FCC RADIO TEST REPORT

FCC ID	:	**TVE-3901M12**
Equipment	:	**Network Security Gateway**
Brand Name	:	**FORTINET**
Model Name	:	**FortiWiFi 50G-5Gxxxxxxxxxx, FORTIWIFI-50G-5Gxxxxxxxxxx, FWF-50G-5Gxxxxxxxxxx, FortiWiFi 51G-5Gxxxxxxxxxx, FORTIWIFI-51G-5Gxxxxxxxxxx, FWF-51G-5Gxxxxxxxxxx** **(where "x" can be used as "A-Z", or "0-9", or "-", or blank for software purposes or marketing purposes only)**
Marketing Name	:	**FortiWiFi 50G-5G, FortiWiFi 51G-5G**
Applicant	:	**Fortinet Inc.** **899 KIFER RD** **SUNNYVALE CA 94086** **UNITED STATES**
Manufacturer	:	**Fortinet Inc.** **899 KIFER RD** **SUNNYVALE CA 94086** **UNITED STATES**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on Dec. 06, 2023 and testing was performed from Dec. 24, 2023 to Feb. 07, 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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Table of Contents

History of this test report

Report No.	Version	Description	Issue Date
FR3D0631C	01	Initial issue of report	Mar. 04, 2024
FR3D0631C	02	Revise Product Feature of Equipment Under Test This report is an updated version, replacing the report issued on Mar. 04, 2024.	Mar. 13, 2024

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	6dB & 26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum Conducted Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	0.66 dB under the limit at 5922.40 MHz
3.5	15.207	AC Conducted Emission	Pass	13.74 dB under the limit at 0.34 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:

1. 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.
2. The purpose of different model name is for SSD.

Reviewed by: Yun Huang

Report Producer: Rachel Hsieh

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs WCDMA/LTE/5G NR, Bluetooth-LE, Wi-Fi 2.4GHz 802.11b/g/n/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, and GNSS **Antenna Type** WWAN: Dipole Antenna WLAN: Dipole Antenna Bluetooth: Monopole Antenna GPS / BDS / Galileo / Glonass / SBAS: Dipole Antenna

Antenna information		
5725 MHz ~ 5850 MHz	Peak Gain (dBi)	Ant. 3: 2.5 Ant. 6: 2.5

Remark:

1. The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.
2. This device does not support partial RU function.

1.1.1 Antenna Directional Gain

<For CDD Mode>

Follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)f)ii)

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

For power measurements on IEEE 802.11 devices,

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

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

For PSD measurements, the directional gain calculation.

Array Gain = 10 log(NANT/NSS) dB.

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

			DG for Power	DG for PSD	Power Limit Reduction	PSD Limit Reduction
	Ant 3 (dBi)	Ant 6 (dBi)	(dBi)	(dBi)	(dB)	(dB)
Band IV	2.50	2.50	2.50	5.51	0.00	0.00

Calculation example:

If a device has two antenna, G_{ANT1}= 2.5dBi; G_{ANT2}= 2.5dBi

Directional gain of power measurement = max(2.5, 2.5) + 0 = 2.5 dBi

Directional gain of PSD derived from formula which is

10 x log { { [10^ (2.5 dBi / 20) + 10^ (2.5 dBi / 20)] ^ 2 } / 2 }

= 5.51 dBi

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

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

<TXBF Modes>

The EUT supports beamforming modes , then

Follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)e)ii)

Directional gain = GANT + 10 log(NANT/NSS) dBi,

where NSS = the number of independent spatial streams of data and GANT is the antenna gain in dBi

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

	Ant 3 (dBi)	Ant 6 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band IV	2.50	2.50	5.51	5.51	0.00	0.00

Calculation example:

Directional gain is derived from formula which is

10 x log { { [10^ (2.5 dBi / 20) + 10^ (2.5 dBi / 20)] ^ 2 } / 2 }

= 5.51 dBi

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

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 662911 D01 Multiple Transmitter Output v02r01.
- ANSI C63.10-2013

Remark:

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

2 Test Configuration of Equipment Under Test

a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

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

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5725-5850 MHz Band 4 (U-NII-3)	149	5745	157	5785
	151*	5755	159*	5795
	153	5765	161	5805
	155#	5775	165	5825

Note:

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

2.2 Test Mode

The SISO mode conducted power is covered by MIMO mode per chain, so only the MIMO mode is tested.

The power for 802.11n mode is smaller than 802.11ac mode, so all other conducted and radiated test is covered by 802.11ac mode.

The power for TxBF mode is smaller than CDD mode, so all other conducted and radiated test is covered by CDD mode.

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

MIMO Mode

<CDD Mode>

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

<TXBF Mode>

Modulation	Data Rate
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 : WLAN (5GHz) Link + AC/DC Adapter

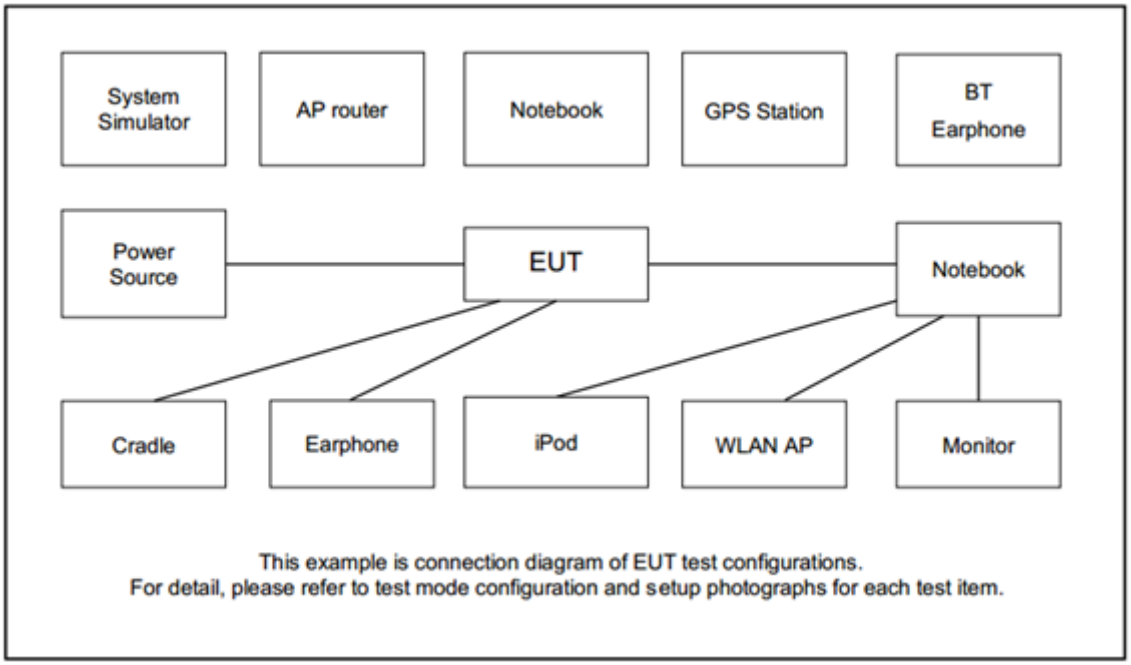
Ch. #		Band IV：5725-5850 MHz		
		802.11a	802.11n HT20	802.11n HT40
L	Low	149	149	151
M	Middle	157	157	-
H	High	165	165	159

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

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

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

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	DELL	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.5 EUT Operation Test Setup

The RF test items, utility “MT7906 QA 0.0.2.78” 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.

For TXBF mode, the modulation modes and data rates manipulated by the command lines in the engineering program made the EUT link to another EUT by power under the normal operation. The “MT7906 QA 0.0.2.78” software tool was used to enable the EUT to transmit signals continuously.

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

= 4.2 + 10 = 14.2 (dB)

3 Test Result

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

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

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

26dB and 99% Occupied bandwidth are reporting only.

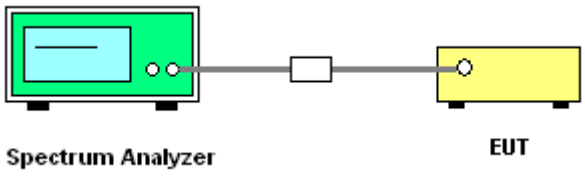
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



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

Please refer to Appendix A.

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

<CDD Modes>

The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter.
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01

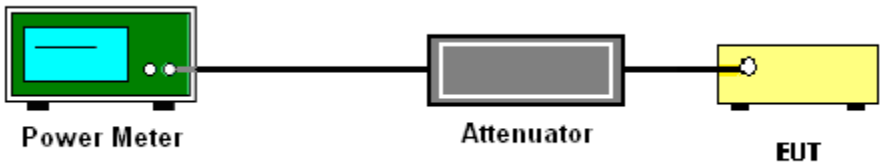
<TXBF Modes>

The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 for TXBF modes.

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

For the band 5.725–5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

Section F) Maximum power spectral density.

<CDD Modes>

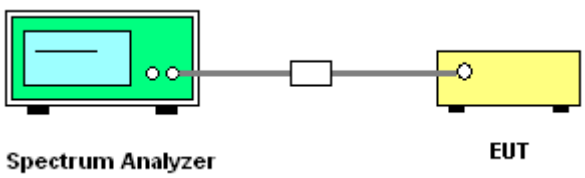
 # Method SA-2 #

(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 = 300kHz.
- Set VBW ≥ 1 MHz.
- Add 10 log (500 kHz/RBW) to the measured result, whereas RBW (<500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement
- 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. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
   Method (c): Measure and add 10 log(N_{ANT}) dB.
   With this technique, spectrum measurements are performed at each output of the device, but rather than summing the spectra or the spectral peaks across the outputs, the quantity 10 log(N_{ANT}) dB is added to each spectrum value before comparing to the emission limit. The addition of 10 log(N_{ANT}) dB serves to apportion the emission limit among the N_{ANT} outputs so that each output is permitted to contribute no more than $1/N_{ANT}$ th of the PSD limit.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

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

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

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

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

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

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

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

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

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

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

3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

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

   (1) Procedure for Unwanted Emissions Measurements Below 1000 MHz

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

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

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

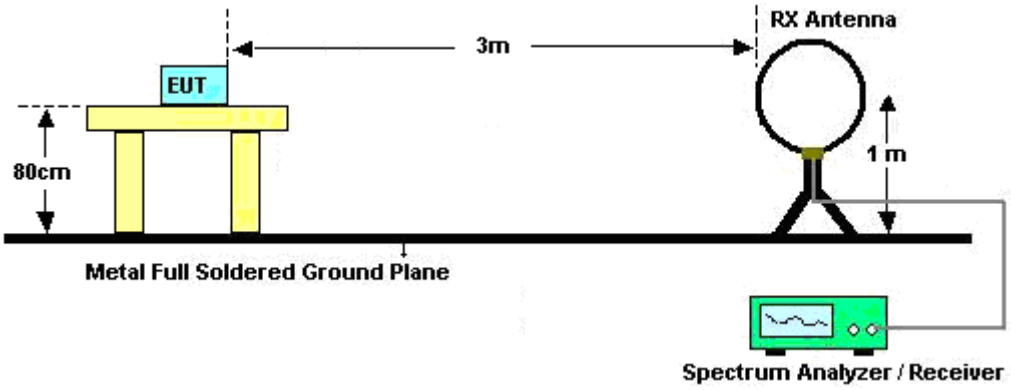
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz

   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT is arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.

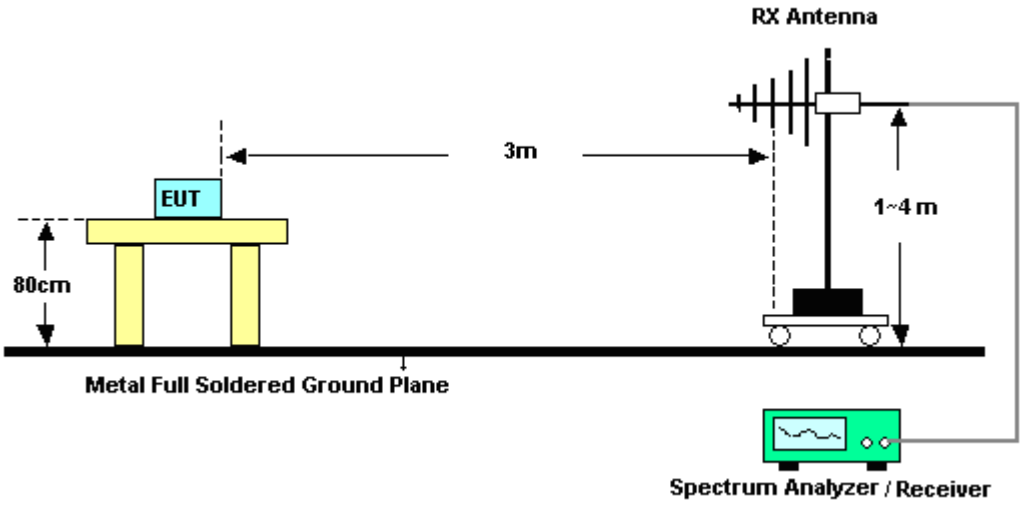
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit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

3.4.4 Test Setup

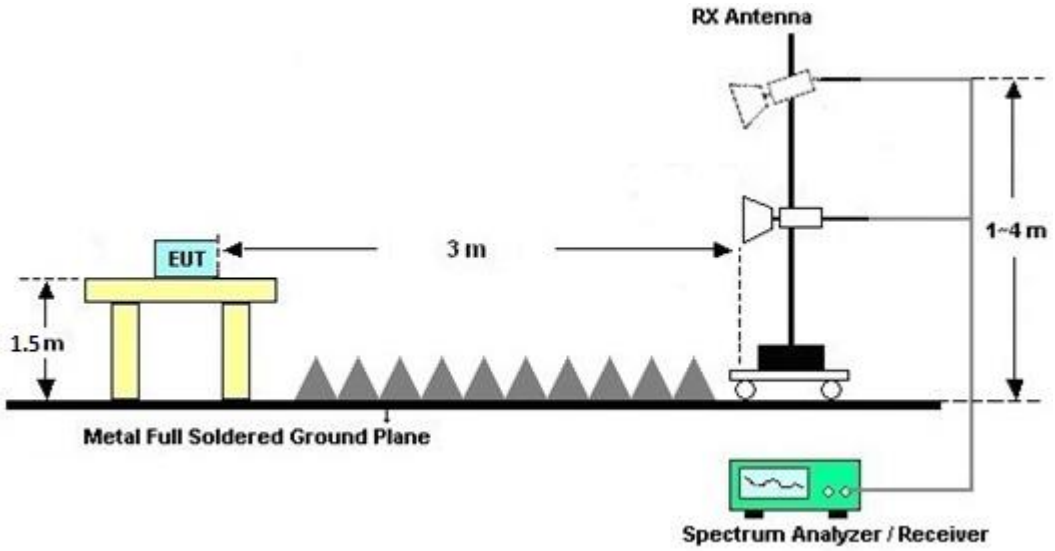
For radiated emissions below 30MHz



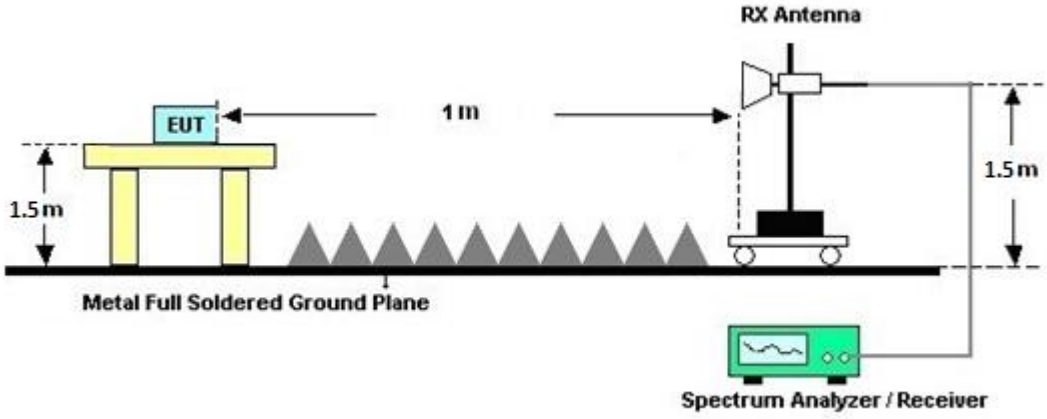
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



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

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

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

3.4.6 Test Result of Radiated Band Edges

Please refer to Appendix C and D.

3.4.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

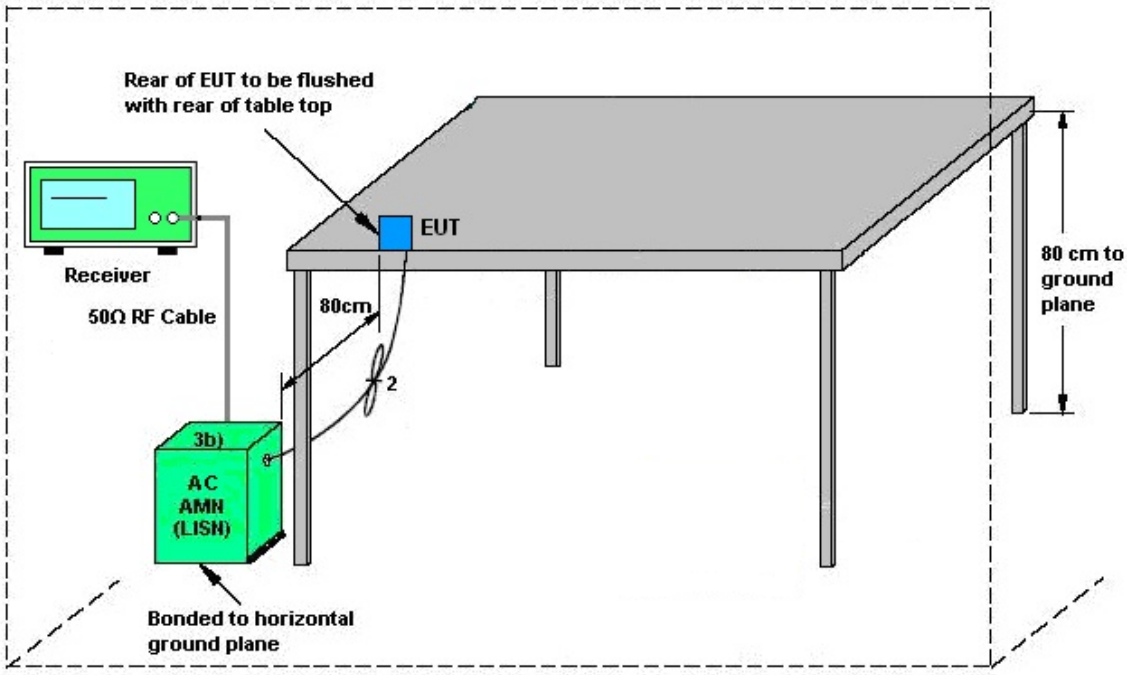
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



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

3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.6 Antenna Requirements

3.6.1 Standard Applicable

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	Dec. 24, 2023~ Feb. 07, 2024	Sep. 11, 2024	Radiation (03CH15-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	41912 & 05	30MHz~1GHz	Feb. 05, 2023	Dec. 24, 2023~ Feb. 03, 2024	Feb. 04, 2024	Radiation (03CH15-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	47020 & 06	30MHz~1GHz	Oct. 07, 2023	Feb. 04, 2024~ Feb. 07, 2024	Oct. 06, 2024	Radiation (03CH15-HY
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-02294	1GHz~18GHz	Jun. 30, 2023	Dec. 24, 2023~ Feb. 07, 2024	Jun. 29, 2024	Radiation (03CH15-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	1225	18GHz~40GHz	Jul. 10, 2023	Dec. 24, 2023~ Feb. 07, 2024	Jul. 09, 2024	Radiation (03CH15-HY)
Amplifier	SONOMA	310N	363440	9kHz~1GHz	Dec. 26, 2022	Dec. 24, 2023	Dec. 25, 2023	Radiation (03CH15-HY)
Amplifier	SONOMA	310N	363440	9kHz~1GHz	Dec. 25, 2023	Dec. 25, 2023~ Feb. 07, 2024	Dec. 24, 2024	Radiation (03CH15-HY)
Preamplifier	EMEC	EM01G18G	060837	1GHz~18GHz	Feb. 16, 2023	Dec. 24, 2023~ Feb. 07, 2024	Feb. 15, 2024	Radiation (03CH15-HY)
Preamplifier	EM Electronics	EM01G18G	060802	1GHz~18GHz	Mar. 03, 2023	Dec. 24, 2023~ Feb. 07, 2024	Mar. 02, 2024	Radiation (03CH15-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY53290045	20MHz~8.4GHz	Oct. 06, 2023	Dec. 24, 2023~ Feb. 07, 2024	Oct. 05, 2024	Radiation (03CH15-HY
Spectrum Analyzer	Keysight	N9010B	MY60241058	10Hz~44GHz	Jul. 06, 2023	Dec. 24, 2023~ Feb. 07, 2024	Jul. 05, 2024	Radiation (03CH15-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Dec. 24, 2023~ Feb. 07, 2024	N/A	Radiation (03CH15-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Dec. 24, 2023~ Feb. 07, 2024	N/A	Radiation (03CH15-HY)
Software	Audix	E3 6.2009-8-24 (k5)	RK-000451	N/A	N/A	Dec. 24, 2023~ Feb. 07, 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	Dec. 24, 2023~ Feb. 07, 2024	Jun. 12, 2024	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804011/2,804 012/2	18-40G	Jan. 03, 2023	Dec. 24, 2023~ Jan. 01, 2024	Jan. 02, 2024	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804011/2,804 012/2	18-40G	Jan. 02, 2024	Jan. 02, 2024~ Feb. 07, 2024	Jan. 01, 2025	Radiation (03CH15-HY)
Filter	Wainwright	WLJ4-1000-15 30-6000-40ST	SN4	1.53GHz Low Pass Filter	Jun. 14, 2023	Dec. 24, 2023~ Feb. 07, 2024	Jun. 13, 2024	Radiation (03CH15-HY)
Filter	Wainwright	WHKX8-5872. 5-6750-18000- 40ST	SN6	6.75GHz High Pass Filter	Jun. 07, 2023	Dec. 24, 2023~ Feb. 07, 2024	Jun. 06, 2024	Radiation (03CH15-HY)
Hygrometer	TECPEL	DTM-302	SN4	N/A	Jul. 26, 2023	Dec. 24, 2023~ Feb. 07, 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	Jan. 02, 2024~ Jan. 19, 2024	Nov. 06, 2024	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	17I00015SNO 36 (NO:35_ 144)	10MHz~6GHz	Aug. 23, 2023	Jan. 02, 2024~ Jan. 19, 2024	Aug. 22, 2024	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101564	10Hz ~ 40GHz	Sep. 12, 2023	Jan. 02, 2024~ Jan. 19, 2024	Sep. 11, 2024	Conducted (TH05-HY)
AC Power Source	ACPOWER	AFC-11003G	F317040033	N/A	N/A	Jan. 17, 2024	N/A	Conduction (CO07-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jan. 17, 2024	N/A	Conduction (CO07-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	9561-F N00373	9kHz-200MHz	Oct. 20, 2023	Jan. 17, 2024	Oct. 19, 2024	Conduction (CO07-HY)
RF Cable	HUBER + SUHNER	RG 214/U	1358175	9kHz~30MHz	Mar. 15, 2023	Jan. 17, 2024	Mar. 14, 2024	Conduction (CO07-HY)
Two-Line V-Network	TESEQ	NNB 51	45051	N/A	Mar. 05, 2023	Jan. 17, 2024	Mar. 04, 2024	Conduction (CO07-HY)
Four-Line V-Network	TESEQ	NNB 52	36122	N/A	Mar. 13, 2023	Jan. 17, 2024	Mar. 12, 2024	Conduction (CO07-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102317	9kHz~3.6GHz	Sep. 20, 2023	Jan. 17, 2024	Sep. 19, 2024	Conduction (CO07-HY)

5 Measurement Uncertainty

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

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:	Ching Chen and Eason Huang	Temperature:	21~25	°C
Test Date:	2024/01/02~2024/01/19	Relative Humidity:	51~54	%

<CDD Mode>

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

U-NII-3 MIMO												
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
					Ant 3	Ant 6	Ant 3	Ant 6	Ant 3	Ant 6		
11a	6Mbps	2	149	5745	39.16	38.61	65.26	66.26	16.35	16.35	0.5	Pass
11a	6Mbps	2	157	5785	38.96	38.46	64.23	63.84	16.34	16.34	0.5	Pass
11a	6Mbps	2	165	5825	35.31	37.46	51.76	58.76	16.35	16.31	0.5	Pass
VHT20	MCS0	2	149	5745	40.76	32.67	67.24	49.16	17.58	17.58	0.5	Pass
VHT20	MCS0	2	157	5785	40.56	33.92	71.03	48.00	17.61	17.57	0.5	Pass
VHT20	MCS0	2	165	5825	31.52	32.52	47.44	47.70	16.93	17.57	0.5	Pass
VHT40	MCS0	2	151	5755	54.65	47.25	94.46	85.74	35.06	35.09	0.5	Pass
VHT40	MCS0	2	159	5795	52.05	44.26	92.06	85.78	35.08	35.10	0.5	Pass
VHT80	MCS0	2	155	5775	75.40	75.40	123.71	111.84	75.14	75.10	0.5	Pass

TEST RESULTS DATA
Average Power Table

U-NII-3 MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 3	Ant 6	SUM	Ant 3	Ant 6	Ant 3	Ant 6	
11a	6Mbps	2	149	5745	26.80	26.50	29.66	30.00		2.50		Pass
11a	6Mbps	2	157	5785	26.70	26.30	29.51	30.00		2.50		Pass
11a	6Mbps	2	165	5825	26.10	26.10	29.11	30.00		2.50		Pass
HT20	MCS0	2	149	5745	26.90	25.20	29.14	30.00		2.50		Pass
HT20	MCS0	2	157	5785	26.70	25.10	28.98	30.00		2.50		Pass
HT20	MCS0	2	165	5825	25.20	24.90	28.06	30.00		2.50		Pass
HT40	MCS0	2	151	5755	25.10	23.70	27.47	30.00		2.50		Pass
HT40	MCS0	2	159	5795	24.30	23.10	26.75	30.00		2.50		Pass
VHT20	MCS0	2	149	5745	26.90	25.30	29.18	30.00		2.50		Pass
VHT20	MCS0	2	157	5785	26.70	25.20	29.02	30.00		2.50		Pass
VHT20	MCS0	2	165	5825	25.30	25.00	28.16	30.00		2.50		Pass
VHT40	MCS0	2	151	5755	25.20	23.80	27.57	30.00		2.50		Pass
VHT40	MCS0	2	159	5795	24.40	23.20	26.85	30.00		2.50		Pass
VHT80	MCS0	2	155	5775	21.60	21.00	24.32	30.00		2.50		Pass

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TEST RESULTS DATA
Power Spectral Density

U-NII-3 MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density with Duty Factor (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					Ant 3	Ant 6	Ant 3	Ant 6	Ant 3	Ant 6	SUM	Ant 3	Ant 6	Ant 3	Ant 6	
11a	6Mbps	2	149	5745	0.18	0.17	2.22		12.57	12.08	15.58	30.00		5.51		Pass
11a	6Mbps	2	157	5785	0.18	0.17	2.22		12.52	11.77	15.53	30.00		5.51		Pass
11a	6Mbps	2	165	5825	0.18	0.17	2.22		11.99	11.46	15.00	30.00		5.51		Pass
VHT20	MCS0	2	149	5745	0.21	0.18	2.22		12.46	11.22	15.47	30.00		5.51		Pass
VHT20	MCS0	2	157	5785	0.21	0.18	2.22		12.32	10.81	15.33	30.00		5.51		Pass
VHT20	MCS0	2	165	5825	0.21	0.18	2.22		11.00	10.58	14.01	30.00		5.51		Pass
VHT40	MCS0	2	151	5755	0.35	0.38	2.22		8.37	7.50	11.38	30.00		5.51		Pass
VHT40	MCS0	2	159	5795	0.35	0.38	2.22		8.08	7.06	11.09	30.00		5.51		Pass
VHT80	MCS0	2	155	5775	0.22	0.22	2.22		2.41	1.77	5.42	30.00		5.51		Pass

Note: PSD Sum = Max PSD(Ant. 3, Ant. 6) + 10 log (n)

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

U-NII-3 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)	Pass/Fail
						Ant 3	Ant 6	Ant 3	Ant 6	Ant 3	Ant 6		
HE20	MCS0	2	149	5745	Full	40.21	39.06	70.42	58.85	18.80	17.71	0.5	Pass
HE20	MCS0	2	157	5785	Full	40.01	39.61	70.30	68.78	18.63	18.57	0.5	Pass
HE20	MCS0	2	165	5825	Full	31.37	32.77	52.73	50.91	18.11	18.09	0.5	Pass
HE40	MCS0	2	151	5755	Full	51.25	45.05	93.58	73.54	35.41	35.10	0.5	Pass
HE40	MCS0	2	159	5795	Full	51.05	41.66	91.07	77.84	35.06	35.08	0.5	Pass
HE80	MCS0	2	155	5775	Full	76.96	76.72	84.10	80.35	75.06	75.14	0.5	Pass

TEST RESULTS DATA
Average Power Table

U-NII-3 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 3	Ant 6	SUM	Ant 3	Ant 6	Ant 3	Ant 6	
HE20	MCS0	2	149	5745	Full	26.90	26.50	29.71	30.00		2.50		Pass
HE20	MCS0	2	157	5785	Full	26.60	26.30	29.46	30.00		2.50		Pass
HE20	MCS0	2	165	5825	Full	25.40	25.10	28.26	30.00		2.50		Pass
HE40	MCS0	2	151	5755	Full	25.20	24.00	27.65	30.00		2.50		Pass
HE40	MCS0	2	159	5795	Full	24.50	23.50	27.04	30.00		2.50		Pass
HE80	MCS0	2	155	5775	Full	20.40	19.70	23.07	30.00		2.50		Pass

TEST RESULTS DATA
Power Spectral Density

U-NII-3 MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density with Duty Factor (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
						Ant 3	Ant 6	Ant 3	Ant 6	Ant 3	Ant 6	SUM	Ant 3	Ant 6	Ant 3	Ant 6	
HE20	MCS0	2	149	5745	Full	0.23	0.25	2.22		11.88	11.40	14.89	30.00		5.51		Pass
HE20	MCS0	2	157	5785	Full	0.23	0.25	2.22		11.74	11.38	14.75	30.00		5.51		Pass
HE20	MCS0	2	165	5825	Full	0.23	0.25	2.22		10.39	10.17	13.40	30.00		5.51		Pass
HE40	MCS0	2	151	5755	Full	0.45	0.41	2.22		8.84	7.72	11.85	30.00		5.51		Pass
HE40	MCS0	2	159	5795	Full	0.45	0.41	2.22		8.14	7.41	11.15	30.00		5.51		Pass
HE80	MCS0	2	155	5775	Full	0.27	0.27	2.22		1.32	0.74	4.33	30.00		5.51		Pass

Note: PSD Sum = Max PSD(Ant. 3, Ant. 6) + 10 log (n)

<TxBF Mode>

TEST RESULTS DATA
Average Power Table

U-NII-3 MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 3	Ant 6	SUM	Ant 3	Ant 6	Ant 3	Ant 6	
HT20	MCS0	2	149	5745	26.80	25.10	29.04	30.00		5.51		Pass
HT20	MCS0	2	157	5785	26.60	25.00	28.88	30.00		5.51		Pass
HT20	MCS0	2	165	5825	25.10	24.80	27.96	30.00		5.51		Pass
HT40	MCS0	2	151	5755	25.00	23.60	27.37	30.00		5.51		Pass
HT40	MCS0	2	159	5795	24.20	23.00	26.65	30.00		5.51		Pass
VHT20	MCS0	2	149	5745	26.90	25.20	29.14	30.00		5.51		Pass
VHT20	MCS0	2	157	5785	26.70	25.10	28.98	30.00		5.51		Pass
VHT20	MCS0	2	165	5825	25.20	24.90	28.06	30.00		5.51		Pass
VHT40	MCS0	2	151	5755	25.10	23.70	27.47	30.00		5.51		Pass
VHT40	MCS0	2	159	5795	24.30	23.10	26.75	30.00		5.51		Pass
VHT80	MCS0	2	155	5775	21.50	20.90	24.22	30.00		5.51		Pass

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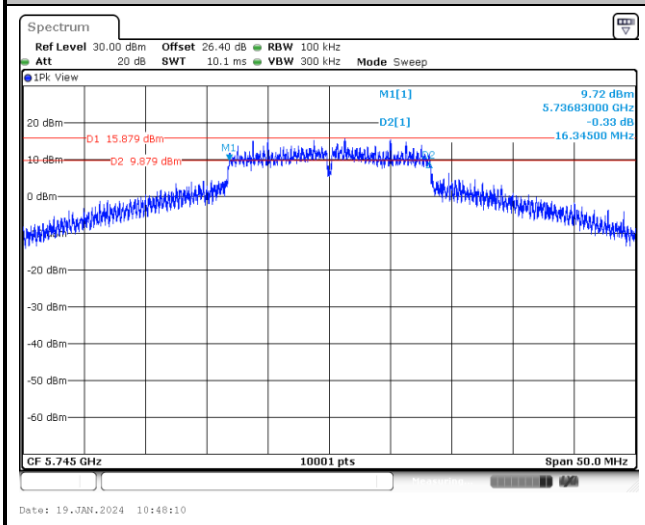
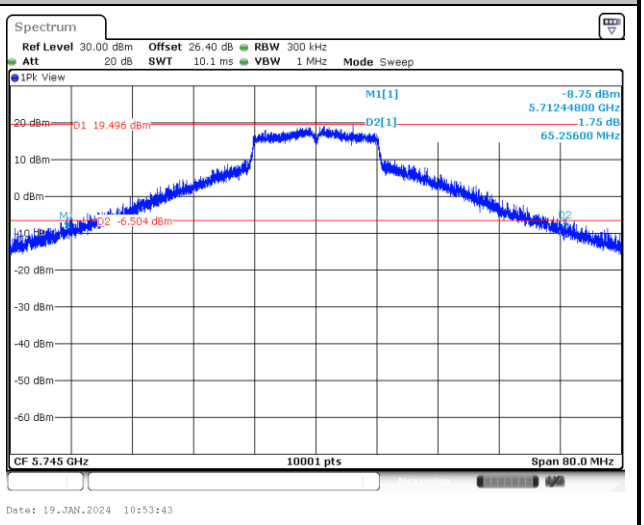
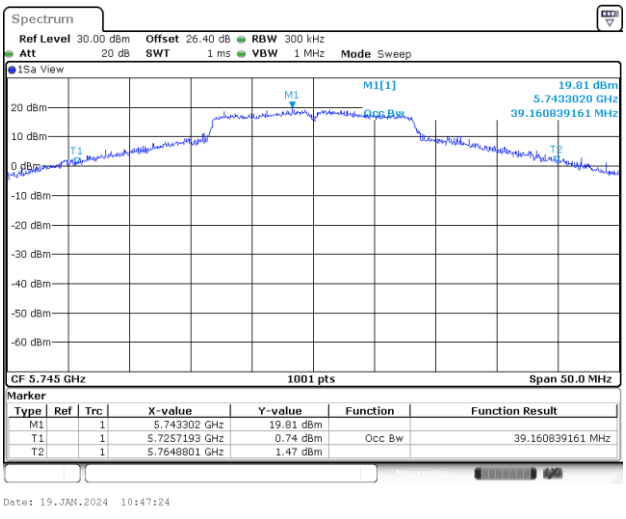
TEST RESULTS DATA
Average Power Table

U-NII-3 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 3	Ant 6	SUM	Ant 3	Ant 6	Ant 3	Ant 6	
HE20	MCS0	2	149	5745	Full	26.80	26.40	29.61	30.00		5.51		Pass
HE20	MCS0	2	157	5785	Full	26.50	26.20	29.36	30.00		5.51		Pass
HE20	MCS0	2	165	5825	Full	25.30	25.00	28.16	30.00		5.51		Pass
HE40	MCS0	2	151	5755	Full	25.10	23.90	27.55	30.00		5.51		Pass
HE40	MCS0	2	159	5795	Full	24.40	23.40	26.94	30.00		5.51		Pass
HE80	MCS0	2	155	5775	Full	20.30	19.60	22.97	30.00		5.51		Pass

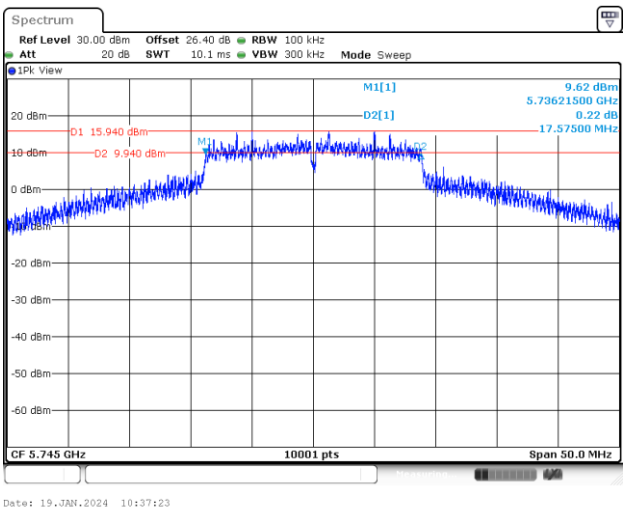
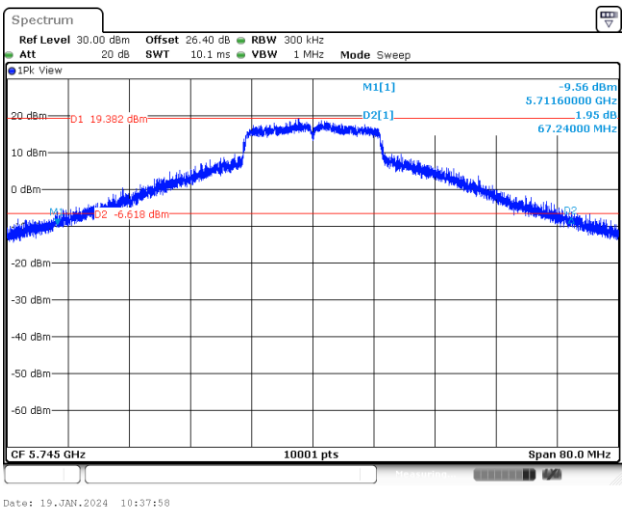
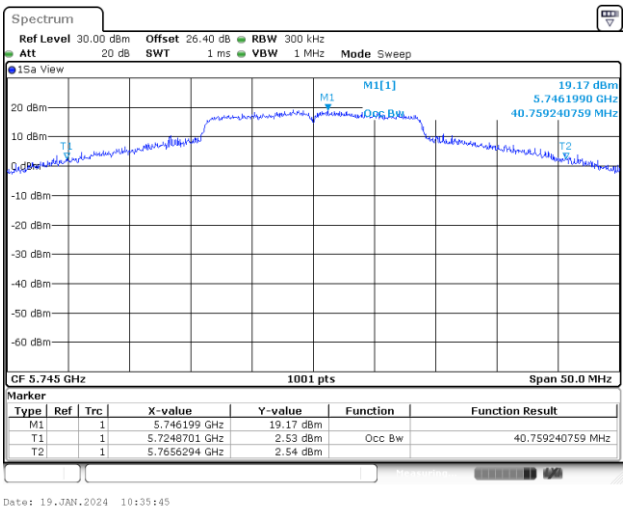
Test Result of 6dB and 26dB and 99% Occupied Bandwidth

MIMO <Ant. 3+6>

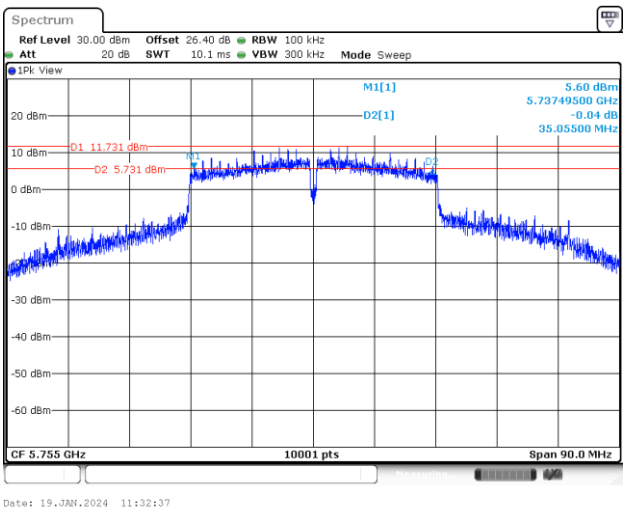
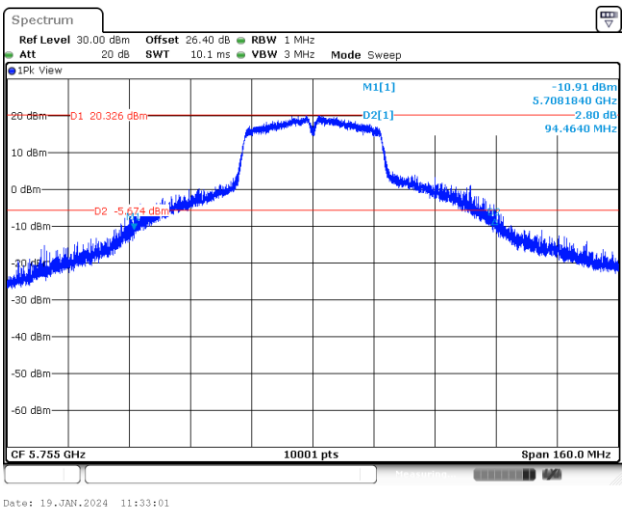
<802.11a>

6dB Bandwidth	26dB Bandwidth
	
99% Occupied Bandwidth	**N/A**
	

<802.11ac VHT20>

6dB Bandwidth	26dB Bandwidth
	
99% Occupied Bandwidth	**N/A**
	

<802.11ac VHT40>

6dB Bandwidth	26dB Bandwidth
	
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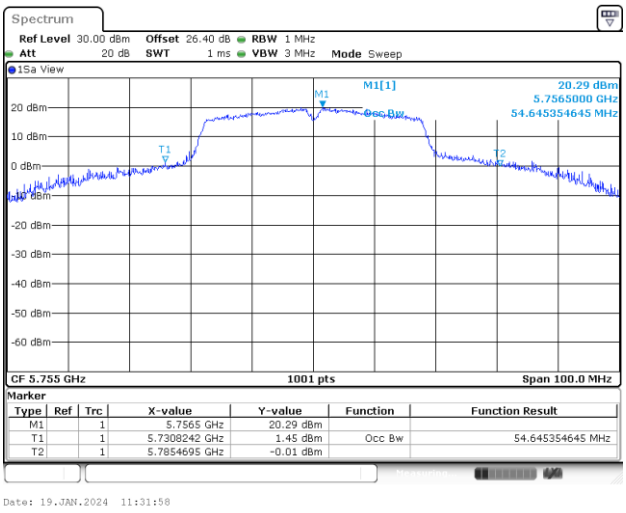
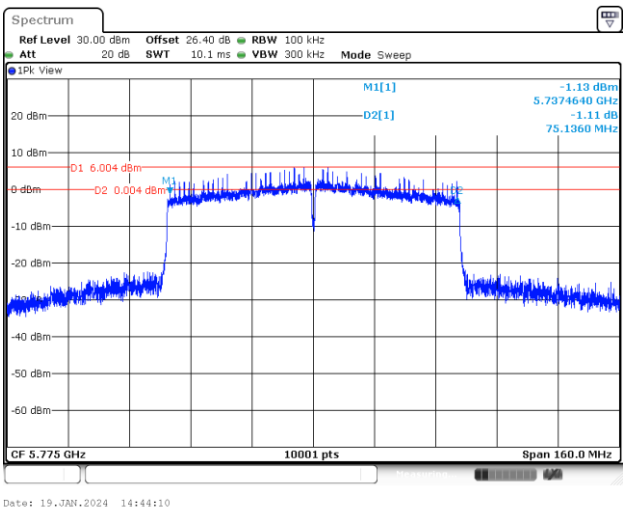
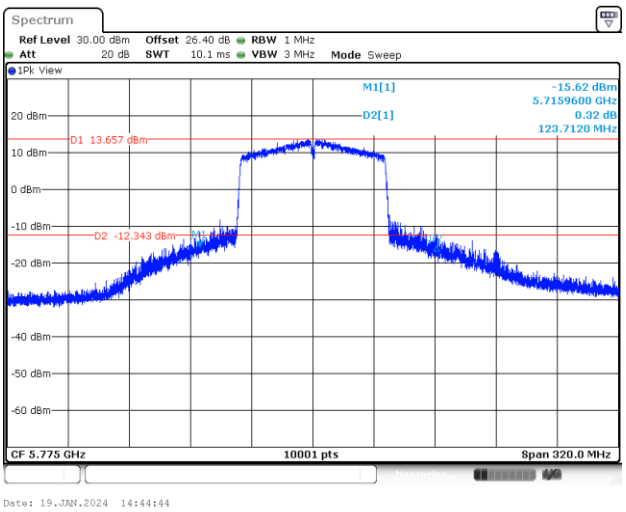
	

<802.11ac VHT80>

6dB Bandwidth	26dB Bandwidth
	
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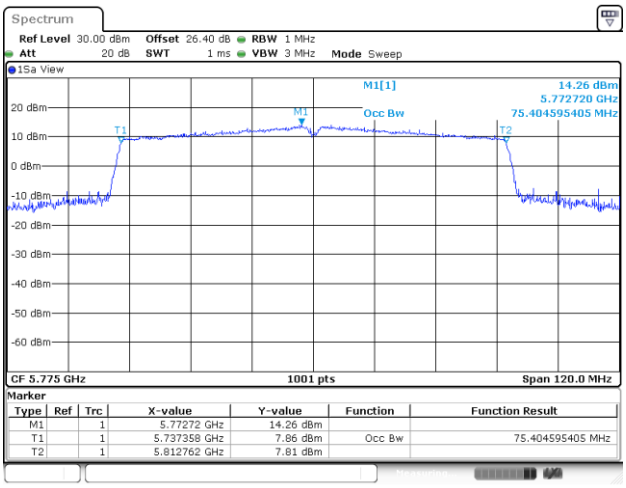
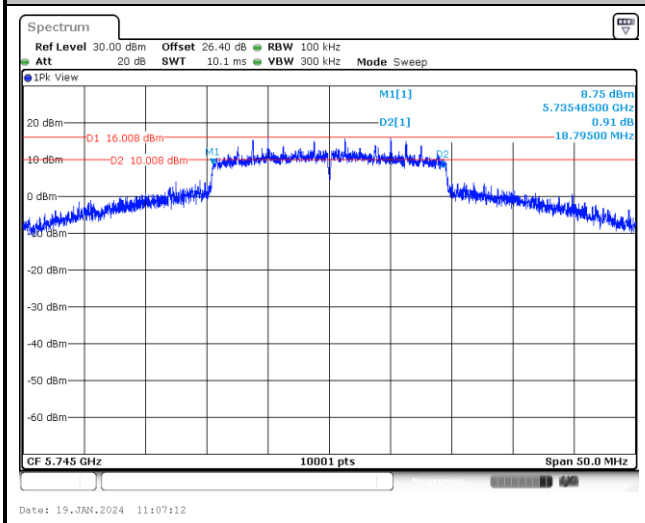
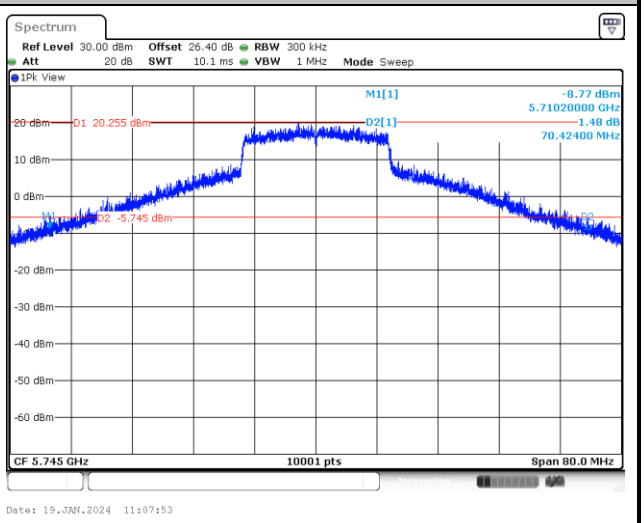
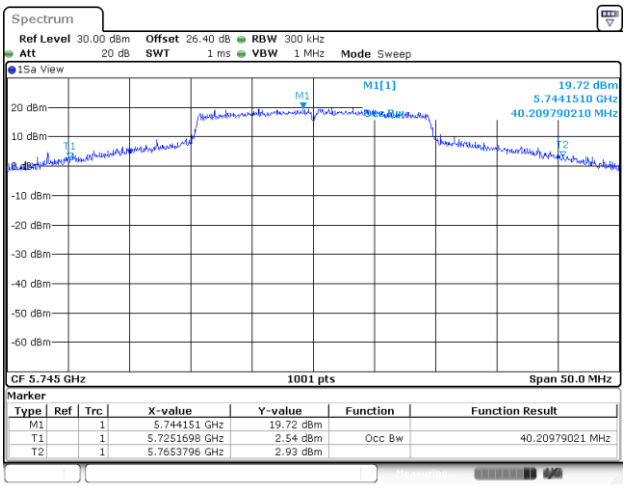
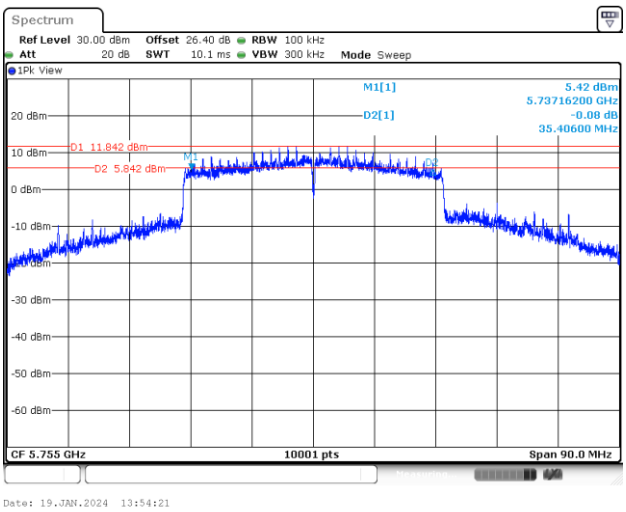
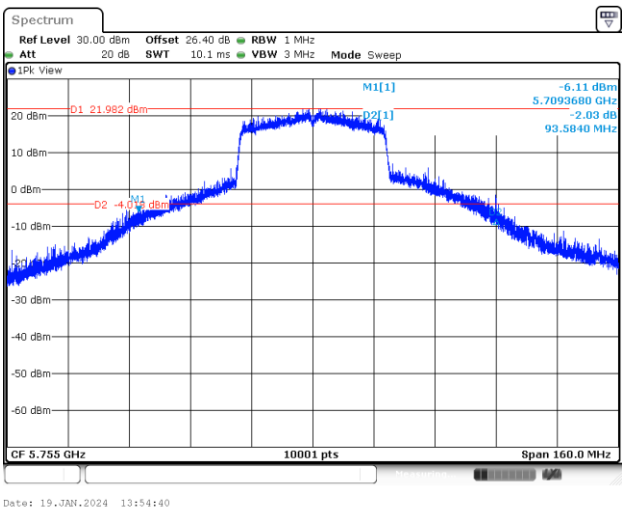
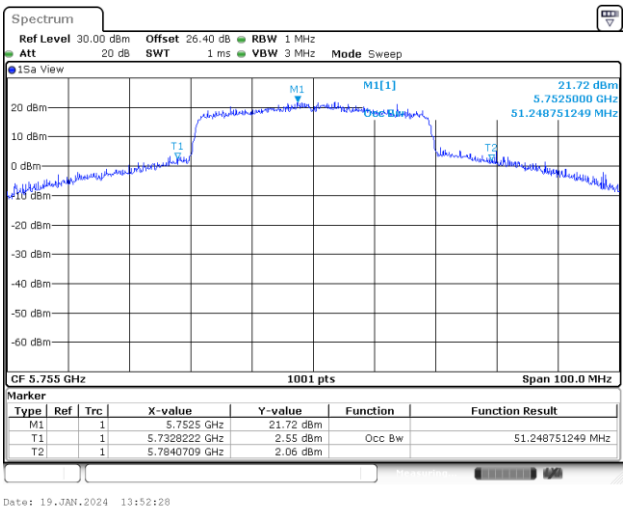
	

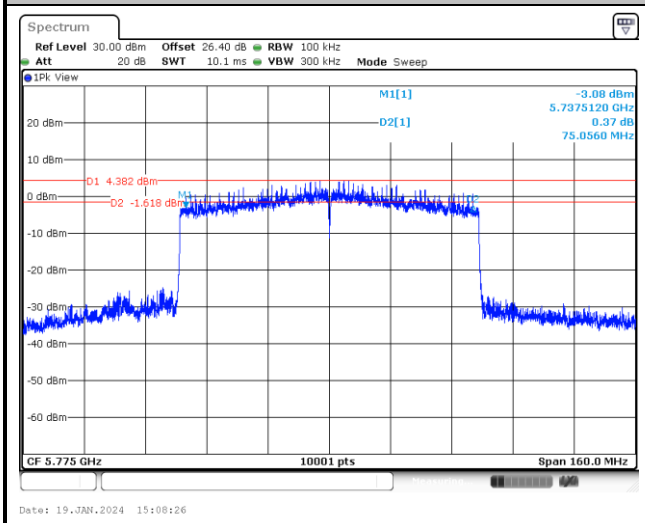
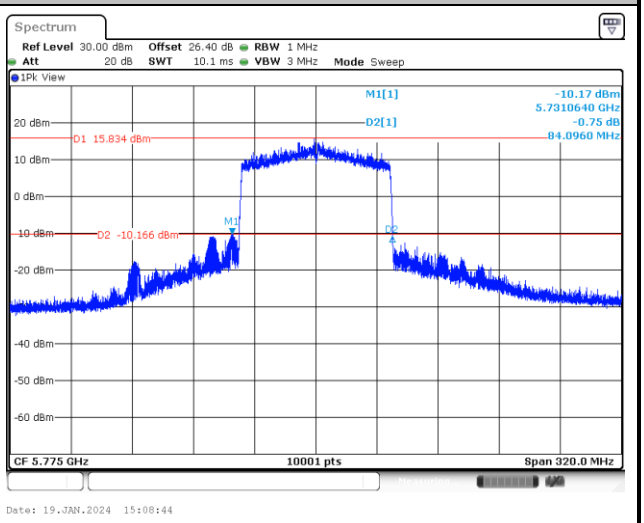
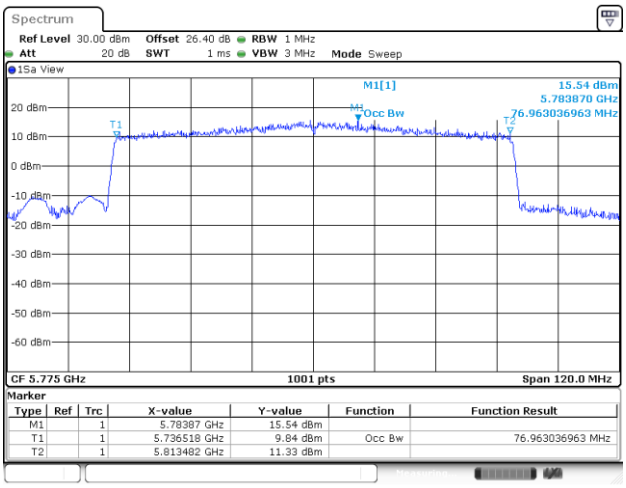
<802.11ax HE20>

6dB Bandwidth	26dB Bandwidth
	
99% Occupied Bandwidth	**N/A**
	

<802.11ax HE40>

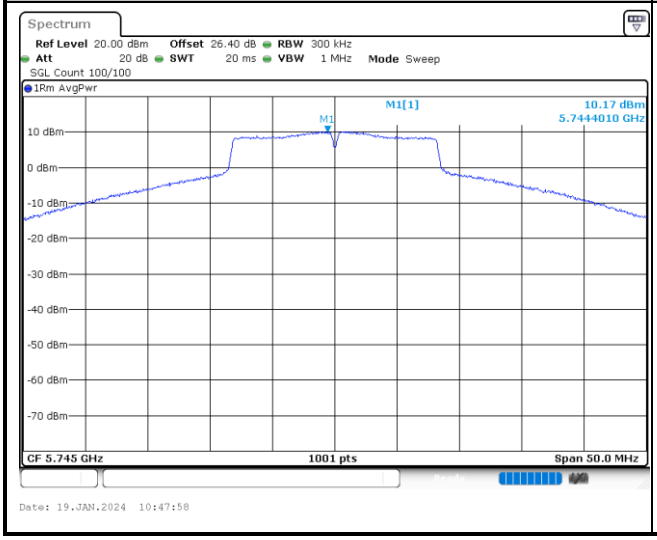
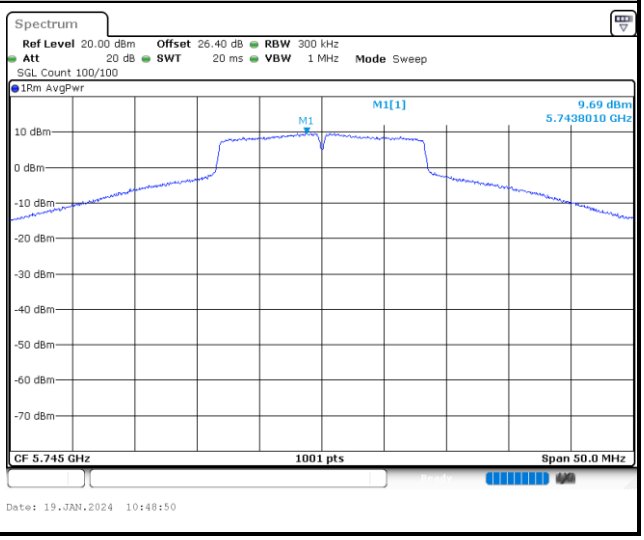
6dB Bandwidth	26dB Bandwidth
	
99% Occupied Bandwidth	**N/A**
	

<802.11ax HE80>

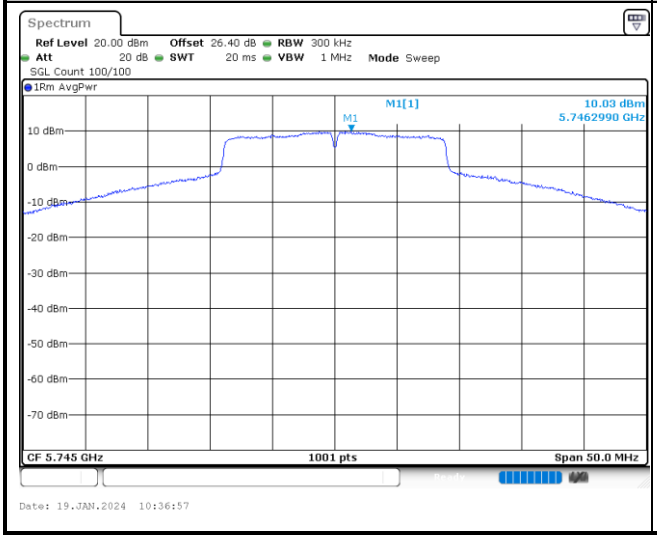
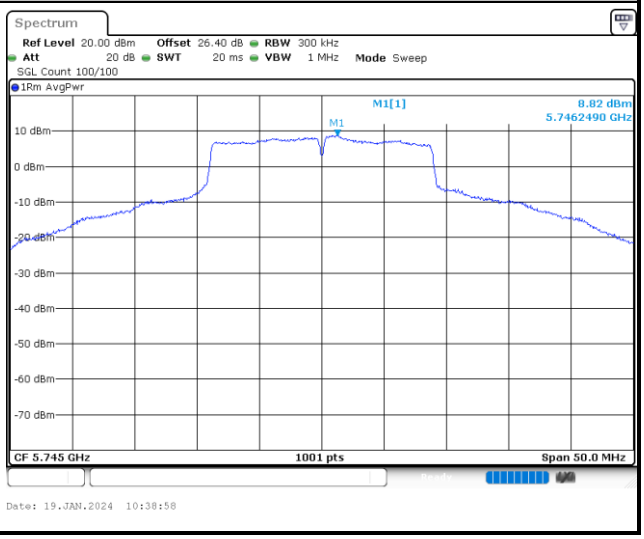
6dB Bandwidth	26dB Bandwidth
	
99% Occupied Bandwidth	**N/A**
	

Test Result of Power Spectral Density

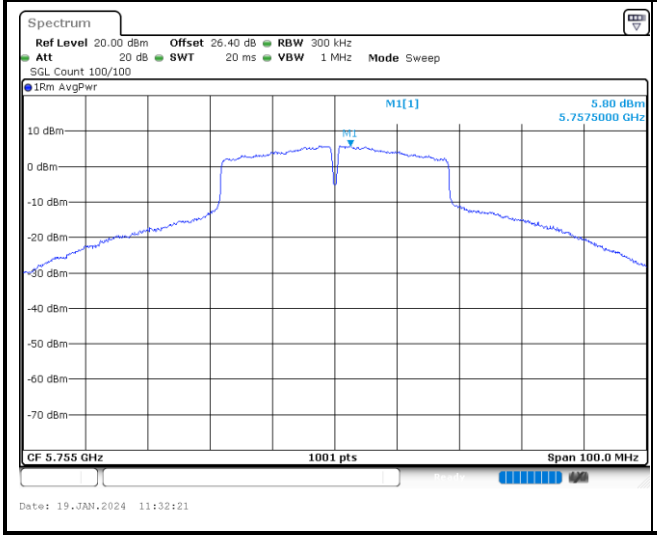
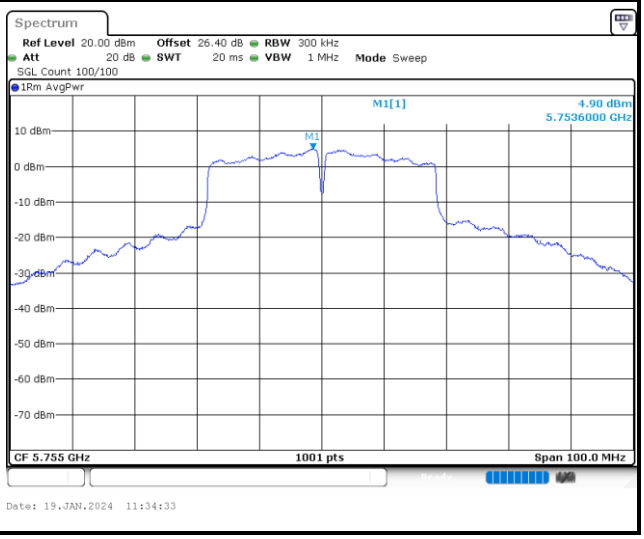
<802.11a>

Maximum Power Density Plot (dBm/300kHz)	
MIMO Ant. 3	**MIMO Ant. 6**
	

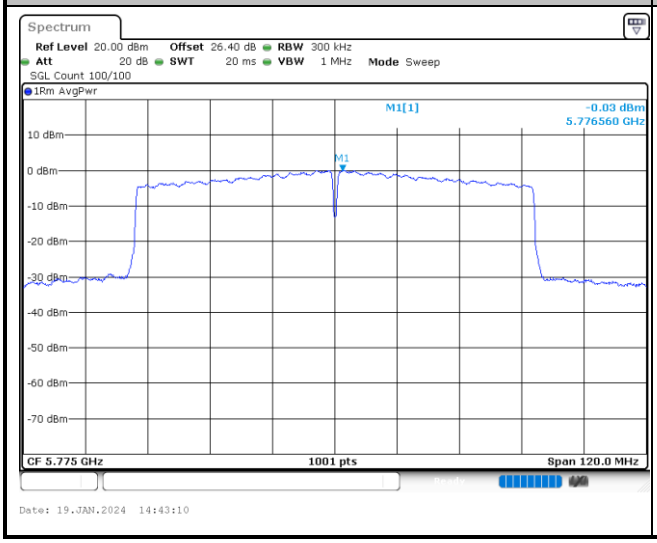
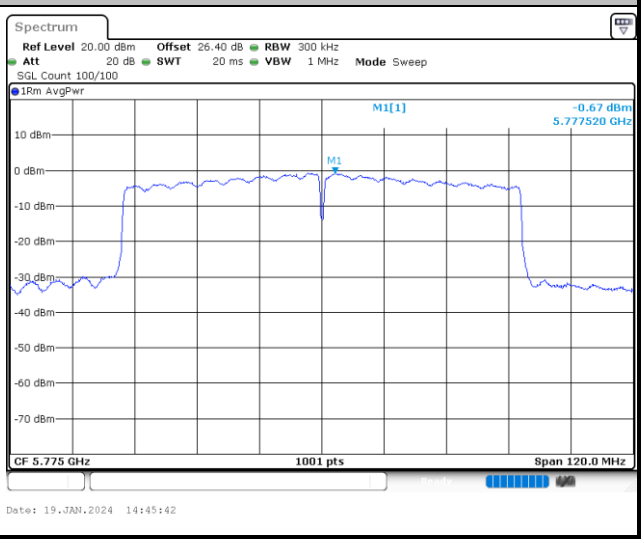
<802.11ac VHT20>

Maximum Power Density Plot (dBm/300kHz)	
MIMO Ant. 3	**MIMO Ant. 6**
	

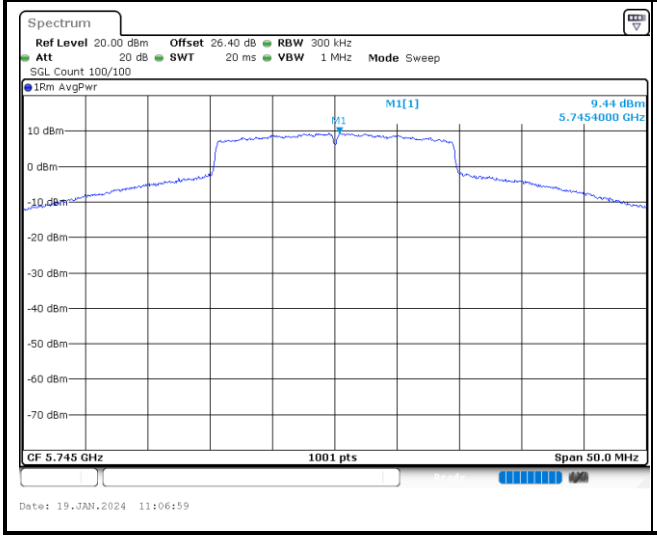
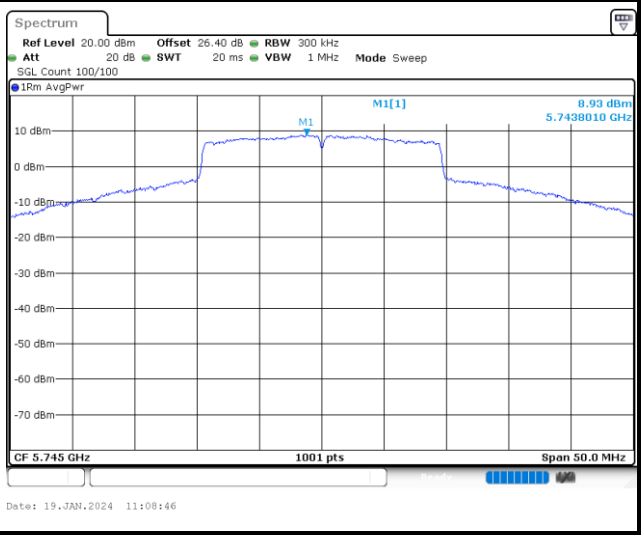
<802.11ac VHT40>

Maximum Power Density Plot (dBm/300kHz)	
MIMO Ant. 3	**MIMO Ant. 6**
	

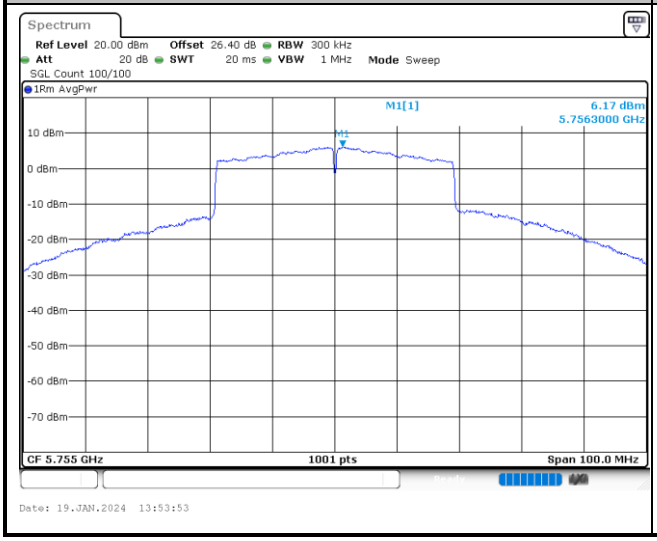
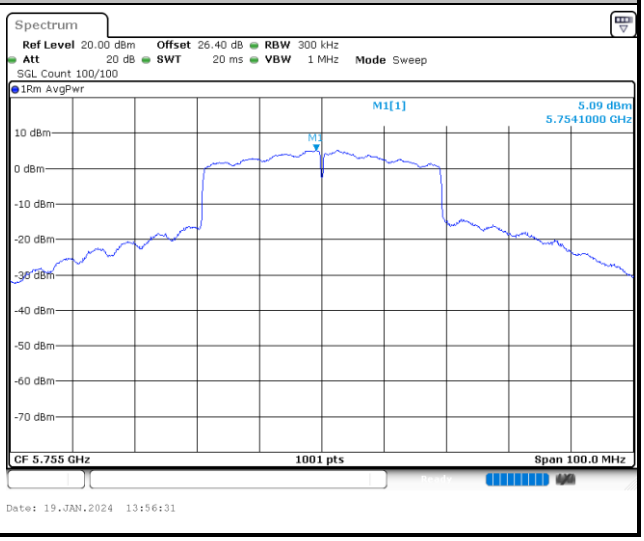
<802.11ac VHT80>

Maximum Power Density Plot (dBm/300kHz)	
MIMO Ant. 3	**MIMO Ant. 6**
	

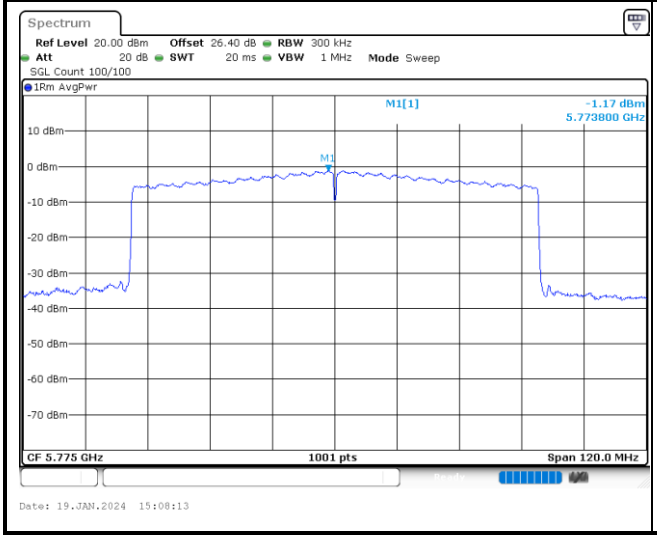
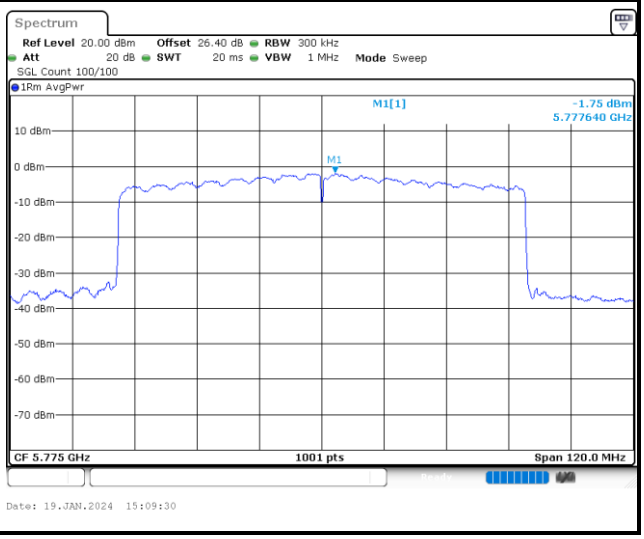
<802.11ax HE20>

Maximum Power Density Plot (dBm/300kHz)	
MIMO Ant. 3	**MIMO Ant. 6**
	

<802.11ax HE40>

Maximum Power Density Plot (dBm/300kHz)	
MIMO Ant. 3	**MIMO Ant. 6**
	

<802.11ax HE80>

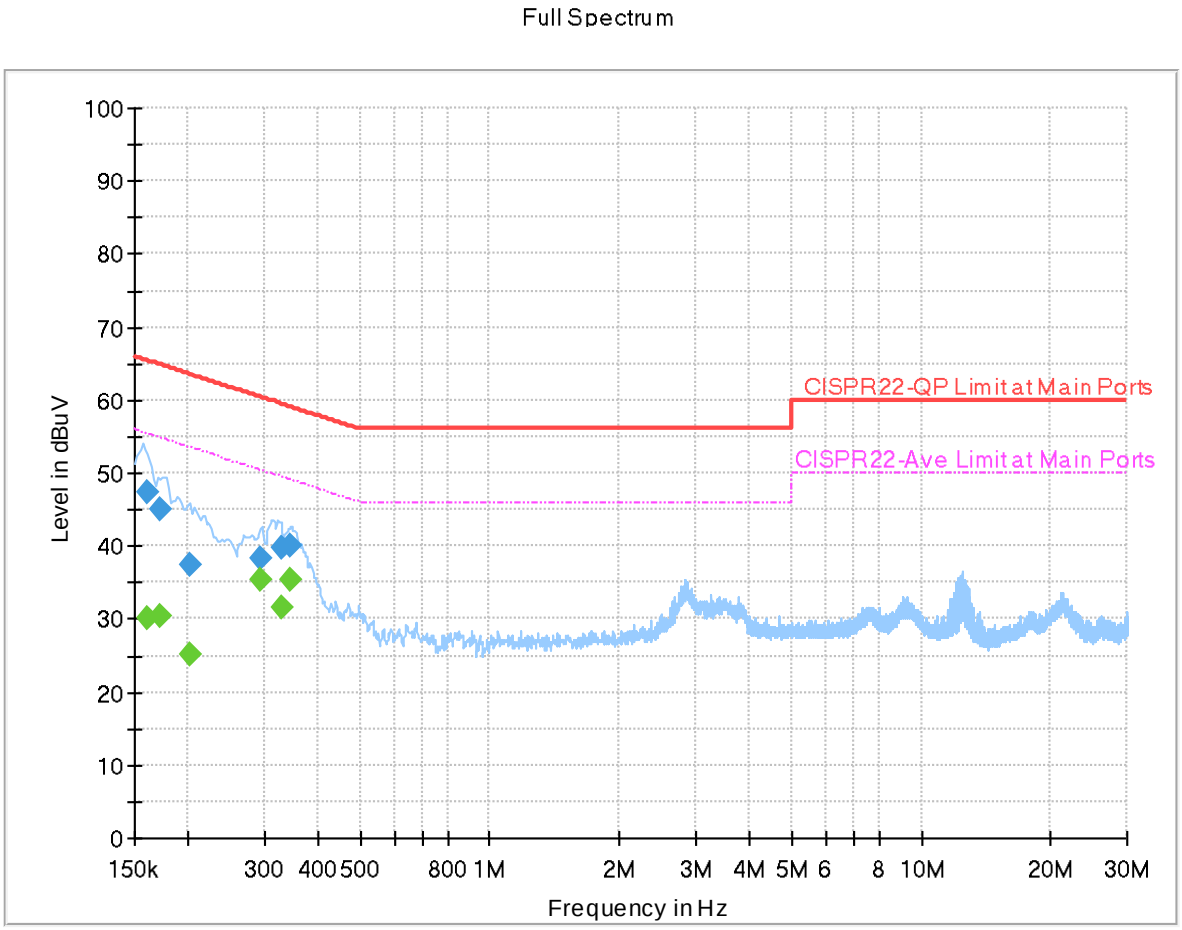
Maximum Power Density Plot (dBm/300kHz)	
MIMO Ant. 3	**MIMO Ant. 6**
	

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Louis Chung	**Temperature :**	22.2~23℃
		Relative Humidity :	47.9~53.2%

EUT Information

Report NO :	3D0631
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

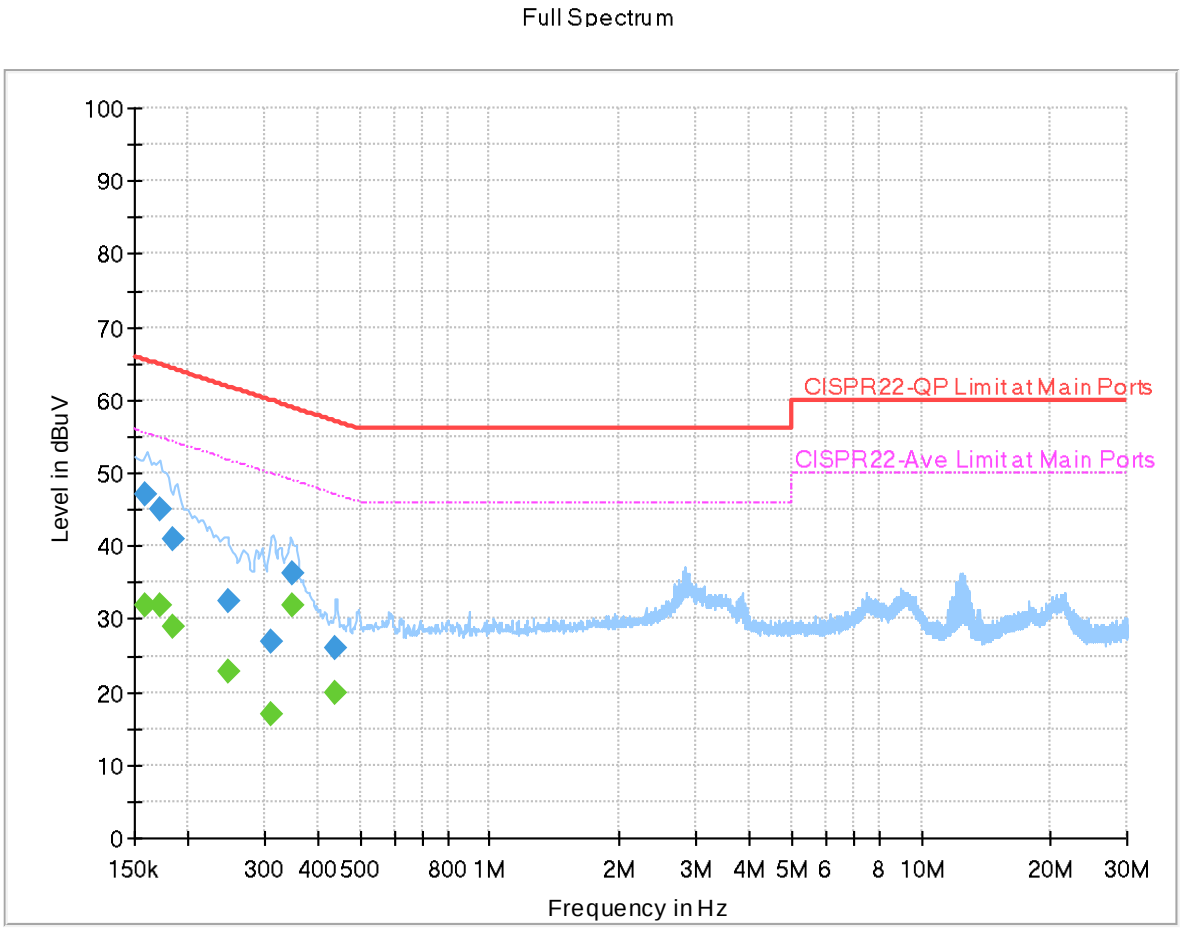


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161160	---	30.21	55.40	25.19	L1	OFF	19.9
0.161160	47.34	---	65.40	18.06	L1	OFF	19.9
0.172500	---	30.41	54.84	24.43	L1	OFF	19.9
0.172500	44.93	---	64.84	19.91	L1	OFF	19.9
0.201930	---	25.18	53.53	28.35	L1	OFF	19.9
0.201930	37.50	---	63.53	26.03	L1	OFF	19.9
0.295170	---	35.35	50.38	15.03	L1	OFF	19.9
0.295170	38.35	---	60.38	22.03	L1	OFF	19.9
0.327390	---	31.57	49.52	17.95	L1	OFF	19.9
0.327390	39.89	---	59.52	19.63	L1	OFF	19.9
0.344580	---	35.35	49.09	13.74	L1	OFF	19.9
0.344580	39.99	---	59.09	19.10	L1	OFF	19.9

EUT Information

Report NO :	3D0631
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)
0.158640	---	31.82	55.54	23.72	N	OFF	19.9
0.158640	47.01	---	65.54	18.53	N	OFF	19.9
0.172860	---	31.94	54.82	22.88	N	OFF	19.9
0.172860	45.12	---	64.82	19.70	N	OFF	19.9
0.183840	---	28.95	54.31	25.36	N	OFF	19.9
0.183840	40.88	---	64.31	23.43	N	OFF	19.9
0.247560	---	22.82	51.84	29.02	N	OFF	19.9
0.247560	32.58	---	61.84	29.26	N	OFF	19.9
0.310290	---	16.84	49.96	33.12	N	OFF	19.9
0.310290	26.79	---	59.96	33.17	N	OFF	19.9
0.349890	---	31.87	48.97	17.10	N	OFF	19.9
0.349890	36.17	---	58.97	22.80	N	OFF	19.9
0.438000	---	19.82	47.10	27.28	N	OFF	19.9
0.438000	26.04	---	57.10	31.06	N	OFF	19.9

Appendix C. Radiated Spurious Emission

Test Engineer :	Daniel Lee, Quentin Liu and Bigshow Wang	**Temperature :**	21.4~23.1°C
		Relative Humidity :	51~58%

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 3+6	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		5647	64.17	-4.03	68.2	58.78	33.24	8.71	36.56	100	57	P	H
		5652.8	68.68	-1.6	70.28	63.27	33.26	8.71	36.56	100	57	P	H
		5719.4	95.96	-14.67	110.63	90.14	33.6	8.77	36.55	100	57	P	H
		5724.6	103.56	-17.73	121.29	97.71	33.62	8.78	36.55	100	57	P	H
	*	5745	116.03	-	-	110.07	33.72	8.79	36.55	100	57	P	H
	*	5745	109.82	-	-	103.86	33.72	8.79	36.55	100	57	A	H
													H
													H
		5647.6	61.34	-6.86	68.2	55.95	33.24	8.71	36.56	400	102	P	V
		5651	60.91	-8.03	68.94	55.5	33.26	8.71	36.56	400	102	P	V
		5720	92.53	-18.27	110.8	86.71	33.6	8.77	36.55	400	102	P	V
		5725	98.5	-23.7	122.2	92.65	33.62	8.78	36.55	400	102	P	V
	*	5745	116.8	-	-	110.84	33.72	8.79	36.55	400	102	P	V
	*	5745	109.58	-	-	103.62	33.72	8.79	36.55	400	102	A	V
													V
													V

WIFI Ant. 3+6	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)
		5645.8	58.69	-9.51	68.2	53.31	33.23	8.71	36.56	376	345	P	H
		5680	63.85	-26.59	90.44	58.27	33.4	8.74	36.56	376	345	P	H
		5709.4	77.98	-29.85	107.83	72.22	33.55	8.76	36.55	376	345	P	H
		5724.4	80.06	-40.77	120.83	74.21	33.62	8.78	36.55	376	345	P	H
	*	5785	115.97	-	-	109.77	33.92	8.83	36.55	100	30	P	H
	*	5785	109.6	-	-	103.4	33.92	8.83	36.55	100	30	A	H
		5853.65	74.48	-39.4	113.88	68.04	34.11	8.87	36.54	100	30	P	H
		5857.955	71.66	-38.31	109.97	65.21	34.12	8.87	36.54	100	30	P	H
		5914.945	64.04	-11.58	75.62	57.49	34.17	8.91	36.53	100	30	P	H
		5933.395	60.84	-7.36	68.2	54.32	34.13	8.92	36.53	100	30	P	H
													H
802.11a CH 157 5785MHz													H
		5625.4	57.75	-10.45	68.2	52.49	33.13	8.69	36.56	376	345	P	V
		5655.6	59.26	-13.1	72.36	53.82	33.28	8.72	36.56	376	345	P	V
		5717.4	75.88	-34.19	110.07	70.07	33.59	8.77	36.55	376	345	P	V
		5723	71.88	-45.76	117.64	66.04	33.62	8.77	36.55	376	345	P	V
	*	5785	115.74	-	-	109.54	33.92	8.83	36.55	376	345	P	V
	*	5785	109.95	-	-	103.75	33.92	8.83	36.55	376	345	A	V
		5853.035	82.42	-32.86	115.28	75.98	34.11	8.87	36.54	376	345	P	V
		5862.875	76.53	-32.06	108.59	70.06	34.13	8.88	36.54	376	345	P	V
		5924.375	66.94	-1.72	68.66	60.41	34.15	8.91	36.53	376	345	P	V
		5928.68	66.67	-1.53	68.2	60.14	34.14	8.92	36.53	376	345	P	V
													V
													V

WIFI Ant. 3+6	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)
	*	5825	116.81	-	-	110.44	34.05	8.86	36.54	100	30	P	H
	*	5825	109.79	-	-	103.42	34.05	8.86	36.54	100	30	A	H
		5850	90.57	-31.63	122.2	84.14	34.1	8.87	36.54	100	30	P	H
		5855	88.32	-22.48	110.8	81.88	34.11	8.87	36.54	100	30	P	H
		5921.8	68.48	-2.08	70.56	61.94	34.16	8.91	36.53	100	30	P	H
		5926	66.94	-1.26	68.2	60.4	34.15	8.92	36.53	100	30	P	H
													H
802.11a													H
CH 165	*	5825	116.21	-	-	109.84	34.05	8.86	36.54	400	345	P	V
5825MHz	*	5825	109.95	-	-	103.58	34.05	8.86	36.54	400	345	A	V
		5851.2	92.39	-27.07	119.46	85.96	34.1	8.87	36.54	400	345	P	V
		5855.4	87.79	-22.9	110.69	81.35	34.11	8.87	36.54	400	345	P	V
		5922.4	69.46	-0.66	70.12	62.92	34.16	8.91	36.53	400	345	P	V
		5936.8	67.04	-1.16	68.2	60.52	34.13	8.92	36.53	400	345	P	V
													V
													V
													V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 3+6	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)
		11490	46.64	-27.36	74	51.69	38.95	13.11	57.11	-	-	P	H
		17235	65.64	-2.56	68.2	68.73	38.62	16.25	57.96	196	22	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
802.11a CH 149 5745MHz													H
		11490	49.54	-24.46	74	54.59	38.95	13.11	57.11	100	268	P	V
		11490	41.62	-12.38	54	46.67	38.95	13.11	57.11	100	268	A	V
		17235	59.03	-9.17	68.2	62.12	38.62	16.25	57.96	100	89	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 3+6	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)
		11570	47.45	-26.55	74	52.39	38.97	13.15	57.06	-	-	P	H
		17355	63.61	-4.59	68.2	66.15	39.08	16.27	57.89	205	118	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
802.11a													H
CH 157		11570	52.26	-21.74	74	57.2	38.97	13.15	57.06	350	360	P	V
5785MHz		11570	43.2	-10.8	54	48.14	38.97	13.15	57.06	350	360	A	V
		17355	62.38	-5.82	68.2	64.92	39.08	16.27	57.89	381	359	P	V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 3+6	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)
		11650	55.43	-18.57	74	60.27	38.99	13.18	57.01	100	331	P	H
		11650	43.76	-10.24	54	48.6	38.99	13.18	57.01	100	331	A	H
		17475	63.85	-4.35	68.2	65.81	39.55	16.3	57.81	200	118	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11a CH 165 5825MHz													H
		11650	55.43	-18.57	74	60.27	38.99	13.18	57.01	100	360	P	V
		11650	41.88	-12.12	54	46.72	38.99	13.18	57.01	100	360	A	V
		17475	62.47	-5.73	68.2	64.43	39.55	16.3	57.81	400	358	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 3+6	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)
		5648.8	61.38	-6.82	68.2	55.99	33.24	8.71	36.56	100	31	P	H
		5655.6	66.01	-6.35	72.36	60.57	33.28	8.72	36.56	100	31	P	H
		5718.4	98.74	-11.61	110.35	92.93	33.59	8.77	36.55	100	31	P	H
		5724	98.78	-21.14	119.92	92.93	33.62	8.78	36.55	100	31	P	H
	*	5745	113.84	-	-	107.88	33.72	8.79	36.55	100	31	P	H
	*	5745	109.25	-	-	103.29	33.72	8.79	36.55	100	31	A	H
802.11n													H
HT20													H
CH 149		5642.8	64.28	-3.92	68.2	58.92	33.21	8.71	36.56	300	99	P	V
5745MHz		5655.6	63.61	-8.75	72.36	58.17	33.28	8.72	36.56	300	99	P	V
		5719.4	94.24	-16.39	110.63	88.42	33.6	8.77	36.55	300	99	P	V
		5724.8	100.56	-21.18	121.74	94.71	33.62	8.78	36.55	300	99	P	V
	*	5745	115.91	-	-	109.95	33.72	8.79	36.55	300	99	P	V
	*	5745	109.57	-	-	103.61	33.72	8.79	36.55	300	99	A	V
													V
													V

WIFI Ant. 3+6	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)
	*	5825	115.83	-	-	109.46	34.05	8.86	36.54	100	32	P	H
	*	5825	109.03	-	-	102.66	34.05	8.86	36.54	100	32	A	H
		5850	90.64	-31.56	122.2	84.21	34.1	8.87	36.54	100	32	P	H
		5855.2	85.08	-25.66	110.74	78.64	34.11	8.87	36.54	100	32	P	H
		5921.8	66.39	-4.17	70.56	59.85	34.16	8.91	36.53	100	32	P	H
		5925.4	62.03	-6.17	68.2	55.49	34.15	8.92	36.53	100	32	P	H
802.11n													H
HT20													H
CH 165	*	5825	116.02	-	-	109.65	34.05	8.86	36.54	300	100	P	V
5825MHz	*	5825	109.41	-	-	103.04	34.05	8.86	36.54	300	100	A	V
		5850.8	83.01	-37.37	120.38	76.58	34.1	8.87	36.54	300	100	P	V
		5855.4	81.33	-29.36	110.69	74.89	34.11	8.87	36.54	300	100	P	V
		5909.8	65.06	-14.36	79.42	58.5	34.18	8.91	36.53	300	100	P	V
		5934	56.25	-11.95	68.2	49.73	34.13	8.92	36.53	300	100	P	V
													V
													V

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

Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 3+6	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)
		11570	47.06	-26.94	74	52	38.97	13.15	57.06	-	-	P	H
		17355	62.79	-5.41	68.2	65.33	39.08	16.27	57.89	200	22	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11n													H
HT20													H
CH 157		11570	48.42	-25.58	74	53.36	38.97	13.15	57.06	-	-	P	V
5785MHz		17355	61.19	-7.01	68.2	63.73	39.08	16.27	57.89	400	358	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 3+6	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)
		5648.59	62.16	-6.04	68.2	56.77	33.24	8.71	36.56	100	59	P	H
		5650.525	65.21	-3.38	68.59	59.81	33.25	8.71	36.56	100	59	P	H
		5715.885	86.73	-22.92	109.65	80.93	33.58	8.77	36.55	100	59	P	H
		5721.045	86	-27.18	113.18	80.17	33.61	8.77	36.55	100	59	P	H
	*	5755	111.38	-	-	105.35	33.78	8.8	36.55	100	59	P	H
	*	5755	105.74	-	-	99.71	33.78	8.8	36.55	100	59	A	H
		5851.675	65.3	-53.08	118.38	58.87	34.1	8.87	36.54	100	59	P	H
		5855.275	66.15	-44.57	110.72	59.71	34.11	8.87	36.54	100	59	P	H
		5920.75	55.35	-15.98	71.33	48.81	34.16	8.91	36.53	100	59	P	H
		5929.75	53.3	-14.9	68.2	46.77	34.14	8.92	36.53	100	59	P	H
802.11n													H
HT40													H
CH 151		5650.095	65.6	-2.67	68.27	60.2	33.25	8.71	36.56	289	1	P	V
5755MHz		5651.6	66.23	-3.16	69.39	60.82	33.26	8.71	36.56	289	1	P	V
		5714.38	89.23	-20	109.23	83.44	33.57	8.77	36.55	289	1	P	V
		5721.475	90.34	-23.82	114.16	84.51	33.61	8.77	36.55	289	1	P	V
	*	5755	112.34	-	-	106.31	33.78	8.8	36.55	289	1	P	V
	*	5755	105.55	-	-	99.52	33.78	8.8	36.55	289	1	A	V
		5852.8	70.31	-45.51	115.82	63.87	34.11	8.87	36.54	289	1	P	V
		5858.425	68.99	-40.85	109.84	62.53	34.12	8.88	36.54	289	1	P	V
		5922.325	61.15	-9.02	70.17	54.61	34.16	8.91	36.53	289	1	P	V
		5927.95	59.35	-8.85	68.2	52.82	34.14	8.92	36.53	289	1	P	V
													V
													V

WIFI Ant. 3+6	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)
		5649.725	57.84	-10.36	68.2	52.44	33.25	8.71	36.56	100	33	P	H
		5667.275	56.12	-24.9	81.02	50.61	33.34	8.73	36.56	100	33	P	H
		5715.2	65.58	-43.88	109.46	59.78	33.58	8.77	36.55	100	33	P	H
		5723.3	69.12	-49.2	118.32	63.28	33.62	8.77	36.55	100	33	P	H
	*	5795	111.53	-	-	105.26	33.97	8.84	36.54	100	33	P	H
	*	5795	105.31	-	-	99.04	33.97	8.84	36.54	100	33	A	H
		5851.19	80	-39.49	119.49	73.57	34.1	8.87	36.54	100	33	P	H
		5858.57	78.97	-30.83	109.8	72.51	34.12	8.88	36.54	100	33	P	H
		5919.25	65.46	-6.98	72.44	58.92	34.16	8.91	36.53	100	33	P	H
		5937.905	65	-3.2	68.2	58.49	34.12	8.92	36.53	100	33	P	H
802.11n													H
HT40													H
CH 159		5640.95	56.03	-12.17	68.2	50.69	33.2	8.7	36.56	308	22	P	V
5795MHz		5658.725	57.02	-17.66	74.68	51.57	33.29	8.72	36.56	308	22	P	V
		5719.025	67.88	-42.65	110.53	62.06	33.6	8.77	36.55	308	22	P	V
		5723.525	68.76	-50.08	118.84	62.92	33.62	8.77	36.55	308	22	P	V
	*	5795	111.81	-	-	105.54	33.97	8.84	36.54	308	22	P	V
	*	5795	105.06	-	-	98.79	33.97	8.84	36.54	308	22	A	V
		5852.01	78.4	-39.22	117.62	71.97	34.1	8.87	36.54	308	22	P	V
		5859.185	76.69	-32.94	109.63	70.23	34.12	8.88	36.54	308	22	P	V
		5920.275	65.11	-6.57	71.68	58.57	34.16	8.91	36.53	308	22	P	V
		5929.09	65.06	-3.14	68.2	58.53	34.14	8.92	36.53	308	22	P	V
													V
													V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 3+6	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)
		5646.4	64.55	-3.65	68.2	59.17	33.23	8.71	36.56	323	57	P	H
		5651.4	64.11	-5.13	69.24	58.7	33.26	8.71	36.56	323	57	P	H
		5718.6	94.19	-16.22	110.41	88.38	33.59	8.77	36.55	323	57	P	H
		5723.4	99.65	-18.9	118.55	93.81	33.62	8.77	36.55	323	57	P	H
	*	5745	115.07	-	-	109.11	33.72	8.79	36.55	323	57	P	H
	*	5745	108.94	-	-	102.98	33.72	8.79	36.55	323	57	A	H
802.11ac													H
VHT20													H
CH 149		5643.8	63.5	-4.7	68.2	58.13	33.22	8.71	36.56	400	78	P	V
5745MHz		5655.6	67.25	-5.11	72.36	61.81	33.28	8.72	36.56	400	78	P	V
		5718.8	92.08	-18.38	110.46	86.27	33.59	8.77	36.55	400	78	P	V
		5723.2	97.89	-20.21	118.1	92.05	33.62	8.77	36.55	400	78	P	V
	*	5745	115.25	-	-	109.29	33.72	8.79	36.55	400	78	P	V
	*	5745	109.04	-	-	103.08	33.72	8.79	36.55	400	78	A	V
													V
													V

WIFI Ant. 3+6	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)
	*	5825	114.62	-	-	108.25	34.05	8.86	36.54	100	30	P	H
	*	5825	108.79	-	-	102.42	34.05	8.86	36.54	100	30	A	H
		5850.4	88.89	-32.4	121.29	82.46	34.1	8.87	36.54	100	30	P	H
		5855.8	83.6	-26.98	110.58	77.16	34.11	8.87	36.54	100	30	P	H
		5923.4	64.65	-4.73	69.38	58.12	34.15	8.91	36.53	100	30	P	H
		5926.6	61.23	-6.97	68.2	54.69	34.15	8.92	36.53	100	30	P	H
802.11ac													H
VHT20													H
CH 165	*	5825	114.74	-	-	108.37	34.05	8.86	36.54	398	360	P	V
5825MHz	*	5825	108.08	-	-	101.71	34.05	8.86	36.54	398	360	A	V
		5850	90.25	-31.95	122.2	83.82	34.1	8.87	36.54	398	360	P	V
		5855.8	84.39	-26.19	110.58	77.95	34.11	8.87	36.54	398	360	P	V
		5922	64.43	-5.98	70.41	57.89	34.16	8.91	36.53	398	360	P	V
		5925.8	63.87	-4.33	68.2	57.33	34.15	8.92	36.53	398	360	P	V
													V
													V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 3+6	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)
		11570	47.11	-26.89	74	52.05	38.97	13.15	57.06	-	-	P	H
		17355	62.79	-5.41	68.2	65.33	39.08	16.27	57.89	195	22	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ac													H
VHT20													H
CH 157		11570	47.87	-26.13	74	52.81	38.97	13.15	57.06	-	-	P	V
5785MHz		17355	61.59	-6.61	68.2	64.13	39.08	16.27	57.89	100	19	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 3+6	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)
		5644.075	62.38	-5.82	68.2	57.01	33.22	8.71	36.56	110	34	P	H
		5699.975	75.27	-29.91	105.18	69.58	33.5	8.75	36.56	110	34	P	H
		5719.97	87.03	-23.76	110.79	81.21	33.6	8.77	36.55	110	34	P	H
		5719.97	87.03	-23.76	110.79	81.21	33.6	8.77	36.55	110	34	P	H
	*	5755	111.67	-	-	105.64	33.78	8.8	36.55	110	34	P	H
	*	5755	105.68	-	-	99.65	33.78	8.8	36.55	110	34	A	H
		5851	67.72	-52.2	119.92	61.29	34.1	8.87	36.54	110	34	P	H
		5865.175	69.79	-38.16	107.95	63.32	34.13	8.88	36.54	110	34	P	H
		5878	64.98	-37.99	102.97	58.46	34.16	8.89	36.53	110	34	P	H
		5930.425	59.41	-8.79	68.2	52.88	34.14	8.92	36.53	110	34	P	H
802.11ac													H
VHT40													H
CH 151		5647.515	64.92	-3.28	68.2	59.53	33.24	8.71	36.56	350	346	P	V
5755MHz		5697.395	77.68	-25.6	103.28	72	33.49	8.75	36.56	350	346	P	V
		5719.97	87.83	-22.96	110.79	82.01	33.6	8.77	36.55	350	346	P	V
		5724.915	89.38	-32.63	122.01	83.53	33.62	8.78	36.55	350	346	P	V
	*	5755	113.5	-	-	107.47	33.78	8.8	36.55	350	346	P	V
	*	5755	106.96	-	-	100.93	33.78	8.8	36.55	350	346	A	V
		5850.55	70.32	-50.63	120.95	63.89	34.1	8.87	36.54	350	346	P	V
		5859.775	68.86	-40.6	109.46	62.4	34.12	8.88	36.54	350	346	P	V
		5880.25	66.85	-34.45	101.3	60.33	34.16	8.89	36.53	350	346	P	V
		5925.7	59.51	-8.69	68.2	52.97	34.15	8.92	36.53	350	346	P	V
													V
													V

WIFI Ant. 3+6	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	55.18	-13.02	68.2	49.81	33.22	8.71	36.56	100	29	P	H
		5664.35	60.46	-18.39	78.85	54.98	33.32	8.72	36.56	100	29	P	H
		5719.7	64.91	-45.81	110.72	59.09	33.6	8.77	36.55	100	29	P	H
		5722.4	66.06	-50.21	116.27	60.23	33.61	8.77	36.55	100	29	P	H
	*	5795	112.66	-	-	106.39	33.97	8.84	36.54	100	29	P	H
	*	5795	105.71	-	-	99.44	33.97	8.84	36.54	100	29	A	H
		5849.96	78.14	-56.06	134.2	71.71	34.1	8.87	36.54	100	29	P	H
		5855.905	77.31	-33.24	110.55	70.87	34.11	8.87	36.54	100	29	P	H
		5922.735	63.71	-6.16	69.87	57.18	34.15	8.91	36.53	100	29	P	H
		5925.195	65.99	-2.21	68.2	59.45	34.15	8.92	36.53	100	29	P	H
802.11ac													H
VHT40													H
CH 159		5644.775	55.49	-12.71	68.2	50.12	33.22	8.71	36.56	399	360	P	V
5795MHz		5652.875	56.33	-14.01	70.34	50.92	33.26	8.71	36.56	399	360	P	V
		5696.75	62.27	-40.53	102.8	56.6	33.48	8.75	36.56	399	360	P	V
		5723.3	67.25	-51.07	118.32	61.41	33.62	8.77	36.55	399	360	P	V
	*	5795	112.7	-	-	106.43	33.97	8.84	36.54	399	360	P	V
	*	5795	105.39	-	-	99.12	33.97	8.84	36.54	399	360	A	V
		5850.165	77.83	-43.99	121.82	71.4	34.1	8.87	36.54	399	360	P	V
		5858.775	77.65	-32.09	109.74	71.19	34.12	8.88	36.54	399	360	P	V
		5916.175	69.3	-5.41	74.71	62.75	34.17	8.91	36.53	399	360	P	V
		5925.605	67.06	-1.14	68.2	60.52	34.15	8.92	36.53	399	360	P	V
													V
													V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 3+6	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)
		5647.25	64.83	-3.37	68.2	59.44	33.24	8.71	36.56	100	30	P	H
		5657.15	68.61	-4.9	73.51	63.16	33.29	8.72	36.56	100	30	P	H
		5714.3	78.8	-30.41	109.21	73.01	33.57	8.77	36.55	100	30	P	H
		5725.1	78.06	-56.14	134.2	72.2	33.63	8.78	36.55	100	30	P	H
	*	5775	106.36	-	-	100.21	33.88	8.82	36.55	100	30	P	H
	*	5775	99.85	-	-	93.7	33.88	8.82	36.55	100	30	A	H
		5853.25	75.8	-38.99	114.79	69.36	34.11	8.87	36.54	100	30	P	H
		5858.425	77.22	-32.62	109.84	70.76	34.12	8.88	36.54	100	30	P	H
		5923.675	65.21	-3.97	69.18	58.68	34.15	8.91	36.53	100	30	P	H
		5933.125	64.82	-3.38	68.2	58.3	34.13	8.92	36.53	100	30	P	H
802.11ac													H
VHT80													H
CH 155		5647.475	65.53	-2.67	68.2	60.14	33.24	8.71	36.56	307	15	P	V
5775MHz		5651.3	65.83	-3.34	69.17	60.42	33.26	8.71	36.56	307	15	P	V
		5719.025	80.32	-30.21	110.53	74.5	33.6	8.77	36.55	307	15	P	V
		5723.975	79.25	-40.61	119.86	73.4	33.62	8.78	36.55	307	15	P	V
	*	5775	105.62	-	-	99.47	33.88	8.82	36.55	307	15	P	V
	*	5775	99.5	-	-	93.35	33.88	8.82	36.55	307	15	A	V
		5852.35	75.82	-41.02	116.84	69.39	34.1	8.87	36.54	307	15	P	V
		5868.325	74.8	-32.27	107.07	68.32	34.14	8.88	36.54	307	15	P	V
		5922.325	63.81	-6.36	70.17	57.27	34.16	8.91	36.53	307	15	P	V
		5934.25	64.01	-4.19	68.2	57.49	34.13	8.92	36.53	307	15	P	V
													V
													V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11ax HE20_Full (Band Edge @ 3m)

WIFI Ant. 3+6	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)
		5648	63.74	-4.46	68.2	58.35	33.24	8.71	36.56	295	59	P	H
		5653	65.2	-5.23	70.43	59.78	33.26	8.72	36.56	295	59	P	H
		5720	93.32	-17.48	110.8	87.5	33.6	8.77	36.55	295	59	P	H
		5724.6	95.44	-25.85	121.29	89.59	33.62	8.78	36.55	295	59	P	H
	*	5745	116.07	-	-	110.11	33.72	8.79	36.55	295	59	P	H
	*	5745	108.2	-	-	102.24	33.72	8.79	36.55	295	59	A	H
802.11ax													H
HE20 Full													H
CH 149		5646.8	60.42	-7.78	68.2	55.04	33.23	8.71	36.56	362	85	P	V
5745MHz		5656.4	64.38	-8.57	72.95	58.94	33.28	8.72	36.56	362	85	P	V
		5719.6	89.76	-20.93	110.69	83.94	33.6	8.77	36.55	362	85	P	V
		5724.6	94.31	-26.98	121.29	88.46	33.62	8.78	36.55	362	85	P	V
	*	5745	113.77	-	-	107.81	33.72	8.79	36.55	362	85	P	V
	*	5745	107.77	-	-	101.81	33.72	8.79	36.55	362	85	A	V
													V
													V

WIFI Ant. 3+6	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)
		5627.8	58.55	-9.65	68.2	53.28	33.14	8.69	36.56	157	25	P	H
		5650.8	57.98	-10.81	68.79	52.58	33.25	8.71	36.56	157	25	P	H
		5716	73.46	-36.22	109.68	67.66	33.58	8.77	36.55	157	25	P	H
		5723.8	75.75	-43.71	119.46	69.9	33.62	8.78	36.55	157	25	P	H
	*	5785	115.12	-	-	108.92	33.92	8.83	36.55	157	25	P	H
	*	5785	107.91	-	-	101.71	33.92	8.83	36.55	157	25	A	H
		5851.395	78.6	-40.42	119.02	72.17	34.1	8.87	36.54	157	25	P	H
		5855.085	79.01	-31.77	110.78	72.57	34.11	8.87	36.54	157	25	P	H
		5923.965	64.58	-4.38	68.96	58.05	34.15	8.91	36.53	157	25	P	H
		5933.19	64.16	-4.04	68.2	57.64	34.13	8.92	36.53	157	25	P	H
802.11ax													H
HE20 Full													H
CH 157		5626.8	58.47	-9.73	68.2	53.21	33.13	8.69	36.56	400	344	P	V
5785MHz		5699.8	69	-36.05	105.05	63.31	33.5	8.75	36.56	400	344	P	V
		5719.8	75.96	-34.78	110.74	70.14	33.6	8.77	36.55	400	344	P	V
		5724	79.87	-40.05	119.92	74.02	33.62	8.78	36.55	400	344	P	V
	*	5785	117.03	-	-	110.83	33.92	8.83	36.55	400	344	P	V
	*	5785	108.66	-	-	102.46	33.92	8.83	36.55	400	344	A	V
		5850.165	77.14	-44.68	121.82	70.71	34.1	8.87	36.54	400	344	P	V
		5855.29	78.17	-32.55	110.72	71.73	34.11	8.87	36.54	400	344	P	V
		5922.735	65.72	-4.15	69.87	59.19	34.15	8.91	36.53	400	344	P	V
		5948.36	64.69	-3.51	68.2	58.19	34.1	8.93	36.53	400	344	P	V
													V
													V

WIFI Ant. 3+6	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)
	*	5825	116.24	-	-	109.87	34.05	8.86	36.54	100	29	P	V
	*	5825	108.69	-	-	102.32	34.05	8.86	36.54	100	29	A	V
		5850.4	90.49	-30.8	121.29	84.06	34.1	8.87	36.54	100	29	P	V
		5856.4	84.95	-25.46	110.41	78.51	34.11	8.87	36.54	100	29	P	V
		5924	66.03	-2.91	68.94	59.5	34.15	8.91	36.53	100	29	P	V
		5926.6	62	-6.2	68.2	55.46	34.15	8.92	36.53	100	29	P	V
802.11ax													H
HE20 Full													H
CH 165	*	5825	114.36	-	-	107.99	34.05	8.86	36.54	349	3	P	H
5825MHz	*	5825	107.71	-	-	101.34	34.05	8.86	36.54	349	3	A	H
		5850	90.25	-31.95	122.2	83.82	34.1	8.87	36.54	349	3	P	H
		5858.8	84.31	-25.42	109.73	77.85	34.12	8.88	36.54	349	3	P	H
		5923.4	61.28	-8.1	69.38	54.75	34.15	8.91	36.53	349	3	P	H
		5933.4	60.7	-7.5	68.2	54.18	34.13	8.92	36.53	349	3	P	H
													V
													V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 3+6	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)
		11490	46.52	-27.48	74	51.57	38.95	13.11	57.11	-	-	P	H
		17235	62.09	-6.11	68.2	65.18	38.62	16.25	57.96	200	9	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 149		11490	47.92	-26.08	74	52.97	38.95	13.11	57.11	-	-	P	V
5745MHz		17235	60.9	-7.3	68.2	63.99	38.62	16.25	57.96	100	90	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 3+6	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)
		11570	46.85	-27.15	74	51.79	38.97	13.15	57.06	-	-	P	H
		17355	59.2	-9	68.2	61.74	39.08	16.27	57.89	200	23	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 157		11570	52.9	-21.1	74	57.84	38.97	13.15	57.06	100	2	P	V
5785MHz		11570	42.58	-11.42	54	47.52	38.97	13.15	57.06	100	2	A	V
		17355	58.52	-9.68	68.2	61.06	39.08	16.27	57.89	100	94	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 3+6	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)
		11650	53.44	-20.56	74	58.28	38.99	13.18	57.01	100	332	P	H
		11650	43.32	-10.68	54	48.16	38.99	13.18	57.01	100	332	A	H
		17475	59.18	-9.02	68.2	61.14	39.55	16.3	57.81	200	27	P	H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 165		11650	51.09	-22.91	74	55.93	38.99	13.18	57.01	100	10	P	V
5825MHz		11650	41.3	-12.7	54	46.14	38.99	13.18	57.01	100	10	A	V
		17475	56.68	-11.52	68.2	58.64	39.55	16.3	57.81	100	86	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.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

Band 4 5725~5850MHz

WIFI 802.11ax HE40_Full (Band Edge @ 3m)

WIFI Ant. 3+6	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)
		5648.16	66.25	-1.95	68.2	60.86	33.24	8.71	36.56	324	31	P	H
		5651.17	65.77	-3.3	69.07	60.36	33.26	8.71	36.56	324	31	P	H
		5716.745	88.79	-21.1	109.89	82.99	33.58	8.77	36.55	324	31	P	H
		5724.27	89.04	-31.5	120.54	83.19	33.62	8.78	36.55	324	31	P	H
	*	5755	111.66	-	-	105.63	33.78	8.8	36.55	324	31	P	H
	*	5755	105.83	-	-	99.8	33.78	8.8	36.55	324	31	A	H
		5850.1	73.18	-48.79	121.97	66.75	34.1	8.87	36.54	324	31	P	H
		5857.525	71.22	-38.87	110.09	64.77	34.12	8.87	36.54	324	31	P	H
		5923.675	64.23	-4.95	69.18	57.7	34.15	8.91	36.53	324	31	P	H
		5941.225	61.55	-6.65	68.2	55.04	34.12	8.92	36.53	324	31	P	H
802.11ax													H
HE40 Full													H
CH 151		5645.15	66.57	-1.63	68.2	61.19	33.23	8.71	36.56	354	12	P	V
5755MHz		5652.03	67.41	-2.3	69.71	62	33.26	8.71	36.56	354	12	P	V
		5718.895	90.55	-19.94	110.49	84.74	33.59	8.77	36.55	354	12	P	V
		5720.185	91.26	-19.96	111.22	85.44	33.6	8.77	36.55	354	12	P	V
	*	5755	112.58	-	-	106.55	33.78	8.8	36.55	354	12	P	V
	*	5755	106.24	-	-	100.21	33.78	8.8	36.55	354	12	A	V
		5851.675	72.2	-46.18	118.38	65.77	34.1	8.87	36.54	354	12	P	V
		5855.95	71	-39.53	110.53	64.56	34.11	8.87	36.54	354	12	P	V
		5919.625	63.36	-8.8	72.16	56.82	34.16	8.91	36.53	354	12	P	V
		5930.2	64.04	-4.16	68.2	57.51	34.14	8.92	36.53	354	12	P	V
													V
													V

WIFI Ant. 3+6	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)
		5642.075	55.96	-12.24	68.2	50.6	33.21	8.71	36.56	100	27	P	H
		5652.2	57.75	-12.09	69.84	52.34	33.26	8.71	36.56	100	27	P	H
		5711.6	66.92	-41.53	108.45	61.15	33.56	8.76	36.55	100	27	P	H
		5720.6	69.54	-42.63	112.17	63.72	33.6	8.77	36.55	100	27	P	H
	*	5795	112.62	-	-	106.35	33.97	8.84	36.54	100	27	P	H
	*	5795	105.32	-	-	99.05	33.97	8.84	36.54	100	27	A	H
		5850.165	82.81	-39.01	121.82	76.38	34.1	8.87	36.54	100	27	P	H
		5855.7	79.81	-30.79	110.6	73.37	34.11	8.87	36.54	100	27	P	H
		5921.505	67.64	-3.14	70.78	61.1	34.16	8.91	36.53	100	27	P	H
		5927.04	66.43	-1.77	68.2	59.89	34.15	8.92	36.53	100	27	P	H
802.11ax													H
HE40 Full													H
CH 159		5638.925	55.42	-12.78	68.2	50.09	33.19	8.7	36.56	295	26	P	V
5795MHz		5655.575	55.86	-16.48	72.34	50.42	33.28	8.72	36.56	295	26	P	V
		5718.8	67.08	-43.38	110.46	61.27	33.59	8.77	36.55	295	26	P	V
		5720.6	68.22	-43.95	112.17	62.4	33.6	8.77	36.55	295	26	P	V
	*	5795	112.92	-	-	106.65	33.97	8.84	36.54	295	26	P	V
	*	5795	105.47	-	-	99.2	33.97	8.84	36.54	295	26	A	V
		5851.6	80.46	-38.09	118.55	74.03	34.1	8.87	36.54	295	26	P	V
		5860.005	79.41	-29.99	109.4	72.95	34.12	8.88	36.54	295	26	P	V
		5919.045	67.45	-5.14	72.59	60.91	34.16	8.91	36.53	295	26	P	V
		5932.37	66.3	-1.9	68.2	59.77	34.14	8.92	36.53	295	26	P	V
													V
													V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11ax HE40_Full (Harmonic @ 3m)

WIFI Ant. 3+6	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)
		11510	47.82	-26.18	74	52.83	38.95	13.13	57.09	-	-	P	H
		17265	59.54	-8.66	68.2	62.5	38.73	16.25	57.94	200	22	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE40 Full													H
CH 151		11510	48.16	-25.84	74	53.17	38.95	13.13	57.09	-	-	P	V
5755MHz		17265	53.59	-14.61	68.2	56.55	38.73	16.25	57.94	400	357	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 3+6	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)
		11590	47.01	-26.99	74	51.92	38.98	13.16	57.05	-	-	P	H
		17385	57.21	-10.99	68.2	59.6	39.2	16.28	57.87	203	14	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE40 Full													H
CH 159		11590	46.86	-27.14	74	51.77	38.98	13.16	57.05	-	-	P	V
5795MHz		17385	55.44	-12.76	68.2	57.83	39.2	16.28	57.87	400	357	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11ax HE80_Full (Band Edge @ 3m)

WIFI Ant. 3+6	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)
		5631.275	63.8	-4.4	68.2	58.5	33.16	8.7	36.56	100	30	P	H
		5653.1	62.87	-7.63	70.5	57.44	33.27	8.72	36.56	100	30	P	H
		5708.45	76.25	-31.32	107.57	70.5	33.54	8.76	36.55	100	30	P	H
		5723.975	75.02	-44.84	119.86	69.17	33.62	8.78	36.55	100	30	P	H
	*	5775	106.82	-	-	100.67	33.88	8.82	36.55	100	30	P	H
	*	5775	98.96	-	-	92.81	33.88	8.82	36.55	100	30	A	H
		5853.25	79.21	-35.58	114.79	72.77	34.11	8.87	36.54	100	30	P	H
		5862.7	76.01	-32.63	108.64	69.54	34.13	8.88	36.54	100	30	P	H
		5923.675	62.08	-7.1	69.18	55.55	34.15	8.91	36.53	100	30	P	H
		5926.6	62.73	-5.47	68.2	56.19	34.15	8.92	36.53	100	30	P	H
802.11ax													H
HE80 Full													H
CH 155		5649.275	64.84	-3.36	68.2	59.44	33.25	8.71	36.56	369	356	P	V
5775MHz		5653.325	65.48	-5.19	70.67	60.05	33.27	8.72	36.56	369	356	P	V
		5718.35	78.72	-31.62	110.34	72.91	33.59	8.77	36.55	369	356	P	V
		5721.725	81.11	-33.62	114.73	75.28	33.61	8.77	36.55	369	356	P	V
	*	5775	106.81	-	-	100.66	33.88	8.82	36.55	369	356	P	V
	*	5775	99.73	-	-	93.58	33.88	8.82	36.55	369	356	A	V
		5853.7	78.79	-34.97	113.76	72.35	34.11	8.87	36.54	369	356	P	V
		5858.425	76.59	-33.25	109.84	70.13	34.12	8.88	36.54	369	356	P	V
		5920.75	62.27	-9.06	71.33	55.73	34.16	8.91	36.53	369	356	P	V
		5932	62.82	-5.38	68.2	56.29	34.14	8.92	36.53	369	356	P	V
													V
													V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11ax HE80_Full (Harmonic @ 3m)

WIFI Ant. 3+6	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)
		11550	46.81	-27.19	74	51.77	38.97	13.14	57.07	-	-	P	H
		17325	47.81	-20.39	68.2	50.47	38.97	16.27	57.9	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE80 Full													H
CH 155		11550	46.31	-27.69	74	51.27	38.97	13.14	57.07	-	-	P	V
5775MHz		17325	48.32	-19.88	68.2	50.98	38.97	16.27	57.9	-	-	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 802.11a (SHF @ 1m)

WIFI Ant. 3+6	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)
		35842	45.87	-22.33	68.2	105.82	0	-1.12	58.83	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
802.11a SHF		35864	46.27	-21.93	68.2	106.22	0	-1.12	58.83	-	-	P	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

5GHz WIFI 802.11a (LF @ 3m)

WIFI Ant. 3+6	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 LF		30.18	22.92	-17.08	40	30.15	24.37	0.72	32.32	-	-	P	H
		140.52	32.2	-11.3	43.5	45.55	17.53	1.5	32.38	-	-	P	H
		146.1	31.84	-11.66	43.5	45.41	17.26	1.55	32.38	-	-	P	H
		717.6	37.45	-8.55	46	39.76	26.77	3.2	32.28	-	-	P	H
		892.8	36.4	-9.6	46	35.5	28.82	3.59	31.51	-	-	P	H
													H
													H
													H
													H
													H
													H
		33.78	29.99	-10.01	40	38.93	22.73	0.74	32.41	-	-	P	V
		112.44	31.01	-12.49	43.5	44.91	17.2	1.34	32.44	-	-	P	V
		134.04	31.2	-12.3	43.5	44.55	17.61	1.45	32.41	-	-	P	V
		140.52	34.21	-9.29	43.5	47.57	17.53	1.5	32.39	-	-	P	V
		146.1	33.79	-9.71	43.5	47.37	17.26	1.55	32.39	-	-	P	V
		888.8	34.86	-11.14	46	34.05	28.77	3.58	31.54	-	-	P	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 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. 3+6	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		11213	48.14	-25.86	74	59.06	39.72	17.65	68.29	-	-	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 @ 11213MHz:

1. Level(dBμV/m)

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

= 39.72(dB/m) + 17.65(dB) + 59.06(dBμV) – 68.29 (dB)

= 48.14 (dBμV/m)

2. Margin(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 48.14(dBμV/m) – 74(dBμV/m)

= -25.86(dB)

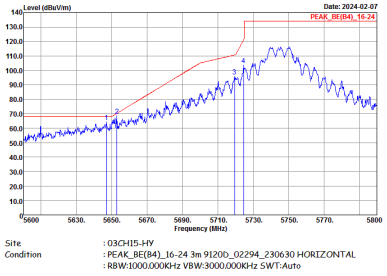
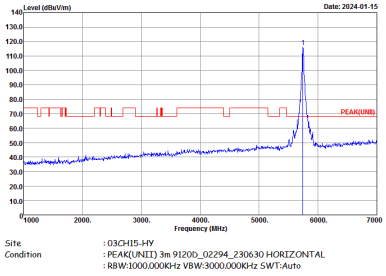
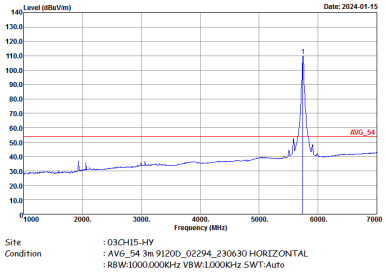
Peak measured complies with the limit line, so test result is “PASS”.

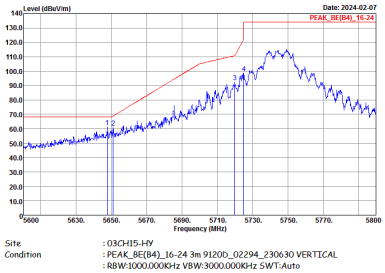
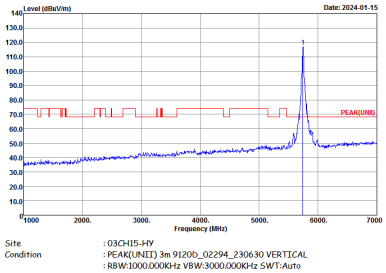
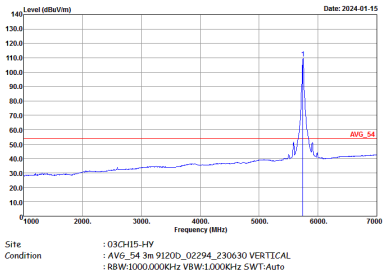
Appendix D. Radiated Spurious Emission Plots

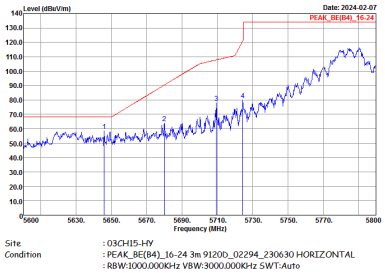
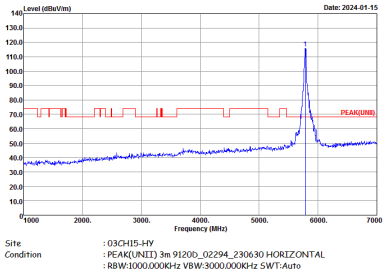
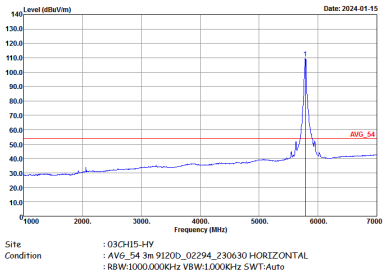
Test Engineer :	Daniel Lee, Quentin Liu and Bigshow Wang	**Temperature :**	21.4~23.1°C
		Relative Humidity :	51~58%

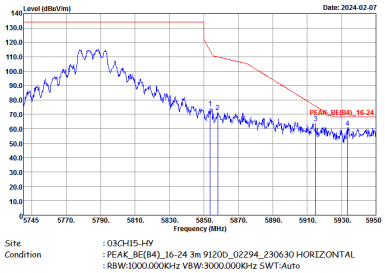
Band 4 - 5725~5850MHz

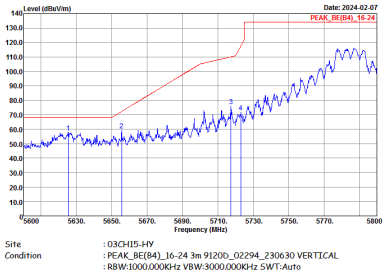
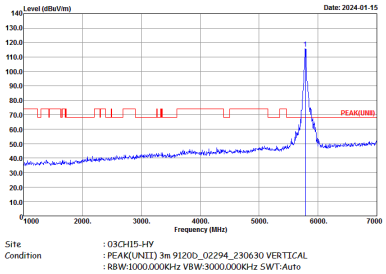
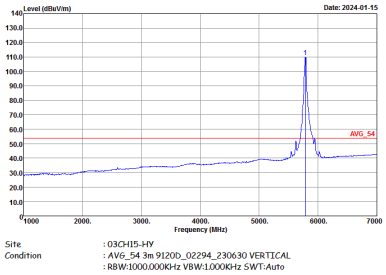
WIFI 802.11a (Band Edge @ 3m)

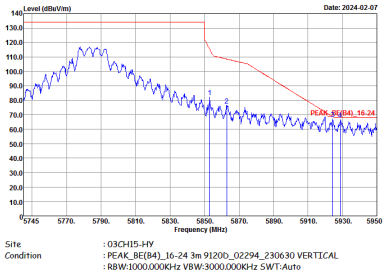
WIFI	**Band 4 5725~5850MHz Band Edge @ 3m**	
ANT	**802.11a CH149 5745MHz**	
3+6	**Horizontal**	**Fundamental**
Peak		
Avg	Left blank	

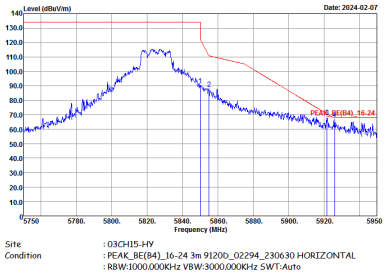
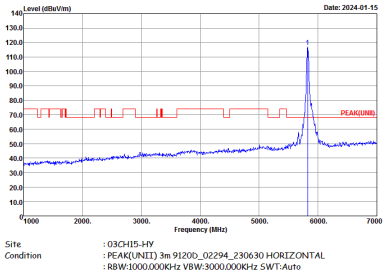
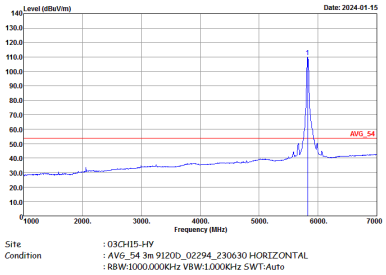
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

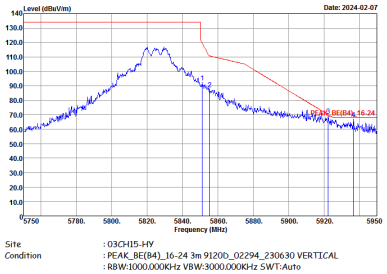
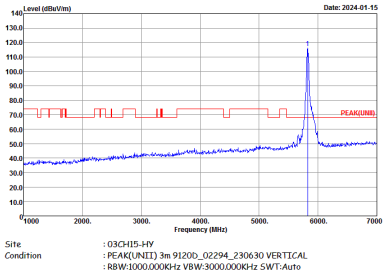
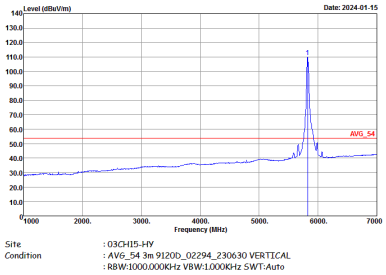
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
3+6	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

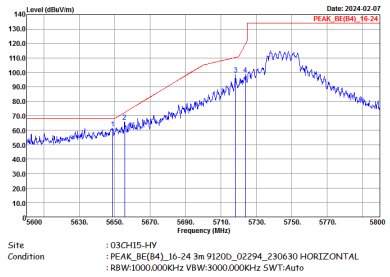
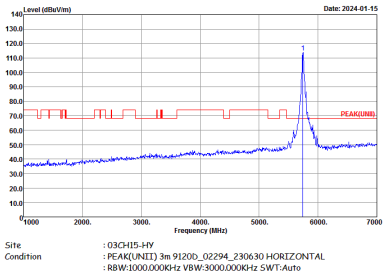
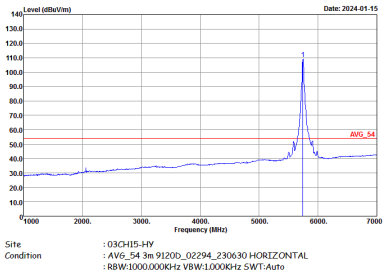
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
3+6	Vertical	Fundamental
Peak		Left blank

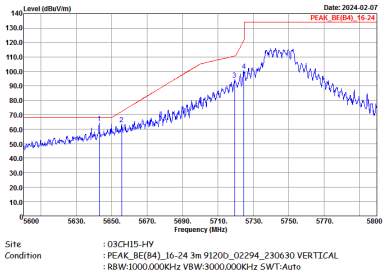
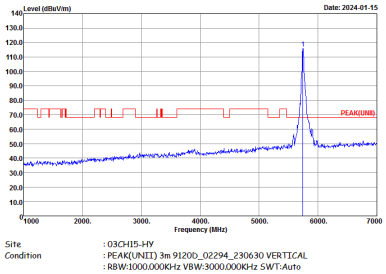
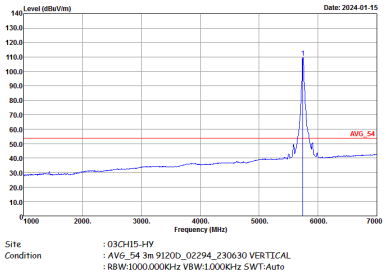
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

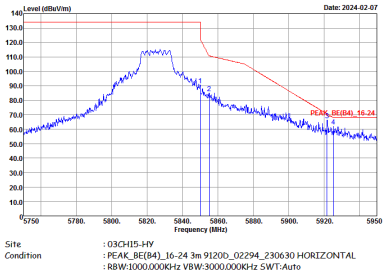
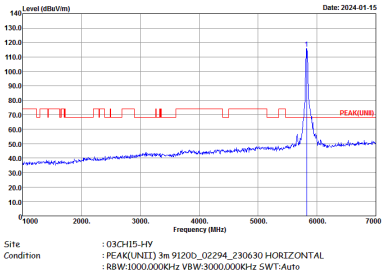
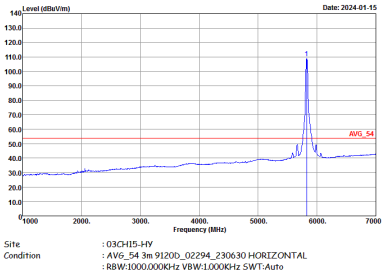
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

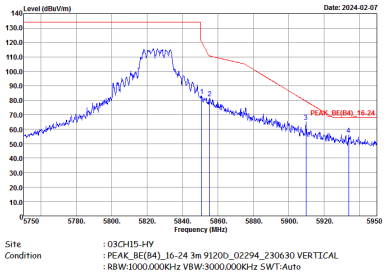
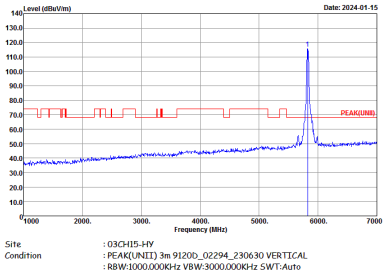
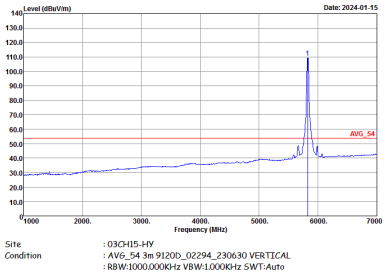
Band 4 5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

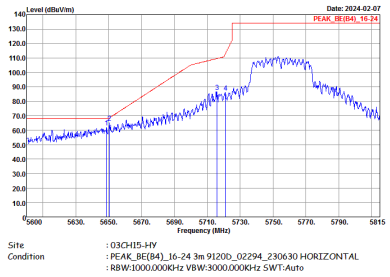
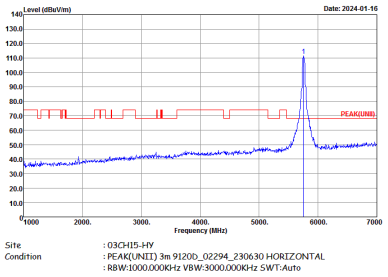
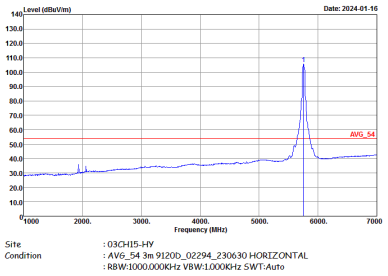
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

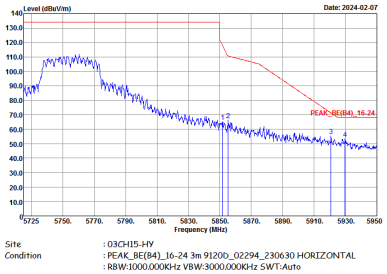
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

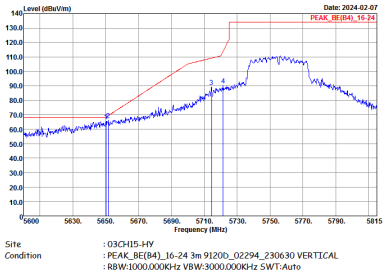
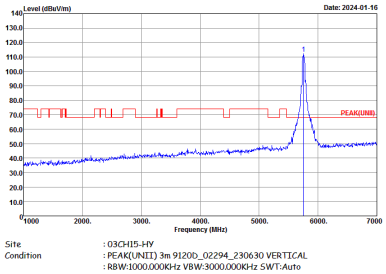
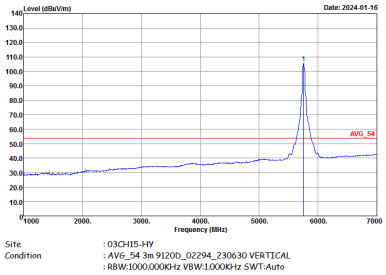
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

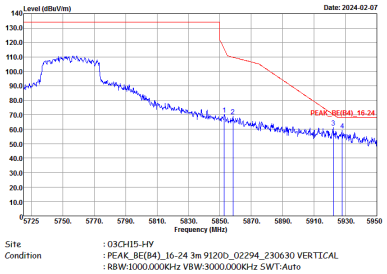
Band 4 5725~5850MHz

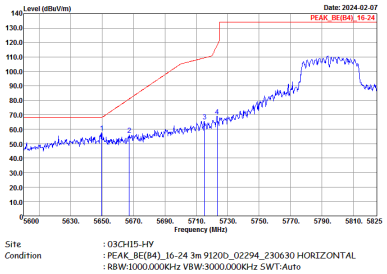
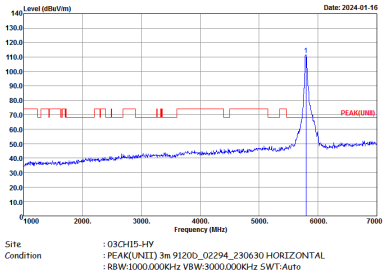
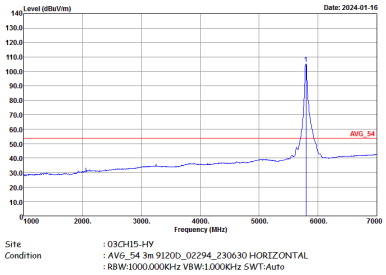
WIFI 802.11n HT40 (Band Edge @ 3m)

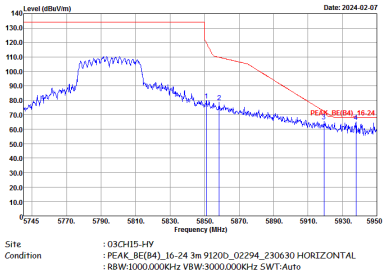
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

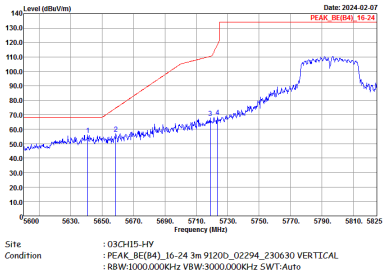
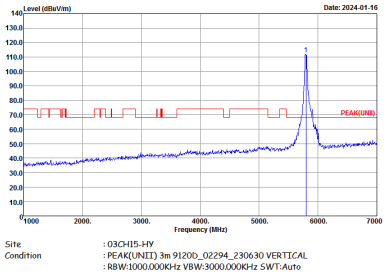
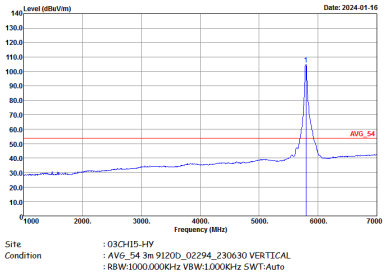
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
3+6	Horizontal	Fundamental
Peak		Left blank

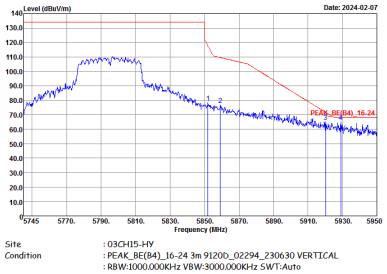
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
3+6	Vertical	Fundamental
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

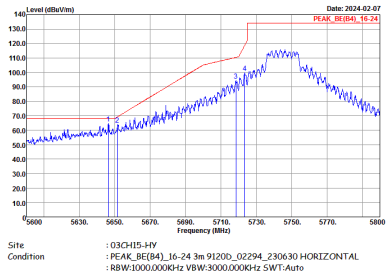
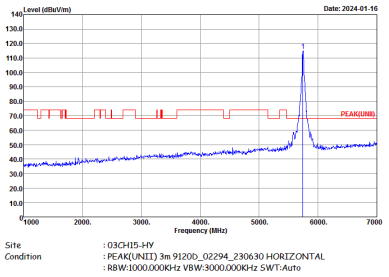
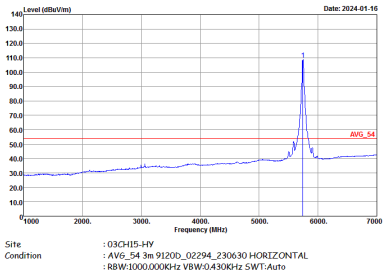
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
3+6	Horizontal	Fundamental
Peak		Left blank

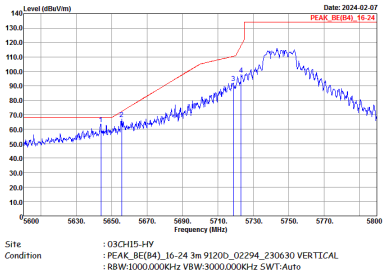
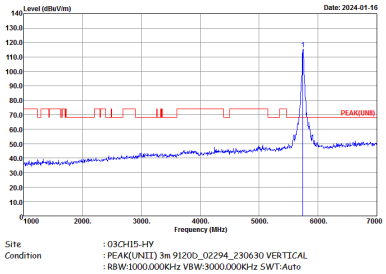
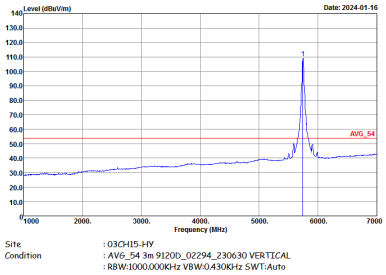
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

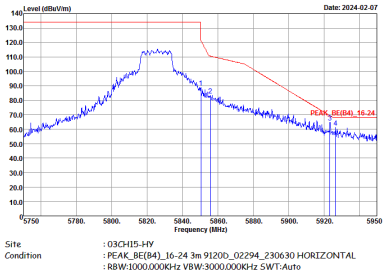
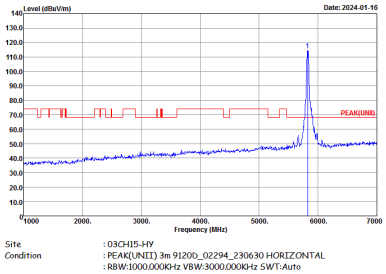
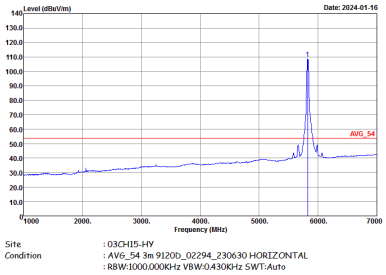
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
3+6	Vertical	Fundamental
Peak		Left blank

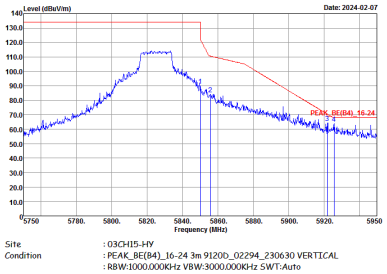
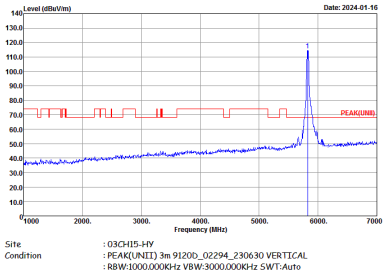
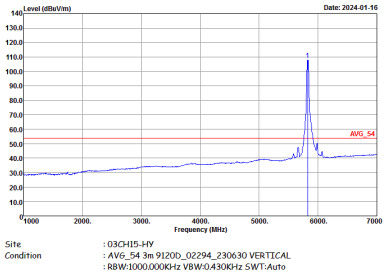
Band 4 5725~5850MHz

WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

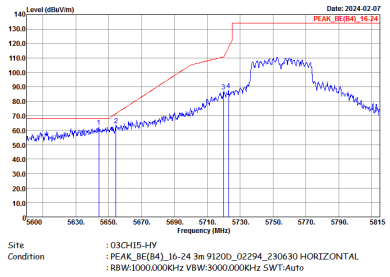
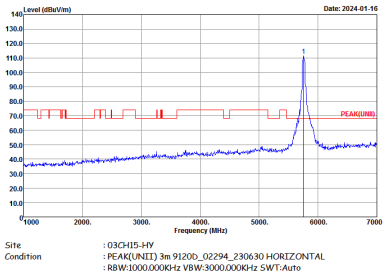
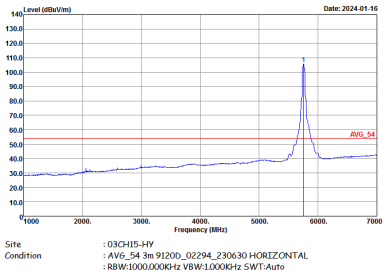
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH149 5745MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

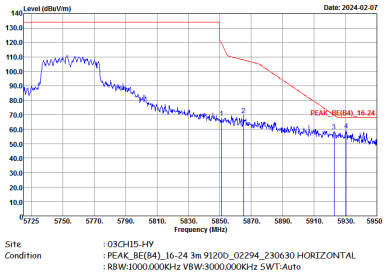
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

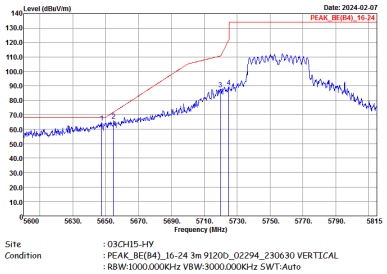
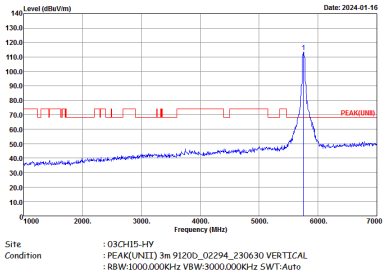
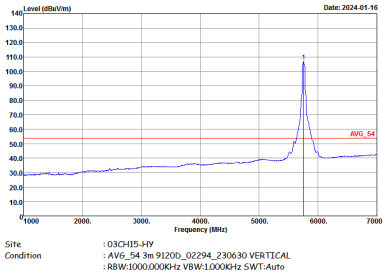
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH165 5825MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

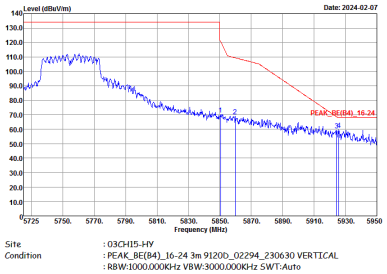
Band 4 5725~5850MHz

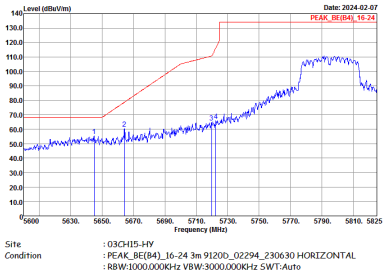
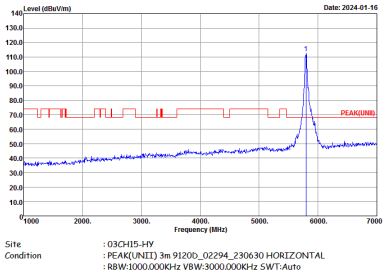
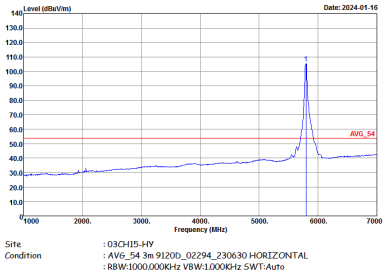
WIFI 802.11ac VHT40 (Band Edge @ 3m)

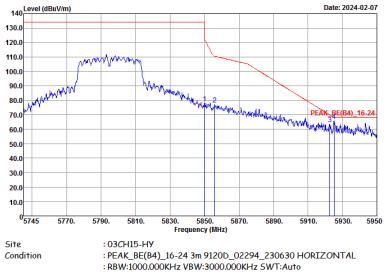
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

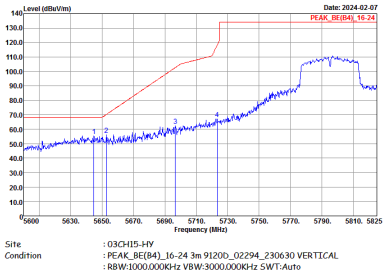
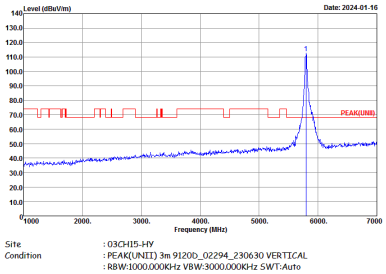
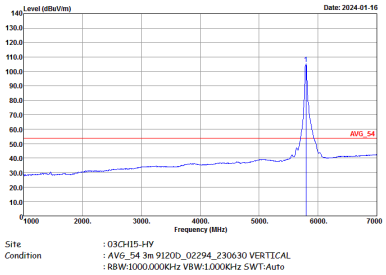
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
3+6	Horizontal	Fundamental
Peak		Left blank

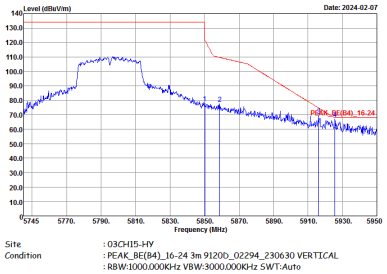
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH151 5755MHz	
3+6	Vertical	Fundamental
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

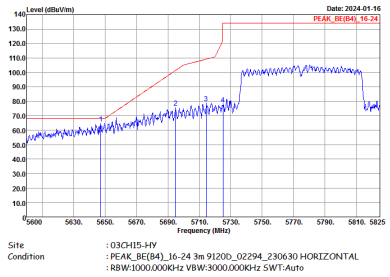
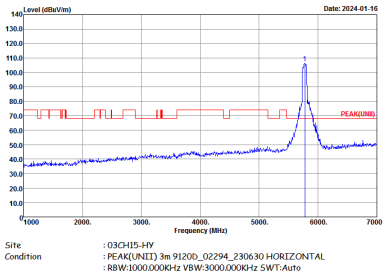
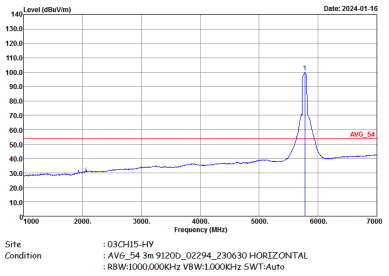
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
3+6	Horizontal	Fundamental
Peak		Left blank

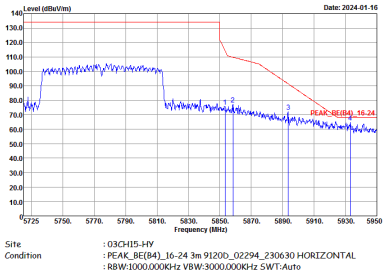
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

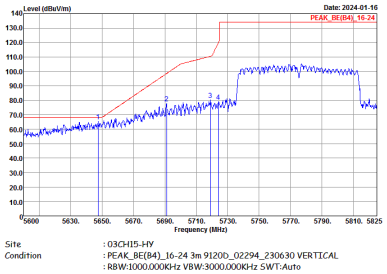
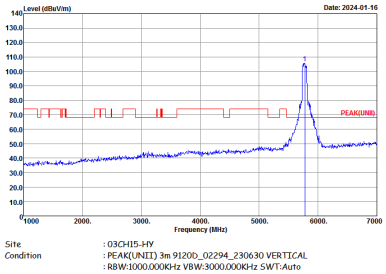
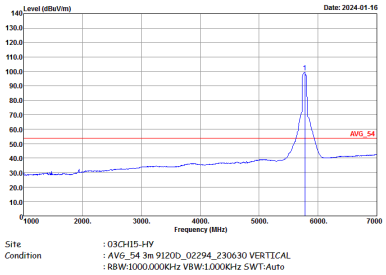
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
3+6	Vertical	Fundamental
Peak		Left blank

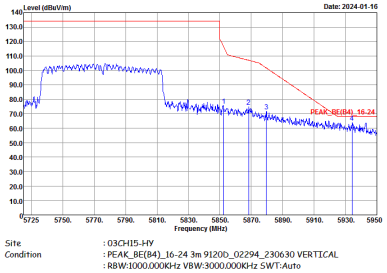
Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

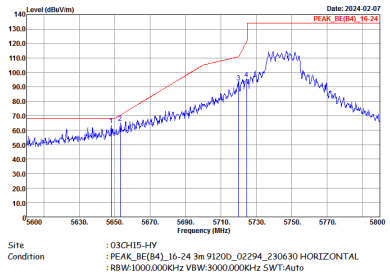
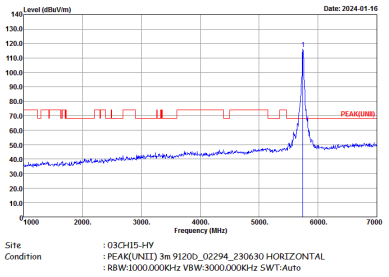
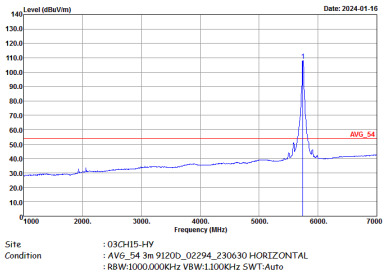
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
3+6	Horizontal	Fundamental
Peak		Left blank

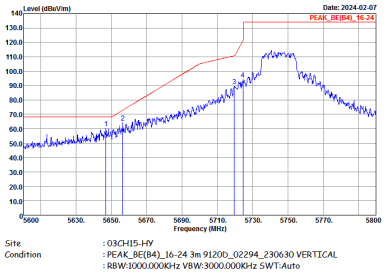
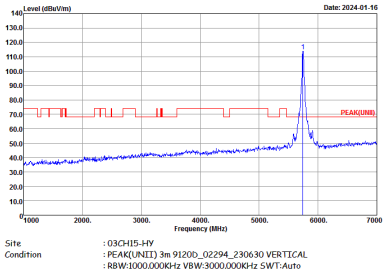
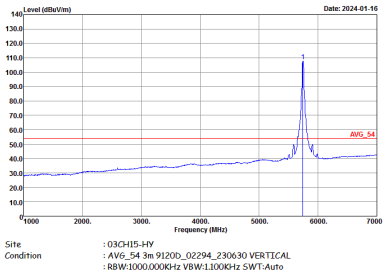
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

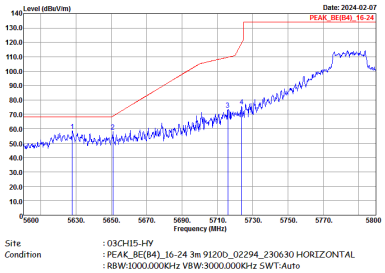
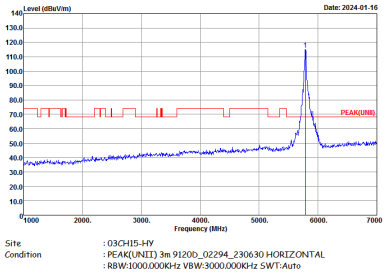
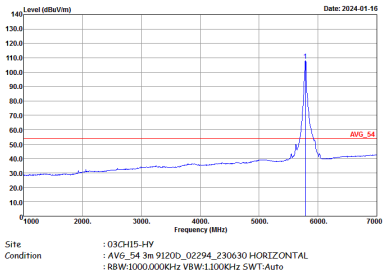
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
3+6	Vertical	Fundamental
Peak		Left blank

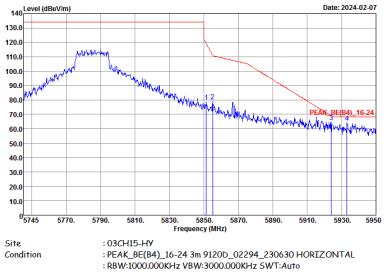
Band 4 - 5725~5850MHz

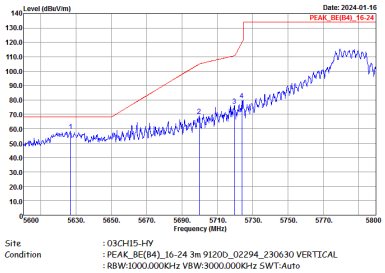
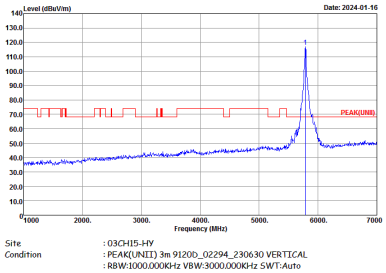
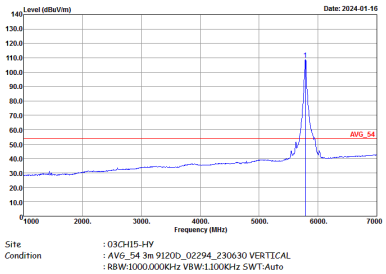
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

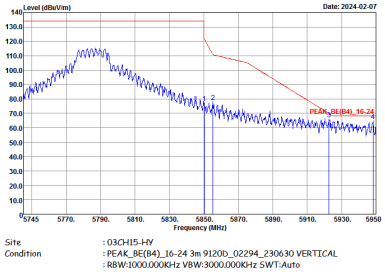
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

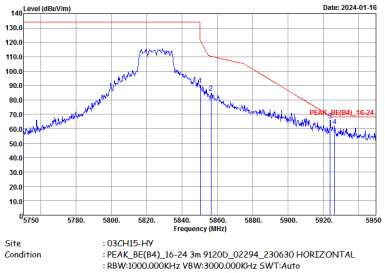
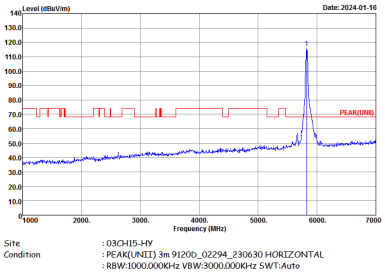
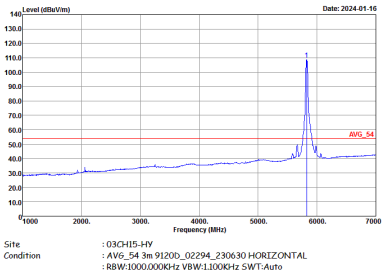
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

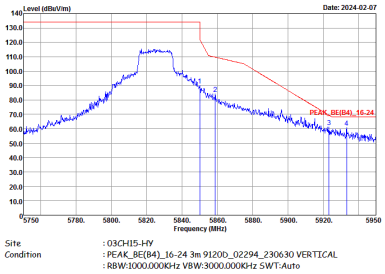
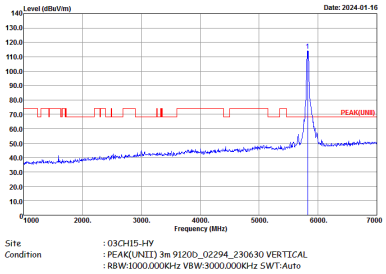
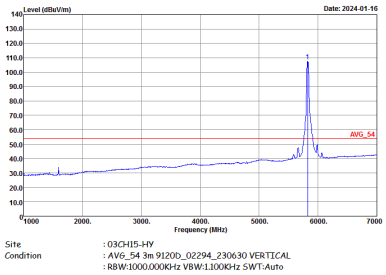
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
3+6	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank		

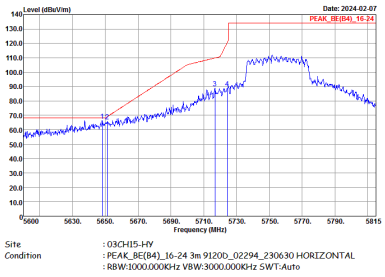
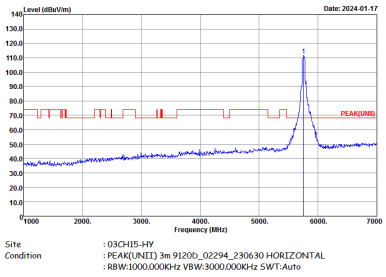
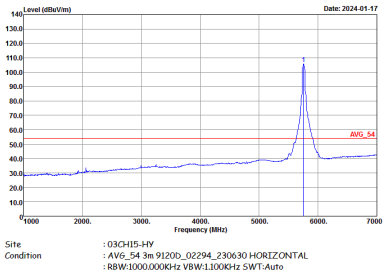
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
3+6	Vertical	Fundamental
Peak		Left blank

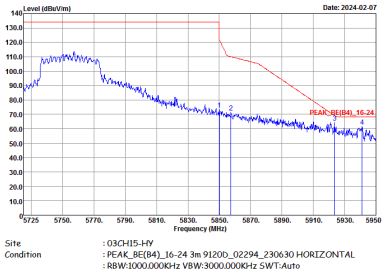
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

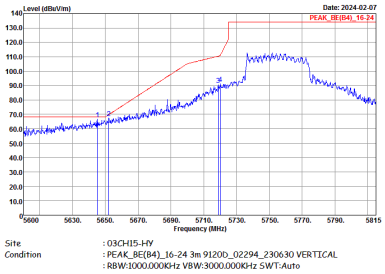
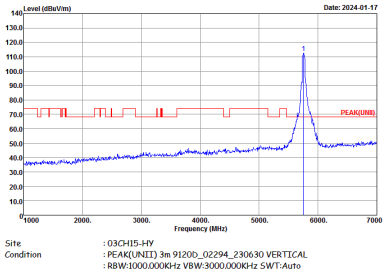
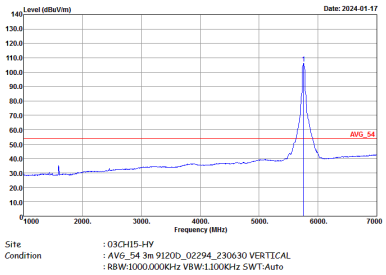
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

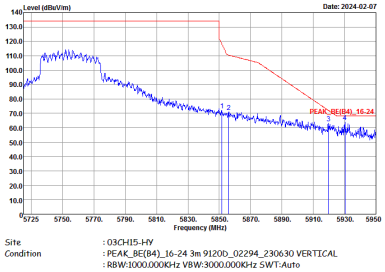
Band 4 5725~5850MHz

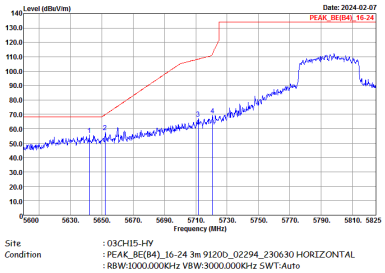
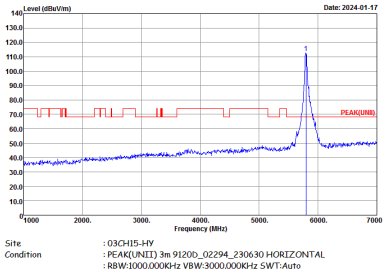
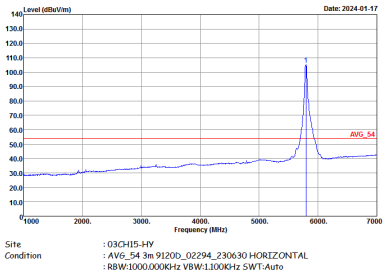
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

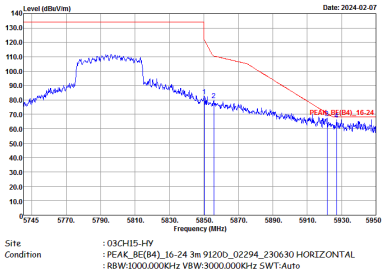
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

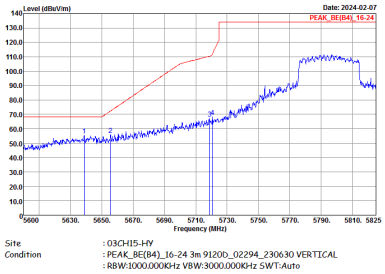
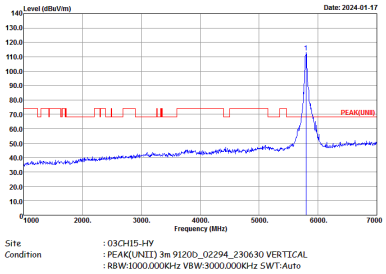
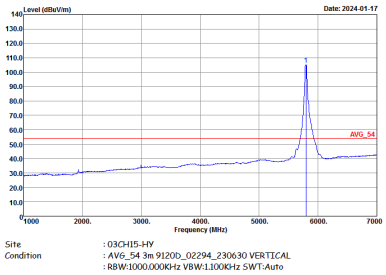
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
3+6	Horizontal	Fundamental
Peak		Left blank

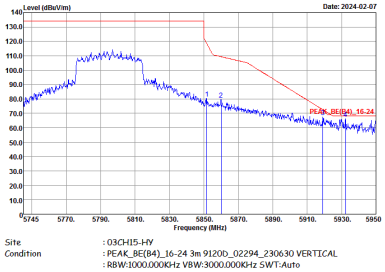
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
3+6	Vertical	Fundamental
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full HT40 CH159 5795MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

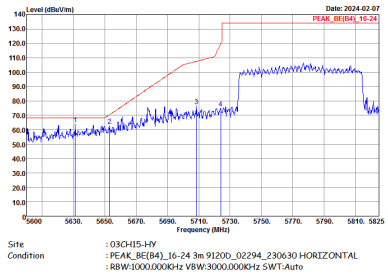
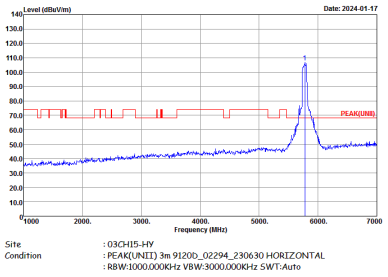
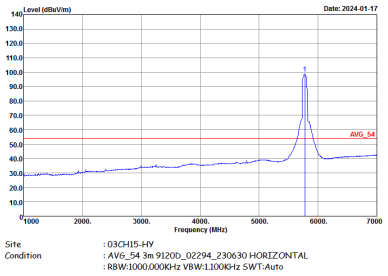
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full HT40 CH159 5795MHz	
3+6	Horizontal	Fundamental
Peak		Left blank

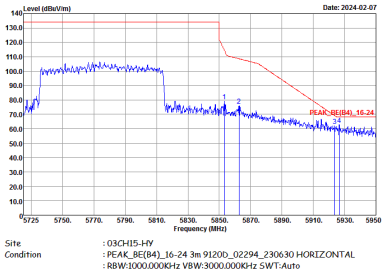
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

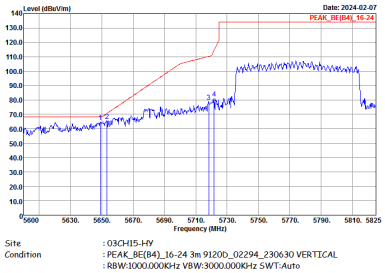
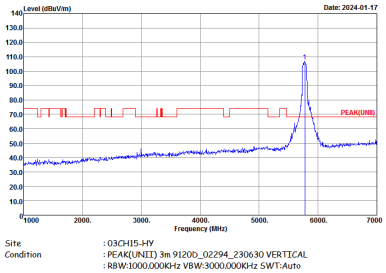
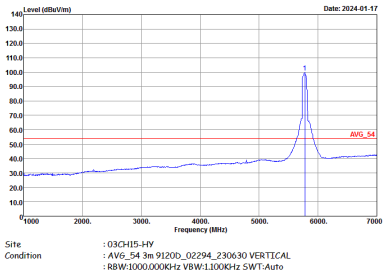
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
3+6	Vertical	Fundamental
Peak		Left blank

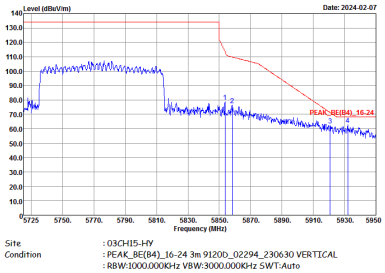
Band 4 5725~5850MHz

WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
3+6	Horizontal	Fundamental
Peak		
Avg	Left blank	

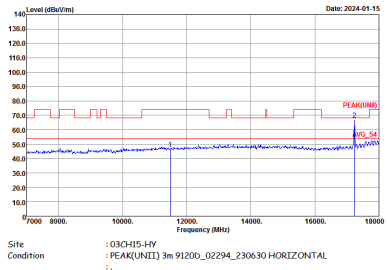
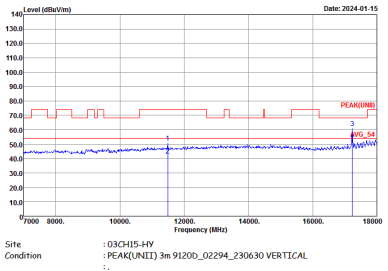
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
3+6	Horizontal	Fundamental
Peak		Left blank

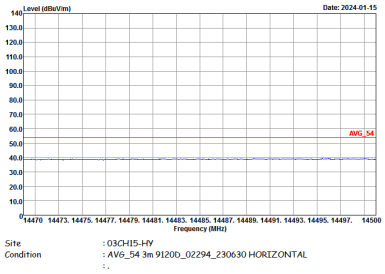
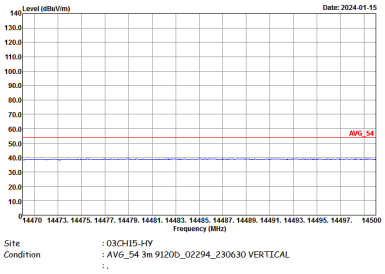
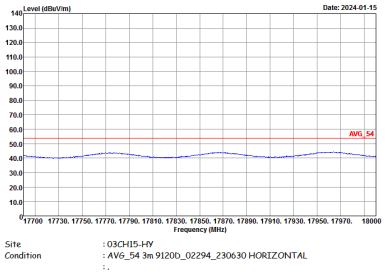
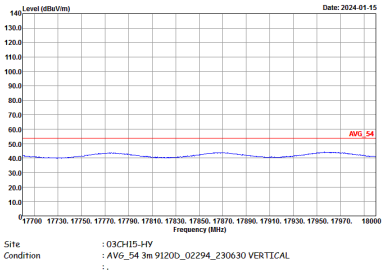
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
3+6	Vertical	Fundamental
Peak		
Avg	Left blank	

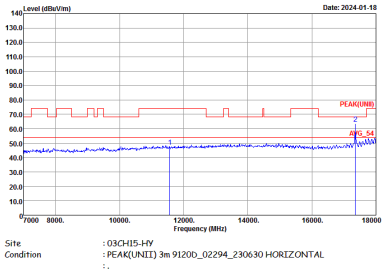
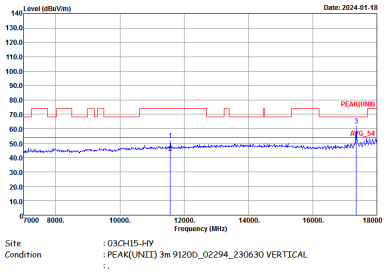
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
3+6	Vertical	Fundamental
Peak		Left blank

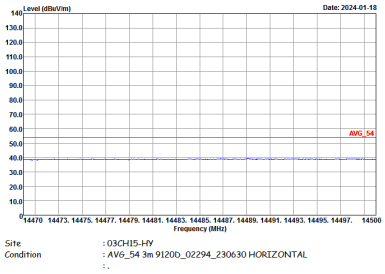
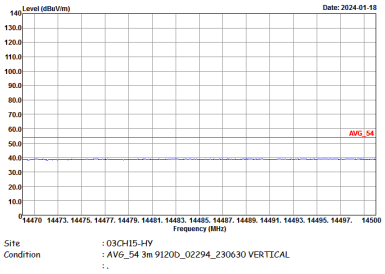
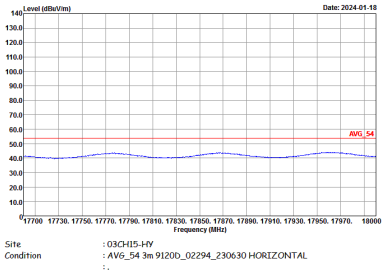
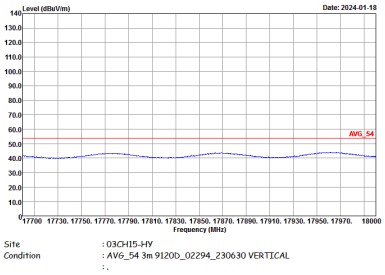
Band 4 - 5725~5850MHz

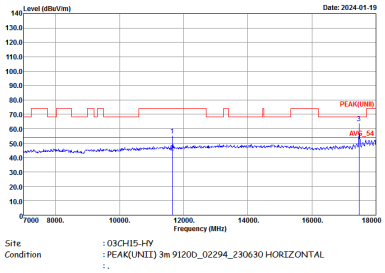
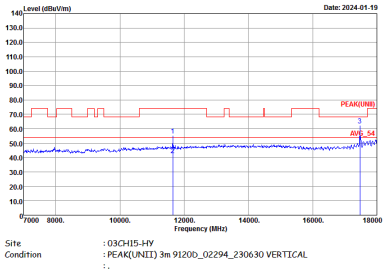
WIFI 802.11a (Harmonic @ 3m)

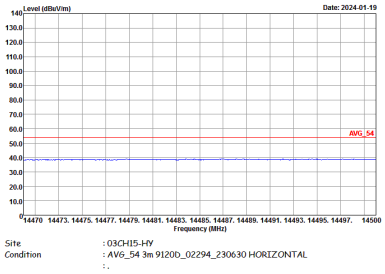
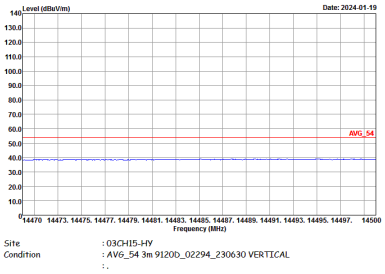
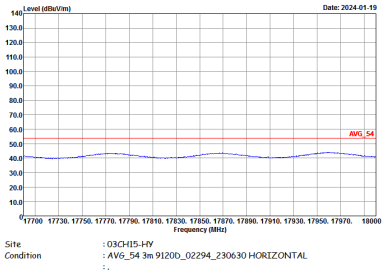
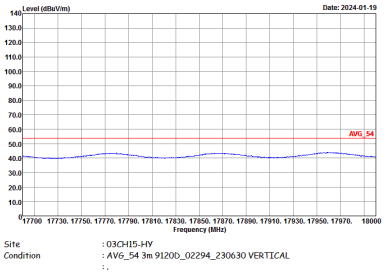
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
3+6	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
3+6	Horizontal	Vertical
Peak		
Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
3+6	Horizontal	Vertical
Peak Avg.		

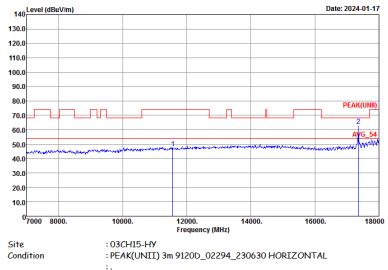
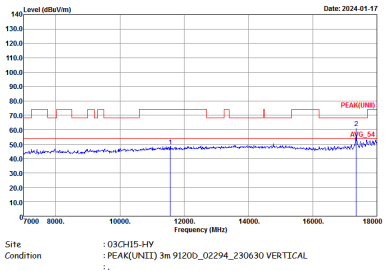
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
3+6	Horizontal	Vertical
Peak		
Avg.		

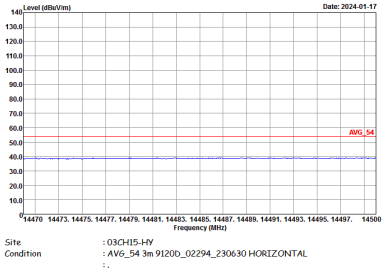
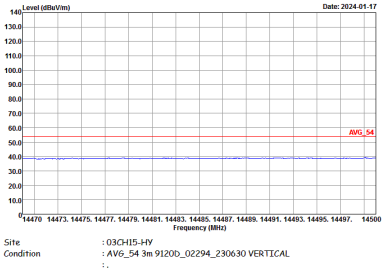
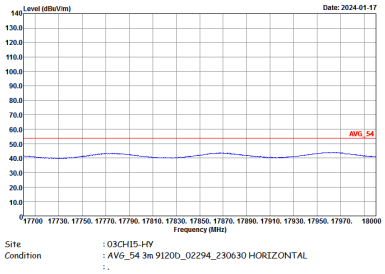
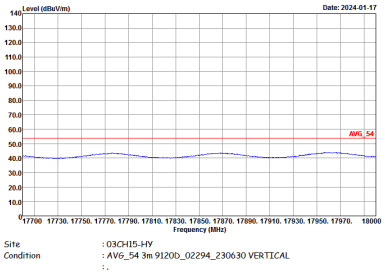
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
3+6	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
3+6	Horizontal	Vertical
Peak		
Avg.		

Band 4 5725~5850MHz

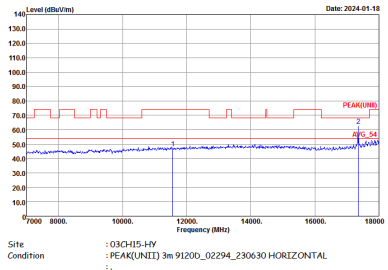
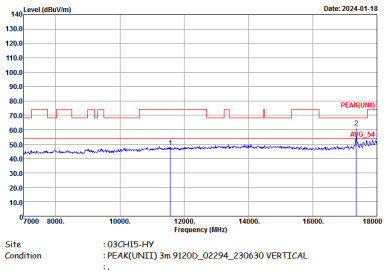
WIFI 802.11n HT20 (Harmonic @ 3m)

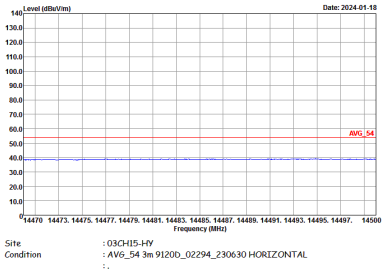
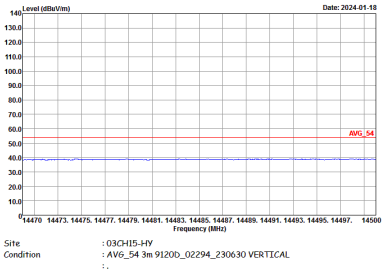
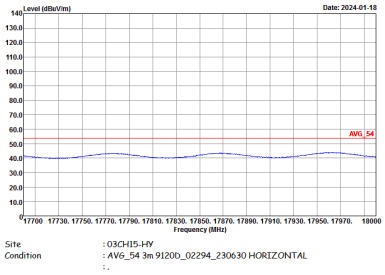
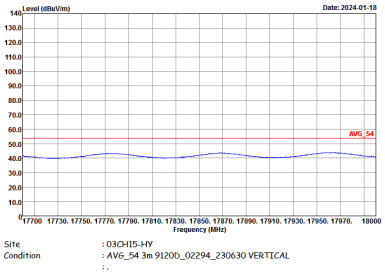
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
3+6	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
3+6	Horizontal	Vertical
Peak		
Avg.		

Band 4 5725~5850MHz

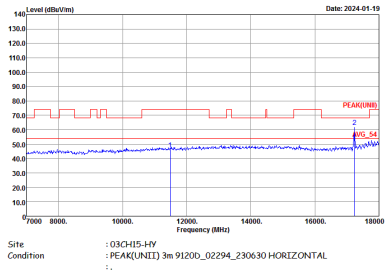
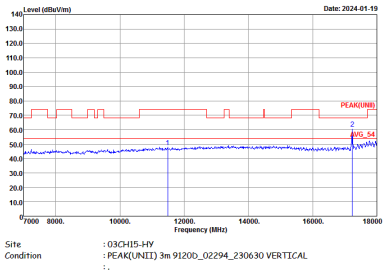
WIFI 802.11ac VHT20 (Harmonic @ 3m)

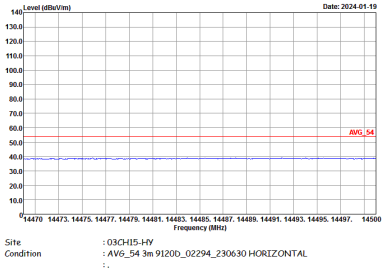
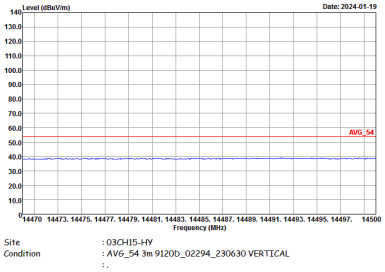
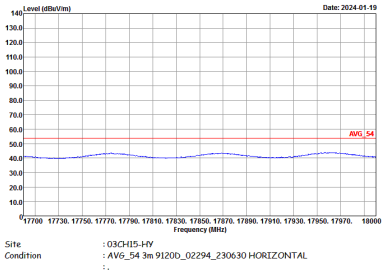
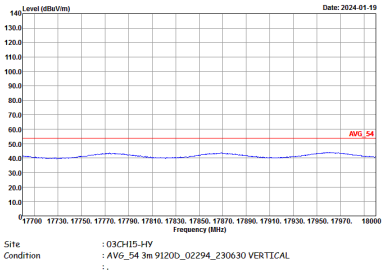
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
3+6	Horizontal	Vertical
Peak Avg.		

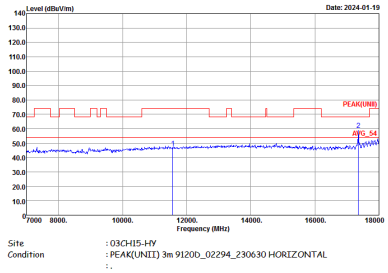
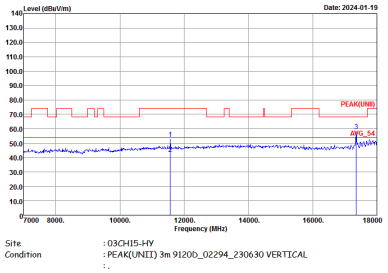
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
3+6	Horizontal	Vertical
Peak		
Avg.		

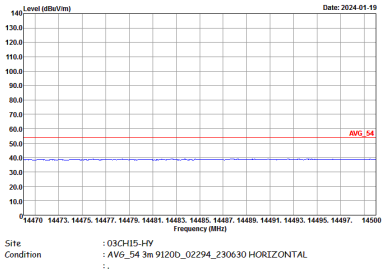
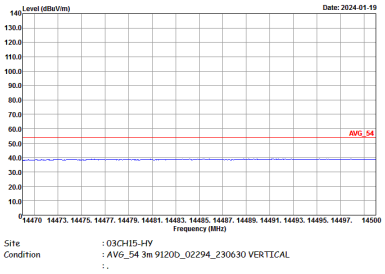
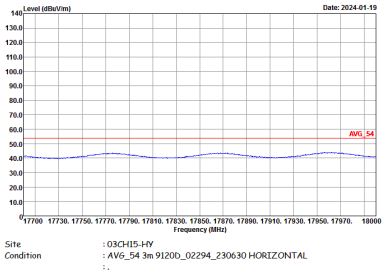
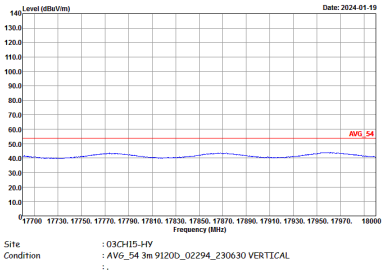
Band 4 - 5725~5850MHz

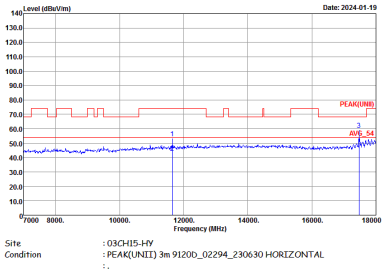
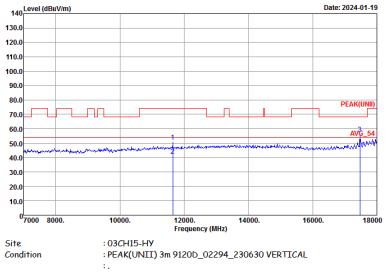
WIFI 802.11ax HE20 Full (Harmonic @ 3m)

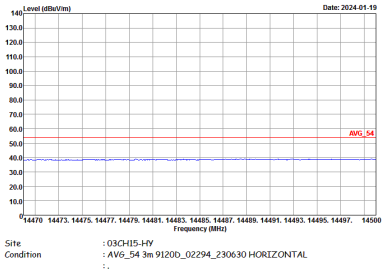
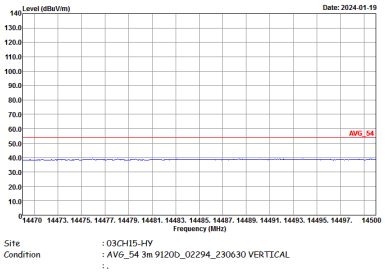
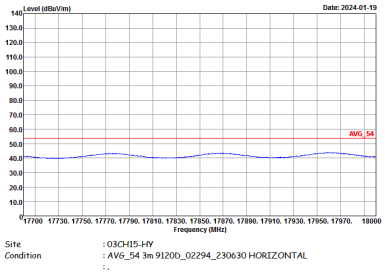
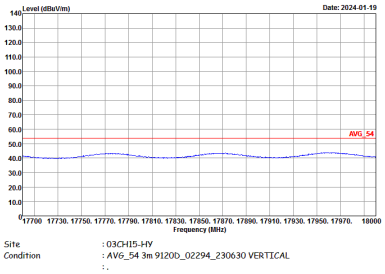
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
3+6	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
3+6	Horizontal	Vertical
Peak		
Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
3+6	Horizontal	Vertical
Peak Avg.		

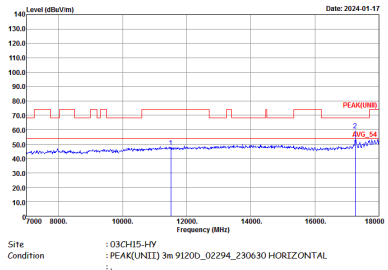
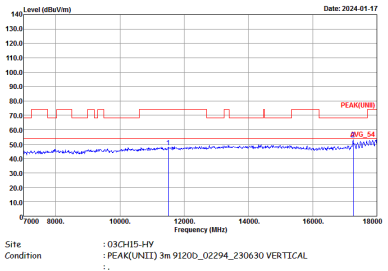
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
3+6	Horizontal	Vertical
Peak		
Avg.		

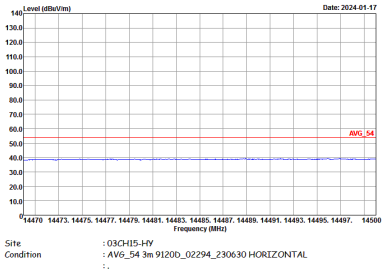
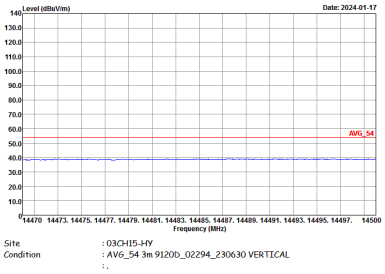
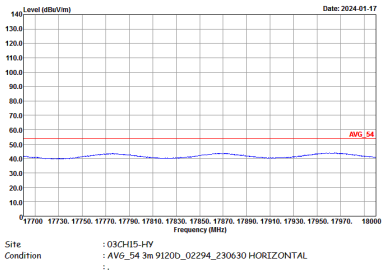
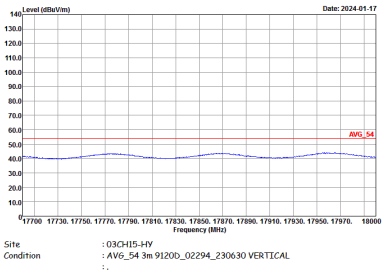
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
3+6	Horizontal	Vertical
Peak Avg.		

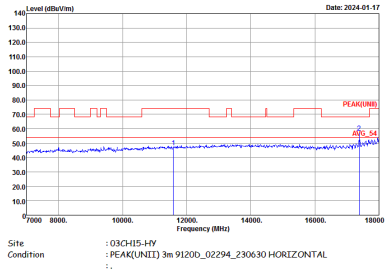
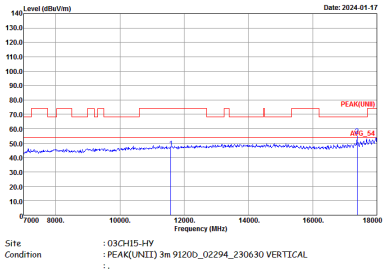
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
3+6	Horizontal	Vertical
Peak		
Avg.		

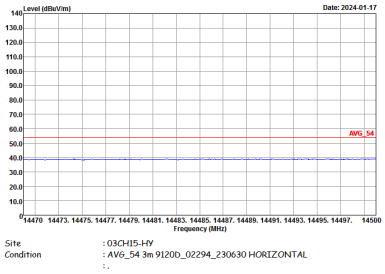
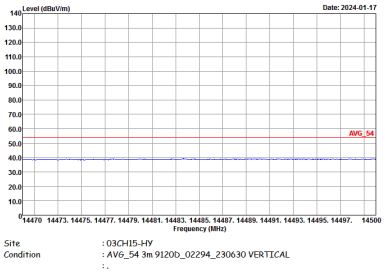
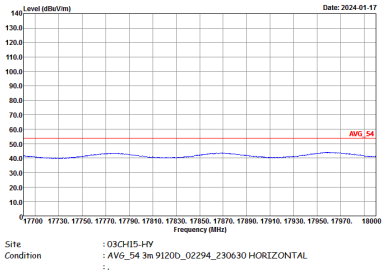
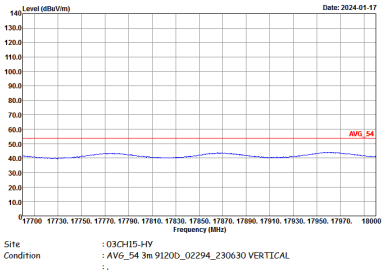
Band 4 5725~5850MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
3+6	Horizontal	Vertical
Peak Avg.		

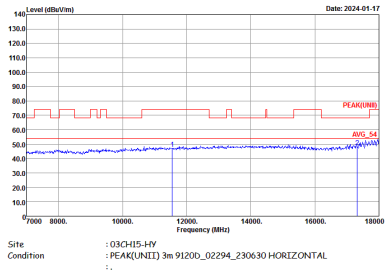
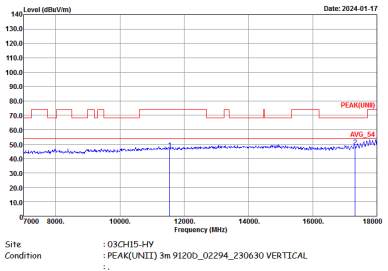
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
3+6	Horizontal	Vertical
Peak		
Avg.		

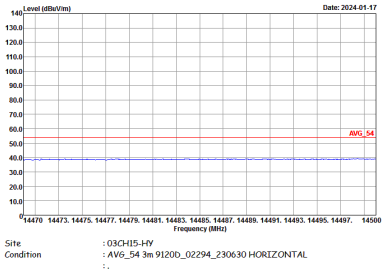
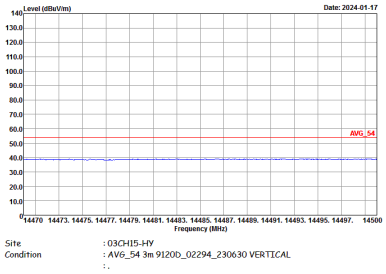
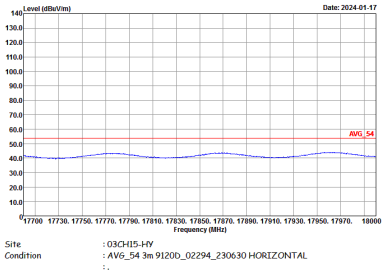
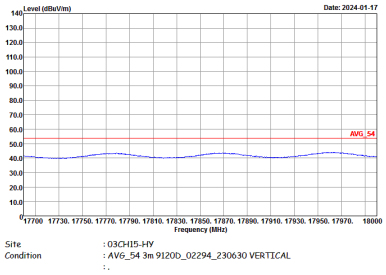
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
3+6	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
3+6	Horizontal	Vertical
Peak		
Avg.		

Band 4 5725~5850MHz

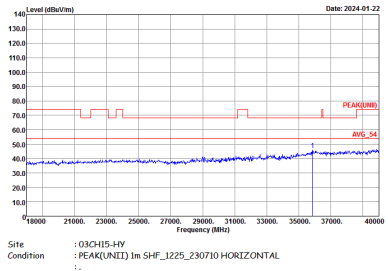
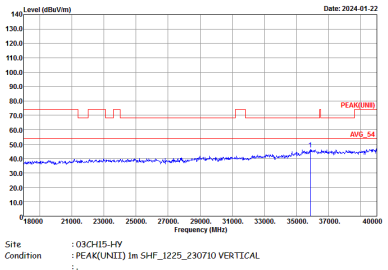
WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
3+6	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
3+6	Horizontal	Vertical
Peak		
Avg.		

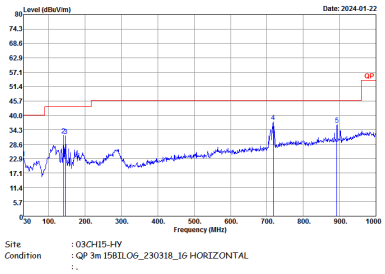
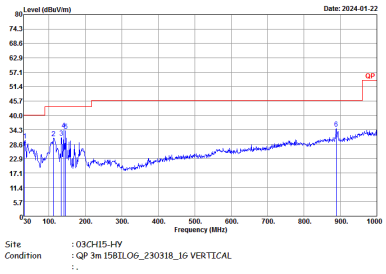
Emission above 18GHz

5GHz WIFI 802.11a (SHF @ 1m)

WIFI	5GHz WIFI	
ANT	802.11a SHF	
3+6	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

5GHz WIFI 802.11a (LF @ 3m)

WIFI	5GHz WIFI	
ANT	802.11a LF	
3+6	Horizontal	Vertical
QP / Peak		

Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
3+6	802.11a	94.62	1055	0.95	1kHz
3+6	5GHz 802.11n HT20	77.90	1075	0.93	1kHz
3+6	5GHz 802.11n HT40	83.06	1030	0.97	1kHz
3+6	5GHz 802.11ac VHT20	95.51	2550	0.39	430Hz
3+6	5GHz 802.11ac VHT40	83.59	1070	0.93	1kHz
3+6	5GHz 802.11ac VHT80	77.54	1070	0.93	1kHz
3+6	5GHz 802.11ax HE20 Full RU	76.31	950	1.05	1.1kHz
3+6	5GHz 802.11ax HE40 Full RU	81.58	930	1.08	1.1kHz
3+6	5GHz 802.11ax HE80 Full RU	75.00	930	1.08	1.1kHz

MIMO <Ant. 3+6>

802.11a	5GHz 802.11n HT20