



# FCC RADIO TEST REPORT

**FCC ID** : QYLAX201NG  
**Equipment** : WLAN Module  
**Brand Name** : Getac  
**Model Name** : AX201NGW  
**Applicant** : Getac Technology Corporation.  
5F., Building A, No. 209, Sec.1,  
Nangang Rd.,Nangang Dist., Taipei  
City 11568, Taiwan, R.O.C.  
**Standard** : FCC Part 15 Subpart C §15.247

The product was received on Jan. 13, 2021 and testing was started from Jan. 27, 2021 and completed on Mar. 09, 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.

Approved by: Louis Wu

**Sporton International Inc. EMC & Wireless Communications Laboratory**

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



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### History of this test report

Report No.	Version	Description	Issued Date
FR111325C	01	Initial issue of report	Apr. 01, 2021



## Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
-	15.247(a)(2)	6dB Bandwidth	-	See Note
-	2.1049	99% Occupied Bandwidth	-	See Note
3.1	15.247(b)	Power Output Measurement	Pass	-
-	15.247(e)	Power Spectral Density	-	See Note
-	15.247(d)	Conducted Band Edges	-	See Note
		Conducted Spurious Emission	-	See Note
3.2	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	Pass	-
3.3	15.207	AC Conducted Emission	Pass	-
3.4	15.203 & 15.247(b)	Antenna Requirement	Pass	-

**Note:** The module (Model: AX201NGW) 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: Wii Chang**

**Report Producer: Ruby Zou**



# 1 General Description

## 1.1 Product Feature of Equipment Under Test

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

Product Specification subjective to this standard	
Sample 1	EUT with Host 1
Sample 2	EUT with Host 2
Sample 3	EUT with Host 3
Antenna Type	WLAN <Main>: PIFA Antenna <Aux.>: PIFA Antenna Bluetooth: PIFA Antenna

Antenna information		
2400 MHz ~ 2483.5 MHz	Peak Gain (dBi)	Main: 2.96 Aux.: 1.3

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

The product was installed into Tablet (Brand Name: Getac, Model Name: F110, F110G6, F110-Ex, F110-621, F110-601) during test, and the host information was recorded in the following table.

Host Information	
Host 1	Host with SKU A
Host 2	Host with SKU B
Host 3	Host with SKU C

SKU	SKU A	SKU B	SKU C
CPU	i3-1115G7 (Non Vpro)	i5-1135G7 (Non Vpro)	i7-1165G7 (Vpro)
DDR	Kingston DDR4-3200 8GB	Kingston DDR4-3200 16GB	Kingston DDR4-3200 32GB
SSD	256GB	512GB	1TB
PANEL	Full HD AUO	Full HD AUO	Full HD AUO
DIGITIZER	EMRright Digitizer	N/A	EMRright Digitizer
OPTION BAY	Micro SD	2D Barcode Reader	RS232 + LAN
Expansion Bay	N/A	Smart Card	Smart Card
Right side option	Finger Print	NXP RFID(PN7462)	Finger Print
WLAN/BT	Intel AX201	Intel AX201	Intel AX201
WWAN(4G)	NA	EM7511	EM7511
GPS/GNS	GPS/GNSS (MC-1010- V2b)	EM7511	EM7511
Rear 8M Camera	Support	Support	Support
Webcam FHD	Support	Not Support	Not Support
IR Webcam	Not Support	Support	Support
USB3.2 Gen2 x 1 Type-A	Support	Support	Support
Type-C (thunder bolt)	Support	Support	Support
Audio/MIC	Support	Support	Support



## 1.2 Modification of EUT

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

## 1.3 Testing Location

<b>Test Site</b>	Sporton International Inc. EMC & Wireless Communications Laboratory
<b>Test Site Location</b>	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
<b>Test Site No.</b>	<b>Sporton Site No.</b> TH05-HY, CO05-HY

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

<b>Test Site</b>	Sporton International Inc. Wensan Laboratory
<b>Test Site Location</b>	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
<b>Test Site No.</b>	<b>Sporton Site No.</b> 03CH15-HY (TAF Code: 3786)
<b>Remark</b>	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 TW0007

## 1.4 Applicable Standards

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

- ♦ FCC Part 15 Subpart C §15.247
- ♦ FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v05r02
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2013

**Remark:**

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



## 2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) 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)
2400-2483.5 MHz	1	2412	7	2442
	2	2417	8	2447
	3	2422	9	2452
	4	2427	10	2457
	5	2432	11	2462
	6	2437		



## 2.2 Test Mode

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

### Single Antenna

Modulation	Data Rate
802.11b	1 Mbps
802.11g	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ax HE20	MCS0
802.11ax HE40	MCS0

### MIMO Antenna

Modulation	Data Rate
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ax HE20	MCS0
802.11ax HE40	MCS0



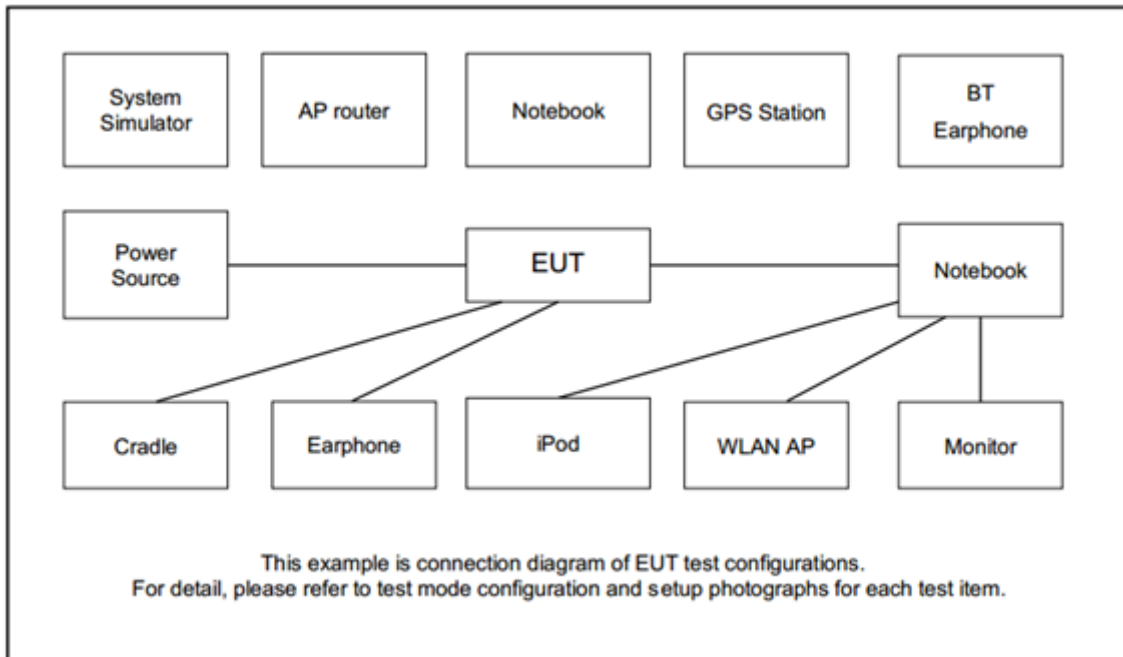


Test Cases	
<b>AC Conducted Emission</b>	Mode 1 :WLAN (2.4GHz) Link + Bluetooth Link + H-Pattern + Earphone + Adapter for Sample 1 Mode 2 :WLAN (2.4GHz) Link + Bluetooth Link + H-Pattern + Earphone + Adapter for Sample 2 Mode 3 :WLAN (2.4GHz) Link + Bluetooth Link + H-Pattern + Earphone + Adapter for Sample 3
<b>Remark:</b> 1. The worst case of conducted emission is mode 2; only the test data of it was reported. 2. For Radiated Test Cases, the tests were performed with Adapter 1, Battery 2 and Sample 2.	

Ch. #	2400-2483.5 MHz		
	802.11b	802.11ax HE20	802.11n HT40
Low	01	-	03
Middle	-	06	-
High	-	-	-

**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, 1.2 m DC O/P: Shielded, 1.8 m

### 2.5 EUT Operation Test Setup

The RF test items, utility “DRTU\_Version 12.1947.0-10428” 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 Output Power Measurement

##### 3.1.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5 MHz, the limit for output power is 30 dBm. If transmitting antenna with directional gain greater than 6 dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

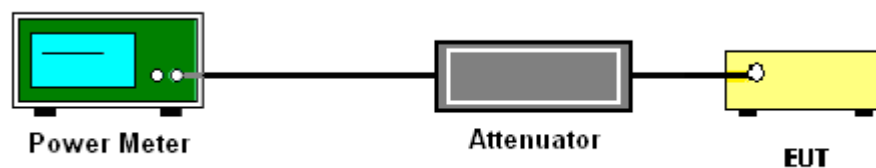
##### 3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

##### 3.1.3 Test Procedures

1. For Peak Power, the testing follows ANSI C63.10 Section 11.9.1.3 PKPM1
2. For Average Power, the testing follows ANSI C63.10 Section 11.9.2.3.1 Method AVGPM
3. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. Set the maximum power setting and enable the EUT to transmit continuously.
5. Measure the conducted output power and record the results in the test report.
6. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

##### 3.1.4 Test Setup



##### 3.1.5 Test Result of Peak Output Power

Please refer to Appendix A.

##### 3.1.6 Test Result of Average Output Power (Reporting Only)

Please refer to Appendix A.



### 3.2 Radiated Band Edges and Spurious Emission Measurement

#### 3.2.1 Limit of Radiated band edge and Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

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

#### 3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

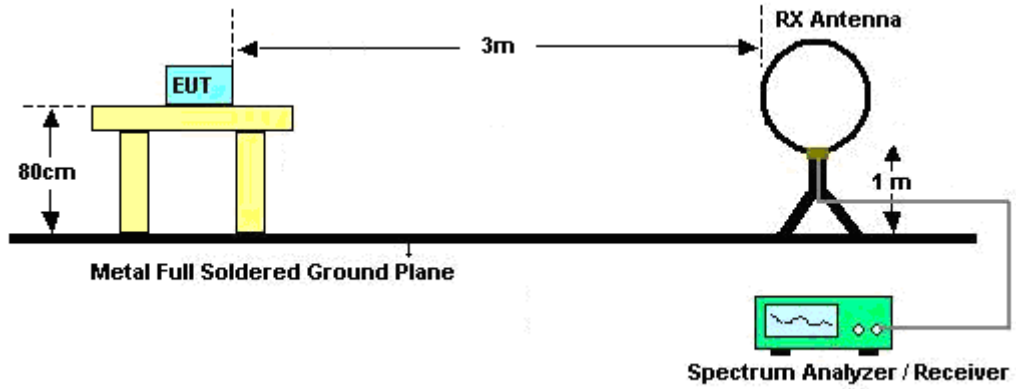


### 3.2.3 Test Procedures

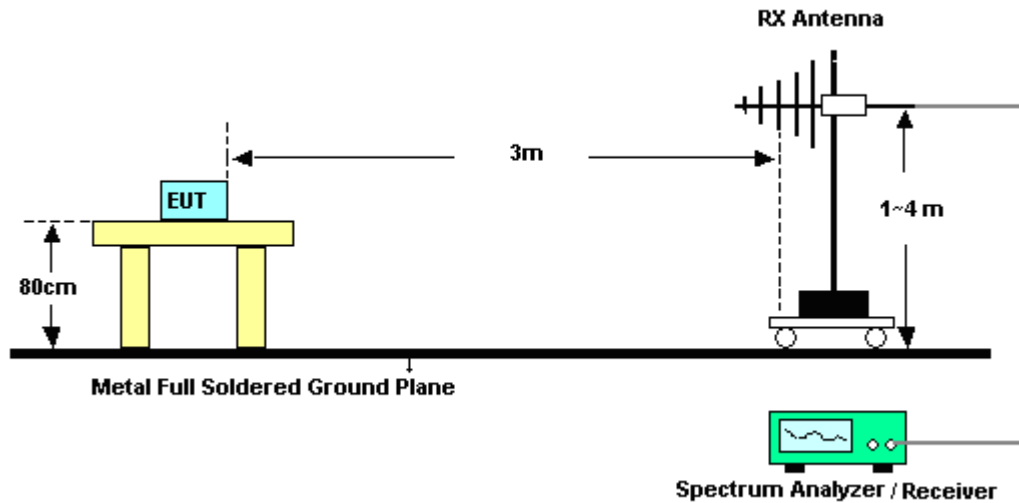
1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For testing below 1 GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1 GHz, the emission level of the EUT in peak mode was 20 dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
8. Use the following spectrum analyzer settings:
  - (1) Span shall wide enough to fully capture the emission being measured;
  - (2) Set RBW = 100 kHz for  $f < 1$  GHz;  $VBW \geq RBW$ ; Sweep = auto; Detector function = peak; Trace = max hold;
  - (3) Set RBW = 1 MHz,  $VBW = 3$  MHz for  $f \geq 1$  GHz for peak measurement.  
For average measurement:
    - $VBW = 10$  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.

### 3.2.4 Test Setup

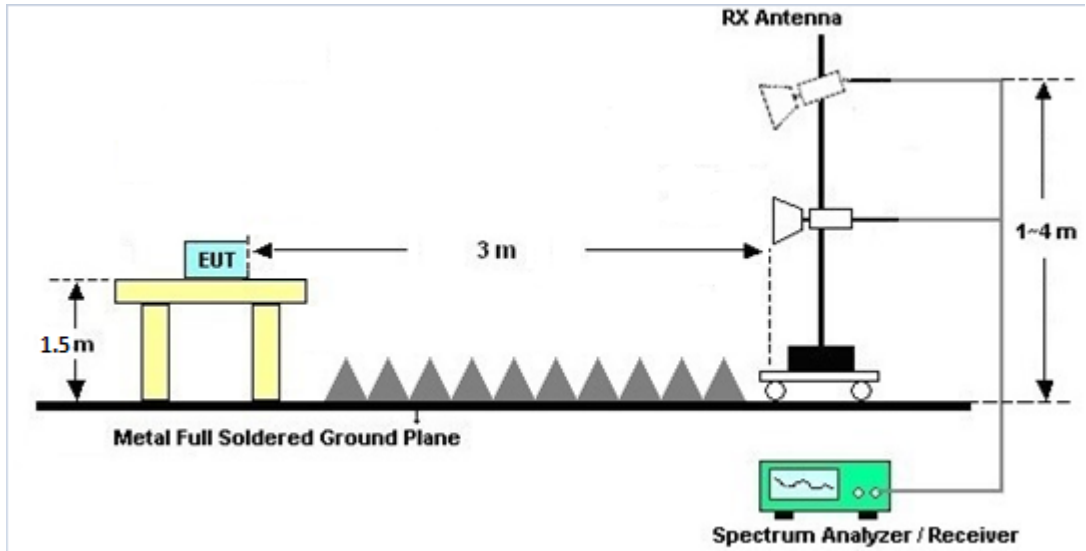
For radiated emissions below 30MHz



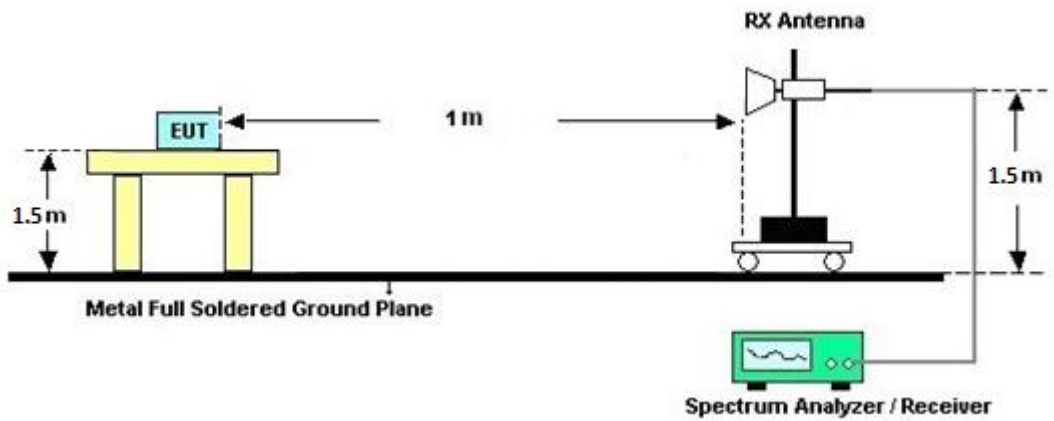
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz





### **3.2.5 Test Results of Radiated Spurious Emissions (9kHz ~ 30MHz)**

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

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

### **3.2.6 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 Emission (30MHz ~ 10<sup>th</sup> Harmonic)**

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 (dBµV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

\*Decreases with the logarithm of the frequency.

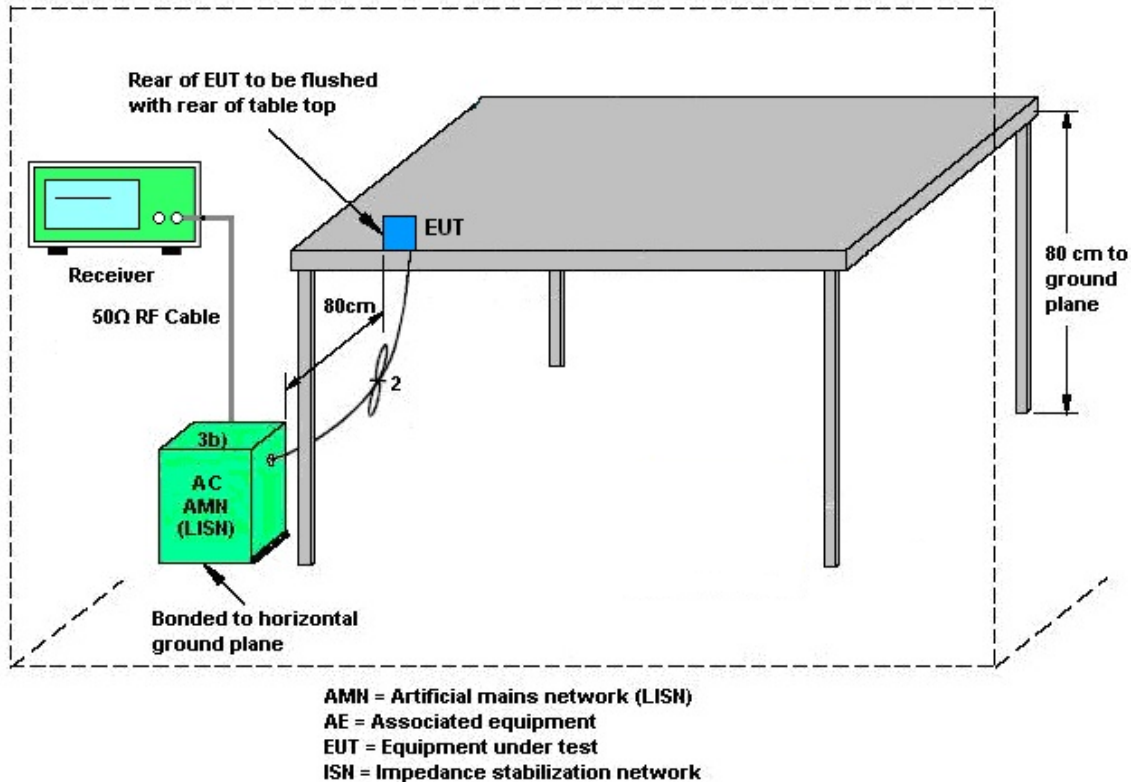
#### 3.3.2 Measuring Instruments

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, and it 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 (IF bandwidth = 9kHz) 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 directional gain of transmitting Antennas is greater than 6 dBi, the power shall be reduced by the same level in dB comparing to gain minus 6 dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

### **3.4.2 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
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jul. 14, 2020	Mar. 06, 2021~ Mar. 09, 2021	Jul. 13, 2021	Radiation (03CH15-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	41912 & 05	30MHz~1GHz	Feb. 08, 2021	Mar. 06, 2021~ Mar. 09, 2021	Feb. 07, 2022	Radiation (03CH15-HY)
Amplifier	SONOMA	310N	363440	9kHz~1GHz	Dec. 28, 2020	Mar. 06, 2021~ Mar. 09, 2021	Dec. 27, 2021	Radiation (03CH15-HY)
Horn Antenna	SCHWARZB ECK	BBHA 9120 D	9120D-016 20	1GHz~18GHz	Nov. 03, 2020	Mar. 06, 2021~ Mar. 09, 2021	Nov. 02, 2021	Radiation (03CH15-HY)
SHF-EHF Horn Antenna	SCHWARZB ECK	BBHA 9170	BBHA9170 251	18GHz~40GHz	Dec. 02, 2020	Mar. 06, 2021~ Mar. 09, 2021	Dec. 01, 2021	Radiation (03CH15-HY)
Preamplifier	Jet-Power	JPA0118-55-3 03	171000180 0055006	1GHz~18GHz	May 07, 2020	Mar. 06, 2021~ Mar. 09, 2021	May 06, 2021	Radiation (03CH15-HY)
Preamplifier	Keysight	83017A	MY5327019 5	1GHz~26.5GHz	Aug. 21, 2020	Mar. 06, 2021~ Mar. 09, 2021	Aug. 20, 2021	Radiation (03CH15-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Oct. 27, 2020	Mar. 06, 2021~ Mar. 09, 2021	Oct. 26, 2021	Radiation (03CH15-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY5413008 5	20MHz~8.4GHz	Nov. 02, 2020	Mar. 06, 2021~ Mar. 09, 2021	Nov. 01, 2021	Radiation (03CH15-HY)
Spectrum Analyzer	Agilent	E4446A	MY5018013 6	3Hz~44GHz	May 04, 2020	Mar. 06, 2021~ Mar. 09, 2021	May 03, 2021	Radiation (03CH15-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Mar. 06, 2021~ Mar. 09, 2021	N/A	Radiation (03CH15-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Mar. 06, 2021~ Mar. 09, 2021	N/A	Radiation (03CH15-HY)
Software	Audix	E3 6.2009-8-24(k 5)	RK-000451	N/A	N/A	Mar. 06, 2021~ Mar. 09, 2021	N/A	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104, 102E	MY36980/4, MY9838/4P E,508405/2 E	30MHz~18G	Nov. 16, 2020	Mar. 06, 2021~ Mar. 09, 2021	Nov. 15, 2021	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz-40GHz	Feb. 22, 2021	Mar. 06, 2021~ Mar. 09, 2021	Feb. 21, 2022	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30MHz-40GHz	Feb. 22, 2021	Mar. 06, 2021~ Mar. 09, 2021	Feb. 21, 2022	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4P E	9kHz~30MHz	Mar. 11, 2021	Mar. 06, 2021~ Mar. 09, 2021	Mar. 10, 2022	Radiation (03CH15-HY)
Filter	Wainwright	WLJ4-1000-15 30-6000-40ST	SN4	1.53GHz Low Pass Filter	Jul. 03, 2020	Mar. 06, 2021~ Mar. 09, 2021	Jul. 02, 2021	Radiation (03CH15-HY)
Filter	Wainwright	WHKX12-2700 -3000-18000-6 0ST	SN4	3GHz High Pass Filter	Sep. 16, 2020	Mar. 06, 2021~ Mar. 09, 2021	Sep. 15, 2021	Radiation (03CH15-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Feb. 02, 2021	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102317	9kHz~3.6GHz	Sep. 11, 2020	Feb. 02, 2021	Sep. 10, 2021	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 18, 2020	Feb. 02, 2021	Nov. 17, 2021	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 16, 2020	Feb. 02, 2021	Nov. 15, 2021	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Feb. 02, 2021	N/A	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 31, 2020	Feb. 02, 2021	Dec. 30, 2021	Conduction (CO05-HY)
Pulse Limiter	SCHWARZB ECK	ESHVTSD 9561-F N3-Z2	109561-F N00373085 1	9kHz-200MHz	Nov. 02, 2020	Feb. 02, 2021	Nov. 01, 2021	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34893241	N/A	Mar. 02, 2020	Jan. 27, 2021~ Feb. 19, 2021	Mar. 01, 2021	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054S NO12	10MHz~6GHz	Dec. 16, 2020	Jan. 27, 2021~ Feb. 19, 2021	Dec. 15, 2021	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz ~ 40GHz	Jul. 22, 2020	Jan. 27, 2021~ Feb. 19, 2021	Jul. 21, 2021	Conducted (TH05-HY)
Switch Box & RF Cable	EM Electronics	EMSW18SE	SW200302	N/A	Mar. 17, 2020	Jan. 27, 2021~ Feb. 19, 2021	Mar. 16, 2021	Conducted (TH05-HY)
Power Meter	Anritsu	ML2495A	1218006	N/A	Oct. 18, 2020	Jan. 27, 2021~ Feb. 19, 2021	Oct. 17, 2021	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1207363	300MHz~40GHz	Oct. 18, 2020	Jan. 27, 2021~ Feb. 19, 2021	Oct. 17, 2021	Conducted (TH05-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
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### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.7
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### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.3
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### Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.9
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**Appendix A. Test Result of Conducted Test Items**

Test Engineer:	Kai Liao	Temperature:	22.5~24.8	°C
Test Date:	2021/01/27 ~ 2021/02/19	Relative Humidity:	55.1~58.9	%

**TEST RESULTS DATA**  
**Peak Output Power**

2.4GHz Band Single Antenna																
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
11b	1Mbps	1	1	2412	21.03	20.71		30.00	30.00	1.30	2.96	22.33	23.67	36.00	36.00	Pass
11b	1Mbps	1	6	2437	21.24	20.81		30.00	30.00	1.30	2.96	22.54	23.77	36.00	36.00	Pass
11b	1Mbps	1	11	2462	21.15	20.67		30.00	30.00	1.30	2.96	22.45	23.63	36.00	36.00	Pass
11b	1Mbps	1	12	2467	21.13	20.61		30.00	30.00	1.30	2.96	22.43	23.57	36.00	36.00	Pass
11b	1Mbps	1	13	2472	21.15	20.37		30.00	30.00	1.30	2.96	22.45	23.33	36.00	36.00	Pass
11g	6Mbps	1	1	2412	21.97	21.62		30.00	30.00	1.30	2.96	23.27	24.58	36.00	36.00	Pass
11g	6Mbps	1	6	2437	22.07	21.77		30.00	30.00	1.30	2.96	23.37	24.73	36.00	36.00	Pass
11g	6Mbps	1	11	2462	21.83	21.48		30.00	30.00	1.30	2.96	23.13	24.44	36.00	36.00	Pass
11g	6Mbps	1	12	2467	21.55	21.38		30.00	30.00	1.30	2.96	22.85	24.34	36.00	36.00	Pass
11g	6Mbps	1	13	2472	20.88	22.21		30.00	30.00	1.30	2.96	22.18	25.17	36.00	36.00	Pass
HT20	MCS0	1	1	2412	18.04	18.46		30.00	30.00	1.30	2.96	19.34	21.42	36.00	36.00	Pass
HT20	MCS0	1	6	2437	21.10	21.32		30.00	30.00	1.30	2.96	22.40	24.28	36.00	36.00	Pass
HT20	MCS0	1	11	2462	18.01	17.57		30.00	30.00	1.30	2.96	19.31	20.53	36.00	36.00	Pass
HT20	MCS0	1	12	2467	16.76	16.33		30.00	30.00	1.30	2.96	18.06	19.29	36.00	36.00	Pass
HT20	MCS0	1	13	2472	14.56	12.73		30.00	30.00	1.30	2.96	15.86	15.69	36.00	36.00	Pass
HT40	MCS0	1	3	2422	18.11	18.08		30.00	30.00	1.30	2.96	19.41	21.04	36.00	36.00	Pass
HT40	MCS0	1	6	2437	19.38	19.02		30.00	30.00	1.30	2.96	20.68	21.98	36.00	36.00	Pass
HT40	MCS0	1	9	2452	17.22	17.50		30.00	30.00	1.30	2.96	18.52	20.46	36.00	36.00	Pass
HT40	MCS0	1	10	2457	12.41	13.28		30.00	30.00	1.30	2.96	13.71	16.24	36.00	36.00	Pass
HT40	MCS0	1	11	2462	14.09	13.21		30.00	30.00	1.30	2.96	15.39	16.17	36.00	36.00	Pass
VHT20	MCS0	1	1	2412	17.68	18.39		30.00	30.00	1.30	2.96	18.98	21.35	36.00	36.00	Pass
VHT20	MCS0	1	6	2437	20.86	21.13		30.00	30.00	1.30	2.96	22.16	24.09	36.00	36.00	Pass
VHT20	MCS0	1	11	2462	17.92	17.41		30.00	30.00	1.30	2.96	19.22	20.37	36.00	36.00	Pass
VHT20	MCS0	1	12	2467	16.72	16.22		30.00	30.00	1.30	2.96	18.02	19.18	36.00	36.00	Pass
VHT20	MCS0	1	13	2472	14.16	16.01		30.00	30.00	1.30	2.96	15.46	18.97	36.00	36.00	Pass
VHT40	MCS0	1	3	2422	18.02	17.82		30.00	30.00	1.30	2.96	19.32	20.78	36.00	36.00	Pass
VHT40	MCS0	1	6	2437	19.21	18.98		30.00	30.00	1.30	2.96	20.51	21.94	36.00	36.00	Pass
VHT40	MCS0	1	9	2452	17.00	17.45		30.00	30.00	1.30	2.96	18.30	20.41	36.00	36.00	Pass
VHT40	MCS0	1	10	2457	12.31	13.19		30.00	30.00	1.30	2.96	13.61	16.15	36.00	36.00	Pass
VHT40	MCS0	1	11	2462	14.01	13.15		30.00	30.00	1.30	2.96	15.31	16.11	36.00	36.00	Pass



2.4GHz Band MIMO																
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
HT20	MCS0	2	1	2412	15.55	15.35	18.46	30.00		2.96		21.42		36.00	Pass	
HT20	MCS0	2	6	2437	19.11	18.96	22.05	30.00		2.96		25.01		36.00	Pass	
HT20	MCS0	2	11	2462	15.32	15.22	18.28	30.00		2.96		21.24		36.00	Pass	
HT20	MCS0	2	12	2467	14.28	14.18	17.24	30.00		2.96		20.20		36.00	Pass	
HT20	MCS0	2	13	2472	11.34	11.26	14.31	30.00		2.96		17.27		36.00	Pass	
HT40	MCS0	2	3	2422	14.71	14.54	17.64	30.00		2.96		20.60		36.00	Pass	
HT40	MCS0	2	6	2437	16.78	16.50	19.65	30.00		2.96		22.61		36.00	Pass	
HT40	MCS0	2	9	2452	14.94	14.51	17.74	30.00		2.96		20.70		36.00	Pass	
HT40	MCS0	2	10	2457	10.80	10.17	13.51	30.00		2.96		16.47		36.00	Pass	
HT40	MCS0	2	11	2462	12.67	12.76	15.73	30.00		2.96		18.69		36.00	Pass	
VHT20	MCS0	2	1	2412	15.25	15.19	18.23	30.00		2.96		21.19		36.00	Pass	
VHT20	MCS0	2	6	2437	18.91	18.63	21.78	30.00		2.96		24.74		36.00	Pass	
VHT20	MCS0	2	11	2462	15.06	15.12	18.10	30.00		2.96		21.06		36.00	Pass	
VHT20	MCS0	2	12	2467	14.02	13.89	16.97	30.00		2.96		19.93		36.00	Pass	
VHT20	MCS0	2	13	2472	13.11	13.06	16.10	30.00		2.96		19.06		36.00	Pass	
VHT40	MCS0	2	3	2422	14.65	14.43	17.55	30.00		2.96		20.51		36.00	Pass	
VHT40	MCS0	2	6	2437	16.72	16.32	19.53	30.00		2.96		22.49		36.00	Pass	
VHT40	MCS0	2	9	2452	14.86	14.45	17.67	30.00		2.96		20.63		36.00	Pass	
VHT40	MCS0	2	10	2457	10.71	10.08	13.42	30.00		2.96		16.38		36.00	Pass	
VHT40	MCS0	2	11	2462	12.64	12.56	15.61	30.00		2.96		18.57		36.00	Pass	

Note: Measured power (dBm) has offset with cable loss.

**TEST RESULTS DATA**  
**Average Output Power**

2.4GHz Band Single Antenna																		
Mod.	Data Rate	N <sub>TX</sub>	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power with duty factor (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant 1	Ant 2	Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
11b	1Mbps	1	1	2412	0.00	0.00	16.77	16.72		30.00	30.00	1.30	2.96	18.07	19.68	36.00	36.00	Pass
11b	1Mbps	1	6	2437	0.00	0.00	17.14	16.83		30.00	30.00	1.30	2.96	18.44	19.79	36.00	36.00	Pass
11b	1Mbps	1	11	2462	0.00	0.00	17.10	16.67		30.00	30.00	1.30	2.96	18.40	19.63	36.00	36.00	Pass
11b	1Mbps	1	12	2467	0.00	0.00	17.06	16.67		30.00	30.00	1.30	2.96	18.36	19.63	36.00	36.00	Pass
11b	1Mbps	1	13	2472	0.00	0.00	17.10	16.28		30.00	30.00	1.30	2.96	18.40	19.24	36.00	36.00	Pass
11g	6Mbps	1	1	2412	0.09	0.09	16.71	16.55		30.00	30.00	1.30	2.96	18.01	19.51	36.00	36.00	Pass
11g	6Mbps	1	6	2437	0.09	0.09	16.91	16.73		30.00	30.00	1.30	2.96	18.21	19.69	36.00	36.00	Pass
11g	6Mbps	1	11	2462	0.09	0.09	16.91	16.59		30.00	30.00	1.30	2.96	18.21	19.55	36.00	36.00	Pass
11g	6Mbps	1	12	2467	0.09	0.09	16.24	16.67		30.00	30.00	1.30	2.96	17.54	19.63	36.00	36.00	Pass
11g	6Mbps	1	13	2472	0.09	0.09	10.81	12.49		30.00	30.00	1.30	2.96	12.11	15.45	36.00	36.00	Pass
HT20	MCS0	1	1	2412	0.05	0.05	12.69	13.37		30.00	30.00	1.30	2.96	13.99	16.33	36.00	36.00	Pass
HT20	MCS0	1	6	2437	0.05	0.05	15.88	16.14		30.00	30.00	1.30	2.96	17.18	19.10	36.00	36.00	Pass
HT20	MCS0	1	11	2462	0.05	0.05	12.85	12.47		30.00	30.00	1.30	2.96	14.15	15.43	36.00	36.00	Pass
HT20	MCS0	1	12	2467	0.05	0.05	11.94	11.40		30.00	30.00	1.30	2.96	13.24	14.36	36.00	36.00	Pass
HT20	MCS0	1	13	2472	0.05	0.05	3.72	2.32		30.00	30.00	1.30	2.96	5.02	5.28	36.00	36.00	Pass
HT40	MCS0	1	3	2422	0.04	0.04	12.54	12.29		30.00	30.00	1.30	2.96	13.84	15.25	36.00	36.00	Pass
HT40	MCS0	1	6	2437	0.04	0.04	14.24	13.74		30.00	30.00	1.30	2.96	15.54	16.70	36.00	36.00	Pass
HT40	MCS0	1	9	2452	0.04	0.04	12.15	12.22		30.00	30.00	1.30	2.96	13.45	15.18	36.00	36.00	Pass
HT40	MCS0	1	10	2457	0.04	0.04	7.54	8.40		30.00	30.00	1.30	2.96	8.84	11.36	36.00	36.00	Pass
HT40	MCS0	1	11	2462	0.04	0.04	3.98	3.51		30.00	30.00	1.30	2.96	5.28	6.47	36.00	36.00	Pass
VHT20	MCS0	1	1	2412	0.05	0.05	12.46	13.25		30.00	30.00	1.30	2.96	13.76	16.21	36.00	36.00	Pass
VHT20	MCS0	1	6	2437	0.05	0.05	15.70	15.95		30.00	30.00	1.30	2.96	17.00	18.91	36.00	36.00	Pass
VHT20	MCS0	1	11	2462	0.05	0.05	12.68	12.29		30.00	30.00	1.30	2.96	13.98	15.25	36.00	36.00	Pass
VHT20	MCS0	1	12	2467	0.05	0.05	11.71	11.26		30.00	30.00	1.30	2.96	13.01	14.22	36.00	36.00	Pass
VHT20	MCS0	1	13	2472	0.05	0.05	3.51	3.99		30.00	30.00	1.30	2.96	4.81	6.95	36.00	36.00	Pass
VHT40	MCS0	1	3	2422	0.06	0.05	12.54	12.12		30.00	30.00	1.30	2.96	13.84	15.08	36.00	36.00	Pass
VHT40	MCS0	1	6	2437	0.06	0.05	13.72	13.74		30.00	30.00	1.30	2.96	15.02	16.70	36.00	36.00	Pass
VHT40	MCS0	1	9	2452	0.06	0.05	12.15	12.22		30.00	30.00	1.30	2.96	13.45	15.18	36.00	36.00	Pass
VHT40	MCS0	1	10	2457	0.06	0.05	7.53	8.32		30.00	30.00	1.30	2.96	8.83	11.28	36.00	36.00	Pass
VHT40	MCS0	1	11	2462	0.06	0.05	3.90	3.51		30.00	30.00	1.30	2.96	5.20	6.47	36.00	36.00	Pass

2.4GHz Band MIMO																		
Mod.	Data Rate	N <sub>TX</sub>	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power with duty factor (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant 1	Ant 2	Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
HT20	MCS0	2	1	2412	0.02	0.02	10.56	10.16	13.37	30.00		2.96		16.33		36.00	Pass	
HT20	MCS0	2	6	2437	0.02	0.02	13.88	13.52	16.71	30.00		2.96		19.67		36.00	Pass	
HT20	MCS0	2	11	2462	0.02	0.02	10.38	10.12	13.26	30.00		2.96		16.22		36.00	Pass	
HT20	MCS0	2	12	2467	0.02	0.02	9.20	9.02	12.12	30.00		2.96		15.08		36.00	Pass	
HT20	MCS0	2	13	2472	0.02	0.02	0.60	0.31	3.47	30.00		2.96		6.43		36.00	Pass	
HT40	MCS0	2	3	2422	0.02	0.04	10.00	8.92	12.50	30.00		2.96		15.46		36.00	Pass	
HT40	MCS0	2	6	2437	0.02	0.04	12.16	11.65	14.92	30.00		2.96		17.88		36.00	Pass	
HT40	MCS0	2	9	2452	0.02	0.04	10.15	9.28	12.75	30.00		2.96		15.71		36.00	Pass	
HT40	MCS0	2	10	2457	0.02	0.04	4.82	5.00	7.92	30.00		2.96		10.88		36.00	Pass	
HT40	MCS0	2	11	2462	0.02	0.04	4.00	3.58	6.81	30.00		2.96		9.77		36.00	Pass	
VHT20	MCS0	2	1	2412	0.02	0.02	10.53	10.13	13.34	30.00		2.96		16.30		36.00	Pass	
VHT20	MCS0	2	6	2437	0.02	0.02	13.71	13.37	16.55	30.00		2.96		19.51		36.00	Pass	
VHT20	MCS0	2	11	2462	0.02	0.02	10.13	9.98	13.07	30.00		2.96		16.03		36.00	Pass	
VHT20	MCS0	2	12	2467	0.02	0.02	9.02	8.92	11.98	30.00		2.96		14.94		36.00	Pass	
VHT20	MCS0	2	13	2472	0.02	0.02	1.08	0.86	3.98	30.00		2.96		6.94		36.00	Pass	
VHT40	MCS0	2	3	2422	0.06	0.05	9.68	8.38	12.09	30.00		2.96		15.05		36.00	Pass	
VHT40	MCS0	2	6	2437	0.06	0.05	11.59	11.39	14.50	30.00		2.96		17.46		36.00	Pass	
VHT40	MCS0	2	9	2452	0.06	0.05	9.89	8.80	12.39	30.00		2.96		15.35		36.00	Pass	
VHT40	MCS0	2	10	2457	0.06	0.05	4.32	4.68	7.51	30.00		2.96		10.47		36.00	Pass	
VHT40	MCS0	2	11	2462	0.06	0.05	2.96	3.48	6.24	30.00		2.96		9.20		36.00	Pass	

Note: Measured power (dBm) has offset with cable loss.

**TEST RESULTS DATA**  
**Peak Output Power**

2.4GHz Band Single Antenna																	
Mod.	Data Rate	N <sub>TX</sub>	CH.	Freq. (MHz)	RU Config	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
						Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
HE20	MCS0	1	1	2412	Full	22.16	21.90		30.00	30.00	1.30	2.96	23.46	24.86	36.00	36.00	Pass
HE20	MCS0	1	1	2412	26/0	18.54	18.66		30.00	30.00	1.30	2.96	19.84	21.62	36.00	36.00	Pass
HE20	MCS0	1	6	2437	Full	21.96	22.17		30.00	30.00	1.30	2.96	23.26	25.13	36.00	36.00	Pass
HE20	MCS0	1	11	2462	Full	22.12	21.82		30.00	30.00	1.30	2.96	23.42	24.78	36.00	36.00	Pass
HE20	MCS0	1	12	2467	Full	21.54	21.21		30.00	30.00	1.30	2.96	22.84	24.17	36.00	36.00	Pass
HE20	MCS0	1	13	2472	Full	22.49	20.83		30.00	30.00	1.30	2.96	23.79	23.79	36.00	36.00	Pass
HE20	MCS0	1	13	2472	26/8	4.75	4.10		30.00	30.00	1.30	2.96	6.05	7.06	36.00	36.00	Pass
HE40	MCS0	1	3	2422	Full	22.07	22.14		30.00	30.00	1.30	2.96	23.37	25.10	36.00	36.00	Pass
HE40	MCS0	1	6	2437	Full	22.14	22.16		30.00	30.00	1.30	2.96	23.44	25.12	36.00	36.00	Pass
HE40	MCS0	1	9	2452	Full	22.07	22.06		30.00	30.00	1.30	2.96	23.37	25.02	36.00	36.00	Pass
HE40	MCS0	1	10	2457	Full	18.19	18.32		30.00	30.00	1.30	2.96	19.49	21.28	36.00	36.00	Pass
HE40	MCS0	1	11	2462	Full	22.81	21.11		30.00	30.00	1.30	2.96	24.11	24.07	36.00	36.00	Pass

2.4GHz Band MIMO																	
Mod.	Data Rate	Ntx	CH.	Freq. (MHz)	RU Config	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
						Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
HE20	MCS0	2	1	2412	Full	19.77	19.79	22.79	30.00		2.96		25.75		36.00	Pass	
HE20	MCS0	2	1	2412	26/0	16.66	16.98	19.83	30.00		2.96		22.79		36.00	Pass	
HE20	MCS0	2	6	2437	Full	19.77	19.20	22.50	30.00		2.96		25.46		36.00	Pass	
HE20	MCS0	2	11	2462	Full	20.06	19.51	22.80	30.00		2.96		25.76		36.00	Pass	
HE20	MCS0	2	12	2467	Full	19.43	18.83	22.15	30.00		2.96		25.11		36.00	Pass	
HE20	MCS0	2	13	2472	Full	22.96	22.16	25.59	30.00		2.96		28.55		36.00	Pass	
HE20	MCS0	2	13	2472	26/8	3.20	20.64	20.72	30.00		2.96		23.68		36.00	Pass	
HE40	MCS0	2	3	2422	Full	20.81	19.98	23.43	30.00		2.96		26.39		36.00	Pass	
HE40	MCS0	2	6	2437	Full	22.65	21.94	25.32	30.00		2.96		28.28		36.00	Pass	
HE40	MCS0	2	9	2452	Full	20.88	19.89	23.42	30.00		2.96		26.38		36.00	Pass	
HE40	MCS0	2	10	2457	Full	16.12	16.32	19.23	30.00		2.96		22.19		36.00	Pass	
HE40	MCS0	2	11	2462	Full	20.38	20.98	23.70	30.00		2.96		26.66		36.00	Pass	

Note: Measured power (dBm) has offset with cable loss.

**TEST RESULTS DATA**  
**Average Output Power**

2.4GHz Band Single Antenna																			
Mod.	Data Rate	N <sub>TX</sub>	CH.	Freq. (MHz)	RU Config	Duty Factor (dB)		Average Conducted Power with duty factor (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
						Ant1	Ant2	Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
HE20	MCS0	1	1	2412	Full	0.05	0.06	16.85	16.81		30.00	30.00	1.30	2.96	18.15	19.77	36.00	36.00	Pass
HE20	MCS0	1	1	2412	26/0	0.05	0.06	6.03	13.26		30.00	30.00	1.30	2.96	7.33	16.22	36.00	36.00	Pass
HE20	MCS0	1	6	2437	Full	0.05	0.06	16.70	16.97		30.00	30.00	1.30	2.96	18.00	19.93	36.00	36.00	Pass
HE20	MCS0	1	11	2462	Full	0.05	0.06	16.95	16.78		30.00	30.00	1.30	2.96	18.25	19.74	36.00	36.00	Pass
HE20	MCS0	1	12	2467	Full	0.05	0.06	16.64	16.32		30.00	30.00	1.30	2.96	17.94	19.28	36.00	36.00	Pass
HE20	MCS0	1	13	2472	Full	0.05	0.06	13.67	12.12		30.00	30.00	1.30	2.96	14.97	15.08	36.00	36.00	Pass
HE20	MCS0	1	13	2472	26/8	0.05	0.06	-3.41	-8.19		30.00	30.00	1.30	2.96	-2.11	-5.23	36.00	36.00	Pass
HE40	MCS0	1	3	2422	Full	0.05	0.05	16.65	16.92		30.00	30.00	1.30	2.96	17.95	19.88	36.00	36.00	Pass
HE40	MCS0	1	6	2437	Full	0.05	0.05	16.76	16.86		30.00	30.00	1.30	2.96	18.06	19.82	36.00	36.00	Pass
HE40	MCS0	1	9	2452	Full	0.05	0.05	16.75	16.88		30.00	30.00	1.30	2.96	18.05	19.84	36.00	36.00	Pass
HE40	MCS0	1	10	2457	Full	0.05	0.05	12.25	12.94		30.00	30.00	1.30	2.96	13.55	15.90	36.00	36.00	Pass
HE40	MCS0	1	11	2462	Full	0.05	0.05	13.63	13.33		30.00	30.00	1.30	2.96	14.93	16.29	36.00	36.00	Pass

2.4GHz Band MIMO																			
Mod.	Data Rate	Ntx	CH.	Freq. (MHz)	RU Config	Duty Factor (dB)		Average Conducted Power with duty factor (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
						Ant1	Ant2	Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
HE20	MCS0	2	1	2412	Full	0.03	0.01	14.04	13.89	16.98	30.00		2.96		19.94		36.00		Pass
HE20	MCS0	2	1	2412	26/0	0.03	0.01	3.49	3.44	6.48	30.00		2.96		9.44		36.00		Pass
HE20	MCS0	2	6	2437	Full	0.03	0.01	13.79	13.39	16.60	30.00		2.96		19.56		36.00		Pass
HE20	MCS0	2	11	2462	Full	0.03	0.01	14.19	13.72	16.97	30.00		2.96		19.93		36.00		Pass
HE20	MCS0	2	12	2467	Full	0.03	0.01	13.19	12.79	16.00	30.00		2.96		18.96		36.00		Pass
HE20	MCS0	2	13	2472	Full	0.03	0.01	11.21	10.29	13.78	30.00		2.96		16.74		36.00		Pass
HE20	MCS0	2	13	2472	26/8	0.03	0.01	-8.33	-7.99	-5.15	30.00		2.96		-2.19		36.00		Pass
HE40	MCS0	2	3	2422	Full	0.03	0.02	14.39	14.45	17.43	30.00		2.96		20.39		36.00		Pass
HE40	MCS0	2	6	2437	Full	0.03	0.02	16.64	16.37	19.52	30.00		2.96		22.48		36.00		Pass
HE40	MCS0	2	9	2452	Full	0.03	0.02	14.59	14.40	17.51	30.00		2.96		20.47		36.00		Pass
HE40	MCS0	2	10	2457	Full	0.03	0.02	10.72	10.21	13.48	30.00		2.96		16.44		36.00		Pass
HE40	MCS0	2	11	2462	Full	0.03	0.02	7.90	10.82	12.61	30.00		2.96		15.57		36.00		Pass

Note: Measured power (dBm) has offset with cable loss.



## Appendix B. AC Conducted Emission Test Results

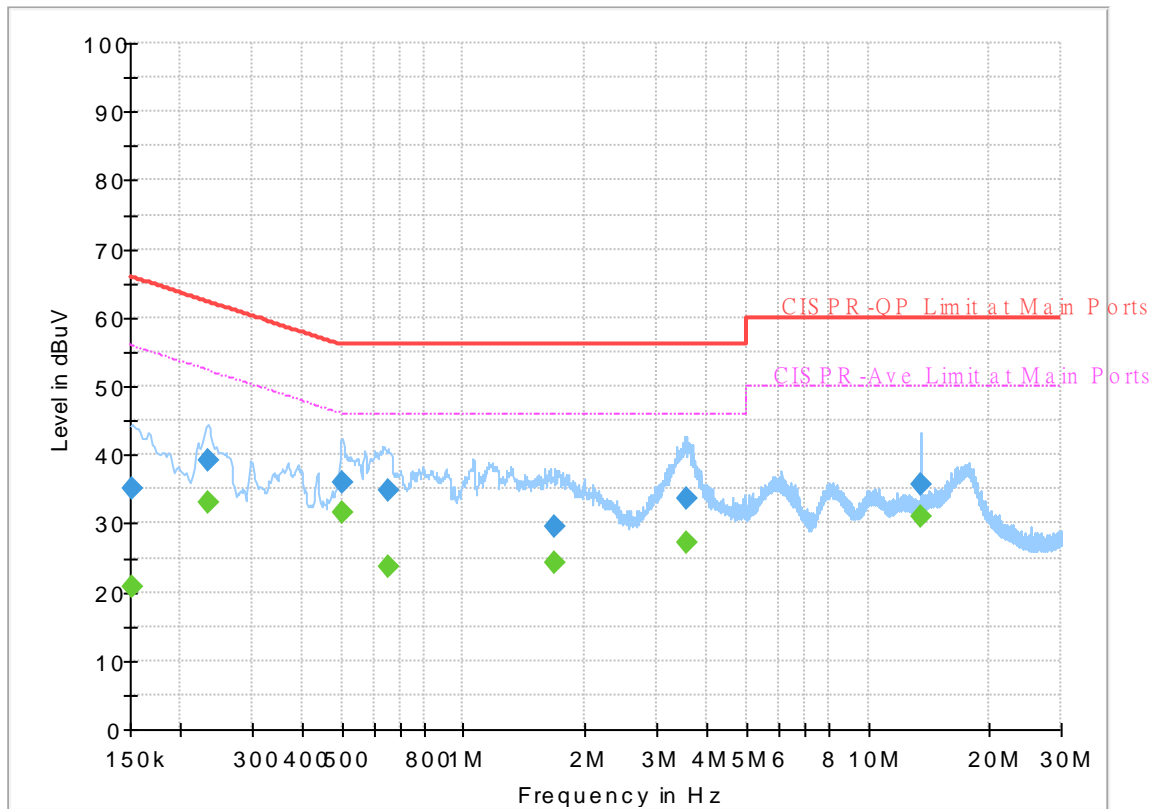
Test Engineer :	Howard Huang	Temperature :	23~26°C
		Relative Humidity :	40~50%



# EUT Information

Report NO : 111325  
 Test Mode : Mode 2  
 Test Voltage : 120Vac/60Hz  
 Phase : Line

Full Spectrum



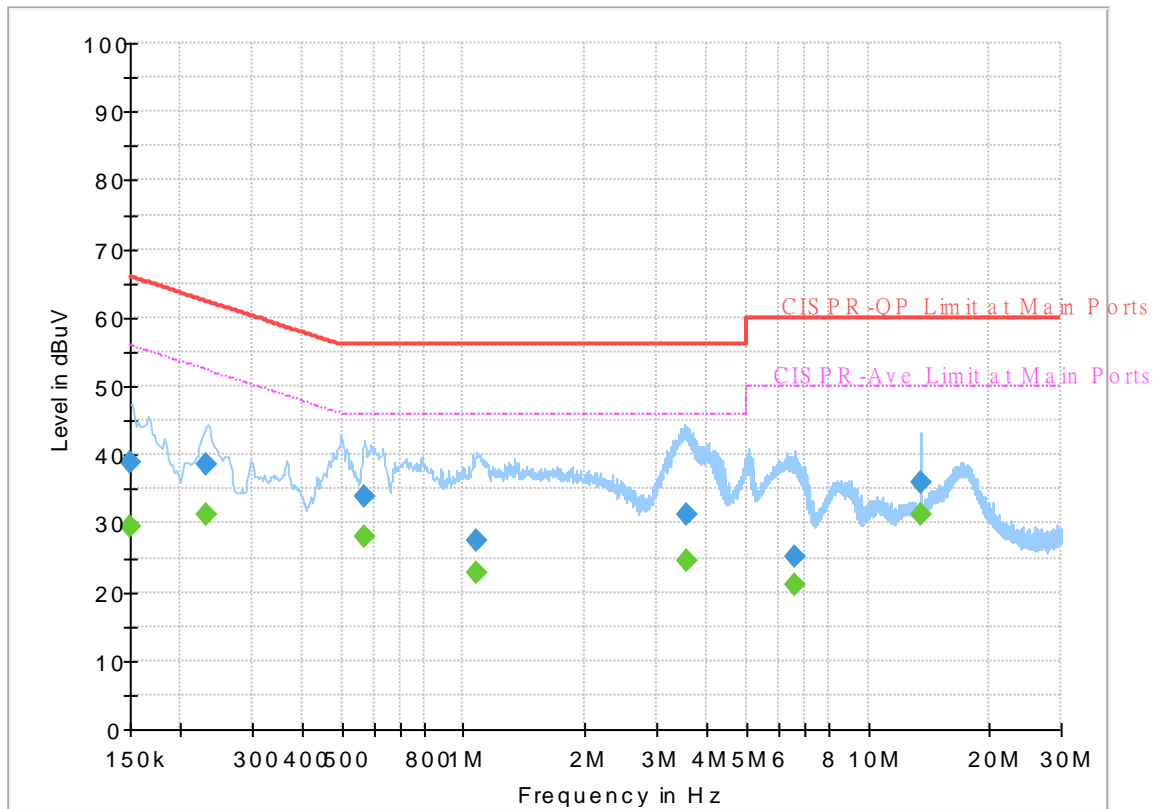
## Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	20.72	55.88	35.16	L1	OFF	19.7
0.152250	35.12	---	65.88	30.76	L1	OFF	19.7
0.233250	---	33.09	52.33	19.24	L1	OFF	19.7
0.233250	39.05	---	62.33	23.28	L1	OFF	19.7
0.501000	---	31.68	46.00	14.32	L1	OFF	19.9
0.501000	35.85	---	56.00	20.15	L1	OFF	19.9
0.649500	---	23.76	46.00	22.24	L1	OFF	20.0
0.649500	34.91	---	56.00	21.09	L1	OFF	20.0
1.684500	---	24.19	46.00	21.81	L1	OFF	20.2
1.684500	29.44	---	56.00	26.56	L1	OFF	20.2
3.545250	---	27.08	46.00	18.92	L1	OFF	20.0
3.545250	33.51	---	56.00	22.49	L1	OFF	20.0
13.560000	---	31.12	50.00	18.88	L1	OFF	20.0
13.560000	35.79	---	60.00	24.21	L1	OFF	20.0

# EUT Information

Report NO : 111325  
 Test Mode : Mode 2  
 Test Voltage : 120Vac/60Hz  
 Phase : Neutral

Full Spectrum



## Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	---	29.60	56.00	26.40	N	OFF	19.7
0.150000	38.95	---	66.00	27.05	N	OFF	19.7
0.231000	---	31.19	52.41	21.22	N	OFF	19.7
0.231000	38.62	---	62.41	23.79	N	OFF	19.7
0.568500	---	27.99	46.00	18.01	N	OFF	19.9
0.568500	33.83	---	56.00	22.17	N	OFF	19.9
1.079250	---	22.71	46.00	23.29	N	OFF	20.2
1.079250	27.57	---	56.00	28.43	N	OFF	20.2
3.545250	---	24.43	46.00	21.57	N	OFF	20.0
3.545250	31.24	---	56.00	24.76	N	OFF	20.0
6.614250	---	20.93	50.00	29.07	N	OFF	20.0
6.614250	25.16	---	60.00	34.84	N	OFF	20.0
13.560000	---	31.22	50.00	18.78	N	OFF	20.0
13.560000	35.94	---	60.00	24.06	N	OFF	20.0



### Appendix C. Radiated Spurious Emission

Test Engineer :	Leo Lee, Mancy Chou and Bigshow Wang	Temperature :	22.8~23.2°C
		Relative Humidity :	44~50%

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	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 )	
802.11b CH 01 2412MHz		2383.29	56.17	-17.83	74	42.97	27.57	16.55	30.92	100	241	P	H	
		2383.605	47.07	-6.93	54	33.87	27.57	16.55	30.92	100	241	A	H	
	*	2412	107.5	-	-	94.31	27.5	16.6	30.91	100	241	P	H	
	*	2412	104.44	-	-	91.25	27.5	16.6	30.91	100	241	A	H	
													H	
														H
			2370.48	54.91	-19.09	74	41.68	27.62	16.53	30.92	298	319	P	V
			2383.605	45.33	-8.67	54	32.13	27.57	16.55	30.92	298	319	A	V
	*		2412	103.71	-	-	90.52	27.5	16.6	30.91	298	319	P	V
	*		2412	100.57	-	-	87.38	27.5	16.6	30.91	298	319	A	V
														V
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



2.4GHz 2400~2483.5MHz
WIFI 802.11b (Harmonic @ 3m)

Table with 14 columns: WIFI Ant. 1, 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). Rows include data for 802.11b CH 01 2412MHz and a Remark section.



Emission above 18GHz

2.4GHz WIFI 802.11b (SHF)

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		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )
2.4GHz 802.11b SHF		23480	40.13	-33.87	74	42.88	38.7	12.55	54	150	0	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
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													H
													H
													H
			18392	37.96	-36.04	74	582.72	-500	10.75	55.51	150	0	P
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against limit line.												





2.4GHz 2400~2483.5MHz

WIFI 802.11 ax 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.	
2		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	(P/A)	(H/V)
802.11ax HE20 Full CH 06 2437MHz		2314	55.32	-18.68	74	42.06	27.77	16.44	30.95	129	28	P	H
		2389.52	44.19	-9.81	54	31.01	27.54	16.56	30.92	129	28	A	H
	*	2437	111.43	-	-	98.19	27.5	16.64	30.9	129	28	P	H
	*	2437	101.61	-	-	88.37	27.5	16.64	30.9	129	28	A	H
		2486.14	55.34	-18.66	74	42.08	27.43	16.71	30.88	129	28	P	H
		2483.53	44.25	-9.75	54	30.99	27.43	16.71	30.88	129	28	A	H
		2338.32	55.4	-18.6	74	42.14	27.72	16.48	30.94	263	251	P	V
		2389.36	43.91	-10.09	54	30.73	27.54	16.56	30.92	263	251	A	V
	*	2437	107.84	-	-	94.6	27.5	16.64	30.9	263	251	P	V
	*	2437	97.97	-	-	84.73	27.5	16.64	30.9	263	251	A	V
		2499.1	55.17	-18.83	74	41.91	27.4	16.73	30.87	263	251	P	V
		2483.53	44.05	-9.95	54	30.79	27.43	16.71	30.88	263	251	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE20 Full (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)
802.11ax HE20 Full CH 06 2437MHz		4874	39.33	-34.67	74	57.29	31.05	10.11	59.12	100	0	P	H
		7311	44.24	-29.76	74	54.19	36.3	12.31	58.56	100	0	P	H
		17985	59.43	-14.57	74	49.74	48.73	18.88	57.92	150	109	P	H
		17985	49.91	-4.09	54	40.22	48.73	18.88	57.92	150	109	A	H
		4874	39.27	-34.73	74	57.23	31.05	10.11	59.12	100	0	P	V
		7311	44.28	-29.72	74	54.23	36.3	12.31	58.56	100	0	P	V
		18000	58.94	-15.06	74	48.95	49	18.89	57.9	100	232	P	V
		18000	49.88	-4.12	54	39.89	49	18.89	57.9	100	232	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												





2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (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)
802.11n HT40 CH 03 2422MHz		2385.68	57.64	-16.36	74	44.44	27.56	16.56	30.92	100	34	P	H
		2390	46.83	-7.17	54	33.65	27.54	16.56	30.92	100	34	A	H
	*	2422	105.27	-	-	92.06	27.5	16.61	30.9	100	34	P	H
	*	2422	97.81	-	-	84.6	27.5	16.61	30.9	100	34	A	H
		2493.52	55.6	-18.4	74	42.34	27.41	16.72	30.87	100	34	P	H
		2483.53	44.23	-9.77	54	30.97	27.43	16.71	30.88	100	34	A	H
		2384.56	56.44	-17.56	74	43.25	27.56	16.55	30.92	295	266	P	V
		2390	46	-8	54	32.82	27.54	16.56	30.92	295	266	A	V
	*	2422	103.1	-	-	89.89	27.5	16.61	30.9	295	266	P	V
	*	2422	94.9	-	-	81.69	27.5	16.61	30.9	295	266	A	V
		2486.05	55.32	-18.68	74	42.06	27.43	16.71	30.88	295	266	P	V
		2483.53	43.99	-10.01	54	30.73	27.43	16.71	30.88	295	266	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

Table with 14 columns: 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). Rows include data for 802.11n HT40 CH 03 at 2422MHz and a Remark section.



**Note symbol**

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



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		( 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 Plots

Test Engineer :	Leo Lee, Mancy Chou and Bigshow Wang	Temperature :	22.8~23.2°C
		Relative Humidity :	44~50%

### Note symbol

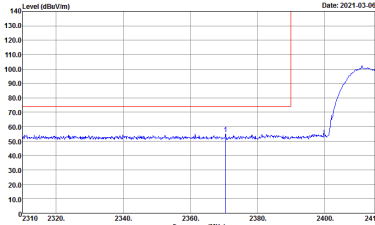
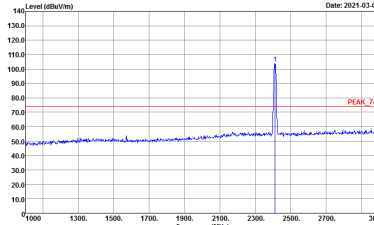
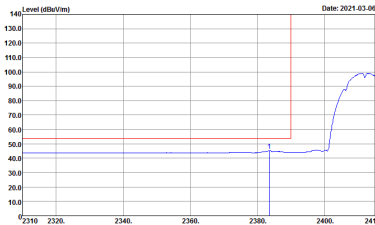
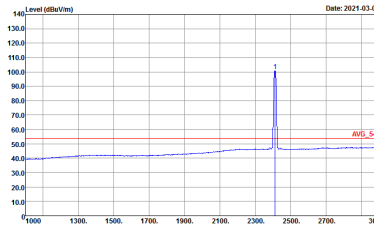
-L	Low channel location
-R	High channel location



2.4GHz 2400~2483.5MHz
WIFI 802.11b (Band Edge @ 3m)

Table with 4 columns: WIFI, ANT, 1, and two sub-columns for Horizontal and Fundamental. Rows are labeled Peak and Avg. Each cell contains a spectral plot and technical details like Site, Condition, Detector, and Project.



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH15-HY            Condition : PEAK_8E_74 3m 91200_15_1620 VERTICAL            Detector : Peak            Project : 111325</p>	 <p>Site : 03CH15-HY            Condition : PEAK_74 3m 91200_15_1620 VERTICAL            Detector : Peak            Project : 111325</p>
Avg.	 <p>Site : 03CH15-HY            Condition : AVG_8E_54 3m 91200_15_1620 VERTICAL            Detector : Peak            Project : 111325</p>	 <p>Site : 03CH15-HY            Condition : AVG_54 3m 91200_15_1620 VERTICAL            Detector : Peak            Project : 111325</p>



2.4GHz 2400~2483.5MHz  
WIFI 802.11b (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Vertical
<b>Peak</b> <b>Avg.</b>	<p>Site : 03CH15-1FY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL Detector : Peak Project : 111325</p>	<p>Site : 03CH15-1FY Condition : PEAK_74 3m 91200_15_1620 VERTICAL Detector : Peak Project : 111325</p>





Emission above 18GHz
2.4GHz WIFI 802.11b (SHF)

Table with 2 columns: Horizontal and Vertical. Each column contains a spectral plot of Level (dBuV/m) vs Frequency (MHz) for 2.4GHz WIFI 802.11b SHF. The plots show a peak at 2412 MHz and an average level around 54 dBuV/m. Metadata includes Site: 03CH16-1FY, Condition: PEAK\_74\_1M 1m SHF HORN BBH49170576, Detector: Peak, Project: 111325.



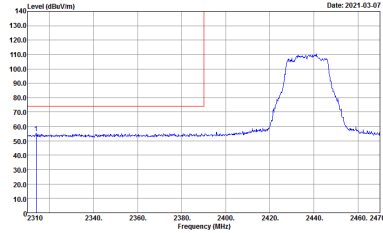
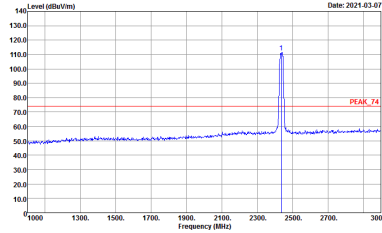
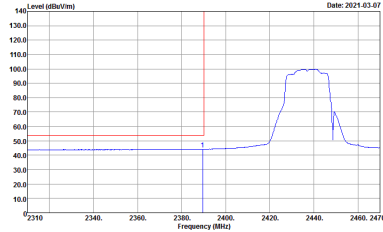
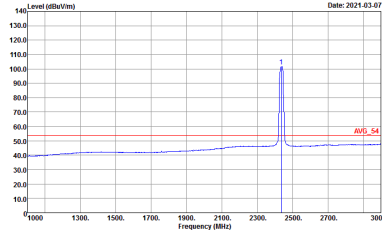
Emission below 1GHz
2.4GHz WIFI 802.11b (LF)

Table with 2 columns: Horizontal and Vertical. Each column contains a spectral plot of Level (dBuV/m) vs Frequency (MHz) from 50 to 1000 MHz. The plots show a blue signal line and a red step function. Metadata includes Site: 03CH15-FY, Condition: QP 3m BTL06\_41912\_20210208, Detector: Peak, Project: 111325.

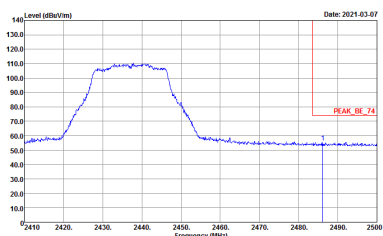
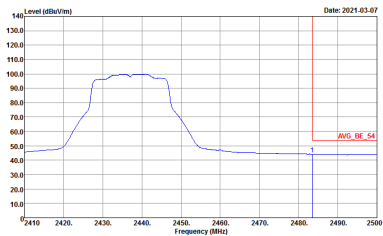


2.4GHz 2400~2483.5MHz

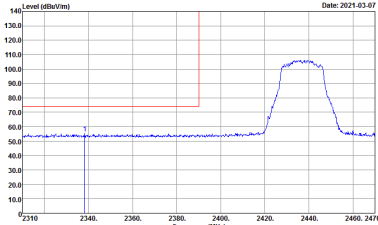
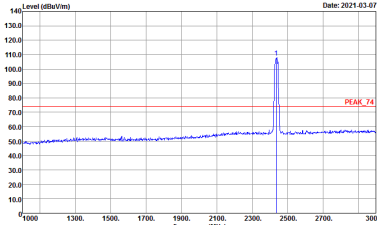
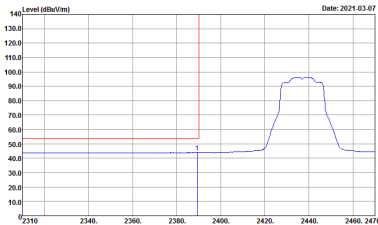
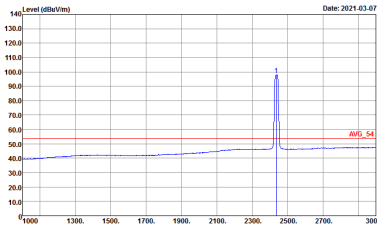
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - L	
2	Horizontal	Fundamental
Peak	 <p>Site : 03CH15-HY            Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL            Detector : Peak            Project : 111325</p>	 <p>Site : 03CH15-HY            Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL            Detector : Peak            Project : 111325</p>
Avg.	 <p>Site : 03CH15-HY            Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL            Detector : Peak            Project : 111325</p>	 <p>Site : 03CH15-HY            Condition : AVG_54 3m 91200_15_1620 HORIZONTAL            Detector : Peak            Project : 111325</p>

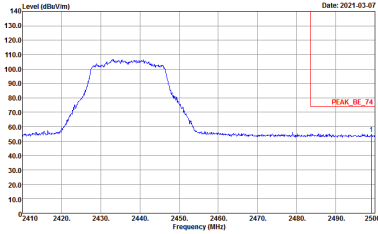
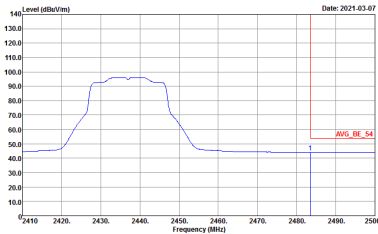


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - R	
2	Horizontal	Fundamental
<p><b>Peak</b></p>	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL            RBW:1000.000kHz VBW:3000.000kHz SWF:Auto            Detector : Peak            Project : 111325</p>	<p>Left blank</p>
<p><b>Avg.</b></p>	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL            RBW:1000.000kHz VBW:0.010kHz SWF:Auto            Detector : Peak            Project : 111325</p>	<p>Left blank</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - L	
2	Vertical	Fundamental
Peak	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : PEAK_8E_74 3m 91200_15_1620 VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 111325</p>	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : PEAK_74 3m 91200_15_1620 VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 111325</p>
Avg.	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : AVG_8E_54 3m 91200_15_1620 VERTICAL            RBW:1000.000KHz VBW:0.010KHz SWT:Auto            Detector : Peak            Project : 111325</p>	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : AVG_54 3m 91200_15_1620 VERTICAL            RBW:1000.000KHz VBW:0.010KHz SWT:Auto            Detector : Peak            Project : 111325</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz - R	
2	Vertical	Fundamental
Peak	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : PEAK_BE_74 3m 91200_15_1620 VERTICAL            RBW:1000.000kHz VBW:3000.000kHz SWF:Auto            Detector : Peak            Project : 111325</p>	Left blank
Avg.	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL            RBW:1000.000kHz VBW:0.010kHz SWF:Auto            Detector : Peak            Project : 111325</p>	Left blank

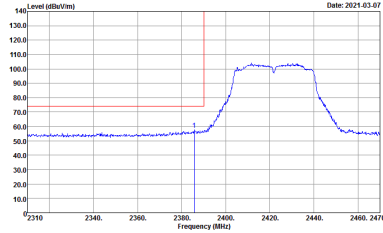
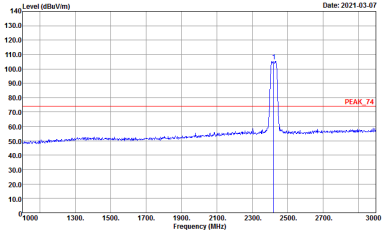
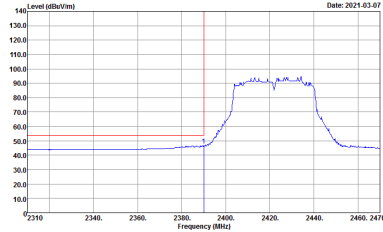
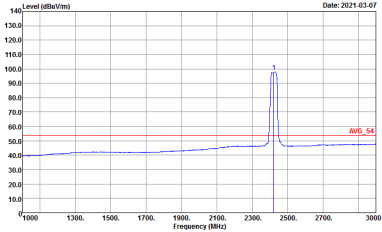


2.4GHz 2400~2483.5MHz  
 WIFI 802.11 ax HE20 Full (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11 ax HE20 Full CH06 2437MHz	
2	Horizontal	Vertical
<b>Peak</b>  <b>Avg.</b>	<p>Site : 03CH15-1FY            Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL            Detector : Peak            Project : 111325</p>	<p>Site : 03CH15-1FY            Condition : PEAK_74 3m 91200_15_1620 VERTICAL            Detector : Peak            Project : 111325</p>

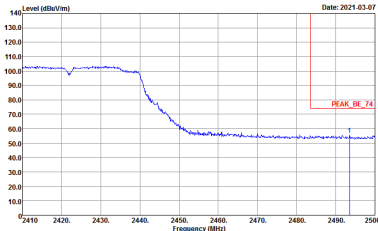
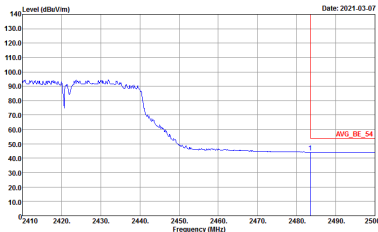


2.4GHz 2400~2483.5MHz  
 WIFI 802.11n HT40 (Band Edge @ 3m)

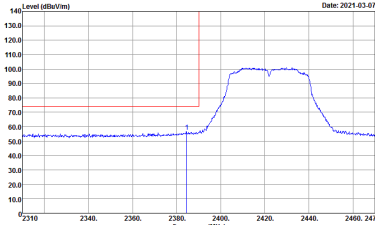
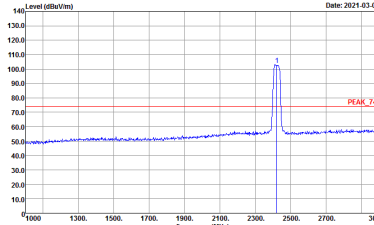
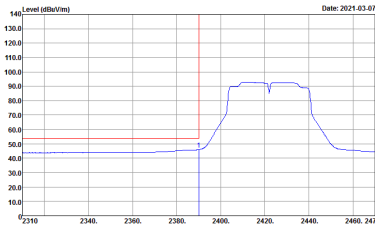
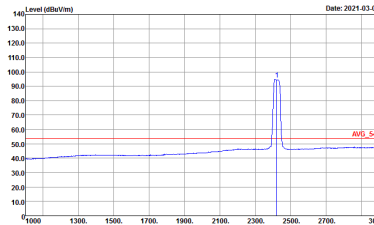
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
1+2	Horizontal	Fundamental
Peak	 <p>Site : 03CH15-HY            Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL            Detector : Peak            Project : 111325</p>	 <p>Site : 03CH15-HY            Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL            Detector : Peak            Project : 111325</p>
Avg.	 <p>Site : 03CH15-HY            Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL            Detector : Peak            Project : 111325</p>	 <p>Site : 03CH15-HY            Condition : AVG_54 3m 91200_15_1620 HORIZONTAL            Detector : Peak            Project : 111325</p>



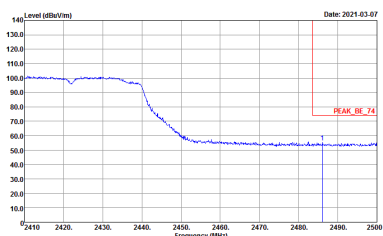
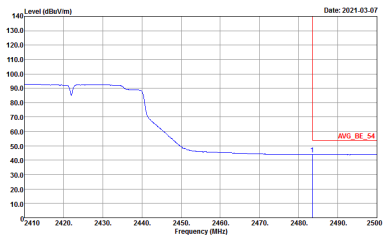


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
1+2	Horizontal	Fundamental
<p><b>Peak</b></p>	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL            RBW:1000.000KHz VBW:3000.000KHz SWF:Auto            Detector : Peak            Project : 111325</p>	<p>Left Blank</p>
<p><b>Avg.</b></p>	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL            RBW:1000.000KHz VBW:0.010KHz SWF:Auto            Detector : Peak            Project : 111325</p>	<p>Left Blank</p>



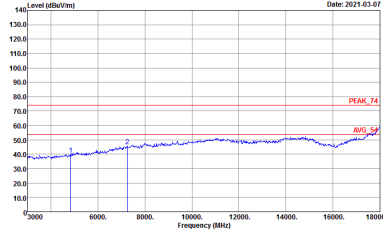
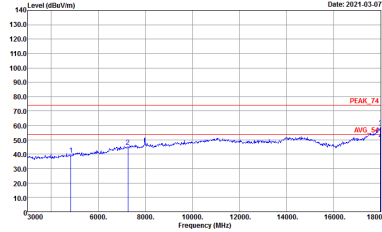
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
1+2	Vertical	Fundamental
Peak	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : PEAK_8E_74 3m 91200_15_1620 VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 111325</p>	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : PEAK_74 3m 91200_15_1620 VERTICAL            RBW:1000.000KHz VBW:3000.000KHz SWT:Auto            Detector : Peak            Project : 111325</p>
Avg.	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : AVG_8E_54 3m 91200_15_1620 VERTICAL            RBW:1000.000KHz VBW:0.010KHz SWT:Auto            Detector : Peak            Project : 111325</p>	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : AVG_54 3m 91200_15_1620 VERTICAL            RBW:1000.000KHz VBW:0.010KHz SWT:Auto            Detector : Peak            Project : 111325</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
1+2	Vertical	Fundamental
<p><b>Peak</b></p>	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : PEAK_BE_74 3m 91200_15_1620 VERTICAL            : RBW:1000.000KHz VBW:3000.000KHz SWF:Auto            Detector : Peak            Project : 111325</p>	<p>Left blank</p>
<p><b>Avg.</b></p>	 <p>Date: 2021-03-07</p> <p>Site : 03CH15-HY            Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL            : RBW:1000.000KHz VBW:0.010KHz SWF:Auto            Detector : Peak            Project : 111325</p>	<p>Left blank</p>



2.4GHz 2400~2483.5MHz  
 WIFI 802.11n HT40 (Harmonic @ 3m)

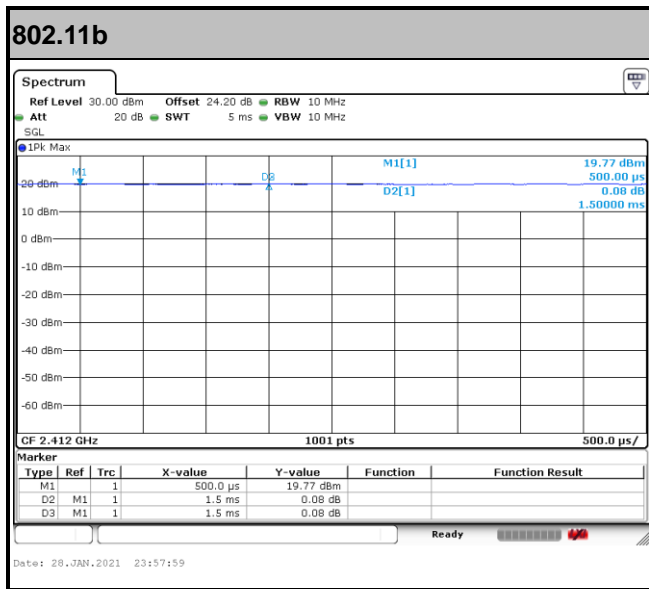
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH03 2422MHz	
1+2	Horizontal	Vertical
<p>Peak</p> <p>Avg.</p>	 <p>Site : 03CH15-1FY          Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL          Detector : Peak          Project : 111325</p>	 <p>Site : 03CH15-1FY          Condition : PEAK_74 3m 91200_15_1620 VERTICAL          Detector : Peak          Project : 111325</p>



## Appendix E. Duty Cycle Plots

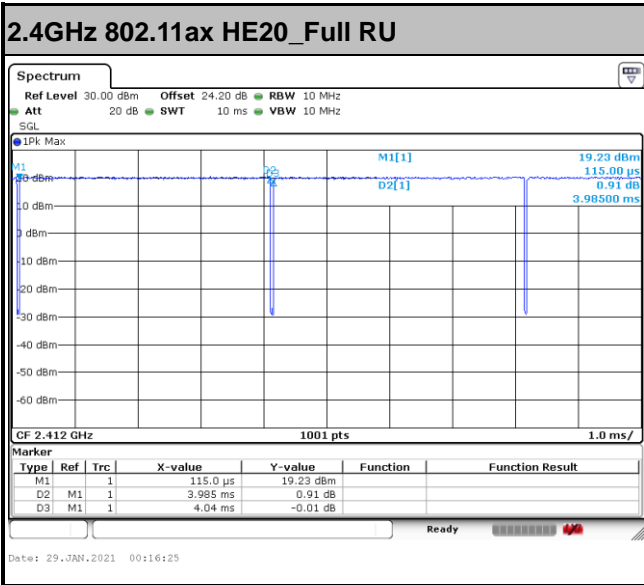
Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1	802.11b	100.00	-	-	10Hz	0.00
2	2.4GHz 802.11ax HE20 Full RU	98.64	-	-	10Hz	0.06
1+2	2.4GHz 802.11n HT40 for Ant 1	99.50	-	-	10Hz	0.02
1+2	2.4GHz 802.11n HT40 for Ant 2	99.12	-	-	10Hz	0.04

<Ant. 1>

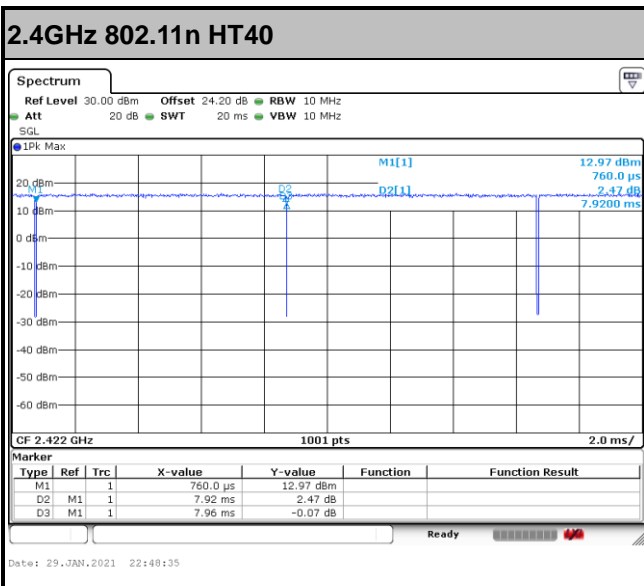




<Ant. 2>



MIMO <Ant. 1>





MIMO <Ant. 2>

