



FCC RADIO TEST REPORT

FCC ID : U8G-P1AX02
Equipment : PEPWAVE / peplink Wireless Product
Brand Name : PEPWAVE / peplink
Model Name : MAX BR1 5G
MAX-BR1-5GD-T
MAX-BR1-5GH-T
Applicant : PISMO LABS TECHNOLOGY LIMITED
A8, 5/F, HK Spinners Industrial Building, Phase 6, 481
Castle Peak Road, Cheung Sha Wan, Hong Kong
Manufacturer : PISMO LABS TECHNOLOGY LIMITED
A8, 5/F, HK Spinners Industrial Building, Phase 6, 481
Castle Peak Road, Cheung Sha Wan, Hong Kong
Standard : FCC Part 15 Subpart E §15.407

The product was received on Mar. 25, 2021 and testing was started from Apr. 12, 2021 and completed on May 19, 2021. 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 of 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.)



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Product Feature of Equipment Under Test.....	5
1.2 Modification of EUT	5
1.3 Testing Location	5
1.4 Applicable Standards.....	6
2 Test Configuration of Equipment Under Test	7
2.1 Carrier Frequency and Channel	7
2.2 Test Mode.....	8
2.3 Connection Diagram of Test System.....	9
2.4 Support Unit used in test configuration and system	9
2.5 EUT Operation Test Setup	9
2.6 Measurement Results Explanation Example.....	10
3 Test Result	11
3.1 26dB & 99% Occupied Bandwidth Measurement	11
3.2 Maximum Conducted Output Power Measurement	13
3.3 Power Spectral Density Measurement	14
3.4 Unwanted Emissions Measurement.....	17
3.5 AC Conducted Emission Measurement.....	21
3.6 Automatically Discontinue Transmission	23
3.7 Antenna Requirements.....	24
4 List of Measuring Equipment.....	25
5 Uncertainty of Evaluation	26
Appendix A. Conducted Test Results	
Appendix B. AC Conducted Emission Test Result	
Appendix C. Radiated Spurious Emission	
Appendix D. Radiated Spurious Emission Plots	
Appendix E. Duty Cycle Plots	
Appendix F. Setup Photographs	



History of this test report

Report No.	Version	Description	Issued Date
FR131219B	01	Initial issue of report	May 21, 2021



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	Under limit 1.21 dB at 5147.420 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 11.64 dB at 14.206 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Pass	-
3.7	15.203 15.407(a)	Antenna Requirement	Pass	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Lewis Ho
Report Producer: Dara Chiu



1 General Description

1.1 Product Feature of Equipment Under Test

Wi-Fi 2.4GHz 802.11b/g/n/ac/ax and Wi-Fi 5GHz 802.11a/n/ac/ax

Product Specification subjective to this standard		
Antenna Type	WLAN: Omni-directional Antenna	
Antenna information		
5150 MHz ~ 5250 MHz	Peak Gain (dBi)	Ant. 1: 4.10 Ant. 2: 4.10

Remark: The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.

1.2 Modification of EUT

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

1.3 Testing Location

Test Site	Sporton International Inc. 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, TH02-HY

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. 03CH16-HY (TAF Code: 3786)
Remark	The radiation emission test item subcontracted to Sporton International Inc. Wensan Laboratory

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

FCC designation No.: TW1190 and TW3786



1.4 Applicable Standards

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

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

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
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, pre-scanned in two antenna panels (Horizontal and Vertical). The worst cases (Ant. Vertical) were recorded in this report.

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

2.1 Carrier Frequency and Channel

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

Note:

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



2.2 Test Mode

Final test modes are considering the modulation and worse data rates as below table.

MIMO Mode

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	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 ax HE80)	MCS0
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + LAN Link + WAN Link + Adapter

Ch. #		Band I : 5150-5250 MHz				
		802.11a	802.11n HT20	802.11ax HE20	802.11ax HE40	802.11ax HE80
L	Low	36	36	36	38	-
M	Middle	44	44	44	-	42
H	High	48	48	48	46	-

Remark: For radiation spurious emission, the final modulation and the worst data rate was reference the max RF conducted power.

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	DELL	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.5 EUT Operation Test Setup

The RF test items, utility “QSPR 5.0-00196” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.



2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

3 Test Result

3.1 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.

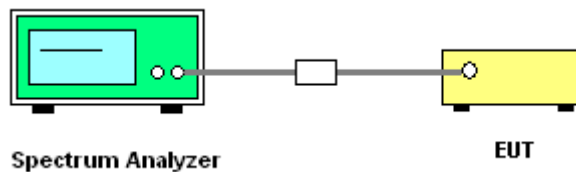
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

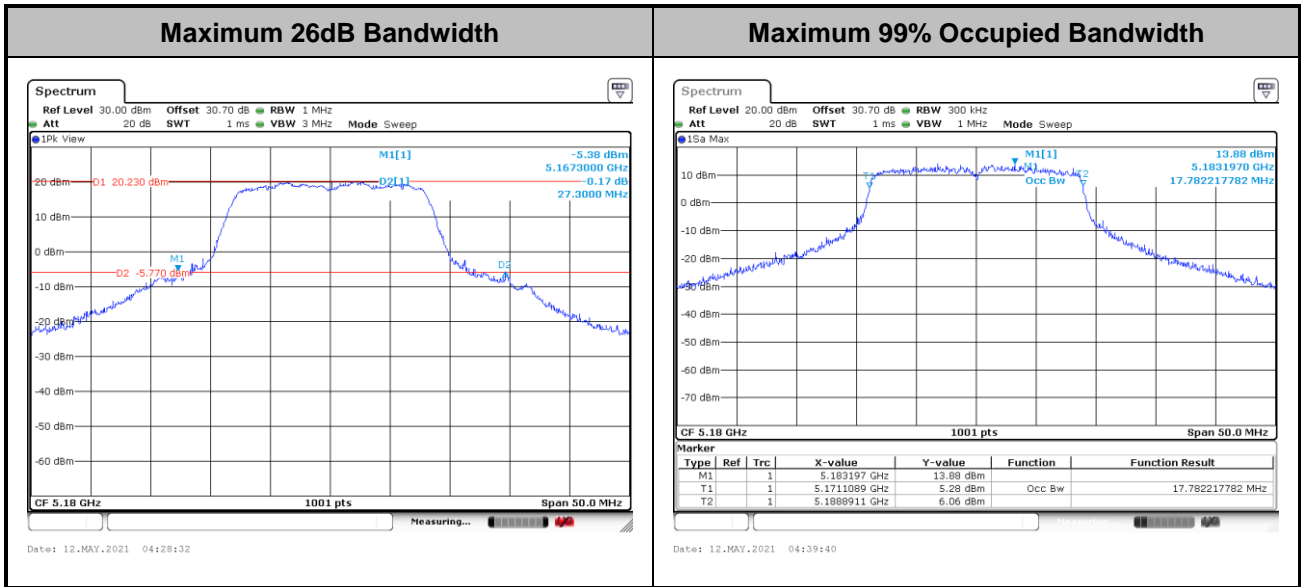
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB 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) $\geq 3 * RBW$.
8. Measure and record the results in the test report.

3.1.4 Test Setup



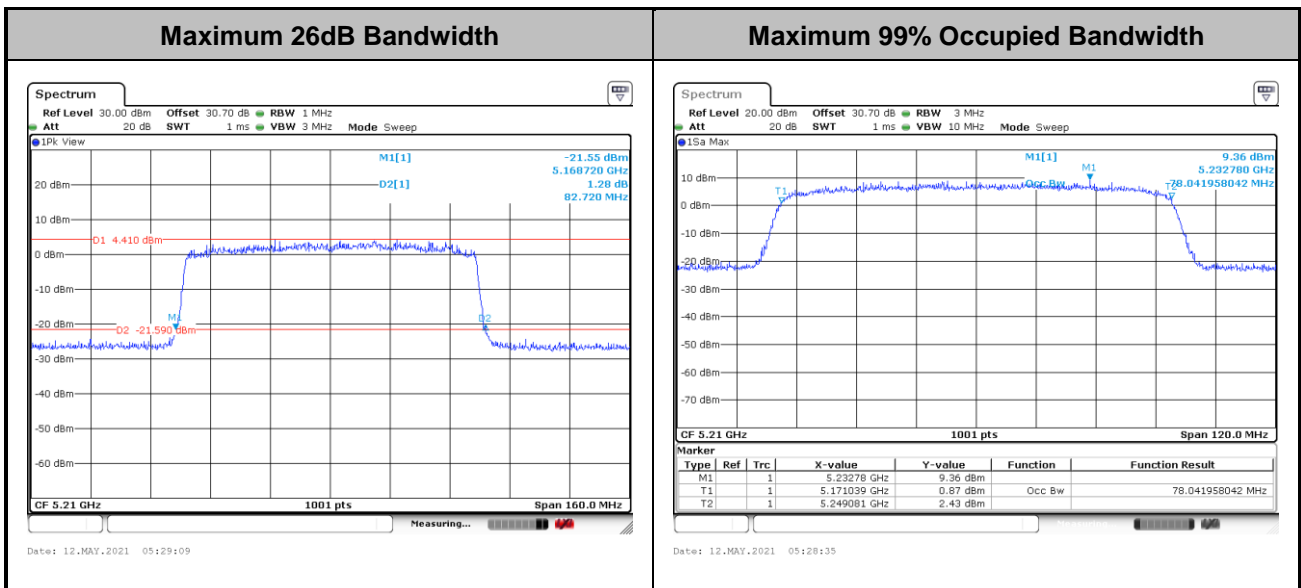
3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.



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

<For 802.11ax Mode>



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.

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

3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

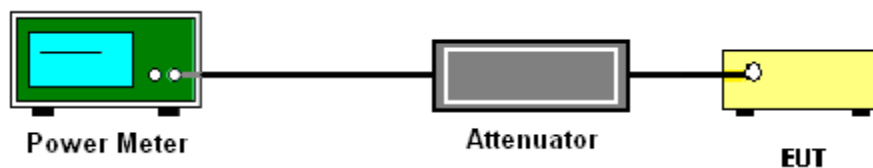
3.2.3 Test Procedures

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

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

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter.
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

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.

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

See list of measuring equipment of this test report.

3.3.3 Test Procedures

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

Section F) Maximum power spectral density.

Method SA-3

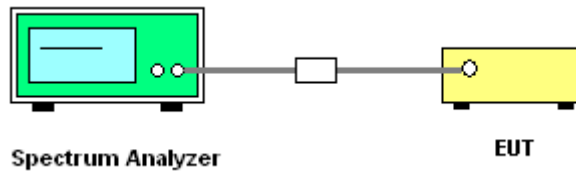
(power averaging (rms) detection with max hold):

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW \geq 3 MHz.
 - Number of points in sweep \geq 2 Span / RBW.
 - Sweep time \leq (number of points in sweep) \times 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 was 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.

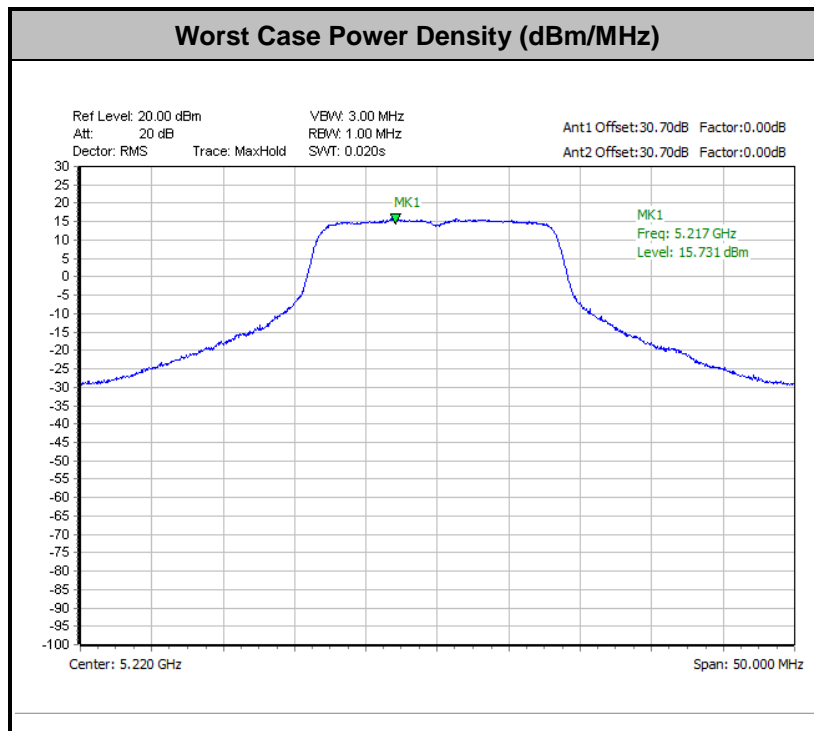
The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points; the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of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

3.3.4 Test Setup



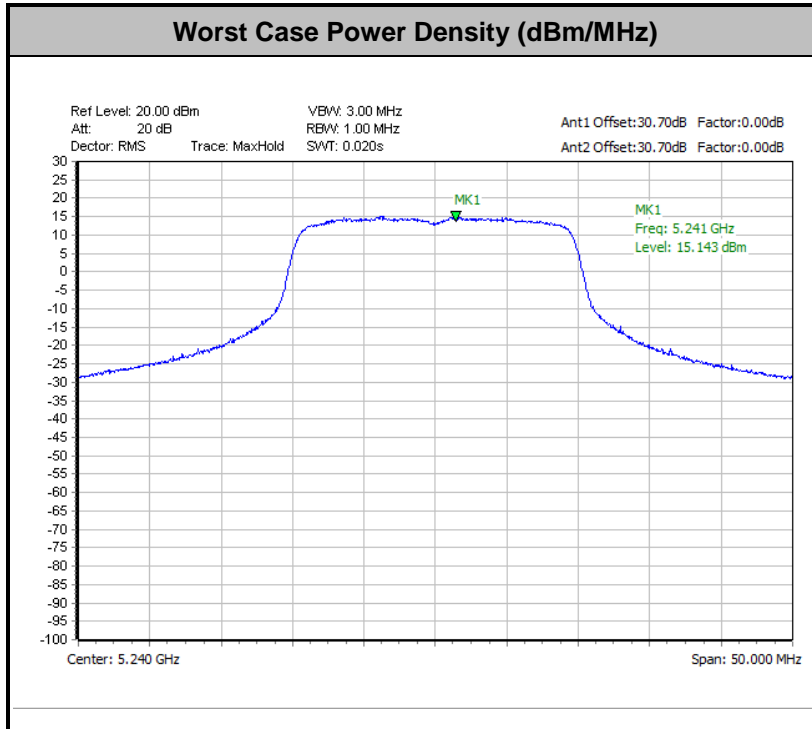
3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.





<For 802.11ax Mode>





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.
- (2) Unwanted spurious emissions fallen 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.

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

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

- (3) KDB789033 D02 v02r01 G)2)c)
 - (i) Sections 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.
 - (ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are based on the use of a peak detector.

3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

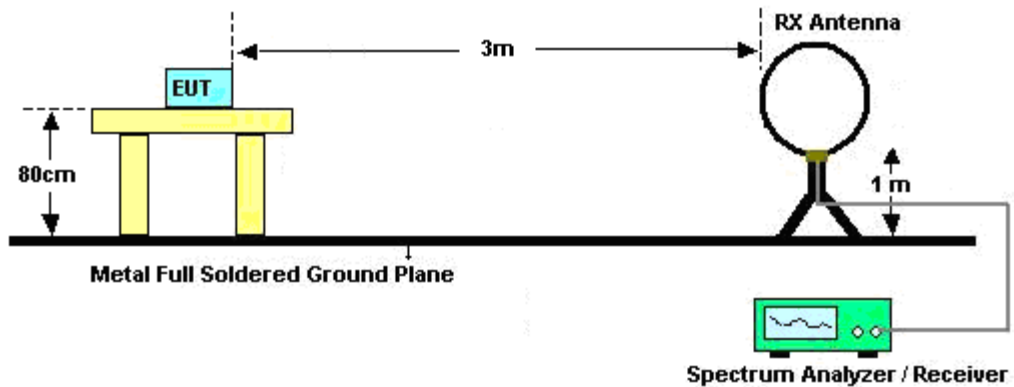


3.4.3 Test Procedures

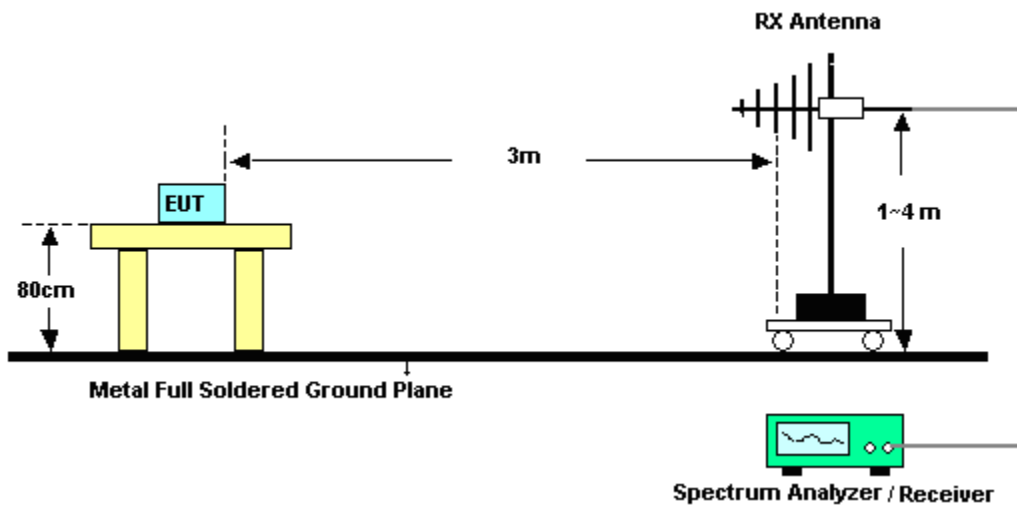
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000 MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW \geq 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - (3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW \geq 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was 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 was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1 GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1 GHz, the emission level of the EUT in peak mode was 20 dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.4.4 Test Setup

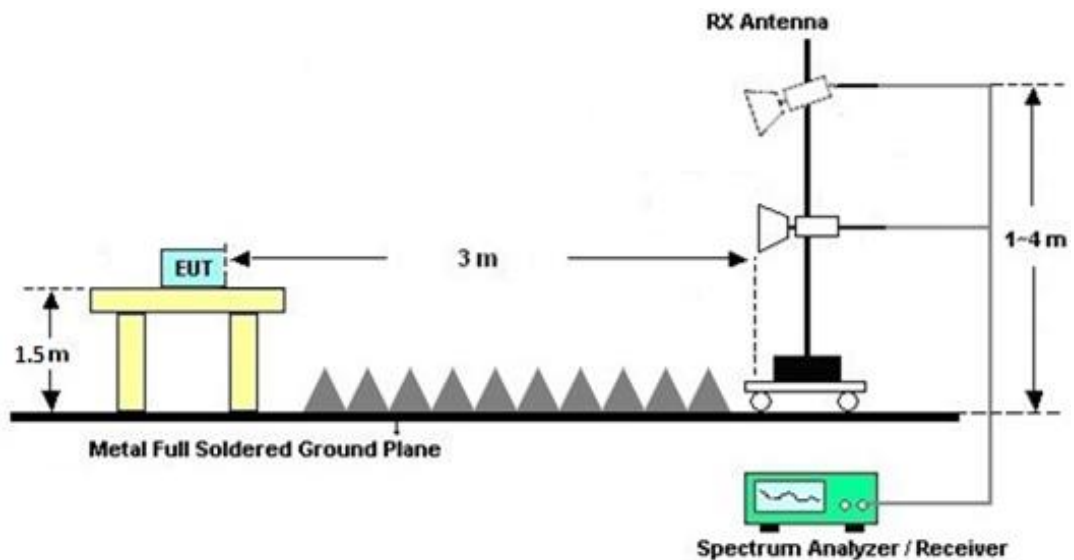
For radiated emissions below 30MHz



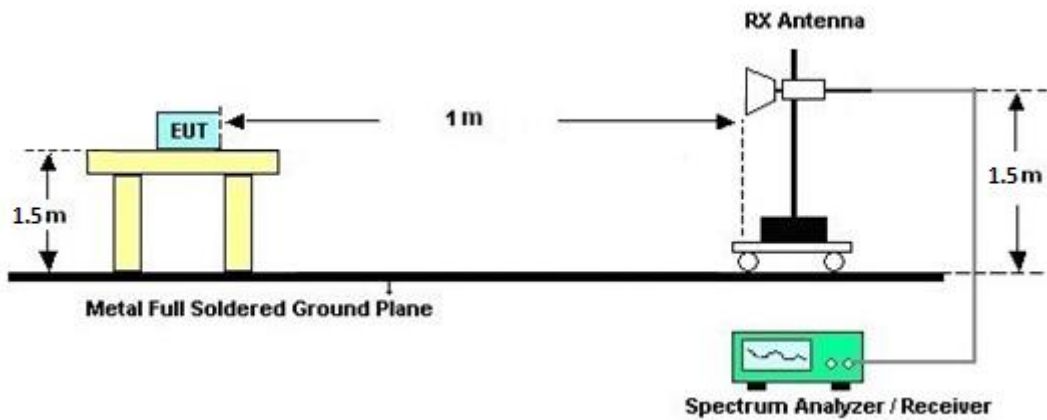
For radiated emissions from 30MHz to 1GHz



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

There is a comparison data 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.

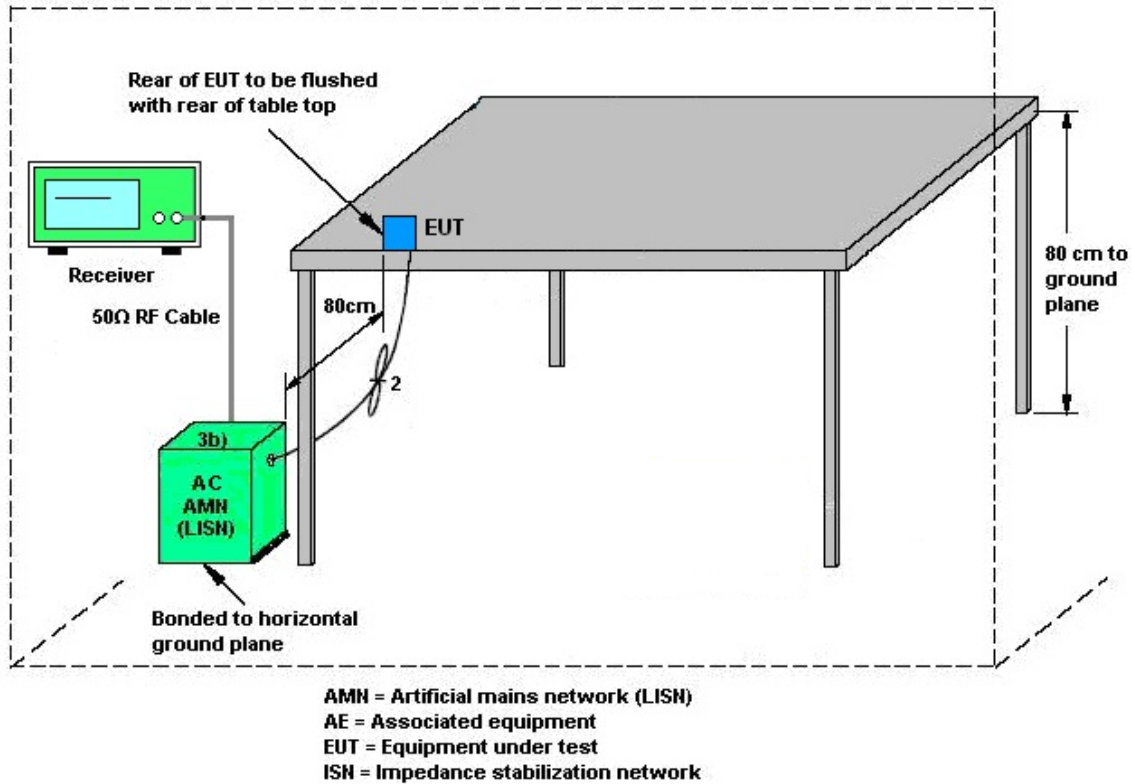
3.5.2 Measuring Instruments

See list of measuring equipment of this test report.

3.5.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was 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 sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
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 Automatically Discontinue Transmission

3.6.1 Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 Test Result of Automatically Discontinue Transmission

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.



3.7 Antenna Requirements

3.7.1 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.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = GANT + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(NANT/NSS=1) dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with GANT set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain GANT is set equal to the antenna having the highest gain, i.e., F)2)f)i).

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

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

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

<CDD Modes>						
			DG	DG	Power	PSD
	Ant. 1	Ant. 2	for	for	Limit	Limit
	(dBi)	(dBi)	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
Band I	4.10	4.10	4.10	7.11	0.00	1.11

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

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



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	Testo	608-H1	34893241	N/A	Mar. 03, 2021	May 11, 2021 ~ May 19, 2021	Mar. 02, 2022	Conducted (TH02-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO10	10MHz~6GHz	Dec. 16, 2020	May 11, 2021 ~ May 19, 2021	Dec. 15, 2021	Conducted (TH02-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz ~ 40GHz	Jul. 22, 2020	May 11, 2021 ~ May 19, 2021	Jul. 21, 2021	Conducted (TH02-HY)
Switch Box & RF Cable	EM Electronics	EMSW18SE	SW200302	N/A	Mar. 17, 2021	May 11, 2021 ~ May 19, 2021	Mar. 16, 2022	Conducted (TH02-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jul. 14, 2020	Apr. 21, 2021 ~ May 13, 2021	Jul. 13, 2021	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N-06	47020 & 06	30MHz to 1GHz	Oct. 11, 2020	Apr. 21, 2021 ~ May 13, 2021	Oct. 10, 2021	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1G	Sep. 30, 2020	Apr. 21, 2021 ~ May 13, 2021	Sep. 29, 2021	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1G~18GHz	Sep. 29, 2020	Apr. 21, 2021 ~ May 13, 2021	Sep. 28, 2021	Radiation (03CH16-HY)
Amplifier	EMCI	EMC051845SE	980729	1-18GHz	Jul. 10, 2020	Apr. 21, 2021 ~ May 13, 2021	Jul. 09, 2021	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz ~40GHz	May 22, 2020	Apr. 21, 2021 ~ May 13, 2021	May 21, 2021	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec. 10, 2020	Apr. 21, 2021 ~ May 13, 2021	Dec. 09, 2021	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A	MY59053012	3Hz~26.5GHz	Nov. 18, 2020	Apr. 21, 2021 ~ May 13, 2021	Nov. 17, 2021	Radiation (03CH16-HY)
Spectrum Analyzer	Agilent	N9010A	MY53470118	10Hz~44GHz	Jan. 15, 2021	Apr. 21, 2021 ~ May 13, 2021	Jan. 14, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11680/4PE	NA	Aug. 29, 2020	Apr. 21, 2021 ~ May 13, 2021	Aug. 28, 2021	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11688/4PE	NA	Aug. 29, 2020	Apr. 21, 2021 ~ May 13, 2021	Aug. 28, 2021	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	EC-A5-300-5757	NA	Aug. 29, 2020	Apr. 21, 2021 ~ May 13, 2021	Aug. 28, 2021	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Apr. 21, 2021 ~ May 13, 2021	N/A	Radiation (03CH16-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Apr. 21, 2021 ~ May 13, 2021	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Apr. 21, 2021 ~ May 13, 2021	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Apr. 21, 2021 ~ May 13, 2021	N/A	Radiation (03CH16-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Apr. 12, 2021	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 30, 2020	Apr. 12, 2021	Nov. 29, 2021	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 18, 2020	Apr. 12, 2021	Nov. 17, 2021	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 16, 2020	Apr. 12, 2021	Nov. 15, 2021	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Apr. 12, 2021	N/A	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Feb. 25, 2021	Apr. 12, 2021	Feb. 24, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 31, 2020	Apr. 12, 2021	Dec. 30, 2021	Conduction (CO05-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.3
-------------------------------------------------------------------------	-----

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.5
-------------------------------------------------------------------------	-----

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	6.3
-------------------------------------------------------------------------	-----

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.7
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	Shiming Liu	Temperature:	22.9~24.3	°C
Test Date:	2021/5/11~2021/5/19	Relative Humidity:	51.2~55.1	%

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 EIRP Limit (dBm)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	2	36	5180	16.53	16.63	21.60	27.30	22.18	
11a	6Mbps	2	44	5220	16.48	16.58	21.55	23.45	22.17	
11a	6Mbps	2	48	5240	16.48	16.53	21.15	22.40	22.17	
HT20	MCS0	2	36	5180	17.68	17.78	22.85	25.15	22.48	
HT20	MCS0	2	44	5220	17.68	17.73	22.50	24.10	22.48	
HT20	MCS0	2	48	5240	17.58	17.63	22.20	22.90	22.45	

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 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	36	5180	22.50	22.20	25.36	30.00		4.10		Pass
11a	6Mbps	2	44	5220	22.50	22.20	25.36	30.00		4.10		Pass
11a	6Mbps	2	48	5240	22.40	22.20	25.31	30.00		4.10		Pass
HT20	MCS0	2	36	5180	22.10	21.90	25.01	30.00		4.10		Pass
HT20	MCS0	2	44	5220	22.10	21.80	24.96	30.00		4.10		Pass
HT20	MCS0	2	48	5240	22.20	22.20	25.21	30.00		4.10		Pass
HT40	MCS0	2	38	5190	11.60	12.80	15.25	30.00		4.10		Pass
HT40	MCS0	2	46	5230	20.30	20.40	23.36	30.00		4.10		Pass
VHT20	MCS0	2	36	5180	21.80	21.70	24.76	30.00		4.10		Pass
VHT20	MCS0	2	44	5220	21.80	21.60	24.71	30.00		4.10		Pass
VHT20	MCS0	2	48	5240	21.60	21.60	24.61	30.00		4.10		Pass
VHT40	MCS0	2	38	5190	11.70	12.90	15.35	30.00		4.10		Pass
VHT40	MCS0	2	46	5230	20.40	20.50	23.46	30.00		4.10		Pass
VHT80	MCS0	2	42	5210	10.20	11.40	13.85	30.00		4.10		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
					SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	36	5180	15.62	15.89		7.11		Pass
11a	6Mbps	2	44	5220	15.73	15.89		7.11		Pass
11a	6Mbps	2	48	5240	15.61	15.89		7.11		Pass
HT20	MCS0	2	36	5180	15.41	15.89		7.11		Pass
HT20	MCS0	2	44	5220	15.53	15.89		7.11		Pass
HT20	MCS0	2	48	5240	15.59	15.89		7.11		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 EIRP Limit (dBm)	
						Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
HE20	MCS0	2	36	5180	Full	19.03	19.03	22.65	24.25	22.79	
HE20	MCS0	2	44	5220	Full	18.98	18.98	23.10	24.20	22.78	
HE20	MCS0	2	48	5240	Full	18.88	18.98	22.55	23.35	22.76	
HE40	MCS0	2	38	5190	Full	37.96	37.96	42.12	42.03	23.01	
HE40	MCS0	2	46	5230	Full	37.96	38.16	42.21	42.93	23.01	
HE80	MCS0	2	42	5210	Full	78.04	77.80	82.72	82.40	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 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
HE20	MCS0	2	36	5180	Full	21.90	21.80	24.86	30.00		4.10		Pass
HE20	MCS0	2	44	5220	Full	21.90	21.70	24.81	30.00		4.10		Pass
HE20	MCS0	2	48	5240	Full	21.70	21.70	24.71	30.00		4.10		Pass
HE40	MCS0	2	38	5190	Full	11.80	13.00	15.45	30.00		4.10		Pass
HE40	MCS0	2	46	5230	Full	20.50	20.60	23.56	30.00		4.10		Pass
HE80	MCS0	2	42	5210	Full	10.30	11.50	13.95	30.00		4.10		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
						SUM	Ant 1	Ant 2	Ant 1	Ant 2	
HE20	MCS0	2	36	5180	Full	15.14	15.89		7.11		Pass
HE20	MCS0	2	44	5220	Full	15.13	15.89		7.11		Pass
HE20	MCS0	2	48	5240	Full	15.14	15.89		7.11		Pass
HE40	MCS0	2	38	5190	Full	2.21	15.89		7.11		Pass
HE40	MCS0	2	46	5230	Full	10.28	15.89		7.11		Pass
HE80	MCS0	2	42	5210	Full	-2.20	15.89		7.11		Pass



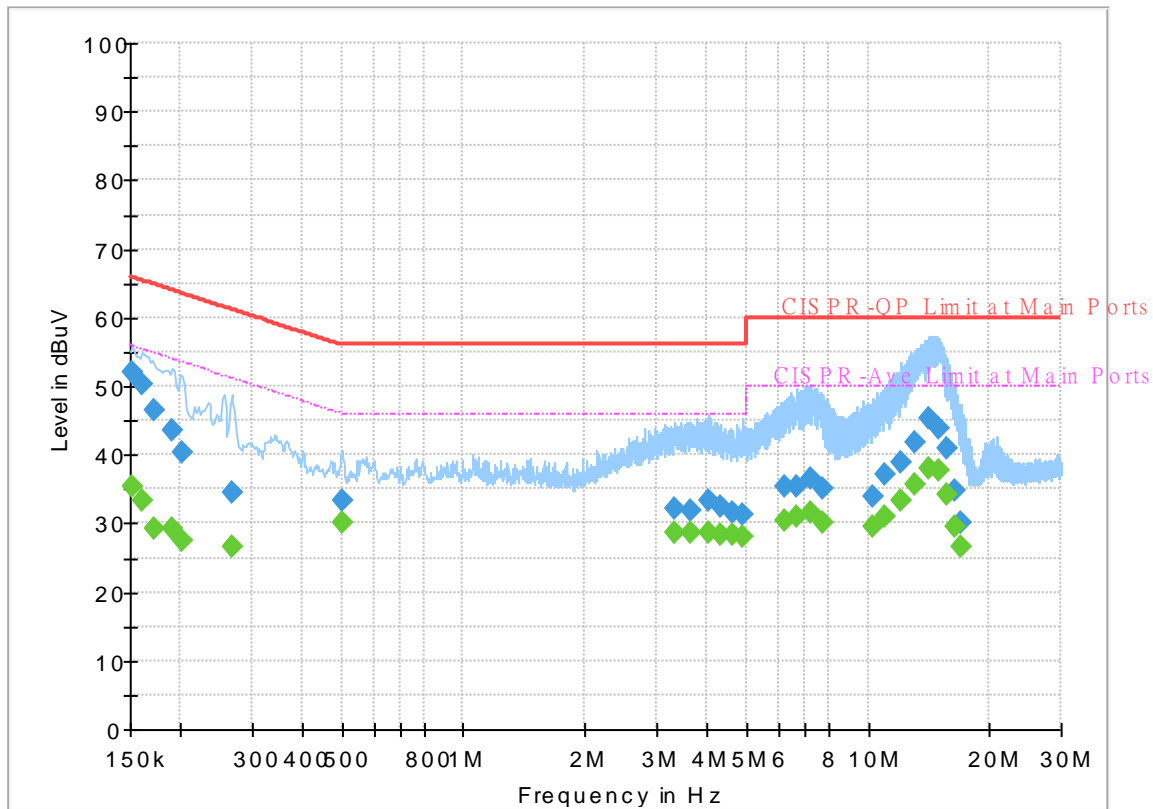
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Tom Lee	Temperature :	23~26°C
		Relative Humidity :	40~50%

EUT Information

Report NO : 131219
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



Final_Result

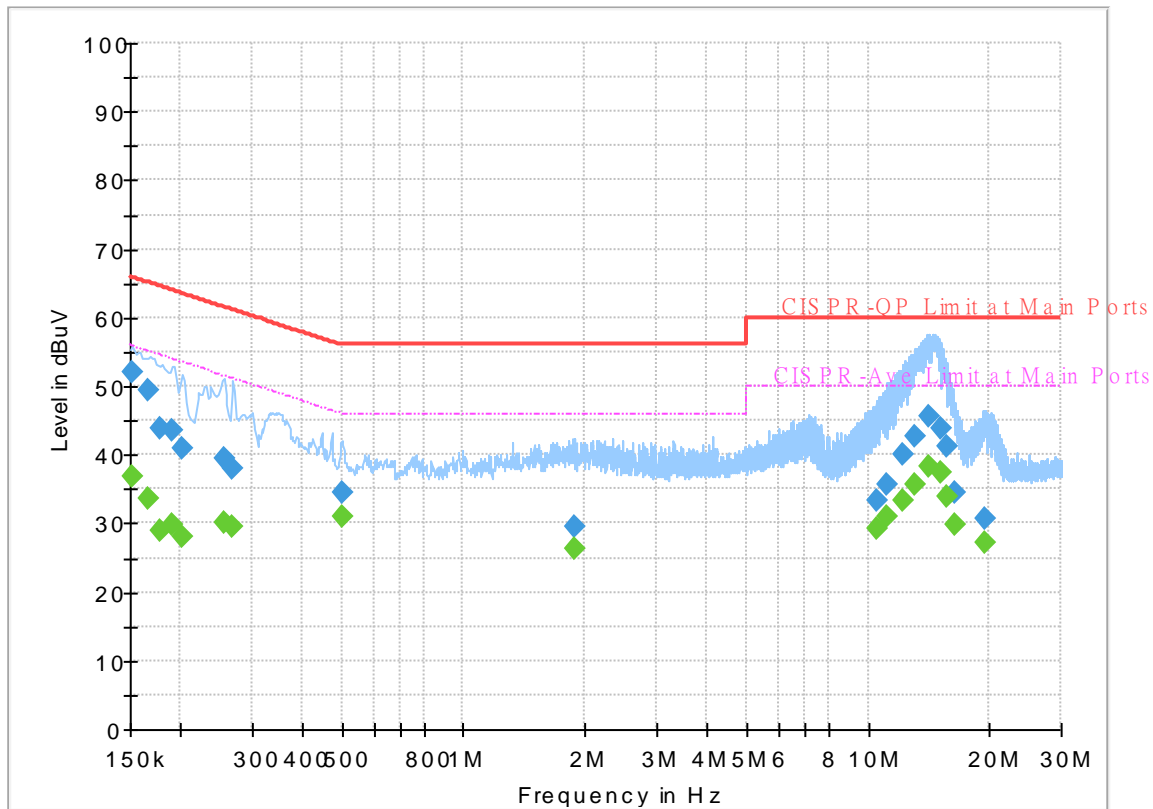
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	35.45	55.88	20.43	L1	OFF	19.7
0.152250	52.06	---	65.88	13.82	L1	OFF	19.7
0.161250	---	33.41	55.40	21.99	L1	OFF	19.7
0.161250	50.20	---	65.40	15.20	L1	OFF	19.7
0.172500	---	29.23	54.84	25.61	L1	OFF	19.7
0.172500	46.54	---	64.84	18.30	L1	OFF	19.7
0.190500	---	29.17	54.02	24.85	L1	OFF	19.7
0.190500	43.45	---	64.02	20.57	L1	OFF	19.7
0.201750	---	27.48	53.54	26.06	L1	OFF	19.7
0.201750	40.26	---	63.54	23.28	L1	OFF	19.7
0.267000	---	26.57	51.21	24.64	L1	OFF	19.7
0.267000	34.58	---	61.21	26.63	L1	OFF	19.7
0.501000	---	30.13	46.00	15.87	L1	OFF	19.9
0.501000	33.21	---	56.00	22.79	L1	OFF	19.9
3.340500	---	28.74	46.00	17.26	L1	OFF	20.1
3.340500	32.09	---	56.00	23.91	L1	OFF	20.1
3.657750	---	28.76	46.00	17.24	L1	OFF	20.1
3.657750	31.94	---	56.00	24.06	L1	OFF	20.1
4.020000	---	28.56	46.00	17.44	L1	OFF	20.1
4.020000	33.27	---	56.00	22.73	L1	OFF	20.1
4.337250	---	28.30	46.00	17.70	L1	OFF	20.1

4.337250	32.42	---	56.00	23.58	L1	OFF	20.1
4.614000	---	28.30	46.00	17.70	L1	OFF	20.1
4.614000	31.57	---	56.00	24.43	L1	OFF	20.1
4.911000	---	28.21	46.00	17.79	L1	OFF	20.1
4.911000	31.19	---	56.00	24.81	L1	OFF	20.1
6.213750	---	30.41	50.00	19.59	L1	OFF	20.1
6.213750	35.28	---	60.00	24.72	L1	OFF	20.1
6.677250	---	30.97	50.00	19.03	L1	OFF	20.1
6.677250	35.34	---	60.00	24.66	L1	OFF	20.1
7.212750	---	31.61	50.00	18.39	L1	OFF	20.1
7.212750	36.52	---	60.00	23.48	L1	OFF	20.1
7.746000	---	30.02	50.00	19.98	L1	OFF	20.1
7.746000	34.98	---	60.00	25.02	L1	OFF	20.1
10.284000	---	29.47	50.00	20.53	L1	OFF	20.2
10.284000	33.93	---	60.00	26.07	L1	OFF	20.2
11.019750	---	30.86	50.00	19.14	L1	OFF	20.2
11.019750	37.20	---	60.00	22.80	L1	OFF	20.2
12.086250	---	33.31	50.00	16.69	L1	OFF	20.3
12.086250	38.85	---	60.00	21.15	L1	OFF	20.3
13.011000	---	35.77	50.00	14.23	L1	OFF	20.3
13.011000	41.72	---	60.00	18.28	L1	OFF	20.3
14.091000	---	38.15	50.00	11.85	L1	OFF	20.3
14.091000	45.40	---	60.00	14.60	L1	OFF	20.3
15.033750	---	37.64	50.00	12.36	L1	OFF	20.3
15.033750	43.80	---	60.00	16.20	L1	OFF	20.3
15.616500	---	34.28	50.00	15.72	L1	OFF	20.4
15.616500	40.86	---	60.00	19.14	L1	OFF	20.4
16.309500	---	29.41	50.00	20.59	L1	OFF	20.4
16.309500	34.69	---	60.00	25.31	L1	OFF	20.4
16.966500	---	26.54	50.00	23.46	L1	OFF	20.4
16.966500	30.05	---	60.00	29.95	L1	OFF	20.4

EUT Information

Report NO : 131219
 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	---	36.75	55.88	19.13	N	OFF	19.7
0.152250	52.03	---	65.88	13.85	N	OFF	19.7
0.165750	---	33.59	55.17	21.58	N	OFF	19.7
0.165750	49.37	---	65.17	15.80	N	OFF	19.7
0.177000	---	28.91	54.63	25.72	N	OFF	19.7
0.177000	43.84	---	64.63	20.79	N	OFF	19.7
0.190500	---	29.90	54.02	24.12	N	OFF	19.7
0.190500	43.68	---	64.02	20.34	N	OFF	19.7
0.201750	---	28.06	53.54	25.48	N	OFF	19.7
0.201750	40.95	---	63.54	22.59	N	OFF	19.7
0.255750	---	30.04	51.57	21.53	N	OFF	19.8
0.255750	39.54	---	61.57	22.03	N	OFF	19.8
0.269250	---	29.48	51.14	21.66	N	OFF	19.8
0.269250	38.00	---	61.14	23.14	N	OFF	19.8
0.501000	---	30.91	46.00	15.09	N	OFF	19.9
0.501000	34.46	---	56.00	21.54	N	OFF	19.9
1.884750	---	26.21	46.00	19.79	N	OFF	20.3
1.884750	29.58	---	56.00	26.42	N	OFF	20.3
10.457250	---	29.23	50.00	20.77	N	OFF	20.3
10.457250	33.44	---	60.00	26.56	N	OFF	20.3
11.159250	---	30.98	50.00	19.02	N	OFF	20.3

11.159250	35.74	---	60.00	24.26	N	OFF	20.3
12.178500	---	33.38	50.00	16.62	N	OFF	20.3
12.178500	39.95	---	60.00	20.05	N	OFF	20.3
13.071750	---	35.68	50.00	14.32	N	OFF	20.4
13.071750	42.69	---	60.00	17.31	N	OFF	20.4
14.205750	---	38.36	50.00	11.64	N	OFF	20.4
14.205750	45.68	---	60.00	14.32	N	OFF	20.4
15.101250	---	37.47	50.00	12.53	N	OFF	20.4
15.101250	43.76	---	60.00	16.24	N	OFF	20.4
15.697500	---	33.85	50.00	16.15	N	OFF	20.5
15.697500	41.23	---	60.00	18.77	N	OFF	20.5
16.327500	---	29.74	50.00	20.26	N	OFF	20.5
16.327500	34.43	---	60.00	25.57	N	OFF	20.5
19.542750	---	27.06	50.00	22.94	N	OFF	20.7
19.542750	30.71	---	60.00	29.29	N	OFF	20.7



Appendix C. Radiated Spurious Emission

Test Engineer :	Karl Hou, Caster Liao, and Andy Yang	Temperature :	20~25°C
		Relative Humidity :	50~60%

Band 1 - 5150~5250MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 36 5180MHz		5141.18	53.61	-20.39	74	38.44	31.8	13.04	29.67	314	28	P	H	
		5150	43.24	-10.76	54	28.06	31.8	13.05	29.67	314	28	A	H	
	*	5180	103.7	-	-	88.61	31.68	13.09	29.68	314	28	P	H	
	*	5180	96.03	-	-	80.94	31.68	13.09	29.68	314	28	A	H	
													H	
													H	
			5149.24	59.74	-14.26	74	44.56	31.8	13.05	29.67	228	359	P	V
			5148.98	51.94	-2.06	54	36.76	31.8	13.05	29.67	228	359	A	V
	*		5180	121.71	-	-	106.62	31.68	13.09	29.68	228	359	P	V
	*		5180	114.07	-	-	98.98	31.68	13.09	29.68	228	359	A	V
													V	
													V	
802.11a CH 44 5220MHz		5144.04	54.05	-19.95	74	38.88	31.8	13.04	29.67	100	317	P	H	
		5098.8	43.16	-10.84	54	28.05	31.8	12.98	29.67	100	317	A	H	
	*	5220	100.13	-	-	85.19	31.48	13.15	29.69	100	317	P	H	
	*	5220	92.78	-	-	77.84	31.48	13.15	29.69	100	317	A	H	
			5437.6	54.2	-19.8	74	38.89	31.53	13.5	29.72	100	317	P	H
			5407.64	42.84	-11.16	54	27.73	31.35	13.48	29.72	100	317	A	H
			5149.5	55.63	-18.37	74	40.45	31.8	13.05	29.67	224	0	P	V
			5087.88	46.17	-7.83	54	31.11	31.75	12.97	29.66	224	0	A	V
	*		5220	121.98	-	-	107.04	31.48	13.15	29.69	224	0	P	V
	*		5220	114.27	-	-	99.33	31.48	13.15	29.69	224	0	A	V
			5446	55.5	-18.5	74	40.13	31.58	13.51	29.72	224	0	P	V
			5415.2	46.39	-7.61	54	31.24	31.39	13.48	29.72	224	0	A	V



802.11a CH 48 5240MHz		5112.06	52.9	-21.1	74	37.77	31.8	13	29.67	112	328	P	H
		5097.76	42.87	-11.13	54	27.77	31.79	12.98	29.67	112	328	A	H
	*	5240	98.7	-	-	83.85	31.36	13.18	29.69	112	328	P	H
	*	5240	91.08	-	-	76.23	31.36	13.18	29.69	112	328	A	H
		5423.88	54.2	-19.8	74	38.99	31.44	13.49	29.72	112	328	P	H
		5456.64	43.04	-10.96	54	27.63	31.61	13.52	29.72	112	328	A	H
		5131.04	56.2	-17.8	74	41.05	31.8	13.02	29.67	213	360	P	V
		5088.14	46.08	-7.92	54	31.02	31.75	12.97	29.66	213	360	A	V
	*	5240	121.75	-	-	106.9	31.36	13.18	29.69	213	360	P	V
	*	5240	114.06	-	-	99.21	31.36	13.18	29.69	213	360	A	V
		5384.12	55.9	-18.1	74	40.93	31.24	13.44	29.71	213	360	P	V
		5436.48	46	-8	54	30.7	31.52	13.5	29.72	213	360	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 36 5180MHz		10360	48.38	-19.82	68.2	45.78	39.44	19.39	56.23	100	0	P	H	
		15540	46.52	-27.48	74	40.73	37.98	23.22	55.41	100	0	P	H	
													H	
													H	
			4824	60.42	-13.58	74	46.02	31.15	12.87	29.62	250	359	P	V
			4824	49.12	-4.88	54	34.72	31.15	12.87	29.62	250	359	A	V
			10360	48.48	-19.72	68.2	45.88	39.44	19.39	56.23	100	0	P	V
			15540	47.14	-26.86	74	41.35	37.98	23.22	55.41	100	0	P	V
														V
														V
802.11a CH 44 5220MHz		10440	48.96	-19.24	68.2	46.06	39.68	19.43	56.21	100	0	P	H	
		15660	47.12	-26.88	74	41.67	37.56	23.32	55.43	100	0	P	H	
													H	
													H	
			4864	58.53	-15.47	74	44.12	31.17	12.87	29.63	223	360	P	V
			4864	48.17	-5.83	54	33.76	31.17	12.87	29.63	223	360	A	V
			10440	50.13	-18.07	68.2	47.23	39.68	19.43	56.21	100	0	P	V
			15660	47.75	-26.25	74	42.3	37.56	23.32	55.43	100	0	P	V
														V
														V
802.11a CH 48 5240MHz		10480	49.2	-19	68.2	46.19	39.76	19.45	56.2	100	0	P	H	
		15720	48.14	-25.86	74	42.85	37.38	23.35	55.44	100	0	P	H	
													H	
													H	
			4886	58.5	-15.5	74	44.13	31.13	12.87	29.63	217	359	P	V
			4886	47.64	-6.36	54	33.27	31.13	12.87	29.63	217	359	A	V
			10480	51.98	-16.22	68.2	48.97	39.76	19.45	56.2	100	0	P	V
			15720	46.69	-27.31	74	41.4	37.38	23.35	55.44	100	0	P	V
														V
														V

Remark

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



Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 36 5180MHz		5004.68	53.83	-20.17	74	39.1	31.51	12.87	29.65	314	27	P	H	
		5149.76	43.33	-10.67	54	28.15	31.8	13.05	29.67	314	27	A	H	
	*	5180	104.06	-	-	88.97	31.68	13.09	29.68	314	27	P	H	
	*	5180	95.9	-	-	80.81	31.68	13.09	29.68	314	27	A	H	
													H	
														H
			5148.98	61.66	-12.34	74	46.48	31.8	13.05	29.67	229	360	P	V
			5149.5	51.63	-2.37	54	36.45	31.8	13.05	29.67	229	360	A	V
	*		5180	122.4	-	-	107.31	31.68	13.09	29.68	229	360	P	V
	*		5180	114.09	-	-	99	31.68	13.09	29.68	229	360	A	V
														V
														V
802.11n HT20 CH 44 5220MHz		5144.56	53.15	-20.85	74	37.98	31.8	13.04	29.67	100	318	P	H	
		5113.88	43.16	-10.84	54	28.03	31.8	13	29.67	100	318	A	H	
	*	5220	101.96	-	-	87.02	31.48	13.15	29.69	100	318	P	H	
	*	5220	93.74	-	-	78.8	31.48	13.15	29.69	100	318	A	H	
			5456.36	53.52	-20.48	74	38.11	31.61	13.52	29.72	100	318	P	H
			5456.64	43.11	-10.89	54	27.7	31.61	13.52	29.72	100	318	A	H
			5127.92	56.09	-17.91	74	40.94	31.8	13.02	29.67	238	360	P	V
			5088.14	46.7	-7.3	54	31.64	31.75	12.97	29.66	238	360	A	V
	*		5220	122.11	-	-	107.17	31.48	13.15	29.69	238	360	P	V
	*		5220	113.9	-	-	98.96	31.48	13.15	29.69	238	360	A	V
			5398.4	55.52	-18.48	74	40.47	31.29	13.47	29.71	238	360	P	V
			5376.28	45.69	-8.31	54	30.76	31.21	13.43	29.71	238	360	A	V



802.11n HT20 CH 48 5240MHz		5070.46	53.53	-20.47	74	38.56	31.68	12.95	29.66	115	319	P	H
		5049.92	42.98	-11.02	54	28.12	31.6	12.92	29.66	115	319	A	H
	*	5240	102.56	-	-	87.71	31.36	13.18	29.69	115	319	P	H
	*	5240	93.85	-	-	79	31.36	13.18	29.69	115	319	A	H
		5425.84	52.82	-21.18	74	37.59	31.46	13.49	29.72	115	319	P	H
		5455.8	43.13	-10.87	54	27.72	31.61	13.52	29.72	115	319	A	H
		5123.5	56.9	-17.1	74	41.76	31.8	13.01	29.67	212	360	P	V
		5087.88	46.65	-7.35	54	31.59	31.75	12.97	29.66	212	360	A	V
	*	5240	122.07	-	-	107.22	31.36	13.18	29.69	212	360	P	V
	*	5240	113.97	-	-	99.12	31.36	13.18	29.69	212	360	A	V
		5404.84	56.41	-17.59	74	41.32	31.33	13.47	29.71	212	360	P	V
		5425.28	46.69	-7.31	54	31.47	31.45	13.49	29.72	212	360	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		10360	49.05	-19.15	68.2	46.45	39.44	19.39	56.23	100	0	P	H
		15540	47.32	-26.68	74	41.53	37.98	23.22	55.41	100	0	P	H
													H
													H
		4824	60.68	-13.32	74	46.28	31.15	12.87	29.62	225	0	P	V
		4824	50.01	-3.99	54	35.61	31.15	12.87	29.62	225	0	A	V
		10360	49.3	-18.9	68.2	46.7	39.44	19.39	56.23	100	0	P	V
		15540	47.53	-26.47	74	41.74	37.98	23.22	55.41	100	0	P	V
													V
													V
802.11n HT20 CH 44 5220MHz		10440	49.42	-18.78	68.2	46.52	39.68	19.43	56.21	100	0	P	H
		15660	46.53	-27.47	74	41.08	37.56	23.32	55.43	100	0	P	H
													H
													H
		4864	58.53	-15.47	74	44.12	31.17	12.87	29.63	223	360	P	V
		4864	47.68	-6.32	54	33.27	31.17	12.87	29.63	223	360	A	V
		10440	49.57	-18.63	68.2	46.67	39.68	19.43	56.21	100	0	P	V
		15660	47.77	-26.23	74	42.32	37.56	23.32	55.43	100	0	P	V
												V	
												V	
802.11n HT20 CH 48 5240MHz		10480	49.03	-19.17	68.2	46.02	39.76	19.45	56.2	100	0	P	H
		15720	47.71	-26.29	74	42.42	37.38	23.35	55.44	100	0	P	H
													H
													H
		4886	57.1	-16.9	74	42.73	31.13	12.87	29.63	204	1	P	V
		4886	46.95	-7.05	54	32.58	31.13	12.87	29.63	204	1	A	V
		10480	50.7	-17.5	68.2	47.69	39.76	19.45	56.2	100	0	P	V
		15720	47.22	-26.78	74	41.93	37.38	23.35	55.44	100	0	P	V
												V	
												V	

Remark

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



Band 1 5150~5250MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE20 Full CH 36 5180MHz		5039.26	53.84	-20.16	74	39.01	31.58	12.91	29.66	314	27	P	H	
		5069.42	43.24	-10.76	54	28.27	31.68	12.95	29.66	314	27	A	H	
	*	5180	106.01	-	-	90.92	31.68	13.09	29.68	314	27	P	H	
	*	5180	95.67	-	-	80.58	31.68	13.09	29.68	314	27	A	H	
													H	
													H	
			5150	60.37	-13.63	74	45.19	31.8	13.05	29.67	228	360	P	V
			5150	51.61	-2.39	54	36.43	31.8	13.05	29.67	228	360	A	V
	*		5180	123.29	-	-	108.2	31.68	13.09	29.68	228	360	P	V
	*		5180	113.75	-	-	98.66	31.68	13.09	29.68	228	360	A	V
													V	
													V	
802.11ax HE20 Full CH 44 5220MHz		5118.3	54.82	-19.18	74	39.68	31.8	13.01	29.67	100	319	P	H	
		5142.22	43.26	-10.74	54	28.09	31.8	13.04	29.67	100	319	A	H	
	*	5220	103.06	-	-	88.12	31.48	13.15	29.69	100	319	P	H	
	*	5220	93.35	-	-	78.41	31.48	13.15	29.69	100	319	A	H	
			5400.92	54.61	-19.39	74	39.54	31.31	13.47	29.71	100	319	P	H
			5455.8	43.14	-10.86	54	27.73	31.61	13.52	29.72	100	319	A	H
			5149.5	55.94	-18.06	74	40.76	31.8	13.05	29.67	226	0	P	V
			5087.88	46.24	-7.76	54	31.18	31.75	12.97	29.66	226	0	A	V
	*		5220	123.12	-	-	108.18	31.48	13.15	29.69	226	0	P	V
	*		5220	113.98	-	-	99.04	31.48	13.15	29.69	226	0	A	V
			5370.12	55.25	-18.75	74	40.36	31.18	13.42	29.71	226	0	P	V
			5375.72	45.97	-8.03	54	31.05	31.2	13.43	29.71	226	0	A	V



802.11ax HE20 Full CH 48 5240MHz		5023.14	53.86	-20.14	74	39.07	31.55	12.89	29.65	104	319	P	H
		5074.62	43.08	-10.92	54	28.09	31.7	12.95	29.66	104	319	A	H
	*	5240	104.16	-	-	89.31	31.36	13.18	29.69	104	319	P	H
	*	5240	93.93	-	-	79.08	31.36	13.18	29.69	104	319	A	H
		5382.16	53.71	-20.29	74	38.75	31.23	13.44	29.71	104	319	P	H
		5456.92	43.2	-10.8	54	27.79	31.61	13.52	29.72	104	319	A	H
		5112.32	56.35	-17.65	74	41.22	31.8	13	29.67	218	0	P	V
		5147.68	46.37	-7.63	54	31.2	31.8	13.04	29.67	218	0	A	V
	*	5240	123.62	-	-	108.77	31.36	13.18	29.69	218	0	P	V
	*	5240	113.8	-	-	98.95	31.36	13.18	29.69	218	0	A	V
		5408.76	56.58	-17.42	74	41.47	31.35	13.48	29.72	218	0	P	V
		5434.24	46.88	-7.12	54	31.59	31.51	13.5	29.72	218	0	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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 36 5180MHz		10360	48.72	-19.48	68.2	46.12	39.44	19.39	56.23	100	0	P	H
		15540	48.17	-25.83	74	42.38	37.98	23.22	55.41	100	0	P	H
													H
													H
		4824	60.97	-13.03	74	46.57	31.15	12.87	29.62	229	360	P	V
		4824	49.16	-4.84	54	34.76	31.15	12.87	29.62	229	360	A	V
		10360	48.65	-19.55	68.2	46.05	39.44	19.39	56.23	100	0	P	V
		15540	46.87	-27.13	74	41.08	37.98	23.22	55.41	100	0	P	V
													V
													V
802.11ax HE20 Full CH 44 5220MHz		10440	48.82	-19.38	68.2	45.92	39.68	19.43	56.21	100	0	P	H
		15660	46.72	-27.28	74	41.27	37.56	23.32	55.43	100	0	P	H
													H
													H
		4864	58.56	-15.44	74	44.15	31.17	12.87	29.63	228	360	P	V
		4864	47.32	-6.68	54	32.91	31.17	12.87	29.63	228	360	A	V
		10440	49.76	-18.44	68.2	46.86	39.68	19.43	56.21	100	0	P	V
		15660	47.07	-26.93	74	41.62	37.56	23.32	55.43	100	0	P	V
												V	
												V	
802.11ax HE20 Full CH 48 5240MHz		10480	49.17	-19.03	68.2	46.16	39.76	19.45	56.2	100	0	P	H
		15720	47.39	-26.61	74	42.1	37.38	23.35	55.44	100	0	P	H
													H
													H
		4886	57.64	-16.36	74	43.27	31.13	12.87	29.63	229	359	P	V
		4886	46.66	-7.34	54	32.29	31.13	12.87	29.63	229	359	A	V
		10480	50.94	-17.26	68.2	47.93	39.76	19.45	56.2	100	0	P	V
		15720	46.89	-27.11	74	41.6	37.38	23.35	55.44	100	0	P	V
												V	
												V	

Remark

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



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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 38 5190MHz		5148.46	54.15	-19.85	74	38.97	31.8	13.05	29.67	312	29	P	H
		5148.46	43.46	-10.54	54	28.28	31.8	13.05	29.67	312	29	A	H
	*	5190	97.3	-	-	82.24	31.64	13.1	29.68	312	29	P	H
	*	5190	87.46	-	-	72.4	31.64	13.1	29.68	312	29	A	H
		5375.72	53.9	-20.1	74	38.98	31.2	13.43	29.71	312	29	P	H
		5454.4	43.18	-10.82	54	27.77	31.61	13.52	29.72	312	29	A	H
		5145.6	60.63	-13.37	74	45.46	31.8	13.04	29.67	224	360	P	V
		5148.2	52.71	-1.29	54	37.53	31.8	13.05	29.67	224	360	A	V
	*	5190	115.33	-	-	100.27	31.64	13.1	29.68	224	360	P	V
	*	5190	105.98	-	-	90.92	31.64	13.1	29.68	224	360	A	V
		5428.36	55.03	-18.97	74	39.79	31.47	13.49	29.72	224	360	P	V
		5388.04	44.89	-9.11	54	29.9	31.25	13.45	29.71	224	360	A	V
802.11ax HE40 Full CH 46 5230MHz		5116.74	53.34	-20.66	74	38.2	31.8	13.01	29.67	306	28	P	H
		5130.26	43.16	-10.84	54	28.01	31.8	13.02	29.67	306	28	A	H
	*	5230	104.58	-	-	89.69	31.42	13.16	29.69	306	28	P	H
	*	5230	95.05	-	-	80.16	31.42	13.16	29.69	306	28	A	H
		5440.12	54.2	-19.8	74	38.88	31.54	13.5	29.72	306	28	P	H
		5453.56	43.29	-10.71	54	27.88	31.61	13.52	29.72	306	28	A	H
		5149.76	60.54	-13.46	74	45.36	31.8	13.05	29.67	230	360	P	V
		5150	50.66	-3.34	54	35.48	31.8	13.05	29.67	230	360	A	V
	*	5230	122.69	-	-	107.8	31.42	13.16	29.69	230	360	P	V
	*	5230	114.07	-	-	99.18	31.42	13.16	29.69	230	360	A	V
	5380.76	56.72	-17.28	74	41.77	31.22	13.44	29.71	230	360	P	V	
	5376	47.59	-6.41	54	32.67	31.2	13.43	29.71	230	360	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 HE40 Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE40 Full CH 38 5190MHz		10380	48.77	-19.43	68.2	46.07	39.52	19.4	56.22	100	0	P	H	
		15570	46.27	-27.73	74	40.54	37.89	23.25	55.41	100	0	P	H	
													H	
													H	
			10380	47.84	-20.36	68.2	45.14	39.52	19.4	56.22	100	0	P	V
			15570	46.95	-27.05	74	41.22	37.89	23.25	55.41	100	0	P	V
														V
802.11ax HE40 Full CH 46 5230MHz		10460	48.85	-19.35	68.2	45.9	39.72	19.44	56.21	100	0	P	H	
		15690	47.3	-26.7	74	41.96	37.44	23.34	55.44	100	0	P	H	
													H	
													H	
			4870	61.1	-12.9	74	46.7	31.16	12.87	29.63	253	31	P	V
			4870	49.61	-4.39	54	35.21	31.16	12.87	29.63	253	31	A	V
			10460	49.75	-18.45	68.2	46.8	39.72	19.44	56.21	100	0	P	V
			15690	46.98	-27.02	74	41.64	37.44	23.34	55.44	100	0	P	V
														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. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 42 5210MHz		5119.6	53.47	-20.53	74	38.33	31.8	13.01	29.67	307	27	P	H
		5062.14	43.37	-10.63	54	28.44	31.65	12.94	29.66	307	27	A	H
	*	5210	93.17	-	-	78.18	31.54	13.13	29.68	307	27	P	H
	*	5210	83.31	-	-	68.32	31.54	13.13	29.68	307	27	A	H
		5402.6	53.33	-20.67	74	38.25	31.32	13.47	29.71	307	27	P	H
		5448.24	43.29	-10.71	54	27.91	31.59	13.51	29.72	307	27	A	H
		5148.72	60.31	-13.69	74	45.13	31.8	13.05	29.67	227	360	P	V
		5147.42	52.79	-1.21	54	37.62	31.8	13.04	29.67	227	360	A	V
	*	5210	112.47	-	-	97.48	31.54	13.13	29.68	227	360	P	V
	*	5210	101.79	-	-	86.8	31.54	13.13	29.68	227	360	A	V
	5431.72	55.4	-18.6	74	40.13	31.49	13.5	29.72	227	360	P	V	
	5376	44.76	-9.24	54	29.84	31.2	13.43	29.71	227	360	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 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ax HE80 Full CH 42 5210MHz		10420	48.01	-20.19	68.2	45.17	39.64	19.42	56.22	100	0	P	H	
		15630	46.67	-27.33	74	41.13	37.68	23.29	55.43	100	0	P	H	
													H	
													H	
			10420	47.97	-20.23	68.2	45.13	39.64	19.42	56.22	100	0	P	V
			15630	46.08	-27.92	74	40.54	37.68	23.29	55.43	100	0	P	V
														V
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Emission below 1GHz

WIFI 802.11ax HE80 Full (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
802.11ax HE80 Full LF		181.32	42.14	-1.36	43.5	57.66	15.12	2.21	32.85	119	118	Q	H	
		239.52	39.9	-6.1	46	52.79	17.28	2.6	32.77	118	124	Q	H	
		321.97	36.9	-9.1	46	46.79	19.6	3.02	32.51	-	-	P	H	
		381.14	33.73	-12.27	46	41.48	21.34	3.31	32.4	-	-	P	H	
		536.34	30.3	-15.7	46	34.72	24.3	3.94	32.66	-	-	P	H	
		863.23	36.31	-9.69	46	34.54	29.21	5.14	32.58	-	-	P	H	
														H
														H
														H
														H
														H
														H
														H
			62.01	30.05	-9.95	40	49.77	11.93	1.14	32.79	-	-	P	V
			168.71	33.57	-9.93	43.5	48.44	15.84	2.1	32.81	100	0	P	V
			240.49	32.04	-13.96	46	44.8	17.39	2.61	32.76	-	-	P	V
			331.67	29.23	-16.77	46	38.72	19.94	3.06	32.49	-	-	P	V
			378.23	28.32	-17.68	46	36.2	21.24	3.29	32.41	-	-	P	V
			918.52	33.71	-12.29	46	30.83	29.66	5.35	32.13	-	-	P	V
														V
													V	
													V	
													V	
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.													



Note symbol

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



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)
= 55.45 (dBμV/m)
2. Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 55.45(dBμV/m) – 74(dBμV/m)
= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)
= 43.54 (dBμV/m)
2. 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

Test Engineer :	Karl Hou, Caster Liao, and Andy Yang	Temperature :	20~25°C
		Relative Humidity :	50~60%

Note symbol

-L	Low channel location
-R	High channel location



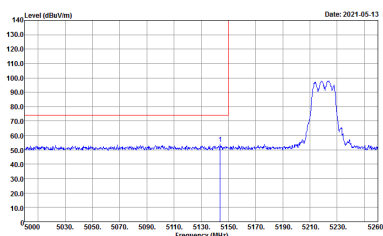
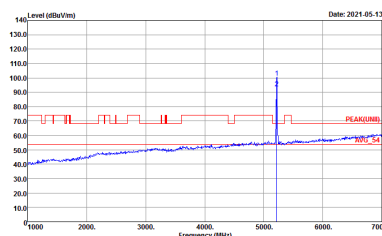
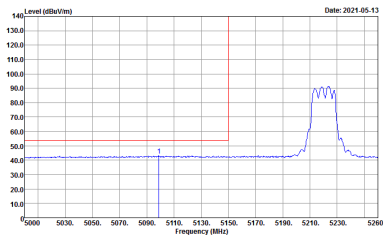
Band 1 - 5150~5250MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1+2	Horizontal	Fundamental
Peak	<p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 131219</p>	<p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 131219</p>
Avg.	<p>Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 131219</p>	Left blank

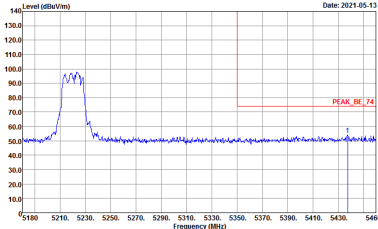
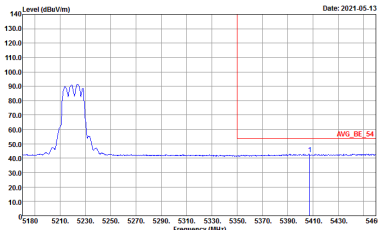


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1+2	Vertical	Fundamental
Peak	<p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	<p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>
Avg.	<p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	Left blank

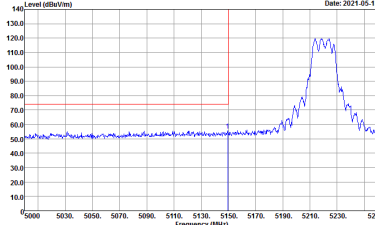
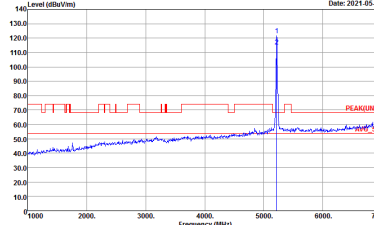
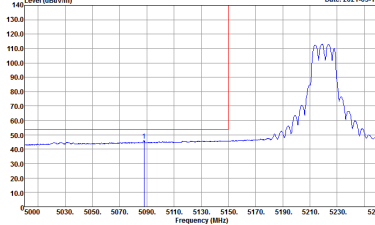


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1+2	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	<p>Left blank</p>



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1+2	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWF:Auto Detector : Peak Project : 131219</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000kHz VBW:1.000kHz SWF:Auto Detector : Peak Project : 131219</p>	<p>Left blank</p>

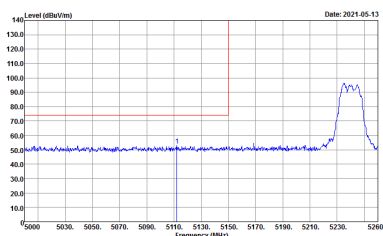
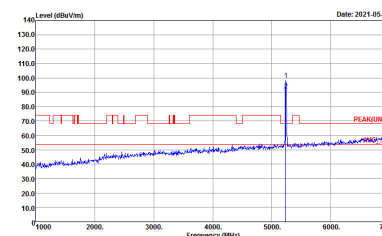
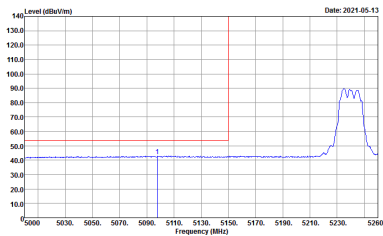


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - L	
1+2	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	<p>Left blank</p>



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1+2	Vertical	Fundamental
Peak	<p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	Left blank
Avg.	<p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	Left blank

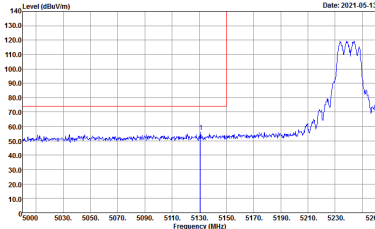
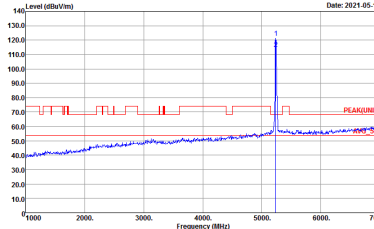
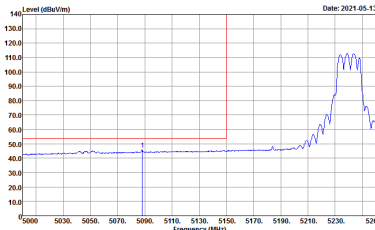


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1+2	Horizontal	Fundamental
Peak	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>
Avg.	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	Left blank

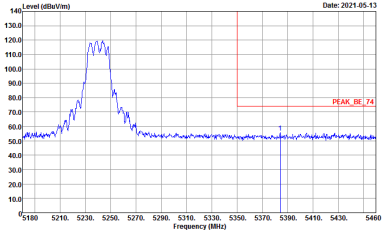
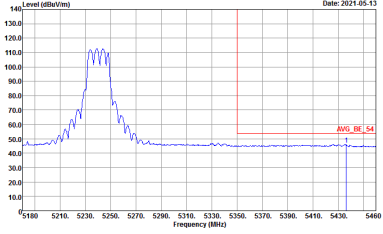


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1+2	Horizontal	Fundamental
<p>Peak</p>		<p>Left blank</p>
<p>Avg.</p>		<p>Left blank</p>



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak	 <p>Date: 2021-05-13</p> <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 131219</p>	 <p>Date: 2021-05-13</p> <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 131219</p>
Avg.	 <p>Date: 2021-05-13</p> <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL RBW:1000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 131219</p>	Left blank



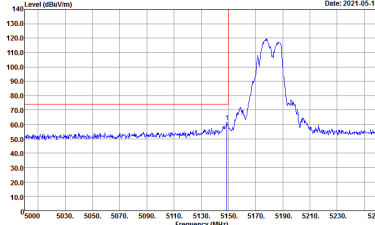
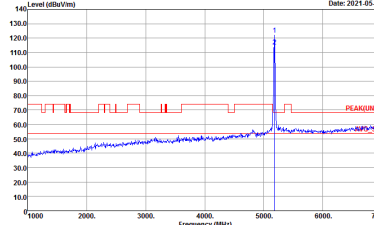

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1+2	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	<p>Left blank</p>



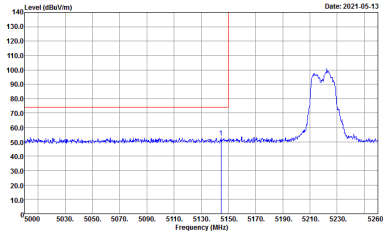
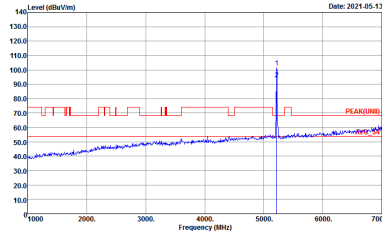
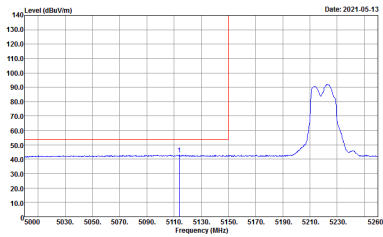
**Band 1 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)**

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Horizontal	Fundamental
Peak	<p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>
Avg.	<p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	Left blank

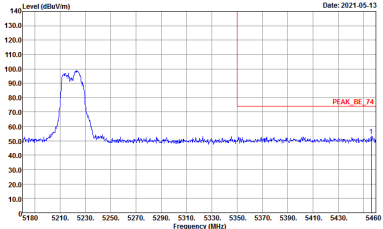
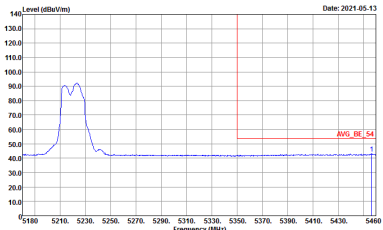


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Vertical	Fundamental
Peak	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>
Avg.	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	Left blank

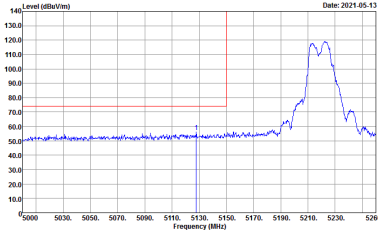
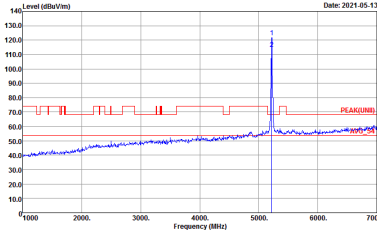
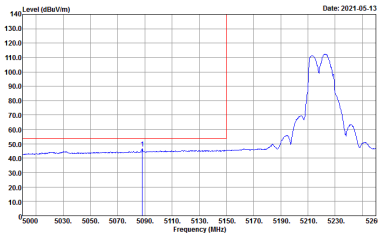


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Horizontal	Fundamental
Peak	 <p>Date: 2021-05-13</p> <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 131219</p>	 <p>Date: 2021-05-13</p> <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 131219</p>
Avg.	 <p>Date: 2021-05-13</p> <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000kHz VBW:1000.000kHz SWT:Auto Detector : Peak Project : 131219</p>	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1+2	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWF:Auto Detector : Peak Project : 131219</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000kHz VBW:1.000kHz SWF:Auto Detector : Peak Project : 131219</p>	<p>Left blank</p>

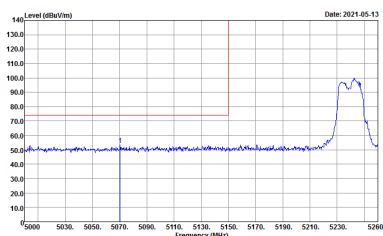
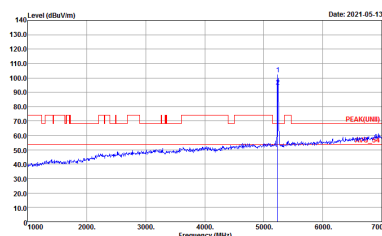
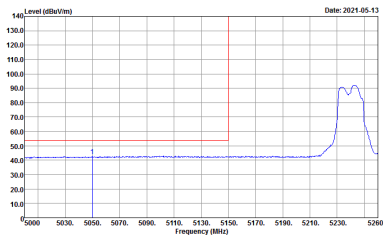


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Vertical	Fundamental
Peak	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>
Avg.	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	Left blank

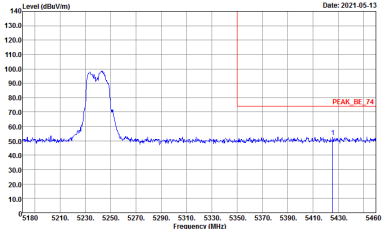
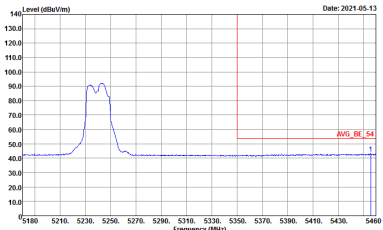


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1+2	Vertical	Fundamental
<p>Peak</p>	<p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	<p>Left blank</p>
<p>Avg.</p>	<p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	<p>Left blank</p>

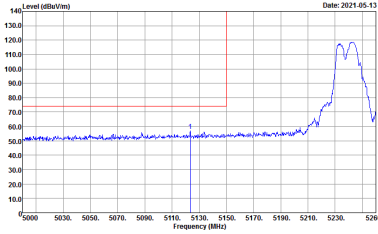
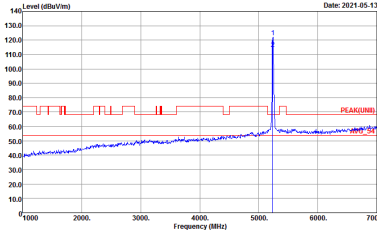
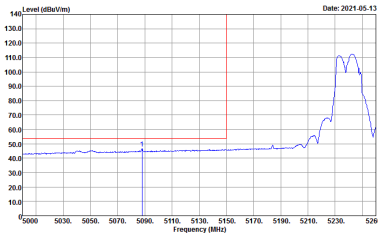


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1+2	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	<p>Left blank</p>

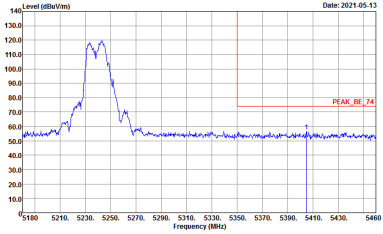
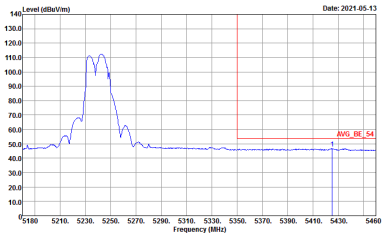


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto Detector : Peak Project : 131219</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWF:Auto Detector : Peak Project : 131219</p>	<p>Left blank</p>



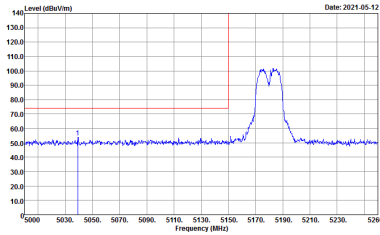
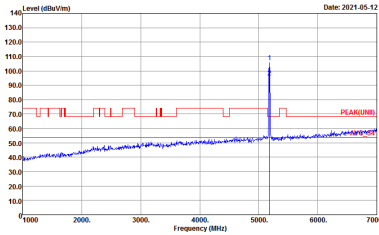
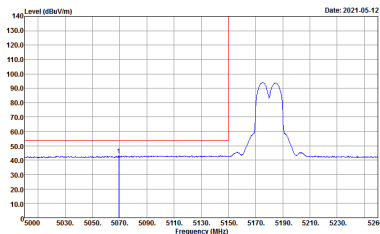
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>
Avg.	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	Left blank



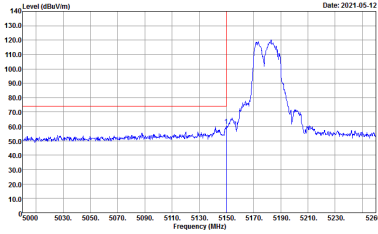
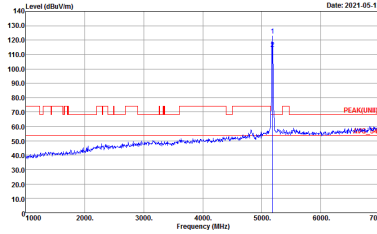
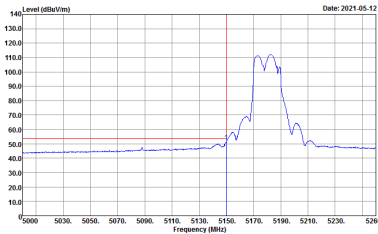
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - R	
1+2	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_1522 VERTICAL Detector : Peak Project : 131219</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_1522 VERTICAL Detector : Peak Project : 131219</p>	<p>Left blank</p>



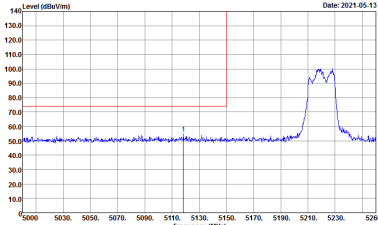
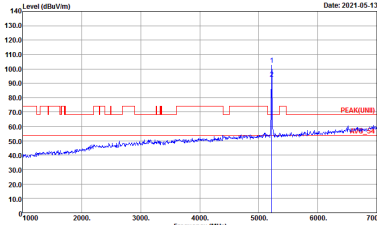
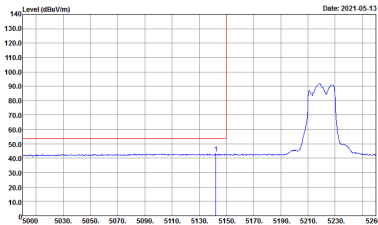
Band 1 5150~5250MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH36 5180MHz	
1+2	Horizontal	Fundamental
<p align="center">Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 131219</p>
<p align="center">Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 131219</p>	<p align="center">Left blank</p>

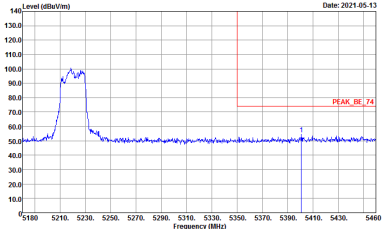
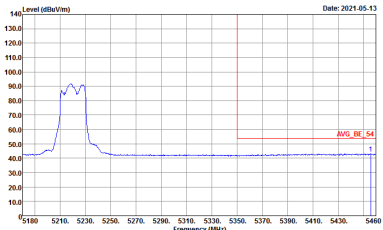


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH36 5180MHz	
1+2	Vertical	Fundamental
Peak	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>
Avg.	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	Left blank

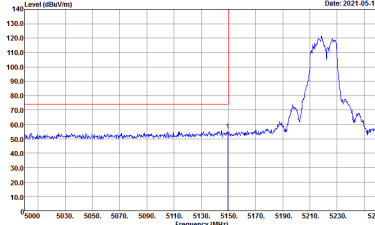
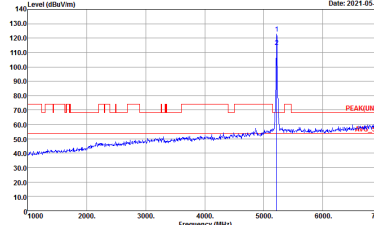
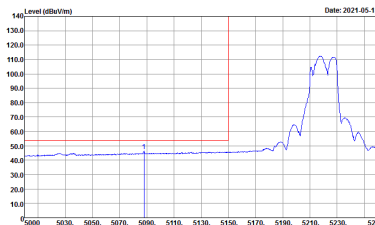


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH44 5220MHz - L	
1+2	Horizontal	Fundamental
Peak	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>
Avg.	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	Left blank

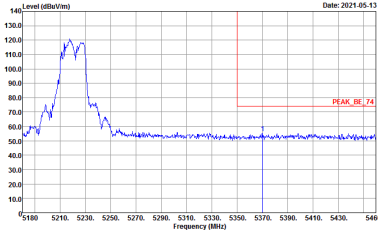
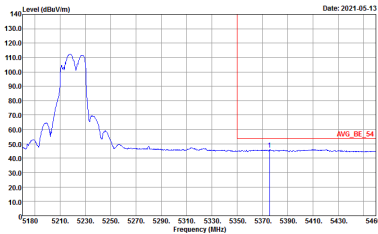


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH44 5220MHz - R	
1+2	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	<p>Left blank</p>

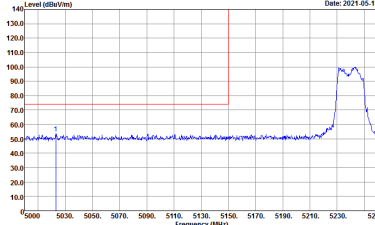
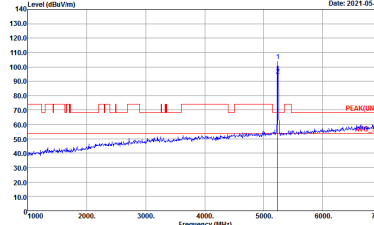
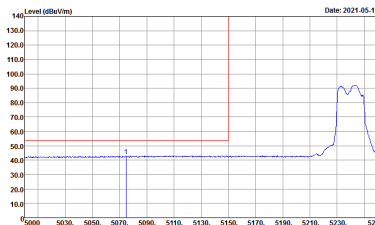


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH44 5220MHz - L	
1+2	Vertical	Fundamental
Peak	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>
Avg.	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	Left blank

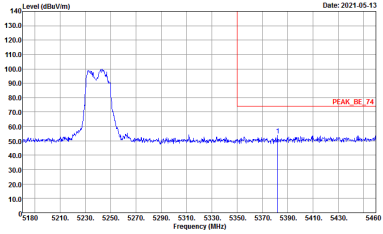
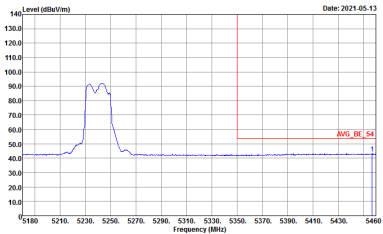


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH44 5220MHz - R	
1+2	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	<p>Left blank</p>

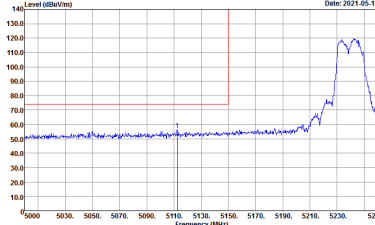
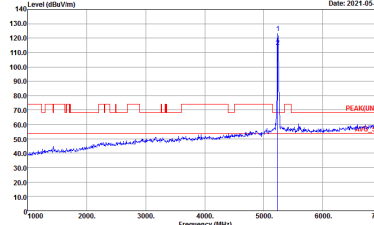
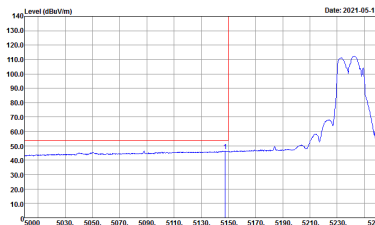


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH48 5240MHz - L	
1+2	Horizontal	Fundamental
Peak	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>
Avg.	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	Left blank

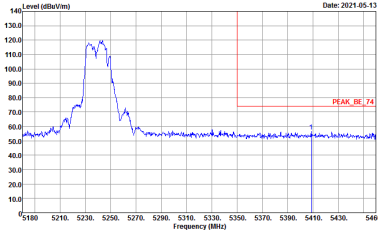
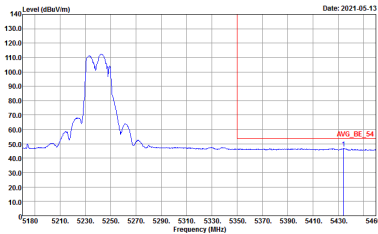


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH48 5240MHz - R	
1+2	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto Detector : Peak Project : 131219</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWF:Auto Detector : Peak Project : 131219</p>	<p>Left blank</p>



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>
Avg.	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	Left blank



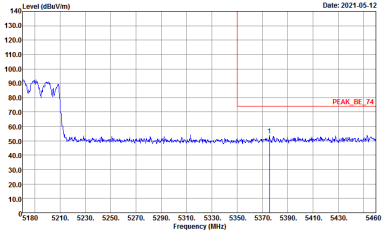
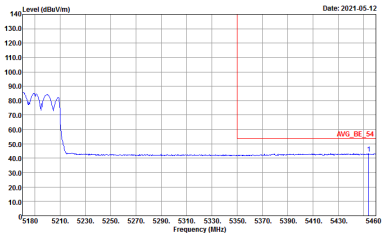
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH48 5240MHz - R	
1+2	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>	<p>Left blank</p>



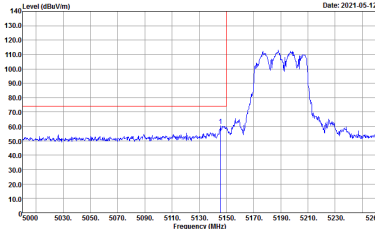
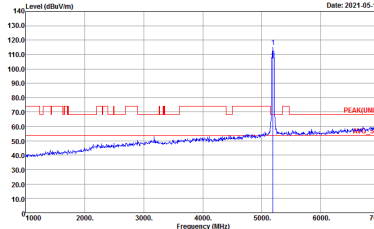
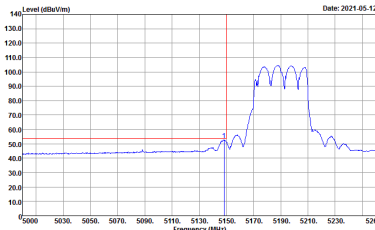
Band 1 5150~5250MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - L	
1+2	Horizontal	Fundamental
Peak	<p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 131219 Setting : 11</p>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Detector : Peak Project : 131219 Setting : 11</p>
Avg.	<p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL RBW:1000.000kHz VBW:1.000kHz SWT:Auto Detector : Peak Project : 131219 Setting : 11</p>	Left blank

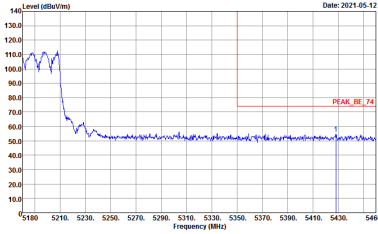
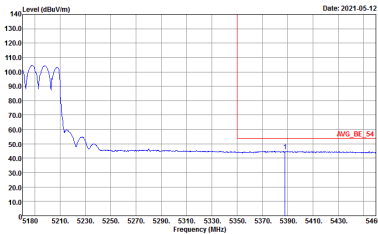


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - R	
1+2	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219 Setting : 11</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219 Setting : 11</p>	<p>Left blank</p>

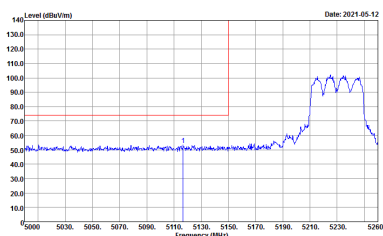
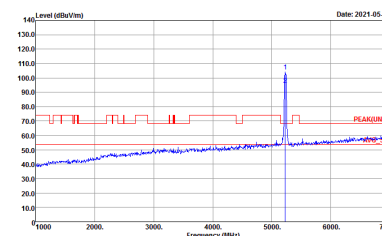
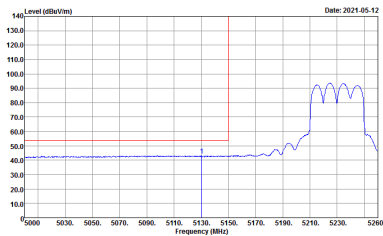


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - L	
1+2	Vertical	Fundamental
Peak	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 11</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 11</p>
Avg.	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 11</p>	Left blank

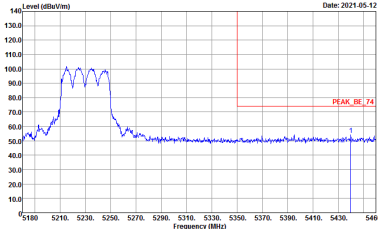
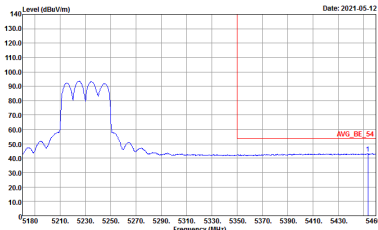


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - R	
1+2	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 11</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 11</p>	<p>Left blank</p>

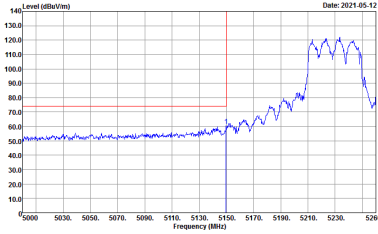
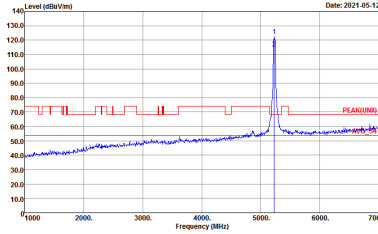
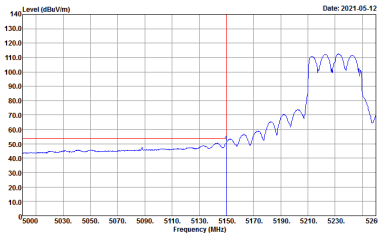


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH46 5230MHz - L	
1+2	Horizontal	Fundamental
Peak	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219 Setting : 18.5</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219 Setting : 18.5</p>
Avg.	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219 Setting : 18.5</p>	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH46 5230MHz - R	
1+2	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219 Setting : 18.5</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219 Setting : 18.5</p>	<p>Left blank</p>



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH46 5230MHz - L	
1+2	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 18.5</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 18.5</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 18.5</p>	<p>Left blank</p>



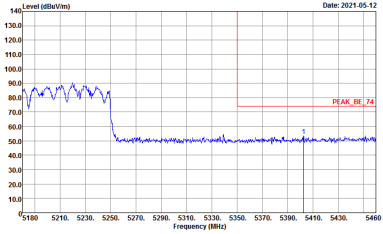
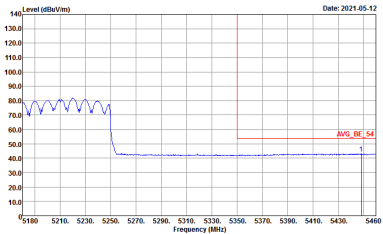
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH46 5230MHz - R	
1+2	Vertical	Fundamental
<p>Peak</p>	<p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 18.5</p>	<p>Left blank</p>
<p>Avg.</p>	<p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 18.5</p>	<p>Left blank</p>



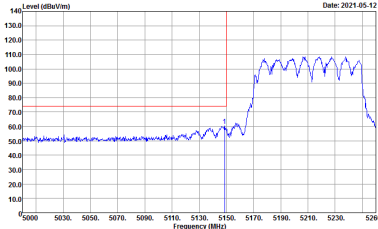
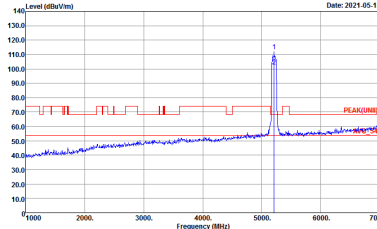
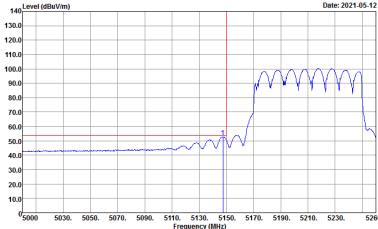
Band 1 5150~5250MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - L	
1+2	Horizontal	Fundamental
Peak	<p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219 Setting : 10</p>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219 Setting : 10</p>
Avg.	<p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219 Setting : 10</p>	Left blank

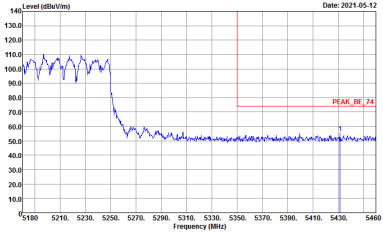
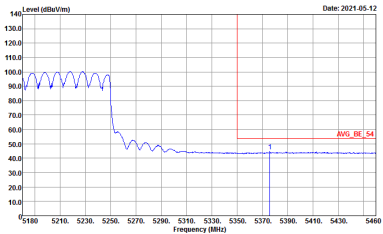


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - R	
1+2	Horizontal	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219 Setting : 10</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219 Setting : 10</p>	<p>Left blank</p>



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - L	
1+2	Vertical	Fundamental
Peak	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 10</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNII) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 10</p>
Avg.	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 10</p>	Left blank



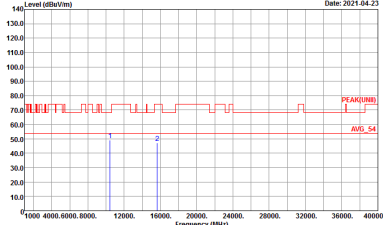
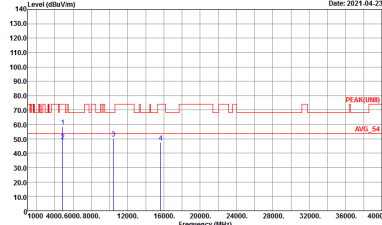
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - R	
1+2	Vertical	Fundamental
<p>Peak</p>	 <p>Site : 03CH16-HY Condition : PEAK_BE_74 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 10</p>	<p>Left blank</p>
<p>Avg.</p>	 <p>Site : 03CH16-HY Condition : AVG_BE_54 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 10</p>	<p>Left blank</p>



Band 1 - 5150~5250MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH16-1#Y Condition : PEAK(UNII) 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 131219</p>	<p>Site : 03CH16-1#Y Condition : PEAK(UNII) 3m 9120D_1522 VERTICAL Detector : Peak Project : 131219</p>



WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH44 5220MHz	
1+2	Horizontal	Vertical
<p>Peak Avg.</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>



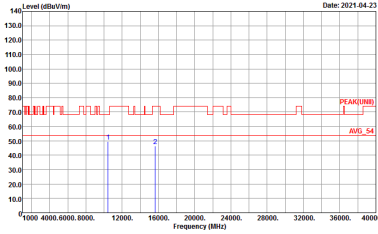
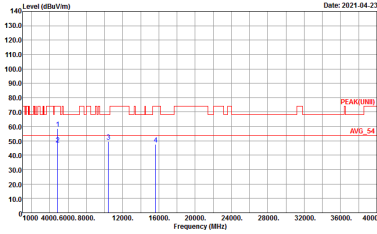
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH48 5240MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>



**Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)**

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>



WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH44 5220MHz	
1+2	Horizontal	Vertical
<p>Peak</p> <p>Avg.</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>



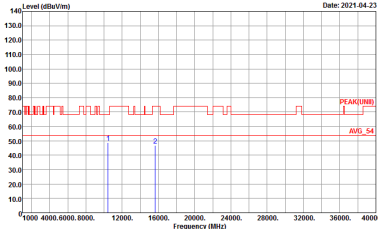
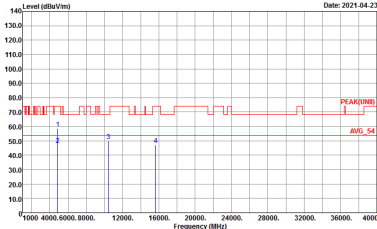
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH48 5240MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>



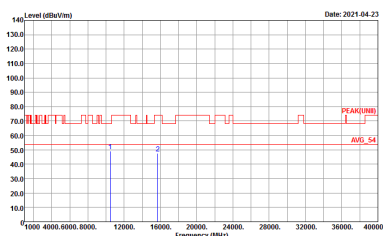
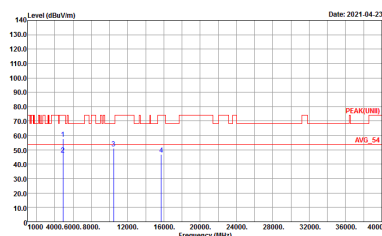
**Band 1 5150~5250MHz
WIFI 802.11ax HE20 Full (Harmonic @ 3m)**

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH36 5180MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>



WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH44 5220MHz	
1+2	Horizontal	Vertical
<p>Peak</p> <p>Avg.</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>



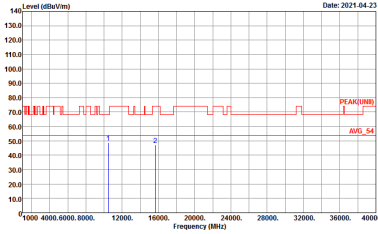
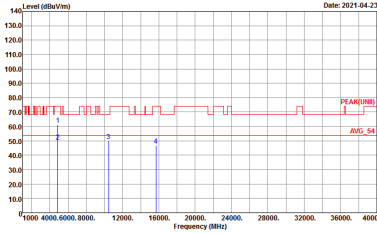
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH48 5240MHz	
1+2	Horizontal	Vertical
<p>Peak</p> <p>Avg.</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>



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

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz	
1+2	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219 Setting : 11</p>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219 Setting : 11</p>



WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH46 5230MHz	
1+2	Horizontal	Vertical
<p>Peak</p> <p>Avg.</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 HORIZONTAL Detector : Peak Project : 131219</p>	 <p>Site : 03CH16-HY Condition : PEAK(UNIT) 3m 91200_1522 VERTICAL Detector : Peak Project : 131219</p>



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

Table with 4 columns: WIFI, ANT, 1+2, and two graph columns (Horizontal and Vertical). The graphs show Level (dBuV/m) vs Frequency (MHz) with peak and average values indicated.



Emission above 18GHz
5GHz WIFI 802.11ax HE80 Full (SHF)

WIFI	5GHz WIFI	
ANT	802.11ax HE80 Full SHF	
1+2	Horizontal	Vertical
QP / Peak	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 1m SHF HORN BBHA9170584 HORIZONTAL Detector : Peak Project : 131219</p>	<p>Site : 03CH16-HY Condition : PEAK(UNIT) 1m SHF HORN BBHA9170584 VERTICAL Detector : Peak Project : 131219</p>



Emission below 1GHz
5GHz WIFI 802.11ax HE80 Full (LF)

WIFI	5GHz WIFI	
ANT	802.11ax HE80 Full LF	
1+2	Horizontal	Vertical
QP / Peak	<p>Site : 03CH16-1FY Condition : QP 3m B1LOG_47020406 HORIZONTAL Detector : Peak Project : 131219</p>	<p>Site : 03CH16-1FY Condition : QP 3m B1LOG_47020406 VERTICAL Detector : Peak Project : 131219</p>



Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle (%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor (dB)
1+2	802.11a	93.18	1435	0.70	1kHz	0.31
1+2	5GHz 802.11n HT20	91.41	5430	0.18	1kHz	0.39
1+2	5GHz 802.11ax HE20 Full RU	95.03	5445	0.18	1kHz	0.22
1+2	5GHz 802.11ax HE40 Full RU	95.78	5445	0.18	1kHz	0.19
1+2	5GHz 802.11ax HE80 Full RU	93.21	5355	0.19	1kHz	0.31

MIMO <Ant. 1+2>

