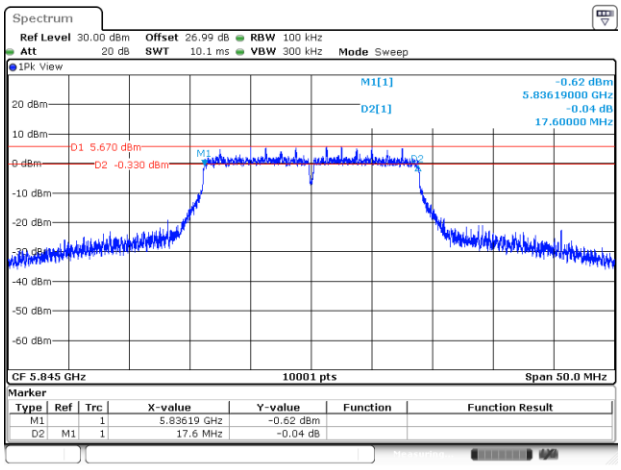
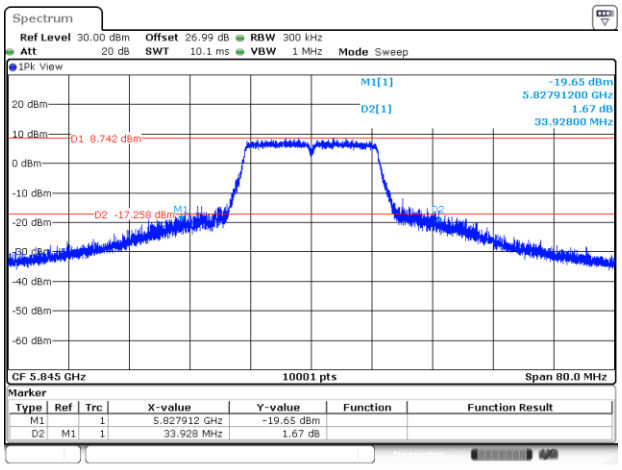
6dB Bandwidth	26dB Bandwidth
	

Occupied Bandwidth

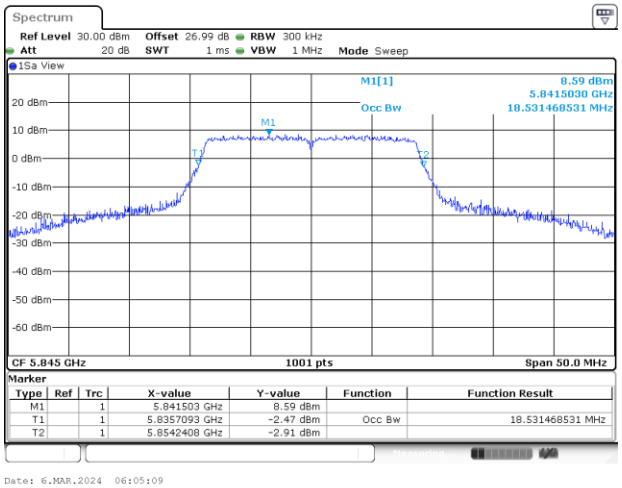


Note: The occupied channel bandwidth is maintained within the band of operation.

<802.11ac VHT20>

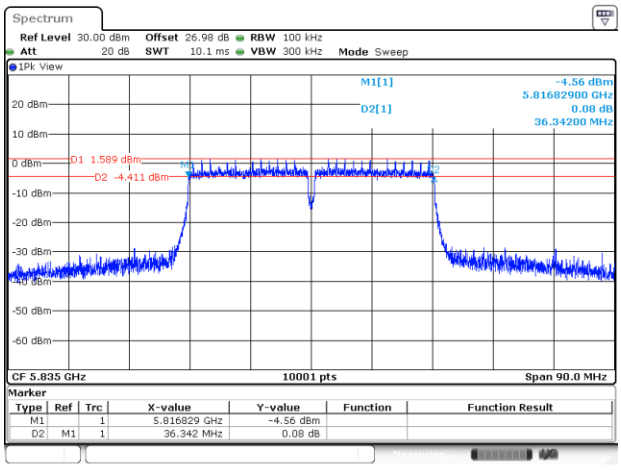
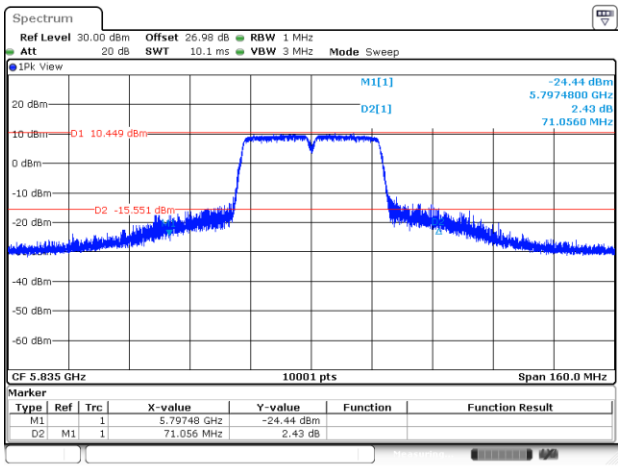
6dB Bandwidth	26dB Bandwidth
	

Occupied Bandwidth

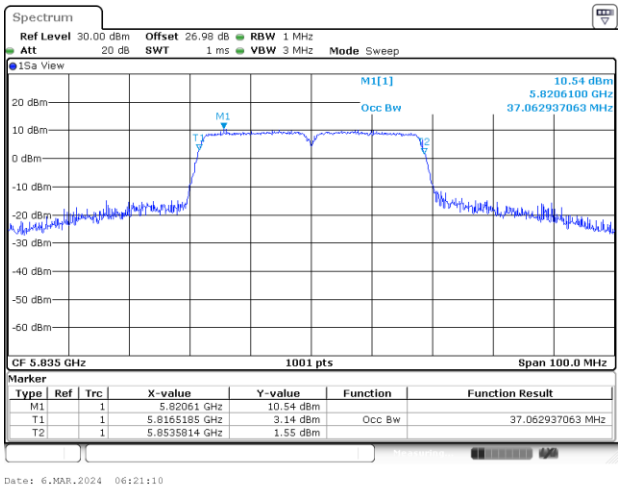


Note: The occupied channel bandwidth is maintained within the band of operation.

<802.11ac VHT40>

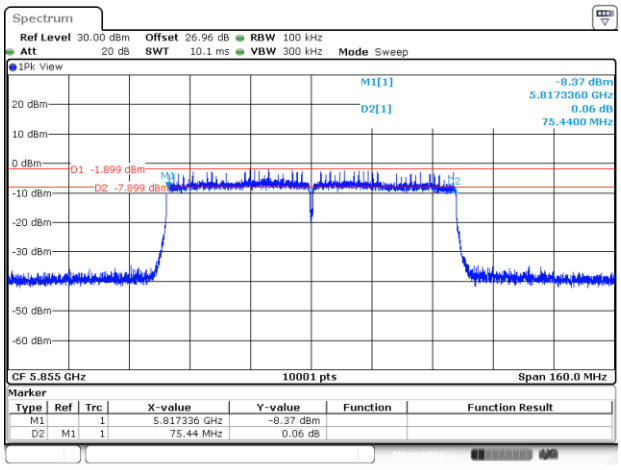
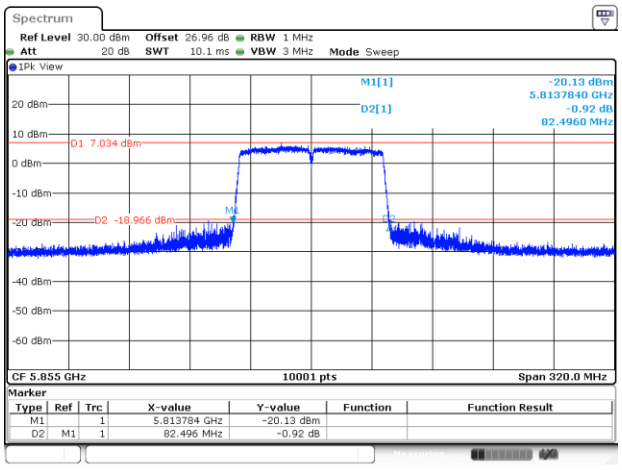
6dB Bandwidth	26dB Bandwidth
	

Occupied Bandwidth



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

<802.11ac VHT80>

6dB Bandwidth	26dB Bandwidth
	

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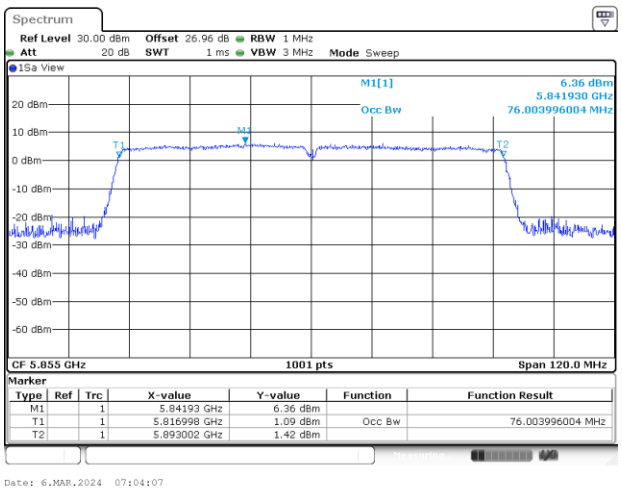
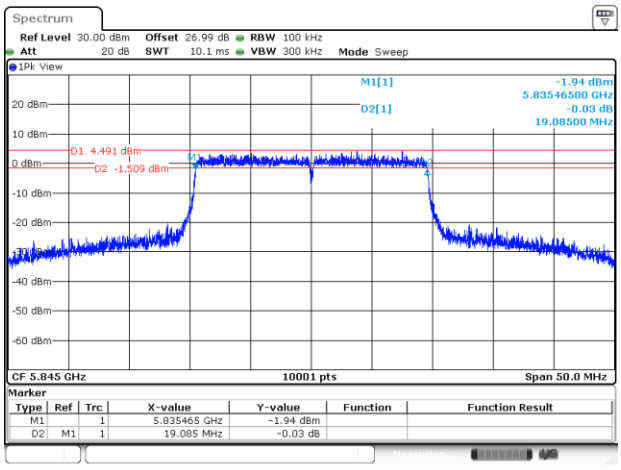
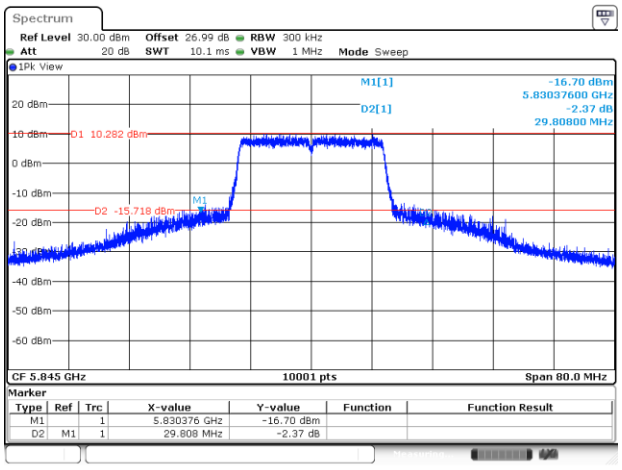


Note: The occupied channel bandwidth is maintained within the band of operation.

<802.11ax HE20>

6dB Bandwidth	26dB Bandwidth
	

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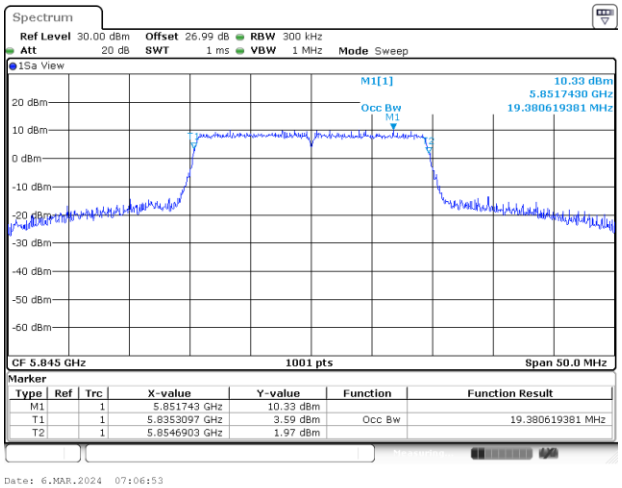
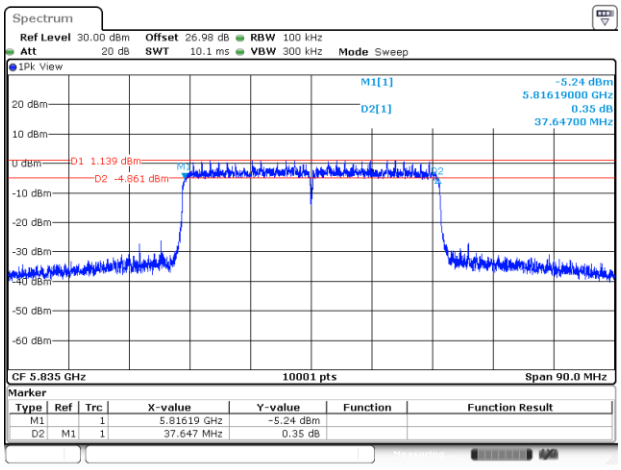
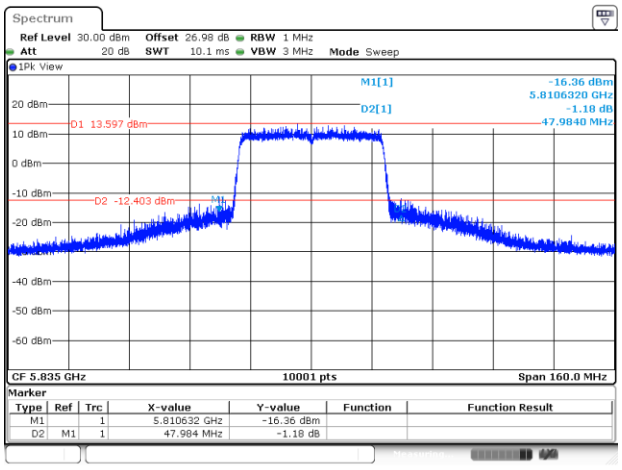
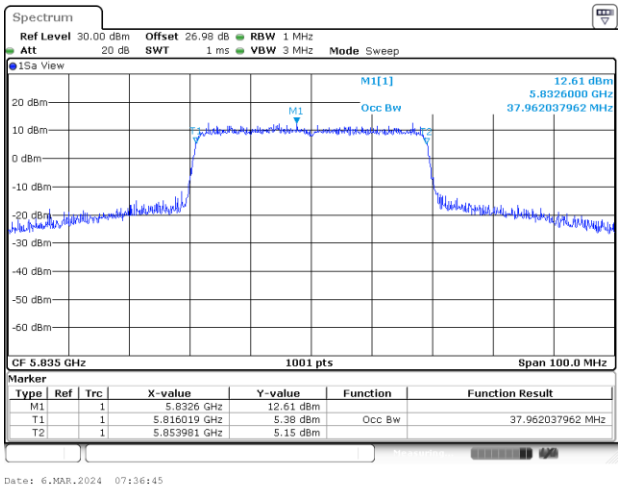


Note: The occupied channel bandwidth is maintained within the band of operation.

<802.11ax HE40>

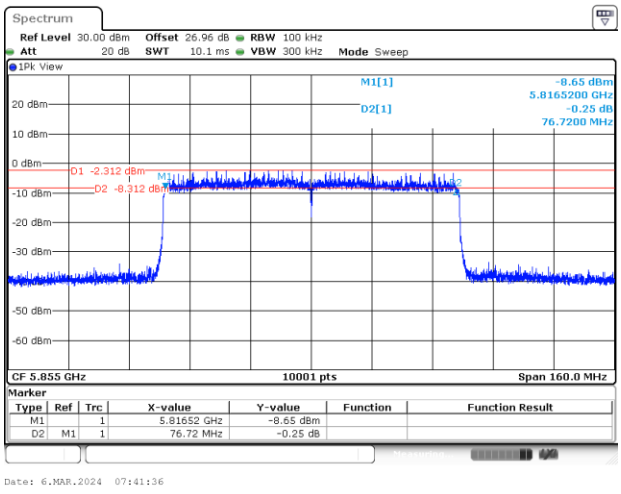
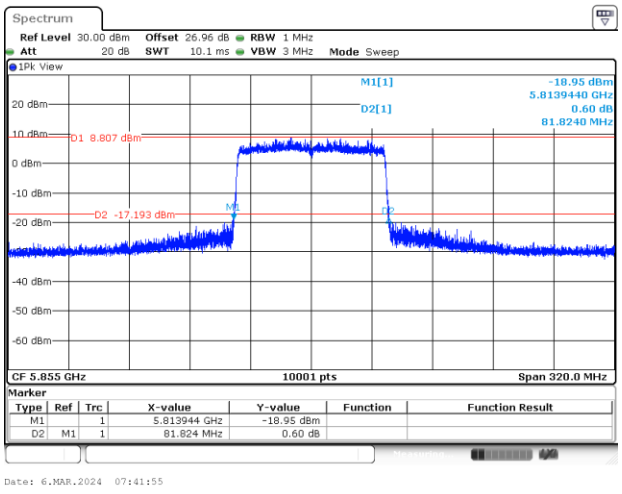
6dB Bandwidth	26dB Bandwidth
	

Occupied Bandwidth

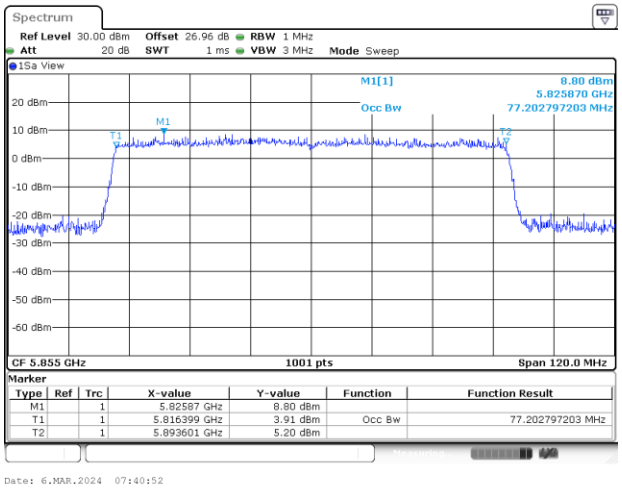


Note: The occupied channel bandwidth is maintained within the band of operation.

<802.11ax HE80>

6dB Bandwidth	26dB Bandwidth
	

Occupied Bandwidth



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

3.2 Maximum E.I.R.P Output Power Measurement

3.2.1 Limit of Maximum E.I.R.P Output Power

For client devices operating under the control of an indoor access point in the 5.850-5.895 GHz band, the maximum power spectral density must not exceed 14 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm. Client devices operating on a channel that spans the 5.725-5.850 GHz and 5.850-5.895 GHz bands must not exceed an e.i.r.p. of 30 dBm.

3.2.2 Measuring Instruments

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

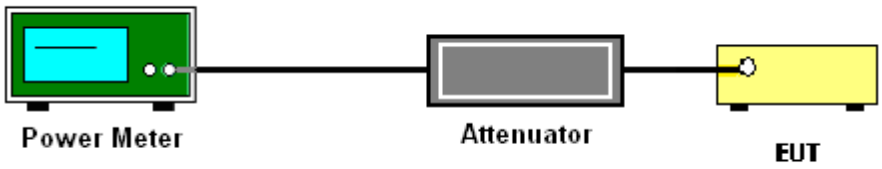
3.2.3 Test Procedures

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.

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

1. For client devices operating under the control of an indoor access point in the 5.850-5.895 GHz band, the maximum power spectral density must not exceed 14 dBm e.i.r.p. in any 1-megahertz band.
2. For client devices operating on a channel that spans the 5.725-5.850 GHz and 5.850-5.895 GHz bands shall meet both 15.407(a)(3)(i) 30dBm/500kHz and 15.407(a)(3)(iii) 14dBm/MHz limit, where the stringent limit 14dBm/MHz is applied.
3. For an indoor access point operating on a channel that spans the 5.725-5.850 GHz and 5.850-5.895 GHz bands shall meet both 15.407(a)(3)(ii) 36dBm limit, where the stringent limit 20dBm/MHz is applied.

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.

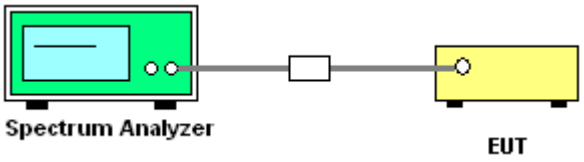
 # Method SA-2 #

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW ≥ 3 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add 10 log(1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add 10 log(1/0.25) = 6 dB if the duty cycle is 25 percent.

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.

3.3.4 Test Setup

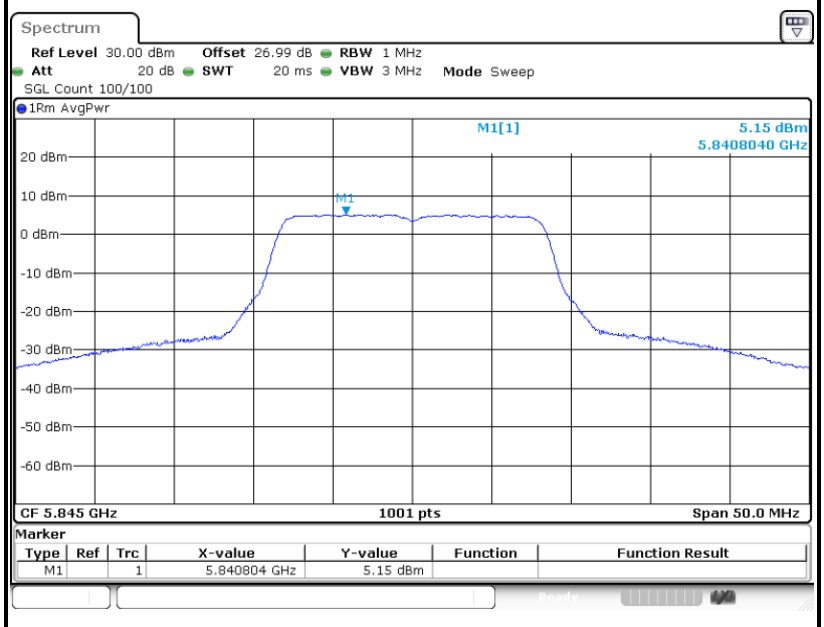


3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

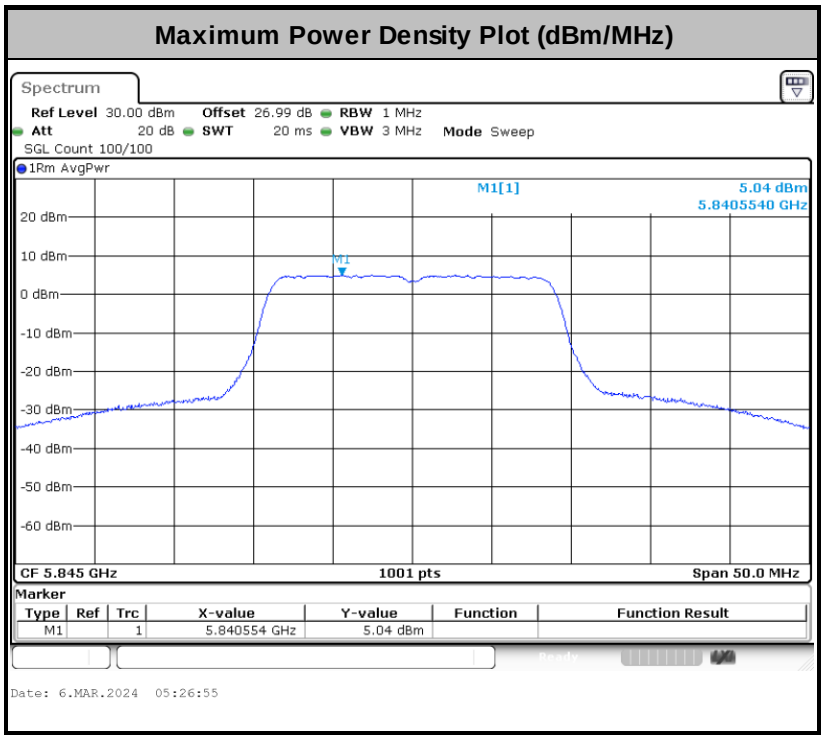
<802.11a>

Maximum Power Density Plot (dBm/MHz)



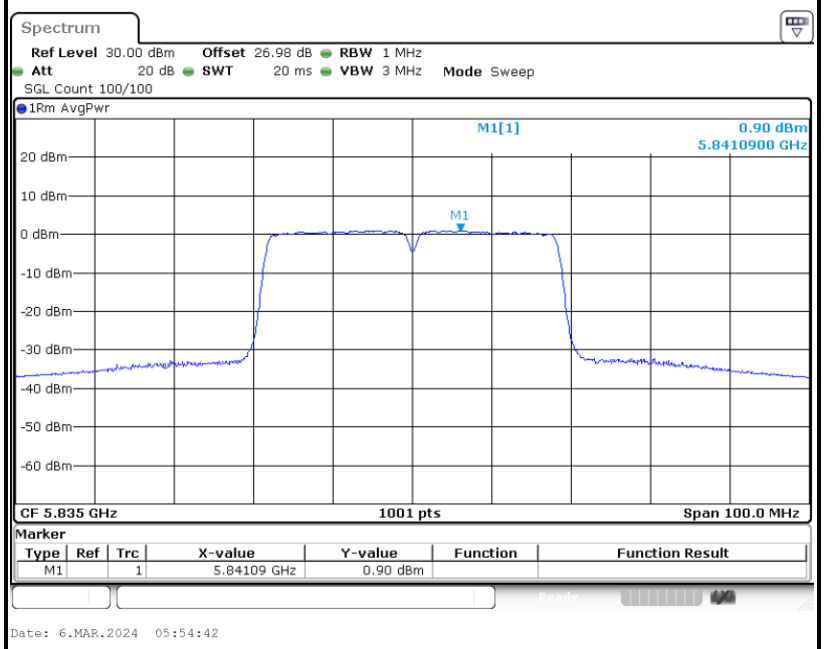
<802.11n HT20>

Maximum Power Density Plot (dBm/MHz)



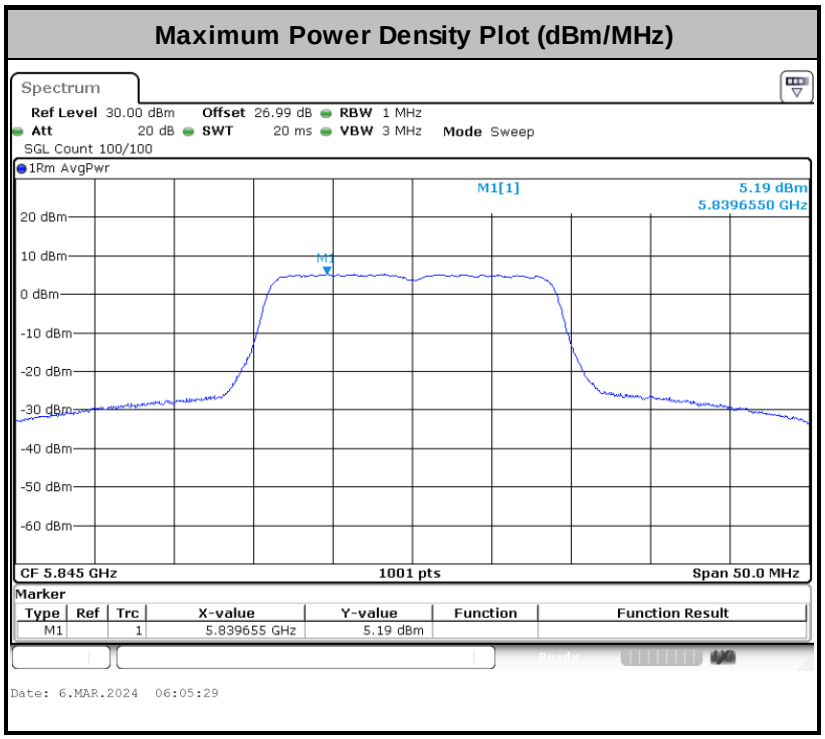
<802.11n HT40>

Maximum Power Density Plot (dBm/MHz)



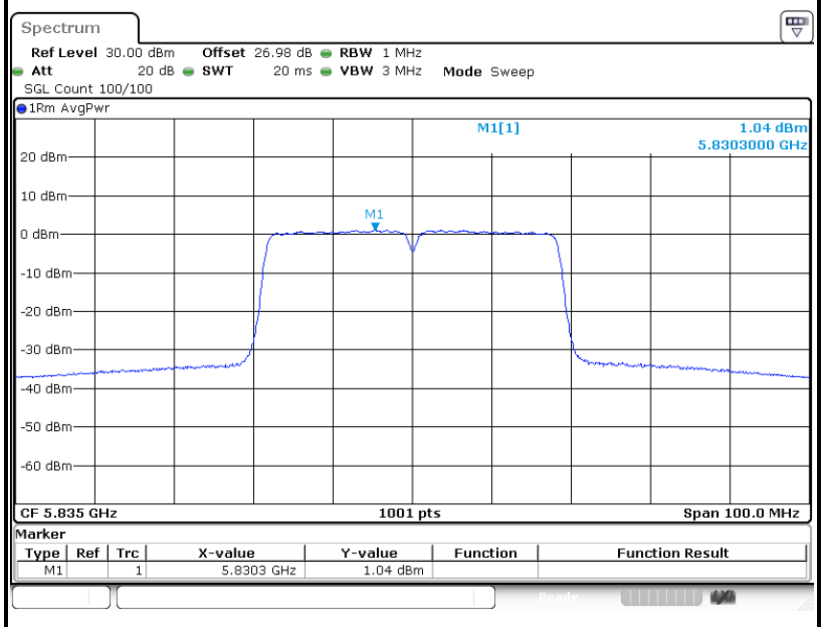
<802.11ac VHT20>

Maximum Power Density Plot (dBm/MHz)



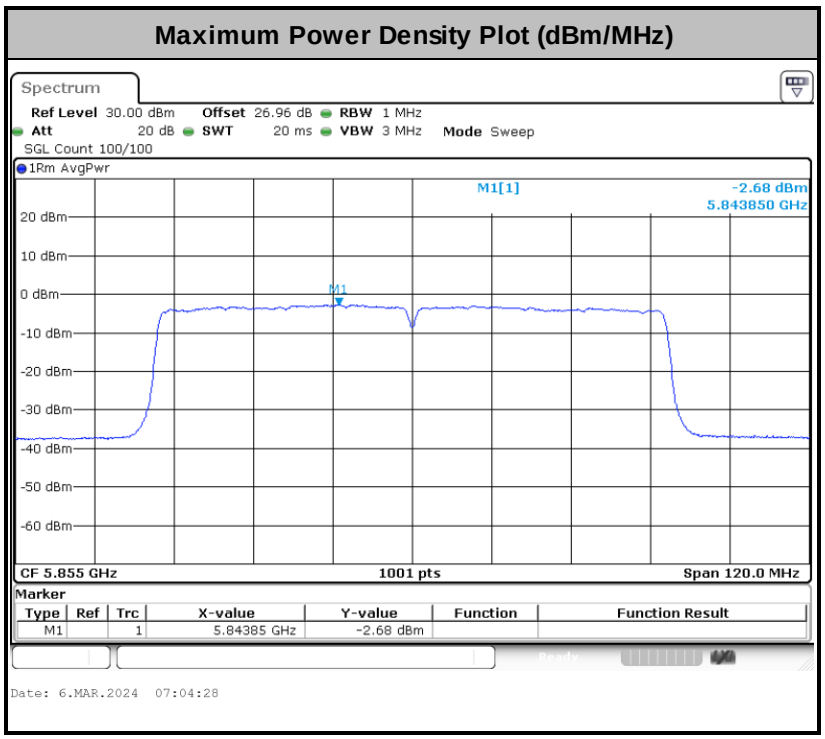
<802.11ac VHT40>

Maximum Power Density Plot (dBm/MHz)



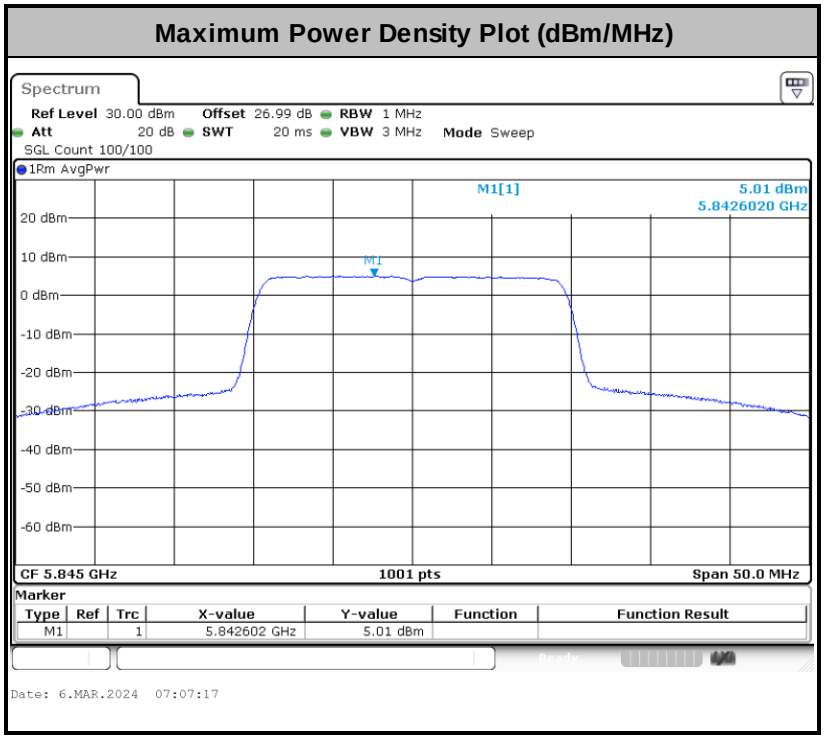
<802.11ac VHT80>

Maximum Power Density Plot (dBm/MHz)



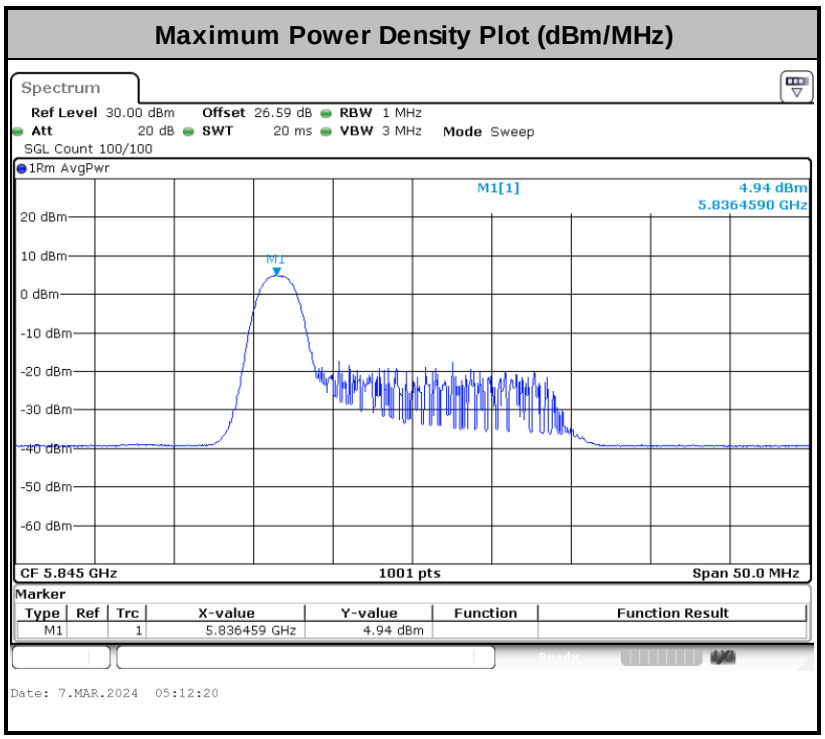
<802.11ax HE20 Full RU>

Maximum Power Density Plot (dBm/MHz)



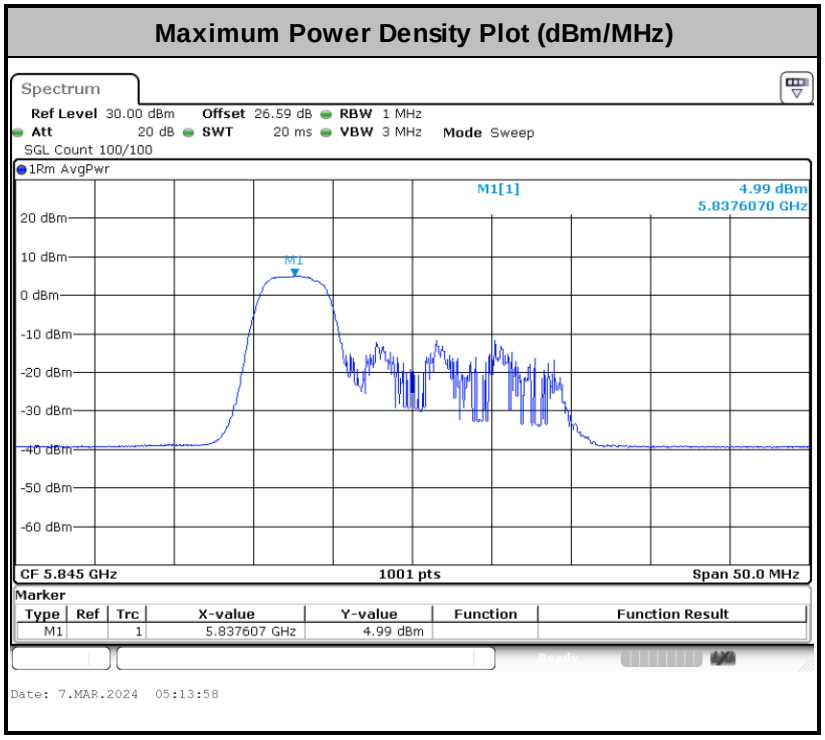
<802.11ax HE20 26 RU>

Maximum Power Density Plot (dBm/MHz)



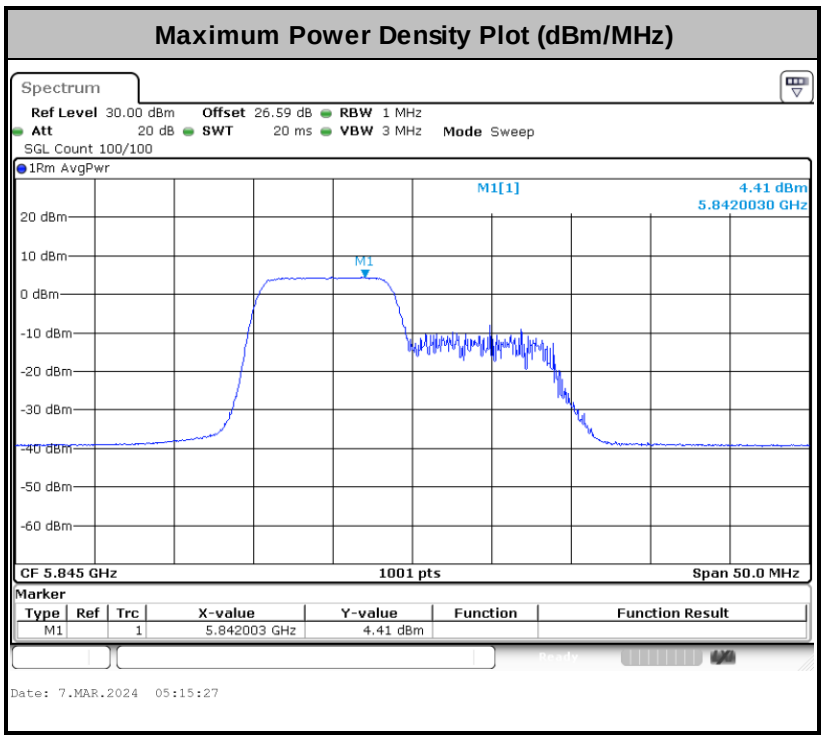
<802.11ax HE20 52 RU>

Maximum Power Density Plot (dBm/MHz)



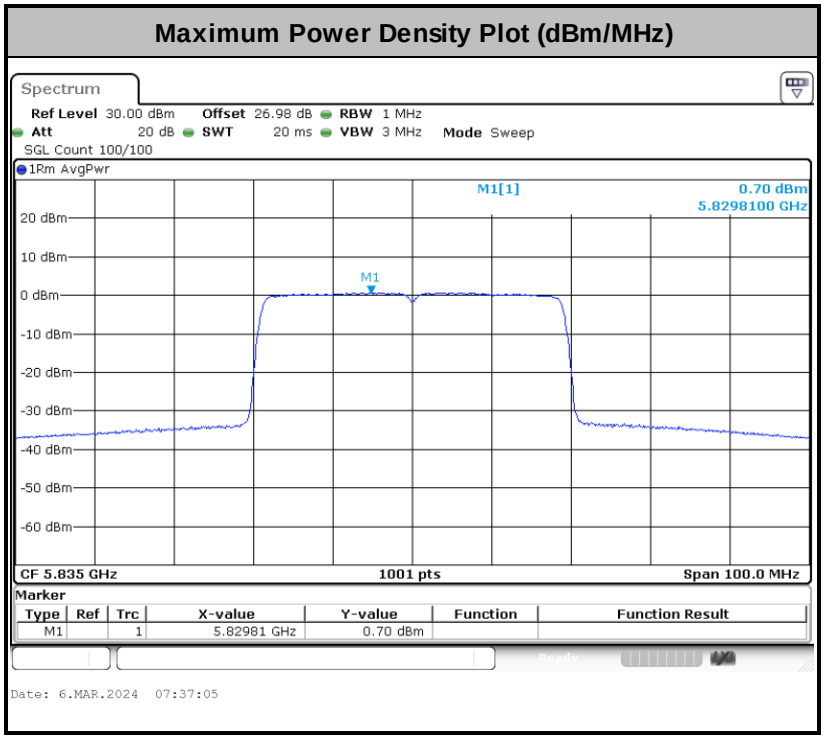
<802.11ax HE20 106 RU>

Maximum Power Density Plot (dBm/MHz)



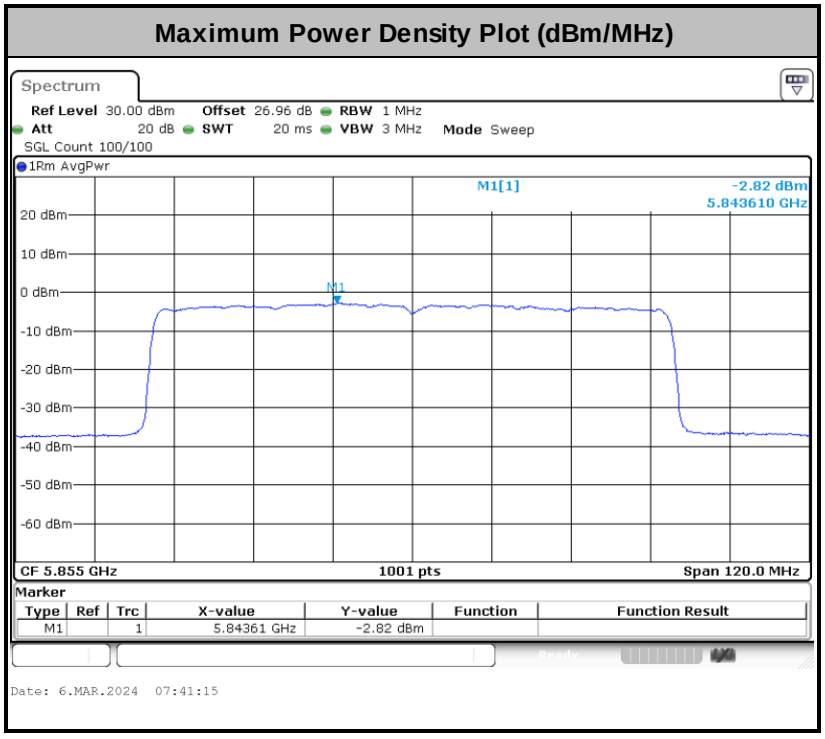
<802.11ax HE40 Full RU>

Maximum Power Density Plot (dBm/MHz)



<802.11ax HE80 Full RU>

Maximum Power Density Plot (dBm/MHz)



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) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as the following table:

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

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

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

(2) For transmitters operating solely in the 5.850-5.895 GHz band or operating on a channel that spans across 5.725-5.895 GHz:

15.407(b)(5)(ii), all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of −5 dBm/MHz and shall decrease linearly to an e.i.r.p. of −27 dBm/MHz at or above 5.925 GHz.

All emissions below 5.725 GHz shall not exceed an e.i.r.p. of −27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz.

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

Use guidance in KDB Publication 789033 for all measurements. Unwanted emissions outside of restricted bands are measured with an RMS detector. In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit.

Unwanted band-edge emissions may be measured using the integration method as described in KDB Publication 789033 3. d) (ii). Emissions below 5725 MHz should be measured using peak-detection while emission above 5895 MHz should be measured using average.

Frequency(GHz)	EIRP (dBm)	Field Strength @3m distance (dBuV/m)	Note
Below 5.65	-27dBm/MHz	68.2	Peak
5.7	10dBm/MHz	105.2	Peak
5.72	15.6dBm/MHz	110.8	Peak
5.725	27dBm/MHz	122.2	Peak
5.895	-5dBm/MHz	90.2	Average
5.895	15dBm/MHz	110.2	Peak
Above 5.925	-27dBm/MHz	68.2	Average
Above 5.925	-7dBm/MHz	88.2	Peak

Note: Field strength at 3 m distance is converted to EIRP as the following equation:

$$EIRP[dBm] = E[dB\mu V/m] - 95.2$$

3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.

   (1) Procedure for Unwanted Emissions Measurements Below 1000 MHz

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

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

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

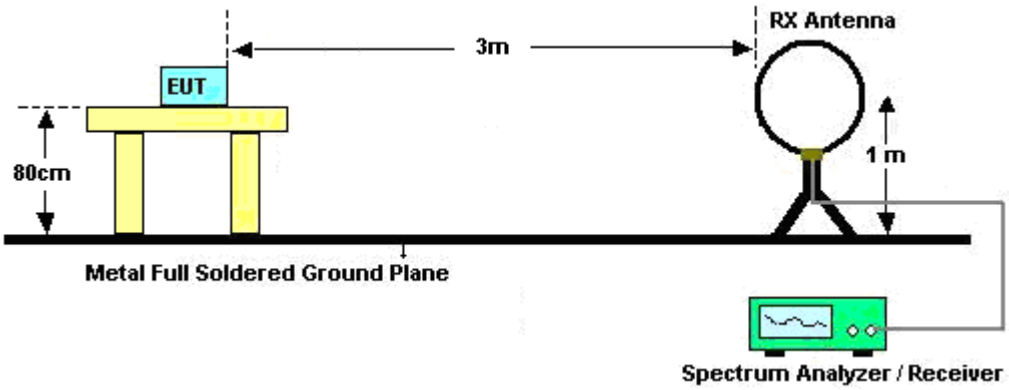
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz

   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

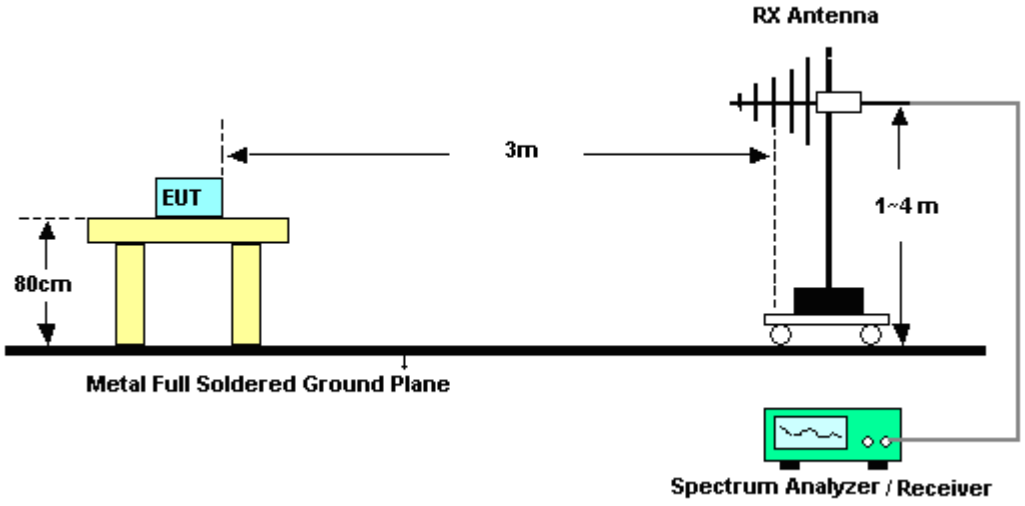
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT was placed at distance 3 meter from measurement antenna which was mounted on the top of a variable height antenna tower.
4. The measurement antenna 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.
5. For each suspected emission, the EUT was 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 1GHz was performed by adjusting the antenna tower from 1m to 4m and by rotating the turn table from 0 degree to 360 degree to find the peak maximum hold reading.
   When there is no suspected emission found and the emission level is with at least 6dB margin against QP limit line, the position is marked as "-".
7. Radiated testing above 1GHz was performed by adjusting the antenna tower from 1m to 4m and by rotating the turn table from 0 degree to 360 degree 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 6dB margin against average limit line, the position is marked as "-".

3.4.4 Test Setup

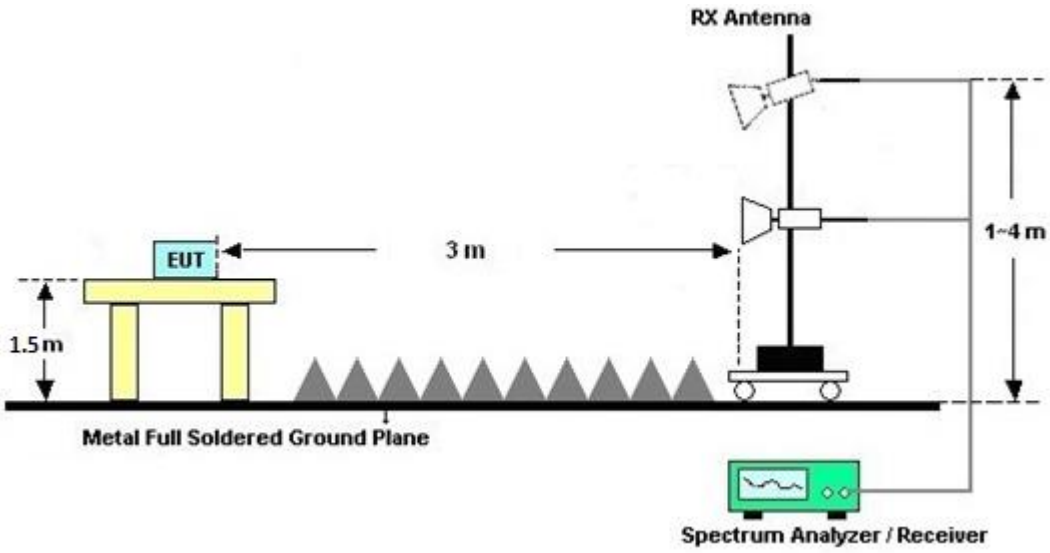
For radiated emissions below 30MHz



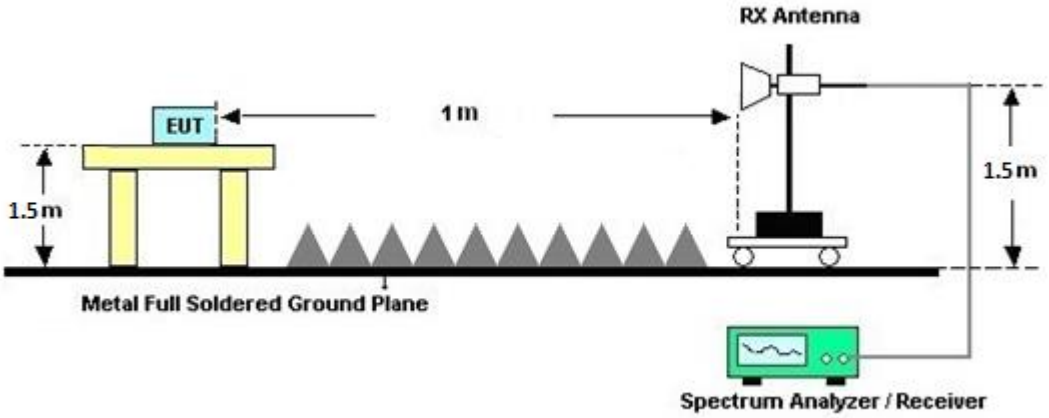
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



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

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was 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 Results of Radiated Spurious Emissions (above 18 GHz)

For frequency above 18GHz, the pre-scanned result is 20dB lower than the limit line is not reported.

3.4.7 Test Result of Radiated Band Edges

Please refer to Appendix C and D.

3.4.8 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

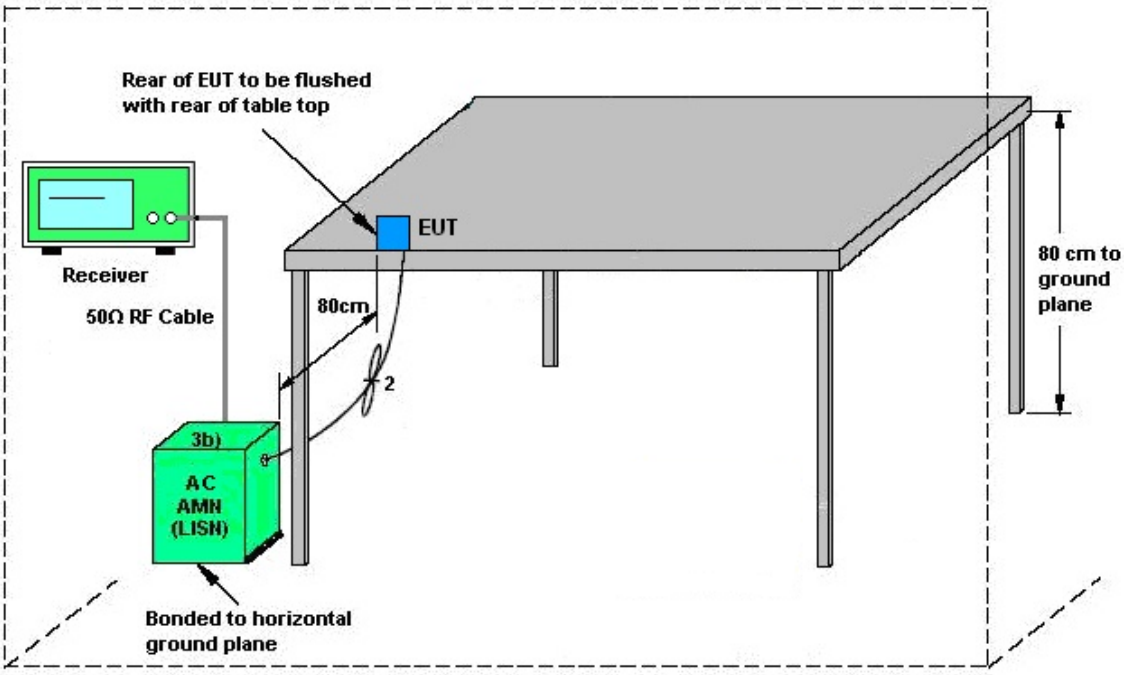
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was 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 sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.5.4 Test Setup



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

3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.6 Antenna Requirements

3.6.1 Standard Applicable

The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

3.6.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 12, 2023	Feb. 08, 2024~ Feb. 28, 2024	Sep. 11, 2024	Radiation (03CH15-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	41912 & 05	30MHz~1GHz	Feb. 04, 2024	Feb. 08, 2024~ Feb. 28, 2024	Feb. 03, 2025	Radiation (03CH15-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-02294	1GHz~18GHz	Jun. 30, 2023	Feb. 08, 2024~ Feb. 28, 2024	Jun. 29, 2024	Radiation (03CH15-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	1225	18GHz~40GHz	Jul. 10, 2023	Feb. 08, 2024~ Feb. 28, 2024	Jul. 09, 2024	Radiation (03CH15-HY)
Amplifier	SONOMA	310N	363440	9kHz~1GHz	Dec. 26, 2023	Feb. 08, 2024~ Feb. 28, 2024	Dec. 25, 2024	Radiation (03CH15-HY)
Preamplifier	EMEC	EM01G18G	060837	1GHz~18GHz	Feb. 16, 2023	Feb. 08, 2024~ Feb. 14, 2024	Feb. 15, 2024	Radiation (03CH15-HY)
Preamplifier	EMEC	EM01G18G	060837	1GHz~18GHz	Feb. 15, 2024	Feb. 15, 2024~ Feb. 28, 2024	Feb. 14, 2025	Radiation (03CH15-HY)
Preamplifier	EM Electronics	EM01G18G	060802	1GHz~18GHz	Mar. 03, 2023	Feb. 08, 2024~ Feb. 28, 2024	Mar. 02, 2024	Radiation (03CH15-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun. 27, 2023	Feb. 08, 2024~ Feb. 28, 2024	Jun. 26, 2024	Radiation (03CH15-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY53290045	20MHz~8.4GHz	Oct. 06, 2023	Feb. 08, 2024~ Feb. 28, 2024	Oct. 05, 2024	Radiation (03CH15-HY
Spectrum Analyzer	Keysight	N9010B	MY60241058	10Hz~44GHz	Jul. 06, 2023	Feb. 08, 2024~ Feb. 28, 2024	Jul. 05, 2024	Radiation (03CH15-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Feb. 08, 2024~ Feb. 28, 2024	N/A	Radiation (03CH15-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Feb. 08, 2024~ Feb. 28, 2024	N/A	Radiation (03CH15-HY)
Software	Audix	E3 6.2009-8-24 (k5)	RK-000451	N/A	N/A	Feb. 08, 2024~ Feb. 28, 2024	N/A	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104, 102E	MY582185/4, 519228/2,803 950/2	N/A	Jun. 13, 2023	Feb. 08, 2024~ Feb. 28, 2024	Jun. 12, 2024	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804011/2,804 012/2	18-40G	Jan. 02, 2024	Feb. 08, 2024~ Feb. 28, 2024	Jan. 01, 2025	Radiation (03CH15-HY)
Filter	Wainwright	WLJ4-1000-15 30-6000-40ST	SN4	1.53GHz Low Pass Filter	Jun. 14, 2023	Feb. 08, 2024~ Feb. 28, 2024	Jun. 13, 2024	Radiation (03CH15-HY)
Filter	Wainwright	WHKX12-2700 -3000-18000-6 0ST	SN4	3GHz High Pass Filter	Jun. 14, 2023	Feb. 08, 2024~ Feb. 28, 2024	Jun. 13, 2024	Radiation (03CH15-HY)
Hygrometer	TECPEL	DTM-302	SN4	N/A	Jul. 26, 2023	Feb. 08, 2024~ Feb. 28, 2024	Jul. 25, 2024	Radiation (03CH15-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 07, 2023	Feb. 15, 2024~ Mar. 07, 2024	Nov. 06, 2024	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	17I00015SNO 36 (NO:35_144)	10MHz~6GHz	Aug. 23, 2023	Feb. 15, 2024~ Mar. 07, 2024	Aug. 22, 2024	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101564	10Hz ~ 40GHz	Sep. 12, 2023	Feb. 15, 2024~ Mar. 07, 2024	Sep. 11, 2024	Conducted (TH05-HY)
AC Power Source	ACPOWER	AFC-11003G	F317040033	N/A	N/A	Mar. 15, 2024	N/A	Conduction (CO07-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Mar. 15, 2024	N/A	Conduction (CO07-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	9561-F N00373	9kHz-200MHz	Oct. 20, 2023	Mar. 15, 2024	Oct. 19, 2024	Conduction (CO07-HY)
Two-Line V-Network	TESEQ	NNB 51	45051	N/A	Mar. 10, 2024	Mar. 15, 2024	Mar. 09, 2025	Conduction (CO07-HY)
Four-Line V-Network	TESEQ	NNB 52	36122	N/A	Mar. 07, 2024	Mar. 15, 2024	Mar. 06, 2025	Conduction (CO07-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102317	9kHz~3.6GHz	Sep. 20, 2023	Mar. 15, 2024	Sep. 19, 2024	Conduction (CO07-HY)

5 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.44 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	6.30 dB

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.50 dB

Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.50 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.40 dB

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Hank Hsu and Willy Chang	Temperature:	21~25	°C
Test Date:	2024/02/15~2024/03/07	Relative Humidity:	51~54	%

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

UNII-4 single antenna												
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	169	5845	17.48	-	25.74	-	16.36	-	0.5	Pass
11a	6Mbps	1	173	5865	17.53	-	28.04	-	16.35	-	0.5	Pass
11a	6Mbps	1	177	5885	17.58	-	31.22	-	16.36	-	0.5	Pass
HT20	MCS0	1	169	5845	18.63	-	35.22	-	17.60	-	0.5	Pass
HT20	MCS0	1	173	5865	18.58	-	34.35	-	17.59	-	0.5	Pass
HT20	MCS0	1	177	5885	18.58	-	34.11	-	17.59	-	0.5	Pass
HT40	MCS0	1	167	5835	37.56	-	74.02	-	36.34	-	0.5	Pass
HT40	MCS0	1	175	5875	37.46	-	73.23	-	36.38	-	0.5	Pass
VHT20	MCS0	1	169	5845	18.53	-	33.93	-	17.60	-	0.5	Pass
VHT20	MCS0	1	173	5865	18.43	-	27.53	-	17.60	-	0.5	Pass
VHT20	MCS0	1	177	5885	18.63	-	33.86	-	17.60	-	0.5	Pass
VHT40	MCS0	1	167	5835	37.06	-	71.06	-	36.34	-	0.5	Pass
VHT40	MCS0	1	175	5875	37.06	-	79.87	-	36.37	-	0.5	Pass
VHT80	MCS0	1	171	5855	76.00	-	82.50	-	75.44	-	0.5	Pass

Report Number : FR412915G

TEST RESULTS DATA
Average Power Table

UNII-4 single antenna										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)		DG (dBi)	E.I.R.P Power (dBm)	E.I.R.P Limit (dBm)	
					Ant 1	SUM	Ant 1	Ant 1	Ant 1	Ant 2
11a	6Mbps	1	169	5845	17.40	-	-1.40	16.00	30	30
11a	6Mbps	1	173	5865	17.40		-1.40	16.00	30	30
11a	6Mbps	1	177	5885	17.20		-1.40	15.80	30	30
HT20	MCS0	1	169	5845	17.20		-1.40	15.80	30	30
HT20	MCS0	1	173	5865	17.40		-1.40	16.00	30	30
HT20	MCS0	1	177	5885	17.20		-1.40	15.80	30	30
HT40	MCS0	1	167	5835	16.40		-1.40	15.00	30	30
HT40	MCS0	1	175	5875	16.40		-1.40	15.00	30	30
VHT20	MCS0	1	169	5845	17.30		-1.40	15.90	30	30
VHT20	MCS0	1	173	5865	17.00		-1.40	15.60	30	30
VHT20	MCS0	1	177	5885	17.40		-1.40	16.00	30	30
VHT40	MCS0	1	167	5835	16.40		-1.40	15.00	30	30
VHT40	MCS0	1	175	5875	16.00		-1.40	14.60	30	30
VHT80	MCS0	1	171	5855	15.30		-1.40	13.90	30	30

TEST RESULTS DATA
Power Spectral Density

UNII-4 single antenna																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			DG (dBi)		EIRP PSD (dBm/MHz)		EIRP PSD Limit (dBm/MHz)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	169	5845	0.43	-	5.58	-		-1.40	-	4.18	-	14.00	14.00	Pass
11a	6Mbps	1	173	5865	0.43	-	5.27	-		-1.40	-	3.87	-	14.00	14.00	Pass
11a	6Mbps	1	177	5885	0.43	-	4.71	-		-1.40	-	3.31	-	14.00	14.00	Pass
HT20	MCS0	1	169	5845	0.46	-	5.50	-		-1.40	-	4.10	-	14.00	14.00	Pass
HT20	MCS0	1	173	5865	0.46	-	5.22	-		-1.40	-	3.82	-	14.00	14.00	Pass
HT20	MCS0	1	177	5885	0.46	-	4.81	-		-1.40	-	3.41	-	14.00	14.00	Pass
HT40	MCS0	1	167	5835	0.49	-	1.39	-		-1.40	-	-0.01	-	14.00	14.00	Pass
HT40	MCS0	1	175	5875	0.49	-	0.83	-	-	-1.40	-	-0.57	-	14.00	14.00	Pass
VHT20	MCS0	1	169	5845	0.47	-	5.66	-		-1.40	-	4.26	-	14.00	14.00	Pass
VHT20	MCS0	1	173	5865	0.47	-	4.32	-		-1.40	-	2.92	-	14.00	14.00	Pass
VHT20	MCS0	1	177	5885	0.47	-	4.66	-		-1.40	-	3.26	-	14.00	14.00	Pass
VHT40	MCS0	1	167	5835	0.48	-	1.52	-		-1.40	-	0.12	-	14.00	14.00	Pass
VHT40	MCS0	1	175	5875	0.48	-	0.94	-		-1.40	-	-0.46	-	14.00	14.00	Pass
VHT80	MCS0	1	171	5855	0.42	-	-2.26	-		-1.40	-	-3.66	-	14.00	14.00	Pass

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

UNII-4 single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
						Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
HE20	MCS0	1	169	5845	Full	19.38	-	29.81	-	19.09	-	0.5	Pass
HE20	MCS0	1	173	5865	Full	19.33	-	30.81	-	19.04	-	0.5	Pass
HE20	MCS0	1	177	5885	Full	19.38	-	28.22	-	19.07	-	0.5	Pass
HE40	MCS0	1	167	5835	Full	37.96	-	47.98	-	37.65	-	0.5	Pass
HE40	MCS0	1	175	5875	Full	37.96	-	49.44	-	37.65	-	0.5	Pass
HE80	MCS0	1	171	5855	Full	77.20	-	81.82	-	76.72	-	0.5	Pass

Report Number : FR412915G

TEST RESULTS DATA
Average Power Table

UNII-4 single antenna											
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)		DG (dBi)	E.I.R.P Power (dBm)	E.I.R.P Limit (dBm)	
						Ant 1	SUM	Ant 1	Ant 1	Ant 1	Ant 2
HE20	MCS0	1	169	5845	Full	17.40		-1.40	16.00	30	30
HE20	MCS0	1	169	5845	26/0	8.30		-1.40	6.90	30	30
HE20	MCS0	1	169	5845	52/37	11.10		-1.40	9.70	30	30
HE20	MCS0	1	169	5845	106/53	14.20		-1.40	12.80	30	30
HE20	MCS0	1	173	5865	Full	17.40		-1.40	16.00	30	30
HE20	MCS0	1	173	5865	26/4	8.70		-1.40	7.30	30	30
HE20	MCS0	1	173	5865	52/38	10.40		-1.40	9.00	30	30
HE20	MCS0	1	173	5865	106/53	14.10	-	-1.40	12.70	30	30
HE20	MCS0	1	177	5885	Full	17.20		-1.40	15.80	30	30
HE20	MCS0	1	177	5885	26/8	7.70		-1.40	6.30	30	30
HE20	MCS0	1	177	5885	52/40	10.20		-1.40	8.80	30	30
HE20	MCS0	1	177	5885	106/54	13.80		-1.40	12.40	30	30
HE40	MCS0	1	167	5835	Full	16.40		-1.40	15.00	30	30
HE40	MCS0	1	175	5875	Full	16.40		-1.40	15.00	30	30
HE80	MCS0	1	171	5855	Full	15.40		-1.40	14.00	30	30

TEST RESULTS DATA
Power Spectral Density

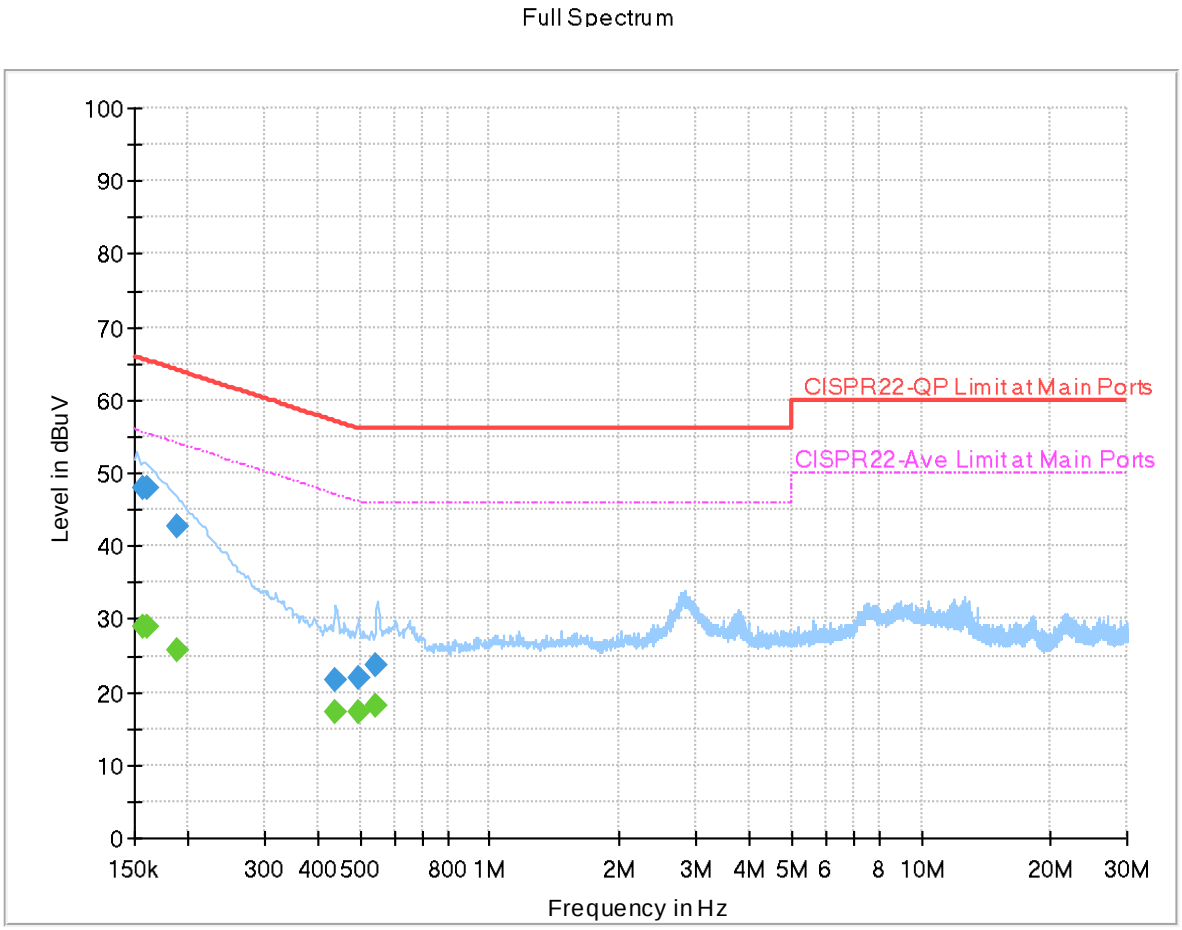
UNII-4 single antenna																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			DG (dBi)		EIRP PSD (dBm/MHz)		EIRP PSD Limit (dBm/MHz)		Pass /Fail
						Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
HE20	MCS0	1	169	5845	Full	0.59	-	5.60	-		-1.40	-	4.20	-	14.00	14.00	Pass
HE20	MCS0	1	169	5845	26/0	0.59	-	5.53	-		-1.40	-	4.13	-	14.00	14.00	Pass
HE20	MCS0	1	169	5845	52/37	0.59	-	5.58	-		-1.40	-	4.18	-	14.00	14.00	Pass
HE20	MCS0	1	169	5845	106/53	0.59	-	5.00	-		-1.40	-	3.60	-	14.00	14.00	Pass
HE20	MCS0	1	173	5865	Full	0.59	-	5.15	-		-1.40	-	3.75	-	14.00	14.00	Pass
HE20	MCS0	1	173	5865	26/4	0.59	-	4.99	-		-1.40	-	3.59	-	14.00	14.00	Pass
HE20	MCS0	1	173	5865	52/38	0.59	-	4.65	-		-1.40	-	3.25	-	14.00	14.00	Pass
HE20	MCS0	1	173	5865	106/53	0.59	-	4.85	-	-	-1.40	-	3.45	-	14.00	14.00	Pass
HE20	MCS0	1	177	5885	Full	0.59	-	4.90	-		-1.40	-	3.50	-	14.00	14.00	Pass
HE20	MCS0	1	177	5885	26/8	0.59	-	4.74	-		-1.40	-	3.34	-	14.00	14.00	Pass
HE20	MCS0	1	177	5885	52/40	0.59	-	4.17	-		-1.40	-	2.77	-	14.00	14.00	Pass
HE20	MCS0	1	177	5885	106/54	0.59	-	4.38	-		-1.40	-	2.98	-	14.00	14.00	Pass
HE40	MCS0	1	167	5835	Full	0.59	-	1.29	-		-1.40	-	-0.11	-	14.00	14.00	Pass
HE40	MCS0	1	175	5875	Full	0.59	-	0.81	-		-1.40	-	-0.59	-	14.00	14.00	Pass
HE80	MCS0	1	171	5855	Full	0.52	-	-2.30	-		-1.40	-	-3.70	-	14.00	14.00	Pass

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Louis Chung	**Temperature :**	20.5~21.7℃
		Relative Humidity :	41.2~46.4%

EUT Information

Report NO :	412915
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

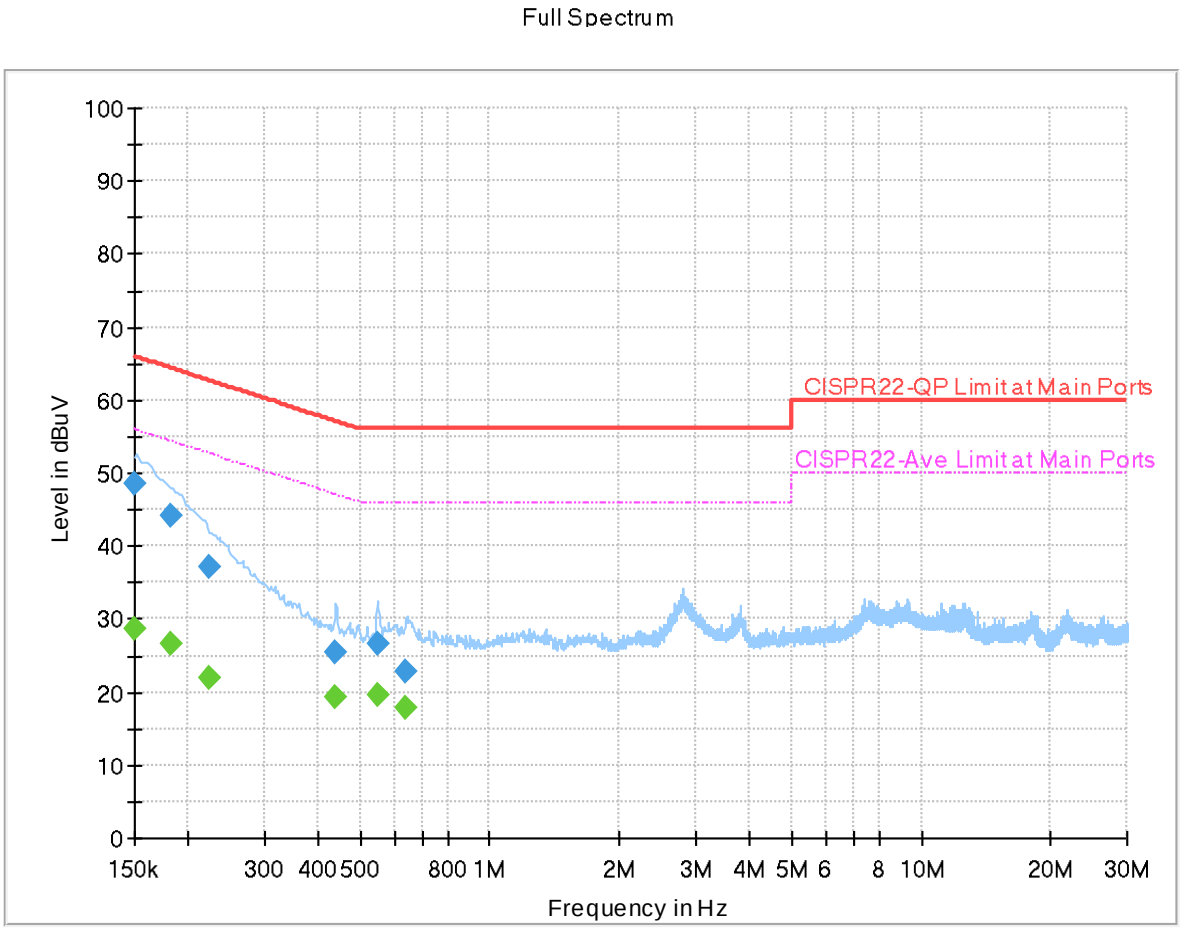


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.156750	---	29.04	55.63	26.59	L1	OFF	19.9
0.156750	48.09	---	65.63	17.54	L1	OFF	19.9
0.161250	---	28.93	55.40	26.47	L1	OFF	19.9
0.161250	47.81	---	65.40	17.59	L1	OFF	19.9
0.188250	---	25.83	54.11	28.28	L1	OFF	19.9
0.188250	42.80	---	64.11	21.31	L1	OFF	19.9
0.435390	---	17.12	47.15	30.03	L1	OFF	19.9
0.435390	21.56	---	57.15	35.59	L1	OFF	19.9
0.494610	---	17.16	46.09	28.93	L1	OFF	19.9
0.494610	21.96	---	56.09	34.13	L1	OFF	19.9
0.546540	---	18.12	46.00	27.88	L1	OFF	19.9
0.546540	23.81	---	56.00	32.19	L1	OFF	19.9

EUT Information

Report NO :	412915
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	---	28.69	56.00	27.31	N	OFF	19.9
0.150000	48.50	---	66.00	17.50	N	OFF	19.9
0.182040	---	26.66	54.39	27.73	N	OFF	19.9
0.182040	44.21	---	64.39	20.18	N	OFF	19.9
0.224250	---	21.89	52.66	30.77	N	OFF	19.9
0.224250	37.05	---	62.66	25.61	N	OFF	19.9
0.438450	---	19.30	47.09	27.79	N	OFF	19.9
0.438450	25.58	---	57.09	31.51	N	OFF	19.9
0.549960	---	19.63	46.00	26.37	N	OFF	19.9
0.549960	26.66	---	56.00	29.34	N	OFF	19.9
0.638250	---	17.76	46.00	28.24	N	OFF	19.9
0.638250	22.70	---	56.00	33.30	N	OFF	19.9

Appendix C. Radiated Spurious Emission

Test Engineer :	Daniel Lee, Quentin Liu and Bigshow Wang	Temperature :	21~23.4°C
		Relative Humidity :	47~59%

UNII-4 - 5850~5895MHz

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.	
1		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5643.66	47.69	-20.51	68.2	42.32	33.22	8.71	36.56	100	50	P	H
		5657.23	47.18	-26.39	73.57	41.73	33.29	8.72	36.56	100	50	P	H
		5705.315	46.43	-60.26	106.69	40.7	33.53	8.76	36.56	100	50	P	H
		5724.785	47.84	-73.87	121.71	41.99	33.62	8.78	36.55	100	50	P	H
	*	5845	101.15	-	-	94.73	34.09	8.87	36.54	100	50	P	H
	*	5845	93.8	-	-	87.38	34.09	8.87	36.54	100	50	A	H
		5896.5	49.51	-59.59	109.1	42.95	34.19	8.9	36.53	100	50	P	H
		5968.5	47.22	-40.98	88.2	40.74	34.06	8.94	36.52	100	50	P	H
		5895.5	39.72	-50.11	89.83	33.16	34.19	8.9	36.53	100	50	A	H
		5933.75	38.86	-29.34	68.2	32.34	34.13	8.92	36.53	100	50	A	H
													H
802.11a													H
CH 169		5615.34	47.8	-20.4	68.2	42.61	33.08	8.68	36.57	100	46	P	V
5845MHz		5657.23	48.4	-25.17	73.57	42.95	33.29	8.72	36.56	100	46	P	V
		5720.065	48.3	-62.65	110.95	42.48	33.6	8.77	36.55	100	46	P	V
		5720.065	48.3	-62.65	110.95	42.48	33.6	8.77	36.55	100	46	P	V
	*	5845	106.87	-	-	100.45	34.09	8.87	36.54	100	46	P	V
	*	5845	99.35	-	-	92.93	34.09	8.87	36.54	100	46	A	V
		5899.75	53.04	-53.67	106.71	46.47	34.2	8.9	36.53	100	46	P	V
		5926.25	49.14	-39.06	88.2	42.6	34.15	8.92	36.53	100	46	P	V
		5895.25	42.66	-47.36	90.02	36.1	34.19	8.9	36.53	100	46	A	V
		5925	40.55	-27.65	68.2	34.02	34.15	8.91	36.53	100	46	A	V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5637.76	48.58	-19.62	68.2	43.25	33.19	8.7	36.56	100	20	P	H
		5665.195	47.26	-32.22	79.48	41.76	33.33	8.73	36.56	100	20	P	H
		5717.115	48.93	-61.06	109.99	43.12	33.59	8.77	36.55	100	20	P	H
		5724.195	46.53	-73.83	120.36	40.68	33.62	8.78	36.55	100	20	P	H
	*	5865	99.44	-	-	92.97	34.13	8.88	36.54	100	20	P	H
	*	5865	91.85	-	-	85.38	34.13	8.88	36.54	100	20	A	H
		5896	54.39	-55.07	109.46	47.83	34.19	8.9	36.53	100	20	P	H
		5952	48.93	-39.27	88.2	42.43	34.1	8.93	36.53	100	20	P	H
		5895.25	43.54	-46.48	90.02	36.98	34.19	8.9	36.53	100	20	A	H
		5942.5	39.08	-29.12	68.2	32.56	34.12	8.93	36.53	100	20	A	H
													H
802.11a CH 173 5865MHz													H
		5643.66	47.17	-21.03	68.2	41.8	33.22	8.71	36.56	100	48	P	V
		5696.17	47.66	-54.72	102.38	41.99	33.48	8.75	36.56	100	48	P	V
		5705.61	48.22	-58.55	106.77	42.49	33.53	8.76	36.56	100	48	P	V
		5723.605	46.36	-72.66	119.02	40.51	33.62	8.78	36.55	100	48	P	V
	*	5865	106.61	-	-	100.14	34.13	8.88	36.54	100	48	P	V
	*	5865	99.16	-	-	92.69	34.13	8.88	36.54	100	48	A	V
		5895.25	63.27	-46.75	110.02	56.71	34.19	8.9	36.53	100	48	P	V
		5935.5	51.99	-36.21	88.2	45.47	34.13	8.92	36.53	100	48	P	V
		5895.25	49.44	-40.58	90.02	42.88	34.19	8.9	36.53	100	48	A	V
		5927.25	41.5	-26.7	68.2	34.96	34.15	8.92	36.53	100	48	A	V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 177 5885MHz		5642.185	46.89	-21.31	68.2	41.53	33.21	8.71	36.56	100	47	P	H
		5655.46	46.94	-25.32	72.26	41.5	33.28	8.72	36.56	100	47	P	H
		5718.295	46.63	-63.69	110.32	40.82	33.59	8.77	36.55	100	47	P	H
		5721.835	45.91	-69.07	114.98	40.08	33.61	8.77	36.55	100	47	P	H
	*	5885	100.38	-	-	93.85	34.17	8.89	36.53	100	47	P	H
	*	5885	92.62	-	-	86.09	34.17	8.89	36.53	100	47	A	H
		5895.25	79.98	-30.04	110.02	73.42	34.19	8.9	36.53	100	47	P	H
		5932.75	49.9	-38.3	88.2	43.38	34.13	8.92	36.53	100	47	P	H
		5895.25	68.53	-21.49	90.02	61.97	34.19	8.9	36.53	100	47	A	H
		5925	40.66	-27.54	68.2	34.13	34.15	8.91	36.53	100	47	A	H
													H
													H
		5634.22	46.63	-21.57	68.2	41.32	33.17	8.7	36.56	100	48	P	V
		5661.065	47.68	-28.74	76.42	42.21	33.31	8.72	36.56	100	48	P	V
		5710.625	47.35	-60.83	108.18	41.59	33.55	8.76	36.55	100	48	P	V
		5720.655	46.44	-65.85	112.29	40.62	33.6	8.77	36.55	100	48	P	V
	*	5885	106.37	-	-	99.84	34.17	8.89	36.53	100	48	P	V
	*	5885	99.03	-	-	92.5	34.17	8.89	36.53	100	48	A	V
		5895.25	85.56	-24.46	110.02	79	34.19	8.9	36.53	100	48	P	V
		5926.25	59.89	-28.31	88.2	53.35	34.15	8.92	36.53	100	48	P	V
		5895.25	75.18	-14.84	90.02	68.62	34.19	8.9	36.53	100	48	A	V
		5925.25	46.38	-21.82	68.2	39.84	34.15	8.92	36.53	100	48	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII- 4 5850~5895MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 169 5845MHz		11690	45.55	-28.45	74	51.37	39.01	13.2	58.03	-	-	P	H
		17535	48.53	-19.67	68.2	51.58	39.79	16.31	59.15	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		11690	47.81	-26.19	74	53.63	39.01	13.2	58.03	-	-	P	V
		17535	49.23	-18.97	68.2	52.28	39.79	16.31	59.15	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11730	46.4	-27.6	74	52.18	39.02	13.21	58.01	-	-	P	H
		17595	51.46	-16.74	68.2	54.17	40.02	16.32	59.05	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
802.11a CH 173 5865MHz													H
		11730	45.62	-28.38	74	51.4	39.02	13.21	58.01	-	-	P	V
		17595	50.81	-17.39	68.2	53.52	40.02	16.32	59.05	-	-	P	V
													V
													V
													V
													V
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WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11770	46.1	-27.9	74	51.81	39.03	13.24	57.98	-	-	P	H
		17655	50.51	-17.69	68.2	52.89	40.25	16.33	58.96	-	-	P	H
													H
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													H
802.11a CH 177 5885MHz													H
		11770	45.57	-28.43	74	51.28	39.03	13.24	57.98	-	-	P	V
		17655	52.36	-15.84	68.2	54.74	40.25	16.33	58.96	-	-	P	V
													V
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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.

UNII- 4 5850~5895MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5620.65	46.94	-21.26	68.2	41.72	33.1	8.69	36.57	100	46	P	H
		5673.455	47.11	-38.49	85.6	41.57	33.37	8.73	36.56	100	46	P	H
		5710.33	46.29	-61.8	108.09	40.53	33.55	8.76	36.55	100	46	P	H
		5721.835	46.15	-68.83	114.98	40.32	33.61	8.77	36.55	100	46	P	H
	*	5845	101.53	-	-	95.11	34.09	8.87	36.54	100	46	P	H
	*	5845	93.92	-	-	87.5	34.09	8.87	36.54	100	46	A	H
		5905.25	47.92	-54.75	102.67	41.36	34.19	8.9	36.53	100	46	P	H
		5949.5	47.56	-40.64	88.2	41.06	34.1	8.93	36.53	100	46	P	H
		5895.25	40.06	-49.96	90.02	33.5	34.19	8.9	36.53	100	46	A	H
		5927.5	38.91	-29.29	68.2	32.37	34.15	8.92	36.53	100	46	A	H
802.11n													H
HT20													H
CH 169		5649.265	47.71	-20.49	68.2	42.31	33.25	8.71	36.56	115	49	P	V
5845MHz		5654.87	48.06	-23.76	71.82	42.63	33.27	8.72	36.56	115	49	P	V
		5707.085	47.58	-59.61	107.19	41.84	33.54	8.76	36.56	115	49	P	V
		5720.36	46.89	-64.73	111.62	41.07	33.6	8.77	36.55	115	49	P	V
	*	5845	106	-	-	99.58	34.09	8.87	36.54	115	49	P	V
	*	5845	98.66	-	-	92.24	34.09	8.87	36.54	115	49	A	V
		5896.75	54.78	-54.13	108.91	48.22	34.19	8.9	36.53	115	49	P	V
		5940.25	49.36	-38.84	88.2	42.85	34.12	8.92	36.53	115	49	P	V
		5895.5	43.19	-46.64	89.83	36.63	34.19	8.9	36.53	115	49	A	V
		5927.75	40.45	-27.75	68.2	33.92	34.14	8.92	36.53	115	49	A	V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5645.725	46.83	-21.37	68.2	41.45	33.23	8.71	36.56	100	43	P	H
		5694.105	46.67	-54.18	100.85	41.01	33.47	8.75	36.56	100	43	P	H
		5718.59	47.87	-62.54	110.41	42.06	33.59	8.77	36.55	100	43	P	H
		5723.9	46.39	-73.3	119.69	40.54	33.62	8.78	36.55	100	43	P	H
	*	5885	99.95	-	-	93.42	34.17	8.89	36.53	100	43	P	H
	*	5885	92.34	-	-	85.81	34.17	8.89	36.53	100	43	A	H
		5895.25	82.17	-27.85	110.02	75.61	34.19	8.9	36.53	100	43	P	H
		5926.25	51.08	-37.12	88.2	44.54	34.15	8.92	36.53	100	43	P	H
		5895.25	70.91	-19.11	90.02	64.35	34.19	8.9	36.53	100	43	A	H
		5925.25	41.46	-26.74	68.2	34.92	34.15	8.92	36.53	100	43	A	H
802.11n													H
HT20													H
CH 177		5616.815	47.05	-21.15	68.2	41.86	33.08	8.68	36.57	100	48	P	V
5885MHz		5682.305	46.62	-45.52	92.14	41.03	33.41	8.74	36.56	100	48	P	V
		5711.51	46.94	-61.49	108.43	41.17	33.56	8.76	36.55	100	48	P	V
		5724.49	46.45	-74.59	121.04	40.6	33.62	8.78	36.55	100	48	P	V
	*	5885	106.37	-	-	99.84	34.17	8.89	36.53	100	48	P	V
	*	5885	99.23	-	-	92.7	34.17	8.89	36.53	100	48	A	V
		5895.25	86.33	-23.69	110.02	79.77	34.19	8.9	36.53	100	48	P	V
		5927.75	60.33	-27.87	88.2	53.8	34.14	8.92	36.53	100	48	P	V
		5895.25	77.76	-12.26	90.02	71.2	34.19	8.9	36.53	100	48	A	V
		5925.25	47.28	-20.92	68.2	40.74	34.15	8.92	36.53	100	48	A	V
													V
													V

Remark

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

UNII- 4 5850~5895MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11730	45.71	-28.29	74	51.49	39.02	13.21	58.01	-	-	P	H
		17595	53	-15.2	68.2	55.71	40.02	16.32	59.05	-	-	P	H
													H
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													H
													H
													H
													H
802.11n													H
HT20													H
CH 173		11730	46.01	-27.99	74	51.79	39.02	13.21	58.01	-	-	P	V
5865MHz		17595	52.44	-15.76	68.2	55.15	40.02	16.32	59.05	-	-	P	V
													V
													V
													V
													V
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													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.

UNII- 4 5850~5895MHz

WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5624.485	47.48	-20.72	68.2	42.24	33.12	8.69	36.57	100	45	P	H
		5667.85	48.43	-33.02	81.45	42.92	33.34	8.73	36.56	100	45	P	H
		5705.905	47.68	-59.18	106.86	41.95	33.53	8.76	36.56	100	45	P	H
		5723.605	47.21	-71.81	119.02	41.36	33.62	8.78	36.55	100	45	P	H
	*	5845	101.04	-	-	94.62	34.09	8.87	36.54	100	45	P	H
	*	5845	93.68	-	-	87.26	34.09	8.87	36.54	100	45	A	H
		5897	48.82	-59.91	108.73	42.26	34.19	8.9	36.53	100	45	P	H
		5941.5	47.56	-40.64	88.2	41.05	34.12	8.92	36.53	100	45	P	H
		5895	40.35	-49.85	90.2	33.79	34.19	8.9	36.53	100	45	A	H
		5925.25	39.05	-29.15	68.2	32.51	34.15	8.92	36.53	100	45	A	H
802.11ac													H
VHT20													H
CH 169		5643.66	46.83	-21.37	68.2	41.46	33.22	8.71	36.56	100	47	P	V
5845MHz		5688.205	47.16	-49.34	96.5	41.54	33.44	8.74	36.56	100	47	P	V
		5713.575	47.56	-61.44	109	41.77	33.57	8.77	36.55	100	47	P	V
		5721.54	49.52	-64.79	114.31	43.69	33.61	8.77	36.55	100	47	P	V
	*	5845	106.8	-	-	100.38	34.09	8.87	36.54	100	47	P	V
	*	5845	99.07	-	-	92.65	34.09	8.87	36.54	100	47	A	V
		5896.25	53.14	-56.14	109.28	46.58	34.19	8.9	36.53	100	47	P	V
		5934.25	49.2	-39	88.2	42.68	34.13	8.92	36.53	100	47	P	V
		5895.5	44.03	-45.8	89.83	37.47	34.19	8.9	36.53	100	47	A	V
		5927	40.64	-27.56	68.2	34.1	34.15	8.92	36.53	100	47	A	V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5633.335	47.39	-20.81	68.2	42.08	33.17	8.7	36.56	100	45	P	H
		5687.32	47.48	-48.37	95.85	41.86	33.44	8.74	36.56	100	45	P	H
		5712.69	46.28	-62.48	108.76	40.5	33.56	8.77	36.55	100	45	P	H
		5724.195	46.64	-73.72	120.36	40.79	33.62	8.78	36.55	100	45	P	H
	*	5885	100.47	-	-	93.94	34.17	8.89	36.53	100	45	P	H
	*	5885	92.82	-	-	86.29	34.17	8.89	36.53	100	45	A	H
		5895.25	82.43	-27.59	110.02	75.87	34.19	8.9	36.53	100	45	P	H
		5925.5	59.04	-29.16	88.2	52.5	34.15	8.92	36.53	100	45	P	H
		5895.25	71.44	-18.58	90.02	64.88	34.19	8.9	36.53	100	45	A	H
		5925.5	42.33	-25.87	68.2	35.79	34.15	8.92	36.53	100	45	A	H
802.11ac													H
VHT20													H
CH 177		5618.29	48.34	-19.86	68.2	43.13	33.09	8.69	36.57	100	48	P	V
5885MHz		5661.95	47.91	-29.16	77.07	42.44	33.31	8.72	36.56	100	48	P	V
		5703.25	47.88	-58.23	106.11	42.16	33.52	8.76	36.56	100	48	P	V
		5721.54	47.05	-67.26	114.31	41.22	33.61	8.77	36.55	100	48	P	V
	*	5885	106.32	-	-	99.79	34.17	8.89	36.53	100	48	P	V
	*	5885	98.86	-	-	92.33	34.17	8.89	36.53	100	48	A	V
		5895.75	87.39	-22.26	109.65	80.83	34.19	8.9	36.53	100	48	P	V
		5925.75	65.39	-22.81	88.2	58.85	34.15	8.92	36.53	100	48	P	V
		5895.25	77.42	-12.6	90.02	70.86	34.19	8.9	36.53	100	48	A	V
		5925	48.16	-20.04	68.2	41.63	34.15	8.91	36.53	100	48	A	V
													V
													V

Remark

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

UNII- 4 5850~5895MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11730	45.73	-28.27	74	51.51	39.02	13.21	58.01	-	-	P	H
		17595	49.91	-18.29	68.2	52.62	40.02	16.32	59.05	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11n													H
HT20													H
CH 173		11730	45.87	-28.13	74	51.65	39.02	13.21	58.01	-	-	P	V
5865MHz		17595	55.43	-12.77	68.2	58.14	40.02	16.32	59.05	-	-	P	V
													V
													V
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													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.

UNII- 4 5850~5895MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5602.065	47.07	-21.13	68.2	41.96	33.01	8.67	36.57	100	46	P	H
		5686.73	47.83	-47.58	95.41	42.22	33.43	8.74	36.56	100	46	P	H
		5718.295	49.34	-60.98	110.32	43.53	33.59	8.77	36.55	100	46	P	H
		5722.425	50.13	-66.2	116.33	44.3	33.61	8.77	36.55	100	46	P	H
	*	5835	97.76	-	-	91.37	34.07	8.86	36.54	100	46	P	H
	*	5835	90.45	-	-	84.06	34.07	8.86	36.54	100	46	A	H
		5896.5	56.78	-52.32	109.1	50.22	34.19	8.9	36.53	100	46	P	H
		5936	51.04	-37.16	88.2	44.52	34.13	8.92	36.53	100	46	P	H
		5895.75	47.78	-41.87	89.65	41.22	34.19	8.9	36.53	100	46	A	H
		5925	41.61	-26.59	68.2	35.08	34.15	8.91	36.53	100	46	A	H
802.11ac													H
VHT40													H
CH 167		5648.38	48.78	-19.42	68.2	43.39	33.24	8.71	36.56	100	47	P	V
5835MHz		5698.53	50.88	-53.24	104.12	45.2	33.49	8.75	36.56	100	47	P	V
		5711.805	53.96	-54.55	108.51	48.18	33.56	8.77	36.55	100	47	P	V
		5721.835	52.43	-62.55	114.98	46.6	33.61	8.77	36.55	100	47	P	V
	*	5835	104.07	-	-	97.68	34.07	8.86	36.54	100	47	P	V
	*	5835	96	-	-	89.61	34.07	8.86	36.54	100	47	A	V
		5903	62.64	-41.68	104.32	56.08	34.19	8.9	36.53	100	47	P	V
		5927.5	57.41	-30.79	88.2	50.87	34.15	8.92	36.53	100	47	P	V
		5895.5	52.91	-36.92	89.83	46.35	34.19	8.9	36.53	100	47	A	V
		5925	45.93	-22.27	68.2	39.4	34.15	8.91	36.53	100	47	A	V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5624.485	47.55	-20.65	68.2	42.31	33.12	8.69	36.57	100	45	P	H
		5651.625	47.82	-21.59	69.41	42.41	33.26	8.71	36.56	100	45	P	H
		5720.065	46.92	-64.03	110.95	41.1	33.6	8.77	36.55	100	45	P	H
		5720.065	46.92	-64.03	110.95	41.1	33.6	8.77	36.55	100	45	P	H
	*	5875	96.99	-	-	90.48	34.15	8.89	36.53	100	45	P	H
	*	5875	89.57	-	-	83.06	34.15	8.89	36.53	100	45	A	H
		5895.5	74.21	-35.62	109.83	67.65	34.19	8.9	36.53	100	45	P	H
		5927.25	60.66	-27.54	88.2	54.12	34.15	8.92	36.53	100	45	P	H
		5895.25	61.67	-28.35	90.02	55.11	34.19	8.9	36.53	100	45	A	H
		5925	50	-18.2	68.2	43.47	34.15	8.91	36.53	100	45	A	H
802.11ac													H
VHT40													H
CH 175		5623.01	47.15	-21.05	68.2	41.91	33.12	8.69	36.57	100	47	P	V
5875MHz		5696.465	47.6	-54.99	102.59	41.93	33.48	8.75	36.56	100	47	P	V
		5720.065	48.41	-62.54	110.95	42.59	33.6	8.77	36.55	100	47	P	V
		5723.31	49.18	-69.17	118.35	43.34	33.62	8.77	36.55	100	47	P	V
	*	5875	103.55	-	-	97.04	34.15	8.89	36.53	100	47	P	V
	*	5875	96.03	-	-	89.52	34.15	8.89	36.53	100	47	A	V
		5896.25	80.01	-29.27	109.28	73.45	34.19	8.9	36.53	100	47	P	V
		5926	66.56	-21.64	88.2	60.02	34.15	8.92	36.53	100	47	P	V
		5895.25	67.86	-22.16	90.02	61.3	34.19	8.9	36.53	100	47	A	V
		5925.5	56.64	-11.56	68.2	50.1	34.15	8.92	36.53	100	47	A	V
													V
													V

Remark

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

UNII- 4 5850~5895MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11670	46.88	-27.12	74	52.73	39	13.19	58.04	-	-	P	H
		17505	49.35	-18.85	68.2	52.58	39.67	16.3	59.2	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ac													H
VHT40													H
CH 167		11670	44.99	-29.01	74	50.84	39	13.19	58.04	-	-	P	V
5835MHz		17505	51.12	-17.08	68.2	54.35	39.67	16.3	59.2	-	-	P	V
													V
													V
													V
													V
													V
													V
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													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11750	45.35	-28.65	74	51.11	39.02	13.22	58	-	-	P	H
		17625	47.51	-20.69	68.2	50.04	40.14	16.33	59	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ac													H
VHT40													H
CH 175		11750	45.4	-28.6	74	51.16	39.02	13.22	58	-	-	P	V
5875MHz		17625	48.28	-19.92	68.2	50.81	40.14	16.33	59	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Remark

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

UNII- 4 5850~5895MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5604.72	47.35	-20.85	68.2	42.23	33.02	8.67	36.57	100	45	P	H
		5689.975	51.98	-45.83	97.81	46.34	33.45	8.75	36.56	100	45	P	H
		5713.575	52.1	-56.9	109	46.31	33.57	8.77	36.55	100	45	P	H
		5723.015	50.17	-67.51	117.68	44.33	33.62	8.77	36.55	100	45	P	H
	*	5855	94.57	-	-	88.13	34.11	8.87	36.54	100	45	P	H
	*	5855	86.31	-	-	79.87	34.11	8.87	36.54	100	45	A	H
		5895.75	67.99	-41.66	109.65	61.43	34.19	8.9	36.53	100	45	P	H
		5944.25	62.03	-26.17	88.2	55.52	34.11	8.93	36.53	100	45	P	H
		5895.25	57.91	-32.11	90.02	51.35	34.19	8.9	36.53	100	45	A	H
		5926.5	51.51	-16.69	68.2	44.97	34.15	8.92	36.53	100	45	A	H
802.11ac													H
VHT80													H
CH 171		5647.79	49.28	-18.92	68.2	43.89	33.24	8.71	36.56	100	48	P	V
5855MHz		5699.71	55.75	-49.24	104.99	50.06	33.5	8.75	36.56	100	48	P	V
		5717.115	55.53	-54.46	109.99	49.72	33.59	8.77	36.55	100	48	P	V
		5720.36	57.24	-54.38	111.62	51.42	33.6	8.77	36.55	100	48	P	V
	*	5855	99.83	-	-	93.39	34.11	8.87	36.54	100	48	P	V
	*	5855	92.39	-	-	85.95	34.11	8.87	36.54	100	48	A	V
		5917.75	73.18	-20.33	93.51	66.64	34.16	8.91	36.53	100	48	P	V
		5926	69.75	-18.45	88.2	63.21	34.15	8.92	36.53	100	48	P	V
		5895.25	64.26	-25.76	90.02	57.7	34.19	8.9	36.53	100	48	A	V
		5926.75	58.24	-9.96	68.2	51.7	34.15	8.92	36.53	100	48	A	V
													V
													V

Remark

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

UNII- 4 5850~5895MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11710	46.31	-27.69	74	52.12	39.01	13.2	58.02	-	-	P	H
		17565	48	-20.2	68.2	50.88	39.9	16.32	59.1	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ac													H
VHT80													H
CH 171		11710	46.04	-27.96	74	51.85	39.01	13.2	58.02	-	-	P	V
5855MHz		17565	48.47	-19.73	68.2	51.35	39.9	16.32	59.1	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Remark

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

UNII- 4 5850~5895MHz

WIFI 802.11ax HE20_Full (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5601.475	46.84	-21.36	68.2	41.73	33.01	8.67	36.57	100	44	P	H
		5650.74	47.3	-21.45	68.75	41.9	33.25	8.71	36.56	100	44	P	H
		5714.165	46.34	-62.83	109.17	40.55	33.57	8.77	36.55	100	44	P	H
		5721.245	45.76	-67.88	113.64	39.93	33.61	8.77	36.55	100	44	P	H
	*	5845	100.9	-	-	94.48	34.09	8.87	36.54	100	44	P	H
	*	5845	92.68	-	-	86.26	34.09	8.87	36.54	100	44	A	H
		5920	48.62	-43.24	91.86	42.08	34.16	8.91	36.53	100	44	P	H
		5994.25	47.01	-41.19	88.2	40.56	34.01	8.96	36.52	100	44	P	H
		5895	40.41	-49.79	90.2	33.85	34.19	8.9	36.53	100	44	A	H
		5925.25	38.65	-29.55	68.2	32.11	34.15	8.92	36.53	100	44	A	H
802.11ax													H
HE20 Full													H
CH 169		5631.27	46.35	-21.85	68.2	41.05	33.16	8.7	36.56	100	47	P	V
5845MHz		5682.01	47.75	-44.17	91.92	42.16	33.41	8.74	36.56	100	47	P	V
		5704.725	47.05	-59.47	106.52	41.33	33.52	8.76	36.56	100	47	P	V
		5721.245	47.23	-66.41	113.64	41.4	33.61	8.77	36.55	100	47	P	V
	*	5845	108.74	-	-	102.32	34.09	8.87	36.54	100	47	P	V
	*	5845	98.81	-	-	92.39	34.09	8.87	36.54	100	47	A	V
		5896.75	54.22	-54.69	108.91	47.66	34.19	8.9	36.53	100	47	P	V
		5926.75	49.15	-39.05	88.2	42.61	34.15	8.92	36.53	100	47	P	V
		5896.25	44.02	-45.26	89.28	37.46	34.19	8.9	36.53	100	47	A	V
		5925	40.57	-27.63	68.2	34.04	34.15	8.91	36.53	100	47	A	V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5636.58	46.82	-21.38	68.2	41.5	33.18	8.7	36.56	100	18	P	H
		5676.11	47.74	-39.82	87.56	42.19	33.38	8.73	36.56	100	18	P	H
		5701.185	46.65	-58.88	105.53	40.94	33.51	8.76	36.56	100	18	P	H
		5723.015	46.45	-71.23	117.68	40.61	33.62	8.77	36.55	100	18	P	H
	*	5865	100.23	-	-	93.76	34.13	8.88	36.54	100	18	P	H
	*	5865	91.93	-	-	85.46	34.13	8.88	36.54	100	18	A	H
		5895.5	56.74	-53.09	109.83	50.18	34.19	8.9	36.53	100	18	P	H
		5951.5	47.97	-40.23	88.2	41.47	34.1	8.93	36.53	100	18	P	H
		5895.25	45.85	-44.17	90.02	39.29	34.19	8.9	36.53	100	18	A	H
		5925.25	38.99	-29.21	68.2	32.45	34.15	8.92	36.53	100	18	A	H
802.11ax													H
HE20 Full													H
CH 173		5642.185	47.36	-20.84	68.2	42	33.21	8.71	36.56	100	49	P	V
5865MHz		5698.53	47.53	-56.59	104.12	41.85	33.49	8.75	36.56	100	49	P	V
		5712.69	48.93	-59.83	108.76	43.15	33.56	8.77	36.55	100	49	P	V
		5720.065	47.15	-63.8	110.95	41.33	33.6	8.77	36.55	100	49	P	V
	*	5865	107.06	-	-	100.59	34.13	8.88	36.54	100	49	P	V
	*	5865	98.7	-	-	92.23	34.13	8.88	36.54	100	49	A	V
		5895.25	64.03	-45.99	110.02	57.47	34.19	8.9	36.53	100	49	P	V
		5925	50.49	-37.71	88.2	43.96	34.15	8.91	36.53	100	49	P	V
		5895.25	51.75	-38.27	90.02	45.19	34.19	8.9	36.53	100	49	A	V
		5925.25	41.48	-26.72	68.2	34.94	34.15	8.92	36.53	100	49	A	V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5645.725	46.99	-21.21	68.2	41.61	33.23	8.71	36.56	100	43	P	H
		5675.225	47.12	-39.79	86.91	41.57	33.38	8.73	36.56	100	43	P	H
		5714.46	46.49	-62.76	109.25	40.7	33.57	8.77	36.55	100	43	P	H
		5720.655	45.77	-66.52	112.29	39.95	33.6	8.77	36.55	100	43	P	H
	*	5885	100.68	-	-	94.15	34.17	8.89	36.53	100	43	P	H
	*	5885	92.36	-	-	85.83	34.17	8.89	36.53	100	43	A	H
		5895.25	80.23	-29.79	110.02	73.67	34.19	8.9	36.53	100	43	P	H
		5926	56.02	-32.18	88.2	49.48	34.15	8.92	36.53	100	43	P	H
		5895.25	77.11	-12.91	90.02	70.55	34.19	8.9	36.53	100	43	A	H
		5925	43.59	-24.61	68.2	37.06	34.15	8.91	36.53	100	43	A	H
802.11ax													H
HE20 Full													H
CH 177		5643.955	46.96	-21.24	68.2	41.59	33.22	8.71	36.56	100	47	P	V
5885MHz		5691.45	47.21	-51.69	98.9	41.56	33.46	8.75	36.56	100	47	P	V
		5716.525	47.55	-62.28	109.83	41.75	33.58	8.77	36.55	100	47	P	V
		5722.425	46.32	-70.01	116.33	40.49	33.61	8.77	36.55	100	47	P	V
	*	5885	107.32	-	-	100.79	34.17	8.89	36.53	100	47	P	V
	*	5885	98.6	-	-	92.07	34.17	8.89	36.53	100	47	A	V
		5895.25	90.47	-19.55	110.02	83.91	34.19	8.9	36.53	100	47	P	V
		5926.25	62.59	-25.61	88.2	56.05	34.15	8.92	36.53	100	47	P	V
		5895.25	83.55	-6.47	90.02	76.99	34.19	8.9	36.53	100	47	A	V
		5925	49.91	-18.29	68.2	43.38	34.15	8.91	36.53	100	47	A	V
													V
													V

Remark

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

UNII- 4 5850~5895MHz

WIFI 802.11ax HE20_Full (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11690	46.49	-27.51	74	52.31	39.01	13.2	58.03	-	-	P	H
		17535	48.46	-19.74	68.2	51.51	39.79	16.31	59.15	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 169		11690	45.59	-28.41	74	51.41	39.01	13.2	58.03	-	-	P	V
5845MHz		17535	48.49	-19.71	68.2	51.54	39.79	16.31	59.15	-	-	P	V
													V
													V
													V
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													V
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													V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11730	45.92	-28.08	74	51.7	39.02	13.21	58.01	-	-	P	H
		17595	50.08	-18.12	68.2	52.79	40.02	16.32	59.05	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 173		11730	45.6	-28.4	74	51.38	39.02	13.21	58.01	-	-	P	V
5865MHz		17595	51.17	-17.03	68.2	53.88	40.02	16.32	59.05	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11770	45.96	-28.04	74	51.67	39.03	13.24	57.98	-	-	P	H
		17655	50.44	-17.76	68.2	52.82	40.25	16.33	58.96	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 177		11770	45.88	-28.12	74	51.59	39.03	13.24	57.98	-	-	P	V
5885MHz		17655	52.54	-15.66	68.2	54.92	40.25	16.33	58.96	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Remark

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

UNII- 4 5850~5895MHz

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

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 26/0 CH 169 5845MHz		5633.63	47.93	-20.27	68.2	42.62	33.17	8.7	36.56	314	327	P	H
		5693.22	47.46	-52.74	100.2	41.8	33.47	8.75	36.56	314	327	P	H
		5710.035	48.08	-59.93	108.01	42.32	33.55	8.76	36.55	314	327	P	H
		5721.245	46.82	-66.82	113.64	40.99	33.61	8.77	36.55	314	327	P	H
	*	5845	108.74	-	-	102.32	34.09	8.87	36.54	314	327	P	H
	*	5845	102.75	-	-	96.33	34.09	8.87	36.54	314	327	A	H
		5895.25	49.18	-60.84	110.02	42.62	34.19	8.9	36.53	314	327	P	H
		5939	48.41	-39.79	88.2	41.9	34.12	8.92	36.53	314	327	P	H
		5895.5	39.31	-50.52	89.83	32.75	34.19	8.9	36.53	314	327	P	H
		5936.75	38.57	-29.63	68.2	32.05	34.13	8.92	36.53	314	327	A	H
		5643.955	47.95	-20.25	68.2	42.58	33.22	8.71	36.56	100	49	P	V
		5651.625	49.79	-19.62	69.41	44.38	33.26	8.71	36.56	100	49	P	V
		5702.66	48.34	-57.61	105.95	42.63	33.51	8.76	36.56	100	49	P	V
		5724.195	49.21	-71.15	120.36	43.36	33.62	8.78	36.55	100	49	P	V
	*	5845	115.13	-	-	108.71	34.09	8.87	36.54	100	49	P	V
	*	5845	108.8	-	-	102.38	34.09	8.87	36.54	100	49	A	V
		5896.25	57.12	-52.16	109.28	50.56	34.19	8.9	36.53	100	49	P	V
		5928.5	52.36	-35.84	88.2	45.83	34.14	8.92	36.53	100	49	P	V
		5896	43.19	-46.27	89.46	36.63	34.19	8.9	36.53	100	49	P	V
		5925.5	40.44	-27.76	68.2	33.9	34.15	8.92	36.53	100	49	A	V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 26/8 CH 177 5885MHz		5637.465	47.63	-20.57	68.2	42.3	33.19	8.7	36.56	100	56	P	H
		5682.895	47.17	-45.41	92.58	41.58	33.41	8.74	36.56	100	56	P	H
		5715.64	46.86	-62.72	109.58	41.06	33.58	8.77	36.55	100	56	P	H
		5723.31	45.7	-72.65	118.35	39.86	33.62	8.77	36.55	100	56	P	H
	*	5885	107.86	-	-	101.33	34.17	8.89	36.53	100	56	P	H
	*	5885	101.36	-	-	94.83	34.17	8.89	36.53	100	56	A	H
		5895	84.07	-26.13	110.2	77.51	34.19	8.9	36.53	100	56	P	H
		5926.5	54.25	-33.95	88.2	47.71	34.15	8.92	36.53	100	56	P	H
		5895	73.84	-16.36	90.2	67.28	34.19	8.9	36.53	100	56	P	H
		5926.25	47.14	-21.06	68.2	40.6	34.15	8.92	36.53	100	56	A	H
		5649.265	46.87	-21.33	68.2	41.47	33.25	8.71	36.56	100	49	P	V
		5698.235	46.66	-57.24	103.9	40.98	33.49	8.75	36.56	100	49	P	V
		5718.295	47.79	-62.53	110.32	41.98	33.59	8.77	36.55	100	49	P	V
		5722.13	46.65	-69.01	115.66	40.82	33.61	8.77	36.55	100	49	P	V
	*	5885	114.93	-	-	108.4	34.17	8.89	36.53	100	49	P	V
	*	5885	107.93	-	-	101.4	34.17	8.89	36.53	100	49	A	V
		5895	89.85	-20.35	110.2	83.29	34.19	8.9	36.53	100	49	P	V
		5929.5	59.49	-28.71	88.2	52.96	34.14	8.92	36.53	100	49	P	V
		5895	80.47	-9.73	90.2	73.91	34.19	8.9	36.53	100	49	P	V
		5926	51.62	-16.58	68.2	45.08	34.15	8.92	36.53	100	49	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII- 4 5850~5895MHz

WIFI 802.11ax HE20_Partial 26 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11670	49.59	-24.41	74	55.44	39	13.19	58.04	400	142	P	H
		11670	40.12	-13.88	54	45.97	39	13.19	58.04	400	142	A	H
		17505	58.83	-9.37	68.2	62.06	39.67	16.3	59.2	100	107	P	H
													H
													H
													H
													H
													H
													H
													H
802.11ax HE20 Partial 26/0 CH 169 5845MHz													H
													H
		11670	59.4	-14.6	74	65.25	39	13.19	58.04	100	131	P	V
		11670	46.25	-7.75	54	52.1	39	13.19	58.04	100	131	A	V
		17505	64.45	-3.75	68.2	67.68	39.67	16.3	59.2	100	130	P	V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 26/4 CH 173 5865MHz		11730	49.43	-24.57	74	55.21	39.02	13.21	58.01	400	150	P	H
		11730	37.41	-16.59	54	43.19	39.02	13.21	58.01	400	150	A	H
		17595	62.73	-5.47	68.2	65.44	40.02	16.32	59.05	100	104	P	H
													H
													H
													H
													H
													H
													H
													H
													H
		11730	54.55	-19.45	74	60.33	39.02	13.21	58.01	100	128	P	V
		11730	44.87	-9.13	54	50.65	39.02	13.21	58.01	100	128	A	V
		17595	64.62	-3.58	68.2	67.33	40.02	16.32	59.05	100	105	P	V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 26/8 CH 177 5885MHz		11790	50.2	-23.8	74	55.88	39.04	13.25	57.97	400	143	P	H
		11790	38.64	-15.36	54	44.32	39.04	13.25	57.97	400	143	A	H
		17685	62.98	-5.22	68.2	65.17	40.37	16.35	58.91	100	105	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		11790	57.17	-16.83	74	62.85	39.04	13.25	57.97	100	127	P	V
		11790	45.74	-8.26	54	51.42	39.04	13.25	57.97	100	127	A	V
		17685	64.08	-4.12	68.2	66.27	40.37	16.35	58.91	100	106	P	V
													V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-4 - 5850~5895MHz

WIFI 802.11ax HE20_Partial 52 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5646.315	48.1	-20.1	68.2	42.72	33.23	8.71	36.56	282	328	P	H
		5669.915	47.97	-35.01	82.98	42.45	33.35	8.73	36.56	282	328	P	H
		5714.755	47.89	-61.44	109.33	42.1	33.57	8.77	36.55	282	328	P	H
		5722.72	49.18	-67.82	117	43.35	33.61	8.77	36.55	282	328	P	H
	*	5845	108.92	-	-	102.5	34.09	8.87	36.54	282	328	P	H
	*	5845	100.65	-	-	94.23	34.09	8.87	36.54	282	328	A	H
		5897.25	51.77	-56.78	108.55	45.21	34.19	8.9	36.53	282	328	P	H
802.11ax		5948	48.34	-39.86	88.2	41.84	34.1	8.93	36.53	282	328	P	H
HE20		5898	40.08	-47.91	87.99	33.51	34.2	8.9	36.53	282	328	P	H
Partial		5925.75	38.83	-29.37	68.2	32.29	34.15	8.92	36.53	282	328	A	H
52/37		5645.135	49.28	-18.92	68.2	43.9	33.23	8.71	36.56	120	47	P	V
CH 169		5670.505	48.23	-35.18	83.41	42.71	33.35	8.73	36.56	120	47	P	V
5845MHz		5710.625	49.03	-59.15	108.18	43.27	33.55	8.76	36.55	120	47	P	V
		5722.425	48.18	-68.15	116.33	42.35	33.61	8.77	36.55	120	47	P	V
	*	5845	113.26	-	-	106.84	34.09	8.87	36.54	120	47	P	V
	*	5845	105.83	-	-	99.41	34.09	8.87	36.54	120	47	A	V
		5895.5	55.83	-54	109.83	49.27	34.19	8.9	36.53	120	47	P	V
		5928.75	51.19	-37.01	88.2	44.66	34.14	8.92	36.53	120	47	P	V
		5895.75	44.22	-45.43	89.65	37.66	34.19	8.9	36.53	120	47	P	V
		5926	40.94	-27.26	68.2	34.4	34.15	8.92	36.53	120	47	A	V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 52/40 CH 177 5885MHz		5642.185	47.31	-20.89	68.2	41.95	33.21	8.71	36.56	100	21	P	H
		5687.32	46.94	-48.91	95.85	41.32	33.44	8.74	36.56	100	21	P	H
		5718.885	46.81	-63.68	110.49	41	33.59	8.77	36.55	100	21	P	H
		5720.655	46.1	-66.19	112.29	40.28	33.6	8.77	36.55	100	21	P	H
	*	5885	104.71	-	-	98.18	34.17	8.89	36.53	100	21	P	H
	*	5885	96.68	-	-	90.15	34.17	8.89	36.53	100	21	A	H
		5895	81.49	-28.71	110.2	74.93	34.19	8.9	36.53	100	21	P	H
		5925.75	50.46	-37.74	88.2	43.92	34.15	8.92	36.53	100	21	P	H
		5895	71.27	-18.93	90.2	64.71	34.19	8.9	36.53	100	21	P	H
		5925.25	39.36	-28.84	68.2	32.82	34.15	8.92	36.53	100	21	A	H
		5634.22	47.42	-20.78	68.2	42.11	33.17	8.7	36.56	100	50	P	V
		5664.9	47.76	-31.5	79.26	42.27	33.32	8.73	36.56	100	50	P	V
		5708.56	46.4	-61.2	107.6	40.65	33.54	8.76	36.55	100	50	P	V
		5720.36	46.76	-64.86	111.62	40.94	33.6	8.77	36.55	100	50	P	V
	*	5885	113.06	-	-	106.53	34.17	8.89	36.53	100	50	P	V
	*	5885	105.29	-	-	98.76	34.17	8.89	36.53	100	50	A	V
		5895	91.63	-18.57	110.2	85.07	34.19	8.9	36.53	100	50	P	V
		5925.5	59.22	-28.98	88.2	52.68	34.15	8.92	36.53	100	50	P	V
		5895	79.49	-10.71	90.2	72.93	34.19	8.9	36.53	100	50	P	V
		5925.25	45.67	-22.53	68.2	39.13	34.15	8.92	36.53	100	50	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-4 - 5850~5895MHz

WIFI 802.11ax HE20_Partial 106 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5644.545	47.22	-20.98	68.2	41.85	33.22	8.71	36.56	300	328	P	H
		5655.755	48.67	-23.81	72.48	43.23	33.28	8.72	36.56	300	328	P	H
		5717.115	47.79	-62.2	109.99	41.98	33.59	8.77	36.55	300	328	P	H
		5722.72	46.36	-70.64	117	40.53	33.61	8.77	36.55	300	328	P	H
	*	5845	104.85	-	-	98.43	34.09	8.87	36.54	300	328	P	H
	*	5845	97.01	-	-	90.59	34.09	8.87	36.54	300	328	A	H
		5903.5	50.45	-53.51	103.96	43.89	34.19	8.9	36.53	300	328	P	H
802.11ax		5952.75	49.12	-39.08	88.2	42.63	34.09	8.93	36.53	300	328	P	H
HE20		5895.5	39.95	-49.88	89.83	33.39	34.19	8.9	36.53	300	328	P	H
Partial		5925.5	39.05	-29.15	68.2	32.51	34.15	8.92	36.53	300	328	A	H
106/53		5607.965	48.02	-20.18	68.2	42.87	33.04	8.68	36.57	100	51	P	V
CH 169		5651.33	49.1	-20.09	69.19	43.69	33.26	8.71	36.56	100	51	P	V
5845MHz		5701.48	48.9	-56.72	105.62	43.19	33.51	8.76	36.56	100	51	P	V
		5724.49	47.67	-73.37	121.04	41.82	33.62	8.78	36.55	100	51	P	V
	*	5845	110.44	-	-	104.02	34.09	8.87	36.54	100	51	P	V
	*	5845	102.76	-	-	96.34	34.09	8.87	36.54	100	51	A	V
		5897.25	56.51	-52.04	108.55	49.95	34.19	8.9	36.53	100	51	P	V
		5926.75	52.08	-36.12	88.2	45.54	34.15	8.92	36.53	100	51	P	V
		5897	43.58	-45.15	88.73	37.02	34.19	8.9	36.53	100	51	P	V
		5925.5	41.36	-26.84	68.2	34.82	34.15	8.92	36.53	100	51	A	V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 106/54 CH 177 5885MHz		5613.275	47.39	-20.81	68.2	42.21	33.07	8.68	36.57	100	58	P	H
		5684.96	47.87	-46.23	94.1	42.27	33.42	8.74	36.56	100	58	P	H
		5711.215	46.47	-61.87	108.34	40.7	33.56	8.76	36.55	100	58	P	H
		5723.31	47.74	-70.61	118.35	41.9	33.62	8.77	36.55	100	58	P	H
	*	5885	104.57	-	-	98.04	34.17	8.89	36.53	100	58	P	H
	*	5885	95.81	-	-	89.28	34.17	8.89	36.53	100	58	A	H
		5895.25	80.75	-29.27	110.02	74.19	34.19	8.9	36.53	100	58	P	H
		5927	54.75	-33.45	88.2	48.21	34.15	8.92	36.53	100	58	P	H
		5895	71.06	-19.14	90.2	64.5	34.19	8.9	36.53	100	58	P	H
		5925.5	40.1	-28.1	68.2	33.56	34.15	8.92	36.53	100	58	A	H
		5635.695	46.53	-21.67	68.2	41.21	33.18	8.7	36.56	100	51	P	V
		5690.27	47.88	-50.15	98.03	42.24	33.45	8.75	36.56	100	51	P	V
		5709.445	47.3	-60.55	107.85	41.54	33.55	8.76	36.55	100	51	P	V
		5721.245	46.59	-67.05	113.64	40.76	33.61	8.77	36.55	100	51	P	V
	*	5885	109.72	-	-	103.19	34.17	8.89	36.53	100	51	P	V
	*	5885	102.12	-	-	95.59	34.17	8.89	36.53	100	51	A	V
		5895	86.97	-23.23	110.2	80.41	34.19	8.9	36.53	100	51	P	V
		5928	58.54	-29.66	88.2	52.01	34.14	8.92	36.53	100	51	P	V
		5895	77.37	-12.83	90.2	70.81	34.19	8.9	36.53	100	51	P	V
		5925.25	44.18	-24.02	68.2	37.64	34.15	8.92	36.53	100	51	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII- 4 5850~5895MHz

WIFI 802.11ax HE40_Full (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5628.91	46.96	-21.24	68.2	41.69	33.14	8.69	36.56	100	45	P	H
		5698.235	47.95	-55.95	103.9	42.27	33.49	8.75	36.56	100	45	P	H
		5707.97	48.44	-58.99	107.43	42.7	33.54	8.76	36.56	100	45	P	H
		5721.245	46.61	-67.03	113.64	40.78	33.61	8.77	36.55	100	45	P	H
	*	5835	98.51	-	-	92.12	34.07	8.86	36.54	100	45	P	H
	*	5835	89.57	-	-	83.18	34.07	8.86	36.54	100	45	A	H
		5895.5	56.96	-52.87	109.83	50.4	34.19	8.9	36.53	100	45	P	H
		5939.75	50.53	-37.67	88.2	44.02	34.12	8.92	36.53	100	45	P	H
		5895.5	46.94	-42.89	89.83	40.38	34.19	8.9	36.53	100	45	A	H
		5929	41.06	-27.14	68.2	34.53	34.14	8.92	36.53	100	45	A	H
802.11ax													H
HE40 Full													H
CH 167		5646.61	49.22	-18.98	68.2	43.84	33.23	8.71	36.56	100	48	P	V
5835MHz		5688.205	50.02	-46.48	96.5	44.4	33.44	8.74	36.56	100	48	P	V
		5719.18	52.62	-57.95	110.57	46.8	33.6	8.77	36.55	100	48	P	V
		5724.785	54.26	-67.45	121.71	48.41	33.62	8.78	36.55	100	48	P	V
	*	5835	105.45	-	-	99.06	34.07	8.86	36.54	100	48	P	V
	*	5835	96.04	-	-	89.65	34.07	8.86	36.54	100	48	A	V
		5896.25	63.02	-46.26	109.28	56.46	34.19	8.9	36.53	100	48	P	V
		5931	57.43	-30.77	88.2	50.9	34.14	8.92	36.53	100	48	P	V
		5895.5	53.24	-36.59	89.83	46.68	34.19	8.9	36.53	100	48	A	V
		5925	45.87	-22.33	68.2	39.34	34.15	8.91	36.53	100	48	A	V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5609.735	46.66	-21.54	68.2	41.5	33.05	8.68	36.57	100	43	P	H
		5655.755	46.59	-25.89	72.48	41.15	33.28	8.72	36.56	100	43	P	H
		5705.315	48.36	-58.33	106.69	42.63	33.53	8.76	36.56	100	43	P	H
		5721.54	47.05	-67.26	114.31	41.22	33.61	8.77	36.55	100	43	P	H
	*	5875	98.35	-	-	91.84	34.15	8.89	36.53	100	43	P	H
	*	5875	89.46	-	-	82.95	34.15	8.89	36.53	100	43	A	H
		5896	71.29	-38.17	109.46	64.73	34.19	8.9	36.53	100	43	P	H
		5925	59.98	-28.22	88.2	53.45	34.15	8.91	36.53	100	43	P	H
		5895.25	62.3	-27.72	90.02	55.74	34.19	8.9	36.53	100	43	A	H
		5925	50.91	-17.29	68.2	44.38	34.15	8.91	36.53	100	43	A	H
802.11ax													H
HE40 Full													H
CH 175		5610.325	47.96	-20.24	68.2	42.8	33.05	8.68	36.57	100	48	P	V
5875MHz		5657.82	47.96	-26.05	74.01	42.51	33.29	8.72	36.56	100	48	P	V
		5707.085	48.97	-58.22	107.19	43.23	33.54	8.76	36.56	100	48	P	V
		5723.605	48.5	-70.52	119.02	42.65	33.62	8.78	36.55	100	48	P	V
	*	5875	104.99	-	-	98.48	34.15	8.89	36.53	100	48	P	V
	*	5875	95.69	-	-	89.18	34.15	8.89	36.53	100	48	A	V
		5898	79.78	-28.21	107.99	73.21	34.2	8.9	36.53	100	48	P	V
		5925	68.64	-19.56	88.2	62.11	34.15	8.91	36.53	100	48	P	V
		5895.25	68.42	-21.6	90.02	61.86	34.19	8.9	36.53	100	48	A	V
		5925.25	57.74	-10.46	68.2	51.2	34.15	8.92	36.53	100	48	A	V
													V
													V

Remark

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

UNII- 4 5850~5895MHz

WIFI 802.11ax HE40_Full (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11670	46.54	-27.46	74	52.39	39	13.19	58.04	-	-	P	H
		17505	48.68	-19.52	68.2	51.91	39.67	16.3	59.2	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE40 Full													H
CH 167		11670	45.83	-28.17	74	51.68	39	13.19	58.04	-	-	P	V
5835MHz		17505	49.47	-18.73	68.2	52.7	39.67	16.3	59.2	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11750	44.94	-29.06	74	50.7	39.02	13.22	58	-	-	P	H
		17625	46.88	-21.32	68.2	49.41	40.14	16.33	59	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE40 Full													H
CH 175		11750	46.16	-27.84	74	51.92	39.02	13.22	58	-	-	P	V
5875MHz		17625	47.16	-21.04	68.2	49.69	40.14	16.33	59	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Remark

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

UNII- 4 5850~5895MHz

WIFI 802.11ax HE80_Full (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5623.6	47	-21.2	68.2	41.76	33.12	8.69	36.57	100	44	P	H
		5695.58	51.31	-50.63	101.94	45.64	33.48	8.75	36.56	100	44	P	H
		5719.77	52.3	-58.44	110.74	46.48	33.6	8.77	36.55	100	44	P	H
		5723.605	50.82	-68.2	119.02	44.97	33.62	8.78	36.55	100	44	P	H
	*	5855	96.16	-	-	89.72	34.11	8.87	36.54	100	44	P	H
	*	5855	86.24	-	-	79.8	34.11	8.87	36.54	100	44	A	H
		5895.25	70.23	-39.79	110.02	63.67	34.19	8.9	36.53	100	44	P	H
		5925.75	63.6	-24.6	88.2	57.06	34.15	8.92	36.53	100	44	P	H
		5895.25	58.35	-31.67	90.02	51.79	34.19	8.9	36.53	100	44	A	H
		5925.75	51.96	-16.24	68.2	45.42	34.15	8.92	36.53	100	44	A	H
802.11ax													H
HE80 Full													H
CH 171		5647.2	51.14	-17.06	68.2	45.75	33.24	8.71	36.56	100	46	P	V
5855MHz		5698.825	53.91	-50.42	104.33	48.23	33.49	8.75	36.56	100	46	P	V
		5708.265	57.22	-50.3	107.52	51.48	33.54	8.76	36.56	100	46	P	V
		5723.31	57.4	-60.95	118.35	51.56	33.62	8.77	36.55	100	46	P	V
	*	5855	101.36	-	-	94.92	34.11	8.87	36.54	100	46	P	V
	*	5855	92.27	-	-	85.83	34.11	8.87	36.54	100	46	A	V
		5895.25	75.35	-34.67	110.02	68.79	34.19	8.9	36.53	100	46	P	V
		5933.5	68.73	-19.47	88.2	62.21	34.13	8.92	36.53	100	46	P	V
		5895.25	64.41	-25.61	90.02	57.85	34.19	8.9	36.53	100	46	A	V
		5925	58.75	-9.45	68.2	52.22	34.15	8.91	36.53	100	46	A	V
													V
													V

Remark

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

UNII- 4 5850~5895MHz

WIFI 802.11ax HE80_Full (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11710	46.13	-27.87	74	51.94	39.01	13.2	58.02	-	-	P	H
		17565	47.01	-21.19	68.2	49.89	39.9	16.32	59.1	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE80 Full													H
CH 171		11710	45.31	-28.69	74	51.12	39.01	13.2	58.02	-	-	P	V
5855MHz		17565	47.26	-20.94	68.2	50.14	39.9	16.32	59.1	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Remark

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

Emission above 18GHz

WIFI 802.11ax HE20_Partial 26 (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.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20_Partial 26 SHF		39782.5	47.96	-26.04	74	59.97	44.4	-0.25	56.16	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		39956.5	47.85	-26.15	74	59.57	44.44	-0.21	55.95	-	-	P	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 HE20_Partial 26 (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.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20_Partial 26 LF		30.9	24.34	-15.66	40	31.61	24.32	0.73	32.32	-	-	P	H
		66.72	26.3	-13.7	40	45.37	12.23	1.08	32.38	-	-	P	H
		99.66	28.92	-14.58	43.5	44.18	15.8	1.31	32.37	-	-	P	H
		130.8	26.62	-16.88	43.5	40.01	17.54	1.43	32.36	-	-	P	H
		200.8	26.03	-17.47	43.5	41.69	14.87	1.85	32.38	-	-	P	H
		341.6	28.58	-17.42	46	38.71	20.01	2.24	32.38	-	-	P	H
													H
													H
													H
													H
													H
													H
													V
		35.94	24.42	-15.58	40	34.16	21.91	0.76	32.41	-	-	P	V
		66.54	27.4	-12.6	40	46.53	12.21	1.08	32.42	-	-	P	V
		95.34	29.93	-13.57	43.5	45.8	15.26	1.29	32.42	-	-	P	V
		174	22.33	-21.17	43.5	37.6	15.36	1.77	32.4	-	-	P	V
		684	28.05	-17.95	46	31.01	26.25	3.14	32.35	-	-	P	V
		933.6	31.52	-14.48	46	29.62	29.35	3.71	31.16	-	-	P	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 and emission level has at least 6dB margin against limit or emission is noise floor only.												

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is **Margin** line.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

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

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		5650	55.45	-12.75	68.2	54.51	32.22	4.58	35.86	103	308	P	H

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

For Peak Limit @ 5650MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Margin(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 68.2(dBμV/m)

= -12.75 (dB)

Peak measured complies with the limit line, so test result is “PASS”.

Appendix D. Radiated Spurious Emission Plots

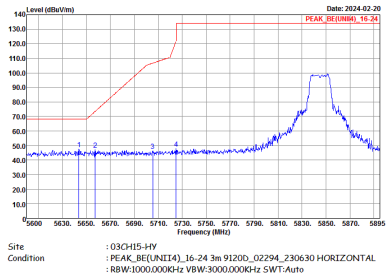
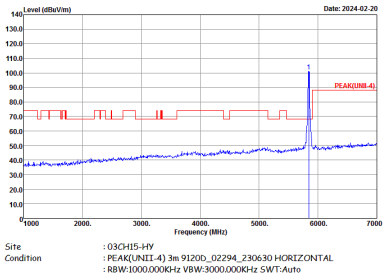
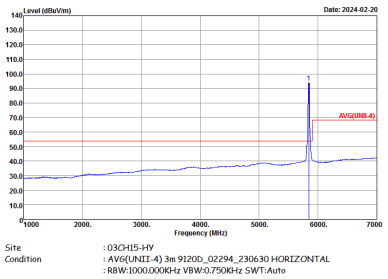
Test Engineer :	Daniel Lee, Quentin Liu and Bigshow Wang	**Temperature :**	21~23.4°C
		Relative Humidity :	47~59%

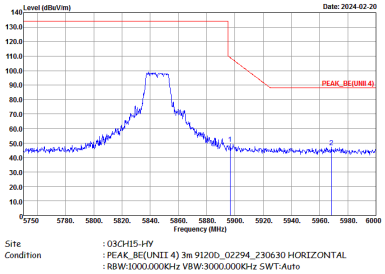
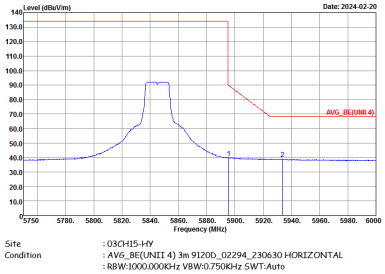
Note symbol

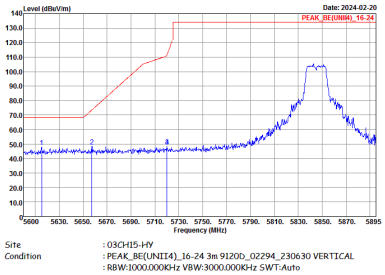
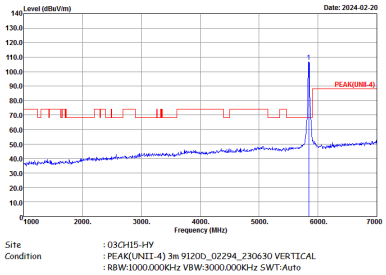
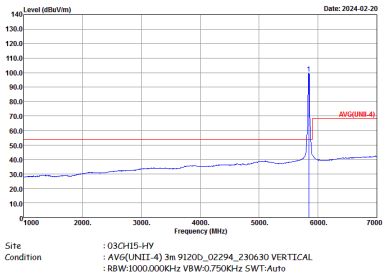
-L	**Low channel location**
-R	**High channel location**

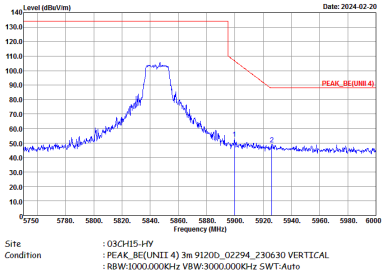
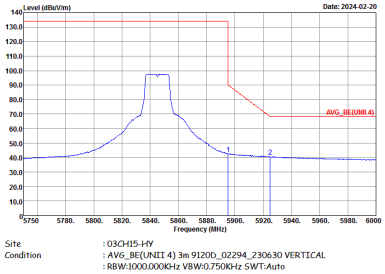
UNII-4 - 5850~5895MHz

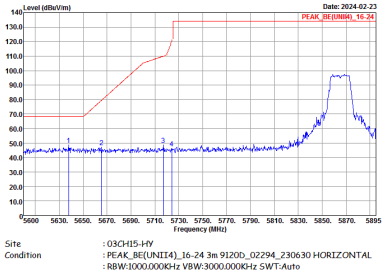
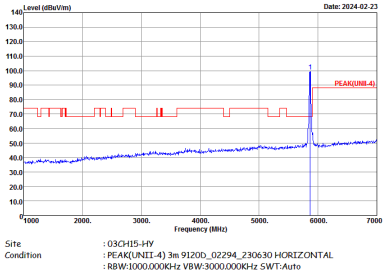
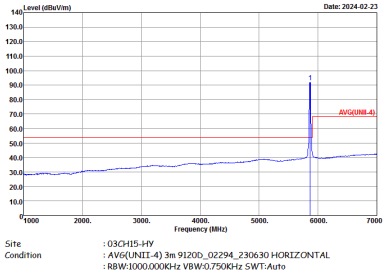
WIFI 802.11a (Band Edge @ 3m)

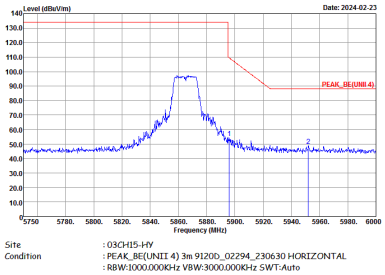
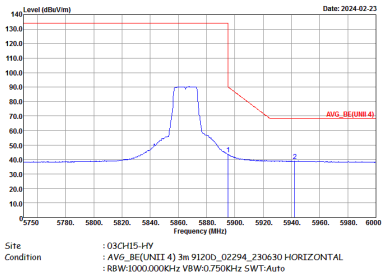
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11a CH169 5845MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.	Left blank	

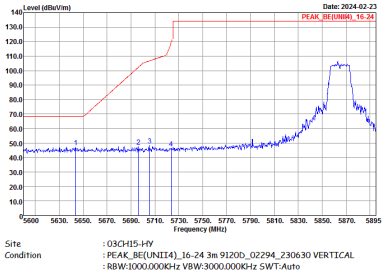
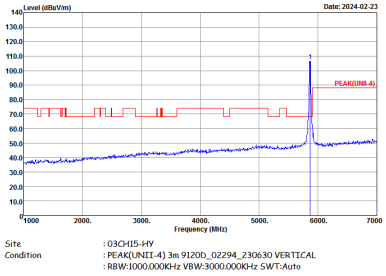
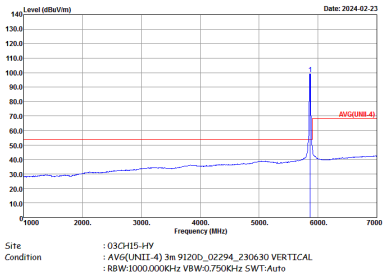
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11a CH169 5845MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

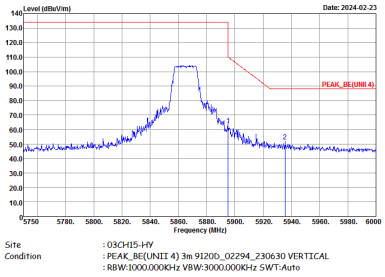
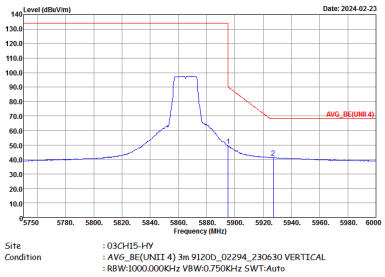
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11a CH169 5845MHz - L	
1	Vertical	Fundamental
Peak		
Avg.	Left blank	

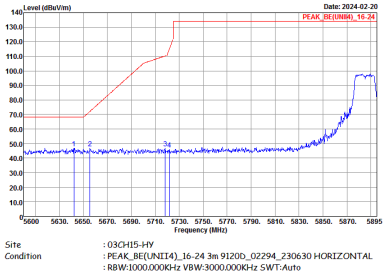
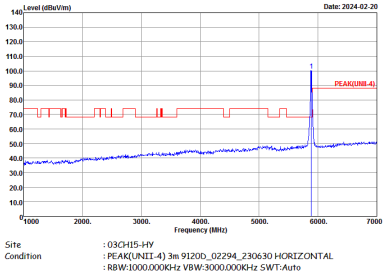
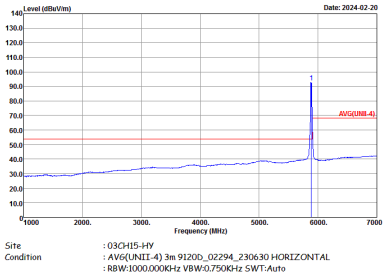
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11a CH169 5845MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

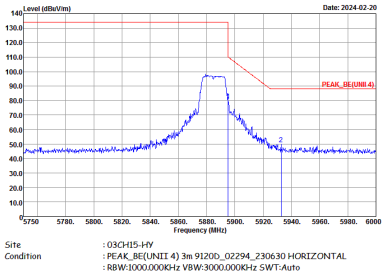
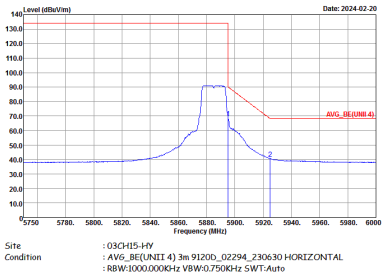
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11a CH173 5865MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.	Left blank	

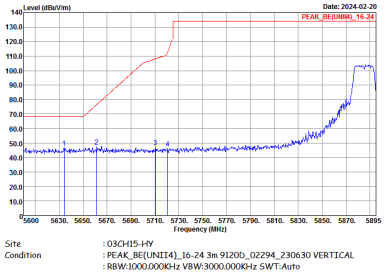
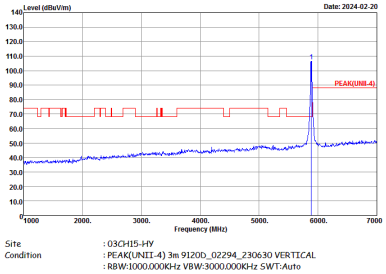
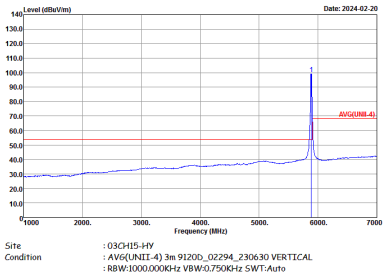
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11a CH173 5865MHz – R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

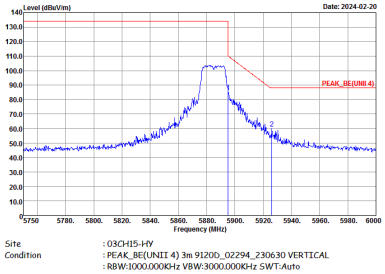
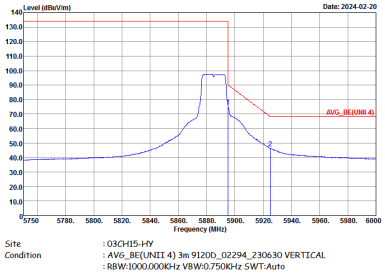
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11a CH173 5865MHz - L	
1	Vertical	Fundamental
Peak		
Avg.	Left blank	

WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11a CH173 5865MHz – R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

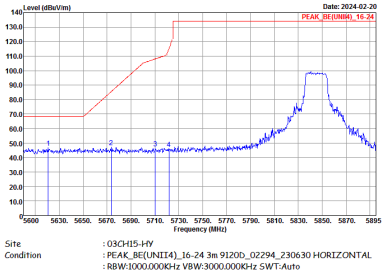
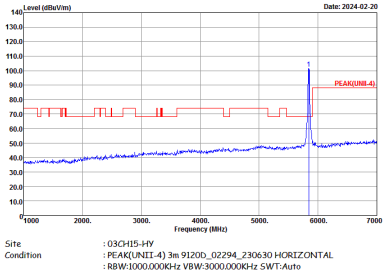
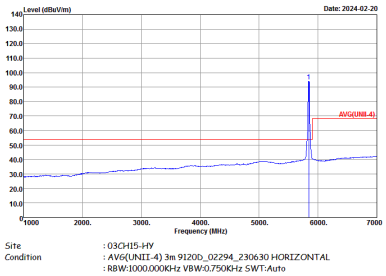
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11a CH177 5885MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.	Left blank	

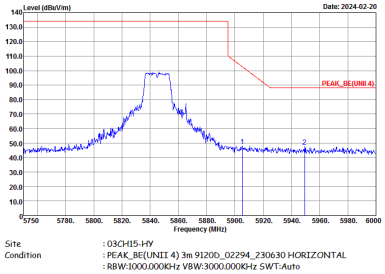
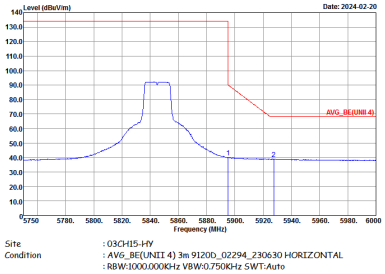
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11a CH177 5885MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

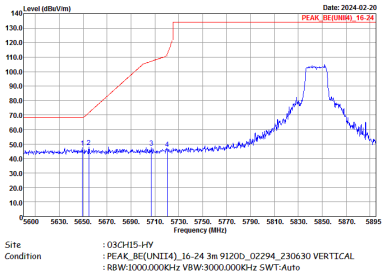
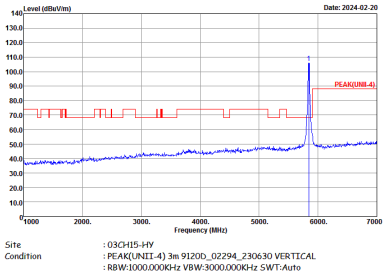
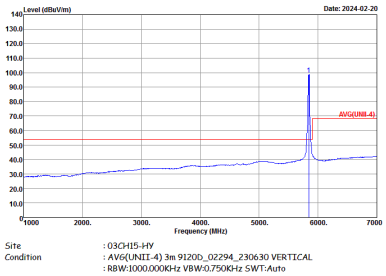
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11a CH177 5885MHz - L	
1	Vertical	Fundamental
Peak		
Avg.	Left blank	

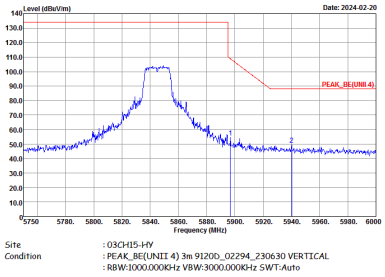
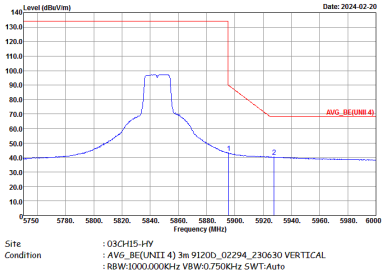
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11a CH177 5885MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

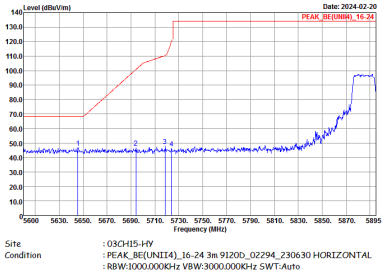
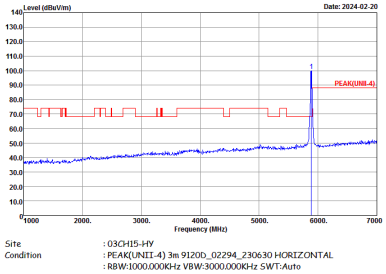
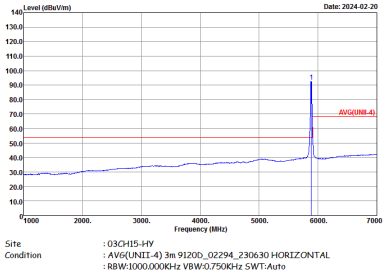
UNII-4 - 5850~5895MHz
WIFI 802.11n HT20 Full (Band Edge @ 3m)

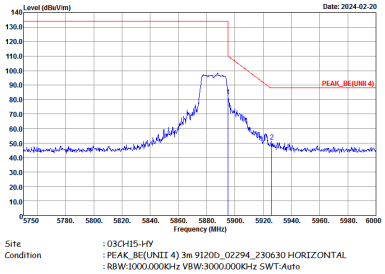
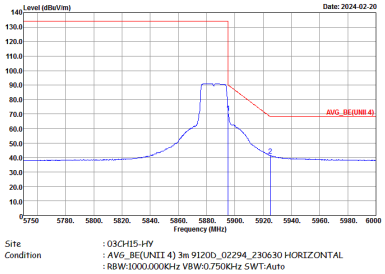
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11n HT20 Full CH169 5845MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.	Left blank	

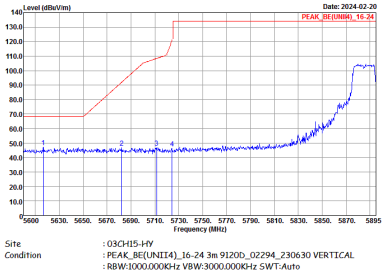
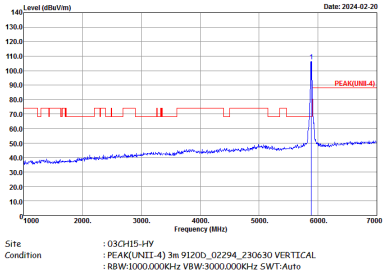
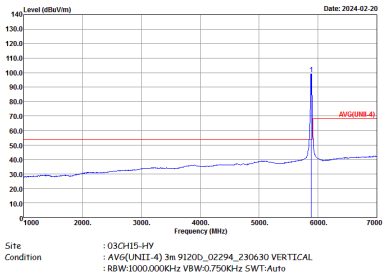
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11n HT20 Full CH169 5845MHz - L	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

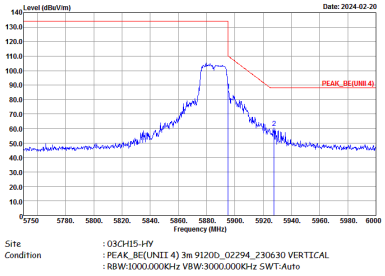
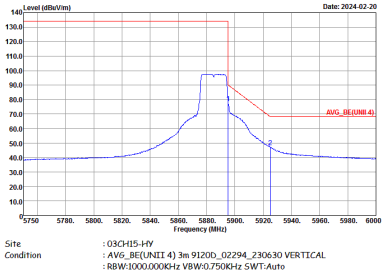
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11n HT20 Full CH169 5845MHz - L	
1	Vertical	Fundamental
Peak		
Avg.	Left blank	

WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11n HT20 Full CH169 5845MHz - L	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

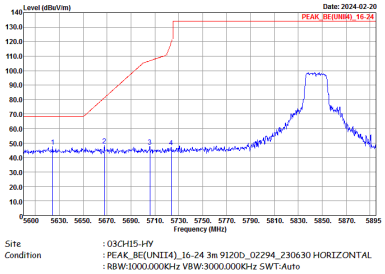
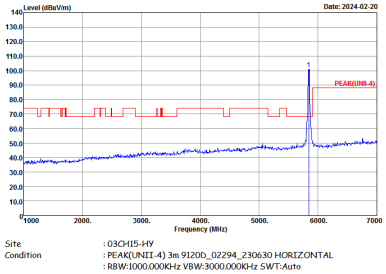
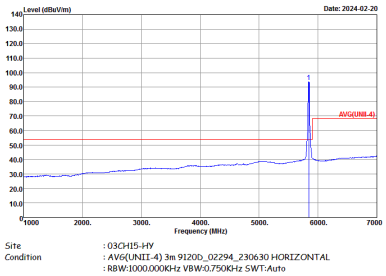
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11n HT20 Full CH177 5885MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.	Left blank	

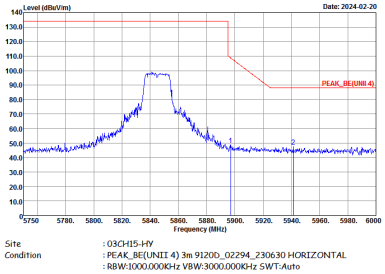
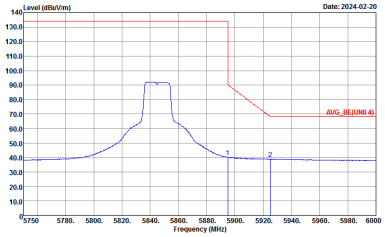
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11n HT20 Full CH177 5885MHz - L	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

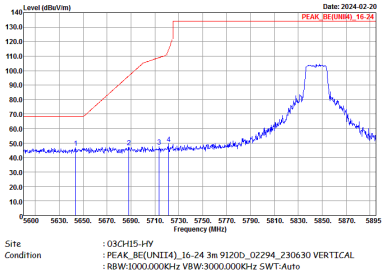
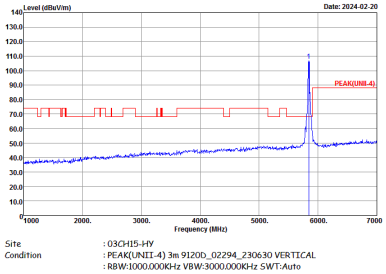
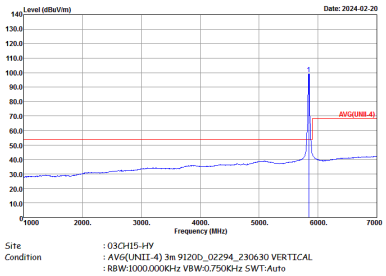
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11n HT20 Full CH177 5885MHz - L	
1	Vertical	Fundamental
Peak		
Avg.	Left blank	

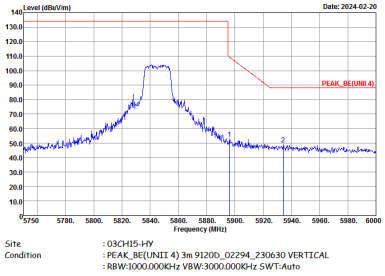
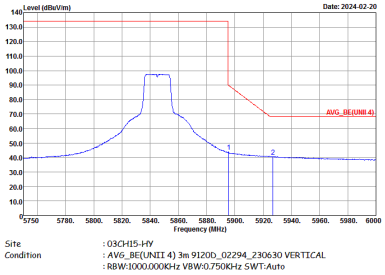
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11n HT20 Full CH177 5885MHz - L	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

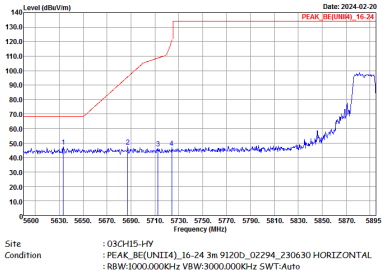
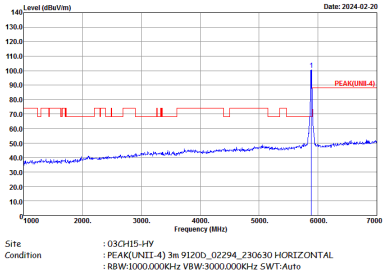
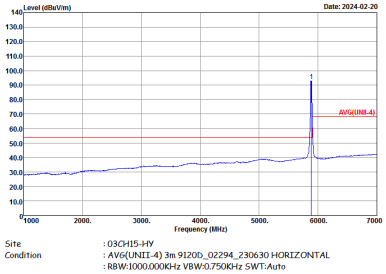
UNII-4 - 5850~5895MHz
WIFI 802.11ac VHT20 Full (Band Edge @ 3m)

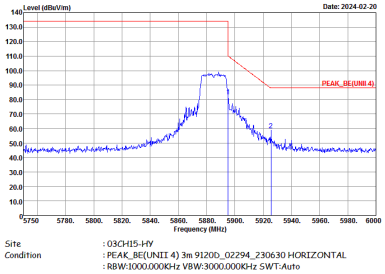
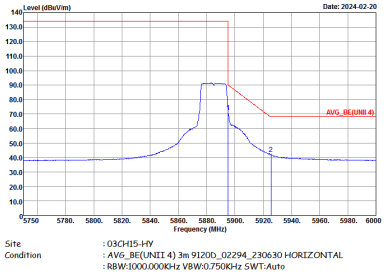
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT20 Full CH169 5845MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.	Left blank	

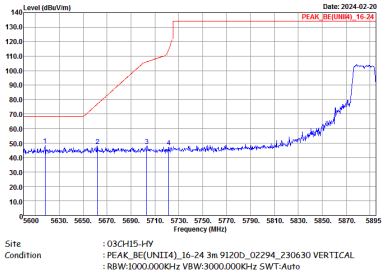
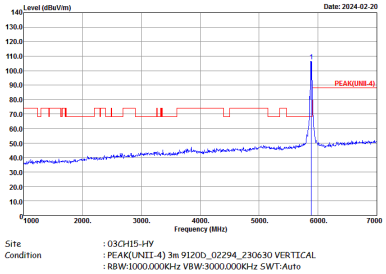
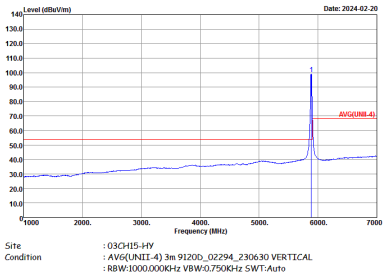
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT20 Full CH169 5845MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNII 4) 3m 9120D_02294_230630 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNII 4) 3m 9120D_02294_230630 HORIZONTAL : RBW:1000.000KHz VBW:0.750KHz SWT:Auto	Left blank

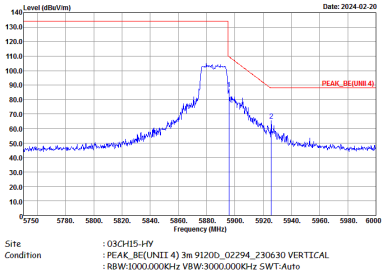
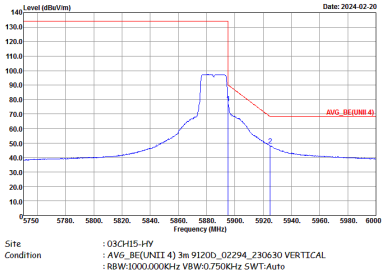
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT20 Full CH169 5845MHz - L	
1	Vertical	Fundamental
Peak		
Avg.	Left blank	

WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT20 Full CH169 5845MHz - L	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

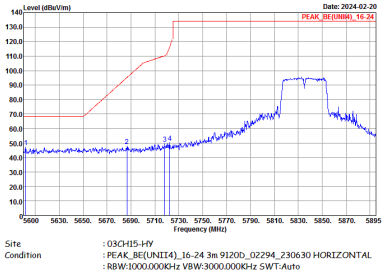
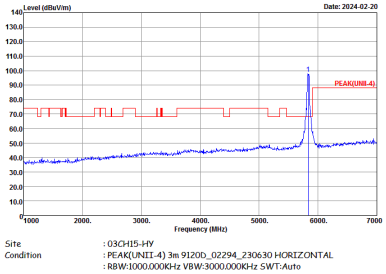
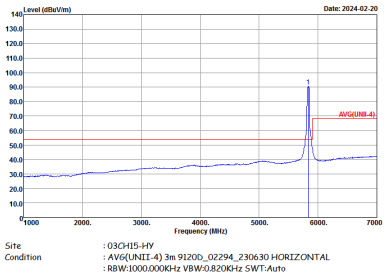
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT20 Full CH177 5885MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.	Left blank	

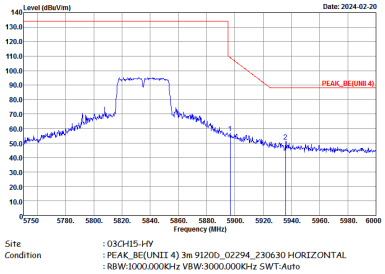
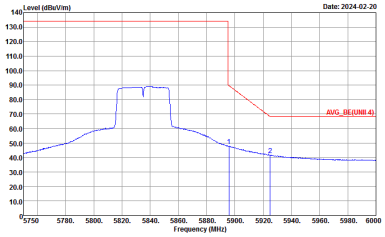
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT20 Full CH177 5885MHz - L	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

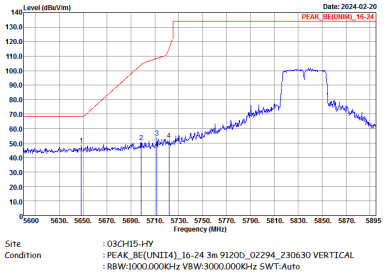
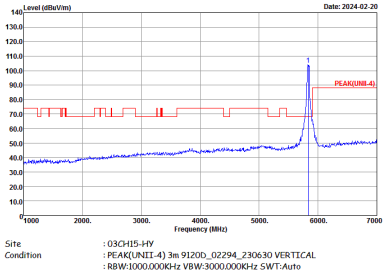
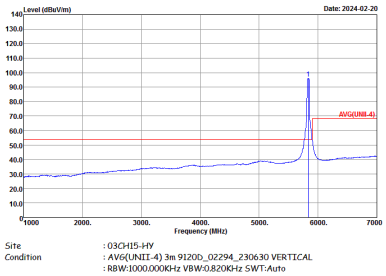
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT20 Full CH177 5885MHz - L	
1	Vertical	Fundamental
Peak		
Avg.	Left blank	

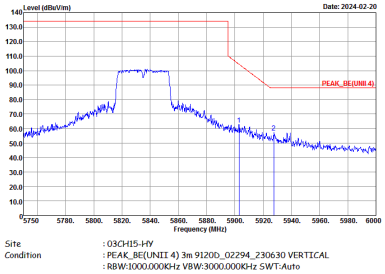
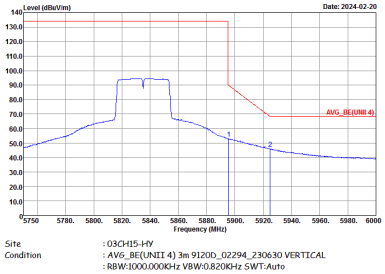
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT20 Full CH177 5885MHz - L	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

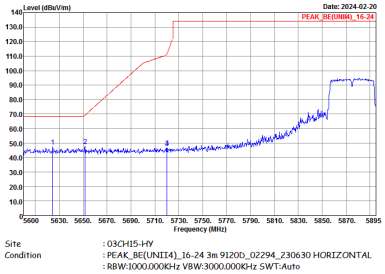
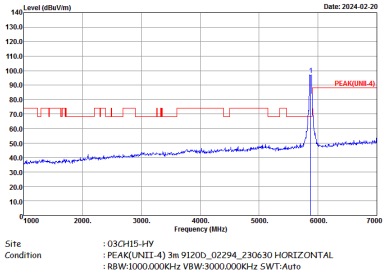
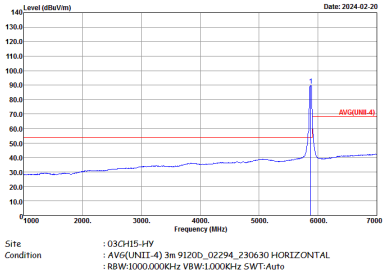
UNII-4 - 5850~5895MHz
WIFI 802.11ac VHT40 Full (Band Edge @ 3m)

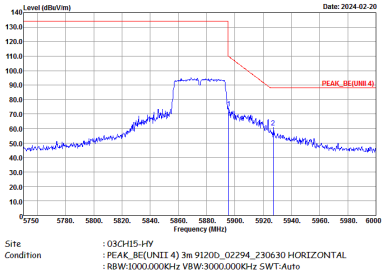
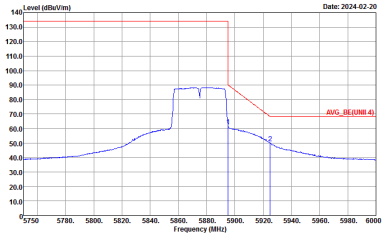
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT40 Full CH167 5835MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.	Left blank	

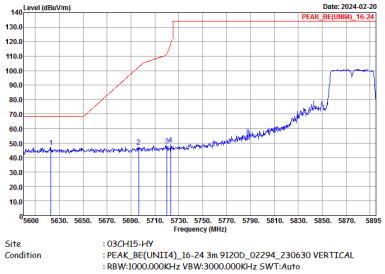
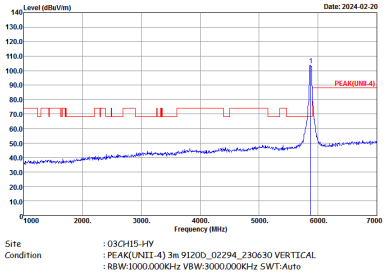
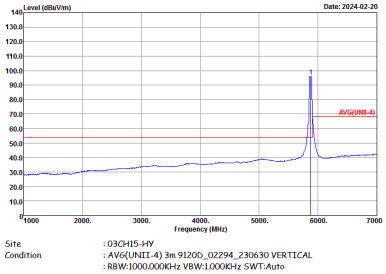
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT40 Full CH167 5835MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNII 4) 3m 9120D_02294_230630 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNII 4) 3m 9120D_02294_230630 HORIZONTAL : RBW:1000.000KHz VBW:0.820KHz SWT:Auto	Left blank

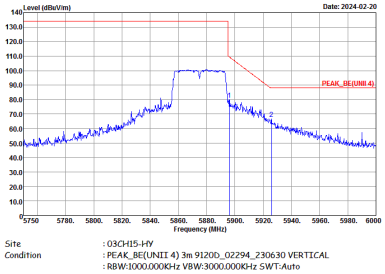
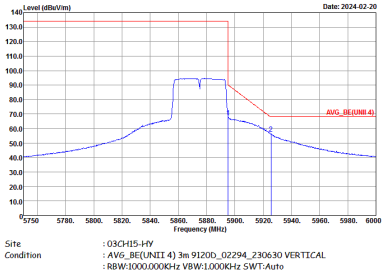
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT40 Full CH167 5835MHz - L	
1	Vertical	Fundamental
Peak		
Avg.	Left blank	

WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT40 Full CH167 5835MHz - L	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

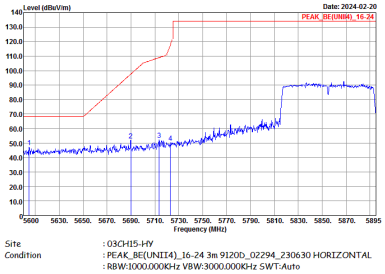
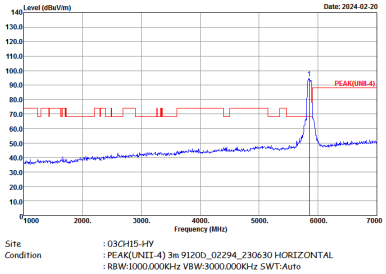
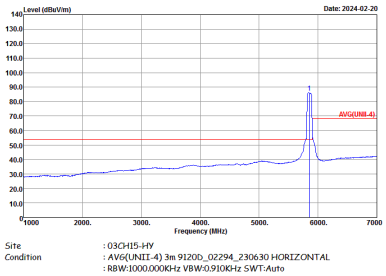
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT40 Full CH175 5875MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.	Left blank	

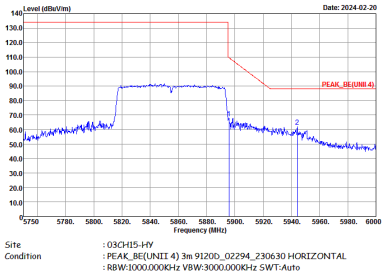
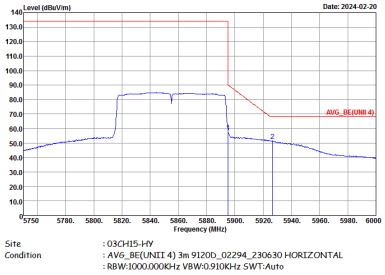
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT40 Full CH175 5875MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNII 4) 3m 9120D_02294_230630 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNII 4) 3m 9120D_02294_230630 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

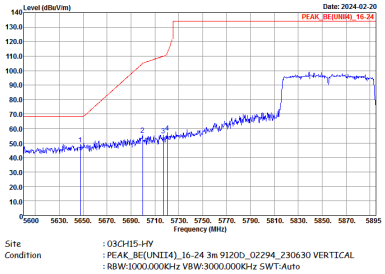
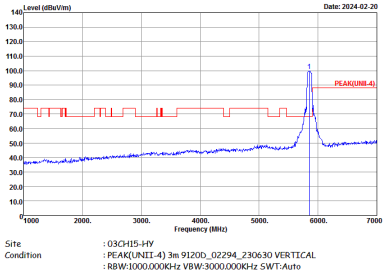
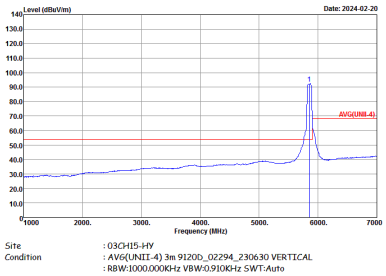
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT40 Full CH175 5875MHz - L	
1	Vertical	Fundamental
Peak		
Avg.	Left blank	

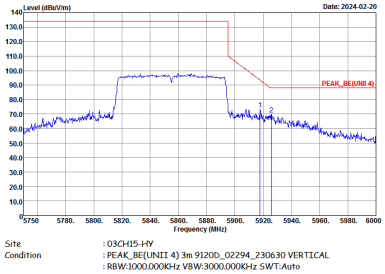
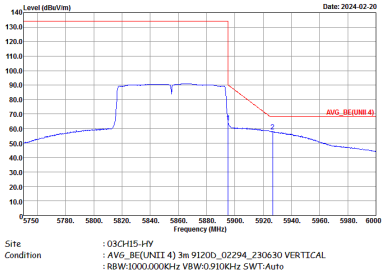
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT40 Full CH175 5875MHz - L	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

UNII-4 - 5850~5895MHz
WIFI 802.11ac VHT80 Full (Band Edge @ 3m)

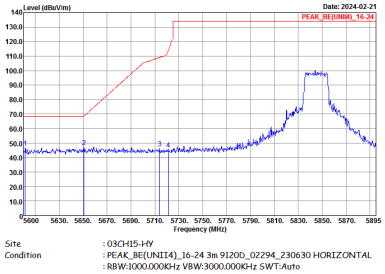
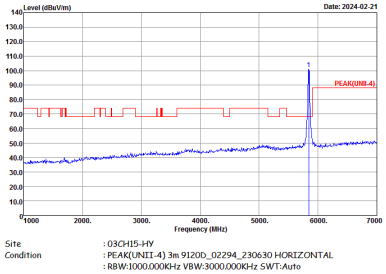
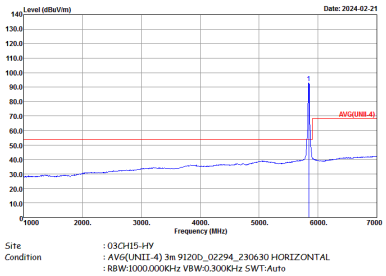
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT80 Full CH171 5855MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.	Left blank	

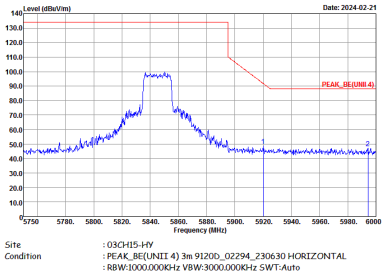
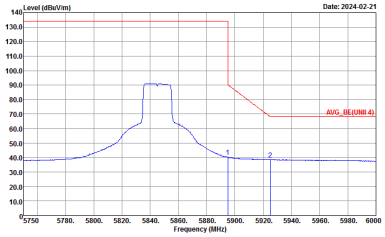
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT80 Full CH171 5855MHz - L	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

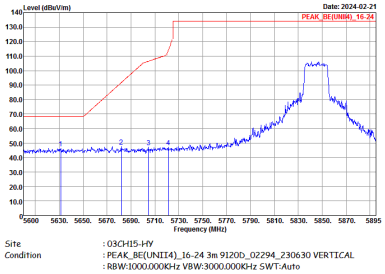
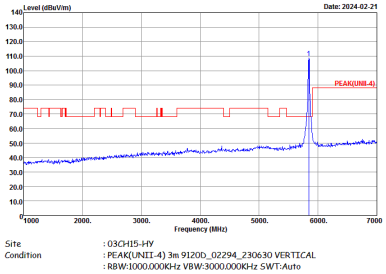
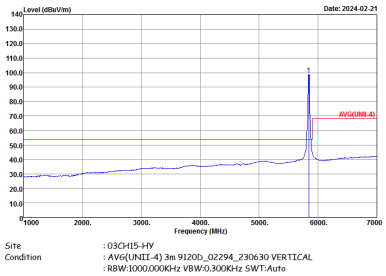
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT80 Full CH171 5855MHz - L	
1	Vertical	Fundamental
Peak		
Avg.	Left blank	

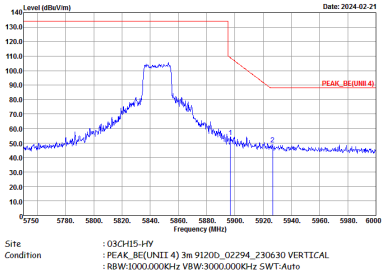
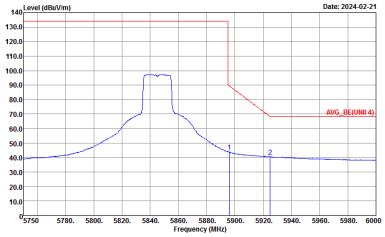
WIFI	UNII- 4 5850~5895MHz Band Edge @ 3m	
ANT	802.11ac VHT80 Full CH171 5855MHz - L	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

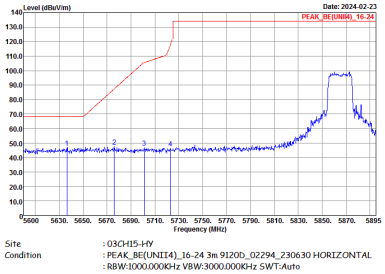
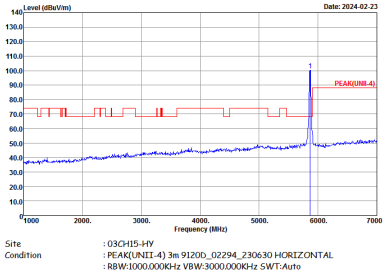
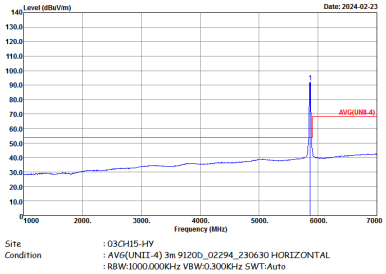
UNII-4 - 5850~5895MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

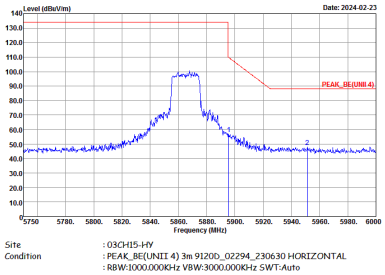
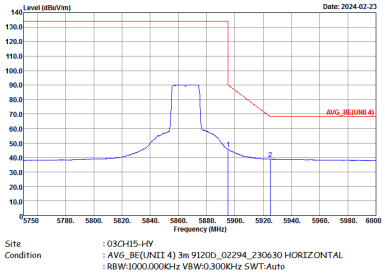
WIFI	UNII- 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH169 5845MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.	Left blank	

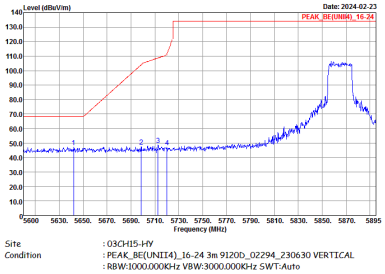
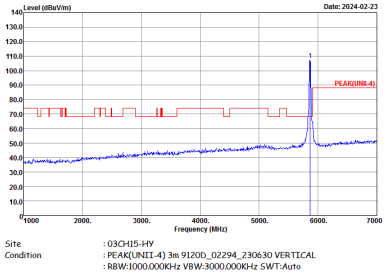
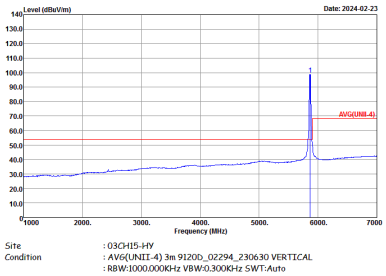
WIFI	UNII- 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH169 5845MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNII 4) 3m 9120D_02294_230630 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNII 4) 3m 9120D_02294_230630 HORIZONTAL : RBW:1000.000KHz VBW:0.300KHz SWT:Auto	Left blank

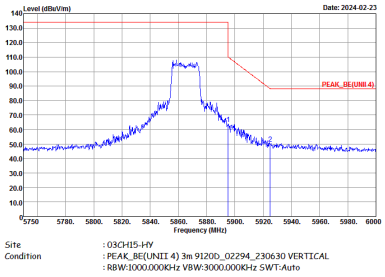
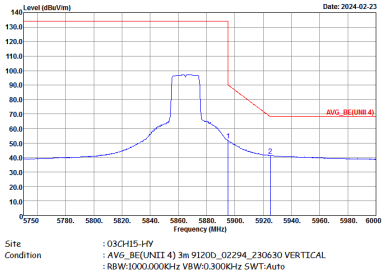
WIFI	UNII- 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH169 5845MHz - L	
1	Vertical	Fundamental
Peak		
Avg.	Left blank	

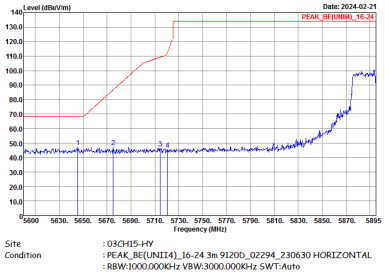
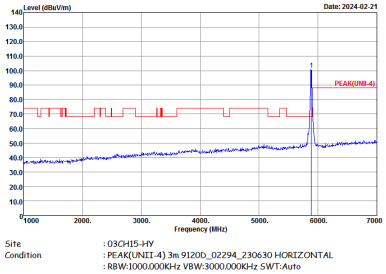
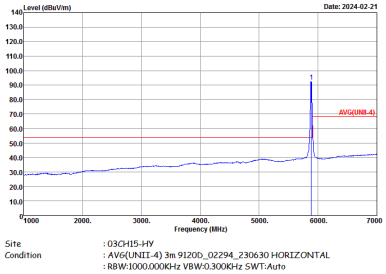
WIFI	UNII- 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH169 5845MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNII 4) 3m 9120D_02294_230630 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNII 4) 3m 9120D_02294_230630 VERTICAL : RBW:1000.000KHz VBW:0.300KHz SWT:Auto	Left blank

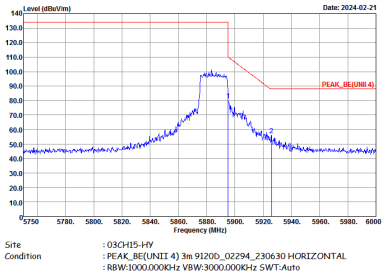
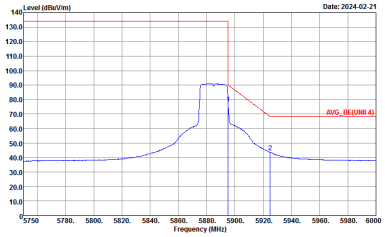
WIFI	UNII- 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH173 5865MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.	Left blank	

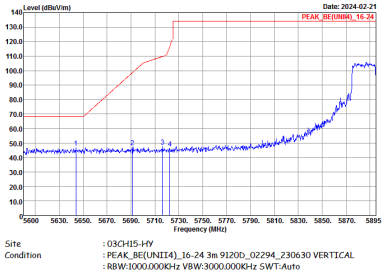
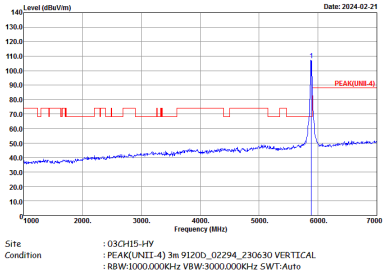
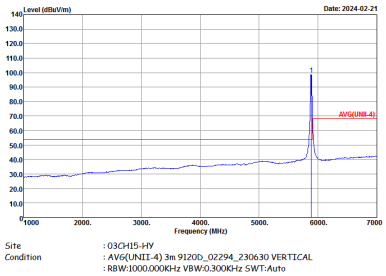
WIFI	UNII- 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH173 5865MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

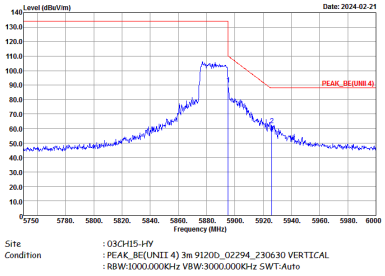
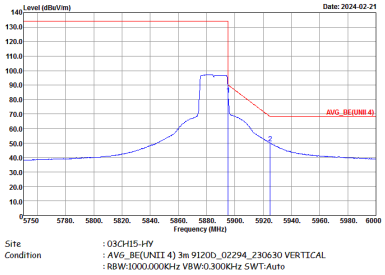
WIFI	UNII- 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH173 5865MHz - L	
1	Vertical	Fundamental
Peak		
Avg.	Left blank	

WIFI	UNII- 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH173 5865MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	UNII- 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH177 5885MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.	Left blank	

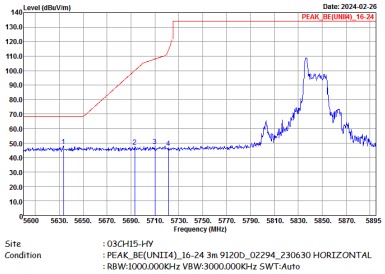
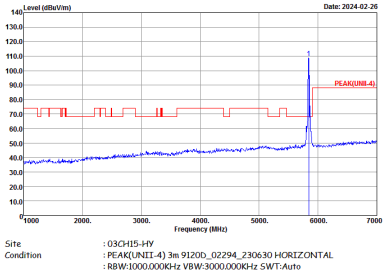
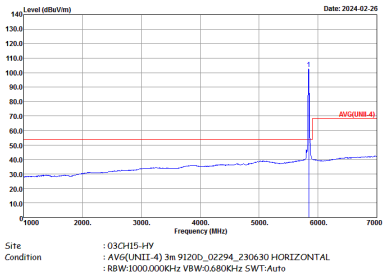
WIFI	UNII- 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH177 5885MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE(UNII 4) 3m 9120D_02294_230630 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE(UNII 4) 3m 9120D_02294_230630 HORIZONTAL : RBW:1000.000KHz VBW:0.300KHz SWT:Auto	Left blank

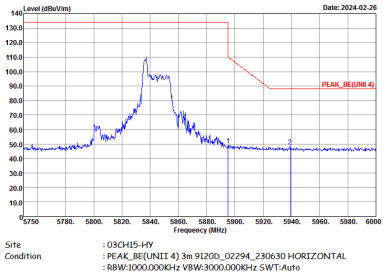
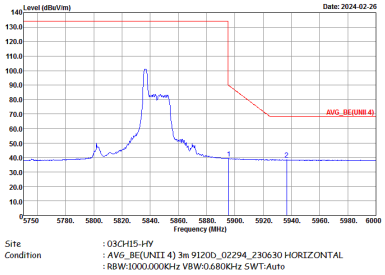
WIFI	UNII- 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH177 5885MHz - L	
1	Vertical	Fundamental
Peak		
Avg.	Left blank	

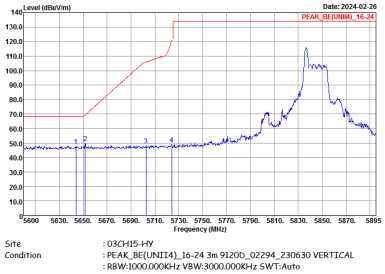
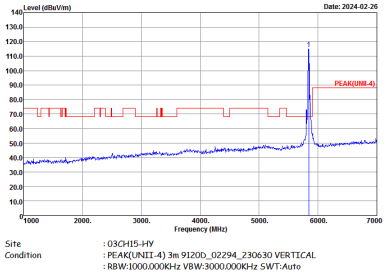
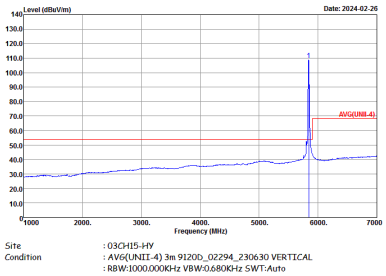
WIFI	UNII- 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH177 5885MHz - R	
1	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

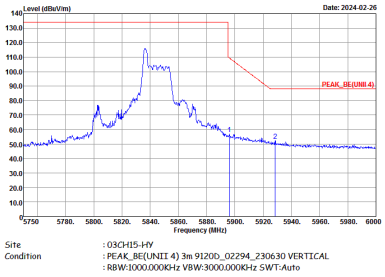
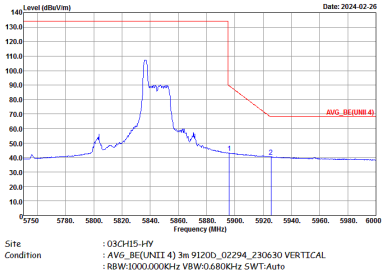
UNII-4 - 5850~5895MHz

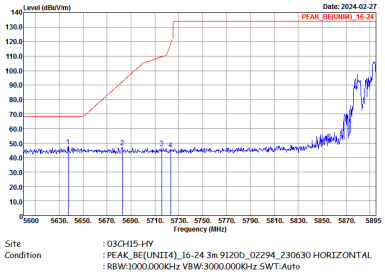
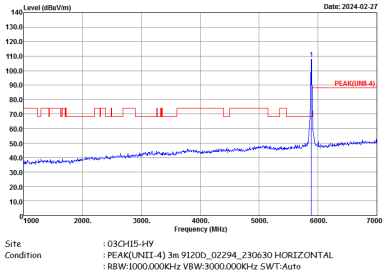
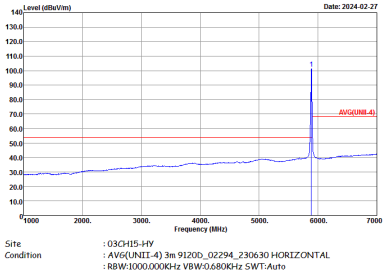
WIFI 802.11ax HE20 Partial 26 (Band Edge @ 3m)

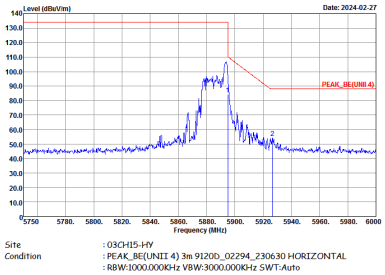
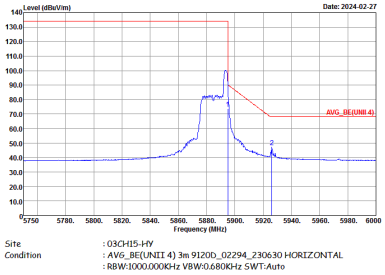
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/0 CH169 5845MHz	
1	Horizontal	Fundamental
Peak		
Avg	Left blank	

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/0 CH169 5845MHz	
1	Horizontal	Fundamental
Peak		Left blank
Avg		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/0 CH169 5845MHz	
1	Vertical	Fundamental
Peak		
Avg	Left blank	

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/0 CH169 5845MHz	
1	Vertical	Fundamental
Peak		Left blank
Avg		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/8 CH177 5885MHz	
1	Horizontal	Fundamental
Peak		
Avg	Left blank	

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 26/8 CH177 5885MHz	
1	Horizontal	Fundamental
Peak		Left blank
Avg		Left blank