# FCC RADIO TEST REPORT

| | | |
|---|---|---|
| **FCC ID** | : | **UZ7WLMT0** |
| **Equipment** | : | **Touch Computer** |
| **Brand Name** | : | **Zebra** |
| **Model Name** | : | **WLMT0** |
| **Applicant** | : | **Zebra Technologies Corporation<br>1 Zebra Plaza, Holtsville, NY 11742** |
| **Manufacturer** | : | **Zebra Technologies Corporation<br>1 Zebra Plaza, Holtsville, NY 11742** |
| **Standard** | : | **FCC Part 15 Subpart E §15.407** |

**The product was received on Jan. 03, 2023 and testing was performed from Jan. 06. 2023 to Feb. 28. 2023. 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 |
|---|---|---|---|
| FR2D2704F | 01 | Initial issue of report | Mar. 03, 2023 |
| FR2D2704F | 02 | Revise Appendix D | Mar. 09, 2023 |
| FR2D2704F | 03 | Revise Appendix C and Appendix D | Mar. 10, 2023 |
| FR2D2704F | 04 | Revise Product Specification of Equipment Under Test | Mar. 13, 2023 |
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# Summary of Test Result

| Report Clause | Ref Std. Clause | Test Items | Result (PASS/FAIL) | Remark |
|---|---|---|---|---|
| 3.1 | 15.403(i) | 6dB & 26dB Bandwidth | Pass | - |
| 3.1 | 2.1049 | 99% Occupied Bandwidth | Reporting only | - |
| 3.2 | 15.407(a) | Maximum Conducted Output Power | Pass | - |
| 3.3 | 15.407(a) | Power Spectral Density | Pass | - |
| 3.4 | 15.407(b) | Unwanted Emissions | Pass | 1.41 dB under the limit at 5650.850 MHz |
| 3.5 | 15.207 | AC Conducted Emission | Pass | 19.36 dB under the limit at 0.474 MHz |
| 3.6 | 15.203 | Antenna Requirement | Pass | - |

**Declaration of Conformity:**

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

**Comments and Explanations:**

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

**Reviewed by: Keven Cheng**

**Report Producer: Dewi Huang**

# 1 General Description

## 1.1 Product Feature of Equipment Under Test

| Product Feature | |
|---|---|
| **Equipment** | Touch Computer |
| **Brand Name** | Zebra |
| **Model Name** | WLMT0 |
| **FCC ID** | UZ7WLMT0 |
| **EUT supports Radios application** | NFC<br>WLAN 11a/b/g/n HT20/HT40<br>WLAN 11ac VHT20/VHT40/VHT80/VHT160<br>WLAN 11ax HE20/HE40/HE80/HE160<br>Bluetooth BR/EDR/LE |
| **Sample 1** | Scanner (SE4710) |
| **Sample 2** | Scanner (SE5500) |
| **HW Version** | DV |
| **SW Version** | 13-08-06.00-TG-UOO-PRD-ATH-04 |
| **FW Version** | FUSION_QA_4_1.0.0.010_T |
| **MFD** | 06FEB23 |
| **EUT Stage** | Identical Prototype |

**Remark:** The EUT's information above is declared by manufacturer.

| Specification of Accessories | | | | |
|---|---|---|---|---|
| **Battery 1**<br>**Standard Battery (3800mAh)** | **Brand Name** | Zebra | **Model Number** | BT-000473 |

| Supported Unit Used in Test Configuration and System | | | | |
|---|---|---|---|---|
| **Battery 2**<br>**Standard BLE Beacon Battery (3800mAh)** | **Brand Name** | Zebra | **Model Number** | BT-000473B |
| **Battery 3**<br>**Extended Battery (5200mAh)** | **Brand Name** | Zebra | **Model Number** | BT-000473E |
| **Adapter 1**<br>**Cigarette Lighter Adapter** | **Brand Name** | Zebra | **Part Number** | CHG-AUTO-USB1-01 |
| **Adapter 2**<br>**USB Wall Charger** | **Brand Name** | Zebra | **Part Number** | PWR-WUA5V12W0US |
| **Earphone 1**<br>**3.5mm PTT Headset** | **Brand Name** | Zebra | **Part Number** | HDST-35MM-PTT1-01 |
| **Earphone 2**<br>**USB-C Audio Headset** | **Brand Name** | Zebra | **Part Number** | HDST-USBC-PTT1-01 |
| **USB Cable**<br>**(Type C to Type A)** | **Brand Name** | Zebra | **Part Number** | CBL-TC5X-USBC2A-01 |
| **Type C-Audio Cable**<br>**(Type C to 3.5mm)** | **Brand Name** | Zebra | **Part Number** | ADP-USBC-35MM1-01 |

## 1.2 Product Specification of Equipment Under Test

| Product Specification is subject to this standard | |
|---|---|
| **Tx/Rx Frequency Range** | 5745 MHz ~ 5825 MHz |
| **Maximum Output Power to Antenna** | **MIMO <Ant. 0+1>**<br>802.11a: 22.81 dBm / 0.1910 W<br>802.11n HT20: 22.71 dBm / 0.1866 W<br>802.11n HT40: 21.61 dBm / 0.1449 W<br>802.11ac VHT20: 22.76 dBm / 0.1888 W<br>802.11ac VHT40: 21.66 dBm / 0.1466 W<br>802.11ac VHT80: 21.71 dBm / 0.1483 W<br>802.11ax HE20: 22.76 dBm / 0.1888 W<br>802.11ax HE40: 21.96 dBm / 0.1570 W<br>802.11ax HE80: 21.91 dBm / 0.1552 W |
| **99% Occupied Bandwidth** | **MIMO <Ant. 0>**<br>802.11a: 16.53<br>802.11ax HE20: 19.03 MHz<br>802.11ax HE40: 38.06 MHz<br>802.11ax HE80: 77.32 MHz<br>**MIMO <Ant. 1>**<br>802.11a: 16.58 MHz<br>802.11ax HE20: 19.08 MHz<br>802.11ax HE40: 38.06 MHz<br>802.11ax HE80: 77.20 MHz |
| **Antenna Type / Gain** | **<Ant. 0>:** Monopole Antenna with gain -0.91 dBi<br>**<Ant. 1>:** IFA Antenna with gain -1.00 dBi |
| **Type of Modulation** | 802.11a/n: OFDM (BPSK/QPSK/16QAM/64QAM)<br>802.11ac: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)<br>802.11ax:OFDMA<br>(BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM) |
| **Antenna Function Description** | |

| | Ant. 0 | Ant. 1 |
|---|---|---|
| 802.11a/n/ac/ax MIMO | V | V |
| 802.11 ax Tx BF | V | V |

**Remark:**

1. MIMO Ant. 0+1 Directional Gain is a calculated result from MIMO Ant. 0 and MIMO Ant. 1. The formula used in calculation is documented in section 1.2.1.
2. Power of MIMO Ant. 0 + Ant. 1 is a calculated result from sum of the power MIMO Ant. 0 and MIMO Ant. 1.
3. 802.11ax Support Tx Beamforming mode, and the manufacturer declares that Tx Beamforming power/EIRP is less than CDD mode 3dbm, so CDD mode cover Tx Beamforming mode.
4. The EUT's information above is declared by manufacturer. Please refer to Comments and Explanations in report summary.

### 1.2.1 Antenna Directional Gain

**<For CDD Mode>**

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

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

For power measurements on IEEE 802.11 devices,

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

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

For PSD measurements, the directional gain calculation.

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

*where*

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

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

$N_{ANT}$ = the total number of antennas

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

$G_k$ is the gain in dBi of the 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 0 (dBi) | Ant 1 (dBi) | DG for Power (dBi) | DG for PSD (dBi) | Power Limit Reduction (dB) | PSD Limit Reduction (dB) |
|---|---|---|---|---|---|---|
| **Band IV** | -0.91 | -1.00 | -0.91 | 2.06 | 0.00 | 0.00 |

Calculation example:

If a device has two antenna, $G_{ANT1}$= -0.91dBi; $G_{ANT2}$=-1.00dBi

Directional gain of power measurement = max(-0.91, -1.00) + 0 = -0.91dBi

Directional gain of PSD derived from formula which is

10 x log { { [ 10^ (-0.91 dBi / 20) + 10^ (-1.00 dBi / 20) ] ^ 2 } / 2 }

= 2.06 dBi

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

## 1.3 Modification of EUT

No modifications made to the EUT during the testing.

## 1.4 Testing Location

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

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

FCC designation No.: TW3786

## 1.5 Applicable Standards

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

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

**Remark:**

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.
3. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

# 2 Test Configuration of Equipment Under Test

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

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

## 2.1 Carrier Frequency and Channel

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

**Note:**

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

## 2.2 Test Mode

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

The PSD of partial RU is reduced to be smaller than full RU according to TCB workshop interim guidance Oct. 2018.

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

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

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

The power for 802.11n and 802.11ac mode is smaller than 802.11ax mode, so all other conducted and radiated test is covered by 802.11ax 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 | MCS0 |
| 802.11ax HE40 | MCS0 |
| 802.11ax HE80 | MCS0 |

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

| Test Cases | |
|---|---|
| AC Conducted Emission | Mode1: WLAN (5GHz) Link + Bluetooth Link + Camera (Rear) + USB Cable (Charging with Adapter 2) + Battery 1 for Sample 1 |

**<Sample 1 with Battery 1>**

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

**<Sample 1 with Battery 2>**

| Ch. # | | Band IV：5725-5850 MHz |
|---|---|---|
| | | 802.11ax HE80 |
| L | Low | - |
| M | Middle | 155 |
| H | High | - |

**<Sample 1 with Battery 3>**

| Ch. # | | Band IV：5725-5850 MHz |
|---|---|---|
| | | 802.11ax HE80 |
| L | Low | - |
| M | Middle | 155 |
| H | High | - |

**<Sample 2 with Battery 2>**

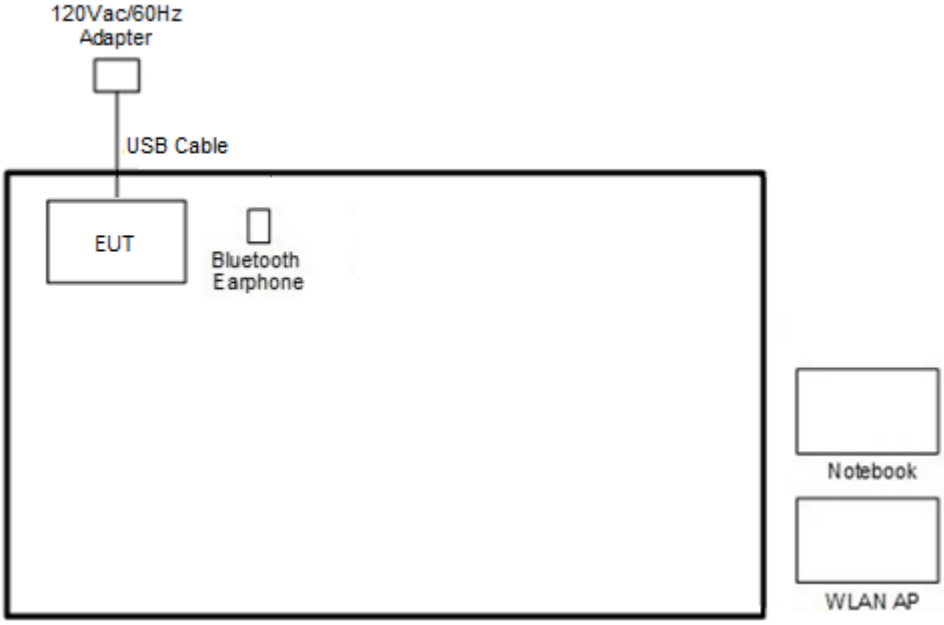
| Ch. # | | Band IV：5725-5850 MHz |
|---|---|---|
| | | 802.11ax HE80 |
| L | Low | - |
| M | Middle | 155 |
| H | High | - |

**Remark:**

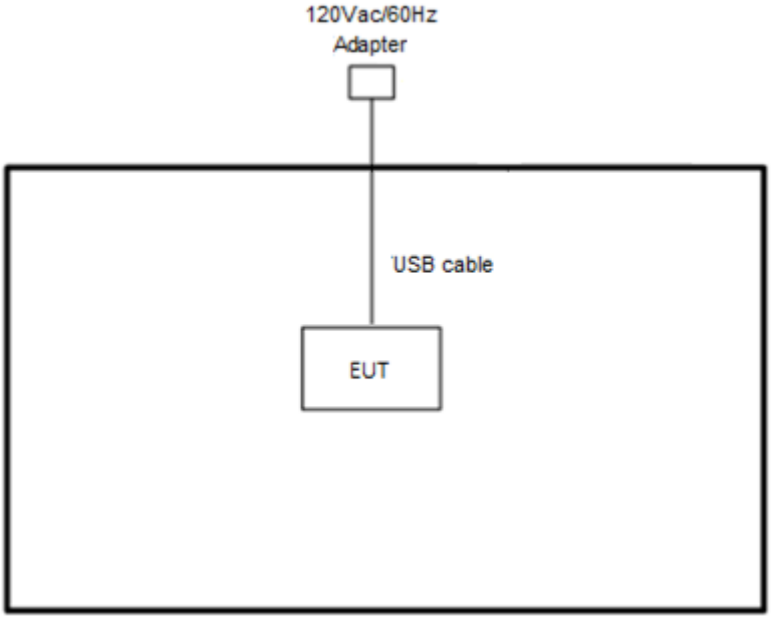
1. For radiation spurious emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power.
2. For Radiated Test Cases, the tests were performed with Adapter 2.

## 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. | Bluetooth Earphone | Kinyo | BTE-3622 | N/A | N/A | N/A |
| 2. | WLAN AP | ASUS | RT-AC52 | N/A | N/A | Unshielded, 1.8 m |
| 3. | Notebook | DELL | P79G | FCC DoC | N/A | AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m |

## 2.5 EUT Operation Test Setup

The RF test items, utility "QRCT Version 4.0.00206.0" was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

## 2.6 Measurement Results Explanation Example

**For all conducted test items:**

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

Example :

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

*Offset = RF cable loss + attenuator factor.*

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

*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.

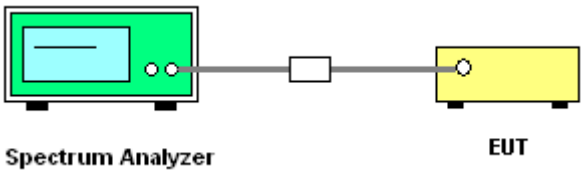
### 3.1.2 Measuring Instruments

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

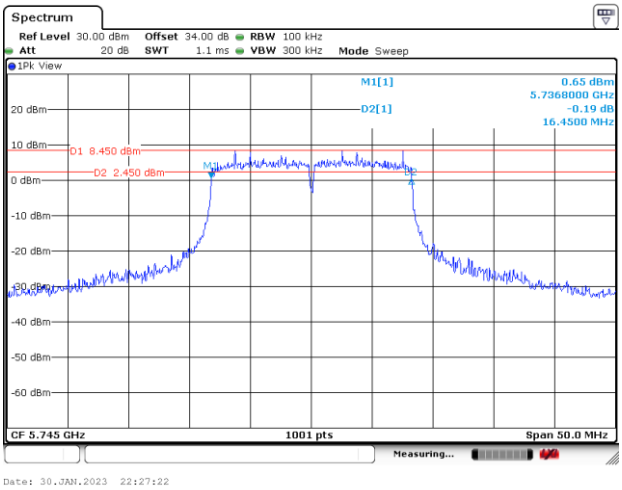
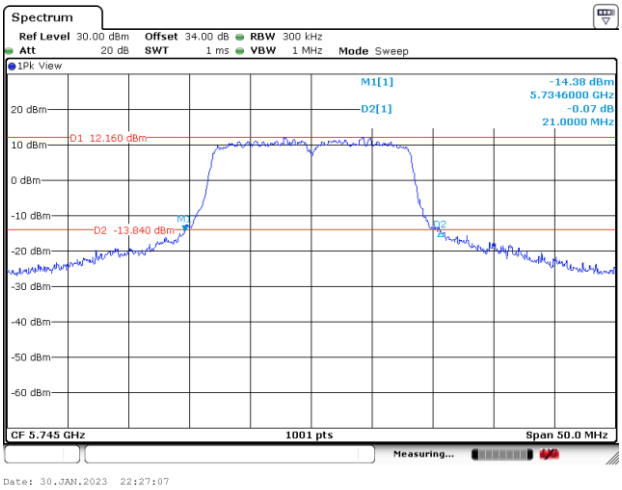
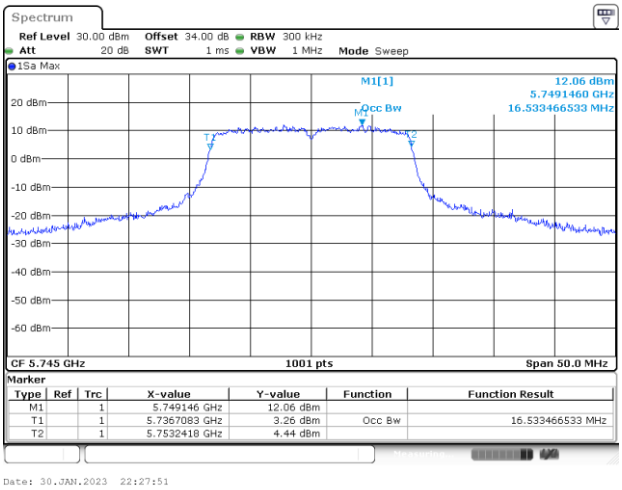



### 3.1.5 Test Result of 6dB and 26dB and 99% Occupied Bandwidth

Please refer to Appendix A.

**MIMO <Ant. 0+1>**

**<802.11a>**

| 6dB Bandwidth | 26dB Bandwidth |
|---|---|
|  |  |
| **99% Occupied Bandwidth** | **NA** |
|  | |

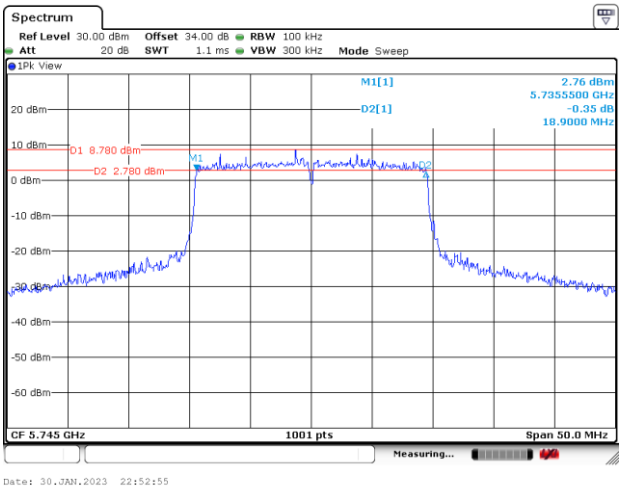
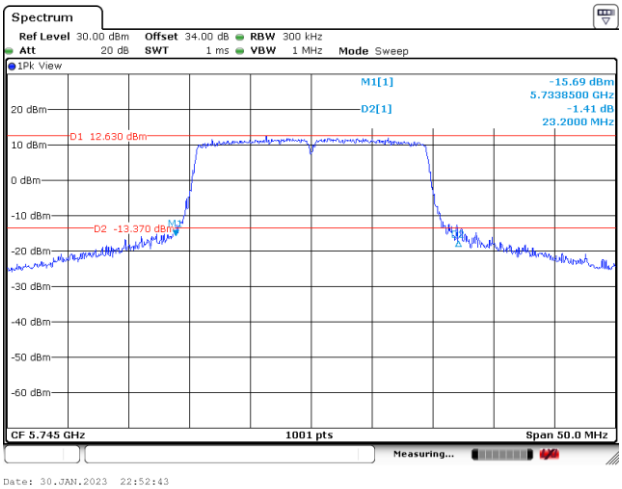
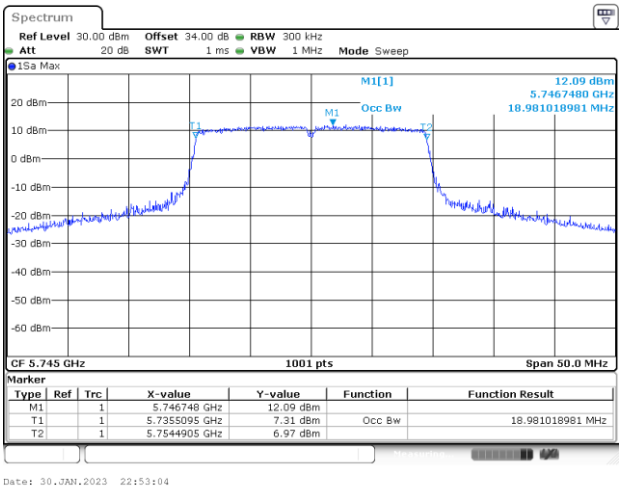






**Note:** The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

**<802.11ax HE20>**

| 6dB Bandwidth | 26dB Bandwidth |
|---|---|
|  |  |
| **99% Occupied Bandwidth** | **NA** |
|  | |

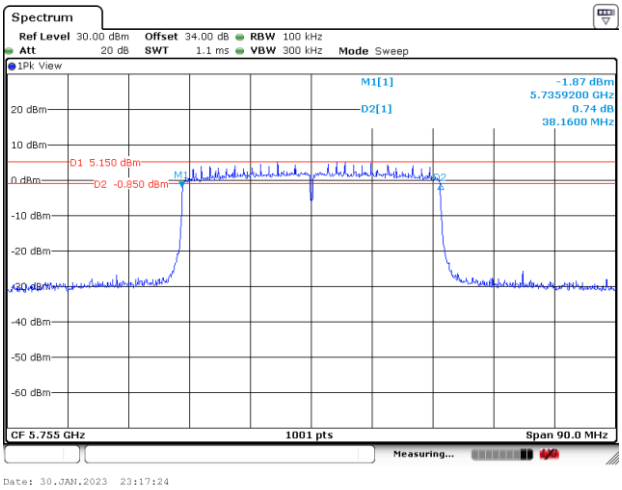
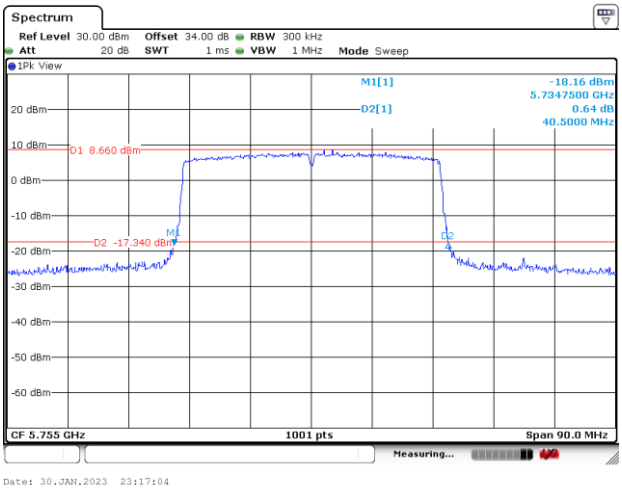
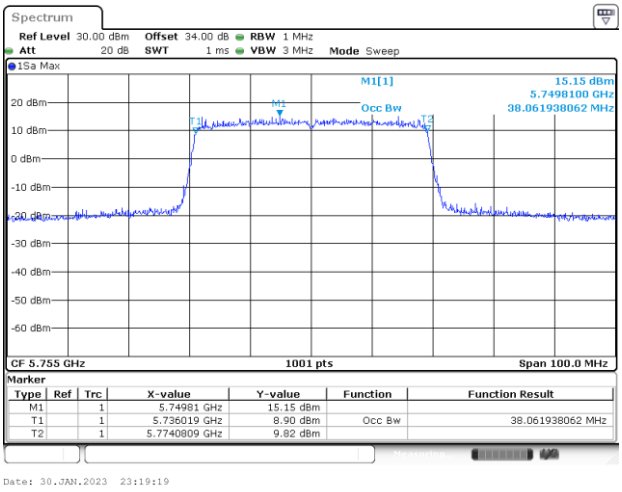






**Note:** The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

**<802.11ax HE40>**

| 6dB Bandwidth | 26dB Bandwidth |
|---|---|
|  |  |
| **99% Occupied Bandwidth** | **NA** |
|  | |

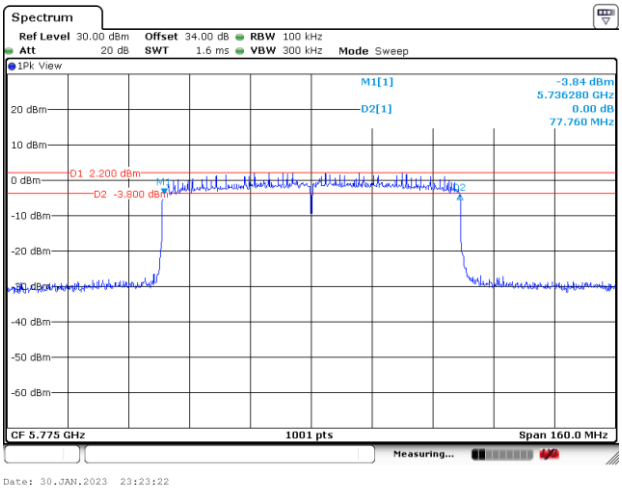
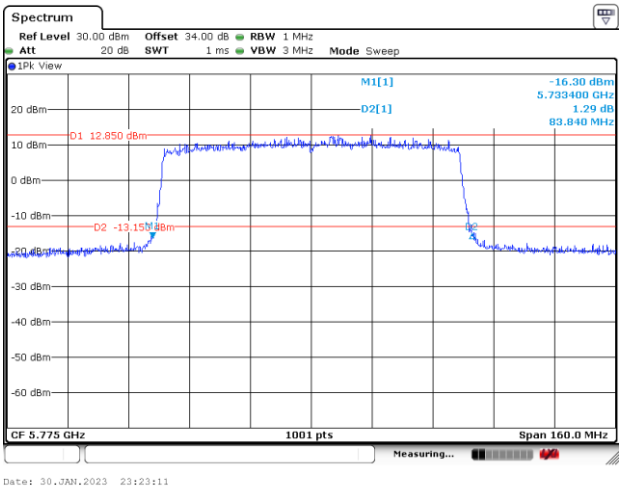
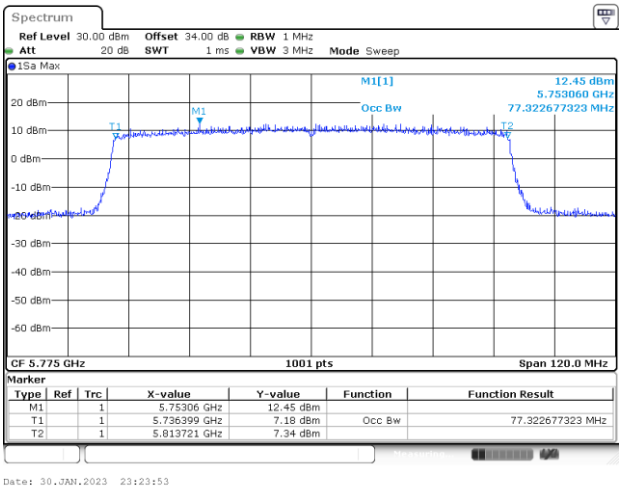






**Note:** The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

**<802.11ax HE80>**

| 6dB Bandwidth | 26dB Bandwidth |
|---|---|
|  |  |
| **99% Occupied Bandwidth** | **NA** |
|  | |







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

## 3.2 Maximum Conducted Output Power Measurement

### 3.2.1 Limit of Maximum Conducted Output Power

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

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

### 3.2.2 Measuring Instruments

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

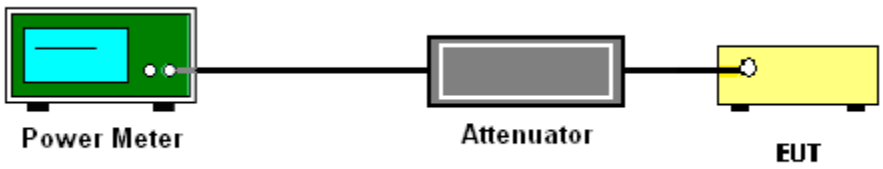
### 3.2.3 Test Procedures

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

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

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

### 3.2.4 Test Setup




### 3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

## 3.3 Power Spectral Density Measurement

### 3.3.1 Limit of Power Spectral Density

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

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

### 3.3.2 Measuring Instruments

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

### 3.3.3 Test Procedures

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

Section F) Maximum power spectral density.

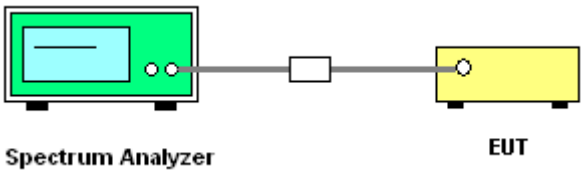
**# Method SA-2 #**

(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.

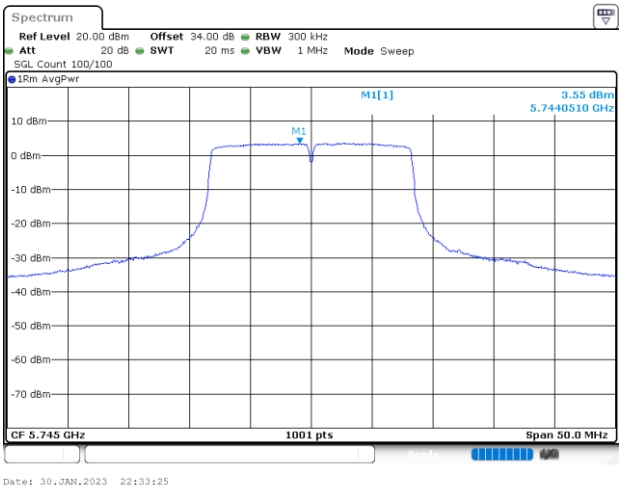
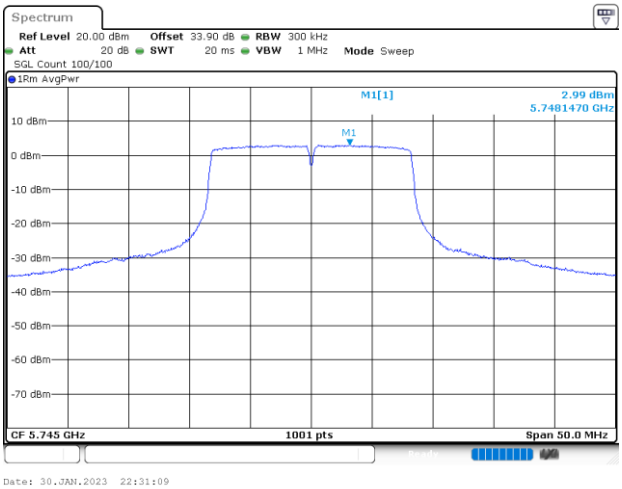
### 3.3.4 Test Setup



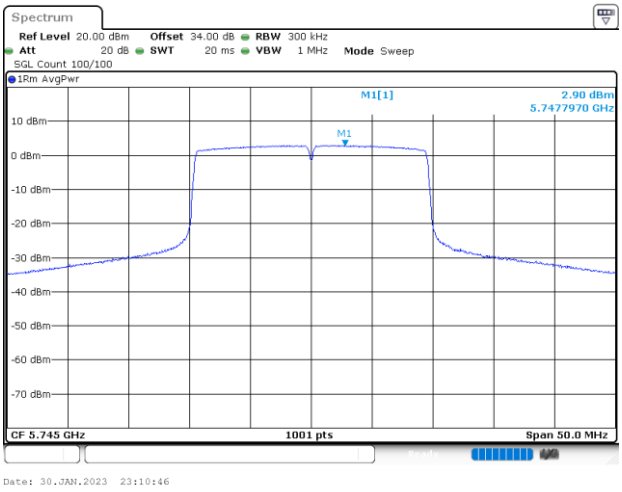
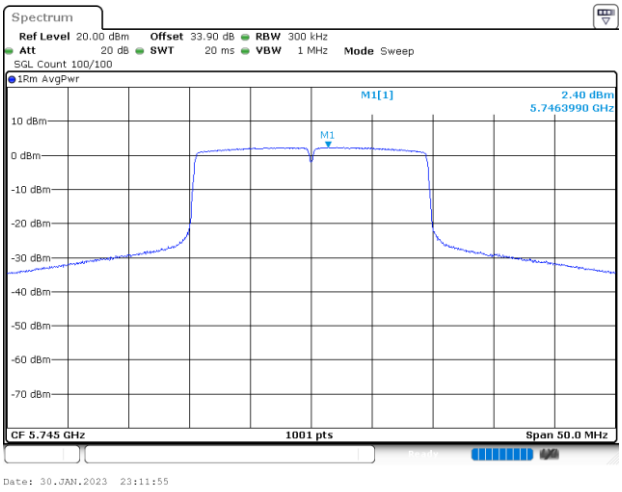

### 3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

**<802.11a>**

| Maximum Power Density Plot (dBm/300kHz) | |
|---|---|
| **MIMO Ant. 0** | **MIMO Ant. 1** |
|  |  |

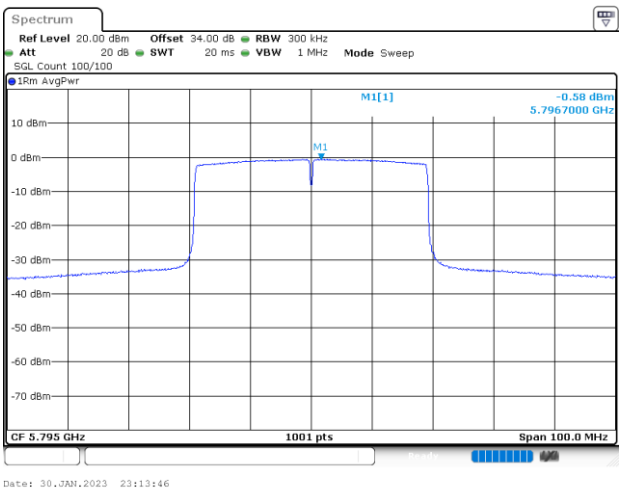
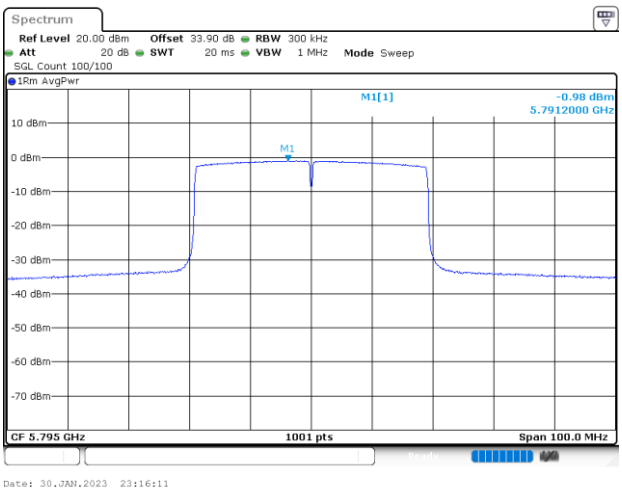
**<802.11ax HE20>**

| Maximum Power Density Plot (dBm/300kHz) | |
|---|---|
| MIMO Ant. 0 | MIMO Ant. 1 |
|  |  |

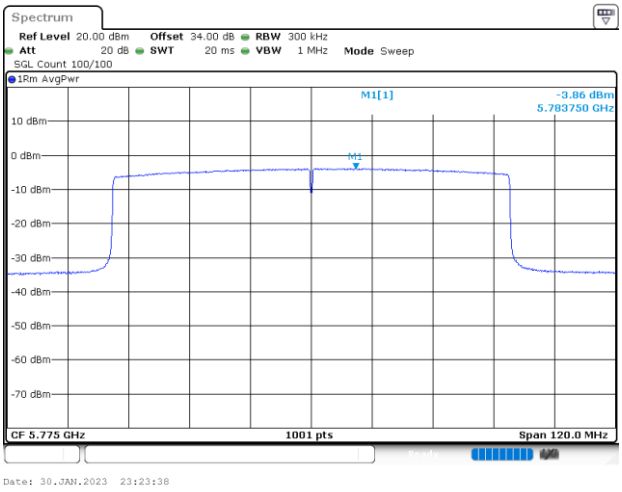
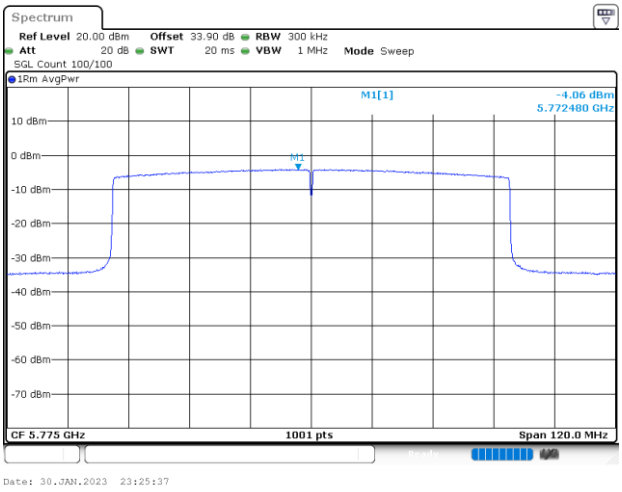




**<802.11ax HE40>**

| Maximum Power Density Plot (dBm/300kHz) | |
|---|---|
| MIMO Ant. 0 | MIMO Ant. 1 |
|  |  |

**<802.11ax HE80>**

| Maximum Power Density Plot (dBm/300kHz) | |
|---|---|
| **MIMO Ant. 0** | **MIMO Ant. 1** |
|  |  |

## 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

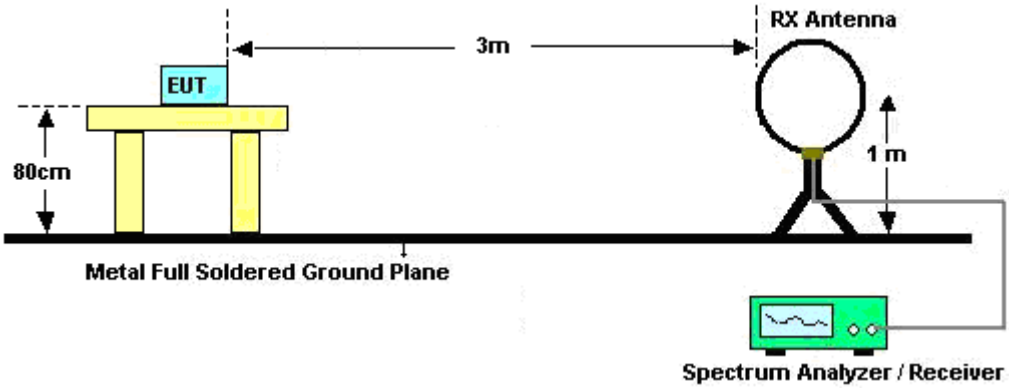
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz
   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting 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.

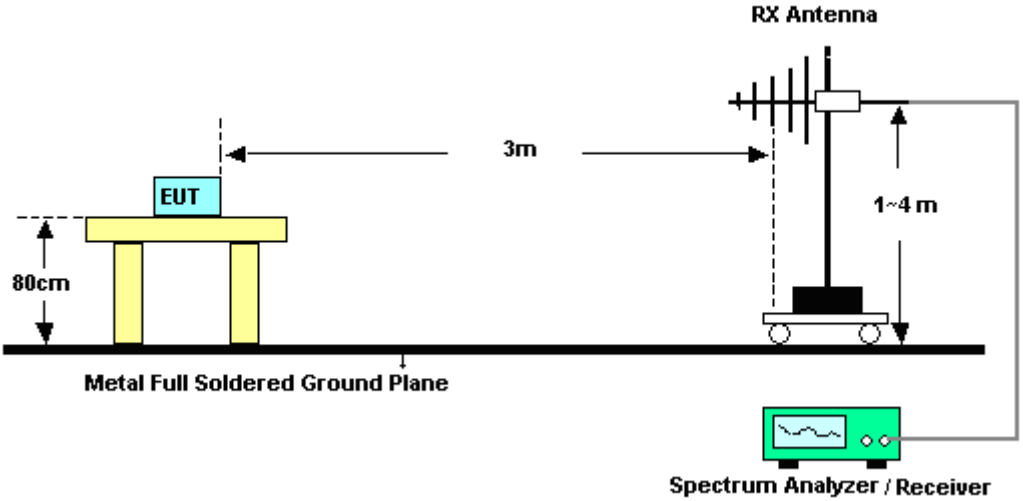
   When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as “-“.

### 3.4.4 Test Setup

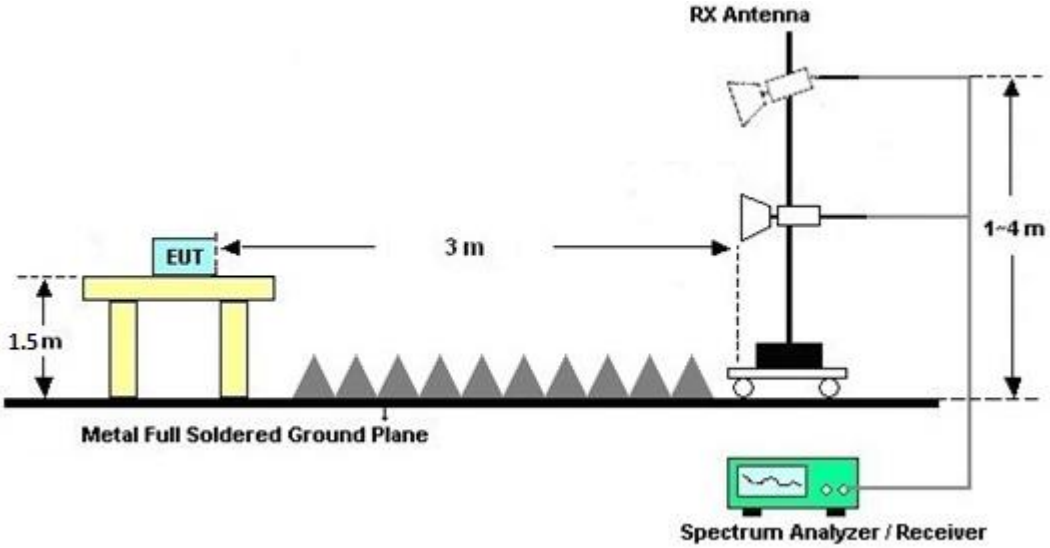
**For radiated emissions below 30MHz**



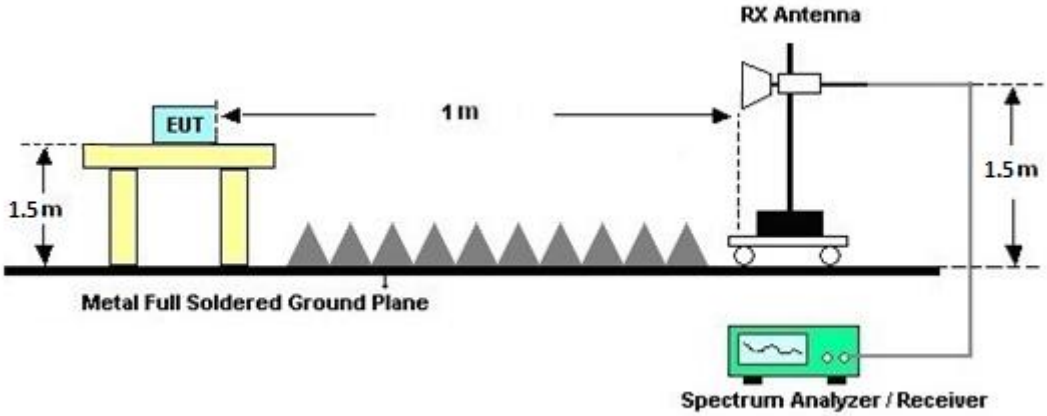

**For radiated emissions from 30MHz to 1GHz**




**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.

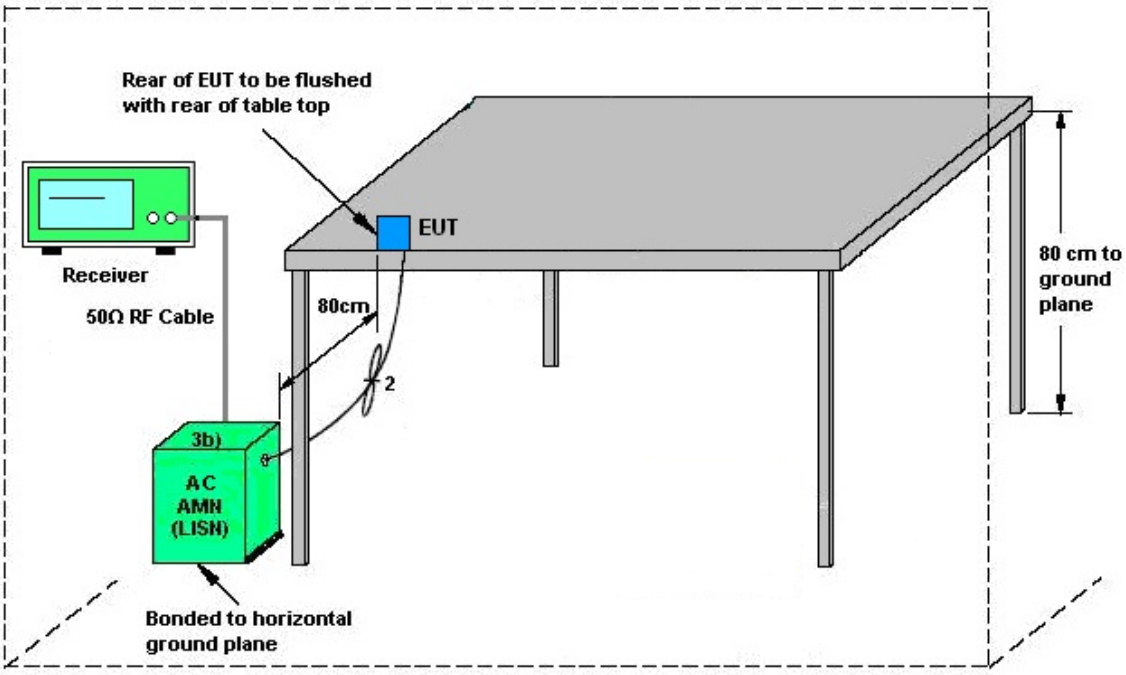
### 3.5.2 Measuring Instruments

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. 17, 2022 | Jan. 06, 2023~ Jan. 31, 2023 | Nov. 16, 2023 | Conducted (TH05-HY) |
| USB Power Sensor | DARE | RPR3006W | 17I00015SNO 36 (NO:35) | 10MHz~6GHz | Sep. 04, 2022 | Jan. 06, 2023~ Jan. 31, 2023 | Sep. 03, 2023 | Conducted (TH05-HY) |
| Signal Analyzer | Rohde & Schwarz | FSV40 | 101905 | 10Hz - 40GHz | Aug. 03, 2022 | Jan. 06, 2023~ Jan. 31, 2023 | Aug. 02, 2023 | Conducted (TH05-HY) |
| AC Power Source | ACPOWER | AFC-11003G | F317040033 | N/A | N/A | Feb. 14, 2023 | N/A | Conduction (CO07-HY) |
| Software | Rohde & Schwarz | EMC32 V10.30 | N/A | N/A | N/A | Feb. 14, 2023 | N/A | Conduction (CO07-HY) |
| Pulse Limiter | SCHWARZBE CK | VTSD 9561-F N | 9561-F N00373 | 9kHz-200MHz | Nov. 01, 2022 | Feb. 14, 2023 | Oct. 31, 2023 | Conduction (CO07-HY) |
| RF Cable | HUBER + SUHNER | RG 214/U | 1358175 | 9kHz~30MHz | Mar. 16, 2022 | Feb. 14, 2023 | Mar. 15, 2023 | Conduction (CO07-HY) |
| Two-Line V-Network | TESEQ | NNB 51 | 45051 | N/A | Feb. 16, 2022 | Feb. 14, 2023 | Feb. 15, 2023 | Conduction (CO07-HY) |
| Four-Line V-Network | TESEQ | NNB 52 | 36122 | N/A | Mar. 04, 2022 | Feb. 14, 2023 | Mar. 03, 2023 | Conduction (CO07-HY) |
| EMI Test Receiver | Rohde & Schwarz | ESCI7 | 100724 | 9kHz~7GHz | Feb. 24, 2022 | Feb. 14, 2023 | Feb. 23, 2023 | Conduction (CO07-HY) |
| Loop Antenna | TESEQ | HLA 6120 | 31244 | 9 kHz~30 MHz | Mar. 18, 2022 | Jan. 24, 2023~ Feb. 28, 2023 | Mar. 17, 2023 | Radiation (03CH15-HY) |
| Bilog Antenna | TESEQ | CBL 6111D & 00800N1D01N -06 | 0103 & 07 | 30MHz~1GHz | Apr. 24, 2022 | Jan. 24, 2023~ Feb. 28, 2023 | Apr. 23, 2023 | Radiation (03CH15-HY) |
| Amplifier | SONOMA | 310N | 363440 | 9kHz~1GHz | Dec. 26, 2022 | Jan. 24, 2023~ Feb. 28, 2023 | Dec. 25, 2023 | Radiation (03CH15-HY) |
| Horn Antenna | SCHWARZBE CK | BBHA 9120 D | 9120D-02294 | 1GHz~18GHz | Jun. 23, 2022 | Jan. 24, 2023~ Feb. 28, 2023 | Jun. 22, 2023 | Radiation (03CH15-HY) |
| SHF-EHF Horn Antenna | SCHWARZBE CK | BBHA 9170 | BBHA917057 6 | 18GHz~40GHz | May 14, 2022 | Jan. 24, 2023~ Feb. 28, 2023 | May 13, 2023 | Radiation (03CH15-HY) |
| Preamplifier | Jet-Power | JPA0118-55-30 3K | 17100018000 54002 | 1GHz~18GHz | Sep. 28, 2022 | Jan. 24, 2023~ Feb. 28, 2023 | Sep. 27, 2023 | Radiation (03CH15-HY) |
| Preamplifier | EM Electronics | EM01G18G | 060802 | 1GHz-18GHz | Mar. 08, 2022 | Jan. 24, 2023~ Feb. 28, 2023 | Mar. 07, 2023 | Radiation (03CH15-HY) |
| EMI Test Receiver | Keysight | N9038A(MXE) | MY54130085 | 20MHz~8.4GHz | Oct. 18, 2022 | Jan. 24, 2023~ Feb. 28, 2023 | Oct. 17, 2023 | Radiation (03CH15-HY |
| Spectrum Analyzer | Keysight | N9010 | MY54200485 | 10Hz~44GHz | May 07, 2022 | Jan. 24, 2023~ Feb. 28, 2023 | May 06, 2023 | Radiation (03CH15-HY) |
| Antenna Mast | ChainTek | MBS-520-1 | N/A | 1m~4m | N/A | Jan. 24, 2023~ Feb. 28, 2023 | N/A | Radiation (03CH15-HY) |
| Turn Table | ChainTek | T-200-S-1 | N/A | 0~360 Degree | N/A | Jan. 24, 2023~ Feb. 28, 2023 | N/A | Radiation (03CH15-HY) |
| Software | Audix | E3 6.2009-8-24 (k5) | RK-000451 | N/A | N/A | Jan. 24, 2023~ Feb. 28, 2023 | N/A | Radiation (03CH15-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 104, 102E | MY582185/4, MY9838/4PE, 519228/2 | 30MHz~18G | Jun. 21, 2022 | Jan. 24, 2023~ Feb. 28, 2023 | Jun. 20, 2023 | Radiation (03CH15-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 102 | 804011/2,804 012/2 | 30MHz-40GHz | Jan. 03, 2023 | Jan. 24, 2023~ Feb. 28, 2023 | Jan. 02, 2024 | Radiation (03CH15-HY) |
| RF Cable | HUBER + SUHNER | SUCOFLEX 104 | MY9837/4PE | 9kHz~30MHz | Mar. 10, 2022 | Jan. 24, 2023~ Feb. 28, 2023 | Mar. 09, 2023 | Radiation (03CH15-HY) |

# 5 Uncertainty of Evaluation

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

| | |
|---|---|
| Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y)) | 3.46 dB |

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

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

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

| | |
|---|---|
| Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y)) | 4.20 dB |

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

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

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

| | |
|---|---|
| Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y)) | 5.20 dB |

# Appendix A. Test Result of Conducted Test Items

| | | | | |
|---|---|---|---|---|
| Test Engineer: | Hank Hsu | Temperature: | 21~25 | °C |
| Test Date: | 2023/01/06~2023/01/31 | 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 0 | Ant 1 | Ant 0 | Ant 1 | Ant 0 | Ant 1 | | |
| 11a | 6Mbps | 2 | 149 | 5745 | 16.53 | 16.58 | 21.00 | 21.75 | 16.45 | 16.45 | 0.5 | Pass |
| 11a | 6Mbps | 2 | 157 | 5785 | 16.53 | 16.48 | 21.20 | 21.50 | 16.40 | 16.40 | 0.5 | Pass |
| 11a | 6Mbps | 2 | 165 | 5825 | 16.53 | 16.48 | 20.95 | 20.25 | 16.40 | 16.40 | 0.5 | Pass |

# ***TEST RESULTS DATA***
## ***Average Power Table***

| U-NII-3 MIMO | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | Average Conducted Power (dBm) | | | FCC Conducted Power Limit (dBm) | | DG (dBi) | | Pass/Fail |
| | | | | | Ant 0 | Ant 1 | SUM | Ant 0 | Ant 1 | Ant 0 | Ant 1 | |
| 11a | 6Mbps | 2 | 149 | 5745 | 20.00 | 19.60 | 22.81 | 30.00 | | -0.91 | | Pass |
| 11a | 6Mbps | 2 | 157 | 5785 | 19.70 | 19.60 | 22.66 | 30.00 | | -0.91 | | Pass |
| 11a | 6Mbps | 2 | 165 | 5825 | 19.80 | 19.80 | 22.81 | 30.00 | | -0.91 | | Pass |
| HT20 | MCS0 | 2 | 149 | 5745 | 19.70 | 19.40 | 22.56 | 30.00 | | -0.91 | | Pass |
| HT20 | MCS0 | 2 | 157 | 5785 | 19.50 | 19.50 | 22.51 | 30.00 | | -0.91 | | Pass |
| HT20 | MCS0 | 2 | 165 | 5825 | 19.70 | 19.70 | 22.71 | 30.00 | | -0.91 | | Pass |
| HT40 | MCS0 | 2 | 151 | 5755 | 18.60 | 18.50 | 21.56 | 30.00 | | -0.91 | | Pass |
| HT40 | MCS0 | 2 | 159 | 5795 | 18.60 | 18.60 | 21.61 | 30.00 | | -0.91 | | Pass |
| VHT20 | MCS8 | 2 | 149 | 5745 | 19.90 | 19.60 | 22.76 | 30.00 | | -0.91 | | Pass |
| VHT20 | MCS8 | 2 | 157 | 5785 | 19.50 | 19.50 | 22.51 | 30.00 | | -0.91 | | Pass |
| VHT20 | MCS8 | 2 | 165 | 5825 | 19.70 | 19.70 | 22.71 | 30.00 | | -0.91 | | Pass |
| VHT40 | MCS0 | 2 | 151 | 5755 | 18.70 | 18.60 | 21.66 | 30.00 | | -0.91 | | Pass |
| VHT40 | MCS0 | 2 | 159 | 5795 | 18.60 | 18.70 | 21.66 | 30.00 | | -0.91 | | Pass |
| VHT80 | MCS0 | 2 | 155 | 5775 | 18.70 | 18.70 | 21.71 | 30.00 | | -0.91 | | Pass |

Report Number : FR2D2704F

## ***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 0 | Ant 1 | Ant 0 | Ant 1 | Ant 0 | Ant 1 | SUM | Ant 0 | Ant 1 | Ant 0 | Ant 1 | |
| 11a | 6Mbps | 2 | 149 | 5745 | 0.00 | 0.00 | 2.22 | | 5.77 | 5.21 | 8.78 | 30.00 | | 2.06 | | Pass |
| 11a | 6Mbps | 2 | 157 | 5785 | 0.00 | 0.00 | 2.22 | | 5.71 | 5.27 | 8.72 | 30.00 | | 2.06 | | Pass |
| 11a | 6Mbps | 2 | 165 | 5825 | 0.00 | 0.00 | 2.22 | | 5.74 | 5.35 | 8.75 | 30.00 | | 2.06 | | Pass |

**Note:** PSD Sum = Max PSD(Ant. 0, Ant. 1) + 10 log (n)

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

| U-NII-3 MIMO | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | RU Config. | 99% Bandwidth (MHz) | | 26dB Bandwidth (MHz) | | 6 dB Bandwidth (MHz) | | 6 dB Bandwidth Min. Limit (MHz) | Pass/Fail |
| | | | | | | Ant 0 | Ant 1 | Ant 0 | Ant 1 | Ant 0 | Ant 1 | | |
| HE20 | MCS0 | 2 | 149 | 5745 | Full | 18.98 | 19.08 | 23.20 | 25.65 | 18.90 | 18.50 | 0.5 | Pass |
| HE20 | MCS0 | 2 | 157 | 5785 | Full | 18.98 | 19.03 | 25.20 | 22.80 | 19.20 | 19.15 | 0.5 | Pass |
| HE20 | MCS0 | 2 | 165 | 5825 | Full | 19.03 | 19.03 | 23.80 | 22.15 | 19.00 | 19.10 | 0.5 | Pass |
| HE40 | MCS0 | 2 | 151 | 5755 | Full | 38.06 | 38.06 | 40.50 | 41.49 | 38.16 | 38.07 | 0.5 | Pass |
| HE40 | MCS0 | 2 | 159 | 5795 | Full | 38.06 | 38.06 | 40.86 | 41.04 | 38.16 | 38.16 | 0.5 | Pass |
| HE80 | MCS0 | 2 | 155 | 5775 | Full | 77.32 | 77.20 | 83.84 | 83.52 | 77.76 | 77.12 | 0.5 | Pass |

Report Number : FR2D2704F

## ***TEST RESULTS DATA***
## ***Average Power Table***

| U-NII-3 MIMO | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mod. | Data Rate | NTX | CH. | Freq. (MHz) | RU Config. | Average Conducted Power (dBm) | | | FCC Conducted Power Limit (dBm) | | DG (dBi) | | Pass/Fail |
| | | | | | | Ant 0 | Ant 1 | SUM | Ant 0 | Ant 1 | Ant 0 | Ant 1 | |
| HE20 | MCS0 | 2 | 149 | 5745 | Full | 19.90 | 19.60 | 22.76 | 30.00 | | -0.91 | | Pass |
| HE20 | MCS0 | 2 | 149 | 5745 | 26/0 | 10.40 | 10.20 | 13.31 | 30.00 | | -0.91 | | Pass |
| HE20 | MCS0 | 2 | 149 | 5745 | 52/37 | 13.20 | 13.00 | 16.11 | 30.00 | | -0.91 | | Pass |
| HE20 | MCS0 | 2 | 149 | 5745 | 106/53 | 16.60 | 16.40 | 19.51 | 30.00 | | -0.91 | | Pass |
| HE20 | MCS0 | 2 | 157 | 5785 | Full | 19.40 | 20.00 | 22.72 | 30.00 | | -0.91 | | Pass |
| HE20 | MCS0 | 2 | 157 | 5785 | 26/4 | 10.70 | 10.60 | 13.66 | 30.00 | | -0.91 | | Pass |
| HE20 | MCS0 | 2 | 157 | 5785 | 52/38 | 12.90 | 13.20 | 16.06 | 30.00 | | -0.91 | | Pass |
| HE20 | MCS0 | 2 | 157 | 5785 | 106/53 | 16.40 | 16.50 | 19.46 | 30.00 | | -0.91 | | Pass |
| HE20 | MCS0 | 2 | 165 | 5825 | Full | 19.70 | 19.80 | 22.76 | 30.00 | | -0.91 | | Pass |
| HE20 | MCS0 | 2 | 165 | 5825 | 26/8 | 10.30 | 10.20 | 13.26 | 30.00 | | -0.91 | | Pass |
| HE20 | MCS0 | 2 | 165 | 5825 | 52/40 | 13.40 | 13.20 | 16.31 | 30.00 | | -0.91 | | Pass |
| HE20 | MCS0 | 2 | 165 | 5825 | 106/54 | 16.50 | 16.60 | 19.56 | 30.00 | | -0.91 | | Pass |
| HE40 | MCS0 | 2 | 151 | 5755 | Full | 18.80 | 18.60 | 21.71 | 30.00 | | -0.91 | | Pass |
| HE40 | MCS0 | 2 | 151 | 5755 | 242/61 | 16.50 | 16.40 | 19.46 | 30.00 | | -0.91 | | Pass |
| HE40 | MCS0 | 2 | 159 | 5795 | Full | 19.00 | 18.90 | 21.96 | 30.00 | | -0.91 | | Pass |
| HE40 | MCS0 | 2 | 159 | 5795 | 242/62 | 16.70 | 16.60 | 19.66 | 30.00 | | -0.91 | | Pass |
| HE80 | MCS0 | 2 | 155 | 5775 | Full | 18.90 | 18.90 | 21.91 | 30.00 | | -0.91 | | Pass |
| HE80 | MCS0 | 2 | 155 | 5775 | 484/65 | 16.30 | 16.40 | 19.36 | 30.00 | | -0.91 | | Pass |
| HE80 | MCS0 | 2 | 155 | 5775 | 484/66 | 15.80 | 15.50 | 18.66 | 30.00 | | -0.91 | | Pass |

Report Number : FR2D2704F

## ***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 0 | Ant 1 | Ant 0 | Ant 1 | Ant 0 | Ant 1 | SUM | Ant 0 | Ant 1 | Ant 0 | Ant 1 | |
| HE20 | MCS0 | 2 | 149 | 5745 | Full | 0.00 | 0.00 | 2.22 | | 5.12 | 4.62 | 8.13 | 30.00 | | 2.06 | | Pass |
| HE20 | MCS0 | 2 | 149 | 5745 | 26/0 | 0.00 | 0.00 | 2.22 | | 4.78 | 4.29 | 7.79 | 30.00 | | 2.06 | | Pass |
| HE20 | MCS0 | 2 | 149 | 5745 | 52/37 | 0.00 | 0.00 | 2.22 | | 4.63 | 4.19 | 7.64 | 30.00 | | 2.06 | | Pass |
| HE20 | MCS0 | 2 | 149 | 5745 | 106/53 | 0.00 | 0.00 | 2.22 | | 4.80 | 4.39 | 7.81 | 30.00 | | 2.06 | | Pass |
| HE20 | MCS0 | 2 | 157 | 5785 | Full | 0.00 | 0.00 | 2.22 | | 4.99 | 4.70 | 8.00 | 30.00 | | 2.06 | | Pass |
| HE20 | MCS0 | 2 | 157 | 5785 | 26/4 | 0.00 | 0.00 | 2.22 | | 4.72 | 4.43 | 7.73 | 30.00 | | 2.06 | | Pass |
| HE20 | MCS0 | 2 | 157 | 5785 | 52/38 | 0.00 | 0.00 | 2.22 | | 4.22 | 4.43 | 7.44 | 30.00 | | 2.06 | | Pass |
| HE20 | MCS0 | 2 | 157 | 5785 | 106/53 | 0.00 | 0.00 | 2.22 | | 4.73 | 4.56 | 7.74 | 30.00 | | 2.06 | | Pass |
| HE20 | MCS0 | 2 | 165 | 5825 | Full | 0.00 | 0.00 | 2.22 | | 5.07 | 4.71 | 8.08 | 30.00 | | 2.06 | | Pass |
| HE20 | MCS0 | 2 | 165 | 5825 | 26/8 | 0.00 | 0.00 | 2.22 | | 4.70 | 4.45 | 7.71 | 30.00 | | 2.06 | | Pass |
| HE20 | MCS0 | 2 | 165 | 5825 | 52/40 | 0.00 | 0.00 | 2.22 | | 4.75 | 4.32 | 7.76 | 30.00 | | 2.06 | | Pass |
| HE20 | MCS0 | 2 | 165 | 5825 | 106/54 | 0.00 | 0.00 | 2.22 | | 4.80 | 4.58 | 7.81 | 30.00 | | 2.06 | | Pass |
| HE40 | MCS0 | 2 | 151 | 5755 | Full | 0.00 | 0.00 | 2.22 | | 1.22 | 0.77 | 4.23 | 30.00 | | 2.06 | | Pass |
| HE40 | MCS0 | 2 | 151 | 5755 | 242/61 | 0.00 | 0.00 | 2.22 | | 0.95 | 0.74 | 3.96 | 30.00 | | 2.06 | | Pass |
| HE40 | MCS0 | 2 | 159 | 5795 | Full | 0.00 | 0.00 | 2.22 | | 1.64 | 1.24 | 4.65 | 30.00 | | 2.06 | | Pass |
| HE40 | MCS0 | 2 | 159 | 5795 | 242/62 | 0.00 | 0.00 | 2.22 | | 1.42 | 1.04 | 4.43 | 30.00 | | 2.06 | | Pass |
| HE80 | MCS0 | 2 | 155 | 5775 | Full | 0.00 | 0.00 | 2.22 | | -1.64 | -1.84 | 1.37 | 30.00 | | 2.06 | | Pass |
| HE80 | MCS0 | 2 | 155 | 5775 | 484/65 | 0.06 | 0.06 | 2.22 | | -2.12 | -2.18 | 0.89 | 30.00 | | 2.06 | | Pass |
| HE80 | MCS0 | 2 | 155 | 5775 | 484/66 | 0.06 | 0.06 | 2.22 | | -2.11 | -2.78 | 0.90 | 30.00 | | 2.06 | | Pass |

**Note:** PSD Sum = Max PSD(Ant. 0, Ant. 1) + 10 log (n)

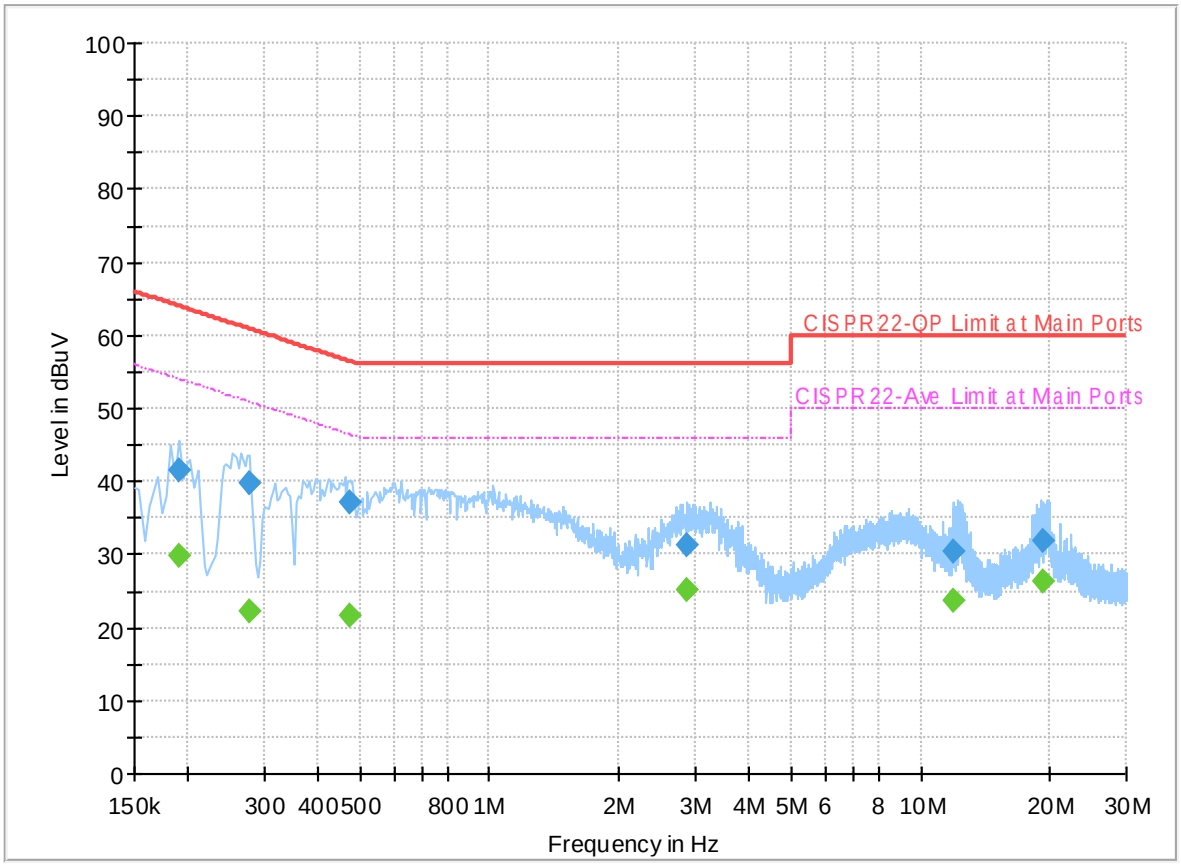
# Appendix B. AC Conducted Emission Test Results

| | | | |
|---|---|---|---|
| **Test Engineer :** | Louis Chung | **Temperature :** | 20.2~23.4℃ |
| | | **Relative Humidity :** | 55.6~71.3% |

## EUT Information

| | |
|---|---|
| Report NO : | 2D2704 |
| Test Mode : | Mode 1 |
| Test Voltage : | 120Vac/60Hz |
| Phase : | Line |

Full Spectrum

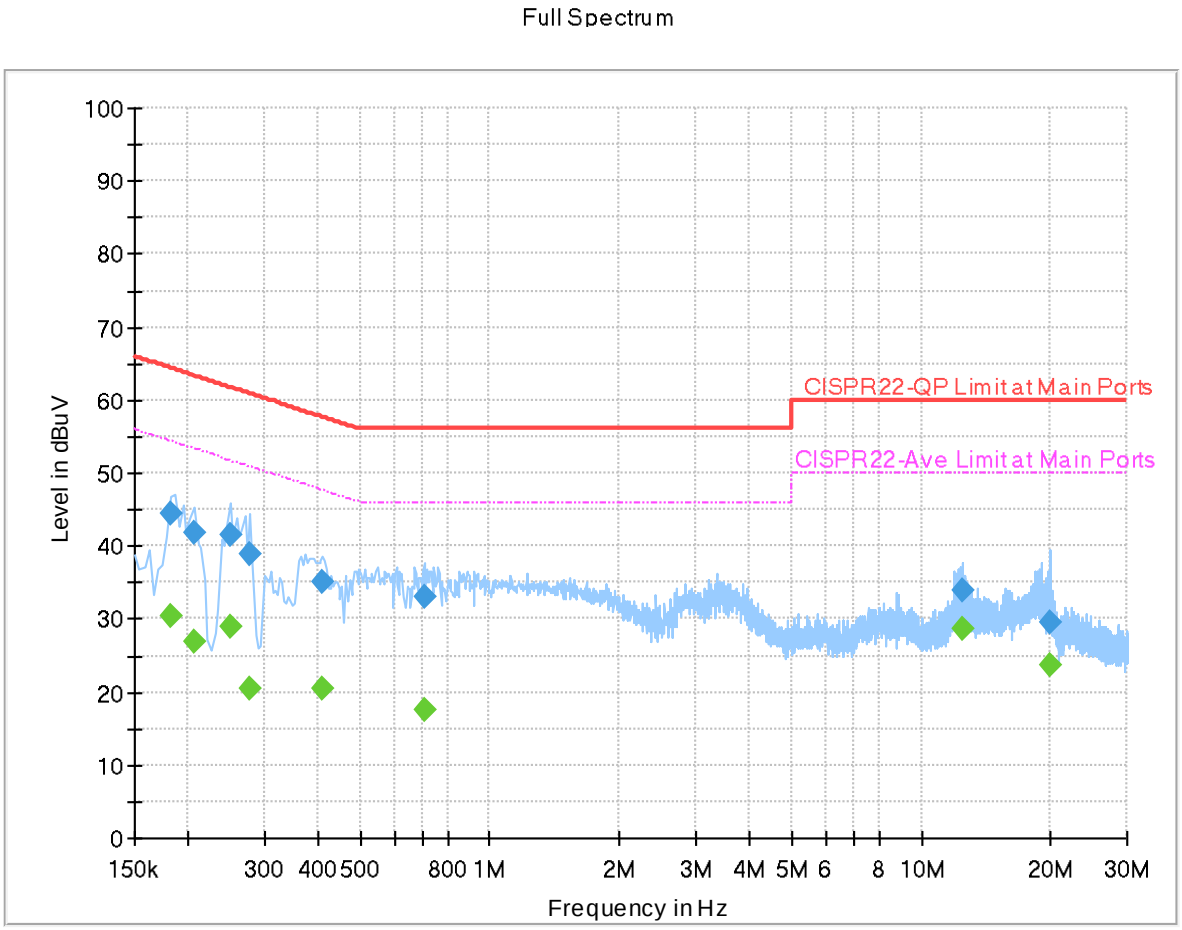



## Final_Result

| Frequency (MHz) | QuasiPeak (dBuV) | CAverage (dBuV) | Limit (dBuV) | Margin (dB) | Line | Filter | Corr. (dB) |
|---|---|---|---|---|---|---|---|
| 0.190000 | --- | 29.96 | 54.04 | 24.08 | L1 | OFF | 20.0 |
| 0.190000 | 41.63 | --- | 64.04 | 22.41 | L1 | OFF | 20.0 |
| 0.278000 | --- | 22.09 | 50.88 | 28.79 | L1 | OFF | 20.0 |
| 0.278000 | 39.91 | --- | 60.88 | 20.97 | L1 | OFF | 20.0 |
| 0.474000 | --- | 21.58 | 46.44 | 24.86 | L1 | OFF | 20.0 |
| 0.474000 | 37.08 | --- | 56.44 | 19.36 | L1 | OFF | 20.0 |
| 2.870000 | --- | 25.15 | 46.00 | 20.85 | L1 | OFF | 20.0 |
| 2.870000 | 31.20 | --- | 56.00 | 24.80 | L1 | OFF | 20.0 |
| 11.974000 | --- | 23.71 | 50.00 | 26.29 | L1 | OFF | 20.2 |
| 11.974000 | 30.27 | --- | 60.00 | 29.73 | L1 | OFF | 20.2 |
| 19.166000 | --- | 26.38 | 50.00 | 23.62 | L1 | OFF | 20.2 |
| 19.166000 | 32.00 | --- | 60.00 | 28.00 | L1 | OFF | 20.2 |

## EUT Information

| | |
|---|---|
| Report NO : | 2D2704 |
| 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) |
|---|---|---|---|---|---|---|---|
| 0.182000 | --- | 30.30 | 54.39 | 24.09 | N | OFF | 20.0 |
| 0.182000 | 44.35 | --- | 64.39 | 20.04 | N | OFF | 20.0 |
| 0.206000 | --- | 26.83 | 53.37 | 26.54 | N | OFF | 20.0 |
| 0.206000 | 41.90 | --- | 63.37 | 21.47 | N | OFF | 20.0 |
| 0.250000 | --- | 28.85 | 51.76 | 22.91 | N | OFF | 20.0 |
| 0.250000 | 41.62 | --- | 61.76 | 20.14 | N | OFF | 20.0 |
| 0.278000 | --- | 20.56 | 50.88 | 30.32 | N | OFF | 20.0 |
| 0.278000 | 38.75 | --- | 60.88 | 22.13 | N | OFF | 20.0 |
| 0.410000 | --- | 20.50 | 47.65 | 27.15 | N | OFF | 20.0 |
| 0.410000 | 35.23 | --- | 57.65 | 22.42 | N | OFF | 20.0 |
| 0.706000 | --- | 17.41 | 46.00 | 28.59 | N | OFF | 20.0 |
| 0.706000 | 32.99 | --- | 56.00 | 23.01 | N | OFF | 20.0 |
| 12.486000 | --- | 28.51 | 50.00 | 21.49 | N | OFF | 20.2 |
| 12.486000 | 33.97 | --- | 60.00 | 26.03 | N | OFF | 20.2 |
| 19.998000 | --- | 23.74 | 50.00 | 26.26 | N | OFF | 20.3 |
| 19.998000 | 29.52 | --- | 60.00 | 30.48 | N | OFF | 20.3 |

# Appendix C. Radiated Spurious Emission

| Test Engineer : | Eric Shou, Quentin Liu and Bigshow Wang | Temperature : | 21~26°C |
|---|---|---|---|
| | | Relative Humidity : | 45~60% |

**<Sample 1 with Battery 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. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0+1 | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 802.11a CH 149 5745MHz | | 5628.6 | 49.09 | -19.11 | 68.2 | 43.22 | 33.06 | 9.53 | 36.72 | 150 | 333 | P | H |
| | | 5700 | 52.83 | -52.37 | 105.2 | 46.28 | 33.7 | 9.57 | 36.72 | 150 | 333 | P | H |
| | | 5720 | 68.17 | -42.63 | 110.8 | 61.5 | 33.82 | 9.57 | 36.72 | 150 | 333 | P | H |
| | | 5724.8 | 78.27 | -43.47 | 121.74 | 71.56 | 33.85 | 9.58 | 36.72 | 150 | 333 | P | H |
| | * | 5745 | 113.99 | - | - | 107.15 | 33.97 | 9.59 | 36.72 | 150 | 333 | P | H |
| | * | 5745 | 106.72 | - | - | 99.88 | 33.97 | 9.59 | 36.72 | 150 | 333 | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 5637.2 | 51.13 | -17.07 | 68.2 | 45.24 | 33.07 | 9.54 | 36.72 | 155 | 341 | P | V |
| | | 5697.6 | 56.03 | -47.4 | 103.43 | 49.52 | 33.67 | 9.56 | 36.72 | 155 | 341 | P | V |
| | | 5716.6 | 74.56 | -35.29 | 109.85 | 67.91 | 33.8 | 9.57 | 36.72 | 155 | 341 | P | V |
| | | 5721.8 | 81.17 | -33.73 | 114.9 | 74.49 | 33.83 | 9.57 | 36.72 | 155 | 341 | P | V |
| | * | 5745 | 118.93 | - | - | 112.09 | 33.97 | 9.59 | 36.72 | 155 | 341 | P | V |
| | * | 5745 | 112.3 | - | - | 105.46 | 33.97 | 9.59 | 36.72 | 155 | 341 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a CH 157 5785MHz | | 5629 | 48.46 | -19.74 | 68.2 | 42.59 | 33.06 | 9.53 | 36.72 | 136 | 334 | P | H |
| | | 5695 | 49.88 | -51.63 | 101.51 | 43.4 | 33.64 | 9.56 | 36.72 | 136 | 334 | P | H |
| | | 5705.8 | 50.2 | -56.63 | 106.83 | 43.62 | 33.73 | 9.57 | 36.72 | 136 | 334 | P | H |
| | | 5723.6 | 49.77 | -69.24 | 119.01 | 43.07 | 33.84 | 9.58 | 36.72 | 136 | 334 | P | H |
| | * | 5785 | 112.49 | - | - | 105.46 | 34.14 | 9.6 | 36.71 | 136 | 334 | P | H |
| | * | 5785 | 106.18 | - | - | 99.15 | 34.14 | 9.6 | 36.71 | 136 | 334 | A | H |
| | | 5851.395 | 49.86 | -69.16 | 119.02 | 42.69 | 34.2 | 9.68 | 36.71 | 136 | 334 | P | H |
| | | 5859.185 | 50.39 | -59.24 | 109.63 | 43.19 | 34.22 | 9.69 | 36.71 | 136 | 334 | P | H |
| | | 5880.71 | 50.68 | -50.28 | 100.96 | 43.41 | 34.26 | 9.72 | 36.71 | 136 | 334 | P | H |
| | | 5936.88 | 48.95 | -19.25 | 68.2 | 41.72 | 34.15 | 9.79 | 36.71 | 136 | 334 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 5633.8 | 50.44 | -17.76 | 68.2 | 44.55 | 33.07 | 9.54 | 36.72 | 132 | 341 | P | V |
| | | 5695.4 | 51.94 | -49.87 | 101.81 | 45.46 | 33.64 | 9.56 | 36.72 | 132 | 341 | P | V |
| | | 5717.6 | 53.22 | -56.91 | 110.13 | 46.56 | 33.81 | 9.57 | 36.72 | 132 | 341 | P | V |
| | | 5721.8 | 54.61 | -60.29 | 114.9 | 47.93 | 33.83 | 9.57 | 36.72 | 132 | 341 | P | V |
| | * | 5785 | 117.69 | - | - | 110.66 | 34.14 | 9.6 | 36.71 | 132 | 341 | P | V |
| | * | 5785 | 112.16 | - | - | 105.13 | 34.14 | 9.6 | 36.71 | 132 | 341 | A | V |
| | | 5851.6 | 53.83 | -64.72 | 118.55 | 46.66 | 34.2 | 9.68 | 36.71 | 132 | 341 | P | V |
| | | 5861.645 | 54.43 | -54.51 | 108.94 | 47.23 | 34.22 | 9.69 | 36.71 | 132 | 341 | P | V |
| | | 5876.2 | 52.91 | -51.4 | 104.31 | 45.66 | 34.25 | 9.71 | 36.71 | 132 | 341 | P | V |
| | | 5932.985 | 51.43 | -16.77 | 68.2 | 44.18 | 34.17 | 9.79 | 36.71 | 132 | 341 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | * | 5825 | 112.25 | - | - | 105.12 | 34.2 | 9.64 | 36.71 | 150 | 333 | P | H |
| | * | 5825 | 105.21 | - | - | 98.08 | 34.2 | 9.64 | 36.71 | 150 | 333 | A | H |
| | | 5851 | 67.88 | -52.04 | 119.92 | 60.71 | 34.2 | 9.68 | 36.71 | 150 | 333 | P | H |
| | | 5855 | 64.87 | -45.93 | 110.8 | 57.69 | 34.21 | 9.68 | 36.71 | 150 | 333 | P | H |
| | | 5876 | 51.77 | -52.69 | 104.46 | 44.52 | 34.25 | 9.71 | 36.71 | 150 | 333 | P | H |
| | | 5928.2 | 48.46 | -19.74 | 68.2 | 41.2 | 34.19 | 9.78 | 36.71 | 150 | 333 | P | H |
| | | | | | | | | | | | | | H |
| 802.11a | | | | | | | | | | | | | H |
| CH 165 | * | 5825 | 118.99 | - | - | 111.86 | 34.2 | 9.64 | 36.71 | 135 | 332 | P | V |
| 5825MHz | * | 5825 | 111.94 | - | - | 104.81 | 34.2 | 9.64 | 36.71 | 135 | 332 | A | V |
| | | 5852.6 | 74.99 | -41.28 | 116.27 | 67.81 | 34.21 | 9.68 | 36.71 | 135 | 332 | P | V |
| | | 5857.6 | 72.46 | -37.61 | 110.07 | 65.26 | 34.22 | 9.69 | 36.71 | 135 | 332 | P | V |
| | | 5876.4 | 55.47 | -48.69 | 104.16 | 48.22 | 34.25 | 9.71 | 36.71 | 135 | 332 | P | V |
| | | 5926 | 51.34 | -16.86 | 68.2 | 44.07 | 34.2 | 9.78 | 36.71 | 135 | 332 | 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. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a CH 149 5745MHz | | 7640 | 52.34 | -21.66 | 74 | 56.8 | 36.26 | 11.51 | 52.23 | 400 | 100 | P | H |
| | | 7640 | 42.18 | -11.82 | 54 | 46.64 | 36.26 | 11.51 | 52.23 | 400 | 100 | A | H |
| | | 11490 | 55.85 | -18.15 | 74 | 56.46 | 39 | 13.51 | 53.12 | - | - | P | H |
| | | 11490 | 42.76 | -11.24 | 54 | 43.37 | 39 | 13.51 | 53.12 | - | - | A | H |
| | | 17235 | 51.77 | -16.43 | 68.2 | 51.89 | 38 | 16.54 | 54.66 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 7640 | 52.68 | -21.32 | 74 | 57.14 | 36.26 | 11.51 | 52.23 | 100 | 2 | P | V |
| | | 7640 | 43.2 | -10.8 | 54 | 47.66 | 36.26 | 11.51 | 52.23 | 100 | 2 | A | V |
| | | 11490 | 55.19 | -18.81 | 74 | 55.8 | 39 | 13.51 | 53.12 | - | - | P | V |
| | | 11490 | 42.49 | -11.51 | 54 | 43.1 | 39 | 13.51 | 53.12 | - | - | A | V |
| | | 17235 | 52 | -16.2 | 68.2 | 52.12 | 38 | 16.54 | 54.66 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a CH 157 5785MHz | | 7707.2 | 53.36 | -20.64 | 74 | 57.56 | 36.53 | 11.51 | 52.24 | 400 | 82 | P | H |
| | | 7707.2 | 42.42 | -11.58 | 54 | 46.62 | 36.53 | 11.51 | 52.24 | 400 | 82 | A | H |
| | | 11570 | 54.52 | -19.48 | 74 | 55.31 | 38.79 | 13.55 | 53.13 | - | - | P | H |
| | | 11570 | 41.51 | -12.49 | 54 | 42.3 | 38.79 | 13.55 | 53.13 | - | - | A | H |
| | | 17355 | 51.42 | -16.78 | 68.2 | 50.82 | 38.17 | 16.61 | 54.18 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 7707.2 | 53.64 | -20.36 | 74 | 57.84 | 36.53 | 11.51 | 52.24 | 100 | 3 | P | V |
| | | 7707.2 | 43.57 | -10.43 | 54 | 47.77 | 36.53 | 11.51 | 52.24 | 100 | 3 | A | V |
| | | 11570 | 54.73 | -19.27 | 74 | 55.52 | 38.79 | 13.55 | 53.13 | - | - | P | V |
| | | 11570 | 41.7 | -12.3 | 54 | 42.49 | 38.79 | 13.55 | 53.13 | - | - | A | V |
| | | 17355 | 51.86 | -16.34 | 68.2 | 51.26 | 38.17 | 16.61 | 54.18 | - | - | P | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11a CH 165 5825MHz | | 7766.667 | 55.22 | -12.98 | 68.2 | 59.23 | 36.73 | 11.51 | 52.25 | 249 | 314 | P | H |
| | | 11650 | 54.06 | -19.94 | 74 | 54.92 | 38.7 | 13.6 | 53.16 | - | - | P | H |
| | | 11650 | 45.07 | -8.93 | 54 | 45.93 | 38.7 | 13.6 | 53.16 | - | - | A | H |
| | | 17475 | 52.27 | -15.93 | 68.2 | 50.83 | 38.45 | 16.69 | 53.7 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 7766.667 | 57.93 | -10.27 | 68.2 | 61.94 | 36.73 | 11.51 | 52.25 | 150 | 17 | P | V |
| | | 11650 | 54.42 | -19.58 | 74 | 55.28 | 38.7 | 13.6 | 53.16 | - | - | P | V |
| | | 11650 | 44.4 | -9.6 | 54 | 45.26 | 38.7 | 13.6 | 53.16 | - | - | A | V |
| | | 17475 | 53.48 | -14.72 | 68.2 | 52.04 | 38.45 | 16.69 | 53.7 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | |

## Band 4 5725~5850MHz

## WIFI 802.11ax HE20_Full (Band Edge @ 3m)

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5640.2 | 49.91 | -18.29 | 68.2 | 44.01 | 33.08 | 9.54 | 36.72 | 138 | 333 | P | H |
| | | 5697.6 | 57.06 | -46.37 | 103.43 | 50.55 | 33.67 | 9.56 | 36.72 | 138 | 333 | P | H |
| | | 5719 | 75.93 | -34.59 | 110.52 | 69.27 | 33.81 | 9.57 | 36.72 | 138 | 333 | P | H |
| | | 5724.8 | 83.16 | -38.58 | 121.74 | 76.45 | 33.85 | 9.58 | 36.72 | 138 | 333 | P | H |
| | * | 5745 | 113.44 | - | - | 106.6 | 33.97 | 9.59 | 36.72 | 138 | 333 | P | H |
| | * | 5745 | 106.98 | - | - | 100.14 | 33.97 | 9.59 | 36.72 | 138 | 333 | A | H |
| 802.11ax | | | | | | | | | | | | | H |
| HE20 Full | | | | | | | | | | | | | H |
| CH 149 | | 5623 | 50.73 | -17.47 | 68.2 | 44.87 | 33.05 | 9.53 | 36.72 | 140 | 341 | P | V |
| 5745MHz | | 5700 | 65.08 | -40.12 | 105.2 | 58.53 | 33.7 | 9.57 | 36.72 | 140 | 341 | P | V |
| | | 5719.8 | 81.64 | -29.1 | 110.74 | 74.97 | 33.82 | 9.57 | 36.72 | 140 | 341 | P | V |
| | | 5720.8 | 82.63 | -29.99 | 112.62 | 75.96 | 33.82 | 9.57 | 36.72 | 140 | 341 | P | V |
| | * | 5745 | 118.87 | - | - | 112.03 | 33.97 | 9.59 | 36.72 | 140 | 341 | P | V |
| | * | 5745 | 112.26 | - | - | 105.42 | 33.97 | 9.59 | 36.72 | 140 | 341 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5631.8 | 48.92 | -19.28 | 68.2 | 43.05 | 33.06 | 9.53 | 36.72 | 146 | 334 | P | H |
| | | 5699.2 | 48.97 | -55.64 | 104.61 | 42.44 | 33.69 | 9.56 | 36.72 | 146 | 334 | P | H |
| | | 5716.4 | 50.14 | -59.65 | 109.79 | 43.49 | 33.8 | 9.57 | 36.72 | 146 | 334 | P | H |
| | | 5724.8 | 50.34 | -71.4 | 121.74 | 43.63 | 33.85 | 9.58 | 36.72 | 146 | 334 | P | H |
| | * | 5785 | 113.77 | - | - | 106.74 | 34.14 | 9.6 | 36.71 | 146 | 334 | P | H |
| | * | 5785 | 106.15 | - | - | 99.12 | 34.14 | 9.6 | 36.71 | 146 | 334 | A | H |
| | | 5852.625 | 49.53 | -66.68 | 116.21 | 42.35 | 34.21 | 9.68 | 36.71 | 146 | 334 | P | H |
| | | 5855.7 | 50.43 | -60.17 | 110.6 | 43.24 | 34.21 | 9.69 | 36.71 | 146 | 334 | P | H |
| | | 5886.45 | 49.9 | -46.8 | 96.7 | 42.61 | 34.27 | 9.73 | 36.71 | 146 | 334 | P | H |
| | | 5936.47 | 49.42 | -18.78 | 68.2 | 42.19 | 34.15 | 9.79 | 36.71 | 146 | 334 | P | H |
| 802.11ax | | | | | | | | | | | | | H |
| HE20 Full | | | | | | | | | | | | | H |
| CH 157 | | 5624.4 | 50.96 | -17.24 | 68.2 | 45.1 | 33.05 | 9.53 | 36.72 | 151 | 341 | P | V |
| 5785MHz | | 5698.2 | 51.47 | -52.4 | 103.87 | 44.95 | 33.68 | 9.56 | 36.72 | 151 | 341 | P | V |
| | | 5702 | 52.91 | -52.85 | 105.76 | 46.35 | 33.71 | 9.57 | 36.72 | 151 | 341 | P | V |
| | | 5720.6 | 52.83 | -59.34 | 112.17 | 46.16 | 33.82 | 9.57 | 36.72 | 151 | 341 | P | V |
| | * | 5785 | 118.41 | - | - | 111.38 | 34.14 | 9.6 | 36.71 | 151 | 341 | P | V |
| | * | 5785 | 111.92 | - | - | 104.89 | 34.14 | 9.6 | 36.71 | 151 | 341 | A | V |
| | | 5850.575 | 54.21 | -66.68 | 120.89 | 47.04 | 34.2 | 9.68 | 36.71 | 151 | 341 | P | V |
| | | 5859.185 | 54.25 | -55.38 | 109.63 | 47.05 | 34.22 | 9.69 | 36.71 | 151 | 341 | P | V |
| | | 5878.865 | 53.1 | -49.23 | 102.33 | 45.83 | 34.26 | 9.72 | 36.71 | 151 | 341 | P | V |
| | | 5930.73 | 51.35 | -16.85 | 68.2 | 44.09 | 34.18 | 9.79 | 36.71 | 151 | 341 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBµV/m ) | Margin ( dB ) | Limit Line ( dBµV/m ) | Read Level ( dBµV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | * | 5825 | 114.19 | - | - | 107.06 | 34.2 | 9.64 | 36.71 | 130 | 334 | P | H |
| | * | 5825 | 106.03 | - | - | 98.9 | 34.2 | 9.64 | 36.71 | 130 | 334 | A | H |
| | | 5850 | 71.08 | -51.12 | 122.2 | 63.91 | 34.2 | 9.68 | 36.71 | 130 | 334 | P | H |
| | | 5855.6 | 68.61 | -42.02 | 110.63 | 61.42 | 34.21 | 9.69 | 36.71 | 130 | 334 | P | H |
| | | 5876.6 | 52.23 | -51.78 | 104.01 | 44.98 | 34.25 | 9.71 | 36.71 | 130 | 334 | P | H |
| | | 5927.8 | 49.83 | -18.37 | 68.2 | 42.57 | 34.19 | 9.78 | 36.71 | 130 | 334 | P | H |
| 802.11ax | | | | | | | | | | | | | H |
| HE20 Full | | | | | | | | | | | | | H |
| CH 165 | * | 5825 | 119.32 | - | - | 112.19 | 34.2 | 9.64 | 36.71 | 155 | 358 | P | V |
| 5825MHz | * | 5825 | 111.75 | - | - | 104.62 | 34.2 | 9.64 | 36.71 | 155 | 358 | A | V |
| | | 5850 | 74.3 | -47.9 | 122.2 | 67.13 | 34.2 | 9.68 | 36.71 | 155 | 358 | P | V |
| | | 5856.6 | 74.93 | -35.42 | 110.35 | 67.74 | 34.21 | 9.69 | 36.71 | 155 | 358 | P | V |
| | | 5876.8 | 60.2 | -43.66 | 103.86 | 52.95 | 34.25 | 9.71 | 36.71 | 155 | 358 | P | V |
| | | 5926 | 52.23 | -15.97 | 68.2 | 44.96 | 34.2 | 9.78 | 36.71 | 155 | 358 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

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

## Band 4 5725~5850MHz

## WIFI 802.11ax HE20 Full (Harmonic @ 3m)

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 8043 | 55.02 | -18.98 | 74 | 58.58 | 37.1 | 11.66 | 52.32 | 400 | 52 | P | H |
| | | 8043 | 44.66 | -9.34 | 54 | 48.22 | 37.1 | 11.66 | 52.32 | 400 | 52 | A | H |
| | | 11490 | 52.93 | -21.07 | 74 | 53.54 | 39 | 13.51 | 53.12 | - | - | P | H |
| | | 11490 | 42.96 | -11.04 | 54 | 43.57 | 39 | 13.51 | 53.12 | - | - | A | H |
| | | 17235 | 52.52 | -15.68 | 68.2 | 52.64 | 38 | 16.54 | 54.66 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| 802.11ax | | | | | | | | | | | | | H |
| HE20 Full | | | | | | | | | | | | | H |
| CH 149 | | 8043 | 57.24 | -16.76 | 74 | 60.8 | 37.1 | 11.66 | 52.32 | 127 | 3 | P | V |
| 5745MHz | | 8043 | 47.23 | -6.77 | 54 | 50.79 | 37.1 | 11.66 | 52.32 | 127 | 3 | A | V |
| | | 11490 | 56.35 | -17.65 | 74 | 56.96 | 39 | 13.51 | 53.12 | - | - | P | V |
| | | 11490 | 46.3 | -7.7 | 54 | 46.91 | 39 | 13.51 | 53.12 | - | - | A | V |
| | | 17235 | 52.22 | -15.98 | 68.2 | 52.34 | 38 | 16.54 | 54.66 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 8099 | 54.05 | -19.95 | 74 | 57.57 | 37.1 | 11.72 | 52.34 | 400 | 49 | P | H |
| | | 8099 | 44.28 | -9.72 | 54 | 47.8 | 37.1 | 11.72 | 52.34 | 400 | 49 | A | H |
| | | 11570 | 54.43 | -19.57 | 74 | 55.22 | 38.79 | 13.55 | 53.13 | - | - | P | H |
| | | 11570 | 44.38 | -9.62 | 54 | 45.17 | 38.79 | 13.55 | 53.13 | - | - | A | H |
| | | 17355 | 51.77 | -16.43 | 68.2 | 51.17 | 38.17 | 16.61 | 54.18 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| 802.11ax | | | | | | | | | | | | | H |
| HE20 Full | | | | | | | | | | | | | H |
| CH 157 | | 8099 | 55.98 | -18.02 | 74 | 59.5 | 37.1 | 11.72 | 52.34 | 153 | 7 | P | V |
| 5785MHz | | 8099 | 46.25 | -7.75 | 54 | 49.77 | 37.1 | 11.72 | 52.34 | 153 | 7 | A | V |
| | | 11570 | 54.29 | -19.71 | 74 | 55.08 | 38.79 | 13.55 | 53.13 | - | - | P | V |
| | | 11570 | 44.34 | -9.66 | 54 | 45.13 | 38.79 | 13.55 | 53.13 | - | - | A | V |
| | | 17355 | 52.24 | -15.96 | 68.2 | 51.64 | 38.17 | 16.61 | 54.18 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11ax HE20 Full CH 165 5825MHz | | 7766.667 | 55.46 | -12.74 | 68.2 | 59.47 | 36.73 | 11.51 | 52.25 | 240 | 318 | P | H |
| | | 11650 | 55.08 | -18.92 | 74 | 55.94 | 38.7 | 13.6 | 53.16 | - | - | P | H |
| | | 11650 | 45.07 | -8.93 | 54 | 45.93 | 38.7 | 13.6 | 53.16 | - | - | A | H |
| | | 17475 | 53.06 | -15.14 | 68.2 | 51.62 | 38.45 | 16.69 | 53.7 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
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| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 7766.667 | 58.06 | -10.14 | 68.2 | 62.07 | 36.73 | 11.51 | 52.25 | 151 | 17 | P | V |
| | | 11650 | 54.62 | -19.38 | 74 | 55.48 | 38.7 | 13.6 | 53.16 | - | - | P | V |
| | | 11650 | 44.67 | -9.33 | 54 | 45.53 | 38.7 | 13.6 | 53.16 | - | - | A | V |
| | | 17475 | 52.93 | -15.27 | 68.2 | 51.49 | 38.45 | 16.69 | 53.7 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
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| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

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

## Band 4 5725~5850MHz

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

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11ax HE20 Partial 106/53 CH 149 5745MHz | | 5628 | 48.54 | -19.66 | 68.2 | 42.67 | 33.06 | 9.53 | 36.72 | 263 | 328 | P | H |
| | | 5700 | 60.81 | -44.39 | 105.2 | 54.26 | 33.7 | 9.57 | 36.72 | 263 | 328 | P | H |
| | | 5717 | 75.6 | -34.36 | 109.96 | 68.95 | 33.8 | 9.57 | 36.72 | 263 | 328 | P | H |
| | | 5720.8 | 73.34 | -39.28 | 112.62 | 66.67 | 33.82 | 9.57 | 36.72 | 263 | 328 | P | H |
| | * | 5745 | 112.05 | - | - | 105.21 | 33.97 | 9.59 | 36.72 | 263 | 328 | P | H |
| | * | 5745 | 105.7 | - | - | 98.86 | 33.97 | 9.59 | 36.72 | 263 | 328 | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 5648.6 | 49.44 | -18.76 | 68.2 | 43.52 | 33.1 | 9.54 | 36.72 | 153 | 346 | P | V |
| | | 5700 | 66.77 | -38.43 | 105.2 | 60.22 | 33.7 | 9.57 | 36.72 | 153 | 346 | P | V |
| | | 5718.4 | 81.7 | -28.65 | 110.35 | 75.04 | 33.81 | 9.57 | 36.72 | 153 | 346 | P | V |
| | | 5720 | 80.92 | -29.88 | 110.8 | 74.25 | 33.82 | 9.57 | 36.72 | 153 | 346 | P | V |
| | * | 5745 | 118.63 | - | - | 111.79 | 33.97 | 9.59 | 36.72 | 153 | 346 | P | V |
| | * | 5745 | 111.47 | - | - | 104.63 | 33.97 | 9.59 | 36.72 | 153 | 346 | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11ax HE20 Partial 106/54 CH 165 5825MHz | * | 5825 | 112.19 | - | - | 105.06 | 34.2 | 9.64 | 36.71 | 243 | 328 | P | H |
| | * | 5825 | 104.51 | - | - | 97.38 | 34.2 | 9.64 | 36.71 | 243 | 328 | A | H |
| | | 5851.8 | 68.86 | -49.24 | 118.1 | 61.69 | 34.2 | 9.68 | 36.71 | 243 | 328 | P | H |
| | | 5858.2 | 68.28 | -41.62 | 109.9 | 61.08 | 34.22 | 9.69 | 36.71 | 243 | 328 | P | H |
| | | 5877.6 | 57.15 | -46.12 | 103.27 | 49.89 | 34.26 | 9.71 | 36.71 | 243 | 328 | P | H |
| | | 5934.4 | 50.22 | -17.98 | 68.2 | 42.98 | 34.16 | 9.79 | 36.71 | 243 | 328 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | * | 5825 | 118.84 | - | - | 111.71 | 34.2 | 9.64 | 36.71 | 144 | 356 | P | V |
| | * | 5825 | 110.68 | - | - | 103.55 | 34.2 | 9.64 | 36.71 | 144 | 356 | A | V |
| | | 5850.4 | 74.67 | -46.62 | 121.29 | 67.5 | 34.2 | 9.68 | 36.71 | 144 | 356 | P | V |
| | | 5858.4 | 72.87 | -36.98 | 109.85 | 65.67 | 34.22 | 9.69 | 36.71 | 144 | 356 | P | V |
| | | 5876.4 | 63.52 | -40.64 | 104.16 | 56.27 | 34.25 | 9.71 | 36.71 | 144 | 356 | P | V |
| | | 5926.6 | 50.47 | -17.73 | 68.2 | 43.21 | 34.19 | 9.78 | 36.71 | 144 | 356 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## Band 4 5725~5850MHz

## WIFI 802.11ax HE40_Full (Band Edge @ 3m)

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5636.335 | 50.82 | -17.38 | 68.2 | 44.93 | 33.07 | 9.54 | 36.72 | 257 | 317 | P | H |
| | | 5698.04 | 64.03 | -39.73 | 103.76 | 57.51 | 33.68 | 9.56 | 36.72 | 257 | 317 | P | H |
| | | 5717.82 | 80.19 | -30 | 110.19 | 73.53 | 33.81 | 9.57 | 36.72 | 257 | 317 | P | H |
| | | 5721.905 | 79.84 | -35.3 | 115.14 | 73.16 | 33.83 | 9.57 | 36.72 | 257 | 317 | P | H |
| | * | 5755 | 110.62 | - | - | 103.72 | 34.02 | 9.59 | 36.71 | 257 | 317 | P | H |
| | * | 5755 | 102.77 | - | - | 95.87 | 34.02 | 9.59 | 36.71 | 257 | 317 | A | H |
| | | 5852.125 | 51.57 | -65.78 | 117.35 | 44.4 | 34.2 | 9.68 | 36.71 | 257 | 317 | P | H |
| | | 5861.8 | 51.58 | -57.31 | 108.89 | 44.38 | 34.22 | 9.69 | 36.71 | 257 | 317 | P | H |
| | | 5880.25 | 52.03 | -49.27 | 101.3 | 44.76 | 34.26 | 9.72 | 36.71 | 257 | 317 | P | H |
| | | 5929.3 | 50.03 | -18.17 | 68.2 | 42.78 | 34.18 | 9.78 | 36.71 | 257 | 317 | P | H |
| 802.11ax | | | | | | | | | | | | | H |
| HE40 Full | | | | | | | | | | | | | H |
| CH 151 | | 5637.84 | 54.43 | -13.77 | 68.2 | 48.53 | 33.08 | 9.54 | 36.72 | 153 | 341 | P | V |
| 5755MHz | | 5697.61 | 70.26 | -33.18 | 103.44 | 63.75 | 33.67 | 9.56 | 36.72 | 153 | 341 | P | V |
| | | 5717.82 | 86.06 | -24.13 | 110.19 | 79.4 | 33.81 | 9.57 | 36.72 | 153 | 341 | P | V |
| | | 5721.475 | 85.8 | -28.36 | 114.16 | 79.12 | 33.83 | 9.57 | 36.72 | 153 | 341 | P | V |
| | * | 5755 | 116.77 | - | - | 109.87 | 34.02 | 9.59 | 36.71 | 153 | 341 | P | V |
| | * | 5755 | 109.15 | - | - | 102.25 | 34.02 | 9.59 | 36.71 | 153 | 341 | A | V |
| | | 5850.1 | 55.27 | -66.7 | 121.97 | 48.1 | 34.2 | 9.68 | 36.71 | 153 | 341 | P | V |
| | | 5870.125 | 55.52 | -51.04 | 106.56 | 48.29 | 34.24 | 9.7 | 36.71 | 153 | 341 | P | V |
| | | 5888.125 | 56.56 | -38.9 | 95.46 | 49.26 | 34.28 | 9.73 | 36.71 | 153 | 341 | P | V |
| | | 5932.225 | 53.33 | -14.87 | 68.2 | 46.08 | 34.17 | 9.79 | 36.71 | 153 | 341 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5649.665 | 49.53 | -18.67 | 68.2 | 43.61 | 33.1 | 9.54 | 36.72 | 249 | 317 | P | H |
| | | 5698.04 | 50.47 | -53.29 | 103.76 | 43.95 | 33.68 | 9.56 | 36.72 | 249 | 317 | P | H |
| | | 5719.325 | 55.68 | -54.93 | 110.61 | 49.01 | 33.82 | 9.57 | 36.72 | 249 | 317 | P | H |
| | | 5720.4 | 55.93 | -55.78 | 111.71 | 49.26 | 33.82 | 9.57 | 36.72 | 249 | 317 | P | H |
| | * | 5795 | 110.56 | - | - | 103.48 | 34.18 | 9.61 | 36.71 | 249 | 317 | P | H |
| | * | 5795 | 102.52 | - | - | 95.44 | 34.18 | 9.61 | 36.71 | 249 | 317 | A | H |
| | | 5850.325 | 65.74 | -55.72 | 121.46 | 58.57 | 34.2 | 9.68 | 36.71 | 249 | 317 | P | H |
| | | 5859.775 | 62.18 | -47.28 | 109.46 | 54.98 | 34.22 | 9.69 | 36.71 | 249 | 317 | P | H |
| | | 5879.35 | 55.26 | -46.71 | 101.97 | 47.99 | 34.26 | 9.72 | 36.71 | 249 | 317 | P | H |
| | | 5929.075 | 51.42 | -16.78 | 68.2 | 44.17 | 34.18 | 9.78 | 36.71 | 249 | 317 | P | H |
| 802.11ax | | | | | | | | | | | | | H |
| HE40 Full | | | | | | | | | | | | | H |
| CH 159 | | 5642.355 | 51.64 | -16.56 | 68.2 | 45.74 | 33.08 | 9.54 | 36.72 | 144 | 356 | P | V |
| 5795MHz | | 5696.32 | 54.03 | -48.46 | 102.49 | 47.53 | 33.66 | 9.56 | 36.72 | 144 | 356 | P | V |
| | | 5716.1 | 61.08 | -48.63 | 109.71 | 54.43 | 33.8 | 9.57 | 36.72 | 144 | 356 | P | V |
| | | 5724.915 | 63.64 | -58.37 | 122.01 | 56.93 | 33.85 | 9.58 | 36.72 | 144 | 356 | P | V |
| | * | 5795 | 115.51 | - | - | 108.43 | 34.18 | 9.61 | 36.71 | 144 | 356 | P | V |
| | * | 5795 | 108.8 | - | - | 101.72 | 34.18 | 9.61 | 36.71 | 144 | 356 | A | V |
| | | 5850.55 | 69.44 | -51.51 | 120.95 | 62.27 | 34.2 | 9.68 | 36.71 | 144 | 356 | P | V |
| | | 5856.85 | 67.93 | -42.35 | 110.28 | 60.74 | 34.21 | 9.69 | 36.71 | 144 | 356 | P | V |
| | | 5876.65 | 61.34 | -42.63 | 103.97 | 54.09 | 34.25 | 9.71 | 36.71 | 144 | 356 | P | V |
| | | 5927.725 | 54.7 | -13.5 | 68.2 | 47.44 | 34.19 | 9.78 | 36.71 | 144 | 356 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

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

## Band 4 5725~5850MHz

## WIFI 802.11ax HE40_Full (Harmonic @ 3m)

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 8057 | 52.91 | -21.09 | 74 | 56.45 | 37.1 | 11.68 | 52.32 | - | - | P | H |
| | | 11510 | 53.41 | -20.59 | 74 | 54.02 | 38.97 | 13.52 | 53.1 | - | - | P | H |
| | | 11510 | 44.71 | -9.29 | 54 | 45.32 | 38.97 | 13.52 | 53.1 | - | - | A | H |
| | | 17265 | 51.26 | -16.94 | 68.2 | 51.25 | 38 | 16.55 | 54.54 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| 802.11ax | | | | | | | | | | | | | H |
| HE40 Full | | | | | | | | | | | | | H |
| CH 151 | | 8057 | 53.86 | -20.14 | 74 | 57.4 | 37.1 | 11.68 | 52.32 | 159 | 15 | P | V |
| 5755MHz | | 8057 | 44.43 | -9.57 | 54 | 47.97 | 37.1 | 11.68 | 52.32 | 159 | 15 | A | V |
| | | 11510 | 53.12 | -20.88 | 74 | 53.73 | 38.97 | 13.52 | 53.1 | - | - | P | V |
| | | 11510 | 44.14 | -9.86 | 54 | 44.75 | 38.97 | 13.52 | 53.1 | - | - | A | V |
| | | 17265 | 52.33 | -15.87 | 68.2 | 52.32 | 38 | 16.55 | 54.54 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11590 | 54.72 | -19.28 | 74 | 55.56 | 38.73 | 13.57 | 53.14 | - | - | P | H |
| | | 11590 | 44.74 | -9.26 | 54 | 45.58 | 38.73 | 13.57 | 53.14 | - | - | A | H |
| | | 17385 | 52.47 | -15.73 | 68.2 | 51.64 | 38.26 | 16.63 | 54.06 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| 802.11ax | | | | | | | | | | | | | H |
| HE40 Full | | | | | | | | | | | | | H |
| CH 159 | | 8133 | 53.66 | -20.34 | 74 | 57.15 | 37.1 | 11.76 | 52.35 | 100 | 359 | P | V |
| 5795MHz | | 8133 | 44.58 | -9.42 | 54 | 48.07 | 37.1 | 11.76 | 52.35 | 100 | 359 | A | V |
| | | 11590 | 54.52 | -19.48 | 74 | 55.36 | 38.73 | 13.57 | 53.14 | - | - | P | V |
| | | 11590 | 44.53 | -9.47 | 54 | 45.37 | 38.73 | 13.57 | 53.14 | - | - | A | V |
| | | 17385 | 52.16 | -16.04 | 68.2 | 51.33 | 38.26 | 16.63 | 54.06 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

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

## Band 4 5725~5850MHz

## WIFI 802.11ax HE40_Partial 242 (Band Edge @ 3m)

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5630.315 | 57.95 | -10.25 | 68.2 | 52.08 | 33.06 | 9.53 | 36.72 | 242 | 328 | P | H |
| | | 5698.9 | 66.43 | -37.96 | 104.39 | 59.9 | 33.69 | 9.56 | 36.72 | 242 | 328 | P | H |
| | | 5716.96 | 72.93 | -37.02 | 109.95 | 66.28 | 33.8 | 9.57 | 36.72 | 242 | 328 | P | H |
| | | 5721.69 | 73.39 | -41.26 | 114.65 | 66.71 | 33.83 | 9.57 | 36.72 | 242 | 328 | P | H |
| | * | 5755 | 109.24 | - | - | 102.34 | 34.02 | 9.59 | 36.71 | 242 | 328 | P | H |
| | * | 5755 | 101.69 | - | - | 94.79 | 34.02 | 9.59 | 36.71 | 242 | 328 | A | H |
| | | 5850.1 | 55.7 | -66.27 | 121.97 | 48.53 | 34.2 | 9.68 | 36.71 | 242 | 328 | P | H |
| | | 5860.675 | 56.81 | -52.4 | 109.21 | 49.61 | 34.22 | 9.69 | 36.71 | 242 | 328 | P | H |
| | | 5878 | 54.32 | -48.65 | 102.97 | 47.05 | 34.26 | 9.72 | 36.71 | 242 | 328 | P | H |
| 802.11ax | | 5926.375 | 51.15 | -17.05 | 68.2 | 43.89 | 34.19 | 9.78 | 36.71 | 242 | 328 | P | H |
| HE40 | | | | | | | | | | | | | H |
| Partial | | | | | | | | | | | | | H |
| 242/61 | | 5635.26 | 64.19 | -4.01 | 68.2 | 58.3 | 33.07 | 9.54 | 36.72 | 143 | 355 | P | V |
| CH 151 | | 5696.535 | 72.36 | -30.29 | 102.65 | 65.86 | 33.66 | 9.56 | 36.72 | 143 | 355 | P | V |
| 5755MHz | | 5716.96 | 77.85 | -32.1 | 109.95 | 71.2 | 33.8 | 9.57 | 36.72 | 143 | 355 | P | V |
| | | 5721.475 | 80.42 | -33.74 | 114.16 | 73.74 | 33.83 | 9.57 | 36.72 | 143 | 355 | P | V |
| | * | 5755 | 114.99 | - | - | 108.09 | 34.02 | 9.59 | 36.71 | 143 | 355 | P | V |
| | * | 5755 | 107.7 | - | - | 100.8 | 34.02 | 9.59 | 36.71 | 143 | 355 | A | V |
| | | 5851 | 59.17 | -60.75 | 119.92 | 52 | 34.2 | 9.68 | 36.71 | 143 | 355 | P | V |
| | | 5855.275 | 59.51 | -51.21 | 110.72 | 52.33 | 34.21 | 9.68 | 36.71 | 143 | 355 | P | V |
| | | 5875.975 | 59.45 | -45.03 | 104.48 | 52.2 | 34.25 | 9.71 | 36.71 | 143 | 355 | P | V |
| | | 5926.825 | 57.1 | -11.1 | 68.2 | 49.84 | 34.19 | 9.78 | 36.71 | 143 | 355 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5620.855 | 56.03 | -12.17 | 68.2 | 50.18 | 33.04 | 9.53 | 36.72 | 258 | 323 | P | H |
| | | 5698.255 | 58.25 | -45.66 | 103.91 | 51.73 | 33.68 | 9.56 | 36.72 | 258 | 323 | P | H |
| | | 5711.155 | 60.78 | -47.55 | 108.33 | 54.16 | 33.77 | 9.57 | 36.72 | 258 | 323 | P | H |
| | | 5722.335 | 62.34 | -53.78 | 116.12 | 55.65 | 33.83 | 9.58 | 36.72 | 258 | 323 | P | H |
| | * | 5795 | 110.27 | - | - | 103.19 | 34.18 | 9.61 | 36.71 | 258 | 323 | P | H |
| | * | 5795 | 101.67 | - | - | 94.59 | 34.18 | 9.61 | 36.71 | 258 | 323 | A | H |
| | | 5852.125 | 67.63 | -49.72 | 117.35 | 60.46 | 34.2 | 9.68 | 36.71 | 258 | 323 | P | H |
| | | 5856.175 | 65.29 | -45.18 | 110.47 | 58.1 | 34.21 | 9.69 | 36.71 | 258 | 323 | P | H |
| | | 5882.5 | 60.79 | -38.84 | 99.63 | 53.52 | 34.26 | 9.72 | 36.71 | 258 | 323 | P | H |
| 802.11ax | | 5927.275 | 56.34 | -11.86 | 68.2 | 49.08 | 34.19 | 9.78 | 36.71 | 258 | 323 | P | H |
| HE40 | | | | | | | | | | | | | H |
| Partial | | | | | | | | | | | | | H |
| 242/62 | | 5650.095 | 62.82 | -5.45 | 68.27 | 56.9 | 33.1 | 9.54 | 36.72 | 149 | 356 | P | V |
| CH 159 | | 5670.09 | 64.34 | -18.77 | 83.11 | 58.17 | 33.34 | 9.55 | 36.72 | 149 | 356 | P | V |
| 5795MHz | | 5715.455 | 65.83 | -43.7 | 109.53 | 59.19 | 33.79 | 9.57 | 36.72 | 149 | 356 | P | V |
| | | 5724.7 | 66.5 | -55.02 | 121.52 | 59.79 | 33.85 | 9.58 | 36.72 | 149 | 356 | P | V |
| | * | 5795 | 115.9 | - | - | 108.82 | 34.18 | 9.61 | 36.71 | 149 | 356 | P | V |
| | * | 5795 | 107.62 | - | - | 100.54 | 34.18 | 9.61 | 36.71 | 149 | 356 | A | V |
| | | 5850.55 | 72.9 | -48.05 | 120.95 | 65.73 | 34.2 | 9.68 | 36.71 | 149 | 356 | P | V |
| | | 5860 | 68.91 | -40.49 | 109.4 | 61.71 | 34.22 | 9.69 | 36.71 | 149 | 356 | P | V |
| | | 5890.15 | 62.61 | -31.35 | 93.96 | 55.31 | 34.28 | 9.73 | 36.71 | 149 | 356 | P | V |
| | | 5931.325 | 58.11 | -10.09 | 68.2 | 50.86 | 34.17 | 9.79 | 36.71 | 149 | 356 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

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

## Band 4 5725~5850MHz

## WIFI 802.11ax HE80_Full (Band Edge @ 3m)

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5649.275 | 58.15 | -10.05 | 68.2 | 52.23 | 33.1 | 9.54 | 36.72 | 250 | 316 | P | H |
| | | 5698.55 | 74.8 | -29.33 | 104.13 | 68.28 | 33.68 | 9.56 | 36.72 | 250 | 316 | P | H |
| | | 5718.35 | 78.75 | -31.59 | 110.34 | 72.09 | 33.81 | 9.57 | 36.72 | 250 | 316 | P | H |
| | | 5720.15 | 78.42 | -32.72 | 111.14 | 71.75 | 33.82 | 9.57 | 36.72 | 250 | 316 | P | H |
| | * | 5775 | 107.03 | - | - | 100.04 | 34.1 | 9.6 | 36.71 | 250 | 316 | P | H |
| | * | 5775 | 99.43 | - | - | 92.44 | 34.1 | 9.6 | 36.71 | 250 | 316 | A | H |
| | | 5850.775 | 74.11 | -46.32 | 120.43 | 66.94 | 34.2 | 9.68 | 36.71 | 250 | 316 | P | H |
| | | 5859.325 | 74.53 | -35.06 | 109.59 | 67.33 | 34.22 | 9.69 | 36.71 | 250 | 316 | P | H |
| | | 5878.45 | 64.89 | -37.75 | 102.64 | 57.62 | 34.26 | 9.72 | 36.71 | 250 | 316 | P | H |
| | | 5929.3 | 54.43 | -13.77 | 68.2 | 47.18 | 34.18 | 9.78 | 36.71 | 250 | 316 | P | H |
| 802.11ax | | | | | | | | | | | | | H |
| HE80 Full | | | | | | | | | | | | | H |
| CH 155 | | 5647.025 | 63.36 | -4.84 | 68.2 | 57.45 | 33.09 | 9.54 | 36.72 | 155 | 342 | P | V |
| 5775MHz | | 5698.325 | 80.54 | -23.43 | 103.97 | 74.02 | 33.68 | 9.56 | 36.72 | 155 | 342 | P | V |
| | | 5719.7 | 85.05 | -25.67 | 110.72 | 78.38 | 33.82 | 9.57 | 36.72 | 155 | 342 | P | V |
| | | 5719.925 | 82.89 | -27.89 | 110.78 | 76.22 | 33.82 | 9.57 | 36.72 | 155 | 342 | P | V |
| | * | 5775 | 114.17 | - | - | 107.18 | 34.1 | 9.6 | 36.71 | 155 | 342 | P | V |
| | * | 5775 | 105.59 | - | - | 98.6 | 34.1 | 9.6 | 36.71 | 155 | 342 | A | V |
| | | 5850.1 | 80 | -41.97 | 121.97 | 72.83 | 34.2 | 9.68 | 36.71 | 155 | 342 | P | V |
| | | 5859.325 | 80.4 | -29.19 | 109.59 | 73.2 | 34.22 | 9.69 | 36.71 | 155 | 342 | P | V |
| | | 5877.1 | 73 | -30.64 | 103.64 | 65.75 | 34.25 | 9.71 | 36.71 | 155 | 342 | P | V |
| | | 5930.2 | 60.33 | -7.87 | 68.2 | 53.07 | 34.18 | 9.79 | 36.71 | 155 | 342 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

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

## Band 4 5725~5850MHz

## WIFI 802.11ax HE80_Full (Harmonic @ 3m)

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11ax HE80 Full CH 155 5775MHz | | 8088 | 53.24 | -20.76 | 74 | 56.76 | 37.1 | 11.72 | 52.34 | 196 | 315 | P | H |
| | | 8088 | 42.98 | -11.02 | 54 | 46.5 | 37.1 | 11.72 | 52.34 | 196 | 315 | A | H |
| | | 11550 | 54.81 | -19.19 | 74 | 55.54 | 38.85 | 13.54 | 53.12 | - | - | P | H |
| | | 11550 | 39.65 | -14.35 | 54 | 40.38 | 38.85 | 13.54 | 53.12 | - | - | A | H |
| | | 17325 | 51.52 | -16.68 | 68.2 | 51.14 | 38.08 | 16.6 | 54.3 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 8088 | 53.91 | -20.09 | 74 | 57.43 | 37.1 | 11.72 | 52.34 | 100 | 357 | P | V |
| | | 8088 | 43.62 | -10.38 | 54 | 47.14 | 37.1 | 11.72 | 52.34 | 100 | 357 | A | V |
| | | 11550 | 54.69 | -19.31 | 74 | 55.42 | 38.85 | 13.54 | 53.12 | - | - | P | V |
| | | 11550 | 41.65 | -12.35 | 54 | 42.38 | 38.85 | 13.54 | 53.12 | - | - | A | V |
| | | 17325 | 51.62 | -16.58 | 68.2 | 51.24 | 38.08 | 16.6 | 54.3 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | |

## Band 4 5725~5850MHz

## WIFI 802.11ax HE80_Partial 484 (Band Edge @ 3m)

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11ax HE80 Partial 484/65 CH 155 5775MHz | | 5636 | 60.26 | -7.94 | 68.2 | 54.37 | 33.07 | 9.54 | 36.72 | 154 | 323 | P | H |
| | | 5675.825 | 62.97 | -24.38 | 87.35 | 56.73 | 33.41 | 9.55 | 36.72 | 154 | 323 | P | H |
| | | 5717.225 | 73.2 | -36.82 | 110.02 | 66.55 | 33.8 | 9.57 | 36.72 | 154 | 323 | P | H |
| | | 5721.275 | 75.19 | -38.52 | 113.71 | 68.51 | 33.83 | 9.57 | 36.72 | 154 | 323 | P | H |
| | * | 5775 | 107.01 | - | - | 100.02 | 34.1 | 9.6 | 36.71 | 154 | 323 | P | H |
| | * | 5775 | 98.58 | - | - | 91.59 | 34.1 | 9.6 | 36.71 | 154 | 323 | A | H |
| | | 5851.9 | 68.49 | -49.38 | 117.87 | 61.32 | 34.2 | 9.68 | 36.71 | 154 | 323 | P | H |
| | | 5857.075 | 70.51 | -39.71 | 110.22 | 63.32 | 34.21 | 9.69 | 36.71 | 154 | 323 | P | H |
| | | 5877.1 | 67.68 | -35.96 | 103.64 | 60.43 | 34.25 | 9.71 | 36.71 | 154 | 323 | P | H |
| | | 5938.3 | 57.17 | -11.03 | 68.2 | 49.93 | 34.15 | 9.8 | 36.71 | 154 | 323 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 5635.775 | 66.59 | -1.61 | 68.2 | 60.7 | 33.07 | 9.54 | 36.72 | 139 | 347 | P | V |
| | | 5675.6 | 69.14 | -18.04 | 87.18 | 62.9 | 33.41 | 9.55 | 36.72 | 139 | 347 | P | V |
| | | 5717 | 79.01 | -30.95 | 109.96 | 72.36 | 33.8 | 9.57 | 36.72 | 139 | 347 | P | V |
| | | 5721.275 | 81.19 | -32.52 | 113.71 | 74.51 | 33.83 | 9.57 | 36.72 | 139 | 347 | P | V |
| | * | 5775 | 112.76 | - | - | 105.77 | 34.1 | 9.6 | 36.71 | 139 | 347 | P | V |
| | * | 5775 | 104.53 | - | - | 97.54 | 34.1 | 9.6 | 36.71 | 139 | 347 | A | V |
| | | 5851.9 | 75.87 | -42 | 117.87 | 68.7 | 34.2 | 9.68 | 36.71 | 139 | 347 | P | V |
| | | 5857.075 | 76.91 | -33.31 | 110.22 | 69.72 | 34.21 | 9.69 | 36.71 | 139 | 347 | P | V |
| | | 5877.325 | 73.96 | -29.51 | 103.47 | 66.71 | 34.25 | 9.71 | 36.71 | 139 | 347 | P | V |
| | | 5932.675 | 64.52 | -3.68 | 68.2 | 57.27 | 34.17 | 9.79 | 36.71 | 139 | 347 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

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

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 5636 | 58.22 | -9.98 | 68.2 | 52.33 | 33.07 | 9.54 | 36.72 | 154 | 323 | P | H |
| | | 5675.825 | 62.16 | -25.19 | 87.35 | 55.92 | 33.41 | 9.55 | 36.72 | 154 | 323 | P | H |
| | | 5717.225 | 71.8 | -38.22 | 110.02 | 65.15 | 33.8 | 9.57 | 36.72 | 154 | 323 | P | H |
| | | 5721.275 | 73.67 | -40.04 | 113.71 | 66.99 | 33.83 | 9.57 | 36.72 | 154 | 323 | P | H |
| | * | 5775 | 106.27 | - | - | 99.28 | 34.1 | 9.6 | 36.71 | 154 | 323 | P | H |
| | * | 5775 | 97.52 | - | - | 90.53 | 34.1 | 9.6 | 36.71 | 154 | 323 | A | H |
| | | 5851.9 | 68.96 | -48.91 | 117.87 | 61.79 | 34.2 | 9.68 | 36.71 | 154 | 323 | P | H |
| | | 5857.075 | 69.32 | -40.9 | 110.22 | 62.13 | 34.21 | 9.69 | 36.71 | 154 | 323 | P | H |
| | | 5877.1 | 66.72 | -36.92 | 103.64 | 59.47 | 34.25 | 9.71 | 36.71 | 154 | 323 | P | H |
| 802.11ax | | 5925.25 | 53.8 | -14.4 | 68.2 | 46.53 | 34.2 | 9.78 | 36.71 | 154 | 323 | P | H |
| HE80 | | | | | | | | | | | | | H |
| Partial | | | | | | | | | | | | | H |
| 484/66 | | 5636 | 64.6 | -3.6 | 68.2 | 58.71 | 33.07 | 9.54 | 36.72 | 176 | 347 | P | V |
| CH 155 | | 5676.05 | 68.5 | -19.02 | 87.52 | 62.26 | 33.41 | 9.55 | 36.72 | 176 | 347 | P | V |
| 5775MHz | | 5717.225 | 77.53 | -32.49 | 110.02 | 70.88 | 33.8 | 9.57 | 36.72 | 176 | 347 | P | V |
| | | 5721.275 | 80.17 | -33.54 | 113.71 | 73.49 | 33.83 | 9.57 | 36.72 | 176 | 347 | P | V |
| | * | 5775 | 111.83 | - | - | 104.84 | 34.1 | 9.6 | 36.71 | 176 | 347 | P | V |
| | * | 5775 | 103.51 | - | - | 96.52 | 34.1 | 9.6 | 36.71 | 176 | 347 | A | V |
| | | 5851.9 | 75.94 | -41.93 | 117.87 | 68.77 | 34.2 | 9.68 | 36.71 | 176 | 347 | P | V |
| | | 5857.3 | 75.72 | -34.44 | 110.16 | 68.53 | 34.21 | 9.69 | 36.71 | 176 | 347 | P | V |
| | | 5877.325 | 72.88 | -30.59 | 103.47 | 65.63 | 34.25 | 9.71 | 36.71 | 176 | 347 | P | V |
| | | 5925.25 | 60.82 | -7.38 | 68.2 | 53.55 | 34.2 | 9.78 | 36.71 | 176 | 347 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

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

**<Sample 1 with Battery 2>**

## Band 4 - 5725~5850MHz

## WIFI 802.11ax HE80_Partial 484 (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. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0+1 | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 802.11ax HE80 Partial 484/65 CH 155 5775MHz | | 5631.725 | 58.76 | -9.44 | 68.2 | 52.89 | 33.06 | 9.53 | 36.72 | 141 | 318 | P | H |
| | | 5699.9 | 63.89 | -41.24 | 105.13 | 57.35 | 33.7 | 9.56 | 36.72 | 141 | 318 | P | H |
| | | 5715.875 | 71.68 | -37.97 | 109.65 | 65.03 | 33.8 | 9.57 | 36.72 | 141 | 318 | P | H |
| | | 5721.05 | 73.92 | -39.27 | 113.19 | 67.24 | 33.83 | 9.57 | 36.72 | 141 | 318 | P | H |
| | * | 5775 | 106.46 | - | - | 99.47 | 34.1 | 9.6 | 36.71 | 141 | 318 | P | H |
| | * | 5775 | 98.43 | - | - | 91.44 | 34.1 | 9.6 | 36.71 | 141 | 318 | A | H |
| | | 5851.9 | 70.4 | -47.47 | 117.87 | 63.23 | 34.2 | 9.68 | 36.71 | 141 | 318 | P | H |
| | | 5857.075 | 69.67 | -40.55 | 110.22 | 62.48 | 34.21 | 9.69 | 36.71 | 141 | 318 | P | H |
| | | 5877.1 | 67.11 | -36.53 | 103.64 | 59.86 | 34.25 | 9.71 | 36.71 | 141 | 318 | P | H |
| | | 5925.925 | 57.63 | -10.57 | 68.2 | 50.36 | 34.2 | 9.78 | 36.71 | 141 | 318 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 5601.35 | 65.31 | -2.89 | 68.2 | 59.51 | 33 | 9.52 | 36.72 | 150 | 347 | P | V |
| | | 5650.85 | 67.42 | -1.41 | 68.83 | 61.49 | 33.11 | 9.54 | 36.72 | 150 | 347 | P | V |
| | | 5715.875 | 79.11 | -30.54 | 109.65 | 72.46 | 33.8 | 9.57 | 36.72 | 150 | 347 | P | V |
| | | 5721.275 | 80.42 | -33.29 | 113.71 | 73.74 | 33.83 | 9.57 | 36.72 | 150 | 347 | P | V |
| | * | 5775 | 113.45 | - | - | 106.46 | 34.1 | 9.6 | 36.71 | 150 | 347 | P | V |
| | * | 5775 | 105.15 | - | - | 98.16 | 34.1 | 9.6 | 36.71 | 150 | 347 | A | V |
| | | 5851.675 | 76.33 | -42.05 | 118.38 | 69.16 | 34.2 | 9.68 | 36.71 | 150 | 347 | P | V |
| | | 5861.125 | 77.61 | -31.47 | 109.08 | 70.41 | 34.22 | 9.69 | 36.71 | 150 | 347 | P | V |
| | | 5875.975 | 74.56 | -29.92 | 104.48 | 67.31 | 34.25 | 9.71 | 36.71 | 150 | 347 | P | V |
| | | 5936.95 | 65.05 | -3.15 | 68.2 | 57.82 | 34.15 | 9.79 | 36.71 | 150 | 347 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

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

## WIFI 802.11ax HE80_Partial 484 (Harmonic @ 3m)

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11ax HE80 Partial 484/65 CH 155 5775MHz | | 11550 | 54.39 | -19.61 | 74 | 55.12 | 38.85 | 13.54 | 53.12 | - | - | P | H |
| | | 11550 | 39.99 | -14.01 | 54 | 40.72 | 38.85 | 13.54 | 53.12 | - | - | A | H |
| | | 17325 | 52.42 | -15.78 | 68.2 | 52.04 | 38.08 | 16.6 | 54.3 | - | - | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 11550 | 53.65 | -20.35 | 74 | 54.38 | 38.85 | 13.54 | 53.12 | - | - | P | V |
| | | 11550 | 39.16 | -14.84 | 54 | 39.89 | 38.85 | 13.54 | 53.12 | - | - | A | V |
| | | 17325 | 51.76 | -16.44 | 68.2 | 51.38 | 38.08 | 16.6 | 54.3 | - | - | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |

**Remark**

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

**<Sample 1 with Battery 3>**

## Band 4 - 5725~5850MHz

## WIFI 802.11ax HE80_Partial 484 (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. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0+1 | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 802.11ax HE80 Partial 484/65 CH 155 5775MHz | | 5649.725 | 54.8 | -13.4 | 68.2 | 48.88 | 33.1 | 9.54 | 36.72 | 252 | 351 | P | H |
| | | 5698.55 | 58.88 | -45.25 | 104.13 | 52.36 | 33.68 | 9.56 | 36.72 | 252 | 351 | P | H |
| | | 5719.925 | 68.11 | -42.67 | 110.78 | 61.44 | 33.82 | 9.57 | 36.72 | 252 | 351 | P | H |
| | | 5725.1 | 69.42 | -64.78 | 134.2 | 62.71 | 33.85 | 9.58 | 36.72 | 252 | 351 | P | H |
| | * | 5775 | 103.08 | - | - | 96.09 | 34.1 | 9.6 | 36.71 | 252 | 351 | P | H |
| | * | 5775 | 94.27 | - | - | 87.28 | 34.1 | 9.6 | 36.71 | 252 | 351 | A | H |
| | | 5851.9 | 65 | -52.87 | 117.87 | 57.83 | 34.2 | 9.68 | 36.71 | 252 | 351 | P | H |
| | | 5858.65 | 65.83 | -43.95 | 109.78 | 58.63 | 34.22 | 9.69 | 36.71 | 252 | 351 | P | H |
| | | 5875.975 | 63.05 | -41.43 | 104.48 | 55.8 | 34.25 | 9.71 | 36.71 | 252 | 351 | P | H |
| | | 5929.3 | 53.91 | -14.29 | 68.2 | 46.66 | 34.18 | 9.78 | 36.71 | 252 | 351 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 5648.15 | 61.09 | -7.11 | 68.2 | 55.17 | 33.1 | 9.54 | 36.72 | 150 | 346 | P | V |
| | | 5699.9 | 65.97 | -39.16 | 105.13 | 59.43 | 33.7 | 9.56 | 36.72 | 150 | 346 | P | V |
| | | 5718.575 | 75.36 | -35.04 | 110.4 | 68.7 | 33.81 | 9.57 | 36.72 | 150 | 346 | P | V |
| | | 5725.1 | 76.73 | -57.47 | 134.2 | 70.02 | 33.85 | 9.58 | 36.72 | 150 | 346 | P | V |
| | * | 5775 | 111.02 | - | - | 104.03 | 34.1 | 9.6 | 36.71 | 150 | 346 | P | V |
| | * | 5775 | 100.62 | - | - | 93.63 | 34.1 | 9.6 | 36.71 | 150 | 346 | A | V |
| | | 5854.6 | 71.45 | -40.26 | 111.71 | 64.27 | 34.21 | 9.68 | 36.71 | 150 | 346 | P | V |
| | | 5858.65 | 72.28 | -37.5 | 109.78 | 65.08 | 34.22 | 9.69 | 36.71 | 150 | 346 | P | V |
| | | 5875.75 | 69.99 | -34.65 | 104.64 | 62.74 | 34.25 | 9.71 | 36.71 | 150 | 346 | P | V |
| | | 5926.6 | 59.39 | -8.81 | 68.2 | 52.13 | 34.19 | 9.78 | 36.71 | 150 | 346 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## WIFI 802.11ax HE80_Partial 484 (Harmonic @ 3m)

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11ax HE80 Partial 484/65 CH 155 5775MHz | | 11550 | 52.77 | -21.23 | 74 | 53.5 | 38.85 | 12.97 | 53.12 | - | - | P | H |
| | | 11550 | 40.45 | -13.55 | 54 | 41.18 | 38.85 | 12.97 | 53.12 | - | - | P | H |
| | | 17325 | 51.41 | -16.79 | 68.2 | 51.03 | 38.08 | 15.9 | 54.3 | - | - | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 11550 | 52.83 | -21.17 | 74 | 53.56 | 38.85 | 13.54 | 53.12 | - | - | P | V |
| | | 11550 | 40.41 | -13.59 | 54 | 41.14 | 38.85 | 13.54 | 53.12 | - | - | P | V |
| | | 17325 | 51.3 | -16.9 | 68.2 | 50.92 | 38.08 | 16.6 | 54.3 | - | - | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | |

**<Sample 2 with Battery 2>**

## Band 4 - 5725~5850MHz

## WIFI 802.11ax HE80_Partial 484 (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. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0+1 | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 802.11ax HE80 Partial 484/65 CH 155 5775MHz | | 5640.95 | 58.81 | -9.39 | 68.2 | 52.91 | 33.08 | 9.54 | 36.72 | 262 | 320 | P | H |
| | | 5666.6 | 64.16 | -16.36 | 80.52 | 58.03 | 33.3 | 9.55 | 36.72 | 262 | 320 | P | H |
| | | 5717.225 | 73.64 | -36.38 | 110.02 | 66.99 | 33.8 | 9.57 | 36.72 | 262 | 320 | P | H |
| | | 5722.4 | 73.71 | -42.56 | 116.27 | 67.02 | 33.83 | 9.58 | 36.72 | 262 | 320 | P | H |
| | * | 5775 | 107.26 | - | - | 100.27 | 34.1 | 9.6 | 36.71 | 262 | 320 | P | H |
| | * | 5775 | 98.68 | - | - | 91.69 | 34.1 | 9.6 | 36.71 | 262 | 320 | A | H |
| | | 5852.125 | 69.93 | -47.42 | 117.35 | 62.76 | 34.2 | 9.68 | 36.71 | 262 | 320 | P | H |
| | | 5867.65 | 69.52 | -37.74 | 107.26 | 62.29 | 34.24 | 9.7 | 36.71 | 262 | 320 | P | H |
| | | 5877.55 | 65.95 | -37.36 | 103.31 | 58.69 | 34.26 | 9.71 | 36.71 | 262 | 320 | P | H |
| | | 5938.525 | 56.34 | -11.86 | 68.2 | 49.1 | 34.15 | 9.8 | 36.71 | 262 | 320 | P | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 5647.925 | 65.78 | -2.42 | 68.2 | 59.86 | 33.1 | 9.54 | 36.72 | 212 | 8 | P | V |
| | | 5698.55 | 71.56 | -32.57 | 104.13 | 65.04 | 33.68 | 9.56 | 36.72 | 212 | 8 | P | V |
| | | 5718.575 | 80.5 | -29.9 | 110.4 | 73.84 | 33.81 | 9.57 | 36.72 | 212 | 8 | P | V |
| | | 5723.75 | 80.49 | -38.86 | 119.35 | 73.79 | 33.84 | 9.58 | 36.72 | 212 | 8 | P | V |
| | * | 5775 | 112.75 | - | - | 105.76 | 34.1 | 9.6 | 36.71 | 212 | 8 | P | V |
| | * | 5775 | 104.71 | - | - | 97.72 | 34.1 | 9.6 | 36.71 | 212 | 8 | A | V |
| | | 5854.6 | 75.73 | -35.98 | 111.71 | 68.55 | 34.21 | 9.68 | 36.71 | 212 | 8 | P | V |
| | | 5864.95 | 75.19 | -32.82 | 108.01 | 67.97 | 34.23 | 9.7 | 36.71 | 212 | 8 | P | V |
| | | 5879.125 | 71.82 | -30.32 | 102.14 | 64.55 | 34.26 | 9.72 | 36.71 | 212 | 8 | P | V |
| | | 5929.975 | 62.03 | -6.17 | 68.2 | 54.77 | 34.18 | 9.79 | 36.71 | 212 | 8 | P | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line. | | | | | | | | | | | | |

## WIFI 802.11ax HE80_Partial 484 (Harmonic @ 3m)

| WIFI Ant. 0+1 | Note | Frequency ( MHz ) | Level ( dBμV/m ) | Margin ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB/m ) | Path Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Peak Avg. (P/A) | Pol. (H/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 802.11ax HE80 Partial 484/65 CH 155 5775MHz | | 11550 | 53.59 | -20.41 | 74 | 54.32 | 38.85 | 13.54 | 53.12 | - | - | P | H |
| | | 11550 | 41.14 | -12.86 | 54 | 41.87 | 38.85 | 13.54 | 53.12 | - | - | P | H |
| | | 17325 | 52.04 | -16.16 | 68.2 | 51.66 | 38.08 | 16.6 | 54.3 | - | - | A | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | | | | | | | | | | | | H |
| | | 11550 | 53.15 | -20.85 | 74 | 53.88 | 38.85 | 13.54 | 53.12 | - | - | P | V |
| | | 11550 | 41.06 | -12.94 | 54 | 41.79 | 38.85 | 13.54 | 53.12 | - | - | P | V |
| | | 17325 | 50.8 | -17.4 | 68.2 | 50.42 | 38.08 | 16.6 | 54.3 | - | - | A | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| | | | | | | | | | | | | | V |
| **Remark** | 1. No other spurious found.<br>2. All results are PASS against Peak and Average limit line.<br>3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. | | | | | | | | | | | | |

## Note symbol

| | |
|---|---|
| * | **Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency. |
| ! | Test result is **over limit** line. |
| P/A | **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. | |
| 0+1 | | ( MHz ) | ( dBμV/m ) | ( dB ) | ( dBμV/m ) | ( dBμV ) | ( dB/m ) | ( dB ) | ( dB ) | ( cm ) | ( deg ) | (P/A) | (H/V) |
| 802.11a CH 149 5745MHz | | 2390 | 55.45 | -18.55 | 74 | 54.51 | 32.22 | 4.58 | 35.86 | 103 | 308 | P | H |
| | | 2390 | 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 @ 2390MHz:**

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Margin (dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

**For Average Limit @ 2390MHz:**

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

2. 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 :** | Eric Shou, Quentin Liu and Bigshow Wang | **Temperature :** | 21~26°C |
| | | **Relative Humidity :** | 45~60% |

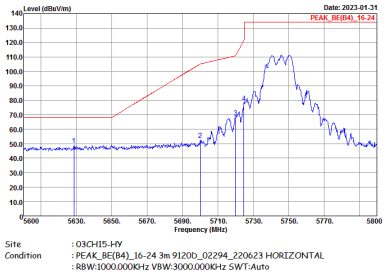
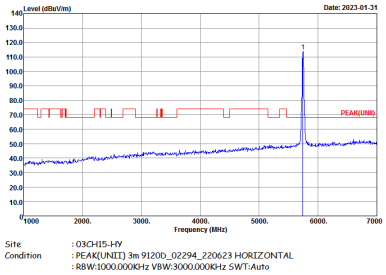
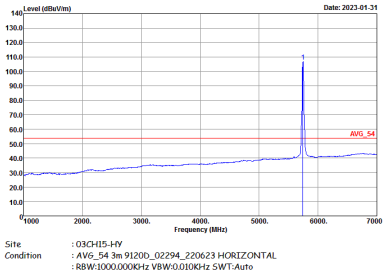
## Note symbol

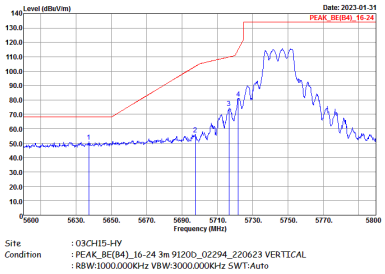
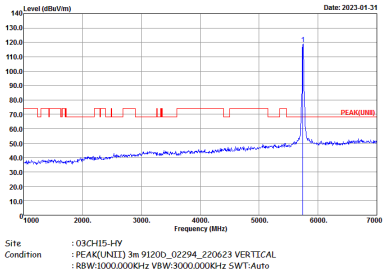
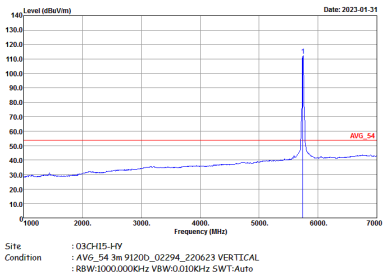
| | |
|---|---|
| -L | **Low channel location** |
| -R | **High channel location** |

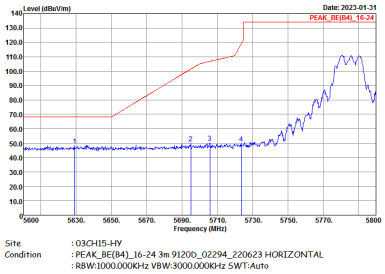
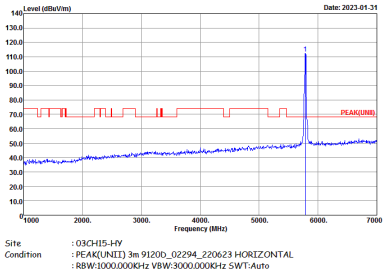
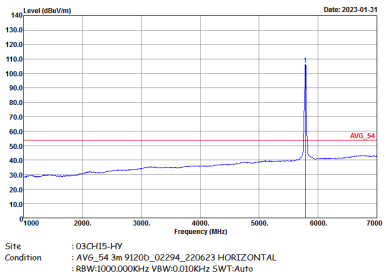
**<Sample 1 with Battery 1>**

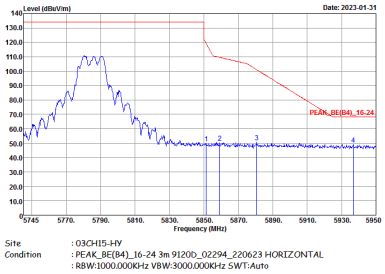
## Band 4 - 5725~5850MHz

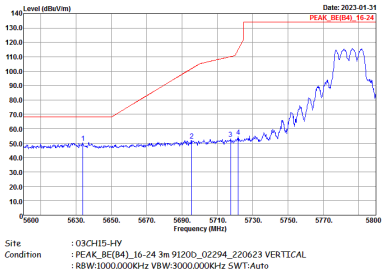
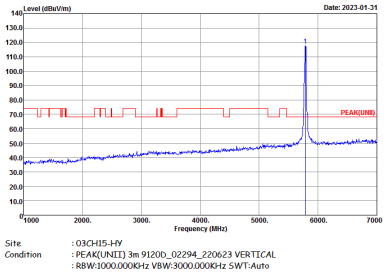
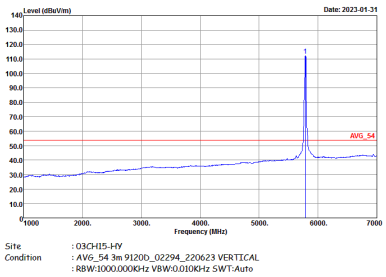
## WIFI 802.11a (Band Edge @ 3m)

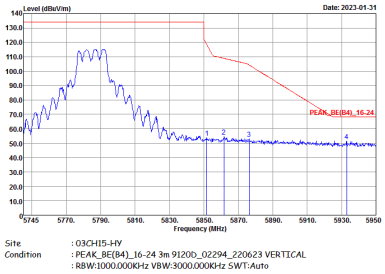
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH149 5745MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

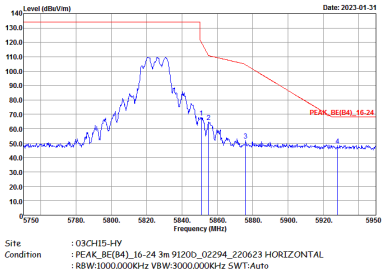
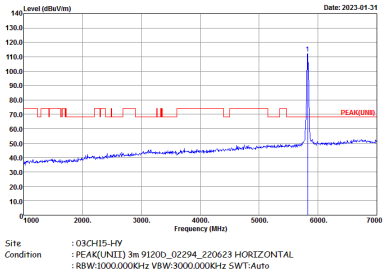
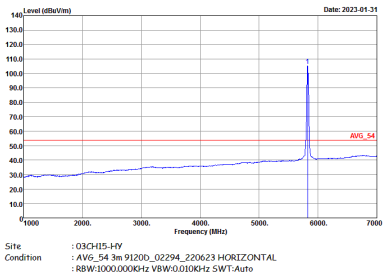
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH149 5745MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

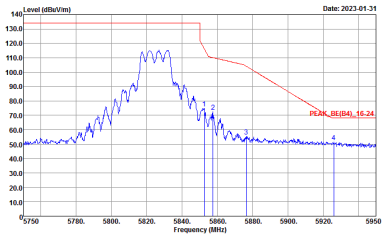
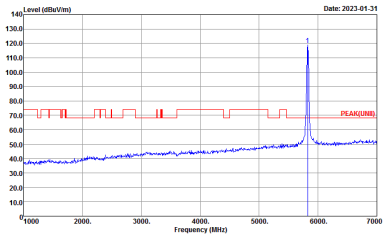
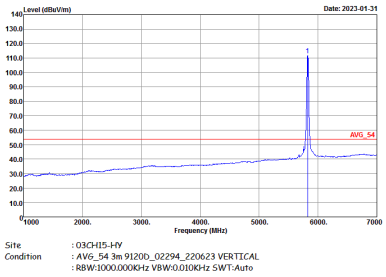
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH157 5785MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH157 5785MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  | Left blank |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH157 5785MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

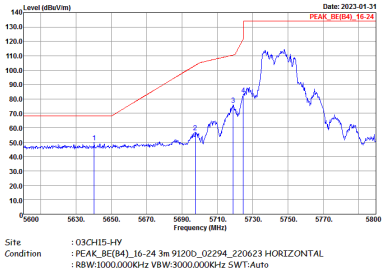
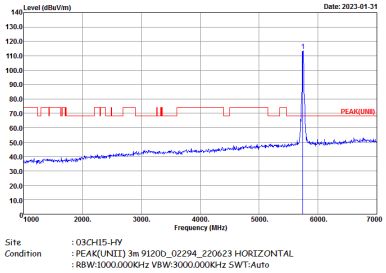
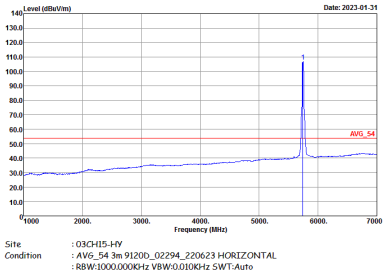
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH157 5785MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  | Left blank |

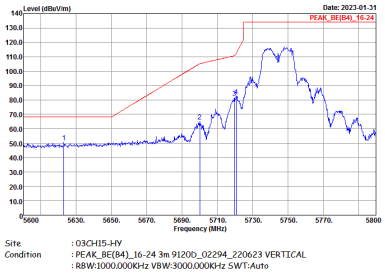
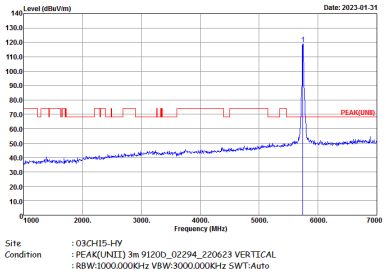
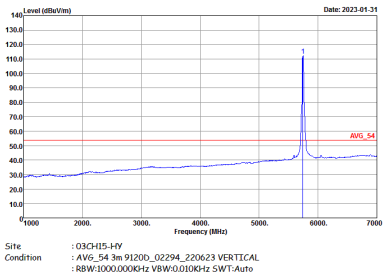
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH165 5825MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

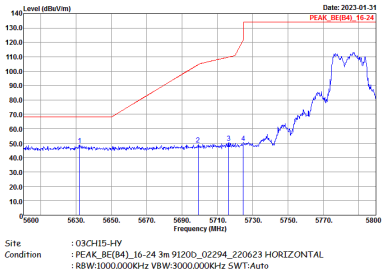
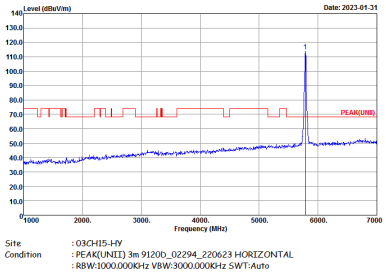
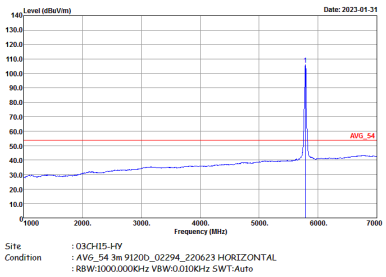
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11a CH165 5825MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

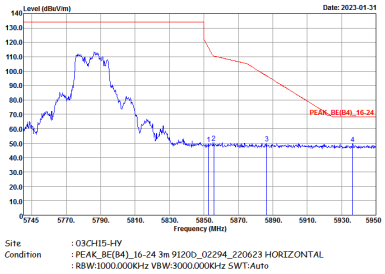
## Band 4 5725~5850MHz

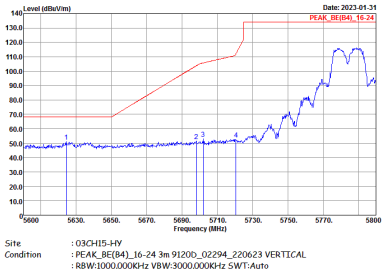
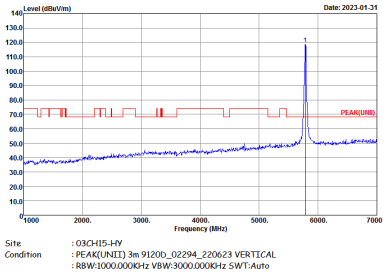
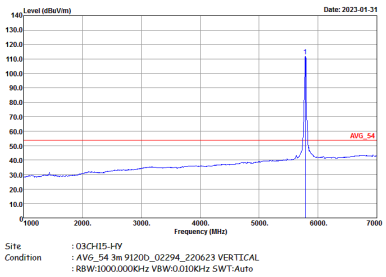
## WIFI 802.11ax HE20 Full (Band Edge @ 3m)

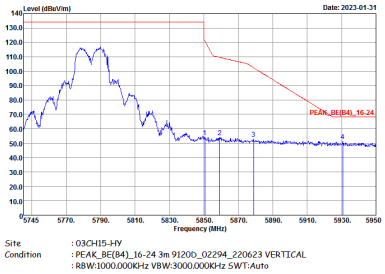
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE20 Full CH149 5745MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

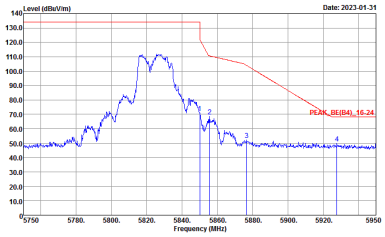
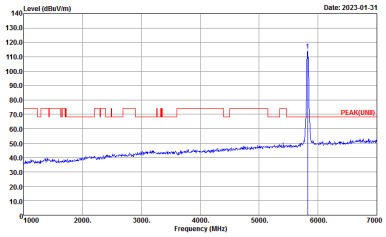
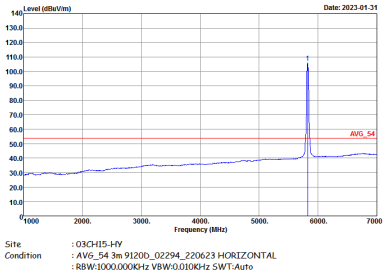
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE20 Full CH149 5745MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

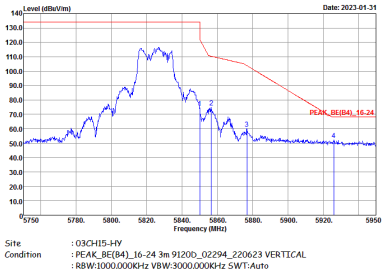
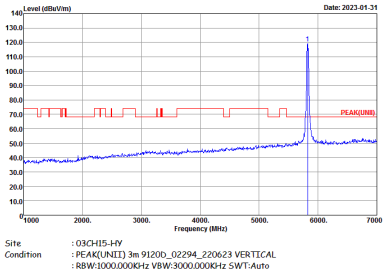
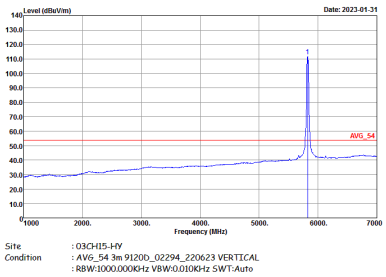
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE20 Full CH157 5785MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE20 Full CH157 5785MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  | Left blank |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE20 Full CH157 5785MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

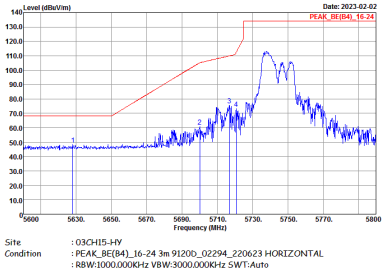
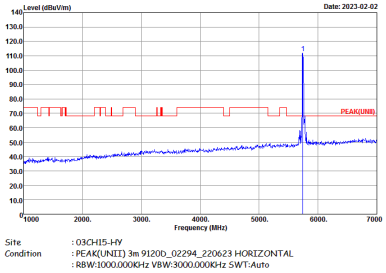
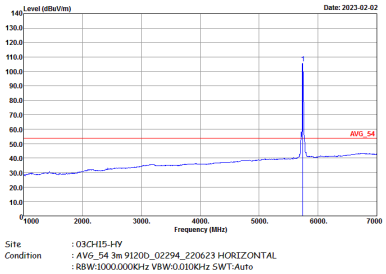
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE20 Full CH157 5785MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  | Left blank |

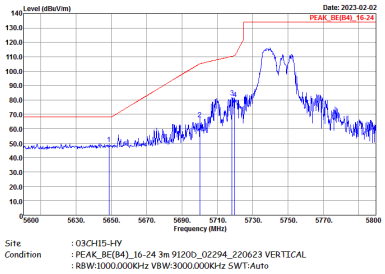
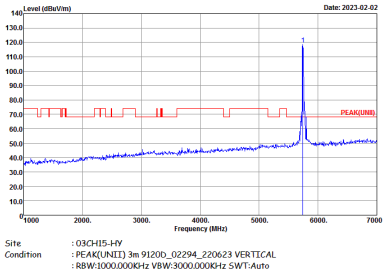
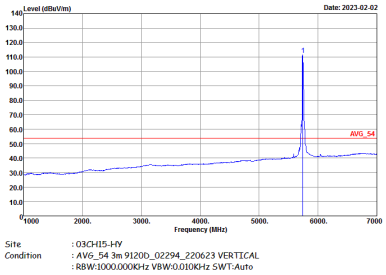
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE20 Full CH165 5825MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

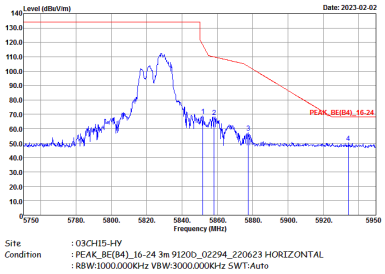
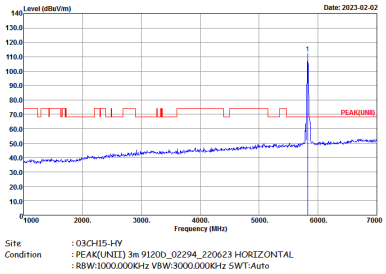
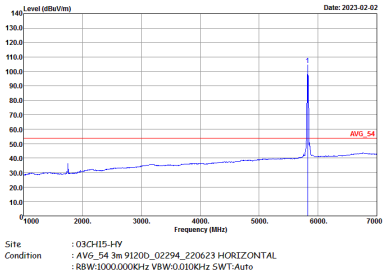
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE20 Full CH165 5825MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

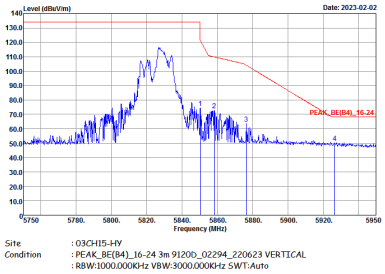
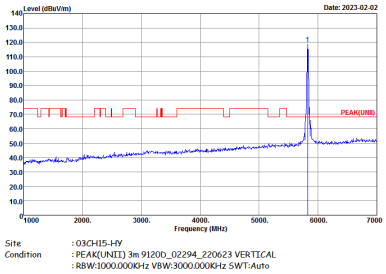
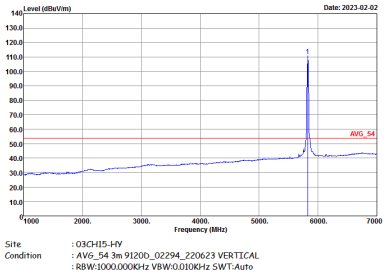
## Band 4 5725~5850MHz

## WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE20 Partial 106/53 CH149 5745MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

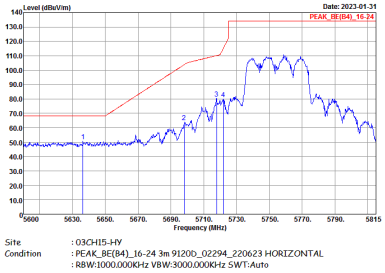
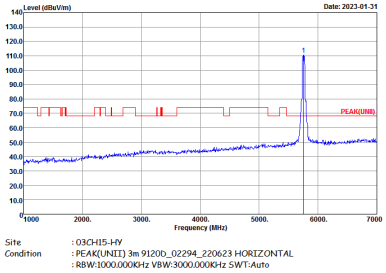
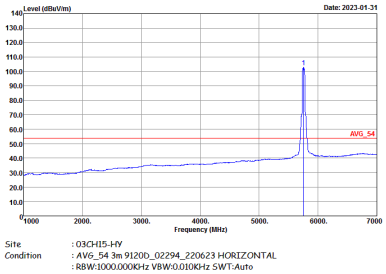
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE20 Partial 106/53 CH149 5745MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

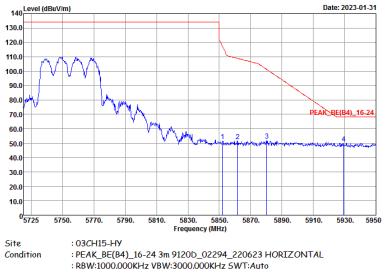
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE20 Partial 106/54 CH165 5825MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

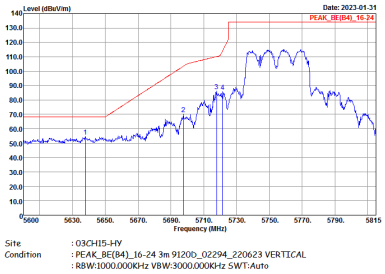
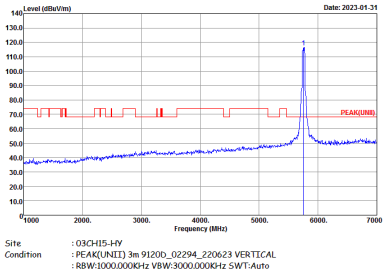
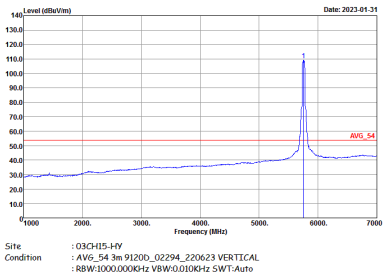
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE20 Partial 106/54 CH165 5825MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

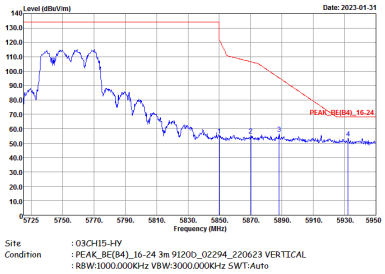
## Band 4 5725~5850MHz

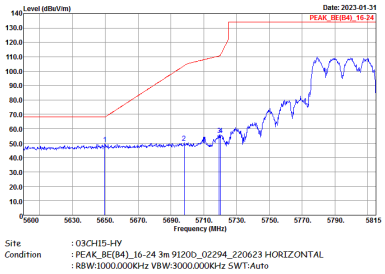
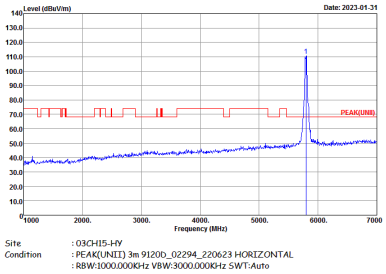
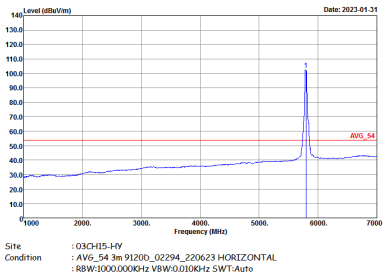
## WIFI 802.11ax HE40 Full (Band Edge @ 3m)

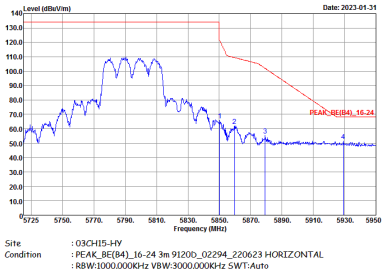
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Full CH151 5755MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

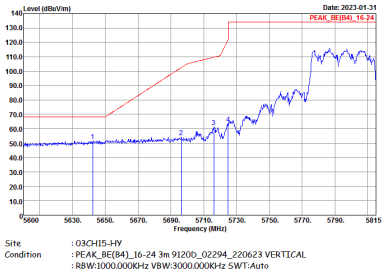
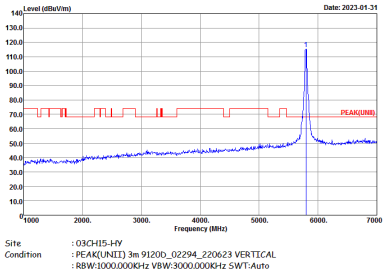
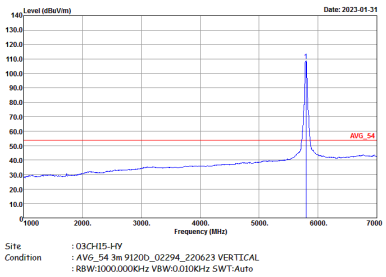
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Full CH151 5755MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  | Left blank |

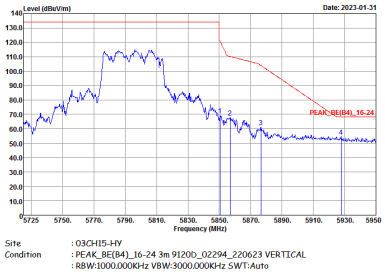
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Full CH151 5755MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Full CH151 5755MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  | Left blank |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Full HT40 CH159 5795MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

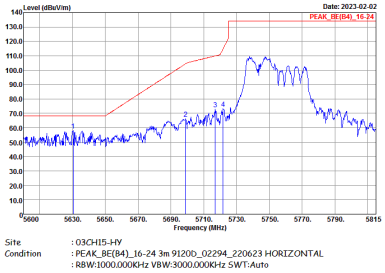
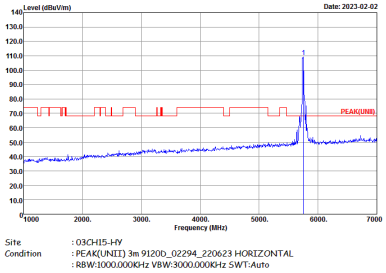
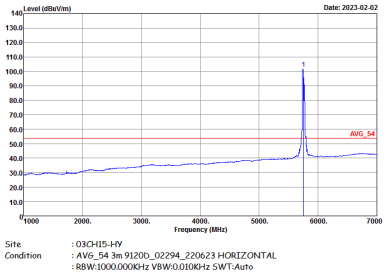
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Full HT40 CH159 5795MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  | Left blank |

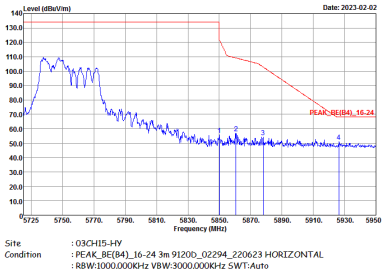
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Full CH159 5795MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

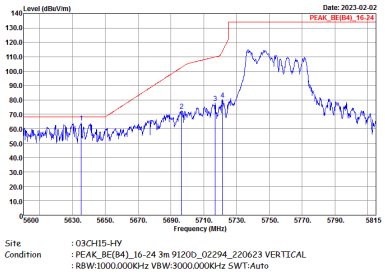
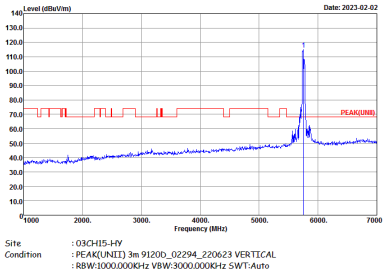
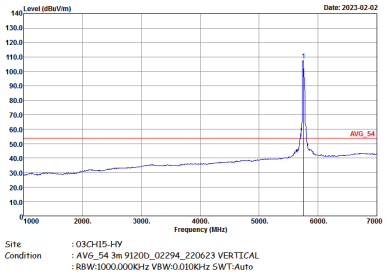
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Full CH159 5795MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  | Left blank |

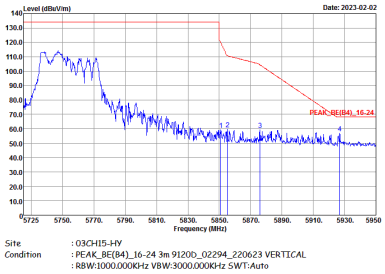
## Band 4 5725~5850MHz

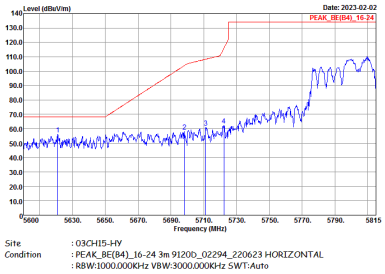
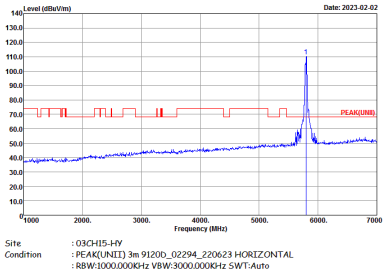
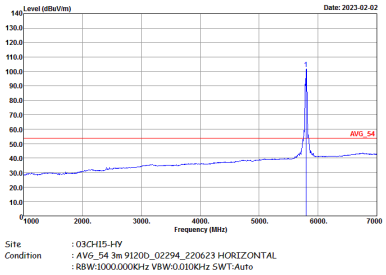
## WIFI 802.11ax HE40 Partial 242 (Band Edge @ 3m)

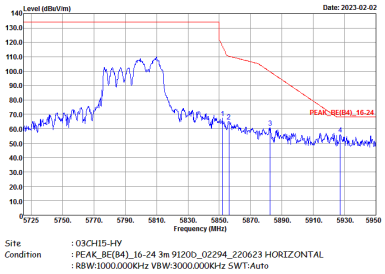
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Partial 242/61 CH151 5755MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

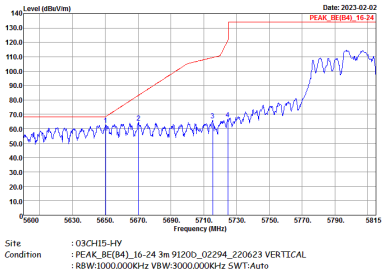
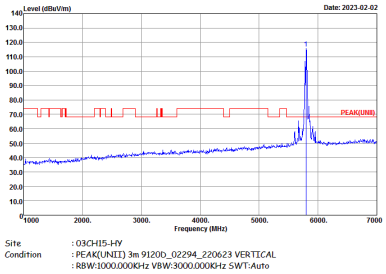
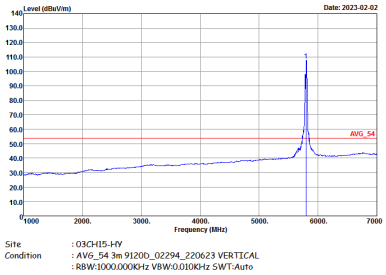
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Partial 242/61 CH151 5755MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  | Left blank |

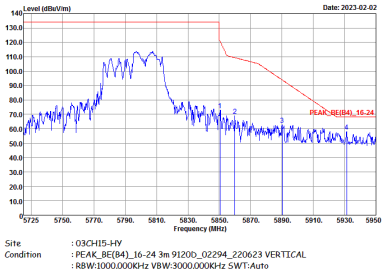
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Partial 242/61 CH151 5755MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Partial 242/61 CH151 5755MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  | Left blank |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Partial 242/62 CH159 5795MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

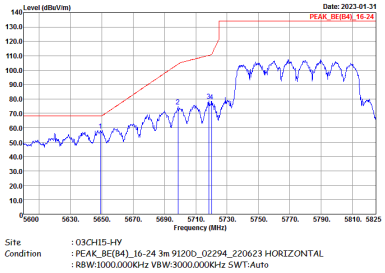
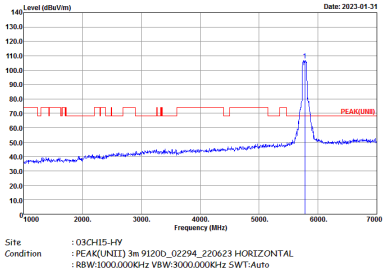
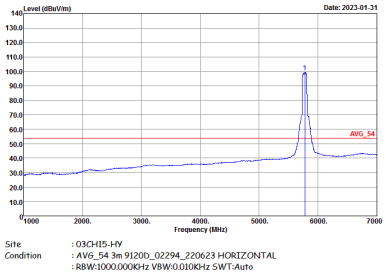
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Partial 242/62 CH159 5795MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  | Left blank |

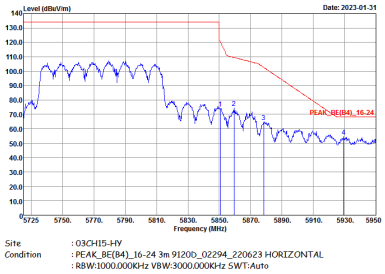
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Partial 242/62 CH159 5795MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

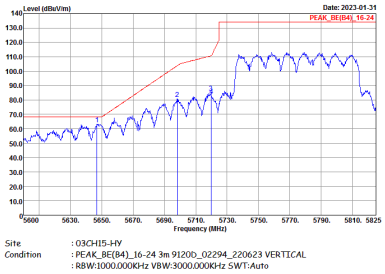
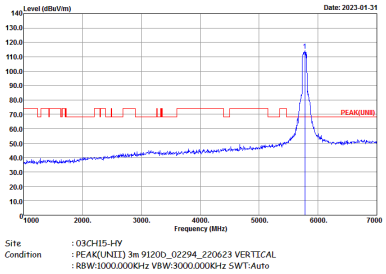
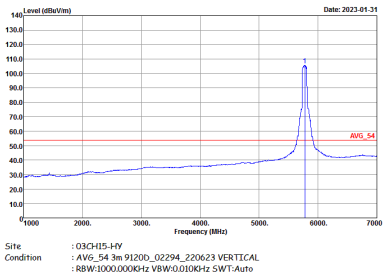
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Partial 242/62 CH159 5795MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  | Left blank |

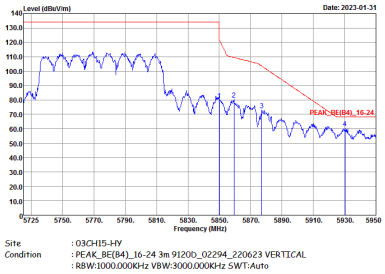
## Band 4 5725~5850MHz

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

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Full CH155 5775MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

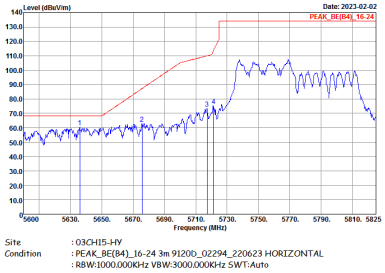
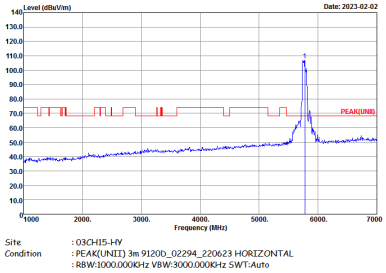
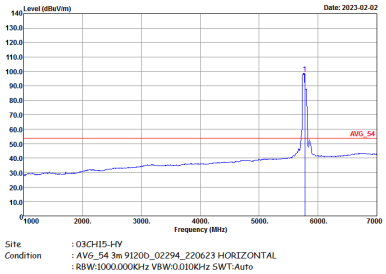
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Full CH155 5775MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  | Left blank |

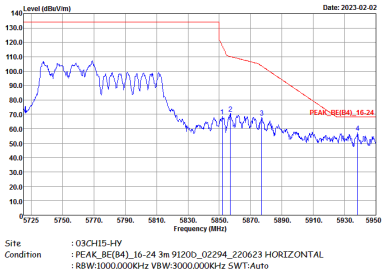
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Full CH155 5775MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

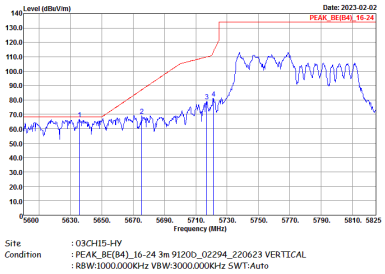
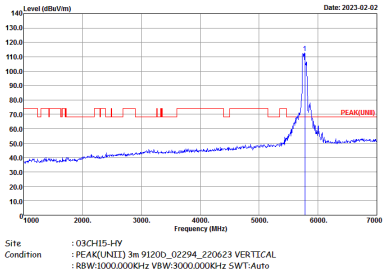
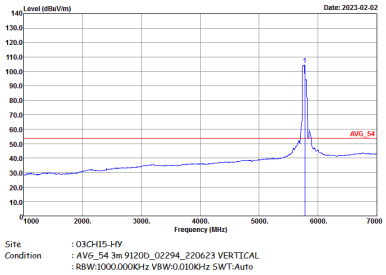
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Full CH155 5775MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  | Left blank |

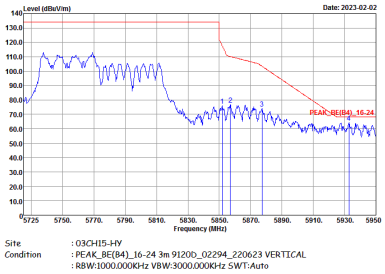
## Band 4 5725~5850MHz

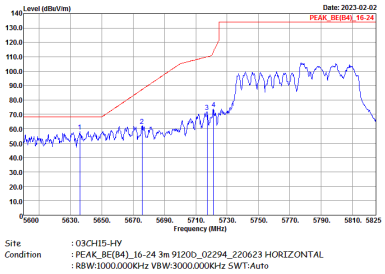
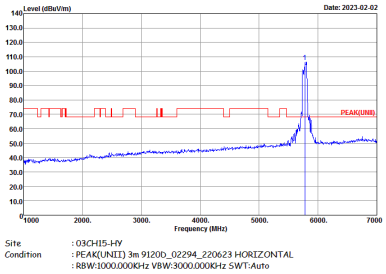
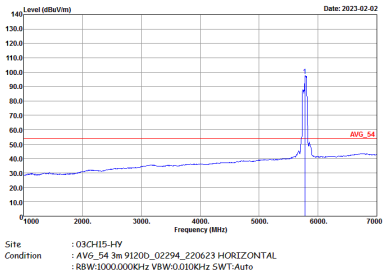
## WIFI 802.11ax HE80 Partial 484 (Band Edge @ 3m)

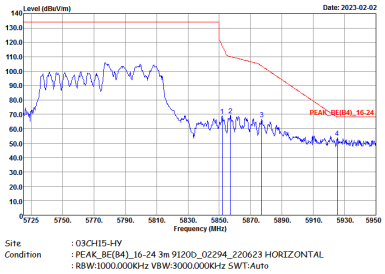
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

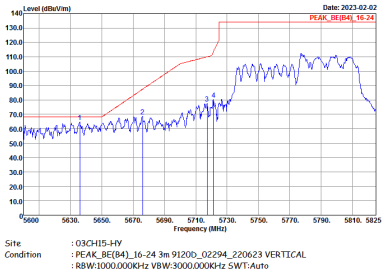
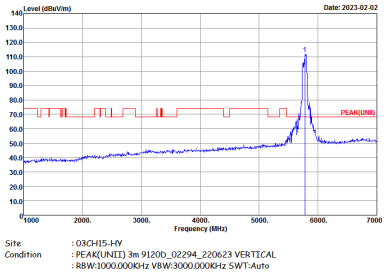
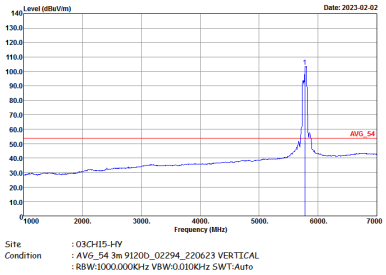
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  | Left blank |

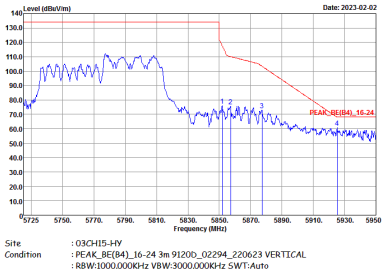
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  | Left blank |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/66 CH155 5775MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

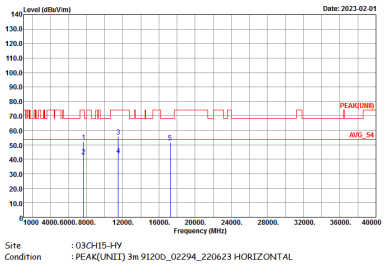
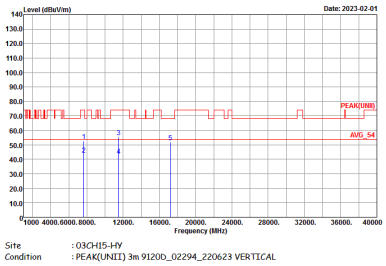
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/66 CH155 5775MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  | Left blank |

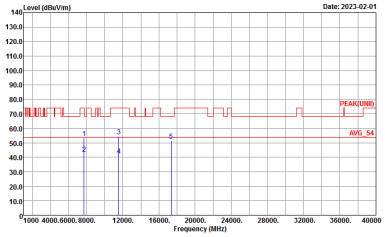
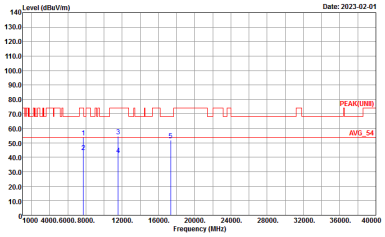
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/66 CH155 5775MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

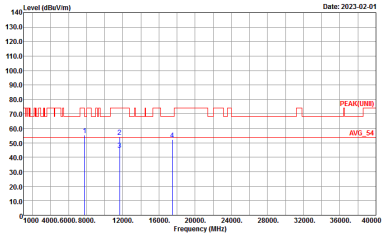
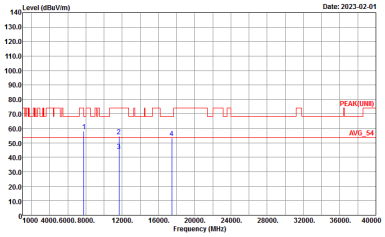
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/66 CH155 5775MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  | Left blank |

## Band 4 - 5725~5850MHz

## WIFI 802.11a (Harmonic @ 3m)

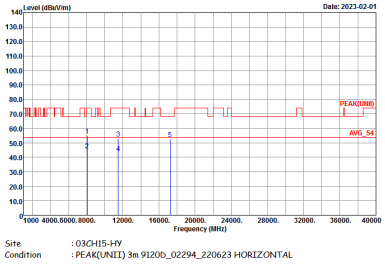
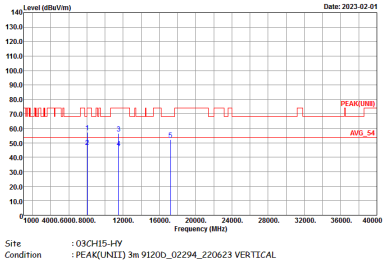
| WIFI | Band 4 5725~5850MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11a CH149 5745MHz | |
| 0+1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

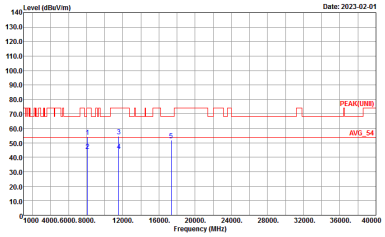
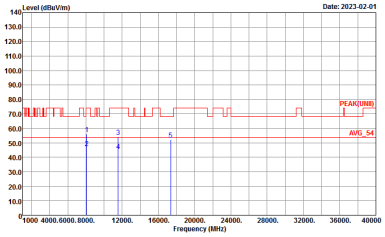
| WIFI | Band 4 5725~5850MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11a CH157 5785MHz | |
| 0+1 | Horizontal | Vertical |
| Peak<br>Avg. |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_02294_220623 HORIZONTAL |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_02294_220623 VERTICAL |

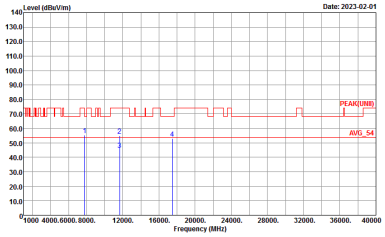
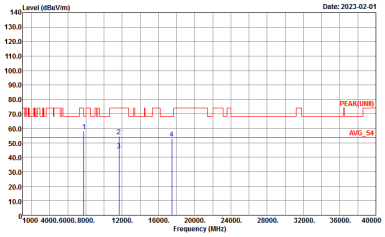
| WIFI | Band 4 5725~5850MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11a CH165 5825MHz | |
| 0+1 | Horizontal | Vertical |
| Peak<br>Avg. |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_02294_220623 HORIZONTAL |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_02294_220623 VERTICAL |

## Band 4 5725~5850MHz

## WIFI 802.11ax HE20 Full (Harmonic @ 3m)

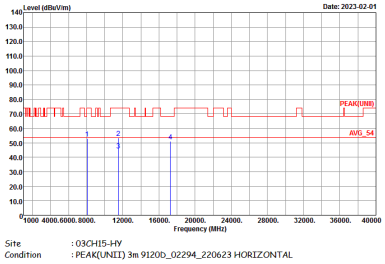
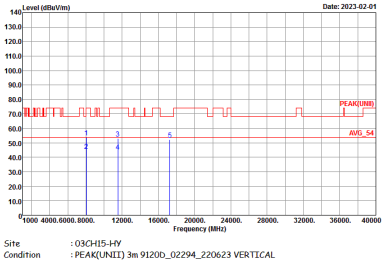
| WIFI | Band 4 5725~5850MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11ax HE20 Full CH149 5745MHz | |
| 0+1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

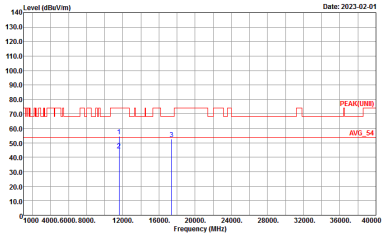
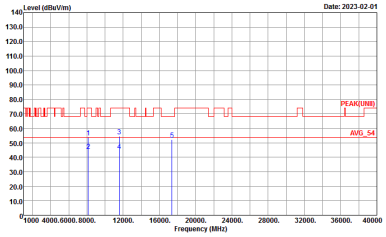
| WIFI | Band 4 5725~5850MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11ax HE20 Full CH157 5785MHz | |
| 0+1 | Horizontal | Vertical |
| Peak<br>Avg. |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_02294_220623 HORIZONTAL |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_02294_220623 VERTICAL |

| WIFI | Band 4 5725~5850MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11ax HE20 Full CH165 5825MHz | |
| 0+1 | Horizontal | Vertical |
| Peak<br>Avg. |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_02294_220623 HORIZONTAL |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_02294_220623 VERTICAL |

## Band 4 5725~5850MHz

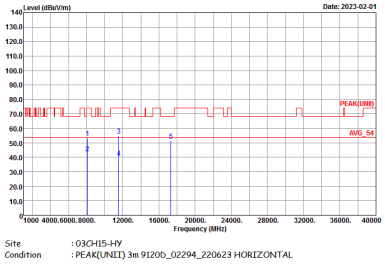
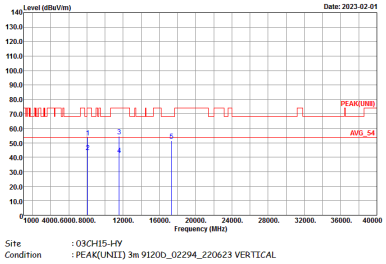
## WIFI 802.11ax HE40 Full (Harmonic @ 3m)

| WIFI | Band 4 5725~5850MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Full CH151 5755MHz | |
| 0+1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

| WIFI | Band 4 5725~5850MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11ax HE40 Full CH159 5795MHz | |
| 0+1 | Horizontal | Vertical |
| Peak<br>Avg. |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_02294_220623 HORIZONTAL |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_02294_220623 VERTICAL |

## Band 4 5725~5850MHz

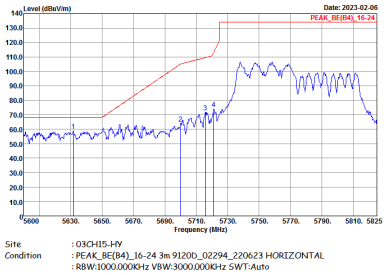
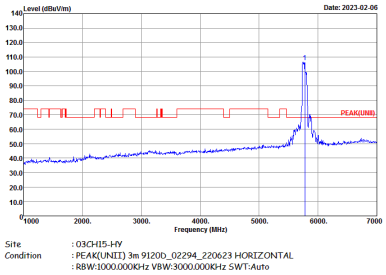
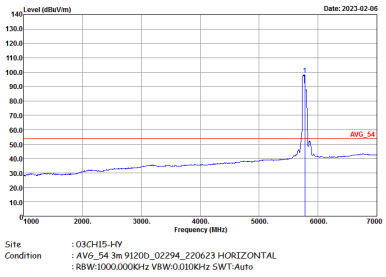
## WIFI 802.11ax HE80 Full (Harmonic @ 3m)

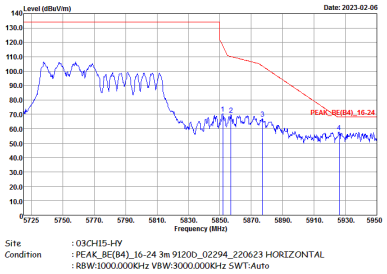
| WIFI | Band 4 5725~5850MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Full CH155 5775MHz | |
| 0+1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

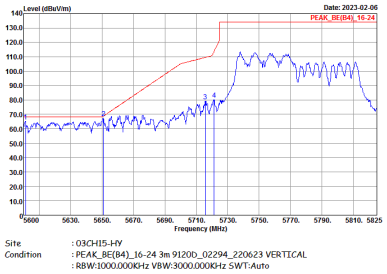
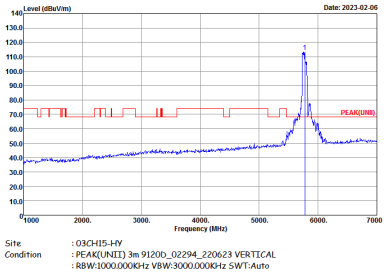
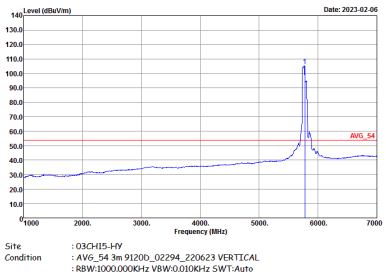
**<Sample 1 with Battery 2>**

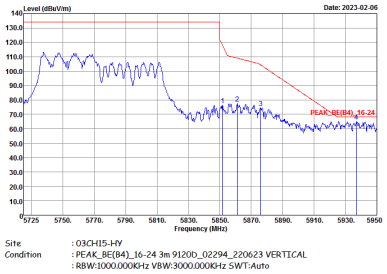
## Band 4 - 5725~5850MHz

## WIFI 802.11ax HE80 Partial 484 (Band Edge @ 3m)

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

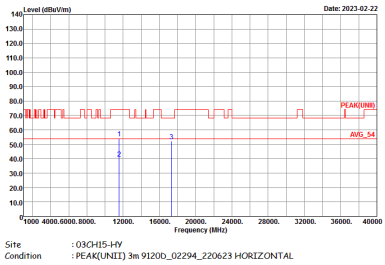
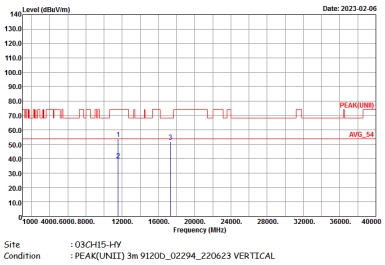
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  | Left blank |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  | Left blank |

## Band 4 - 5725~5850MHz

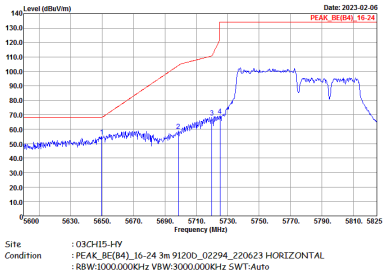
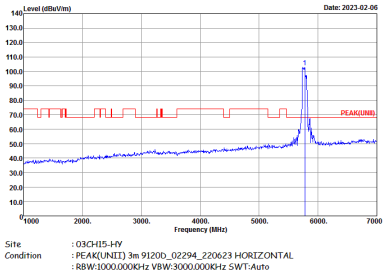
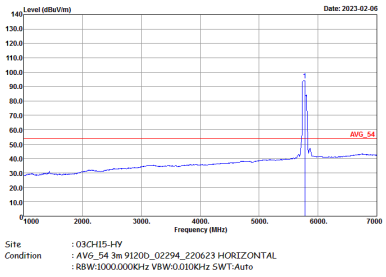
## WIFI 802.11ax HE80 Partial 484 (Harmonic @ 3m)

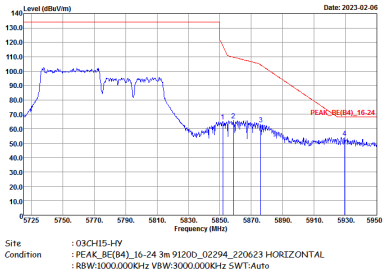
| WIFI | Band 4 5725~5850MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 F Partial 484/65 CH155 5775MHz | |
| 0+1 | Horizontal | Vertical |
| Peak<br>Avg. |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_02294_220623 HORIZONTAL |  <br>Site : 03CH15-HY<br>Condition : PEAK(UNII) 3m 9120D_02294_220623 VERTICAL |

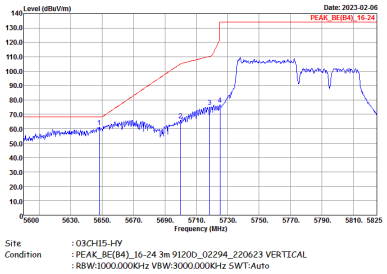
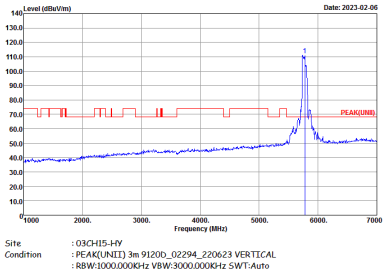
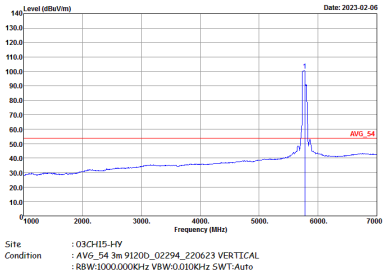
**<Sample 1 with Battery 3>**

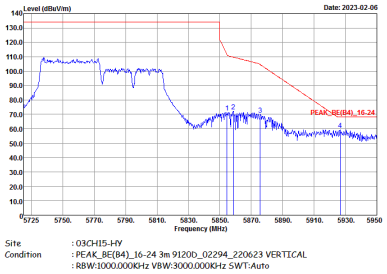
## Band 4 - 5725~5850MHz

## WIFI 802.11ax HE80 Partial 484 (Band Edge @ 3m)

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

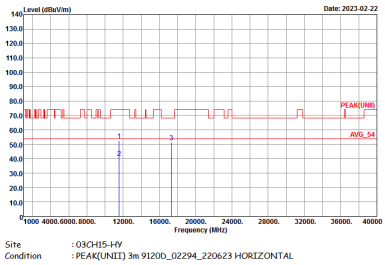
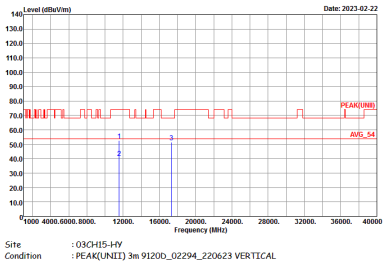
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  | Left blank |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  | Left blank |

## Band 4 - 5725~5850MHz

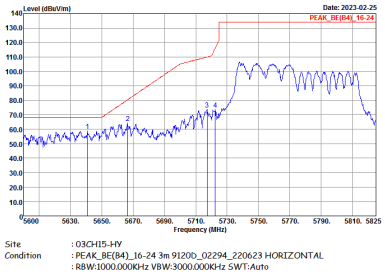
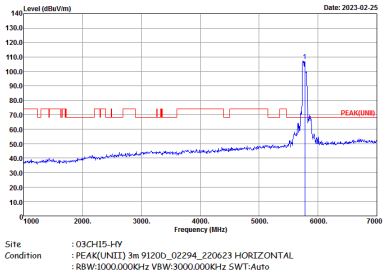
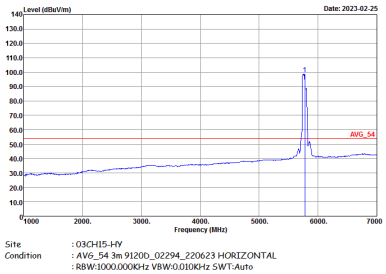
## WIFI 802.11ax HE80 Partial 484 (Harmonic @ 3m)

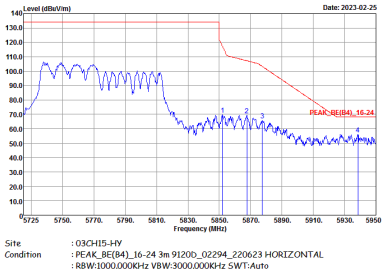
| WIFI | Band 4 5725~5850MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

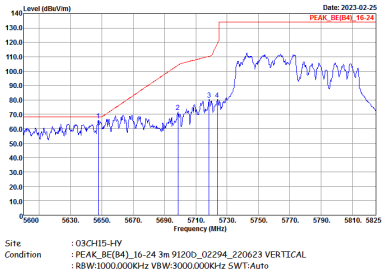
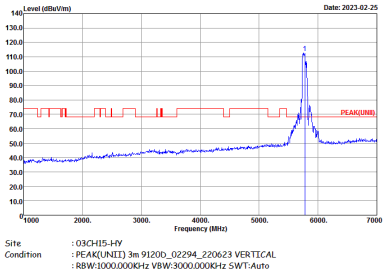
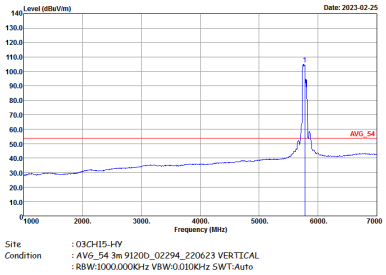
**<Sample 2 with Battery 2>**

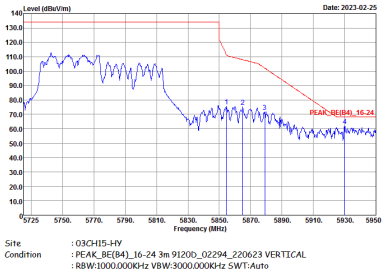
## Band 4 - 5725~5850MHz

## WIFI 802.11ax HE80 Partial 484 (Band Edge @ 3m)

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

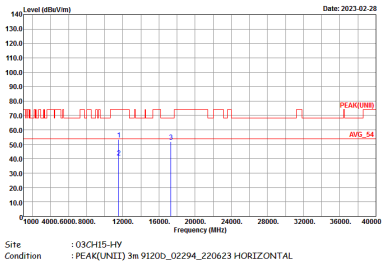
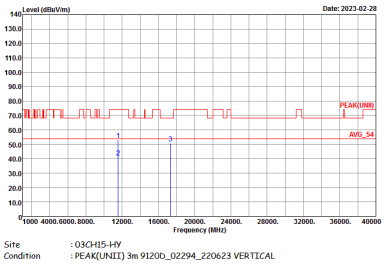
| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Horizontal | Fundamental |
| Peak |  | Left blank |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  |  |
| Avg | Left blank |  |

| WIFI | Band 4 5725~5850MHz Band Edge @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Vertical | Fundamental |
| Peak |  | Left blank |

## Band 4 - 5725~5850MHz

## WIFI 802.11ax HE80 Partial 484 (Harmonic @ 3m)

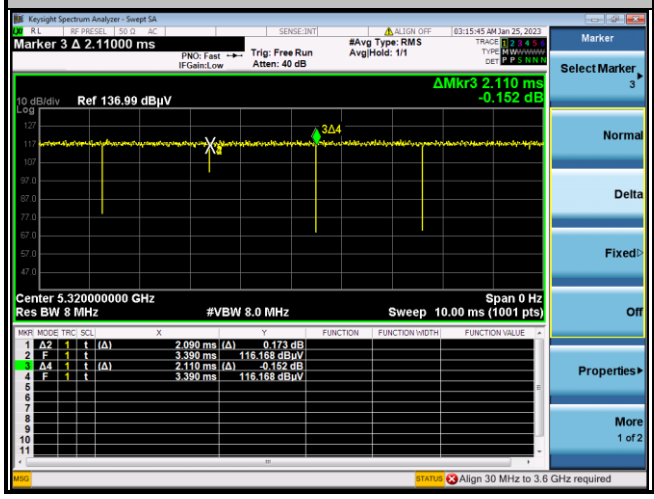
| WIFI | Band 4 5725~5850MHz Harmonic @ 3m | |
|---|---|---|
| ANT | 802.11ax HE80 Partial 484/65 CH155 5775MHz | |
| 0+1 | Horizontal | Vertical |
| Peak<br>Avg. |  |  |

# Appendix E. Duty Cycle Plots

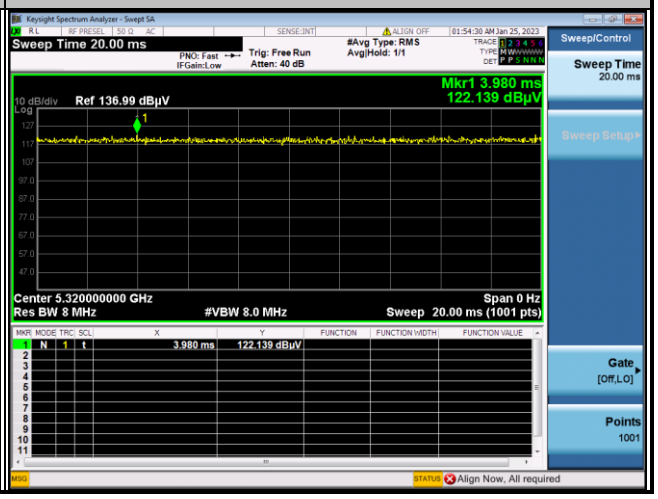
| Antenna | Band | Duty Cycle(%) | T(us) | 1/T(kHz) | VBW Setting |
|---|---|---|---|---|---|
| 0+1 | 5GHz 802.11a | 99.05 | - | - | 10Hz |
| 0+1 | 5GHz 802.11ax HE20 Full RU | 100.00 | - | - | 10Hz |
| 0+1 | 5GHz 802.11ax HE20 106 RU | 99.06 | - | - | 10Hz |
| 0+1 | 5GHz 802.11ax HE40 Full RU | 98.90 | - | - | 10Hz |
| 0+1 | 5GHz 802.11ax HE40 242 RU | 99.27 | - | - | 10Hz |
| 0+1 | 5GHz 802.11ax HE80 Full RU | 99.50 | - | - | 10Hz |
| 0+1 | 5GHz 802.11ax HE80 484 RU | 98.94 | - | - | 10Hz |

**<MIMO. 0+1>**

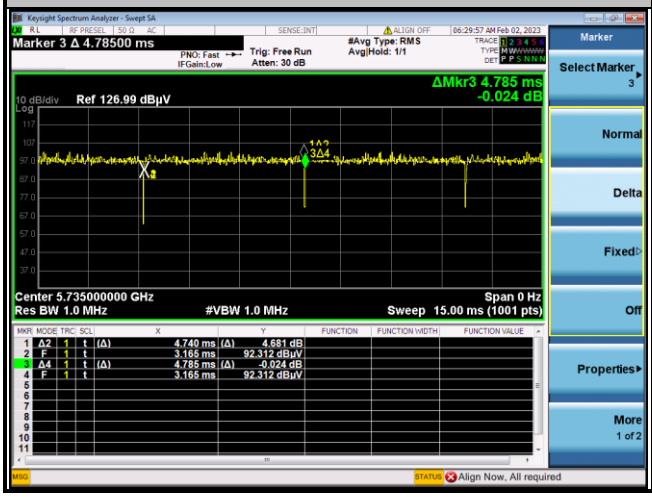
**802.11a**



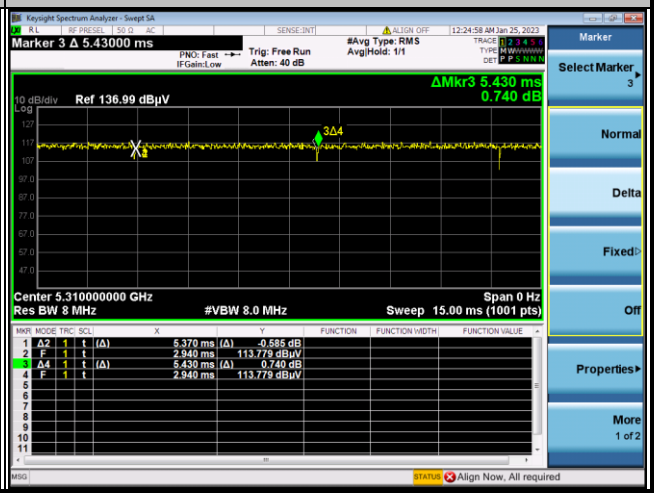

**802.11ax HE20 Full RU**



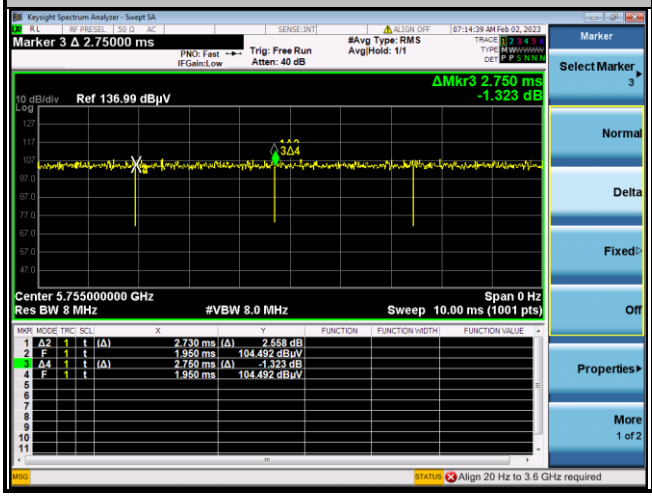
## 802.11ax HE20 106 RU



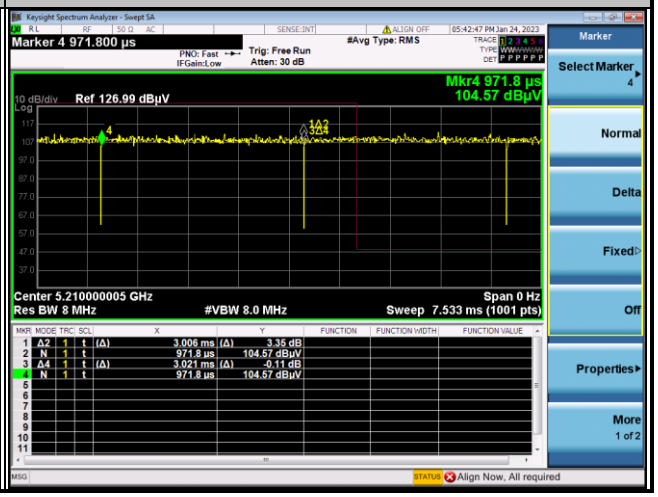

## 802.11ax HE40 Full RU

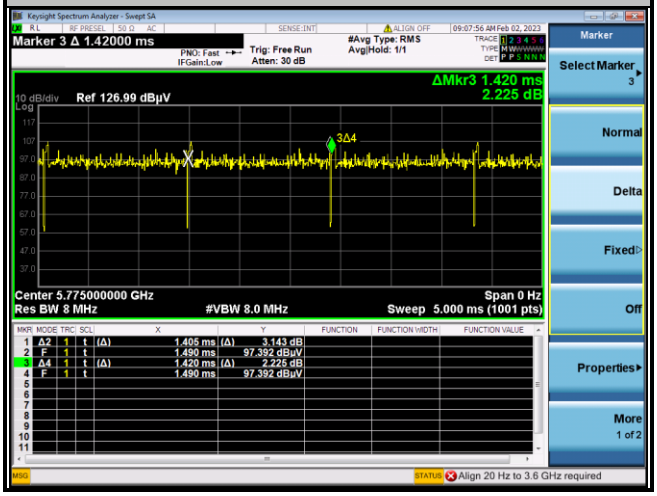



## 802.11ax HE40 242 RU




## 802.11ax HE80 Full RU




## 802.11ax HE80 484 RU