FCC RADIO TEST REPORT

FCC ID	:	**J9CQCARD7280N2**
Equipment	:	**QCARD7280**
Brand Name	:	**Qualcomm**
Model Name	:	**QCARD7280N2**
Applicant	:	**Qualcomm Technologies, Inc. 5775 Morehouse Drive, San Diego, California 92121, United State**
Manufacturer	:	**Qualcomm Semiconductor Limited No. 16-1 Zhanye 2nd Rd. East District Hsinchu City, 300091 (Taiwan)**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on Feb. 16, 2022 and testing was performed from Apr. 20, 2022 to Aug. 11, 2022. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory

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

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Table of Contents

History of this test report

Report No.	Version	Description	Issue Date
FR1N1011G	01	Initial issue of report	Aug. 16, 2022
FR1N1011G	02	1. Revise test mode description, antenna information and brand name 2. Revise Limit of Power Spectral Density	Sep. 12, 2022

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.407(e)	6dB & 26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum E.I.R.P Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	1.79 dB under the limit at 5895.000 MHz
-	15.207	AC Conducted Emission	Not Required	-
3.5	15.203 15.407(a)	Antenna Requirement	Pass	-

Note: Not required means after assessing, test items are not necessary to carry out.

Declaration of Conformity:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results. 2. The measurement uncertainty please refer to this report "Uncertainty of Evaluation".
Comments and Explanations:
The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Avis Chuang

Report Producer: Lucy Wu

1 General Description

1.1 Product Feature of Equipment Under Test

WCDMA/LTE/5G NR, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ac/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, and Wi-Fi 6GHz 802.11a/n/ac/ax.

Antenna Information								
Antenna Set	RF Chain No.	Brand	Model	Antenna Net Gain (dBi)	Frequency Range (MHz)	Ant. Type	Connector Type	Cable Length (mm)
A	Chain0/1	HONG BO	260-25094	3.53	2.4~2.4835 GHz	PIFA	i-pex (MHF 4L)	300mm
				3.06	5.15~5.25 GHz			
				3.07	5.25~5.35 GHz			
				4.81	5.47~5.725 GHz			
				4.2	5.725~5.850 GHz			
B	Chain0/1	HONG BO	260-25083	5.09	5.850~5.895 GHz	PIFA	i-pex (MHF 4L)	300mm
				5.14	5.925~6.425 GHz			
				5.09	6.425~6.525 GHz			
				5.16	6.525~6.875 GHz			
				5.12	6.875~7.125 GHz			
C	Chain0/1	HONG BO	260-25084	3.22	2.4~2.4835 GHz	Monopole	i-pex (MHF 4L)	200mm
				3.35	5.15~5.25 GHz			
				3.42	5.25~5.35 GHz			
				4.77	5.47~5.725 GHz			
				4.72	5.725~5.850 GHz			
				4.71	5.850~5.895 GHz			
				4.75	5.925~6.425 GHz			
				4.29	6.425~6.525 GHz			
				4.81	6.525~6.875 GHz			
				4.74	6.875~7.125 GHz			

Remark:

1. Ant. 5 means Chain 0 and Ant. 4 means Chain 1.
2. The maximum gain was chosen for test.
3. The EUT's information above is declared by manufacturer. Please refer to Comments and Explanations in report summary.

1.2 Modification of EUT

No modifications are made to the EUT during all test items.

1.3 Testing Location

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

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

FCC designation No.: TW3786

1.4 Applicable Standards

According to the specifications of 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.
- FCC KDB 291074 D02 EMC Measurement v01(Draft)
- 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: radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

2.1 Carrier Frequency and Channel

Frequency Band	Bandwidth	Channel	Frequency (MHz)	Note
5850-5895 MHz (U-NII-4)	20 MHz	169	5845	Straddle
		173	5865	
		177	5885	
	40 MHz	167	5835	Straddle
		175	5875	
	80 MHz	171	5855	Straddle
	160 MHz	163	5815	Straddle

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

2.2 Test Mode

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 802.11n/ac mode has no higher power and PSD than 802.11ax mode, thus the 802.11ax mode is chosen as main test configuration, and the 802.11n/ac mode is verified the power.

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

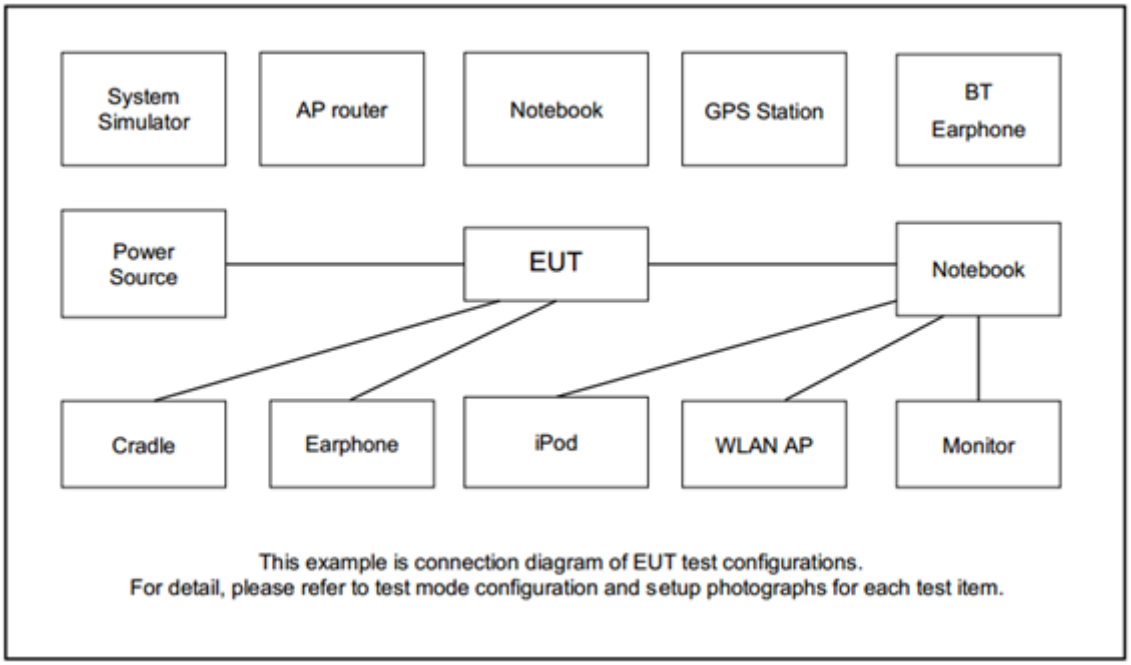
Specification	MCS index /Data Rate
802.11a	6 Mbps
802.11n HT20 (Covered by HE20)	MCS0
802.11n HT40 (Covered by HE40)	MCS0
802.11ac VHT20 (Covered by HE20)	MCS0
802.11ac VHT40 (Covered by HE40)	MCS0
802.11ac VHT80 (Covered by HE80)	MCS0
802.11ac VHT160 (Covered by HE160)	MCS0
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0
802.11ax HE160	MCS0

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

Ch. #		RF test channel of UNII-4 and UNII-3 &-4 span channels				
		802.11a	802.11ax HE20	802.11ax HE40	802.11ax HE80	802.11ax HE160
L	Low	169	169	167	-	-
M	Middle	173	173	-	171	163
H	High	177	177	175	-	-

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

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	DELL	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
2.	Power Supply	GW Instek	GET874629	N/A	N/A	Unshielded, 1.8 m
3.	Fixture	Qualcomm	20-33568-H1	N/A	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “QRCT v4.0.00195.0” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

= 4.2 + 10 = 14.2 (dB)

3 Test Result

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

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

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

26dB and 99% Occupied bandwidth are reporting only.

3.1.2 Measuring Instruments

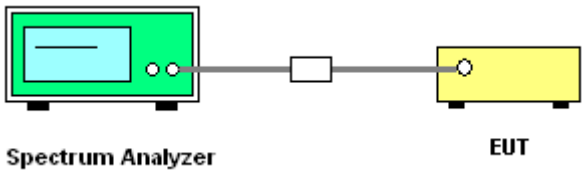
See list of measuring equipment of this test report.

3.1.3 Test Procedures

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

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

3.1.4 Test Setup

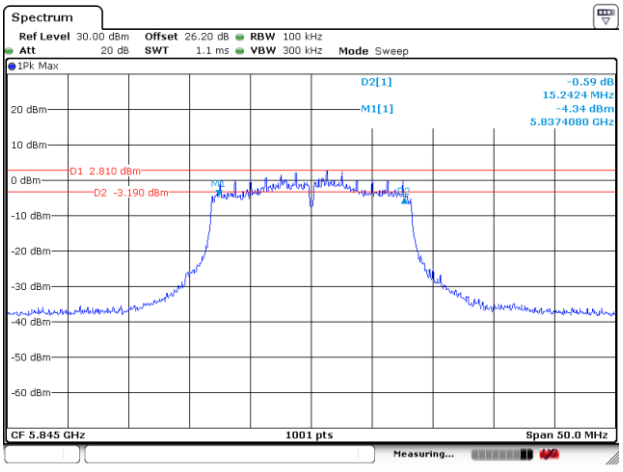
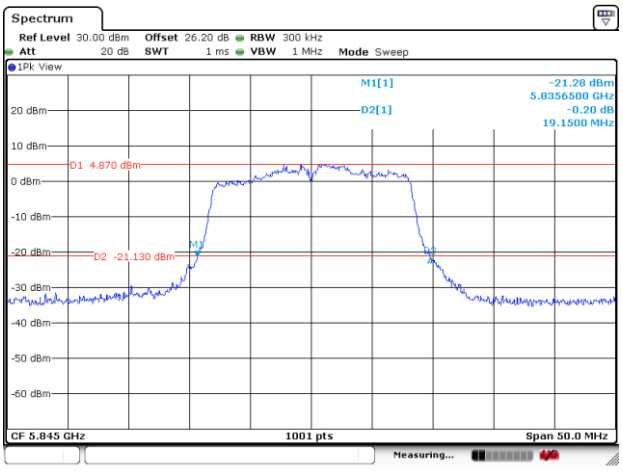


3.1.5 Test Result of 6dB and 26dB and 99% Occupied Bandwidth

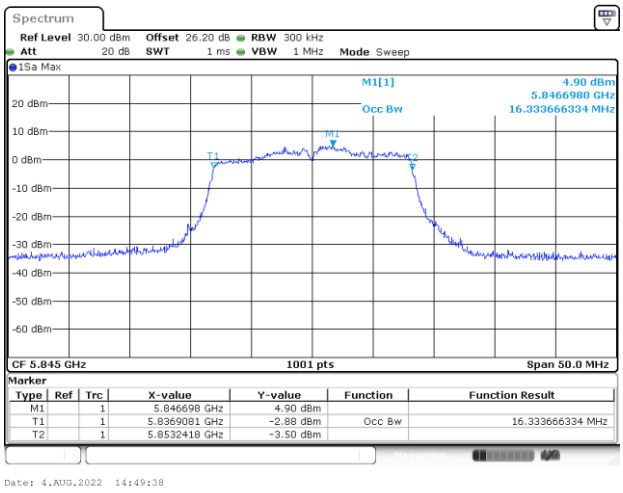
Please refer to Appendix A.

MIMO <Ant. 5+4>

<802.11a Mode>

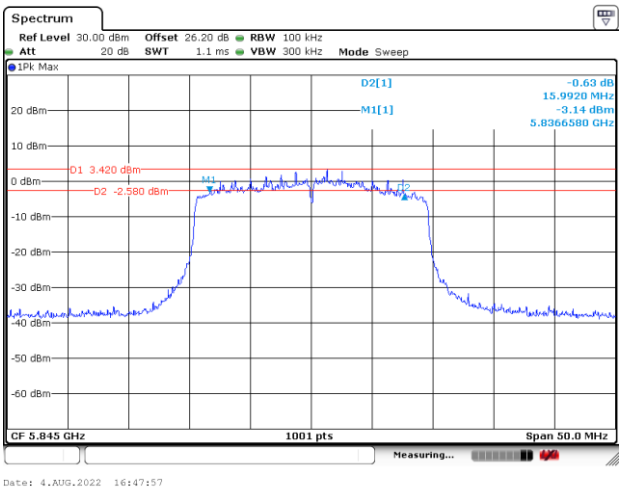
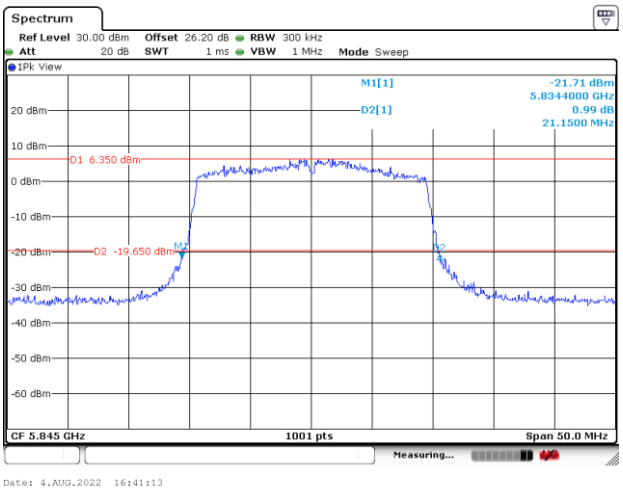
6dB Bandwidth	26dB Bandwidth
	

Occupied Bandwidth

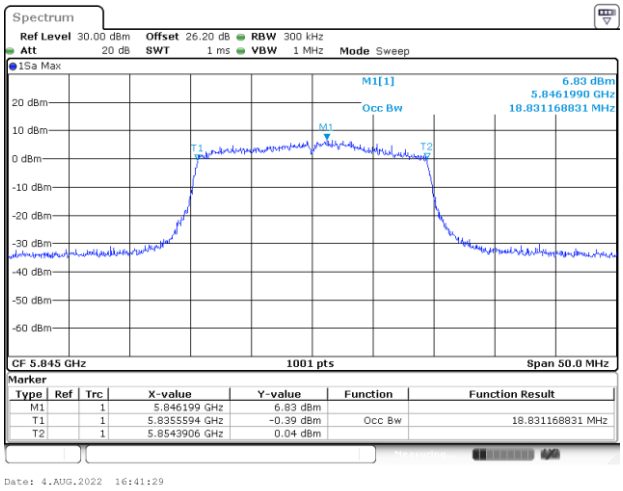


Note: The occupied channel bandwidth is maintained within the band of operation.

<802.11ax HE20 Mode>

6dB Bandwidth	26dB Bandwidth
	

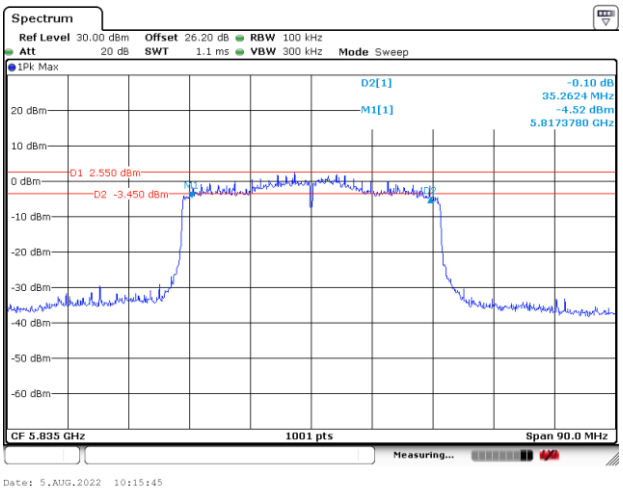
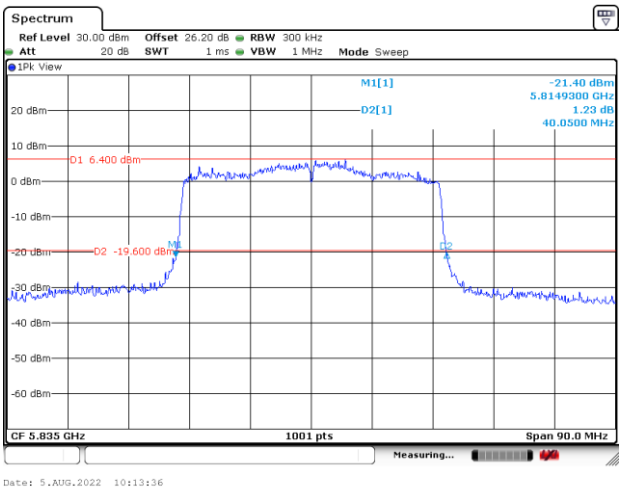
Occupied Bandwidth



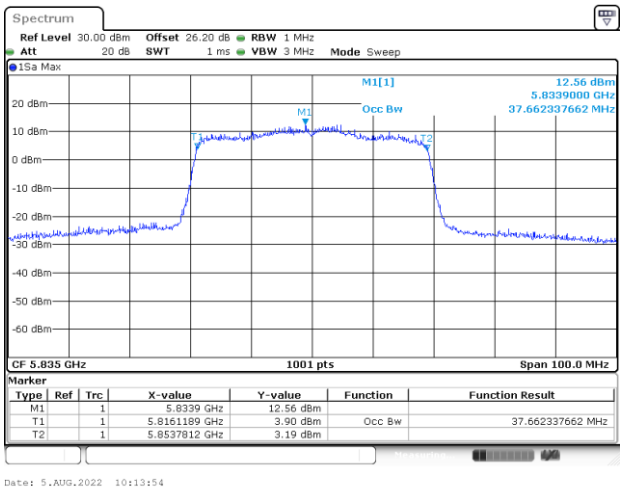
Marker						
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.846199 GHz	6.83 dBm		
T1		1	5.8355594 GHz	-0.39 dBm	Occ Bw	18.831168831 MHz
T2		1	5.8543906 GHz	0.04 dBm		

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

<802.11ax HE40 Mode>

6dB Bandwidth	26dB Bandwidth
	

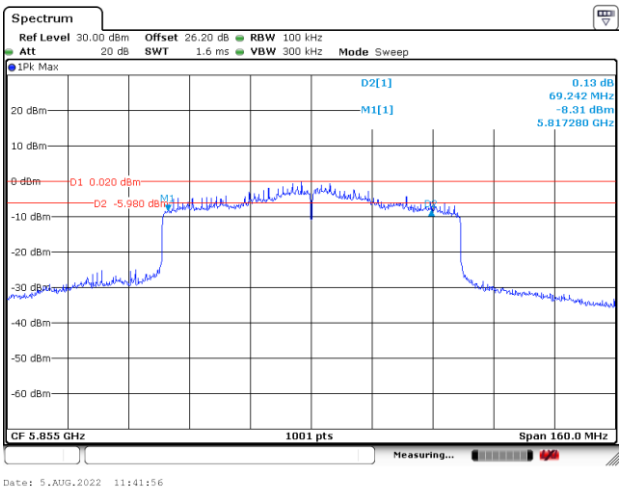
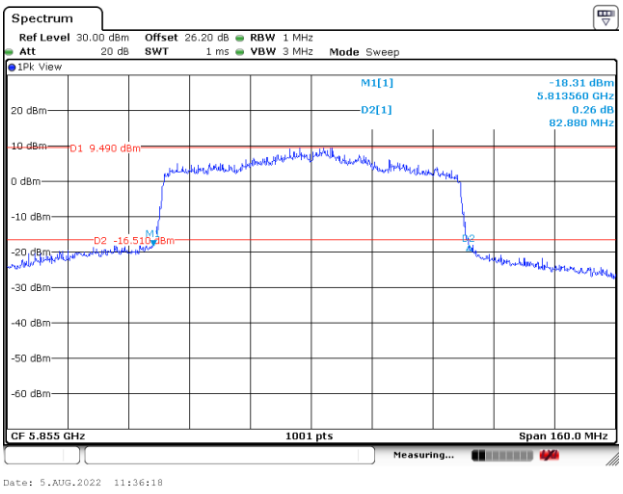
Occupied Bandwidth



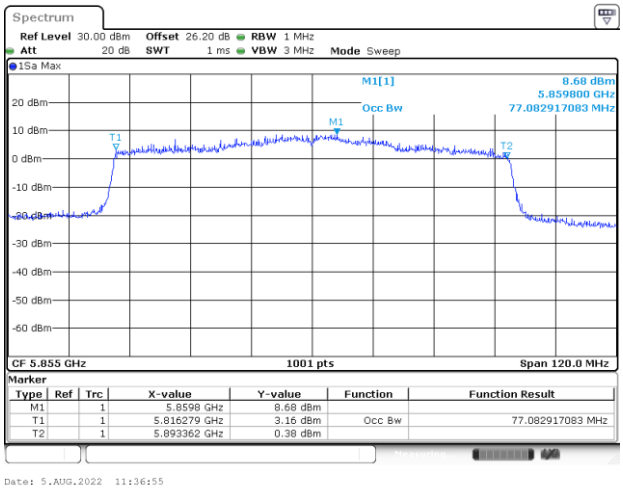
Marker						
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.8339 GHz	12.56 dBm		
T1		1	5.8161189 GHz	3.90 dBm	Occ Bw	37.662337662 MHz
T2		1	5.8537812 GHz	3.19 dBm		

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

<802.11ax HE80 Mode>

6dB Bandwidth	26dB Bandwidth
	

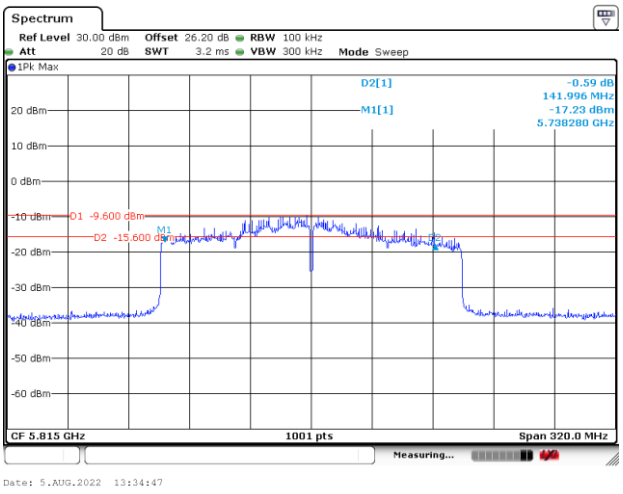
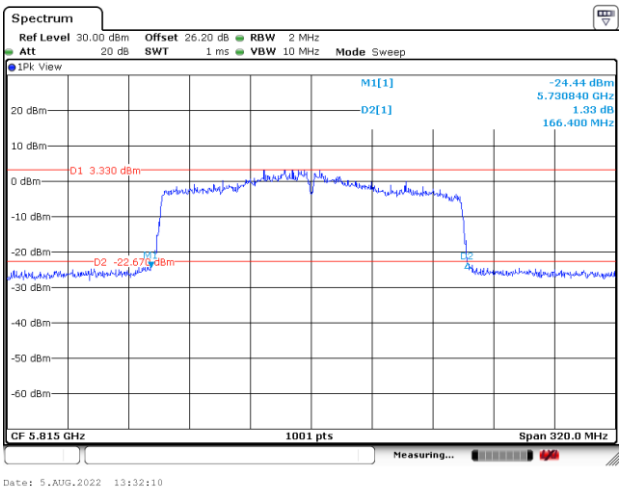
Occupied Bandwidth



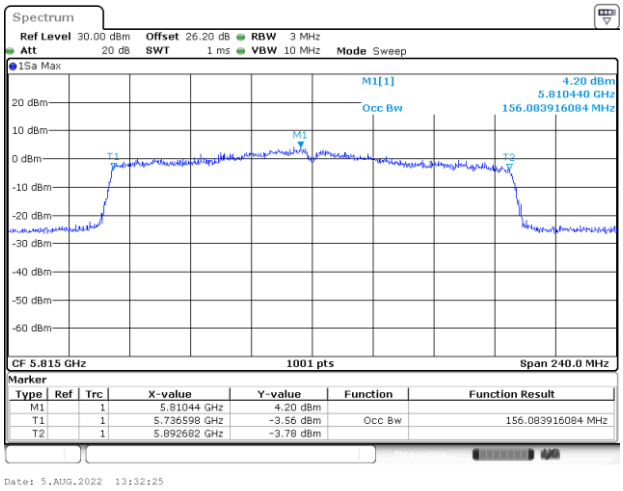
Marker						
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.8598 GHz	8.68 dBm		
T1		1	5.816279 GHz	3.16 dBm	Occ Bw	77.082917083 MHz
T2		1	5.893362 GHz	0.38 dBm		

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

<802.11ax HE160 Mode>

6dB Bandwidth	26dB Bandwidth
	

Occupied Bandwidth



Marker						
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	5.81044 GHz	4.20 dBm		
T1		1	5.736598 GHz	-3.56 dBm	Occ Bw	156.083916084 MHz
T2		1	5.892682 GHz	-3.78 dBm		

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

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

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

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

3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

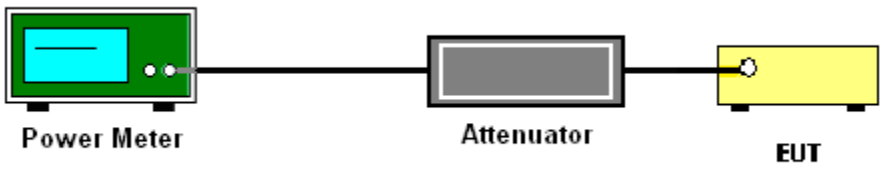
3.2.3 Test Procedures

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

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

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

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

3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedures

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

Section F) Maximum power spectral density.

 # Method SA-2 #

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

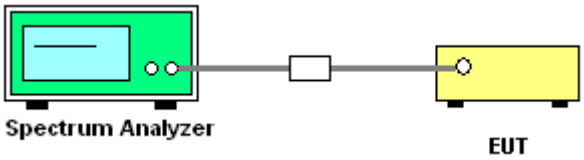
- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW ≥ 3 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add 10 log(1/x),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

1. The RF output of EUT is connected to the spectrum analyzer by a low loss cable.
2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

   Method (a): Measure and sum the spectra across the outputs.

   The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points; the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

3.3.4 Test Setup

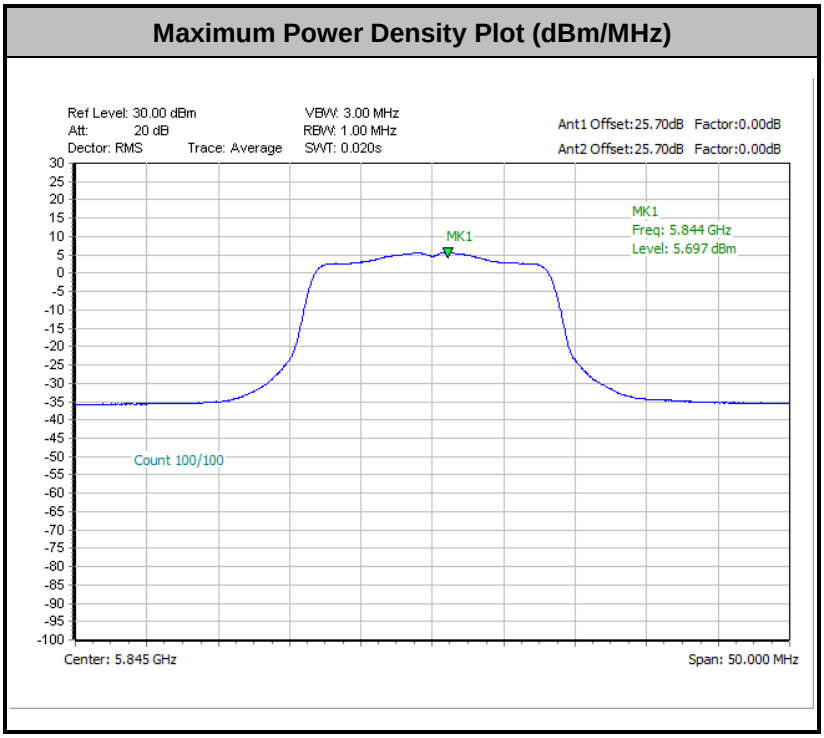


3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

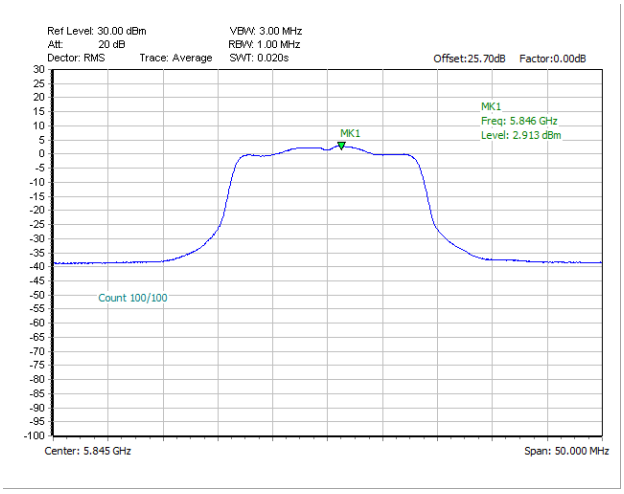
<802.11a>

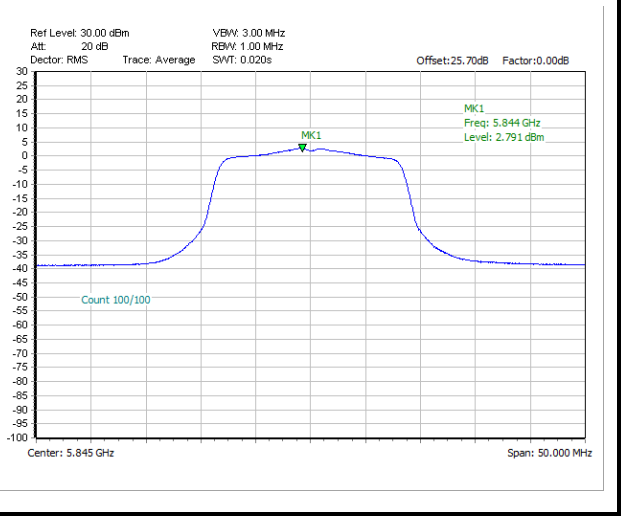
Maximum Power Density Plot (dBm/MHz)



Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

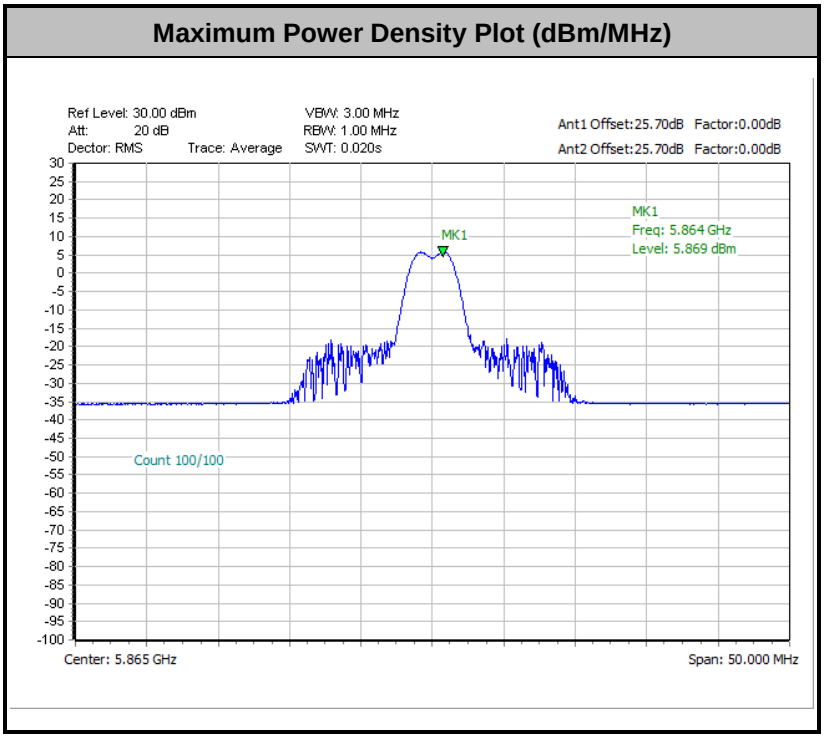
Maximum Power Density Plot Trace 1 (Ant 5)	Maximum Power Density Plot Trace 2 (Ant 4)





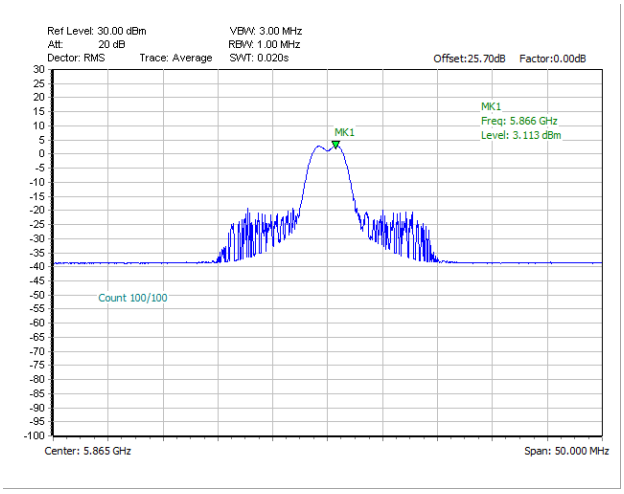
<802.11ax HE20>

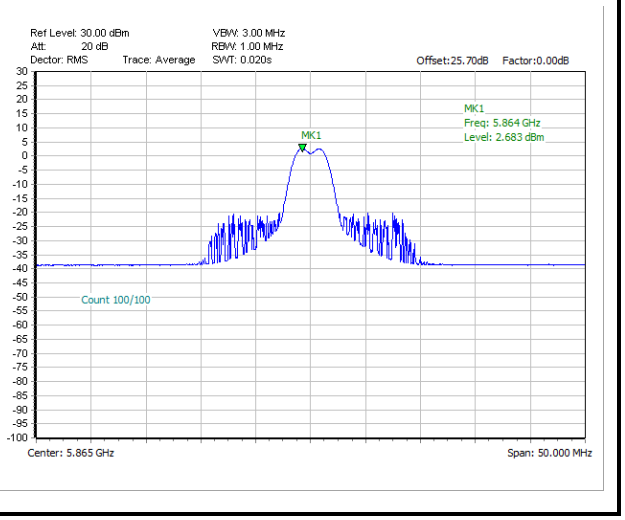
Maximum Power Density Plot (dBm/MHz)



Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

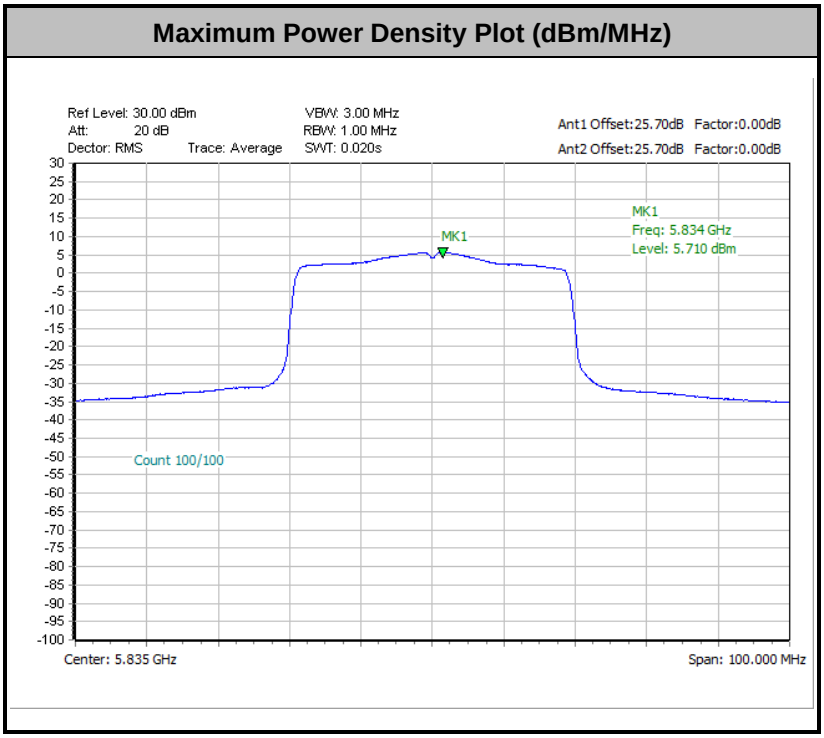
Maximum Power Density Plot Trace 1 (Ant 5)	Maximum Power Density Plot Trace 2 (Ant 4)





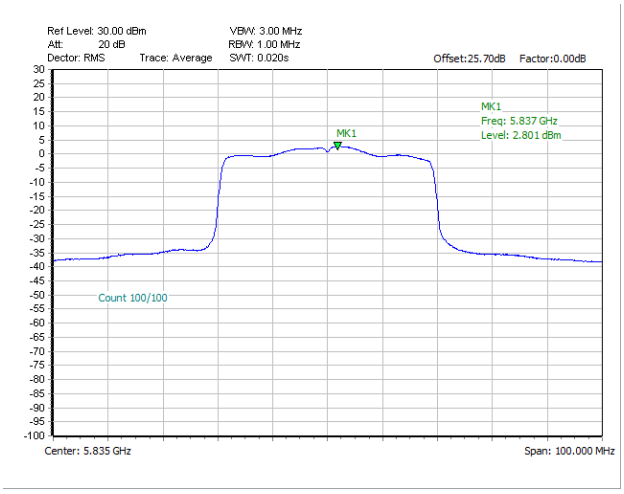
<802.11ax HE40>

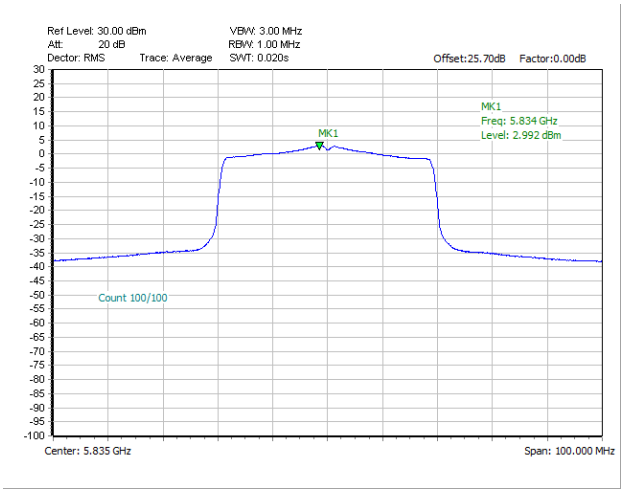
Maximum Power Density Plot (dBm/MHz)



Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

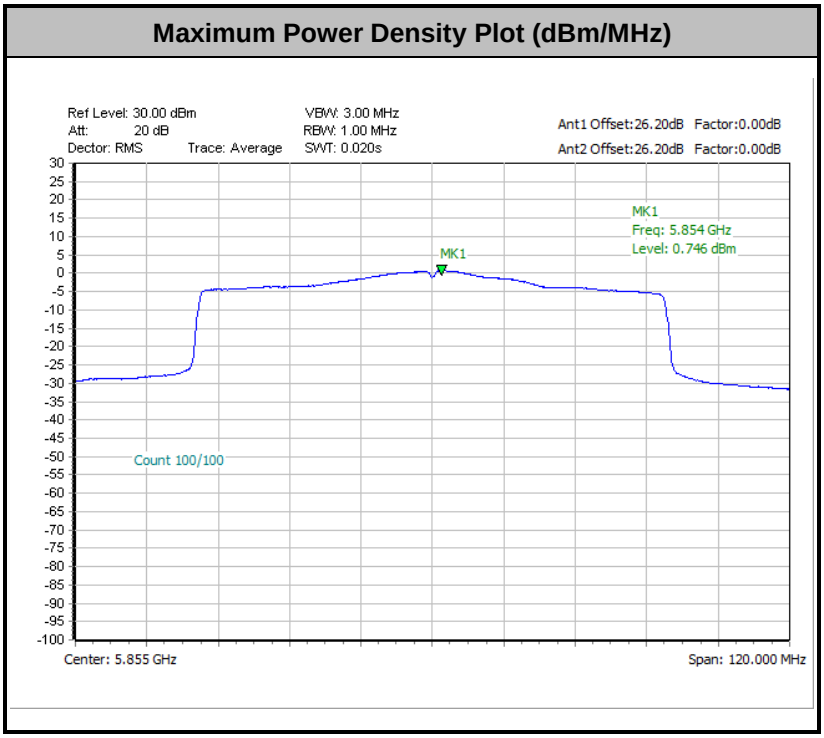
Maximum Power Density Plot Trace 1 (Ant 5)	Maximum Power Density Plot Trace 2 (Ant 4)





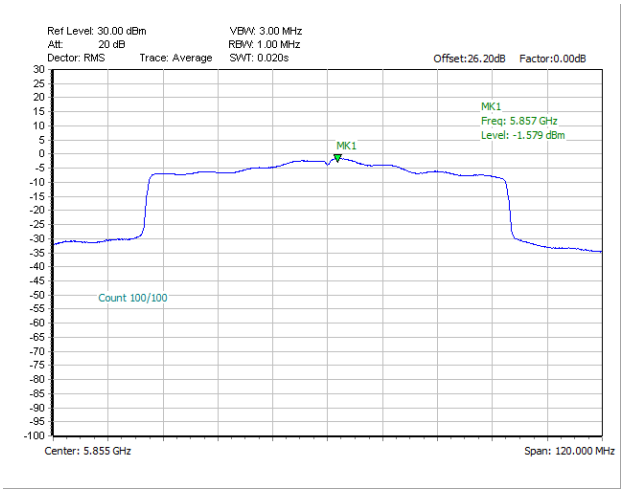
<802.11ax HE80>

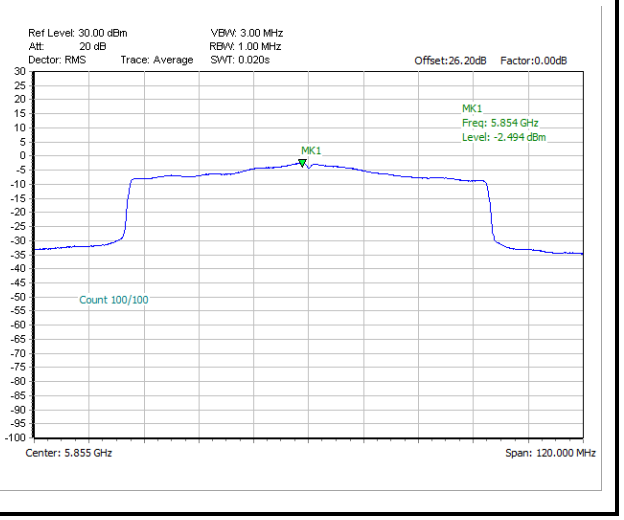
Maximum Power Density Plot (dBm/MHz)



Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

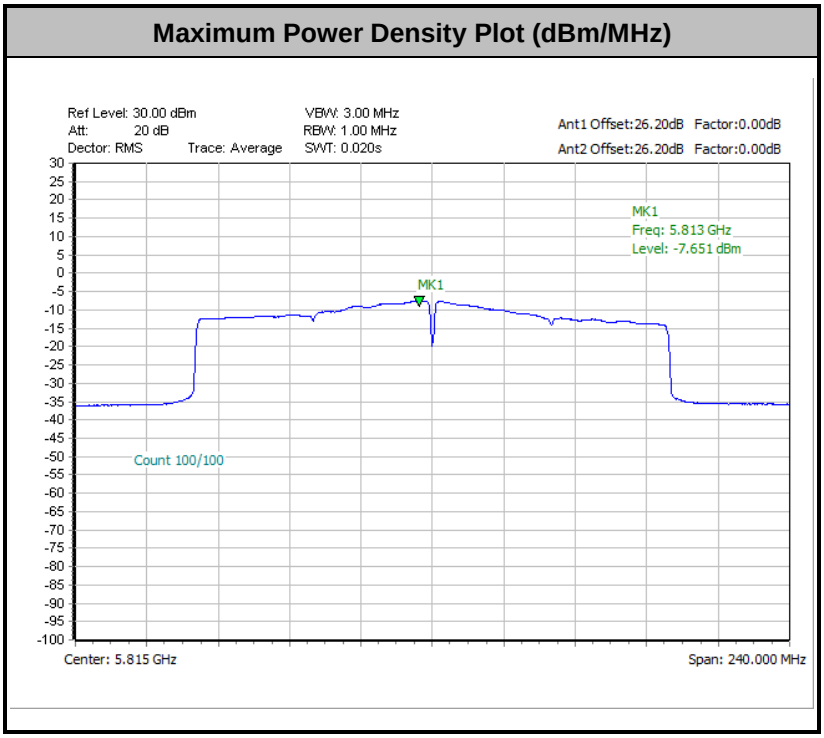
Maximum Power Density Plot Trace 1 (Ant 5)	Maximum Power Density Plot Trace 2 (Ant 4)





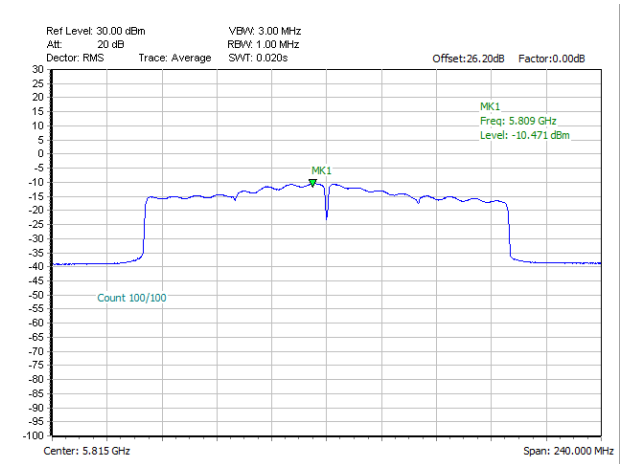
<802.11ax HE160>

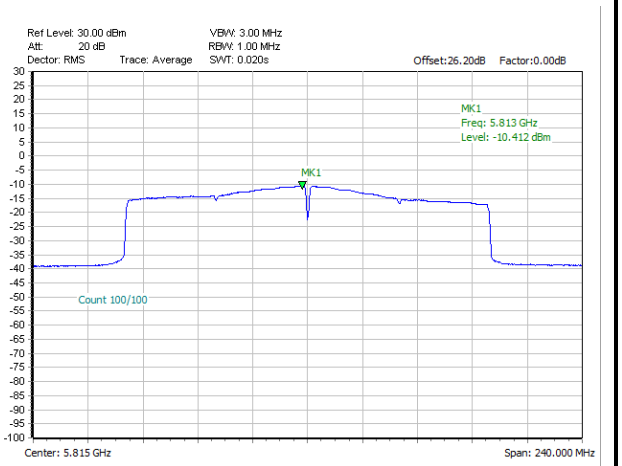
Maximum Power Density Plot (dBm/MHz)



Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

Maximum Power Density Plot Trace 1 (Ant 5)	Maximum Power Density Plot Trace 2 (Ant 4)





3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

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

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

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

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

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

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

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

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

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

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

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

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

EIRP[dBm] = E[dBμV/m]− 95.2

3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 11.12.2 Antenna-port conducted measurements.
2. Measure the conducted output power (in dBm) using the peak detector.
3. Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP.
4. Add the appropriate maximum ground reflection factor to the EIRP (6 dB for frequencies ≤ 30 MHz; 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive; and 0 dB for frequencies > 1000 MHz).
5. Convert the resultant EIRP to an equivalent electric field strength using the following relationship:

   E = EIRP − 20 log d + 104.8,

   where

   E is the electric field strength in dBμV/m

   EIRP is the equivalent isotropically radiated power in dBm

   d is the specified measurement distance in 3m
6. Compare the resultant electric field strength level with the applicable regulatory limit.
7. Corrected Reading for conducted spurious emission: Antenna Gain + Path Loss + MIMO Factor + Read Level = Level
8. Perform the cabinet radiated spurious emission test

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

   (1) Procedure for Unwanted Emissions Measurements Below 1000 MHz

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

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

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

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

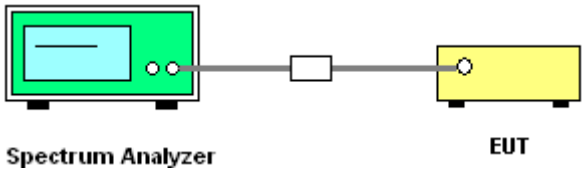
   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

10. The EUT was placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
11. The EUT was placed at distance 3 meter from measurement antenna which was mounted on the top of a variable height antenna tower.
12. The measurement antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization.
13. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
14. Radiated testing below 1GHz was performed by adjusting the antenna tower from 1m to 4m and by rotating the turn table from 0 degree to 360 degree to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6dB margin against QP limit line, the position is marked as “-“.

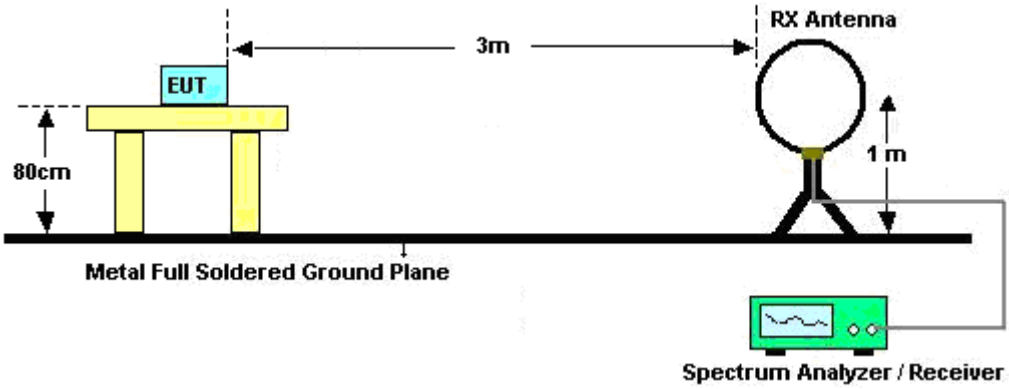
15. Radiated testing above 1GHz was performed by adjusting the antenna tower from 1m to 4m and by rotating the turn table from 0 degree to 360 degree to find the peak maximum hold reading for scanning all frequencies.
    When there is no suspected emission found and the harmonic emission level is with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

3.4.4 Test Setup

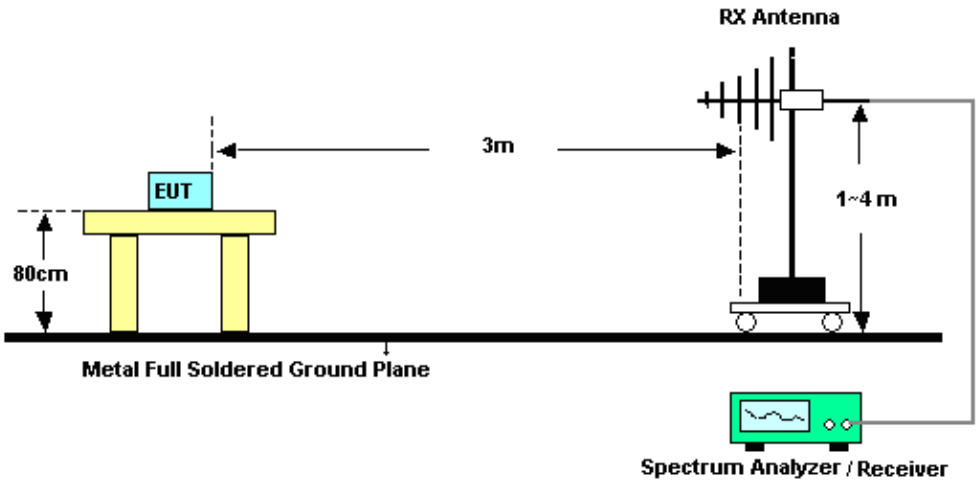
For Conducted Measurement Setup:



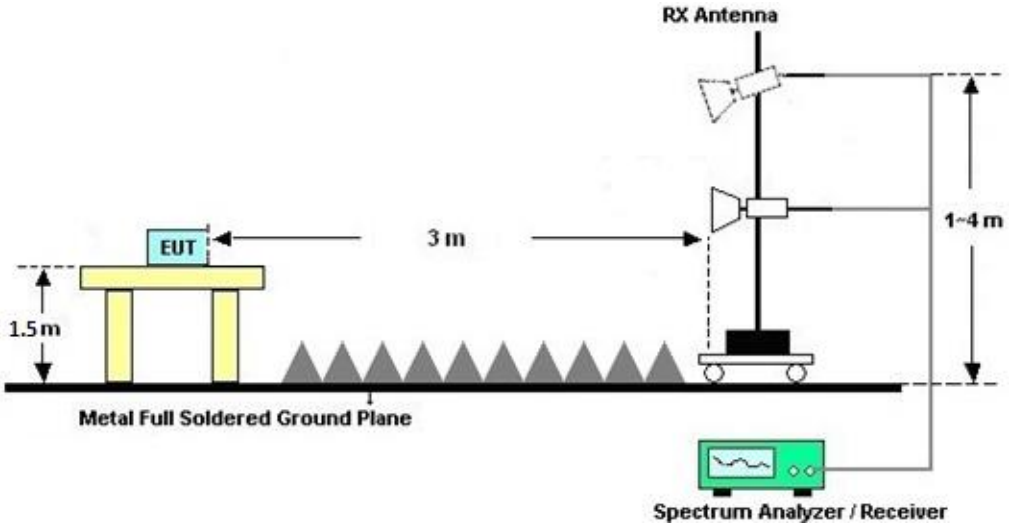
For radiated emissions below 30MHz



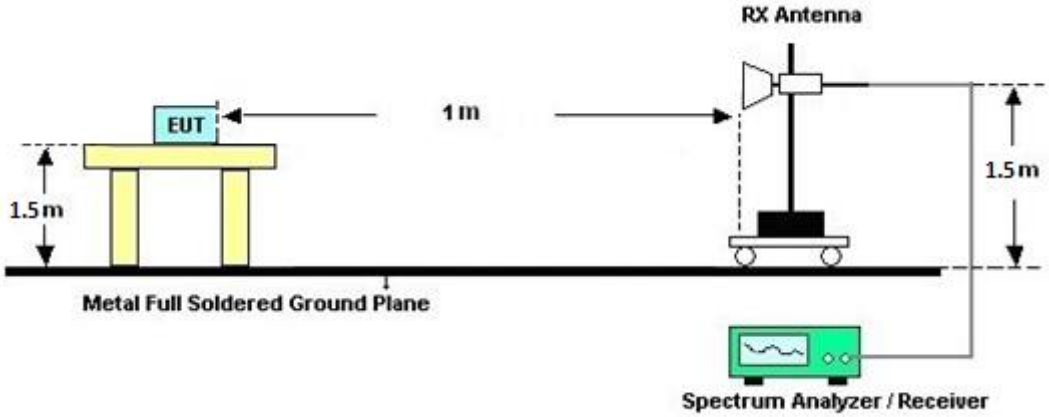
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



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

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

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

3.4.6 Test Result of Conduced Spurious at Band Edges in the Restricted Band

Please refer to Appendix B and C.

3.4.7 Test Result of Conduced Spurious Emission in the Restricted Band

Please refer to Appendix B and C.

3.4.8 Test Result of Cabinet Radiated Spurious at Band Edges

Please refer to Appendix D and E.

3.4.9 Test Result of Cabinet Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix D and E.

3.4.10 Duty Cycle

Please refer to Appendix F.

3.5 Antenna Requirements

3.5.1 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.5.2 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

The directional gain is calculated as

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

where

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

The EUT supports beamforming for 802.11ac and 11ax modes.

The directional gain calculation is following F)2)e)ii) of KDB 662911 D01 v02r01.

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

The directional gain of EUT is listed in the following table.

UNII-4	Ant 5 (dBi)	Ant 4 (dBi)	DG for Power (dBi)	DG for PSD (dBi)
	5.09	5.09	8.10	8.10

Calculation example:

The DG is derived from formula is

10 x log { { [10^ (5.09dBi / 20) + 10^ (5.09 dBi / 20)] ^ 2 } / 2 }

= 8.10 dBi

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 09, 2021	Apr. 20, 2022~ Apr. 29, 2022	Sep. 08, 2022	Radiation (03CH15-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	41912 & 05	30MHz~1GHz	Feb. 06, 2022	Apr. 20, 2022~ Apr. 29, 2022	Feb. 05, 2023	Radiation (03CH15-HY)
Amplifier	SONOMA	310N	363440	9kHz~1GHz	Dec. 27, 2021	Apr. 20, 2022~ Apr. 29, 2022	Dec. 26, 2022	Radiation (03CH15-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-02038	1GHz~18GHz	Aug. 04, 2021	Apr. 20, 2022~ Apr. 29, 2022	Aug. 03, 2022	Radiation (03CH15-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 30, 2021	Apr. 20, 2022~ Apr. 29, 2022	Nov. 29, 2022	Radiation (03CH15-HY)
Preamplifier	Jet-Power	JPA0118-55-303	171000180005006	1GHz~18GHz	May 06, 2021	Apr. 20, 2022~ Apr. 29, 2022	May 05, 2022	Radiation (03CH15-HY)
Preamplifier	EM Electronics	EM01G18G	060803	1GHz-18GHz	Dec. 16, 2021	Apr. 20, 2022~ Apr. 29, 2022	Dec. 15, 2022	Radiation (03CH15-HY)
Preamplifier	EMEC	EM18G40G	060801	18-40GHz	Jun. 22, 2021	Apr. 20, 2022~ Apr. 29, 2022	Jun. 21, 2022	Radiation (03CH15-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY54130085	20MHz~8.4GHz	Oct. 21, 2021	Apr. 20, 2022~ Apr. 29, 2022	Oct. 20, 2022	Radiation (03CH15-HY
Spectrum Analyzer	Agilent	E4446A	MY50180136	3Hz~44GHz	May 07, 2021	Apr. 20, 2022~ Apr. 29, 2022	May 06, 2022	Radiation (03CH15-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Apr. 20, 2022~ Apr. 29, 2022	N/A	Radiation (03CH15-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Apr. 20, 2022~ Apr. 29, 2022	N/A	Radiation (03CH15-HY)
Software	Audix	E3 6.2009-8-24 (k5)	RK-000451	N/A	N/A	Apr. 20, 2022~ Apr. 29, 2022	N/A	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104, 102E	MY36980/4, MY9838/4PE, 508405/2E	30MHz~18G	Nov. 15, 2021	Apr. 20, 2022~ Apr. 29, 2022	Nov. 14, 2022	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804011/2,804012/2	30MHz-40GHz	Jan. 04, 2022	Apr. 20, 2022~ Apr. 29, 2022	Jan. 03, 2023	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz~30MHz	Mar. 10, 2022	Apr. 20, 2022~ Apr. 29, 2022	Mar. 09, 2023	Radiation (03CH15-HY)
Filter	Wainwright	WLJ4-1000-1530-6000-40ST	SN4	1.53GHz Low Pass Filter	Jul. 02, 2021	Apr. 20, 2022~ Apr. 29, 2022	Jul. 01, 2022	Radiation (03CH15-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN6	6.75GHz High Pass Filter	Jun. 30, 2021	Apr. 20, 2022~ Apr. 29, 2022	Jun. 29, 2022	Radiation (03CH15-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 16, 2021	Jun. 02, 2022~ Aug. 08, 2022	Nov. 15, 2022	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO12 (NO:113)	10MHz~6GHz	Dec. 16, 2021	Jun. 02, 2022~ Aug. 08, 2022	Dec. 15, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	Jun. 02, 2022~ Aug. 08, 2022	Aug. 29, 2022	Conducted (TH05-HY)
Switch Control Mainframe	E-IUSTRUMENT	ETF-1405-0	EC1900067 (BOX7)	N/A	Aug. 12, 2021	Jun. 02, 2022~ Aug. 08, 2022	Aug. 11, 2022	Conducted (TH05-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	ROHDE & SCHWARZ	FSV40	101565	10Hz~40GHz	Dec. 29, 2021	Jun. 03, 2022~ Aug. 11, 2022	Dec. 28, 2022	CSE (TH05-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz~30MHz	Mar. 10, 2022	Jun. 03, 2022~ Aug. 11, 2022	Mar. 09, 2023	CSE (TH05-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30MHz~18GHz	Dec. 10, 2021	Jun. 03, 2022~ Aug. 11, 2022	Dec. 09, 2022	CSE (TH05-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Feb. 21, 2022	Jun. 03, 2022~ Aug. 11, 2022	Feb. 20, 2023	CSE (TH05-HY)
Filter	Wainwright	WLKS1200-12 SS	SN2	1.2GHz Low Pass Filter	Mar. 15, 2022	Jun. 03, 2022~ Aug. 11, 2022	Mar. 14, 2023	CSE (TH05-HY)
Filter	Wainwright	WHKX8-5872. 5-6750-18000-40ST	SN17	6.75GHz High Pass Filter	May 23, 2022	Jun. 03, 2022~ Aug. 11, 2022	May 22, 2023	CSE (TH05-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.8 dB**

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.3 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.6 dB**

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Richard Qiu	Temperature:	21~25	°C
Test Date:	2022/6/2~2022/8/8	Relative Humidity:	51~54	%

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

UNII-4 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 5	Ant 4	Ant 5	Ant 4	Ant 5	Ant 4		
11a	6Mbps	2	169	5845	16.33	16.33	19.15	20.35	15.24	15.19	0.5	Pass
11a	6Mbps	2	173	5865	16.38	16.33	18.75	19.65	15.19	15.19	0.5	Pass
11a	6Mbps	2	177	5885	16.38	16.28	19.05	19.00	15.44	15.39	0.5	Pass

Report Number : FR1N1011G

TEST RESULTS DATA
Average Power Table

UNII-4 MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			DG (dBi)	E.I.R.P Power (dBm)	E.I.R.P Limit (dBm)
					Ant 5	Ant 4	Ant 5	Ant 4	SUM	Ant 5 + Ant 4	Ant 5 + Ant 4	Ant 5 + Ant 4
11a	6Mbps	2	169	5845	0.00	0.00	12.80	12.70	15.76	8.10	23.86	30
11a	6Mbps	2	173	5865	0.00	0.00	13.20	12.50	15.87	8.10	23.97	30
11a	6Mbps	2	177	5885	0.00	0.00	13.10	12.20	15.68	8.10	23.78	30
HT20	MCS0	2	169	5845	0.00	0.00	12.90	12.90	15.91	8.10	24.01	30
HT20	MCS0	2	173	5865	0.00	0.00	13.40	12.70	16.07	8.10	24.17	30
HT20	MCS0	2	177	5885	0.00	0.00	13.60	13.00	16.32	8.10	24.42	30
HT40	MCS0	2	167	5835	0.00	0.00	15.80	15.70	18.76	8.10	26.86	30
HT40	MCS0	2	175	5875	0.00	0.00	14.30	13.70	17.02	8.10	25.12	30
VHT20	MCS0	2	169	5845	0.00	0.00	13.00	13.00	16.01	8.10	24.11	30
VHT20	MCS0	2	173	5865	0.00	0.00	13.50	12.80	16.17	8.10	24.27	30
VHT20	MCS0	2	177	5885	0.00	0.00	13.70	13.10	16.42	8.10	24.52	30
VHT40	MCS0	2	167	5835	0.00	0.00	15.90	15.80	18.86	8.10	26.96	30
VHT40	MCS0	2	175	5875	0.00	0.00	14.40	13.80	17.12	8.10	25.22	30
VHT80	MCS0	2	171	5855	0.00	0.00	12.90	12.10	15.53	8.10	23.63	30
VHT160	MCS0	2	163	5815	0.00	0.00	7.30	7.40	10.36	8.10	18.46	30

TEST RESULTS DATA
Power Spectral Density

UNII-4 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			DG (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass /Fail
					Ant 5	Ant 4	Ant 5	Ant 4	SUM	Ant 5 + Ant 4	Ant 5 + Ant 4	Ant 5 + Ant 4	
11a	6Mbps	2	169	5845	0.00	0.00			5.70	8.10	13.80	14.00	Pass
11a	6Mbps	2	173	5865	0.00	0.00			5.67	8.10	13.77	14.00	Pass
11a	6Mbps	2	177	5885	0.00	0.00			5.45	8.10	13.55	14.00	Pass

Note: PSD Sum = Max PSD(Ant. 5, Ant. 4) + 10 log (n)

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

UNII-4 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 5	Ant 4	Ant 5	Ant 4	Ant 5	Ant 4		
HE20	MCS0	2	169	5845	Full	18.83	18.88	21.15	21.05	15.99	16.79	0.5	Pass
HE20	MCS0	2	169	5845	26/0	18.88	18.63	21.15	20.70	2.19	2.19	0.5	Pass
HE20	MCS0	2	169	5845	52/37	18.58	18.38	21.40	20.95	17.19	14.64	0.5	Pass
HE20	MCS0	2	169	5845	106/53	18.48	18.38	23.10	21.65	18.09	18.14	0.5	Pass
HE20	MCS0	2	169	5845	242/61	19.18	19.13	25.15	23.25	19.04	19.04	0.5	Pass
HE20	MCS0	2	173	5865	Full	18.83	18.88	20.95	21.35	15.69	15.59	0.5	Pass
HE20	MCS0	2	173	5865	26/4	17.43	17.18	18.80	18.60	15.14	8.99	0.5	Pass
HE20	MCS0	2	173	5865	52/38	17.33	17.23	18.80	18.70	15.19	12.64	0.5	Pass
HE20	MCS0	2	173	5865	106/53	18.33	18.53	21.65	23.90	17.18	17.29	0.5	Pass
HE20	MCS0	2	173	5865	242/61	22.48	26.02	45.29	46.07	19.09	19.14	0.5	Pass
HE20	MCS0	2	177	5885	Full	18.78	18.83	21.05	20.90	16.04	16.39	0.5	Pass
HE20	MCS0	2	177	5885	26/8	18.83	18.28	20.65	20.45	2.21	2.16	0.5	Pass
HE20	MCS0	2	177	5885	52/40	18.48	17.93	21.35	20.65	17.14	4.65	0.5	Pass
HE20	MCS0	2	177	5885	106/54	18.48	18.38	21.75	21.05	18.44	17.29	0.5	Pass
HE20	MCS0	2	177	5885	242/61	19.08	19.28	22.75	29.45	19.14	19.14	0.5	Pass
HE40	MCS0	2	167	5835	Full	37.66	37.76	40.05	40.14	35.26	35.26	0.5	Pass
HE40	MCS0	2	167	5835	484/65	40.95	39.56	66.96	69.12	38.32	37.60	0.5	Pass
HE40	MCS0	2	175	5875	Full	37.66	38.66	39.96	61.02	35.44	36.61	0.5	Pass
HE40	MCS0	2	175	5875	484/65	41.35	41.75	68.22	70.92	38.23	38.32	0.5	Pass
HE80	MCS0	2	171	5855	Full	77.08	76.96	82.88	82.72	69.24	60.44	0.5	Pass
HE80	MCS0	2	171	5855	996/67	77.80	77.92	128.48	116.48	78.36	78.20	0.5	Pass
HE160	MCS0	2	163	5815	Full	156.08	155.60	166.40	165.76	141.99	132.08	0.5	Pass
HE160	MCS0	2	163	5815	1992/68	158.48	157.76	173.12	208.64	158.32	158.64	0.5	Pass

TEST RESULTS DATA
Average Power Table

UNII-4 MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Conducted Power (dBm)			DG (dBi)	E.I.R.P Power (dBm)	E.I.R.P Limit (dBm)
						Ant 5	Ant 4	Ant 5	Ant 4	SUM	Ant 5 + Ant 4	Ant 5 + Ant 4	Ant 5 + Ant 4
HE20	MCS0	2	169	5845	Full	0.00	0.00	13.10	13.10	16.11	8.10	24.21	30
HE20	MCS0	2	169	5845	26/0	0.00	0.00	5.20	5.30	8.26	8.10	16.36	30
HE20	MCS0	2	169	5845	52/37	0.00	0.00	8.40	8.20	11.31	8.10	19.41	30
HE20	MCS0	2	169	5845	106/53	0.00	0.00	11.50	11.10	14.31	8.10	22.42	30
HE20	MCS0	2	169	5845	242/61	0.00	0.00	15.20	15.10	18.16	8.10	26.26	30
HE20	MCS0	2	173	5865	Full	0.00	0.00	13.60	12.90	16.27	8.10	24.37	30
HE20	MCS0	2	173	5865	26/4	0.00	0.00	6.90	6.70	9.81	8.10	17.91	30
HE20	MCS0	2	173	5865	52/38	0.00	0.00	8.10	8.30	11.21	8.10	19.31	30
HE20	MCS0	2	173	5865	106/53	0.00	0.00	12.00	10.80	14.45	8.10	22.55	30
HE20	MCS0	2	173	5865	242/61	0.00	0.00	15.60	14.90	18.27	8.10	26.37	30
HE20	MCS0	2	177	5885	Full	0.00	0.00	13.80	13.20	16.52	8.10	24.62	30
HE20	MCS0	2	177	5885	26/8	0.00	0.00	5.60	5.20	8.41	8.10	16.52	30
HE20	MCS0	2	177	5885	52/40	0.00	0.00	8.20	8.30	11.26	8.10	19.36	30
HE20	MCS0	2	177	5885	106/54	0.00	0.00	11.10	10.70	13.91	8.10	22.02	30
HE20	MCS0	2	177	5885	242/61	0.00	0.00	13.60	12.20	15.97	8.10	24.07	30
HE40	MCS0	2	167	5835	Full	0.00	0.00	16.00	15.90	18.96	8.10	27.06	30
HE40	MCS0	2	167	5835	484/65	0.00	0.00	15.20	14.80	18.01	8.10	26.12	30
HE40	MCS0	2	175	5875	Full	0.00	0.00	14.50	13.90	17.22	8.10	25.32	30
HE40	MCS0	2	175	5875	484/65	0.00	0.00	15.10	13.90	17.55	8.10	25.65	30
HE80	MCS0	2	171	5855	Full	0.00	0.00	13.00	12.20	15.63	8.10	23.73	30
HE80	MCS0	2	171	5855	996/67	0.00	0.00	12.30	11.00	14.71	8.10	22.81	30
HE160	MCS0	2	163	5815	Full	0.00	0.00	7.40	7.50	10.46	8.10	18.56	30
HE160	MCS0	2	163	5815	1992/68	0.00	0.00	7.80	17.50	17.94	8.10	26.04	30

TEST RESULTS DATA
Power Spectral Density

UNII-4 MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Average Power Density with Duty Factor (dBm/MHz)			DG (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass /Fail
						Ant 5	Ant 4	Ant 5	Ant 4	SUM	Ant 5 + Ant 4	Ant 5 + Ant 4	Ant 5 + Ant 4	
HE20	MCS0	2	169	5845	Full	0.00	0.00			5.53	8.10	13.63	14.00	Pass
HE20	MCS0	2	169	5845	26/0	0.00	0.00			5.46	8.10	13.56	14.00	Pass
HE20	MCS0	2	169	5845	52/37	0.00	0.00			5.58	8.10	13.68	14.00	Pass
HE20	MCS0	2	169	5845	106/53	0.00	0.00			5.66	8.10	13.76	14.00	Pass
HE20	MCS0	2	169	5845	242/61	0.00	0.00			5.80	8.10	13.90	14.00	Pass
HE20	MCS0	2	173	5865	Full	0.00	0.00			5.61	8.10	13.71	14.00	Pass
HE20	MCS0	2	173	5865	26/4	0.00	0.00			5.87	8.10	13.97	14.00	Pass
HE20	MCS0	2	173	5865	52/38	0.00	0.00			5.42	8.10	13.52	14.00	Pass
HE20	MCS0	2	173	5865	106/53	0.00	0.00			5.60	8.10	13.70	14.00	Pass
HE20	MCS0	2	173	5865	242/61	0.00	0.00			5.86	8.10	13.96	14.00	Pass
HE20	MCS0	2	177	5885	Full	0.00	0.00			5.76	8.10	13.86	14.00	Pass
HE20	MCS0	2	177	5885	26/8	0.00	0.00			5.62	8.10	13.72	14.00	Pass
HE20	MCS0	2	177	5885	52/40	0.00	0.00			5.46	8.10	13.56	14.00	Pass
HE20	MCS0	2	177	5885	106/54	0.00	0.00			5.76	8.10	13.86	14.00	Pass
HE20	MCS0	2	177	5885	242/61	0.00	0.00			4.86	8.10	12.96	14.00	Pass
HE40	MCS0	2	167	5835	Full	0.00	0.00			5.71	8.10	13.81	14.00	Pass
HE40	MCS0	2	167	5835	484/65	0.00	0.00			3.63	8.10	11.73	14.00	Pass
HE40	MCS0	2	175	5875	Full	0.00	0.00			4.20	8.10	12.30	14.00	Pass
HE40	MCS0	2	175	5875	484/65	0.00	0.00			3.83	8.10	11.93	14.00	Pass
HE80	MCS0	2	171	5855	Full	0.00	0.00			0.75	8.10	8.85	14.00	Pass
HE80	MCS0	2	171	5855	996/67	0.00	0.00			-2.74	8.10	5.36	14.00	Pass
HE160	MCS0	2	163	5815	Full	0.00	0.00			-7.65	8.10	0.45	14.00	Pass
HE160	MCS0	2	163	5815	1992/68	0.00	0.00			-9.36	8.10	-1.26	14.00	Pass

Note: PSD Sum = Max PSD(Ant. 5, Ant. 4) + 10 log (n)

Appendix B. Conducted Spurious Emission

Test Engineer :	Richard Qiu, Jacob Yu, Eric Chang, Ken Wu and Nick Yu	Temperature :	22.7~24.8°C
		Relative Humidity :	52~59%

UNII-4 - 5735~5895MHz

WIFI 802.11a (Band Edge)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Gain	Path Loss	MIMO Factor	Grounding Factor	Peak Avg.
5		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11a CH 169 5845MHz		5644.84	-38.66	-11.66	-27	-51.17	8.1	1.4	3.01	0	P
		5679.355	-38.42	-33.18	-5.24	-50.93	8.1	1.4	3.01	0	P
		5706.79	-38.92	-50.82	11.9	-51.41	8.1	1.38	3.01	0	P
		5725	-38.5	-65.5	27	-50.97	8.1	1.36	3.01	0	P
	*	5845	20.36	-	-	7.91	8.1	1.34	3.01	0	P
	*	5845	8.6	-	-	-3.85	8.1	1.34	3.01	0	A
		5898.5	-24.49	-36.92	12.43	-37.04	8.1	1.44	3.01	0	P
		5929.75	-31.37	-24.37	-7	-43.93	8.1	1.45	3.01	0	P
		5895.25	-49.68	-44.5	-5.18	-62.22	8.1	1.43	3.01	0	A
		5926.75	-50.31	-23.31	-27	-62.87	8.1	1.45	3.01	0	A
802.11a CH 173 5865MHz		5632.155	-39.05	-12.05	-27	-51.57	8.1	1.41	3.01	0	P
		5691.745	-38.5	-42.41	3.91	-51	8.1	1.39	3.01	0	P
		5715.05	-38.13	-52.35	14.22	-50.62	8.1	1.38	3.01	0	P
		5724.195	-39.46	-64.63	25.17	-51.93	8.1	1.36	3.01	0	P
	*	5865	20.8	-	-	8.32	8.1	1.37	3.01	0	P
	*	5865	9.22	-	-	-3.26	8.1	1.37	3.01	0	A
		5899.25	-26.88	-38.76	11.88	-39.43	8.1	1.44	3.01	0	P
		5965.5	-36.63	-29.63	-7	-49.21	8.1	1.47	3.01	0	P
		5895	-46.56	-41.56	-5	-59.1	8.1	1.43	3.01	0	A
		5925.75	-49.15	-22.15	-27	-61.71	8.1	1.45	3.01	0	A

WIFI Ant. 5	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11a CH 177 5885MHz		5617.7	-39.37	-12.37	-27	-51.9	8.1	1.42	3.01	0	P
		5682.895	-38.91	-36.29	-2.62	-51.42	8.1	1.4	3.01	0	P
		5712.985	-37.85	-51.49	13.64	-50.34	8.1	1.38	3.01	0	P
		5723.015	-38.91	-61.39	22.48	-51.38	8.1	1.36	3.01	0	P
	*	5885	20.79	-	-	8.26	8.1	1.42	3.01	0	P
	*	5885	9.16	-	-	-3.37	8.1	1.42	3.01	0	A
		5895	-0.5	-15.5	15	-13.04	8.1	1.43	3.01	0	P
		5930	-34.14	-27.14	-7	-46.7	8.1	1.45	3.01	0	P
		5895	-29.7	-24.7	-5	-42.24	8.1	1.43	3.01	0	A
		5925	-47.93	-20.93	-27	-60.49	8.1	1.45	3.01	0	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11a (Harmonic)

WIFI Ant. 5	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11a		11650	-65.82	-44.62	-21.2	-79.83	8.1	2.9	3.01	0	P
CH 169		17535	-63.63	-36.63	-27	-78.68	8.1	3.94	3.01	0	P
5845MHz		23380	-60.69	-33.69	-27	-78.43	8.1	6.63	3.01	0	P
802.11a		11730	-64.09	-42.89	-21.2	-78.12	8.1	2.92	3.01	0	P
CH 173		17595	-63.33	-36.33	-27	-78.4	8.1	3.96	3.01	0	P
5865MHz		23460	-61.52	-34.52	-27	-79.28	8.1	6.65	3.01	0	P
802.11a		11770.4	-65.64	-44.44	-21.2	-79.67	8.1	2.92	3.01	0	P
CH 177		17655	-60.89	-33.89	-27	-75.97	8.1	3.97	3.01	0	P
5885MHz		23540	-60	-33	-27	-77.77	8.1	6.66	3.01	0	P
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE20 Full (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
5		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
		5626.255	-38.81	-11.81	-27	-51.33	8.1	1.41	3.01	0	P
		5674.045	-38.81	-29.64	-9.17	-51.32	8.1	1.4	3.01	0	P
		5717.705	-38.34	-53.3	14.96	-50.82	8.1	1.37	3.01	0	P
802.11ax		5725.08	-38.03	-77.03	39	-50.5	8.1	1.36	3.01	0	P
HE20 Full	*	5845	21.53	-	-	9.08	8.1	1.34	3.01	0	P
CH 169	*	5845	9.01	-	-	-3.44	8.1	1.34	3.01	0	A
5845MHz		5914	-34.75	-35.8	1.05	-47.31	8.1	1.45	3.01	0	P
		5934.5	-36.9	-29.9	-7	-49.47	8.1	1.46	3.01	0	P
		5895	-48.54	-43.54	-5	-61.08	8.1	1.43	3.01	0	A
		5925.25	-49.73	-22.73	-27	-62.29	8.1	1.45	3.01	0	A
		5648.085	-38.6	-11.6	-27	-51.11	8.1	1.4	3.01	0	P
		5697.35	-38.13	-46.18	8.05	-50.63	8.1	1.39	3.01	0	P
		5712.69	-38.19	-51.75	13.56	-50.68	8.1	1.38	3.01	0	P
802.11ax		5724.49	-37.52	-63.36	25.84	-49.99	8.1	1.36	3.01	0	P
HE20 Full	*	5865	21.49	-	-	9.01	8.1	1.37	3.01	0	P
CH 173	*	5865	9.4	-	-	-3.08	8.1	1.37	3.01	0	A
5865MHz		5896.5	-25.5	-39.4	13.9	-38.04	8.1	1.43	3.01	0	P
		5925.5	-36.7	-29.7	-7	-49.26	8.1	1.45	3.01	0	P
		5895	-46.13	-41.13	-5	-58.67	8.1	1.43	3.01	0	A
		5925	-49.17	-22.17	-27	-61.73	8.1	1.45	3.01	0	A

WIFI Ant. 5	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
		5643.365	-38.29	-11.29	-27	-50.81	8.1	1.41	3.01	0	P
		5685.55	-37.86	-37.2	-0.66	-50.36	8.1	1.39	3.01	0	P
		5715.935	-36.77	-51.23	14.46	-49.25	8.1	1.37	3.01	0	P
802.11ax		5724.785	-38.69	-65.2	26.51	-51.16	8.1	1.36	3.01	0	P
HE20 Full	*	5885	22.48	-	-	9.95	8.1	1.42	3.01	0	P
CH 177	*	5885	10.21	-	-	-2.32	8.1	1.42	3.01	0	A
5885MHz		5895	12.24	-2.76	15	-0.3	8.1	1.43	3.01	0	P
		5942	-22.63	-15.63	-7	-35.2	8.1	1.46	3.01	0	P
		5895	-14.19	-9.19	-5	-26.73	8.1	1.43	3.01	0	A
		5925	-47	-20	-27	-59.56	8.1	1.45	3.01	0	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE20 Full (Harmonic)

WIFI Ant. 5	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11ax		11690	-65.4	-44.2	-21.2	-79.42	8.1	2.91	3.01	0	P
HE20 Full		17535	-62.37	-35.37	-27	-77.42	8.1	3.94	3.01	0	P
CH 169		23380	-60.35	-33.35	-27	-78.09	8.1	6.63	3.01	0	P
5845MHz											
802.11ax		11730	-65.55	-44.35	-21.2	-79.58	8.1	2.92	3.01	0	P
HE20 Full		17595	-62.57	-35.57	-27	-77.64	8.1	3.96	3.01	0	P
CH 173		23460	-60.82	-33.82	-27	-78.58	8.1	6.65	3.01	0	P
5865MHz											
802.11ax		7062	-53.79	-26.79	-27	-67.56	8.1	2.66	3.01	0	P
HE20 Full		11770	-65.95	-44.75	-21.2	-79.98	8.1	2.92	3.01	0	P
CH 177		17655	-61.17	-34.17	-27	-76.25	8.1	3.97	3.01	0	P
5885MHz											
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE20 Partial 26 (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
5		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE20 Partial 26/0 CH 169 5845MHz		5635.695	-38.88	-11.88	-27	-51.4	8.1	1.41	3.01	0	P
		5651.92	-39.84	-14.27	-25.57	-52.35	8.1	1.4	3.01	0	P
		5706.79	-38.34	-50.24	11.9	-50.83	8.1	1.38	3.01	0	P
		5723.015	-37.43	-59.91	22.48	-49.9	8.1	1.36	3.01	0	P
	*	5845	22.44	-	-	9.99	8.1	1.34	3.01	0	P
	*	5845	10.67	-	-	-1.78	8.1	1.34	3.01	0	A
		5923.25	-38.15	-32.43	-5.72	-50.71	8.1	1.45	3.01	0	P
		5937.75	-35.96	-28.96	-7	-48.53	8.1	1.46	3.01	0	P
		5923.5	-50.23	-24.33	-25.9	-62.79	8.1	1.45	3.01	0	A
		5925.75	-50.24	-23.24	-27	-62.8	8.1	1.45	3.01	0	A
802.11ax HE20 Partial 26/4 CH 173 5865MHz		5644.545	-38.42	-11.42	-27	-50.93	8.1	1.4	3.01	0	P
		5683.19	-37.87	-35.47	-2.4	-50.38	8.1	1.4	3.01	0	P
		5702.955	-37.88	-48.71	10.83	-50.37	8.1	1.38	3.01	0	P
		5721.245	-39.15	-57.59	18.44	-51.63	8.1	1.37	3.01	0	P
	*	5865	22.01	-	-	9.53	8.1	1.37	3.01	0	P
	*	5865	11.2	-	-	-1.28	8.1	1.37	3.01	0	A
		5917.25	-35.89	-34.56	-1.33	-48.45	8.1	1.45	3.01	0	P
		5960	-36.13	-29.13	-7	-48.71	8.1	1.47	3.01	0	P
		5895.25	-49.65	-44.47	-5.18	-62.19	8.1	1.43	3.01	0	A
		5925.5	-50.1	-23.1	-27	-62.66	8.1	1.45	3.01	0	A

WIFI Ant. 5	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11ax HE20 Partial 26/8 CH 177 5885MHz		5633.04	-38.72	-11.72	-27	-51.24	8.1	1.41	3.01	0	P
		5687.91	-37.67	-38.75	1.08	-50.17	8.1	1.39	3.01	0	P
		5716.23	-38.06	-52.61	14.55	-50.54	8.1	1.37	3.01	0	P
		5723.31	-38.54	-61.69	23.15	-51.01	8.1	1.36	3.01	0	P
	*	5885	23.11	-	-	10.58	8.1	1.42	3.01	0	P
	*	5885	11.11	-	-	-1.42	8.1	1.42	3.01	0	A
		5895	12.84	-2.16	15	0.3	8.1	1.43	3.01	0	P
		5926.75	-35.98	-28.98	-7	-48.54	8.1	1.45	3.01	0	P
		5895	-13.82	-8.82	-5	-26.36	8.1	1.43	3.01	0	A
		5926.25	-49.37	-22.37	-27	-61.93	8.1	1.45	3.01	0	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE20 Partial 26 (Harmonic)

WIFI Ant. 5	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11ax HE20 Partial 26/0 CH 169 5845MHz		11690	-63.95	-42.75	-21.2	-77.97	8.1	2.91	3.01	0	P
		17535	-62.06	-35.06	-27	-77.11	8.1	3.94	3.01	0	P
802.11ax HE20 Partial 26/4 CH 173 5865MHz		11730	-65.77	-44.57	-21.2	-79.8	8.1	2.92	3.01	0	P
		17595	-61.58	-34.58	-27	-76.65	8.1	3.96	3.01	0	P
802.11ax HE20 Partial 26/8 CH 177 5885MHz		11770	-65.09	-43.89	-21.2	-79.12	8.1	2.92	3.01	0	P
		17655	-58.55	-31.55	-27	-73.63	8.1	3.97	3.01	0	P
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE20 Partial 52 (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
5		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE20 Partial 52/37 CH 177 5885MHz		5648.38	-37.6	-10.6	-27	-50.11	8.1	1.4	3.01	0	P
		5674.045	-37.68	-28.51	-9.17	-50.19	8.1	1.4	3.01	0	P
		5712.395	-38.09	-51.56	13.47	-50.58	8.1	1.38	3.01	0	P
		5721.245	-38.13	-56.57	18.44	-50.61	8.1	1.37	3.01	0	P
	*	5885	22.95	-	-	10.42	8.1	1.42	3.01	0	P
	*	5885	10.86	-	-	-1.67	8.1	1.42	3.01	0	A
		5895	12.7	-2.3	15	0.16	8.1	1.43	3.01	0	P
		5938.75	-35.06	-28.06	-7	-47.63	8.1	1.46	3.01	0	P
		5895	-13.93	-8.93	-5	-26.47	8.1	1.43	3.01	0	A
		5925.25	-48.98	-21.98	-27	-61.54	8.1	1.45	3.01	0	A

Remark

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

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE20 Partial 106 (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
5		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE20 Partial 106/53 CH 177 5885MHz		5615.34	-38.62	-11.62	-27	-51.15	8.1	1.42	3.01	0	P
		5652.215	-39.94	-14.59	-25.35	-52.45	8.1	1.4	3.01	0	P
		5706.2	-37.04	-48.78	11.74	-49.53	8.1	1.38	3.01	0	P
		5722.13	-37.45	-57.91	20.46	-49.93	8.1	1.37	3.01	0	P
	*	5885	22.18	-	-	9.65	8.1	1.42	3.01	0	P
	*	5885	12.44	-	-	-0.09	8.1	1.42	3.01	0	A
		5895	12.23	-2.77	15	-0.31	8.1	1.43	3.01	0	P
		5926	-35.18	-28.18	-7	-47.74	8.1	1.45	3.01	0	P
		5895	-13.32	-8.32	-5	-25.86	8.1	1.43	3.01	0	A
		5925	-48.98	-21.98	-27	-61.54	8.1	1.45	3.01	0	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE20 Partial 242 (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
5		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE20 Partial 242/61 CH 177 5885MHz		5647.79	-38.42	-11.42	-27	-50.93	8.1	1.4	3.01	0	P
		5665.49	-38.17	-22.67	-15.5	-50.68	8.1	1.4	3.01	0	P
		5705.02	-38.48	-49.89	11.41	-50.97	8.1	1.38	3.01	0	P
		5724.785	-38.18	-64.69	26.51	-50.65	8.1	1.36	3.01	0	P
	*	5885	23.42	-	-	10.89	8.1	1.42	3.01	0	P
	*	5885	10.18	-	-	-2.35	8.1	1.42	3.01	0	A
		5895	12.85	-2.15	15	0.31	8.1	1.43	3.01	0	P
		5926.5	-19.04	-12.04	-7	-31.6	8.1	1.45	3.01	0	P
		5895	-14.33	-9.33	-5	-26.87	8.1	1.43	3.01	0	A
		5925	-47.19	-20.19	-27	-59.75	8.1	1.45	3.01	0	A

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

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE40 Full (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
5		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
		5646.315	-30.71	-3.71	-27	-43.22	8.1	1.4	3.01	0	P
		5653.69	-31.84	-7.58	-24.26	-44.35	8.1	1.4	3.01	0	P
		5716.525	-24.79	-39.42	14.63	-37.27	8.1	1.37	3.01	0	P
802.11ax		5722.13	-24.06	-44.52	20.46	-36.54	8.1	1.37	3.01	0	P
HE40 Full	*	5835	20.82	-	-	8.38	8.1	1.33	3.01	0	P
CH 167	*	5835	8.91	-	-	-3.53	8.1	1.33	3.01	0	A
5835MHz		5920.25	-17.88	-14.36	-3.52	-30.44	8.1	1.45	3.01	0	P
		5931.25	-18.89	-11.89	-7	-31.46	8.1	1.46	3.01	0	P
		5923.25	-46.15	-20.43	-25.72	-58.71	8.1	1.45	3.01	0	A
		5927	-46.21	-19.21	-27	-58.77	8.1	1.45	3.01	0	A
		5628.025	-38.69	-11.69	-27	-51.21	8.1	1.41	3.01	0	P
		5655.165	-38.09	-14.93	-23.16	-50.6	8.1	1.4	3.01	0	P
		5719.475	-26.88	-42.33	15.45	-39.36	8.1	1.37	3.01	0	P
802.11ax		5723.605	-26.69	-50.51	23.82	-39.16	8.1	1.36	3.01	0	P
HE40 Full	*	5875	20.52	-	-	8.02	8.1	1.39	3.01	0	P
CH 175	*	5875	8.14	-	-	-4.36	8.1	1.39	3.01	0	A
5875MHz		5921.5	-11.2	-6.76	-4.44	-23.76	8.1	1.45	3.01	0	P
		5944	-13.26	-6.26	-7	-25.83	8.1	1.46	3.01	0	P
		5895	-15.72	-10.72	-5	-28.26	8.1	1.43	3.01	0	A
		5925	-39.79	-12.79	-27	-52.35	8.1	1.45	3.01	0	A

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

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE40 Full (Harmonic)

WIFI Ant. 5	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11ax		7779.981	-39.96	-12.96	-27	-53.7	8.1	2.63	3.01	0	P
HE40 Full		11670	-64.51	-43.31	-21.2	-78.52	8.1	2.9	3.01	0	P
CH 167		17505	-61.58	-34.58	-27	-76.63	8.1	3.94	3.01	0	P
5835MHz		22340	-60.49	-39.29	-21.2	-77.93	8.1	6.33	3.01	0	P
802.11ax		7050	-55	-28	-27	-68.78	8.1	2.67	3.01	0	P
HE40 Full		11672.55	-65.75	-44.55	-21.2	-79.76	8.1	2.9	3.01	0	P
CH 175		17505	-61.77	-34.77	-27	-76.82	8.1	3.94	3.01	0	P
5875MHz		23340	-60.65	-33.65	-27	-78.39	8.1	6.63	3.01	0	P
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE40 Partial 484 (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
5		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE40 Partial 484/65 CH 167 5835MHz		5647.79	-30.74	-3.74	-27	-43.25	8.1	1.4	3.01	0	P
		5651.625	-30.16	-4.37	-25.79	-42.67	8.1	1.4	3.01	0	P
		5705.315	-25.52	-37.01	11.49	-38.01	8.1	1.38	3.01	0	P
		5723.605	-22.14	-45.96	23.82	-34.61	8.1	1.36	3.01	0	P
	*	5835	22.79	-	-	10.35	8.1	1.33	3.01	0	P
	*	5835	8.96	-	-	-3.48	8.1	1.33	3.01	0	A
		5924.25	-18.32	-11.87	-6.45	-30.88	8.1	1.45	3.01	0	P
		5928.5	-19.38	-12.38	-7	-31.94	8.1	1.45	3.01	0	P
		5921.5	-45.23	-20.79	-24.44	-57.79	8.1	1.45	3.01	0	A
		5927.25	-45.56	-18.56	-27	-58.12	8.1	1.45	3.01	0	A
802.11ax HE40 Partial 484/65 CH 175 5875MHz		5646.905	-36.58	-9.58	-27	-49.09	8.1	1.4	3.01	0	P
		5694.4	-29.68	-35.55	5.87	-42.18	8.1	1.39	3.01	0	P
		5714.755	-25.43	-39.56	14.13	-37.92	8.1	1.38	3.01	0	P
		5721.245	-23.76	-42.2	18.44	-36.24	8.1	1.37	3.01	0	P
	*	5875	22.23	-	-	9.73	8.1	1.39	3.01	0	P
	*	5875	8.35	-	-	-4.15	8.1	1.39	3.01	0	A
		5924.75	-11.79	-4.97	-6.82	-24.35	8.1	1.45	3.01	0	P
		5927	-10.18	-3.18	-7	-22.74	8.1	1.45	3.01	0	P
		5895	-15.45	-10.45	-5	-27.99	8.1	1.43	3.01	0	A
		5925	-39	-12	-27	-51.56	8.1	1.45	3.01	0	A

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

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE80 Full (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
5		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE80 Full CH 171 5855MHz		5643.66	-32.67	-5.67	-27	-45.19	8.1	1.41	3.01	0	P
		5657.23	-30.21	-8.58	-21.63	-42.72	8.1	1.4	3.01	0	P
		5707.38	-22.54	-34.61	12.07	-35.03	8.1	1.38	3.01	0	P
		5720.655	-19.25	-36.34	17.09	-31.73	8.1	1.37	3.01	0	P
	*	5855	16.78	-	-	4.31	8.1	1.36	3.01	0	P
	*	5855	4.55	-	-	-7.92	8.1	1.36	3.01	0	A
		5920.25	-18.4	-14.88	-3.52	-30.96	8.1	1.45	3.01	0	P
		5928.75	-18.93	-11.93	-7	-31.49	8.1	1.45	3.01	0	P
		5922	-35.43	-10.63	-24.8	-47.99	8.1	1.45	3.01	0	A
		5928.75	-35.17	-8.17	-27	-47.73	8.1	1.45	3.01	0	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE80 Full (Harmonic)

WIFI Ant. 5	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11ax		11710	-66.22	-45.02	-21.2	-80.25	8.1	2.92	3.01	0	P
HE80 Full		17565	-62.5	-35.5	-27	-77.56	8.1	3.95	3.01	0	P
CH 171		23420	-60.74	-33.74	-27	-78.49	8.1	6.64	3.01	0	P
5855MHz											
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE80 Partial 996 (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
5		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE80 Partial 996/67 CH 171 5855MHz		5608.26	-36.14	-9.14	-27	-48.67	8.1	1.42	3.01	0	P
		5680.24	-29.16	-24.58	-4.58	-41.67	8.1	1.4	3.01	0	P
		5715.935	-26.36	-40.82	14.46	-38.84	8.1	1.37	3.01	0	P
		5723.015	-26.57	-49.05	22.48	-39.04	8.1	1.36	3.01	0	P
	*	5855	18.18	-	-	5.71	8.1	1.36	3.01	0	P
	*	5855	4.86	-	-	-7.61	8.1	1.36	3.01	0	A
		5895	-1.94	-16.94	15	-14.48	8.1	1.43	3.01	0	P
		5941.5	-17.89	-10.89	-7	-30.46	8.1	1.46	3.01	0	P
		5895	-20.64	-15.64	-5	-33.18	8.1	1.43	3.01	0	A
		5925.5	-34.3	-7.3	-27	-46.86	8.1	1.45	3.01	0	A

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

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE160 Full (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
5		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE160 Full CH 163 5815MHz		5625.96	-29.55	-2.55	-27	-42.07	8.1	1.41	3.01	0	P
		5655.755	-28.08	-5.36	-22.72	-40.59	8.1	1.4	3.01	0	P
		5712.395	-31.05	-44.52	13.47	-43.54	8.1	1.38	3.01	0	P
		5725.08	-30.9	-69.9	39	-43.37	8.1	1.36	3.01	0	P
	*	5815	8.74	-	-	-3.67	8.1	1.3	3.01	0	P
	*	5815	-3.74	-	-	-16.15	8.1	1.3	3.01	0	A
		5895	-8.42	-23.42	15	-20.96	8.1	1.43	3.01	0	P
		5968	-27.08	-20.08	-7	-39.66	8.1	1.47	3.01	0	P
		5924	-48.12	-21.85	-26.27	-60.68	8.1	1.45	3.01	0	A
		5959	-47.45	-20.45	-27	-60.03	8.1	1.47	3.01	0	A

Remark

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

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE160 Full (Harmonic)

WIFI Ant. 5	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11ax		7753.314	-38.62	-11.62	-27	-52.36	8.1	2.63	3.01	0	P
HE160 Full		11630	-65.1	-43.9	-21.2	-79.11	8.1	2.9	3.01	0	P
CH 163		17445	-63.46	-36.46	-27	-78.49	8.1	3.92	3.01	0	P
5815MHz		23260	-61.57	-34.57	-27	-79.29	8.1	6.61	3.01	0	P
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE160 Partial 1992 (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
5		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE160 Partial 1992/68 CH 163 5815MHz		5644.84	-29.36	-2.36	-27	-41.87	8.1	1.4	3.01	0	P
		5652.805	-28.52	-3.6	-24.92	-41.03	8.1	1.4	3.01	0	P
		5701.185	-28.63	-38.96	10.33	-41.13	8.1	1.39	3.01	0	P
		5725.08	-29.95	-68.95	39	-42.42	8.1	1.36	3.01	0	P
	*	5815	9.59	-	-	-2.82	8.1	1.3	3.01	0	P
	*	5815	-2.94	-	-	-15.35	8.1	1.3	3.01	0	A
		5895	-4.76	-19.76	15	-17.3	8.1	1.43	3.01	0	P
		5953.25	-25.5	-18.5	-7	-38.08	8.1	1.47	3.01	0	P
		5895	-28.6	-23.6	-5	-41.14	8.1	1.43	3.01	0	A
		5939.5	-45.61	-18.61	-27	-58.18	8.1	1.46	3.01	0	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

Emission above 25GHz

5GHz WIFI 802.11ax HE20 Partial 242 (SHF)

WIFI Ant. 5	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
5GHz 802.11ax HE20 Partial 242 SHF		39944	-39.22	-18.02	-21.2	-70.21	8.1	19.88	3.01	0	P
		39944	-50.43	-9.23	-41.2	-81.42	8.1	19.88	3.01	0	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

Emission below 1GHz

5GHz WIFI 802.11ax HE20 Partial 242 (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
5		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
5GHz 802.11ax HE20 Partial 242 LF		64.56	-75.12	-19.92	-55.2	-91.16	8.1	0.23	3.01	4.7	P
		196.59	-73.95	-22.25	-51.7	-90.19	8.1	0.43	3.01	4.7	P
		243.3	-73.55	-24.35	-49.2	-89.83	8.1	0.47	3.01	4.7	P
		332.2	-73.21	-24.01	-49.2	-89.56	8.1	0.54	3.01	4.7	P
		878.9	-71.81	-22.61	-49.2	-88.63	8.1	1.01	3.01	4.7	P
		973.4	-72	-30.8	-41.2	-89.01	8.1	1.2	3.01	4.7	P
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11a (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
4		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11a CH 169 5845MHz		5601.77	-38.53	-11.53	-27	-51.06	8.1	1.42	3.01	0	P
		5652.51	-39.12	-13.99	-25.13	-51.63	8.1	1.4	3.01	0	P
		5705.61	-36.71	-48.28	11.57	-49.2	8.1	1.38	3.01	0	P
		5724.785	-37.54	-64.05	26.51	-50.01	8.1	1.36	3.01	0	P
	*	5845	20.31	-	-	7.86	8.1	1.34	3.01	0	P
	*	5845	8.62	-	-	-3.83	8.1	1.34	3.01	0	A
		5923.75	-37.06	-30.97	-6.09	-49.62	8.1	1.45	3.01	0	P
		5945.5	-36.25	-29.25	-7	-48.82	8.1	1.46	3.01	0	P
		5923.75	-49.32	-23.23	-26.09	-61.88	8.1	1.45	3.01	0	A
		5925.25	-49.33	-22.33	-27	-61.89	8.1	1.45	3.01	0	A
802.11a CH 173 5865MHz		5640.71	-38.49	-11.49	-27	-51.01	8.1	1.41	3.01	0	P
		5651.035	-39.27	-13.04	-26.23	-51.78	8.1	1.4	3.01	0	P
		5719.18	-38.82	-54.19	15.37	-51.3	8.1	1.37	3.01	0	P
		5720.655	-38.83	-55.92	17.09	-51.31	8.1	1.37	3.01	0	P
	*	5865	20.95	-	-	8.47	8.1	1.37	3.01	0	P
	*	5865	8.27	-	-	-4.21	8.1	1.37	3.01	0	A
		5913.75	-34.84	-36.08	1.24	-47.4	8.1	1.45	3.01	0	P
		5968	-36.43	-29.43	-7	-49.01	8.1	1.47	3.01	0	P
		5895	-47.79	-42.79	-5	-60.33	8.1	1.43	3.01	0	A
		5925.75	-49.25	-22.25	-27	-61.81	8.1	1.45	3.01	0	A

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11a CH 177 5885MHz		5611.21	-37.66	-10.66	-27	-50.19	8.1	1.42	3.01	0	P
		5680.535	-38.48	-34.12	-4.36	-50.99	8.1	1.4	3.01	0	P
		5702.07	-37.63	-48.21	10.58	-50.13	8.1	1.39	3.01	0	P
		5721.245	-38.97	-57.41	18.44	-51.45	8.1	1.37	3.01	0	P
	*	5885	19.69	-	-	7.16	8.1	1.42	3.01	0	P
	*	5885	8.04	-	-	-4.49	8.1	1.42	3.01	0	A
		5895	-1.15	-16.15	15	-13.69	8.1	1.43	3.01	0	P
		5961.25	-30.73	-23.73	-7	-43.31	8.1	1.47	3.01	0	P
		5895	-31.49	-26.49	-5	-44.03	8.1	1.43	3.01	0	A
		5925	-49.22	-22.22	-27	-61.78	8.1	1.45	3.01	0	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11a (Harmonic)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11a		11690	-66.02	-44.82	-21.2	-80.04	8.1	2.91	3.01	0	P
CH 169		17532.7	-62.41	-35.41	-27	-77.46	8.1	3.94	3.01	0	P
5845MHz											
802.11a		11730	-65.18	-43.98	-21.2	-79.21	8.1	2.92	3.01	0	P
CH 173		17595	-62.5	-35.5	-27	-77.57	8.1	3.96	3.01	0	P
5865MHz											
802.11a		11770.4	-65.61	-44.41	-21.2	-79.64	8.1	2.92	3.01	0	P
CH 177		17655	-60.9	-33.9	-27	-75.98	8.1	3.97	3.01	0	P
5885MHz											
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE20 Full (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
4		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
		5641.3	-38.39	-11.39	-27	-50.91	8.1	1.41	3.01	0	P
		5698.235	-37.81	-46.51	8.7	-50.31	8.1	1.39	3.01	0	P
		5709.74	-38.07	-50.8	12.73	-50.56	8.1	1.38	3.01	0	P
802.11ax		5722.72	-38.2	-60	21.8	-50.67	8.1	1.36	3.01	0	P
HE20 Full	*	5845	21.6	-	-	9.15	8.1	1.34	3.01	0	P
CH 169	*	5845	8.67	-	-	-3.78	8.1	1.34	3.01	0	A
5845MHz		5904.75	-35.51	-43.35	7.84	-48.06	8.1	1.44	3.01	0	P
		5928	-36.45	-29.45	-7	-49.01	8.1	1.45	3.01	0	P
		5895.25	-48.86	-43.68	-5.18	-61.4	8.1	1.43	3.01	0	A
		5925.25	-49.67	-22.67	-27	-62.23	8.1	1.45	3.01	0	A
		5634.515	-39	-12	-27	-51.52	8.1	1.41	3.01	0	P
		5692.335	-38.26	-42.61	4.35	-50.76	8.1	1.39	3.01	0	P
		5704.725	-38.46	-49.79	11.33	-50.95	8.1	1.38	3.01	0	P
802.11ax		5720.36	-37.49	-53.91	16.42	-49.97	8.1	1.37	3.01	0	P
HE20 Full	*	5865	20.87	-	-	8.39	8.1	1.37	3.01	0	P
CH 173	*	5865	8.33	-	-	-4.15	8.1	1.37	3.01	0	A
5865MHz		5896	-27.73	-42	14.27	-40.27	8.1	1.43	3.01	0	P
		5935.75	-35.83	-28.83	-7	-48.4	8.1	1.46	3.01	0	P
		5895	-46.74	-41.74	-5	-59.28	8.1	1.43	3.01	0	A
		5925	-49.26	-22.26	-27	-61.82	8.1	1.45	3.01	0	A

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
		5644.84	-37.76	-10.76	-27	-50.27	8.1	1.4	3.01	0	P
		5656.64	-37.99	-15.92	-22.07	-50.5	8.1	1.4	3.01	0	P
		5714.46	-37.04	-51.09	14.05	-49.53	8.1	1.38	3.01	0	P
802.11ax		5724.785	-38.6	-65.11	26.51	-51.07	8.1	1.36	3.01	0	P
HE20 Full	*	5885	22.31	-	-	9.78	8.1	1.42	3.01	0	P
CH 177	*	5885	9.03	-	-	-3.5	8.1	1.42	3.01	0	A
5885MHz		5895	12.16	-2.84	15	-0.38	8.1	1.43	3.01	0	P
		5928.5	-34.22	-27.22	-7	-46.78	8.1	1.45	3.01	0	P
		5895	-14.18	-9.18	-5	-26.72	8.1	1.43	3.01	0	A
		5925	-47.64	-20.64	-27	-60.2	8.1	1.45	3.01	0	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE20 Full (Harmonic)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11ax		8767.5	-60.33	-33.33	-27	-74.18	8.1	2.74	3.01	0	P
HE20 Full		11690	-66.49	-45.29	-21.2	-80.51	8.1	2.91	3.01	0	P
CH 169		17535	-62.06	-35.06	-27	-77.11	8.1	3.94	3.01	0	P
5845MHz											
802.11ax		8211	-60.54	-39.34	-21.2	-74.33	8.1	2.68	3.01	0	P
HE20 Full		11730	-65.38	-44.18	-21.2	-79.41	8.1	2.92	3.01	0	P
CH 173		17595	-60.74	-33.74	-27	-75.81	8.1	3.96	3.01	0	P
5865MHz											
802.11ax		7062	-56.5	-29.5	-27	-70.27	8.1	2.66	3.01	0	P
HE20 Full		8239	-60.02	-38.82	-21.2	-73.81	8.1	2.68	3.01	0	P
CH 177		11770	-65.64	-44.44	-21.2	-79.67	8.1	2.92	3.01	0	P
5885MHz		17655	-62.36	-35.36	-27	-77.44	8.1	3.97	3.01	0	P
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE20 Partial 26 (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
4		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE20 Partial 26/0 CH 169 5845MHz		5623.01	-37.92	-10.92	-27	-50.44	8.1	1.41	3.01	0	P
		5691.155	-38.51	-41.99	3.48	-51.01	8.1	1.39	3.01	0	P
		5711.805	-38.41	-51.72	13.31	-50.9	8.1	1.38	3.01	0	P
		5723.605	-38.96	-62.78	23.82	-51.43	8.1	1.36	3.01	0	P
	*	5845	21.55	-	-	9.1	8.1	1.34	3.01	0	P
	*	5845	9.93	-	-	-2.52	8.1	1.34	3.01	0	A
		5898.25	-36.71	-49.32	12.61	-49.26	8.1	1.44	3.01	0	P
		5929.5	-37.11	-30.11	-7	-49.67	8.1	1.45	3.01	0	P
		5900.25	-50.23	-41.37	-8.86	-62.78	8.1	1.44	3.01	0	A
		5927.5	-50.49	-23.49	-27	-63.05	8.1	1.45	3.01	0	A
802.11ax HE20 Partial 26/4 CH 173 5865MHz		5622.715	-38.97	-11.97	-27	-51.49	8.1	1.41	3.01	0	P
		5689.975	-38.02	-40.63	2.61	-50.52	8.1	1.39	3.01	0	P
		5711.805	-38.38	-51.69	13.31	-50.87	8.1	1.38	3.01	0	P
		5722.72	-39.01	-60.81	21.8	-51.48	8.1	1.36	3.01	0	P
	*	5865	21.52	-	-	9.04	8.1	1.37	3.01	0	P
	*	5865	10.34	-	-	-2.14	8.1	1.37	3.01	0	A
		5920.25	-37.18	-33.66	-3.52	-49.74	8.1	1.45	3.01	0	P
		5947.25	-37.41	-30.41	-7	-49.98	8.1	1.46	3.01	0	P
		5895.75	-50.03	-44.48	-5.55	-62.57	8.1	1.43	3.01	0	A
		5925.25	-50.34	-23.34	-27	-62.9	8.1	1.45	3.01	0	A

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11ax HE20 Partial 26/8 CH 177 5885MHz		5606.49	-37.48	-10.48	-27	-50.01	8.1	1.42	3.01	0	P
		5692.63	-38.29	-42.86	4.57	-50.79	8.1	1.39	3.01	0	P
		5710.625	-37.53	-50.51	12.98	-50.02	8.1	1.38	3.01	0	P
		5722.13	-37.92	-58.38	20.46	-50.4	8.1	1.37	3.01	0	P
	*	5885	23.42	-	-	10.89	8.1	1.42	3.01	0	P
	*	5885	10.68	-	-	-1.85	8.1	1.42	3.01	0	A
		5895	13.21	-1.79	15	0.67	8.1	1.43	3.01	0	P
		5935.25	-35.94	-28.94	-7	-48.51	8.1	1.46	3.01	0	P
		5895	-13.94	-8.94	-5	-26.48	8.1	1.43	3.01	0	A
		5925.5	-49.75	-22.75	-27	-62.31	8.1	1.45	3.01	0	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE20 Partial 26 (Harmonic)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11ax		8767.5	-61.29	-34.29	-27	-75.14	8.1	2.74	3.01	0	P
HE20		11690	-67.07	-45.87	-21.2	-81.09	8.1	2.91	3.01	0	P
Partial		17535	-63.1	-36.1	-27	-78.15	8.1	3.94	3.01	0	P
26/0											
CH 169											
5845MHz											
802.11ax		11730	-64.41	-43.21	-21.2	-78.44	8.1	2.92	3.01	0	P
HE20		17595	-62.2	-35.2	-27	-77.27	8.1	3.96	3.01	0	P
Partial											
26/4											
CH 173											
5865MHz											
802.11ax		8239	-61.34	-40.14	-21.2	-75.13	8.1	2.68	3.01	0	P
HE20		11770	-66.3	-45.1	-21.2	-80.33	8.1	2.92	3.01	0	P
Partial		17655	-61.84	-34.84	-27	-76.92	8.1	3.97	3.01	0	P
26/8											
CH 177											
5885MHz											
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE20 Partial 52 (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
4		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE20 Partial 52/37 CH 177 5885MHz		5625.37	-38.67	-11.67	-27	-51.19	8.1	1.41	3.01	0	P
		5664.015	-37.41	-20.81	-16.6	-49.92	8.1	1.4	3.01	0	P
		5712.395	-37.53	-51	13.47	-50.02	8.1	1.38	3.01	0	P
		5721.54	-37.88	-56.99	19.11	-50.36	8.1	1.37	3.01	0	P
	*	5885	23.69	-	-	11.16	8.1	1.42	3.01	0	P
	*	5885	10.89	-	-	-1.64	8.1	1.42	3.01	0	A
		5895	12.78	-2.22	15	0.24	8.1	1.43	3.01	0	P
		5934.25	-36.37	-29.37	-7	-48.94	8.1	1.46	3.01	0	P
		5895	-13.7	-8.7	-5	-26.24	8.1	1.43	3.01	0	A
		5925.25	-49.02	-22.02	-27	-61.58	8.1	1.45	3.01	0	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE20 Partial 106 (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
4		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE20 Partial 106/53 CH 177 5885MHz		5609.735	-38.91	-11.91	-27	-51.44	8.1	1.42	3.01	0	P
		5661.95	-38.09	-19.96	-18.13	-50.6	8.1	1.4	3.01	0	P
		5715.64	-38.11	-52.49	14.38	-50.6	8.1	1.38	3.01	0	P
		5724.49	-39.07	-64.91	25.84	-51.54	8.1	1.36	3.01	0	P
	*	5885	21.76	-	-	9.23	8.1	1.42	3.01	0	P
	*	5885	9.86	-	-	-2.67	8.1	1.42	3.01	0	A
		5895	11.73	-3.27	15	-0.81	8.1	1.43	3.01	0	P
		5931.25	-35.39	-28.39	-7	-47.96	8.1	1.46	3.01	0	P
		5895	-13.33	-8.33	-5	-25.87	8.1	1.43	3.01	0	A
		5925.25	-49.65	-22.65	-27	-62.21	8.1	1.45	3.01	0	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE20 Partial 242 (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
4		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE20 Partial 242/61 CH 177 5885MHz		5635.695	-38.91	-11.91	-27	-51.43	8.1	1.41	3.01	0	P
		5656.64	-38.29	-16.22	-22.07	-50.8	8.1	1.4	3.01	0	P
		5707.085	-38.18	-50.17	11.99	-50.67	8.1	1.38	3.01	0	P
		5720.065	-38.82	-54.57	15.75	-51.3	8.1	1.37	3.01	0	P
	*	5885	21.72	-	-	9.19	8.1	1.42	3.01	0	P
	*	5885	9.05	-	-	-3.48	8.1	1.42	3.01	0	A
		5926.25	-20.92	-13.92	-7	-33.48	8.1	1.45	3.01	0	P
		5895	-14.75	-9.75	-5	-27.29	8.1	1.43	3.01	0	P
		5925	-47.98	-20.98	-27	-60.54	8.1	1.45	3.01	0	A
		5635.695	-38.91	-11.91	-27	-51.43	8.1	1.41	3.01	0	A

Remark

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

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE40 Full (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
4		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
		5634.81	-35.86	-8.86	-27	-48.38	8.1	1.41	3.01	0	P
		5651.625	-34.22	-8.43	-25.79	-46.73	8.1	1.4	3.01	0	P
		5709.15	-20.04	-32.6	12.56	-32.53	8.1	1.38	3.01	0	P
802.11ax		5721.245	-24.93	-43.37	18.44	-37.41	8.1	1.37	3.01	0	P
HE40 Full	*	5835	21.03	-	-	8.59	8.1	1.33	3.01	0	P
CH 167	*	5835	8.66	-	-	-3.78	8.1	1.33	3.01	0	A
5835MHz		5923.5	-21.29	-15.39	-5.9	-33.85	8.1	1.45	3.01	0	P
		5925.75	-21.26	-14.26	-7	-33.82	8.1	1.45	3.01	0	P
		5895	-39.97	-34.97	-5	-52.51	8.1	1.43	3.01	0	A
		5925.25	-45.43	-18.43	-27	-57.99	8.1	1.45	3.01	0	A
		5600.59	-37.71	-10.71	-27	-50.24	8.1	1.42	3.01	0	P
		5686.73	-34.87	-35.08	0.21	-47.37	8.1	1.39	3.01	0	P
		5715.05	-33.17	-47.39	14.22	-45.66	8.1	1.38	3.01	0	P
802.11ax		5724.785	-32.97	-59.48	26.51	-45.44	8.1	1.36	3.01	0	P
HE40 Full	*	5875	20.41	-	-	7.91	8.1	1.39	3.01	0	P
CH 175	*	5875	7.59	-	-	-4.91	8.1	1.39	3.01	0	A
5875MHz		5895	3.83	-11.17	15	-8.71	8.1	1.43	3.01	0	P
		5926	-13.78	-6.78	-7	-26.34	8.1	1.45	3.01	0	P
		5895	-15.6	-10.6	-5	-28.14	8.1	1.43	3.01	0	A
		5925	-37.76	-10.76	-27	-50.32	8.1	1.45	3.01	0	A

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

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE40 Full (Harmonic)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11ax		7780	-44.27	-17.27	-27	-58.01	8.1	2.63	3.01	0	P
HE40 Full		11672.55	-65.33	-44.13	-21.2	-79.34	8.1	2.9	3.01	0	P
CH 167		17505	-63.18	-36.18	-27	-78.23	8.1	3.94	3.01	0	P
5835MHz											
802.11ax		8225	-61.25	-40.05	-21.2	-75.04	8.1	2.68	3.01	0	P
HE40 Full		11750	-65.82	-44.62	-21.2	-79.85	8.1	2.92	3.01	0	P
CH 175		17625	-61.34	-34.34	-27	-76.41	8.1	3.96	3.01	0	P
5875MHz											
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE40 Partial 484 (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
4		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE40 Partial 484/65 CH 167 5835MHz		5647.79	-33.1	-6.1	-27	-45.61	8.1	1.4	3.01	0	P
		5650.445	-33.76	-7.09	-26.67	-46.27	8.1	1.4	3.01	0	P
		5700.3	-27.93	-38.01	10.08	-40.43	8.1	1.39	3.01	0	P
		5724.195	-29.16	-54.33	25.17	-41.63	8.1	1.36	3.01	0	P
	*	5835	21.4	-	-	8.96	8.1	1.33	3.01	0	P
	*	5835	8.08	-	-	-4.36	8.1	1.33	3.01	0	A
		5923.5	-20.71	-14.81	-5.9	-33.27	8.1	1.45	3.01	0	P
		5927	-22.15	-15.15	-7	-34.71	8.1	1.45	3.01	0	P
		5895	-41.23	-36.23	-5	-53.77	8.1	1.43	3.01	0	A
		5925	-46.03	-19.03	-27	-58.59	8.1	1.45	3.01	0	A
802.11ax HE40 Partial 484/65 CH 175 5875MHz		5616.52	-37.78	-10.78	-27	-50.31	8.1	1.42	3.01	0	P
		5686.435	-32.65	-32.64	-0.01	-45.15	8.1	1.39	3.01	0	P
		5702.66	-34.68	-45.43	10.75	-47.18	8.1	1.39	3.01	0	P
		5720.36	-29.53	-45.95	16.42	-42.01	8.1	1.37	3.01	0	P
	*	5875	20.55	-	-	8.05	8.1	1.39	3.01	0	P
	*	5875	7.18	-	-	-5.32	8.1	1.39	3.01	0	A
		5924.5	-11.07	-4.44	-6.63	-23.63	8.1	1.45	3.01	0	P
		5926.25	-11.37	-4.37	-7	-23.93	8.1	1.45	3.01	0	P
		5895	-16.24	-11.24	-5	-28.78	8.1	1.43	3.01	0	A
		5925	-39.05	-12.05	-27	-51.61	8.1	1.45	3.01	0	A

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

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE80 Full (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
4		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE80 Full CH 171 5855MHz		5632.45	-36.32	-9.32	-27	-48.84	8.1	1.41	3.01	0	P
		5696.17	-35.09	-42.27	7.18	-47.59	8.1	1.39	3.01	0	P
		5706.79	-31.7	-43.6	11.9	-44.19	8.1	1.38	3.01	0	P
		5724.785	-32.85	-59.36	26.51	-45.32	8.1	1.36	3.01	0	P
	*	5855	16.07	-	-	3.6	8.1	1.36	3.01	0	P
	*	5855	3.26	-	-	-9.21	8.1	1.36	3.01	0	A
		5895	2.02	-12.98	15	-10.52	8.1	1.43	3.01	0	P
		5926	-22.79	-15.79	-7	-35.35	8.1	1.45	3.01	0	P
		5895	-20.84	-15.84	-5	-33.38	8.1	1.43	3.01	0	A
		5925	-36.49	-9.49	-27	-49.05	8.1	1.45	3.01	0	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE80 Full (Harmonic)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11ax		11710	-66.04	-44.84	-21.2	-80.07	8.1	2.92	3.01	0	P
HE80 Full		17565	-63.39	-36.39	-27	-78.45	8.1	3.95	3.01	0	P
CH 171											
5855MHz											
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE80 Partial 996 (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
4		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE80 Partial 996/67 CH 171 5855MHz		5629.5	-37.57	-10.57	-27	-50.09	8.1	1.41	3.01	0	P
		5696.17	-36.15	-43.33	7.18	-48.65	8.1	1.39	3.01	0	P
		5708.56	-30.99	-43.39	12.4	-43.48	8.1	1.38	3.01	0	P
		5724.785	-35.06	-61.57	26.51	-47.53	8.1	1.36	3.01	0	P
	*	5855	14.87	-	-	2.4	8.1	1.36	3.01	0	P
	*	5855	2.13	-	-	-10.34	8.1	1.36	3.01	0	A
		5895	1.86	-13.14	15	-10.68	8.1	1.43	3.01	0	P
		5925.25	-21.36	-14.36	-7	-33.92	8.1	1.45	3.01	0	P
		5895	-22.2	-17.2	-5	-34.74	8.1	1.43	3.01	0	A
		5925.5	-35.03	-8.03	-27	-47.59	8.1	1.45	3.01	0	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE160 Full (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
4		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE160 Full CH 163 5815MHz		5606.195	-29.96	-2.96	-27	-42.49	8.1	1.42	3.01	0	P
		5651.33	-28.85	-2.84	-26.01	-41.36	8.1	1.4	3.01	0	P
		5702.955	-30.18	-41.01	10.83	-42.67	8.1	1.38	3.01	0	P
		5720.36	-29.31	-45.73	16.42	-41.79	8.1	1.37	3.01	0	P
	*	5815	10.13	-	-	-2.28	8.1	1.3	3.01	0	P
	*	5815	-3.61	-	-	-16.02	8.1	1.3	3.01	0	A
		5895	-8.29	-23.29	15	-20.83	8.1	1.43	3.01	0	P
		5966	-27.32	-20.32	-7	-39.9	8.1	1.47	3.01	0	P
		5895	-28.62	-23.62	-5	-41.16	8.1	1.43	3.01	0	A
		5964	-46.8	-19.8	-27	-59.38	8.1	1.47	3.01	0	A

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

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE160 Full (Harmonic)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
802.11ax		7753.3	-45.66	-18.66	-27	-59.4	8.1	2.63	3.01	0	P
HE160 Full		11630	-66.33	-45.13	-21.2	-80.34	8.1	2.9	3.01	0	P
CH 163		17445	-61.93	-34.93	-27	-76.96	8.1	3.92	3.01	0	P
5815MHz											
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE160 Partial 1992 (Band Edge)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
4		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11ax HE160 Partial 1992/68 CH 163 5815MHz		5649.855	-29.69	-2.69	-27	-42.2	8.1	1.4	3.01	0	P
		5656.345	-30.86	-8.57	-22.29	-43.37	8.1	1.4	3.01	0	P
		5700.005	-25.8	-35.8	10	-38.3	8.1	1.39	3.01	0	P
		5724.49	-24.61	-50.45	25.84	-37.08	8.1	1.36	3.01	0	P
	*	5815	8.75	-	-	-3.66	8.1	1.3	3.01	0	P
	*	5815	-4.48	-	-	-16.89	8.1	1.3	3.01	0	A
		5895	-7.08	-22.08	15	-19.62	8.1	1.43	3.01	0	P
		5964	-24.41	-17.41	-7	-36.99	8.1	1.47	3.01	0	P
		5895	-28.94	-23.94	-5	-41.48	8.1	1.43	3.01	0	A
		5925	-41.07	-14.07	-27	-53.63	8.1	1.45	3.01	0	A

Remark

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

Emission above 25GHz

WIFI 802.11ax HE20 Full (SHF)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBm)	Over Limit (dB)	Limit Line (dBm)	Read Level (dBm)	Antenna Gain (dBi)	Path Loss (dB)	MIMO Factor (dB)	Grounding Factor (dB)	Peak Avg. (P/A)
5GHz 802.11ax HE20 Full SHF		39912	-38.86	-17.66	-21.2	-69.79	8.1	19.82	3.01	0	P
		39912	-50.46	-9.26	-41.2	-81.39	8.1	19.82	3.01	0	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

Emission below 1GHz

WIFI 802.11ax HE20 Full (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
4		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
5GHz 802.11ax HE20 Full LF		80.76	-73.65	-18.45	-55.2	-89.71	8.1	0.25	3.01	4.7	P
		101.82	-73.41	-21.71	-51.7	-89.5	8.1	0.28	3.01	4.7	P
		233.58	-74.39	-25.19	-49.2	-90.67	8.1	0.47	3.01	4.7	P
		591.2	-73.27	-24.07	-49.2	-89.87	8.1	0.79	3.01	4.7	P
		905.5	-72.34	-23.14	-49.2	-89.18	8.1	1.03	3.01	4.7	P
		969.2	-72.73	-31.53	-41.2	-89.73	8.1	1.19	3.01	4.7	P
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.										

Note symbol

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

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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	MIMO	Grounding	Peak
Ant.				Limit	Line	Level	Gain	Loss	Factor	Factor	Avg.
4		(MHz)	(dBm)	(dB)	(dBm)	(dBm)	(dBi)	(dB)	(dB)	(dB)	(P/A)
802.11a CH 169 5845MHz		5945.5	-36.25	-29.25	-7	-48.82	8.1	1.46	3.01	0	P
		5923.75	-49.32	-23.23	-26.09	-61.88	8.1	1.45	3.01	0	A

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. MIMO Factor(dB) = 10 log (N_{ANT}) , where N_{ANT} is the number of outputs
3. Grounding Factor(dB) = Ground reflection factor (i.e., 6 dB for f ≤ 30 MHz and 4.7 dB for 30 MHz < f ≤ 960 MHz)
4. Level(dBm) = Antenna Gain(dBi) + Path Loss(dB) + Read Level(dBm) + MIMO Factor(dB) + Grounding Factor(dB)
5. Over Limit(dB) = Level(dBm) – Limit Line(dBm)

For Peak Limit @ 5945.5MHz:

1. Level(dBm)

= Antenna Gain(dBi) + Path Loss(dB) + MIMO Factor(dB) + Grounding Factor(dB) + Read Level(dBμV) +

= 8.10(dBi) + 1.46(dB) + 3.01 (dB) + 0(dB) – 48.82(dBm)

= -36.25 (dBm)

2. Over Limit(dB) = Level(dBm) – Limit Line(dBm)

= -36.25(dBm) + 7(dBm)

= -29.25(dB)

For Average Limit @ 5923.75MHz:

1. Level(dBm)

= Antenna Gain(dBi) + Path Loss(dB) + MIMO Factor(dB) + Grounding Factor(dB) + Read Level(dBm)

= 8.10(dBi) + 1.45(dB) + 3.01 (dB) + 0(dB) – 61.88(dBm)

= -49.32 (dBm)

2. Over Limit(dB) = Level(dBm) – Limit Line(dBm)

= -49.32(dBm) + 26.09(dBm)

= -23.23(dB)

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

Appendix C. Conducted Spurious Emission Plots

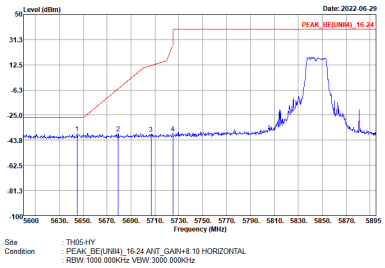
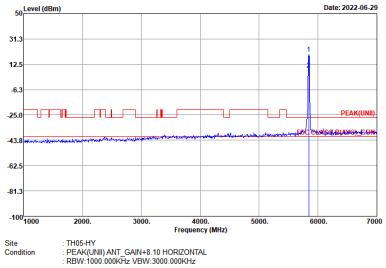
Test Engineer :	Richard Qiu, Jacob Yu, Eric Chang, Ken Wu and Nick Yu	**Temperature :**	22.7~24.8°C
		Relative Humidity :	52~59%

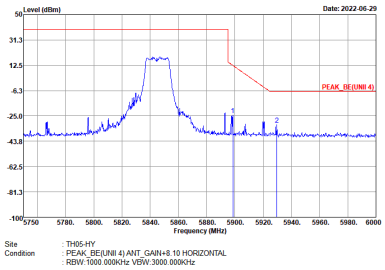
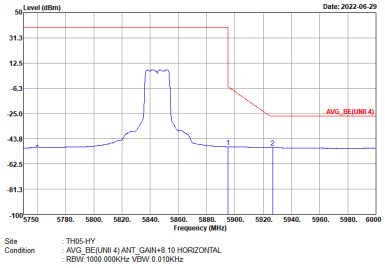
Note symbol

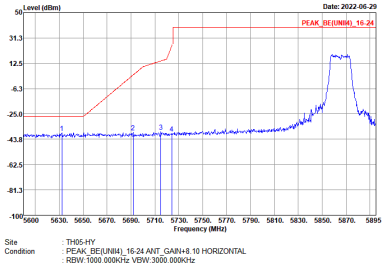
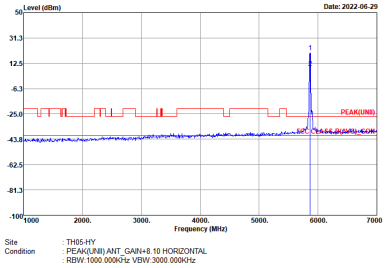
-L	**Low channel location**
-R	**High channel location**

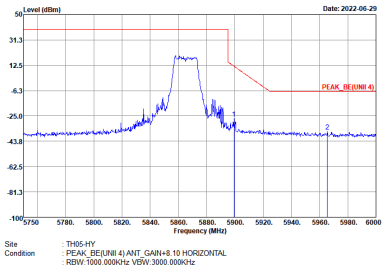
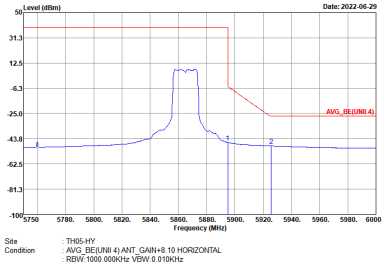
UNII-4 - 5735~5895MHz

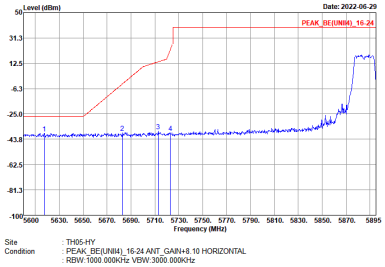
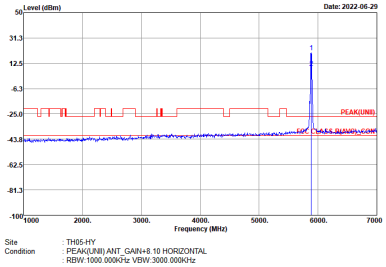
802.11a (Band Edge)

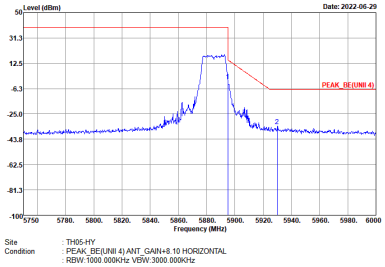
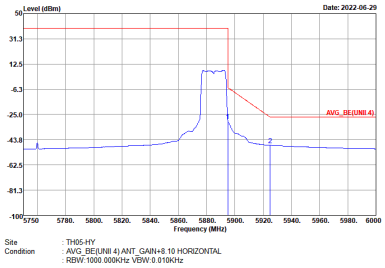
WIFI	**UNII-4 - 5735~5895MHz Band Edge**	
ANT	**802.11a CH169 5845MHz - L**	
5	**CSE**	**Fundamental**
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11a CH169 5845MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11a CH173 5865MHz - L	
5	CSE	Fundamental
Peak		

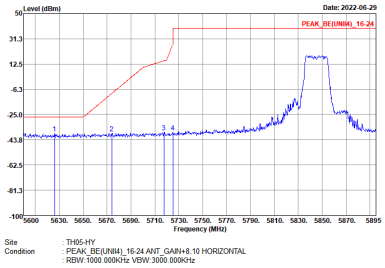
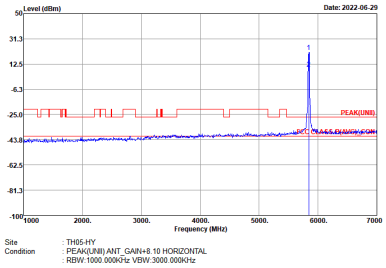
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11a CH173 5865MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

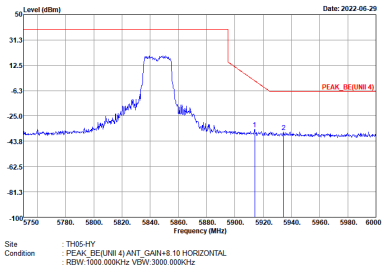
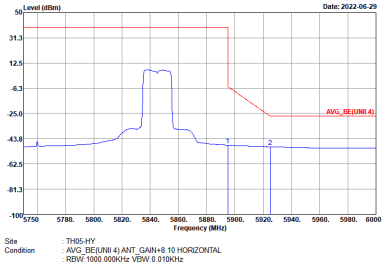
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11a CH177 5885MHz - L	
5	CSE	Fundamental
Peak		

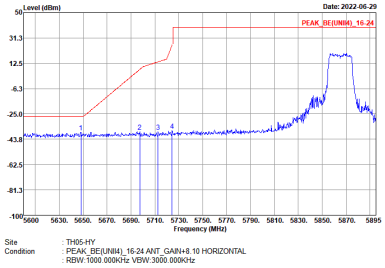
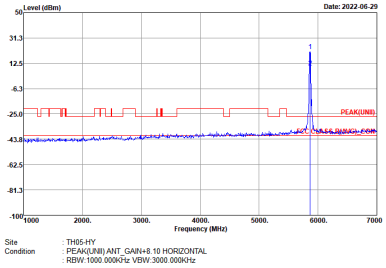
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11a CH177 5885MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

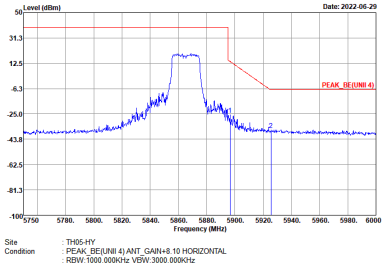
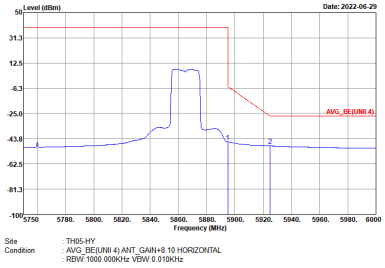
UNII-4 - 5735~5895MHz

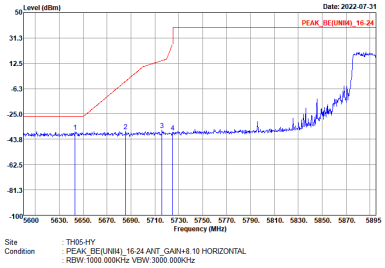
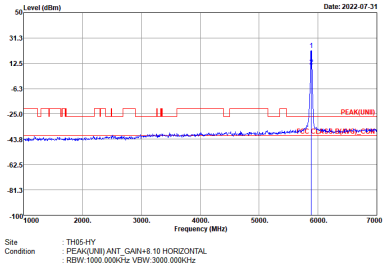
802.11ax HE20 Full (Band Edge)

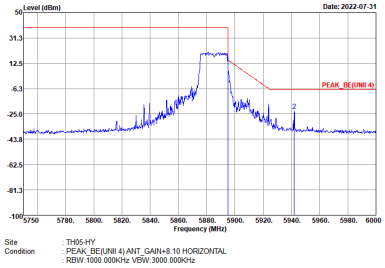
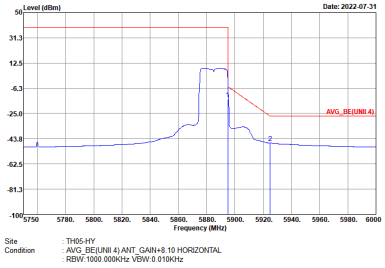
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Full CH169 5845MHz - L	
5	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Full CH169 5845MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Full CH173 5865MHz - L	
5	CSE	Fundamental
Peak		

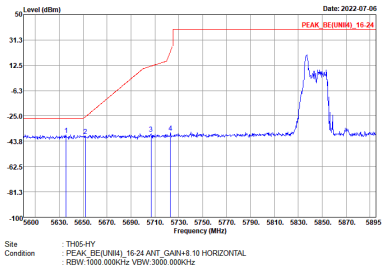
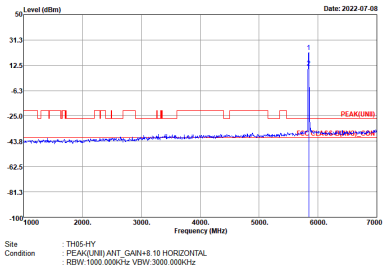
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Full CH173 5865MHz- R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

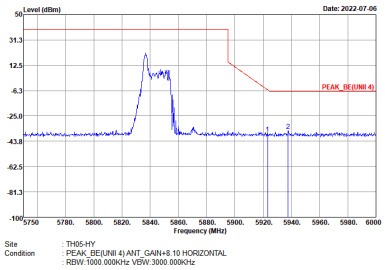
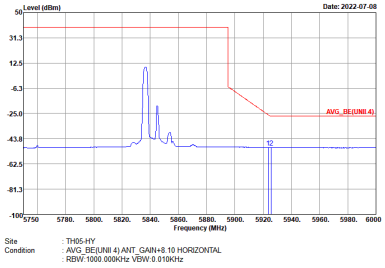
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Full CH177 5885MHz - L	
5	CSE	Fundamental
Peak		

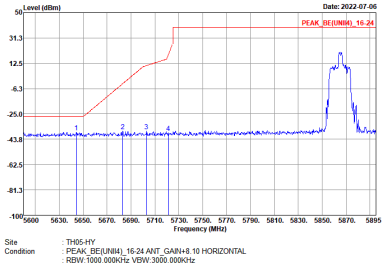
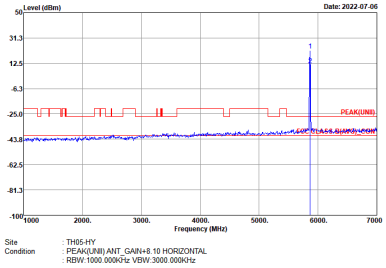
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Full CH177 5885MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

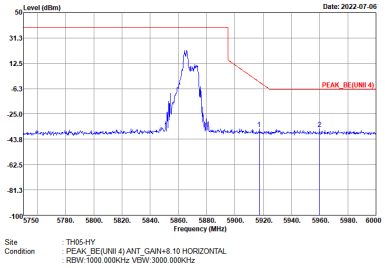
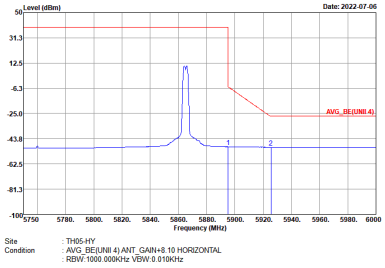
UNII-4 - 5735~5895MHz

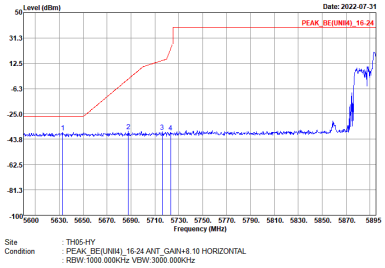
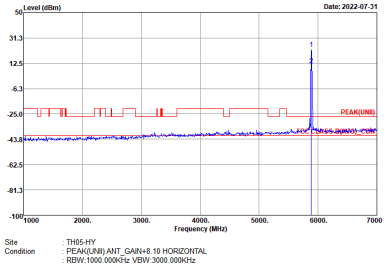
802.11ax HE20 Partial 26 (Band Edge)

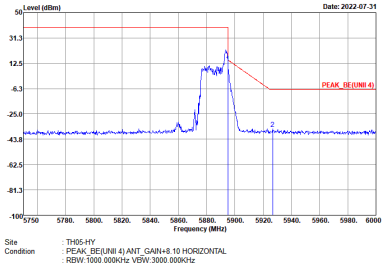
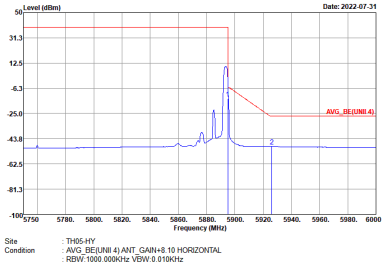
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 26/0 CH169 5845MHz - L	
5	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 26/0 CH169 5845MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 26/4 CH173 5865MHz - L	
5	CSE	Fundamental
Peak		

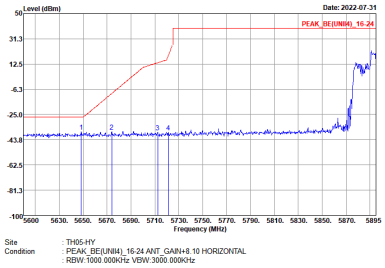
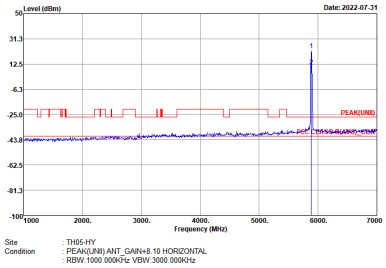
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 26/4 CH173 5865MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

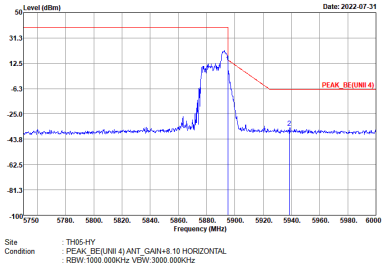
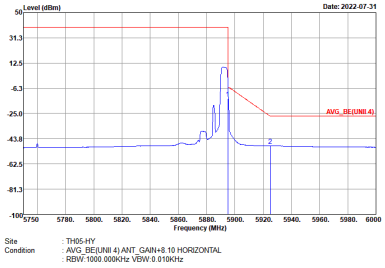
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 26/8 CH177 5885MHz - L	
5	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 26/8 CH177 5885MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

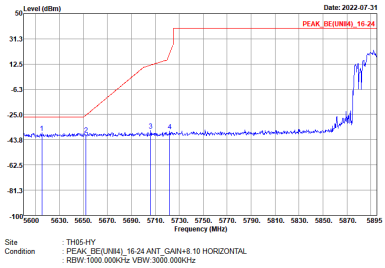
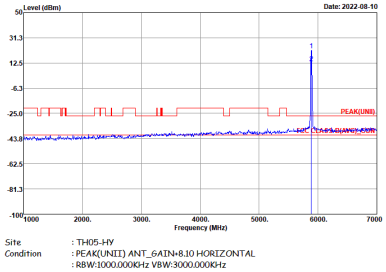
802.11ax HE20 Partial 52 (Band Edge)

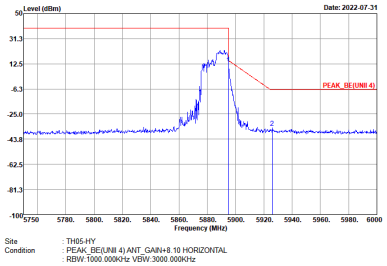
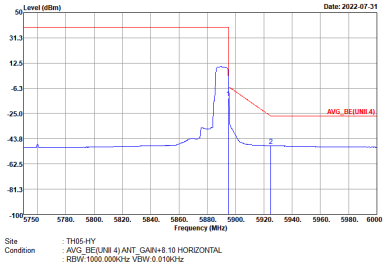
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 52/37 CH177 5885MHz - L	
5	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 52/37 CH177 5885MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

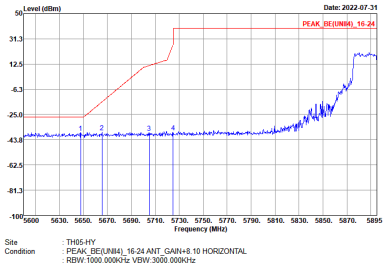
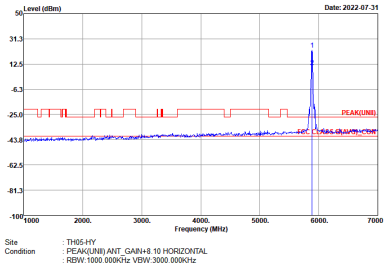
802.11ax HE20 Partial 106 (Band Edge)

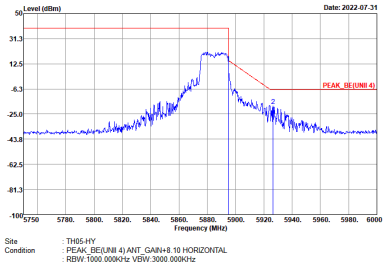
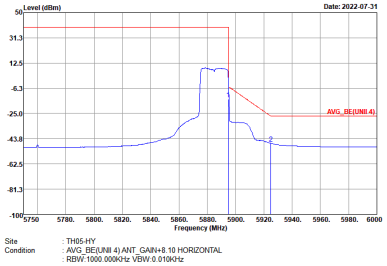
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 106/54 CH177 5885MHz - L	
5	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 106/54 CH177 5885MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

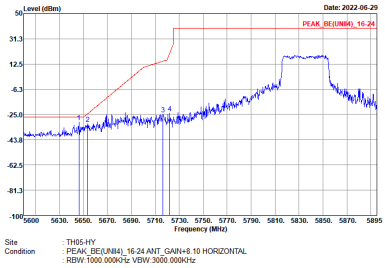
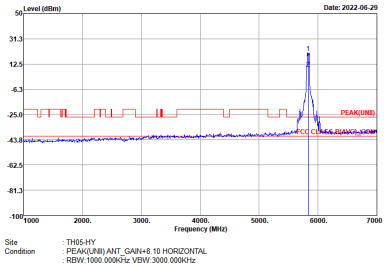
802.11ax HE20 Partial 242 (Band Edge)

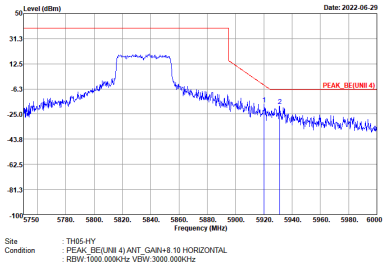
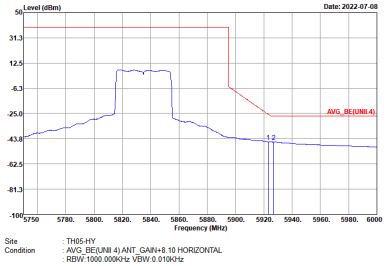
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 242/61 CH177 5885MHz - L	
5	CSE	Fundamental
Peak		

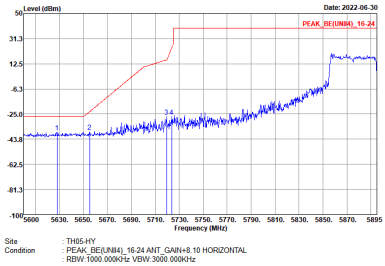
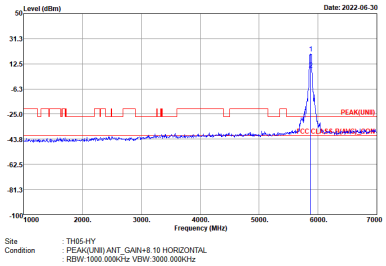
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 242/61 CH177 5885MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

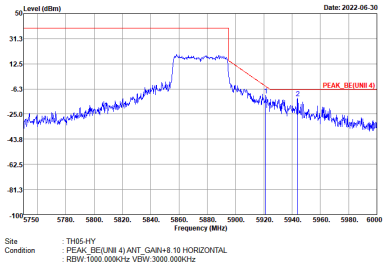
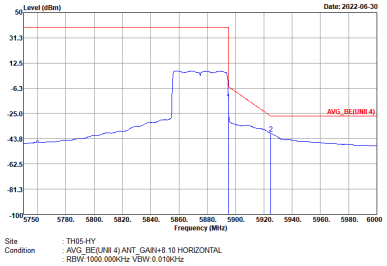
UNII-4 - 5735~5895MHz

802.11ax HE40 Full (Band Edge)

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Full CH167 5835MHz - L	
5	CSE	Fundamental
Peak		

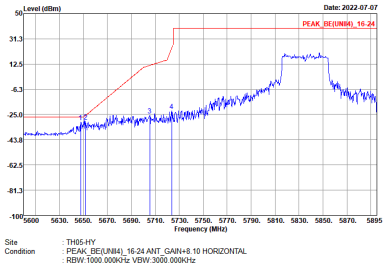
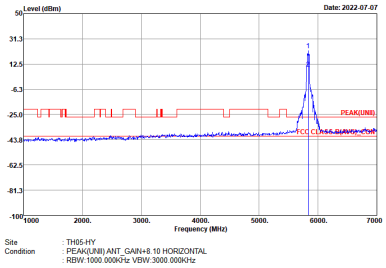
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Full CH167 5835MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

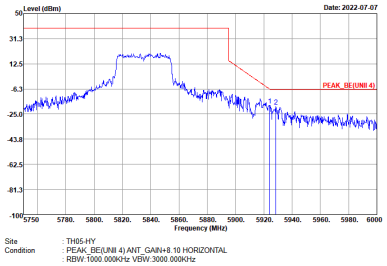
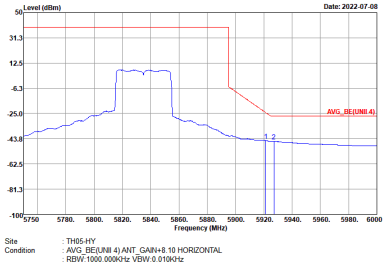
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Full CH175 5875MHz - L	
5	CSE	Fundamental
Peak		

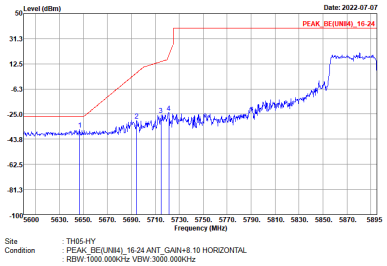
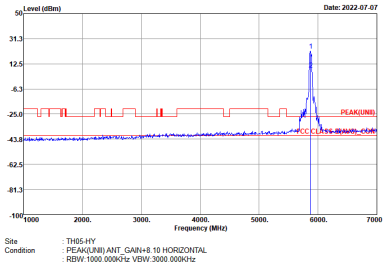
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Full CH175 5875MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

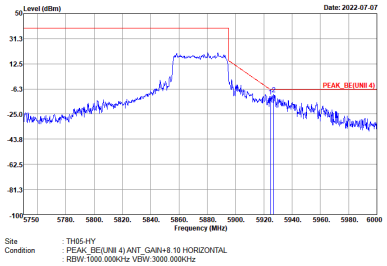
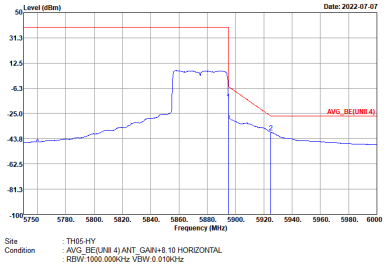
UNII-4 - 5735~5895MHz

802.11ax HE40 Partial 484 (Band Edge)

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Partial 484/65 CH167 5835MHz - L	
5	CSE	Fundamental
Peak		

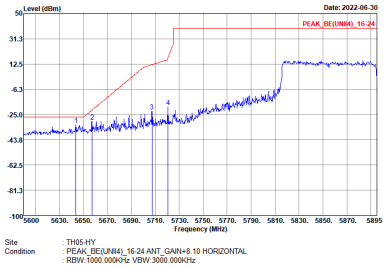
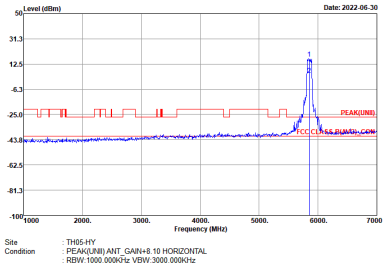
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Partial 484/65 CH167 5835MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

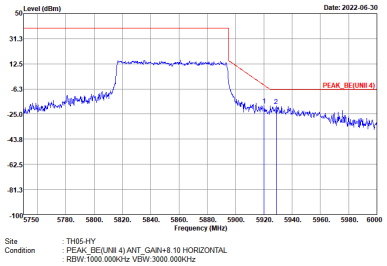
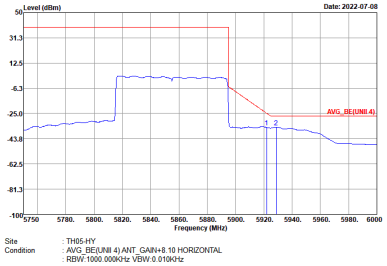
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Partial 484/65 CH175 5875MHz - L	
5	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Partial 484/65 CH175 5875MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

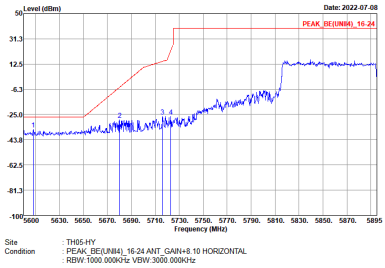
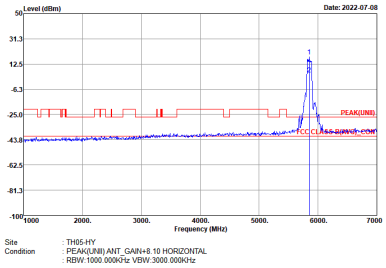
802.11ax HE80 Full (Band Edge)

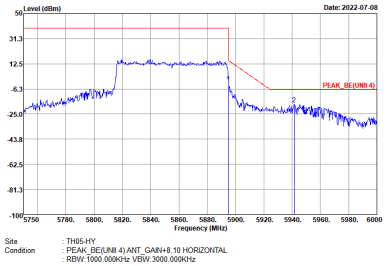
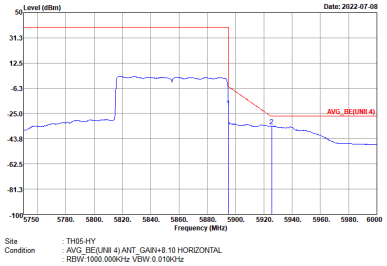
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE80 Full CH171 5855MHz - L	
5	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE80 Full CH171 5855MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

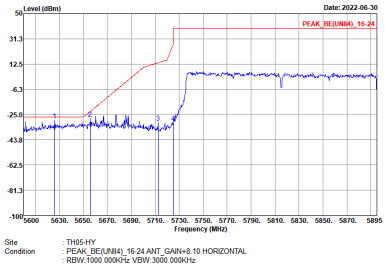
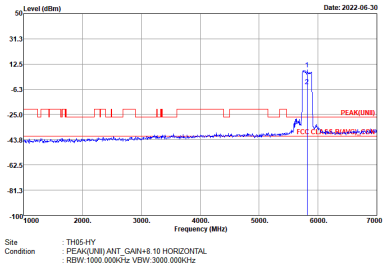
802.11ax HE80 Partial 996 (Band Edge)

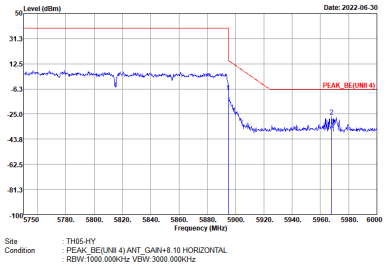
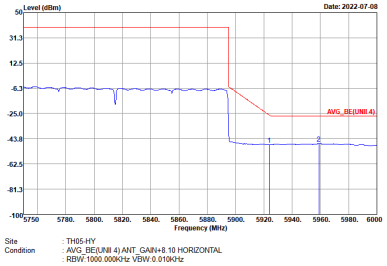
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE80 Partial 996/87 CH171 5855MHz - L	
5	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE80 Partial 996/87 CH171 5855MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

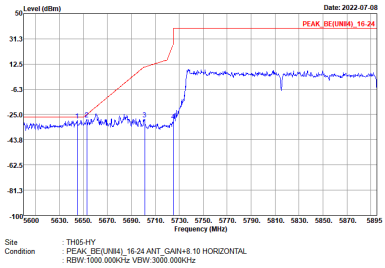
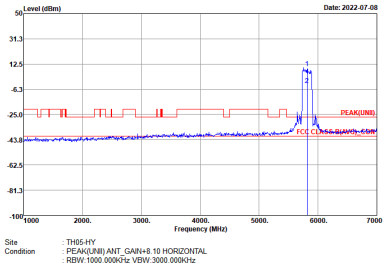
802.11ax HE160 Full (Band Edge)

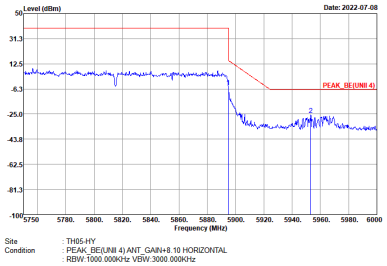
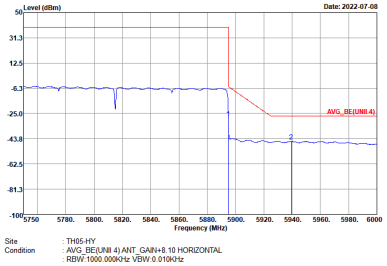
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE160 Full CH163 5815MHz - L	
	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE160 Full CH163 5815MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

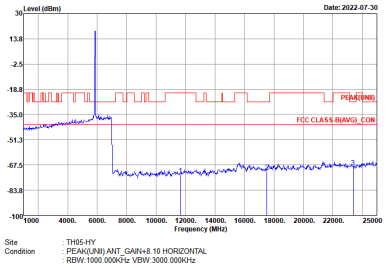
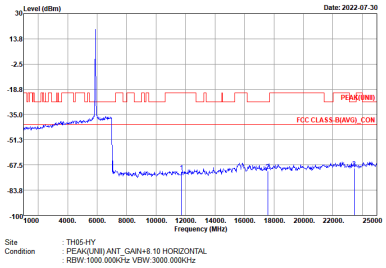
802.11ax HE160 Partial 1992 (Band Edge)

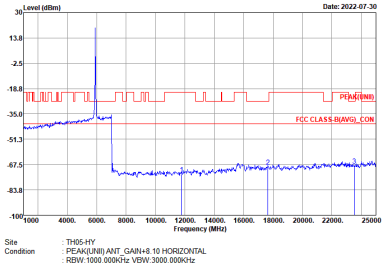
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE80 Partial 1992/68 CH163 5815MHz - L	
5	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE80 Partial 1992/68 CH163 5815MHz - R	
5	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

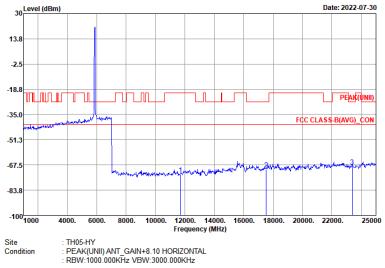
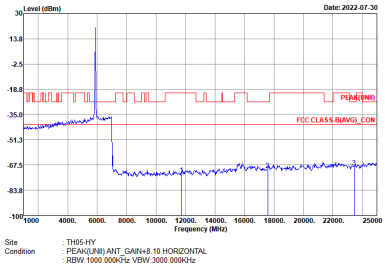
WIFI 802.11a (Harmonic)

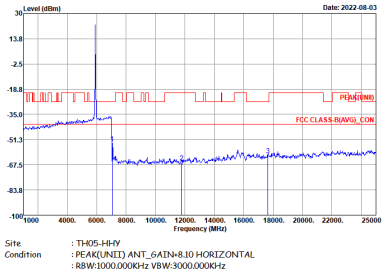
WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11a	
5	CH169 5845MHz	CH173 5865MHz
Peak Avg.		

WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11a	
5	CH177 5885MHz	
Peak Avg.		Left blank

UNII-4 - 5735~5895MHz

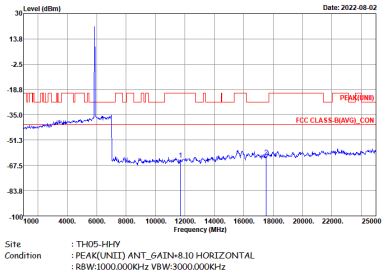
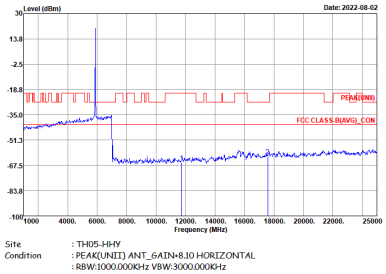
WIFI 802.11ax HE20 Full (Harmonic)

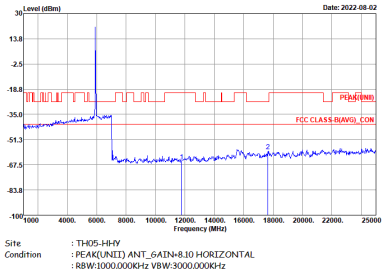
WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11ax HE20 Full	
5	CH169 5845MHz	CH173 5865MHz
Peak Avg.		

WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11ax HE20 Full	
5	CH177 5885MHz	
Peak Avg.		Left blank

UNII-4 - 5735~5895MHz

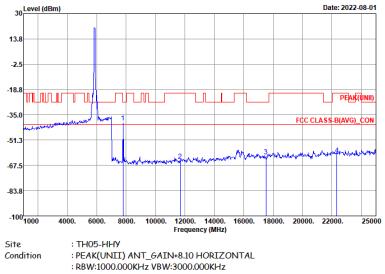
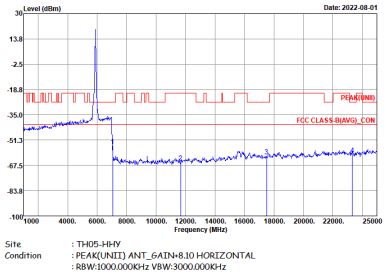
WIFI 802.11ax HE20 Partial 26 (Harmonic)

WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11ax HE20 Partial 26	
5	Partial 26/0 CH169 5845MHz	Partial 26/4 CH173 5865MHz
Peak Avg.		

WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11ax HE20 Partial 26	
5	Partial 26/8 CH177 5885MHz	
Peak Avg.		Left blank

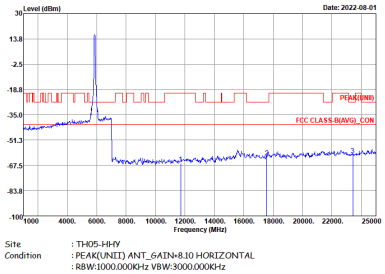
UNII-4 - 5735~5895MHz

WIFI 802.11ax HE40 Full (Harmonic)

WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11ax HE40 Full	
5	CH167 5835MHz	CH175 5875MHz
Peak Avg.		

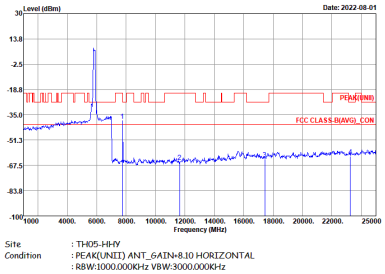
UNII-4 - 5735~5895MHz

WIFI 802.11ax HE80 Full (Harmonic)

WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11ax HE80 Full	
5	CH171 5855MHz	
Peak Avg.		Left blank

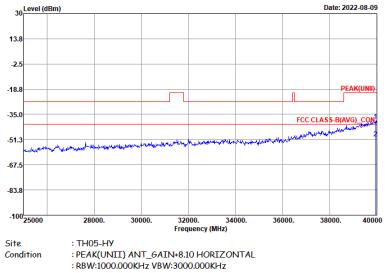
UNII-4 - 5735~5895MHz

WIFI 802.11ax HE160 Full (Harmonic)

WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11ax HE160 Full	
5	CH163 5815MHz	
Peak Avg.		Left blank

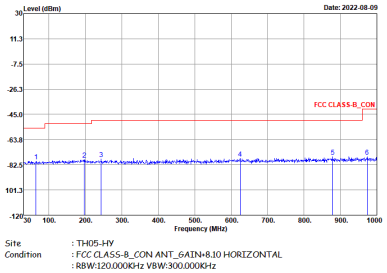
Emission above 25GHz

5GHz WIFI 802.11ax HE20 Partial 242 (SHF)

WIFI	5GHz 5735~5895MHz	
ANT	802.11ax HE20 Partial 242 SHF	
5	CSE	-
Peak Avg.	 Site : TH05-HV Condition : PEAK(UNII) ANT_6AIN+8.10 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz	Left blank

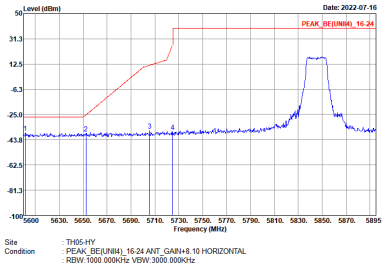
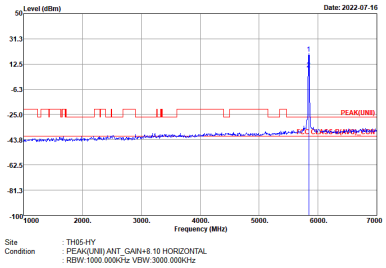
Emission below 1GHz

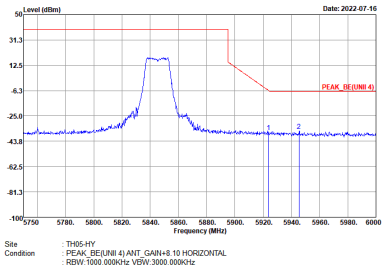
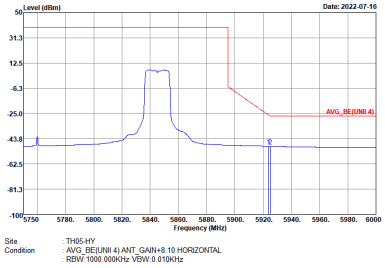
5GHz WIFI 802.11ax HE20 Partial 242 (LF)

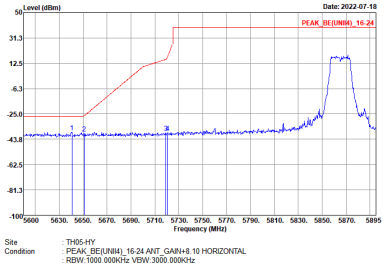
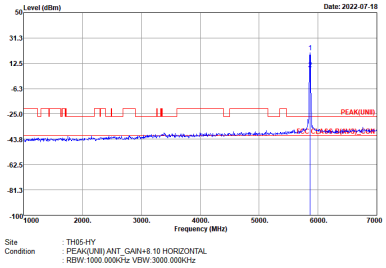
WIFI	5GHz 5735~5895MHz	
ANT	802.11ax HE20 Partial 242 LF	
5	CSE	-
QP / Peak	 Site : TH05-HV Condition : FCC CLASS-B_CON ANT_6AIN+8.10 HORIZONTAL : RBW:120.000KHz VBW:300.000KHz	Left blank

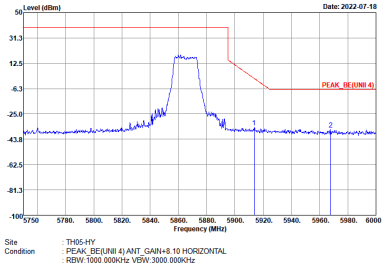
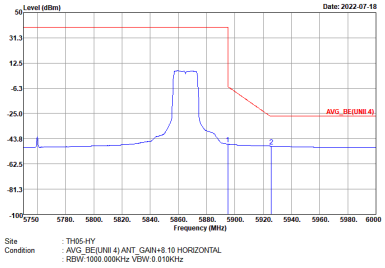
UNII-4 - 5735~5895MHz

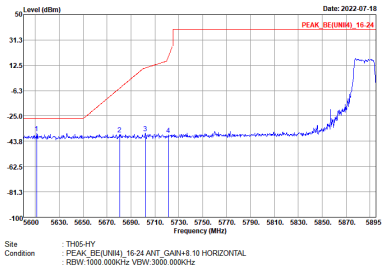
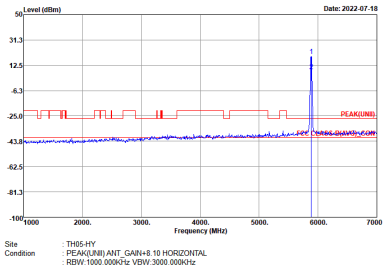
802.11a (Band Edge)

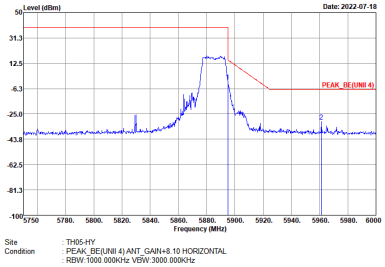
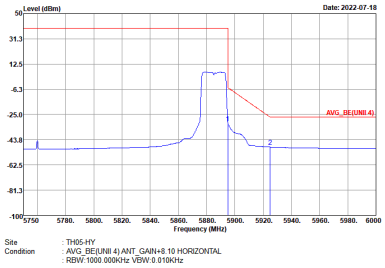
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11a CH169 5845MHz - L	
4	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11a CH169 5845MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11a CH173 5865MHz - L	
4	CSE	Fundamental
Peak		

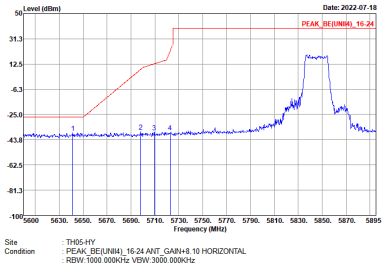
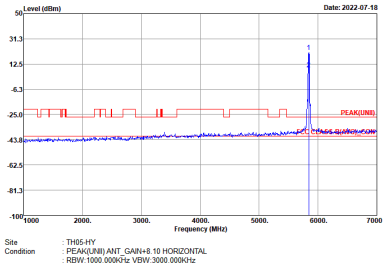
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11a CH173 5865MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

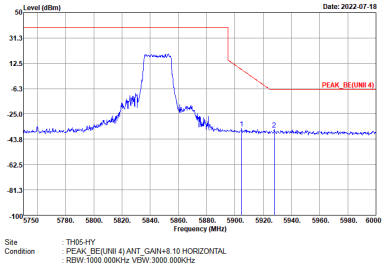
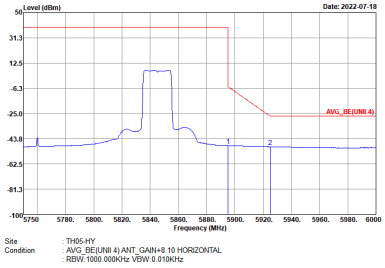
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11a CH177 5885MHz - L	
4	CSE	Fundamental
Peak		

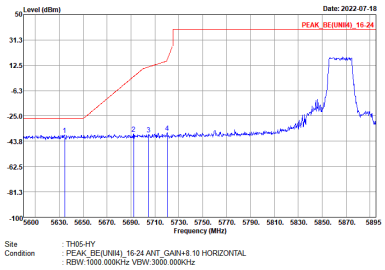
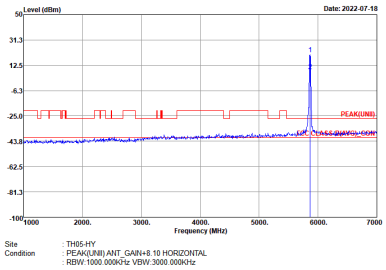
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11a CH177 5885MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

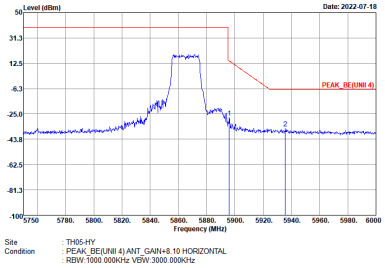
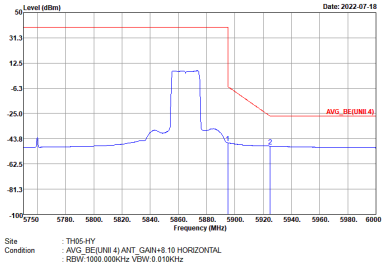
UNII-4 - 5735~5895MHz

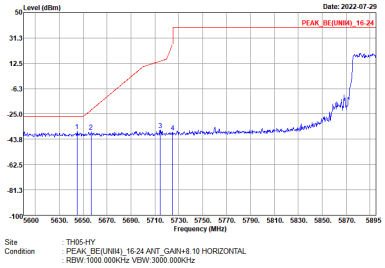
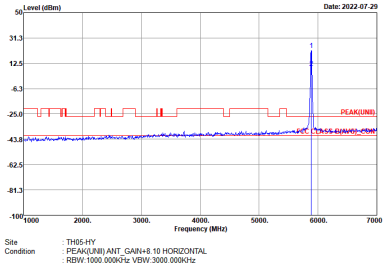
802.11ax HE20 Full (Band Edge)

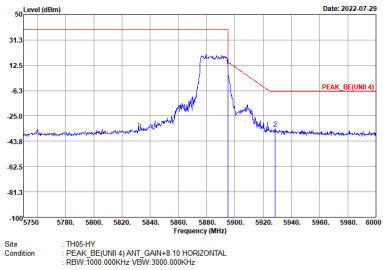
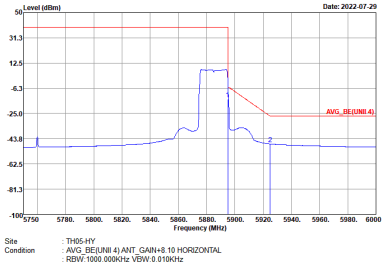
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Full CH169 5845MHz - L	
4	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Full CH169 5845MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Full CH173 5865MHz - L	
4	CSE	Fundamental
Peak		

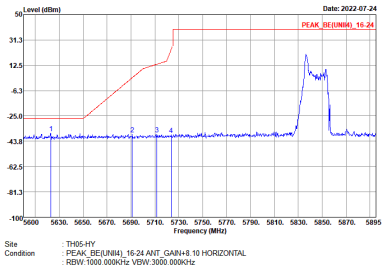
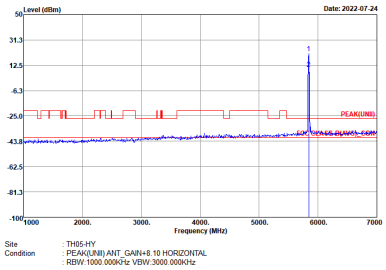
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Full CH173 5865MHz- R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

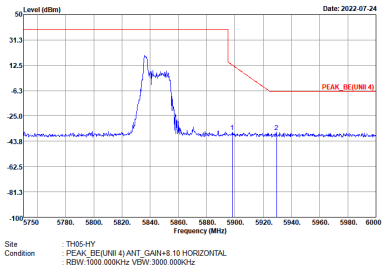
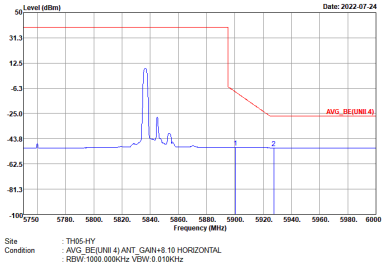
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Full CH177 5885MHz - L	
4	CSE	Fundamental
Peak		

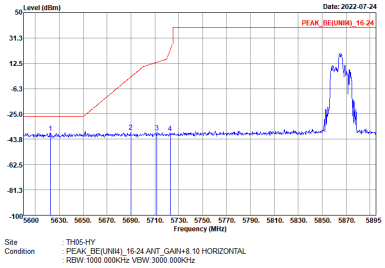
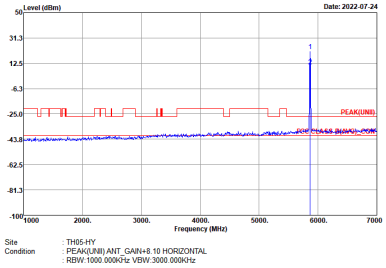
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Full CH177 5885MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

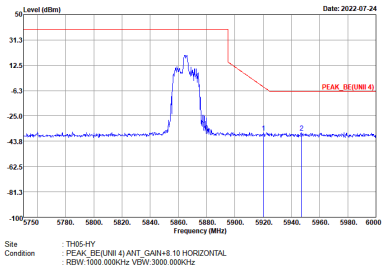
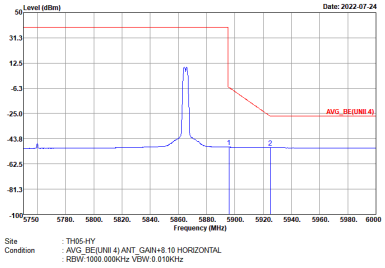
UNII-4 - 5735~5895MHz

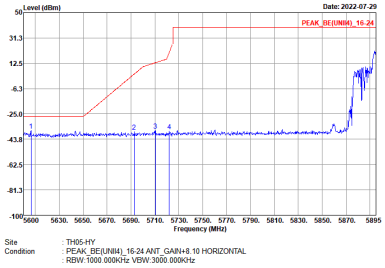
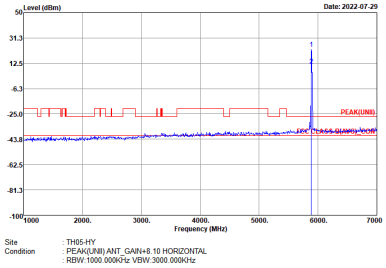
802.11ax HE20 Partial 26 (Band Edge)

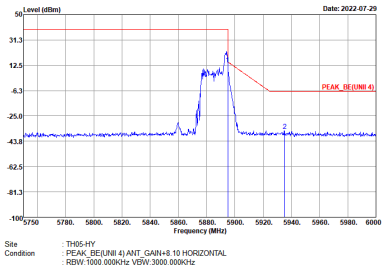
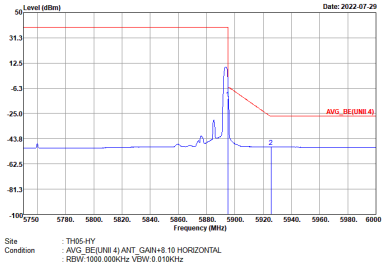
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 26/0 CH169 5845MHz - L	
4	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 26/0 CH169 5845MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 26/4 CH173 5865MHz - L	
4	CSE	Fundamental
Peak		

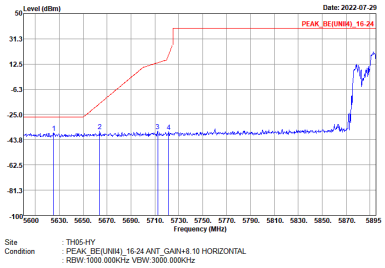
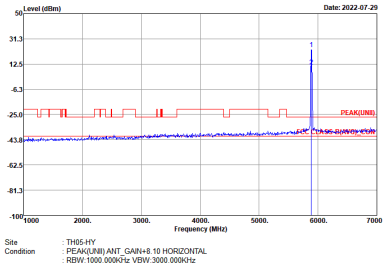
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 26/4 CH173 5865MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

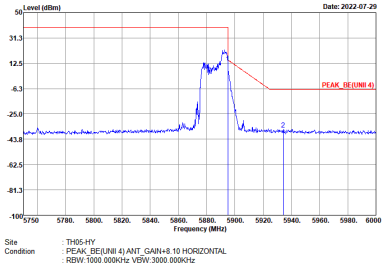
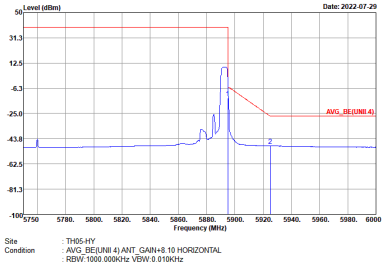
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 26/8 CH177 5885MHz - L	
4	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 26/8 CH177 5885MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

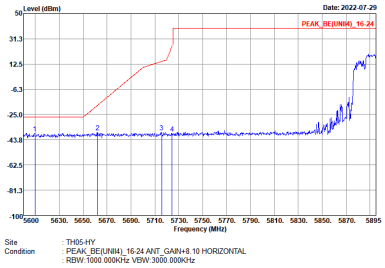
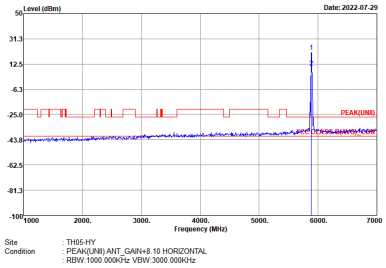
802.11ax HE20 Partial 52 (Band Edge)

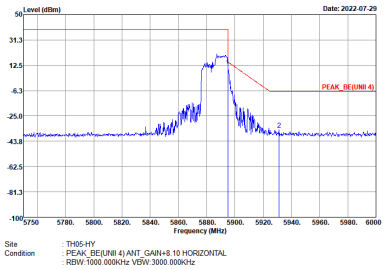
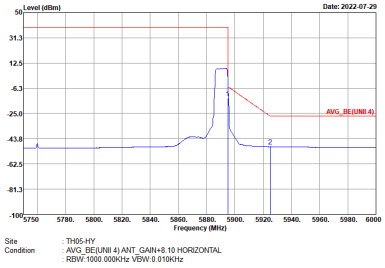
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 52/37 CH177 5885MHz - L	
4	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 52/37 CH177 5885MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

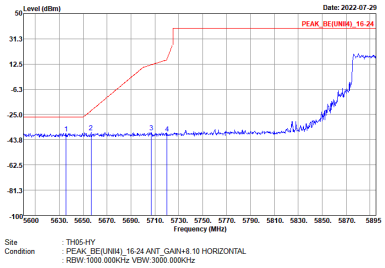
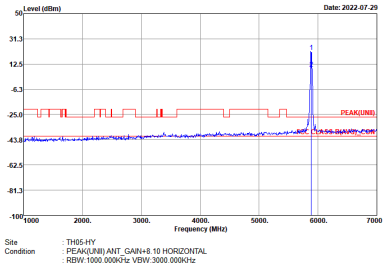
802.11ax HE20 Partial 106 (Band Edge)

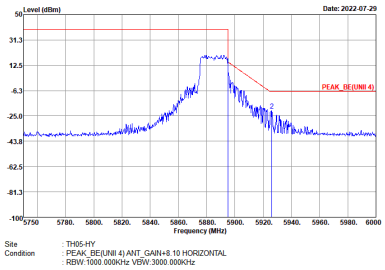
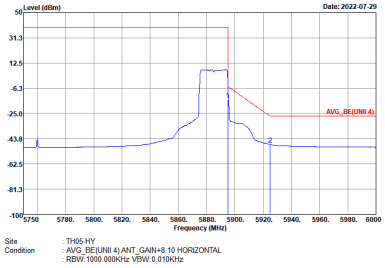
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 106/54 CH177 5885MHz - L	
4	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 106/54 CH177 5885MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

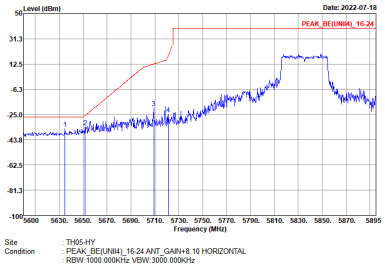
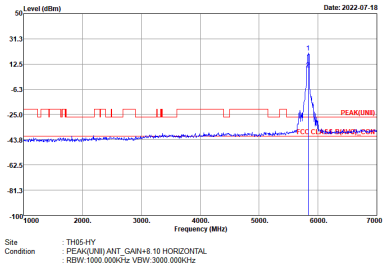
802.11ax HE20 Partial 242 (Band Edge)

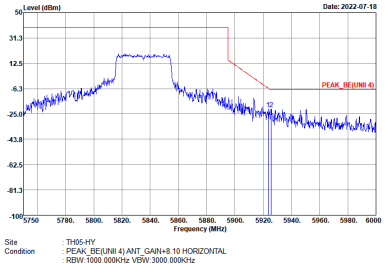
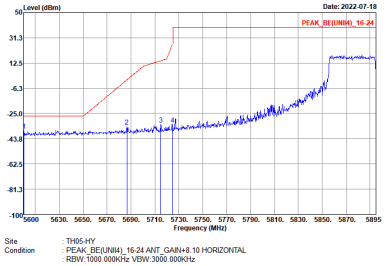
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 242/61 CH177 5885MHz - L	
4	CSE	Fundamental
Peak		

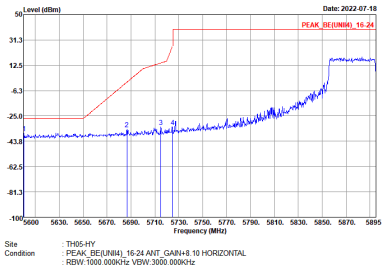
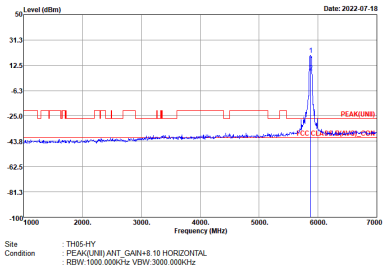
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE20 Partial 242/61 CH177 5885MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

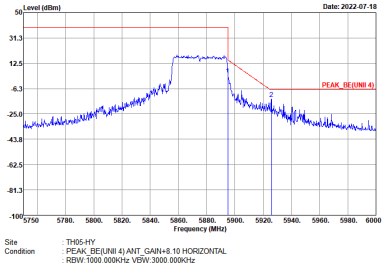
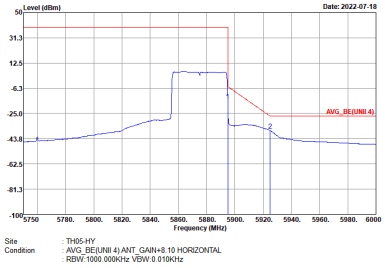
UNII-4 - 5735~5895MHz

802.11ax HE40 Full (Band Edge)

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Full CH167 5835MHz - L	
4	CSE	Fundamental
Peak		

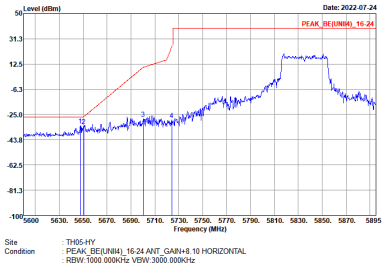
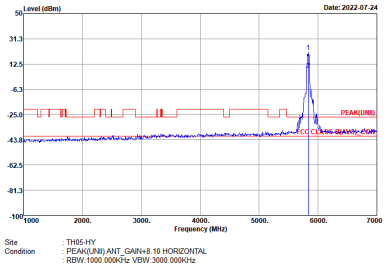
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Full CH167 5835MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

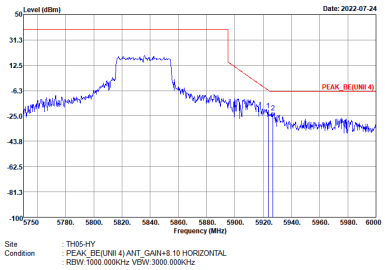
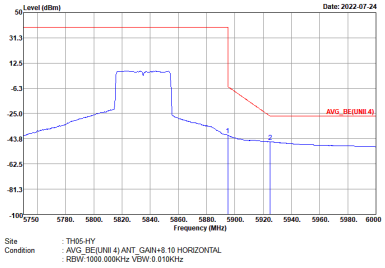
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Full CH175 5875MHz - L	
4	CSE	Fundamental
Peak		

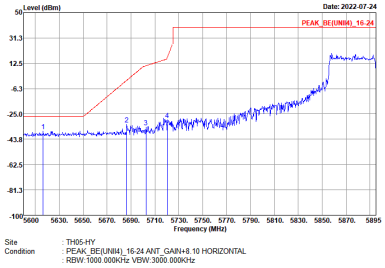
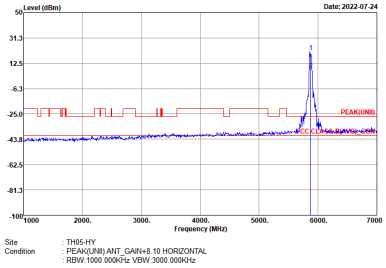
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Full CH175 5875MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

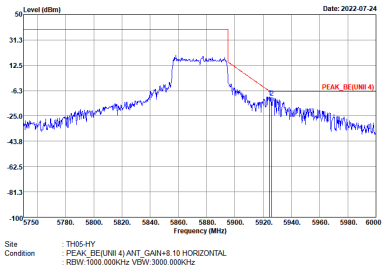
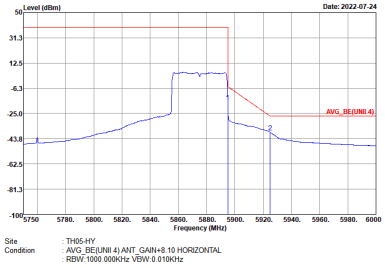
UNII-4 - 5735~5895MHz

802.11ax HE40 Partial 484 (Band Edge)

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Partial 484/65 CH167 5835MHz - L	
4	CSE	Fundamental
Peak		

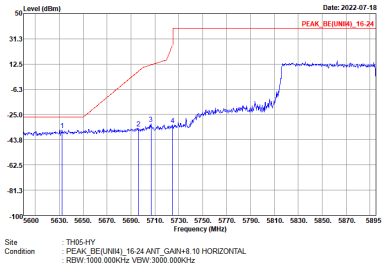
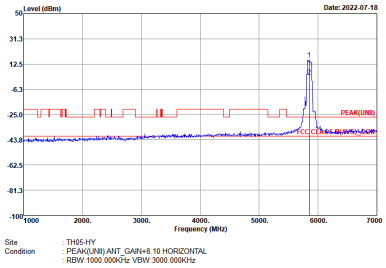
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Partial 484/65 CH167 5835MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

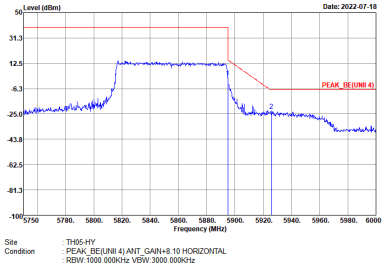
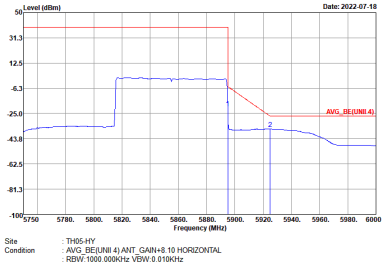
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Partial 484/65 CH175 5875MHz - L	
4	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE40 Partial 484/65 CH175 5875MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

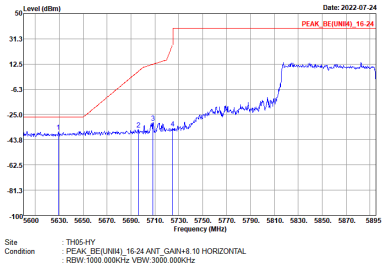
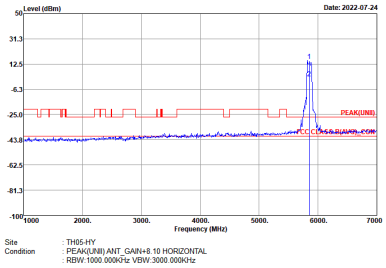
802.11ax HE80 Full (Band Edge)

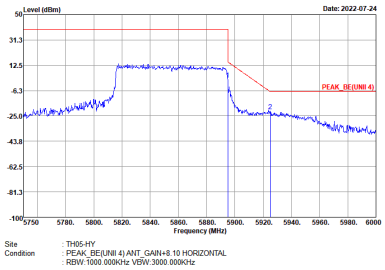
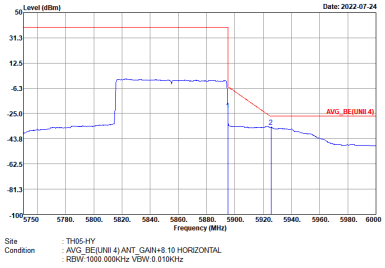
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE80 Full CH171 5855MHz - L	
4	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE80 Full CH171 5855MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

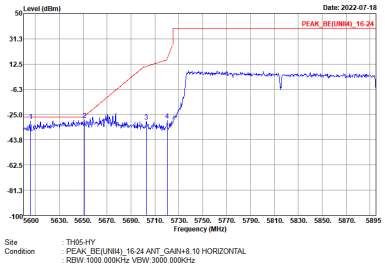
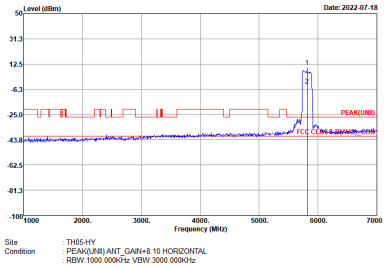
802.11ax HE80 Partial 996 (Band Edge)

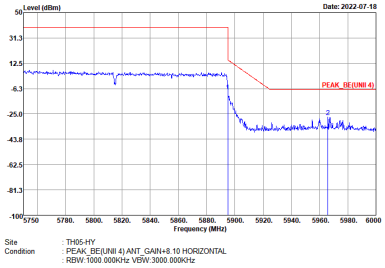
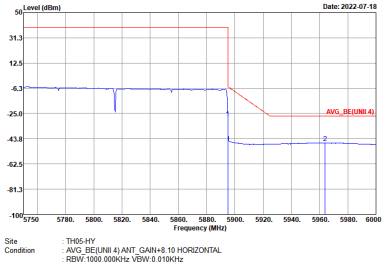
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE80 Partial 996/87 CH171 5855MHz - L	
4	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE80 Partial 996/87 CH171 5855MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

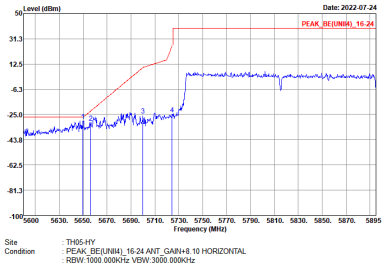
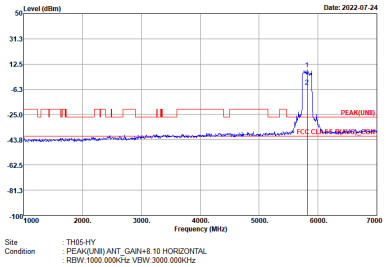
802.11ax HE160 Full (Band Edge)

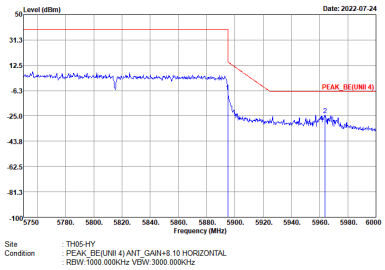
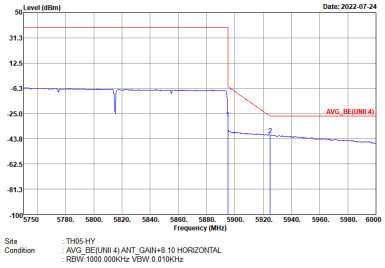
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE160 Full CH163 5815MHz - L	
4	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE160 Full CH163 5815MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

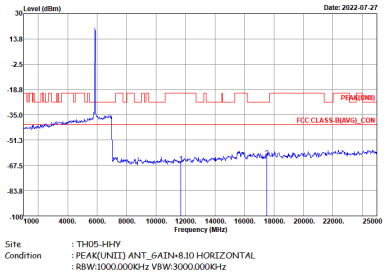
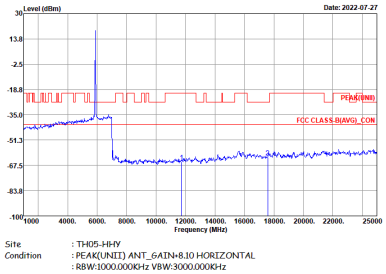
802.11ax HE160 Partial 1992 (Band Edge)

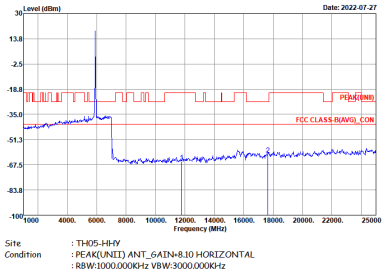
WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE80 Partial 1992/68 CH163 5815MHz - L	
4	CSE	Fundamental
Peak		

WIFI	UNII-4 - 5735~5895MHz Band Edge	
ANT	802.11ax HE80 Partial 1992/68 CH163 5815MHz - R	
4	CSE	Fundamental
Peak		Left blank
Peak		Left blank

UNII-4 - 5735~5895MHz

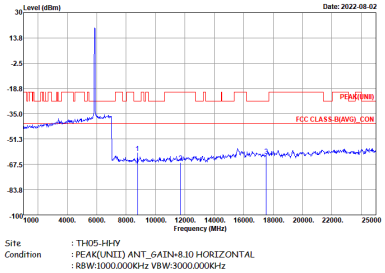
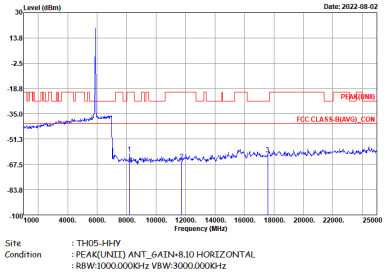
WIFI 802.11a (Harmonic)

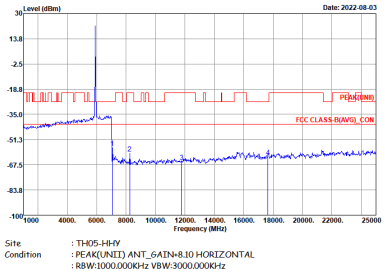
WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11a	
4	CH169 5845MHz	CH173 5865MHz
Peak Avg.		

WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11a	
4	CH177 5885MHz	
Peak Avg.		Left blank

UNII-4 - 5735~5895MHz

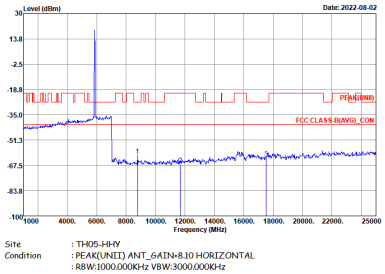
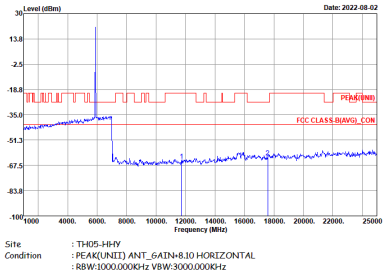
WIFI 802.11ax HE20 Full (Harmonic)

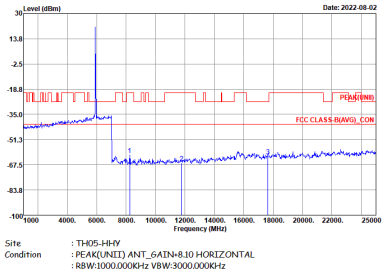
WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11ax HE20 Full	
4	CH169 5845MHz	CH173 5865MHz
Peak Avg.		

WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11ax HE20 Full	
4	CH177 5885MHz	
Peak Avg.		Left blank

UNII-4 - 5735~5895MHz

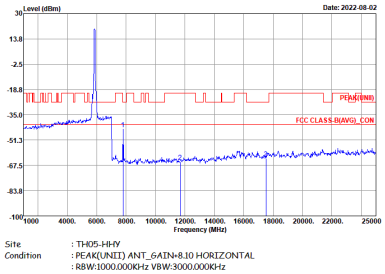
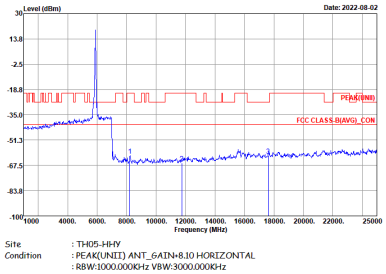
WIFI 802.11ax HE20 Partial 26 (Harmonic)

WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11ax HE20 Partial 26	
4	Partial 26/0 CH169 5845MHz	Partial 26/4 CH173 5865MHz
Peak Avg.		

WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11ax HE20 Partial 26	
4	Partial 26/8 CH177 5885MHz	
Peak Avg.	 Site : TH05-HHY Condition : PEAK(UNII) ANT_6AIN+8.10 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz	Left blank

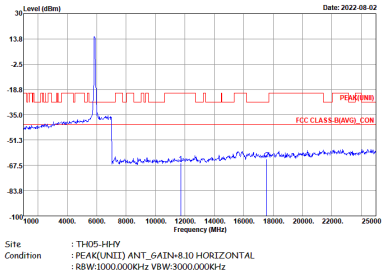
UNII-4 - 5735~5895MHz

WIFI 802.11ax HE40 Full (Harmonic)

WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11ax HE40 Full	
4	CH167 5835MHz	CH175 5875MHz
Peak Avg.		

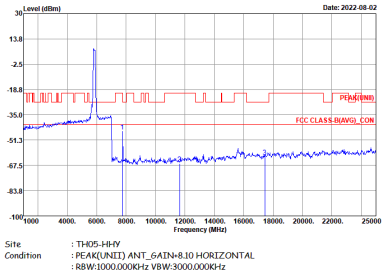
UNII-4 - 5735~5895MHz

WIFI 802.11ax HE80 Full (Harmonic)

WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11ax HE80 Full	
4	CH171 5855MHz	
Peak Avg.		Left blank

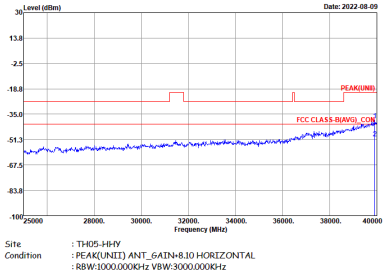
UNII-4 - 5735~5895MHz

WIFI 802.11ax HE160 Full (Harmonic)

WIFI	UNII-4 - 5735~5895MHz Harmonic	
ANT	802.11ax HE160 Full	
4	CH163 5815MHz	
Peak Avg.		Left blank

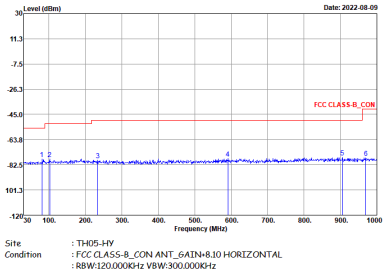
Emission above 25GHz

5GHz WIFI 802.11ax HE20 Full (SHF)

WIFI	5GHz 5735~5895MHz	
ANT	802.11ax HE20 Full SHF	
4	CSE	-
Peak Avg.		Left blank

Emission below 1GHz

5GHz WIFI 802.11ax HE20 Full (LF)

WIFI	5GHz 5735~5895MHz	
ANT	802.11ax HE20 Full LF	
4	CSE	-
QP / Peak		Left blank

Appendix D. Cabinet Radiated Spurious Emission

Test Engineer :	Leo Li and Bigshow Wang	Temperature :	22.1~23.1°C
		Relative Humidity :	55~60%

UNII-4 - 5735~5895MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
5+4		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 169 5845MHz		5610.325	49.26	-18.94	68.2	42.66	33	10.39	36.79	100	66	P	H
		5650.15	48.84	-19.47	68.31	42.22	33	10.44	36.82	100	66	P	H
		5711.805	48.49	-60.02	108.51	41.68	33.17	10.5	36.86	100	66	P	H
		5720.95	48.35	-64.62	112.97	41.48	33.23	10.51	36.87	100	66	P	H
	*	5845	99.25	-	-	91.7	33.88	10.63	36.96	100	66	P	H
	*	5845	91.79	-	-	84.24	33.88	10.63	36.96	100	66	A	H
		5902	49.66	-55.4	105.06	41.99	34	10.67	37	100	66	P	H
		5933.75	49.6	-38.6	88.2	41.93	34	10.69	37.02	100	66	P	H
		5896.75	38.97	-49.94	88.91	31.31	33.99	10.67	37	100	66	A	H
		5926	38.82	-29.38	68.2	31.15	34	10.69	37.02	100	66	A	H
		5605.31	48.87	-19.33	68.2	42.27	33	10.39	36.79	400	4	P	V
		5692.63	48.71	-51.06	99.77	41.99	33.09	10.48	36.85	400	4	P	V
		5702.66	47.55	-58.4	105.95	40.8	33.12	10.49	36.86	400	4	P	V
		5720.36	47.13	-64.49	111.62	40.27	33.22	10.51	36.87	400	4	P	V
	*	5845	94.23	-	-	86.68	33.88	10.63	36.96	400	4	P	V
	*	5845	86.9	-	-	79.35	33.88	10.63	36.96	400	4	A	V
		5920	49.71	-42.15	91.86	42.04	34	10.68	37.01	400	4	P	V
		5935.5	50.04	-38.16	88.2	42.37	34	10.69	37.02	400	4	P	V
		5911.5	38.88	-39.21	78.09	31.21	34	10.68	37.01	400	4	A	V
		5930.25	38.75	-29.45	68.2	31.08	34	10.69	37.02	400	4	A	V

WIFI Ant. 5+4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5636.875	49.04	-19.16	68.2	42.43	33	10.42	36.81	100	67	P	H
		5692.925	48.19	-51.79	99.98	41.47	33.09	10.48	36.85	100	67	P	H
		5719.18	47.74	-62.83	110.57	40.88	33.22	10.51	36.87	100	67	P	H
		5720.95	47.08	-65.89	112.97	40.21	33.23	10.51	36.87	100	67	P	H
	*	5865	100.35	-	-	92.74	33.93	10.65	36.97	100	67	P	H
	*	5865	92.43	-	-	84.82	33.93	10.65	36.97	100	67	A	H
		5895.5	50.65	-59.18	109.83	42.98	33.99	10.67	36.99	100	67	P	H
		5964	49.81	-38.39	88.2	42.22	33.92	10.71	37.04	100	67	P	H
		5895.5	40.29	-49.54	89.83	32.62	33.99	10.67	36.99	100	67	A	H
		5925.25	38.89	-29.31	68.2	31.22	34	10.69	37.02	100	67	A	H
													H
802.11a CH 173 5865MHz													H
		5645.135	47.94	-20.26	68.2	41.32	33	10.43	36.81	400	49	P	V
		5687.91	48.94	-47.34	96.28	42.23	33.08	10.48	36.85	400	49	P	V
		5704.43	48.59	-57.85	106.44	41.83	33.13	10.49	36.86	400	49	P	V
		5723.9	47.97	-71.72	119.69	41.08	33.24	10.52	36.87	400	49	P	V
	*	5865	94.64	-	-	87.03	33.93	10.65	36.97	400	49	P	V
	*	5865	87.4	-	-	79.79	33.93	10.65	36.97	400	49	A	V
		5922	49.7	-40.69	90.39	42.02	34	10.69	37.01	400	49	P	V
		5945	49.45	-38.75	88.2	41.78	34	10.7	37.03	400	49	P	V
		5895.25	39.13	-50.89	90.02	31.46	33.99	10.67	36.99	400	49	A	V
		5925	38.83	-29.37	68.2	31.16	34	10.69	37.02	400	49	A	V
													V
													V

WIFI Ant. 5+4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 177 5885MHz		5602.655	47.72	-20.48	68.2	41.12	33	10.38	36.78	100	66	P	H
		5678.47	48.02	-41.29	89.31	41.33	33.06	10.47	36.84	100	66	P	H
		5704.135	47.45	-58.91	106.36	40.7	33.12	10.49	36.86	100	66	P	H
		5721.54	47.83	-66.48	114.31	40.96	33.23	10.51	36.87	100	66	P	H
	*	5885	99.92	-	-	92.28	33.97	10.66	36.99	100	66	P	H
	*	5885	92.48	-	-	84.84	33.97	10.66	36.99	100	66	A	H
		5895.75	70.06	-39.59	109.65	62.39	33.99	10.67	36.99	100	66	P	H
		5926.5	50.2	-38	88.2	42.53	34	10.69	37.02	100	66	P	H
		5895.25	59.3	-30.72	90.02	51.63	33.99	10.67	36.99	100	66	A	H
		5925.25	38.99	-29.21	68.2	31.32	34	10.69	37.02	100	66	A	H
		5648.675	48.45	-19.75	68.2	41.84	33	10.43	36.82	396	49	P	V
		5660.475	48.55	-27.43	75.98	41.91	33.02	10.45	36.83	396	49	P	V
		5717.115	48.24	-61.75	109.99	41.4	33.2	10.51	36.87	396	49	P	V
		5723.31	49.33	-69.02	118.35	42.44	33.24	10.52	36.87	396	49	P	V
	*	5885	94.75	-	-	87.11	33.97	10.66	36.99	396	49	P	V
	*	5885	87.38	-	-	79.74	33.97	10.66	36.99	396	49	A	V
		5895.5	61.26	-48.57	109.83	53.59	33.99	10.67	36.99	396	49	P	V
		5954.25	50.17	-38.03	88.2	42.53	33.97	10.71	37.04	396	49	P	V
		5895.25	53.25	-36.77	90.02	45.58	33.99	10.67	36.99	396	49	A	V
		5926	38.85	-29.35	68.2	31.18	34	10.69	37.02	396	49	A	V

Remark

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

UNII-4 - 5735~5895MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 5+4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11690	45.88	-28.12	74	53.12	38.51	15.22	60.97	-	-	P	H
		12489	47.61	-26.39	74	54.99	38.7	15.59	61.67	-	-	P	H
		12489	38.82	-15.18	54	46.2	38.7	15.59	61.67	-	-	A	H
		14491	48.23	-25.77	74	54.72	40.51	16.48	63.48	-	-	P	H
		14491	39.44	-14.56	54	45.93	40.51	16.48	63.48	-	-	A	H
		17535	48.48	-19.72	68.2	49.01	38.71	18.55	57.79	-	-	P	H
		18000	51.93	-22.07	74	47.06	43.1	18.94	57.17	-	-	P	H
		18000	43.14	-10.86	54	38.27	43.1	18.94	57.17	-	-	A	H
													H
													H
													H
802.11a CH 169 5845MHz													H
		11690	45.56	-28.44	74	52.8	38.51	15.22	60.97	-	-	P	V
		12368	47.59	-26.41	74	54.91	38.73	15.54	61.59	-	-	P	V
		12368	38.8	-15.2	54	46.12	38.73	15.54	61.59	-	-	A	V
		14491	48.72	-25.28	74	55.21	40.51	16.48	63.48	-	-	P	V
		14491	39.93	-14.07	54	46.42	40.51	16.48	63.48	-	-	A	V
		17535	47.98	-20.22	68.2	48.51	38.71	18.55	57.79	-	-	P	V
		17989	52.86	-21.14	74	48.11	43	18.93	57.18	-	-	P	V
		17989	44.07	-9.93	54	39.32	43	18.93	57.18	-	-	A	V
													V
													V
													V
													V

WIFI Ant. 5+4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11730	47.17	-26.83	74	54.48	38.47	15.24	61.02	-	-	P	H
		12676	47.64	-26.36	74	54.7	38.95	15.66	61.67	-	-	P	H
		12676	38.85	-15.15	54	45.91	38.95	15.66	61.67	-	-	A	H
		14480	48.11	-25.89	74	54.59	40.52	16.47	63.47	-	-	P	H
		14480	39.32	-14.68	54	45.8	40.52	16.47	63.47	-	-	A	H
		17595	47.26	-20.94	68.2	47.3	39.07	18.6	57.71	-	-	P	H
		18000	52.36	-21.64	74	47.49	43.1	18.94	57.17	-	-	P	H
		18000	43.57	-10.43	54	38.7	43.1	18.94	57.17	-	-	A	H
													H
													H
													H
802.11a CH 173 5865MHz													H
		11730	47.03	-26.97	74	54.34	38.47	15.24	61.02	-	-	P	V
		12511	49.01	-24.99	74	56.39	38.71	15.59	61.68	-	-	P	V
		12511	40.22	-13.78	54	47.6	38.71	15.59	61.68	-	-	A	V
		14491	48.74	-25.26	74	55.23	40.51	16.48	63.48	-	-	P	V
		14491	39.95	-14.05	54	46.44	40.51	16.48	63.48	-	-	A	V
		17595	47.41	-20.79	68.2	47.45	39.07	18.6	57.71	-	-	P	V
		18000	52.14	-21.86	74	47.27	43.1	18.94	57.17	-	-	P	V
		18000	43.35	-10.65	54	38.48	43.1	18.94	57.17	-	-	A	V
													V
													V
													V
													V

WIFI Ant. 5+4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 177 5885MHz		11770	47.34	-26.66	74	54.72	38.43	15.26	61.07	-	-	P	H
		12555	48.72	-25.28	74	56.03	38.76	15.61	61.68	-	-	P	H
		12555	39.93	-14.07	54	47.24	38.76	15.61	61.68	-	-	A	H
		14491	47.73	-26.27	74	54.22	40.51	16.48	63.48	-	-	P	H
		14491	38.94	-15.06	54	45.43	40.51	16.48	63.48	-	-	A	H
		17655	48.25	-19.95	68.2	47.74	39.49	18.65	57.63	-	-	P	H
		18000	52.83	-21.17	74	47.96	43.1	18.94	57.17	-	-	P	H
		18000	44.04	-9.96	54	39.17	43.1	18.94	57.17	-	-	A	H
													H
													H
													H
													H
		11770	47.22	-26.78	74	54.6	38.43	15.26	61.07	-	-	P	V
		12445	47.78	-26.22	74	55.15	38.7	15.57	61.64	-	-	P	V
		12445	38.99	-15.01	54	46.36	38.7	15.57	61.64	-	-	A	V
		14491	47.57	-26.43	74	54.06	40.51	16.48	63.48	-	-	P	V
		14491	38.78	-15.22	54	45.27	40.51	16.48	63.48	-	-	A	V
		17655	47.48	-20.72	68.2	46.97	39.49	18.65	57.63	-	-	P	V
		18000	52.53	-21.47	74	47.66	43.1	18.94	57.17	-	-	P	V
		18000	43.74	-10.26	54	38.87	43.1	18.94	57.17	-	-	A	V
													V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.
4. The emission level close to 18GHz is checked that the average emission level is noise floor only.

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE20_Full (Harmonic @ 3m)

WIFI Ant. 5+4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11730	47.12	-26.88	74	54.43	38.47	15.24	61.02	-	-	P	H
		11906	48.07	-25.93	74	55.37	38.6	15.33	61.23	-	-	P	H
		11906	39.28	-14.72	54	46.58	38.6	15.33	61.23	-	-	A	H
		14491	47.54	-26.46	74	54.03	40.51	16.48	63.48	-	-	P	H
		14491	38.75	-15.25	54	45.24	40.51	16.48	63.48	-	-	A	H
		17595	47.95	-20.25	68.2	47.99	39.07	18.6	57.71	-	-	P	H
		18000	52.62	-21.38	74	47.75	43.1	18.94	57.17	-	-	P	H
		18000	43.83	-10.17	54	38.96	43.1	18.94	57.17	-	-	A	H
													H
													H
802.11ax													H
HE20 Full													H
CH 173		11730	46.29	-27.71	74	53.6	38.47	15.24	61.02	-	-	P	V
5865MHz		11796	47.68	-26.32	74	55.1	38.4	15.28	61.1	-	-	P	V
		11796	38.89	-15.11	54	46.31	38.4	15.28	61.1	-	-	A	V
		14480	48.49	-25.51	74	54.97	40.52	16.47	63.47	-	-	P	V
		14480	39.7	-14.3	54	46.18	40.52	16.47	63.47	-	-	A	V
		17595	47.87	-20.33	68.2	47.91	39.07	18.6	57.71	-	-	P	V
		17989	52.38	-21.62	74	47.63	43	18.93	57.18	-	-	P	V
		17989	43.59	-10.41	54	38.84	43	18.93	57.18	-	-	A	V
													V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.
4. The emission level close to 18GHz is checked that the average emission level is noise floor only.

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE40_Full (Harmonic @ 3m)

WIFI Ant. 5+4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (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)
		10905	48.06	-25.94	74	55.52	38.69	14.83	60.98	-	-	P	H
		10905	39.27	-14.73	54	46.73	38.69	14.83	60.98	-	-	A	H
		11670	45.35	-28.65	74	52.56	38.53	15.21	60.95	-	-	P	H
		14491	48.09	-25.91	74	54.58	40.51	16.48	63.48	-	-	P	H
		14491	39.3	-14.7	54	45.79	40.51	16.48	63.48	-	-	A	H
		17505	46.5	-21.7	68.2	47.28	38.53	18.52	57.83	-	-	P	H
		18000	52.19	-21.81	74	47.32	43.1	18.94	57.17	-	-	P	H
		18000	43.4	-10.6	54	38.53	43.1	18.94	57.17	-	-	A	H
													H
													H
802.11ax													H
HE40 Full													H
CH 167		11670	45.31	-28.69	74	52.52	38.53	15.21	60.95	-	-	P	V
5835MHz		12456	47.54	-26.46	74	54.91	38.7	15.58	61.65	-	-	P	V
		12456	38.75	-15.25	54	46.12	38.7	15.58	61.65	-	-	A	V
		14491	48.54	-25.46	74	55.03	40.51	16.48	63.48	-	-	P	V
		14491	39.75	-14.25	54	46.24	40.51	16.48	63.48	-	-	A	V
		17505	47.68	-20.52	68.2	48.46	38.53	18.52	57.83	-	-	P	V
		18000	51.86	-22.14	74	46.99	43.1	18.94	57.17	-	-	P	V
		18000	43.07	-10.93	54	38.2	43.1	18.94	57.17	-	-	A	V
													V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.
4. The emission level close to 18GHz is checked that the average emission level is noise floor only.

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE80_Full (Harmonic @ 3m)

WIFI Ant. 5+4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (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)
		11000	46.62	-27.38	74	54.18	38.6	14.88	61.04	-	-	P	H
		12621	47.63	-26.37	74	54.82	38.84	15.64	61.67	-	-	A	H
		12621	38.84	-15.16	54	46.03	38.84	15.64	61.67	-	-	P	H
		14480	48.54	-25.46	74	55.02	40.52	16.47	63.47	-	-	A	H
		14480	39.75	-14.25	54	46.23	40.52	16.47	63.47	-	-	P	H
		16500	47.28	-20.92	68.2	49.93	38.6	17.68	58.93	-	-	A	H
		17989	52.23	-21.77	74	47.48	43	18.93	57.18	-	-	P	H
		17989	43.44	-10.56	54	38.69	43	18.93	57.18	-	-	P	H
													H
													H
802.11ax													H
HE80 Full													H
CH 171		11000	47.49	-26.51	74	55.05	38.6	14.88	61.04	-	-	P	V
5855MHz		11785	48.27	-25.73	74	55.67	38.42	15.27	61.09	-	-	A	V
		11785	39.48	-14.52	54	46.88	38.42	15.27	61.09	-	-	P	V
		14491	47.33	-26.67	74	53.82	40.51	16.48	63.48	-	-	A	V
		14491	38.54	-15.46	54	45.03	40.51	16.48	63.48	-	-	P	V
		16500	46.9	-21.3	68.2	49.55	38.6	17.68	58.93	-	-	A	V
		18000	52.42	-21.58	74	47.55	43.1	18.94	57.17	-	-	P	V
		18000	43.63	-10.37	54	38.76	43.1	18.94	57.17	-	-	P	V
													V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.
4. The emission level close to 18GHz is checked that the average emission level is noise floor only.

UNII-4 - 5735~5895MHz

WIFI 802.11ax HE160_Full (Harmonic @ 3m)

WIFI Ant. 5+4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (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)
		11477	47.61	-26.39	74	54.38	38.87	15.12	60.76	-	-	P	H
		11477	38.82	-15.18	54	45.59	38.87	15.12	60.76	-	-	A	H
		11630	45.65	-28.35	74	52.79	38.57	15.19	60.9	-	-	P	H
		14480	49.1	-24.9	74	55.58	40.52	16.47	63.47	-	-	P	H
		14480	40.31	-13.69	54	46.79	40.52	16.47	63.47	-	-	A	H
		17445	46.93	-21.27	68.2	47.95	38.44	18.47	57.93	-	-	P	H
		17989	51.93	-22.07	74	47.18	43	18.93	57.18	-	-	P	H
		17989	43.14	-10.86	54	38.39	43	18.93	57.18	-	-	A	H
													H
													H
802.11ax													H
HE160 Full													H
CH 163		10839	48.39	-25.61	74	55.66	38.88	14.79	60.94	-	-	P	V
5815MHz		10839	39.6	-14.4	54	46.87	38.88	14.79	60.94	-	-	A	V
		11630	45.39	-28.61	74	52.53	38.57	15.19	60.9	-	-	P	V
		14491	47.86	-26.14	74	54.35	40.51	16.48	63.48	-	-	P	V
		14491	39.07	-14.93	54	45.56	40.51	16.48	63.48	-	-	A	V
		17445	46.37	-21.83	68.2	47.39	38.44	18.47	57.93	-	-	P	V
		17989	52.6	-21.4	74	47.85	43	18.93	57.18	-	-	P	V
		17989	43.81	-10.19	54	39.06	43	18.93	57.18	-	-	A	V
													V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.
4. The emission level close to 18GHz is checked that the average emission level is noise floor only.

Emission above 18GHz

WIFI 802.11a (SHF @ 1m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
5+4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		23960	41.8	-32.2	74	58.89	38.8	-2.17	53.72	-	-	P	H
		36010	45.95	-28.05	74	62.34	43.22	-0.92	58.69	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
802.11a													H
SHF		25744	42.43	-31.57	74	59.63	38.9	-2.85	53.25	-	-	P	V
		35940	45.93	-28.07	74	62.48	43.06	-0.91	58.7	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Remark

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

Emission below 1GHz

WIFI 802.11a (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
5+4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		30.97	22.32	-17.68	40	29.99	24.21	0.62	32.5	-	-	P	H
		88.2	29.33	-14.17	43.5	46.22	14.36	1.25	32.5	-	-	P	H
		95.96	33.26	-10.24	43.5	49	15.45	1.29	32.48	-	-	P	H
		167.74	28.18	-15.32	43.5	43.06	15.8	1.81	32.49	-	-	P	H
		187.14	25.09	-18.41	43.5	40.98	14.72	1.86	32.47	-	-	P	H
		885.54	33.83	-12.17	46	32.6	28.86	4.07	31.7	-	-	P	H
													H
													H
													H
													H
													H
802.11a													H
LF		33.88	28.66	-11.34	40	37.81	22.72	0.66	32.53	-	-	P	V
		66.86	25.12	-14.88	40	44.61	11.96	1.09	32.54	-	-	P	V
		94.02	26.4	-17.1	43.5	42.5	15.11	1.27	32.48	-	-	P	V
		170.65	25.55	-17.95	43.5	40.65	15.57	1.82	32.49	-	-	P	V
		265.71	20.4	-25.6	46	30.7	19.85	2.28	32.43	-	-	P	V
		948.59	33.3	-12.7	46	29.71	30.63	4.27	31.31	-	-	P	V
													V
													V
													V
													V
													V
													V

Remark

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

Note symbol

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

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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
5+4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 169 5845MHz		5933.75	49.6	-38.6	88.2	41.93	34	10.69	37.02	100	66	P	H
		5896.75	38.97	-49.94	88.91	31.31	33.99	10.67	37	100	66	A	H

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

For Peak Limit @ 5933.75MHz:

1. Level(dBμV/m)

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

= 34.0(dB/m) + 10.69(dB) + 41.93(dBμV) – 37.02 (dB)

= 49.60 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 49.6(dBμV/m) – 88.2(dBμV/m)

= -38.6(dB)

For Average Limit @ 5896.75MHz:

1. Level(dBμV/m)

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

= 33.99(dB/m) + 10.67(dB) + 31.31(dBμV) – 37.0 (dB)

= 38.97 (dBμV/m)

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

= 38.97(dBμV/m) – 88.91(dBμV/m)

= -49.94(dB)

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

Appendix E. Cabinet Radiated Spurious Emission Plots

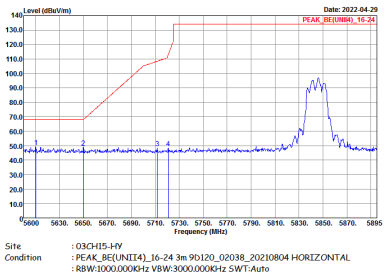
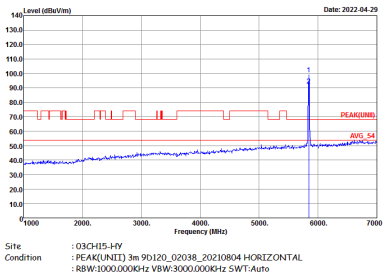
Test Engineer :	Leo Li and Bigshow Wang	**Temperature :**	22.1~23.1°C
		Relative Humidity :	55~60%

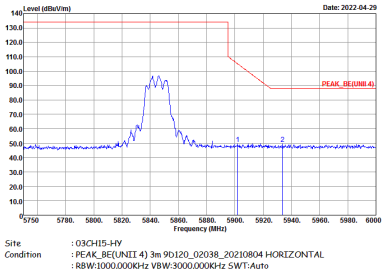
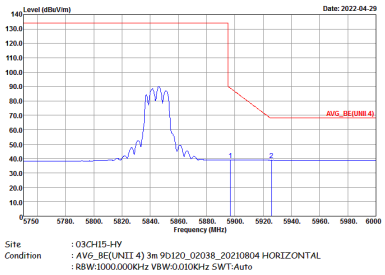
Note symbol

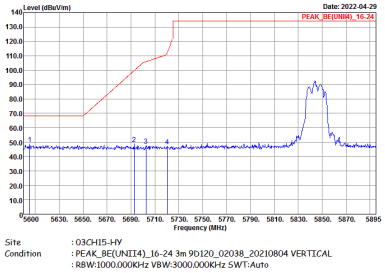
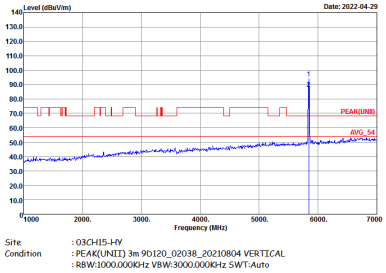
-L	**Low channel location**
-R	**High channel location**

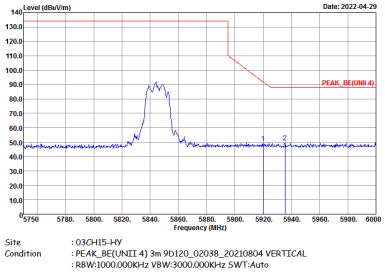
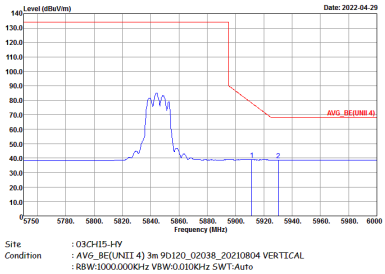
UNII-4 - 5735~5895MHz

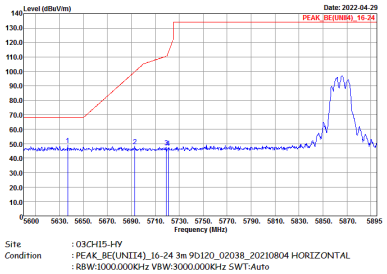
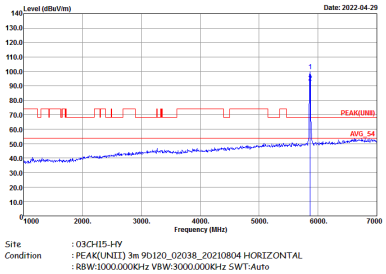
WIFI 802.11a (Band Edge @ 3m)

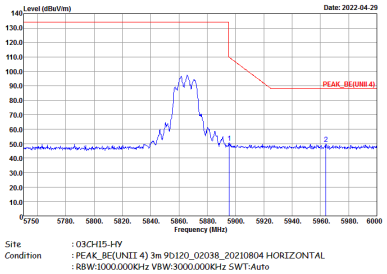
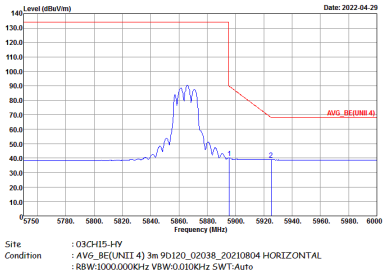
WIFI	**UNII-4 5735~5895MHz Band Edge @ 3m**	
ANT	**802.11a CH169 5845MHz - L**	
5+4	**Horizontal**	**Fundamental**
Peak		

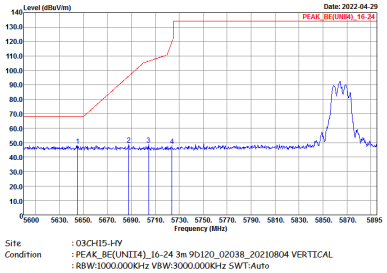
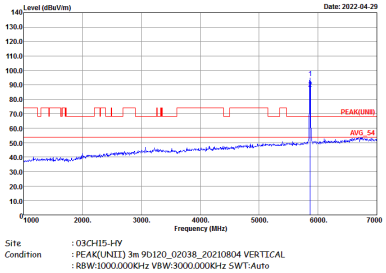
WIFI	UNII-4 5735~5895MHz Band Edge @ 3m	
ANT	802.11a CH169 5845MHz - R	
5+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

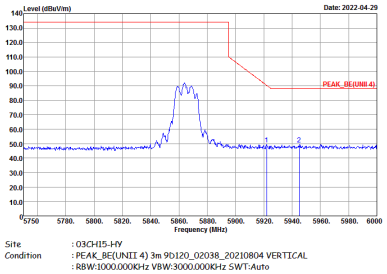
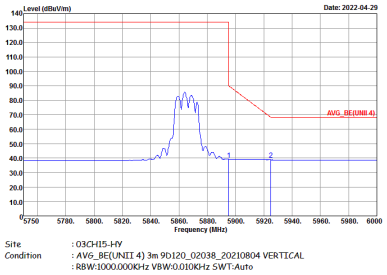
WIFI	UNII-4 5735~5895MHz Band Edge @ 3m	
ANT	802.11a CH169 5845MHz - L	
5+4	Vertical	Fundamental
Peak		

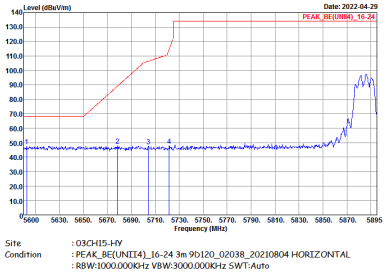
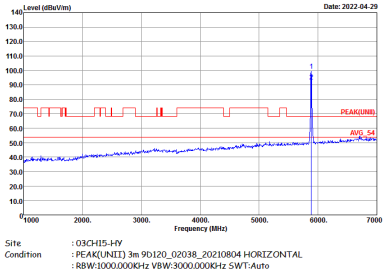
WIFI	UNII-4 5735~5895MHz Band Edge @ 3m	
ANT	802.11a CH169 5845MHz - R	
5+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

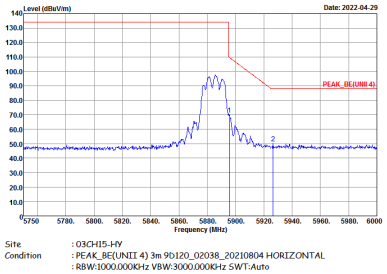
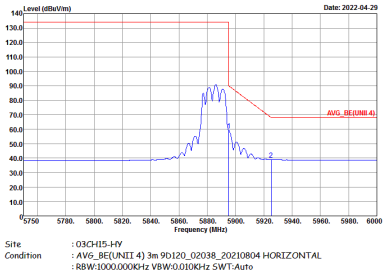
WIFI	UNII-4 5735~5895MHz Band Edge @ 3m	
ANT	802.11a CH173 5865MHz - L	
5+4	Horizontal	Fundamental
Peak		

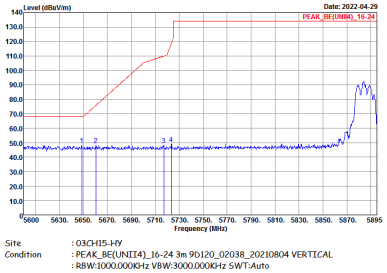
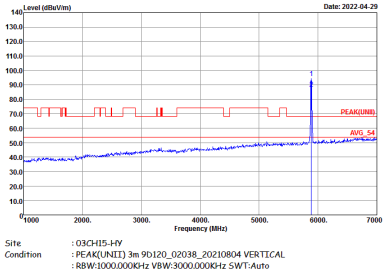
WIFI	UNII-4 5735~5895MHz Band Edge @ 3m	
ANT	802.11a CH173 5865MHz - R	
5+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

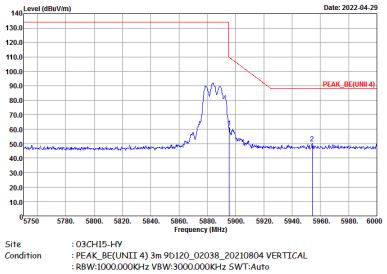
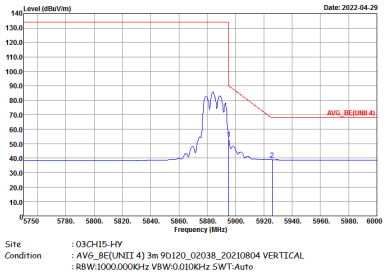
WIFI	UNII-4 5735~5895MHz Band Edge @ 3m	
ANT	802.11a CH173 5865MHz - L	
5+4	Vertical	Fundamental
Peak		

WIFI	UNII-4 5735~5895MHz Band Edge @ 3m	
ANT	802.11a CH173 5865MHz - R	
5+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	UNII-4 5735~5895MHz Band Edge @ 3m	
ANT	802.11a CH177 5885MHz - L	
5+4	Horizontal	Fundamental
Peak		

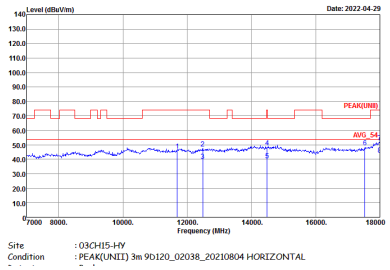
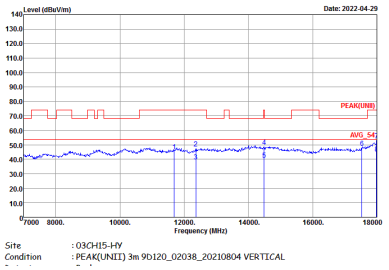
WIFI	UNII-4 5735~5895MHz Band Edge @ 3m	
ANT	802.11a CH177 5885MHz - R	
5+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

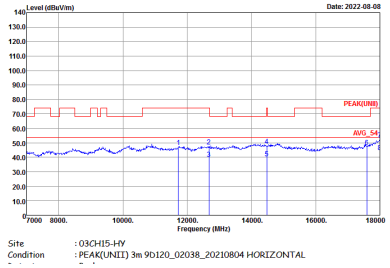
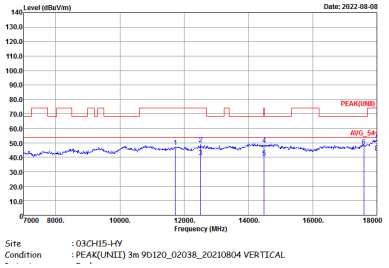
WIFI	UNII-4 5735~5895MHz Band Edge @ 3m	
ANT	802.11a CH177 5885MHz - L	
5+4	Vertical	Fundamental
Peak		

WIFI	UNII-4 5735~5895MHz Band Edge @ 3m	
ANT	802.11a CH177 5885MHz - R	
5+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

UNII-4 - 5735~5895MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI	UNII-4 5735~5895MHz Harmonic @ 3m	
ANT	802.11a CH169 5845MHz	
5+4	Horizontal	Vertical
Peak Avg.		

WIFI	UNII-4 5735~5895MHz Harmonic @ 3m	
ANT	802.11a CH173 5865MHz	
5+4	Horizontal	Vertical
Peak Avg.		

WIFI	UNII-4 5735~5895MHz Harmonic @ 3m	
ANT	802.11a CH177 5885MHz	
5+4	Horizontal	Vertical
Peak Avg.