



FCC RADIO TEST REPORT

FCC ID : UZ7MC9401
Equipment : Mobile Computer
Brand Name : ZEBRA
Model Name : MC9401
Applicant : Zebra Technologies Corporation
1 Zebra Plaza, Holtsville, NY 11742
Manufacturer : Zebra Technologies Corporation
1 Zebra Plaza, Holtsville, NY 11742
Standard : FCC Part 15 Subpart E §15.407

The product was received on Jul. 04, 2023 and testing was performed from Jul. 06, 2023 to Aug. 15, 2023. We, Sporton International Inc. EMC & Wireless Communications 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. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory

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History of this test report

Report No.	Version	Description	Issue Date
FR362117F	01	Initial issue of report	Aug. 24, 2023



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	1.26 dB under the limit at 5639.20 MHz
3.5	15.207	AC Conducted Emission	Pass	16.46 dB under the limit at 0.17 MHz
3.6	15.203	Antenna Requirement	Pass	-

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty".

Disclaimer:

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

Reviewed by: Keven Cheng
Report Producer: Michelle Chen



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Computer
Brand Name	ZEBRA
Model Name	MC9401
FCC ID	UZ7MC9401
EUT supports Radios application	NFC WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80/VHT160 WLAN 11ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE
HW Version	EV
SW Version	13-05-28.00-TG-U00-PRD-NEM-04
FW Version	FUSION_QA_6_1.0.0.001_T
MFD	08JUN23
EUT Stage	Identical Prototype

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

Specification of Accessories				
Adapter USB Wall Charger	Brand Name	Zebra	Model Number	PWR-WUA5V12W0US
Battery Standard Battery (7000mAh)	Brand Name	Zebra	Model Number	BT-000370
Earphone USB-C Audio Headset	Brand Name	Zebra	Model Number	HDST-USBC-PTT1-01
USB Cable (Type C to Type A)	Brand Name	Zebra	Model Number	CBL-TC2X-USBC-01
Holster	Brand Name	Zebra	Model Number	SG-MC9X-SHLSTG-01
USB Cable (CUP)	Brand Name	Zebra	Model Number	CBL-MC93-USBCHG-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. 6+7> 802.11a: 22.47 dBm / 0.1766 W 802.11n HT20: 22.41 dBm / 0.1742 W 802.11n HT40: 22.26 dBm / 0.1683 W 802.11ac VHT20: 22.41 dBm / 0.1742 W 802.11ac VHT40: 22.26 dBm / 0.1683 W 802.11ac VHT80: 21.57 dBm / 0.1435 W 802.11ax HE20: 22.51 dBm / 0.1782 W 802.11ax HE40: 22.36 dBm / 0.1722 W 802.11ax HE80: 21.67 dBm / 0.1469 W									
99% Occupied Bandwidth	MIMO <Ant. 6> 802.11a: 16.33 802.11ax HE20: 18.83 MHz 802.11ax HE40: 37.86 MHz 802.11ax HE80: 76.84 MHz MIMO <Ant. 7> 802.11a: 16.53 MHz 802.11ax HE20: 19.33 MHz 802.11ax HE40: 38.16 MHz 802.11ax HE80: 77.32 MHz									
Antenna Type / Gain	<Ant. 6> : Coupling Antenna with gain 3.47 dBi <Ant. 7> : Coupling Antenna with gain 2.92 dBi									
Type of Modulation	802.11a/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) 802.11ax: OFDMA (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM)									
Antenna Function Description	<table border="1"> <thead> <tr> <th></th> <th>Ant. 6</th> <th>Ant. 7</th> </tr> </thead> <tbody> <tr> <td>802.11a/n/ac/ax MIMO</td> <td>V</td> <td>V</td> </tr> <tr> <td>802.11ax TXBF</td> <td>V</td> <td>V</td> </tr> </tbody> </table>		Ant. 6	Ant. 7	802.11a/n/ac/ax MIMO	V	V	802.11ax TXBF	V	V
	Ant. 6	Ant. 7								
802.11a/n/ac/ax MIMO	V	V								
802.11ax TXBF	V	V								

Remark:

1. MIMO Ant. 6+7 Directional Gain is a calculated result from MIMO Ant. 6 and MIMO Ant. 7. The formula used in calculation is documented in section 1.1.1.
2. Power of MIMO Ant. 6 + Ant. 7 is a calculated result from sum of the power MIMO Ant. 6 and MIMO Ant. 7.
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 Disclaimer 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 k th antenna.

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

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

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



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

			DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
	Ant 6 (dBi)	Ant 7 (dBi)				
Band IV	3.47	2.92	3.47	6.21	0.00	0.21

Calculation example:

If a device has two antenna, $G_{ANT6}= 3.47\text{dBi}$; $G_{ANT7}=2.92\text{dBi}$

Directional gain of power measurement = $\max(3.47, 2.92) + 0 = 3.47 \text{ dBi}$

Directional gain of PSD derived from formula which is

$$10 \times \log \left\{ \left[10^{\frac{3.47 \text{ dBi}}{20}} + 10^{\frac{2.92 \text{ dBi}}{20}} \right]^2 \right\} / 2$$

= 6.21 dBi

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

<For TXBF Modes>

The EUT supports beamforming modes , then

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

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

where

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

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

N_{ANT} = the total number of antennas

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

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

			DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
	Ant 6 (dBi)	Ant 7 (dBi)				
Band IV	3.47	2.92	6.21	6.21	0.21	0.21

Calculation example:

Directional gain of PSD derived from formula which is

$$10 \times \log \left\{ \left[10^{(3.47 \text{ dBi} / 20)} + 10^{(2.92 \text{ dBi} / 20)} \right]^2 / 2 \right\}$$

= 6.21 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. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No. CO05-HY, 03CH07-HY, TH03-HY

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

FCC designation No.: TW1190

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 26/52/106/242/484/996-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	Mode 1 : WLAN (5GHz) Link + Bluetooth Link + Battery Standard Battery (7000mAh) + Scan + USB Cable (Type C to Type A) with USB Cable (CUP) (Charging from Adapter USB Wall Charger)

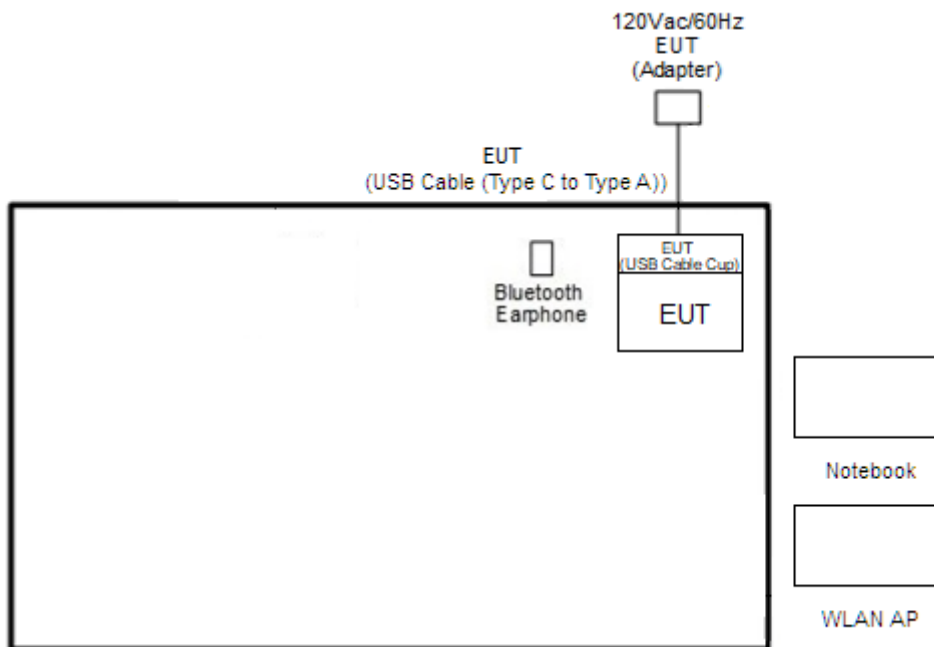
MIMO <Ant. 6+7>

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	-

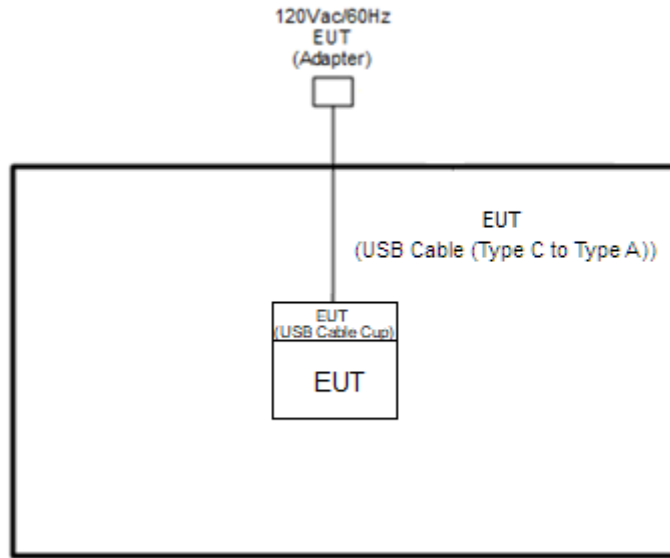
Remark: For radiation spurious emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power.

2.3 Connection Diagram of Test System

<AC Conducted Emission Mode>



<WLAN Tx Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Earphone	Sony Ericsson	MW600	PY700A2029	N/A	N/A
2.	WLAN AP	NETGEAR64	RAXE500	N/A	N/A	Unshielded, 1.8 m
3.	Notebook	Dell	Latitude 3420	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 4.0.00211.0” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.



2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

3 Test Result

3.1 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.

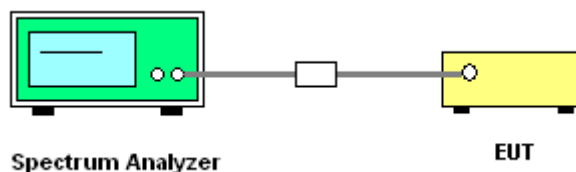
3.1.2 Measuring Instruments

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 $\geq 3 \times$ 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



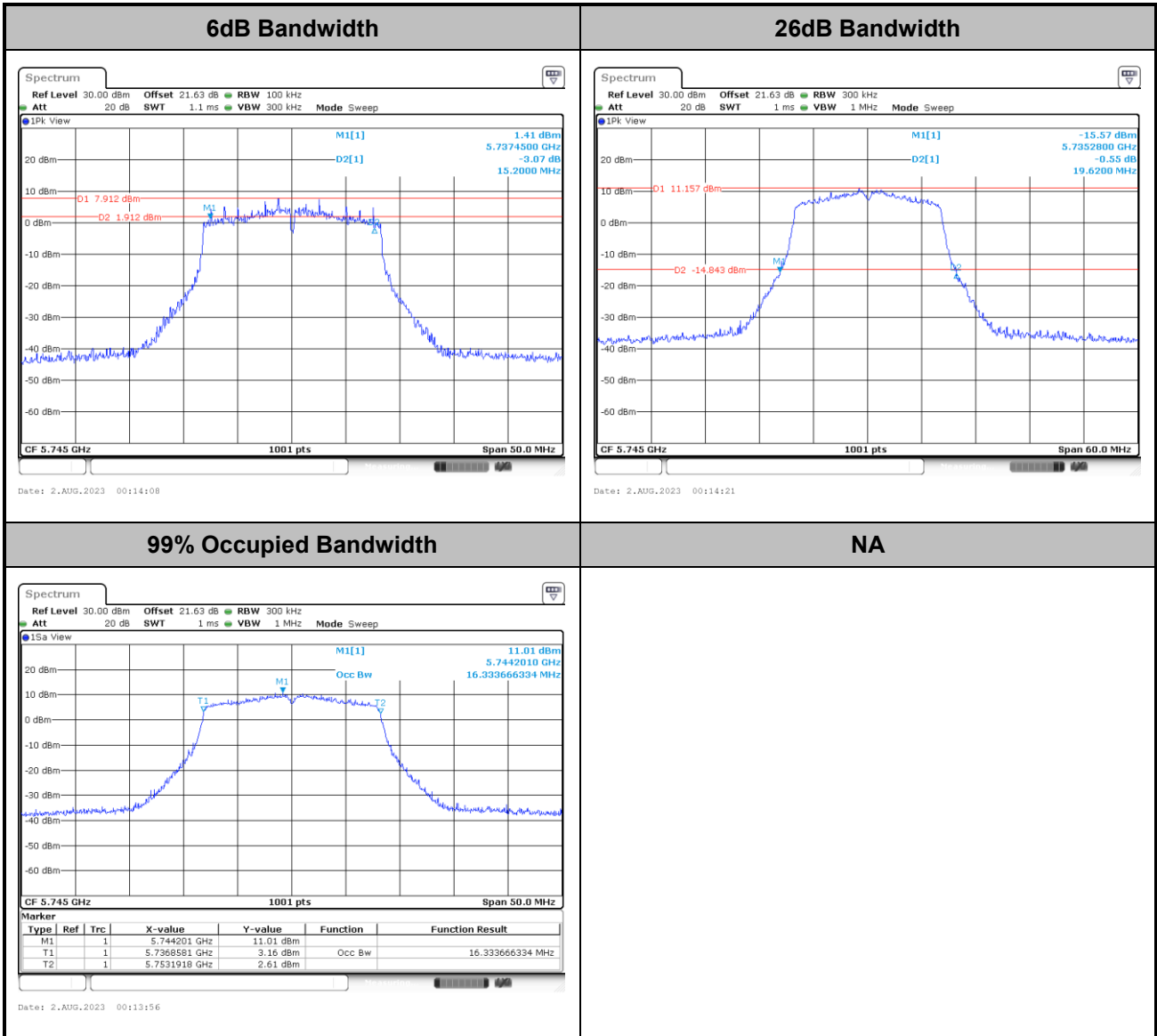
3.1.5 Test Result of 6dB and 26dB and 99% Occupied Bandwidth

Please refer to Appendix A.



MIMO <Ant. 6+7>

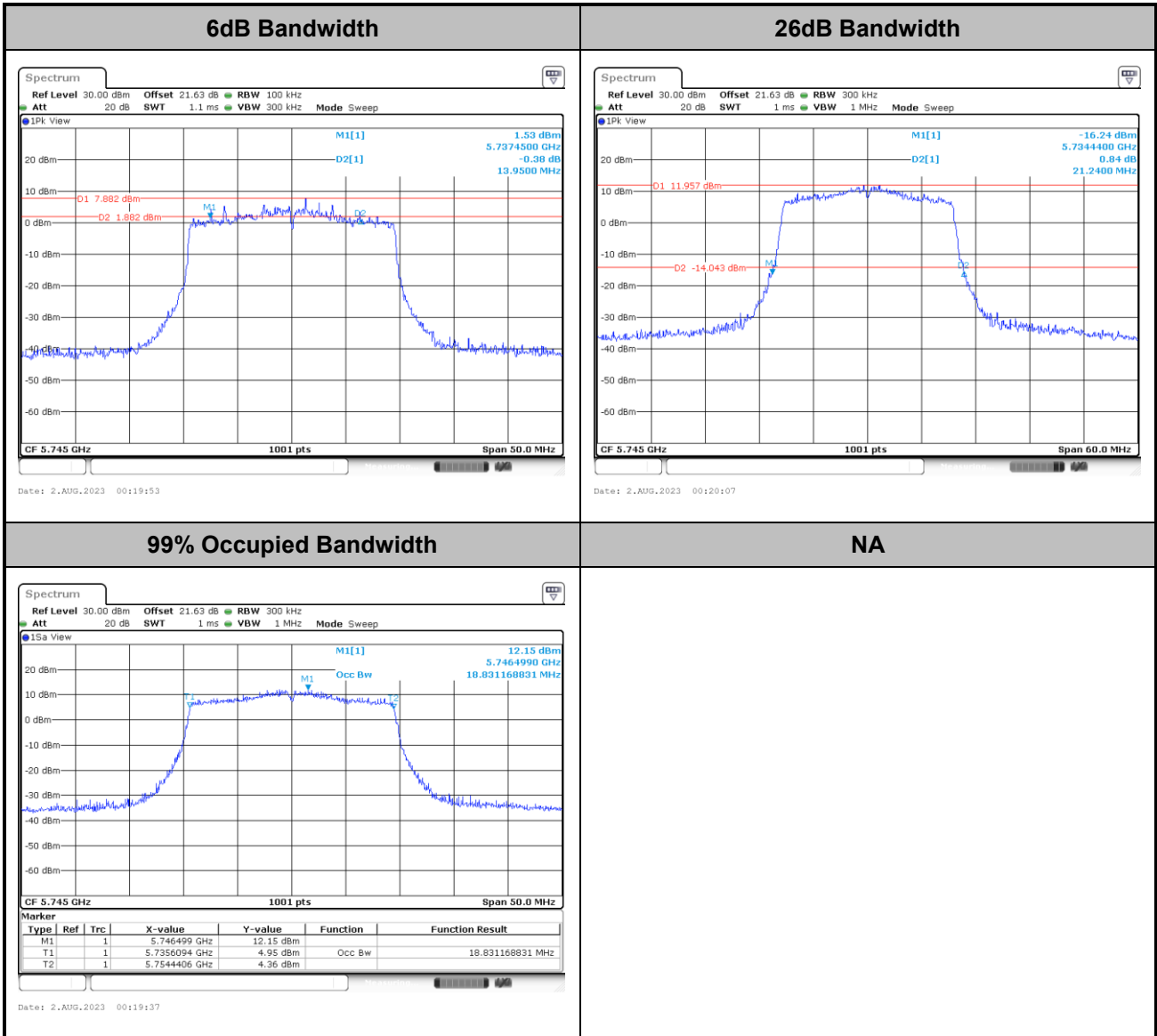
<802.11a>



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



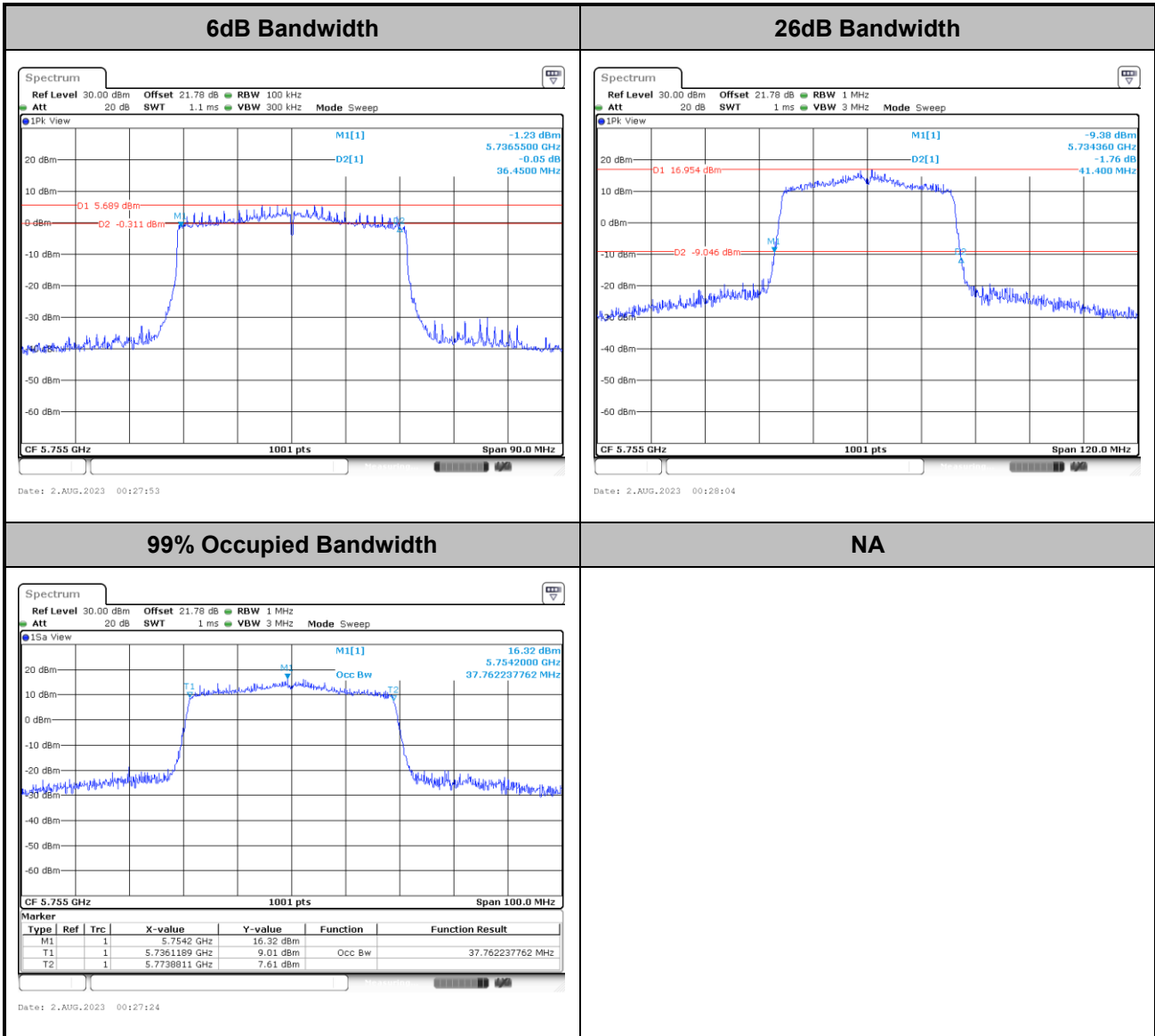
<802.11ax HE20>



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



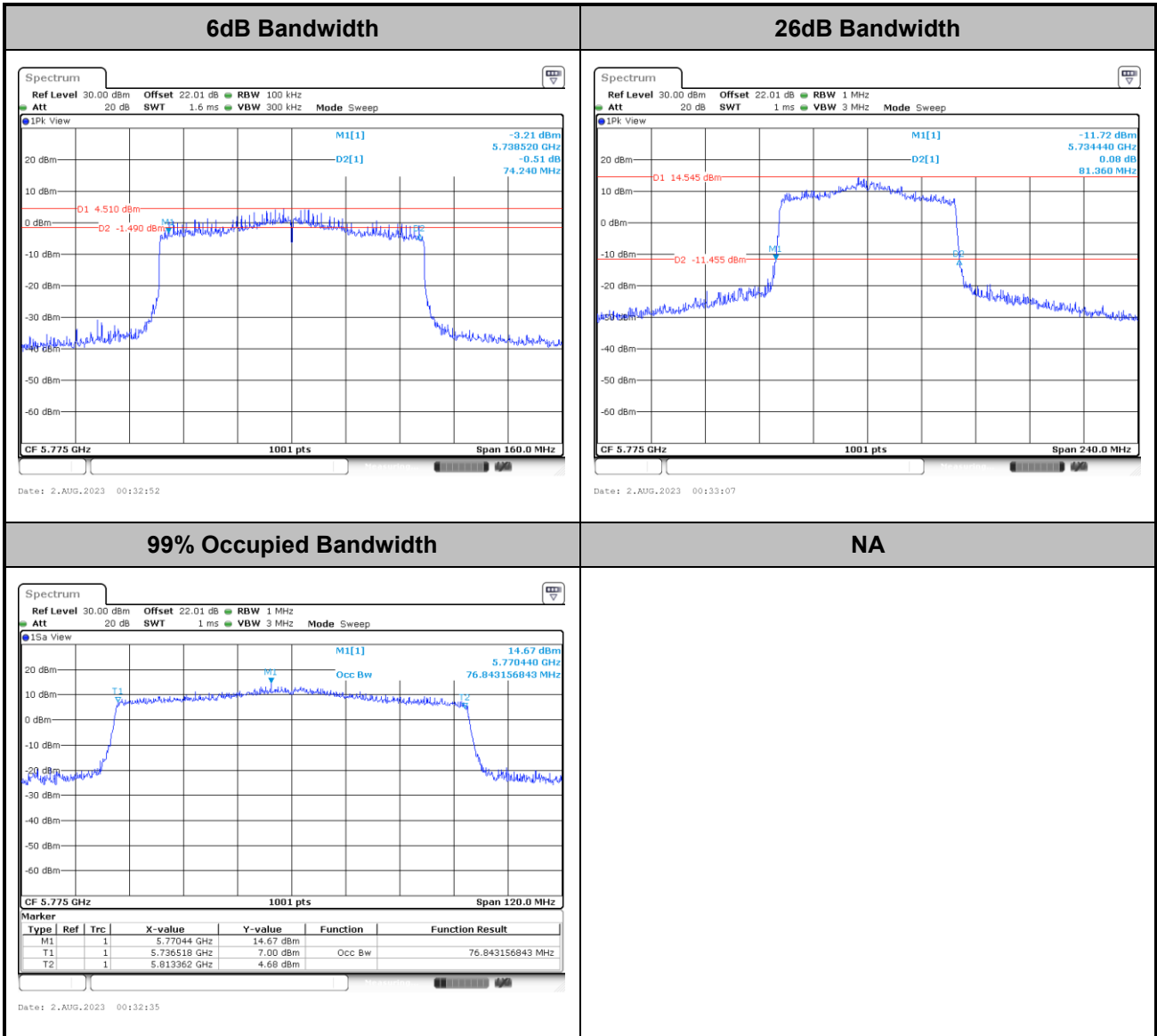
<802.11ax HE40>



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



<802.11ax HE80>



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

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.

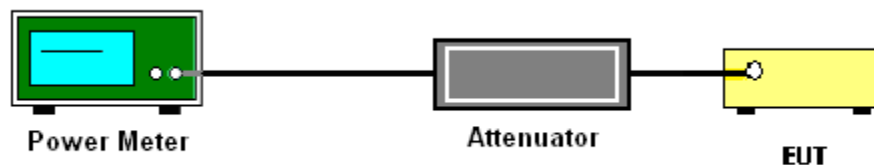
3.2.3 Test Procedures

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

Method PM (Measurement using an RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, $10 \log(1/x)$, where x is the duty cycle.
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

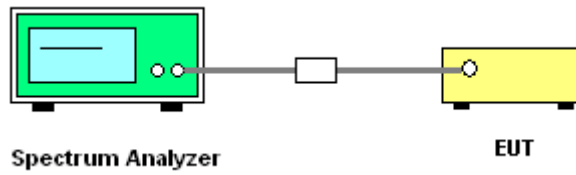
The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section F) Maximum power spectral density.

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 \geq 1 MHz.
 - Add $10 \log(500 \text{ kHz/RBW})$ 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 $\geq 2 \text{ Span} / \text{RBW}$.
 - 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 $10 \log(1/0.25) = 6 \text{ dB}$ 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 $10 \log(N_{\text{ANT}})$ 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 $10 \log(N_{\text{ANT}})$ dB is added to each spectrum value before comparing to the emission limit. The addition of $10 \log(N_{\text{ANT}})$ dB serves to apportion the emission limit among the N_{ANT} outputs so that each output is permitted to contribute no more than $1/N_{\text{ANT}}^{\text{th}}$ of the PSD limit.

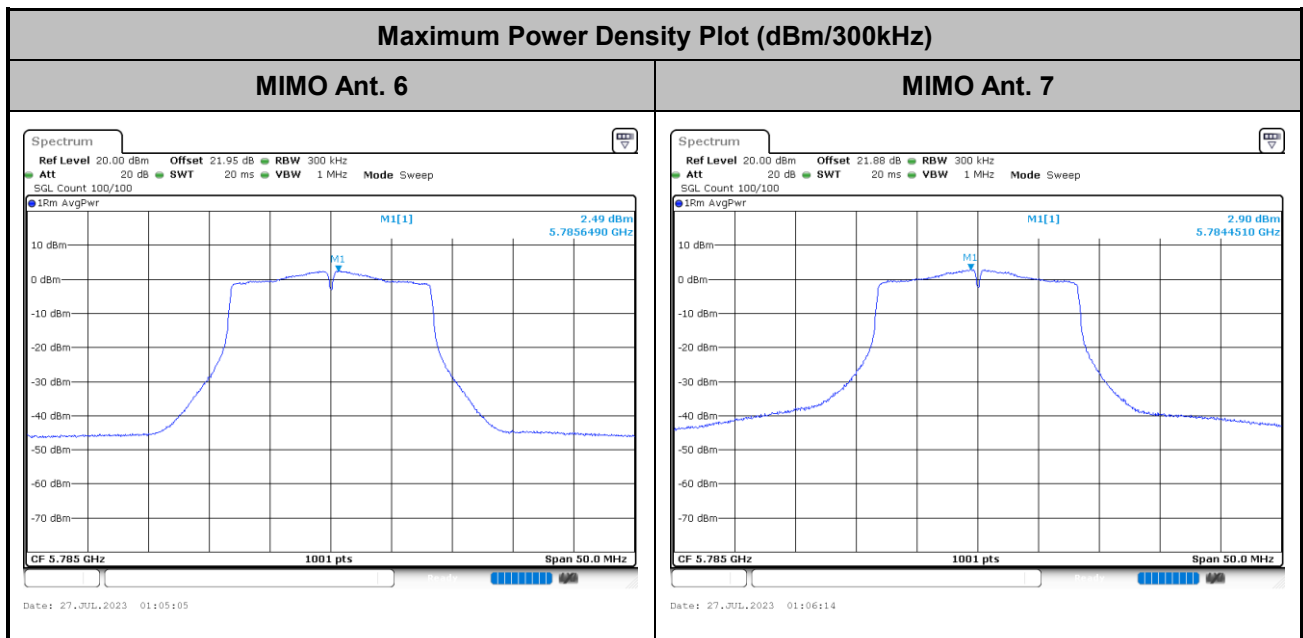
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

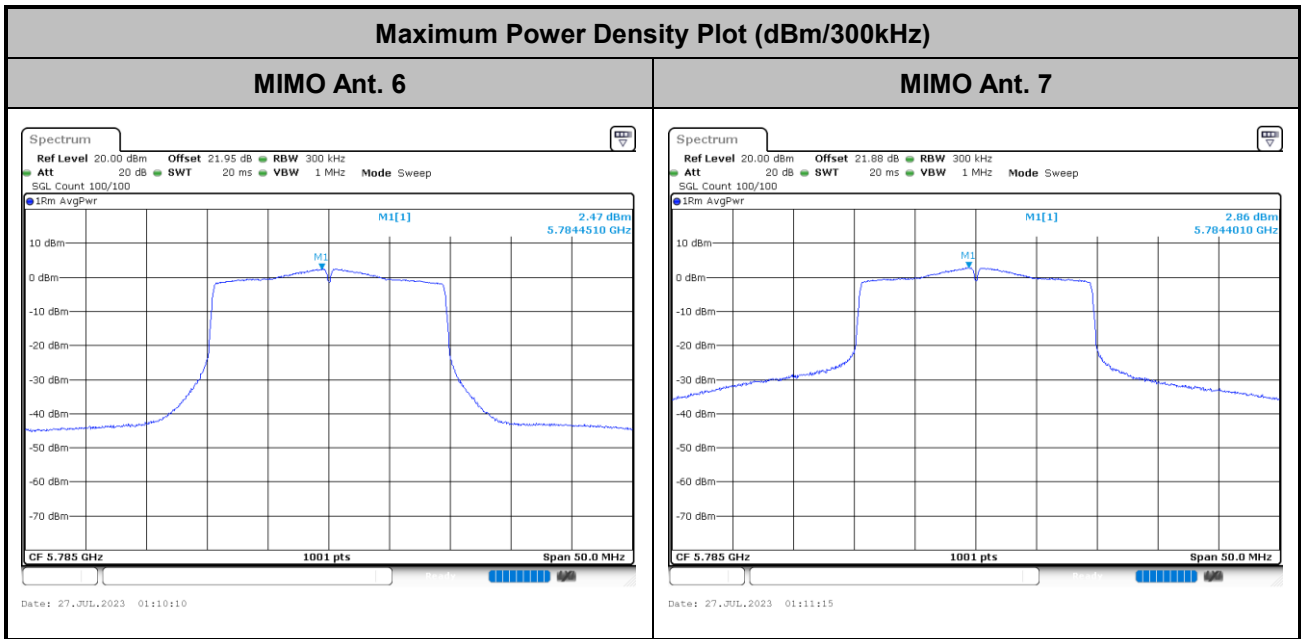
Please refer to Appendix A.

<802.11a>

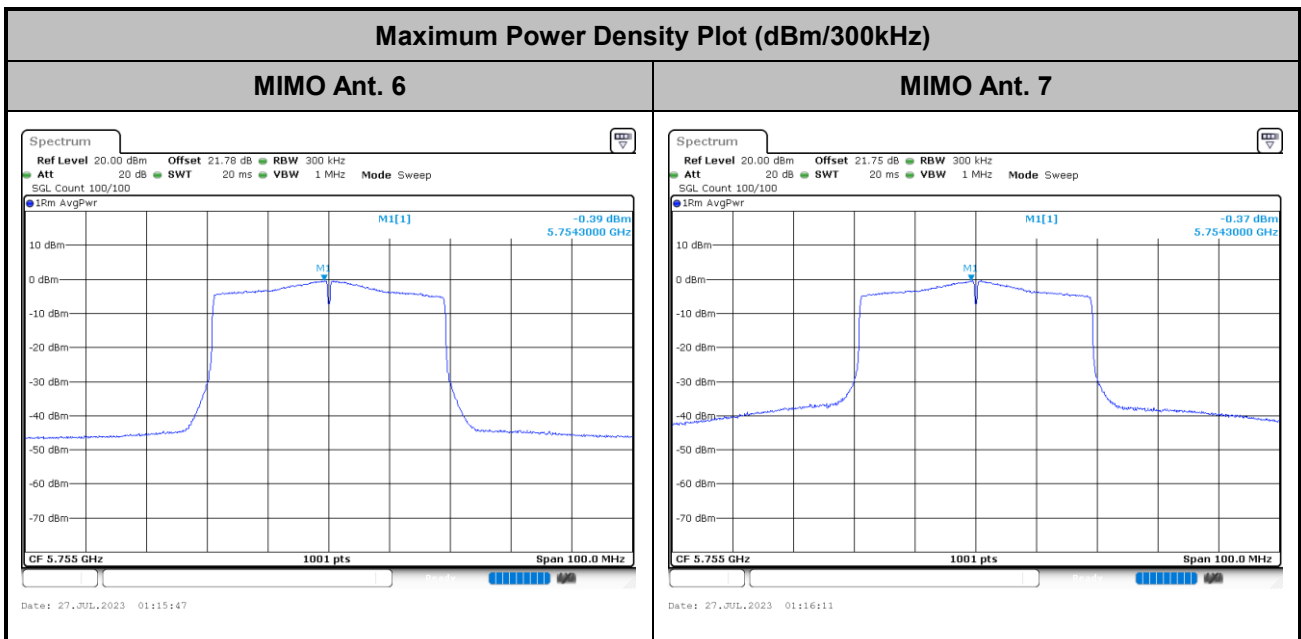




<802.11ax HE20>

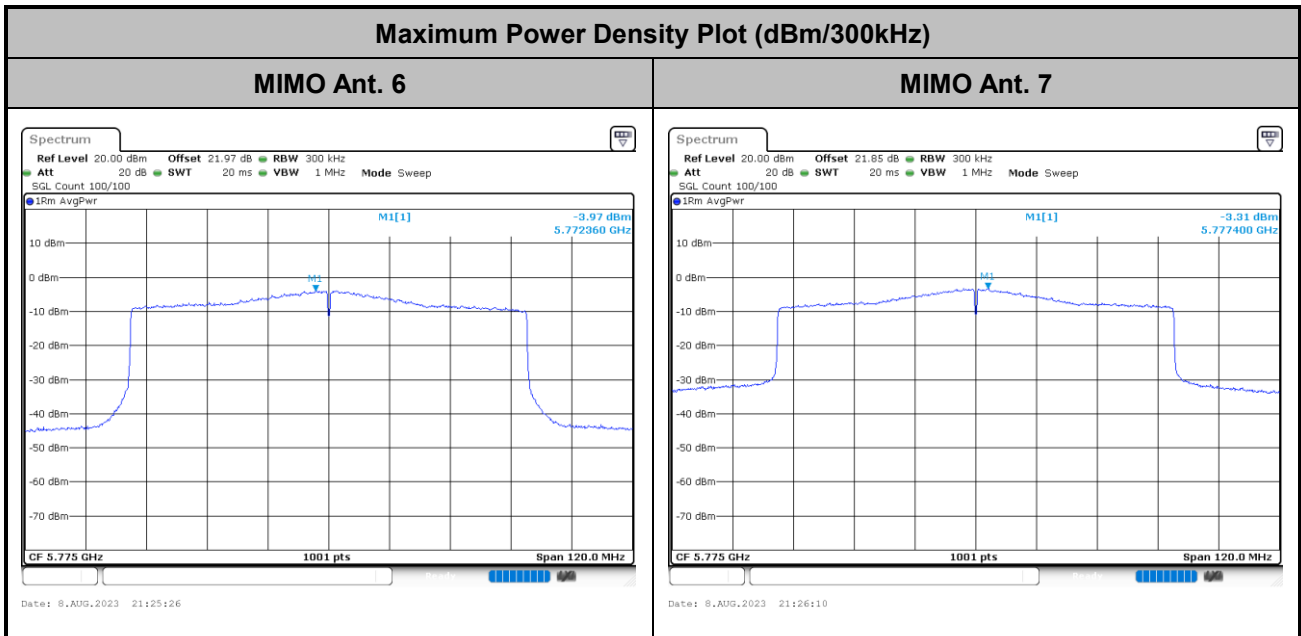


<802.11ax HE40>





<802.11ax HE80>



Note: Average Power Density (dB) = Measured value+ Duty Factor



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.

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

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

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

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

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



3.4.2 Measuring Instruments

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

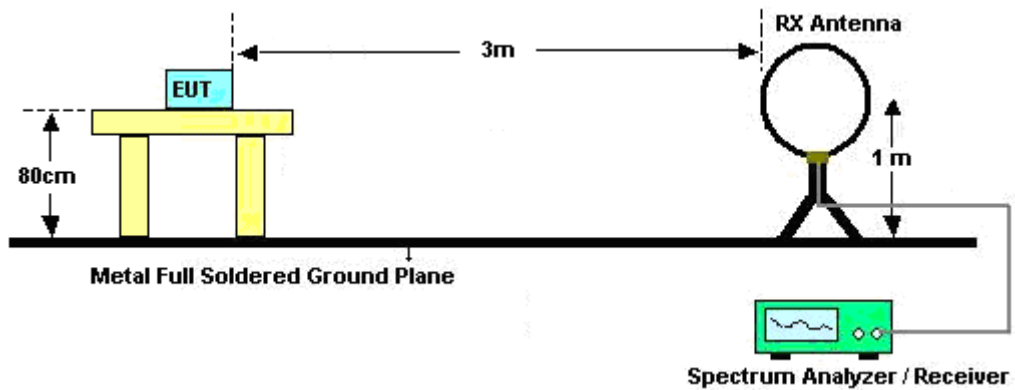
3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000 MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW \geq 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - (3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW \geq 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT is arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.

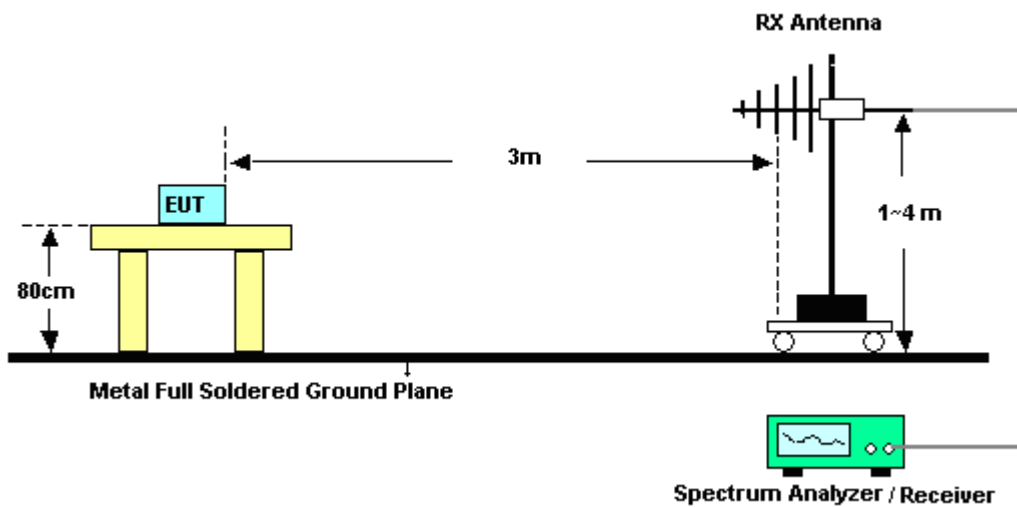
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit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

3.4.4 Test Setup

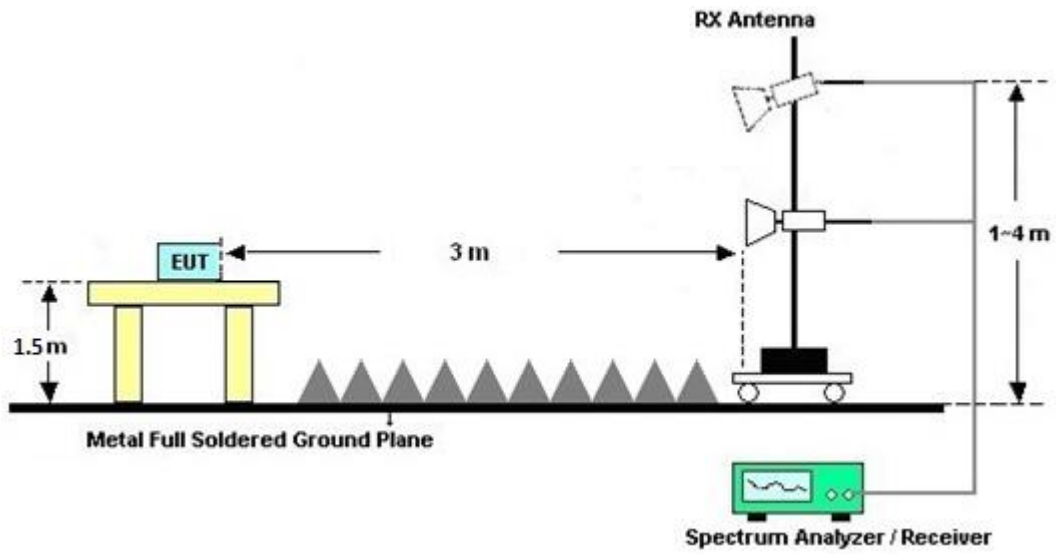
For radiated emissions below 30MHz



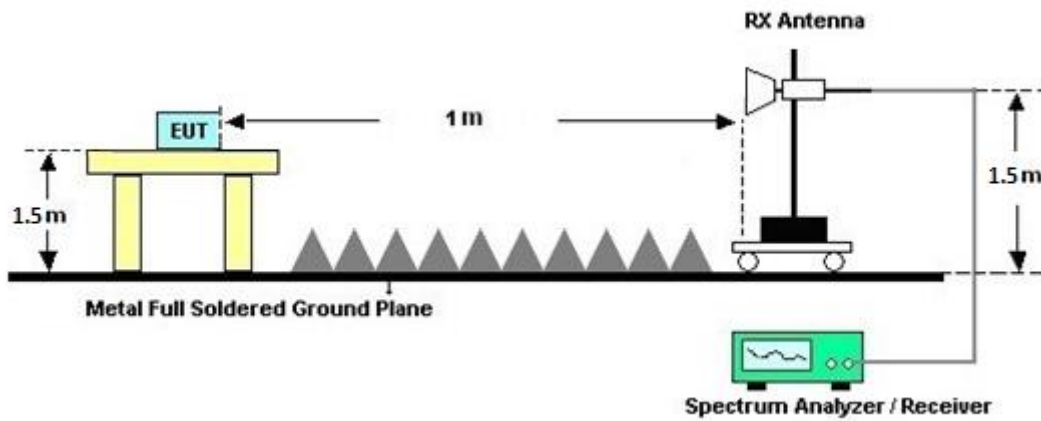
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz





3.4.5 Test Results of Radiated 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 (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



3.6 Antenna Requirements

3.6.1 Standard Applicable

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	TECEPEL	DTM-303A	TP201996	N/A	Nov. 17, 2022	Jul. 06, 2023~ Aug. 11, 2023	Nov. 16, 2023	Conducted (TH03-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO 12 (NO:113)	10MHz~6GHz	Dec. 13, 2022	Jul. 06, 2023~ Aug. 11, 2023	Dec. 12, 2023	Conducted (TH03-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101564	10Hz ~ 40GHz	Sep. 13, 2022	Jul. 06, 2023~ Aug. 11, 2023	Sep. 12, 2023	Conducted (TH03-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jul. 18, 2023	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2022	Jul. 18, 2023	Nov. 30, 2023	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2022	Jul. 18, 2023	Nov. 16, 2023	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 17, 2022	Jul. 18, 2023	Nov. 16, 2023	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	Jul. 18, 2023	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Aug. 01, 2022	Jul. 18, 2023	Jul. 31, 2023	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 29, 2022	Jul. 18, 2023	Dec. 28, 2023	Conduction (CO05-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	35419 & 03	30MHz~1GHz	Apr. 23, 2023	Aug. 01, 2023~ Aug. 15, 2023	Apr. 22, 2024	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 01, 2022	Aug. 01, 2023~ Aug. 15, 2023	Nov. 30, 2023	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Feb. 28, 2023	Aug. 01, 2023~ Aug. 15, 2023	Feb. 27, 2024	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010180 0-30-10P	1590075	1GHz~18GHz	Apr. 20, 2023	Aug. 01, 2023~ Aug. 15, 2023	Apr. 19, 2024	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 03, 2022	Aug. 01, 2023~ Aug. 15, 2023	Oct. 02, 2023	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Mar. 24, 2023	Aug. 01, 2023~ Aug. 15, 2023	Mar. 23, 2024	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 25, 2023	Aug. 01, 2023~ Aug. 15, 2023	Jul. 24, 2024	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Mar. 28, 2023	Aug. 01, 2023~ Aug. 15, 2023	Mar. 27, 2024	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682/4	30MHz to 18GHz	Feb. 22, 2023	Aug. 01, 2023~ Aug. 15, 2023	Feb. 21, 2024	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4	9kHz to 18GHz	Feb. 22, 2023	Aug. 01, 2023~ Aug. 15, 2023	Feb. 21, 2024	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4	9kHz to 18GHz	Feb. 22, 2023	Aug. 01, 2023~ Aug. 15, 2023	Feb. 21, 2024	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 16, 2022	Aug. 01, 2023~ Aug. 15, 2023	Sep. 15, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 22, 2023	Aug. 01, 2023~ Aug. 15, 2023	Feb. 21, 2024	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	Apr. 20, 2023	Aug. 01, 2023~ Aug. 15, 2023	Apr. 19, 2024	Radiation (03CH07-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	Aug. 01, 2023~ Aug. 15, 2023	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	Aug. 01, 2023~ Aug. 15, 2023	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Aug. 01, 2023~ Aug. 15, 2023	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Aug. 01, 2023~ Aug. 15, 2023	N/A	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	Aug. 01, 2023~ Aug. 15, 2023	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	Mar. 14, 2023	Aug. 01, 2023~ Aug. 15, 2023	Mar. 13, 2024	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 24, 2022	Aug. 01, 2023~ Aug. 15, 2023	Nov. 23, 2023	Radiation (03CH07-HY)



5 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.5 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	6.5 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.6 dB
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Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.3 dB
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.3 dB
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	Hank Hsu	Temperature:	21~25	°C
Test Date:	2023/7/6~2023/8/11	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 6	Ant 7	Ant 6	Ant 7	Ant 6	Ant 7		
11a	6Mbps	2	149	5745	16.33	16.53	19.62	22.68	15.20	15.20	0.5	Pass
11a	6Mbps	2	157	5785	16.33	16.43	19.68	21.18	15.20	15.20	0.5	Pass
11a	6Mbps	2	165	5825	16.33	16.33	19.44	19.68	15.15	15.20	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 6	Ant 7	SUM	Ant 6	Ant 7	Ant 6	Ant 7	
11a	6Mbps	2	149	5745	19.10	19.80	22.47	30.00		3.47		Pass
11a	6Mbps	2	157	5785	19.00	19.40	22.21	30.00		3.47		Pass
11a	6Mbps	2	165	5825	19.20	19.50	22.36	30.00		3.47		Pass
HT20	MCS0	2	149	5745	19.00	19.50	22.27	30.00		3.47		Pass
HT20	MCS0	2	157	5785	19.20	19.60	22.41	30.00		3.47		Pass
HT20	MCS0	2	165	5825	19.00	19.20	22.11	30.00		3.47		Pass
HT40	MCS0	2	151	5755	19.20	19.20	22.21	30.00		3.47		Pass
HT40	MCS0	2	159	5795	19.30	19.20	22.26	30.00		3.47		Pass
VHT20	MCS0	2	149	5745	19.00	19.50	22.27	30.00		3.47		Pass
VHT20	MCS0	2	157	5785	19.20	19.60	22.41	30.00		3.47		Pass
VHT20	MCS0	2	165	5825	19.00	19.20	22.11	30.00		3.47		Pass
VHT40	MCS0	2	151	5755	19.20	19.20	22.21	30.00		3.47		Pass
VHT40	MCS0	2	159	5795	19.30	19.20	22.26	30.00		3.47		Pass
VHT80	MCS0	2	155	5775	18.30	18.80	21.57	30.00		3.47		Pass

TEST RESULTS DATA
Power Spectral Density

U-NII-3 MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density with Duty Factor (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
					Ant 6	Ant 7	Ant 6	Ant 7	Ant 6	Ant 7	SUM	Ant 6	Ant 7	Ant 6	Ant 7	
11a	6Mbps	2	149	5745	0.68	0.68	2.22	5.14	5.60	8.61	29.79	29.79	6.21	6.21	Pass	
11a	6Mbps	2	157	5785	0.68	0.68	2.22	5.39	5.80	8.81	29.79	29.79	6.21	6.21	Pass	
11a	6Mbps	2	165	5825	0.68	0.68	2.22	5.27	5.73	8.74	29.79	29.79	6.21	6.21	Pass	

Note: PSD Sum = Max PSD(Ant. 6, Ant. 7) + 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 6	Ant 7	Ant 6	Ant 7	Ant 6	Ant 7		
HE20	MCS0	2	149	5745	Full	18.83	19.33	21.24	31.38	13.95	14.00	0.5	Pass
HE20	MCS0	2	157	5785	Full	18.83	19.23	21.00	31.26	15.85	17.85	0.5	Pass
HE20	MCS0	2	165	5825	Full	18.83	18.93	20.88	21.48	16.15	15.85	0.5	Pass
HE40	MCS0	2	151	5755	Full	37.76	38.06	41.40	53.16	36.45	35.19	0.5	Pass
HE40	MCS0	2	159	5795	Full	37.86	38.16	41.40	42.84	36.18	35.28	0.5	Pass
HE80	MCS0	2	155	5775	Full	76.84	77.32	81.36	90.96	74.24	74.24	0.5	Pass

TEST RESULTS DATA
Average Power Table

U-NII-3 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 6	Ant 7	SUM	Ant 6	Ant 7	Ant 6	Ant 7	
HE20	MCS0	2	149	5745	Full	19.10	19.60	22.37	30.00		3.47		Pass
HE20	MCS0	2	149	5745	26/0	11.20	11.90	14.57	30.00		3.47		Pass
HE20	MCS0	2	149	5745	52/37	13.70	14.20	16.97	30.00		3.47		Pass
HE20	MCS0	2	149	5745	106/53	16.70	17.30	20.02	30.00		3.47		Pass
HE20	MCS0	2	157	5785	Full	19.30	19.70	22.51	30.00		3.47		Pass
HE20	MCS0	2	157	5785	26/4	11.10	11.50	14.31	30.00		3.47		Pass
HE20	MCS0	2	157	5785	52/38	14.00	14.70	17.37	30.00		3.47		Pass
HE20	MCS0	2	157	5785	106/53	17.10	17.90	20.53	30.00		3.47		Pass
HE20	MCS0	2	165	5825	Full	19.10	19.30	22.21	30.00		3.47		Pass
HE20	MCS0	2	165	5825	26/8	11.10	11.40	14.26	30.00		3.47		Pass
HE20	MCS0	2	165	5825	52/40	14.00	14.30	17.16	30.00		3.47		Pass
HE20	MCS0	2	165	5825	106/54	17.10	17.50	20.31	30.00		3.47		Pass
HE40	MCS0	2	151	5755	Full	19.30	19.30	22.31	30.00		3.47		Pass
HE40	MCS0	2	151	5755	242/61	17.70	18.00	20.86	30.00		3.47		Pass
HE40	MCS0	2	159	5795	Full	19.40	19.30	22.36	30.00		3.47		Pass
HE40	MCS0	2	159	5795	242/62	17.40	17.70	20.56	30.00		3.47		Pass
HE80	MCS0	2	155	5775	Full	18.40	18.90	21.67	30.00		3.47		Pass
HE80	MCS0	2	155	5775	484/65	17.20	17.70	20.47	30.00		3.47		Pass
HE80	MCS0	2	155	5775	484/66	16.10	16.90	19.53	30.00		3.47		Pass

TEST RESULTS DATA
Power Spectral Density

U-NII-3 MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density with Duty Factor (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
						Ant 6	Ant 7	Ant 6	Ant 7	Ant 6	Ant 7	SUM	Ant 6	Ant 7	Ant 6	Ant 7	
HE20	MCS0	2	149	5745	Full	0.66	0.64	2.22	4.50	5.08	8.09	29.79	6.21	Pass			
HE20	MCS0	2	149	5745	26/0	0.63	0.64	2.22	4.66	5.04	8.05	29.79	6.21	Pass			
HE20	MCS0	2	149	5745	52/37	0.64	0.64	2.22	4.00	4.56	7.57	29.79	6.21	Pass			
HE20	MCS0	2	149	5745	106/53	0.67	0.67	2.22	4.41	4.70	7.71	29.79	6.21	Pass			
HE20	MCS0	2	157	5785	Full	0.66	0.64	2.22	5.35	5.72	8.73	29.79	6.21	Pass			
HE20	MCS0	2	157	5785	26/4	0.63	0.64	2.22	4.98	5.19	8.20	29.79	6.21	Pass			
HE20	MCS0	2	157	5785	52/38	0.64	0.64	2.22	5.01	5.52	8.53	29.79	6.21	Pass			
HE20	MCS0	2	157	5785	106/53	0.67	0.67	2.22	5.03	5.48	8.49	29.79	6.21	Pass			
HE20	MCS0	2	165	5825	Full	0.66	0.64	2.22	4.86	5.03	8.04	29.79	6.21	Pass			
HE20	MCS0	2	165	5825	26/8	0.63	0.64	2.22	4.86	4.91	7.92	29.79	6.21	Pass			
HE20	MCS0	2	165	5825	52/40	0.64	0.64	2.22	4.57	4.77	7.78	29.79	6.21	Pass			
HE20	MCS0	2	165	5825	106/54	0.67	0.67	2.22	4.44	4.84	7.85	29.79	6.21	Pass			
HE40	MCS0	2	151	5755	Full	0.66	0.66	2.22	2.49	2.51	5.52	29.79	6.21	Pass			
HE40	MCS0	2	151	5755	242/61	0.67	0.65	2.22	1.59	2.07	5.08	29.79	6.21	Pass			
HE40	MCS0	2	159	5795	Full	0.66	0.66	2.22	2.48	2.33	5.49	29.79	6.21	Pass			
HE40	MCS0	2	159	5795	242/62	0.67	0.65	2.22	1.64	2.05	5.06	29.79	6.21	Pass			
HE80	MCS0	2	155	5775	Full	0.69	0.65	2.22	-1.06	-0.44	2.57	29.79	6.21	Pass			
HE80	MCS0	2	155	5775	484/65	0.68	0.66	2.22	-1.87	-1.80	1.21	29.79	6.21	Pass			
HE80	MCS0	2	155	5775	484/66	0.68	0.66	2.22	-2.47	-2.06	0.95	29.79	6.21	Pass			

Note: PSD Sum = Max PSD(Ant. 6, Ant. 7) + 10 log (n)



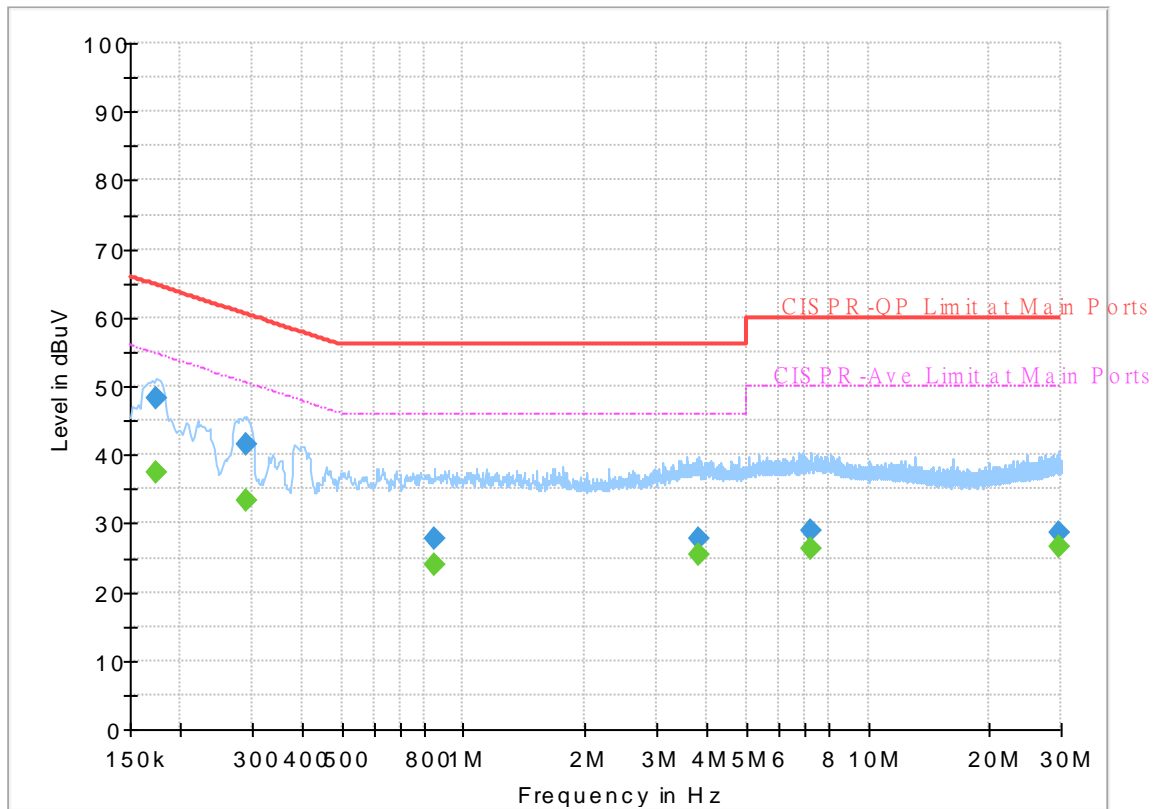
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Li Yan-Xun	Temperature :	23~26°C
		Relative Humidity :	45~55%

EUT Information

Report NO : 362117
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



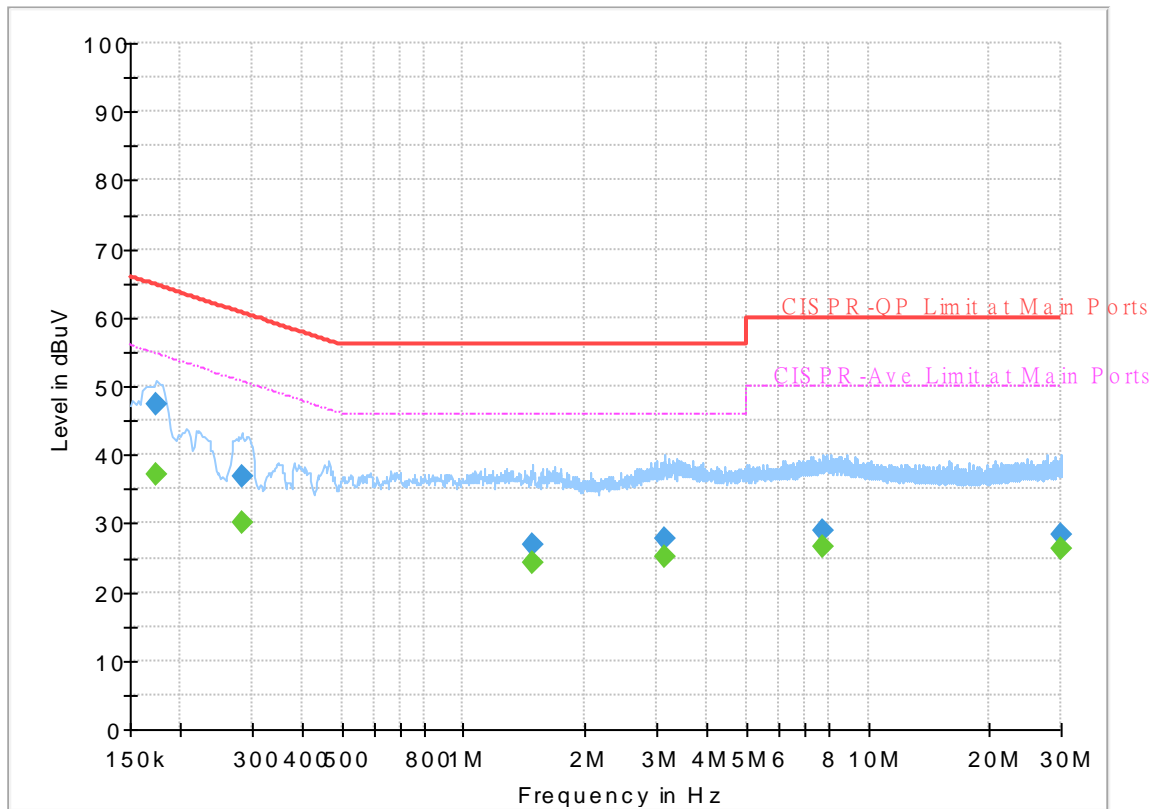
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.174750	---	37.48	54.73	17.25	L1	OFF	19.8
0.174750	48.27	---	64.73	16.46	L1	OFF	19.8
0.291750	---	33.28	50.47	17.19	L1	OFF	19.9
0.291750	41.59	---	60.47	18.88	L1	OFF	19.9
0.847500	---	24.08	46.00	21.92	L1	OFF	19.9
0.847500	27.87	---	56.00	28.13	L1	OFF	19.9
3.813000	---	25.51	46.00	20.49	L1	OFF	20.0
3.813000	27.84	---	56.00	28.16	L1	OFF	20.0
7.233000	---	26.45	50.00	23.55	L1	OFF	20.1
7.233000	29.02	---	60.00	30.98	L1	OFF	20.1
29.492250	---	26.66	50.00	23.34	L1	OFF	20.6
29.492250	28.74	---	60.00	31.26	L1	OFF	20.6

EUT Information

Report NO : 362117
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.174750	---	37.21	54.73	17.52	N	OFF	19.8
0.174750	47.51	---	64.73	17.22	N	OFF	19.8
0.285000	---	29.98	50.67	20.69	N	OFF	19.9
0.285000	36.78	---	60.67	23.89	N	OFF	19.9
1.482000	---	24.13	46.00	21.87	N	OFF	19.9
1.482000	26.96	---	56.00	29.04	N	OFF	19.9
3.147000	---	25.01	46.00	20.99	N	OFF	19.9
3.147000	27.63	---	56.00	28.37	N	OFF	19.9
7.757250	---	26.47	50.00	23.53	N	OFF	20.1
7.757250	28.94	---	60.00	31.06	N	OFF	20.1
29.967000	---	26.39	50.00	23.61	N	OFF	20.8
29.967000	28.22	---	60.00	31.78	N	OFF	20.8



Appendix C. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	23.2~25.9°C
		Relative Humidity :	44.6~60.1%

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
6+7		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
802.11a CH 149 5745MHz		5645.8	54.05	-14.15	68.2	40.59	34.9	12.47	33.91	300	254	P	H	
		5698.4	67.73	-36.29	104.02	54.16	35	12.49	33.92	300	254	P	H	
		5712.4	73.32	-35.35	108.67	59.73	35.02	12.5	33.93	300	254	P	H	
		5724.2	75.91	-44.47	120.38	62.29	35.05	12.5	33.93	300	254	P	H	
	*	5745	110.53	-	-	96.85	35.09	12.52	33.93	300	254	P	H	
	*	5745	103.83	-	-	90.15	35.09	12.52	33.93	300	254	A	H	
														H
														H
			5639.4	55.67	-12.53	68.2	42.21	34.9	12.47	33.91	400	127	P	V
			5696.8	69.1	-33.74	102.84	55.54	34.99	12.49	33.92	400	127	P	V
			5719.8	75.2	-35.54	110.74	61.59	35.04	12.5	33.93	400	127	P	V
			5723.8	79.04	-40.42	119.46	65.42	35.05	12.5	33.93	400	127	P	V
	*		5745	115.01	-	-	101.33	35.09	12.52	33.93	174	317	P	V
	*		5745	108.79	-	-	95.11	35.09	12.52	33.93	174	317	A	V
													V	
													V	



WIFI Ant. 6+7	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)
		5631.4	51.04	-17.16	68.2	37.57	34.9	12.47	33.9	200	235	P	H
		5697.4	57.66	-45.62	103.28	44.1	34.99	12.49	33.92	200	235	P	H
		5719.6	61.48	-49.21	110.69	47.87	35.04	12.5	33.93	200	235	P	H
		5720.6	61.42	-50.75	112.17	47.81	35.04	12.5	33.93	200	235	P	H
	*	5785	111.49	-	-	97.8	35.1	12.53	33.94	200	235	P	H
	*	5785	104.84	-	-	91.15	35.1	12.53	33.94	200	235	A	H
		5851.2	64.87	-54.59	119.46	51.13	35.1	12.6	33.96	200	235	P	H
		5861.8	64.5	-44.39	108.89	50.66	35.12	12.68	33.96	200	235	P	H
		5892.6	59.23	-32.91	92.14	45.33	35.19	12.68	33.97	200	235	P	H
		5940.8	52.9	-15.3	68.2	38.85	35.2	12.83	33.98	200	235	P	H
													H
													H
802.11a													
CH 157													
5785MHz		5646.6	51.99	-16.21	68.2	38.53	34.9	12.47	33.91	194	323	P	V
		5695.8	59.65	-42.45	102.1	46.09	34.99	12.49	33.92	194	323	P	V
		5715.8	61.19	-48.44	109.63	47.59	35.03	12.5	33.93	194	323	P	V
		5722.2	63.71	-52.11	115.82	50.1	35.04	12.5	33.93	194	323	P	V
	*	5785	116.29	-	-	102.6	35.1	12.53	33.94	194	323	P	V
	*	5785	108.69	-	-	95	35.1	12.53	33.94	194	323	A	V
		5852.4	62.69	-54.04	116.73	48.95	35.1	12.6	33.96	194	323	P	V
		5856.2	62.83	-47.63	110.46	49.08	35.11	12.6	33.96	194	323	P	V
		5876.2	60.42	-43.89	104.31	46.56	35.15	12.68	33.97	194	323	P	V
		5936.8	52.59	-15.61	68.2	38.62	35.2	12.75	33.98	194	323	P	V
													V
													V



WiFi Ant. 6+7	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	*	5825	106.82	-	-	93.07	35.1	12.6	33.95	349	133	P	H	
	*	5825	99.94	-	-	86.19	35.1	12.6	33.95	349	133	A	H	
		5851.2	70.24	-49.22	119.46	56.5	35.1	12.6	33.96	349	133	P	H	
		5855.6	67.01	-43.62	110.63	53.26	35.11	12.6	33.96	349	133	P	H	
		5878.4	58.25	-44.42	102.67	44.38	35.16	12.68	33.97	349	133	P	H	
		5925.8	51.74	-16.46	68.2	37.77	35.2	12.75	33.98	349	133	P	H	
														H
														H
	*	5825	112	-	-	98.25	35.1	12.6	33.95	213	336	P	V	
	*	5825	106.65	-	-	92.9	35.1	12.6	33.95	213	336	A	V	
		5851.2	65.62	-53.84	119.46	51.88	35.1	12.6	33.96	213	336	P	V	
		5856.4	58.1	-52.31	110.41	44.35	35.11	12.6	33.96	213	336	P	V	
		5882.4	54.01	-45.69	99.7	40.14	35.16	12.68	33.97	213	336	P	V	
		5934	52.29	-15.91	68.2	38.32	35.2	12.75	33.98	213	336	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. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 149 5745MHz		11490	45.22	-28.78	74	44.34	38.19	19.76	57.07	-	-	P	H	
		17235	50.78	-17.42	68.2	41.2	41.4	23.81	55.63	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11490	46	-28	74	45.12	38.19	19.76	57.07	-	-	P	V
			17235	50.66	-17.54	68.2	41.08	41.4	23.81	55.63	-	-	P	V
														V
														V
														V
														V
													V	
													V	
													V	



WIFI Ant. 6+7	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		11570	45.78	-28.22	74	44.66	38.27	19.83	56.98	-	-	P	H
		17355	50.51	-17.69	68.2	40.72	41.51	23.91	55.63	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
			11570	46.26	-27.74	74	45.14	38.27	19.83	56.98	-	-	P
		17355	51.49	-16.71	68.2	41.7	41.51	23.91	55.63	-	-	P	V
													V
													V
													V
													V
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													V
													V



WiFi Ant. 6+7	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		11650	49.3	-24.7	74	47.9	38.4	19.91	56.91	200	93	P	H	
		11650	42.21	-11.79	54	40.81	38.4	19.91	56.91	200	93	A	H	
		17475	51.81	-16.39	68.2	41.99	41.45	24	55.63	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11650	49.21	-24.79	74	47.81	38.4	19.91	56.91	400	60	P	V
			11650	41.51	-12.49	54	40.11	38.4	19.91	56.91	400	60	A	V
			17475	51.63	-16.57	68.2	41.81	41.45	24	55.63	-	-	P	V
														V
														V
														V
														V
														V
														V
													V	
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. 													



Band 4 5725~5850MHz
WIFI 802.11ax HE20_Full (Band Edge @ 3m)

WIFI Ant. 6+7	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 149 5745MHz		5613.2	49.65	-18.55	68.2	36.19	34.9	12.46	33.9	300	254	P	H	
		5699.8	53.57	-51.48	105.05	40	35	12.49	33.92	300	254	P	H	
		5718.8	70.21	-40.25	110.46	56.6	35.04	12.5	33.93	300	254	P	H	
		5723.8	76.58	-42.88	119.46	62.96	35.05	12.5	33.93	300	254	P	H	
	*	5745	109.72	-	-	96.04	35.09	12.52	33.93	300	254	P	H	
	*	5745	104	-	-	90.32	35.09	12.52	33.93	300	254	A	H	
														H
														H
			5647	50.74	-17.46	68.2	37.28	34.9	12.47	33.91	211	317	P	V
			5697.4	58.32	-44.96	103.28	44.76	34.99	12.49	33.92	211	317	P	V
			5720	71.91	-38.89	110.8	58.3	35.04	12.5	33.93	211	317	P	V
			5724.6	76.79	-44.5	121.29	63.17	35.05	12.5	33.93	211	317	P	V
	*		5745	115.72	-	-	102.04	35.09	12.52	33.93	211	317	P	V
	*		5745	107.56	-	-	93.88	35.09	12.52	33.93	211	317	A	V
													V	
													V	



WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5609.2	49.64	-18.56	68.2	36.18	34.9	12.46	33.9	300	251	P	H
		5666.6	49.42	-31.1	80.52	35.91	34.93	12.49	33.91	300	251	P	H
		5716.8	50.23	-59.68	109.91	36.63	35.03	12.5	33.93	300	251	P	H
		5722.4	48.3	-67.97	116.27	34.69	35.04	12.5	33.93	300	251	P	H
	*	5785	111.93	-	-	98.24	35.1	12.53	33.94	300	251	P	H
	*	5785	104.16	-	-	90.47	35.1	12.53	33.94	300	251	A	H
		5850.8	52.78	-67.6	120.38	39.04	35.1	12.6	33.96	300	251	P	H
		5864	50.76	-57.52	108.28	36.91	35.13	12.68	33.96	300	251	P	H
		5894.6	52.45	-38.21	90.66	38.55	35.19	12.68	33.97	300	251	P	H
		5948	50.96	-17.24	68.2	36.92	35.2	12.83	33.99	300	251	P	H
802.11ax													H
HE20 Full													H
CH 157		5608.6	50.39	-17.81	68.2	36.93	34.9	12.46	33.9	200	325	P	V
5785MHz		5695	50.81	-50.7	101.51	37.25	34.99	12.49	33.92	200	325	P	V
		5715	54.68	-54.72	109.4	41.08	35.03	12.5	33.93	200	325	P	V
		5721.8	55.47	-59.43	114.9	41.86	35.04	12.5	33.93	200	325	P	V
	*	5785	115.35	-	-	101.66	35.1	12.53	33.94	200	325	P	V
	*	5785	108.66	-	-	94.97	35.1	12.53	33.94	200	325	A	V
		5852.2	56.01	-61.17	117.18	42.27	35.1	12.6	33.96	200	325	P	V
		5857	53.84	-56.4	110.24	40.09	35.11	12.6	33.96	200	325	P	V
		5876	52.17	-52.29	104.46	38.31	35.15	12.68	33.97	200	325	P	V
		5928.8	50.49	-17.71	68.2	36.52	35.2	12.75	33.98	200	325	P	V
													V
													V



WiFi Ant. 6+7	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	*	5825	111.75	-	-	98	35.1	12.6	33.95	200	230	P	H	
	*	5825	103.91	-	-	90.16	35.1	12.6	33.95	200	230	A	H	
		5850.8	76.18	-44.2	120.38	62.44	35.1	12.6	33.96	200	230	P	H	
		5855.2	70.01	-40.73	110.74	56.26	35.11	12.6	33.96	200	230	P	H	
		5890.2	52.77	-41.15	93.92	38.88	35.18	12.68	33.97	200	230	P	H	
		5949.2	50.71	-17.49	68.2	36.67	35.2	12.83	33.99	200	230	P	H	
														H
														H
	*	5825	115.34	-	-	101.59	35.1	12.6	33.95	208	325	P	V	
	*	5825	108.42	-	-	94.67	35.1	12.6	33.95	208	325	A	V	
		5851.8	74.16	-43.94	118.1	60.42	35.1	12.6	33.96	208	325	P	V	
		5855	68.98	-41.82	110.8	55.23	35.11	12.6	33.96	208	325	P	V	
		5877	58	-45.71	103.71	44.14	35.15	12.68	33.97	208	325	P	V	
		5935.6	52.33	-15.87	68.2	38.36	35.2	12.75	33.98	208	325	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. 6+7	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 149 5745MHz		11490	46.39	-27.61	74	45.51	38.19	19.76	57.07	-	-	P	H
		17235	50.73	-17.47	68.2	41.15	41.4	23.81	55.63	-	-	P	H
													H
													H
													H
													H
													H
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													H
													H
													H
													H
													H
													H
													H
													H
													H
			11490	45.9	-28.1	74	45.02	38.19	19.76	57.07	-	-	P
		17235	50.04	-18.16	68.2	40.46	41.4	23.81	55.63	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V



WiFi Ant. 6+7	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 157 5785MHz		11570	46.24	-27.76	74	45.12	38.27	19.83	56.98	-	-	P	H	
		17355	50.98	-17.22	68.2	41.19	41.51	23.91	55.63	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11570	46.46	-27.54	74	45.34	38.27	19.83	56.98	-	-	P	V
			17355	51.15	-17.05	68.2	41.36	41.51	23.91	55.63	-	-	P	V
														V
														V
														V
														V
														V
													V	
													V	
													V	
													V	



WiFi Ant. 6+7	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		11650	47.75	-26.25	74	46.35	38.4	19.91	56.91	-	-	P	H
		17475	50.52	-17.68	68.2	40.7	41.45	24	55.63	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
			11650	46.61	-27.39	74	45.21	38.4	19.91	56.91	-	-	P
		17475	50.86	-17.34	68.2	41.04	41.45	24	55.63	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. 												



Band 4 5725~5850MHz
WIFI 802.11ax HE20_Partial 106 (Band Edge @ 3m)

WIFI Ant. 6+7	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		5645	54.45	-13.75	68.2	40.99	34.9	12.47	33.91	200	226	P	H	
		5694.8	69.82	-31.55	101.37	56.26	34.99	12.49	33.92	200	226	P	H	
		5714	76.09	-33.03	109.12	62.49	35.03	12.5	33.93	200	226	P	H	
		5723.2	76.22	-41.88	118.1	62.6	35.05	12.5	33.93	200	226	P	H	
	*	5745	111.29	-	-	97.61	35.09	12.52	33.93	200	226	P	H	
	*	5745	103.59	-	-	89.91	35.09	12.52	33.93	200	226	A	H	
														H
														H
			5642.6	61.2	-7	68.2	47.74	34.9	12.47	33.91	200	127	P	V
			5698.8	77.22	-27.1	104.32	63.65	35	12.49	33.92	200	127	P	V
			5715.8	82.5	-27.13	109.63	68.9	35.03	12.5	33.93	200	127	P	V
			5724	81.93	-37.99	119.92	68.31	35.05	12.5	33.93	200	127	P	V
	*		5745	116.14	-	-	102.46	35.09	12.52	33.93	142	313	P	V
	*		5745	109.28	-	-	95.6	35.09	12.52	33.93	142	313	A	V
														V
													V	



WIFI Ant. 6+7	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	112.08	-	-	98.33	35.1	12.6	33.95	200	224	P	H	
	*	5825	105.15	-	-	91.4	35.1	12.6	33.95	200	224	P	H	
		5851.6	86.59	-31.96	118.55	72.85	35.1	12.6	33.96	200	224	P	H	
		5857.4	81.99	-28.14	110.13	68.24	35.11	12.6	33.96	200	224	P	H	
		5875.6	76.88	-27.87	104.75	63.02	35.15	12.68	33.97	200	224	P	H	
		5926.2	65.64	-2.56	68.2	51.67	35.2	12.75	33.98	200	224	A	H	
														H
														H
	*	5825	116.39	-	-	102.64	35.1	12.6	33.95	173	314	P	V	
	*	5825	108.66	-	-	94.91	35.1	12.6	33.95	173	314	P	V	
		5852.4	87.71	-29.02	116.73	73.97	35.1	12.6	33.96	344	111	P	V	
		5864.2	82.36	-25.86	108.22	68.51	35.13	12.68	33.96	344	111	P	V	
		5880.4	78.54	-22.65	101.19	64.67	35.16	12.68	33.97	344	111	P	V	
		5938	66.85	-1.35	68.2	52.88	35.2	12.75	33.98	344	111	A	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 (Band Edge @ 3m)

WIFI Ant. 6+7	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)
		5643	61.48	-6.72	68.2	48.02	34.9	12.47	33.91	129	87	P	H
		5698.4	68.74	-35.28	104.02	55.17	35	12.49	33.92	129	87	P	H
		5718.4	74.68	-35.67	110.35	61.07	35.04	12.5	33.93	129	87	P	H
		5723.6	79.03	-39.98	119.01	65.41	35.05	12.5	33.93	129	87	P	H
	*	5755	107.55	-	-	93.87	35.1	12.52	33.94	129	87	P	H
	*	5755	100.82	-	-	87.14	35.1	12.52	33.94	129	87	A	H
		5851.6	63.2	-55.35	118.55	49.46	35.1	12.6	33.96	129	87	P	H
		5873	62.9	-42.86	105.76	49.04	35.15	12.68	33.97	129	87	P	H
		5877.4	62.71	-40.71	103.42	48.85	35.15	12.68	33.97	129	87	P	H
		5929	59.04	-9.16	68.2	45.07	35.2	12.75	33.98	129	87	P	H
802.11ax													H
HE40 Full													H
CH 151		5615.4	65.67	-2.53	68.2	52.21	34.9	12.46	33.9	186	121	P	V
5755MHz		5697.6	71.4	-32.03	103.43	57.83	35	12.49	33.92	186	121	P	V
		5717.2	78.87	-31.15	110.02	65.27	35.03	12.5	33.93	186	121	P	V
		5721.2	81.73	-31.81	113.54	68.12	35.04	12.5	33.93	186	121	P	V
	*	5755	111.43	-	-	97.75	35.1	12.52	33.94	186	121	P	V
	*	5755	101.49	-	-	87.81	35.1	12.52	33.94	186	121	A	V
		5854.2	61.93	-50.69	112.62	48.18	35.11	12.6	33.96	186	121	P	V
		5856.8	62.57	-47.73	110.3	48.82	35.11	12.6	33.96	186	121	P	V
		5893.4	61.7	-29.85	91.55	47.8	35.19	12.68	33.97	186	121	P	V
		5934	58.06	-10.14	68.2	44.09	35.2	12.75	33.98	186	121	P	V
													V
													V



WIFI Ant. 6+7	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)
		5634.4	50.23	-17.97	68.2	36.76	34.9	12.47	33.9	328	251	P	H
		5672.6	51.56	-33.4	84.96	38.03	34.95	12.49	33.91	328	251	P	H
		5718.6	51.58	-58.83	110.41	37.97	35.04	12.5	33.93	328	251	P	H
		5724.4	50.88	-69.95	120.83	37.26	35.05	12.5	33.93	328	251	P	H
	*	5795	110.97	-	-	97.29	35.1	12.53	33.95	328	251	P	H
	*	5795	101.99	-	-	88.31	35.1	12.53	33.95	328	251	A	H
		5850	58.58	-63.62	122.2	44.84	35.1	12.6	33.96	328	251	P	H
		5857.2	56.01	-54.17	110.18	42.26	35.11	12.6	33.96	328	251	P	H
		5880.2	52.42	-48.92	101.34	38.55	35.16	12.68	33.97	328	251	P	H
		5929.4	51.74	-16.46	68.2	37.77	35.2	12.75	33.98	328	251	P	H
802.11ax													H
HE40 Full													H
CH 159		5634.6	52.07	-16.13	68.2	38.6	34.9	12.47	33.9	213	324	P	V
5795MHz		5698.4	54.88	-49.14	104.02	41.31	35	12.49	33.92	213	324	P	V
		5716	55.71	-53.97	109.68	42.11	35.03	12.5	33.93	213	324	P	V
		5724.6	55.98	-65.31	121.29	42.36	35.05	12.5	33.93	213	324	P	V
	*	5795	114.62	-	-	100.94	35.1	12.53	33.95	213	324	P	V
	*	5795	105.84	-	-	92.16	35.1	12.53	33.95	213	324	A	V
		5851.4	57.32	-61.69	119.01	43.58	35.1	12.6	33.96	200	333	P	V
		5855.8	61.3	-49.28	110.58	47.55	35.11	12.6	33.96	200	333	P	V
		5884.6	54.17	-43.9	98.07	40.29	35.17	12.68	33.97	200	333	P	V
		5938	53.34	-14.86	68.2	39.37	35.2	12.75	33.98	200	333	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. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE40 Full CH 151 5755MHz		11510	45.97	-28.03	74	45	38.21	19.8	57.04	-	-	P	H	
		17265	50.43	-17.77	68.2	40.82	41.4	23.84	55.63	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11510	47.14	-26.86	74	46.17	38.21	19.8	57.04	-	-	P	V
			17265	49.62	-18.58	68.2	40.01	41.4	23.84	55.63	-	-	P	V
														V
														V
														V
														V
													V	
													V	
													V	
													V	



WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 159 5795MHz		11590	47.25	-26.75	74	46.06	38.29	19.87	56.97	-	-	P	H
		17385	51.57	-16.63	68.2	41.69	41.57	23.94	55.63	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
	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. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5648.6	57.66	-10.54	68.2	44.2	34.9	12.47	33.91	314	267	P	H
		5692.4	67.42	-32.18	99.6	53.87	34.98	12.49	33.92	314	267	P	H
		5705	71.6	-35	106.6	58.01	35.01	12.5	33.92	314	267	P	H
		5724.8	75.69	-46.05	121.74	62.07	35.05	12.5	33.93	314	267	P	H
	*	5755	110.74	-	-	97.06	35.1	12.52	33.94	314	267	P	H
	*	5755	100.91	-	-	87.23	35.1	12.52	33.94	314	267	A	H
		5853	54.23	-61.13	115.36	40.48	35.11	12.6	33.96	314	267	P	H
		5856.8	54.38	-55.92	110.3	40.63	35.11	12.6	33.96	314	267	P	H
		5882.4	60.39	-39.31	99.7	46.52	35.16	12.68	33.97	314	267	P	H
		5936	52.95	-15.25	68.2	38.98	35.2	12.75	33.98	314	267	P	H
802.11ax													H
HE40													H
Partial													H
242/61		5647.4	64.94	-3.26	68.2	51.48	34.9	12.47	33.91	229	132	P	V
CH 151		5684.4	72.59	-21.1	93.69	59.05	34.97	12.49	33.92	229	132	P	V
5755MHz		5709.4	76.91	-30.92	107.83	63.31	35.02	12.5	33.92	229	132	P	V
		5724	79.86	-40.06	119.92	66.24	35.05	12.5	33.93	229	132	P	V
	*	5755	114.52	-	-	100.84	35.1	12.52	33.94	145	323	P	V
	*	5755	105.75	-	-	92.07	35.1	12.52	33.94	145	323	A	V
		5851.2	65.08	-54.38	119.46	51.34	35.1	12.6	33.96	229	132	P	V
		5858.4	59.4	-50.45	109.85	45.64	35.12	12.6	33.96	229	132	P	V
		5893.8	62.94	-28.31	91.25	49.04	35.19	12.68	33.97	229	132	P	V
		5936.4	57.83	-10.37	68.2	43.86	35.2	12.75	33.98	229	132	P	V
													V
													V



WiFi Ant. 6+7	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5645	57	-11.2	68.2	43.54	34.9	12.47	33.91	323	268	P	H
		5689.2	60.79	-36.45	97.24	47.24	34.98	12.49	33.92	323	268	P	H
		5708	62.5	-44.94	107.44	48.9	35.02	12.5	33.92	323	268	P	H
		5722.8	59.3	-57.88	117.18	45.68	35.05	12.5	33.93	323	268	P	H
	*	5795	109.5	-	-	95.82	35.1	12.53	33.95	323	268	P	H
	*	5795	101.36	-	-	87.68	35.1	12.53	33.95	323	268	A	H
		5851	74.02	-45.9	119.92	60.28	35.1	12.6	33.96	323	268	P	H
		5861.4	70.6	-38.41	109.01	56.76	35.12	12.68	33.96	323	268	P	H
		5879.8	67.19	-34.44	101.63	53.32	35.16	12.68	33.97	323	268	P	H
		5930.4	58.34	-9.86	68.2	44.37	35.2	12.75	33.98	323	268	P	H
802.11ax													H
HE40													H
Partial													H
242/62		5628.2	59.91	-8.29	68.2	46.44	34.9	12.47	33.9	304	128	P	V
CH 159		5673.4	63.91	-21.65	85.56	50.39	34.95	12.49	33.92	304	128	P	V
5795MHz		5719.2	63.18	-47.4	110.58	49.57	35.04	12.5	33.93	304	128	P	V
		5721.8	62.76	-52.14	114.9	49.15	35.04	12.5	33.93	304	128	P	V
	*	5795	112.86	-	-	99.18	35.1	12.53	33.95	150	314	P	V
	*	5795	105.34	-	-	91.66	35.1	12.53	33.95	150	314	A	V
		5853	73.18	-42.18	115.36	59.43	35.11	12.6	33.96	304	128	P	V
		5858.8	74.39	-35.34	109.73	60.63	35.12	12.6	33.96	304	128	P	V
		5876.6	72.15	-31.86	104.01	58.29	35.15	12.68	33.97	304	128	P	V
		5926.6	66.51	-1.69	68.2	52.54	35.2	12.75	33.98	304	128	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. 6+7	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)
		5638.4	60.27	-7.93	68.2	46.81	34.9	12.47	33.91	300	258	P	H
		5685.8	65.07	-29.65	94.72	51.53	34.97	12.49	33.92	300	258	P	H
		5720	66.22	-44.58	110.8	52.61	35.04	12.5	33.93	300	258	P	H
		5724.4	68.9	-51.93	120.83	55.28	35.05	12.5	33.93	300	258	P	H
	*	5775	106.77	-	-	93.09	35.1	12.52	33.94	300	258	P	H
	*	5775	99.12	-	-	85.44	35.1	12.52	33.94	300	258	A	H
		5852	67.31	-50.33	117.64	53.57	35.1	12.6	33.96	300	258	P	H
		5858.2	67.13	-42.77	109.9	53.37	35.12	12.6	33.96	300	258	P	H
		5875.6	63.36	-41.39	104.75	49.5	35.15	12.68	33.97	300	258	P	H
		5927	58.02	-10.18	68.2	44.05	35.2	12.75	33.98	300	258	P	H
802.11ax													H
HE80 Full													H
CH 155		5639.2	66.94	-1.26	68.2	53.48	34.9	12.47	33.91	169	127	P	V
5775MHz		5681.4	73.9	-17.57	91.47	60.37	34.96	12.49	33.92	169	127	P	V
		5719	73.59	-36.93	110.52	59.98	35.04	12.5	33.93	169	127	P	V
		5722.4	72.79	-43.48	116.27	59.18	35.04	12.5	33.93	169	127	P	V
	*	5775	110.86	-	-	97.18	35.1	12.52	33.94	171	327	P	V
	*	5775	103.24	-	-	89.56	35.1	12.52	33.94	171	327	A	V
		5851	71.18	-48.74	119.92	57.44	35.1	12.6	33.96	169	127	P	V
		5855.2	69.62	-41.12	110.74	55.87	35.11	12.6	33.96	169	127	P	V
		5877.2	67.83	-35.74	103.57	53.97	35.15	12.68	33.97	169	127	P	V
		5929.2	61.76	-6.44	68.2	47.79	35.2	12.75	33.98	169	127	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. 6+7	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		11550	46.08	-27.92	74	45	38.25	19.83	57	-	-	P	H	
		17325	51.43	-16.77	68.2	41.73	41.45	23.88	55.63	-	-	P	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			11550	46.65	-27.35	74	45.57	38.25	19.83	57	-	-	P	V
			17325	51.61	-16.59	68.2	41.91	41.45	23.88	55.63	-	-	P	V
													V	
													V	
													V	
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Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only. 													



Band 4 5725~5850MHz
WIFI 802.11ax HE80_Partial 484 (Band Edge @ 3m)

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5641.8	62.57	-5.63	68.2	49.11	34.9	12.47	33.91	315	267	P	H
		5680.2	67.26	-23.33	90.59	53.73	34.96	12.49	33.92	315	267	P	H
		5716.2	72.94	-36.8	109.74	59.34	35.03	12.5	33.93	315	267	P	H
		5723.4	76.53	-42.02	118.55	62.91	35.05	12.5	33.93	315	267	P	H
	*	5775	104.93	-	-	91.25	35.1	12.52	33.94	315	267	P	H
	*	5775	97.81	-	-	84.13	35.1	12.52	33.94	315	267	A	H
		5853.8	68.99	-44.55	113.54	55.24	35.11	12.6	33.96	315	267	P	H
		5865.4	74.02	-33.87	107.89	60.18	35.13	12.68	33.97	315	267	P	H
		5877.8	69.95	-33.17	103.12	56.08	35.16	12.68	33.97	315	267	P	H
		5939.8	65.31	-2.89	68.2	51.34	35.2	12.75	33.98	315	267	P	H
802.11ax													H
HE80													H
Partial													H
484/65		5640.8	66.88	-1.32	68.2	53.42	34.9	12.47	33.91	200	5	P	V
CH 155		5659.8	69.86	-5.62	75.48	56.38	34.92	12.47	33.91	200	5	P	V
5775MHz		5707.2	78.46	-28.76	107.22	64.87	35.01	12.5	33.92	200	5	P	V
		5724.8	76.44	-45.3	121.74	62.82	35.05	12.5	33.93	200	5	P	V
	*	5775	110.56	-	-	96.88	35.1	12.52	33.94	144	315	P	V
	*	5775	103.09	-	-	89.41	35.1	12.52	33.94	144	315	A	V
		5851.6	76.15	-42.4	118.55	62.41	35.1	12.6	33.96	200	5	P	V
		5861.4	79.25	-29.76	109.01	65.41	35.12	12.68	33.96	200	5	P	V
		5883.8	73.99	-24.68	98.67	60.11	35.17	12.68	33.97	200	5	P	V
		5941	65.53	-2.67	68.2	51.48	35.2	12.83	33.98	200	5	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WiFi Ant. 6+7	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)
		5608	61.86	-6.34	68.2	48.4	34.9	12.46	33.9	328	251	P	H
		5667.8	67.15	-14.26	81.41	53.63	34.94	12.49	33.91	328	251	P	H
		5713.8	70.93	-38.14	109.07	57.33	35.03	12.5	33.93	328	251	P	H
		5721.8	68.4	-46.5	114.9	54.79	35.04	12.5	33.93	328	251	P	H
	*	5775	105.98	-	-	92.3	35.1	12.52	33.94	328	251	P	H
	*	5775	97.5	-	-	83.82	35.1	12.52	33.94	328	251	A	H
		5850.6	66.74	-54.09	120.83	53	35.1	12.6	33.96	328	251	P	H
		5855.2	70.62	-40.12	110.74	56.87	35.11	12.6	33.96	328	251	P	H
		5894.6	68.49	-22.17	90.66	54.59	35.19	12.68	33.97	328	251	P	H
		5932.4	63.89	-4.31	68.2	49.92	35.2	12.75	33.98	328	251	P	H
802.11ax													H
HE80													H
Partial													H
484/66		5639.6	65.05	-3.15	68.2	51.59	34.9	12.47	33.91	300	128	P	V
CH 155		5686.6	75.34	-19.98	95.32	61.8	34.97	12.49	33.92	300	128	P	V
5775MHz		5708	73.24	-34.2	107.44	59.64	35.02	12.5	33.92	300	128	P	V
		5725	69.1	-53.1	122.2	55.48	35.05	12.5	33.93	300	128	P	V
	*	5775	110.97	-	-	97.29	35.1	12.52	33.94	143	316	P	V
	*	5775	101.83	-	-	88.15	35.1	12.52	33.94	143	316	A	V
		5851.8	69.23	-48.87	118.1	55.49	35.1	12.6	33.96	300	128	P	V
		5866	70.15	-37.57	107.72	56.31	35.13	12.68	33.97	300	128	P	V
		5904	68.13	-15.57	83.7	54.16	35.2	12.75	33.98	300	128	P	V
		5947.2	65.72	-2.48	68.2	51.68	35.2	12.83	33.99	300	128	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

5GHz WIFI 802.11ax HE80 Full (LF @ 3m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
6+7		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
802.11ax HE80 Full LF		31.08	22.05	-17.95	40	26.89	23.82	1.4	30.06	-	-	P	H	
		149.61	25.08	-18.42	43.5	35.58	17.11	2.35	29.96	-	-	P	H	
		293.79	20.2	-25.8	46	28	19.24	2.91	29.95	-	-	P	H	
		717.9	29.97	-16.03	46	28.37	26.57	4.7	29.67	-	-	P	H	
		888	33.4	-12.6	46	28.39	28.7	5.39	29.08	-	-	P	H	
		958	33.73	-12.27	46	26.44	30.57	5.51	28.79	-	-	P	H	
														H
														H
														H
														H
														H
														H
														H
			30	33.5	-6.5	40	38.07	24.11	1.4	30.08	-	-	P	V
			58.89	25.48	-14.52	40	42.27	11.65	1.49	29.93	-	-	P	V
			149.07	24.21	-19.29	43.5	34.7	17.12	2.35	29.96	-	-	P	V
			762.7	30.57	-15.43	46	27.58	27.9	4.79	29.7	-	-	P	V
			883.1	32.27	-13.73	46	27.22	28.79	5.37	29.11	-	-	P	V
			953.1	34.09	-11.91	46	27.03	30.36	5.51	28.81	-	-	P	V
														V
													V	
													V	
													V	
													V	
													V	

Remark

- No other spurious found.
- All results are PASS against limit line.
- The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.



Note symbol

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



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

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
6+7		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a		11213	48.14	-25.86	74	59.06	39.72	17.65	68.29	-	-	P	H
CH 149		11213	37.67	-16.33	54	48.59	39.72	17.65	68.29	-	-	A	H
5745MHz													

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

For Peak Limit @ 11213MHz:

1. Level(dBµV/m)
 - = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBµV) - Preamp Factor(dB)
 - = 39.72(dB/m) + 17.65(dB) + 59.06(dBµV) – 68.29 (dB)
 - = 48.14 (dBµV/m)
2. Margin(dB)
 - = Level(dBµV/m) – Limit Line(dBµV/m)
 - = 48.14(dBµV/m) – 74(dBµV/m)
 - = -25.86(dB)

For Average Limit @ 11213MHz:

1. Level(dBµV/m)
 - = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBµV) - Preamp Factor(dB)
 - = 39.72(dB/m) + 17.65(dB) + 48.59(dBµV) – 68.29 (dB)
 - = 37.67 (dBµV/m)
2. Margin(dB) = Level(dBµV/m) – Limit Line(dBµV/m)
 - = 37.67(dBµV/m) – 54(dBµV/m)
 - = -16.33(dB)

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



Appendix D. Radiated Spurious Emission Plots

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	23.2~25.9°C
		Relative Humidity :	44.6~60.1%



Band 4 - 5725~5850MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
6+7	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_R1(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LNB) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>

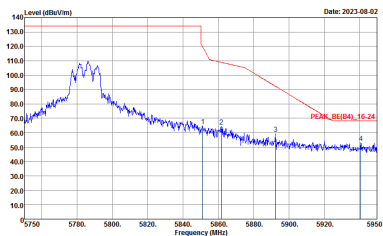


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
6+7	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_REF(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LINB) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>

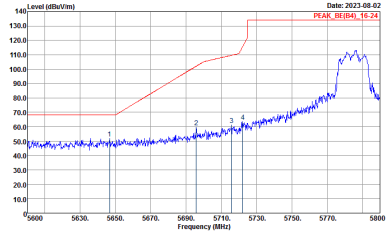
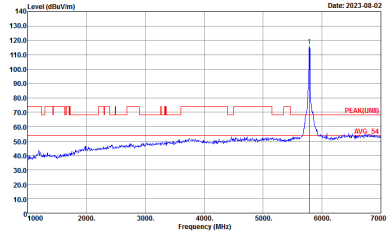
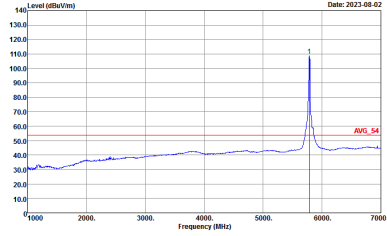


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
6+7	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_REFID#1_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LIN#) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>

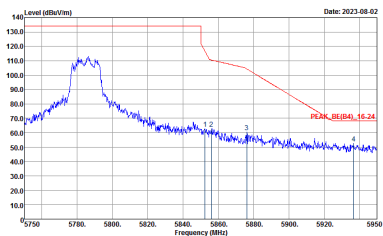


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
6+7	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_B4_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
6+7	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_REF(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(FUND) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
6+7	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_B4_16-24 3m HF_ANT_00075942 VERTICAL : RBW=1000.000kHz VBW=3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
6+7	Horizontal	Fundamental
Peak	<p>Site Condition : 03CH07-HY : PEAK BE(B4) 16-24 3m HF ANT 00075962 HORIZONTAL</p>	<p>Site Condition : 03CH07-HY : PEAK(LUNII) 3m HF ANT 00075962 HORIZONTAL</p>
Avg.	Left blank	<p>Site Condition : 03CH07-HY : AVG 54 3m HF ANT 00075962 HORIZONTAL</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
6+7	Vertical	Fundamental
Peak	<p>Site Condition : 03CH07-HY : PEAK BE(B4) 16-24 3m HF ANT 00075962 VERTICAL</p>	<p>Site Condition : 03CH07-HY : PEAK(U)III 3m HF ANT 00075962 VERTICAL</p>
Avg.	Left blank	<p>Site Condition : 03CH07-HY : AVG 54 3m HF ANT 00075962 VERTICAL</p>



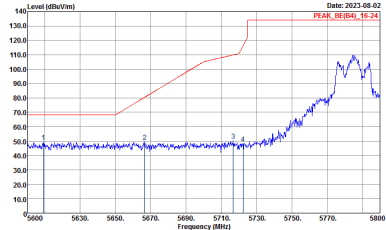
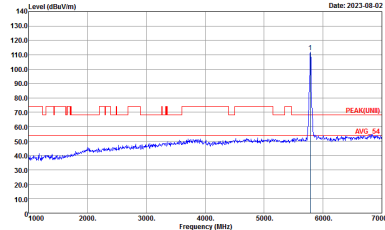
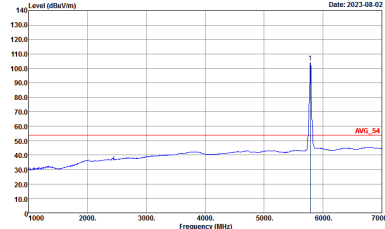
Band 4 5725~5850MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
6+7	Horizontal	Fundamental
<p align="center">Peak</p>	<p>Site : 03CH07-HY Condition : PEAK_BE(84)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(URB) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
<p align="center">Avg.</p>	<p align="center">Left blank</p>	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.300kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
6+7	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_REF(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LINB) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>

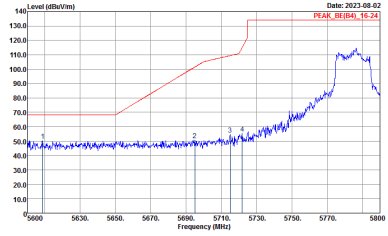
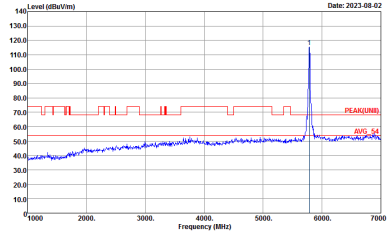
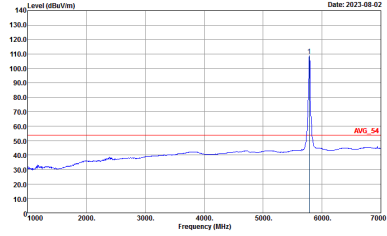


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
6+7	Horizontal	Fundamental
Peak	 <p>Date: 2023-08-02 PEAK_REF(B4)_16-24</p> <p>Site : 03CH07-HY Condition : PEAK_REF(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Date: 2023-08-02</p> <p>Site : 03CH07-HY Condition : PEAK(FUNB)_3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	 <p>Date: 2023-08-02</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>

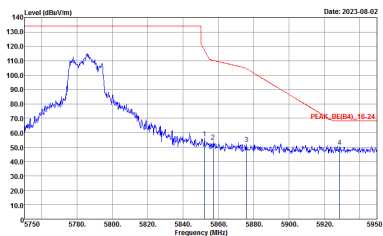


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
6+7	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_B4(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW=1000.000kHz VBW=3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
6+7	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_REF(84)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(URB) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>

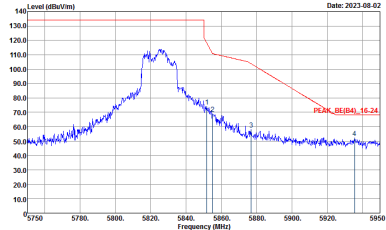
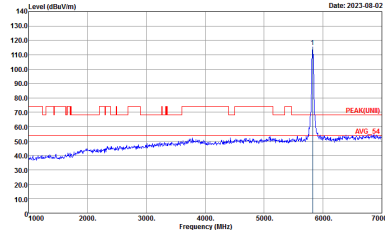
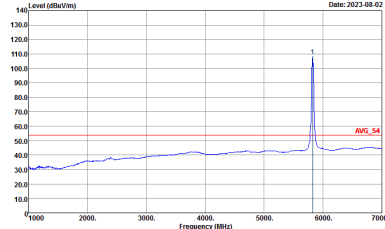


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
6+7	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_B4_16-24 3m HF_ANT_00075962 VERTICAL : RBW=1000.000kHz VBW=3000.000kHz SWT:Auto</p>	Left blank



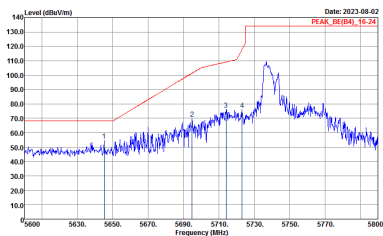
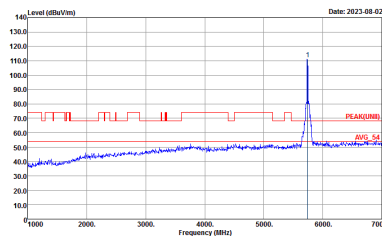
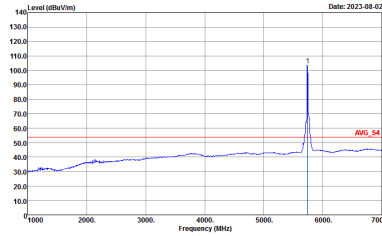
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
6+7	Horizontal	Fundamental
Peak		
Avg.	Left blank	



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
6+7	Vertical	Fundamental
Peak	 <p>Date: 2023-08-02</p> <p>Site : 03CH07-HY Condition : PEAK_BI(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Date: 2023-08-02</p> <p>Site : 03CH07-HY Condition : PEAK(LINB) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	 <p>Date: 2023-08-02</p> <p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



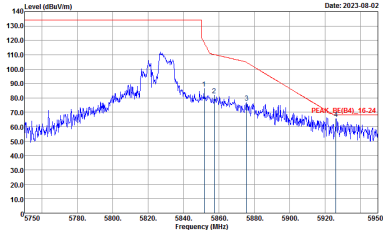
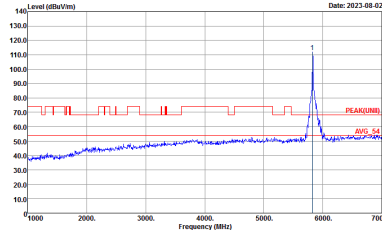
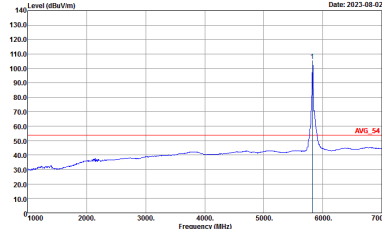
Band 4 5725~5850MHz
WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH149 5745MHz	
6+7	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(BA)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(FUN) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	 <p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH149 5745MHz	
6+7	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BB(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LINE) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



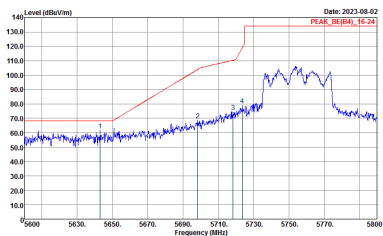
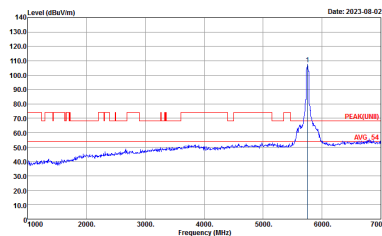
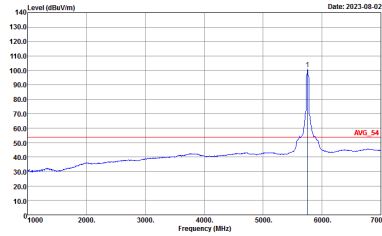
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/54 CH165 5825MHz	
6+7	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_8E10A_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LINE) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



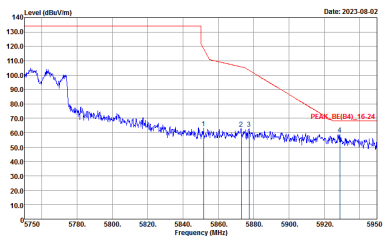
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/54 CH165 5825MHz	
6+7	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_8E(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LINE) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>



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	
6+7	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LINII) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg.	Left blank	 <p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
6+7	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_B4_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW=1000.000kHz VBW=3000.000kHz SWT:Auto</p>	Left blank

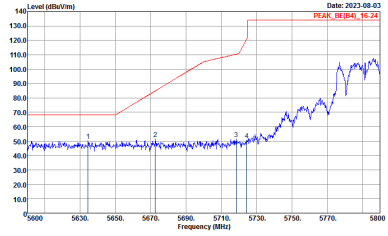
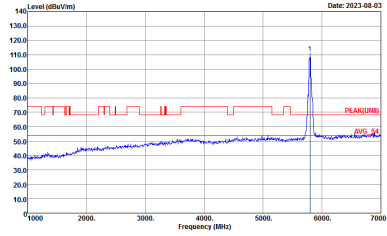
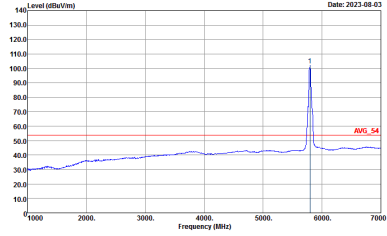


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
6+7	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_REFID#1_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LIN#) : 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>

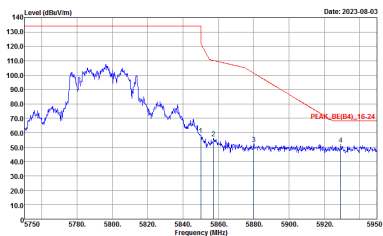


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
6+7	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_B4_16-24 3m HF_ANT_00075962 VERTICAL : RBW=1000.000kHz VBW=3000.000kHz SWT:Auto</p>	Left blank

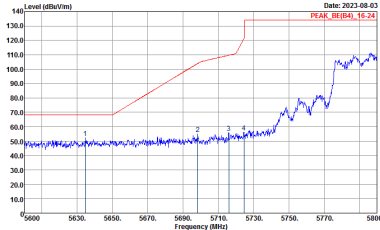
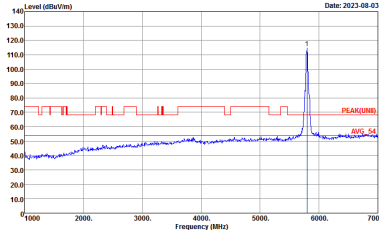
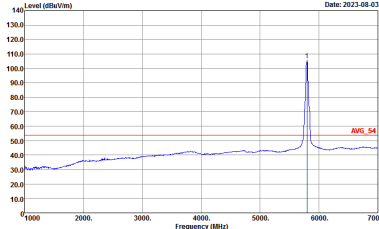


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full HT40 CH159 5795MHz	
6+7	Horizontal	Fundamental
Peak	 <p>Date: 2023-08-03 PEAK_REF(B4)_16-24</p> <p>Site : 03CH07-HY Condition : PEAK_REF(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Date: 2023-08-03</p> <p>Site : 03CH07-HY Condition : PEAK(FUNB)_3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	 <p>Date: 2023-08-03</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full HT40 CH159 5795MHz	
6+7	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



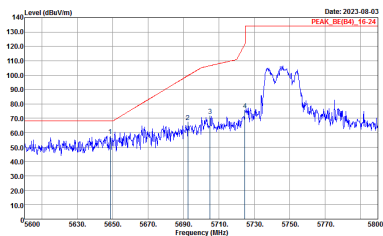
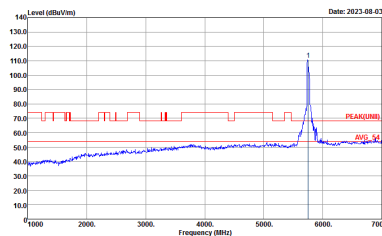
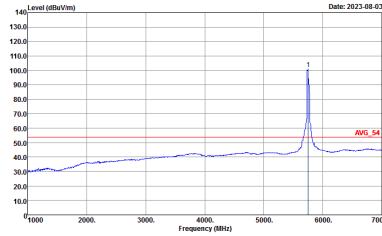
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
6+7	Vertical	Fundamental
Peak	 <p>Date: 2023-08-03 PEAK_REF(B4)_16-24</p> <p>Site : 03CH07-HY Condition : PEAK_REF(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Date: 2023-08-03 PEAK(LRR)</p> <p>Site : 03CH07-HY Condition : PEAK(LRR) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	 <p>Date: 2023-08-03 AVG_S4</p> <p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
6+7	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_B4(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW=1000.000kHz VBW=3000.000kHz SWT:Auto</p>	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	
6+7	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(BA)_16-24 3m HE_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(UNI) 3m HE_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	 <p>Site : 03CH07-HY Condition : AVG_S4 3m HE_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/61 CH151 5755MHz	
6+7	Horizontal	Fundamental
Peak	<p>Level (dBuV/m)</p> <p>Date: 2023-08-03</p> <p>Frequency (MHz)</p> <p>PEAK_EE(04)_16-24</p> <p>Site : 03CH07-HY Condition : PEAK_EE(04)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank

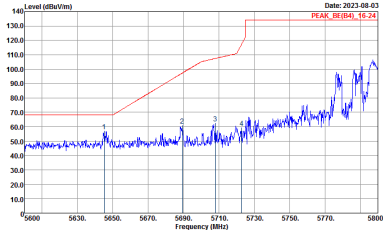
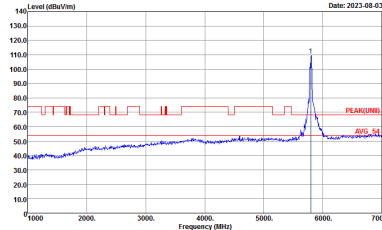
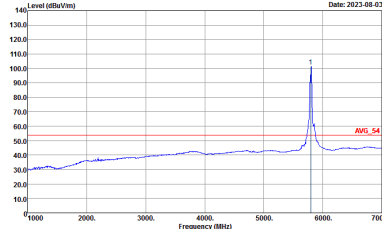


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/61 CH151 5755MHz	
6+7	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BB(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LINE) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>

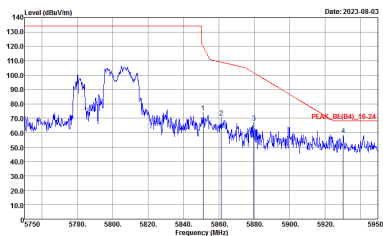


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/61 CH151 5755MHz	
6+7	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_EE(04)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank

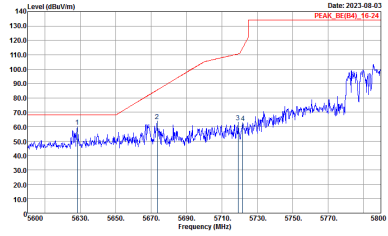
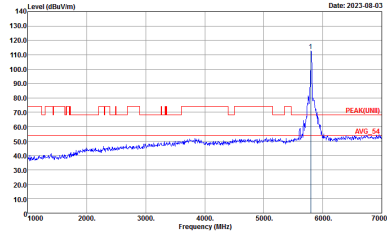
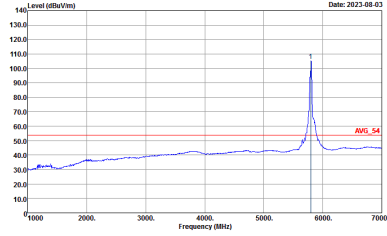


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/62 CH159 5795MHz	
6+7	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LMB) : 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>

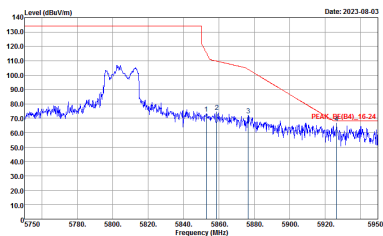


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/62 CH159 5795MHz	
6+7	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_EE(04)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



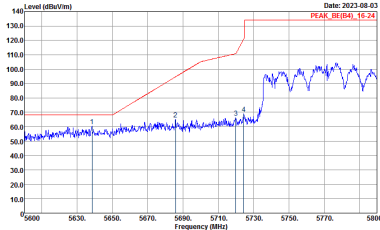
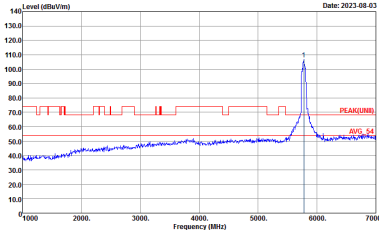
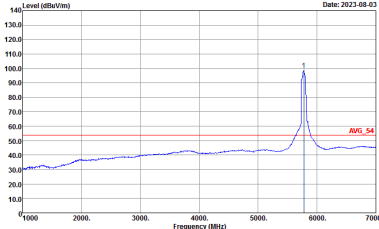
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/62 CH159 5795MHz	
6+7	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BB(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LMB) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	 <p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>



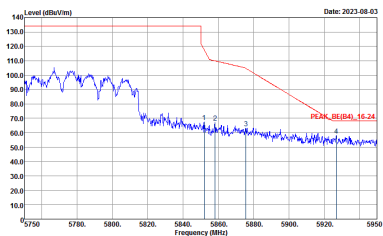
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/62 CH159 5795MHz	
6+7	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_8E10A)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



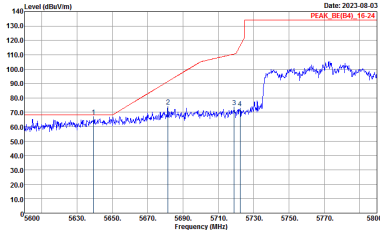
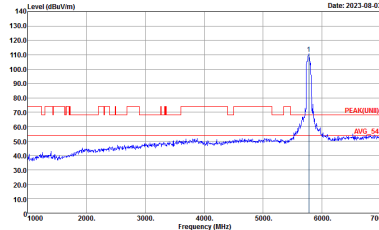
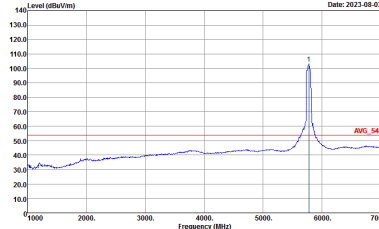
Band 4 5725~5850MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
6+7	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(LINII) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto</p>
Avg.	Left blank	 <p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
6+7	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_B4(84)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



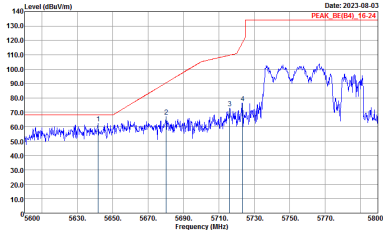
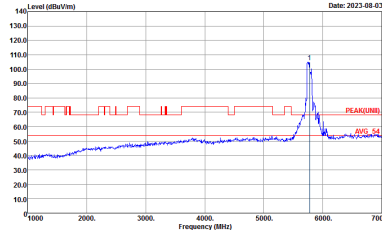
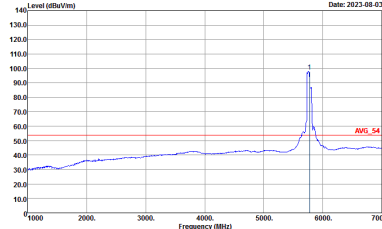
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
6+7	Vertical	Fundamental
Peak	 <p>Date: 2023-08-03 PEAK_REF(B4)_16-24</p> <p>Site : 03CH07-HY Condition : PEAK_REF(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Date: 2023-08-03 PEAK(URB)</p> <p>Site : 03CH07-HY Condition : PEAK(URB) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	 <p>Date: 2023-08-03 AVG_54</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto</p>



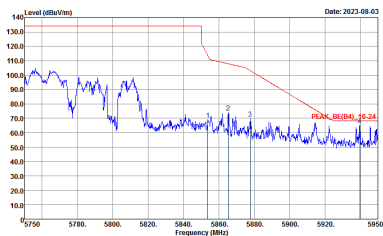
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
6+7	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_80211ax_16-24 3m HF_ANT_00075962 VERTICAL : RBW=1000.000kHz VBW=3000.000kHz SWT:Auto</p>	Left blank



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	
6+7	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE(BA)_16-24 3m HE_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK(UNI) 3m HE_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	 <p>Site : 03CH07-HY Condition : AVG_S4 3m HE_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Partial 484/65 CH155 5775MHz	
6+7	Horizontal	Fundamental
Peak.	 <p>Site : 03CH07-HY Condition : PEAK_EE(04)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Partial 484/65 CH155 5775MHz	
6+7	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LINE) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>

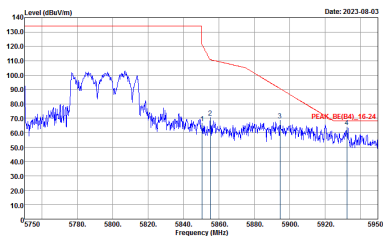


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Partial 484/65 CH155 5775MHz	
6+7	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_EE(04)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Partial 484/66 CH155 5775MHz	
6+7	Horizontal	Fundamental
Peak	<p>Level (dBu/Vm) vs Frequency (MHz) plot for Peak Horizontal. The plot shows a rising signal level from approximately 50 dBu/Vm at 5725 MHz to over 120 dBu/Vm at 5850 MHz. A red line indicates the peak level at 16.24 dBu/Vm. The date is 2023-08-03.</p> <p>Site : 03CH07-HY Condition : PEAK_BE(B4)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Level (dBu/Vm) vs Frequency (MHz) plot for Peak Fundamental. The plot shows a flat baseline around 50 dBu/Vm with a sharp peak at approximately 5775 MHz reaching about 110 dBu/Vm. A red line indicates the peak level at 54 dBu/Vm. The date is 2023-08-03.</p> <p>Site : 03CH07-HY Condition : PEAK(LINE) 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	<p>Level (dBu/Vm) vs Frequency (MHz) plot for Avg. Fundamental. The plot shows a flat baseline around 50 dBu/Vm with a sharp peak at approximately 5775 MHz reaching about 110 dBu/Vm. A red line indicates the average level at 54 dBu/Vm. The date is 2023-08-03.</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Partial 484/66 CH155 5775MHz	
6+7	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_EE(04)_16-24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Partial 484/66 CH155 5775MHz	
6+7	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BB(B4)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK(LNB) 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	Left blank	<p>Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto</p>



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Partial 484/66 CH155 5775MHz	
6+7	Vertical	Fundamental
Peak	<p>Level (dBuV/m)</p> <p>Date: 2023-08-03</p> <p>Frequency (MHz)</p> <p>Peak: PEAK_08(04)_16.24</p> <p>Site : 03CH07-HY Condition : PEAK_08(04)_16-24 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	Left blank

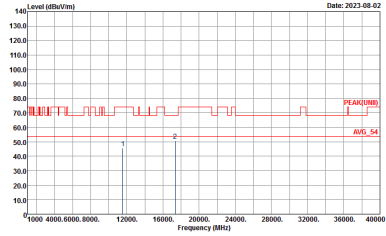
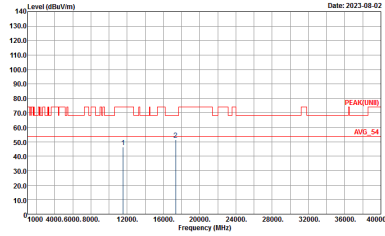


Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
6+7	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : PEAK(LINII) 3m HF ANT 00075962 HORIZONTAL</p>	<p>Site : 03CH07-VY Condition : PEAK(LINII) 3m HF ANT 00075962 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
6+7	Horizontal	Vertical
<p>Peak Avg.</p>	 <p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF ANT 00075962 HORIZONTAL</p>	 <p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF ANT 00075962 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
6+7	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF ANT 00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF ANT 00075962 VERTICAL</p>



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	
6+7	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : PEAK(UWB) 3m HF ANT 00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : PEAK(UWB) 3m HF ANT 00075962 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
6+7	Horizontal	Vertical
Peak Avg.	<div style="display: flex; justify-content: space-around;"> <div data-bbox="427 459 813 728"> <p>Date: 2023-08-02</p> <p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF ANT 00075962 HORIZONTAL</p> </div> <div data-bbox="901 459 1287 728"> <p>Date: 2023-08-02</p> <p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF ANT 00075962 VERTICAL</p> </div> </div>	



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
6+7	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF ANT 00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF ANT 00075962 VERTICAL</p>



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	
6+7	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : :PEAK(UWB) 3m HF ANT 00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : :PEAK(UWB) 3m HF ANT 00075962 VERTICAL</p>



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
6+7	Horizontal	Vertical
Peak Avg.	<div style="display: flex; justify-content: space-around;"> <div data-bbox="427 459 813 728"> <p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF ANT 00075962 HORIZONTAL</p> </div> <div data-bbox="901 459 1287 728"> <p>Site : 03CH07-HY Condition : PEAK(LIN) 3m HF ANT 00075962 VERTICAL</p> </div> </div>	



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	
6+7	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : :PEAK(UWB) 3m HF ANT 00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : :PEAK(UWB) 3m HF ANT 00075962 VERTICAL</p>



Emission below 1GHz

5GHz WIFI 802.11ax HE80 Full (LF @ 3m)

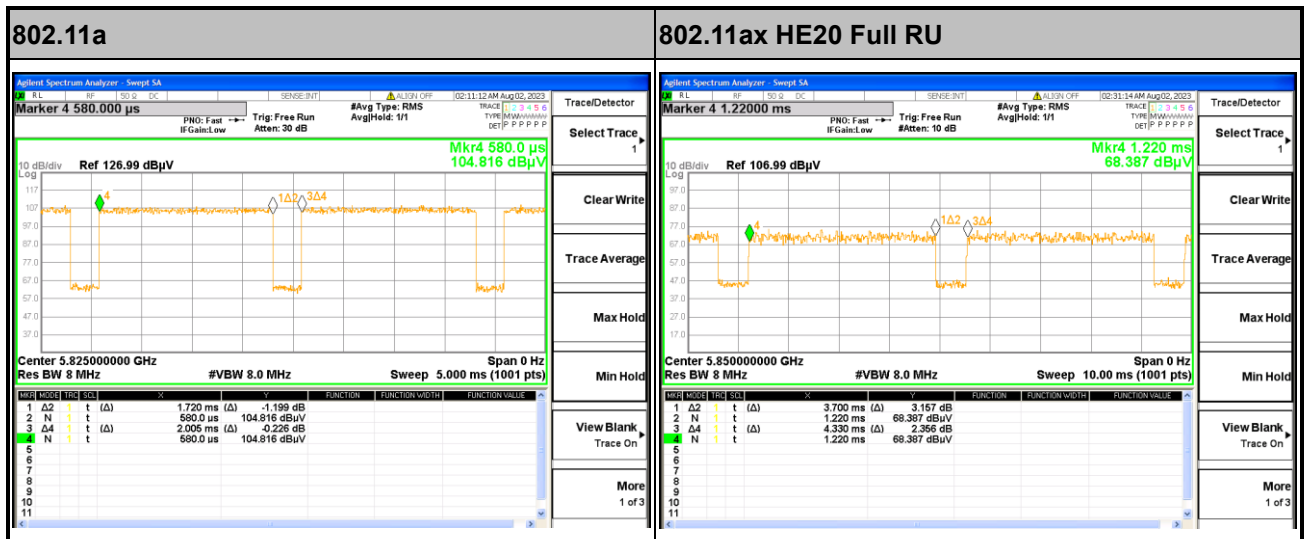
WIFI	5GHz WIFI	
ANT	802.11ax HE80 Full LF	
6+7	Horizontal	Vertical
QP / Peak	<p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419161 H HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419161 H VERTICAL</p>



Appendix E. Duty Cycle Plots

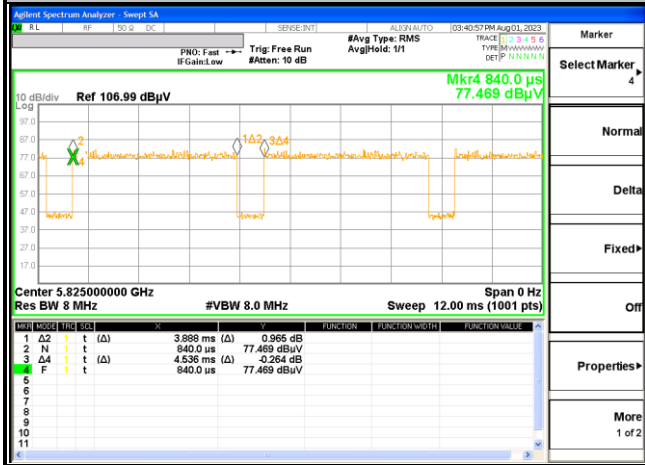
Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
6+7	802.11a	85.79	1720	0.58	1kHz
6+7	5GHz 802.11ax HE20 Full RU	85.45	3700	0.27	300Hz
6+7	5GHz 802.11ax HE20 106 RU	85.71	3888	0.26	300Hz
6+7	5GHz 802.11ax HE40 Full RU	85.71	2220	0.45	1kHz
6+7	5GHz 802.11ax HE40 242 RU	85.71	1740	0.57	1kHz
6+7	5GHz 802.11ax HE80 Full RU	85.71	930	1.08	3kHz
6+7	5GHz 802.11ax HE80 484 RU	85.96	1715	0.58	1kHz

MIMO <Ant. 6+7>

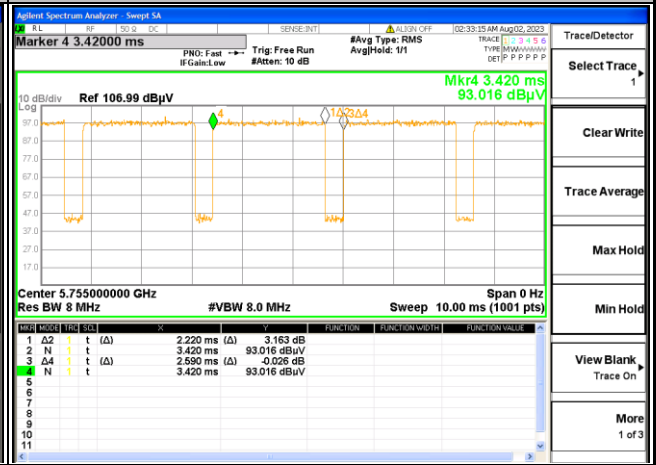




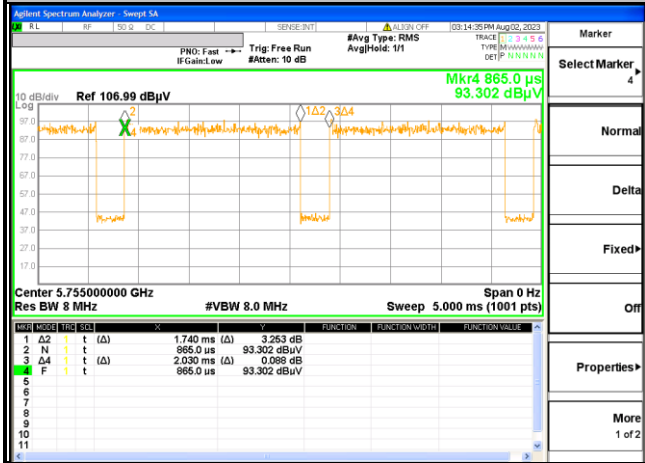
802.11ax HE20 106 RU



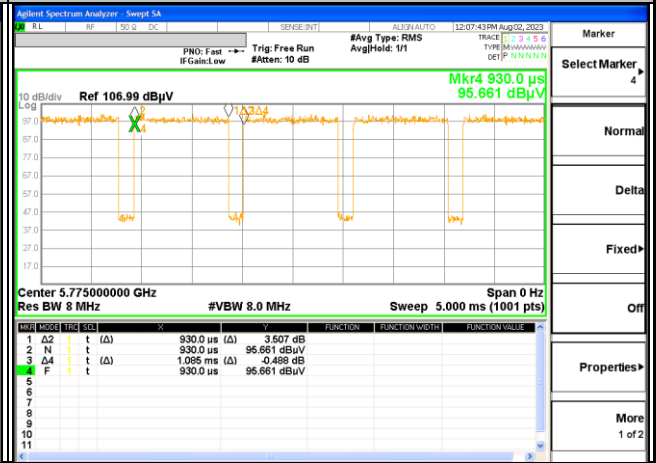
802.11ax HE40 Full RU



802.11ax HE40 242 RU



802.11ax HE80 Full RU



802.11ax HE80 484 RU

