



FCC RADIO TEST REPORT

FCC ID : PU5-TP00114C
Equipment : Notebook Computer
Brand Name : Lenovo
Model Name : TP00114C
Applicant : Wistron Corporation
21F, No. 88, Sec. 1, Hsin Tai Wu Rd., Hsichih Dist,
New Taipei City 221, Taiwan
Manufacturer : Lenovo PC HK Limited
23/F, Lincoln House, Taikoo Place, 979 King's
Road, Quarry Bay, Hong Kong, P.R. China
Standard : FCC Part 15 Subpart E §15.407

Equipment: Intel AX200NGW tested inside of Lenovo Notebook Computer

The product was received on Apr. 08, 2021 and testing was started from Jun. 09, 2021 and completed on Jun. 17, 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 partial 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



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History of this test report

Report No.	Version	Description	Issued Date
FR140857-01D	01	Initial issue of report	Jun. 16, 2021
FR140857-01D	02	Revise test data	Jun. 18, 2021

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
-	15.403(i)	26dB Bandwidth	-	See Note
-	2.1049	99% Occupied Bandwidth	-	See Note
3.1	15.407(a)	Maximum Conducted Output Power	Pass	-
-	15.407(a)	Power Spectral Density	-	See Note
3.2	15.407(b)	Unwanted Emissions	Pass	Under limit 3.46 dB at 5150.000 MHz
3.3	15.207	AC Conducted Emission	Pass	Under limit 10.83 dB at 4.574 MHz
-	15.407(c)	Automatically Discontinue Transmission	-	See Note
3.4	15.203 15.407(a)	Antenna Requirement	Pass	-

Note: The module (Model: AX200NGW) makes no difference after verifying output power, this report reuses test data from the module report.

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: Sheng Kuo

Report Producer: Celery Wei

1. General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Notebook Computer
Brand Name	Lenovo
Model Name	TP00114C
FCC ID	PU5-TP00114C
Sample 1	EUT with High-Tek Antenna
Sample 2	EUT with AWAN Antenna
EUT supports Radios application	WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT80/VHT160 WLAN 11ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE
EUT Stage	Production Unit

Remark:

1. The above EUT's information was declared by manufacturer.
2. Equipment: Intel AX200NGW tested inside of Lenovo Notebook Computer.

Antenna Information			
Antenna 1 (WLAN)	Manufacturer	High-Tek	
	Antenna Type	Tx1:PIFA Antenna	Tx2:PIFA Antenna
	Part number	025.901JG.0011	025.901JH.0011
	Peak gain (dBi)	Main Antenna :	Aux Antenna :
		WLAN(5G B1):0.28 WLAN(5G B2):0.50 WLAN(5G B3):1.44	CE WLAN(5G B1):-1.59 CE WLAN(5G B2):-2.27 CE WLAN(5G B3):-0.75
Antenna 2 (WLAN)	Manufacturer	AWAN	
	Antenna Type	Tx1:PIFA Antenna	Tx2:PIFA Antenna
	Part number	025.901JG.0021	025.901JH.0021
	Peak gain (dBi)	Main Antenna :	Aux Antenna :
		WLAN(5G B1):-0.42 WLAN(5G B2):-1.74 WLAN(5G B3):0.2	WLAN(5G B1):-0.59 WLAN(5G B2):-0.16 WLAN(5G B3):1.61

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.
2. For Radiated Test Cases, the tests were performed with "High-Tek Antenna"

1.2 Product Specification of Equipment Under Test

Product Specification subjective to this standard			
Tx / Rx Frequency Range	5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5720 MHz		
Maximum Output Power to Antenna	<5180 MHz ~ 5240 MHz> <Chain A> 802.11a: 12.30 dBm / 0.0170 W <Chain B> 802.11a: 12.40 dBm / 0.0174 W MIMO<Chain A+B> 802.11ax HE20: 12.46 dBm / 0.0176 W 802.11ax HE40: 12.21 dBm / 0.0167 W 802.11ax HE80: 12.31 dBm / 0.0170 W 802.11ax HE160: 12.26 dBm / 0.0168 W		
	<5260 MHz ~ 5320 MHz> <Chain A> 802.11a: 12.30 dBm / 0.0170 W <Chain B> 802.11a: 12.40 dBm / 0.0174 W MIMO<Chain A+B> 802.11ax HE20: 12.41 dBm / 0.0174 W 802.11ax HE40: 12.36 dBm / 0.0172 W 802.11ax HE80: 12.46 dBm / 0.0176 W		
	<5500 MHz ~ 5720 MHz> <Chain A> 802.11a: 12.40 dBm / 0.0174 W <Chain B> 802.11a: 12.50 dBm / 0.0178 W MIMO<Chain A+B> 802.11ax HE20: 12.46 dBm / 0.0176 W 802.11ax HE40: 12.36 dBm / 0.0172 W 802.11ax HE80: 12.46 dBm / 0.0176 W 802.11ax HE160: 12.21 dBm / 0.0166 W		
Type of Modulation	802.11a/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) 802.11ax: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM)		
Antenna Function Description		Chain A	Chain B
	802.11 a	V	V
	802.11 ax MIMO	V	V

Remark:

- For other wireless features of this EUT, test report will be issued separately.
- MIMO Chain A+B is a calculated result from sum of the power MIMO Chain A and MIMO Chain B.

1.3 Modification of EUT

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

1.4 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan
Test Site No.	Sporton Site No.
	TH02-HY, CO05-HY

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

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan
Test Site No.	Sporton Site No.
	03CH12-HY (TAF Code: 3786)
Remark	The Radiated Spurious 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

1.5 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 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.

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 (1 GHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in Tablet Type (three orthogonal panels, X, Y, Z) and Notebook Type. The worst cases (Notebook type for Chain B and Y Plane for MIMO Chain A+B) 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		
Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz Band 2 (U-NII-2A)	52	5260	60	5300
	54*	5270	62*	5310
	56	5280	64	5320
	58 [#]	5290		
Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470-5725 MHz Band 3 (U-NII-2C)	100	5500	112	5560
	102*	5510	116	5580
	104	5520	132	5660
	106 [#]	5530	134*	5670
	108	5540	136	5680
	110*	5550	140	5700
Frequency Band	Channel		Freq. (MHz)	
5150-5350 MHz	50 [@]		5250	
5470-5725 MHz	114 [@]		5570	

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

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

Note:

1. The above Frequency and Channel 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.
3. The above Frequency and Channel in "@ " were 802.11ac VHT160 and 802.11ax HE160.

2.2 Test Mode

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

Single Mode

Modulation	Data Rate
802.11a	6 Mbps

MIMO Mode

Modulation	Data Rate
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0
802.11ax HE160	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : Bluetooth Link + WLAN (2.4GHz) Link + TC + TF + Adapter
Remark: 1. TF stands for test function, and consists of H-Pattern, MPEG4, Camera, fingerprint. 2. TC stands for test configuration, and consists of Earphone + Mic, Micro SD Card, USB HD (Data Link) (USB *2), LCD Monitor (HDMI out) and LAN Link. 3. Data Link means data application transferred mode between EUT and USB HD. 4. HDMI means media application transferred between EUT and external display.	

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11a	802.11a	802.11a
L	Low	36	-	100
M	Middle	40	60	116
H	High	-	64	-

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ax HE20	802.11ax HE20	802.11ax HE20
L	Low	36	-	100
M	Middle	40	60	116
H	High	-	64	-

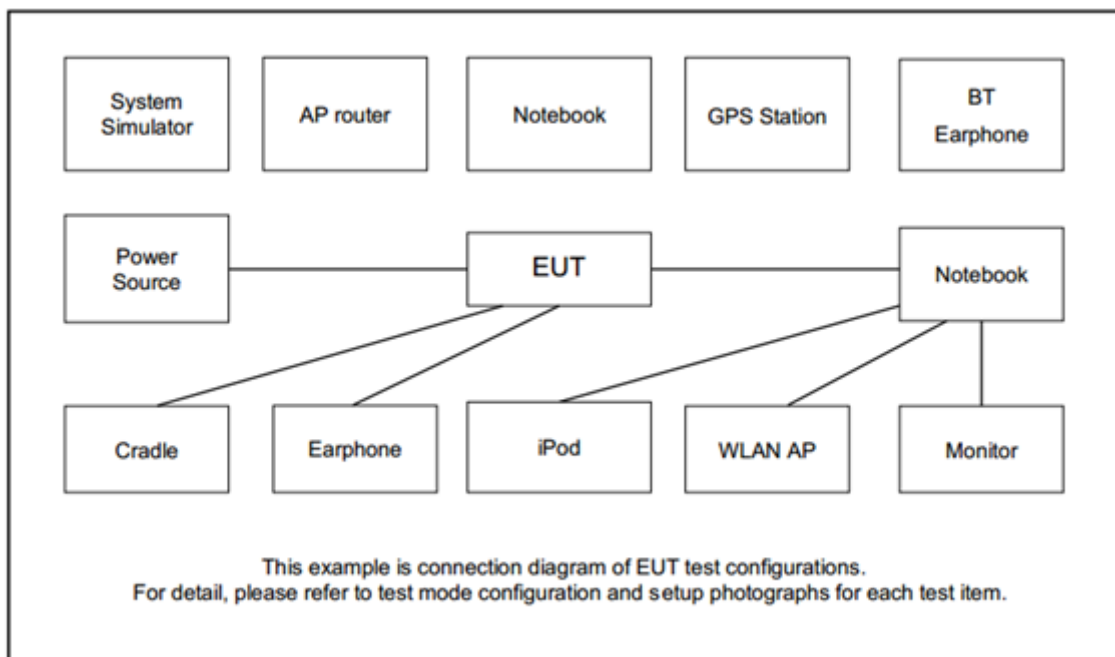
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ax HE40	802.11ax HE40	802.11ax HE40
L	Low	38	-	102
M	Middle	-	-	-
H	High	-	62	-

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

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

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.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
3.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A
4.	Notebook	Dell	Latitude 3400	FCC DoC	N/A	AC I/P : Unshielded, 1.2m DC O/P : Shielded, 1.8m
5.	LCD Monitor	Asus	PB27UQ	FCC DoC	Shielded, 1.6m	Unshielded, 1.8m
6.	USB HD	ADATA	HV620S-1T	FCC DoC	Shielded, 1.0m	N/A

2.5 EUT Operation Test Setup

The RF test items, utility "DRTU V12.1947.0-10428" 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.

3. Test Result

3.1 Maximum Conducted Output Power Measurement

3.1.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

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

For the 5.25–5.725 GHz bands:

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

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

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

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

3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

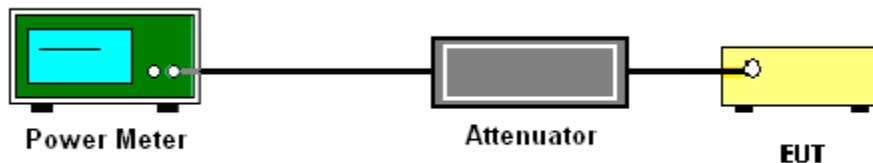
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

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.

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

3.1.4 Test Setup



3.1.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.2 Unwanted Emissions Measurement

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

3.2.2 Limit of Unwanted Emissions

- (1) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27dBm/MHz.

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

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

- (2) Unwanted spurious emissions 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.

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

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.

3.2.3 Measuring Instruments

See list of measuring equipment of this test report.

3.2.4 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 Peak Unwanted Emissions Measurements Above 1000 MHz

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

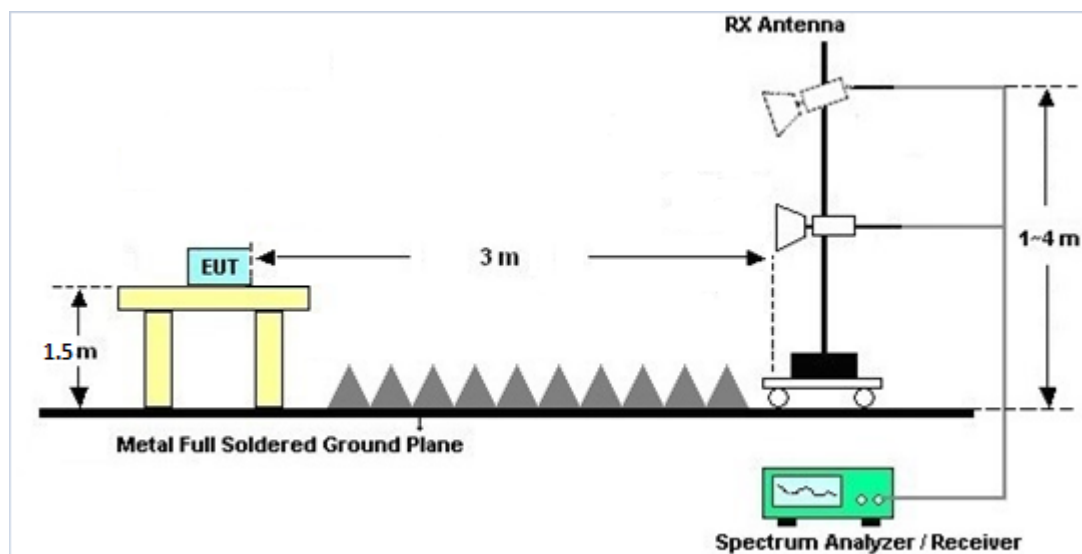
(2) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz

- 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.

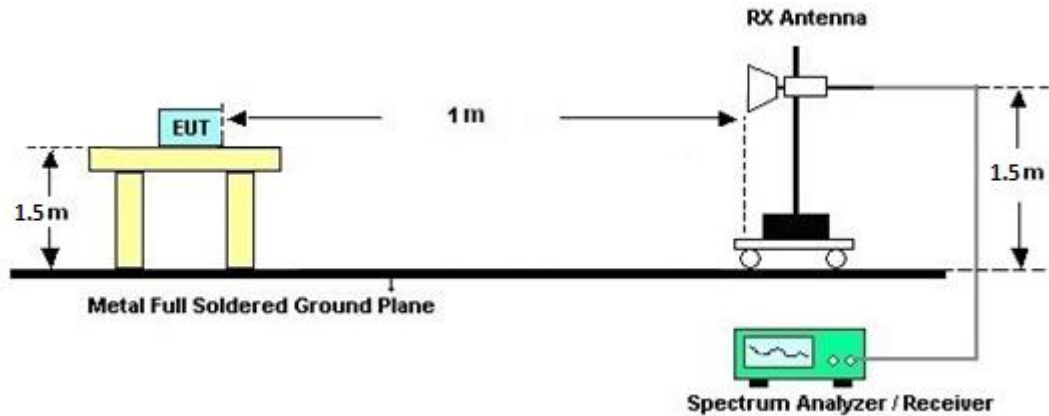
2. The EUT was placed on a turntable with 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted 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 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.

3.2.5 Test Setup

For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



3.2.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.2.7 Duty Cycle

Please refer to Appendix E.

3.2.8 Test Result of Radiated Spurious Emissions

Please refer to Appendix C and D.

3.3 AC Conducted Emission Measurement

3.3.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

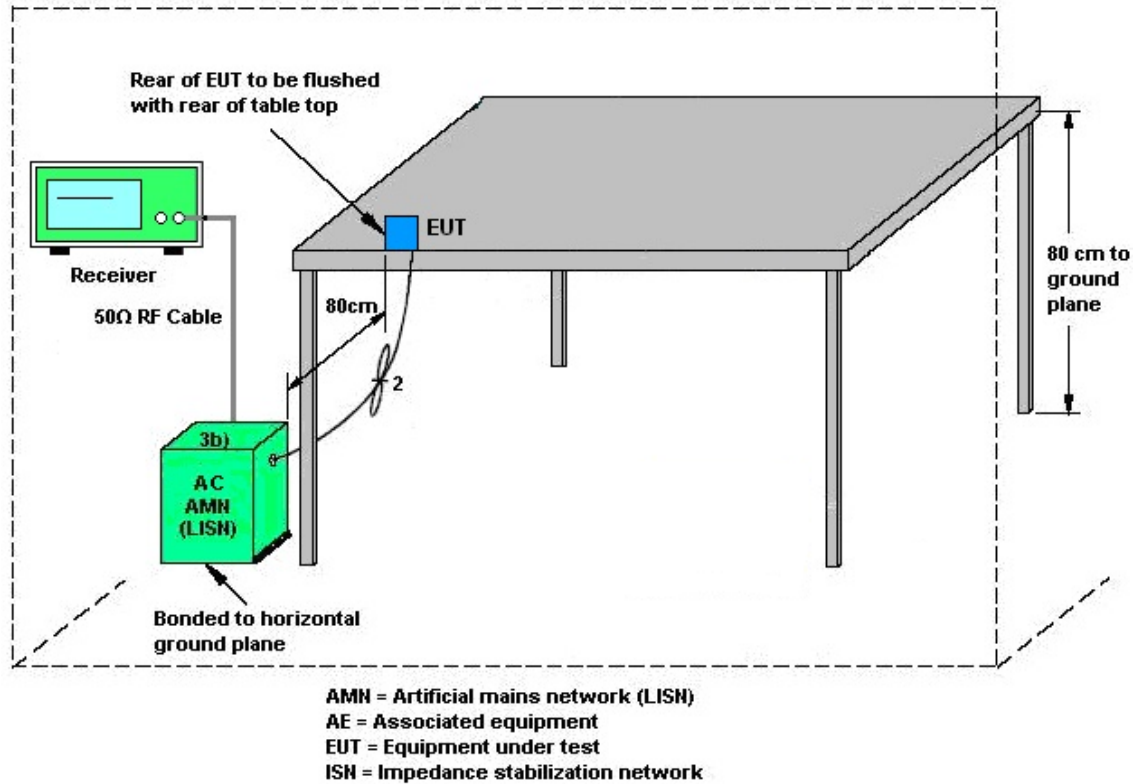
3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 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.

3.3.4 Test Setup



3.3.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.4 Antenna Requirements

3.4.1 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.

3.4.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.4.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



4. List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1328	1GHz~18GHz	Nov. 23, 2020	Jun. 10, 2021~Jun. 14, 2021	Nov. 22, 2021	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	00993	18GHz~40GHz	Nov. 19, 2020	Jun. 10, 2021~Jun. 14, 2021	Nov. 18, 2021	Radiation (03CH12-HY)
Preamplifier	Keysight	83017A	MY57280120	1GHz~26.5GHz	Jul. 20, 2020	Jun. 10, 2021~Jun. 14, 2021	Jul. 19, 2021	Radiation (03CH12-HY)
Preamplifier	E-INSTRUMENT TECH LTD.	ERA-100M-18G-56-01-A70	EC1900249	1GHz-18GHz	Dec. 05, 2020	Jun. 10, 2021~Jun. 14, 2021	Dec. 04, 2021	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 11, 2020	Jun. 10, 2021~Jun. 14, 2021	Dec. 10, 2021	Radiation (03CH12-HY)
Spectrum Analyzer	Agilent	N9010A	MY53470118	10Hz~44GHz	Jan. 15, 2021	Jun. 10, 2021~Jun. 14, 2021	Jan. 14, 2022	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30MHz~18GHz	Dec. 11, 2020	Jun. 10, 2021~Jun. 14, 2021	Dec. 10, 2021	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Feb. 22, 2021	Jun. 10, 2021~Jun. 14, 2021	Feb. 21, 2022	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30MHz~40GHz	Feb. 22, 2021	Jun. 10, 2021~Jun. 14, 2021	Feb. 21, 2022	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jun. 10, 2021~Jun. 14, 2021	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jun. 10, 2021~Jun. 14, 2021	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-000989	N/A	N/A	Jun. 10, 2021~Jun. 14, 2021	N/A	Radiation (03CH12-HY)
Filter	Wainwright	WLKS1200-12SS	SN2	1.2GHz Low Pass Filter	Mar. 17, 2021	Jun. 10, 2021~Jun. 14, 2021	Mar. 16, 2022	Radiation (03CH12-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN2	6.75GHz High Pass Filter	Mar. 17, 2021	Jun. 10, 2021~Jun. 14, 2021	Mar. 16, 2022	Radiation (03CH12-HY)
Power Sensor	DARE	RPR3006W	17100015 SNO37	10MHz~6GHz	Dec. 02, 2020	Jun. 09, 2021~Jun. 17, 2021	Dec. 01, 2021	Conducted (TH02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSQ	200578/026	20Hz-26.5GHz	Jul. 17, 2020	Jun. 09, 2021~Jun. 17, 2021	Jul. 16, 2021	Conducted (TH02-HY)
Switch Box & RF Cable	EM Electronics	EMSW18SE	SW200302	N/A	Mar. 17, 2021	Jun. 09, 2021~Jun. 17, 2021	Mar. 16, 2022	Conducted (TH02-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jun. 12, 2021	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 30, 2020	Jun. 12, 2021	Nov. 29, 2021	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 01, 2020	Jun. 12, 2021	Nov. 30, 2021	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 16, 2020	Jun. 12, 2021	Nov. 15, 2021	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jun. 12, 2021	N/A	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Feb. 25, 2021	Jun. 12, 2021	Feb. 24, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 31, 2020	Jun. 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 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

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

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.9 dB
--	--------

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Ching Chen	Temperature:	24~25	°C
Test Date:	2021/6/9-2021/6/17	Relative Humidity:	51~54	%

Remark: For Conducted Test Items, Ant. 1 means Chain A (Aux.) and Ant. 2 means Chain B (Main).

TEST RESULTS DATA
Average Power Table

FCC Band I single antenna													
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	1	36	5180	12.30	12.40		24.00	24.00	-1.59	0.28		Pass
11a	6Mbps	1	40	5200	12.30	12.40		24.00	24.00	-1.59	0.28		Pass

TEST RESULTS DATA
Average Power Table

FCC Band II single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	60	5300	12.30	12.40		23.98	23.98	-2.27	0.50	26.99	Pass
11a	6Mbps	1	64	5320	12.30	12.40		23.98	23.98	-2.27	0.50	26.99	Pass

TEST RESULTS DATA
Average Power Table

FCC Band III single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	100	5500	12.40	12.50		23.98	23.98	1.61	0.20	26.99	Pass
11a	6Mbps	1	116	5580	12.20	12.50		23.98	23.98	1.61	0.20	26.99	Pass
11a	6Mbps	1	140	5700	12.10	12.40		23.98	23.98	1.61	0.20	26.99	Pass

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	9.50	9.40	12.46	24.00		0.28		Pass
HE20	MCS0	2	40	5200	Full	9.50	9.40	12.46	24.00		0.28		Pass
HE40	MCS0	2	38	5190	Full	9.40	9.00	12.21	24.00		0.28		Pass
HE80	MCS0	2	42	5210	Full	9.50	9.10	12.31	24.00		0.28		Pass
HE160	MCS0	2	50	5250	Full	9.40	9.10	12.26	24.00		0.28		Pass

TEST RESULTS DATA
Average Power Table

FCC Band II MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
HE20	MCS0	2	60	5300	Full	9.40	9.20	12.31	23.98		0.50		26.99	Pass
HE20	MCS0	2	64	5320	Full	9.50	9.30	12.41	23.98		0.50		26.99	Pass
HE40	MCS0	2	62	5310	Full	9.50	9.20	12.36	23.98		0.50		26.99	Pass
HE80	MCS0	2	58	5290	Full	9.60	9.30	12.46	23.98		0.50		26.99	Pass

TEST RESULTS DATA
Average Power Table

FCC Band III MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
HE20	MCS0	2	100	5500	Full	9.50	9.40	12.46	23.98		1.61		26.99	Pass
HE20	MCS0	2	116	5580	Full	9.60	9.30	12.46	23.98		1.61		26.99	Pass
HE40	MCS0	2	102	5510	Full	9.50	9.20	12.36	23.98		1.61		26.99	Pass
HE80	MCS0	2	106	5530	Full	9.60	9.30	12.46	23.98		1.61		26.99	Pass
HE160	MCS0	2	114	5570	Full	9.40	9.00	12.21	23.98		1.61		26.99	Pass



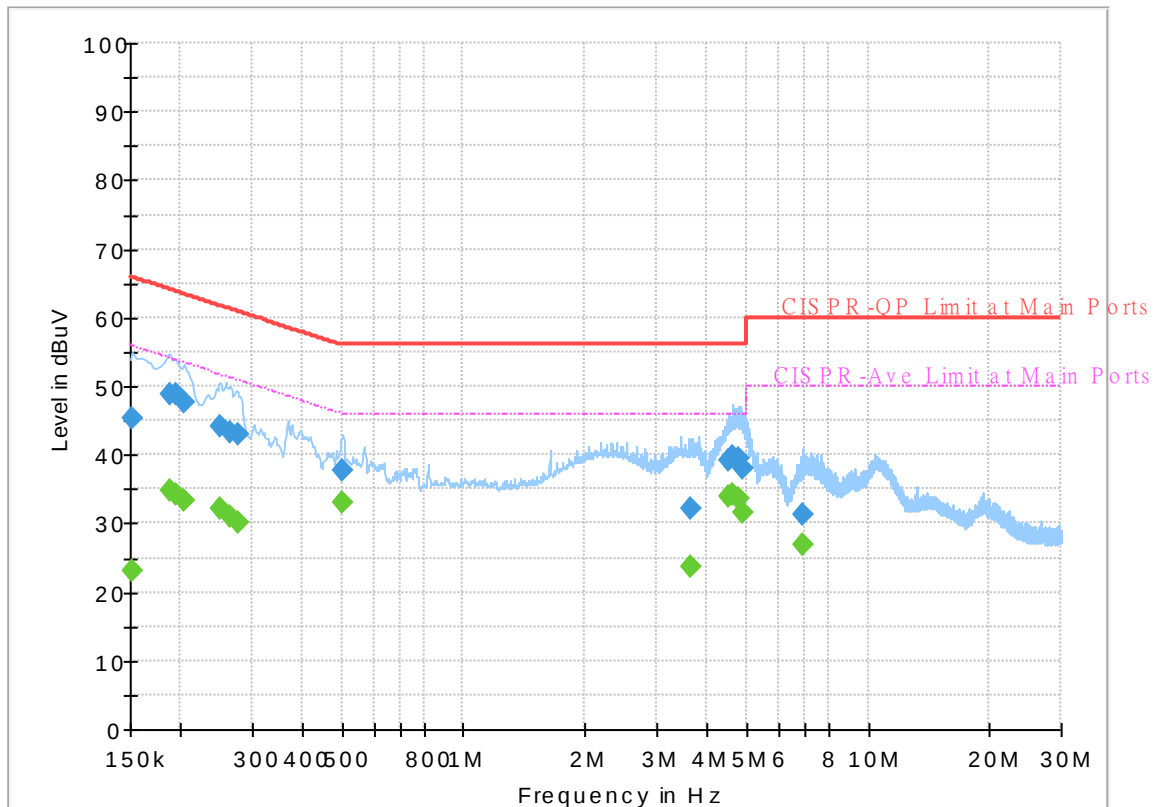
Appendix B. AC Conducted Emission Test Results

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

EUT Information

Report NO : 140857-01
Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Line

Full Spectrum



Final_Result

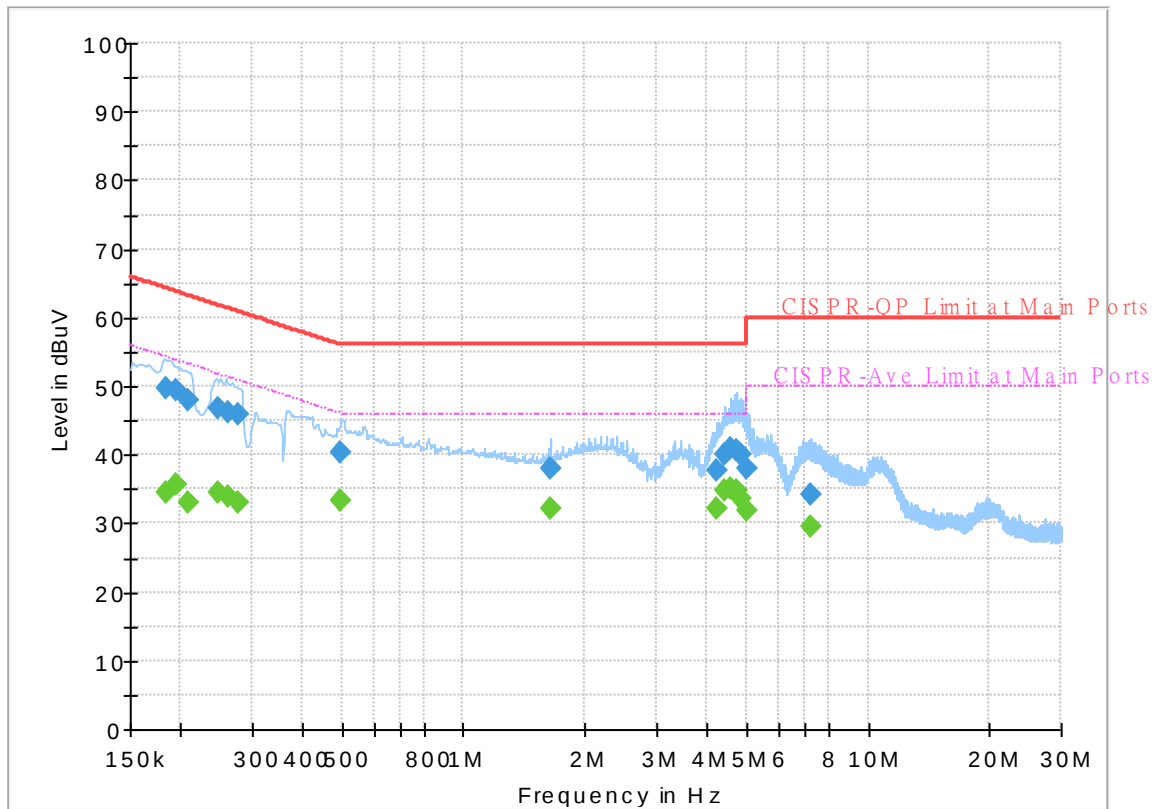
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	23.11	55.88	32.77	L1	OFF	19.6
0.152250	45.30	---	65.88	20.58	L1	OFF	19.6
0.188250	---	34.70	54.11	19.41	L1	OFF	19.6
0.188250	48.80	---	64.11	15.31	L1	OFF	19.6
0.195000	---	34.12	53.82	19.70	L1	OFF	19.6
0.195000	48.69	---	63.82	15.13	L1	OFF	19.6
0.204000	---	33.32	53.45	20.13	L1	OFF	19.6
0.204000	47.65	---	63.45	15.80	L1	OFF	19.6
0.251250	---	32.20	51.72	19.52	L1	OFF	19.6
0.251250	44.06	---	61.72	17.66	L1	OFF	19.6
0.264750	---	31.04	51.28	20.24	L1	OFF	19.6
0.264750	43.32	---	61.28	17.96	L1	OFF	19.6
0.276000	---	30.17	50.94	20.77	L1	OFF	19.6
0.276000	42.86	---	60.94	18.08	L1	OFF	19.6
0.503250	---	32.90	46.00	13.10	L1	OFF	19.7
0.503250	37.62	---	56.00	18.38	L1	OFF	19.7
3.664500	---	23.66	46.00	22.34	L1	OFF	19.9
3.664500	32.13	---	56.00	23.87	L1	OFF	19.9
4.508250	---	33.98	46.00	12.02	L1	OFF	19.9
4.508250	39.32	---	56.00	16.68	L1	OFF	19.9
4.650000	---	34.07	46.00	11.93	L1	OFF	19.9

4.650000	39.70	---	56.00	16.30	L1	OFF	19.9
4.791750	---	33.53	46.00	12.47	L1	OFF	19.9
4.791750	39.39	---	56.00	16.61	L1	OFF	19.9
4.924500	---	31.70	46.00	14.30	L1	OFF	19.9
4.924500	37.90	---	56.00	18.10	L1	OFF	19.9
6.913500	---	26.95	50.00	23.05	L1	OFF	20.0
6.913500	31.43	---	60.00	28.57	L1	OFF	20.0

EUT Information

Report NO : 140857-01
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)
0.183750	---	34.55	54.31	19.76	N	OFF	19.6
0.183750	49.82	---	64.31	14.49	N	OFF	19.6
0.195000	---	35.74	53.82	18.08	N	OFF	19.6
0.195000	49.49	---	63.82	14.33	N	OFF	19.6
0.208500	---	33.13	53.27	20.14	N	OFF	19.6
0.208500	47.88	---	63.27	15.39	N	OFF	19.6
0.246750	---	34.43	51.87	17.44	N	OFF	19.6
0.246750	46.86	---	61.87	15.01	N	OFF	19.6
0.262500	---	33.99	51.35	17.36	N	OFF	19.6
0.262500	46.32	---	61.35	15.03	N	OFF	19.6
0.276000	---	32.96	50.94	17.98	N	OFF	19.6
0.276000	45.80	---	60.94	15.14	N	OFF	19.6
0.498750	---	33.28	46.02	12.74	N	OFF	19.7
0.498750	40.39	---	56.02	15.63	N	OFF	19.7
1.637250	---	32.16	46.00	13.84	N	OFF	20.1
1.637250	38.14	---	56.00	17.86	N	OFF	20.1
4.231500	---	32.22	46.00	13.78	N	OFF	19.9
4.231500	37.59	---	56.00	18.41	N	OFF	19.9
4.431750	---	34.76	46.00	11.24	N	OFF	19.9
4.431750	39.95	---	56.00	16.05	N	OFF	19.9
4.573500	---	35.17	46.00	10.83	N	OFF	19.9

4.573500	40.79	---	56.00	15.21	N	OFF	19.9
4.715250	---	34.74	46.00	11.26	N	OFF	19.9
4.715250	40.75	---	56.00	15.25	N	OFF	19.9
4.848000	---	33.68	46.00	12.32	N	OFF	19.9
4.848000	39.96	---	56.00	16.04	N	OFF	19.9
4.992000	---	31.90	46.00	14.10	N	OFF	19.9
4.992000	37.99	---	56.00	18.01	N	OFF	19.9
7.244250	---	29.52	50.00	20.48	N	OFF	20.0
7.244250	34.14	---	60.00	25.86	N	OFF	20.0



Appendix C. Radiated Spurious Emission

Test Engineer :	Jack Cheng, Lance Chiang and Chuan Chu	Temperature :	21.8~26.8°C
		Relative Humidity :	53.6~68.2%

Remark: For Radiated Spurious Emission Test Items, Ant. 1 means Chain A (Aux.) and Ant. 2 means Chain B (Main).

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5148.2	62.28	-11.72	74	53.7	31.9	9.96	33.28	119	239	P	H
		5150	50.54	-3.46	54	41.96	31.9	9.96	33.28	119	239	A	H
	*	5180	109.81	-	-	101.37	31.72	9.99	33.27	119	239	P	H
	*	5180	101.69	-	-	93.25	31.72	9.99	33.27	119	239	A	H
													H
													H
		5150	54.71	-19.29	74	46.13	31.9	9.96	33.28	351	157	P	V
		5150	46.97	-7.03	54	38.39	31.9	9.96	33.28	351	157	A	V
	*	5180	106.51	-	-	98.07	31.72	9.99	33.27	351	157	P	V
	*	5180	98.52	-	-	90.08	31.72	9.99	33.27	351	157	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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

WIFI Ant. 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 40 5200MHz		10400	49.03	-19.17	68.2	60.58	39.7	16.04	67.29	100	0	P	H
		15600	49.93	-24.07	74	59.94	37.5	19.67	67.18	100	0	P	H
													H
													H
		10400	48.82	-19.38	68.2	60.37	39.7	16.04	67.29	100	0	P	V
		15600	48.8	-25.2	74	58.81	37.5	19.67	67.18	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 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 64 5320MHz	*	5320	108.25	-	-	100.19	31.2	10.12	33.26	103	247	P	H
	*	5320	100.58	-	-	92.52	31.2	10.12	33.26	103	247	A	H
		5431.36	53.21	-20.79	74	44.69	31.53	10.24	33.25	103	247	P	H
		5350.08	42.6	-11.4	54	34.5	31.2	10.15	33.25	103	247	A	H
													H
													H
	*	5320	105.01	-	-	96.95	31.2	10.12	33.26	352	153	P	V
	*	5320	93.31	-	-	85.25	31.2	10.12	33.26	352	153	A	V
		5455.68	50.13	-23.87	74	41.47	31.62	10.28	33.24	352	153	P	V
		5350.08	40.89	-13.11	54	32.79	31.2	10.15	33.25	352	153	A	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 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 60 5300MHz		10600	49.03	-24.97	74	60.24	39.7	16.2	67.11	100	0	P	H
		15900	48.22	-25.78	74	58.69	37.2	19.72	67.39	100	0	P	H
													H
													H
		10600	49.4	-24.6	74	60.61	39.7	16.2	67.11	100	0	P	V
		15900	47.7	-26.3	74	58.17	37.2	19.72	67.39	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 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 100 5500MHz		5447.28	49.66	-24.34	74	41.05	31.59	10.27	33.25	117	250	P	H
		5470	50.42	-17.78	68.2	41.68	31.68	10.3	33.24	117	250	P	H
		5459.92	41.95	-12.05	54	33.27	31.64	10.28	33.24	117	250	A	H
	*	5500	109.41	-	-	100.51	31.8	10.34	33.24	117	250	P	H
	*	5500	101.58	-	-	92.68	31.8	10.34	33.24	117	250	A	H
													H
		5445.04	49.68	-24.32	74	41.09	31.58	10.26	33.25	368	152	P	V
		5466.96	48.74	-19.46	68.2	40.02	31.67	10.29	33.24	368	152	P	V
		5459.92	41.08	-12.92	54	32.4	31.64	10.28	33.24	368	152	A	V
	*	5500	108.19	-	-	99.29	31.8	10.34	33.24	368	152	P	V
	*	5500	99.75	-	-	90.85	31.8	10.34	33.24	368	152	A	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 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 116 5580MHz		11160	49.25	-24.75	74	59.43	39.72	16.68	66.58	100	0	P	H
		16740	52.29	-15.91	68.2	58.84	40.08	20.11	66.74	100	0	P	H
													H
													H
		11160	48.69	-25.31	74	58.87	39.72	16.68	66.58	100	0	P	V
		16740	51.3	-16.9	68.2	57.85	40.08	20.11	66.74	100	0	P	V
													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 HE20 Full (Band Edge @ 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 HE20 Full CH 36 5180MHz		5150	53.06	-20.94	74	44.48	31.9	9.96	33.28	175	306	P	H
		5150	43.72	-10.28	54	35.14	31.9	9.96	33.28	175	306	A	H
	*	5180	110.48	-	-	102.04	31.72	9.99	33.27	175	306	P	H
	*	5180	100.09	-	-	91.65	31.72	9.99	33.27	175	306	A	H
													H
													H
		5147.42	57.91	-16.09	74	49.34	31.9	9.95	33.28	285	338	P	V
		5150	48.32	-5.68	54	39.74	31.9	9.96	33.28	285	338	A	V
	*	5180	112.05	-	-	103.61	31.72	9.99	33.27	285	338	P	V
	*	5180	102.86	-	-	94.42	31.72	9.99	33.27	285	338	A	V
													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 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 40 5220MHz		10400	49.97	-18.23	68.2	61.52	39.7	16.04	67.29	100	0	P	H
		15600	47.26	-26.74	74	57.27	37.5	19.67	67.18	100	0	V	H
													H
													H
		10400	50.39	-17.81	68.2	61.94	39.7	16.04	67.29	100	0	P	V
		15600	48.08	-25.92	74	58.09	37.5	19.67	67.18	100	0	V	V
													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 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		5149.24	55.57	-18.43	74	46.99	31.9	9.96	33.28	178	307	P	H
		5150	47.13	-6.87	54	38.55	31.9	9.96	33.28	178	307	A	H
	*	5190	105.88	-	-	97.49	31.66	10	33.27	178	307	P	H
	*	5190	95.89	-	-	87.5	31.66	10	33.27	178	307	A	H
		5387.2	49.37	-24.63	74	41.08	31.35	10.19	33.25	178	307	P	H
		5350	41.07	-12.93	54	32.98	31.2	10.15	33.26	178	307	A	H
		5147.68	58.79	-15.21	74	50.21	31.9	9.96	33.28	292	329	P	V
		5150	50.31	-3.69	54	41.73	31.9	9.96	33.28	292	329	A	V
	*	5190	108.94	-	-	100.55	31.66	10	33.27	292	329	P	V
	*	5190	98.67	-	-	90.28	31.66	10	33.27	292	329	A	V
		5408.48	49.34	-24.66	74	40.95	31.43	10.21	33.25	292	329	P	V
		5351.36	40.86	-13.14	54	32.75	31.21	10.15	33.25	292	329	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

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

WIFI Ant. 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		5146.9	55.69	-18.31	74	47.12	31.9	9.95	33.28	192	40	P	H
		5148.98	45.96	-8.04	54	37.38	31.9	9.96	33.28	192	40	A	H
		5210	101.57	-	-	93.28	31.54	10.02	33.27	192	40	P	H
		5210	92.02	-	-	83.73	31.54	10.02	33.27	192	40	A	H
		5453.84	49.19	-24.81	74	40.53	31.62	10.28	33.24	192	40	P	H
		5350	40.49	-13.51	54	32.4	31.2	10.15	33.26	192	40	A	H
		5142.48	58.37	-15.63	74	49.8	31.9	9.95	33.28	295	325	P	V
		5149.76	49.49	-4.51	54	40.91	31.9	9.96	33.28	295	325	A	V
		5210	105.4	-	-	97.11	31.54	10.02	33.27	295	325	P	V
		5210	95.34	-	-	87.05	31.54	10.02	33.27	295	325	A	V
		5374.04	51.1	-22.9	74	42.87	31.3	10.18	33.25	295	325	P	V
		5350	41.4	-12.6	54	33.31	31.2	10.15	33.26	295	325	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

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

WIFI Ant. 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 HE160 Full CH 50 5250MHz		5143.78	50.88	-23.12	74	42.31	31.9	9.95	33.28	188	39	P	H
		5148.46	42.75	-11.25	54	34.17	31.9	9.96	33.28	188	39	A	H
	*	5250	95.68	-	-	87.58	31.3	10.06	33.26	188	39	P	H
	*	5250	85.98	-	-	77.88	31.3	10.06	33.26	188	39	A	H
		5364.52	51.35	-22.65	74	43.17	31.26	10.17	33.25	188	39	P	H
		5401.2	43.52	-10.48	54	35.17	31.4	10.2	33.25	188	39	A	H
		5146.9	52.53	-21.47	74	43.96	31.9	9.95	33.28	290	348	P	V
		5149.76	44.6	-9.4	54	36.02	31.9	9.96	33.28	290	348	A	V
	*	5250	98.32	-	-	90.22	31.3	10.06	33.26	290	348	P	V
	*	5250	88.79	-	-	80.69	31.3	10.06	33.26	290	348	A	V
		5358.64	55.44	-18.56	74	47.3	31.23	10.16	33.25	290	348	P	V
		5402.32	45.9	-8.1	54	37.54	31.41	10.2	33.25	290	348	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11ax 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 64 5320MHz	*	5320	108.42	-	-	100.36	31.2	10.12	33.26	191	40	P	H
	*	5320	98.81	-	-	90.75	31.2	10.12	33.26	191	40	A	H
		5445.92	50.03	-23.97	74	41.44	31.58	10.26	33.25	191	40	P	H
		5350.08	41.55	-12.45	54	33.45	31.2	10.15	33.25	191	40	A	H
													H
													H
	*	5320	110.74	-	-	102.68	31.2	10.12	33.26	299	350	P	V
	*	5320	101.25	-	-	93.19	31.2	10.12	33.26	299	350	A	V
		5430.08	49.68	-24.32	74	41.17	31.52	10.24	33.25	299	350	P	V
		5350.08	42.85	-11.15	54	34.75	31.2	10.15	33.25	299	350	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 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 60 5300MHz		10600	49.72	-24.28	74	60.93	39.7	16.2	67.11	100	0	P	H
		15900	48.24	-25.76	74	58.71	37.2	19.72	67.39	100	0	P	H
													H
													H
		10600	49.91	-24.09	74	61.12	39.7	16.2	67.11	100	0	P	V
		15900	49.59	-24.41	74	60.06	37.2	19.72	67.39	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ax 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 62 5310MHz		5126.14	49.72	-24.28	74	41.17	31.9	9.93	33.28	187	41	P	H
		5120.02	40.89	-13.11	54	32.34	31.9	9.93	33.28	187	41	A	H
	*	5310	104.14	-	-	96.09	31.2	10.11	33.26	187	41	P	H
	*	5310	93.45	-	-	85.4	31.2	10.11	33.26	187	41	A	H
		5438.88	49.16	-24.84	74	40.6	31.56	10.25	33.25	187	41	P	H
		5350.08	41.35	-12.65	54	33.25	31.2	10.15	33.25	187	41	A	H
		5149.6	51.39	-22.61	74	42.81	31.9	9.96	33.28	293	350	P	V
		5120.02	41.31	-12.69	54	32.76	31.9	9.93	33.28	293	350	A	V
	*	5310	106.02	-	-	97.97	31.2	10.11	33.26	293	350	P	V
	*	5310	95.97	-	-	87.92	31.2	10.11	33.26	293	350	A	V
		5451.6	50.37	-23.63	74	41.73	31.61	10.27	33.24	293	350	P	V
		5350.08	42.49	-11.51	54	34.39	31.2	10.15	33.25	293	350	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

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

WIFI Ant. 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 58 5290MHz		5140.76	50.76	-23.24	74	42.19	31.9	9.95	33.28	186	40	P	H
		5120.02	41.07	-12.93	54	32.52	31.9	9.93	33.28	186	40	A	H
	*	5290	100.94	-	-	92.88	31.22	10.1	33.26	186	40	P	H
	*	5290	91.71	-	-	83.65	31.22	10.1	33.26	186	40	A	H
		5361.6	50.27	-23.73	74	42.11	31.25	10.16	33.25	186	40	P	H
		5353.2	42.63	-11.37	54	34.51	31.21	10.16	33.25	186	40	A	H
		5086.7	51.74	-22.26	74	43.28	31.85	9.89	33.28	293	326	P	V
		5149.94	41.67	-12.33	54	33.09	31.9	9.96	33.28	293	326	A	V
	*	5290	103.95	-	-	95.89	31.22	10.1	33.26	293	326	P	V
	*	5290	94.21	-	-	86.15	31.22	10.1	33.26	293	326	A	V
		5376.48	51.17	-22.83	74	42.93	31.31	10.18	33.25	293	326	P	V
		5351.76	44.36	-9.64	54	36.25	31.21	10.15	33.25	293	326	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11ax 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 100 5500MHz		5380.72	49.98	-24.02	74	41.73	31.32	10.18	33.25	210	4	P	H
		5468.08	50.85	-17.35	68.2	42.12	31.67	10.3	33.24	210	4	P	H
		5460	41.57	-12.43	54	32.89	31.64	10.28	33.24	210	4	A	H
	*	5500	108.41	-	-	99.51	31.8	10.34	33.24	210	4	P	H
	*	5500	99.14	-	-	90.24	31.8	10.34	33.24	210	4	A	H
		5455.44	51.38	-22.62	74	42.72	31.62	10.28	33.24	313	347	P	V
		5469.52	50.51	-17.69	68.2	41.77	31.68	10.3	33.24	313	347	P	V
		5460	42.58	-11.42	54	33.9	31.64	10.28	33.24	313	347	A	V
	*	5500	111.85	-	-	102.95	31.8	10.34	33.24	313	347	P	V
	*	5500	101.99	-	-	93.09	31.8	10.34	33.24	313	347	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ax HE20 (Harmonic @ 3m)

WIFI Ant. 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 116 5580MHz		11160	49.83	-24.17	74	60.01	39.72	16.68	66.58	100	0	P	H
		16740	51.38	-16.82	68.2	57.93	40.08	20.11	66.74	100	0	P	H
													H
													H
		11160	48.82	-25.18	74	59	39.72	16.68	66.58	100	0	P	V
		16740	51.04	-17.16	68.2	57.59	40.08	20.11	66.74	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Band 3 5470~5725MHz****WIFI 802.11ax 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 102 5510MHz		5457.76	49.64	-24.36	74	40.97	31.63	10.28	33.24	152	359	P	H
		5470	51.52	-16.68	68.2	42.78	31.68	10.3	33.24	152	359	P	H
		5459.92	42.18	-11.82	54	33.5	31.64	10.28	33.24	152	359	A	H
	*	5510	104.96	-	-	96.07	31.78	10.35	33.24	152	359	P	H
	*	5510	94.86	-	-	85.97	31.78	10.35	33.24	152	359	A	H
		5735.705	50.58	-17.62	68.2	41.43	31.94	10.53	33.32	152	359	P	H
		5459.68	53.28	-20.72	74	44.6	31.64	10.28	33.24	286	347	P	V
		5467.84	54.74	-13.46	68.2	46.02	31.67	10.29	33.24	286	347	P	V
		5459.92	43.95	-10.05	54	35.27	31.64	10.28	33.24	286	347	A	V
	*	5510	107.96	-	-	99.07	31.78	10.35	33.24	286	347	P	V
	*	5510	98.02	-	-	89.13	31.78	10.35	33.24	286	347	A	V
		5748.62	50.49	-17.71	68.2	41.28	31.99	10.54	33.32	286	347	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

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

WIFI Ant. 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 106 5530MHz		5456.56	49.58	-24.42	74	40.91	31.63	10.28	33.24	218	5	P	H
		5460.4	49.32	-18.88	68.2	40.64	31.64	10.28	33.24	218	5	A	H
		5459.68	42.1	-11.9	54	33.42	31.64	10.28	33.24	218	5	P	H
	*	5530	102.13	-	-	93.26	31.74	10.38	33.25	218	5	A	H
	*	5530	91.61	-	-	82.74	31.74	10.38	33.25	218	5	P	H
		5747.045	51.13	-17.07	68.2	41.92	31.99	10.54	33.32	218	5	A	H
		5440.96	50.04	-23.96	74	41.47	31.56	10.26	33.25	255	347	P	V
		5461.6	50.76	-17.44	68.2	42.06	31.65	10.29	33.24	255	347	A	V
		5459.44	43.33	-10.67	54	34.65	31.64	10.28	33.24	255	347	P	V
	*	5530	104.13	-	-	95.26	31.74	10.38	33.25	255	347	A	V
	*	5530	95.03	-	-	86.16	31.74	10.38	33.25	255	347	P	V
		5759.96	50.09	-18.11	68.2	40.86	32.02	10.54	33.33	255	347	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ax HE160 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 HE160 Full CH 114 5570MHz		5436.4	49.25	-24.75	74	40.7	31.55	10.25	33.25	137	2	P	H
		5469.04	48.83	-19.37	68.2	40.09	31.68	10.3	33.24	137	2	A	H
		5459.44	42.38	-11.62	54	33.7	31.64	10.28	33.24	137	2	P	H
	*	5570	94.89	-	-	86.05	31.66	10.44	33.26	137	2	A	H
	*	5570	85.71	-	-	76.87	31.66	10.44	33.26	137	2	P	H
		5740.43	51.59	-16.61	68.2	42.41	31.96	10.54	33.32	137	2	A	H
		5450.32	50.04	-23.96	74	41.41	31.6	10.27	33.24	322	0	P	V
		5467.84	50.32	-17.88	68.2	41.6	31.67	10.29	33.24	322	0	A	V
		5459.44	43.48	-10.52	54	34.8	31.64	10.28	33.24	322	0	P	V
	*	5570	97.51	-	-	88.67	31.66	10.44	33.26	322	0	A	V
	*	5570	89.11	-	-	80.27	31.66	10.44	33.26	322	0	P	V
		5740.43	53.46	-14.74	68.2	44.28	31.96	10.54	33.32	322	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Note symbol

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

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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	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

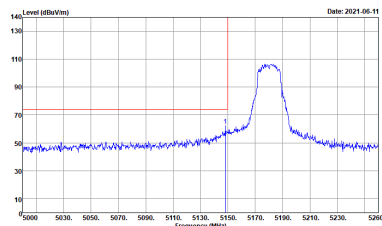
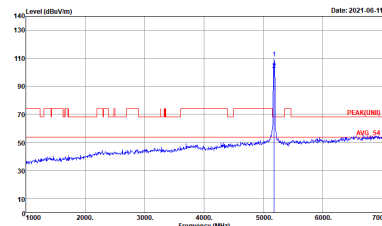
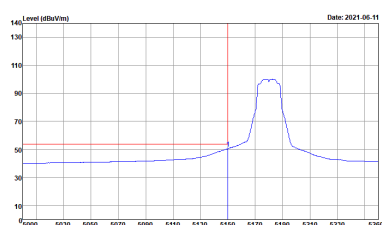
Test Engineer :	Jack Cheng, Lance Chiang and Chuan Chu	Temperature :	21.8~26.8°C
		Relative Humidity :	53.6~68.2%

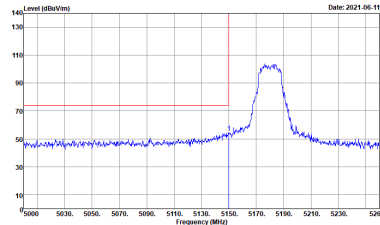
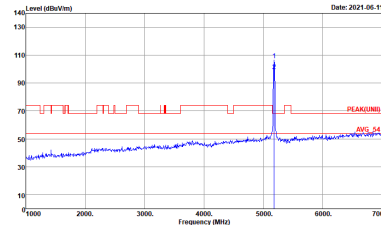
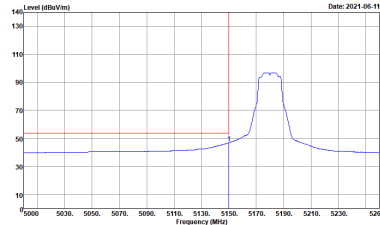
Remark: For Radiated Spurious Emission Test Items, Ant. 1 means Chain A (Aux.) and Ant. 2 means Chain B (Main).

Note symbol

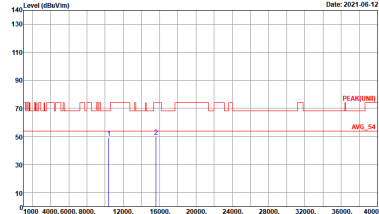
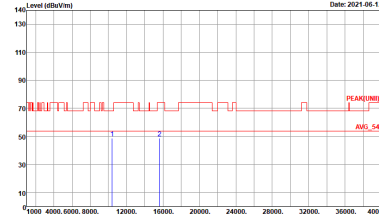
-L	Low channel location
-R	High channel location

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

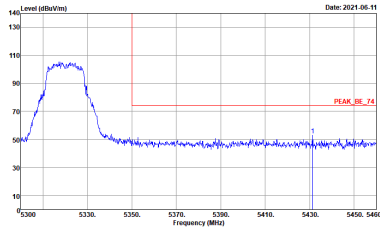
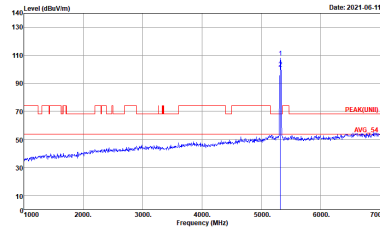
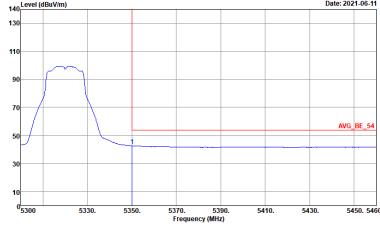
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_91200_1328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_91200_1328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_91200_1328 HORIZONTAL : RBW:1000.000kHz VBW:10.000kHz SWT:Auto	Left blank

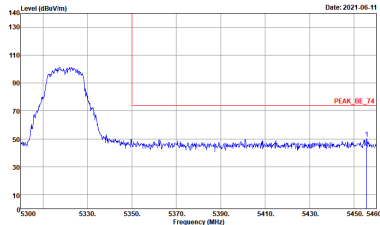
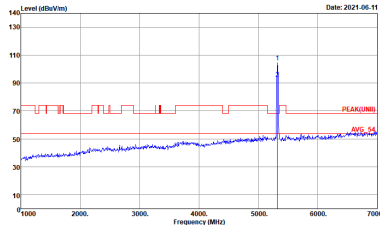
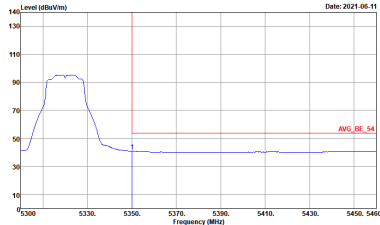
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000kHz VBW:100.000kHz SWT:Auto	Left blank

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

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11a CH40 5220MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_91200_1328 HORIZONTAL	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_91200_1328 VERTICAL

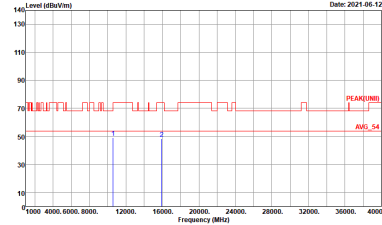
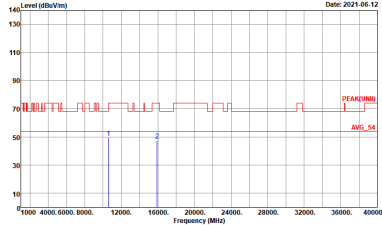
Band 2 - 5250~5350MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_91200_1328 HORIZONTAL : RBW:1000.0000Hz VBW:3000.0000Hz SW1:Auto	 Site : 03CH12-HY Condition : PEAK(UM) 3m HORN_91200_1328 HORIZONTAL : RBW:1000.0000Hz VBW:3000.0000Hz SW1:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_91200_1328 HORIZONTAL : RBW:1000.0000Hz VBW:10.0000Hz SW1:Auto	Left blank

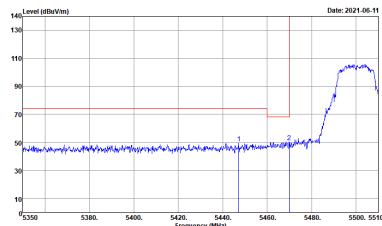
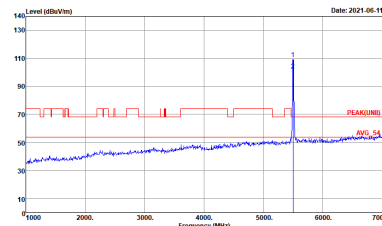
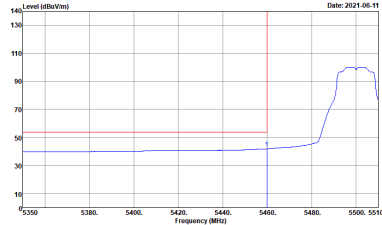
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
2	Vertical	Fundamental
Peak	 Site Condition : 03CH12-HY : PEAK_BE_74 3m HORN_91200_1328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site Condition : 03CH12-HY : PEAK(UNIT) 3m HORN_91200_1328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
	 Site Condition : 03CH12-HY : AVG_BE_54 3m HORN_91200_1328 VERTICAL : RBW:1000.000kHz VBW:1000.000kHz SWT:Auto	Left blank



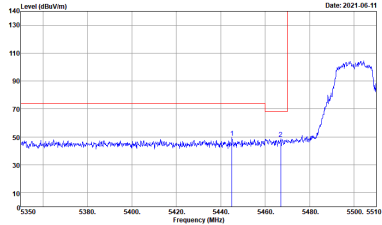
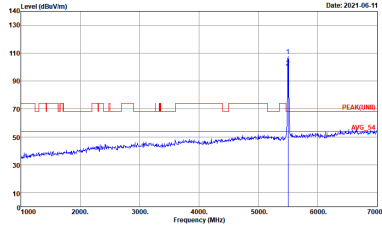
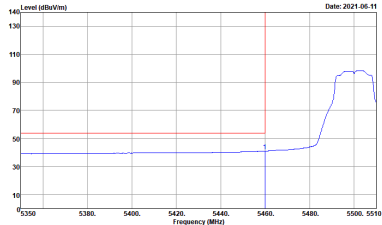
Band 2 5250~5350MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11a CH60 5300MHz	
2	Horizontal	Vertical
Peak Avg.	 Site : 03CH12-4Y Condition : PEAK(UNIT) 3m HORN_9120D_1328 HORIZONTAL	 Site : 03CH12-4Y Condition : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL

Band 3 - 5470~5725MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE(UNIT)_83 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE(UNIT)_83 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11a CH100 5500MHz	
2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT1) 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE(UNIT1)_B3 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

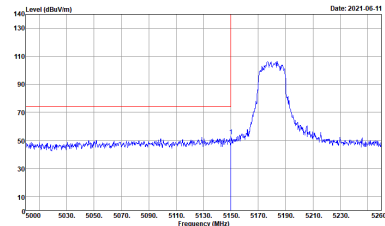
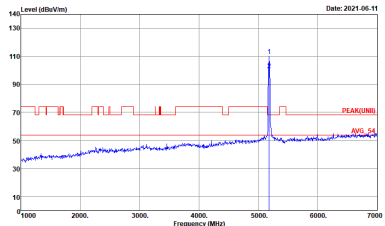
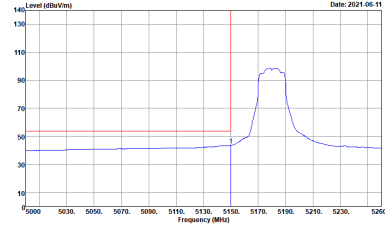


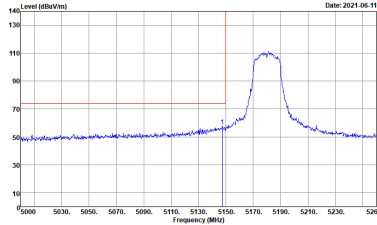
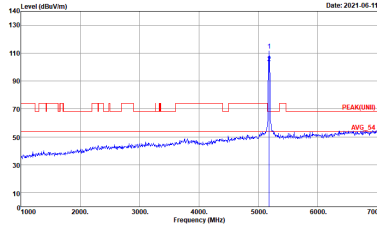
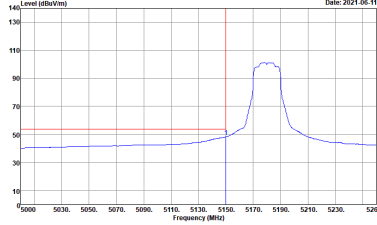
Band 3 - 5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

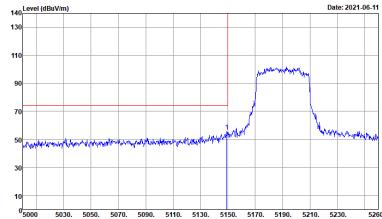
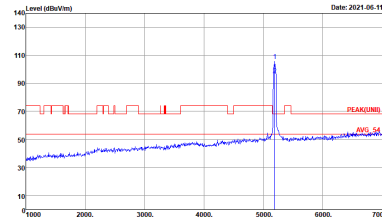
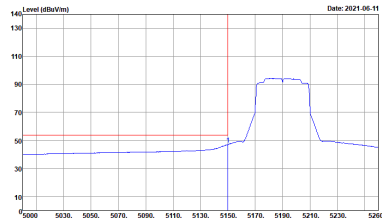
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11a CH116 5580MHz	
2	Horizontal	Vertical
Peak Avg.	Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 HORIZONTAL	Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL

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
Peak	 Site : 03CH12-14Y Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL	 Site : 03CH12-14Y Condition : PEAK(UNIT) 3m HORN_9120D_1328 HORIZONTAL
Avg.	 Site : 03CH12-14Y Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL	Left blank

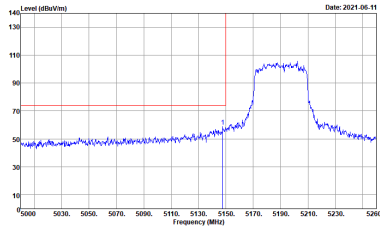
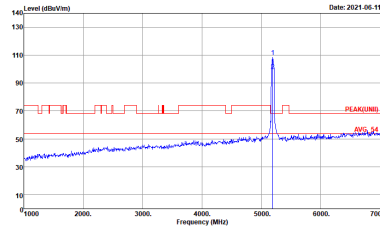
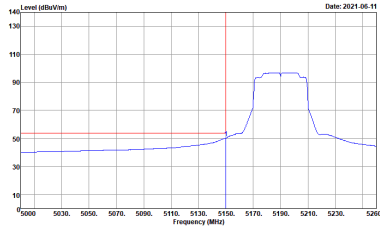
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH36 5180MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL RBW:1000.000kHz VBW:100.000kHz SWT:Auto	Left blank

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

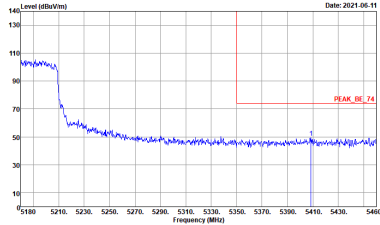
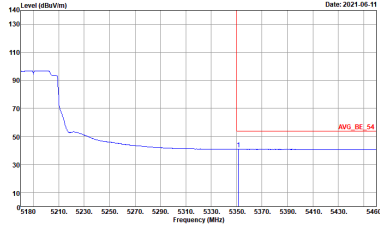
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - R	
1+2	Horizontal	Fundamental
Peak	Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	Site : 03CH12-HY Condition : AVG_BE_64 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	Left blank

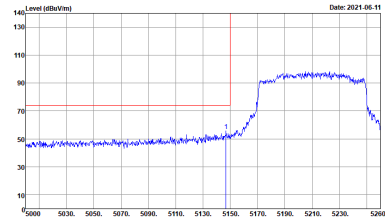
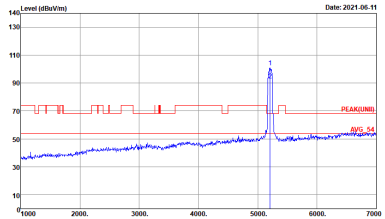
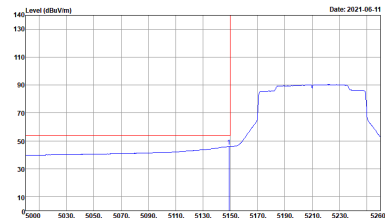
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_91200_1328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(FUND) 3m HORN_91200_1328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_91200_1328 VERTICAL : RBW:1000.000kHz VBW:100.000kHz SWT:Auto	Left blank



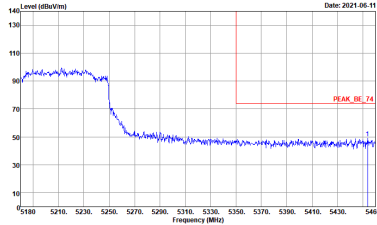
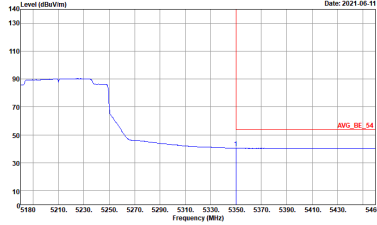
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH38 5190MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:1000.000KHz SWT:Auto	Left blank

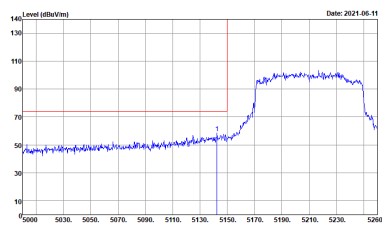
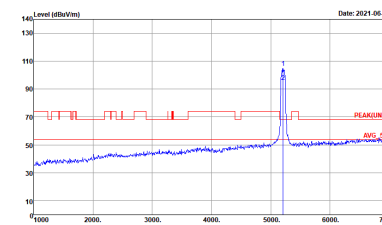
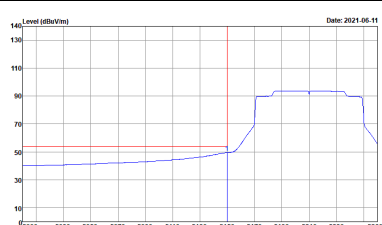


Band 1 5150~5250MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

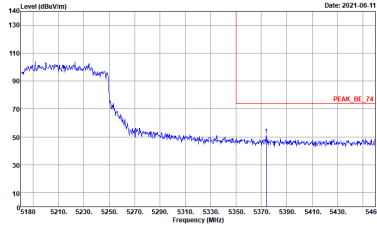
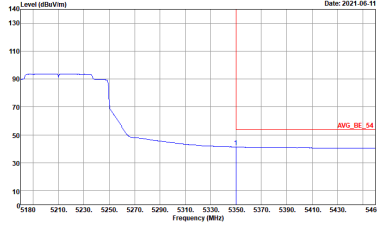
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank



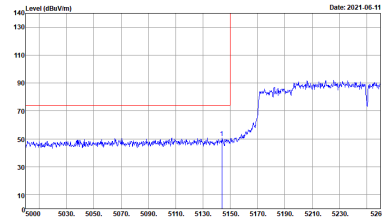
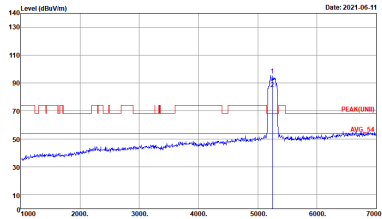
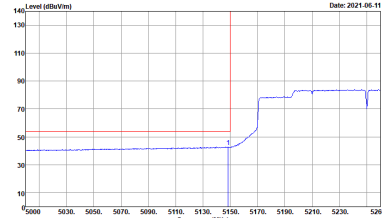
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

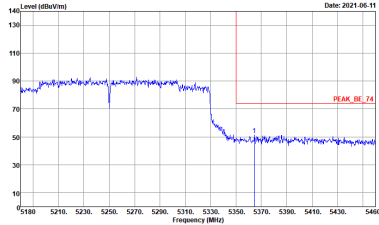
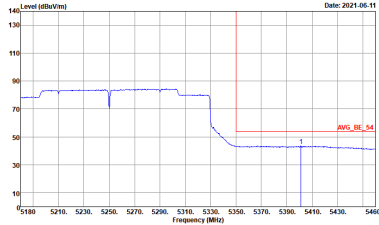


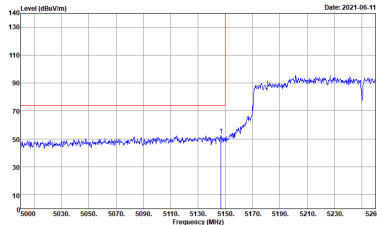
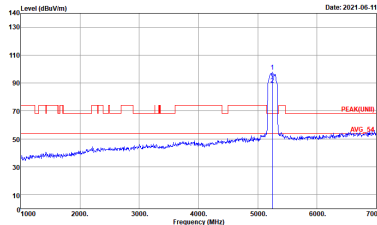
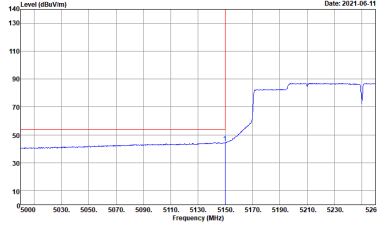
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH42 5210MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

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

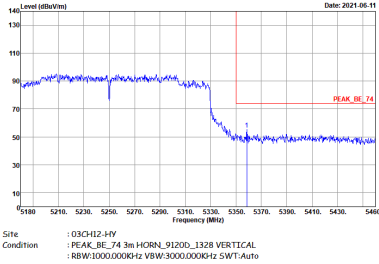
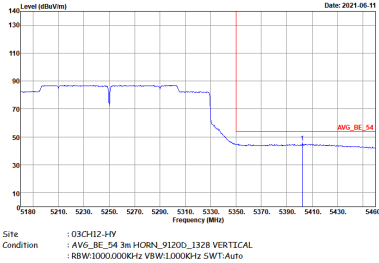
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH50 5250MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_91200_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_91200_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_91200_1328 HORIZONTAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank



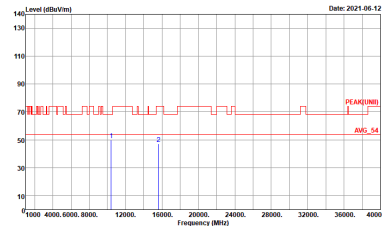
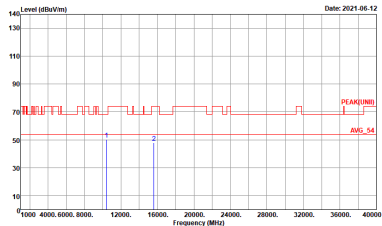
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH50 5250MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH50 5250MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL RBW:1000.000kHz VBW:1.000kHz SWT:Auto	Left blank

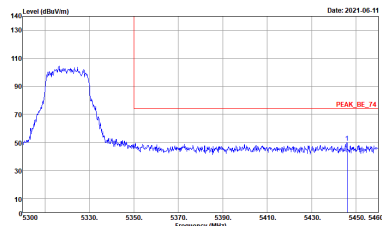
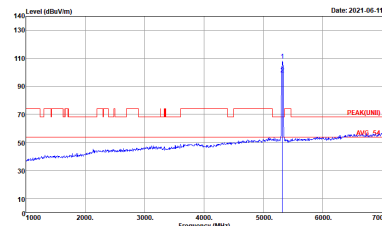
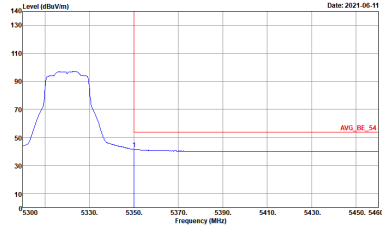


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH50 5250MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

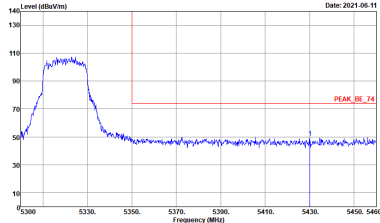
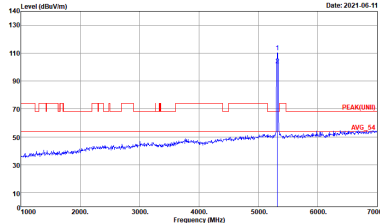
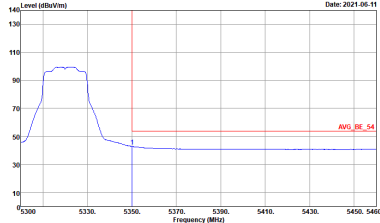
Band 1 - 5150~5250MHz
WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH40 5200MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_91200_1328 HORIZONTAL	 Site : 03CH12-HY Condition : PEAK(UNII) 3m HORN_91200_1328 VERTICAL

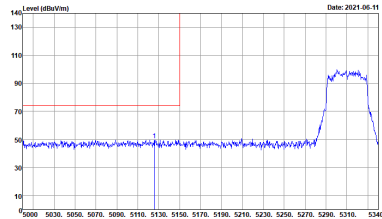
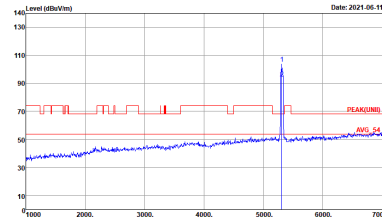
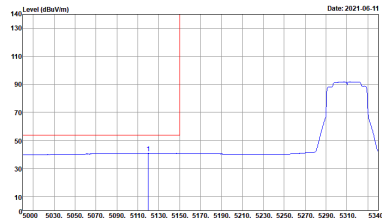
Band 2 - 5250~5350MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH64 5320MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_91200_1328 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SW1:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_91200_1328 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SW1:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_91200_1328 HORIZONTAL : RBW:1000.0000kHz VBW:0.0100kHz SW1:Auto	Left blank

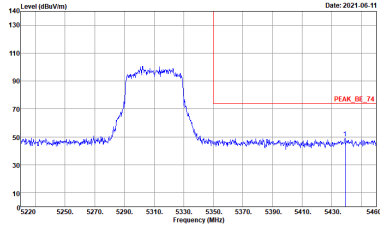
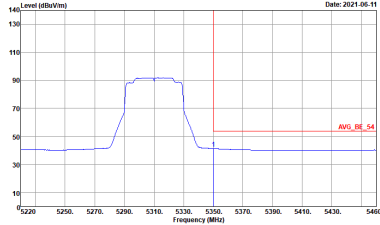


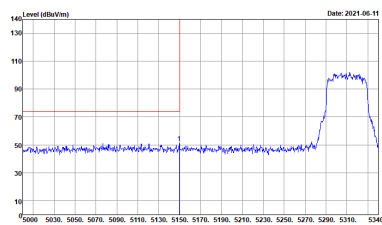
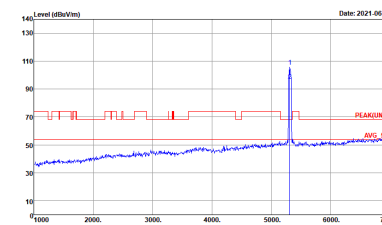
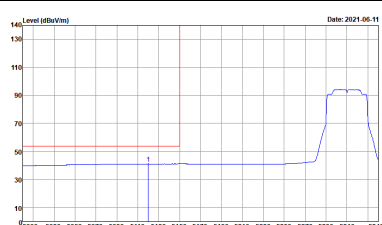
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH64 5320MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(FUND) 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	Left blank

Band 2 - 5250~5350MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

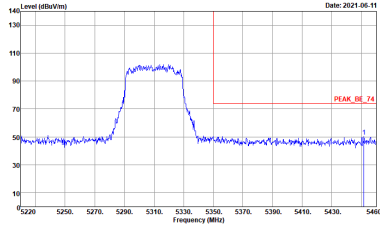
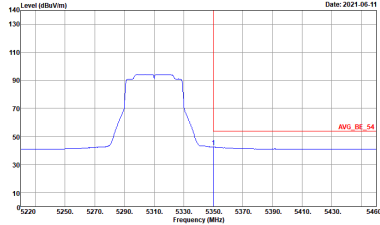
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH62 5310 - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank



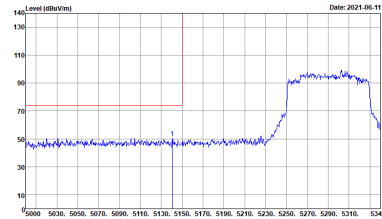
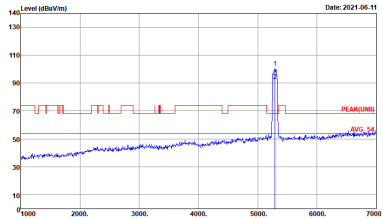
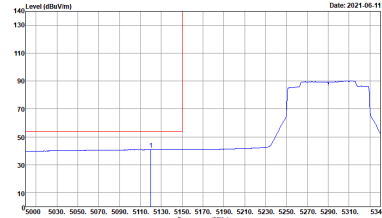
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH62 5310 - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH12-HY Condition : AVG_BE_64 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:1000.000KHz SWT:Auto	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH62 5310 - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(FUND) 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	Left blank

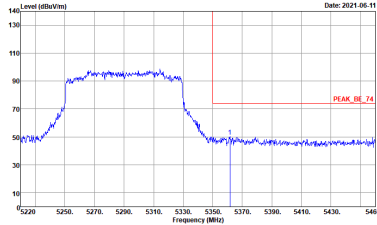
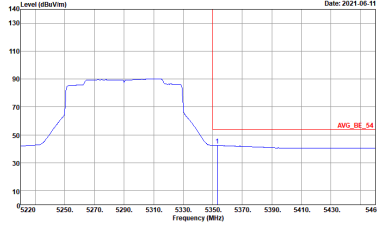


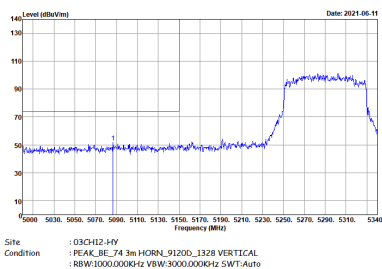
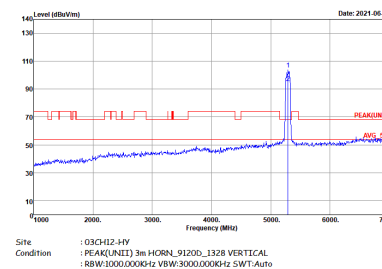
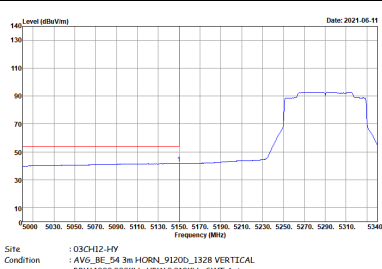
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH62 5310 - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_91200_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH12-HY Condition : AVG_BE_64 3m HORN_91200_1328 VERTICAL : RBW:1000.000KHz VBW:1000.000KHz SWT:Auto	Left blank

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

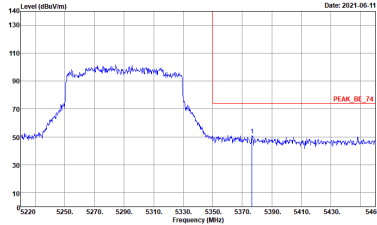
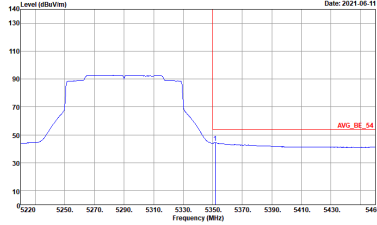
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH58 5290MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH58 5290MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000kHz VBW:10.000kHz SWT:Auto	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH58 5290MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

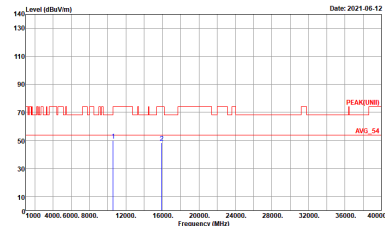
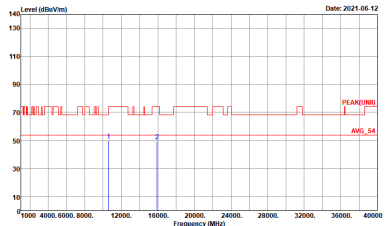


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH58 5290MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE_74 3m HORN_9120D_1328 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH12-HY Condition : AVG_BE_54 3m HORN_9120D_1328 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



Band 2 - 5250~5350MHz

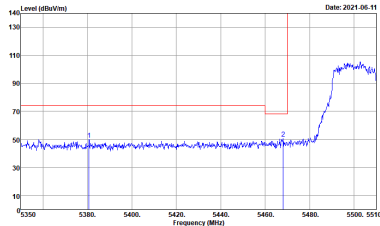
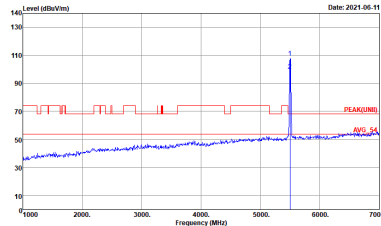
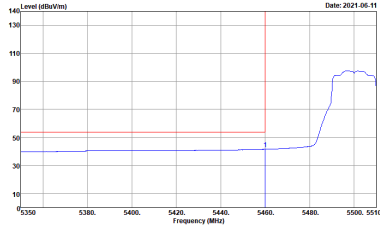
WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH60 5300MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_91200_1328 HORIZONTAL	 Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_91200_1328 VERTICAL

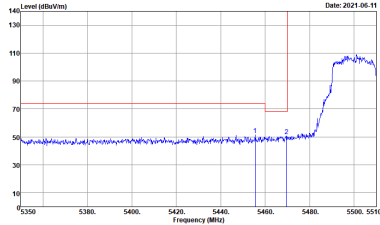
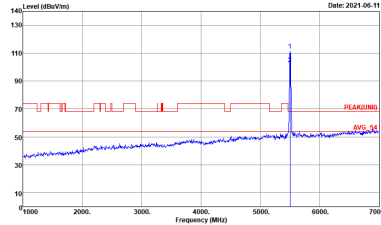
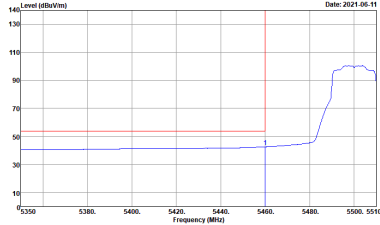


Band 3 - 5470~5725MHz

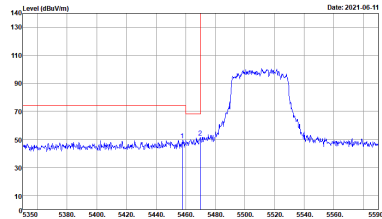
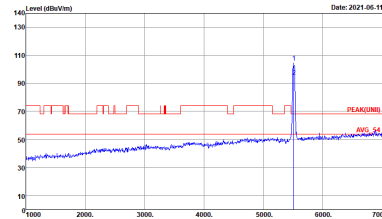
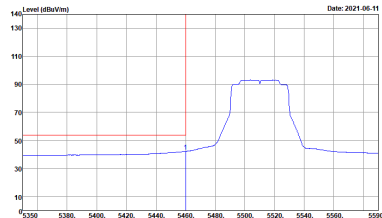
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH100 5500MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT1) 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE(UNIT1)_B3 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	Left blank

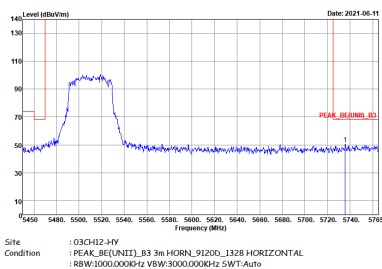


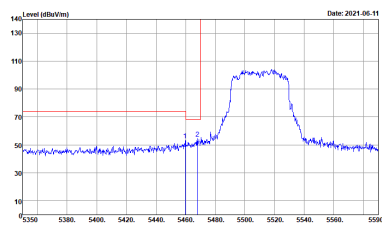
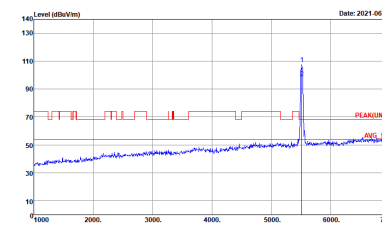
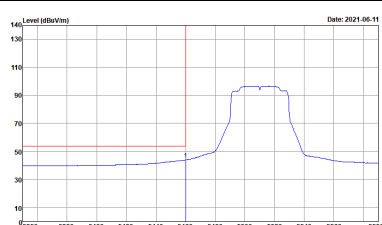
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH100 5500MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT1) 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE(UNIT1)_B3 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

Band 3 - 5470~5725MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

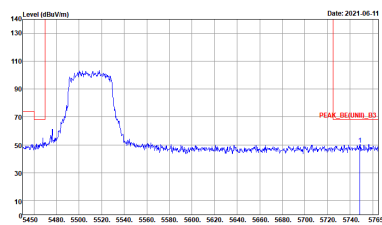
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH102 5510MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT1) 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE(UNIT1)_B3 3m HORN_9120D_1328 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH102 5510MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

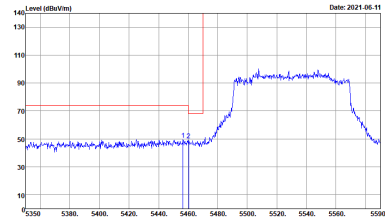
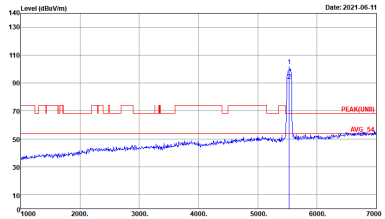
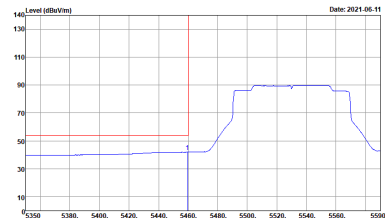
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH102 5510MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT1) 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE(UNIT1)_B3 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank



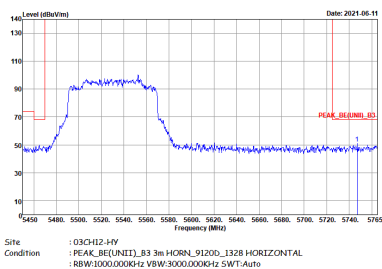
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH102 5510MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH2-47Y Condition : PEAK_BE[UNIT]_B3 3m HORN_9120D_1328 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Date: 2021.06.11	Left blank



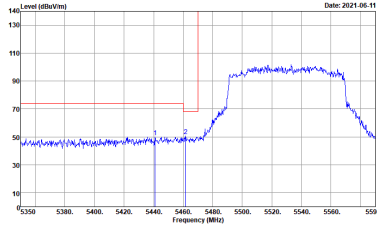
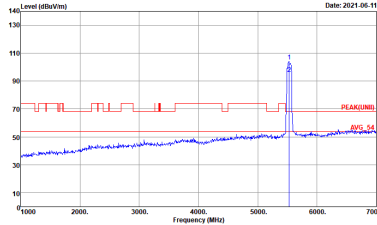
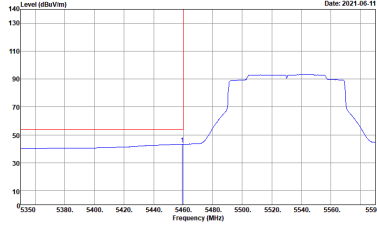
Band 3 5470~5725MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH106 5530MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT1)_B3 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE(UNIT1)_B3 3m HORN_91200_1328 HORIZONTAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

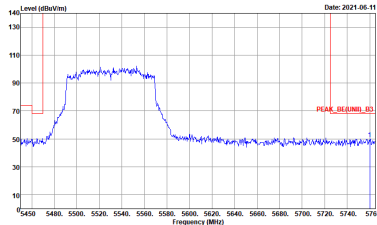


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH106 5530MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

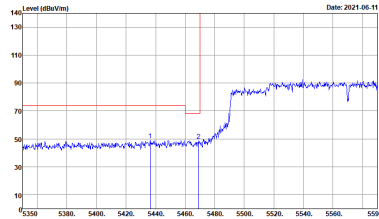
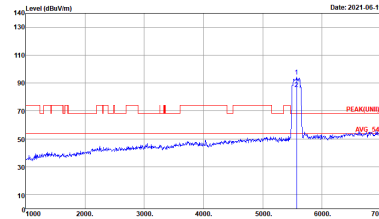
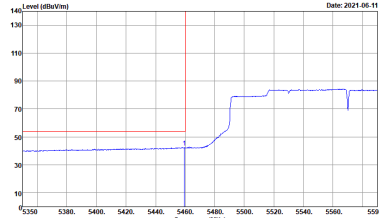


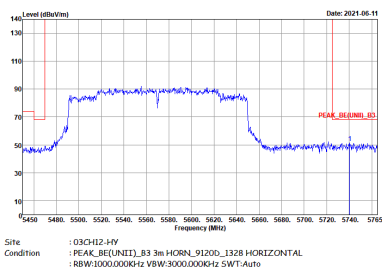
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH106 5530MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE(UNIT1)_B3 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT1) 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE(UNIT1)_B3 3m HORN_9120D_1328 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank

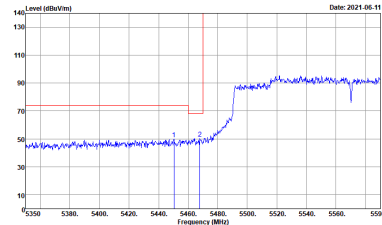
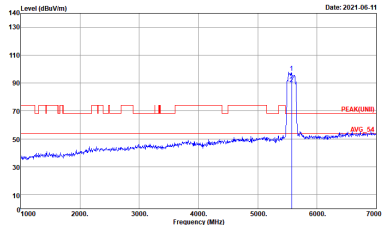
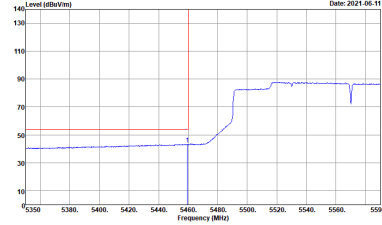


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH106 5530MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-44Y Condition : PEAK_BE(UNIT)_B3 3m HORN_9120D_1328 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Date: 2021.06.11	Left blank

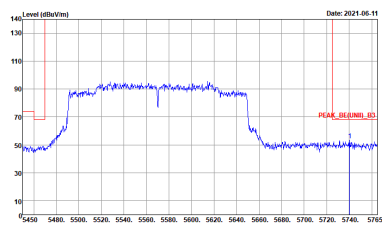
Band 3 5470~5725MHz
WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH114 5570MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH12-HY Condition : PEAK_BE(UNIT)_B3 3m HORN_91200_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH12-HY Condition : PEAK(UNIT)_B3 3m HORN_91200_1328 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH12-HY Condition : AVG_BE(UNIT)_B3 3m HORN_91200_1328 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH114 5570MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH114 5570MHz - L	
1+2	Vertical	Fundamental
Peak	 Site: 03CH12-HY Condition: PEAK_BE(UNIT1)_B3 3m HORN_9120D_1328 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site: 03CH12-HY Condition: PEAK(UNIT1) 3m HORN_9120D_1328 VERTICAL RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site: 03CH12-HY Condition: AVG_BE(UNIT1)_B3 3m HORN_9120D_1328 VERTICAL RBW:1000.000kHz VBW:1.000kHz SWT:Auto	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ax HE160 Full CH114 5570MHz - R	
1+2	Vertical	Fundamental
Peak	 Site : 03CH12-44Y Condition : PEAK_BE(UNIT)_B3 3m HORN_9120D_1328 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Date: 2021.06.11	Left blank



Band 3 - 5470~5725MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

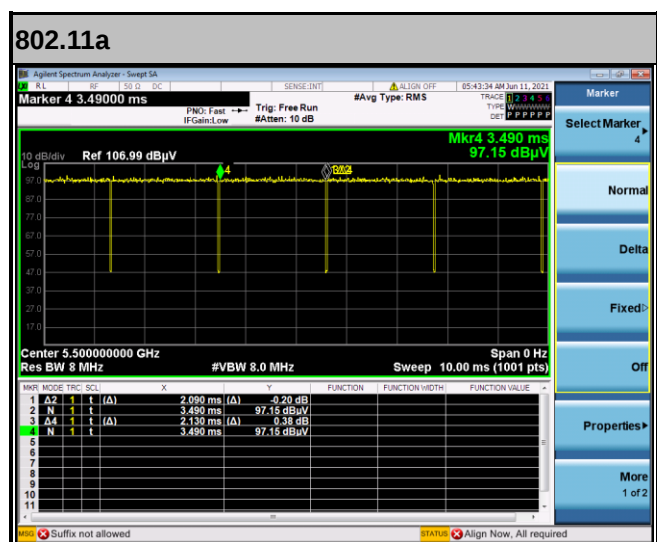
WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH116 5580MHz	
1+2	Horizontal	Vertical
Peak Avg.	Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_91200_1328 HORIZONTAL	Site : 03CH12-HY Condition : PEAK(UNIT) 3m HORN_91200_1328 VERTICAL



Appendix E. Duty Cycle Plots

Chain	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
B	802.11a	98.12	-	-	10Hz	0.08
A+B	5GHz 802.11ax HE20 Full RU	98.75	-	-	10Hz	0.05
A+B	5GHz 802.11ax HE40 Full RU	99.00	-	-	10Hz	0.05
A+B	5GHz 802.11ax HE80 Full RU	99.00	-	-	10Hz	0.05
A+B	5GHz 802.11ax HE160 Full RU	96.21	2290	0.44	1kHz	0.17

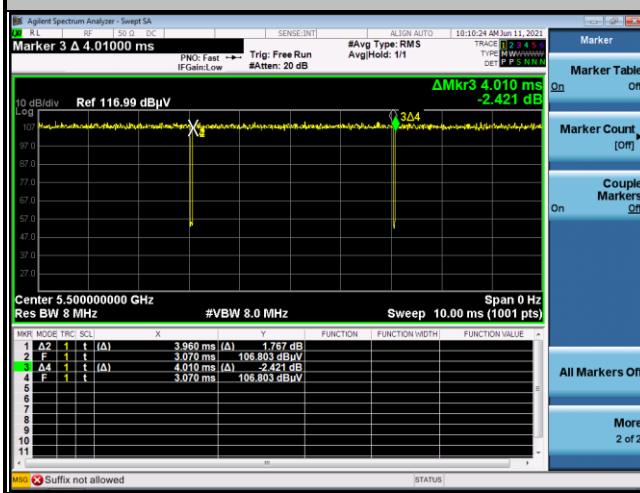
<Chain B>



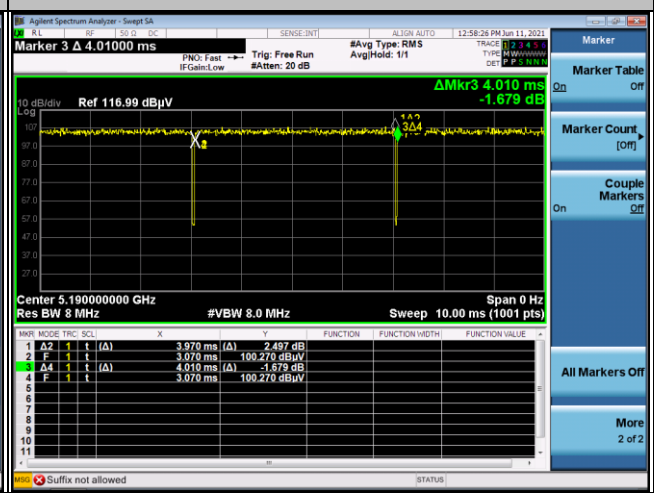


MIMO <Chain A+B>

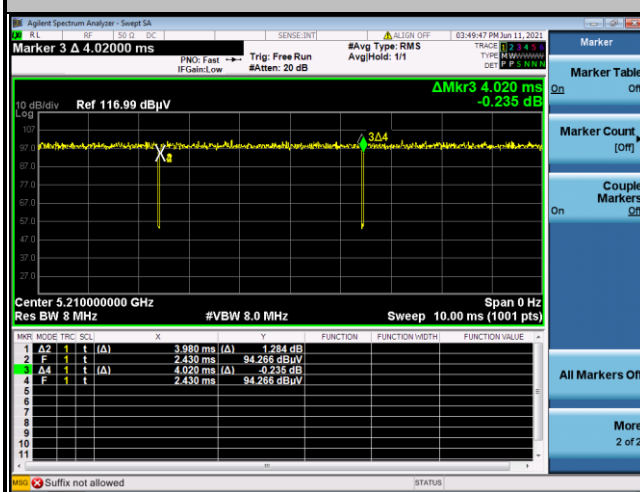
802.11ax HE20 Full RU



802.11ax HE40 Full RU



802.11ax HE80 Full RU



802.11ax HE160 Full RU

