FCC RADIO TEST REPORT

FCC ID	:	**A4RGR83Y**
Equipment	:	**Phone**
Model Name	:	**GR83Y**
Applicant	:	**Google LLC** **1600 Amphitheatre Parkway,** **Mountain View, California, 94043 USA**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on Dec. 20, 2023 and testing was performed from Jan. 08, 2024 to Apr. 03, 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

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

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History of this test report

Report No.	Version	Description	Issue Date
FR3N2325F	01	Initial issue of report	Apr. 08, 2024
FR3N2325F	02	1. Revise Section 1.1 and 2.2 2. Revise Appendix A, C, and D This report is an updated version, replacing the report issued on Apr. 08, 2024.	May 08, 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	6.59 dB under the limit at 95.61 MHz
3.5	15.207	AC Conducted Emission	Pass	15.01 dB under the limit at 0.15 MHz
3.6	15.203	Antenna Requirement	Pass	-

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

Reviewed by: William Chen

Report Producer: Rebecca Wu

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs GSM/WCDMA/LTE/5G NR, Bluetooth, BLE, BLE channel sounding, Thread, Wi-Fi 802.11be, UWB, NFC, WPT, NTN and GNSS. **Antenna Type** WLAN: <Ant. 3>: PIFA Antenna <Ant. 4>: IFA Antenna

EUT Information List	
S/N	**Performed Test Item**
41101FDAP0002H	RF Conducted Measurement
41051FDAP0001T	Radiated Spurious Emission
3B131FDAP0007E	Conducted Emission

Antenna information		
5725 MHz ~ 5850 MHz	Peak Gain (dBi)	Ant. 3: -2.5 Ant. 4: -4.7

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

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 $N_{ANT} \le 4$.

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

For PSD measurements, the directional gain calculation.

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

where

Each antenna is driven by no more than one spatial stream;
N_{SS} = the number of independent spatial streams of data;
N_{ANT} = the total number of antennas
$g_{j,k} = 10^{G_k / 20}$ if the kth antenna is being fed by spatial stream j, or zero if it is not;
G_k is the gain in dBi of the kth antenna.

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

Directional gain = $10*\log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}]$ dBi

Where G1, G2….GN denote single antenna gain.

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

	Ant 3 (dBi)	Ant 4 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band IV	-2.50	-4.70	-2.50	-0.52	0.00	0.00

Calculation example:

If a device has two antenna, G_{ANT3}= -2.5dBi; G_{ANT4}=-4.7dBi

Directional gain of power measurement = max(-2.5, -4.7) + 0 = -2.5 dBi

Directional gain of PSD derived from formula which is

10 x log { { [10^ (-2.50 dBi / 20) + 10^ (-4.70 dBi / 20)] ^ 2 } / 2 }

=-0.52 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, 03CH16-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). For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape) and accessory (Adapter or Earphone), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and find X plane with Adapter as worst plane.

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

2.1 Carrier Frequency and Channel

Frequency Band	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 and 802.11be EHT40.
2. The above Frequency and Channel with "#" are 802.11ac VHT80 and 802.11ax HE80 and 802.11be EHT80.

2.2 Test Mode

This device supports WiFi 802.11be 20MHz bandwidth for 2.4GHz and 160MHz bandwidth for both 5GHz and 6GHz.

This device supports 26/52/106/242/484/996 single tone RU modes for 802.11ax/be modes and the 242/484/996-tone RU modes are covered by 20/40/80MHz channels.

This device supports MRU 52T+26T/106T+26T (small RU) and punctured modes (large RU) for 802.11be mode.

The PSD of partial RU is reduced to be smaller than full RU according to TCB workshop interim guidance Oct. 2022.
The 802.11ax/be modes are investigated among full RU, single RU and MRU modes for emission spot check and the 11ax modes are covered by 11be modes.
The PSD and power of partial RU and MRU are less than full RU configurations so the full RU is chosen as main test configuration.

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

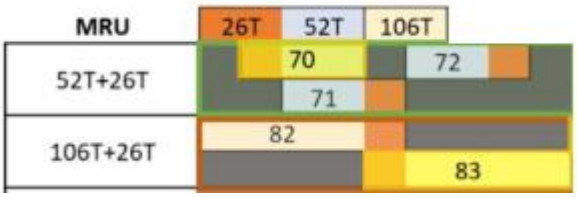
The final test modes include the worst data rates for each modulation shown in the table below.

MIMO Mode

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20 (Covered by HE20)	MCS0
802.11n HT40 (Covered by HE40)	MCS0
802.11ac VHT20 (Covered by HE20)	MCS0
802.11ac VHT40 (Covered by HE40)	MCS0
802.11ac VHT80 (Covered by HE80)	MCS0
802.11ax HE20 (Covered by EHT20)	MCS0
802.11ax HE40 (Covered by EHT40)	MCS0
802.11ax HE80 (Covered by EHT80)	MCS0
802.11be EHT20	MCS0
802.11be EHT40	MCS0
802.11be EHT80	MCS0

Index of MRU and puncture mode mapping

Small MRU



Large MRU

484+242-tone MRU			
2	1	4	3
80MHz puncture 20			
8	4	2	1

484+242-tone MRU							
2	1	4	3	6	5	8	7
160MHz puncture 20							
128	64	32	16	8	4	2	1

996+484-tone MRU			
2	1	4	3
160MHz puncture 40			
192	48	12	3

Note: The RF waveform is identical for large MRU and puncture modes.

Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + USB Cable 2 (Charging from AC Adapter)

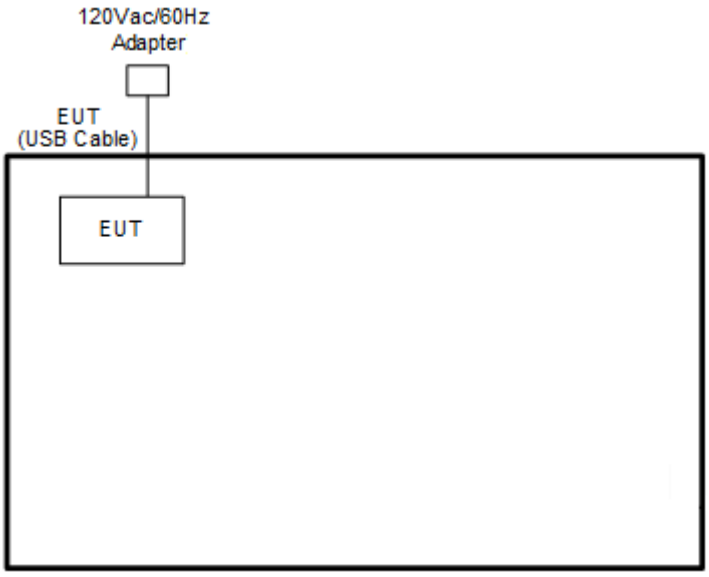
Remark:
1. For Radiated Test Cases, the tests were performed with USB Cable 2.
2. During the preliminary test, both charging modes (Adapter mode and WPT mode) were verified. It is determined that the adaptor mode is the worst case for official test.

Ch. #		Band IV：5725-5850 MHz			
		802.11a	802.11be EHT20	802.11be EHT40	802.11be EHT80
L	Low	149	149	151	-
M	Middle	157	157	-	155
H	High	165	165	159	-

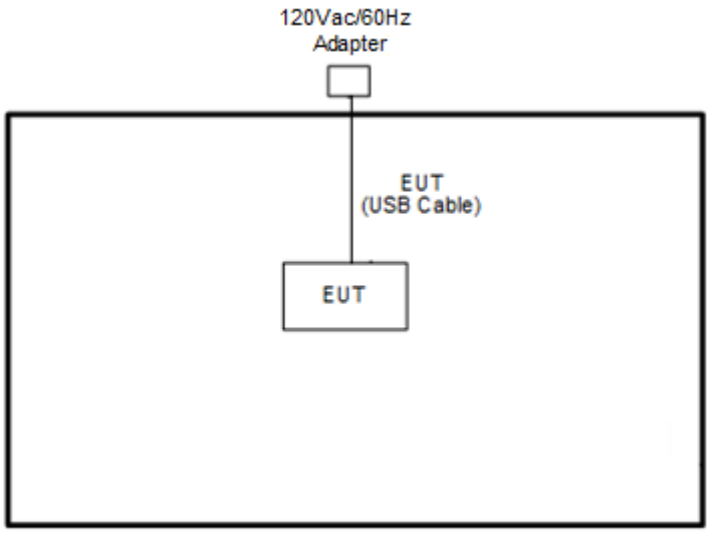
Remark: For radiation spurious emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power.

2.3 Connection Diagram of Test System

<AC Conducted Emission Mode>



<WLAN Tx Mode>



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	Latitude5480	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
2.	AC Adapter	Aohai	G9BR1	N/A	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “WLAN_DUT_Control_GUI_11-29-23” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :
The spectrum analyzer offset is derived from RF cable loss and attenuator factor.
Offset = RF cable loss + attenuator factor.
Following shows an offset computation example with cable loss 4.2 dB and 10 dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).
= 4.2 + 10 = 14.2 (dB)

3 Test Result

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

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

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

26dB and 99% Occupied bandwidth are reporting only.

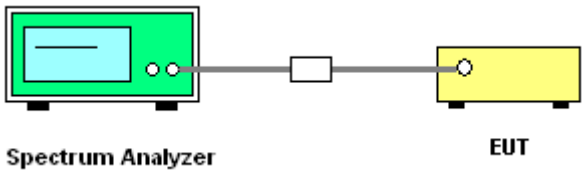
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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.

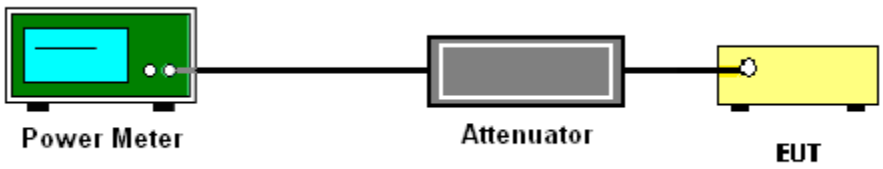
3.2.3 Test Procedures

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

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

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

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

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

Section F) Maximum power spectral density.

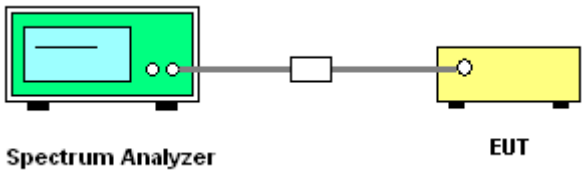
 # Method SA-2 #

(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

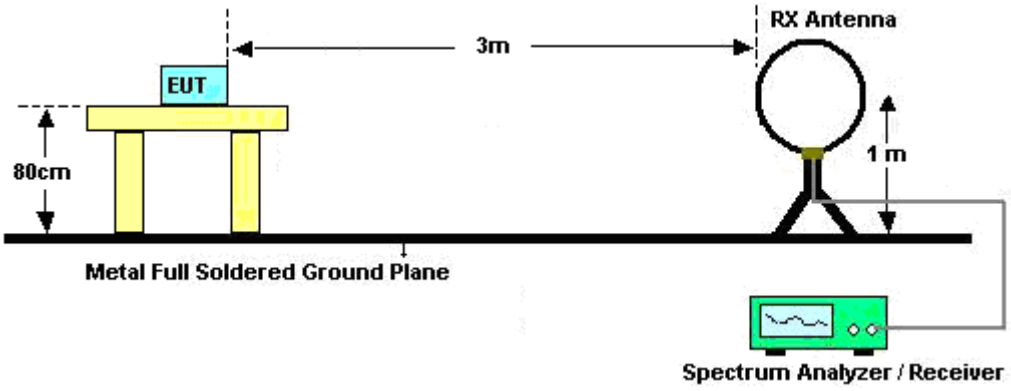
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz

   - 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.

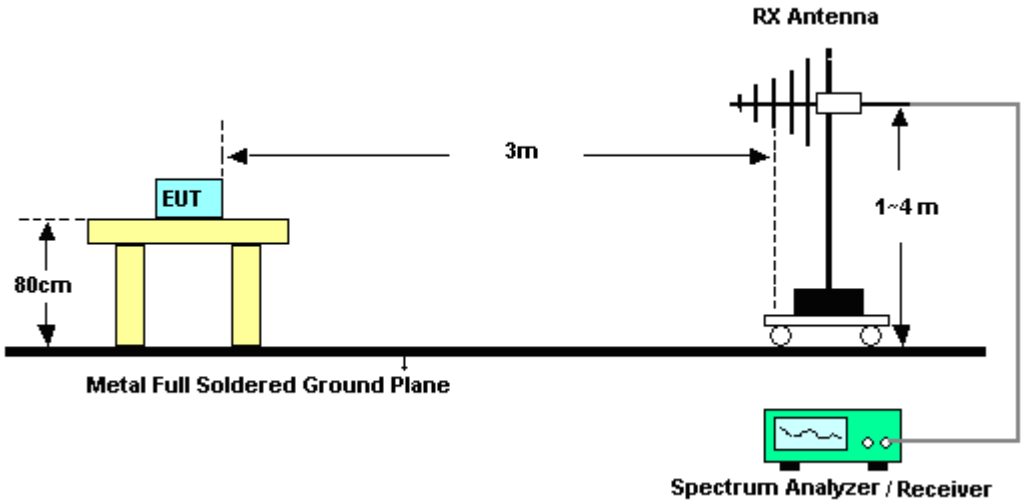
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit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

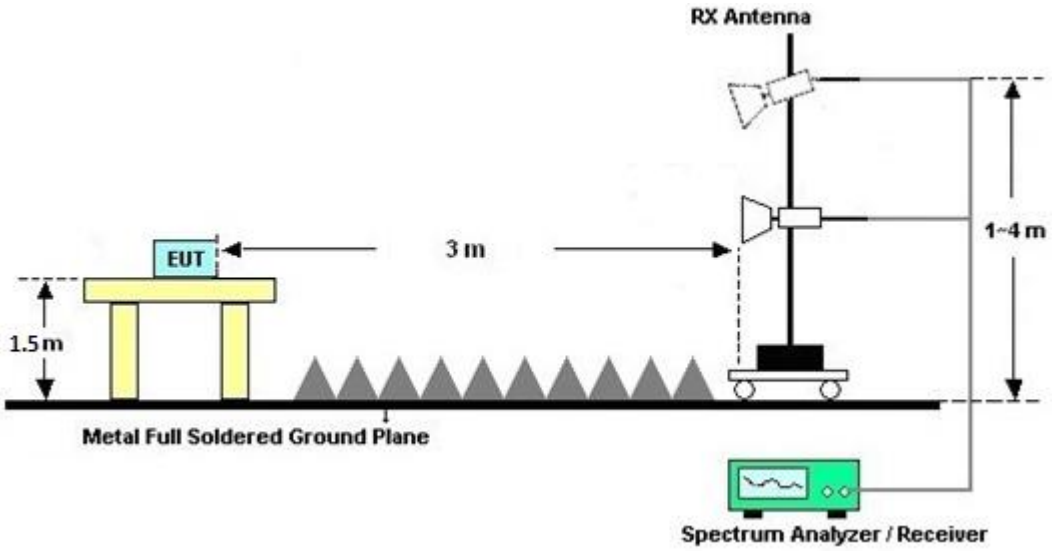
For radiated emissions below 30MHz



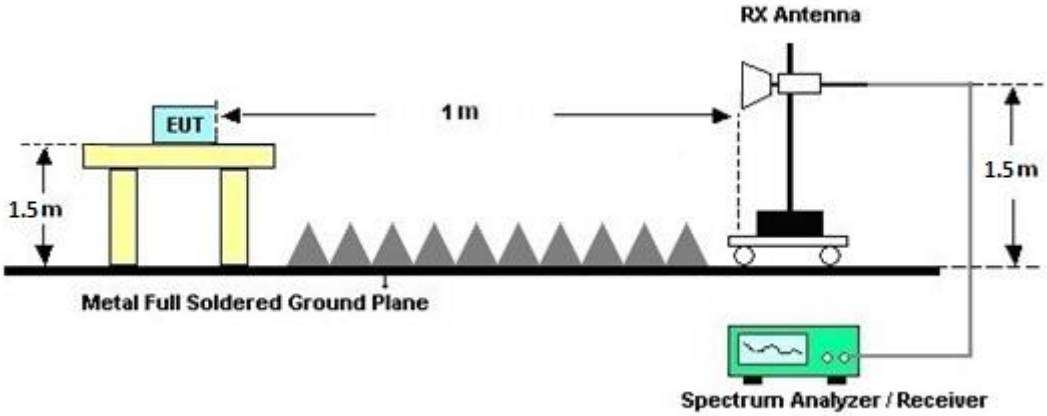
For radiated emissions from 30MHz to 1GHz



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.

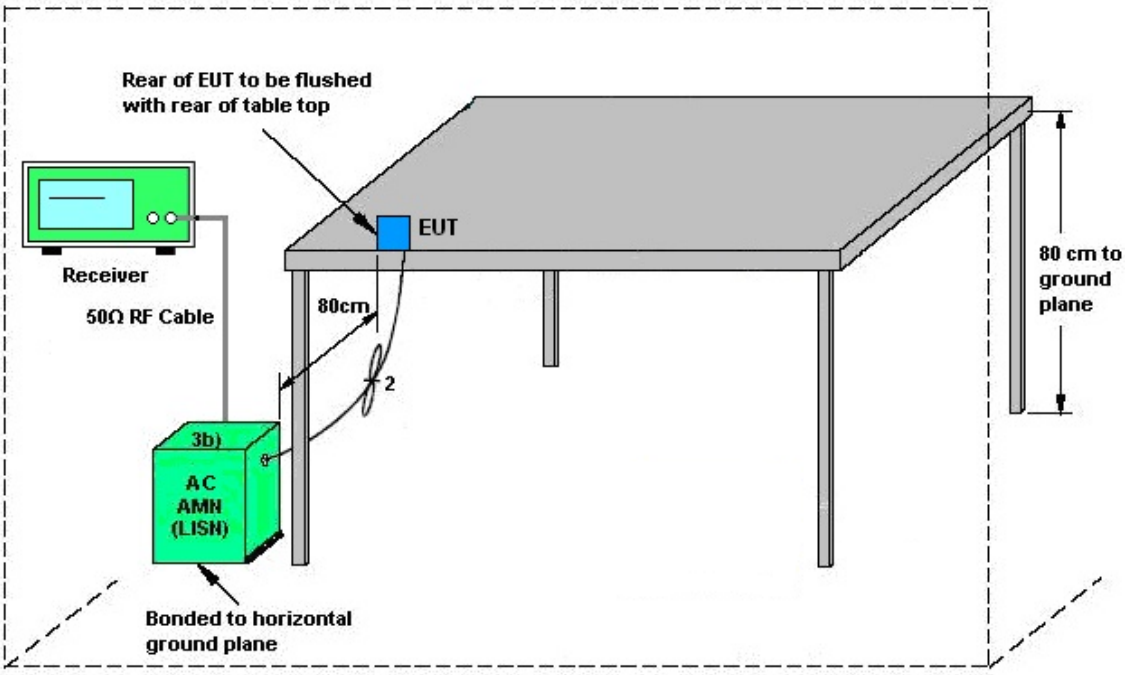
3.5.2 Measuring Instruments

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
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 07, 2023	Jan. 08, 2024~ Apr. 03, 2024	Nov. 06, 2024	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	17I00015SNO 36 (NO:35)	10MHz~6GHz	Aug. 23, 2023	Jan. 08, 2024~ Apr. 03, 2024	Aug. 22, 2024	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV3044	101466	10HZ~44GHZ	Nov. 27, 2023	Jan. 08, 2024~ Apr. 03, 2024	Nov. 26, 2024	Conducted (TH05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 12, 2023	Jan. 19, 2024~ Mar. 28, 2024	Sep. 11, 2024	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	1224	18GHz-40GHz	Jul. 10, 2023	Jan. 19, 2024~ Mar. 28, 2024	Jul. 09, 2024	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY57290111	3Hz~26.5GHz	Dec. 04, 2023	Jan. 19, 2024~ Mar. 28, 2024	Dec. 03, 2024	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N -06	47020 & 06	30MHz to 1GHz	Oct. 07, 2023	Jan. 19, 2024~ Mar. 28, 2024	Oct. 06, 2024	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1G~18GHz	Mar. 23, 2023	Jan. 19, 2024~ Mar. 21, 2024	Mar. 22, 2024	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-02038	1G~18GHz	Jul. 31, 2023	Jan. 19, 2024~ Mar. 28, 2024	Jul. 30, 2024	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1GHz	Jul. 03, 2023	Jan. 19, 2024~ Mar. 28, 2024	Jul. 02, 2024	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec. 07, 2023	Jan. 19, 2024~ Mar. 28, 2024	Dec. 06, 2024	Radiation (03CH16-HY)
Preamplifier	EMEC	EM1G18G	060812	1GHz~18GHz	Dec. 25, 2023	Jan. 19, 2024~ Mar. 28, 2024	Dec. 24, 2024	Radiation (03CH16-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun. 27, 2023	Jan. 19, 2024~ Mar. 28, 2024	Jun. 26, 2024	Radiation (03CH16-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN17	1.53GHz Low Pass Filter	Jan. 15, 2024	Jan. 19, 2024~ Mar. 28, 2024	Jan. 14, 2025	Radiation (03CH16-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN27	6.75GHz High Pass Filter	Nov. 13, 2023	Jan. 19, 2024~ Mar. 28, 2024	Nov. 12, 2024	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9K~30M	Mar. 07, 2023	Jan. 19, 2024~ Mar. 05, 2024	Mar. 06, 2024	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9K~30M	Mar. 06, 2024	Mar. 06, 2024~ Mar. 28, 2024	Mar. 05, 2025	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102/SUCOFLEX 104	EC-A5-300-5757,805935/4,802434/4	30MHz~18GHz	Aug. 08, 2023	Jan. 19, 2024~ Mar. 28, 2024	Aug. 07, 2024	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804011/2,804012/2	18-40GHz	Jan. 02, 2024	Jan. 19, 2024~ Mar. 28, 2024	Jan. 01, 2025	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Jan. 19, 2024~ Mar. 28, 2024	N/A	Radiation (03CH16-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Jan. 19, 2024~ Mar. 28, 2024	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Jan. 19, 2024~ Mar. 28, 2024	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Jan. 19, 2024~ Mar. 28, 2024	N/A	Radiation (03CH16-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ACPOWER	AFC-11003G	F317040033	N/A	N/A	Mar. 23, 2024	N/A	Conduction (CO07-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Mar. 23, 2024	N/A	Conduction (CO07-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	9561-F N00373	9kHz-200MHz	Oct. 20, 2023	Mar. 23, 2024	Oct. 19, 2024	Conduction (CO07-HY)
RF Cable	HUBER + SUHNER	RG 214/U	1358175	9kHz~30MHz	Mar. 14, 2024	Mar. 23, 2024	Mar. 13, 2025	Conduction (CO07-HY)
Two-Line V-Network	TESEQ	NNB 51	45051	N/A	Mar. 10, 2024	Mar. 23, 2024	Mar. 09, 2025	Conduction (CO07-HY)
Four-Line V-Network	TESEQ	NNB 52	36122	N/A	Mar. 07, 2024	Mar. 23, 2024	Mar. 06, 2025	Conduction (CO07-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102317	9kHz~3.6GHz	Sep. 20, 2023	Mar. 23, 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))	**6.50 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))	**4.50 dB**

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

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

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Ju Chang	Temperature:	21~25	°C
Test Date:	2024/01/08 ~ 2024/04/03	Relative Humidity:	51~54	%

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 4	Ant 3	Ant 4	Ant 3	Ant 4		
11a	6Mbps	2	149	5745	23.18	20.28	37.04	35.28	16.40	16.45	0.5	Pass
11a	6Mbps	2	157	5785	24.07	22.22	38.24	35.44	16.40	16.45	0.5	Pass
11a	6Mbps	2	165	5825	24.03	22.05	37.20	35.84	16.25	15.80	0.5	Pass

TEST RESULTS DATA
Average Power Table

U-NII-3 MIMO												
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4	
11a	6Mbps	2	149	5745	20.35	20.98	23.69	30.00		-2.50		Pass
11a	6Mbps	2	157	5785	20.45	20.98	23.73	30.00		-2.50		Pass
11a	6Mbps	2	165	5825	20.55	20.98	23.78	30.00		-2.50		Pass
HT20	MCS0	2	149	5745	20.15	20.78	23.49	30.00		-2.50		Pass
HT20	MCS0	2	157	5785	20.45	20.88	23.68	30.00		-2.50		Pass
HT20	MCS0	2	165	5825	20.45	20.88	23.68	30.00		-2.50		Pass
HT40	MCS0	2	151	5755	19.05	19.78	22.44	30.00		-2.50		Pass
HT40	MCS0	2	159	5795	19.25	19.88	22.59	30.00		-2.50		Pass
VHT20	MCS0	2	149	5745	20.15	20.78	23.49	30.00		-2.50		Pass
VHT20	MCS0	2	157	5785	20.45	20.88	23.68	30.00		-2.50		Pass
VHT20	MCS0	2	165	5825	20.45	20.88	23.68	30.00		-2.50		Pass
VHT40	MCS0	2	151	5755	19.05	19.78	22.44	30.00		-2.50		Pass
VHT40	MCS0	2	159	5795	19.25	19.88	22.59	30.00		-2.50		Pass
VHT80	MCS0	2	155	5775	19.15	19.88	22.54	30.00		-2.50		Pass

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 4	Ant 3	Ant 4	Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4	
11a	6Mbps	2	149	5745	0.00	0.00	2.22		6.95	7.62	10.63	30.00		-0.52		Pass
11a	6Mbps	2	157	5785	0.00	0.00	2.22		7.35	7.73	10.74	30.00		-0.52		Pass
11a	6Mbps	2	165	5825	0.00	0.00	2.22		6.88	7.50	10.51	30.00		-0.52		Pass

Note: PSD Sum = Max PSD(Ant. 3, Ant. 4) + 10 log (n)

TEST RESULTS DATA
Average Power Table

U-NII-3 MIMO													
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4	
HE20	MCS0	2	149	5745	Full	20.15	20.78	23.49	30.00		-2.50		Pass
HE20	MCS0	2	157	5785	Full	20.45	20.88	23.68	30.00		-2.50		Pass
HE20	MCS0	2	165	5825	Full	20.45	20.88	23.68	30.00		-2.50		Pass
HE40	MCS0	2	151	5755	Full	19.05	19.78	22.44	30.00		-2.50		Pass
HE40	MCS0	2	159	5795	Full	19.25	19.88	22.59	30.00		-2.50		Pass
HE80	MCS0	2	155	5775	Full	19.15	19.88	22.54	30.00		-2.50		Pass

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 4	Ant 3	Ant 4	Ant 3	Ant 4		
EHT20	MCS0	2	149	5745	Full	22.56	20.69	43.68	35.84	18.50	18.90	0.5	Pass
EHT20	MCS0	2	157	5785	Full	24.78	23.60	43.92	43.52	18.75	18.30	0.5	Pass
EHT20	MCS0	2	165	5825	Full	24.00	22.03	41.20	43.76	18.65	18.95	0.5	Pass
EHT40	MCS0	2	151	5755	Full	38.97	38.60	70.88	72.00	37.71	37.71	0.5	Pass
EHT40	MCS0	2	159	5795	Full	40.54	39.12	70.88	71.36	37.98	37.80	0.5	Pass
EHT80	MCS0	2	155	5775	Full	77.86	77.70	138.56	137.28	77.28	76.80	0.5	Pass

TEST RESULTS DATA
Average Power Table

U-NII-3 MIMO													
Mod.	Data Rate	N_{TX}	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4	
EHT20	MCS0	2	149	5745	Full	20.25	20.88	23.59	30.00		-2.50		Pass
EHT20	MCS0	2	149	5745	26/0	12.45	12.48	15.48	30.00		-2.50		Pass
EHT20	MCS0	2	149	5745	52/37	14.95	15.18	18.08	30.00		-2.50		Pass
EHT20	MCS0	2	149	5745	106/53	18.45	18.78	21.63	30.00		-2.50		Pass
EHT20	MCS0	2	149	5745	52T+26T/70	16.85	17.28	20.08	30.00		-2.50		Pass
EHT20	MCS0	2	149	5745	106T+26T/82	19.25	19.58	22.43	30.00		-2.50		Pass
EHT20	MCS0	2	157	5785	Full	20.55	20.98	23.78	30.00		-2.50		Pass
EHT20	MCS0	2	157	5785	26/4	12.85	12.78	15.83	30.00		-2.50		Pass
EHT20	MCS0	2	157	5785	52/38	15.35	15.48	18.43	30.00		-2.50		Pass
EHT20	MCS0	2	157	5785	106/53	18.25	18.38	21.33	30.00		-2.50		Pass
EHT20	MCS0	2	157	5785	52T+26T/71	17.15	17.38	20.28	30.00		-2.50		Pass
EHT20	MCS0	2	157	5785	106T+26T/83	19.15	19.38	22.28	30.00		-2.50		Pass
EHT20	MCS0	2	165	5825	Full	20.55	20.98	23.78	30.00		-2.50		Pass
EHT20	MCS0	2	165	5825	26/8	12.55	12.48	15.53	30.00		-2.50		Pass
EHT20	MCS0	2	165	5825	52/40	15.35	15.28	18.33	30.00		-2.50		Pass
EHT20	MCS0	2	165	5825	106/54	18.35	18.58	21.48	30.00		-2.50		Pass
EHT20	MCS0	2	165	5825	52T+26T/72	17.15	17.08	20.13	30.00		-2.50		Pass
EHT20	MCS0	2	165	5825	106T+26T/83	19.45	19.78	22.63	30.00		-2.50		Pass
EHT40	MCS0	2	151	5755	Full	19.15	19.88	22.54	30.00		-2.50		Pass
EHT40	MCS0	2	159	5795	Full	19.35	19.98	22.69	30.00		-2.50		Pass
EHT80	MCS0	2	155	5775	Full	19.25	19.98	22.64	30.00		-2.50		Pass
EHT80	MCS0	2	155	5775	Puncture20/1	18.45	18.98	21.73	30.00		-2.50		Pass

TEST RESULTS DATA
Power Spectral Density

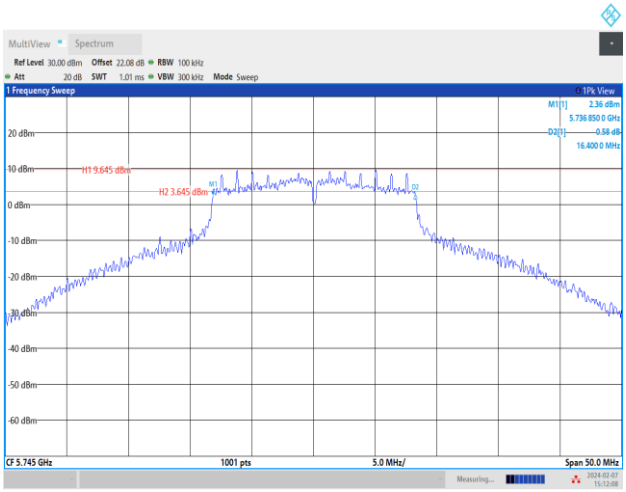
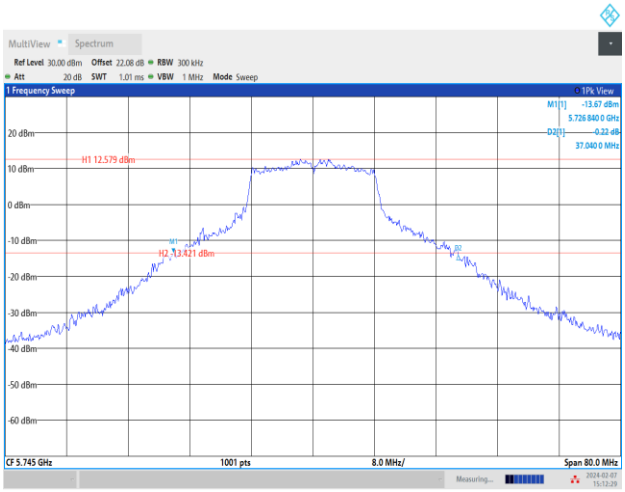
U-NII-3 MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density with Duty Factor (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
						Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4	
EHT20	MCS0	2	149	5745	Full	0.00	0.00	2.22		6.22	6.71	9.72	30.00		-0.52		Pass
EHT20	MCS0	2	149	5745	26/0	0.08	0.08	2.22		6.18	6.33	9.34	30.00		-0.52		Pass
EHT20	MCS0	2	149	5745	52/37	0.12	0.09	2.22		6.02	6.23	9.24	30.00		-0.52		Pass
EHT20	MCS0	2	149	5745	106/53	0.13	0.13	2.22		6.14	6.58	9.59	30.00		-0.52		Pass
EHT20	MCS0	2	149	5745	52T+26T/70	0.00	0.05	2.22		6.19	6.42	9.43	30.00		-0.52		Pass
EHT20	MCS0	2	149	5745	106T+26T/82	0.09	0.09	2.22		6.18	6.66	9.67	30.00		-0.52		Pass
EHT20	MCS0	2	157	5785	Full	0.00	0.00	2.22		6.56	7.11	10.12	30.00		-0.52		Pass
EHT20	MCS0	2	157	5785	26/4	0.08	0.08	2.22		6.43	6.79	9.80	30.00		-0.52		Pass
EHT20	MCS0	2	157	5785	52/38	0.12	0.09	2.22		6.53	6.61	9.62	30.00		-0.52		Pass
EHT20	MCS0	2	157	5785	106/53	0.13	0.13	2.22		6.46	6.62	9.63	30.00		-0.52		Pass
EHT20	MCS0	2	157	5785	52T+26T/71	0.00	0.05	2.22		6.46	6.86	9.87	30.00		-0.52		Pass
EHT20	MCS0	2	157	5785	106T+26T/83	0.09	0.09	2.22		6.42	6.64	9.65	30.00		-0.52		Pass
EHT20	MCS0	2	165	5825	Full	0.00	0.00	2.22		6.22	6.83	9.84	30.00		-0.52		Pass
EHT20	MCS0	2	165	5825	26/8	0.08	0.08	2.22		6.21	6.36	9.37	30.00		-0.52		Pass
EHT20	MCS0	2	165	5825	52/40	0.12	0.09	2.22		5.90	6.34	9.35	30.00		-0.52		Pass
EHT20	MCS0	2	165	5825	106/54	0.13	0.13	2.22		6.02	6.36	9.37	30.00		-0.52		Pass
EHT20	MCS0	2	165	5825	52T+26T/72	0.00	0.05	2.22		5.96	6.35	9.36	30.00		-0.52		Pass
EHT20	MCS0	2	165	5825	106T+26T/83	0.09	0.09	2.22		6.19	6.47	9.48	30.00		-0.52		Pass
EHT40	MCS0	2	151	5755	Full	0.07	0.07	2.22		2.16	2.90	5.91	30.00		-0.52		Pass
EHT40	MCS0	2	159	5795	Full	0.07	0.07	2.22		2.56	3.04	6.05	30.00		-0.52		Pass
EHT80	MCS0	2	155	5775	Full	0.12	0.12	2.22		-0.43	0.20	3.21	30.00		-0.52		Pass
EHT80	MCS0	2	155	5775	Puncture20/1	0.09	0.09	2.22		-0.54	-0.23	2.78	30.00		-0.52		Pass

Note: PSD Sum = Max PSD(Ant. 3, Ant. 4) + 10 log (n)

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

MIMO <Ant. 3+4>

<802.11a>

6dB Bandwidth	26dB Bandwidth
	
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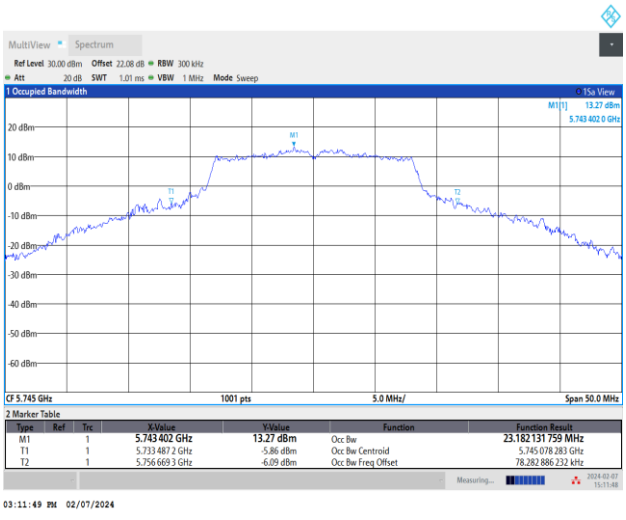
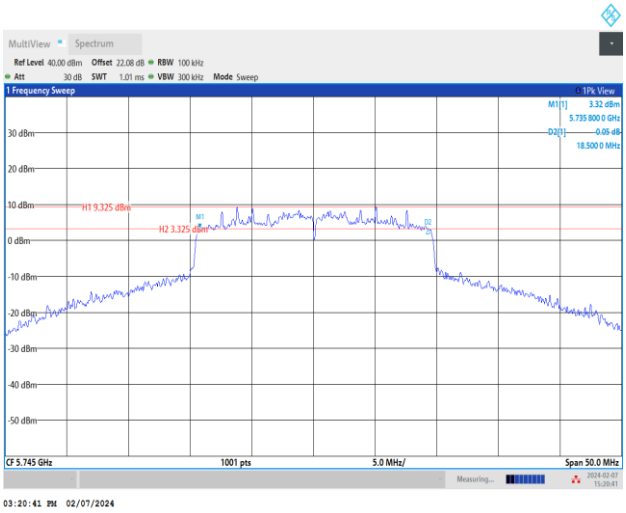
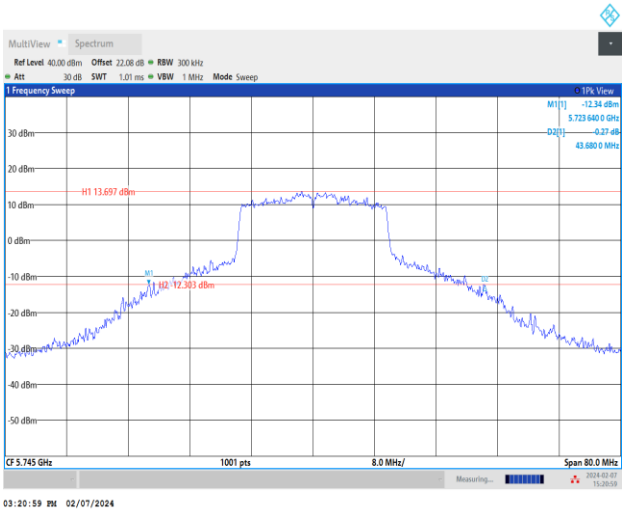
	

<802.11be EHT20>

6dB Bandwidth	26dB Bandwidth
	
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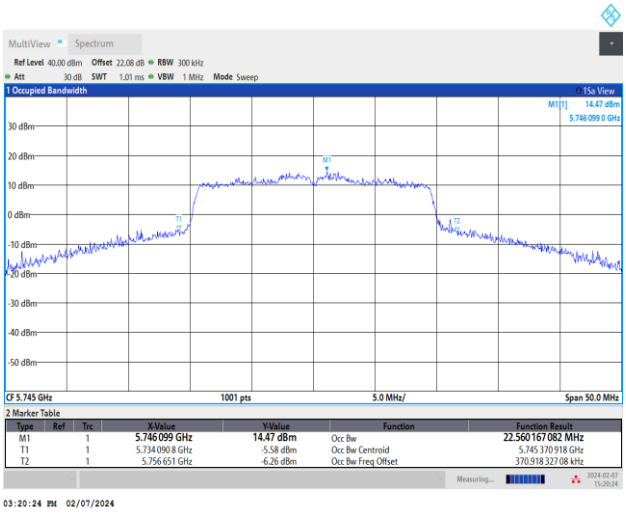	

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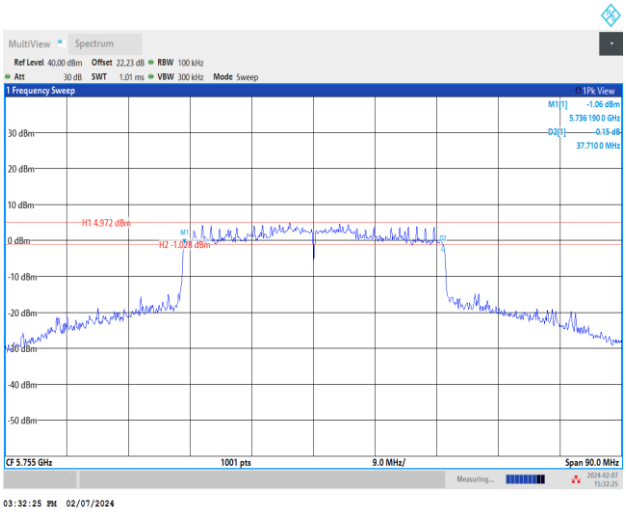
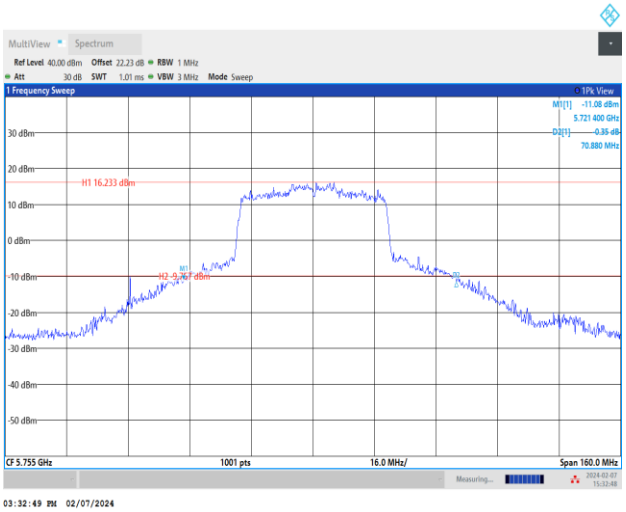
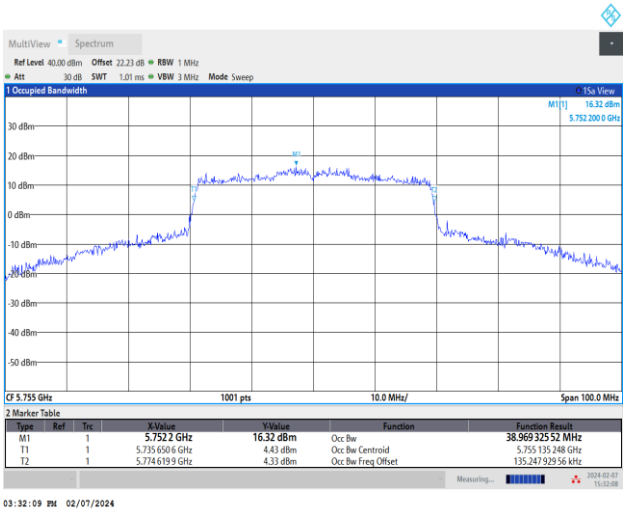
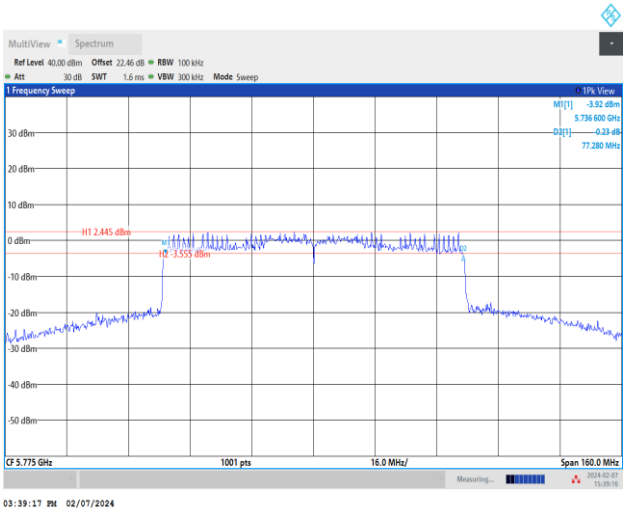
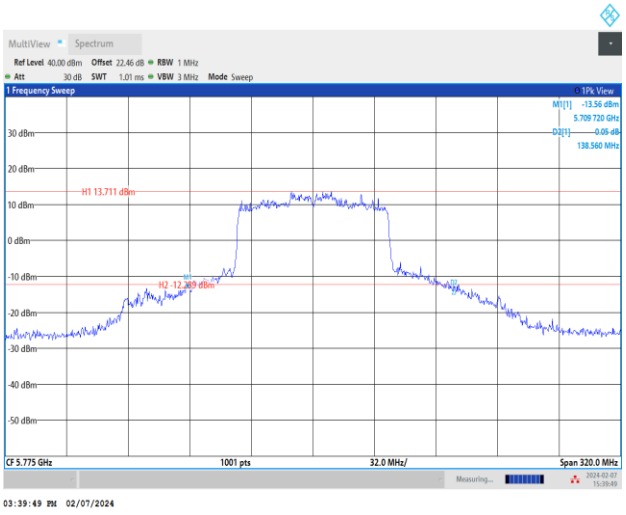
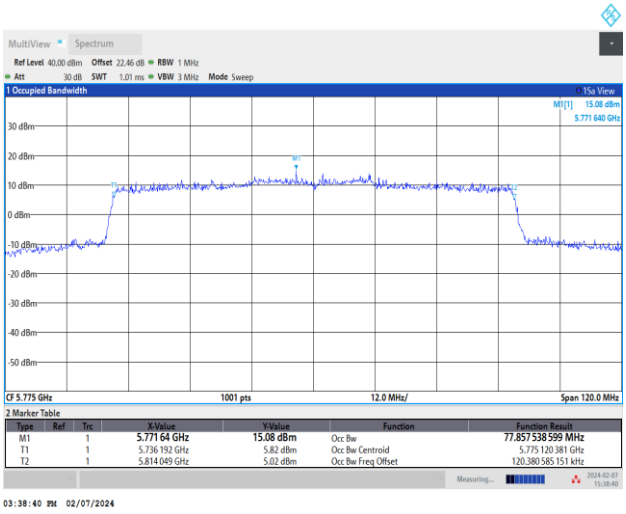
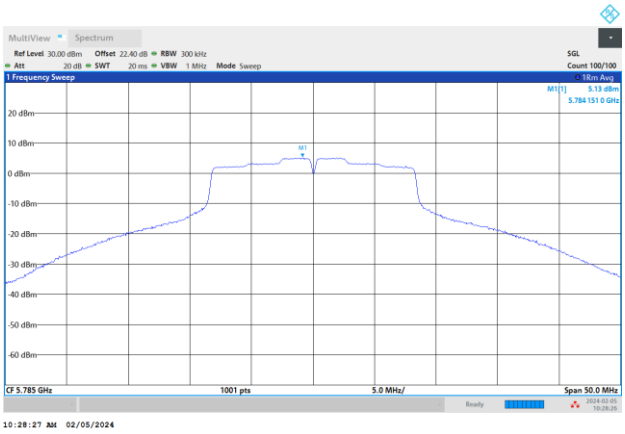
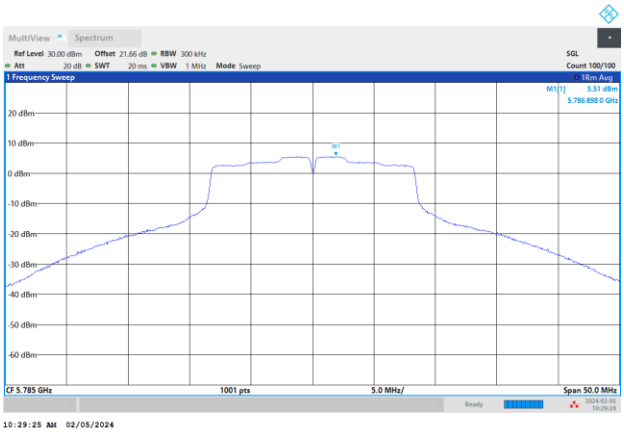
6dB Bandwidth	26dB Bandwidth
	
99% Occupied Bandwidth	**N/A**
	

<802.11be EHT80>

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

Test Result of Power Spectral Density

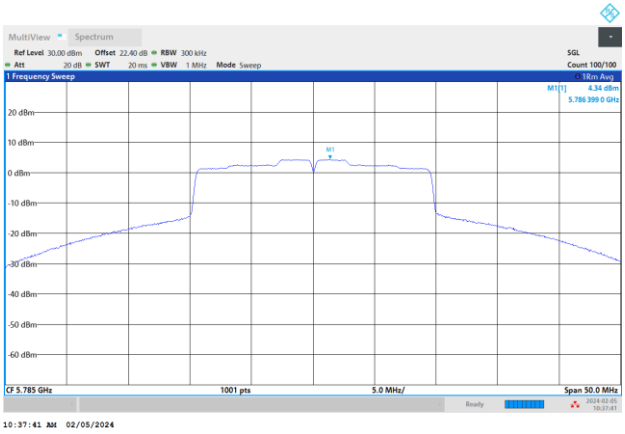
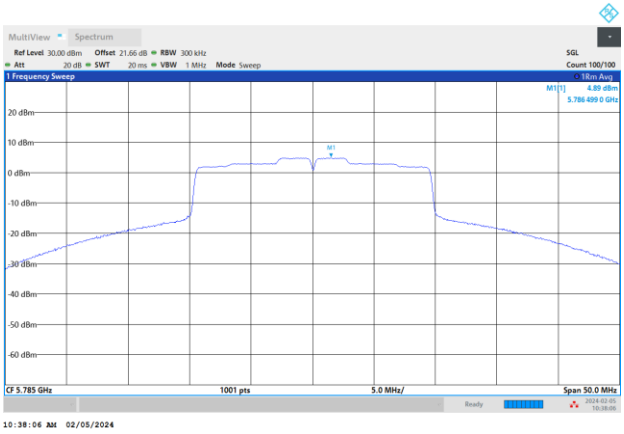
<802.11a>

Maximum Power Density Plot (dBm/300kHz)	
MIMO Ant. 3	**MIMO Ant. 4**
	

Note:

1. EIRP Power Density (dBm/MHz) = Measured value+ Duty Factor + Directional Gain
2. The test plot is showing a bin by bin combined result mathematically adds two traces.

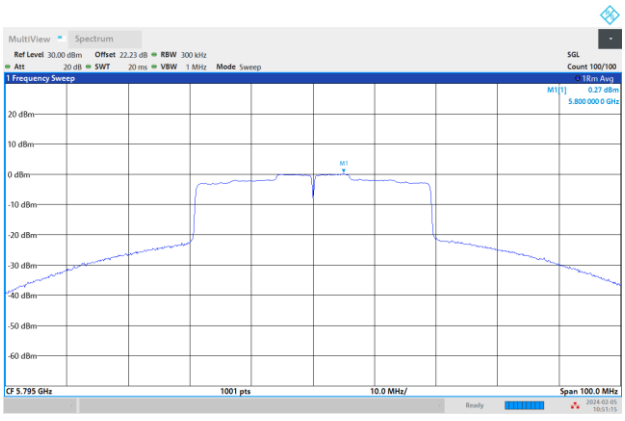
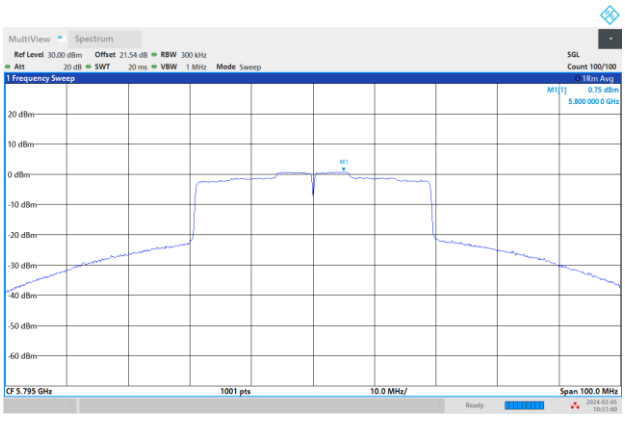
<802.11be EHT20>

Maximum Power Density Plot (dBm/300kHz)	
MIMO Ant. 3	**MIMO Ant. 4**
	

Note:

1. EIRP Power Density (dBm/MHz) = Measured value+ Duty Factor + Directional Gain
2. The test plot is showing a bin by bin combined result mathematically adds two traces.

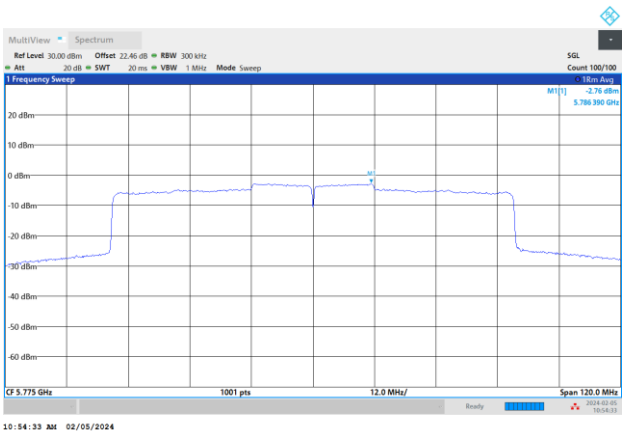
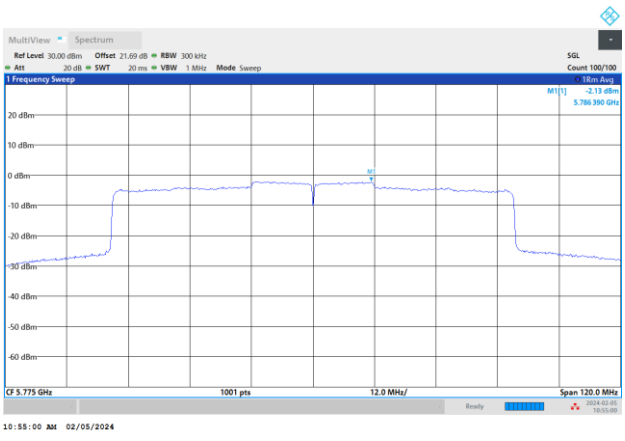
<802.11be EHT40>

Maximum Power Density Plot (dBm/300kHz)	
MIMO Ant. 3	**MIMO Ant. 4**
	

Note:

1. EIRP Power Density (dBm/MHz) = Measured value+ Duty Factor + Directional Gain
2. The test plot is showing a bin by bin combined result mathematically adds two traces.

<802.11be EHT80>

Maximum Power Density Plot (dBm/300kHz)	
MIMO Ant. 3	**MIMO Ant. 4**
	

Note:

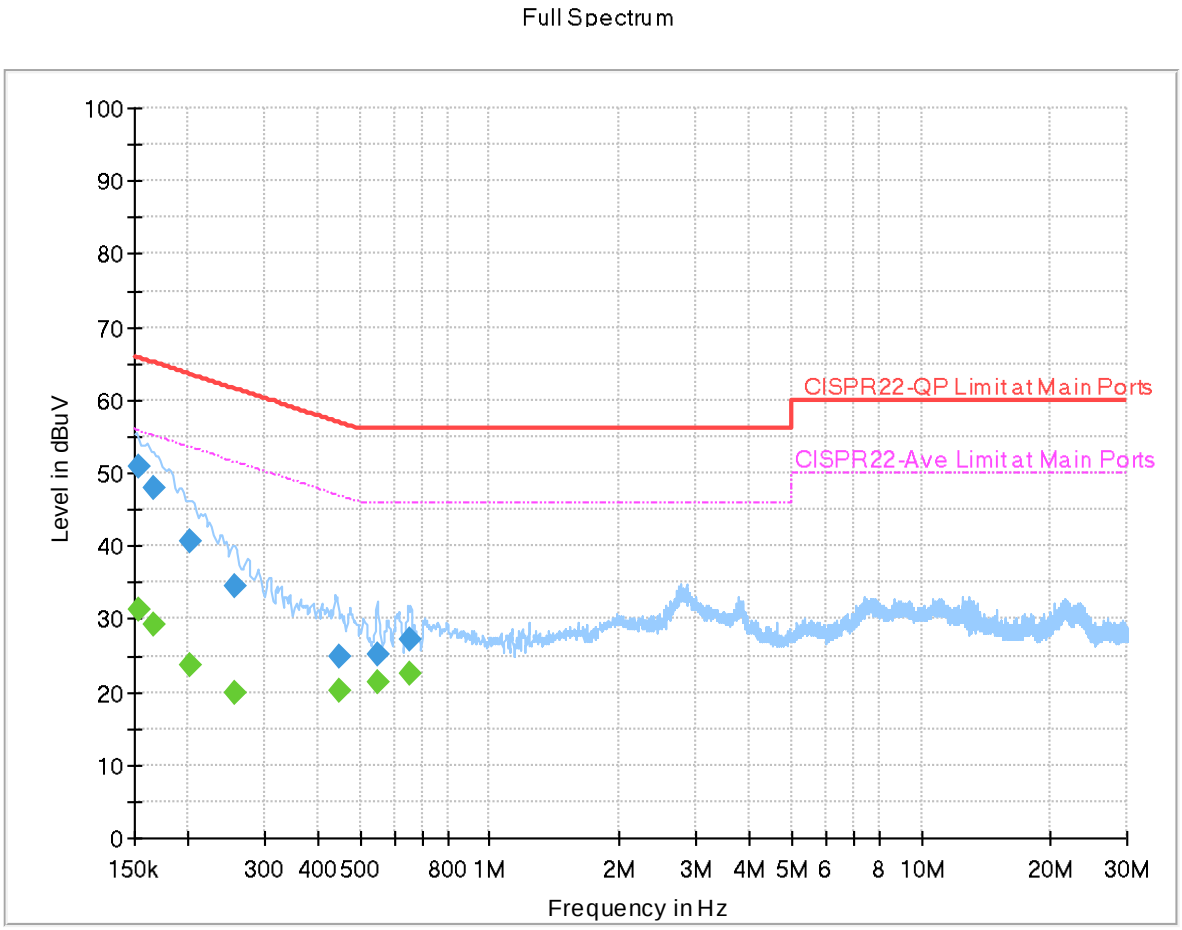
1. EIRP Power Density (dBm/MHz) = Measured value+ Duty Factor + Directional Gain
2. The test plot is showing a bin by bin combined result mathematically adds two traces.

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Louis Chung	**Temperature :**	19.2~23.3℃
		Relative Humidity :	49.5~53.6%

EUT Information

Report NO :	3N2325
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

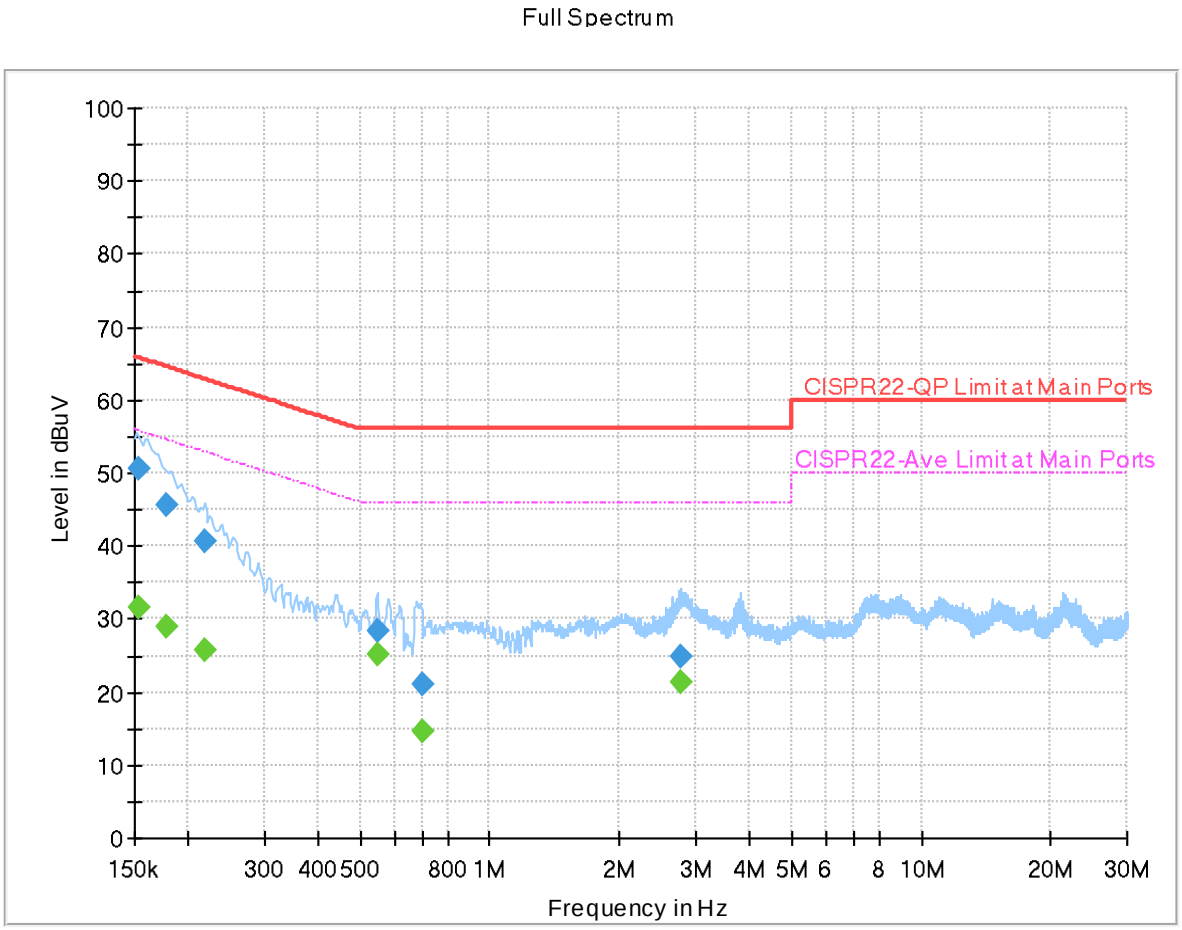


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.153713	---	31.38	55.80	24.42	L1	OFF	19.9
0.153713	50.79	---	65.80	15.01	L1	OFF	19.9
0.165750	---	29.26	55.17	25.91	L1	OFF	19.9
0.165750	47.81	---	65.17	17.36	L1	OFF	19.9
0.201750	---	23.69	53.54	29.85	L1	OFF	19.9
0.201750	40.54	---	63.54	23.00	L1	OFF	19.9
0.256560	---	19.97	51.54	31.57	L1	OFF	19.9
0.256560	34.41	---	61.54	27.13	L1	OFF	19.9
0.447000	---	20.24	46.93	26.69	L1	OFF	19.9
0.447000	24.77	---	56.93	32.16	L1	OFF	19.9
0.547530	---	21.49	46.00	24.51	L1	OFF	19.9
0.547530	25.21	---	56.00	30.79	L1	OFF	19.9
0.652380	---	22.54	46.00	23.46	L1	OFF	19.9
0.652380	27.28	---	56.00	28.72	L1	OFF	19.9

EUT Information

Report NO :	3N2325
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)
0.152903	---	31.53	55.84	24.31	N	OFF	19.9
0.152903	50.70	---	65.84	15.14	N	OFF	19.9
0.177090	---	28.98	54.62	25.64	N	OFF	19.9
0.177090	45.65	---	64.62	18.97	N	OFF	19.9
0.218040	---	25.59	52.89	27.30	N	OFF	19.9
0.218040	40.65	---	62.89	22.24	N	OFF	19.9
0.549150	---	25.06	46.00	20.94	N	OFF	19.9
0.549150	28.24	---	56.00	27.76	N	OFF	19.9
0.696750	---	14.55	46.00	31.45	N	OFF	19.9
0.696750	21.02	---	56.00	34.98	N	OFF	19.9
2.783670	---	21.41	46.00	24.59	N	OFF	20.0
2.783670	24.80	---	56.00	31.20	N	OFF	20.0

Appendix C. Radiated Spurious Emission

Test Engineer :	Jack Tsai, Bill Chang, Gary Guo, and Steven Wu	**Temperature :**	18.2~20.2°C
		Relative Humidity :	54.2~56.1%

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Margin	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
3+4		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5603.4	55.42	-12.78	68.2	40.03	32.91	11.85	29.37	101	324	P	H
		5699	60.82	-43.64	104.46	44.89	33.39	11.93	29.39	101	324	P	H
		5719.6	70.89	-39.8	110.69	54.81	33.52	11.95	29.39	101	324	P	H
		5724.6	77.5	-43.79	121.29	61.39	33.55	11.95	29.39	101	324	P	H
	*	5745	112.59	-	-	96.35	33.67	11.97	29.4	101	324	P	H
	*	5745	105.64	-	-	89.4	33.67	11.97	29.4	101	324	A	H
													H
													H
		5648.4	55.4	-12.8	68.2	39.8	33.09	11.89	29.38	333	121	P	V
		5697.8	58.27	-45.31	103.58	42.34	33.39	11.93	29.39	333	121	P	V
		5719.6	68.89	-41.8	110.69	52.81	33.52	11.95	29.39	333	121	P	V
		5724.4	75.21	-45.62	120.83	59.1	33.55	11.95	29.39	333	121	P	V
	*	5745	109	-	-	92.76	33.67	11.97	29.4	333	121	P	V
	*	5745	103.62	-	-	87.38	33.67	11.97	29.4	333	121	A	V
													V
													V

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5620.4	57	-11.2	68.2	41.52	32.98	11.87	29.37	100	326	P	H
		5676	56.56	-30.92	87.48	40.78	33.26	11.91	29.39	100	326	P	H
		5713	57.88	-50.96	108.84	41.85	33.48	11.94	29.39	100	326	P	H
		5722.6	57.14	-59.59	116.73	41.04	33.54	11.95	29.39	100	326	P	H
	*	5785	112.49	-	-	96.06	33.84	12	29.41	100	326	P	H
	*	5785	105.3	-	-	88.87	33.84	12	29.41	100	326	A	H
		5852.2	56.66	-60.52	117.18	39.93	34.01	12.14	29.42	100	326	P	H
		5856.2	56.76	-53.7	110.46	40.01	34.02	12.15	29.42	100	326	P	H
		5920.2	56.98	-14.76	71.74	39.91	34.2	12.3	29.43	100	326	P	H
		5937	57.14	-11.06	68.2	40.03	34.2	12.35	29.44	100	326	P	H
													H
802.11a CH 157 5785MHz													H
		5604.6	55.51	-12.69	68.2	40.11	32.92	11.85	29.37	384	117	P	V
		5682.8	56.08	-36.43	92.51	40.25	33.3	11.92	29.39	384	117	P	V
		5714.6	55.88	-53.41	109.29	39.84	33.49	11.94	29.39	384	117	P	V
		5720	55.35	-55.45	110.8	39.27	33.52	11.95	29.39	384	117	P	V
	*	5785	110.22	-	-	93.79	33.84	12	29.41	384	117	P	V
	*	5785	103.57	-	-	87.14	33.84	12	29.41	384	117	A	V
		5851.4	56.26	-62.75	119.01	39.53	34.01	12.14	29.42	384	117	P	V
		5856.6	57.7	-52.65	110.35	40.94	34.03	12.15	29.42	384	117	P	V
		5921	56.75	-14.4	71.15	39.67	34.2	12.31	29.43	384	117	P	V
		5935.4	57.46	-10.74	68.2	40.36	34.2	12.34	29.44	384	117	P	V
													V
													V

WIFI Ant. 3+4	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	111.09	-	-	94.49	33.95	12.07	29.42	100	326	P	H
	*	5825	105.28	-	-	88.68	33.95	12.07	29.42	100	326	A	H
		5850.2	74.33	-47.41	121.74	57.62	34	12.13	29.42	100	326	P	H
		5856.6	71.15	-39.2	110.35	54.39	34.03	12.15	29.42	100	326	P	H
		5877	63.04	-40.67	103.71	46.16	34.11	12.2	29.43	100	326	P	H
		5949.4	57.8	-10.4	68.2	40.66	34.2	12.38	29.44	100	326	P	H
													H
802.11a													H
CH 165	*	5825	108.94	-	-	92.34	33.95	12.07	29.42	398	117	P	V
5825MHz	*	5825	102.47	-	-	85.87	33.95	12.07	29.42	398	117	A	V
		5851	68.4	-51.52	119.92	51.69	34	12.13	29.42	398	117	P	V
		5861.6	67.02	-41.93	108.95	50.23	34.05	12.16	29.42	398	117	P	V
		5879.8	57.67	-43.96	101.63	40.77	34.12	12.21	29.43	398	117	P	V
		5937.2	56.85	-11.35	68.2	39.74	34.2	12.35	29.44	398	117	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+4	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		11490	47.78	-26.22	74	57.07	39	17.48	65.77	-	-	P	H
		17235	49.33	-18.87	68.2	54.79	38.2	21.95	65.61	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		11490	47.77	-26.23	74	57.06	39	17.48	65.77	-	-	P	V
		17235	50.16	-18.04	68.2	55.62	38.2	21.95	65.61	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 3+4	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	47.83	-26.17	74	57.24	38.86	17.54	65.81	-	-	P	H
		17355	48.07	-20.13	68.2	53.03	38.52	22	65.48	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
802.11a CH 157 5785MHz													H
		11570	47.86	-26.14	74	57.27	38.86	17.54	65.81	-	-	P	V
		17355	47.37	-20.83	68.2	52.33	38.52	22	65.48	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 3+4	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	47.4	-26.6	74	57.04	38.6	17.61	65.85	-	-	P	H
		17475	49.73	-18.47	68.2	54.27	38.75	22.06	65.35	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
802.11a CH 165 5825MHz													H
		11650	47.53	-26.47	74	57.17	38.6	17.61	65.85	-	-	P	V
		17475	48.84	-19.36	68.2	53.38	38.75	22.06	65.35	-	-	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 802.11be (EHT20)_Full (Band Edge @ 3m)

WIFI Ant. 3+4	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)
802.11be (EHT20) Full CH 149 5745MHz		5605	56.31	-11.89	68.2	40.91	32.92	11.85	29.37	100	324	P	H
		5692.8	61.2	-38.69	99.89	45.31	33.36	11.92	29.39	100	324	P	H
		5719.8	75.98	-34.76	110.74	59.9	33.52	11.95	29.39	100	324	P	H
		5725	80.76	-41.44	122.2	64.66	33.55	11.95	29.4	100	324	P	H
	*	5745	110.87	-	-	94.63	33.67	11.97	29.4	100	324	P	H
	*	5745	103.97	-	-	87.73	33.67	11.97	29.4	100	324	A	H
													H
													H
		5649	56.47	-11.73	68.2	40.86	33.1	11.89	29.38	335	120	P	V
		5696.6	61.91	-40.78	102.69	45.99	33.38	11.93	29.39	335	120	P	V
		5719.8	75.52	-35.22	110.74	59.44	33.52	11.95	29.39	335	120	P	V
		5725	80.48	-41.72	122.2	64.38	33.55	11.95	29.4	335	120	P	V
	*	5745	107.79	-	-	91.55	33.67	11.97	29.4	335	120	P	V
	*	5745	101.97	-	-	85.73	33.67	11.97	29.4	335	120	A	V
													V
													V

WIFI Ant. 3+4	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)
		5640.8	56.56	-11.64	68.2	41	33.06	11.88	29.38	100	328	P	H
		5696.2	57.4	-45	102.4	41.48	33.38	11.93	29.39	100	328	P	H
		5715.6	58.14	-51.43	109.57	42.1	33.49	11.94	29.39	100	328	P	H
		5722.8	58.2	-58.98	117.18	42.1	33.54	11.95	29.39	100	328	P	H
	*	5785	109.82	-	-	93.39	33.84	12	29.41	100	328	P	H
	*	5785	104.18	-	-	87.75	33.84	12	29.41	100	328	A	H
		5854.8	58.34	-52.92	111.26	41.6	34.02	12.14	29.42	100	328	P	H
		5862.2	57.48	-51.3	108.78	40.69	34.05	12.16	29.42	100	328	P	H
		5885.4	57.03	-40.45	97.48	40.1	34.14	12.22	29.43	100	328	P	H
		5934.2	56.55	-11.65	68.2	39.45	34.2	12.34	29.44	100	328	P	H
802.11be (EHT20) Full CH 157 5785MHz													H
													H
		5618.2	56.19	-12.01	68.2	40.73	32.97	11.86	29.37	346	119	P	V
		5680	55.58	-34.86	90.44	39.78	33.28	11.91	29.39	346	119	P	V
		5707.4	55.98	-51.29	107.27	39.99	33.44	11.94	29.39	346	119	P	V
		5720.4	56.39	-55.32	111.71	40.31	33.52	11.95	29.39	346	119	P	V
	*	5785	108.39	-	-	91.96	33.84	12	29.41	346	119	P	V
	*	5785	102.12	-	-	85.69	33.84	12	29.41	346	119	A	V
		5851.4	57.25	-61.76	119.01	40.52	34.01	12.14	29.42	346	119	P	V
		5872.2	56.81	-49.17	105.98	39.95	34.09	12.19	29.42	346	119	P	V
		5894.6	57.51	-33.15	90.66	40.52	34.18	12.24	29.43	346	119	P	V
		5944.8	57.18	-11.02	68.2	40.06	34.2	12.36	29.44	346	119	P	V
													V
													V

WIFI Ant. 3+4	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)
802.11be (EHT20) Full CH 165 5825MHz	*	5825	109.99	-	-	93.39	33.95	12.07	29.42	100	324	P	H
	*	5825	103.68	-	-	87.08	33.95	12.07	29.42	100	324	A	H
		5850	74.71	-47.49	122.2	58	34	12.13	29.42	100	324	P	H
		5856.8	69.47	-40.83	110.3	52.71	34.03	12.15	29.42	100	324	P	H
		5878.8	63.48	-38.9	102.38	46.59	34.12	12.2	29.43	100	324	P	H
		5935	58.18	-10.02	68.2	41.08	34.2	12.34	29.44	100	324	P	H
													H
													H
	*	5825	106.88	-	-	90.28	33.95	12.07	29.42	307	111	P	V
	*	5825	100.97	-	-	84.37	33.95	12.07	29.42	307	111	A	V
		5850	74.39	-47.81	122.2	57.68	34	12.13	29.42	307	111	P	V
		5855.2	68.24	-42.5	110.74	51.49	34.02	12.15	29.42	307	111	P	V
		5875.6	62.5	-42.25	104.75	45.63	34.1	12.2	29.43	307	111	P	V
		5937.8	57.83	-10.37	68.2	40.72	34.2	12.35	29.44	307	111	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 802.11be (EHT20) Full (Harmonic @ 3m)

WIFI Ant. 3+4	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)
802.11be (EHT20) Full CH 149 5745MHz		11490	47.86	-26.14	74	57.15	39	17.48	65.77	-	-	P	H
		17235	49.95	-18.25	68.2	55.41	38.2	21.95	65.61	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		11490	47.73	-26.27	74	57.02	39	17.48	65.77	-	-	P	V
		17235	48.3	-19.9	68.2	53.76	38.2	21.95	65.61	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 3+4	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	47.74	-26.26	74	57.15	38.86	17.54	65.81	-	-	P	H
		17355	49.01	-19.19	68.2	53.97	38.52	22	65.48	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
802.11be (EHT20) Full CH 157 5785MHz		11570	47.84	-26.16	74	57.25	38.86	17.54	65.81	-	-	P	V
		17355	48.36	-19.84	68.2	53.32	38.52	22	65.48	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 3+4	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)
802.11be (EHT20) Full CH 165 5825MHz		11650	47.04	-26.96	74	56.68	38.6	17.61	65.85	-	-	P	H
		17475	49.92	-18.28	68.2	54.46	38.75	22.06	65.35	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		11650	47.73	-26.27	74	57.37	38.6	17.61	65.85	-	-	P	V
		17475	49.18	-19.02	68.2	53.72	38.75	22.06	65.35	-	-	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 802.11be (EHT20)_Partial 26 (Band Edge @ 3m)

WIFI Ant. 3+4	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)
802.11be (EHT20) Partial 26/0 CH 149 5745MHz		5620.4	56.98	-11.22	68.2	41.42	33.06	11.87	29.37	100	241	P	H
		5697	56.29	-46.7	102.99	40.47	33.28	11.93	29.39	100	241	P	H
		5718.4	65.96	-44.39	110.35	49.93	33.48	11.94	29.39	100	241	P	H
		5723.8	68.12	-51.34	119.46	52.02	33.54	11.95	29.39	100	241	P	H
	*	5745	113.65	-	-	97.33	33.75	11.97	29.4	100	241	P	H
	*	5745	106.13	-	-	89.81	33.75	11.97	29.4	100	241	A	H
													H
													H
		5622.6	56.71	-11.49	68.2	41.16	33.05	11.87	29.37	299	302	P	V
		5660.6	55.88	-20.19	76.07	40.3	33.06	11.9	29.38	299	302	P	V
		5718.2	61.14	-49.16	110.3	45.11	33.48	11.94	29.39	299	302	P	V
		5724	63.12	-56.8	119.92	47.02	33.54	11.95	29.39	299	302	P	V
	*	5745	109.5	-	-	93.18	33.75	11.97	29.4	299	302	P	V
	*	5745	101.58	-	-	85.26	33.75	11.97	29.4	299	302	A	V
													V
													V

WIFI Ant. 3+4	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)
802.11be (EHT20) Partial 26/8 CH 165 5825MHz	*	5825	112.48	-	-	95.88	33.95	12.07	29.42	102	323	P	H
	*	5825	106.03	-	-	89.43	33.95	12.07	29.42	102	323	A	H
		5850.4	61.94	-59.35	121.29	45.23	34	12.13	29.42	102	323	P	H
		5866.2	59.2	-48.46	107.66	42.39	34.06	12.17	29.42	102	323	P	H
		5893.2	57.58	-34.12	91.7	40.6	34.17	12.24	29.43	102	323	P	H
		5932	57.27	-10.93	68.2	40.18	34.2	12.33	29.44	102	323	P	H
													H
													H
	*	5825	105.85	-	-	89.25	33.95	12.07	29.42	100	120	P	V
	*	5825	101.14	-	-	84.54	33.95	12.07	29.42	100	120	A	V
		5852.4	58.37	-58.36	116.73	41.64	34.01	12.14	29.42	100	120	P	V
		5871	58.63	-47.69	106.32	41.79	34.08	12.18	29.42	100	120	P	V
		5876.6	57.59	-46.42	104.01	40.71	34.11	12.2	29.43	100	120	P	V
		5934	57.59	-10.61	68.2	40.49	34.2	12.34	29.44	100	120	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 802.11be (EHT20)_Partial 52 (Band Edge @ 3m)

WIFI Ant. 3+4	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)
		5645.6	56.21	-11.99	68.2	40.69	33.01	11.89	29.38	100	242	P	H
		5689.8	56.1	-41.58	97.68	40.33	33.24	11.92	29.39	100	242	P	H
		5719	67.73	-42.79	110.52	51.68	33.49	11.95	29.39	100	242	P	H
		5723.6	71.05	-47.96	119.01	54.95	33.54	11.95	29.39	100	242	P	H
	*	5745	113.66	-	-	97.34	33.75	11.97	29.4	100	242	P	H
802.11be	*	5745	104.96	-	-	88.64	33.75	11.97	29.4	100	242	A	H
(EHT20)													H
Partial													H
52/37		5608.2	56.03	-12.17	68.2	40.46	33.08	11.86	29.37	300	302	P	V
CH 149		5696	55.29	-46.96	102.25	39.47	33.28	11.93	29.39	300	302	P	V
5745MHz		5719.4	63.92	-46.71	110.63	47.87	33.49	11.95	29.39	300	302	P	V
		5723.6	67.38	-51.63	119.01	51.28	33.54	11.95	29.39	300	302	P	V
	*	5745	107.93	-	-	91.61	33.75	11.97	29.4	300	302	P	V
	*	5745	101.5	-	-	85.18	33.75	11.97	29.4	300	302	A	V
													V
													V

WIFI Ant. 3+4	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	110.24	-	-	93.64	33.95	12.07	29.42	101	324	P	H
	*	5825	105.26	-	-	88.66	33.95	12.07	29.42	101	324	A	H
		5852.6	68.01	-48.26	116.27	51.28	34.01	12.14	29.42	101	324	P	H
		5861.8	65.3	-43.59	108.89	48.51	34.05	12.16	29.42	101	324	P	H
		5896.2	58.31	-31.16	89.47	41.31	34.18	12.25	29.43	101	324	P	H
802.11be		5925.4	57.49	-10.71	68.2	40.41	34.2	12.32	29.44	101	324	P	H
(EHT20)													H
Partial													H
52/40	*	5825	108.96	-	-	92.36	33.95	12.07	29.42	320	116	P	V
CH 165	*	5825	102.46	-	-	85.86	33.95	12.07	29.42	320	116	A	V
5825MHz		5853.6	64.71	-49.28	113.99	47.98	34.01	12.14	29.42	320	116	P	V
		5863.6	61.29	-47.1	108.39	44.49	34.05	12.17	29.42	320	116	P	V
		5890.8	57.45	-36.02	93.47	40.49	34.16	12.23	29.43	320	116	P	V
		5938.6	57.4	-10.8	68.2	40.29	34.2	12.35	29.44	320	116	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 802.11be (EHT20)_Partial 106 (Band Edge @ 3m)

WIFI Ant. 3+4	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)
		5641.6	56.59	-11.61	68.2	41.07	33.02	11.88	29.38	107	240	P	H
		5697.2	59.82	-43.32	103.14	44	33.28	11.93	29.39	107	240	P	H
		5719.6	70.23	-40.46	110.69	54.17	33.5	11.95	29.39	107	240	P	H
		5724.6	75.55	-45.74	121.29	59.44	33.55	11.95	29.39	107	240	P	H
	*	5745	112.39	-	-	96.07	33.75	11.97	29.4	107	240	P	H
802.11be	*	5745	105.05	-	-	88.73	33.75	11.97	29.4	107	240	A	H
(EHT20)													H
Partial													H
106/53		5647.4	55.48	-12.72	68.2	39.96	33.01	11.89	29.38	300	301	P	V
CH 149		5695.8	56.3	-45.8	102.1	40.49	33.27	11.93	29.39	300	301	P	V
5745MHz		5720	67.03	-43.77	110.8	50.97	33.5	11.95	29.39	300	301	P	V
		5721.6	69.84	-44.61	114.45	53.76	33.52	11.95	29.39	300	301	P	V
	*	5745	108.25	-	-	91.93	33.75	11.97	29.4	300	301	P	V
	*	5745	100.98	-	-	84.66	33.75	11.97	29.4	300	301	A	V
													V
													V

WIFI Ant. 3+4	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	112.06	-	-	95.46	33.95	12.07	29.42	100	324	P	H
	*	5825	105.45	-	-	88.85	33.95	12.07	29.42	100	324	A	H
		5852.2	72.35	-44.83	117.18	55.62	34.01	12.14	29.42	100	324	P	H
		5856.6	69.81	-40.54	110.35	53.05	34.03	12.15	29.42	100	324	P	H
		5875.8	61.38	-43.23	104.61	44.51	34.1	12.2	29.43	100	324	P	H
802.11be		5932.6	58.35	-9.85	68.2	41.26	34.2	12.33	29.44	100	324	P	H
(EHT20)													H
Partial													H
106/54	*	5825	108.09	-	-	91.49	33.95	12.07	29.42	335	115	P	V
CH 165	*	5825	102.09	-	-	85.49	33.95	12.07	29.42	335	115	A	V
5825MHz		5850	68.42	-53.78	122.2	51.71	34	12.13	29.42	335	115	P	V
		5859.4	66.63	-42.94	109.57	49.85	34.04	12.16	29.42	335	115	P	V
		5878.2	57.52	-45.3	102.82	40.64	34.11	12.2	29.43	335	115	P	V
		5935.8	57.06	-11.14	68.2	39.96	34.2	12.34	29.44	335	115	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 802.11be (EHT40)_Full (Band Edge @ 3m)

WIFI Ant. 3+4	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)
802.11be (EHT40) Full CH 151 5755MHz		5649.8	57.54	-10.66	68.2	41.93	33.1	11.89	29.38	100	325	P	H
		5697.6	66.93	-36.5	103.43	51	33.39	11.93	29.39	100	325	P	H
		5718.6	79.03	-31.38	110.41	62.97	33.51	11.94	29.39	100	325	P	H
		5722.8	79.87	-37.31	117.18	63.77	33.54	11.95	29.39	100	325	P	H
	*	5755	106.33	-	-	90.04	33.72	11.97	29.4	100	325	P	H
	*	5755	100.22	-	-	83.93	33.72	11.97	29.4	100	325	A	H
		5851.8	57.96	-60.14	118.1	41.23	34.01	12.14	29.42	100	325	P	H
		5868.6	57.71	-49.28	106.99	40.88	34.07	12.18	29.42	100	325	P	H
		5893.4	57.46	-34.09	91.55	40.48	34.17	12.24	29.43	100	325	P	H
		5946.4	57.16	-11.04	68.2	40.03	34.2	12.37	29.44	100	325	P	H
													H
													H
		5614.8	56.55	-11.65	68.2	41.1	32.96	11.86	29.37	330	116	P	V
		5700	63.36	-41.84	105.2	47.42	33.4	11.93	29.39	330	116	P	V
		5719.8	76.29	-34.45	110.74	60.21	33.52	11.95	29.39	330	116	P	V
		5723	78.87	-38.77	117.64	62.77	33.54	11.95	29.39	330	116	P	V
	*	5755	105.22	-	-	88.93	33.72	11.97	29.4	330	116	P	V
	*	5755	98.19	-	-	81.9	33.72	11.97	29.4	330	116	A	V
		5852.6	57.84	-58.43	116.27	41.11	34.01	12.14	29.42	330	116	P	V
		5871.6	57.11	-49.04	106.15	40.25	34.09	12.19	29.42	330	116	P	V
		5875.6	57.32	-47.43	104.75	40.45	34.1	12.2	29.43	330	116	P	V
		5935.8	56.63	-11.57	68.2	39.53	34.2	12.34	29.44	330	116	P	V
													V
													V

WIFI Ant. 3+4	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)
802.11be (EHT40) Full CH 159 5795MHz		5602.6	55.46	-12.74	68.2	40.07	32.91	11.85	29.37	100	325	P	H
		5691.8	57.45	-41.7	99.15	41.57	33.35	11.92	29.39	100	325	P	H
		5719.4	61.26	-49.37	110.63	45.18	33.52	11.95	29.39	100	325	P	H
		5723.2	62.65	-55.45	118.1	46.55	33.54	11.95	29.39	100	325	P	H
	*	5795	107.44	-	-	90.96	33.88	12.01	29.41	100	325	P	H
	*	5795	100.2	-	-	83.72	33.88	12.01	29.41	100	325	A	H
		5852.8	67.15	-48.67	115.82	50.42	34.01	12.14	29.42	100	325	P	H
		5859.8	66.76	-42.69	109.45	49.98	34.04	12.16	29.42	100	325	P	H
		5875.4	63.33	-41.57	104.9	46.47	34.1	12.19	29.43	100	325	P	H
		5925.6	56.81	-11.39	68.2	39.73	34.2	12.32	29.44	100	325	P	H
													H
													H
		5610.2	56.23	-11.97	68.2	40.8	32.94	11.86	29.37	366	120	P	V
		5659.2	56.39	-18.64	75.03	40.71	33.16	11.9	29.38	366	120	P	V
		5718.8	60.06	-50.4	110.46	43.99	33.51	11.95	29.39	366	120	P	V
		5724.8	59.38	-62.36	121.74	43.27	33.55	11.95	29.39	366	120	P	V
	*	5795	104.4	-	-	87.92	33.88	12.01	29.41	366	120	P	V
	*	5795	97.74	-	-	81.26	33.88	12.01	29.41	366	120	A	V
		5853.6	61.85	-52.14	113.99	45.12	34.01	12.14	29.42	366	120	P	V
		5863	60.52	-48.04	108.56	43.73	34.05	12.16	29.42	366	120	P	V
		5879.4	58.52	-43.41	101.93	41.63	34.12	12.2	29.43	366	120	P	V
		5947.6	57.19	-11.01	68.2	40.06	34.2	12.37	29.44	366	120	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 802.11be (EHT40)_Full (Harmonic @ 3m)

WIFI Ant. 3+4	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)
802.11be (EHT40) Full CH 151 5755MHz		11510	47.8	-26.2	74	57.1	38.98	17.5	65.78	-	-	P	H
		17265	47.63	-20.57	68.2	53.01	38.23	21.96	65.57	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		11510	47.55	-26.45	74	56.85	38.98	17.5	65.78	-	-	P	V
		17265	47.12	-21.08	68.2	52.5	38.23	21.96	65.57	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 3+4	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)
802.11be (EHT40) Full CH 159 5795MHz		11590	47.15	-26.85	74	56.59	38.82	17.56	65.82	-	-	P	H
		17385	49.99	-18.21	68.2	54.77	38.64	22.02	65.44	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		11590	47.53	-26.47	74	56.97	38.82	17.56	65.82	-	-	P	V
		17385	48.86	-19.34	68.2	53.64	38.64	22.02	65.44	-	-	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 802.11be (EHT80)_Full (Band Edge @ 3m)

WIFI Ant. 3+4	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)
802.11be (EHT80) Full CH 155 5775MHz		5650	60.99	-7.21	68.2	45.38	33.1	11.89	29.38	100	326	P	H
		5688.6	77.1	-19.69	96.79	61.24	33.33	11.92	29.39	100	326	P	H
		5718.8	80.71	-29.75	110.46	64.64	33.51	11.95	29.39	100	326	P	H
		5722	80.75	-34.61	115.36	64.66	33.53	11.95	29.39	100	326	P	H
	*	5775	104.68	-	-	88.3	33.8	11.99	29.41	100	326	P	H
	*	5775	97.19	-	-	80.81	33.8	11.99	29.41	100	326	A	H
		5851.8	75.2	-42.9	118.1	58.47	34.01	12.14	29.42	100	326	P	H
		5857	73.42	-36.82	110.24	56.66	34.03	12.15	29.42	100	326	P	H
		5876.8	68.57	-35.29	103.86	51.69	34.11	12.2	29.43	100	326	P	H
		5928	60.1	-8.1	68.2	43.02	34.2	12.32	29.44	100	326	P	H
													H
													H
		5649	61.12	-7.08	68.2	45.51	33.1	11.89	29.38	362	122	P	V
		5695.6	72.4	-29.56	101.96	56.49	33.37	11.93	29.39	362	122	P	V
		5719.8	74.59	-36.15	110.74	58.51	33.52	11.95	29.39	362	122	P	V
		5720.6	75.32	-36.85	112.17	59.24	33.52	11.95	29.39	362	122	P	V
	*	5775	101.7	-	-	85.32	33.8	11.99	29.41	362	122	P	V
	*	5775	94.44	-	-	78.06	33.8	11.99	29.41	362	122	A	V
		5850.8	72.75	-47.63	120.38	56.04	34	12.13	29.42	362	122	P	V
		5857.4	68.92	-41.21	110.13	52.16	34.03	12.15	29.42	362	122	P	V
		5877.4	62.86	-40.56	103.42	45.98	34.11	12.2	29.43	362	122	P	V
		5925.2	60.37	-7.83	68.2	43.29	34.2	12.32	29.44	362	122	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 802.11be (EHT80)_Full (Harmonic @ 3m)

WIFI Ant. 3+4	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)
802.11be (EHT80) Full CH 155 5775MHz		11550	47.99	-26.01	74	57.36	38.9	17.53	65.8	-	-	P	H
		17325	48.63	-19.57	68.2	53.75	38.4	21.99	65.51	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		11550	47.2	-26.8	74	56.57	38.9	17.53	65.8	-	-	P	V
		17325	49.25	-18.95	68.2	54.37	38.4	21.99	65.51	-	-	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 802.11be (EHT20) Full (SHF @ 1m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
3+4		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		39450	47.33	-26.67	74	58.39	45.8	-0.33	56.53	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
802.11be													H
(EHT20)													H
Full		39186	47.76	-26.24	74	59.8	45.1	-0.45	56.69	-	-	P	V
SHF													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Remark

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

Emission below 1GHz

WIFI 802.11be (EHT20) Full (LF @ 3m)

WIFI Ant. 3+4	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)
802.11be (EHT20) Full LF		30	21.95	-18.05	40	29.24	24.4	0.75	32.44	-	-	P	H
		95.61	36.91	-6.59	43.5	52.56	15.38	1.39	32.42	-	-	P	H
		179.85	30.86	-12.64	43.5	46.22	15.05	1.93	32.34	-	-	P	H
		481.3	25.29	-20.71	46	31.08	23.62	3.23	32.64	-	-	P	H
		744.5	31.25	-14.75	46	31.36	28.16	4.27	32.54	-	-	P	H
		962.9	34.39	-19.61	54	29.87	31.01	4.9	31.39	-	-	P	H
													H
													H
													H
													H
													H
													H
		35.4	25.03	-14.97	40	34.71	21.97	0.81	32.46	-	-	P	V
		95.07	30.89	-12.61	43.5	46.66	15.27	1.38	32.42	-	-	P	V
		179.85	29.67	-13.83	43.5	45.03	15.05	1.93	32.34	-	-	P	V
		525.4	25.27	-20.73	46	30.51	24.02	3.36	32.62	-	-	P	V
		738.9	30.76	-15.24	46	31.09	27.98	4.26	32.57	-	-	P	V
		947.5	33.52	-12.48	46	29.5	30.72	4.84	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 limit** line.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

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

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
3+4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11be (EHT80) Full CH 155 5775MHz		5928	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		5928	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

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

For Peak Limit @ 5928MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Margin (dB)

= LevμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 5928MHz:

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

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

= 43.54 (dBμV/m) – 54(dBμV/m)

= -10.46(dB)

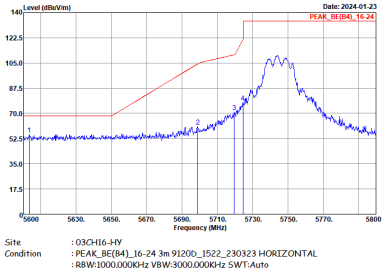
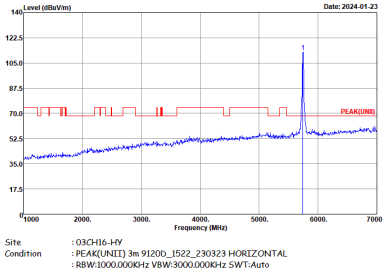
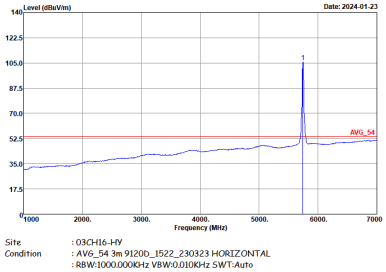
Both peak and average measured complies with the limit line, so test result is "PASS".

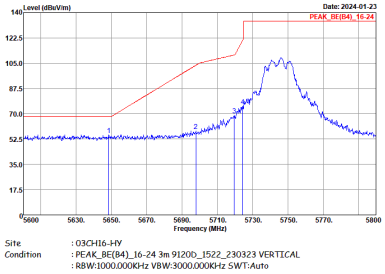
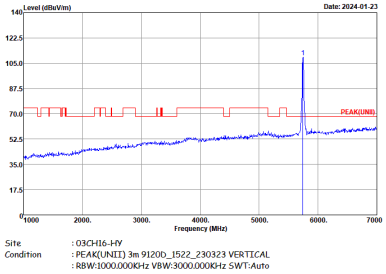
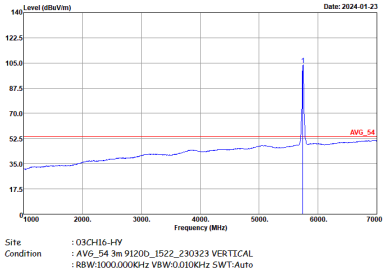
Appendix D. Radiated Spurious Emission Plots

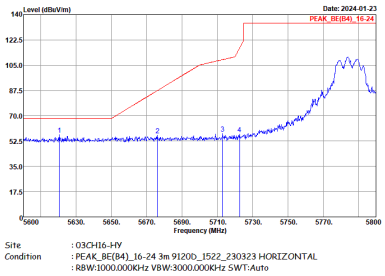
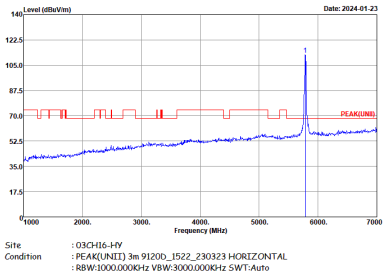
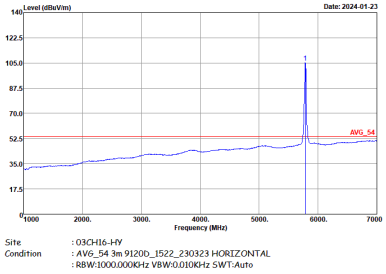
Test Engineer :	Jack Tsai, Bill Chang, Gary Guo, and Steven Wu	**Temperature :**	18.2~20.2°C
		Relative Humidity :	54.2~56.1%

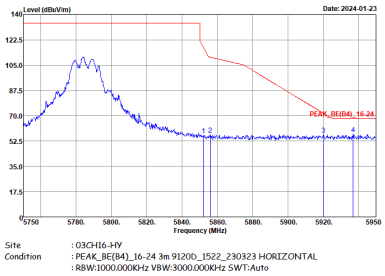
Band 4 - 5725~5850MHz

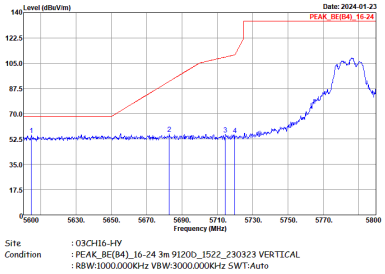
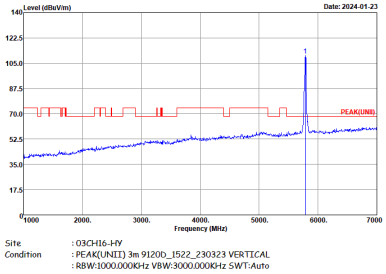
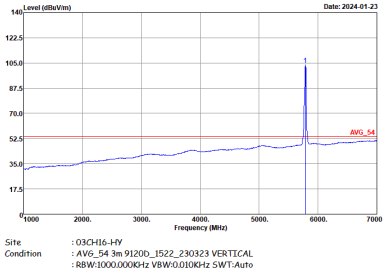
WIFI 802.11a (Band Edge @ 3m)

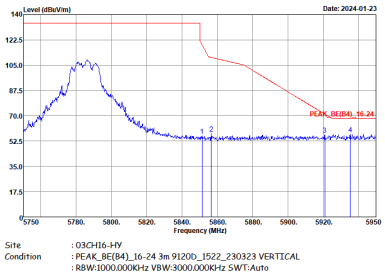
WIFI	**Band 4 5725~5850MHz Band Edge @ 3m**	
ANT	**802.11a CH149 5745MHz**	
3+4	**Horizontal**	**Fundamental**
Peak		
Avg	Left blank	

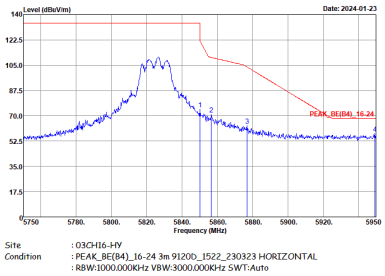
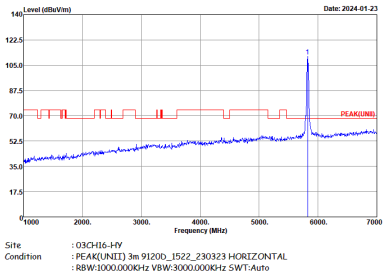
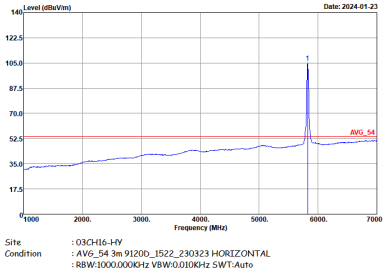
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
3+4	Vertical	Fundamental
Peak		
Avg	Left blank	

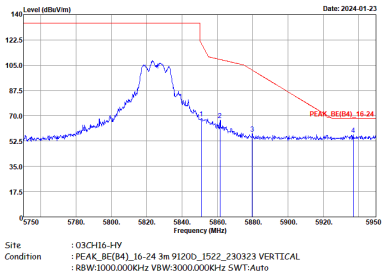
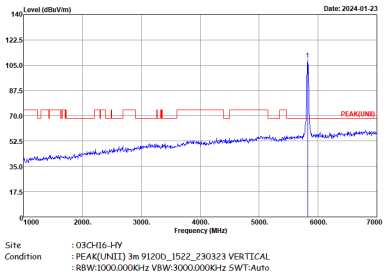
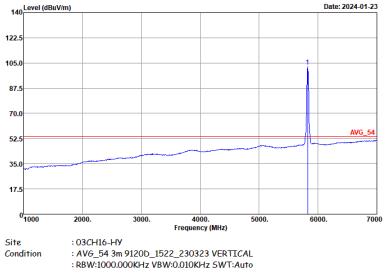
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
3+4	Horizontal	Fundamental
Peak		
Avg	Left blank	

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
3+4	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE(B4)_16-24 3m 9120D_1522_230323 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

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

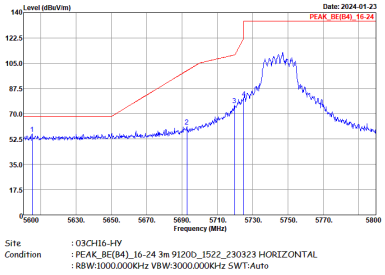
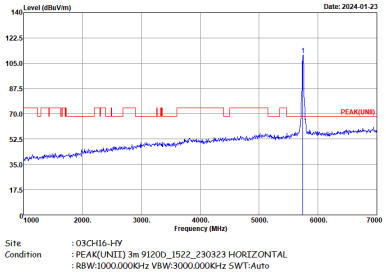
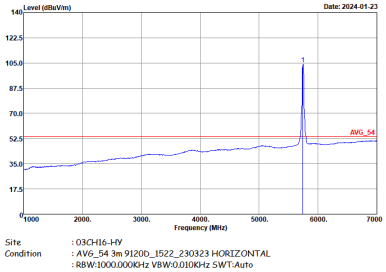
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
3+4	Vertical	Fundamental
Peak		Left blank

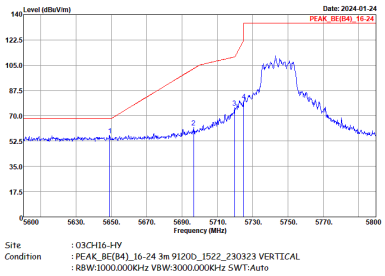
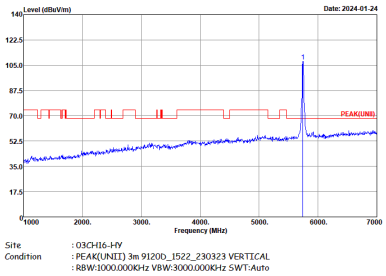
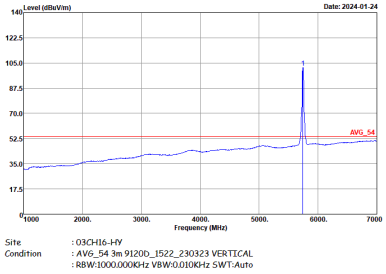
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
3+4	Horizontal	Fundamental
Peak		
Avg	Left blank	

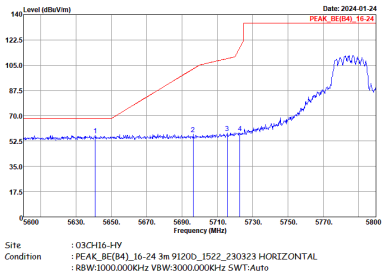
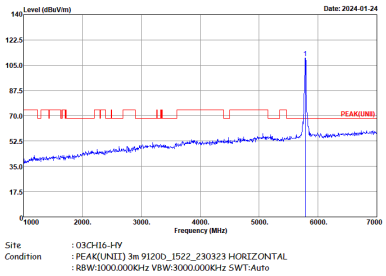
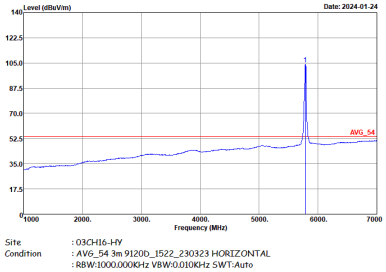
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
3+4	Vertical	Fundamental
Peak		
Avg	Left blank	

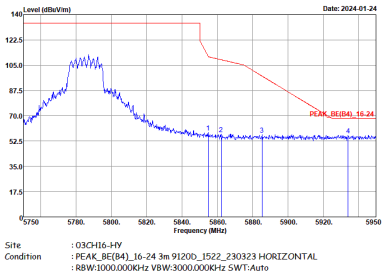
Band 4 5725~5850MHz

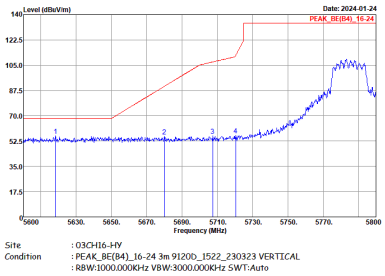
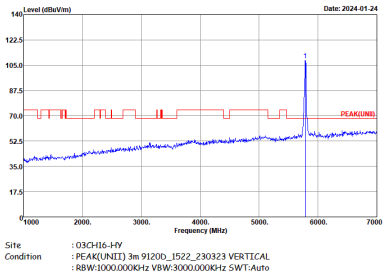
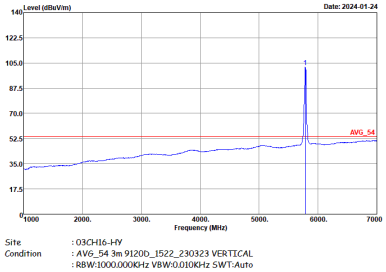
WIFI 802.11be EHT20 Full (Band Edge @ 3m)

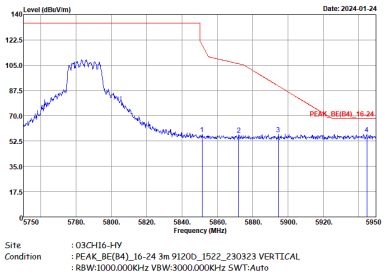
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT20 Full CH149 5745MHz	
3+4	Horizontal	Fundamental
Peak		
Avg	Left blank	

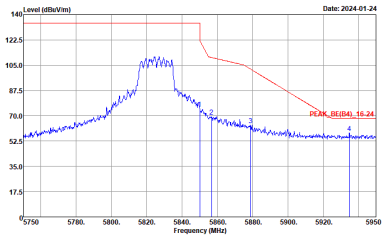
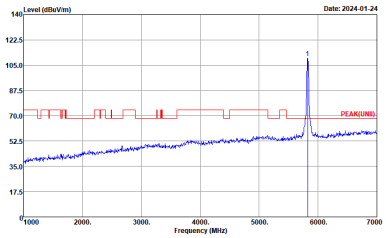
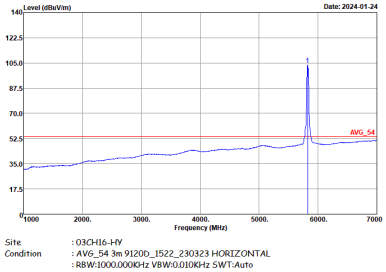
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT20 Full CH149 5745MHz	
3+4	Vertical	Fundamental
Peak		
Avg	Left blank	

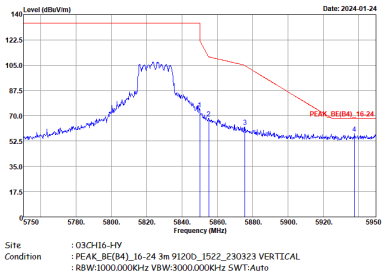
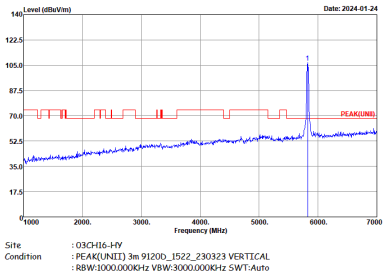
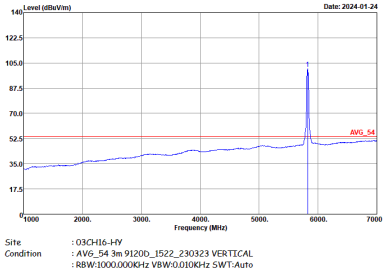
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT20 Full CH157 5785MHz	
3+4	Horizontal	Fundamental
Peak		
Avg	Left blank	

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT20 Full CH157 5785MHz	
3+4	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE(84)_16-24 3m 91200_1522_230323 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT20 Full CH157 5785MHz	
3+4	Vertical	Fundamental
Peak		
Avg	Left blank	

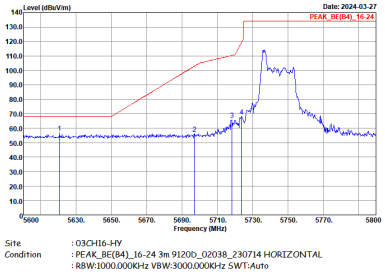
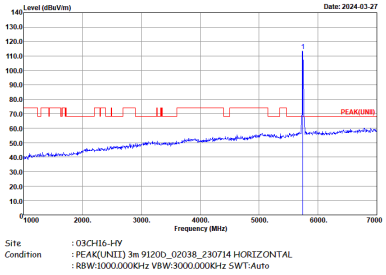
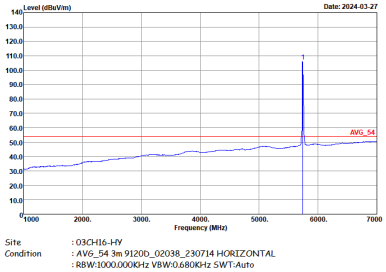
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT20 Full CH157 5785MHz	
3+4	Vertical	Fundamental
Peak		Left blank

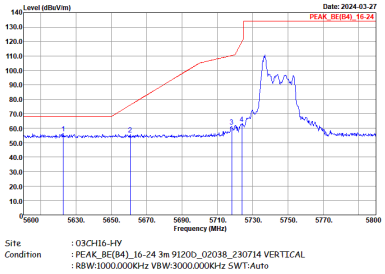
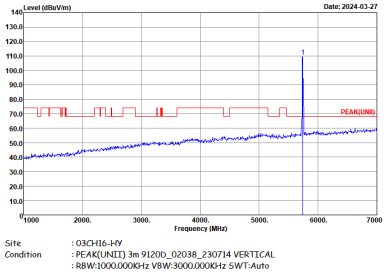
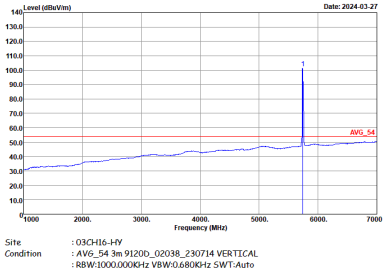
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT20 Full CH165 5825MHz	
3+4	Horizontal	Fundamental
Peak		
Avg	Left blank	

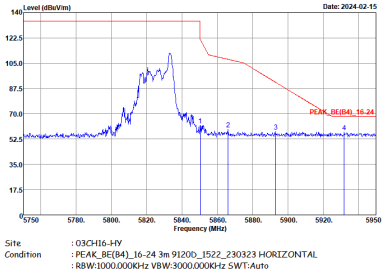
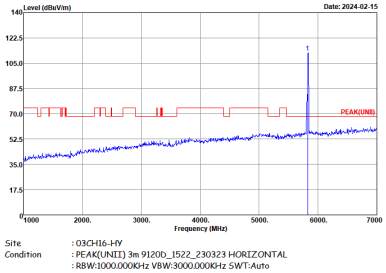
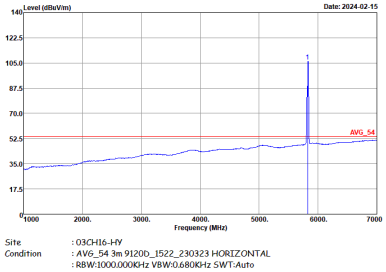
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT20 Full CH165 5825MHz	
3+4	Vertical	Fundamental
Peak		
Avg	Left blank	

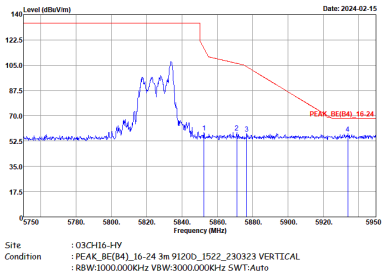
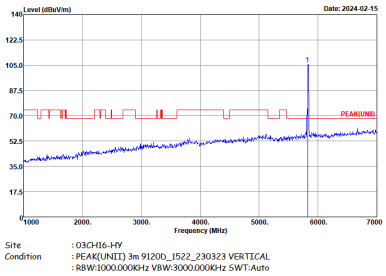
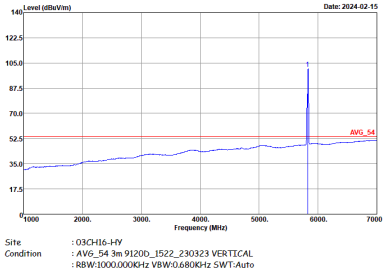
Band 4 5725~5850MHz

WIFI 802.11be (EHT20)_Partial 26 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be (EHT20)_Partial 26/0 CH149 5745MHz	
3+4	Horizontal	Fundamental
Peak		
Avg	Left blank	

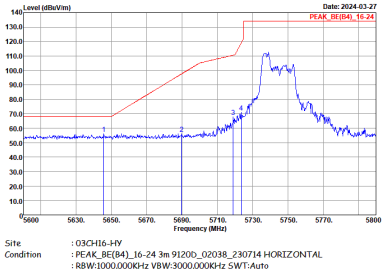
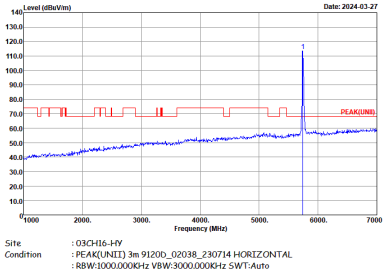
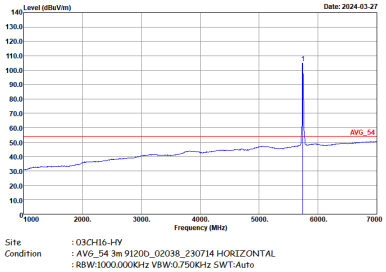
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be (EHT20)_Partial 26/0 CH149 5745MHz	
3+4	Vertical	Fundamental
Peak		
Avg	Left blank	

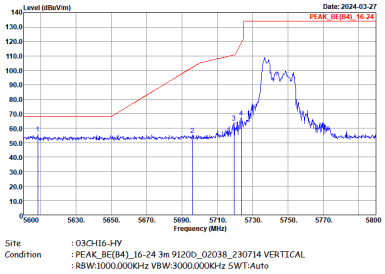
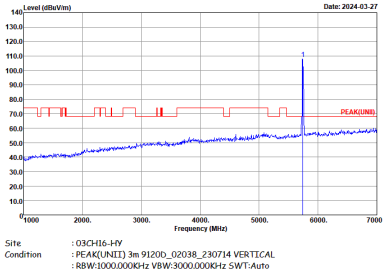
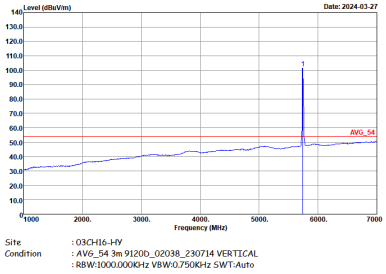
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be (EHT20)_Partial 26/8 CH165 5825MHz	
3+4	Horizontal	Fundamental
Peak		
Avg	Left blank	

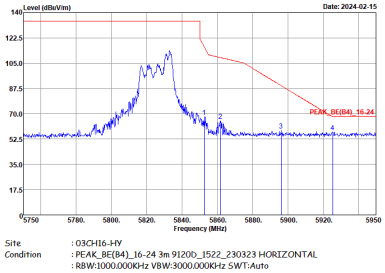
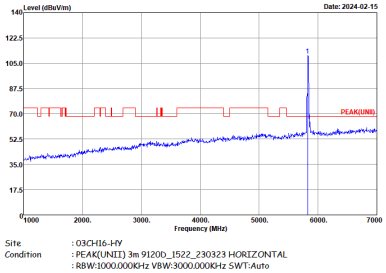
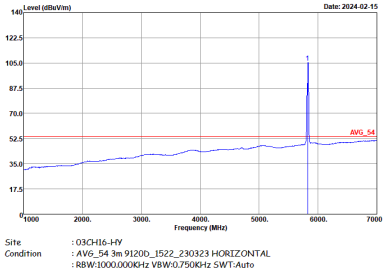
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be (EHT20)_Partial 26/8 CH165 5825MHz	
3+4	Vertical	Fundamental
Peak		
Avg	Left blank	

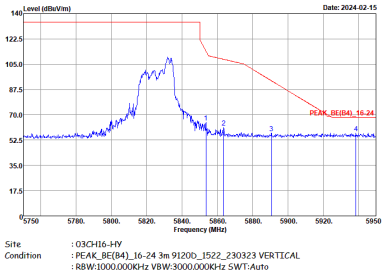
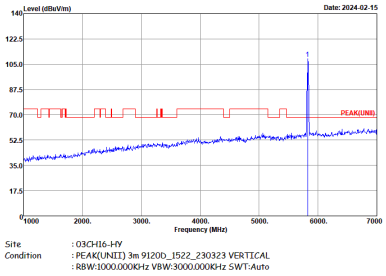
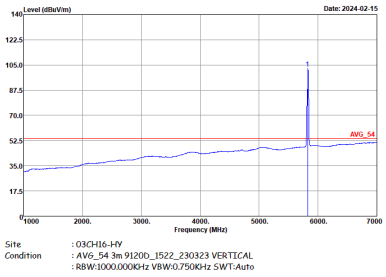
Band 4 5725~5850MHz

WIFI 802.11be (EHT20)_Partial 52 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be (EHT20)_Partial 52/37 CH149 5745MHz	
3+4	Horizontal	Fundamental
Peak		
Avg	Left blank	

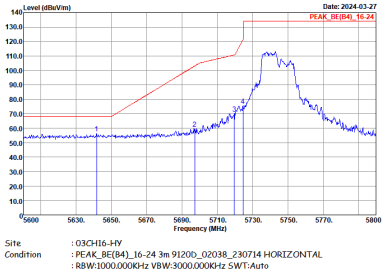
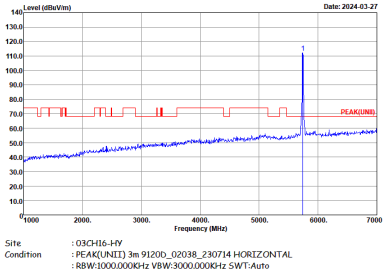
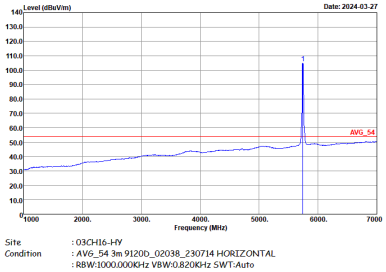
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be (EHT20)_Partial 52/37 CH149 5745MHz	
3+4	Vertical	Fundamental
Peak		
Avg	Left blank	

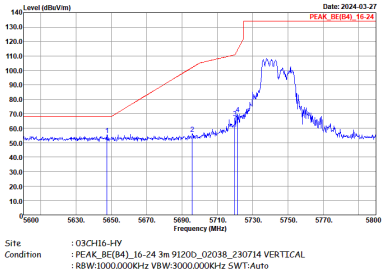
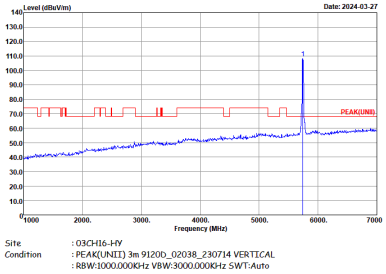
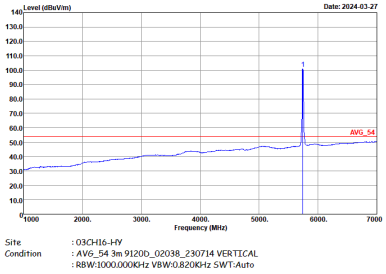
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be (EHT20)_Partial 52/40 CH165 5825MHz	
3+4	Horizontal	Fundamental
Peak		
Avg	Left blank	

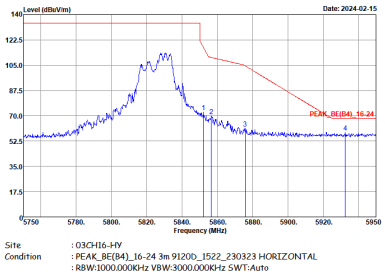
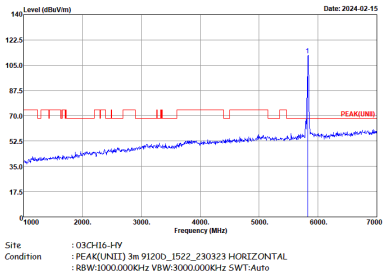
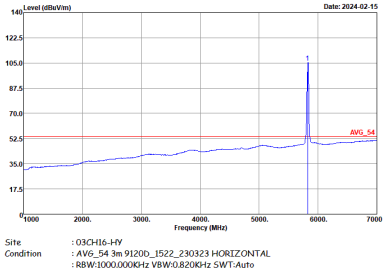
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be (EHT20)_Partial 52/40 CH165 5825MHz	
3+4	Vertical	Fundamental
Peak		
Avg	Left blank	

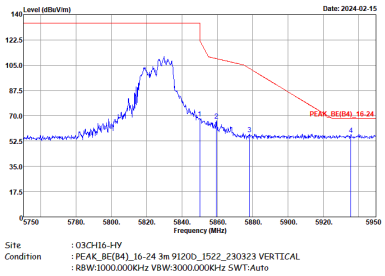
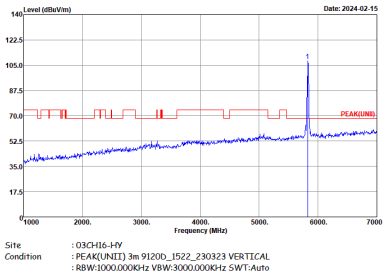
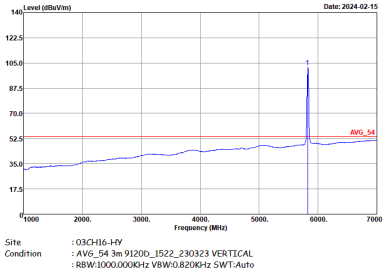
Band 4 5725~5850MHz

WIFI 802.11be (EHT20)_Partial 106 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be (EHT20)_Partial 106/53 CH149 5745MHz	
3+4	Horizontal	Fundamental
Peak		
Avg	Left blank	

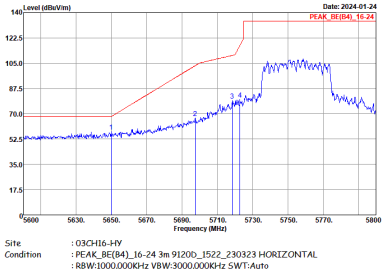
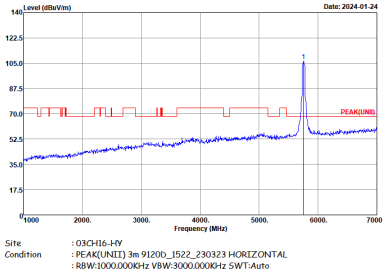
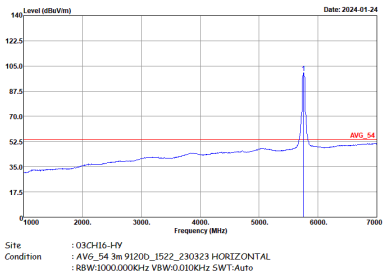
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be (EHT20)_Partial 106/53 CH149 5745MHz	
3+4	Vertical	Fundamental
Peak		
Avg	Left blank	

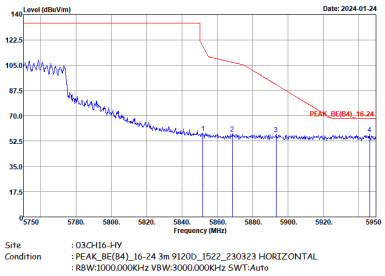
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be (EHT20)_Partial 106/54 CH165 5825MHz	
3+4	Horizontal	Fundamental
Peak		
Avg	Left blank	

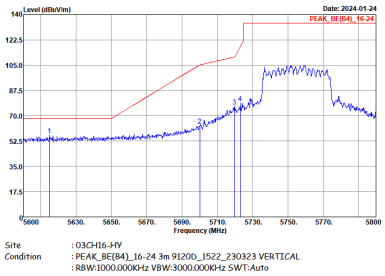
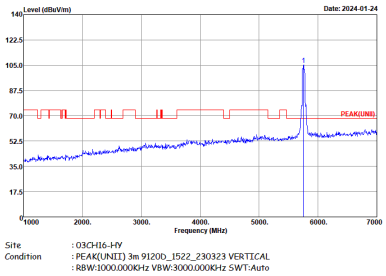
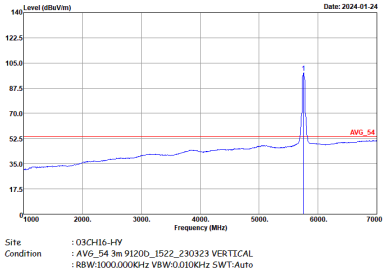
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be (EHT20)_Partial 106/54 CH165 5825MHz	
3+4	Vertical	Fundamental
Peak		
Avg	Left blank	

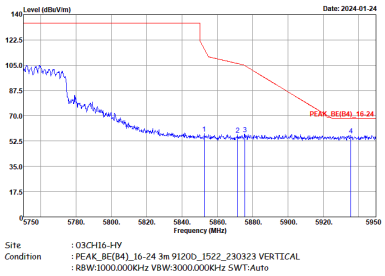
Band 4 5725~5850MHz

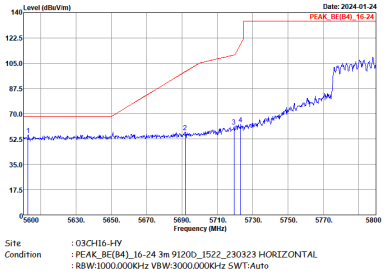
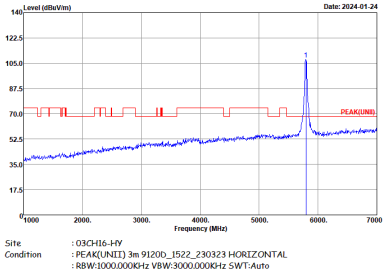
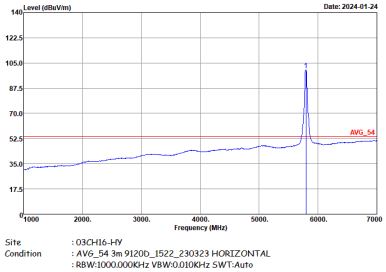
WIFI 802.11be EHT40 Full (Band Edge @ 3m)

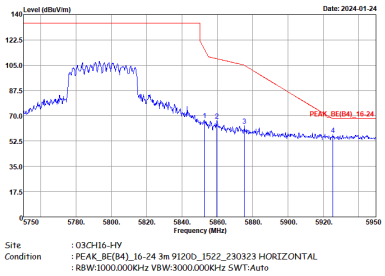
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT40 Full CH151 5755MHz	
3+4	Horizontal	Fundamental
Peak		
Avg	Left blank	

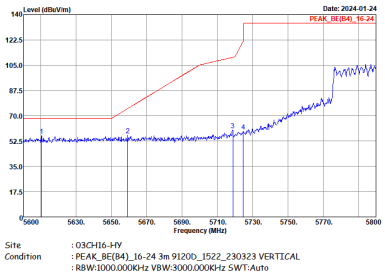
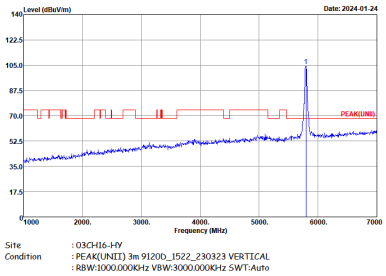
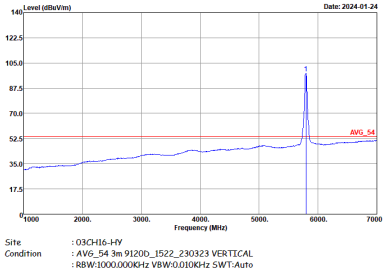
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT40 Full CH151 5755MHz	
3+4	Horizontal	Fundamental
Peak		Left blank

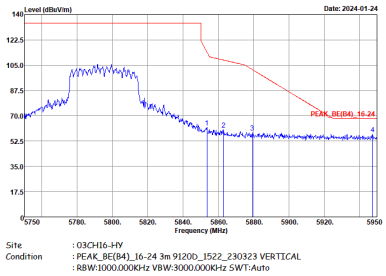
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT40 Full CH151 5755MHz	
3+4	Vertical	Fundamental
Peak		
Avg	Left blank	

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT40 Full CH151 5755MHz	
3+4	Vertical	Fundamental
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT40 Full HT40 CH159 5795MHz	
3+4	Horizontal	Fundamental
Peak		
Avg	Left blank	

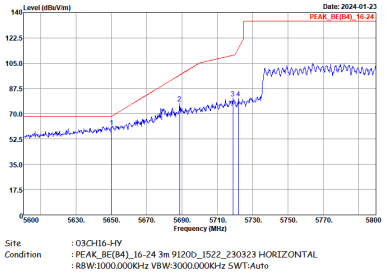
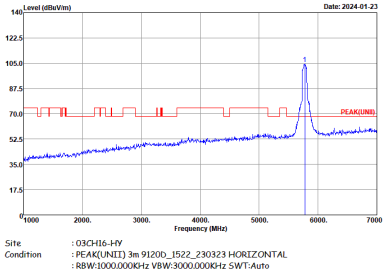
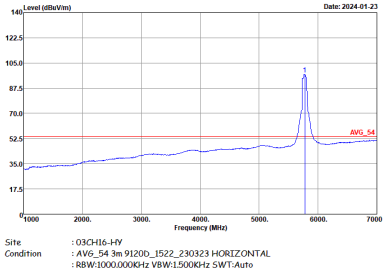
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT40 Full HT40 CH159 5795MHz	
3+4	Horizontal	Fundamental
Peak		Left blank

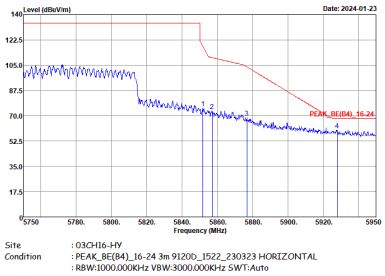
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT40 Full CH159 5795MHz	
3+4	Vertical	Fundamental
Peak		
Avg	Left blank	

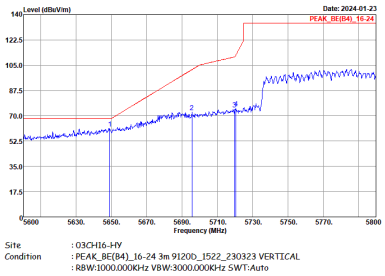
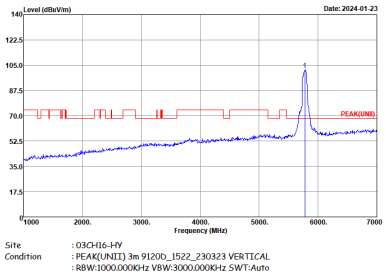
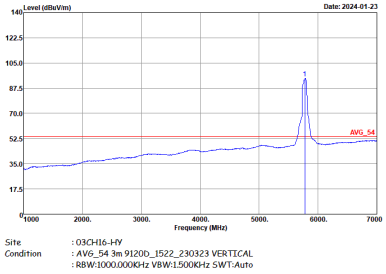
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT40 Full CH159 5795MHz	
3+4	Vertical	Fundamental
Peak		Left blank

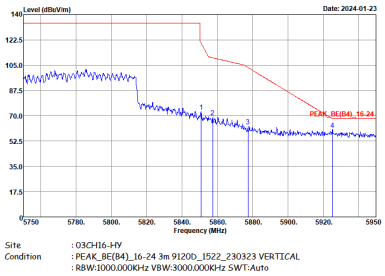
Band 4 5725~5850MHz

WIFI 802.11be EHT80 Full (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT80 Full CH155 5775MHz	
3+4	Horizontal	Fundamental
Peak		
Avg	Left blank	

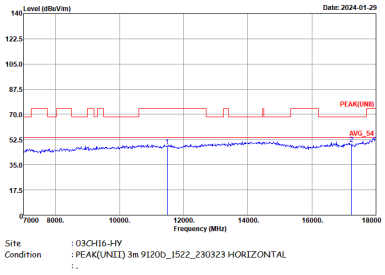
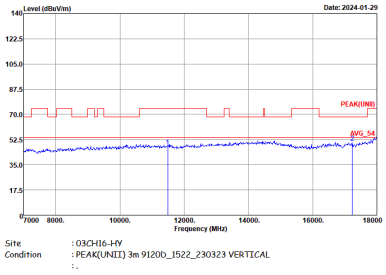
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT80 Full CH155 5775MHz	
3+4	Horizontal	Fundamental
Peak		Left blank

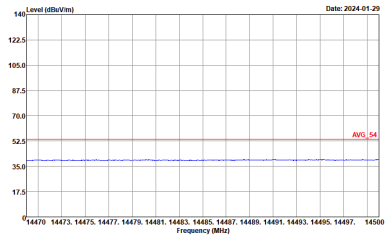
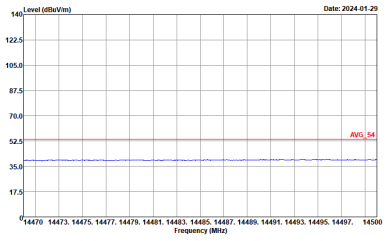
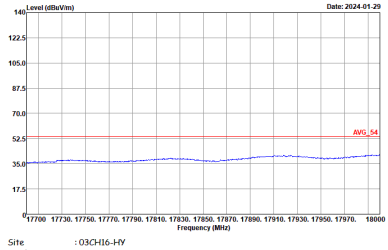
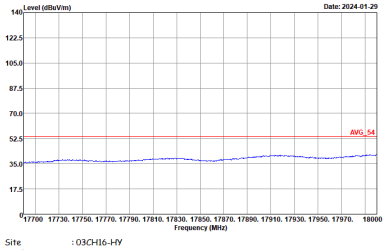
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT80 Full CH155 5775MHz	
3+4	Vertical	Fundamental
Peak		
Avg	Left blank	

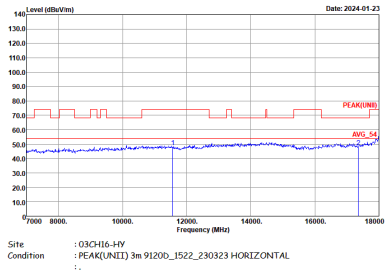
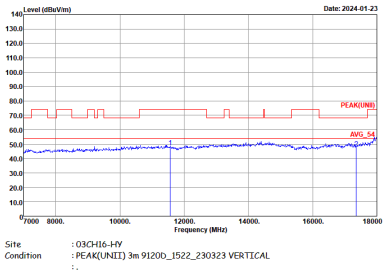
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11be EHT80 Full CH155 5775MHz	
3+4	Vertical	Fundamental
Peak		Left blank

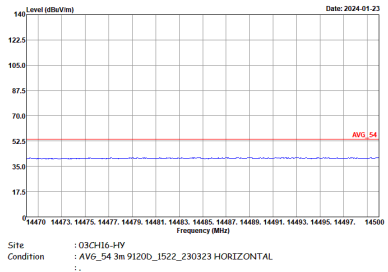
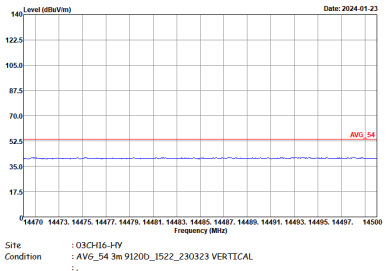
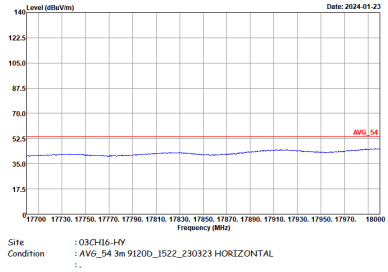
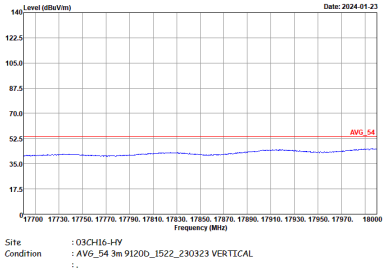
Band 4 - 5725~5850MHz

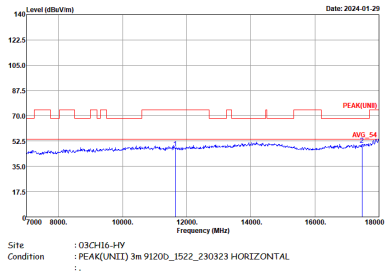
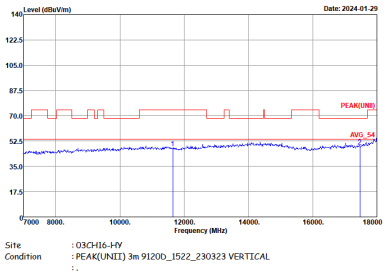
WIFI 802.11a (Harmonic @ 3m)

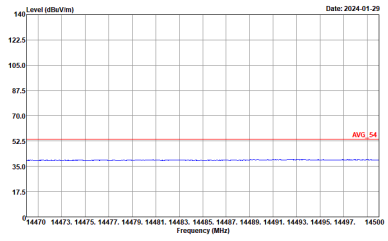
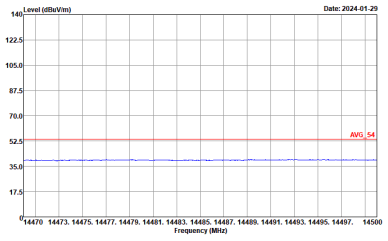
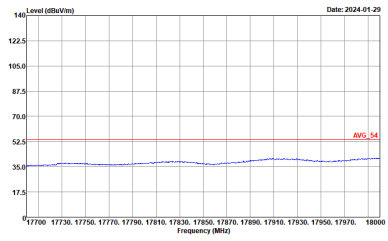
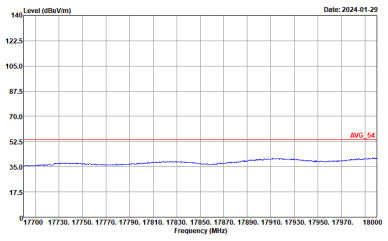
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
3+4	Horizontal	Vertical
Peak Avg.		

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

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

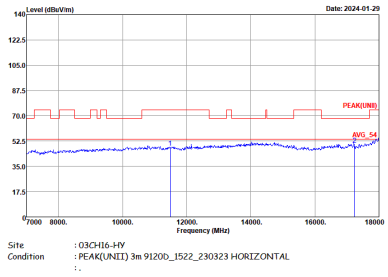
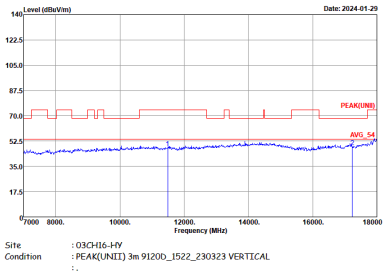
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
3+4	Horizontal	Vertical
Peak		
Avg.		

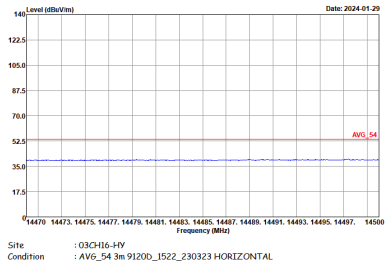
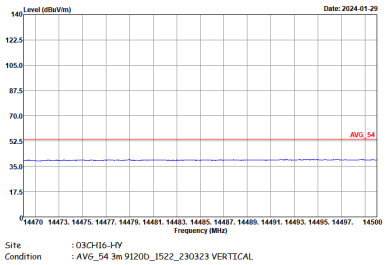
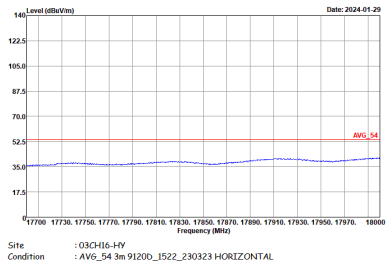
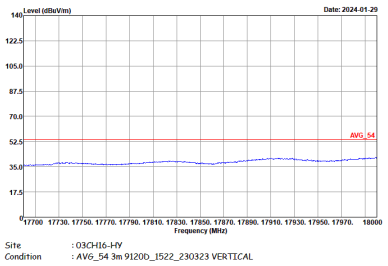
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
3+4	Horizontal	Vertical
Peak Avg.		

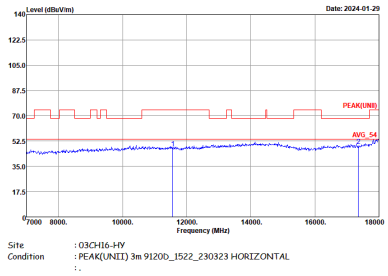
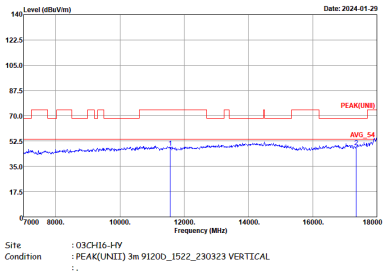
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
3+4	Horizontal	Vertical
Peak		
Avg.		

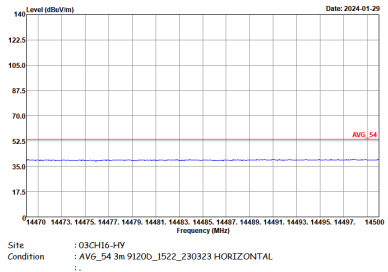
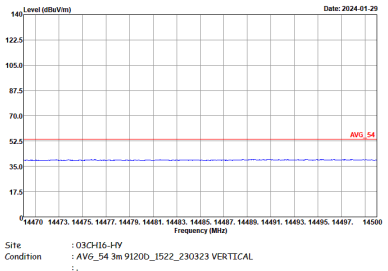
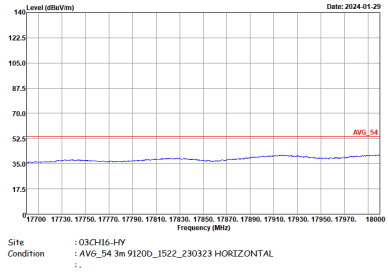
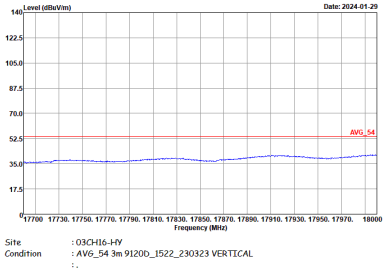
Band 4 5725~5850MHz

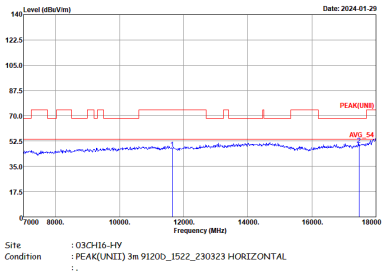
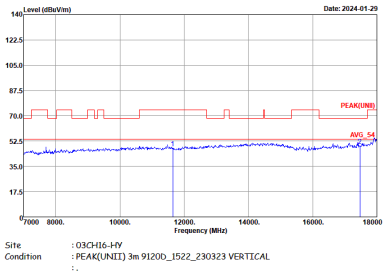
WIFI 802.11be EHT20 Full (Harmonic @ 3m)

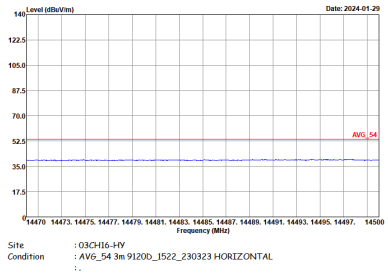
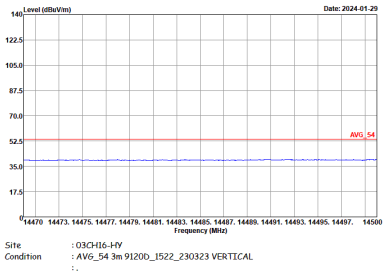
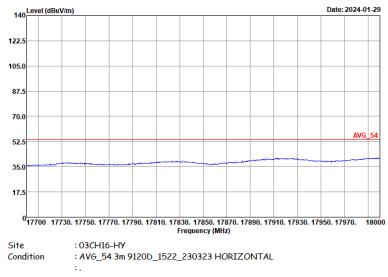
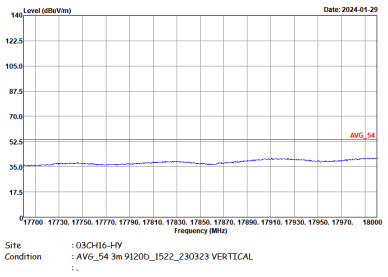
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11be EHT20 Full CH149 5745MHz	
3+4	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11be EHT20 Full CH149 5745MHz	
3+4	Horizontal	Vertical
Peak		
Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11be EHT20 Full CH157 5785MHz	
3+4	Horizontal	Vertical
Peak Avg.		

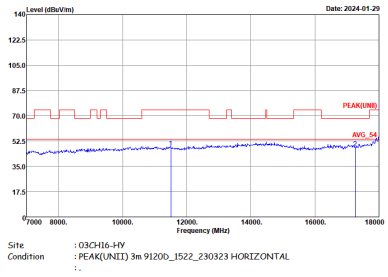
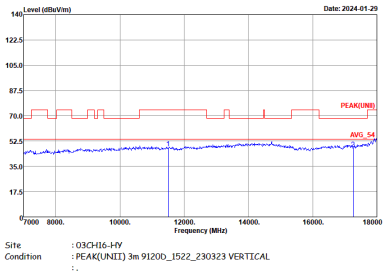
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11be EHT20 Full CH157 5785MHz	
3+4	Horizontal	Vertical
Peak		
Avg.		

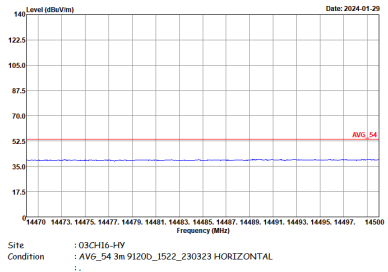
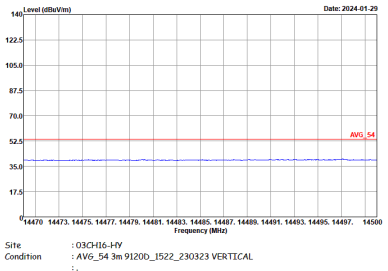
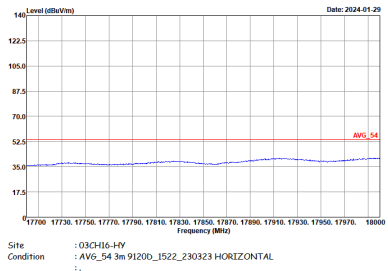
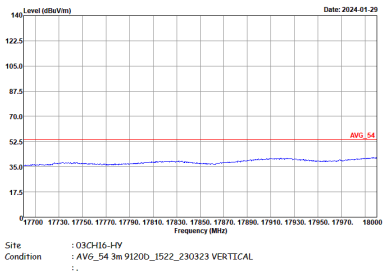
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11be EHT20 Full CH165 5825MHz	
3+4	Horizontal	Vertical
Peak Avg.		

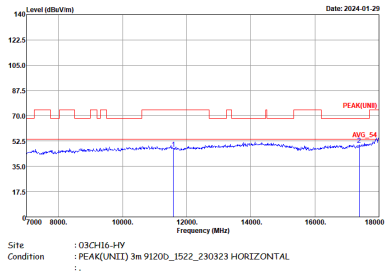
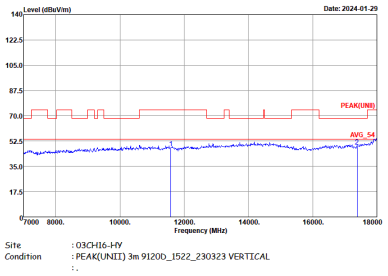
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11be EHT20 Full CH165 5825MHz	
3+4	Horizontal	Vertical
Peak		
Avg.		

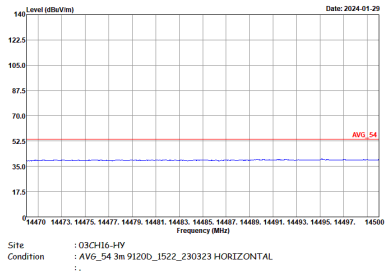
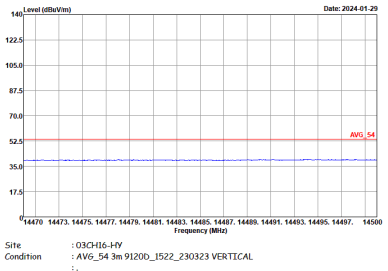
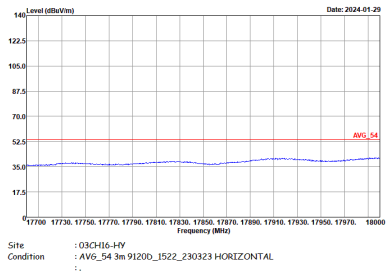
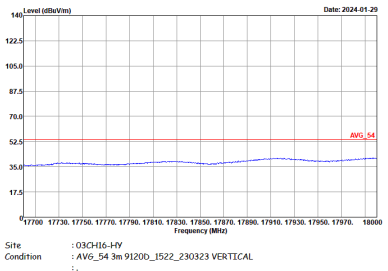
Band 4 5725~5850MHz

WIFI 802.11be EHT40 Full (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11be EHT40 Full CH151 5755MHz	
3+4	Horizontal	Vertical
Peak Avg.		

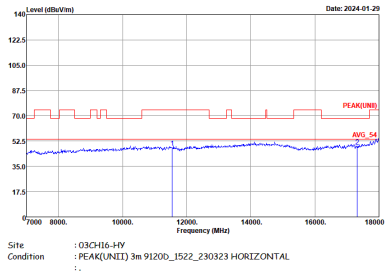
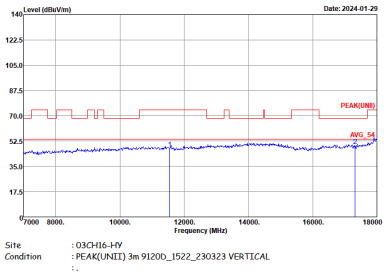
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11be EHT40 Full CH151 5755MHz	
3+4	Horizontal	Vertical
Peak		
Avg.		

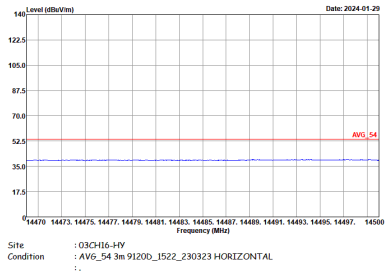
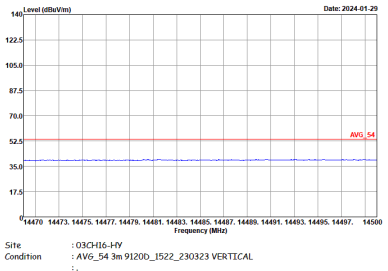
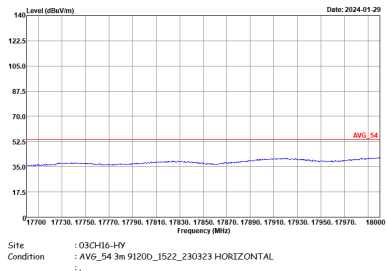
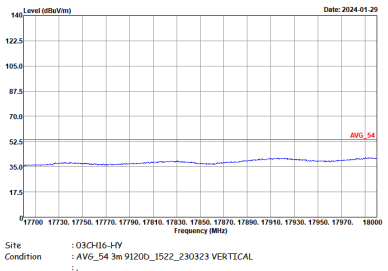
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11be EHT40 Full CH159 5795MHz	
3+4	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11be EHT40 Full CH159 5795MHz	
3+4	Horizontal	Vertical
Peak		
Avg.		

Band 4 5725~5850MHz

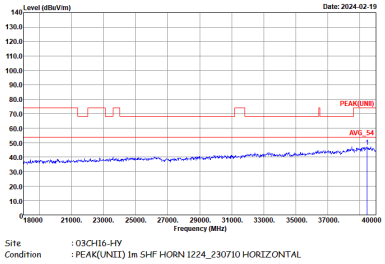
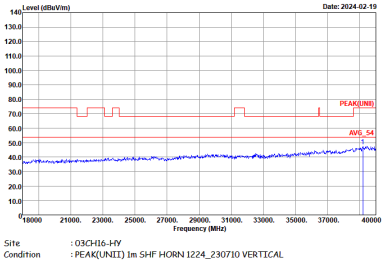
WIFI 802.11be EHT80 Full (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11be EHT80 Full CH155 5775MHz	
3+4	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11be EHT80 Full CH155 5775MHz	
3+4	Horizontal	Vertical
Peak		
Avg.		

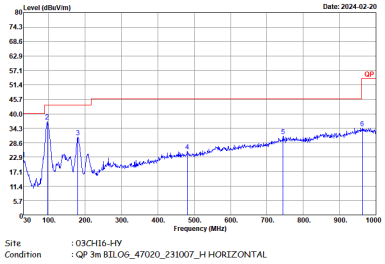
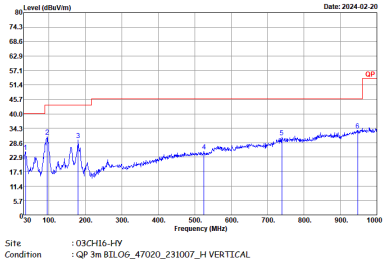
Emission above 18GHz

5GHz WIFI 802.11be EHT20 Full (SHF @ 1m)

WIFI	5GHz WIFI	
ANT	802.11be EHT20 Full SHF	
3+4	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

5GHz WIFI 802.11be EHT20 Full (LF)

WIFI	5GHz WIFI	
ANT	802.11be EHT20 Full LF	
3+4	Horizontal	Vertical
QP / Peak		

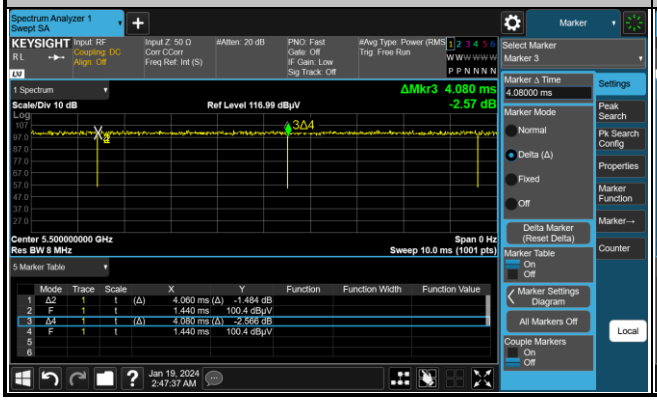
Appendix E. Duty Cycle Plots

<For Radiated Spurious Emission test>

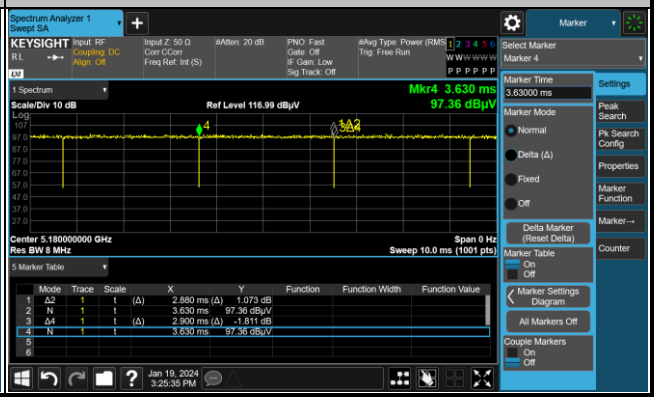
Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
3+4	802.11a	99.51	-	-	10Hz
3+4	5GHz 802.11be EHT20 Full RU	99.31	-	-	10Hz
3+4	5GHz 802.11be EHT20 26 RU	97.89	1620	0.62	680Hz
3+4	5GHz 802.11be EHT20 52 RU	97.33	1460	0.68	750Hz
3+4	5GHz 802.11be EHT20 106 RU	97.01	1300	0.77	820Hz
3+4	5GHz 802.11be EHT40 Full RU	98.79	-	-	10Hz
3+4	5GHz 802.11be EHT80 Full RU	97.38	742	1.35	1.5KHz

MIMO <Ant. 3+4>

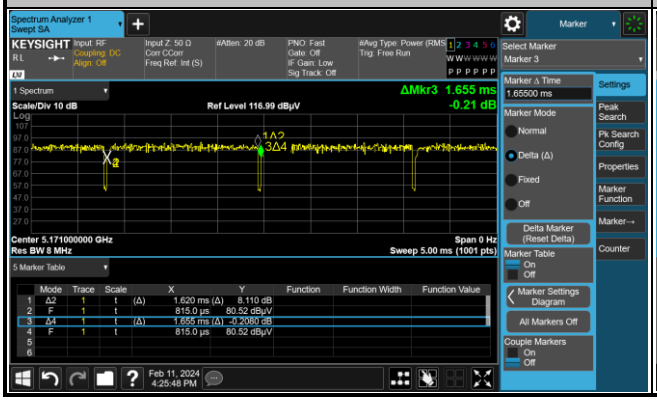
802.11a



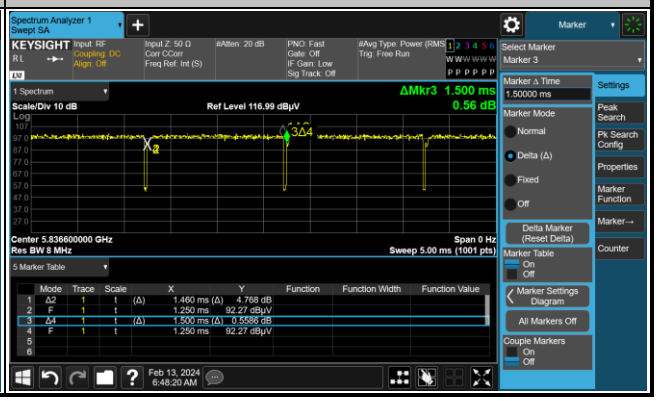
5GHz 802.11be(EHT20) Full RU

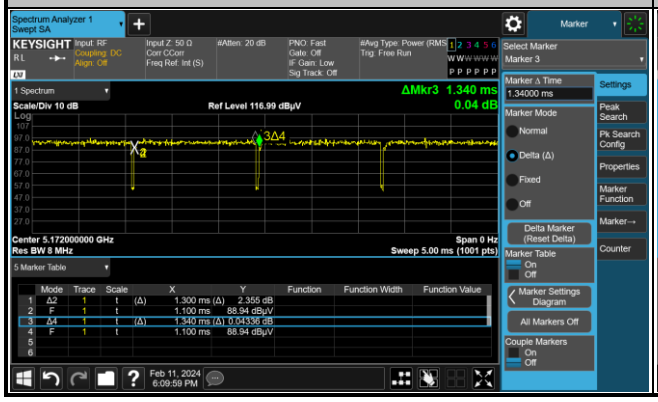
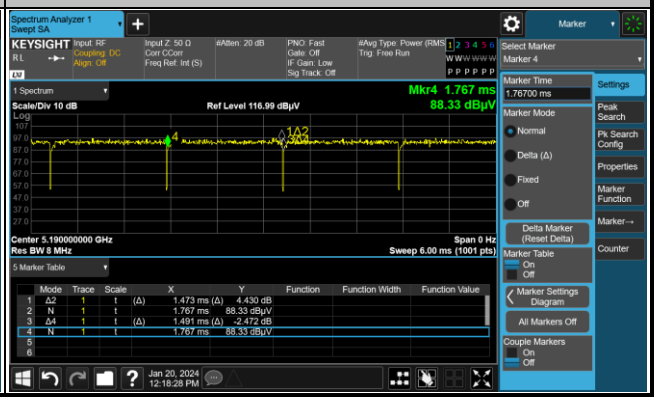


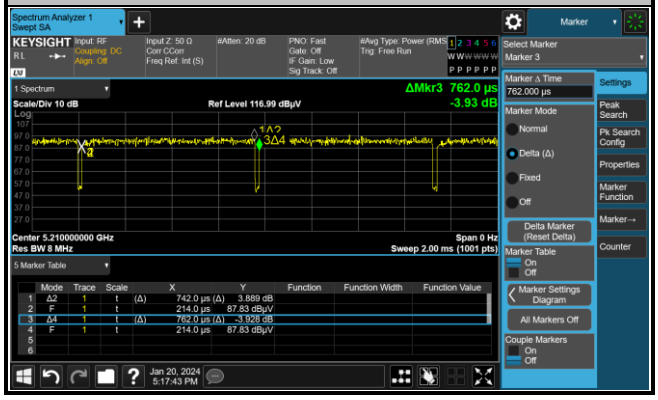
5GHz 802.11be(EHT20) 26 RU



5GHz 802.11be(EHT20) 52 RU



5GHz 802.11be(EHT20) 106 RU	5GHz 802.11be(EHT40) Full RU
	

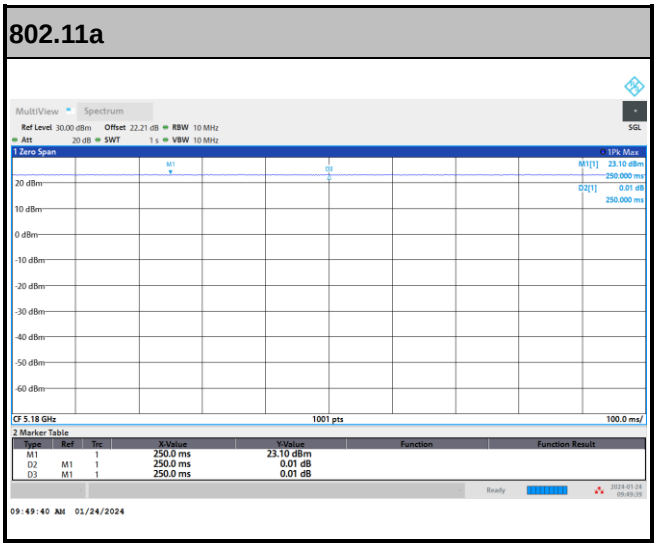
5GHz 802.11be(EHT80) Full RU


<For Conducted test>

Antenna	Band	Duty Cycle(%)	T(us)	Duty Factor(dB)
3+4	5GHz 802.11a for Ant. 3	100.00	-	0.00
3+4	5GHz 802.11a for Ant. 4	100.00	-	0.00
3+4	5GHz 802.11be EHT20 Full RU for Ant 3	100.00	-	0.00
3+4	5GHz 802.11be EHT20 Full RU for Ant 4	100.00	-	0.00
3+4	5GHz 802.11be EHT20 26 RU for Ant 3	98.07	-	0.08
3+4	5GHz 802.11be EHT20 26 RU for Ant 4	98.07	-	0.08
3+4	5GHz 802.11be EHT20 52 RU for Ant 3	97.34	1464	0.12
3+4	5GHz 802.11be EHT20 52 RU for Ant 4	97.86	1464	0.09
3+4	5GHz 802.11be EHT20 106 RU for Ant 3	97.02	1304	0.13
3+4	5GHz 802.11be EHT20 106 RU for Ant 4	97.10	1305	0.13
3+4	5GHz 802.11be EHT20 52+26 RU for Ant 3	100.00	-	0.00
3+4	5GHz 802.11be EHT20 52+26 RU for Ant 4	98.85	-	0.05
3+4	5GHz 802.11be EHT20 106+26 RU for Ant 3	98.04	-	0.09
3+4	5GHz 802.11be EHT20 106+26 RU for Ant 4	98.04	-	0.09
3+4	5GHz 802.11be EHT40 Full RU for Ant 3	98.40	-	0.07
3+4	5GHz 802.11be EHT40 Full RU for Ant 4	98.40	-	0.07
3+4	5GHz 802.11be EHT80 Full RU for Ant 3	97.37	740	0.12
3+4	5GHz 802.11be EHT80 Full RU for Ant 4	97.37	740	0.12
3+4	5GHz 802.11be EHT80 Punture20 for Ant 3	98.05	-	0.09
3+4	5GHz 802.11be EHT80 Punture20 for Ant 4	98.06	-	0.09

MIMO <Ant. 3+4>

802.11a



———THE END———