FCC RADIO TEST REPORT

FCC ID	:	**PY322100564**
Equipment	:	**Netgear 5G MHS Travel Router**
Brand Name	:	**Netgear**
Model Name	:	**MR6150**
Applicant	:	**Netgear Inc** **350 E. Plumeria Drive, San Jose, CA 95134, United States**
Manufacturer	:	**Netgear Inc** **350 E. Plumeria Drive, San Jose, CA 95134, United States**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on May 11, 2022 and testing was performed from May 23, 2022 to Jun. 15, 2022. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Louis Wu

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issue Date
FR190614-04B	01	Initial issue of report	Jun. 22, 2022
FR190614-04B	02	Revise section 3.3.5	Aug. 31, 2022

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum Conducted Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	0.18 dB under the limit at 5150.000 MHz
3.5	15.207	AC Conducted Emission	Pass	9.49 dB under the limit at 0.593 MHz
3.6	15.203 15.407(a)	Antenna Requirement	Pass	-

Declaration of Conformity:

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

1 General Description

1.1 Product Feature of Equipment Under Test

LTE/5G NR, Wi-Fi 2.4GHz 802.11b/g/n/ac/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, and GPS

Product Feature	
Antenna Type	WWAN: **<Ant. 1>**: Monopole Antenna **<Ant. 2>**: Monopole Antenna WLAN: **<Ant. 3>**: Monopole Antenna **<Ant. 4>**: Monopole Antenna GPS: PIFA Antenna

Antenna information		
5150 MHz ~ 5250 MHz	Peak Gain (dBi)	Ant. 3: 3.29 Ant. 4: 2.59
5250 MHz ~ 5350 MHz	Peak Gain (dBi)	Ant. 3: 3.29 Ant. 4: 2.59
5470 MHz ~ 5725 MHz	Peak Gain (dBi)	Ant. 3: 3.29 Ant. 4: 2.59

Remark: 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 made to the EUT during the testing.

1.3 Testing Location

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

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

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 (TAF Code: 3786)
Remark	The Conducted test item subcontracted to Sporton International Inc. Wensan Laboratory.

FCC designation No.: TW1190 and TW3786

1.4 Applicable Standards

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

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

Remark:

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

2 Test Configuration of Equipment Under Test

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

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

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5150-5250 MHz Band 1 (U-NII-1)	36	5180	44	5220
	38*	5190	46*	5230
	40	5200	48	5240
	42#	5210		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz Band 2 (U-NII-2A)	52	5260	60	5300
	54*	5270	62*	5310
	56	5280	64	5320
	58#	5290		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470-5725 MHz Band 3 (U-NII-2C)	100	5500	112	5560
	102*	5510	116	5580
	104	5520	132	5660
	106#	5530	134*	5670
	108	5540	136	5680
	110*	5550	140	5700

Frequency Band	Channel	Freq. (MHz)
5150-5350 MHz	50@	5250
5470-5725 MHz	114@	5570

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
TDWR Channel	118*	5590	124	5620
	120	5600	126*	5630
	122#	5610	128	5640

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
Straddle Channel	138#	5690	144	5720
	142*	5710		

Note:

1. The above Frequency and Channel with "*" are 802.11n HT40 and 802.11ac VHT40 and 802.11ax HE40.
2. The above Frequency and Channel with "#" are 802.11ac VHT80 and 802.11ax HE80.
3. The above Frequency and Channel with "@" are 802.11ac VHT160 and 802.11ax HE160.

2.2 Test Mode

The CDD mode is chosen as worst case configuration for all test cases due to higher power than SISO mode.

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 consider the modulation and the worst data rates as shown in the table below.

MIMO Mode

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

Test Cases	
AC Conducted Emission	Mode 1 : LTE Band 7 Link +WLAN (5GHz) Link – Master + USB Cable (Charging from AC Adapter) + Battery

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ax HE20	802.11ax HE20	802.11ax HE20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

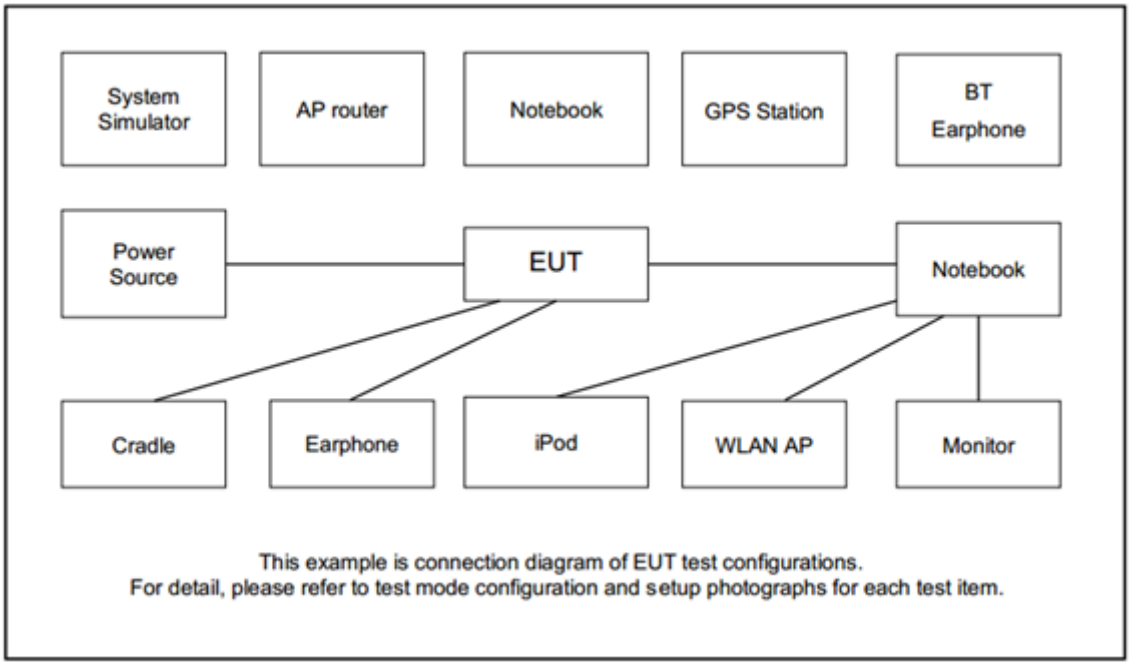
Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ax HE40	802.11ax HE40	802.11ax HE40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle		-	-	142

Ch. #		Band I：5150-5250 MHz	Band II：5250-5350 MHz	Band III：5470-5725MHz
		802.11ax HE80	802.11ax HE80	802.11ax HE80
L	Low	-	-	106
M	Middle	42	58	-
H	High	-	-	122
Straddle		-	-	138

BW160	5150-5350 MHz	5470-5725MHz
	802.11ax HE160	802.11ax HE160
Ch. #	50	114

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.	Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded,1.8m
2.	Notebook	Dell	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.5 EUT Operation Test Setup

The RF test items, utility “QPSR v.5.0-00197” 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 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

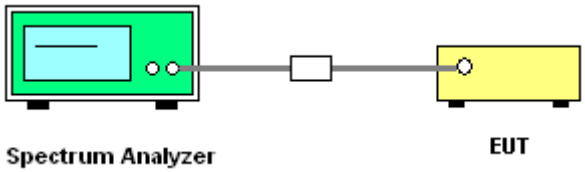
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) ≥ 3 * RBW.
8. Measure and record the results in the test report.

3.1.4 Test Setup

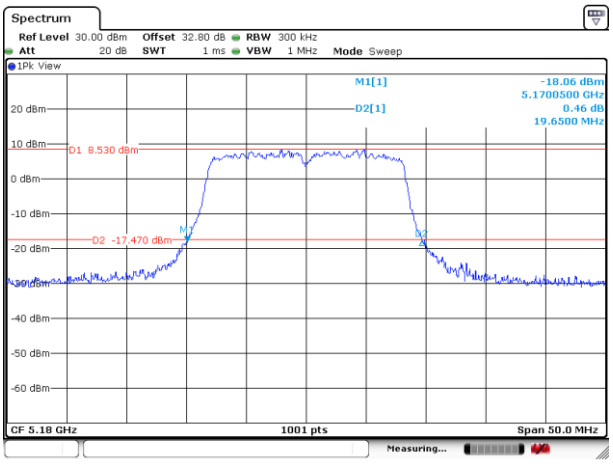
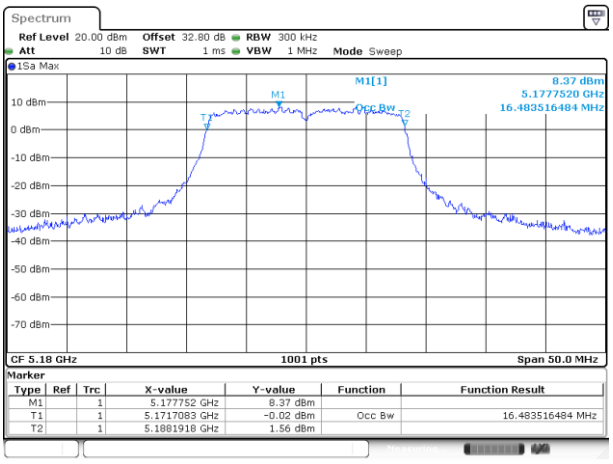


3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

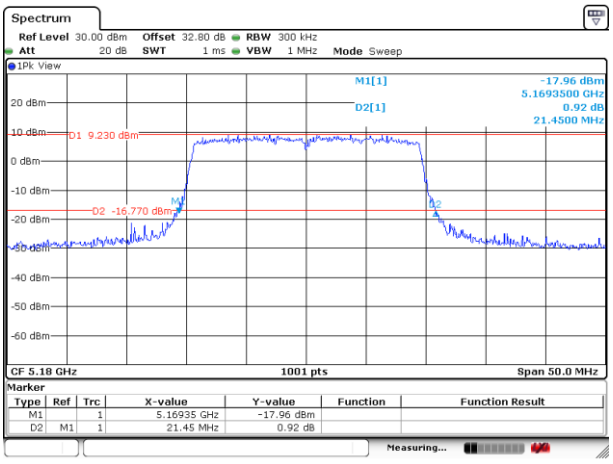
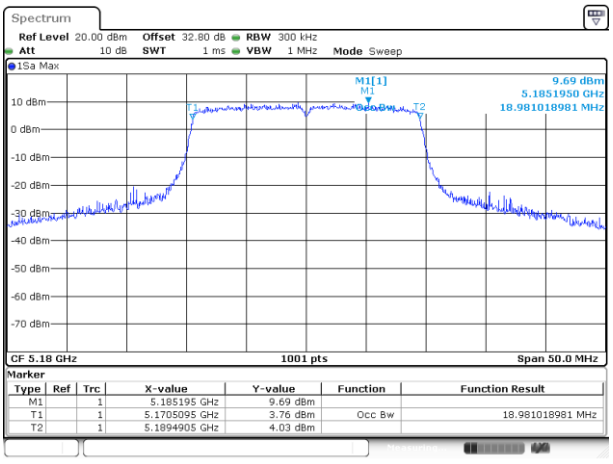
MIMO <Ant. 3+4>

<802.11a>

26dB Bandwidth	99% Occupied Bandwidth
	

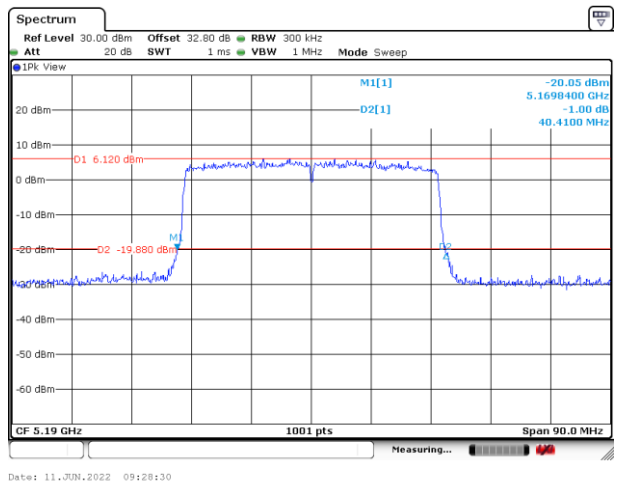
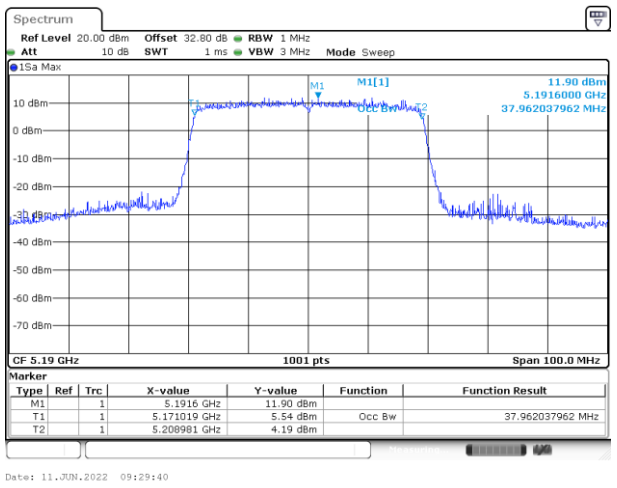
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ax HE20>

26dB Bandwidth	99% Occupied Bandwidth
	

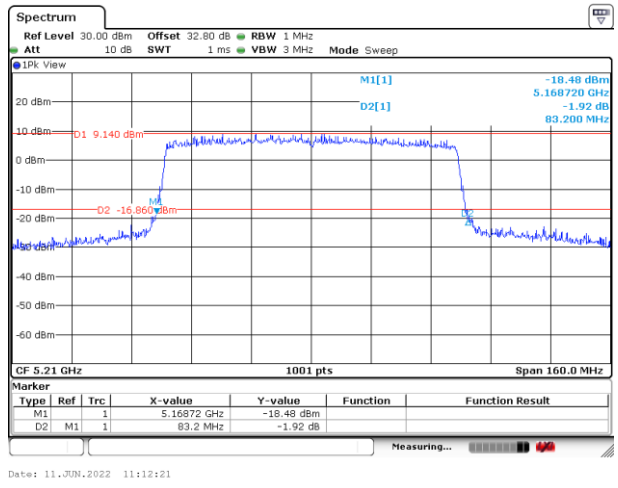
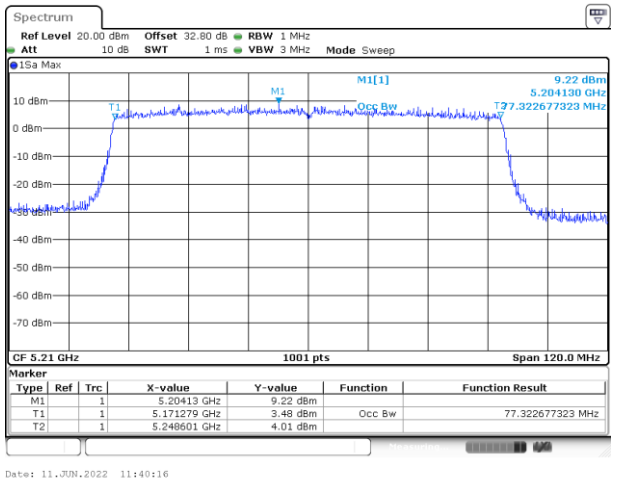
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ax HE40>

26dB Bandwidth	99% Occupied Bandwidth
	

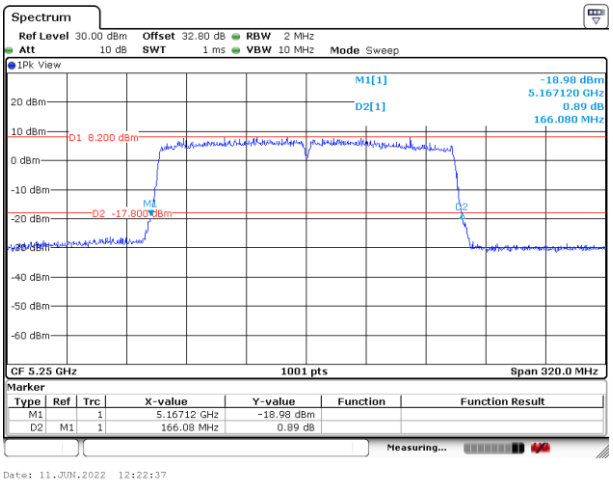
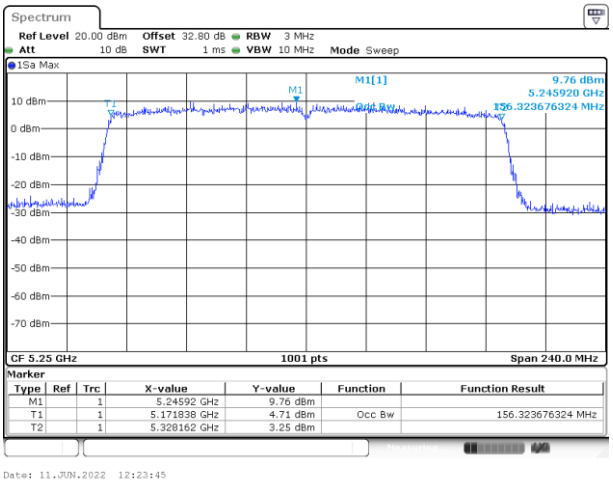
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ax HE80>

26dB Bandwidth	99% Occupied Bandwidth
	

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

<802.11ax HE160>

26dB Bandwidth	99% Occupied Bandwidth
	

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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

■ For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

For the 5.25–5.725 GHz bands:

■ The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

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

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

3.2.2 Measuring Instruments

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

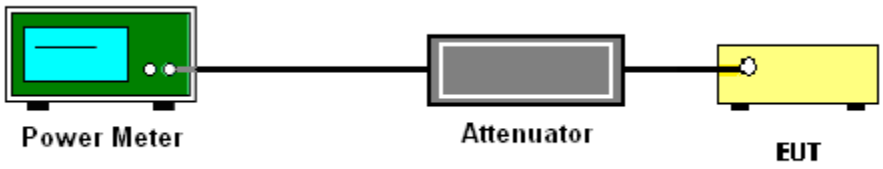
3.2.3 Test Procedures

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

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

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz band. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1.0 MHz band.

For the 5.25–5.725 GHz bands:

The maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

Section F) Maximum power spectral density.

 # Method SA-3 #

(power averaging (rms) detection with max hold):

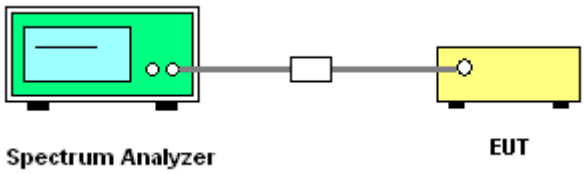
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW ≥ 3 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time ≤ (number of points in sweep) × T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
  Detector = power averaging (rms).
- Trace mode = max hold.
- Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.

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

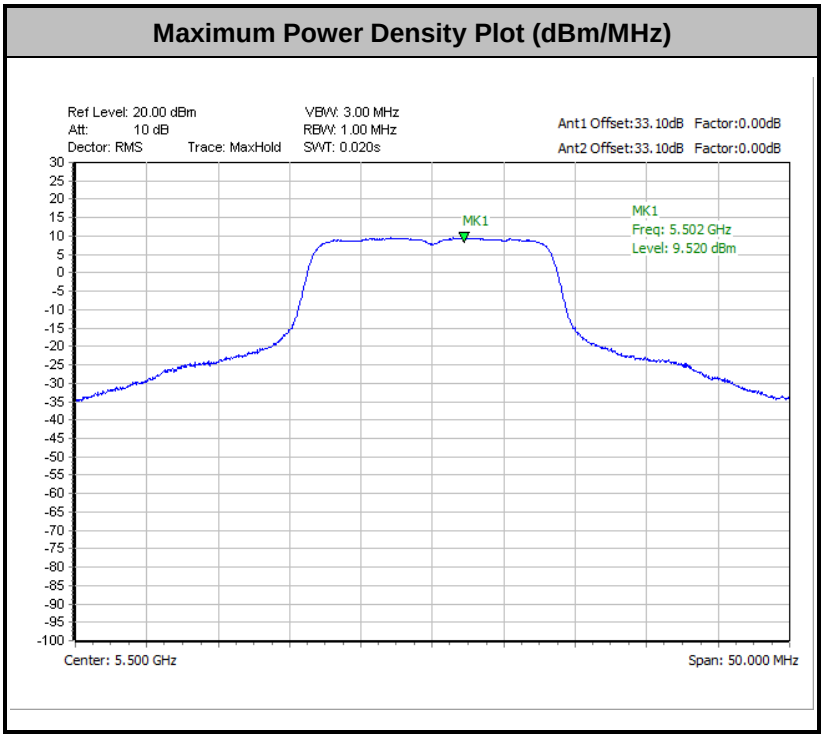


3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

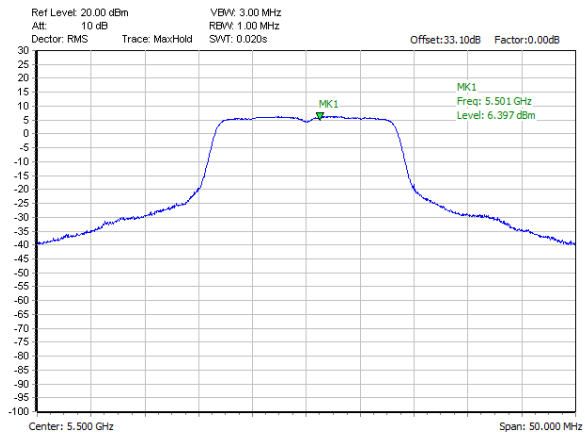
<802.11a>

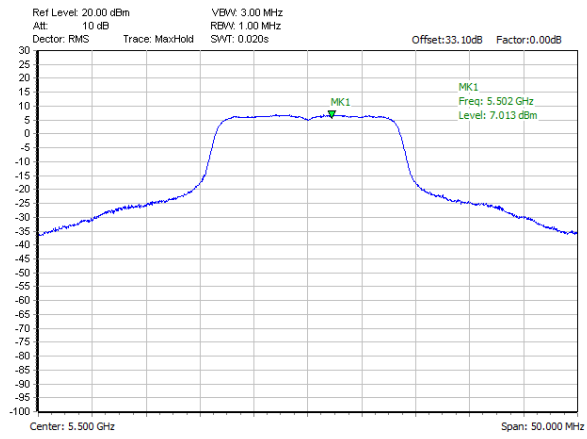
Maximum Power Density Plot (dBm/MHz)



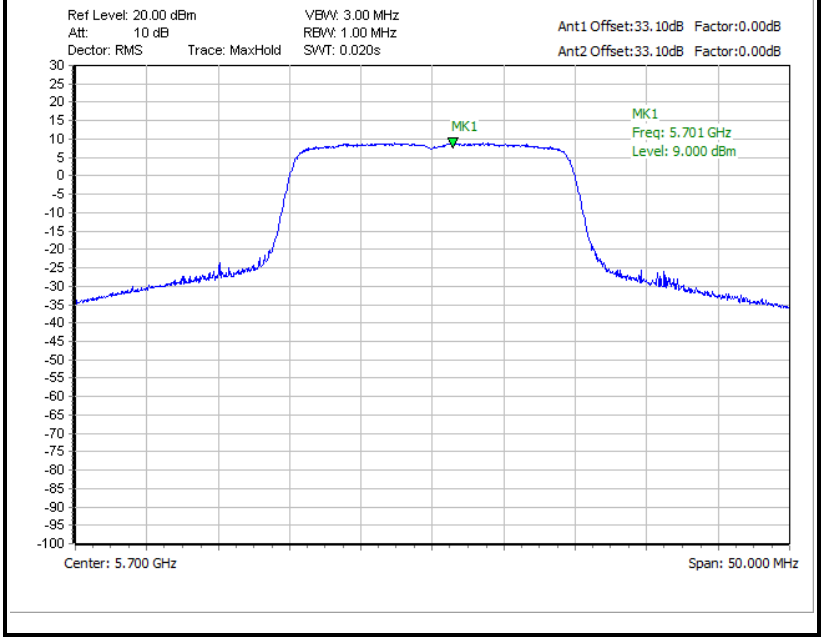
Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

Maximum Power Density Plot Trace 1 (Ant 3)	Maximum Power Density Plot Trace 2 (Ant 4)

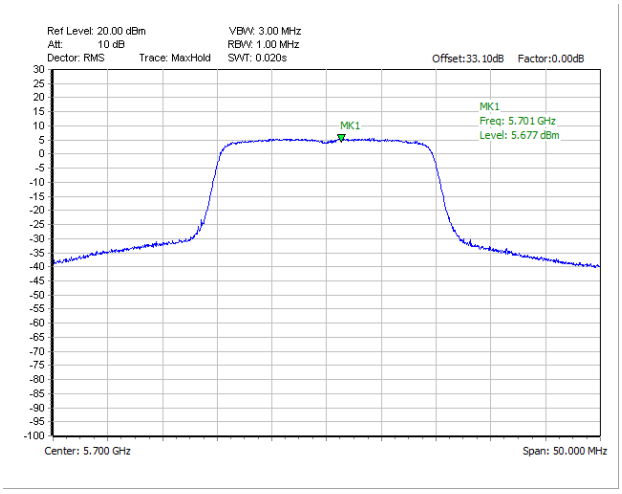
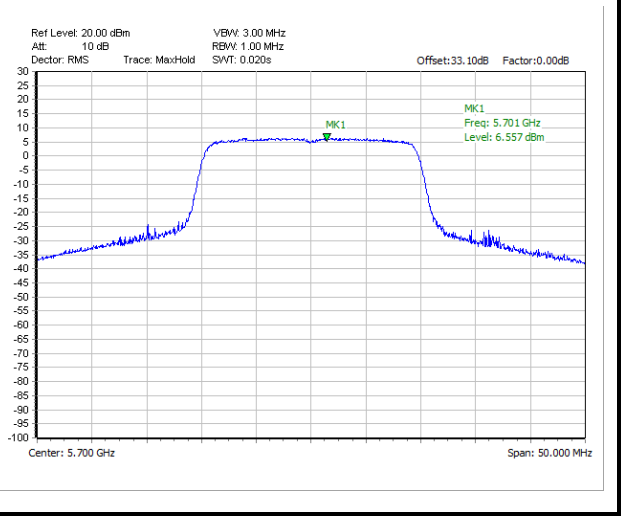




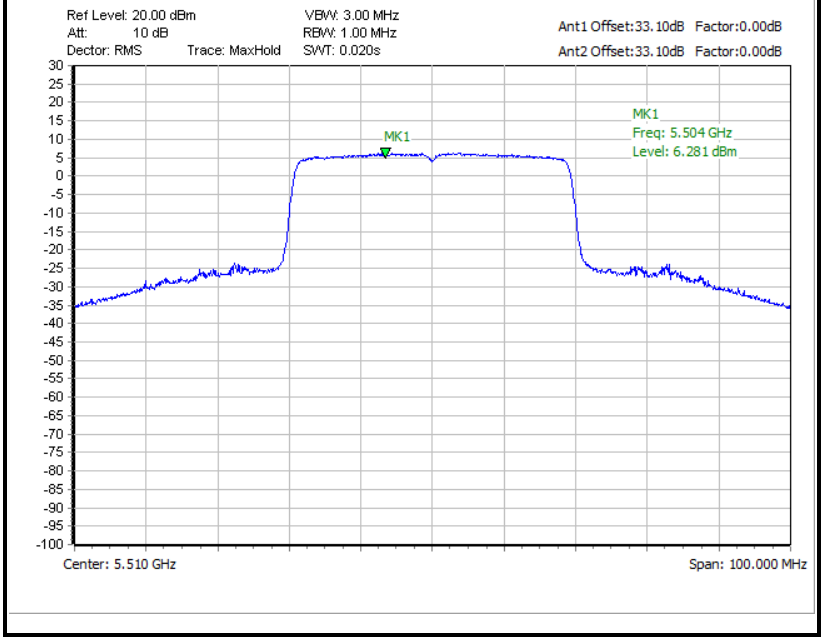
<802.11ax HE20>

Maximum Power Density Plot (dBm/MHz)


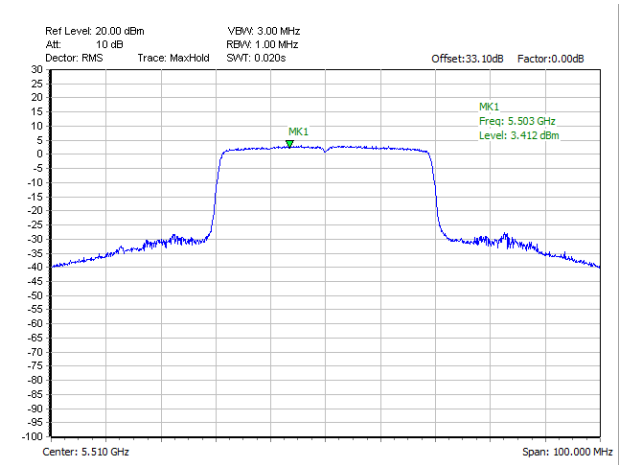
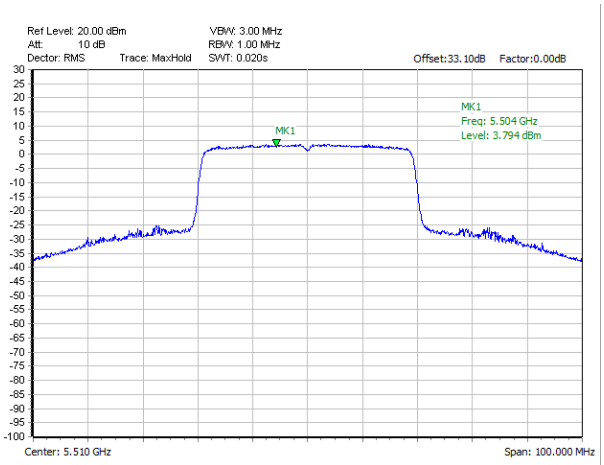
Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

Maximum Power Density Plot Trace 1 (Ant 3)	Maximum Power Density Plot Trace 2 (Ant 4)
	

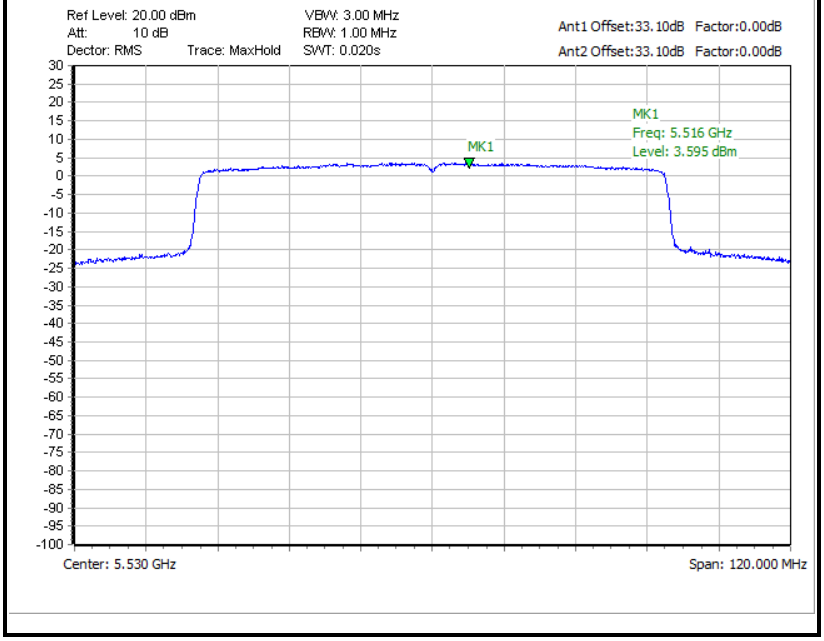
<802.11ax HE40>

Maximum Power Density Plot (dBm/MHz)


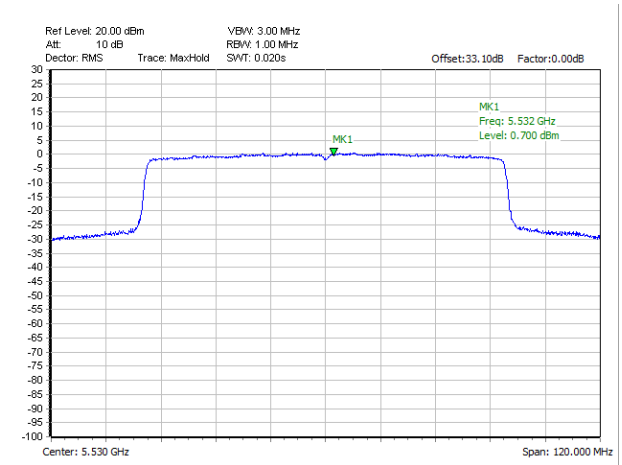
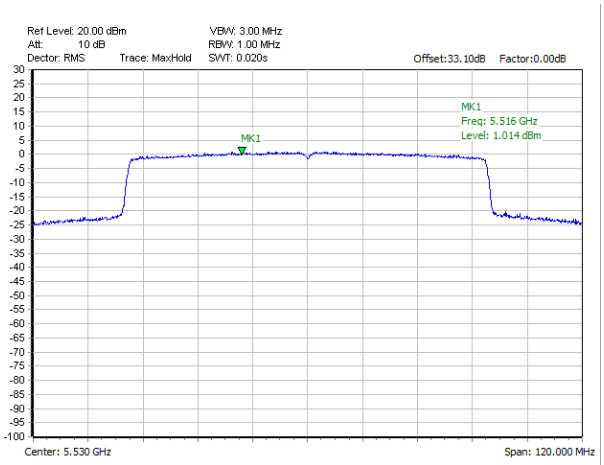
Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

Maximum Power Density Plot Trace 1 (Ant 3)	Maximum Power Density Plot Trace 2 (Ant 4)
	

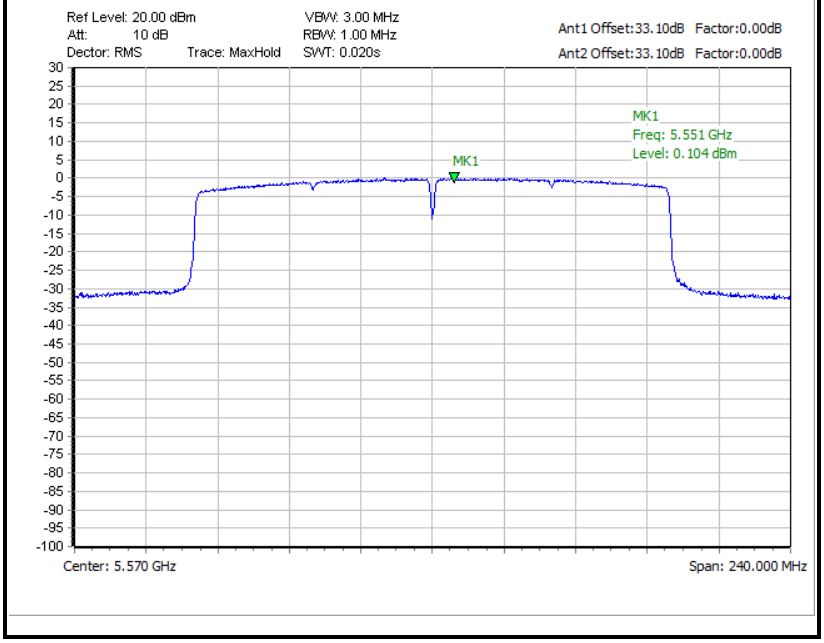
<802.11ax HE80>

Maximum Power Density Plot (dBm/MHz)


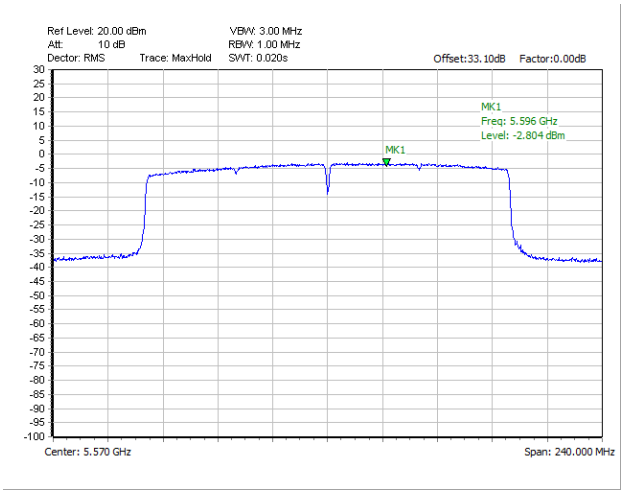
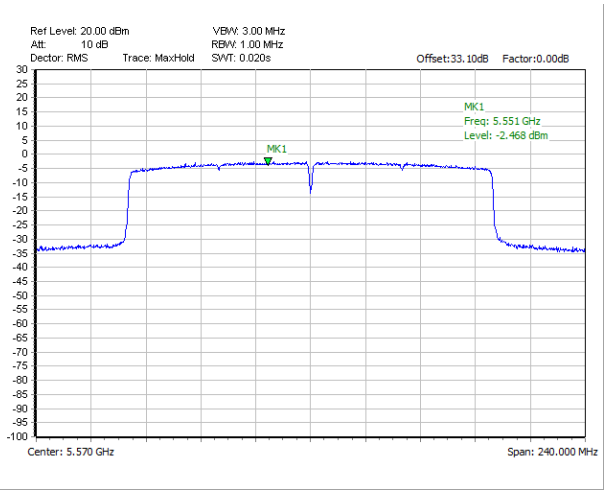
Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

Maximum Power Density Plot Trace 1 (Ant 3)	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 3)	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) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of –27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

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

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

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

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

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

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

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

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

3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

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

(1) Procedure for Unwanted Emissions Measurements Below 1000 MHz

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

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

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

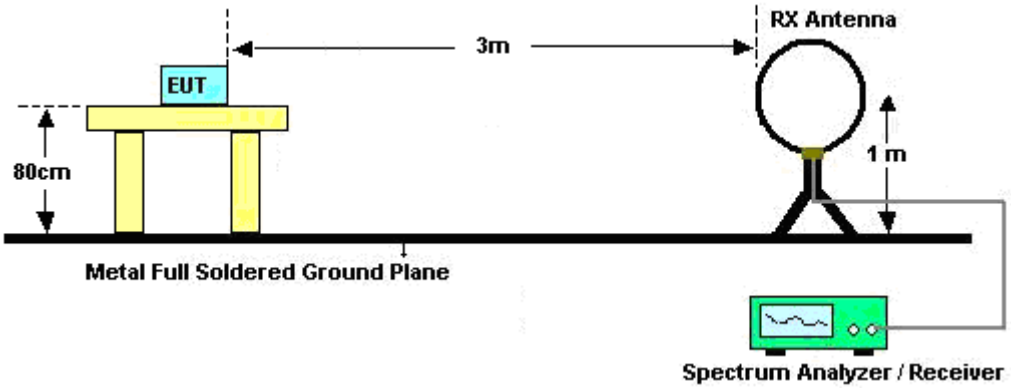
(3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz

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

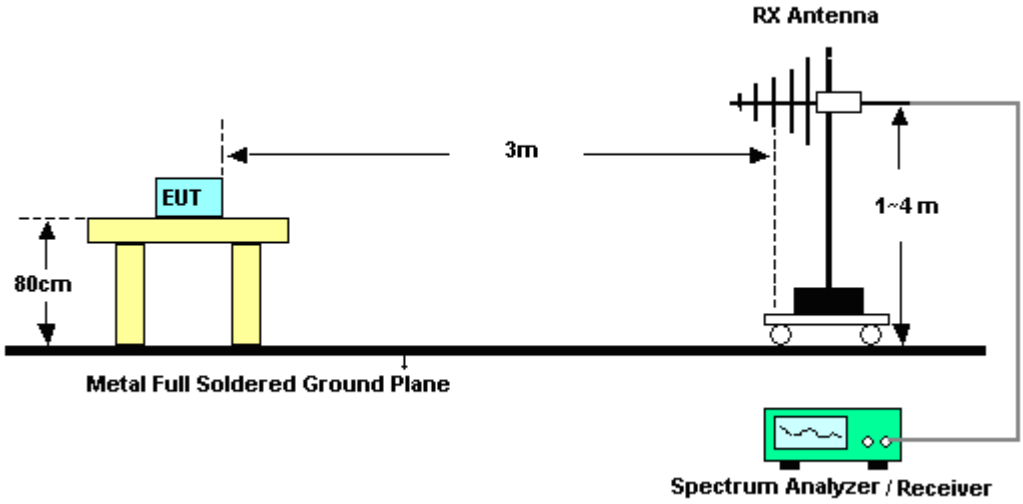
2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna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

3.4.4 Test Setup

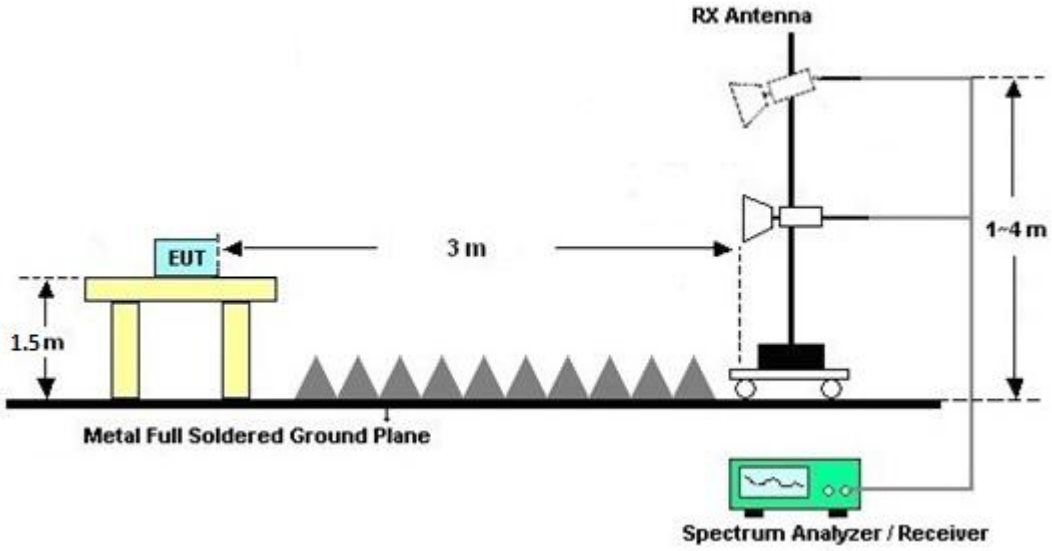
For radiated emissions below 30MHz



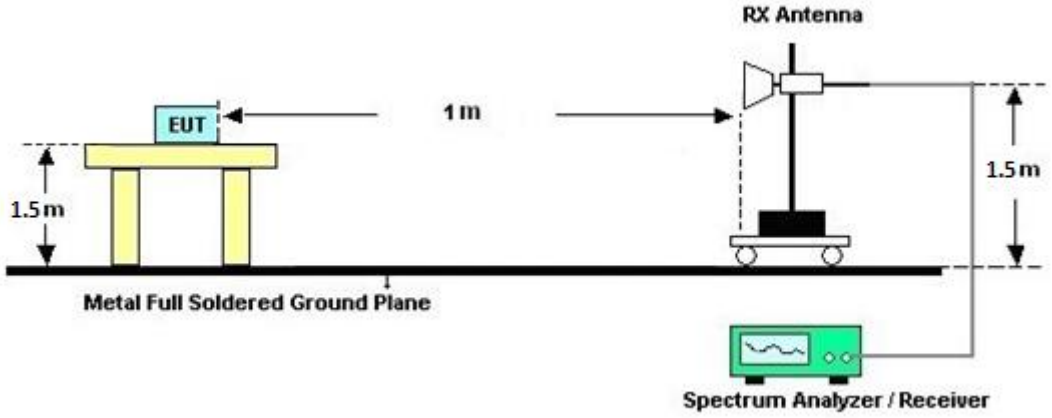
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



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

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

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

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.4.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

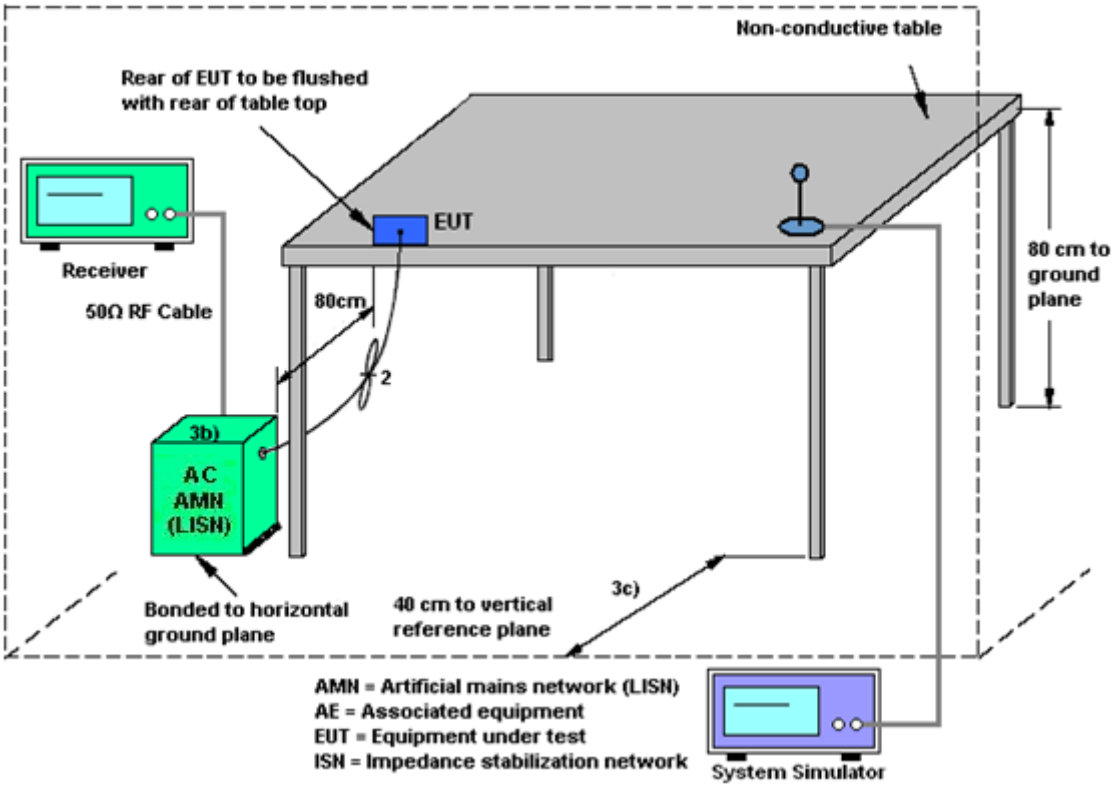
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.6 Antenna Requirements

3.6.1 Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.6.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.6.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For power measurements on IEEE 802.11 devices,

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

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

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

For PSD measurements, the directional gain calculation follows F)2)f)ii) of KDB 662911 D01 v02r01.

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

where

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

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

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

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

For example: If a device has two antenna, G_{ANT1}= 3.6dBi; G_{ANT2}=4.2dBi

Directional gain of power measurement = max(3.6, 4.2) + 0 = 4.2 dBi

Directional gain of PSD measurement = $10 * \log[(10^{3.6/20} + 10^{4.2/20})^2 / 2]$ = 6.92 dBi

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

<CDD Modes>						
	Ant. 3 (dBi)	Ant. 4 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band I	3.29	2.59	3.29	5.96	0.00	0.00
Band II	3.29	2.59	3.29	5.96	0.00	0.00
Band III	3.29	2.59	3.29	5.96	0.00	0.00

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

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

Calculation example:
The DG for PSD is derived from formula is
10 x log { { [10^ (3.29 dBi / 20) + 10^ (2.59 dBi / 20)] ^ 2 } / 2 }
= 5.96 dBi

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	35419 & 03	30MHz~1GHz	Apr. 24, 2022	May 23, 2022~ Jun. 08, 2022	Apr. 23, 2023	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 03, 2021	May 23, 2022~ Jun. 08, 2022	Dec. 02, 2022	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Jan. 07, 2022	May 23, 2022~ Jun. 08, 2022	Jan. 06, 2023	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 21, 2022	May 23, 2022~ Jun. 08, 2022	Apr. 20, 2023	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 04, 2021	May 23, 2022~ Jun. 08, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Oct. 04, 2021	May 23, 2022~ Jun. 08, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 23, 2021	May 23, 2022~ Jun. 08, 2022	Jul. 22, 2022	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Jul. 22, 2021	May 23, 2022~ Jun. 08, 2022	Jul. 21, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682/4	30MHz to 18GHz	Feb. 23, 2022	May 23, 2022~ Jun. 08, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4	9kHz to 18GHz	Feb. 23, 2022	May 23, 2022~ Jun. 08, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4	9kHz to 18GHz	Feb. 23, 2022	May 23, 2022~ Jun. 08, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 17, 2021	May 23, 2022~ Jun. 08, 2022	Sep. 16, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 23, 2022	May 23, 2022~ Jun. 08, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	Apr. 14, 2022	May 23, 2022~ Jun. 08, 2022	Apr. 13, 2023	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	May 23, 2022~ Jun. 08, 2022	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	May 23, 2022~ Jun. 08, 2022	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	May 23, 2022~ Jun. 08, 2022	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	May 23, 2022~ Jun. 08, 2022	N/A	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	May 23, 2022~ Jun. 08, 2022	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	Mar. 07, 2022	May 23, 2022~ Jun. 08, 2022	Mar. 06, 2023	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 30, 2021	May 23, 2022~ Jun. 08, 2022	Nov. 29, 2022	Radiation (03CH07-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 16. 2021	Jun. 02, 2022~ Jun. 11, 2022	Nov. 15. 2022	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO 12 (NO:113)	10MHz~6GHz	Dec. 16, 2021	Jun. 02, 2022~ Jun. 11, 2022	Dec. 15, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	Jun. 02, 2022~ Jun. 11, 2022	Aug. 29, 2022	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jun. 15, 2022	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2021	Jun. 15, 2022	Nov. 30, 2022	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2021	Jun. 15, 2022	Nov. 16, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 03, 2021	Jun. 15, 2022	Dec. 02, 2022	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	Jun. 15, 2022	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Jul. 28, 2021	Jun. 15, 2022	Jul. 27, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 30, 2021	Jun. 15, 2022	Dec. 29, 2022	Conduction (CO05-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.1 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.1 dB**

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.0 dB**

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Mina Liu	Temperature:	21~25	°C
Test Date:	2022/6/2~2022/06/11	Relative Humidity:	51~54	%

TEST RESULTS DATA
26dB and 99% OBW

Band I MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)			Note
					Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4		
11a	6Mbps	2	36	5180	16.48	16.48	19.65	20.80	-		22.17			
11a	6Mbps	2	44	5220	16.48	16.58	20.15	24.45	-		22.17			
11a	6Mbps	2	48	5240	16.48	16.53	20.75	25.45	-		22.17			

TEST RESULTS DATA
Average Power Table

FCC Band I MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)			Pass/Fail
					Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4		
11a	6Mbps	2	36	5180	17.20	17.70	20.47	30.00		3.29			Pass
11a	6Mbps	2	44	5220	17.30	17.90	20.62	30.00		3.29			Pass
11a	6Mbps	2	48	5240	17.10	17.90	20.53	30.00		3.29			Pass
HT20	MCS0	2	36	5180	17.10	17.40	20.26	30.00		3.29			Pass
HT20	MCS0	2	44	5220	17.20	17.70	20.47	30.00		3.29			Pass
HT20	MCS0	2	48	5240	17.00	17.70	20.37	30.00		3.29			Pass
HT40	MCS0	2	38	5190	16.90	17.40	20.17	30.00		3.29			Pass
HT40	MCS0	2	46	5230	17.00	17.70	20.37	30.00		3.29			Pass
VHT20	MCS0	2	36	5180	17.10	17.40	20.26	30.00		3.29			Pass
VHT20	MCS0	2	44	5220	17.20	17.70	20.47	30.00		3.29			Pass
VHT20	MCS0	2	48	5240	17.00	17.70	20.37	30.00		3.29			Pass
VHT40	MCS0	2	38	5190	16.90	17.40	20.17	30.00		3.29			Pass
VHT40	MCS0	2	46	5230	17.00	17.70	20.37	30.00		3.29			Pass
VHT80	MCS0	2	42	5210	16.20	16.60	19.41	30.00		3.29			Pass
VHT160	MCS0	2	50	5250	15.20	16.00	18.63	30.00		3.29			Pass

TEST RESULTS DATA
Power Spectral Density

FCC Band I MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4	
11a	6Mbps	2	36	5180			9.38	17.00		5.96		Pass
11a	6Mbps	2	44	5220			9.32	17.00		5.96		Pass
11a	6Mbps	2	48	5240			9.15	17.00		5.96		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band II MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	
11a	6Mbps	2	52	5260	16.48	16.53	20.30	21.70	23.17		29.17		23.98		
11a	6Mbps	2	60	5300	16.48	16.53	20.60	24.60	23.17		29.17		23.98		
11a	6Mbps	2	64	5320	16.43	16.48	19.75	21.30	23.16		29.16		23.96		

TEST RESULTS DATA
Average Power Table

FCC Band II MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4		
11a	6Mbps	2	52	5260	17.40	17.40	20.41	23.98		3.29		30	Pass
11a	6Mbps	2	60	5300	17.10	17.40	20.26	23.98		3.29		30	Pass
11a	6Mbps	2	64	5320	16.20	16.70	19.47	23.96		3.29		30	Pass
HT20	MCS0	2	52	5260	17.10	17.20	20.16	23.98		3.29		30	Pass
HT20	MCS0	2	60	5300	17.10	17.50	20.31	23.98		3.29		30	Pass
HT20	MCS0	2	64	5320	15.70	16.00	18.86	23.98		3.29		30	Pass
HT40	MCS0	2	54	5270	17.00	17.30	20.16	23.98		3.29		30	Pass
HT40	MCS0	2	62	5310	15.90	16.50	19.22	23.98		3.29		30	Pass
VHT20	MCS0	2	52	5260	17.10	17.20	20.16	23.98		3.29		30	Pass
VHT20	MCS0	2	60	5300	17.10	17.50	20.31	23.98		3.29		30	Pass
VHT20	MCS0	2	64	5320	15.70	16.00	18.86	23.98		3.29		30	Pass
VHT40	MCS0	2	54	5270	17.00	17.30	20.16	23.98		3.29		30	Pass
VHT40	MCS0	2	62	5310	15.90	16.50	19.22	23.98		3.29		30	Pass
VHT80	MCS0	2	58	5290	15.00	15.80	18.43	23.98		3.29		30	Pass

TEST RESULTS DATA
Power Spectral Density

Band II MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4		
11a	6Mbps	2	52	5260			9.19	11.00		5.96			Pass
11a	6Mbps	2	60	5300			9.00	11.00		5.96			Pass
11a	6Mbps	2	64	5320			8.23	11.00		5.96			Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4
11a	6Mbps	2	100	5500	16.48	16.48	20.40	21.25	23.17		29.17		23.98		----	----
11a	6Mbps	2	116	5580	16.43	16.48	19.95	20.80	23.16		29.16		23.98		----	----
11a	6Mbps	2	140	5700	16.43	16.43	19.90	19.75	23.16		29.16		23.96		----	----

Band III straddle channel MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4
11a	6Mbps	2	144	5720	13.24	13.24	14.90	19.75	22.22		28.22		22.73		-	-

TEST RESULTS DATA
Average Power Table

FCC Band III MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4		
11a	6Mbps	2	100	5500	17.30	17.60	20.46	23.98		3.29		30	Pass
11a	6Mbps	2	116	5580	17.20	17.80	20.52	23.98		3.29		30	Pass
11a	6Mbps	2	140	5700	17.20	17.80	20.52	23.96		3.29		30	Pass
HT20	MCS0	2	100	5500	17.20	17.60	20.41	23.98		3.29		30	Pass
HT20	MCS0	2	116	5580	17.20	17.80	20.52	23.98		3.29		30	Pass
HT20	MCS0	2	140	5700	17.20	17.80	20.52	23.98		3.29		30	Pass
HT40	MCS0	2	102	5510	16.90	17.40	20.17	23.98		3.29		30	Pass
HT40	MCS0	2	110	5550	16.70	17.40	20.07	23.98		3.29		30	Pass
HT40	MCS0	2	134	5670	16.70	17.30	20.02	23.98		3.29		30	Pass
VHT20	MCS0	2	100	5500	17.20	17.60	20.41	23.98		3.29		30	Pass
VHT20	MCS0	2	116	5580	17.20	17.80	20.52	23.98		3.29		30	Pass
VHT20	MCS0	2	140	5700	17.20	17.80	20.52	23.98		3.29		30	Pass
VHT40	MCS0	2	102	5510	16.90	17.40	20.17	23.98		3.29		30	Pass
VHT40	MCS0	2	110	5550	16.70	17.40	20.07	23.98		3.29		30	Pass
VHT40	MCS0	2	134	5670	16.70	17.30	20.02	23.98		3.29		30	Pass
VHT80	MCS0	2	106	5530	17.00	17.30	20.16	23.98		3.29		30	Pass
VHT80	MCS0	2	122	5610	16.70	17.50	20.13	23.98		3.29		30	Pass
VHT160	MCS0	2	114	5570	16.20	16.70	19.47	23.98		3.29		30	Pass

FCC Band III straddle channel MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4		
11a	6Mbps	2	144	5720	17.20	17.90	20.57	22.73		3.29		30	Pass
HT20	MCS0	2	144	5720	17.10	17.80	20.47	23.98		3.29		30	Pass
HT40	MCS0	2	142	5710	16.80	17.40	20.12	23.98		3.29		30	Pass
VHT20	MCS0	2	144	5720	17.10	17.80	20.47	23.98		3.29		30	Pass
VHT40	MCS0	2	142	5710	16.80	17.40	20.12	23.98		3.29		30	Pass
VHT80	MCS0	2	138	5690	16.90	17.50	20.22	23.98		3.29		30	Pass

TEST RESULTS DATA
Power Spectral Density

Band III MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4		
11a	6Mbps	2	100	5500			9.52	11.00		5.96			Pass
11a	6Mbps	2	116	5580			9.44	11.00		5.96			Pass
11a	6Mbps	2	140	5700			9.34	11.00		5.96			Pass

Band III straddle channel MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4		
11a	6Mbps	2	144	5720			9.38	11.00		5.96			Pass

TEST RESULTS DATA
26dB and 99% OBW

Band I MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)			Note
						Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4		
HE20	MCS0	2	36	5180	Full	18.98	19.03	21.45	22.80	-		22.78			
HE20	MCS0	2	44	5220	Full	18.98	19.08	21.75	29.25	-		22.78			
HE20	MCS0	2	48	5240	Full	18.98	19.18	21.95	28.70	-		22.78			
HE40	MCS0	2	38	5190	Full	37.96	37.96	40.41	40.59	-		23.01			
HE40	MCS0	2	46	5230	Full	38.06	38.16	40.77	40.77	-		23.01			
HE80	MCS0	2	42	5210	Full	77.32	77.32	83.20	82.88	-		23.01			
HE160	MCS0	2	50	5250	Full	156.32	156.80	166.08	166.72	-		23.01			

TEST RESULTS DATA
Average Power Table

FCC Band I MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)			Pass/Fail
						Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4		
HE20	MCS0	2	36	5180	Full	17.20	17.50	20.36	30.00		3.29			Pass
HE20	MCS0	2	44	5220	Full	17.30	17.80	20.57	30.00		3.29			Pass
HE20	MCS0	2	48	5240	Full	17.10	17.80	20.47	30.00		3.29			Pass
HE40	MCS0	2	38	5190	Full	17.00	17.50	20.27	30.00		3.29			Pass
HE40	MCS0	2	46	5230	Full	17.10	17.80	20.47	30.00		3.29			Pass
HE80	MCS0	2	42	5210	Full	16.30	16.70	19.51	30.00		3.29			Pass
HE160	MCS0	2	50	5250	Full	15.30	16.10	18.73	30.00		3.29			Pass

TEST RESULTS DATA
Power Spectral Density

FCC Band I MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
						Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4	
HE20	MCS0	2	36	5180	Full			8.78	17.00		5.96		Pass
HE20	MCS0	2	44	5220	Full			8.79	17.00		5.96		Pass
HE20	MCS0	2	48	5240	Full			8.79	17.00		5.96		Pass
HE40	MCS0	2	38	5190	Full			5.77	17.00		5.96		Pass
HE40	MCS0	2	46	5230	Full			5.90	17.00		5.96		Pass
HE80	MCS0	2	42	5210	Full			2.77	17.00		5.96		Pass
HE160	MCS0	2	50	5250	Full			-1.25	17.00		5.96		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band II MIMO															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
						Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	
HE20	MCS0	2	52	5260	Full	18.98	18.98	21.63	23.25	23.78		29.78		23.98		
HE20	MCS0	2	60	5300	Full	18.98	19.08	22.05	25.10	23.78		29.78		23.98		
HE20	MCS0	2	64	5320	Full	18.98	18.98	21.60	21.70	23.78		29.78		23.98		
HE40	MCS0	2	54	5270	Full	37.96	38.16	40.68	41.31	23.98		30.00		23.98		
HE40	MCS0	2	62	5310	Full	38.06	38.16	40.77	40.68	23.98		30.00		23.98		
HE80	MCS0	2	58	5290	Full	77.44	77.44	82.72	84.80	23.98		30.00		23.98		

TEST RESULTS DATA
Average Power Table

FCC Band II MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4		
HE20	MCS0	2	52	5260	Full	17.20	17.30	20.26	23.98		3.29		30	Pass
HE20	MCS0	2	60	5300	Full	17.20	17.60	20.41	23.98		3.29		30	Pass
HE20	MCS0	2	64	5320	Full	15.80	16.10	18.96	23.98		3.29		30	Pass
HE40	MCS0	2	54	5270	Full	17.10	17.40	20.26	23.98		3.29		30	Pass
HE40	MCS0	2	62	5310	Full	16.00	16.60	19.32	23.98		3.29		30	Pass
HE80	MCS0	2	58	5290	Full	15.10	15.90	18.53	23.98		3.29		30	Pass

TEST RESULTS DATA
Power Spectral Density

Band II MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
						Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4		
HE20	MCS0	2	52	5260	Full			8.33	11.00		5.96			Pass
HE20	MCS0	2	60	5300	Full			8.31	11.00		5.96			Pass
HE20	MCS0	2	64	5320	Full			7.13	11.00		5.96			Pass
HE40	MCS0	2	54	5270	Full			5.90	11.00		5.96			Pass
HE40	MCS0	2	62	5310	Full			4.98	11.00		5.96			Pass
HE80	MCS0	2	58	5290	Full			1.77	11.00		5.96			Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
						Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4
HE20	MCS0	2	100	5500	Full	18.98	19.03	21.65	24.20	23.78		29.78		23.98		----	----
HE20	MCS0	2	116	5580	Full	18.93	19.03	21.55	21.65	23.77		29.77		23.98		----	----
HE20	MCS0	2	140	5700	Full	18.98	18.98	21.50	21.55	23.78		29.78		23.98		----	----
HE40	MCS0	2	102	5510	Full	37.96	38.16	40.86	40.77	23.98		30.00		23.98		----	----
HE40	MCS0	2	110	5550	Full	37.96	38.16	40.32	40.77	23.98		30.00		23.98		----	----
HE40	MCS0	2	134	5670	Full	37.96	37.96	40.86	40.59	23.98		30.00		23.98		----	----
HE80	MCS0	2	106	5530	Full	77.44	77.44	84.48	83.52	23.98		30.00		23.98		----	----
HE80	MCS0	2	122	5610	Full	77.32	77.44	83.36	83.84	23.98		30.00		23.98		----	----
HE160	MCS0	2	114	5570	Full	156.08	156.56	165.76	165.76	23.98		30.00		23.98		----	----

Band III straddle channel MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
						Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4
HE20	MCS0	2	144	5720	Full	14.49	14.49	15.80	15.80	22.61		28.61		22.99		3.2	3.25
HE40	MCS0	2	142	5710	Full	33.98	33.98	35.07	35.02	23.98		30.00		23.98		3.99	3.99
HE80	MCS0	2	138	5690	Full	73.72	73.72	76.60	87.00	23.98		30.00		23.98		3.881	3.721

TEST RESULTS DATA
Average Power Table

FCC Band III MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4		
HE20	MCS0	2	100	5500	Full	17.30	17.70	20.51	23.98		3.29		30	Pass
HE20	MCS0	2	116	5580	Full	17.30	17.90	20.62	23.98		3.29		30	Pass
HE20	MCS0	2	140	5700	Full	17.30	17.90	20.62	23.98		3.29		30	Pass
HE40	MCS0	2	102	5510	Full	17.00	17.50	20.27	23.98		3.29		30	Pass
HE40	MCS0	2	110	5550	Full	16.80	17.50	20.17	23.98		3.29		30	Pass
HE40	MCS0	2	134	5670	Full	16.80	17.40	20.12	23.98		3.29		30	Pass
HE80	MCS0	2	106	5530	Full	17.10	17.40	20.26	23.98		3.29		30	Pass
HE80	MCS0	2	122	5610	Full	16.80	17.60	20.23	23.98		3.29		30	Pass
HE160	MCS0	2	114	5570	Full	16.30	16.80	19.57	23.98		3.29		30	Pass

FCC Band III straddle channel MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4		
HE20	MCS0	2	144	5720	Full	17.20	17.90	20.57	22.99		3.29		30	Pass
HE40	MCS0	2	142	5710	Full	16.90	17.50	20.22	23.98		3.29		30	Pass
HE80	MCS0	2	138	5690	Full	17.00	17.60	20.32	23.98		3.29		30	Pass

TEST RESULTS DATA
Power Spectral Density

Band III MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
						Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4		
HE20	MCS0	2	100	5500	Full			8.81	11.00		5.96			Pass
HE20	MCS0	2	116	5580	Full			8.71	11.00		5.96			Pass
HE20	MCS0	2	140	5700	Full			9.00	11.00		5.96			Pass
HE40	MCS0	2	102	5510	Full			6.28	11.00		5.96			Pass
HE40	MCS0	2	110	5550	Full			6.20	11.00		5.96			Pass
HE40	MCS0	2	134	5670	Full			5.88	11.00		5.96			Pass
HE80	MCS0	2	106	5530	Full			3.60	11.00		5.96			Pass
HE80	MCS0	2	122	5610	Full			3.55	11.00		5.96			Pass
HE160	MCS0	2	114	5570	Full			0.10	11.00		5.96			Pass

Band III straddle channel MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
						Ant 3	Ant 4	SUM	Ant 3	Ant 4	Ant 3	Ant 4		
HE20	MCS0	2	144	5720	Full			8.54	11.00		5.96			Pass
HE40	MCS0	2	142	5710	Full			5.81	11.00		5.96			Pass
HE80	MCS0	2	138	5690	Full			3.31	11.00		5.96			Pass

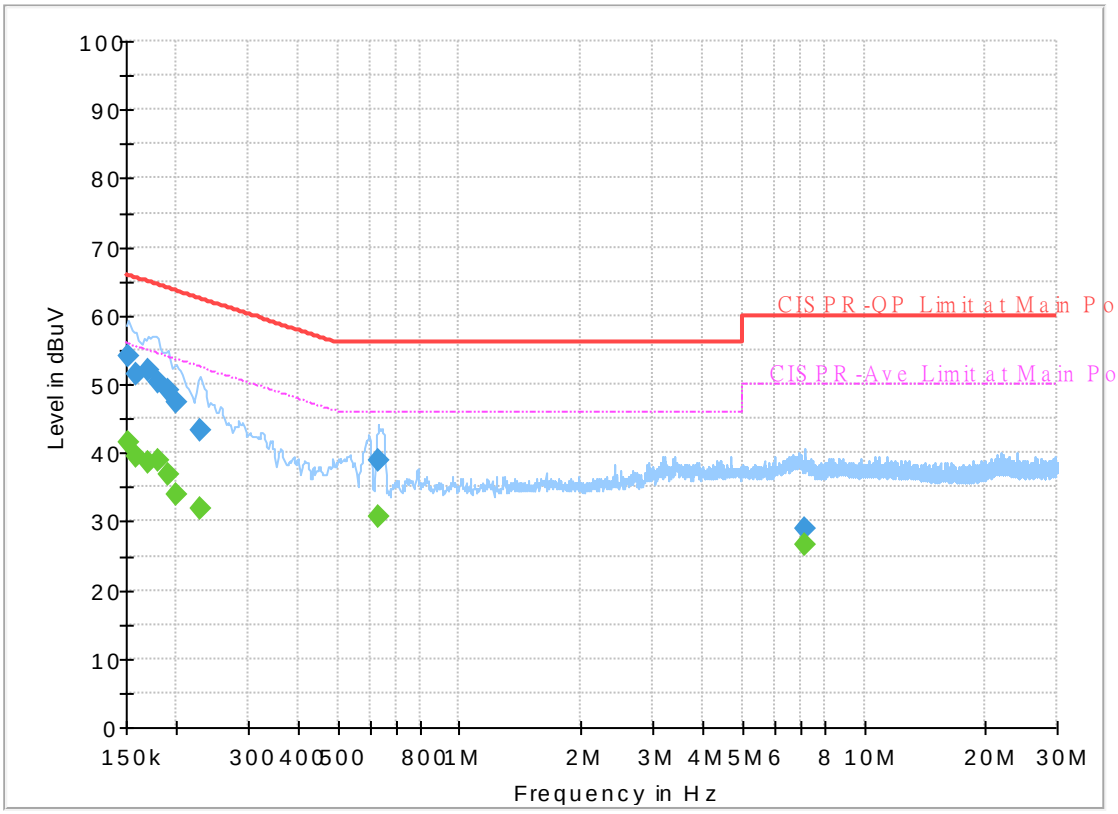
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Calivn Wang	**Temperature :**	23~26℃
		Relative Humidity :	45~55%

EUT Information

Report NO :	190614-04
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

Full Spectrum



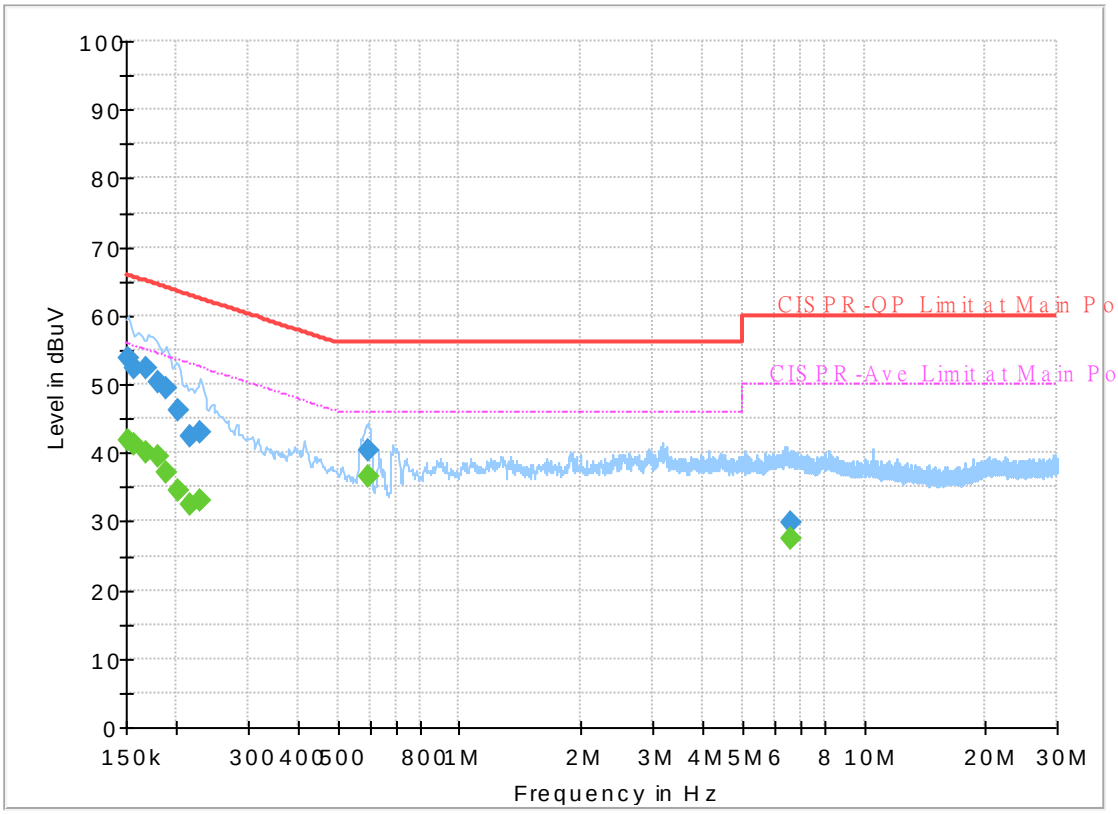
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	41.38	55.88	14.50	L1	OFF	19.6
0.152250	54.10	---	65.88	11.78	L1	OFF	19.6
0.159000	---	39.34	55.52	16.18	L1	OFF	19.6
0.159000	51.58	---	65.52	13.94	L1	OFF	19.6
0.170250	---	38.67	54.95	16.28	L1	OFF	19.6
0.170250	52.08	---	64.95	12.87	L1	OFF	19.6
0.179250	---	38.77	54.52	15.75	L1	OFF	19.6
0.179250	50.42	---	64.52	14.10	L1	OFF	19.6
0.190500	---	36.74	54.02	17.28	L1	OFF	19.6
0.190500	48.98	---	64.02	15.04	L1	OFF	19.6
0.199500	---	33.98	53.63	19.65	L1	OFF	19.6
0.199500	47.32	---	63.63	16.31	L1	OFF	19.6
0.228750	---	31.99	52.50	20.51	L1	OFF	19.6
0.228750	43.26	---	62.50	19.24	L1	OFF	19.6
0.631500	---	30.57	46.00	15.43	L1	OFF	19.6
0.631500	39.02	---	56.00	16.98	L1	OFF	19.6
7.149750	---	26.71	50.00	23.29	L1	OFF	19.9
7.149750	29.01	---	60.00	30.99	L1	OFF	19.9

EUT Information

Report NO :	190614-04
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	41.89	55.88	13.99	N	OFF	19.6
0.152250	53.80	---	65.88	12.08	N	OFF	19.6
0.156750	---	41.20	55.63	14.43	N	OFF	19.6
0.156750	52.42	---	65.63	13.21	N	OFF	19.6
0.168000	---	40.05	55.06	15.01	N	OFF	19.6
0.168000	52.32	---	65.06	12.74	N	OFF	19.6
0.179250	---	39.45	54.52	15.07	N	OFF	19.6
0.179250	50.17	---	64.52	14.35	N	OFF	19.6
0.188250	---	37.20	54.11	16.91	N	OFF	19.6
0.188250	49.45	---	64.11	14.66	N	OFF	19.6
0.201750	---	34.63	53.54	18.91	N	OFF	19.6
0.201750	46.29	---	63.54	17.25	N	OFF	19.6
0.215250	---	32.57	53.00	20.43	N	OFF	19.6
0.215250	42.52	---	63.00	20.48	N	OFF	19.6
0.228750	---	32.91	52.50	19.59	N	OFF	19.6
0.228750	42.88	---	62.50	19.62	N	OFF	19.6
0.593250	---	36.51	46.00	9.49	N	OFF	19.6
0.593250	40.46	---	56.00	15.54	N	OFF	19.6
6.614250	---	27.38	50.00	22.62	N	OFF	19.9
6.614250	29.93	---	60.00	30.07	N	OFF	19.9

Appendix C. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh, Ken Wu	**Temperature :**	22~28.1°C
		Relative Humidity :	53.3~67.5%

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
3+4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5148.72	54.66	-19.34	74	44	34.1	11.84	35.28	100	11	P	H
		5147.68	45.73	-8.27	54	35.07	34.1	11.84	35.28	100	11	A	H
	*	5180	110.67	-	-	99.84	34.22	11.88	35.27	100	11	P	H
	*	5180	103.33	-	-	92.5	34.22	11.88	35.27	100	11	A	H
													H
													H
		5147.42	52.83	-21.17	74	42.17	34.1	11.84	35.28	100	298	P	V
		5147.94	46.13	-7.87	54	35.47	34.1	11.84	35.28	100	298	A	V
	*	5180	111.23	-	-	100.4	34.22	11.88	35.27	100	298	P	V
	*	5180	103.84	-	-	93.01	34.22	11.88	35.27	100	298	A	V
													V
													V
802.11a CH 44 5220MHz		5113.62	48.44	-25.56	74	37.84	34.1	11.8	35.3	100	0	P	H
		5150	40.14	-13.86	54	29.48	34.1	11.84	35.28	100	0	A	H
	*	5220	110.78	-	-	99.74	34.38	11.91	35.25	100	0	P	H
	*	5220	103.48	-	-	92.44	34.38	11.91	35.25	100	0	A	H
		5401.48	48.36	-25.64	74	36.81	34.7	12.01	35.16	100	0	P	H
		5458.6	38.56	-15.44	54	26.91	34.7	12.08	35.13	100	0	A	H
		5005.98	48.93	-25.07	74	38.51	34.09	11.68	35.35	100	296	P	V
		5148.72	40.48	-13.52	54	29.82	34.1	11.84	35.28	100	296	A	V
	*	5220	112.14	-	-	101.1	34.38	11.91	35.25	100	296	P	V
	*	5220	104.13	-	-	93.09	34.38	11.91	35.25	100	296	A	V
		5356.4	47.3	-26.7	74	35.88	34.61	11.99	35.18	100	296	P	V
		5459.72	38.56	-15.44	54	26.91	34.7	12.08	35.13	100	296	A	V

802.11a CH 48 5240MHz		5072.02	48.82	-25.18	74	38.34	34.04	11.75	35.31	100	12	P	H
		5148.98	39.45	-14.55	54	28.79	34.1	11.84	35.28	100	12	A	H
	*	5240	111.54	-	-	100.4	34.46	11.92	35.24	100	12	P	H
	*	5240	103.44	-	-	92.3	34.46	11.92	35.24	100	12	A	H
		5411.56	47.38	-26.62	74	35.82	34.7	12.02	35.16	100	12	P	H
		5460	38.53	-15.47	54	26.88	34.7	12.08	35.13	100	12	A	H
		5142.22	48.73	-25.27	74	38.09	34.1	11.83	35.29	100	298	P	V
		5150	39.6	-14.4	54	28.94	34.1	11.84	35.28	100	298	A	V
	*	5240	111.87	-	-	100.73	34.46	11.92	35.24	100	298	P	V
	*	5240	104.34	-	-	93.2	34.46	11.92	35.24	100	298	A	V
		5352.2	47.9	-26.1	74	36.5	34.6	11.98	35.18	100	298	P	V
		5352.76	38.5	-15.5	54	27.09	34.61	11.98	35.18	100	298	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	61.96	-6.24	68.2	65.03	37.32	18.42	58.81	-	-	P	H
		15540	47.68	-26.32	74	41.63	40.2	22.59	56.74	-	-	P	H
													H
													H
		10360	65.1	-3.1	68.2	68.17	37.32	18.42	58.81	100	288	P	V
		15540	52.09	-21.91	74	46.04	40.2	22.59	56.74	100	326	P	V
		15540	42.49	-11.51	54	36.44	40.2	22.59	56.74	100	326	A	V
													V
802.11a CH 44 5220MHz		10440	63.32	-4.88	68.2	66.04	37.52	18.48	58.72	100	308	P	H
		15660	46.72	-27.28	74	40.28	40.32	22.67	56.55	-	-	P	H
													H
													H
		10440	65.53	-2.67	68.2	68.25	37.52	18.48	58.72	100	289	P	V
		15660	46.99	-27.01	74	40.55	40.32	22.67	56.55	-	-	P	V
													V
													V
802.11a CH 48 5240MHz		10480	62.95	-5.25	68.2	65.48	37.64	18.51	58.68	100	109	P	H
		15720	47.93	-26.07	74	41.22	40.46	22.7	56.45	-	-	P	H
													H
													H
		10480	61.78	-6.42	68.2	64.31	37.64	18.51	58.68	100	288	P	V
		15720	47.92	-26.08	74	41.21	40.46	22.7	56.45	-	-	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												

Band 1 5150~5250MHz

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

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5149.5	63.48	-10.52	74	52.82	34.1	11.84	35.28	100	11	P	H
		5150	51.08	-2.92	54	40.42	34.1	11.84	35.28	100	11	A	H
	*	5180	112.08	-	-	101.25	34.22	11.88	35.27	100	11	P	H
	*	5180	103.63	-	-	92.8	34.22	11.88	35.27	100	11	A	H
802.11ax													H
HE20 Full													H
CH 36		5149.76	62.38	-11.62	74	51.72	34.1	11.84	35.28	100	298	P	V
5180MHz		5150	52.2	-1.8	54	41.54	34.1	11.84	35.28	100	298	A	V
	*	5180	112.93	-	-	102.1	34.22	11.88	35.27	100	298	P	V
	*	5180	104.03	-	-	93.2	34.22	11.88	35.27	100	298	A	V
													V
													V
		5019.5	49.36	-24.64	74	38.95	34.06	11.69	35.34	100	12	P	H
		5149.76	40.28	-13.72	54	29.62	34.1	11.84	35.28	100	12	A	H
	*	5240	113.35	-	-	102.21	34.46	11.92	35.24	100	12	P	H
	*	5240	103.85	-	-	92.71	34.46	11.92	35.24	100	12	A	H
802.11ax		5424.72	49.67	-24.33	74	38.07	34.7	12.04	35.14	100	12	P	H
HE20 Full		5459.44	39.49	-14.51	54	27.84	34.7	12.08	35.13	100	12	A	H
CH 48		5117.52	48.71	-25.29	74	38.1	34.1	11.81	35.3	100	298	P	V
5240MHz		5150	40.47	-13.53	54	29.81	34.1	11.84	35.28	100	298	A	V
	*	5240	113.94	-	-	102.8	34.46	11.92	35.24	100	298	P	V
	*	5240	104.74	-	-	93.6	34.46	11.92	35.24	100	298	A	V
		5453.28	50.31	-23.69	74	38.67	34.7	12.07	35.13	100	298	P	V
		5459.72	39.47	-14.53	54	27.82	34.7	12.08	35.13	100	298	A	V

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

Band 1 5150~5250MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10440	65.11	-3.09	68.2	67.83	37.52	18.48	58.72	100	111	P	H
		15660	47.39	-26.61	74	40.95	40.32	22.67	56.55	-	-	P	H
802.11ax													H
HE20 Full													H
CH 44		10440	64.22	-3.98	68.2	66.94	37.52	18.48	58.72	100	288	P	V
5220MHz		15660	46.91	-27.09	74	40.47	40.32	22.67	56.55	-	-	P	V
													V
													V

Remark

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

Band 1 5150~5250MHz

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

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5150	69.62	-4.38	74	58.96	34.1	11.84	35.28	305	3	P	H
		5150	53.82	-0.18	54	43.16	34.1	11.84	35.28	305	3	A	H
	*	5190	108.05	-	-	97.17	34.26	11.89	35.27	305	3	P	H
	*	5190	99.05	-	-	88.17	34.26	11.89	35.27	305	3	A	H
802.11ax		5440.68	48.96	-25.04	74	37.34	34.7	12.06	35.14	305	3	P	H
HE40 Full		5458.88	39.45	-14.55	54	27.8	34.7	12.08	35.13	305	3	A	H
CH 38		5150	65.54	-8.46	74	54.88	34.1	11.84	35.28	100	298	P	V
5190MHz		5148.98	52.57	-1.43	54	41.91	34.1	11.84	35.28	100	298	A	V
	*	5190	111.21	-	-	100.33	34.26	11.89	35.27	100	298	P	V
	*	5190	101.68	-	-	90.8	34.26	11.89	35.27	100	298	A	V
		5457.2	48.4	-25.6	74	36.75	34.7	12.08	35.13	100	298	P	V
		5350	39.49	-14.51	54	28.09	34.6	11.98	35.18	100	298	A	V
		5141.7	53.98	-20.02	74	43.34	34.1	11.83	35.29	100	0	P	H
		5150	43.94	-10.06	54	33.28	34.1	11.84	35.28	100	0	A	H
	*	5230	109.3	-	-	98.2	34.42	11.92	35.24	100	0	P	H
	*	5230	100.5	-	-	89.4	34.42	11.92	35.24	100	0	A	H
802.11ax		5375.44	49.53	-24.47	74	38.05	34.65	12	35.17	100	0	P	H
HE40 Full		5350	40.66	-13.34	54	29.26	34.6	11.98	35.18	100	0	A	H
CH 46		5147.94	54.99	-19.01	74	44.33	34.1	11.84	35.28	100	299	P	V
5230MHz		5145.08	44.52	-9.48	54	33.86	34.1	11.84	35.28	100	299	A	V
	*	5230	110.4	-	-	99.3	34.42	11.92	35.24	100	299	P	V
	*	5230	101.8	-	-	90.7	34.42	11.92	35.24	100	299	A	V
		5366.48	51.09	-22.91	74	39.65	34.63	11.99	35.18	100	299	P	V
		5353.88	41.05	-12.95	54	29.64	34.61	11.98	35.18	100	299	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

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

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 42 5210MHz		5145.34	67.16	-6.84	74	56.5	34.1	11.84	35.28	288	9	P	H
		5146.38	52.78	-1.22	54	42.12	34.1	11.84	35.28	288	9	A	H
	*	5210	103.82	-	-	92.82	34.34	11.91	35.25	288	9	P	H
	*	5210	95.64	-	-	84.64	34.34	11.91	35.25	288	9	A	H
		5356.12	51.44	-22.56	74	40.02	34.61	11.99	35.18	288	9	P	H
		5350	41.97	-12.03	54	30.57	34.6	11.98	35.18	288	9	A	H
		5143.26	63.52	-10.48	74	52.88	34.1	11.83	35.29	105	303	P	V
		5144.82	52.5	-1.5	54	41.84	34.1	11.84	35.28	105	303	A	V
	*	5210	106.49	-	-	95.49	34.34	11.91	35.25	105	303	P	V
	*	5210	97.66	-	-	86.66	34.34	11.91	35.25	105	303	A	V
		5351.36	51.15	-22.85	74	39.75	34.6	11.98	35.18	105	303	P	V
		5356.12	41.9	-12.1	54	30.48	34.61	11.99	35.18	105	303	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE160 Full CH 50 5250MHz		5125.32	59.38	-14.62	74	48.76	34.1	11.81	35.29	100	10	P	H
		5146.12	50.84	-3.16	54	40.18	34.1	11.84	35.28	100	10	A	H
	*	5250	101.25	-	-	90.05	34.5	11.93	35.23	100	10	P	H
	*	5250	93.89	-	-	82.69	34.5	11.93	35.23	100	10	A	H
		5393.92	62.79	-11.21	74	51.26	34.69	12.01	35.17	100	10	P	H
		5375.72	51.34	-2.66	54	39.86	34.65	12	35.17	100	10	A	H
		5126.88	59.86	-14.14	74	49.23	34.1	11.82	35.29	100	298	P	V
		5146.12	50.09	-3.91	54	39.43	34.1	11.84	35.28	100	298	A	V
	*	5250	103.3	-	-	92.1	34.5	11.93	35.23	100	298	P	V
	*	5250	95	-	-	83.8	34.5	11.93	35.23	100	298	A	V
		5354.16	59.63	-14.37	74	48.22	34.61	11.98	35.18	100	298	P	V
		5375.44	52.09	-1.91	54	40.61	34.65	12	35.17	100	298	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		5082.25	50.26	-23.74	74	39.75	34.06	11.76	35.31	292	358	P	H
		5149.8	39.97	-14.03	54	29.31	34.1	11.84	35.28	292	358	A	H
	*	5260	111.11	-	-	99.89	34.52	11.93	35.23	292	358	P	H
	*	5260	103.7	-	-	92.48	34.52	11.93	35.23	292	358	A	H
		5350.08	50.61	-23.39	74	39.21	34.6	11.98	35.18	292	358	P	H
		5350.08	39.85	-14.15	54	28.45	34.6	11.98	35.18	292	358	A	H
		5149.8	49.84	-24.16	74	39.18	34.1	11.84	35.28	100	301	P	V
		5150	40.06	-13.94	54	29.4	34.1	11.84	35.28	100	301	A	V
	*	5260	112.59	-	-	101.37	34.52	11.93	35.23	100	301	P	V
	*	5260	104.58	-	-	93.36	34.52	11.93	35.23	100	301	A	V
		5350.8	49.27	-24.73	74	37.87	34.6	11.98	35.18	100	301	P	V
		5350.08	39.85	-14.15	54	28.45	34.6	11.98	35.18	100	301	A	V
802.11a CH 60 5300MHz		5120.4	49.4	-24.6	74	38.78	34.1	11.81	35.29	285	357	P	H
		5149.8	39.54	-14.46	54	28.88	34.1	11.84	35.28	285	357	A	H
	*	5300	110.7	-	-	99.35	34.6	11.95	35.2	285	357	P	H
	*	5300	103.65	-	-	92.3	34.6	11.95	35.2	285	357	A	H
		5351.76	58.51	-15.49	74	47.11	34.6	11.98	35.18	285	357	P	H
		5352.24	47.59	-6.41	54	36.19	34.6	11.98	35.18	285	357	A	H
		5090.65	49.33	-24.67	74	38.79	34.08	11.77	35.31	100	302	P	V
		5148.4	39.57	-14.43	54	28.91	34.1	11.84	35.28	100	302	A	V
	*	5300	111.94	-	-	100.59	34.6	11.95	35.2	100	302	P	V
	*	5300	104.14	-	-	92.79	34.6	11.95	35.2	100	302	A	V
		5350.56	60.52	-13.48	74	49.12	34.6	11.98	35.18	100	302	P	V
		5350.08	47.94	-6.06	54	36.54	34.6	11.98	35.18	100	302	A	V

802.11a CH 64 5320MHz	*	5320	110.73	-	-	99.36	34.6	11.97	35.2	299	0	P	H
	*	5320	103.37	-	-	92	34.6	11.97	35.2	299	0	A	H
		5351.84	60.01	-13.99	74	48.61	34.6	11.98	35.18	299	0	P	H
		5350.08	50.66	-3.34	54	39.26	34.6	11.98	35.18	299	0	A	H
													H
													H
	*	5320	112.1	-	-	100.73	34.6	11.97	35.2	100	297	P	V
	*	5320	104.73	-	-	93.36	34.6	11.97	35.2	100	297	A	V
		5353.28	63.32	-10.68	74	51.91	34.61	11.98	35.18	100	297	P	V
		5350.24	51.48	-2.52	54	40.08	34.6	11.98	35.18	100	297	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		7011	53.81	-14.39	68.2	60.08	35.86	15.14	57.27	-	-	P	H
		10520	59.38	-8.82	68.2	61.81	37.66	18.56	58.65	-	-	P	H
		15780	47.1	-26.9	74	40.08	40.64	22.73	56.35	-	-	P	H
													H
		7011	54.63	-13.57	68.2	60.9	35.86	15.14	57.27	-	-	P	V
		10520	57.34	-10.86	68.2	59.77	37.66	18.56	58.65	-	-	P	V
		15780	47.29	-26.71	74	40.27	40.64	22.73	56.35	-	-	P	V
													V
802.11a CH 60 5300MHz		7066	53.27	-14.93	68.2	59.72	35.67	15.19	57.31	-	-	P	H
		10600	57.23	-16.77	74	59.7	37.5	18.62	58.59	100	110	P	H
		10600	49.11	-4.89	54	51.58	37.5	18.62	58.59	100	110	A	H
		15900	47.83	-26.17	74	40.27	40.9	22.81	56.15	-	-	P	H
		7066	53.93	-14.27	68.2	60.38	35.67	15.19	57.31	-	-	P	V
		10600	57.86	-16.14	74	60.33	37.5	18.62	58.59	100	287	P	V
		10600	47.23	-6.77	54	49.7	37.5	18.62	58.59	100	287	A	V
		15900	47.98	-26.02	74	40.42	40.9	22.81	56.15	-	-	P	V
802.11a CH 64 5320MHz		7093	52.11	-16.09	68.2	58.62	35.61	15.21	57.33	-	-	P	H
		10640	55.21	-18.79	74	57.62	37.5	18.65	58.56	100	310	P	H
		10640	47.97	-6.03	54	50.38	37.5	18.65	58.56	100	310	A	H
		15960	46.33	-27.67	74	38.58	40.96	22.85	56.06	-	-	P	H
		7093	53.38	-14.82	68.2	59.89	35.61	15.21	57.33	-	-	P	V
		10640	55.79	-18.21	74	58.2	37.5	18.65	58.56	100	286	P	V
		10640	48.31	-5.69	54	50.72	37.5	18.65	58.56	100	286	A	V
		15960	47.04	-26.96	74	39.29	40.96	22.85	56.06	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												

Band 2 5250~5350MHz

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

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5037.1	49.9	-24.1	74	39.5	34.03	11.71	35.34	292	359	P	H
		5149.45	40.38	-13.62	54	29.72	34.1	11.84	35.28	292	359	A	H
	*	5260	113	-	-	101.78	34.52	11.93	35.23	292	359	P	H
	*	5260	104.29	-	-	93.07	34.52	11.93	35.23	292	359	A	H
802.11ax		5351.52	50.68	-23.32	74	39.28	34.6	11.98	35.18	292	359	P	H
HE20 Full		5350.08	40.45	-13.55	54	29.05	34.6	11.98	35.18	292	359	A	H
CH 52		5145.6	51.19	-22.81	74	40.53	34.1	11.84	35.28	100	295	P	V
5260MHz		5148.75	40.6	-13.4	54	29.94	34.1	11.84	35.28	100	295	A	V
	*	5260	115.52	-	-	104.3	34.52	11.93	35.23	100	295	P	V
	*	5260	106.06	-	-	94.84	34.52	11.93	35.23	100	295	A	V
		5352	53.6	-20.4	74	42.2	34.6	11.98	35.18	100	295	P	V
		5350.32	41.67	-12.33	54	30.27	34.6	11.98	35.18	100	295	A	V
	*	5320	112.08	-	-	100.71	34.6	11.97	35.2	280	355	P	H
	*	5320	102.4	-	-	91.03	34.6	11.97	35.2	280	355	A	H
		5360.16	57.91	-16.09	74	46.48	34.62	11.99	35.18	280	355	P	H
		5350.4	51.97	-2.03	54	40.57	34.6	11.98	35.18	280	355	A	H
802.11ax													H
HE20 Full													H
CH 64	*	5320	113.67	-	-	102.3	34.6	11.97	35.2	100	295	P	V
5320MHz	*	5320	104.61	-	-	93.24	34.6	11.97	35.2	100	295	A	V
		5353.76	63.77	-10.23	74	52.36	34.61	11.98	35.18	100	295	P	V
		5353.76	52.82	-1.18	54	41.41	34.61	11.98	35.18	100	295	A	V
													V
													V

Remark

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

Band 2 5250~5350MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 60 5300MHz		7066	52.99	-15.21	68.2	59.44	35.67	15.19	57.31	-	-	P	H
		10600	57.48	-16.52	74	59.95	37.5	18.62	58.59	100	110	P	H
		10600	45.94	-8.06	54	48.41	37.5	18.62	58.59	100	110	A	H
		15900	47.89	-26.11	74	40.33	40.9	22.81	56.15	-	-	P	H
		7066	54.59	-13.61	68.2	61.04	35.67	15.19	57.31	-	-	P	V
		10600	55.74	-18.26	74	58.21	37.5	18.62	58.59	100	288	P	V
		10600	45.25	-8.75	54	47.72	37.5	18.62	58.59	100	288	A	V
		15900	47.93	-26.07	74	40.37	40.9	22.81	56.15	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												

Band 2 5250~5350MHz

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

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5134.75	53.43	-20.57	74	42.8	34.1	11.82	35.29	100	17	P	H
		5143.85	41.95	-12.05	54	31.29	34.1	11.84	35.28	100	17	A	H
	*	5270	110.08	-	-	98.83	34.54	11.94	35.23	100	17	P	H
	*	5270	101.29	-	-	90.04	34.54	11.94	35.23	100	17	A	H
802.11ax		5353.92	57.23	-16.77	74	45.82	34.61	11.98	35.18	100	17	P	H
HE40 Full		5354.16	43.56	-10.44	54	32.15	34.61	11.98	35.18	100	17	A	H
CH 54		5150	56.07	-17.93	74	45.41	34.1	11.84	35.28	100	295	P	V
5270MHz		5146.3	42.27	-11.73	54	31.61	34.1	11.84	35.28	100	295	A	V
	*	5270	110.64	-	-	99.39	34.54	11.94	35.23	100	295	P	V
	*	5270	102.48	-	-	91.23	34.54	11.94	35.23	100	295	A	V
		5359.2	58.49	-15.51	74	47.06	34.62	11.99	35.18	100	295	P	V
		5350.32	44.74	-9.26	54	33.34	34.6	11.98	35.18	100	295	A	V
		5135.1	49.37	-24.63	74	38.73	34.1	11.83	35.29	100	359	P	H
		5150	40.34	-13.66	54	29.68	34.1	11.84	35.28	100	359	A	H
	*	5310	109.84	-	-	98.48	34.6	11.96	35.2	100	359	P	H
	*	5310	100.14	-	-	88.78	34.6	11.96	35.2	100	359	A	H
802.11ax		5351.04	64.93	-9.07	74	53.53	34.6	11.98	35.18	100	359	P	H
HE40 Full		5350.08	52.52	-1.48	54	41.12	34.6	11.98	35.18	100	359	A	H
CH 62		5057.75	49.69	-24.31	74	39.26	34.02	11.74	35.33	100	160	P	V
5310MHz		5144.55	40.08	-13.92	54	29.42	34.1	11.84	35.28	100	160	A	V
	*	5310	109.18	-	-	97.82	34.6	11.96	35.2	100	160	P	V
	*	5310	101.26	-	-	89.9	34.6	11.96	35.2	100	160	A	V
		5350.32	64.02	-9.98	74	52.62	34.6	11.98	35.18	100	160	P	V
		5353.44	50.37	-3.63	54	38.96	34.61	11.98	35.18	100	160	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 2 5250~5350MHz

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

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 58 5290MHz		5141.75	55.7	-18.3	74	45.06	34.1	11.83	35.29	100	106	P	H
		5145.95	42.4	-11.6	54	31.74	34.1	11.84	35.28	100	106	A	H
	*	5290	106.94	-	-	95.63	34.58	11.95	35.22	100	106	P	H
	*	5290	97.15	-	-	85.84	34.58	11.95	35.22	100	106	A	H
		5365.92	62.21	-11.79	74	50.77	34.63	11.99	35.18	100	106	P	H
		5355.84	52.69	-1.31	54	41.27	34.61	11.99	35.18	100	106	A	H
		5130.55	52.11	-21.89	74	41.48	34.1	11.82	35.29	100	248	P	V
		5150	42.09	-11.91	54	31.43	34.1	11.84	35.28	100	248	A	V
	*	5290	106.65	-	-	95.34	34.58	11.95	35.22	100	248	P	V
	*	5290	97.74	-	-	86.43	34.58	11.95	35.22	100	248	A	V
		5352	61.87	-12.13	74	50.47	34.6	11.98	35.18	100	248	P	V
		5353.92	52.5	-1.5	54	41.09	34.61	11.98	35.18	100	248	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		5459.28	52.09	-21.91	74	40.44	34.7	12.08	35.13	100	184	P	H
		5466.48	59.82	-8.38	68.2	48.16	34.7	12.09	35.13	100	184	P	H
		5459.76	44.13	-9.87	54	32.48	34.7	12.08	35.13	100	184	A	H
	*	5500	110.43	-	-	98.73	34.7	12.12	35.12	100	184	P	H
	*	5500	102.97	-	-	91.27	34.7	12.12	35.12	100	184	A	H
													H
		5456.24	56.08	-17.92	74	44.44	34.7	12.07	35.13	100	107	P	V
		5467.44	61.52	-6.68	68.2	49.86	34.7	12.09	35.13	100	107	P	V
		5457.84	45.26	-8.74	54	33.61	34.7	12.08	35.13	100	107	A	V
	*	5500	111.85	-	-	100.15	34.7	12.12	35.12	100	107	P	V
	*	5500	103.69	-	-	91.99	34.7	12.12	35.12	100	107	A	V
													V
802.11a CH 116 5580MHz		5411.92	48.24	-25.76	74	36.68	34.7	12.02	35.16	100	188	P	H
		5463.28	47.77	-20.43	68.2	36.12	34.7	12.08	35.13	100	188	P	H
		5459.68	39.67	-14.33	54	28.02	34.7	12.08	35.13	100	188	A	H
	*	5580	110.28	-	-	98.5	34.7	12.22	35.14	100	188	P	H
	*	5580	102.62	-	-	90.84	34.7	12.22	35.14	100	188	A	H
		5759.96	49.34	-18.86	68.2	37	35.2	12.31	35.17	100	188	P	H
		5385.52	49.1	-24.9	74	37.6	34.67	12	35.17	100	107	P	V
		5461.36	47.82	-20.38	68.2	36.17	34.7	12.08	35.13	100	107	P	V
		5458	39.74	-14.26	54	28.09	34.7	12.08	35.13	100	107	A	V
	*	5580	109.39	-	-	97.61	34.7	12.22	35.14	100	107	P	V
	*	5580	101.22	-	-	89.44	34.7	12.22	35.14	100	107	A	V
		5753.975	49.35	-18.85	68.2	37.01	35.2	12.31	35.17	100	107	P	V

802.11a CH 140 5700MHz	*	5700	111.03	-	-	99.01	34.9	12.28	35.16	100	78	P	H
	*	5700	103.61	-	-	91.59	34.9	12.28	35.16	100	78	A	H
		5727.64	56.39	-11.81	68.2	44.18	35.07	12.3	35.16	100	78	P	H
													H
													H
													H
	*	5700	111.46	-	-	99.44	34.9	12.28	35.16	100	243	P	V
	*	5700	104.47	-	-	92.45	34.9	12.28	35.16	100	243	A	V
		5728.04	56.05	-12.15	68.2	43.84	35.07	12.3	35.16	100	243	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	54.27	-19.73	74	55.63	38	18.93	58.29	100	40	P	H
		11000	46.51	-7.49	54	47.87	38	18.93	58.29	100	40	A	H
		16500	49.21	-18.99	68.2	40.13	42.1	23.29	56.31	-	-	P	H
													H
		11000	53.99	-20.01	74	55.35	38	18.93	58.29	100	241	P	V
		11000	45.84	-8.16	54	47.2	38	18.93	58.29	100	241	A	V
		16500	50.04	-18.16	68.2	40.96	42.1	23.29	56.31	-	-	P	V
													V
802.11a CH 116 5580MHz		11160	54.1	-19.9	74	55.01	37.86	19.06	57.83	333	172	P	H
		11160	44.63	-9.37	54	45.54	37.86	19.06	57.83	333	172	A	H
		16740	48.35	-19.85	68.2	38.92	42.14	23.48	56.19	-	-	P	H
													H
		11160	55.26	-18.74	74	56.17	37.86	19.06	57.83	390	156	P	V
		11160	45.56	-8.44	54	46.47	37.86	19.06	57.83	390	156	A	V
		16740	49.32	-18.88	68.2	39.89	42.14	23.48	56.19	-	-	P	V
													V
802.11a CH 140 5700MHz		11400	52.57	-21.43	74	52.26	38.2	19.25	57.14	100	135	P	H
		11400	42.55	-11.45	54	42.24	38.2	19.25	57.14	100	135	A	H
		17100	50.21	-17.99	68.2	40.73	41.6	23.78	55.9	-	-	P	H
													H
		11400	54.18	-19.82	74	53.87	38.2	19.25	57.14	358	345	P	V
		11400	43.94	-10.06	54	43.63	38.2	19.25	57.14	358	345	A	V
		17100	51.51	-16.69	68.2	42.03	41.6	23.78	55.9	-	-	P	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.

Band 3 - 5470~5725MHz

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

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5459.28	55	-19	74	43.35	34.7	12.08	35.13	100	94	P	H
		5464.72	60.25	-7.95	68.2	48.6	34.7	12.08	35.13	100	94	P	H
		5458.64	44.82	-9.18	54	33.17	34.7	12.08	35.13	100	94	A	H
	*	5500	113.51	-	-	101.81	34.7	12.12	35.12	100	94	P	H
802.11ax	*	5500	103.42	-	-	91.72	34.7	12.12	35.12	100	94	A	H
HE20 Full		5453.04	53.78	-20.22	74	42.14	34.7	12.07	35.13	100	255	P	V
CH 100		5464.4	54.95	-13.25	68.2	43.3	34.7	12.08	35.13	100	255	P	V
5500MHz		5455.92	42.69	-11.31	54	31.05	34.7	12.07	35.13	100	255	A	V
	*	5500	113.9	-	-	102.2	34.7	12.12	35.12	100	255	P	V
	*	5500	104.59	-	-	92.89	34.7	12.12	35.12	100	255	A	V
													V
													V
	*	5700	112.13	-	-	100.11	34.9	12.28	35.16	100	76	P	H
	*	5700	102.83	-	-	90.81	34.9	12.28	35.16	100	76	A	H
		5725.08	55.1	-13.1	68.2	42.91	35.05	12.3	35.16	100	76	P	H
													H
802.11ax													H
HE20 Full													H
CH 140	*	5700	112.19	-	-	100.17	34.9	12.28	35.16	103	251	P	V
5700MHz	*	5700	103.19	-	-	91.17	34.9	12.28	35.16	103	251	A	V
		5726.92	53.11	-15.09	68.2	40.91	35.06	12.3	35.16	103	251	P	V
													V
													V
													V

Remark

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

Band 3 5470~5725MHz

WIFI 802.11ax HE20 (Harmonic @ 3m)

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 116 5580MHz		11160	54.52	-19.48	74	55.43	37.86	19.06	57.83	333	172	P	H
		11160	44.23	-9.77	54	45.14	37.86	19.06	57.83	333	172	A	H
		16740	48.62	-19.58	68.2	39.19	42.14	23.48	56.19	-	-	P	H
													H
		11160	54.37	-19.63	74	55.28	37.86	19.06	57.83	390	157	P	V
		11160	45.01	-8.99	54	45.92	37.86	19.06	57.83	390	157	A	V
		16740	48.91	-19.29	68.2	39.48	42.14	23.48	56.19	-	-	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												

Band 3 5470~5725MHz

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

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5458.24	54.33	-19.67	74	42.68	34.7	12.08	35.13	100	4	P	H
		5465.68	60.92	-7.28	68.2	49.26	34.7	12.09	35.13	100	4	P	H
		5457.28	46.73	-7.27	54	35.08	34.7	12.08	35.13	100	4	A	H
	*	5510	109.32	-	-	97.6	34.7	12.14	35.12	100	4	P	H
802.11ax	*	5510	100.19	-	-	88.47	34.7	12.14	35.12	100	4	A	H
HE40 Full		5759.96	51.46	-16.74	68.2	39.12	35.2	12.31	35.17	100	4	P	H
CH 102		5456.32	53.65	-20.35	74	42.01	34.7	12.07	35.13	100	164	P	V
5510MHz		5464.96	60.88	-7.32	68.2	49.23	34.7	12.08	35.13	100	164	P	V
		5455.6	45.71	-8.29	54	34.07	34.7	12.07	35.13	100	164	A	V
	*	5510	111.57	-	-	99.85	34.7	12.14	35.12	100	164	P	V
	*	5510	101.88	-	-	90.16	34.7	12.14	35.12	100	164	A	V
		5760.275	51.56	-16.64	68.2	39.22	35.2	12.31	35.17	100	164	P	V
		5459.2	50	-24	74	38.35	34.7	12.08	35.13	100	8	P	H
		5462.56	50.47	-17.73	68.2	38.82	34.7	12.08	35.13	100	8	P	H
		5457.04	41.54	-12.46	54	29.89	34.7	12.08	35.13	100	8	A	H
	*	5550	108.41	-	-	96.66	34.7	12.18	35.13	100	8	P	H
802.11ax	*	5550	99.37	-	-	87.62	34.7	12.18	35.13	100	8	A	H
HE40 Full		5759.96	50.98	-17.22	68.2	38.64	35.2	12.31	35.17	100	8	P	H
CH 110		5423.2	50.71	-23.29	74	39.13	34.7	12.04	35.16	100	162	P	V
5550MHz		5470	49.33	-18.87	68.2	37.67	34.7	12.09	35.13	100	162	P	V
		5454.88	41.09	-12.91	54	29.45	34.7	12.07	35.13	100	162	A	V
	*	5550	110.69	-	-	98.94	34.7	12.18	35.13	100	162	P	V
	*	5550	101.67	-	-	89.92	34.7	12.18	35.13	100	162	A	V
		5759.96	49.78	-18.42	68.2	37.44	35.2	12.31	35.17	100	162	P	V

		5443.8	49.2	-24.8	74	37.58	34.7	12.06	35.14	112	325	P	H
		5466.2	47.25	-20.95	68.2	35.59	34.7	12.09	35.13	112	325	P	H
		5459.2	39.49	-14.51	54	27.84	34.7	12.08	35.13	112	325	A	H
	*	5670	109.07	-	-	97.17	34.78	12.27	35.15	112	325	P	H
802.11ax	*	5670	99.59	-	-	87.69	34.78	12.27	35.15	112	325	A	H
HE40 Full		5725.45	52.56	-15.64	68.2	40.37	35.05	12.3	35.16	112	325	P	H
CH 134		5453.6	47.61	-26.39	74	35.97	34.7	12.07	35.13	100	76	P	V
5670MHz		5467.25	47.85	-20.35	68.2	36.19	34.7	12.09	35.13	100	76	P	V
		5457.8	39.51	-14.49	54	27.86	34.7	12.08	35.13	100	76	A	V
	*	5670	109.39	-	-	97.49	34.78	12.27	35.15	100	76	P	V
	*	5670	101.87	-	-	89.97	34.78	12.27	35.15	100	76	A	V
		5725	52.68	-15.52	68.2	40.49	35.05	12.3	35.16	100	76	P	V

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

Band 3 5470~5725MHz

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

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5455.84	62.27	-11.73	74	50.63	34.7	12.07	35.13	102	6	P	H
		5465.44	61.16	-7.04	68.2	49.5	34.7	12.09	35.13	102	6	P	H
		5455.36	53.12	-0.88	54	41.48	34.7	12.07	35.13	102	6	A	H
	*	5530	105.63	-	-	93.9	34.7	12.16	35.13	102	6	P	H
802.11ax	*	5530	96.99	-	-	85.26	34.7	12.16	35.13	102	6	A	H
HE80 Full		5759.96	50.94	-17.26	68.2	38.6	35.2	12.31	35.17	102	6	P	H
CH 106		5453.44	62.5	-11.5	74	50.86	34.7	12.07	35.13	100	165	P	V
5530MHz		5464	61.68	-6.52	68.2	50.03	34.7	12.08	35.13	100	165	P	V
		5454.4	52.85	-1.15	54	41.21	34.7	12.07	35.13	100	165	A	V
	*	5530	106.68	-	-	94.95	34.7	12.16	35.13	100	165	P	V
	*	5530	98.62	-	-	86.89	34.7	12.16	35.13	100	165	A	V
		5759.96	50.44	-17.76	68.2	38.1	35.2	12.31	35.17	100	165	P	V
		5450.8	49.65	-24.35	74	38.01	34.7	12.07	35.13	100	0	P	H
		5465.15	52.2	-16	68.2	40.55	34.7	12.08	35.13	100	0	P	H
		5459.55	42.43	-11.57	54	30.78	34.7	12.08	35.13	100	0	A	H
	*	5610	105.56	-	-	93.76	34.7	12.24	35.14	100	0	P	H
802.11ax	*	5610	96.55	-	-	84.75	34.7	12.24	35.14	100	0	A	H
HE80 Full		5728.075	54.27	-13.93	68.2	42.06	35.07	12.3	35.16	100	0	P	H
CH 122		5395.85	49.82	-24.18	74	38.29	34.69	12.01	35.17	100	164	P	V
5610MHz		5469.7	50.31	-17.89	68.2	38.65	34.7	12.09	35.13	100	164	P	V
		5455.7	41.45	-12.55	54	29.81	34.7	12.07	35.13	100	164	A	V
	*	5610	106.38	-	-	94.58	34.7	12.24	35.14	100	164	P	V
	*	5610	98.58	-	-	86.78	34.7	12.24	35.14	100	164	A	V
		5741.2	51.43	-16.77	68.2	39.15	35.15	12.3	35.17	100	164	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 5470~5725MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5443.84	59.3	-14.7	74	47.68	34.7	12.06	35.14	100	20	P	H
		5463.04	57.08	-11.12	68.2	45.43	34.7	12.08	35.13	100	20	P	H
		5453.68	50.1	-3.9	54	38.46	34.7	12.07	35.13	100	20	A	H
	*	5570	100.83	-	-	89.05	34.7	12.21	35.13	100	20	P	H
802.11ax	*	5570	93.33	-	-	81.55	34.7	12.21	35.13	100	20	A	H
HE160 Full		5725.94	54.05	-14.15	68.2	41.85	35.06	12.3	35.16	100	20	P	H
CH 114		5428	61.08	-12.92	74	49.48	34.7	12.04	35.14	100	203	P	V
5570MHz		5467.6	58.94	-9.26	68.2	47.28	34.7	12.09	35.13	100	203	P	V
		5458.96	51.21	-2.79	54	39.56	34.7	12.08	35.13	100	203	A	V
	*	5570	103.92	-	-	92.14	34.7	12.21	35.13	100	203	P	V
	*	5570	95.07	-	-	83.29	34.7	12.21	35.13	100	203	A	V
		5735.705	55.41	-12.79	68.2	43.17	35.11	12.3	35.17	100	203	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
3+4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz		5412.01	47.71	-26.29	74	36.15	34.7	12.02	35.16	279	348	P	H
		5461.93	47.13	-21.07	68.2	35.48	34.7	12.08	35.13	279	348	P	H
		5459.59	39.45	-14.55	54	27.8	34.7	12.08	35.13	279	348	A	H
	*	5720	111.37	-	-	99.22	35.02	12.29	35.16	279	348	P	H
	*	5720	103.7	-	-	91.55	35.02	12.29	35.16	279	348	A	H
		5912.25	50.95	-17.25	68.2	38.48	35.18	12.49	35.2	279	348	P	H
		5424.1	48.59	-25.41	74	37.01	34.7	12.04	35.16	100	76	P	V
		5468.17	47.96	-20.24	68.2	36.3	34.7	12.09	35.13	100	76	P	V
		5459.59	39.47	-14.53	54	27.82	34.7	12.08	35.13	100	76	A	V
	*	5720	113.45	-	-	101.3	35.02	12.29	35.16	100	76	P	V
	*	5720	105.71	-	-	93.56	35.02	12.29	35.16	100	76	A	V
		5943.5	52.1	-16.1	68.2	39.65	35.11	12.54	35.2	100	76	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 144 5720MHz		11440	52.72	-21.28	74	52.3	38.16	19.28	57.02	400	176	P	H
		11440	42.49	-11.51	54	42.07	38.16	19.28	57.02	400	176	A	H
		17160	49.93	-18.27	68.2	40.36	41.54	23.83	55.8	-	-	P	H
													H
		11440	52.46	-21.54	74	52.04	38.16	19.28	57.02	310	157	P	V
		11440	43.37	-10.63	54	42.95	38.16	19.28	57.02	310	157	A	V
		17160	50.37	-17.83	68.2	40.8	41.54	23.83	55.8	-	-	P	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.

Band 3 - Straddle Channel

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

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5405.77	48.71	-25.29	74	37.15	34.7	12.02	35.16	279	348	P	H
		5460.76	48.3	-19.9	68.2	36.65	34.7	12.08	35.13	279	348	P	H
		5459.59	39.45	-14.55	54	27.8	34.7	12.08	35.13	279	348	A	H
	*	5720	112.19	-	-	100.04	35.02	12.29	35.16	279	348	P	H
802.11ax	*	5720	103.27	-	-	91.12	35.02	12.29	35.16	279	348	A	H
HE20 Full		5855.25	51.57	-16.63	68.2	39.14	35.2	12.41	35.18	279	348	P	H
CH 144		5407.72	49.51	-24.49	74	37.95	34.7	12.02	35.16	100	76	P	V
5720MHz		5460.37	47.58	-20.62	68.2	35.93	34.7	12.08	35.13	100	76	P	V
		5458.42	39.43	-14.57	54	27.78	34.7	12.08	35.13	100	76	A	V
	*	5720	114.47	-	-	102.32	35.02	12.29	35.16	100	76	P	V
	*	5720	105.35	-	-	93.2	35.02	12.29	35.16	100	76	A	V
		5881.25	50.37	-17.83	68.2	37.91	35.2	12.45	35.19	100	76	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11440	49.38	-24.62	74	48.96	38.16	19.28	57.02	-	-	P	H
		17160	50.2	-18	68.2	40.63	41.54	23.83	55.8	-	-	P	H
802.11ax													H
HE20 Full													H
CH 144		11440	49.97	-24.03	74	49.55	38.16	19.28	57.02	-	-	P	V
5720MHz		17160	50.17	-18.03	68.2	40.6	41.54	23.83	55.8	-	-	P	V
													V
													V

Remark

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

Band 3 - Straddle Channel

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

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 142 5710MHz		5361.31	48.91	-25.09	74	37.48	34.62	11.99	35.18	279	345	P	H
		5463.49	47.13	-21.07	68.2	35.48	34.7	12.08	35.13	279	345	P	H
		5459.59	39.51	-14.49	54	27.86	34.7	12.08	35.13	279	345	A	H
	*	5710	108.82	-	-	96.73	34.96	12.29	35.16	279	345	P	H
	*	5710	100.19	-	-	88.1	34.96	12.29	35.16	279	345	A	H
		5945.5	51.56	-16.64	68.2	39.11	35.11	12.54	35.2	279	345	P	H
		5433.85	48.73	-25.27	74	37.12	34.7	12.05	35.14	100	76	P	V
		5466.61	47.79	-20.41	68.2	36.13	34.7	12.09	35.13	100	76	P	V
		5458.03	39.53	-14.47	54	27.88	34.7	12.08	35.13	100	76	A	V
	*	5710	111.75	-	-	99.66	34.96	12.29	35.16	100	76	P	V
	*	5710	102.79	-	-	90.7	34.96	12.29	35.16	100	76	A	V
		5913.25	51.48	-16.72	68.2	39.02	35.17	12.49	35.2	100	76	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11420	49.21	-24.79	74	48.84	38.18	19.27	57.08	-	-	P	H
		17130	49.88	-18.32	68.2	40.35	41.57	23.81	55.85	-	-	P	H
802.11ax													H
HE40 Full													H
CH 142		11420	48.51	-25.49	74	48.14	38.18	19.27	57.08	-	-	P	V
5710MHz		17130	49.52	-18.68	68.2	39.99	41.57	23.81	55.85	-	-	P	V
													V
													V

Remark

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

Band 3 Straddle Channel

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

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5390.17	49.85	-24.15	74	38.34	34.68	12	35.17	371	346	P	H
		5468.95	49.08	-19.12	68.2	37.42	34.7	12.09	35.13	371	346	P	H
		5459.2	39.81	-14.19	54	28.16	34.7	12.08	35.13	371	346	A	H
	*	5690	106.18	-	-	94.2	34.86	12.28	35.16	371	346	P	H
802.11ax	*	5690	98.68	-	-	86.7	34.86	12.28	35.16	371	346	A	H
HE80 Full		5851	50.92	-17.28	68.2	38.5	35.2	12.4	35.18	371	346	P	H
CH 138		5405.38	48.61	-25.39	74	37.05	34.7	12.02	35.16	101	76	P	V
5690MHz		5463.49	48.78	-19.42	68.2	37.13	34.7	12.08	35.13	101	76	P	V
		5459.59	39.74	-14.26	54	28.09	34.7	12.08	35.13	101	76	A	V
	*	5690	109.8	-	-	97.82	34.86	12.28	35.16	101	76	P	V
	*	5690	99.88	-	-	87.9	34.86	12.28	35.16	101	76	A	V
		5854	51.65	-16.55	68.2	39.22	35.2	12.41	35.18	101	76	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 3 - Straddle Channel

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant. 3+4	Note	Frequency (MHz)	Level (dBµV/m)	Margin (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11380	49.63	-24.37	74	49.41	38.18	19.24	57.2	-	-	P	H
		17070	49.81	-18.39	68.2	40.37	41.63	23.75	55.94	-	-	P	H
802.11ax													H
HE80 Full													H
CH 138		11380	47.06	-26.94	74	46.84	38.18	19.24	57.2	-	-	P	V
5690MHz		17070	49.05	-19.15	68.2	39.61	41.63	23.75	55.94	-	-	P	V
													V
													V

Remark

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

Emission below 1GHz

WIFI 802.11ax HE40 Full (LF @ 3m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
3+4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE40 Full LF		40.26	25.07	-14.93	40	34.87	19.26	1	30.06	-	-	P	H
		51.6	30.17	-9.83	40	45.47	13.56	1.17	30.03	-	-	P	H
		96.42	34.26	-9.24	43.5	47.01	15.48	1.75	29.98	-	-	P	H
		824.3	30.9	-15.1	46	27.41	27.58	5.07	29.16	-	-	P	H
		862.1	32.25	-13.75	46	27.17	28.87	5.21	29	-	-	P	H
		940.5	33.7	-12.3	46	27.09	29.75	5.54	28.68	-	-	P	H
		39.45	32.45	-7.55	40	41.82	19.69	1	30.06	-	-	P	V
		51.87	32.89	-7.11	40	48.31	13.43	1.18	30.03	-	-	P	V
		92.91	34.93	-8.57	43.5	48.1	15.13	1.71	30.01	-	-	P	V
		796.3	31.12	-14.88	46	27.56	27.81	5.01	29.26	-	-	P	V
		860	31.97	-14.03	46	26.96	28.83	5.19	29.01	-	-	P	V
		925.1	33.39	-12.61	46	27.57	29.05	5.5	28.73	-	-	P	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	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
3+4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5150	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		5150	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

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

For Peak Limit @ 5150MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 5150MHz:

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

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

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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

Appendix D. Radiated Spurious Emission Plots

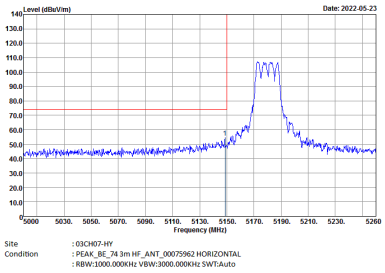
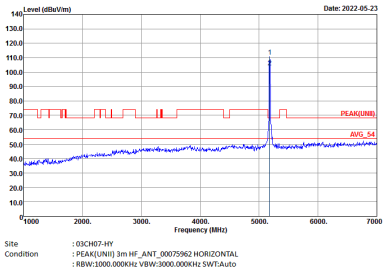
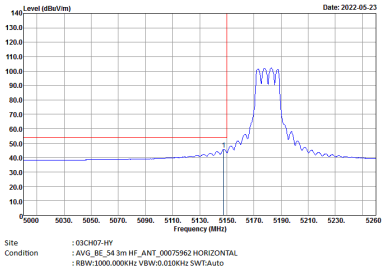
Test Engineer :	Jesse Wang, Stan Hsieh, Ken Wu	**Temperature :**	22~28.1°C
		Relative Humidity :	53.3~67.5%

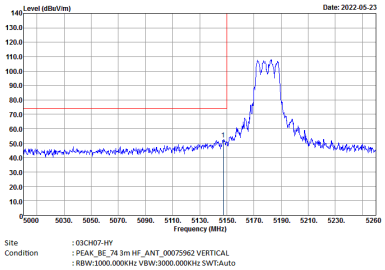
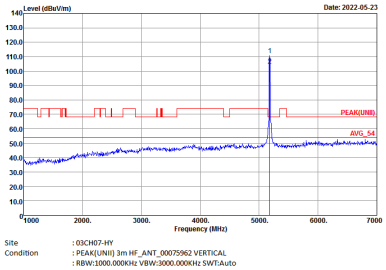
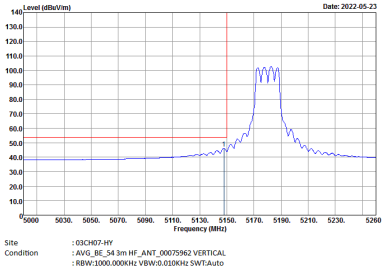
Note symbol

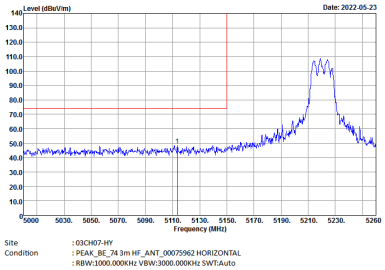
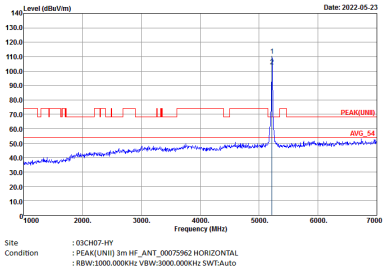
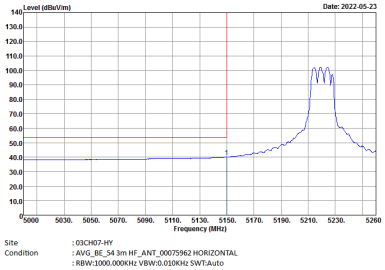
-L	**Low channel location**
-R	**High channel location**

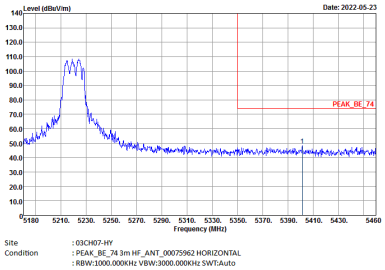
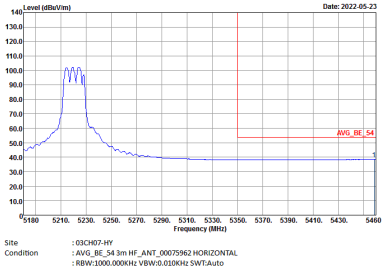
Band 1 - 5150~5250MHz

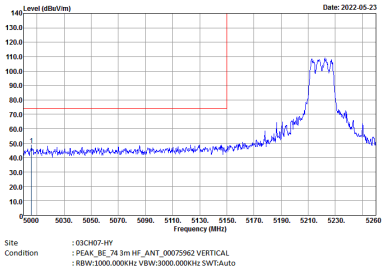
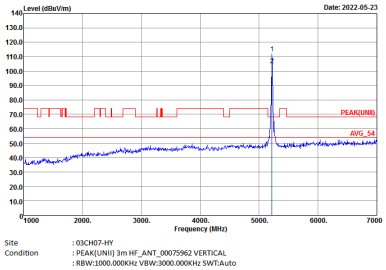
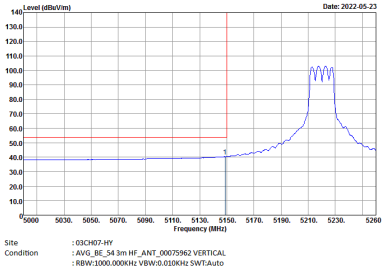
WIFI 802.11a (Band Edge @ 3m)

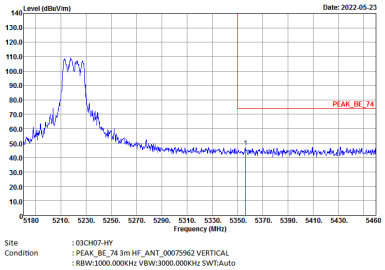
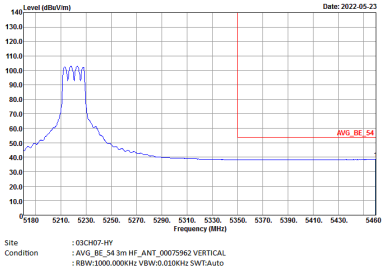
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

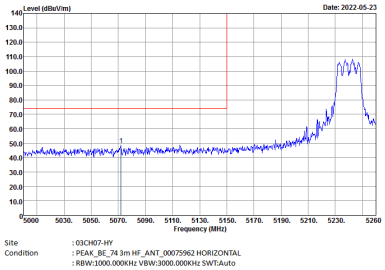
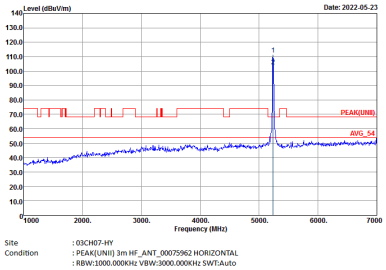
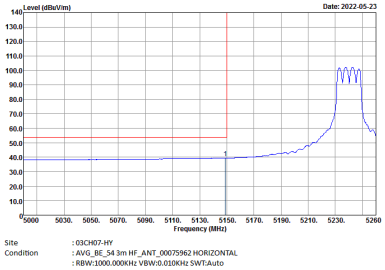
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

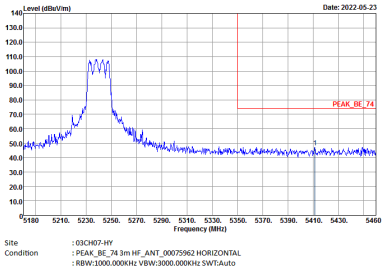
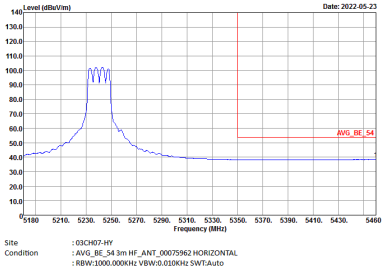
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

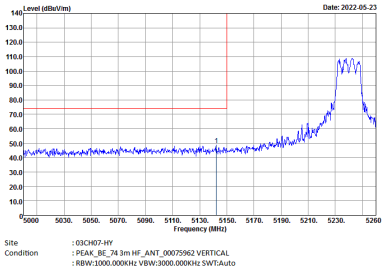
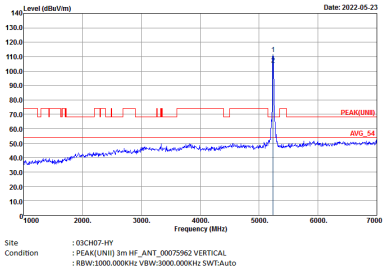
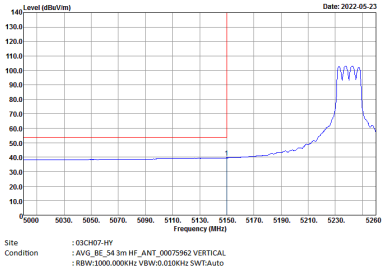
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

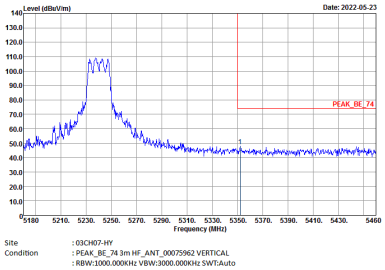
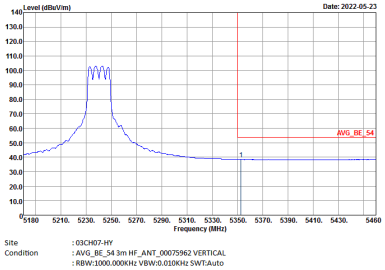
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

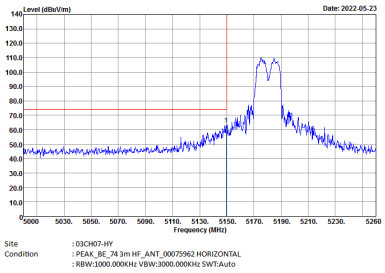
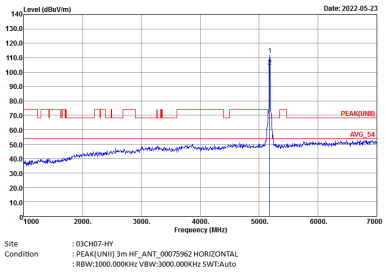
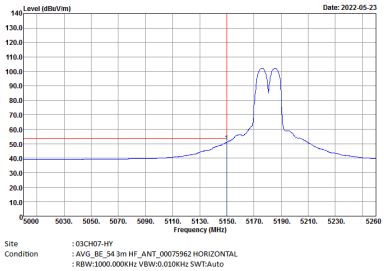
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

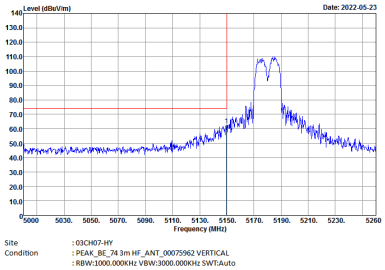
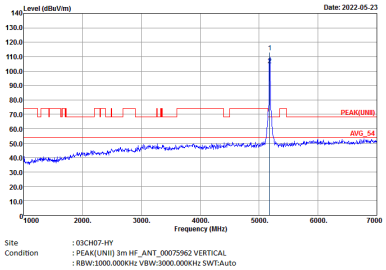
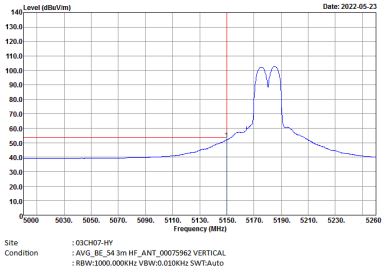
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

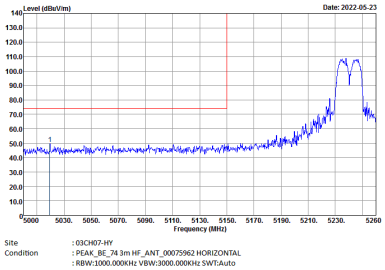
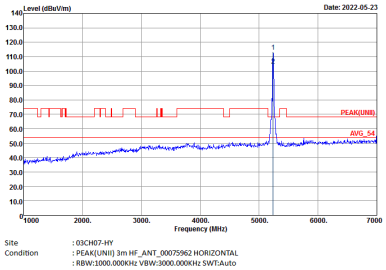
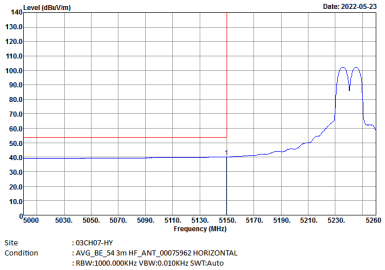
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

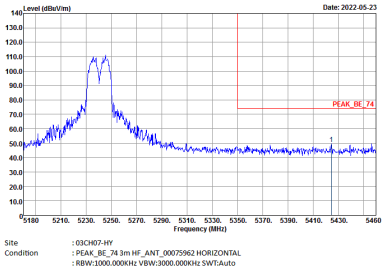
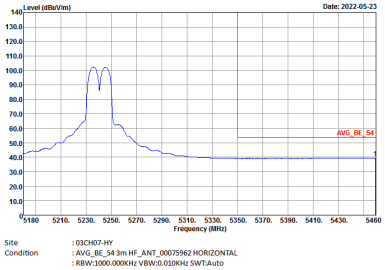
Band 1 5150~5250MHz

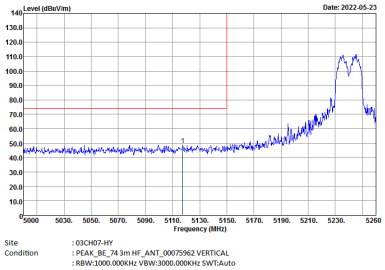
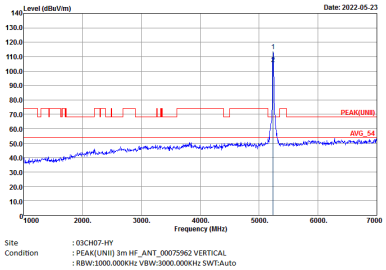
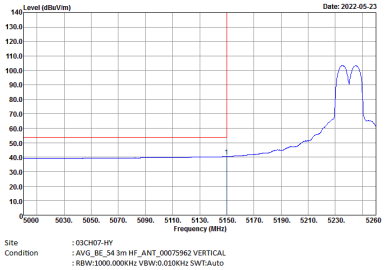
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

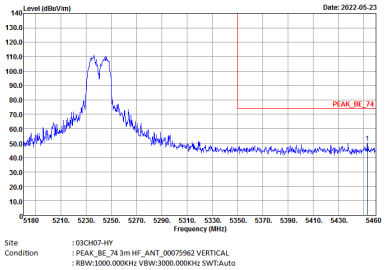
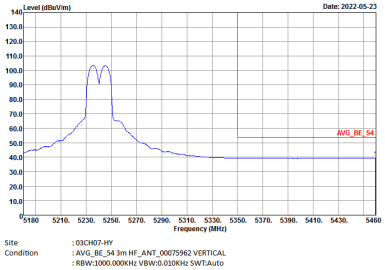
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH36 5180MHz	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH36 5180MHz	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

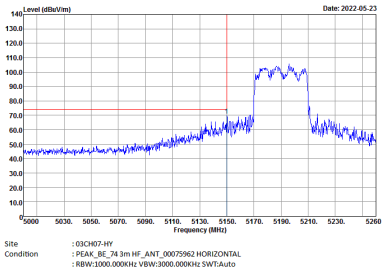
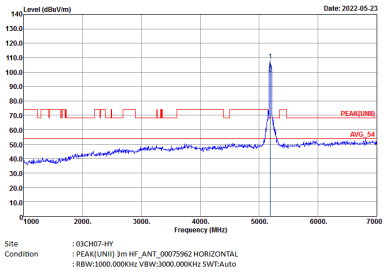
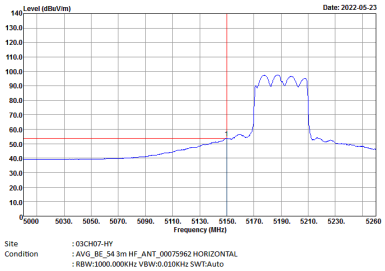
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH48 5240MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

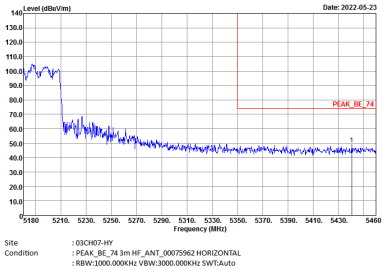
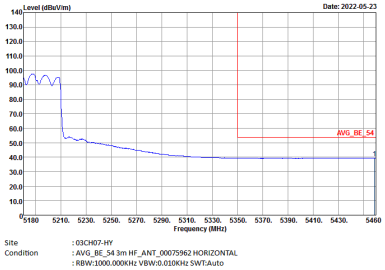
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH48 5240MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

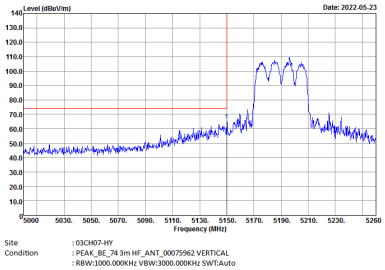
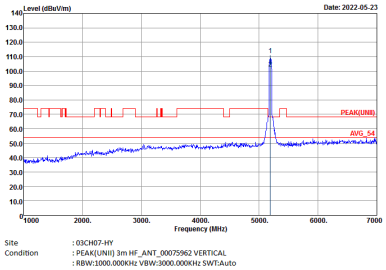
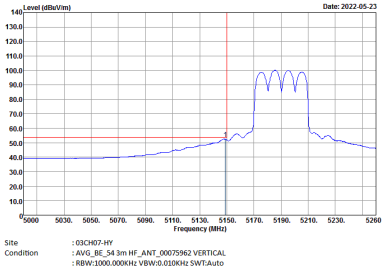
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH48 5240MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

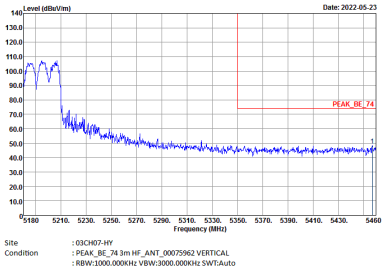
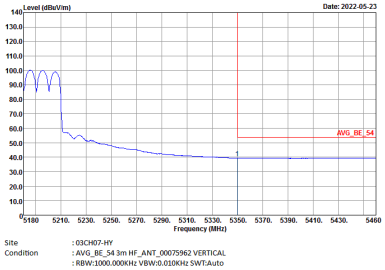
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH48 5240MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

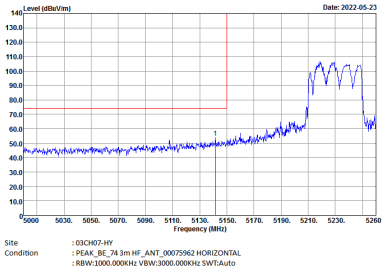
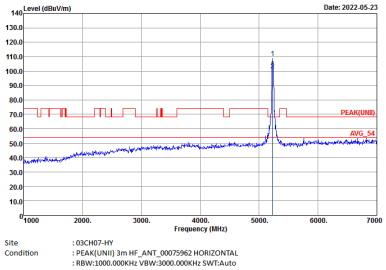
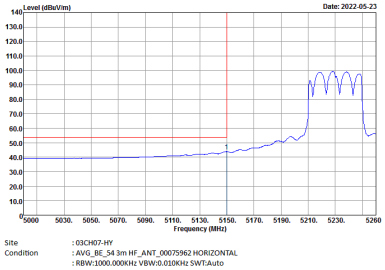
Band 1 5150~5250MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

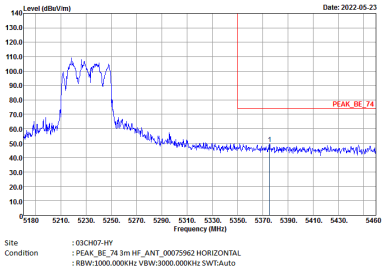
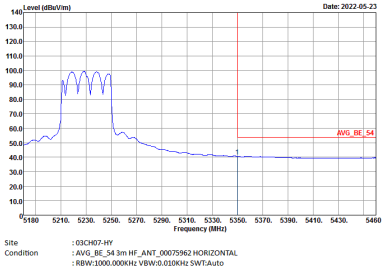
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

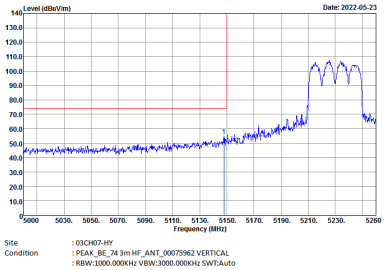
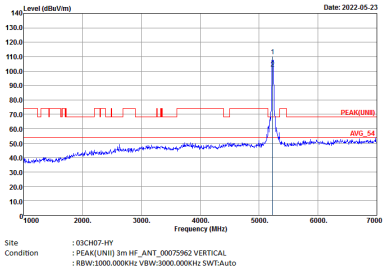
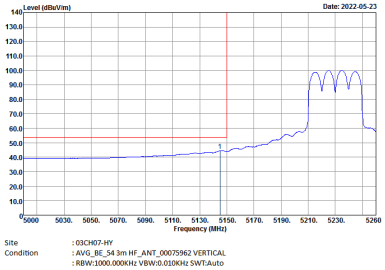
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

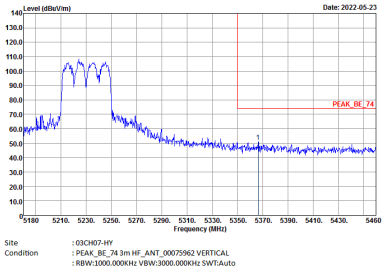
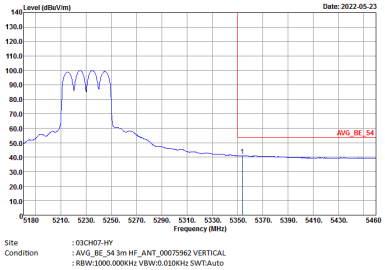
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

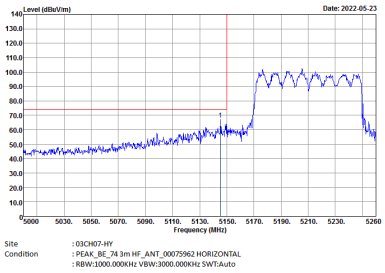
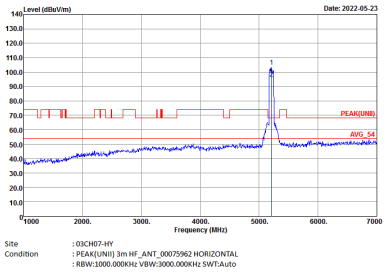
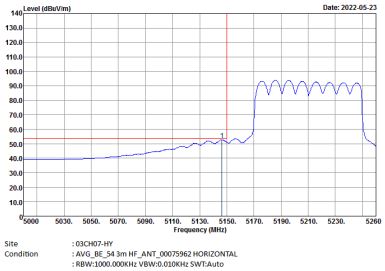
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH46 5230MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

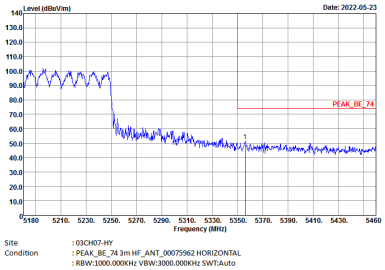
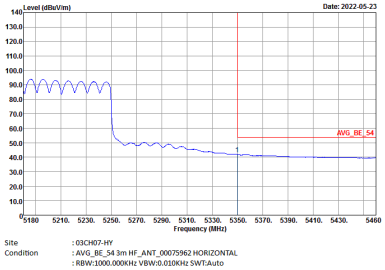
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH46 5230MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

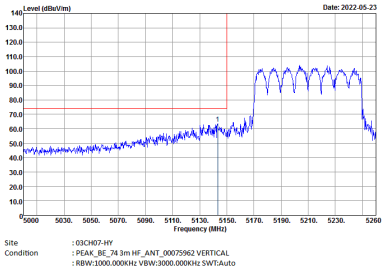
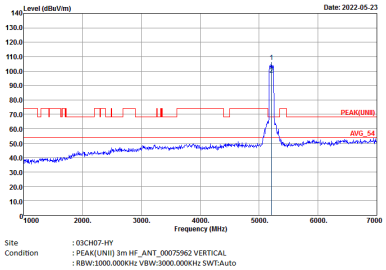
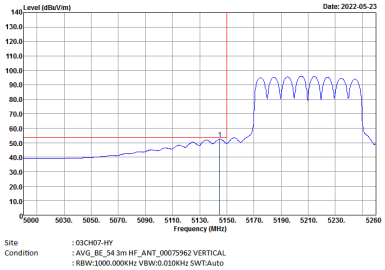
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH46 5230MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

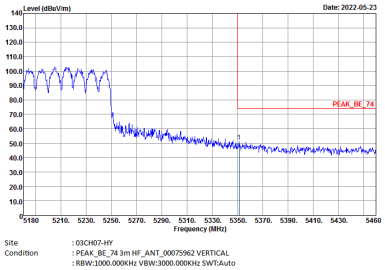
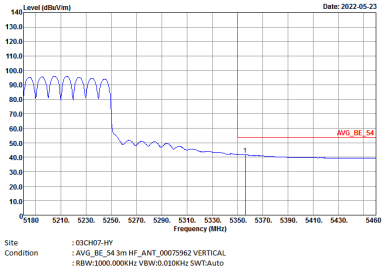
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH46 5230MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 5150~5250MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

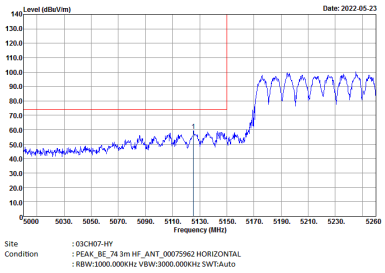
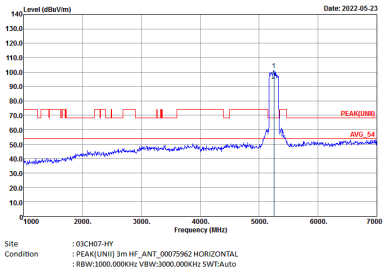
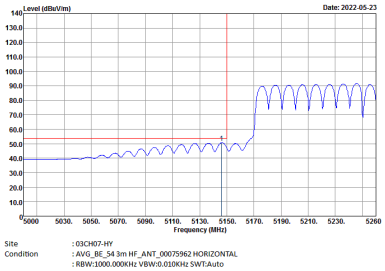
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

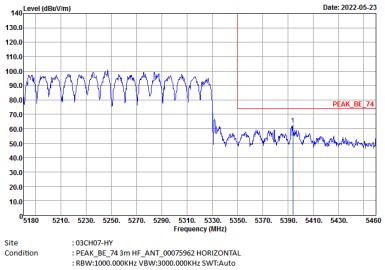
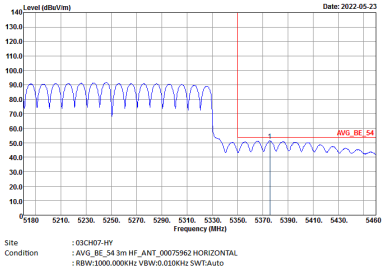
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

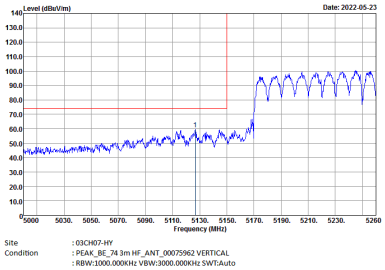
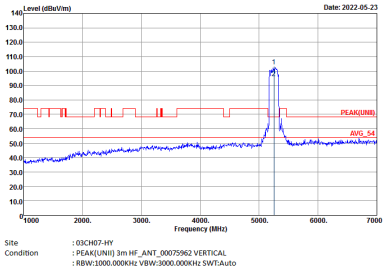
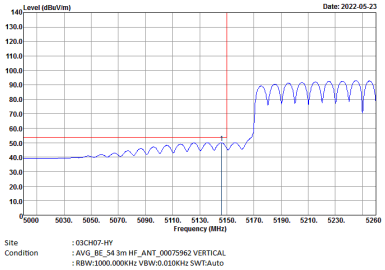
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

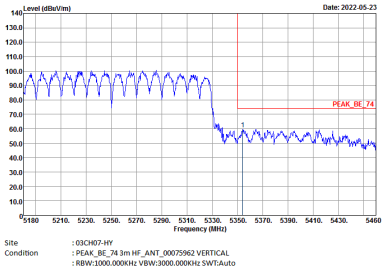
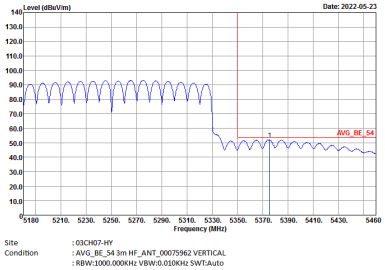
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 5150~5250MHz
WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH50 5250MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

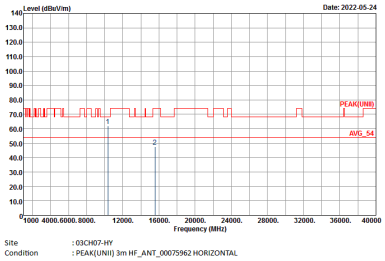
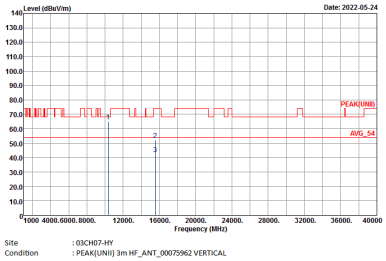
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH50 5250MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

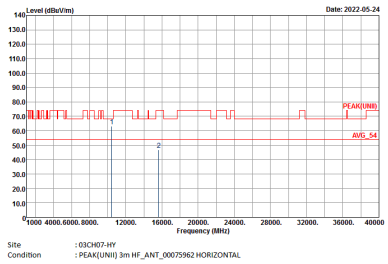
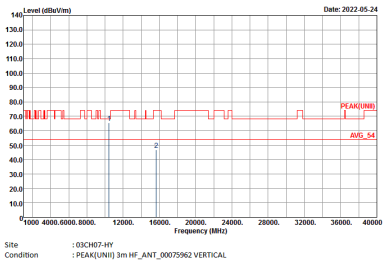
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH50 5250MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

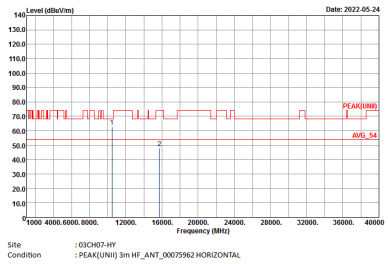
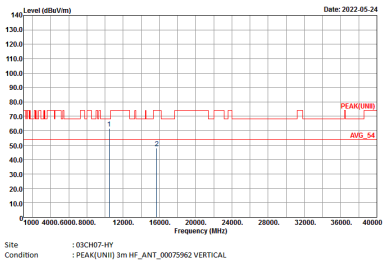
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH50 5250MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 1 - 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

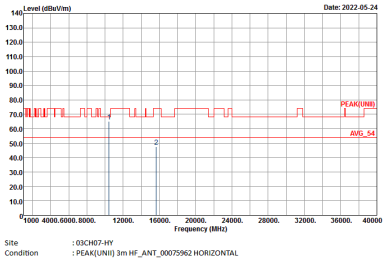
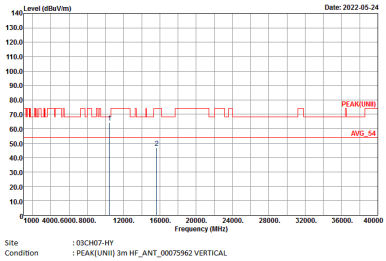
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
3+4	Horizontal	Vertical
Peak Avg.		

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
3+4	Horizontal	Vertical
Peak Avg.		

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
3+4	Horizontal	Vertical
Peak Avg.		

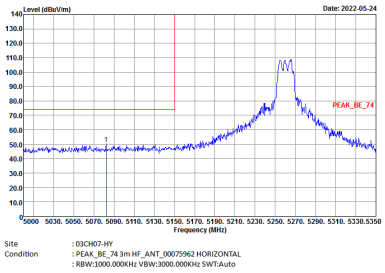
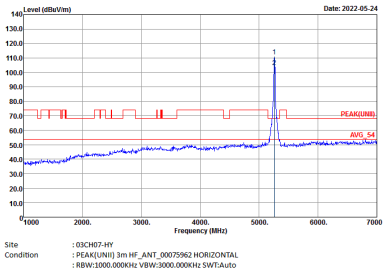
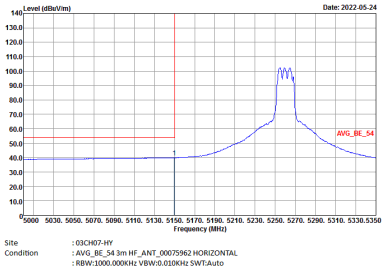
Band 1 - 5150~5250MHz

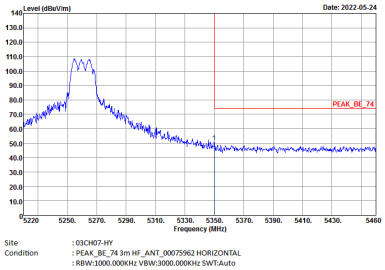
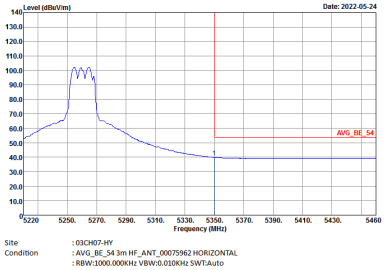
WIFI 802.11ax HE20 Full (Harmonic @ 3m)

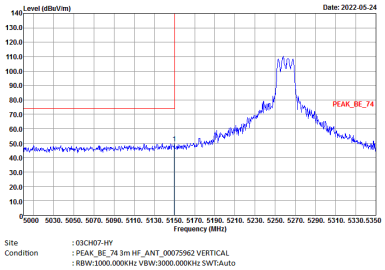
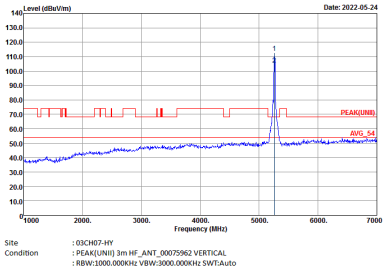
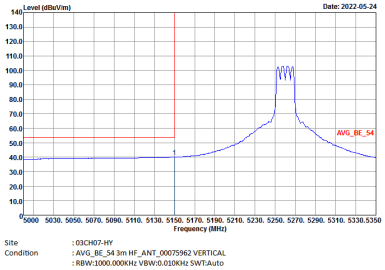
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH44 5220MHz	
3+4	Horizontal	Vertical
Peak Avg.		

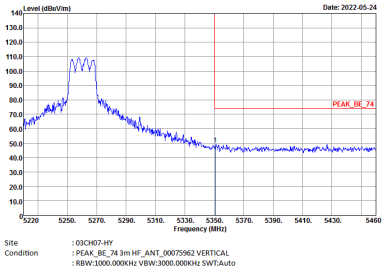
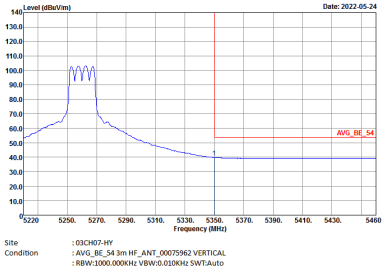
Band 2 - 5250~5350MHz

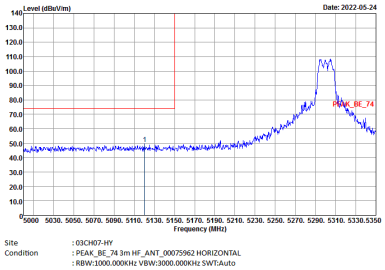
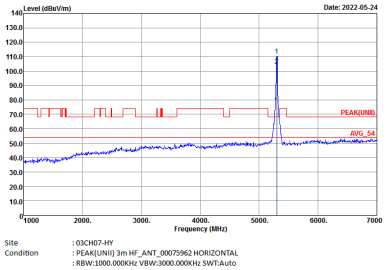
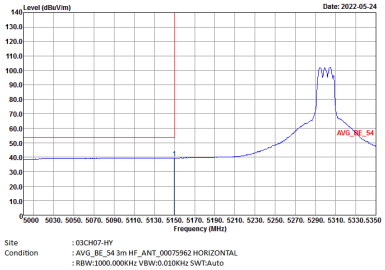
WIFI 802.11a (Band Edge @ 3m)

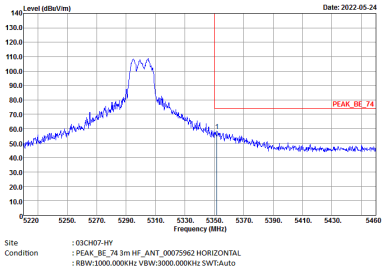
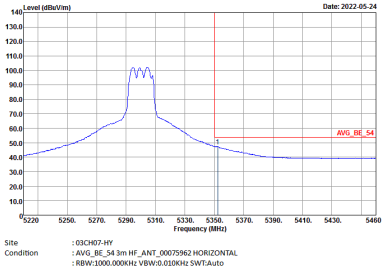
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

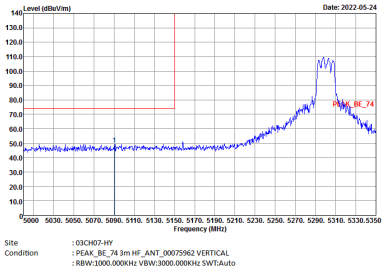
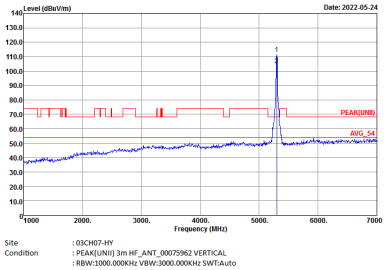
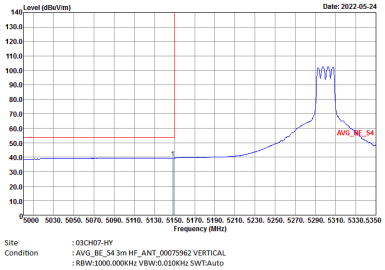
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

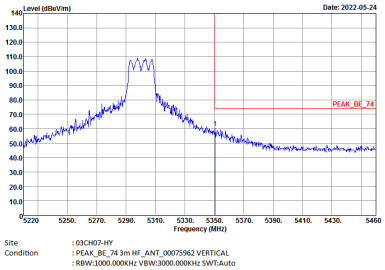
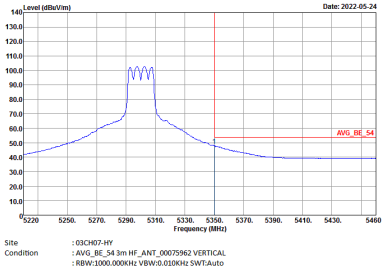
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

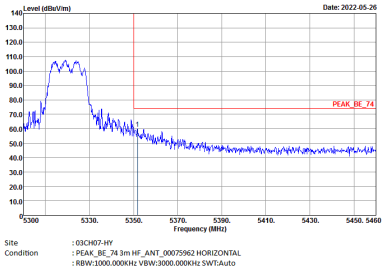
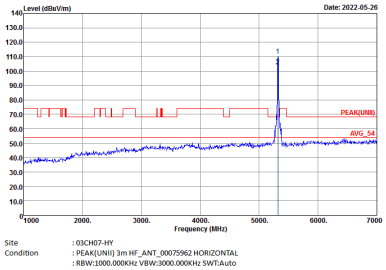
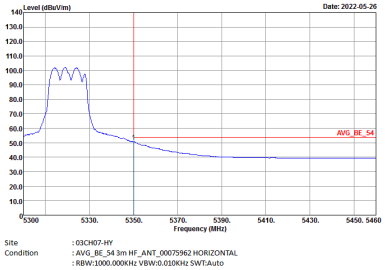
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

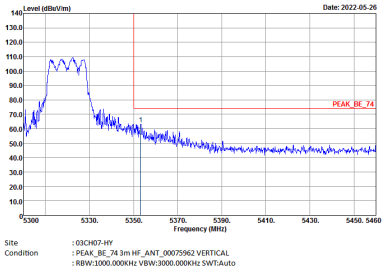
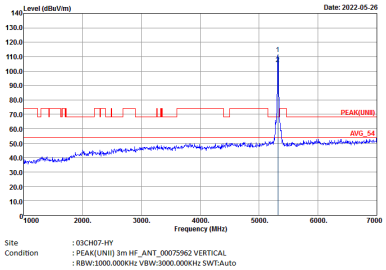
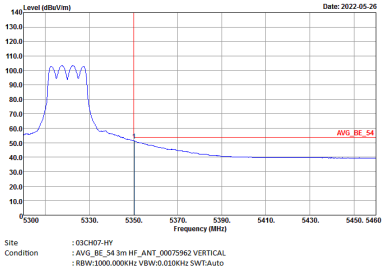
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

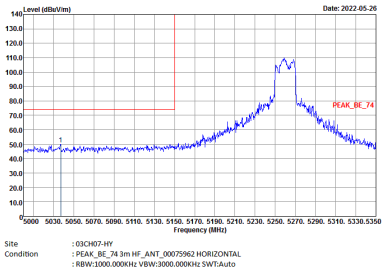
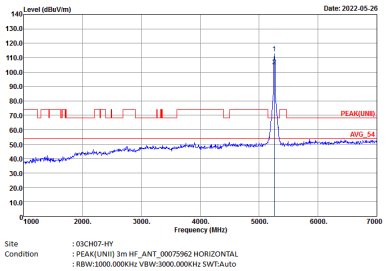
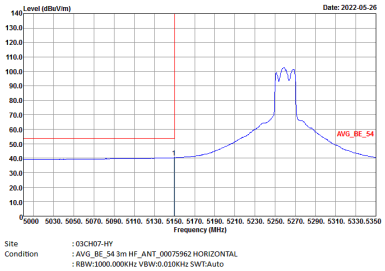
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

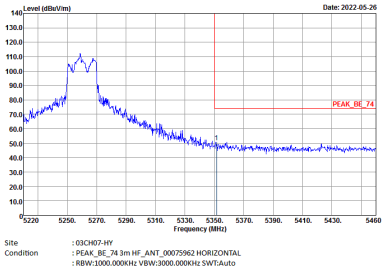
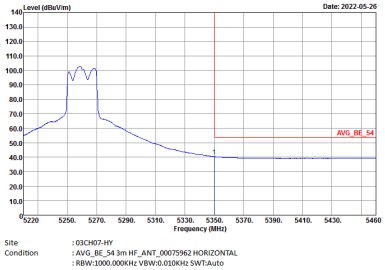
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

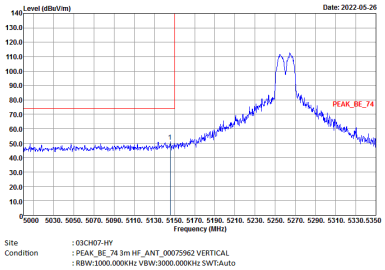
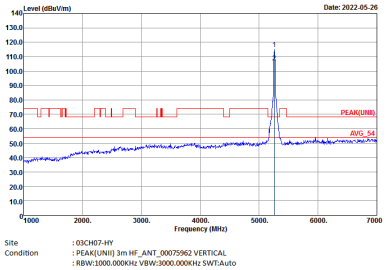
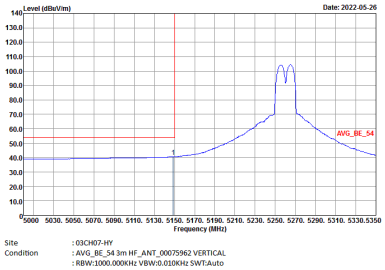
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

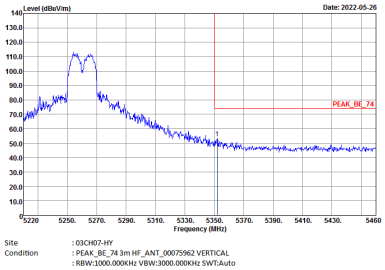
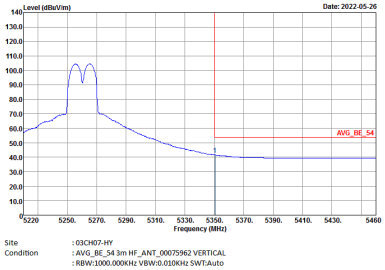
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

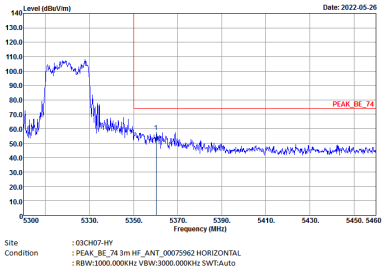
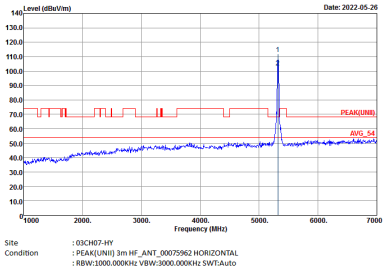
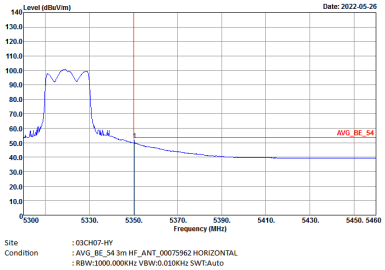
Band 2 5250~5350MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

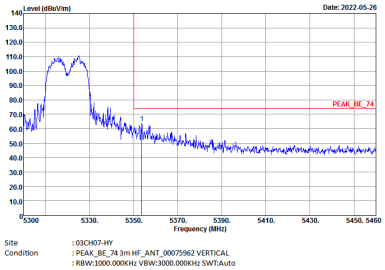
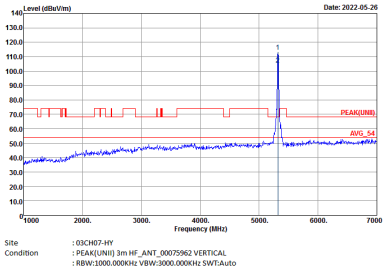
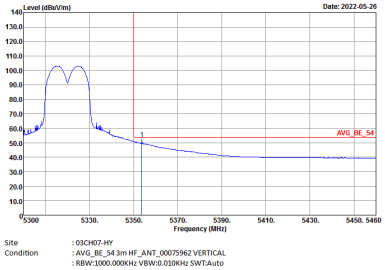
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH52 5260MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH52 5260MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH52 5260MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

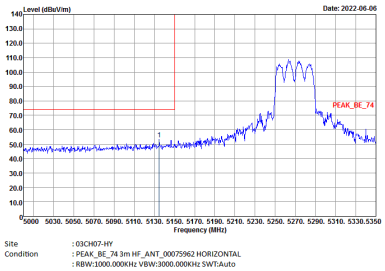
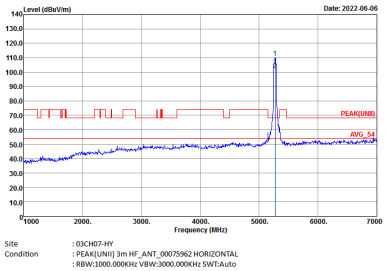
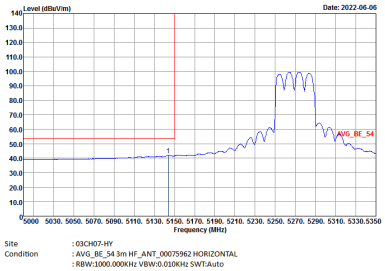
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH52 5260MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

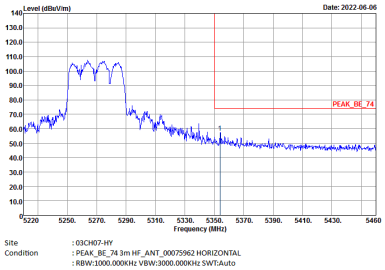
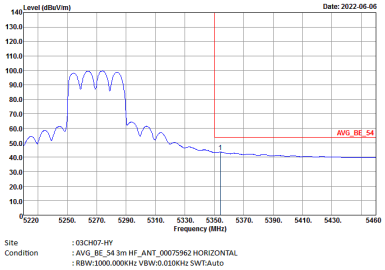
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH64 5320MHz	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

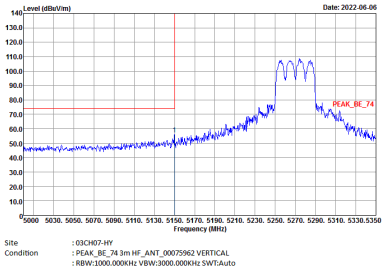
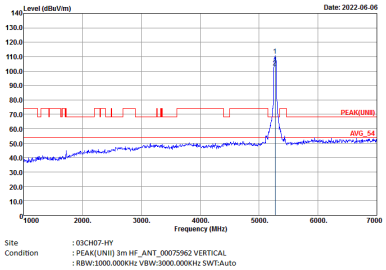
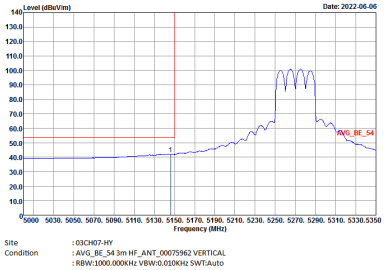
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH64 5320MHz	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

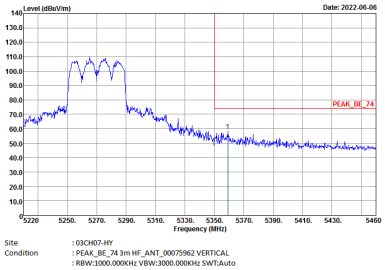
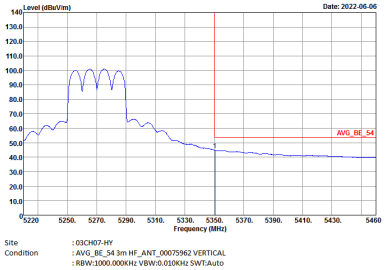
Band 2 - 5250~5350MHz

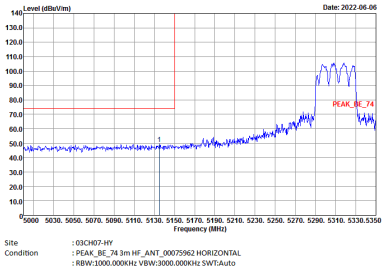
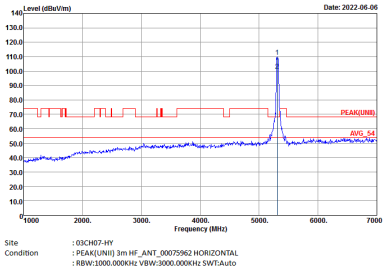
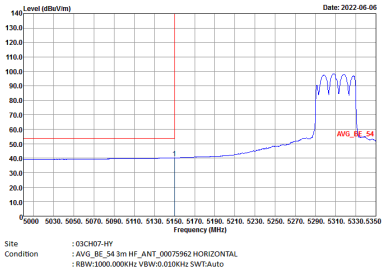
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

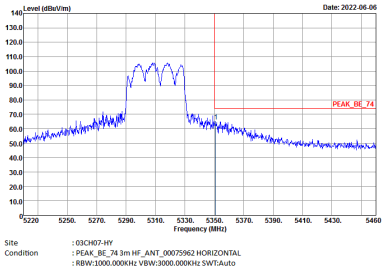
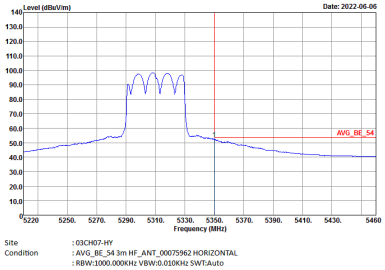
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH54 5270 - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

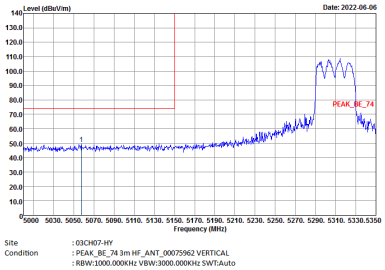
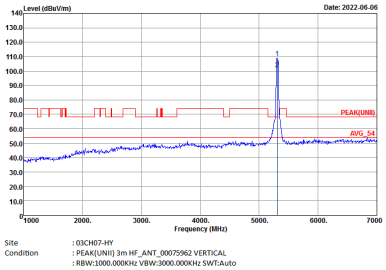
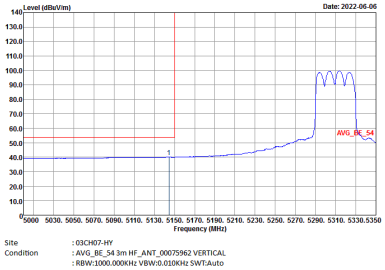
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH54 5270 - R	
3+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

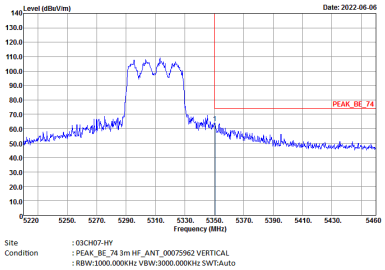
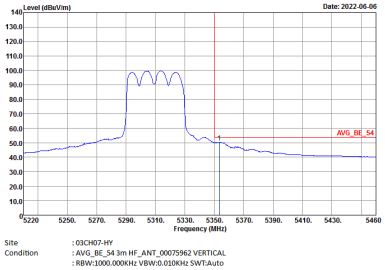
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH54 5270 - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH54 5270 - R	
3+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

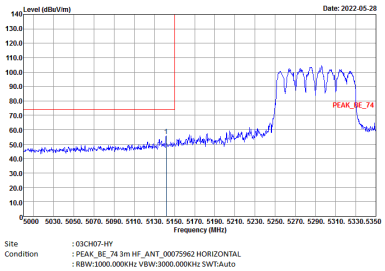
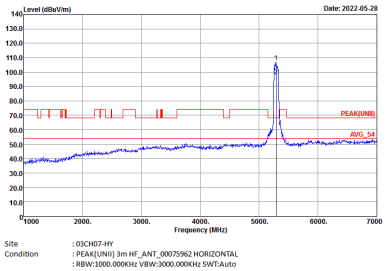
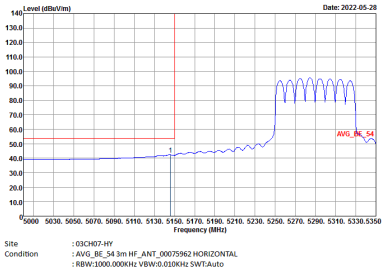
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH62 5310 - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

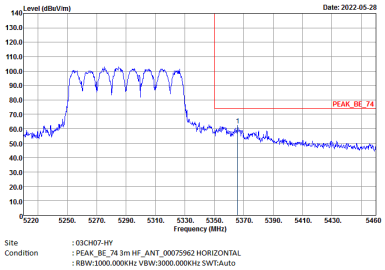
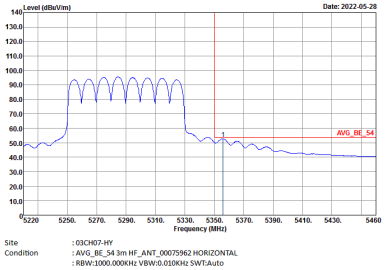
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH62 5310 - R	
3+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

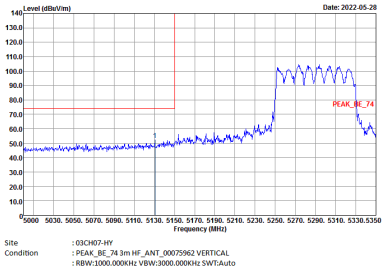
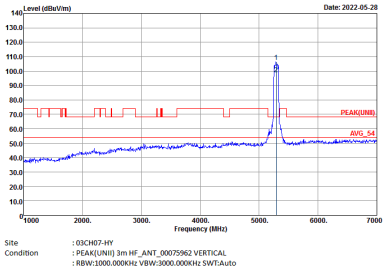
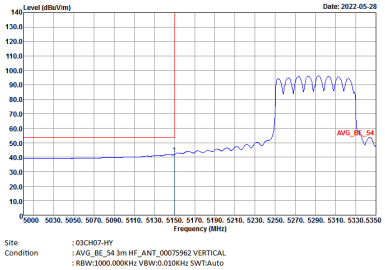
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH62 5310 - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

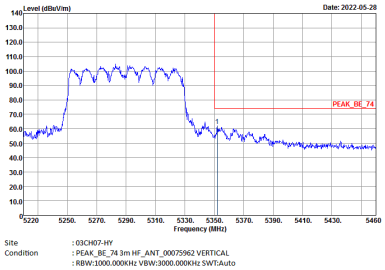
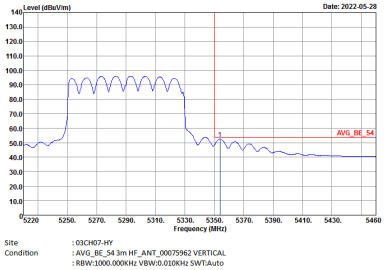
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH62 5310 - R	
3+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 2 5250~5350MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH58 5290MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

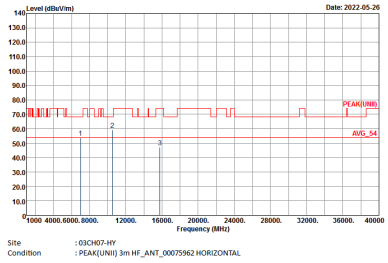
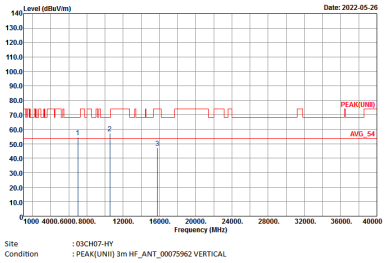
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH58 5290MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

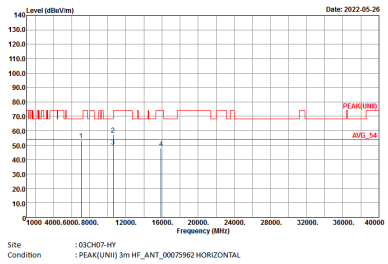
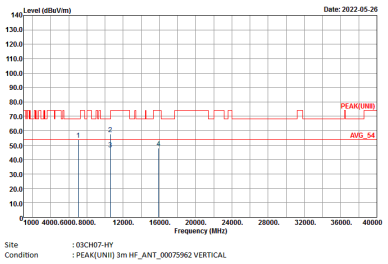
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH58 5290MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

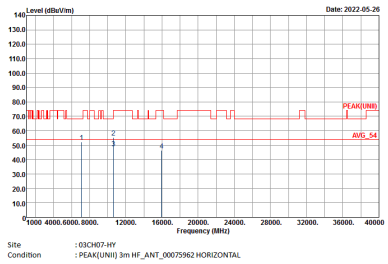
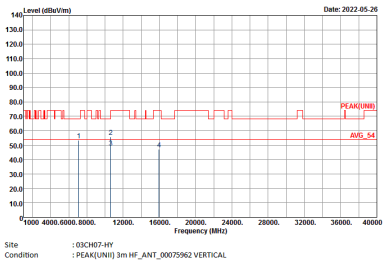
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH58 5290MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

Band 2 - 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

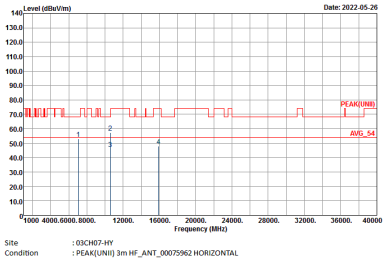
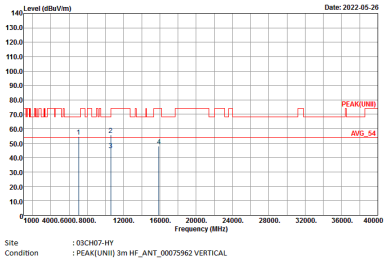
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH52 5260MHz	
3+4	Horizontal	Vertical
Peak Avg.		

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
3+4	Horizontal	Vertical
Peak Avg.		

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH64 5320MHz	
3+4	Horizontal	Vertical
Peak Avg.		

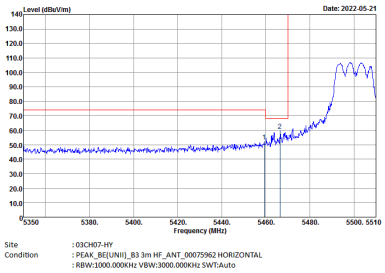
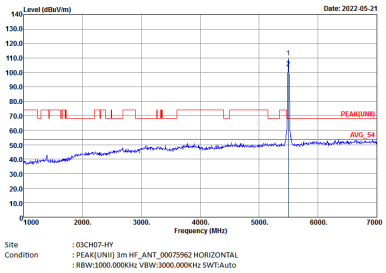
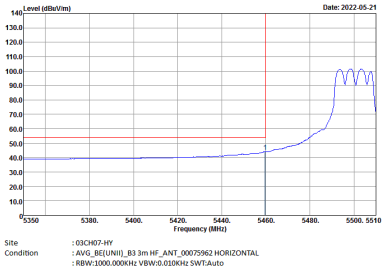
Band 2 - 5250~5350MHz

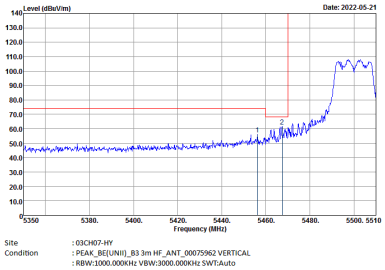
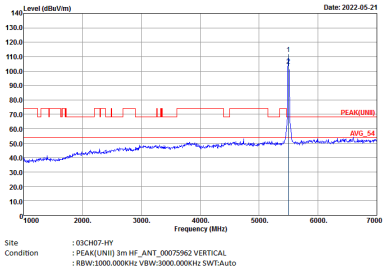
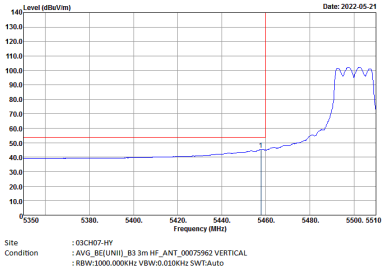
WIFI 802.11ax HE20 Full (Harmonic @ 3m)

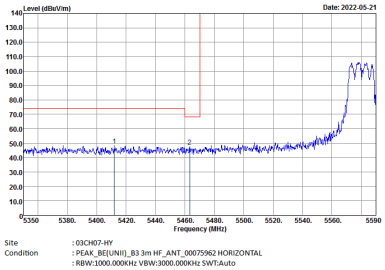
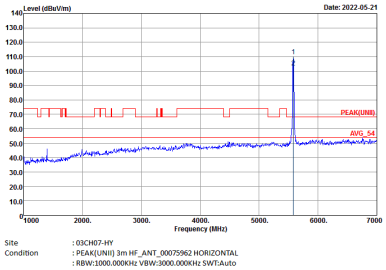
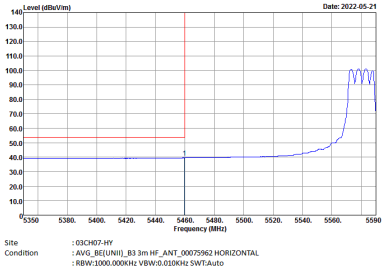
WIFI	Band 1 5250~5350MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH60 5300MHz	
3+4	Horizontal	Vertical
Peak Avg.		

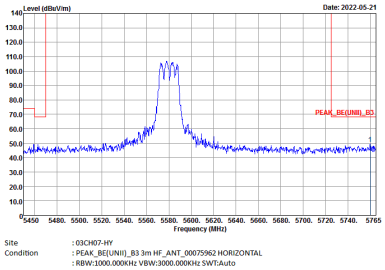
Band 3 - 5470~5725MHz

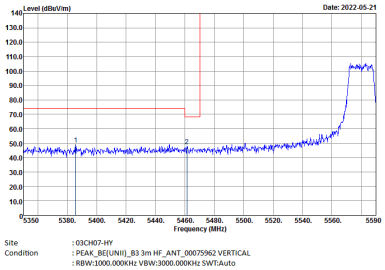
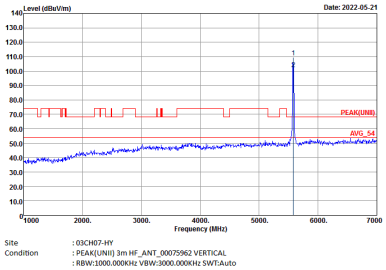
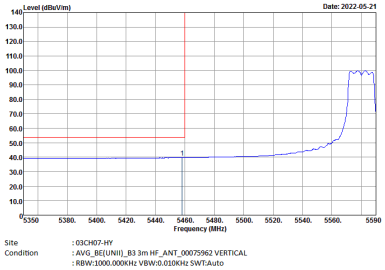
WIFI 802.11a (Band Edge @ 3m)

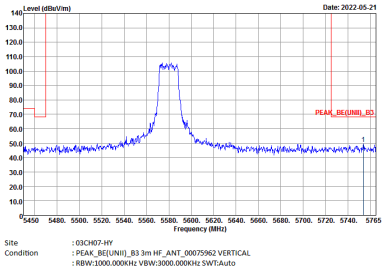
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

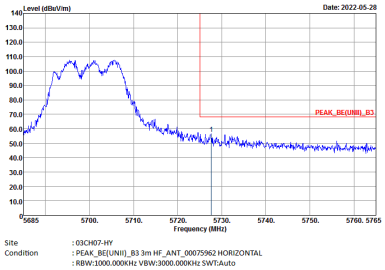
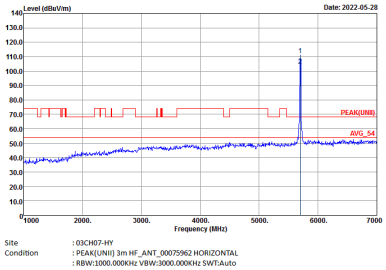
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

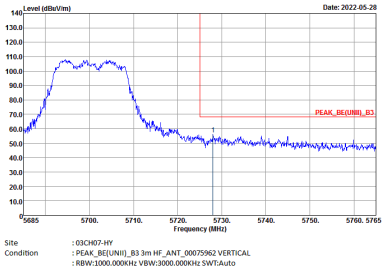
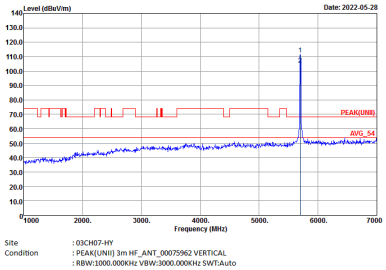
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank

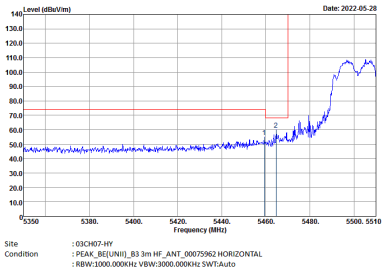
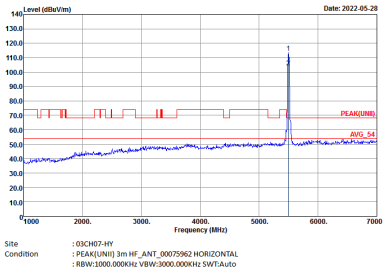
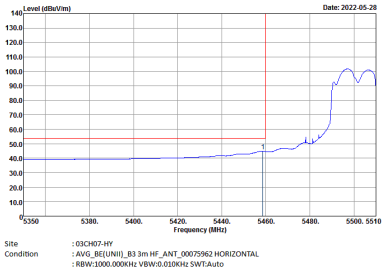
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

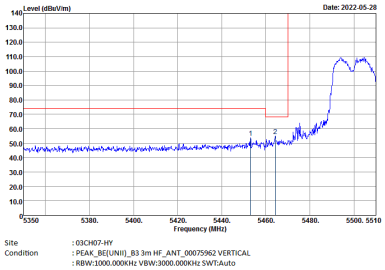
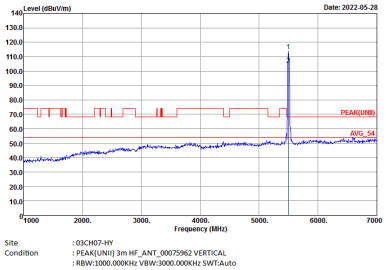
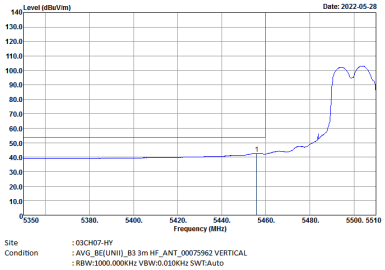
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH116 5580MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank

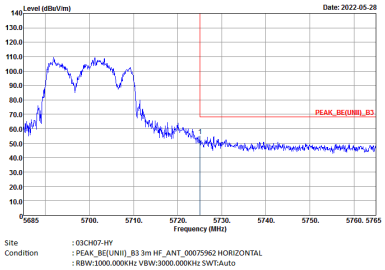
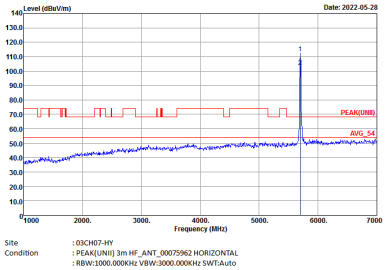
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
3+4	Horizontal	Fundamental
Peak		

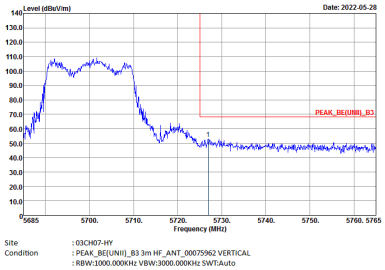
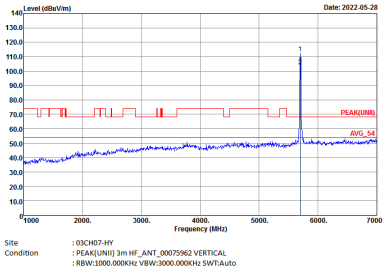
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH140 5700MHz	
3+4	Vertical	Fundamental
Peak		

Band 3 5470~5725MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH100 5500MHz	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

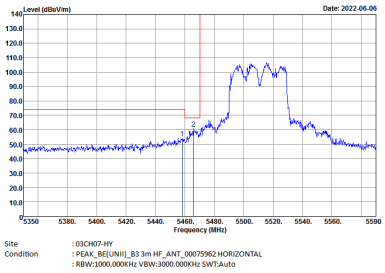
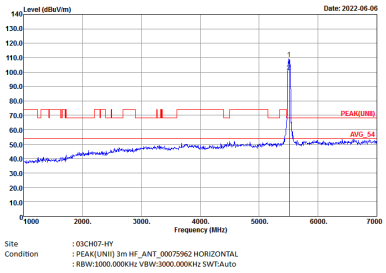
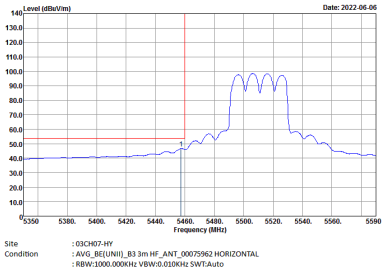
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH100 5500MHz	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

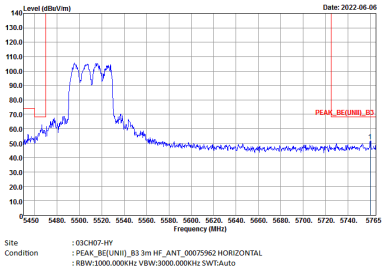
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH140 5700MHz	
3+4	Horizontal	Fundamental
Peak		

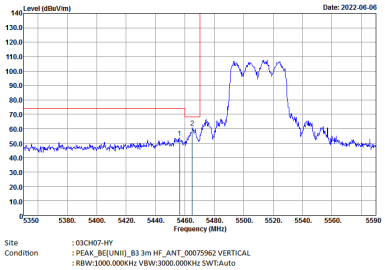
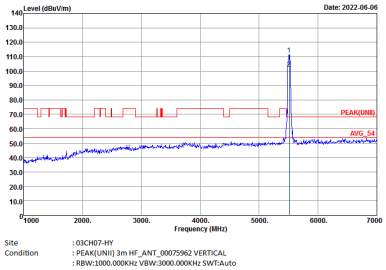
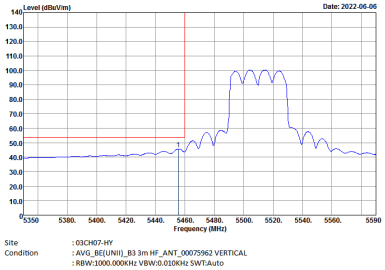
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH140 5700MHz	
3+4	Vertical	Fundamental
Peak		

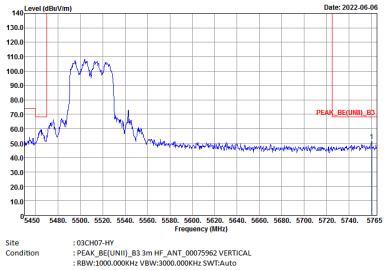
Band 3 - 5470~5725MHz

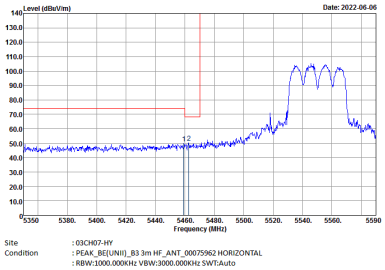
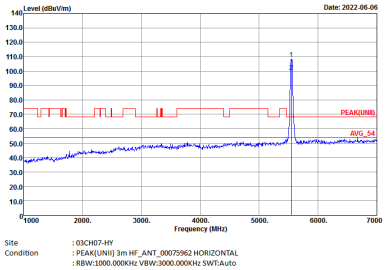
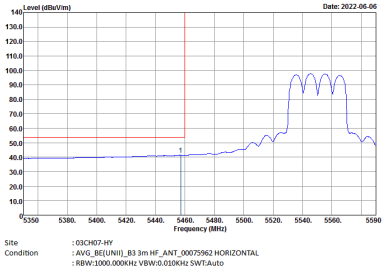
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

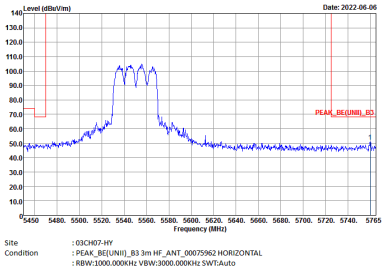
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH102 5510MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

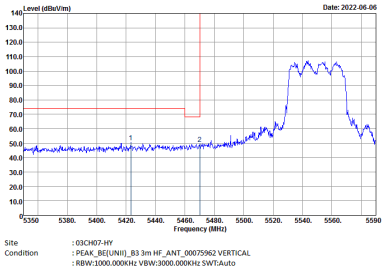
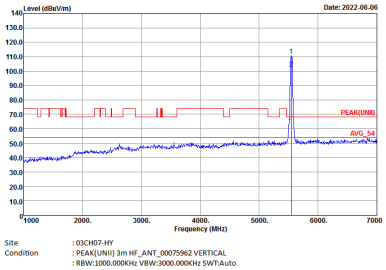
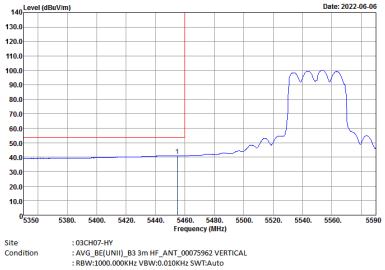
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH102 5510MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank

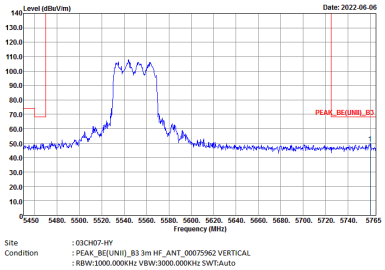
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH102 5510MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

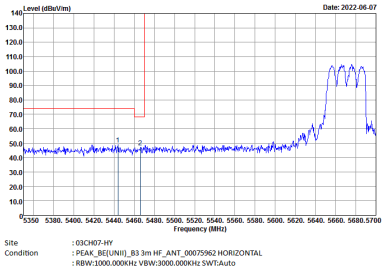
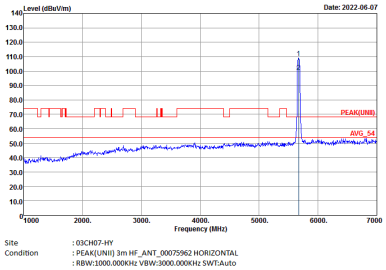
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH102 5510MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank

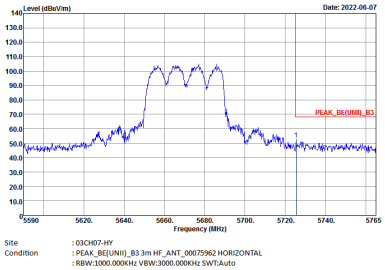
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH110 5550MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

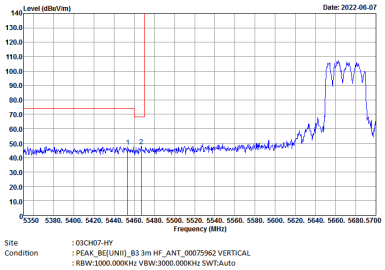
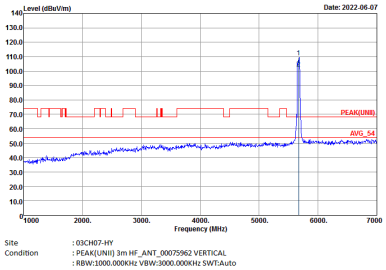
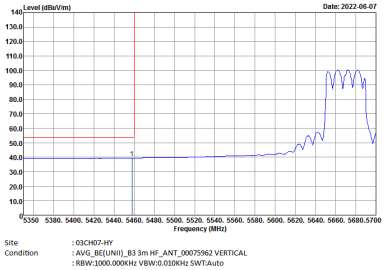
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH110 5550MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank

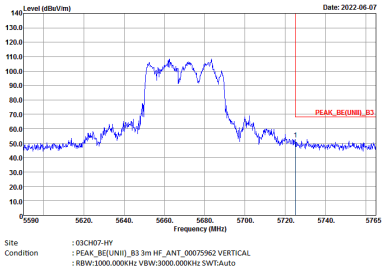
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH110 5550MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH110 5550MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank

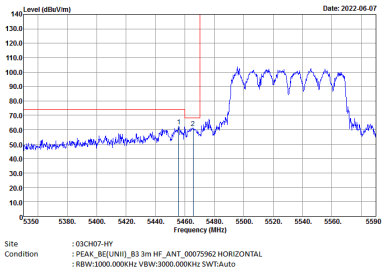
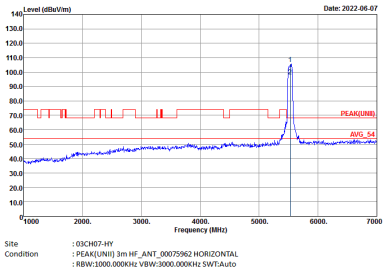
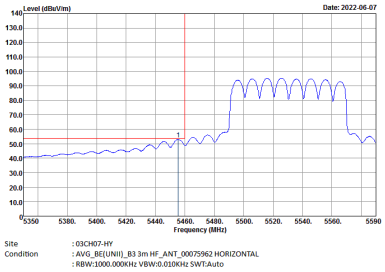
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH134 5670MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

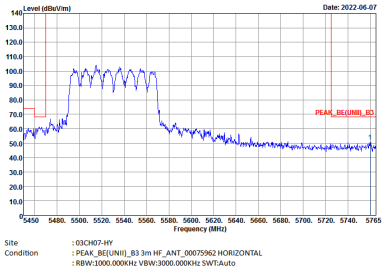
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH134 5670MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank

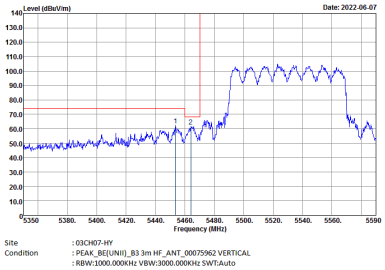
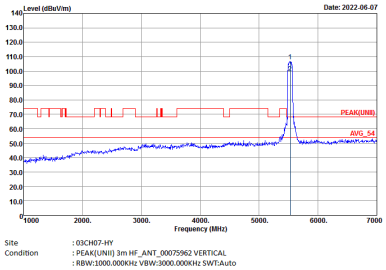
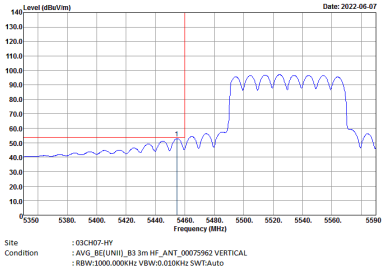
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH134 5670MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

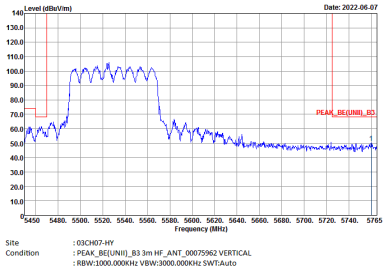
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH134 5670MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank

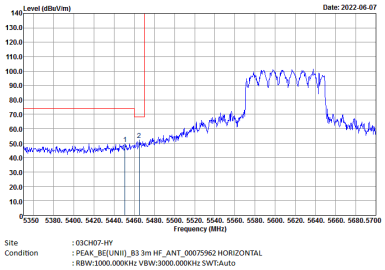
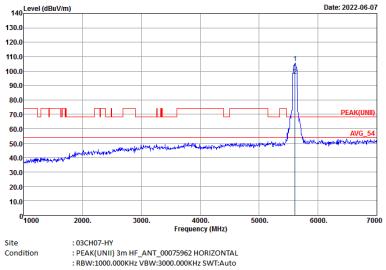
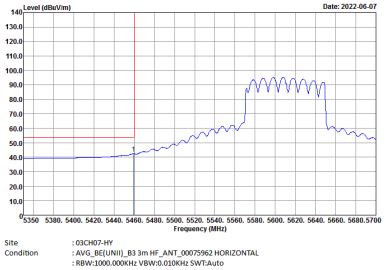
Band 3 5470~5725MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

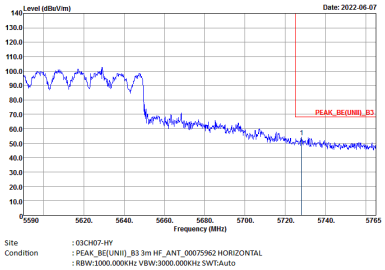
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH106 5530MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

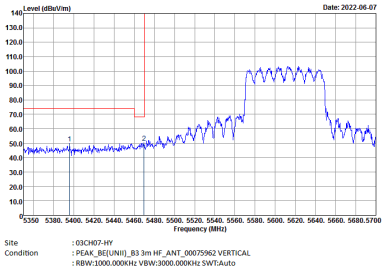
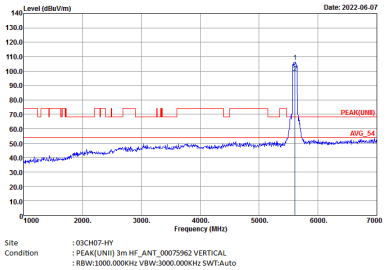
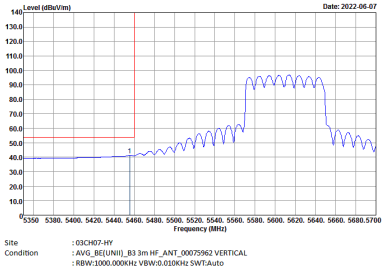
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH106 5530MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank

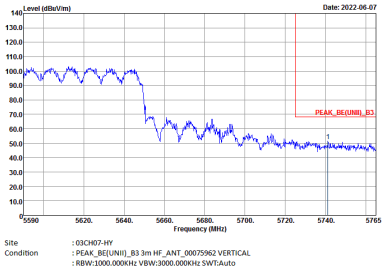
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH106 5530MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH106 5530MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank

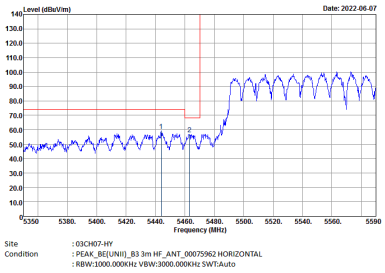
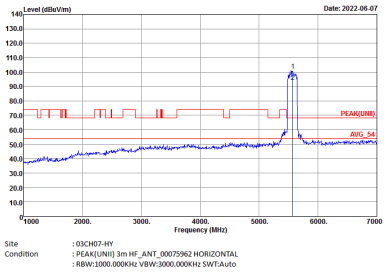
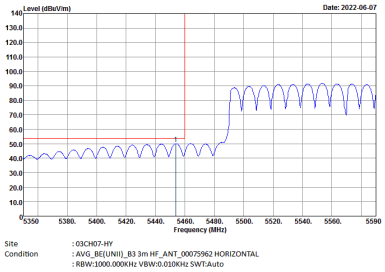
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH122 5610MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

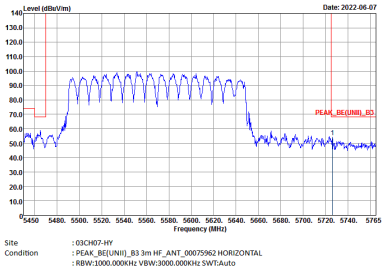
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH122 5610MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank

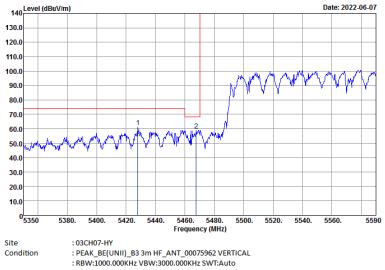
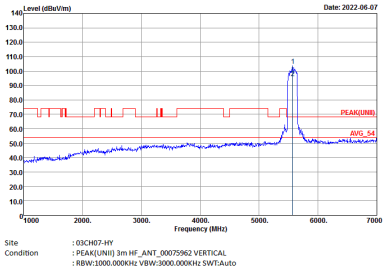
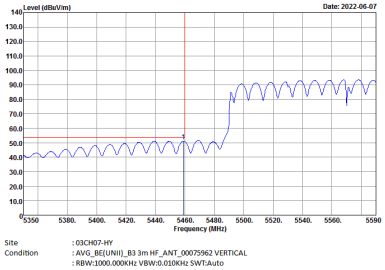
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH122 5610MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

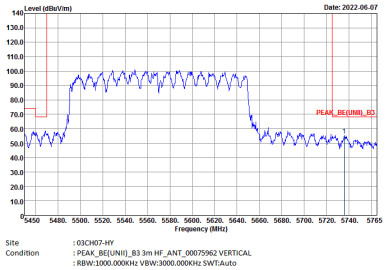
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH122 5610MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank

Band 3 5470~5725MHz
WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH114 5570MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

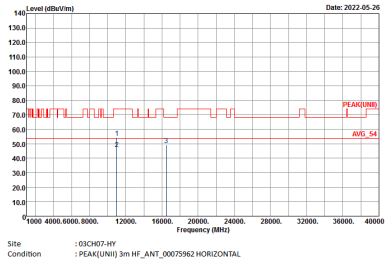
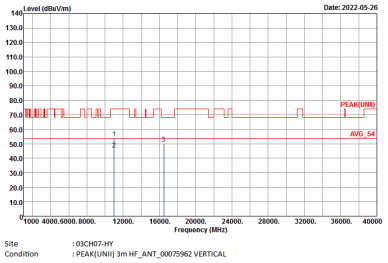
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH114 5570MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank

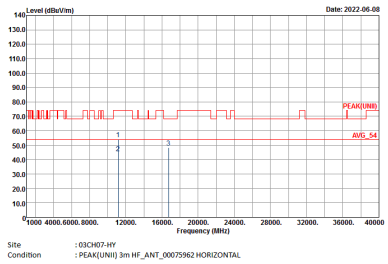
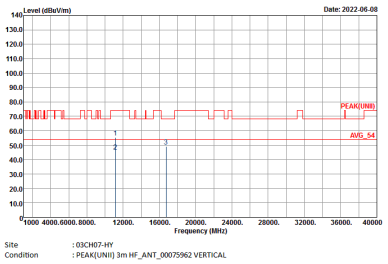
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH114 5570MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

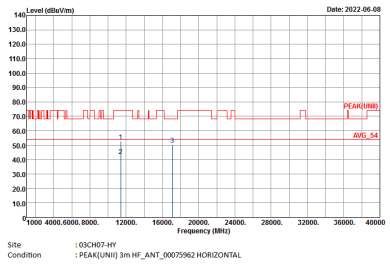
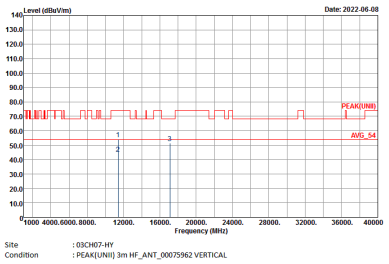
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH114 5570MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank

Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

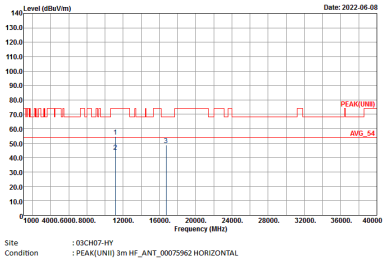
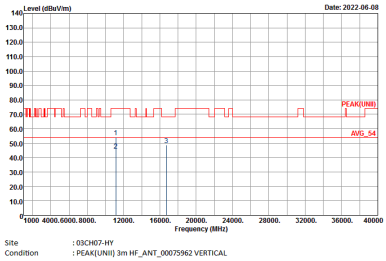
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH100 5500MHz	
3+4	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH116 5580MHz	
3+4	Horizontal	Vertical
Peak Avg.		

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH140 5700MHz	
3+4	Horizontal	Vertical
Peak Avg.		

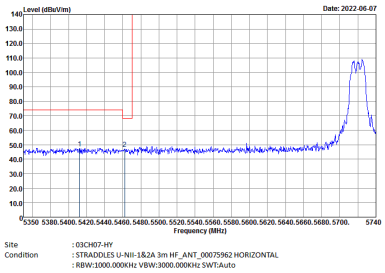
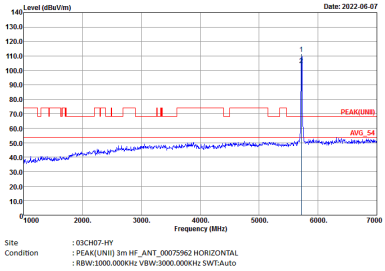
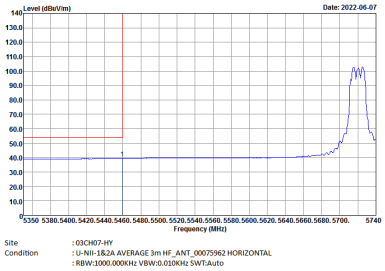
Band 3 - 5470~5725MHz

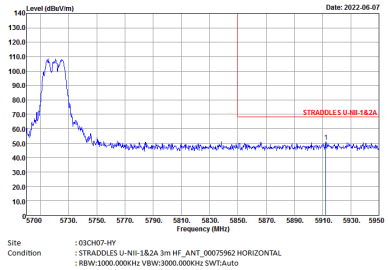
WIFI 802.11ax HE20 Full (Harmonic @ 3m)

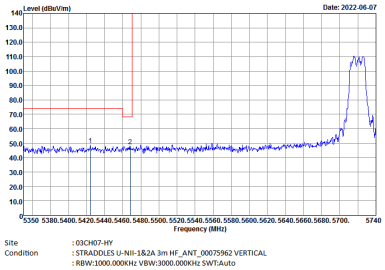
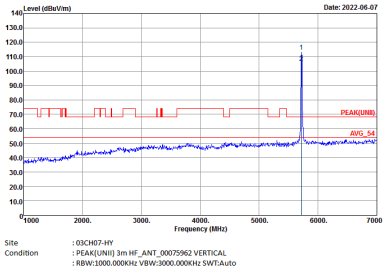
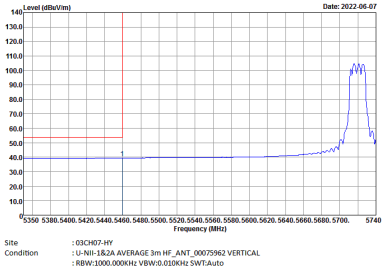
WIFI	Band 1 5250~5350MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH116 5580MHz	
3+4	Horizontal	Vertical
Peak Avg.		

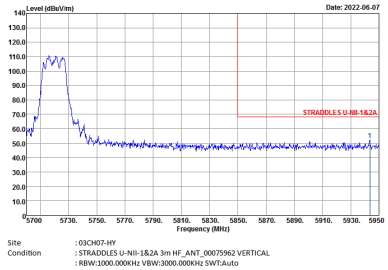
Band 3 - Straddle Channel

WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

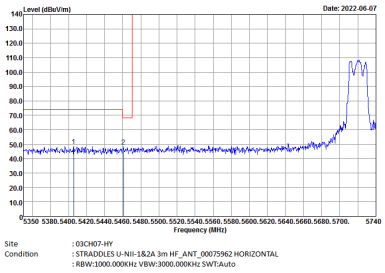
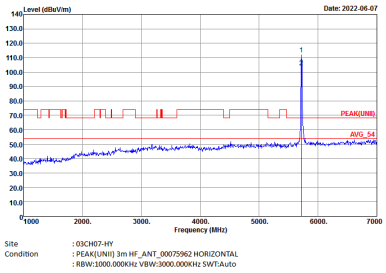
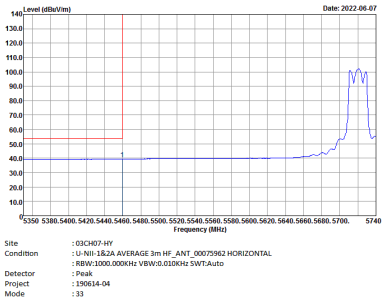
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz – R	
3+4	Horizontal	Fundamental
Peak		Left blank

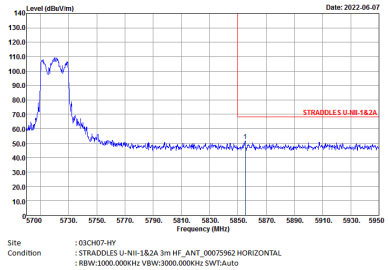
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

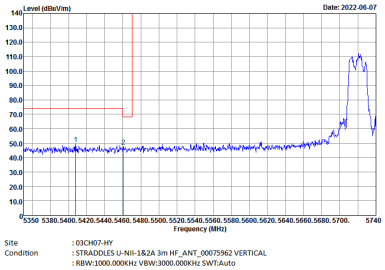
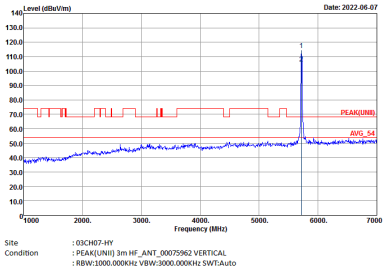
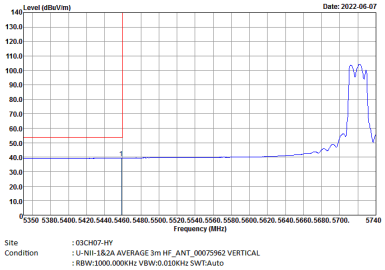
WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11a CH144 5720MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank

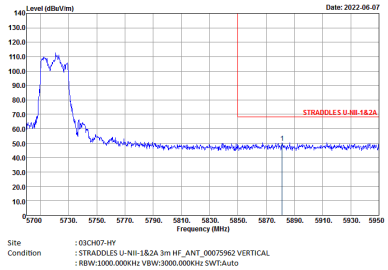
Band 3 – Straddle Channel

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

WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ax HE20 Full CH144 5720MHz - L	
3+4	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ax HE20 Full CH144 5720MHz - R	
3+4	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ax HE20 Full CH144 5720MHz - L	
3+4	Vertical	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 Straddle Channel Band Edge @ 3m	
ANT	802.11ax HE20 Full CH144 5720MHz - R	
3+4	Vertical	Fundamental
Peak		Left blank