FCC RADIO TEST REPORT

FCC ID	:	**APYHRO00309**
Equipment	:	**Smart phone**
Brand Name	:	**SHARP**
Model Name	:	**APYHRO00309**
Applicant	:	**SHARP CORPORATION** **1 Takumi-cho, Sakai-ku, Sakai City Osaka, Japan 590-8522**
Manufacturer	:	**SHARP CORPORATION** **1 Takumi-Cho, Sakai-Ku, Sakai-Shi, Osaka 590-8522, Japan**
Standard	:	**FCC Part 15 Subpart C §15.247**

The product was received on Jan. 14, 2022 and testing was performed from Jan. 29, 2022 to Mar. 11, 2022. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Louis Wu

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory

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

Table of Contents

History of this test report

Report No.	Version	Description	Issue Date
FR211502C	01	Initial issue of report	Mar. 14, 2022
FR211502C	02	Revise Applicant Address	Mar. 18, 2022

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.247(a)(2)	6dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.247(b)	Power Output Measurement	Pass	-
3.3	15.247(e)	Power Spectral Density	Pass	-
3.4	15.247(d)	Conducted Band Edges	Pass	-
		Conducted Spurious Emission	Pass	-
3.5	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	Pass	3.11 dB under the limit at 2390.000 MHz
3.6	15.207	AC Conducted Emission	Pass	13.58 dB under the limit at 0.449 MHz
3.7	15.203 & 15.247(b)	Antenna Requirement	Pass	-

Declaration of Conformity:

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

Comments and Explanations:

The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Keven Cheng

Report Producer: Cindy Liu

1 General Description

1.1 Product Feature of Equipment Under Test

GSM/WCDMA/LTE, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ac, Wi-Fi 5GHz 802.11a/n/ac, NFC, FM Receiver and GNSS

Product Feature	
Antenna Type	WWAN <Ant. 0>: Monopole Antenna <Ant. 1>: PIFA Antenna <Ant. 2>: Monopole Antenna WLAN: Loop Antenna Bluetooth: Loop Antenna GPS / Glonass / BDS / Galileo: PIFA Antenna NFC: Loop Antenna FM: Using earphone as antenna

Antenna information		
2400 MHz ~ 2483.5 MHz	Peak Gain (dBi)	-1.36

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

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	**Sporton Site No.**
	CO05-HY (TAF Code: 1190)
Remark	The AC Conducted Emission test item subcontracted to Sporton International Inc. EMC & Wireless Communications Laboratory

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

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	TH05-HY, 03CH16-HY

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

FCC designation No.: TW1190 and TW3786

1.4 Applicable Standards

According to the specifications declared by 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.
- ANSI C63.10-2013

Remark:

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

2 Test Configuration of Equipment Under Test

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

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

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
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

The final test modes consider the modulation and the worst data rates as shown in the table below.

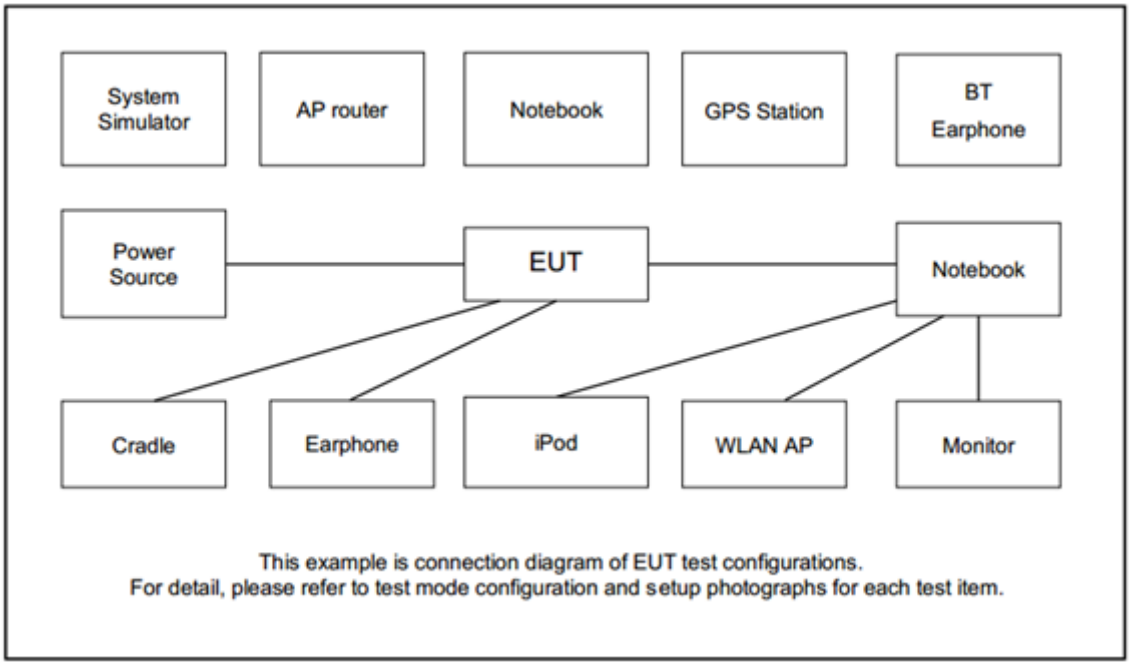
Modulation	Data Rate
802.11b	1 Mbps
802.11g	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20 (Covered by HT20)	MCS0
802.11ac VHT40 (Covered by HT40)	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : Bluetooth Link + WLAN (2.4GHz) Link + Earphone + MPEG4 + USB Cable (Charging from Adapter)

Ch. #	2400-2483.5 MHz			
	802.11b	802.11g	802.11n HT20	802.11n HT40
Low	01	01	01	03
Middle	06	06	06	06
High	11	11	11	09

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

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	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.	Notebook	Dell	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Earphone	Nokia	WH-108	FCC DoC	Unshielded,1.5m	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “QRCT Version 3.0.303.0” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example:
The spectrum analyzer offset is derived from RF cable loss and attenuator factor.
Offset = RF cable loss + attenuator factor.
Following shows an offset computation example with cable loss 4.2 dB and 10 dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).
= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 6dB and 99% Bandwidth Measurement

3.1.1 Limit of 6dB and 99% Bandwidth

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

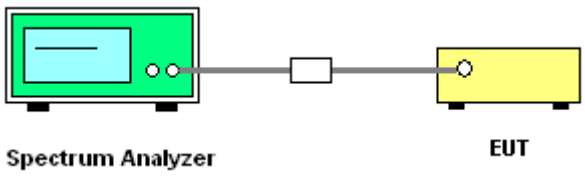
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 6.9.3 (OBW) and 11.8.1 (6dB BW).
2. The RF output of EUT is connected to the spectrum analyzer by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6 dB bandwidth must be greater than 500 kHz.
5. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) ≥ 3 * RBW.
6. Measure and record the results in the test report.

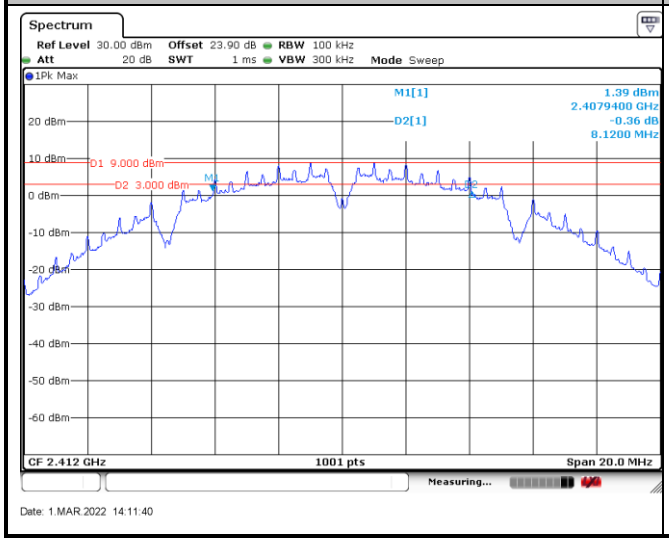
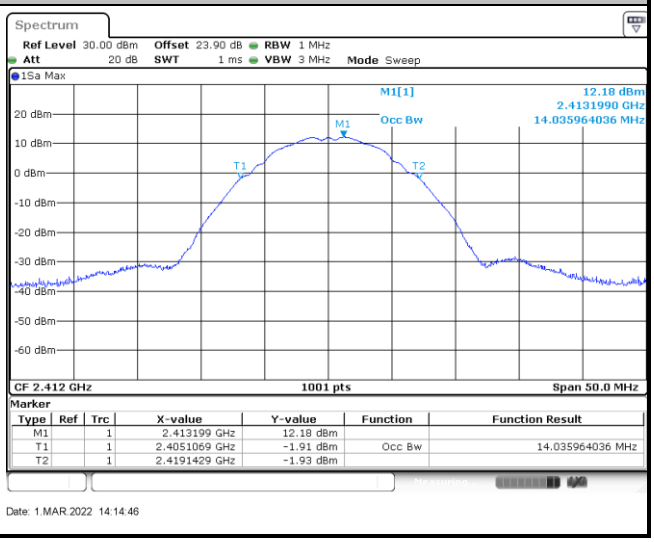
3.1.4 Test Setup



3.1.5 Test Result of 6dB and 99% Occupied Bandwidth

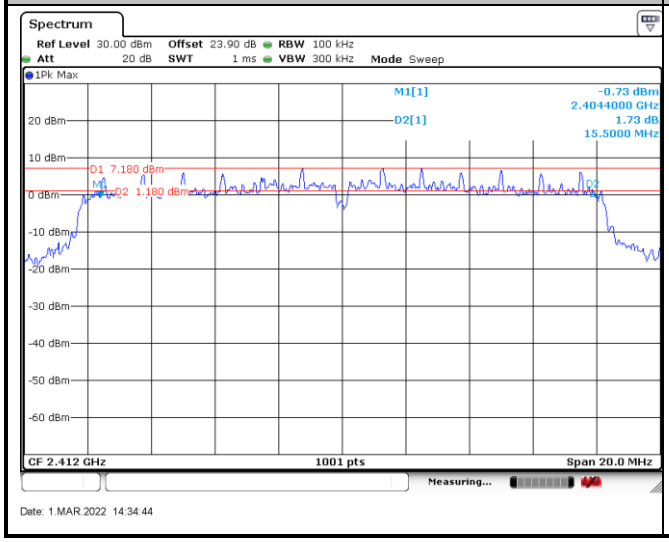
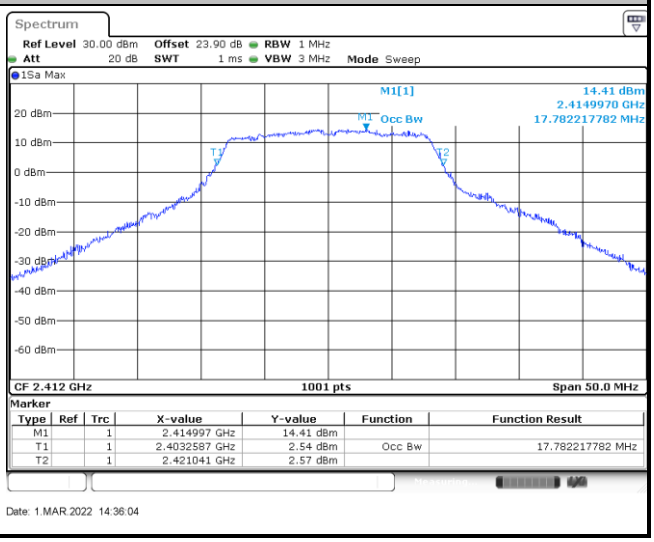
Please refer to Appendix A.

<802.11b>

6dB Bandwidth	99% Occupied Bandwidth
	

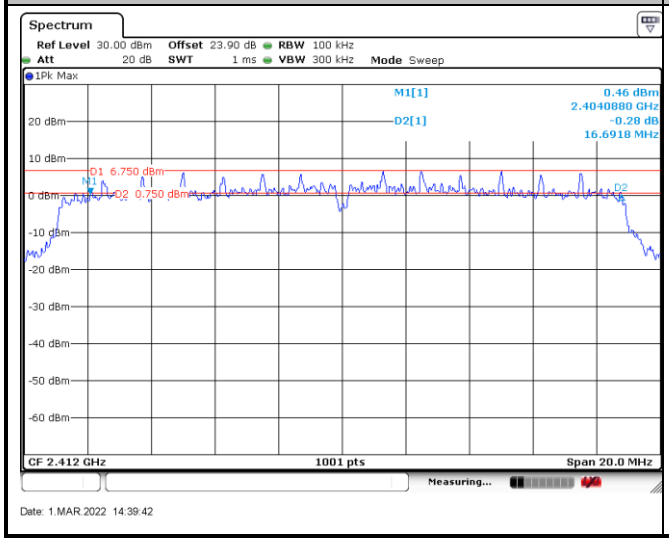
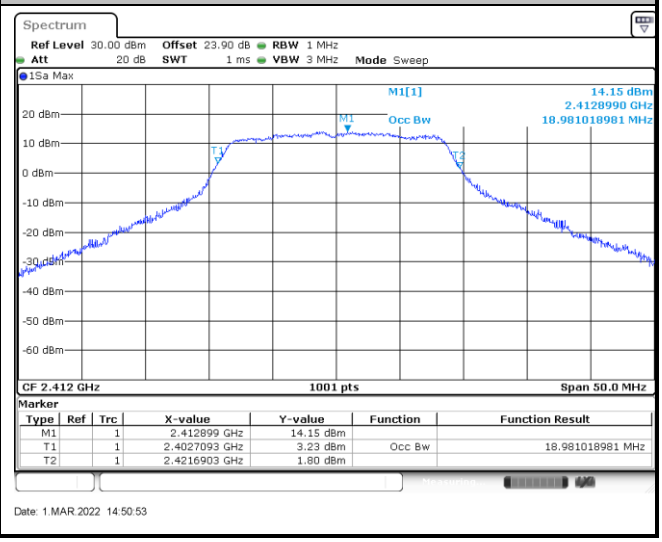
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11g>

6dB Bandwidth	99% Occupied Bandwidth
	

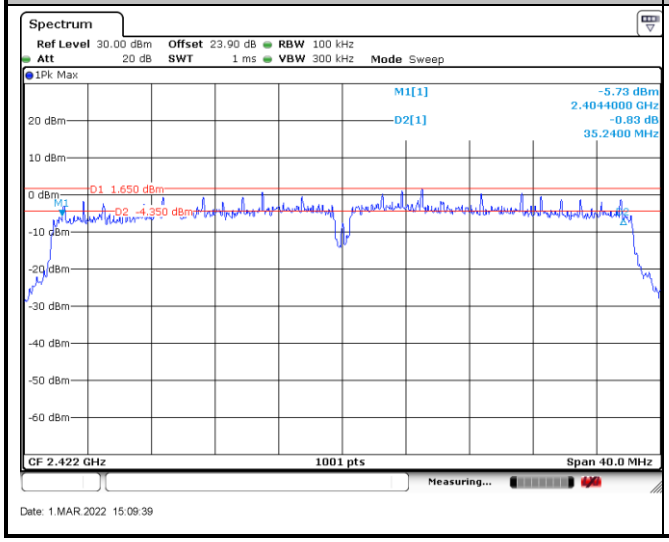
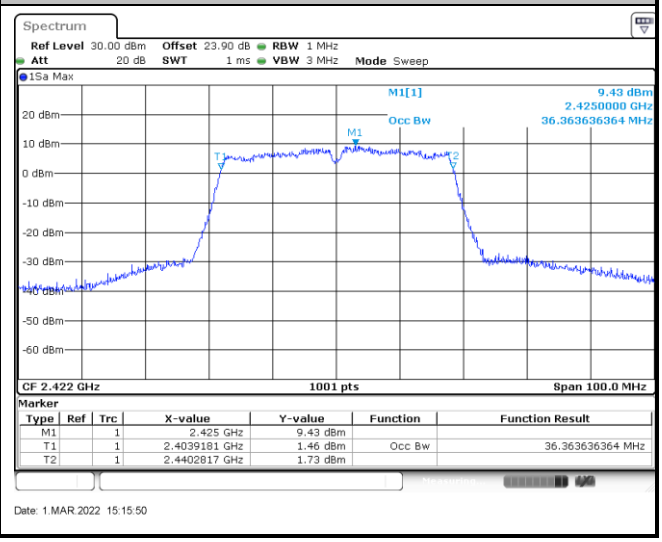
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11n HT20>

6dB Bandwidth	99% Occupied Bandwidth
	

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

<802.11n HT40>

6dB Bandwidth	99% Occupied Bandwidth
	

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

3.2 Output Power Measurement

3.2.1 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.

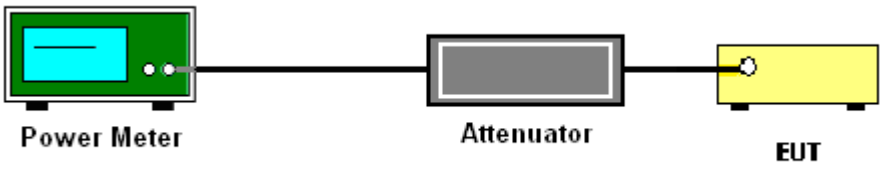
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

1. For Average Power, the testing follows ANSI C63.10 Section 11.9.2.3.2 Method AVGPM-G
2. The RF output of EUT is connected to the power meter by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to transmit continuously.
4. Measure the conducted output power and record the results in the test report.

3.2.4 Test Setup



3.2.5 Test Result of Average Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

The peak power spectral density shall not be greater than 8 dBm in any 3 kHz band at any time interval of continuous transmission.

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 11.10.2 Method PKPSD.
2. The RF output of EUT is connected to the spectrum analyzer by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 3 kHz. Video bandwidth VBW = 10 kHz In order to make an accurate measurement, set the span to 1.5 times DTS Channel Bandwidth. (6dB BW)
5. Detector = peak, Sweep time = auto couple, Trace mode = max hold, Allow trace to fully stabilize. Use the peak marker function to determine the maximum power level.
6. Measure and record the results in the test report.

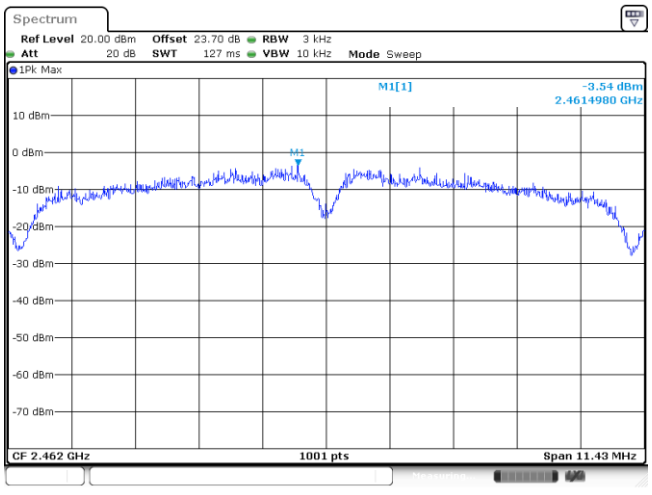
3.3.4 Test Setup

3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

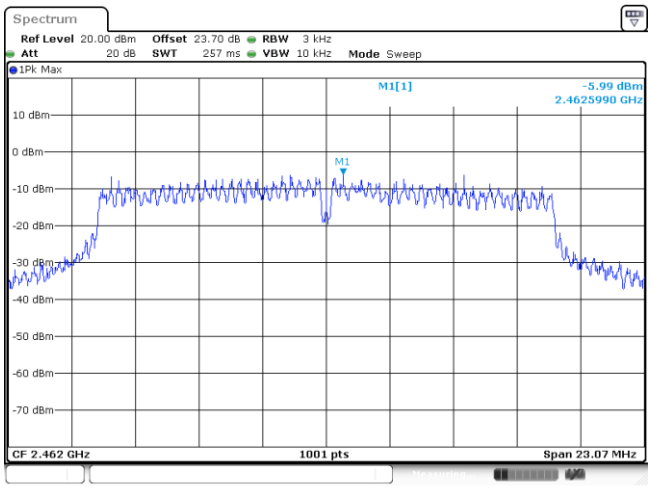
<802.11b>

Maximum Power Density Plot (dBm/3kHz)



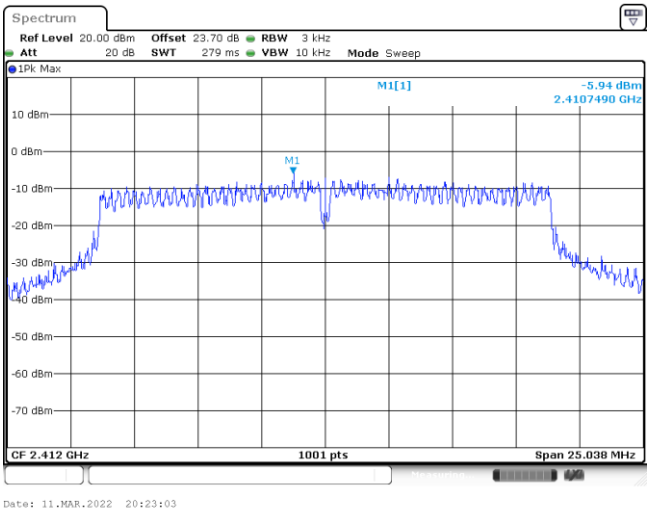
<802.11g>

Maximum Power Density Plot (dBm/3kHz)



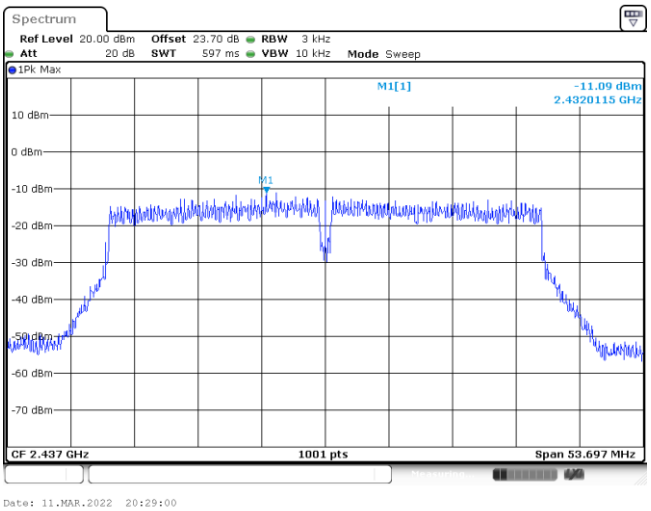
<802.11n HT20>

Maximum Power Density Plot (dBm/3kHz)



<802.11n HT40>

Maximum Power Density Plot (dBm/3kHz)



3.4 Conducted Band Edges and Spurious Emission Measurement

3.4.1 Limit of Conducted Band Edges and Spurious Emission Measurement

In any 100 kHz bandwidth outside of the authorized frequency band, the emissions which fall in the non-restricted bands shall be attenuated at least 20 dB / 30dB relative to the maximum PSD level in 100 kHz by RF conducted measurement.

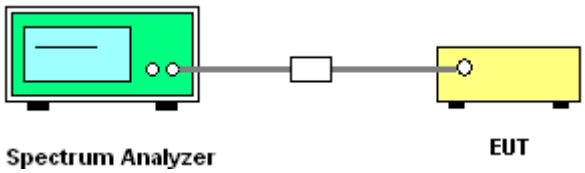
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 11.11.3 Emission level measurement.
2. The RF output of EUT is connected to the spectrum analyzer by RF cable and attenuator. The path loss is compensated to the results for each measurement.
3. Set the maximum power setting and enable the EUT to transmit continuously.
4. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB per 15.247(d).
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

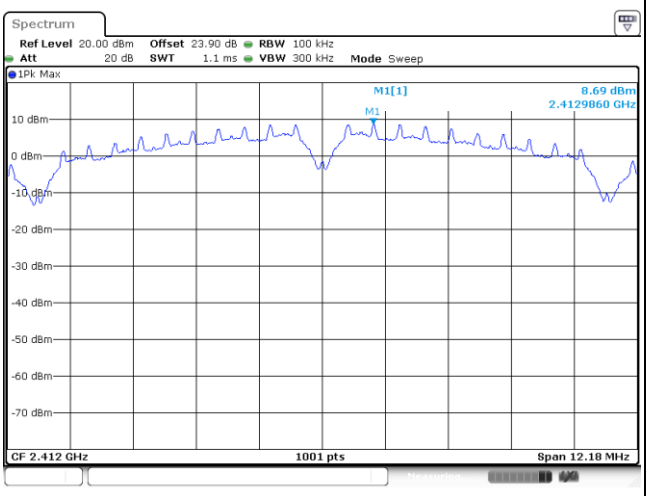
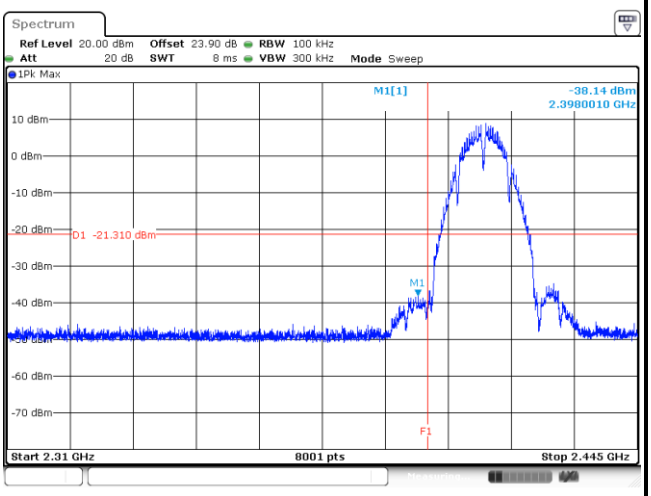
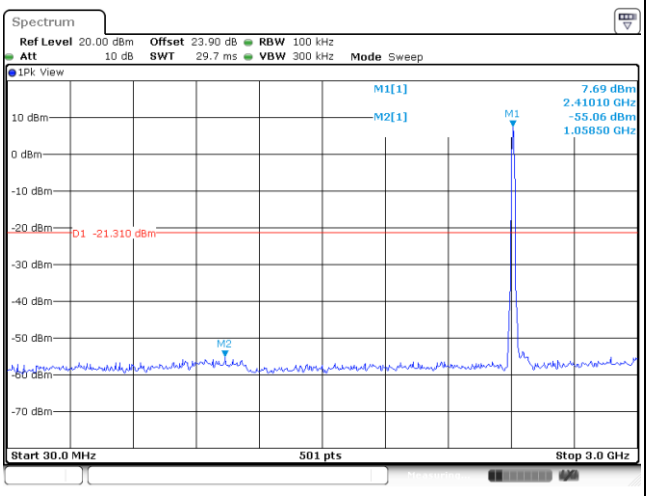
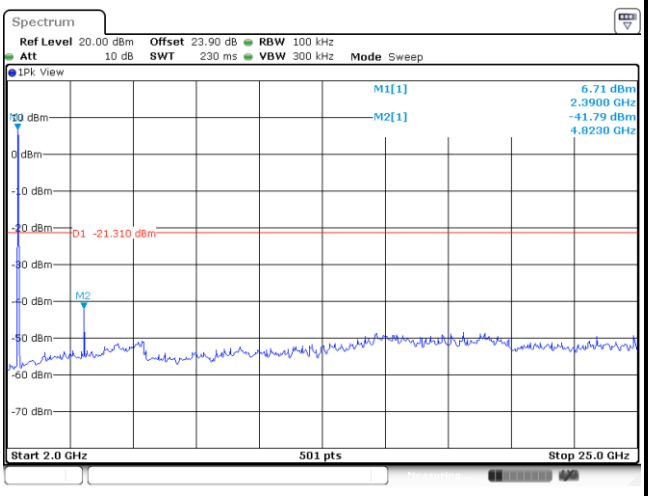
3.4.4 Test Setup



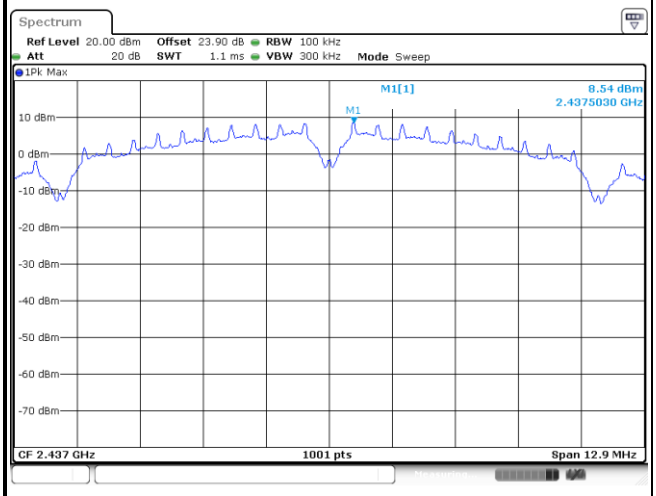
3.4.5 Test Result of Conducted Band Edges and Spurious Emission

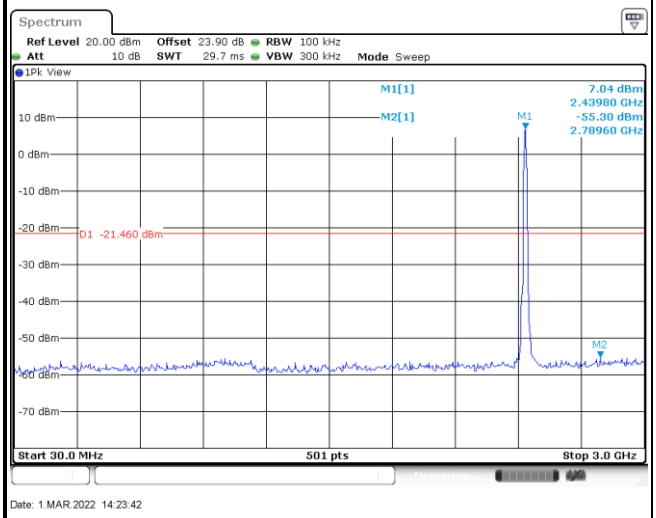
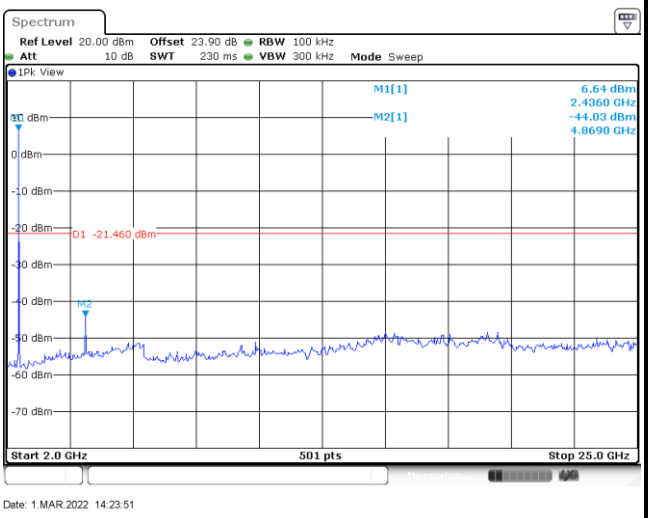
Number of TX = 1, Ant. 4 (Measured)

Test Mode :	802.11b	Test Channel :	01

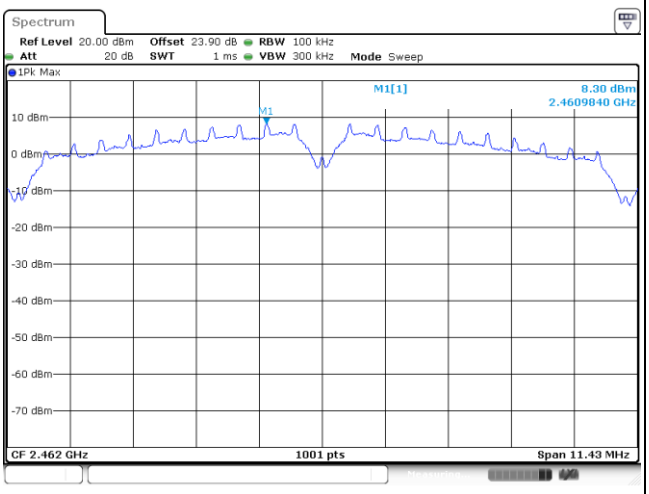
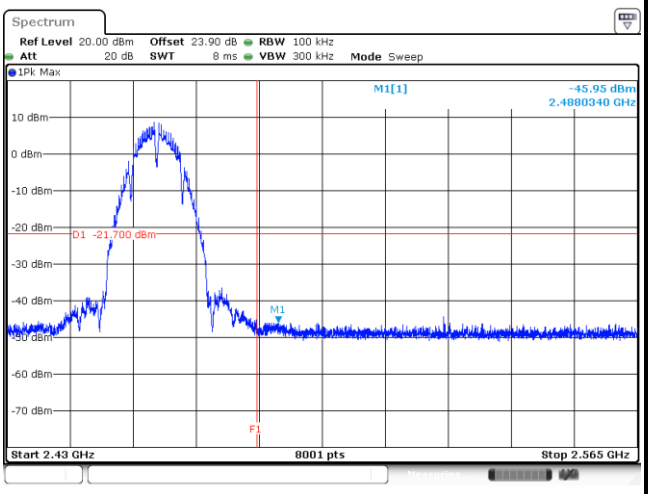
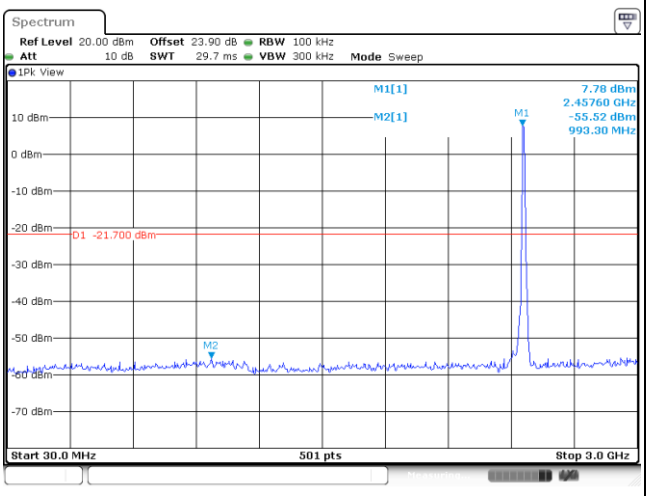
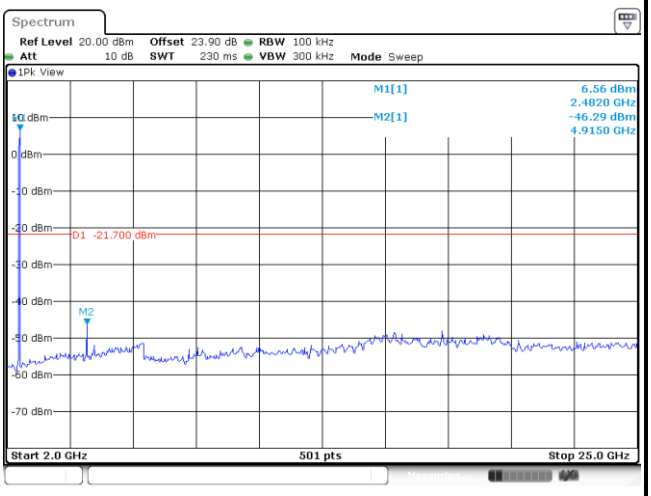
100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

Test Mode :	802.11b	Test Channel :	06

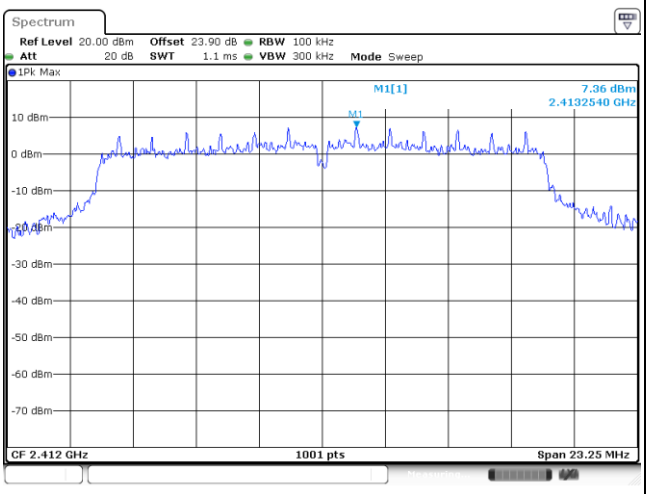
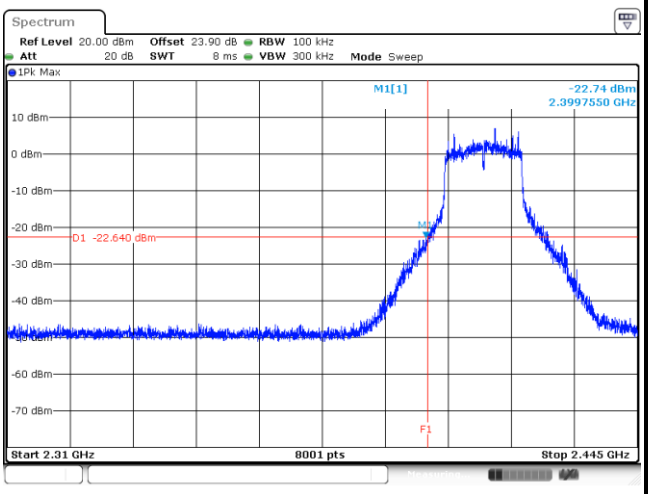
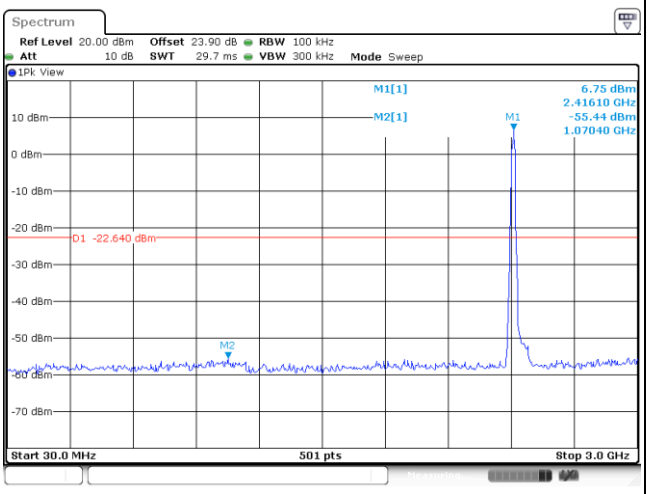
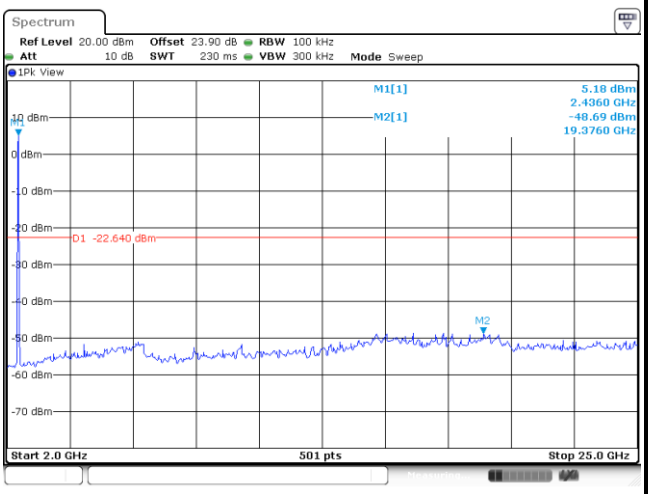
100kHz PSD reference Level	Channel Plot
	

Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

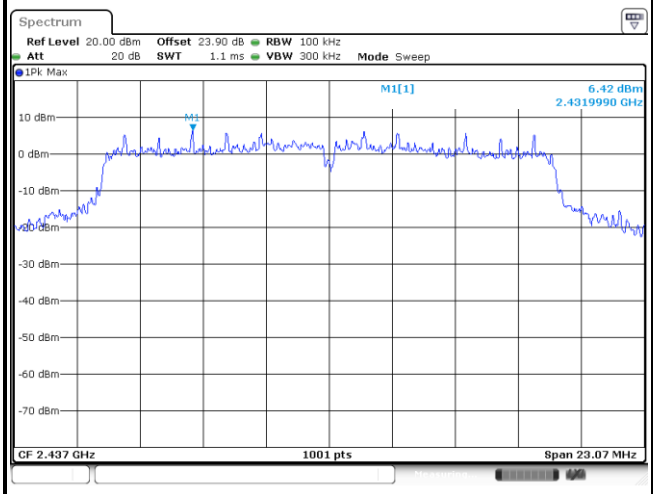
Test Mode :	802.11b	Test Channel :	11

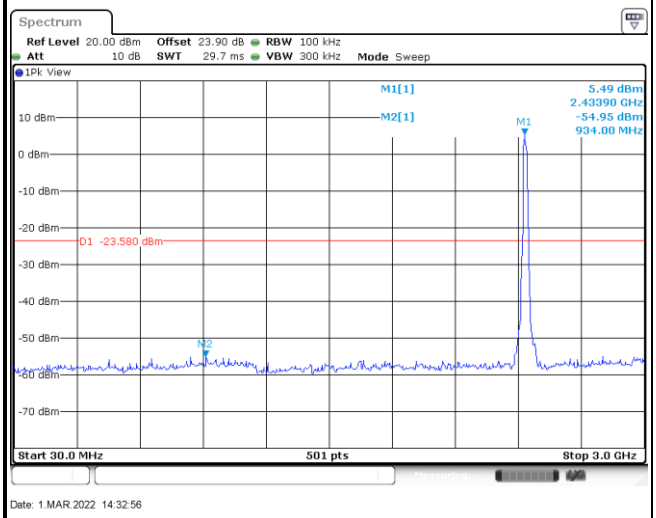
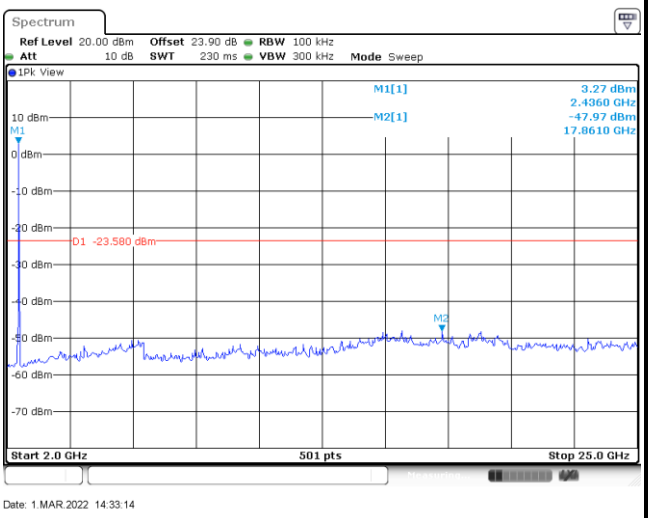
100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

Test Mode :	802.11g	Test Channel :	01

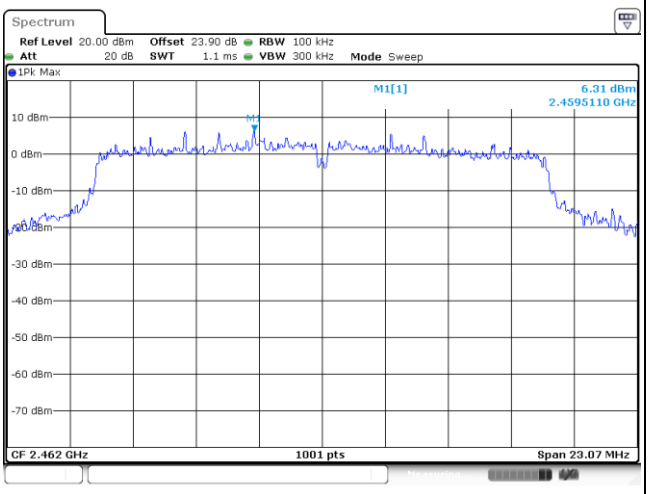
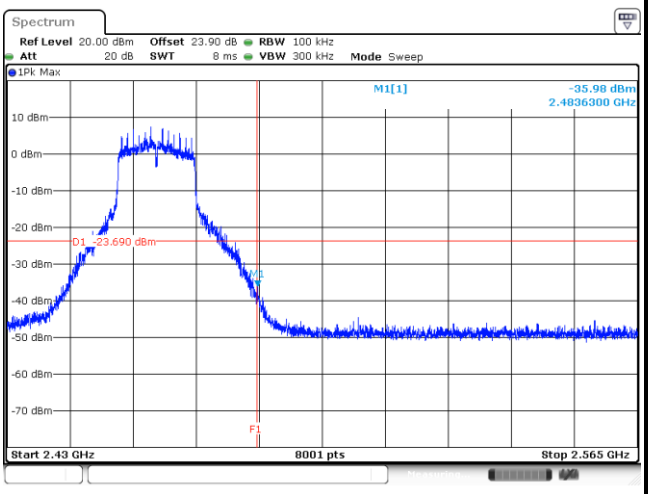
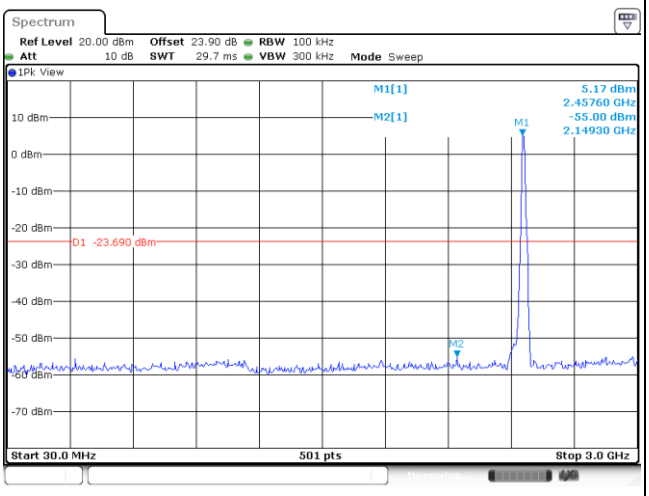
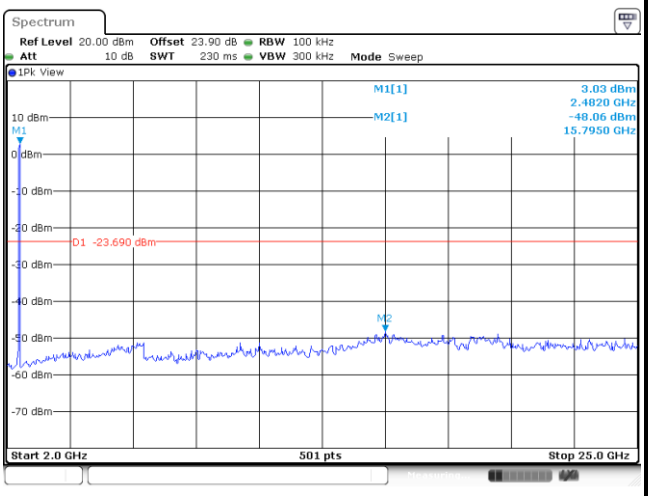
100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

Test Mode :	802.11g	Test Channel :	06

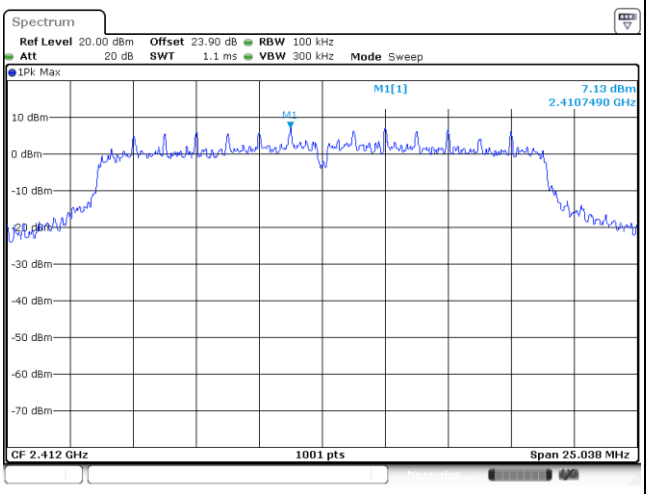
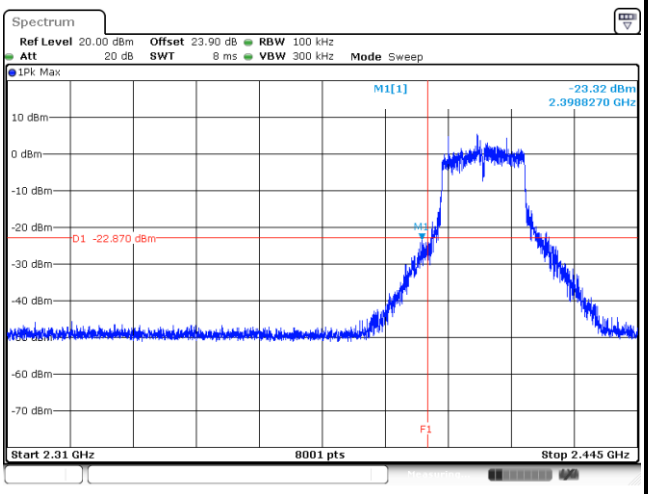
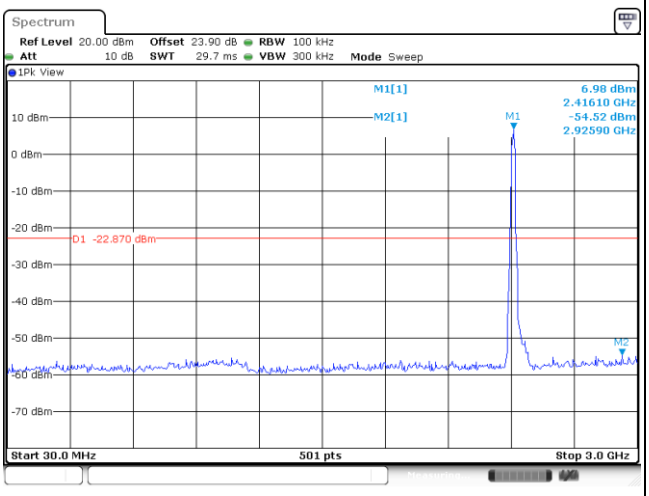
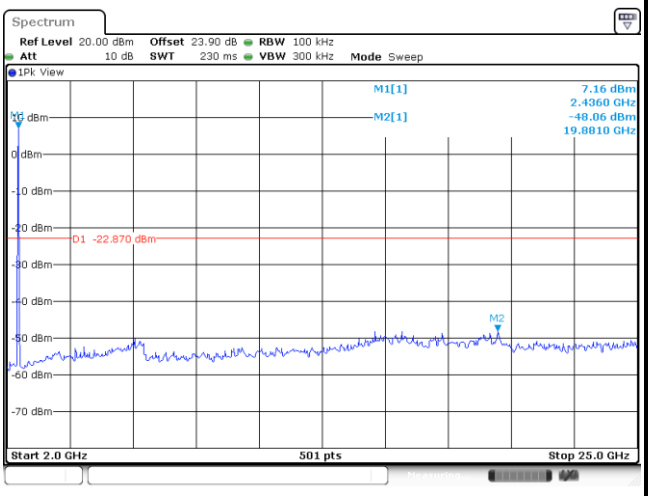
100kHz PSD reference Level	Channel Plot
	

Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

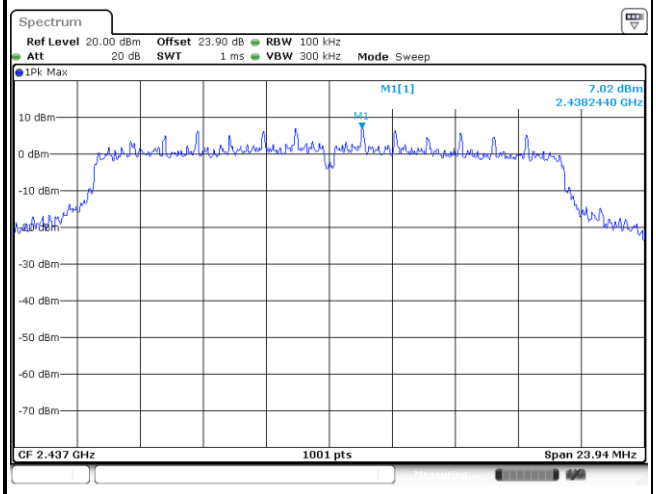
Test Mode :	802.11g	Test Channel :	11

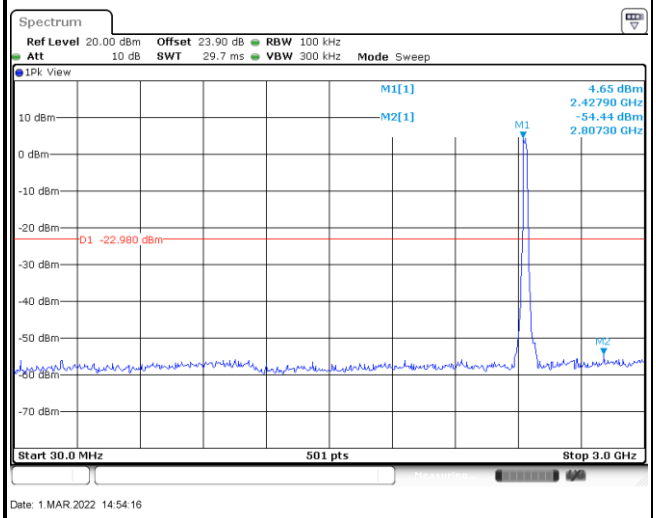
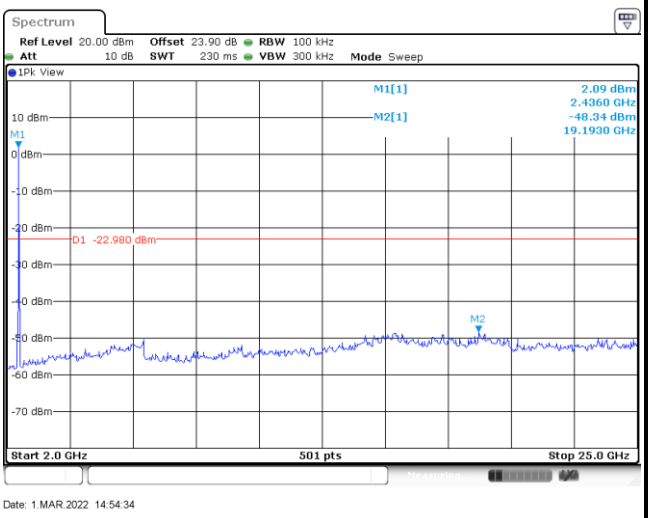
100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

Test Mode :	802.11n HT20	Test Channel :	01

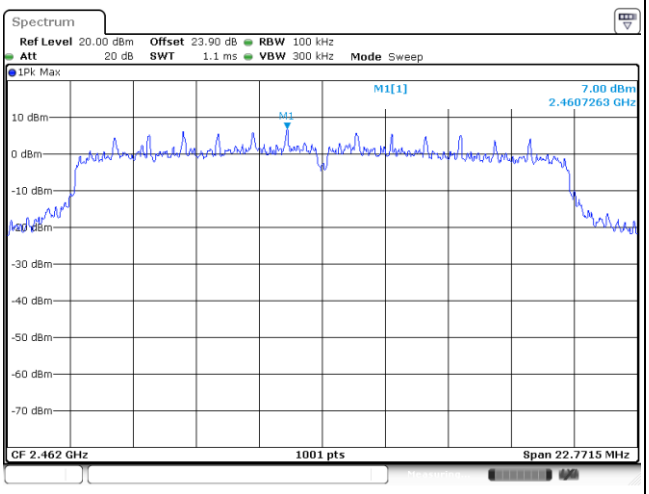
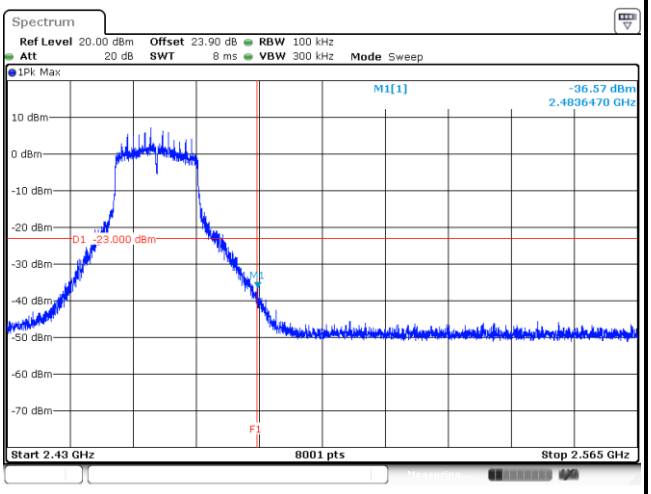
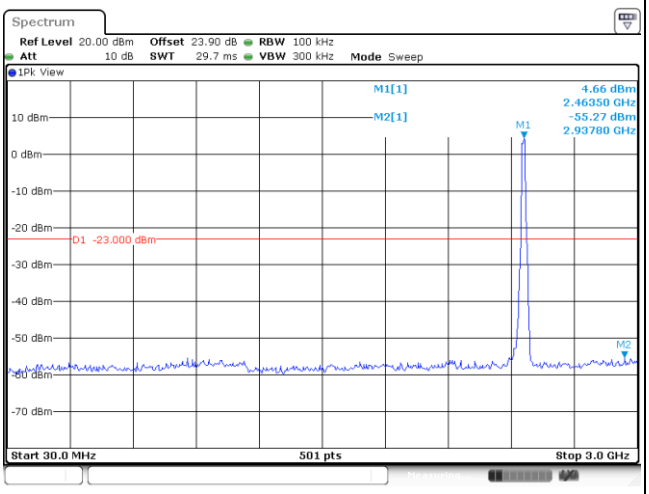
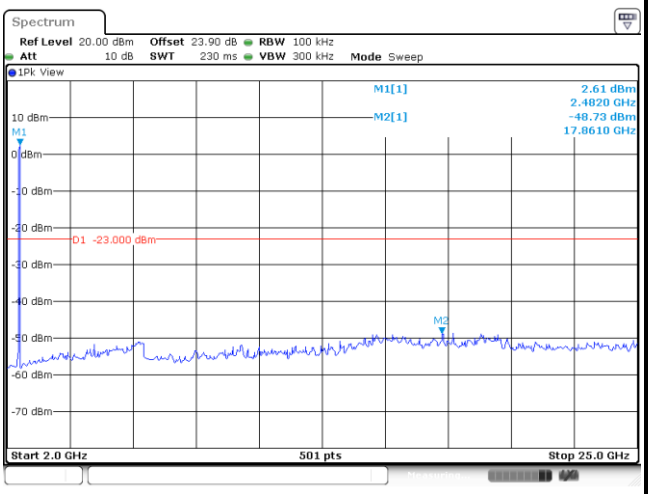
100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

Test Mode :	802.11n HT20	Test Channel :	06

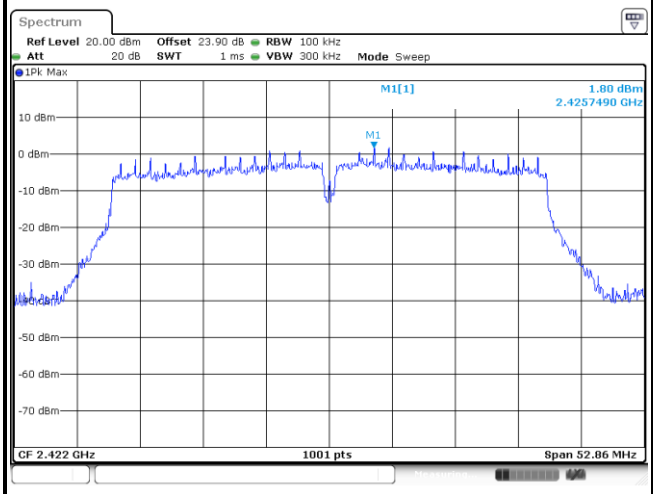
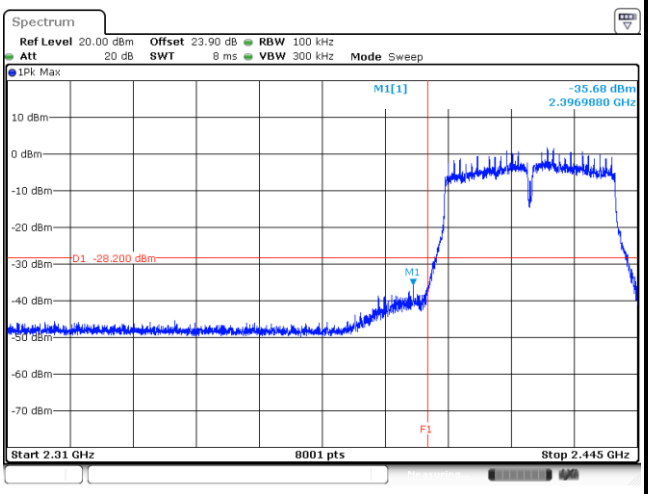
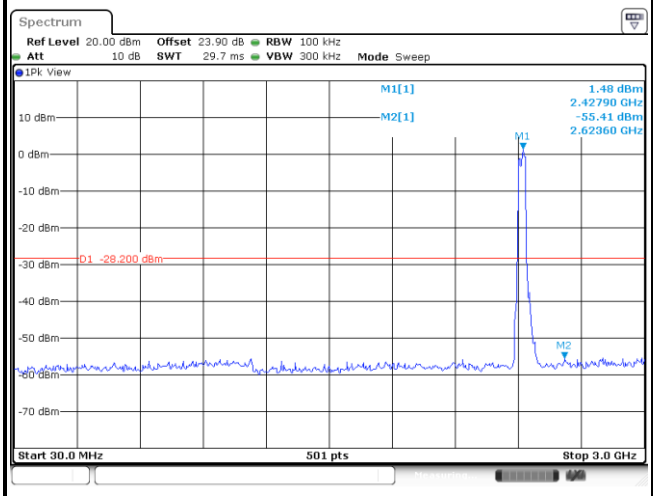
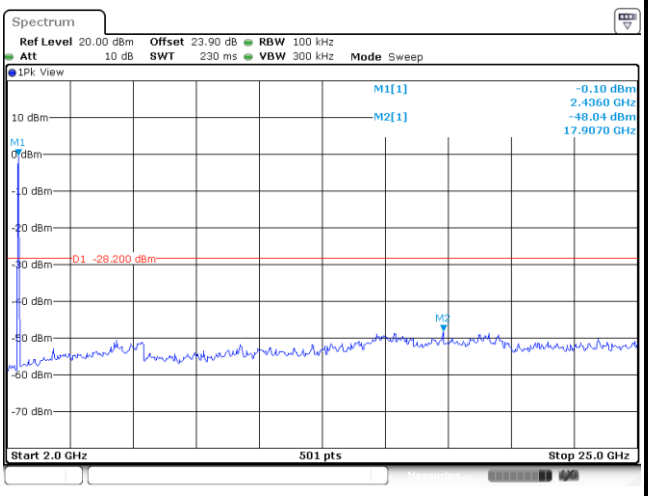
100kHz PSD reference Level	Channel Plot
	

Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

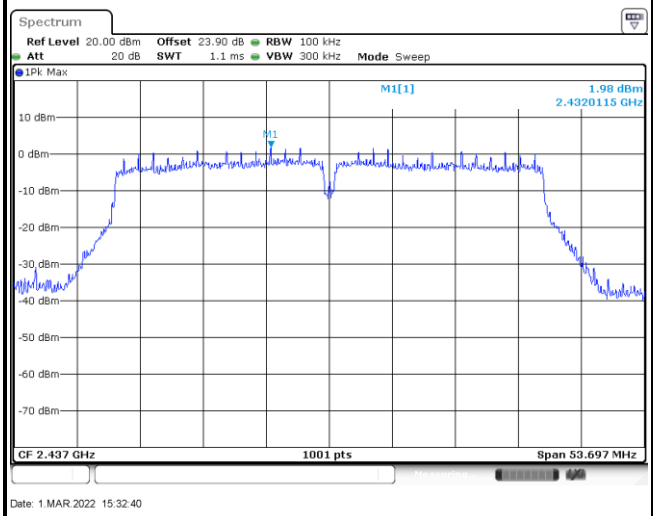
Test Mode :	802.11n HT20	Test Channel :	11

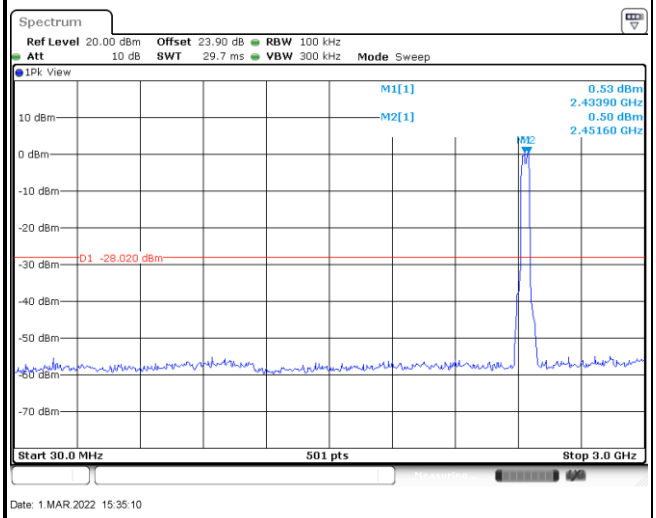
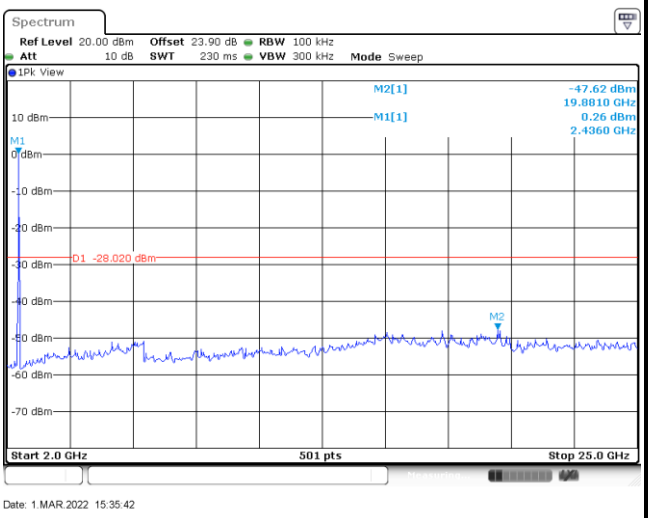
100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

Test Mode :	802.11n HT40	Test Channel :	03

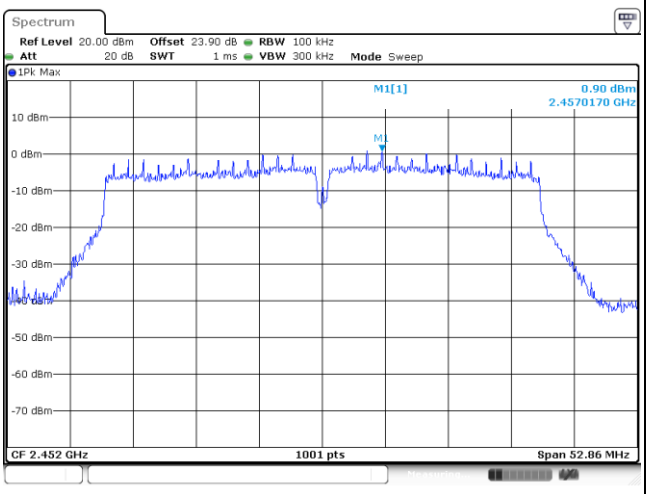
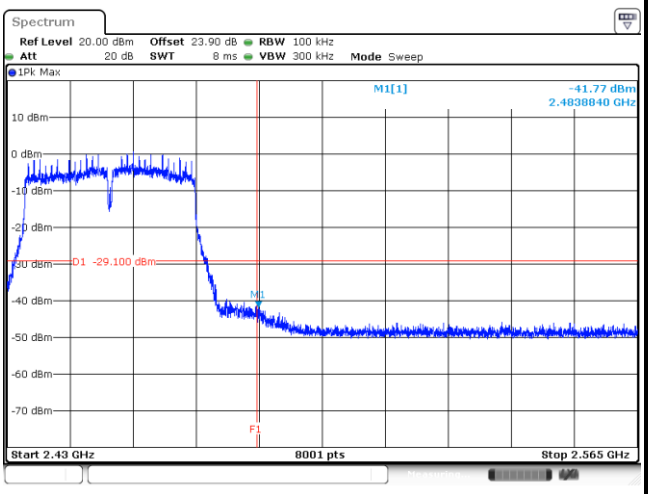
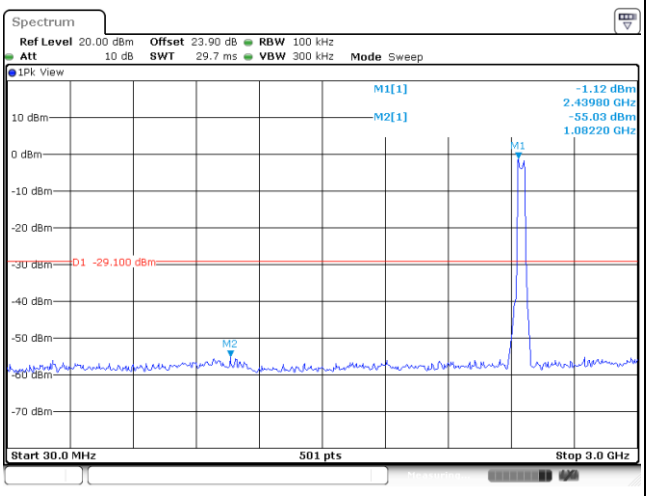
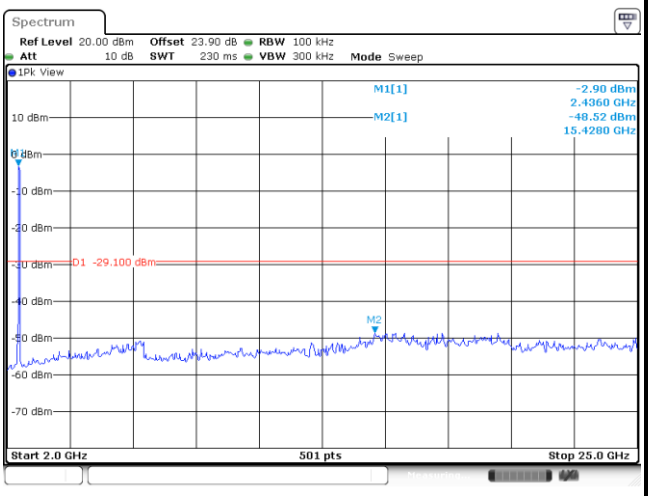
100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

Test Mode :	802.11n HT40	Test Channel :	06

100kHz PSD reference Level	Channel Plot
	

Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

Test Mode :	802.11n HT40	Test Channel :	09

100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 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 is 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

3.5.2 Measuring Instruments

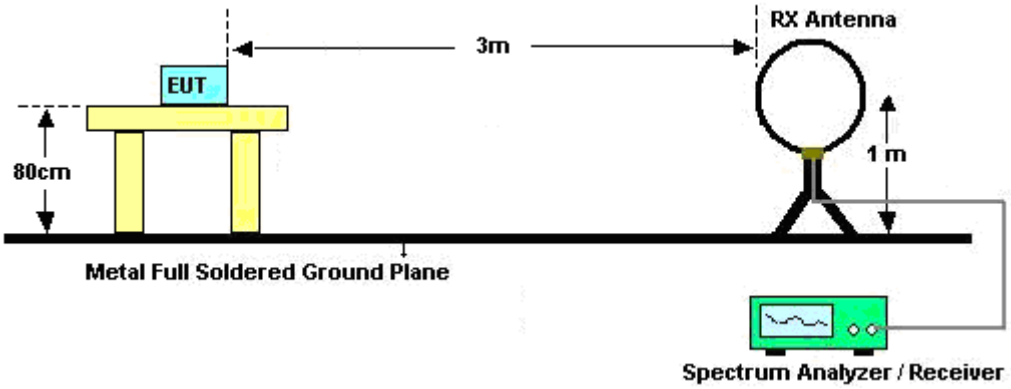
Please refer to the measuring equipment list in this test report.

3.5.3 Test Procedures

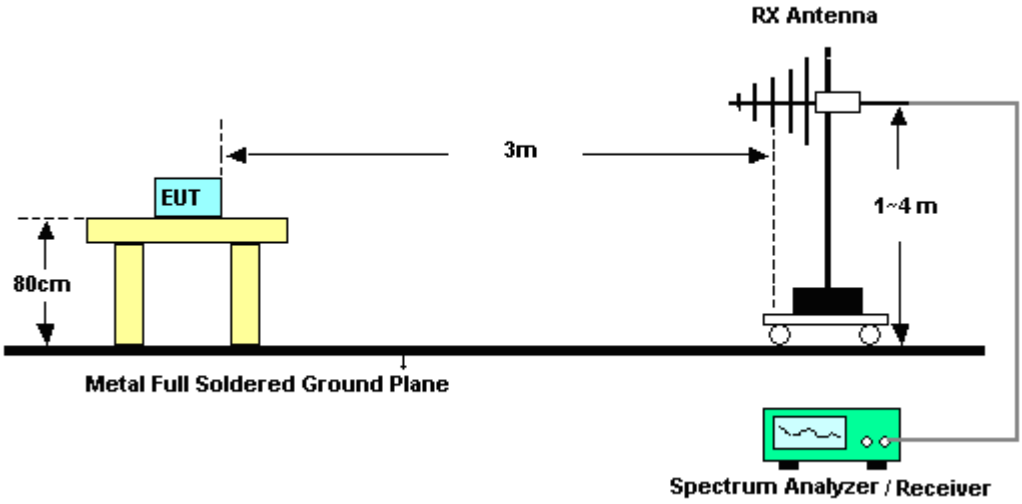
1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT is arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
4. The EUT is set 3 meters away from the receiving antenna, which is mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as "-".
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as "-".
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 ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
   (3) Set RBW = 1 MHz, VBW= 3 MHz for f ≥ 1 GHz for peak measurement.
   For average measurement:
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.5.4 Test Setup

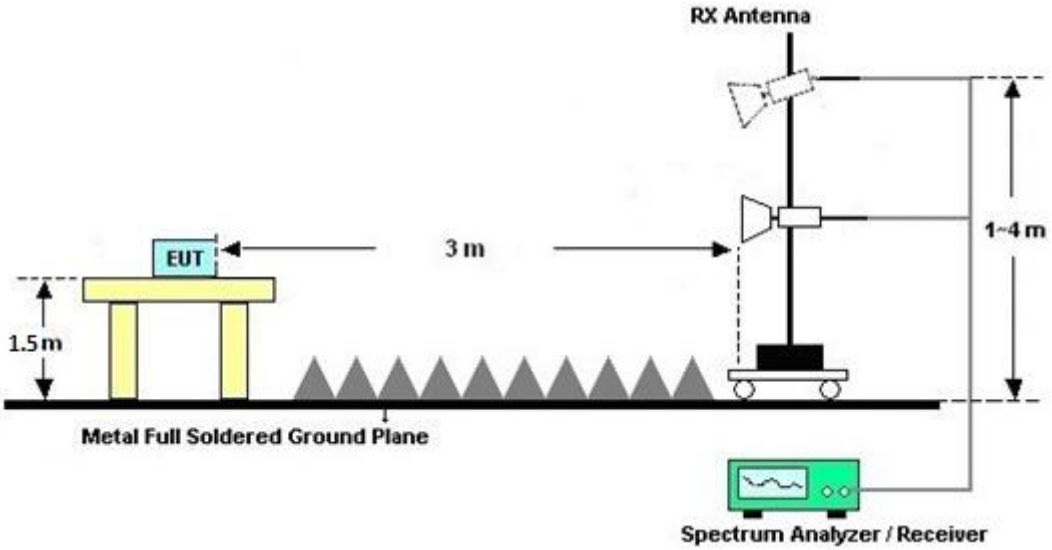
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated test above 1GHz



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

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

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

3.5.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.5.7 Duty Cycle

Please refer to Appendix E.

3.5.8 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic)

Please refer to Appendix C and D.

3.6 AC Conducted Emission Measurement

3.6.1 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.

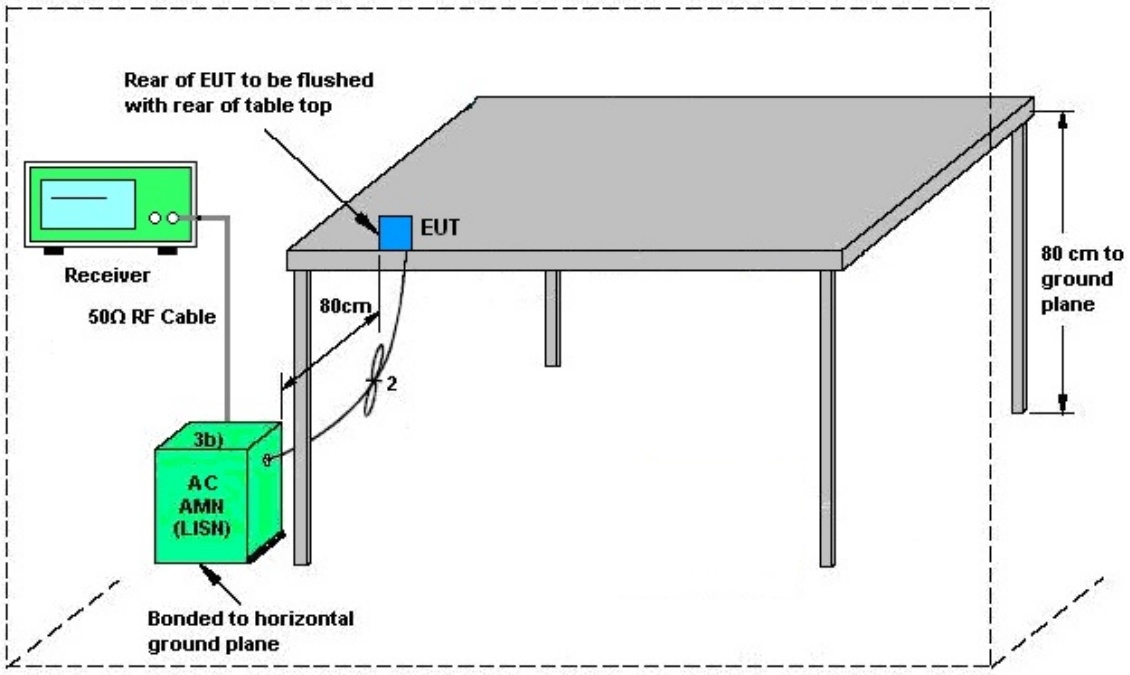
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN shall be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF bandwidth = 9kHz) with Maximum Hold Mode.

3.6.4 Test Setup



AMN = Artificial mains network (LISN)
AE = Associated equipment
EUT = Equipment under test
ISN = Impedance stabilization network

3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.7 Antenna Requirements

3.7.1 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.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 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	Sep. 07, 2021	Feb. 08, 2022~ Mar. 11, 2022	Sep. 06, 2022	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N-06	47020 & 06	30MHz to 1GHz	Oct. 09, 2021	Feb. 08, 2022~ Mar. 11, 2022	Oct. 08, 2022	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-02114	1G~18GHz	Aug. 04, 2021	Feb. 08, 2022~ Mar. 11, 2022	Aug. 03, 2022	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	00993	18GHz ~40GHz	Nov. 30, 2021	Feb. 08, 2022~ Mar. 11, 2022	Nov. 29, 2022	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1G	Jul. 05, 2021	Feb. 08, 2022~ Mar. 11, 2022	Jul. 04. 2022	Radiation (03CH16-HY)
Amplifier	EMCI	EMC051845SE	980729	1-18GHz	Jul. 09, 2021	Feb. 08, 2022~ Mar. 11, 2022	Jul. 08, 2022	Radiation (03CH16-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun. 22, 2021	Feb. 08, 2022~ Mar. 11, 2022	Jun. 21, 2022	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec. 09, 2021	Feb. 08, 2022~ Mar. 11, 2022	Dec. 08, 2022	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY57290111	3Hz~26.5GHz	Dec. 15, 2021	Feb. 08, 2022~ Mar. 11, 2022	Dec. 14, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11680/4PE	NA	Aug. 28, 2021	Feb. 08, 2022~ Mar. 11, 2022	Aug. 27, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11688/4PE	NA	Aug. 28, 2021	Feb. 08, 2022~ Mar. 11, 2022	Aug. 27, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	EC-A5-300-5757	NA	Aug. 28, 2021	Feb. 08, 2022~ Mar. 11, 2022	Aug. 27, 2022	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Feb. 08, 2022~ Mar. 11, 2022	N/A	Radiation (03CH16-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Feb. 08, 2022~ Mar. 11, 2022	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Feb. 08, 2022~ Mar. 11, 2022	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Feb. 08, 2022~ Mar. 11, 2022	N/A	Radiation (03CH16-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 16. 2021	Feb. 06, 2022~ Mar. 11, 2022	Nov. 15. 2022	Conducted (TH05-HY)
Power Meter	DARE	RPR3006W	16I00054SNO12 (NO:113)	10MHz~6GHz	Dec. 16, 2021	Feb. 06, 2022~ Mar. 11, 2022	Dec. 15, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	Feb. 06, 2022~ Mar. 11, 2022	Aug. 29, 2022	Conducted (TH05-HY)
Switch Control Manframe	E-IUSTRUMENT	ETF-1405-0	EC1900067 (BOX7)	N/A	Aug. 12, 2021	Feb. 06, 2022~ Mar. 11, 2022	Aug. 11, 2022	Conducted (TH05-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	Jan. 29, 2022	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2021	Jan. 29, 2022	Nov. 30, 2022	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2021	Jan. 29, 2022	Nov. 16, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 03, 2021	Jan. 29, 2022	Dec. 02, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 16, 2021	Jan. 29, 2022	Nov. 15, 2022	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	Jan. 29, 2022	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Jul. 28, 2021	Jan. 29, 2022	Jul. 27, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 30, 2021	Jan. 29, 2022	Dec. 29, 2022	Conduction (CO05-HY)

5 Uncertainty of Evaluation

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

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

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.2 dB**

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

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

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Hank Hsu/Derek Hsu	Temperature:	21~25	°C
Test Date:	2022/2/6~2022/3/11	Relative Humidity:	51~54	%

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

2.4GHz Band Single Antenna										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
					Ant4	Ant5	Ant4	Ant5		
11b	1Mbps	1	1	2412	14.04	-	8.12	-	0.50	Pass
11b	1Mbps	1	6	2437	14.09	-	8.60	-	0.50	Pass
11b	1Mbps	1	11	2462	13.99	-	7.62	-	0.50	Pass
11g	6Mbps	1	1	2412	17.78	-	15.50	-	0.50	Pass
11g	6Mbps	1	6	2437	17.83	-	15.38	-	0.50	Pass
11g	6Mbps	1	11	2462	17.83	-	15.38	-	0.50	Pass
HT20	MCS0	1	1	2412	18.98	-	16.69	-	0.50	Pass
HT20	MCS0	1	6	2437	18.98	-	15.96	-	0.50	Pass
HT20	MCS0	1	11	2462	18.83	-	15.18	-	0.50	Pass
HT40	MCS0	1	3	2422	36.36	-	35.24	-	0.50	Pass
HT40	MCS0	1	6	2437	36.56	-	35.80	-	0.50	Pass
HT40	MCS0	1	9	2452	36.46	-	35.24	-	0.50	Pass

TEST RESULTS DATA
Average Output Power

2.4GHz Band Single Antenna																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant4	Ant5	SUM	Ant4	Ant5	Ant4	Ant5	Ant4	Ant5	Ant4	Ant5	
11b	1Mbps	1	1	2412	17.40	-		30.00	-	-1.36	-	16.04	-	36.00	-	Pass
11b	1Mbps	1	6	2437	18.10	-		30.00	-	-1.36	-	16.74	-	36.00	-	Pass
11b	1Mbps	1	11	2462	18.60	-		30.00	-	-1.36	-	17.24	-	36.00	-	Pass
11g	6Mbps	1	1	2412	18.80	-		30.00	-	-1.36	-	17.44	-	36.00	-	Pass
11g	6Mbps	1	6	2437	18.70	-		30.00	-	-1.36	-	17.34	-	36.00	-	Pass
11g	6Mbps	1	11	2462	18.70	-		30.00	-	-1.36	-	17.34	-	36.00	-	Pass
HT20	MCS0	1	1	2412	18.70	-		30.00	-	-1.36	-	17.34	-	36.00	-	Pass
HT20	MCS0	1	6	2437	18.50	-		30.00	-	-1.36	-	17.14	-	36.00	-	Pass
HT20	MCS0	1	11	2462	18.00	-		30.00	-	-1.36	-	16.64	-	36.00	-	Pass
HT40	MCS0	1	3	2422	16.20	-		30.00	-	-1.36	-	14.84	-	36.00	-	Pass
HT40	MCS0	1	6	2437	16.40	-		30.00	-	-1.36	-	15.04	-	36.00	-	Pass
HT40	MCS0	1	9	2452	15.00	-		30.00	-	-1.36	-	13.64	-	36.00	-	Pass
VHT20	MCS0	1	1	2412	18.60	-		30.00	-	-1.36	-	17.24	-	36.00	-	Pass
VHT20	MCS0	1	6	2437	18.40	-		30.00	-	-1.36	-	17.04	-	36.00	-	Pass
VHT20	MCS0	1	11	2462	17.90	-		30.00	-	-1.36	-	16.54	-	36.00	-	Pass
VHT40	MCS0	1	3	2422	16.10	-		30.00	-	-1.36	-	14.74	-	36.00	-	Pass
VHT40	MCS0	1	6	2437	16.30	-		30.00	-	-1.36	-	14.94	-	36.00	-	Pass
VHT40	MCS0	1	9	2452	15.00	-		30.00	-	-1.36	-	13.64	-	36.00	-	Pass

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

TEST RESULTS DATA
Peak Power Spectral Density

2.4GHz Band Single Antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Ant4	Ant5	Worse + 3.01	Ant4	Ant5	Ant4	Ant5	
11b	1Mbps	1	1	2412	-4.36	-		-1.36	-	8.00	-	Pass
11b	1Mbps	1	6	2437	-4.39	-		-1.36	-	8.00	-	Pass
11b	1Mbps	1	11	2462	-3.54	-		-1.36	-	8.00	-	Pass
11g	6Mbps	1	1	2412	-6.17	-		-1.36	-	8.00	-	Pass
11g	6Mbps	1	6	2437	-6.21	-		-1.36	-	8.00	-	Pass
11g	6Mbps	1	11	2462	-5.99	-		-1.36	-	8.00	-	Pass
HT20	MCS0	1	1	2412	-5.94	-		-1.36	-	8.00	-	Pass
HT20	MCS0	1	6	2437	-6.51	-		-1.36	-	8.00	-	Pass
HT20	MCS0	1	11	2462	-6.59	-		-1.36	-	8.00	-	Pass
HT40	MCS0	1	3	2422	-11.23	-		-1.36	-	8.00	-	Pass
HT40	MCS0	1	6	2437	-11.09	-		-1.36	-	8.00	-	Pass
HT40	MCS0	1	9	2452	-12.45	-		-1.36	-	8.00	-	Pass

Measured power density (dBm) has offset with cable loss.

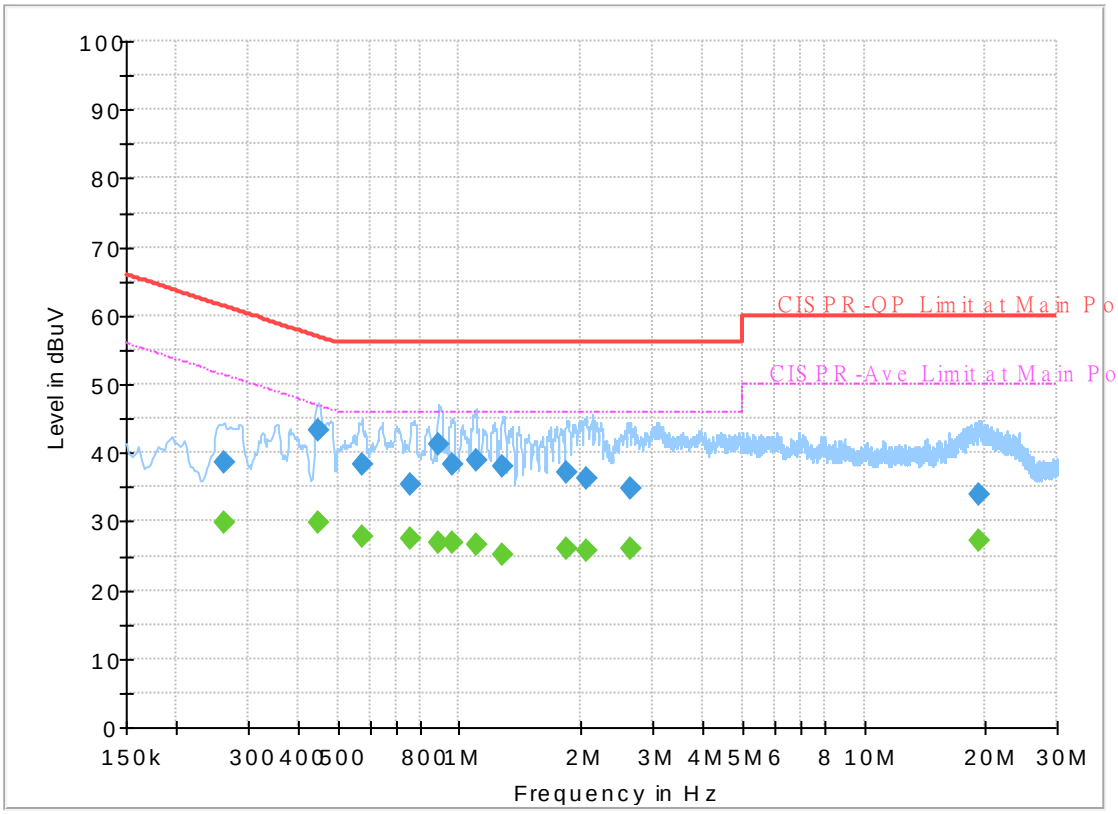
Appendix B. AC Conducted Emission Test Results

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

EUT Information

Report NO :	211502
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

Full Spectrum



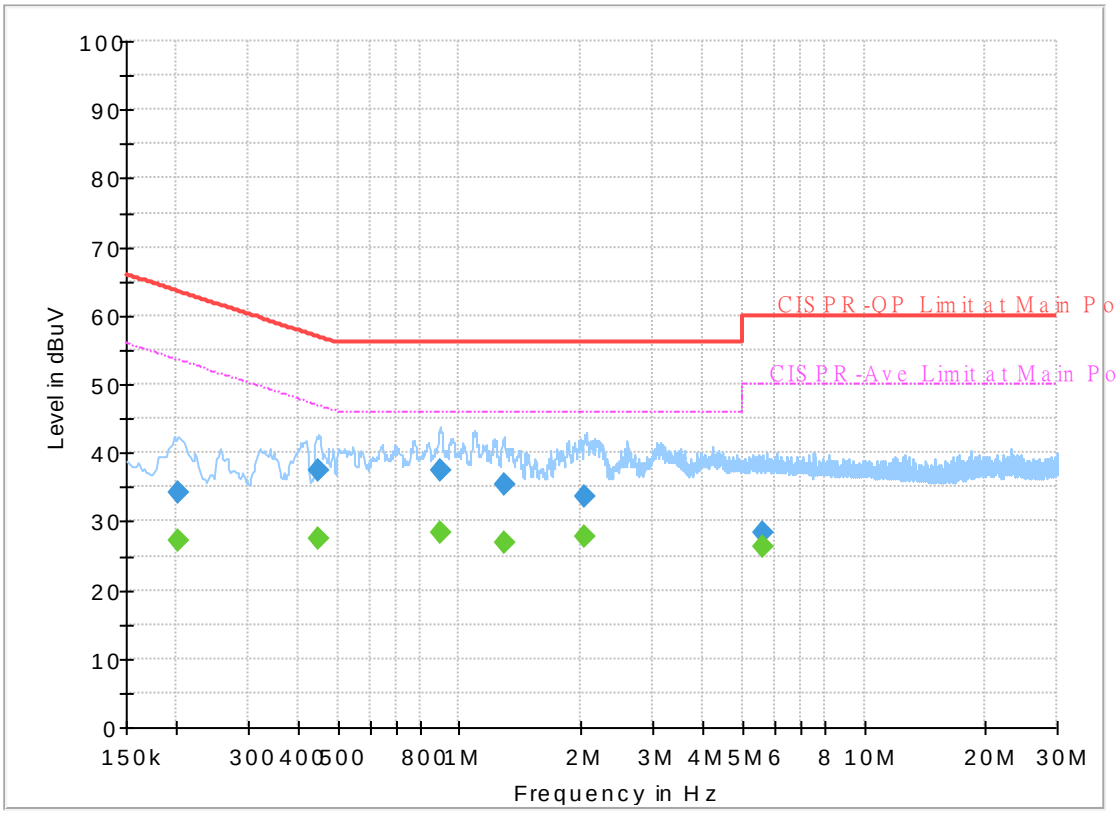
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.262500	---	29.76	51.35	21.59	L1	OFF	19.6
0.262500	38.63	---	61.35	22.72	L1	OFF	19.6
0.449250	---	29.73	46.89	17.16	L1	OFF	19.6
0.449250	43.31	---	56.89	13.58	L1	OFF	19.6
0.573000	---	27.87	46.00	18.13	L1	OFF	19.6
0.573000	38.37	---	56.00	17.63	L1	OFF	19.6
0.757500	---	27.40	46.00	18.60	L1	OFF	19.6
0.757500	35.37	---	56.00	20.63	L1	OFF	19.6
0.888000	---	26.95	46.00	19.05	L1	OFF	19.6
0.888000	41.19	---	56.00	14.81	L1	OFF	19.6
0.964500	---	26.95	46.00	19.05	L1	OFF	19.6
0.964500	38.34	---	56.00	17.66	L1	OFF	19.6
1.097250	---	26.50	46.00	19.50	L1	OFF	19.6
1.097250	38.95	---	56.00	17.05	L1	OFF	19.6
1.272750	---	25.10	46.00	20.90	L1	OFF	19.6
1.272750	38.11	---	56.00	17.89	L1	OFF	19.6
1.846500	---	25.90	46.00	20.10	L1	OFF	19.7
1.846500	37.10	---	56.00	18.90	L1	OFF	19.7
2.067000	---	25.80	46.00	20.20	L1	OFF	19.7
2.067000	36.33	---	56.00	19.67	L1	OFF	19.7
2.643000	---	26.05	46.00	19.95	L1	OFF	19.7
2.643000	34.89	---	56.00	21.11	L1	OFF	19.7
19.214250	---	27.23	50.00	22.77	L1	OFF	20.3
19.214250	33.81	---	60.00	26.19	L1	OFF	20.3

EUT Information

Report NO :	211502
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)
0.201750	---	27.31	53.54	26.23	N	OFF	19.6
0.201750	34.29	---	63.54	29.25	N	OFF	19.6
0.449250	---	27.53	46.89	19.36	N	OFF	19.6
0.449250	37.50	---	56.89	19.39	N	OFF	19.6
0.892500	---	28.47	46.00	17.53	N	OFF	19.6
0.892500	37.49	---	56.00	18.51	N	OFF	19.6
1.286250	---	26.87	46.00	19.13	N	OFF	19.6
1.286250	35.42	---	56.00	20.58	N	OFF	19.6
2.037750	---	27.69	46.00	18.31	N	OFF	19.7
2.037750	33.65	---	56.00	22.35	N	OFF	19.7
5.633250	---	26.32	50.00	23.68	N	OFF	19.8
5.633250	28.45	---	60.00	31.55	N	OFF	19.8

Appendix C. Radiated Spurious Emission

Test Engineer :	Andy Yang, Karl Hou and Wilson Wu	Temperature :	20~25°C
		Relative Humidity :	50~65%

2.4GHz 2400~2483.5MHz

WIFI 802.11b (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.	
4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2371.845	56.34	-17.66	74	40.95	27.29	18.18	30.08	104	108	P	H
		2389.17	44.55	-9.45	54	29.04	27.36	18.22	30.07	104	108	A	H
	*	2412	106.21	-	-	90.57	27.45	18.26	30.07	104	108	P	H
	*	2412	103	-	-	87.36	27.45	18.26	30.07	104	108	A	H
													H
													H
		2347.17	56.39	-17.61	74	41.16	27.19	18.13	30.09	390	73	P	V
		2389.065	44.24	-9.76	54	28.73	27.36	18.22	30.07	390	73	A	V
	*	2412	105.01	-	-	89.37	27.45	18.26	30.07	390	73	P	V
	*	2412	101.6	-	-	85.96	27.45	18.26	30.07	390	73	A	V
													V
													V
802.11b CH 06 2437MHz		2382.38	56.89	-17.11	74	41.44	27.33	18.2	30.08	120	101	P	H
		2388.12	43.92	-10.08	54	28.42	27.35	18.22	30.07	120	101	A	H
	*	2437	106.16	-	-	90.36	27.55	18.31	30.06	120	101	P	H
	*	2437	102.97	-	-	87.17	27.55	18.31	30.06	120	101	A	H
		2494.75	56.77	-17.23	74	40.53	27.87	18.41	30.04	120	101	P	H
		2484.6	44.83	-9.17	54	28.67	27.81	18.39	30.04	120	101	A	H
		2367.54	55.7	-18.3	74	40.33	27.27	18.18	30.08	380	74	P	V
		2388.96	43.73	-10.27	54	28.22	27.36	18.22	30.07	380	74	A	V
	*	2437	105.33	-	-	89.53	27.55	18.31	30.06	380	74	P	V
	*	2437	102.14	-	-	86.34	27.55	18.31	30.06	380	74	A	V
		2494.82	57.41	-16.59	74	41.17	27.87	18.41	30.04	380	74	P	V
		2486.28	44.66	-9.34	54	28.48	27.82	18.4	30.04	380	74	A	V

802.11b CH 11 2462MHz	*	2462	105.99	-	-	90.02	27.67	18.35	30.05	110	110	P	H
	*	2462	102.59	-	-	86.62	27.67	18.35	30.05	110	110	A	H
		2487.04	56.75	-17.25	74	40.57	27.82	18.4	30.04	110	110	P	H
		2483.52	45.17	-8.83	54	29.02	27.8	18.39	30.04	110	110	A	H
													H
													H
	*	2462	102.86	-	-	86.89	27.67	18.35	30.05	290	74	P	V
	*	2462	99.55	-	-	83.58	27.67	18.35	30.05	290	74	A	V
		2489	57.28	-16.72	74	41.09	27.83	18.4	30.04	290	74	P	V
		2486.96	44.86	-9.14	54	28.68	27.82	18.4	30.04	290	74	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)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4824	48.65	-25.35	74	59.13	32.45	12.34	55.27	100	226	P	H
		4824	45.04	-8.96	54	55.52	32.45	12.34	55.27	100	226	A	H
		11085	49.62	-24.38	74	46.39	38.9	19.64	55.31	-	-	P	H
		11085	39.58	-14.42	54	36.35	38.9	19.64	55.31	-	-	A	H
		14490	49.25	-24.75	74	41.17	40.4	22.01	54.33	-	-	P	H
		14490	39.17	-14.83	54	31.09	40.4	22.01	54.33	-	-	A	H
		17970	54.27	-19.73	74	43.06	42.76	25.03	56.58	-	-	P	H
		17970	44.31	-9.69	54	33.1	42.76	25.03	56.58	-	-	A	H
													H
													H
													H
802.11b CH 01 2412MHz													H
		4824	52.65	-21.35	74	63.13	32.45	12.34	55.27	363	337	P	V
		4824	50.14	-3.86	54	60.62	32.45	12.34	55.27	363	337	A	V
		10635	49.04	-24.96	74	46.26	39	19.24	55.46	-	-	P	V
		10635	38.96	-15.04	54	36.18	39	19.24	55.46	-	-	A	V
		14490	49	-25	74	40.92	40.4	22.01	54.33	-	-	P	V
		14490	38.93	-15.07	54	30.85	40.4	22.01	54.33	-	-	A	V
		17955	53.36	-20.64	74	42.25	42.64	25.04	56.57	-	-	P	V
													V
													V
													V
													V
													V

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4874	46.62	-27.38	74	57.03	32.6	12.32	55.33	-	-	P	H
		7311	47.84	-26.16	74	50.88	36.78	15.83	55.65	-	-	P	H
		11550	49.76	-24.24	74	45.8	38.8	20.14	54.98	-	-	P	H
		11550	39.73	-14.27	54	35.77	38.8	20.14	54.98	-	-	A	H
		14490	50.23	-23.77	74	42.15	40.4	22.01	54.33	-	-	P	H
		14490	40.16	-13.84	54	32.08	40.4	22.01	54.33	-	-	A	H
		17970	54.24	-19.76	74	43.03	42.76	25.03	56.58	-	-	P	H
		17970	44.31	-9.69	54	33.1	42.76	25.03	56.58	-	-	A	H
													H
													H
													H
802.11b CH 06 2437MHz													H
		4874	52.58	-21.42	74	62.99	32.6	12.32	55.33	266	330	P	V
		4874	50.45	-3.55	54	60.86	32.6	12.32	55.33	266	330	A	V
		7311	51.03	-22.97	74	54.07	36.78	15.83	55.65	100	4	P	V
		7311	44.28	-9.72	54	47.32	36.78	15.83	55.65	100	4	A	V
		10860	49.17	-24.83	74	46.18	38.96	19.43	55.4	-	-	P	V
		10860	39.09	-14.91	54	36.1	38.96	19.43	55.4	-	-	A	V
		14490	49.44	-24.56	74	41.36	40.4	22.01	54.33	-	-	P	V
		14490	39.33	-14.67	54	31.25	40.4	22.01	54.33	-	-	A	V
		17970	53.55	-20.45	74	42.34	42.76	25.03	56.58	-	-	P	V
		17970	43.53	-10.47	54	32.32	42.76	25.03	56.58	-	-	A	V
													V
													V

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4924	47.08	-26.92	74	57.33	32.84	12.3	55.39	-	-	P	H
		7386	50.37	-23.63	74	53.37	36.41	16.25	55.66	100	321	P	H
		7386	42.34	-11.66	54	45.34	36.41	16.25	55.66	100	321	A	H
		11385	49.36	-24.64	74	45.29	39.2	19.96	55.09	-	-	P	H
		11385	39.34	-14.66	54	35.27	39.2	19.96	55.09	-	-	A	H
		14490	49.69	-24.31	74	41.61	40.4	22.01	54.33	-	-	P	H
		14490	39.65	-14.35	54	31.57	40.4	22.01	54.33	-	-	A	H
		17955	54.46	-19.54	74	43.35	42.64	25.04	56.57	-	-	P	H
		17955	44.41	-9.59	54	33.3	42.64	25.04	56.57	-	-	A	H
													H
													H
802.11b CH 11 2462MHz													H
		4924	52.53	-21.47	74	62.78	32.84	12.3	55.39	308	317	P	V
		4924	50.64	-3.36	54	60.89	32.84	12.3	55.39	308	317	A	V
		7386	52.65	-21.35	74	55.65	36.41	16.25	55.66	100	22	P	V
		7386	45.76	-8.24	54	48.76	36.41	16.25	55.66	100	22	A	V
		12030	49.29	-24.71	74	44.65	38.79	20.66	54.81	-	-	P	V
		12030	39.15	-14.85	54	34.51	38.79	20.66	54.81	-	-	A	V
		14490	49.55	-24.45	74	41.47	40.4	22.01	54.33	-	-	P	V
		14490	39.47	-14.53	54	31.39	40.4	22.01	54.33	-	-	A	V
		17955	53.79	-20.21	74	42.68	42.64	25.04	56.57	-	-	P	V
		17955	43.71	-10.29	54	32.6	42.64	25.04	56.57	-	-	A	V
													V
													V

Remark

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

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2388.54	59.96	-14.04	74	44.46	27.35	18.22	30.07	100	334	P	H
		2390	50.24	-3.76	54	34.73	27.36	18.22	30.07	100	334	A	H
	*	2412	107.66	-	-	92.02	27.45	18.26	30.07	100	334	P	H
	*	2412	100.28	-	-	84.64	27.45	18.26	30.07	100	334	A	H
													H
													H
		2390	58.57	-15.43	74	43.06	27.36	18.22	30.07	304	80	P	V
		2390	49.06	-4.94	54	33.55	27.36	18.22	30.07	304	80	A	V
	*	2412	106.51	-	-	90.87	27.45	18.26	30.07	304	80	P	V
	*	2412	99.2	-	-	83.56	27.45	18.26	30.07	304	80	A	V
													V
													V
802.11g CH 06 2437MHz		2383.22	55.98	-18.02	74	40.52	27.33	18.21	30.08	133	356	P	H
		2389.38	44.4	-9.6	54	28.89	27.36	18.22	30.07	133	356	A	H
	*	2437	107.82	-	-	92.02	27.55	18.31	30.06	133	356	P	H
	*	2437	100.08	-	-	84.28	27.55	18.31	30.06	133	356	A	H
		2485.51	56.97	-17.03	74	40.81	27.81	18.39	30.04	133	356	P	H
		2484.46	45.34	-8.66	54	29.18	27.81	18.39	30.04	133	356	A	H
		2389.94	55.93	-18.07	74	40.42	27.36	18.22	30.07	356	264	P	V
		2389.94	44.22	-9.78	54	28.71	27.36	18.22	30.07	356	264	A	V
	*	2437	106.24	-	-	90.44	27.55	18.31	30.06	356	264	P	V
	*	2437	98.48	-	-	82.68	27.55	18.31	30.06	356	264	A	V
		2498.67	56.89	-17.11	74	40.62	27.89	18.42	30.04	356	264	P	V
		2497.2	45.08	-8.92	54	28.83	27.88	18.41	30.04	356	264	A	V

802.11g CH 11 2462MHz	*	2462	107.23	-	-	91.26	27.67	18.35	30.05	100	357	P	H
	*	2462	99.28	-	-	83.31	27.67	18.35	30.05	100	357	A	H
		2483.52	61.41	-12.59	74	45.26	27.8	18.39	30.04	100	357	P	H
		2483.52	50.68	-3.32	54	34.53	27.8	18.39	30.04	100	357	A	H
													H
													H
	*	2462	106.46	-	-	90.49	27.67	18.35	30.05	289	78	P	V
	*	2462	98.7	-	-	82.73	27.67	18.35	30.05	289	78	A	V
		2483.88	60.55	-13.45	74	44.4	27.8	18.39	30.04	289	78	P	V
		2483.52	49.34	-4.66	54	33.19	27.8	18.39	30.04	289	78	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 802.11g (Harmonic @ 3m)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4824	45.69	-28.31	74	56.17	32.45	12.34	55.27	-	-	P	H
		11370	49.33	-24.67	74	45.29	39.2	19.94	55.1	-	-	P	H
		11370	39.27	-14.73	54	35.23	39.2	19.94	55.1	-	-	A	H
		14490	49.72	-24.28	74	41.64	40.4	22.01	54.33	-	-	P	H
		14490	39.66	-14.34	54	31.58	40.4	22.01	54.33	-	-	A	H
		17940	52.67	-21.33	74	41.68	42.52	25.03	56.56	-	-	P	H
		17940	42.5	-11.5	54	31.51	42.52	25.03	56.56	-	-	A	H
													H
													H
													H
													H
802.11g CH 01 2412MHz													H
		4824	51.72	-22.28	74	62.2	32.45	12.34	55.27	100	239	P	V
		4824	40.73	-13.27	54	51.21	32.45	12.34	55.27	100	239	A	V
		10995	49.44	-24.56	74	46.37	38.9	19.54	55.37	-	-	P	V
		10995	39.32	-14.68	54	36.25	38.9	19.54	55.37	-	-	A	V
		14490	49.1	-24.9	74	41.02	40.4	22.01	54.33	-	-	P	V
		14490	39.13	-14.87	54	31.05	40.4	22.01	54.33	-	-	A	V
		17985	53.46	-20.54	74	42.13	42.88	25.04	56.59	-	-	P	V
		17985	43.4	-10.6	54	32.07	42.88	25.04	56.59	-	-	A	V
													V
													V
													V
													V

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4874	43.98	-30.02	74	54.39	32.6	12.32	55.33	-	-	P	H
		7311	47.57	-26.43	74	50.61	36.78	15.83	55.65	-	-	P	H
		11175	49.11	-24.89	74	45.65	38.97	19.73	55.24	-	-	P	H
		11175	39.06	-14.94	54	35.6	38.97	19.73	55.24	-	-	A	H
		14475	48.73	-25.27	74	40.65	40.4	22	54.32	-	-	P	H
		14475	38.64	-15.36	54	30.56	40.4	22	54.32	-	-	A	H
		17970	53.41	-20.59	74	42.2	42.76	25.03	56.58	-	-	P	H
		17970	43.3	-10.7	54	32.09	42.76	25.03	56.58	-	-	A	H
													H
													H
													H
802.11g													H
CH 06		4874	51.14	-22.86	74	61.55	32.6	12.32	55.33	100	238	P	V
2437MHz		4874	40.17	-13.83	54	50.58	32.6	12.32	55.33	100	238	A	V
		7311	51.82	-22.18	74	54.86	36.78	15.83	55.65	100	25	P	V
		7311	41.11	-12.89	54	44.15	36.78	15.83	55.65	100	25	A	V
		12105	49.21	-24.79	74	44.28	38.99	20.69	54.75	-	-	P	V
		12105	39.15	-14.85	54	34.22	38.99	20.69	54.75	-	-	A	V
		14490	49.14	-24.86	74	41.06	40.4	22.01	54.33	-	-	P	V
		14490	39.1	-14.9	54	31.02	40.4	22.01	54.33	-	-	A	V
		17970	53.29	-20.71	74	42.08	42.76	25.03	56.58	-	-	P	V
		17970	43.51	-10.49	54	32.3	42.76	25.03	56.58	-	-	A	V
													V
													V

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4924	41.56	-32.44	74	51.81	32.84	12.3	55.39	-	-	P	H
		7386	48.21	-25.79	74	51.21	36.41	16.25	55.66	100	130	P	H
		7386	37.08	-16.92	54	40.08	36.41	16.25	55.66	100	130	A	H
		11070	49.09	-24.91	74	45.89	38.9	19.62	55.32	-	-	P	H
		11070	38.99	-15.01	54	35.79	38.9	19.62	55.32	-	-	A	H
		14475	48.53	-25.47	74	40.45	40.4	22	54.32	-	-	P	H
		14475	38.46	-15.54	54	30.38	40.4	22	54.32	-	-	A	H
		17955	52.36	-21.64	74	41.25	42.64	25.04	56.57	-	-	P	H
		17955	42.28	-11.72	54	31.17	42.64	25.04	56.57	-	-	A	H
													H
													H
802.11g													H
CH 11		4924	50.42	-23.58	74	60.67	32.84	12.3	55.39	100	288	P	V
2462MHz		4924	39.94	-14.06	54	50.19	32.84	12.3	55.39	100	288	A	V
		7386	52.96	-21.04	74	55.96	36.41	16.25	55.66	100	26	P	V
		7386	41.45	-12.55	54	44.45	36.41	16.25	55.66	100	26	A	V
		11385	48.85	-25.15	74	44.78	39.2	19.96	55.09	-	-	P	V
		11385	38.79	-15.21	54	34.72	39.2	19.96	55.09	-	-	A	V
		14490	49.13	-24.87	74	41.05	40.4	22.01	54.33	-	-	P	V
		14490	39.09	-14.91	54	31.01	40.4	22.01	54.33	-	-	A	V
		17880	52.64	-21.36	74	42.18	41.96	25.02	56.52	-	-	P	V
		17880	42.61	-11.39	54	32.15	41.96	25.02	56.52	-	-	A	V
													V
													V

Remark

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

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		2390	61.8	-12.2	74	46.29	27.36	18.22	30.07	100	334	P	H
		2390	50.89	-3.11	54	35.38	27.36	18.22	30.07	100	334	A	H
	*	2412	107.55	-	-	91.91	27.45	18.26	30.07	100	334	P	H
	*	2412	100.17	-	-	84.53	27.45	18.26	30.07	100	334	A	H
802.11n													H
HT20													H
CH 01		2389.905	60.84	-13.16	74	45.33	27.36	18.22	30.07	305	81	P	V
2412MHz		2390	48.93	-5.07	54	33.42	27.36	18.22	30.07	305	81	A	V
	*	2412	105.38	-	-	89.74	27.45	18.26	30.07	305	81	P	V
	*	2412	97.69	-	-	82.05	27.45	18.26	30.07	305	81	A	V
													V
													V
		2367.82	56.01	-17.99	74	40.64	27.27	18.18	30.08	114	336	P	H
		2389.66	44.61	-9.39	54	29.1	27.36	18.22	30.07	114	336	A	H
	*	2437	108.39	-	-	92.59	27.55	18.31	30.06	114	336	P	H
	*	2437	100.51	-	-	84.71	27.55	18.31	30.06	114	336	A	H
802.11n		2496.64	57.55	-16.45	74	41.3	27.88	18.41	30.04	114	336	P	H
HT20		2484.11	45.38	-8.62	54	29.23	27.8	18.39	30.04	114	336	A	H
CH 06		2387	56.71	-17.29	74	41.22	27.35	18.21	30.07	329	76	P	V
2437MHz		2389.66	44.16	-9.84	54	28.65	27.36	18.22	30.07	329	76	A	V
	*	2437	106.4	-	-	90.6	27.55	18.31	30.06	329	76	P	V
	*	2437	98.41	-	-	82.61	27.55	18.31	30.06	329	76	A	V
		2499.3	56.94	-17.06	74	40.66	27.9	18.42	30.04	329	76	P	V
		2484.04	45.19	-8.81	54	29.04	27.8	18.39	30.04	329	76	A	V

	*	2462	107.07	-	-	91.1	27.67	18.35	30.05	111	336	P	H
	*	2462	99.23	-	-	83.26	27.67	18.35	30.05	111	336	A	H
		2483.96	61.25	-12.75	74	45.1	27.8	18.39	30.04	111	336	P	H
		2483.52	50.11	-3.89	54	33.96	27.8	18.39	30.04	111	336	A	H
802.11n													H
HT20													H
CH 11	*	2462	104.3	-	-	88.33	27.67	18.35	30.05	345	267	P	V
2462MHz	*	2462	96.54	-	-	80.57	27.67	18.35	30.05	345	267	A	V
		2483.96	59.11	-14.89	74	42.96	27.8	18.39	30.04	345	267	P	V
		2483.52	48.26	-5.74	54	32.11	27.8	18.39	30.04	345	267	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 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4824	45.93	-28.07	74	56.41	32.45	12.34	55.27	-	-	P	H
		11295	49.4	-24.6	74	45.5	39.19	19.86	55.15	-	-	P	H
		11295	38.81	-15.19	54	34.91	39.19	19.86	55.15	-	-	A	H
		14475	48.78	-25.22	74	40.7	40.4	22	54.32	-	-	P	H
		14475	39.83	-14.17	54	31.75	40.4	22	54.32	-	-	A	H
		17880	52.99	-21.01	74	42.53	41.96	25.02	56.52	-	-	P	H
		17880	43.24	-10.76	54	32.78	41.96	25.02	56.52	-	-	A	H
													H
													H
													H
802.11n													H
HT20													H
CH 01		4824	43.9	-30.1	74	54.38	32.45	12.34	55.27	-	-	P	V
2412MHz		10860	49.73	-24.27	74	46.74	38.96	19.43	55.4	-	-	P	V
		10860	38.59	-15.41	54	35.6	38.96	19.43	55.4	-	-	A	V
		14505	50.54	-23.46	74	42.46	40.39	22.02	54.33	-	-	P	V
		14505	39.75	-14.25	54	31.67	40.39	22.02	54.33	-	-	A	V
		17985	53.41	-20.59	74	42.08	42.88	25.04	56.59	-	-	P	V
		17985	43.63	-10.37	54	32.3	42.88	25.04	56.59	-	-	A	V
													V
													V
													V
													V
													V

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4874	46.21	-27.79	74	56.62	32.6	12.32	55.33	-	-	P	H
		7311	45.78	-28.22	74	48.82	36.78	15.83	55.65	-	-	P	H
		10650	49.7	-24.3	74	46.9	39	19.25	55.45	-	-	P	H
		10650	38.61	-15.39	54	35.81	39	19.25	55.45	-	-	A	H
		14475	48.53	-25.47	74	40.45	40.4	22	54.32	-	-	P	H
		14475	39.52	-14.48	54	31.44	40.4	22	54.32	-	-	A	H
		17910	53.42	-20.58	74	42.66	42.28	25.02	56.54	-	-	P	H
		17910	43.51	-10.49	54	32.75	42.28	25.02	56.54	-	-	A	H
													H
													H
802.11n													H
HT20													H
CH 06		4874	43.09	-30.91	74	53.5	32.6	12.32	55.33	-	-	P	V
2437MHz		7311	46.01	-27.99	74	49.05	36.78	15.83	55.65	-	-	P	V
		10725	49.36	-24.64	74	46.44	39.05	19.31	55.44	-	-	P	V
		10725	39.1	-14.9	54	36.18	39.05	19.31	55.44	-	-	A	V
		14491	48.75	-25.25	74	40.67	40.4	22.01	54.33	-	-	P	V
		14491	40.83	-13.17	54	32.75	40.4	22.01	54.33	-	-	A	V
		17940	53.54	-20.46	74	42.55	42.52	25.03	56.56	-	-	P	V
		17940	43.42	-10.58	54	32.43	42.52	25.03	56.56	-	-	A	V
													V
													V
													V
													V

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4924	46.98	-27.02	74	57.23	32.84	12.3	55.39	-	-	P	H
		7386	46.79	-27.21	74	49.79	36.41	16.25	55.66	-	-	P	H
		12345	49.76	-24.24	74	44.72	38.8	20.81	54.57	-	-	P	H
		12345	39.53	-14.47	54	34.49	38.8	20.81	54.57	-	-	A	H
		14475	48.14	-25.86	74	40.06	40.4	22	54.32	-	-	P	H
		14475	40.51	-13.49	54	32.43	40.4	22	54.32	-	-	A	H
		17865	53.41	-20.59	74	43.12	41.78	25.02	56.51	-	-	P	H
		17865	43.07	-10.93	54	32.78	41.78	25.02	56.51	-	-	A	H
													H
													H
802.11n													H
HT20													H
CH 11		4924	42.32	-31.68	74	52.57	32.84	12.3	55.39	-	-	P	V
2462MHz		7386	46.33	-27.67	74	49.33	36.41	16.25	55.66	-	-	P	V
		11175	50.15	-23.85	74	46.69	38.97	19.73	55.24	-	-	P	V
		11175	38.66	-15.34	54	35.2	38.97	19.73	55.24	-	-	A	V
		14505	49.59	-24.41	74	41.51	40.39	22.02	54.33	-	-	P	V
		14505	40.64	-13.36	54	32.56	40.39	22.02	54.33	-	-	A	V
		17940	52.96	-21.04	74	41.97	42.52	25.03	56.56	-	-	P	V
		17940	43.26	-10.74	54	32.27	42.52	25.03	56.56	-	-	A	V
													V
													V
													V
													V

Remark

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

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		2389.52	57.94	-16.06	74	42.43	27.36	18.22	30.07	382	28	P	H
		2389.52	50.14	-3.86	54	34.63	27.36	18.22	30.07	382	28	A	H
	*	2422	101.02	-	-	85.31	27.49	18.28	30.06	382	28	P	H
	*	2422	92.7	-	-	76.99	27.49	18.28	30.06	382	28	A	H
802.11n		2489.01	56.9	-17.1	74	40.71	27.83	18.4	30.04	382	28	P	H
HT40		2496.5	46.51	-7.49	54	30.26	27.88	18.41	30.04	382	28	A	H
CH 03		2389.52	58.44	-15.56	74	42.93	27.36	18.22	30.07	338	90	P	V
2422MHz		2389.8	50.1	-3.9	54	34.59	27.36	18.22	30.07	338	90	A	V
	*	2422	101.13	-	-	85.42	27.49	18.28	30.06	338	90	P	V
	*	2422	93.43	-	-	77.72	27.49	18.28	30.06	338	90	A	V
		2490.55	56.7	-17.3	74	40.5	27.84	18.4	30.04	338	90	P	V
		2497.13	47.14	-6.86	54	30.89	27.88	18.41	30.04	338	90	A	V
		2388.68	56.24	-17.76	74	40.74	27.35	18.22	30.07	329	35	P	H
		2389.94	48.02	-5.98	54	32.51	27.36	18.22	30.07	329	35	A	H
	*	2437	104.41	-	-	88.61	27.55	18.31	30.06	329	35	P	H
	*	2437	96.37	-	-	80.57	27.55	18.31	30.06	329	35	A	H
802.11n		2484.04	58.13	-15.87	74	41.98	27.8	18.39	30.04	329	35	P	H
HT40		2484.39	50.08	-3.92	54	33.92	27.81	18.39	30.04	329	35	A	H
CH 06		2341.92	55.28	-18.72	74	40.07	27.18	18.12	30.09	332	91	P	V
2437MHz		2389.38	46.05	-7.95	54	30.54	27.36	18.22	30.07	332	91	A	V
	*	2437	100.1	-	-	84.3	27.55	18.31	30.06	332	91	P	V
	*	2437	92.28	-	-	76.48	27.55	18.31	30.06	332	91	A	V
		2493.91	57.23	-16.77	74	41	27.86	18.41	30.04	332	91	P	V
		2483.69	47.68	-6.32	54	31.53	27.8	18.39	30.04	332	91	A	V

		2345.84	56.04	-17.96	74	40.81	27.19	18.13	30.09	332	33	P	H
		2386.3	45.78	-8.22	54	30.29	27.35	18.21	30.07	332	33	A	H
	*	2452	99.98	-	-	84.09	27.61	18.33	30.05	332	33	P	H
	*	2452	92.09	-	-	76.2	27.61	18.33	30.05	332	33	A	H
802.11n		2484.88	57.63	-16.37	74	41.47	27.81	18.39	30.04	332	33	P	H
HT40		2483.76	49.14	-4.86	54	32.99	27.8	18.39	30.04	332	33	A	H
CH 09		2372.58	55.93	-18.07	74	40.53	27.29	18.19	30.08	321	87	P	V
2452MHz		2373.84	45.81	-8.19	54	30.4	27.3	18.19	30.08	321	87	A	V
	*	2452	100.37	-	-	84.48	27.61	18.33	30.05	321	87	P	V
	*	2452	92.25	-	-	76.36	27.61	18.33	30.05	321	87	A	V
		2485.09	58.44	-15.56	74	42.28	27.81	18.39	30.04	321	87	P	V
		2483.83	49.07	-4.93	54	32.92	27.8	18.39	30.04	321	87	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)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4844	43.01	-30.99	74	53.48	32.49	12.33	55.29	-	-	P	H
		7266	45.64	-28.36	74	48.82	36.87	15.59	55.64	-	-	P	H
		10785	49.57	-24.43	74	46.46	39.17	19.36	55.42	-	-	P	H
		10785	38.76	-15.24	54	35.65	39.17	19.36	55.42	-	-	A	H
		14475	48.82	-25.18	74	40.74	40.4	22	54.32	-	-	P	H
		14475	40.21	-13.79	54	32.13	40.4	22	54.32	-	-	A	H
		17970	53.02	-20.98	74	41.81	42.76	25.03	56.58	-	-	P	H
		17970	43.6	-10.4	54	32.39	42.76	25.03	56.58	-	-	A	H
													H
													H
802.11n													H
HT40													H
CH 03		4844	41.15	-32.85	74	51.62	32.49	12.33	55.29	-	-	P	V
2422MHz		7266	46.07	-27.93	74	49.25	36.87	15.59	55.64	-	-	P	V
		10680	49.88	-24.12	74	47.05	39	19.28	55.45	-	-	P	V
		10680	39.07	-14.93	54	36.24	39	19.28	55.45	-	-	A	V
		14505	50.51	-23.49	74	42.43	40.39	22.02	54.33	-	-	P	V
		14505	40.33	-13.67	54	32.25	40.39	22.02	54.33	-	-	A	V
		17880	53.66	-20.34	74	43.2	41.96	25.02	56.52	-	-	P	V
		17880	43.12	-10.88	54	32.66	41.96	25.02	56.52	-	-	A	V
													V
													V
													V
													V

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4874	42.54	-31.46	74	52.95	32.6	12.32	55.33	-	-	P	H
		7311	45.85	-28.15	74	48.89	36.78	15.83	55.65	-	-	P	H
		11490	49.63	-24.37	74	45.72	38.84	20.08	55.01	-	-	P	H
		11490	38.47	-15.53	54	34.56	38.84	20.08	55.01	-	-	A	H
		14475	48.59	-25.41	74	40.51	40.4	22	54.32	-	-	P	H
		14475	40.22	-13.78	54	32.14	40.4	22	54.32	-	-	A	H
		17955	53.37	-20.63	74	42.26	42.64	25.04	56.57	-	-	P	H
		17955	43.71	-10.29	54	32.6	42.64	25.04	56.57	-	-	A	H
													H
													H
802.11n													H
HT40													H
CH 06		4874	39.33	-34.67	74	49.74	32.6	12.32	55.33	-	-	P	V
2437MHz		7311	45.77	-28.23	74	48.81	36.78	15.83	55.65	-	-	P	V
		11445	49.89	-24.11	74	45.88	39.02	20.03	55.04	-	-	P	V
		11445	38.72	-15.28	54	34.71	39.02	20.03	55.04	-	-	A	V
		14490	50.92	-23.08	74	42.84	40.4	22.01	54.33	-	-	P	V
		14490	40.49	-13.51	54	32.41	40.4	22.01	54.33	-	-	A	V
		17970	53.32	-20.68	74	42.11	42.76	25.03	56.58	-	-	P	V
		17970	43.27	-10.73	54	32.06	42.76	25.03	56.58	-	-	A	V
													V
													V
													V
													V

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		4904	40.55	-33.45	74	50.9	32.72	12.3	55.37	-	-	P	H
		7356	46.04	-27.96	74	48.97	36.65	16.08	55.66	-	-	P	H
		11490	49.62	-24.38	74	45.71	38.84	20.08	55.01	-	-	P	H
		11490	39.09	-14.91	54	35.18	38.84	20.08	55.01	-	-	A	H
		14475	48.42	-25.58	74	40.34	40.4	22	54.32	-	-	P	H
		14475	40.49	-13.51	54	32.41	40.4	22	54.32	-	-	A	H
		17910	53.06	-20.94	74	42.3	42.28	25.02	56.54	-	-	P	H
		17910	43.23	-10.77	54	32.47	42.28	25.02	56.54	-	-	A	H
													H
													H
802.11n													H
HT40													H
CH 09		4904	40.39	-33.61	74	50.74	32.72	12.3	55.37	-	-	P	V
2452MHz		7356	46.6	-27.4	74	49.53	36.65	16.08	55.66	-	-	P	V
		11250	49.59	-24.41	74	45.85	39.1	19.82	55.18	-	-	P	V
		11250	39.11	-14.89	54	35.37	39.1	19.82	55.18	-	-	A	V
		14490	49.21	-24.79	74	41.13	40.4	22.01	54.33	-	-	P	V
		14490	40.55	-13.45	54	32.47	40.4	22.01	54.33	-	-	A	V
		17970	53.43	-20.57	74	42.22	42.76	25.03	56.58	-	-	P	V
		17970	43.63	-10.37	54	32.42	42.76	25.03	56.58	-	-	A	V
													V
													V
													V
													V

Remark

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

Emission below 1GHz

2.4GHz WIFI 802.11n HT20 (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		97.9	23	-20.5	43.5	38.02	15.56	1.72	32.3	-	-	P	H
		153.19	23.19	-20.31	43.5	36	17.12	2.33	32.26	-	-	P	H
		251.16	21.73	-24.27	46	32.35	18.73	2.89	32.24	-	-	P	H
		553.8	27.83	-18.17	46	30.44	25.68	4.12	32.41	-	-	P	H
		740.04	36.39	-9.61	46	36.03	28.02	4.69	32.35	-	-	P	H
		796.3	35.19	-10.81	46	34.59	27.97	4.89	32.26	-	-	P	H
													H
													H
													H
													H
2.4GHz													H
802.11n													H
HT20		33.88	31.5	-8.5	40	40.19	22.77	0.85	32.31	-	-	P	V
LF		98.87	31.1	-12.4	43.5	46.01	15.66	1.73	32.3	-	-	P	V
		185.2	24.51	-18.99	43.5	39.44	14.88	2.42	32.23	-	-	P	V
		438.37	26.25	-19.75	46	31.96	23.07	3.64	32.42	-	-	P	V
		743.92	33.4	-12.6	46	32.97	28.08	4.7	32.35	-	-	P	V
		797.27	34.76	-11.24	46	34.15	27.97	4.89	32.25	-	-	P	V
													V
													V
													V
													V
													V
													V

Remark

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

Note symbol

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

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

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

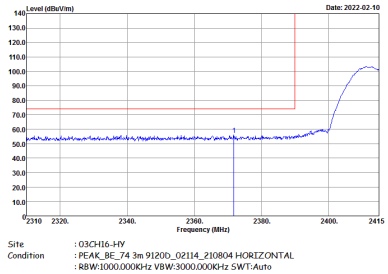
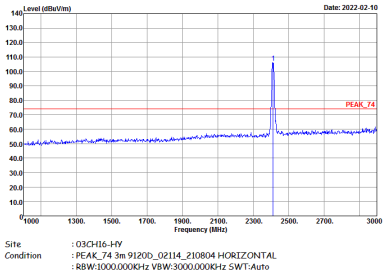
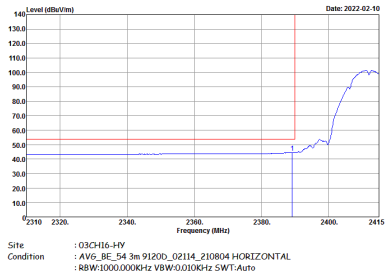
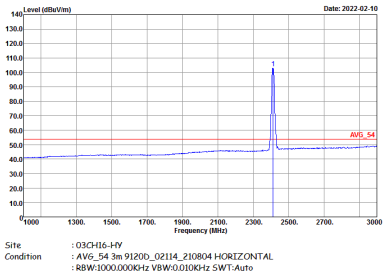
Test Engineer :	Andy Yang, Karl Hou and Wilson Wu	**Temperature :**	20~25°C
		Relative Humidity :	50~65%

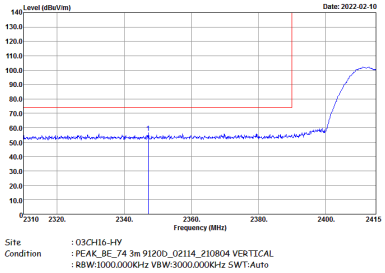
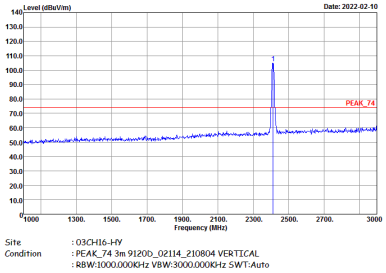
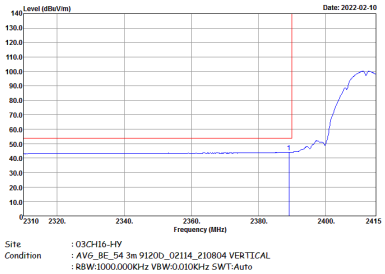
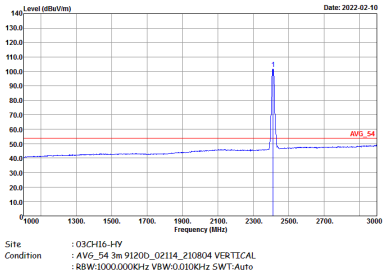
Note symbol

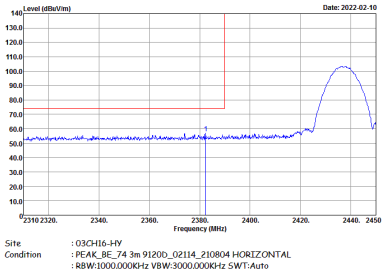
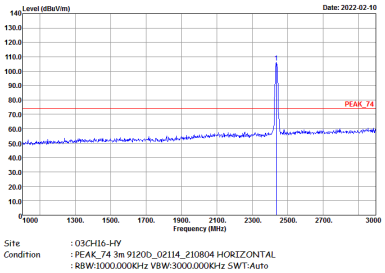
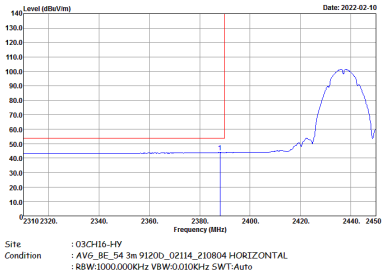
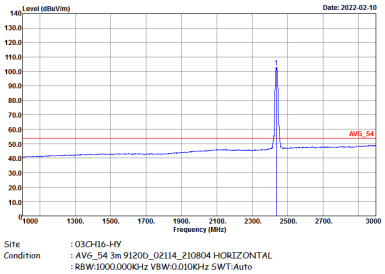
-L	**Low channel location**
-R	**High channel location**

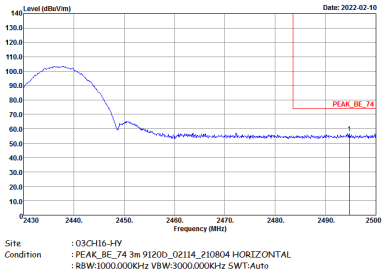
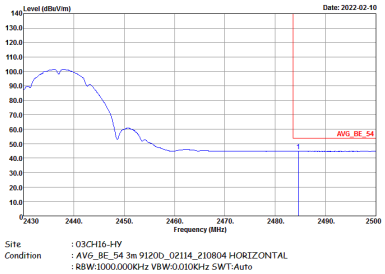
2.4GHz 2400~2483.5MHz

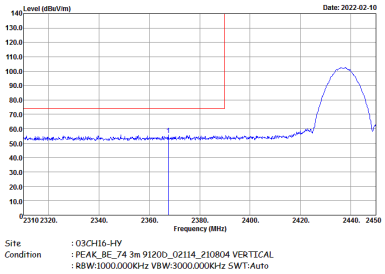
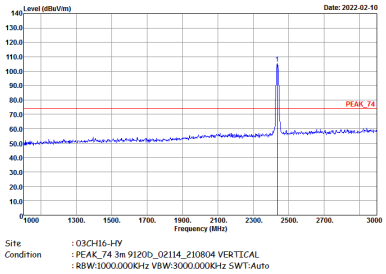
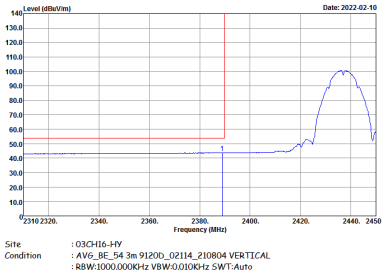
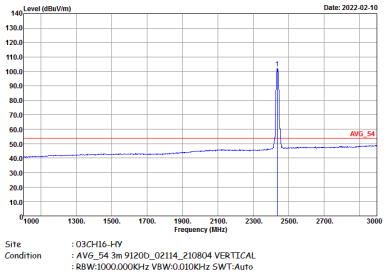
WIFI 802.11b (Band Edge @ 3m)

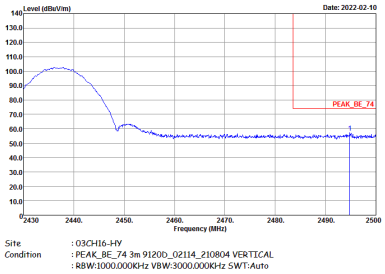
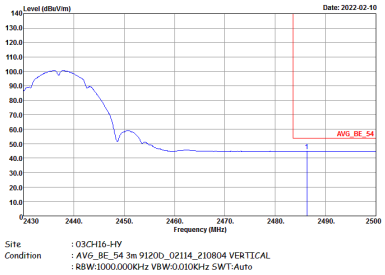
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
4	Horizontal	Fundamental
Peak		
Avg.		

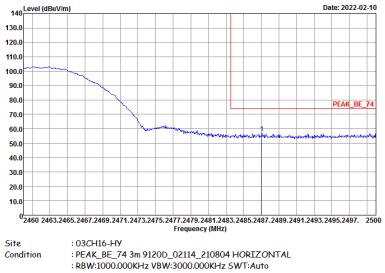
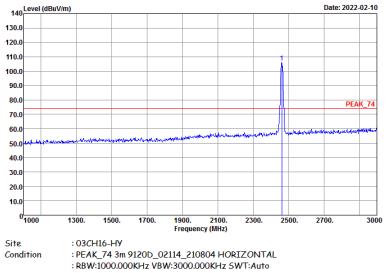
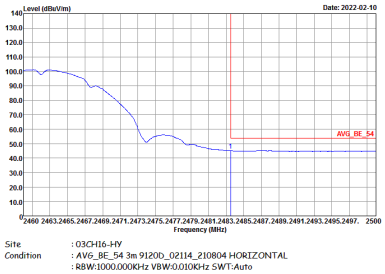
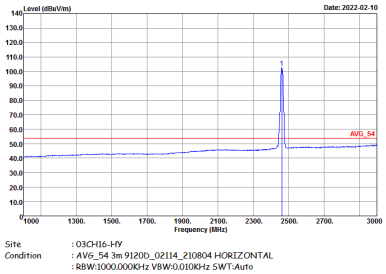
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
4	Vertical	Fundamental
Peak		
Avg.		

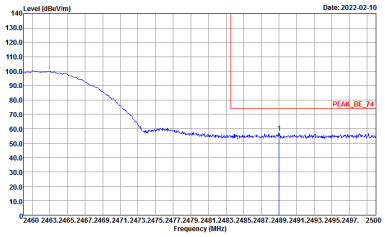
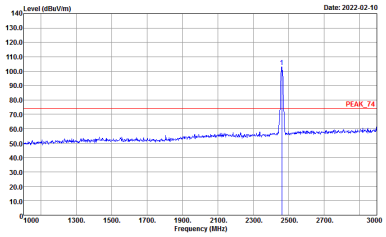
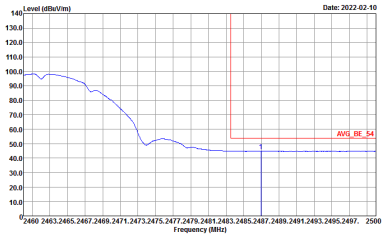
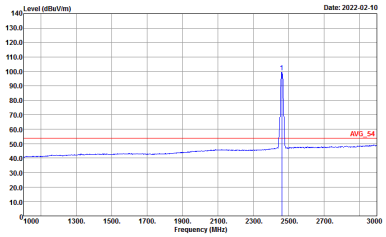
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
4	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
4	Vertical	Fundamental
Peak		
Avg.		

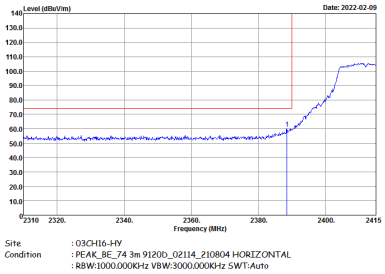
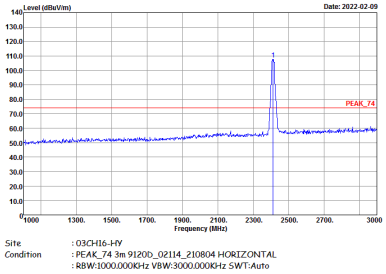
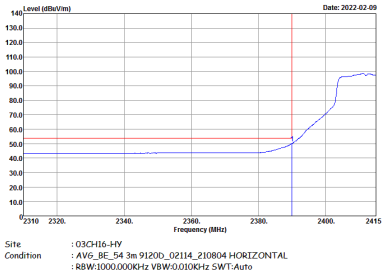
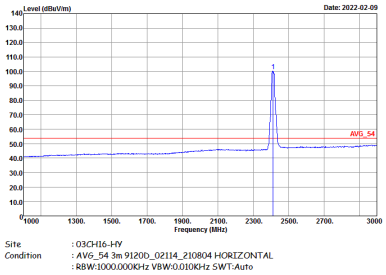
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

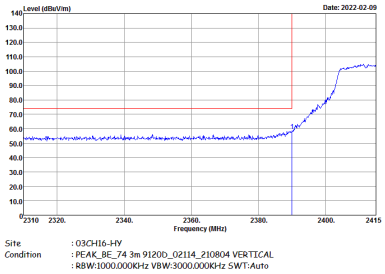
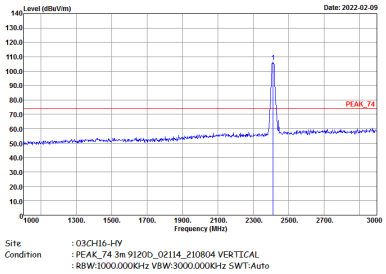
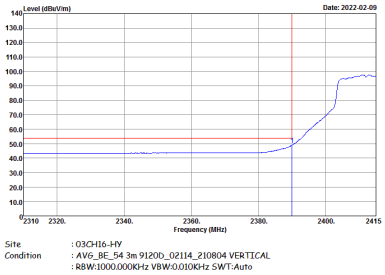
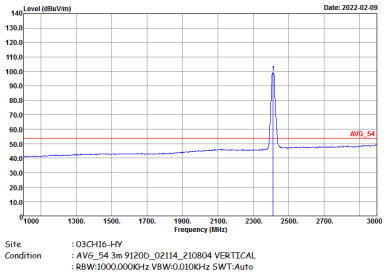
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
4	Horizontal	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_02114_210804 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_02114_210804 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_02114_210804 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_02114_210804 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

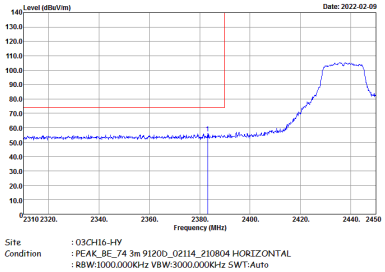
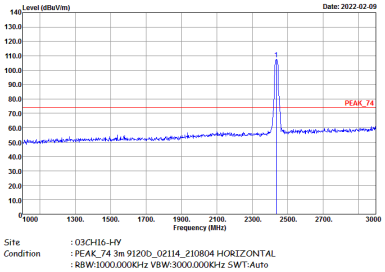
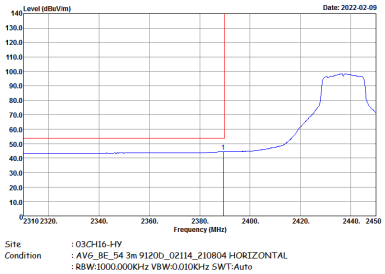
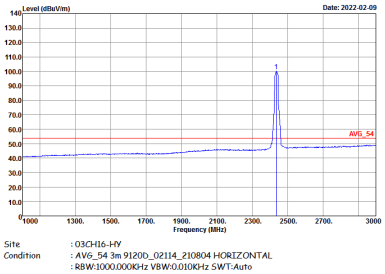
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
4	Vertical	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_02114_210804 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_02114_210804 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_02114_210804 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_02114_210804 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

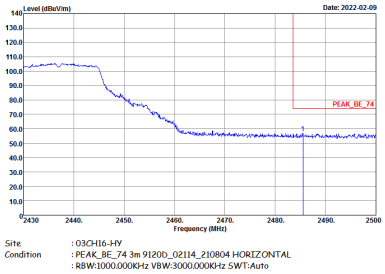
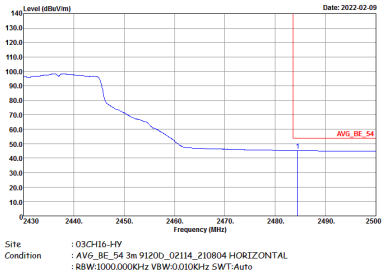
2.4GHz 2400~2483.5MHz

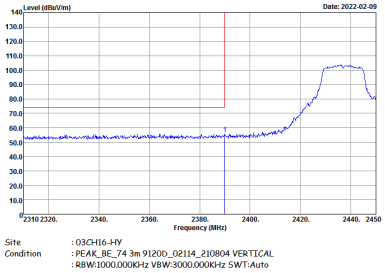
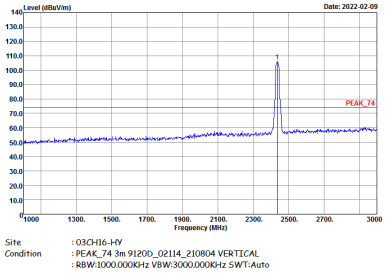
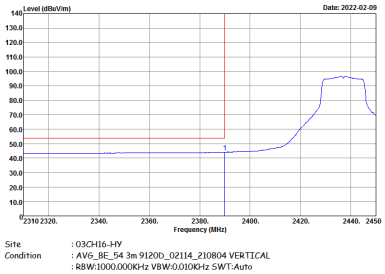
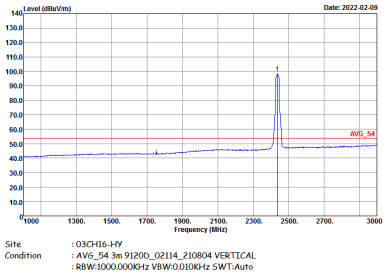
WIFI 802.11g (Band Edge @ 3m)

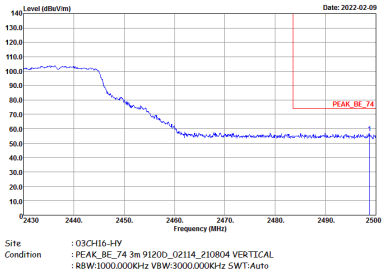
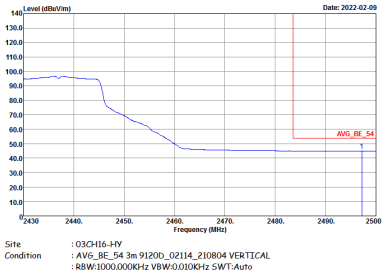
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
4	Horizontal	Fundamental
Peak		
Avg.		

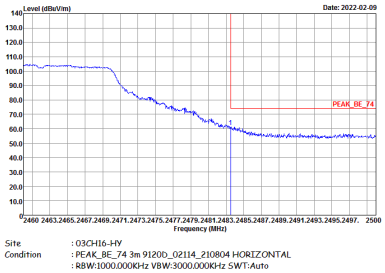
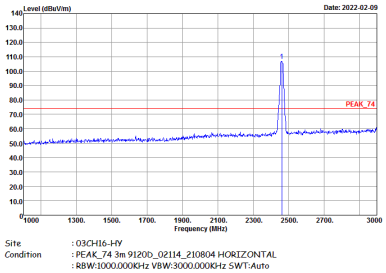
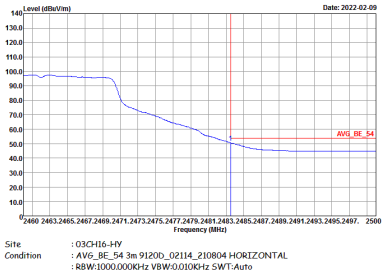
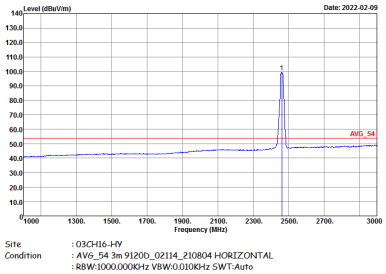
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
4	Vertical	Fundamental
Peak		
Avg.		

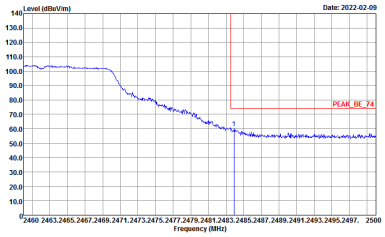
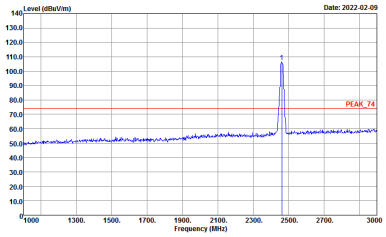
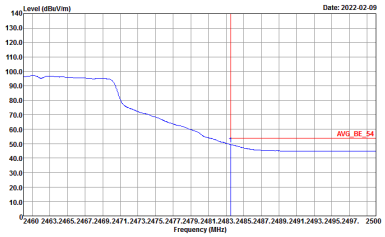
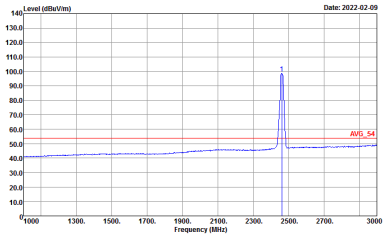
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
4	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
4	Vertical	Fundamental
Peak		
Avg.		

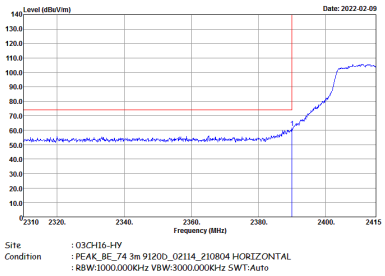
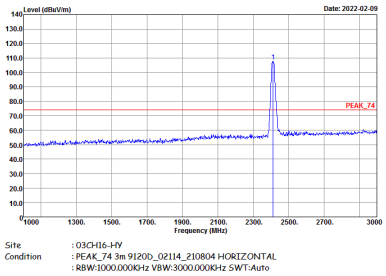
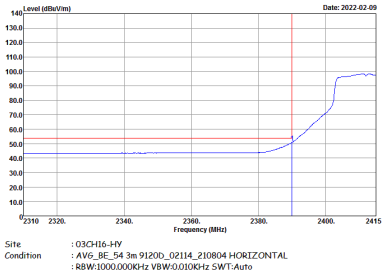
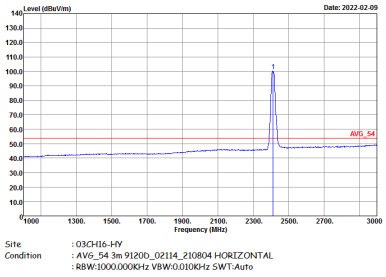
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
4	Vertical	Fundamental
Peak		Left Blank
Avg.		Left Blank

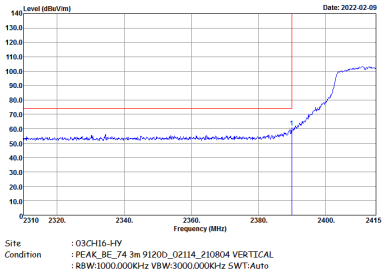
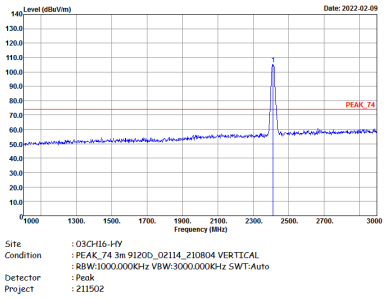
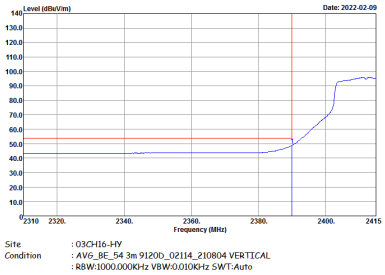
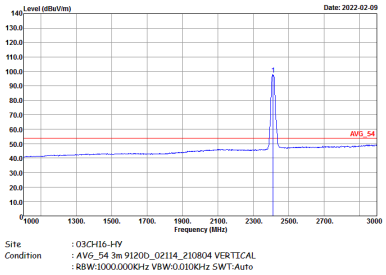
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
4	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_02114_210804 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_02114_210804 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_02114_210804 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HY Condition : AVG_54 3m 9120D_02114_210804 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

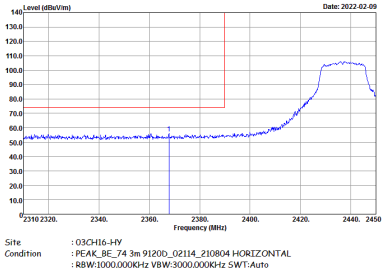
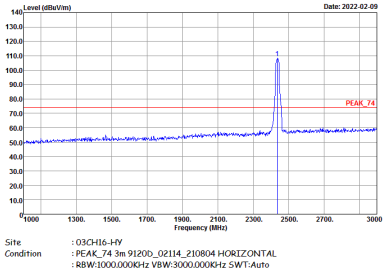
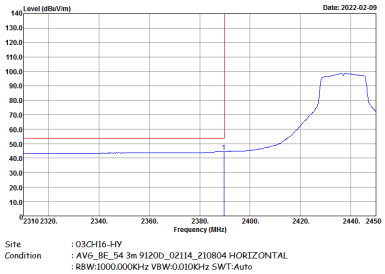
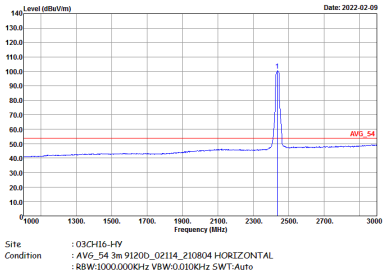
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
4	Vertical	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_02114_210804 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_02114_210804 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_02114_210804 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_02114_210804 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

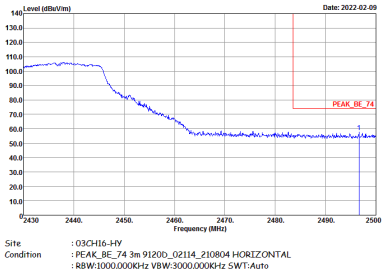
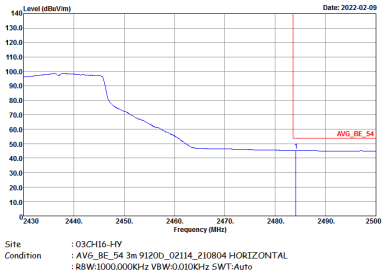
2.4GHz 2400~2483.5MHz

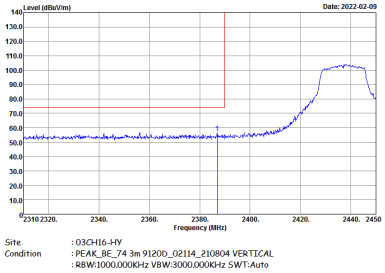
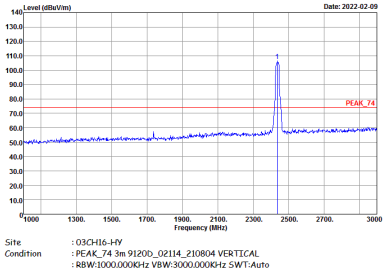
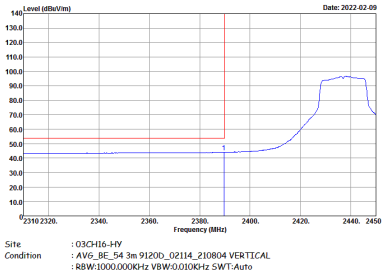
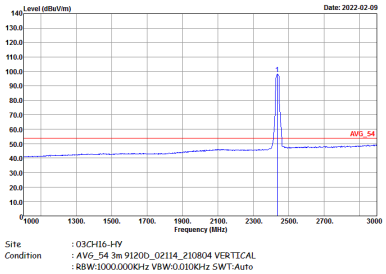
WIFI 802.11n HT20 (Band Edge @ 3m)

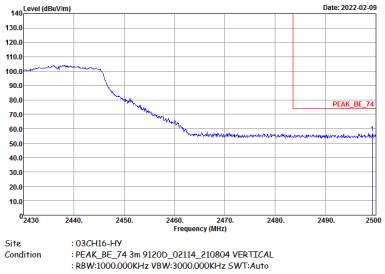
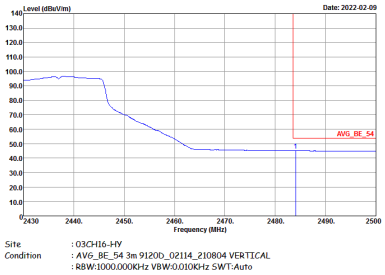
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
4	Horizontal	Fundamental
Peak		
Avg.		

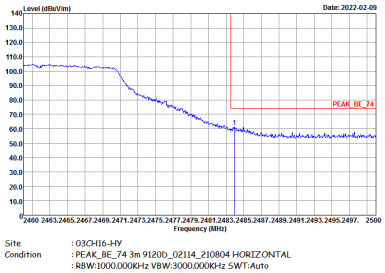
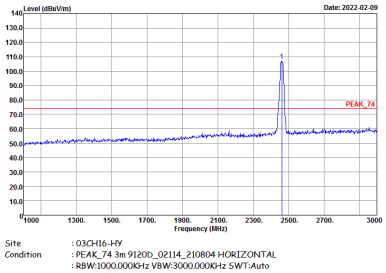
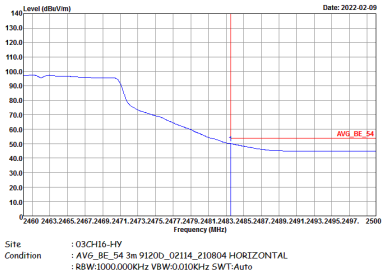
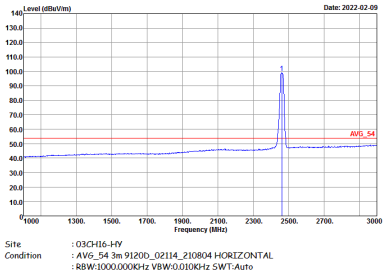
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
4	Vertical	Fundamental
Peak		
Avg.		

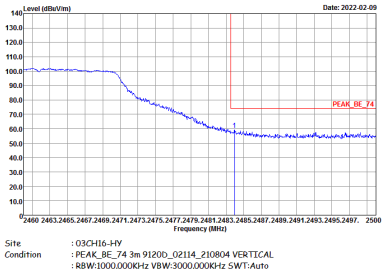
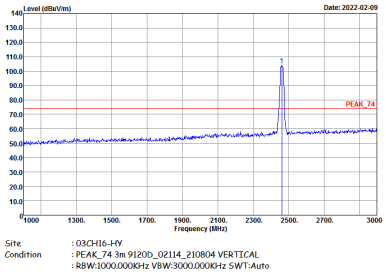
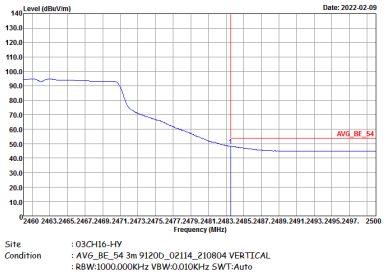
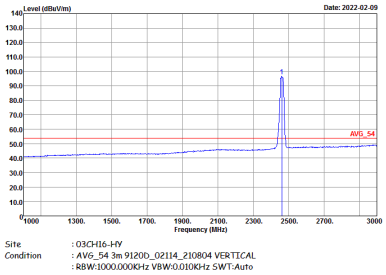
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
4	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
4	Vertical	Fundamental
Peak		
Avg.		

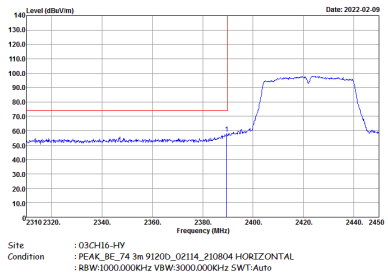
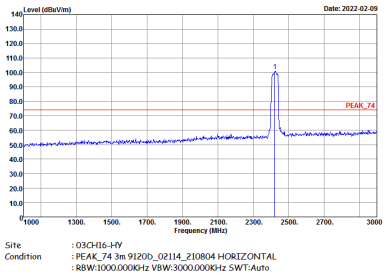
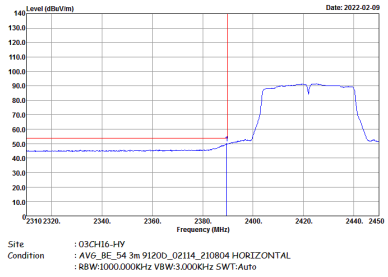
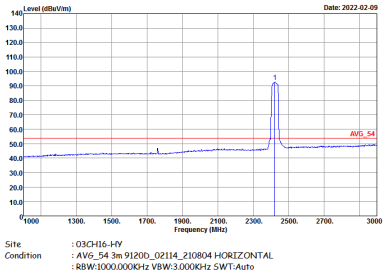
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
4	Vertical	Fundamental
Peak		Left Blank
Avg.		Left Blank

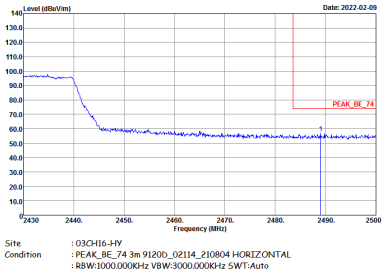
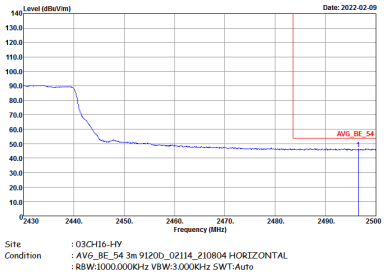
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
4	Horizontal	Fundamental
Peak	 Site : 03CH16-HY Condition : PEAK_BE_74 3m 9120D_02114_210804 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_02114_210804 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HY Condition : AVG_BE_54 3m 9120D_02114_210804 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HY Condition : AVG_54 3m 9120D_02114_210804 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

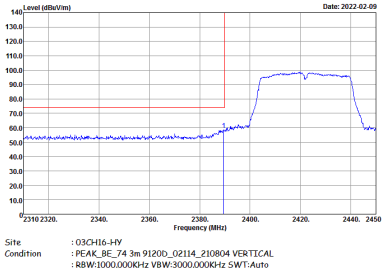
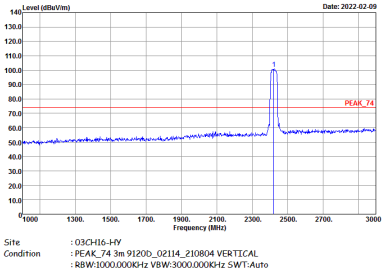
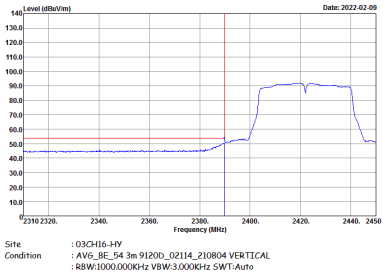
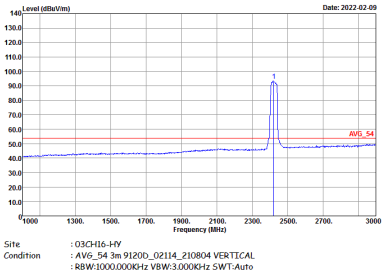
WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
4	Vertical	Fundamental
Peak	 Site : 03CH16-HV Condition : PEAK_BE_74 3m 9120D_02114_210804 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH16-HV Condition : PEAK_74 3m 9120D_02114_210804 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH16-HV Condition : AVG_BE_54 3m 9120D_02114_210804 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH16-HV Condition : AVG_54 3m 9120D_02114_210804 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

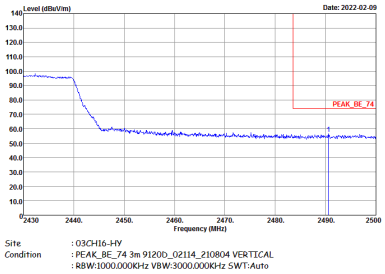
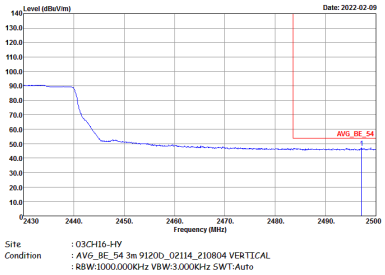
2.4GHz 2400~2483.5MHz

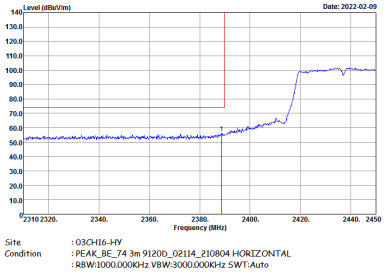
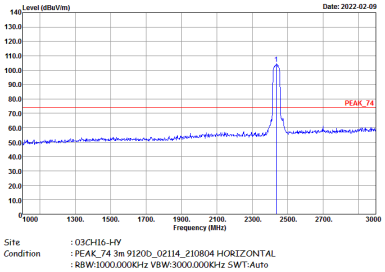
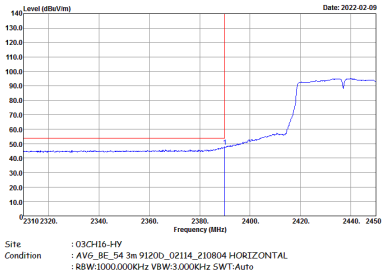
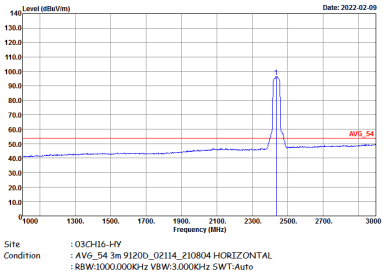
WIFI 802.11n HT40 (Band Edge @ 3m)

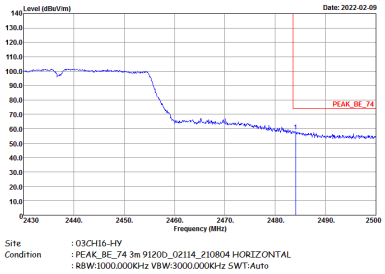
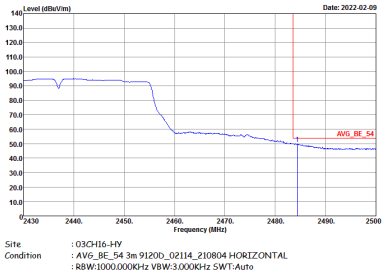
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
4	Horizontal	Fundamental
Peak		
Avg.		

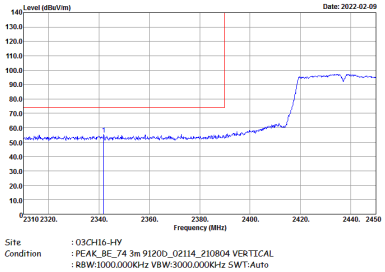
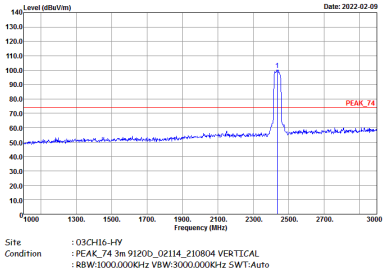
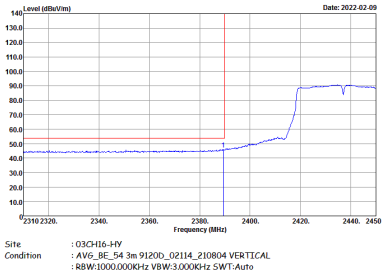
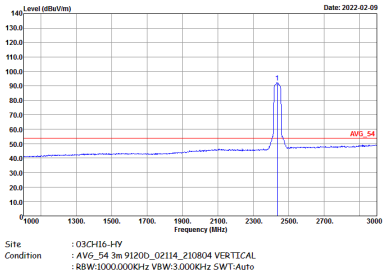
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
4	Horizontal	Fundamental
Peak		Left Blank
Avg.		Left Blank

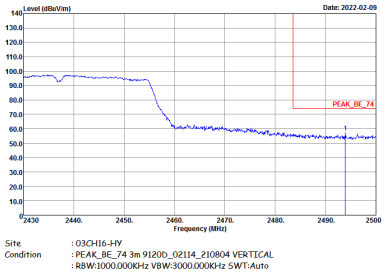
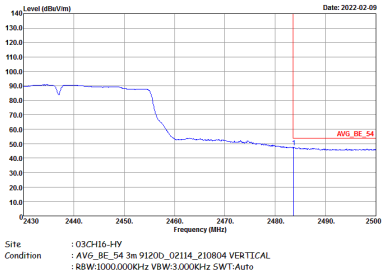
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
4	Vertical	Fundamental
Peak		
Avg.		

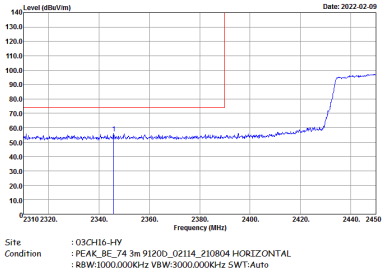
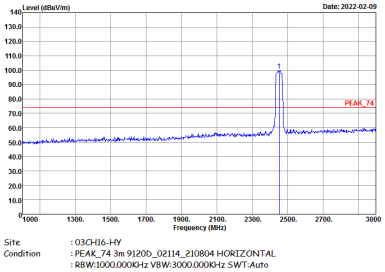
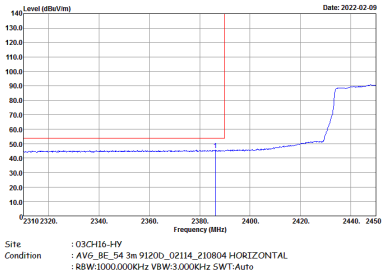
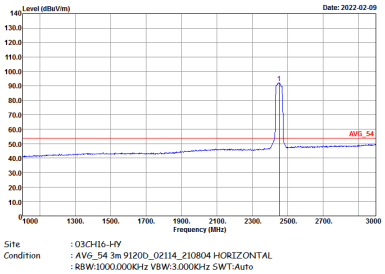
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

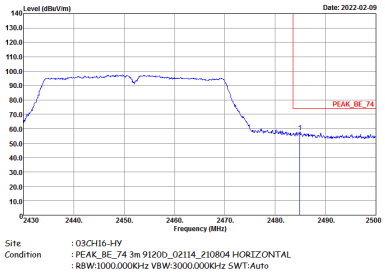
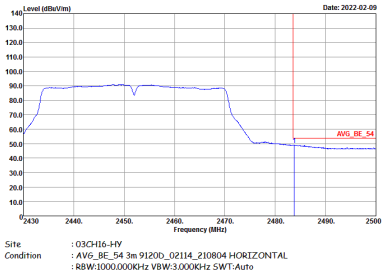
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - L	
4	Horizontal	Fundamental
Peak		
Avg.		

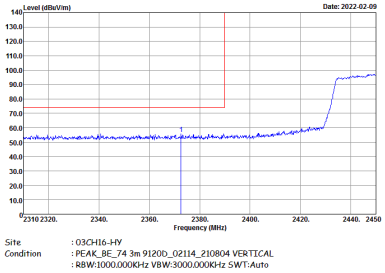
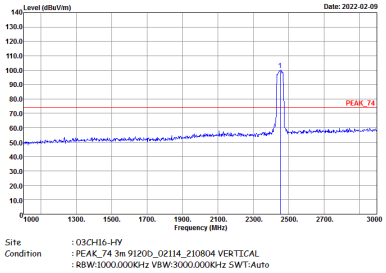
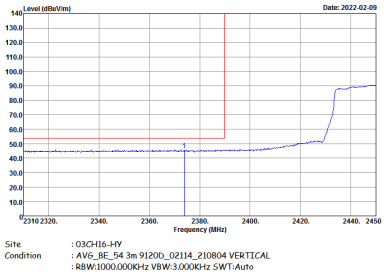
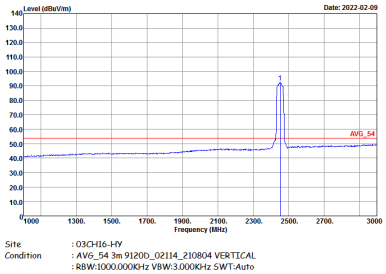
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - R	
4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

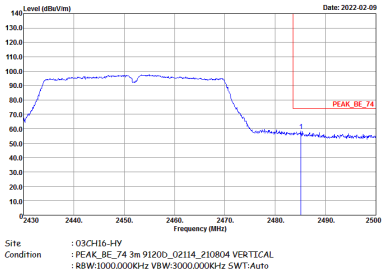
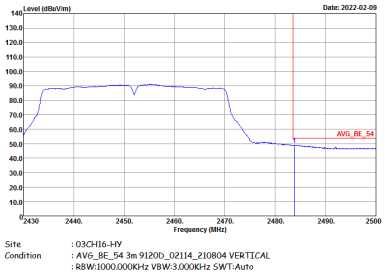
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - L	
4	Vertical	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - R	
4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
4	Horizontal	Fundamental
Peak		
Avg.		

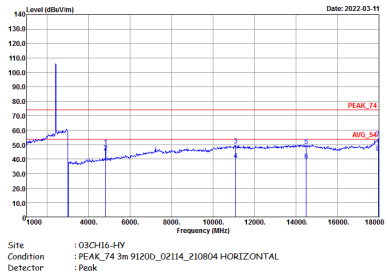
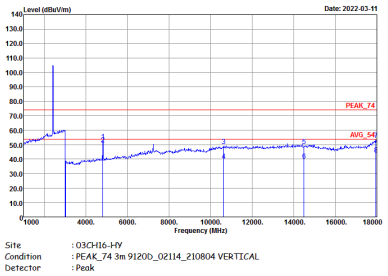
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - R	
4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

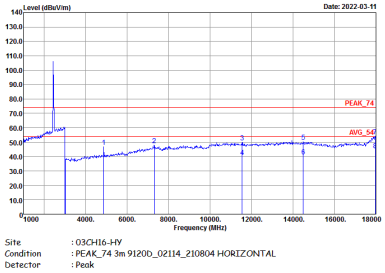
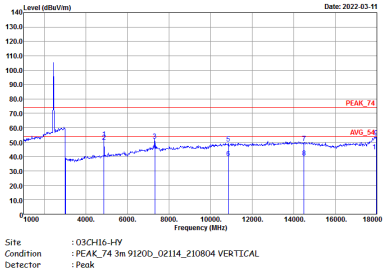
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
4	Vertical	Fundamental
Peak		
Avg.		

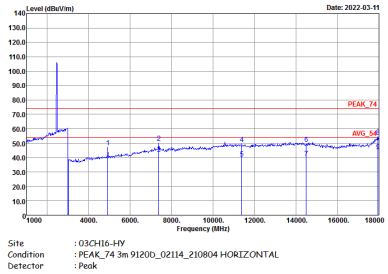
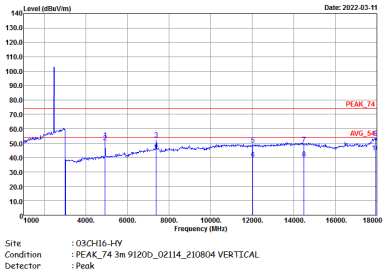
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - R	
4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

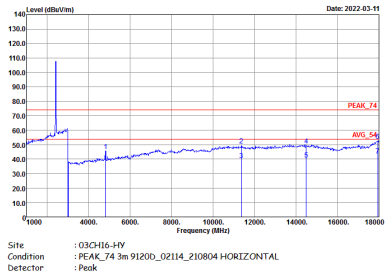
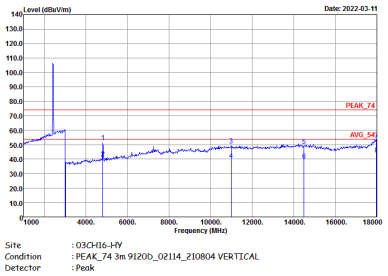
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
4	Horizontal	Vertical
Peak Avg.		

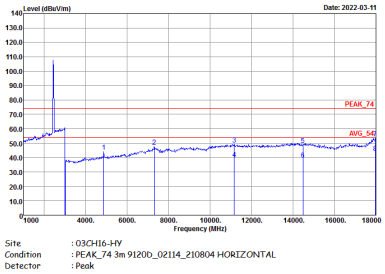
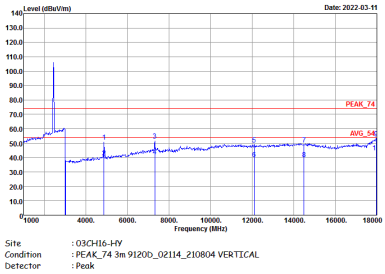
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
4	Horizontal	Vertical
Peak Avg.		

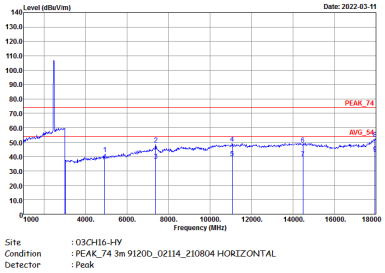
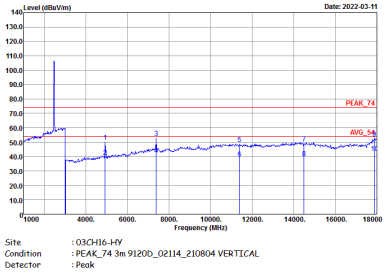
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
4	Horizontal	Vertical
Peak Avg.		

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

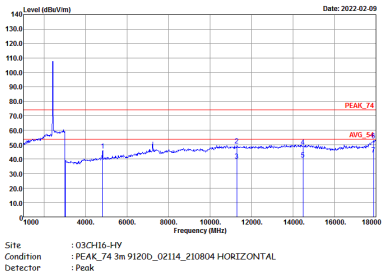
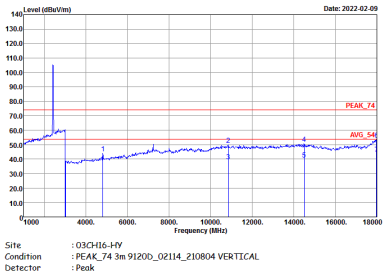
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
4	Horizontal	Vertical
Peak Avg.		

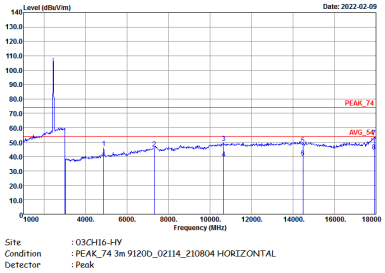
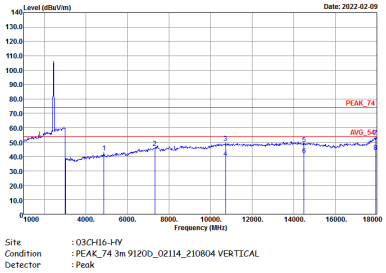
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
4	Horizontal	Vertical
Peak Avg.		

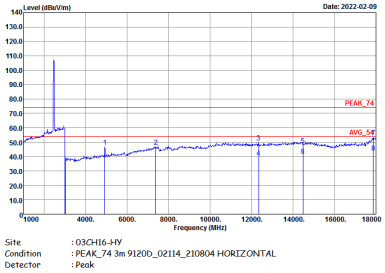
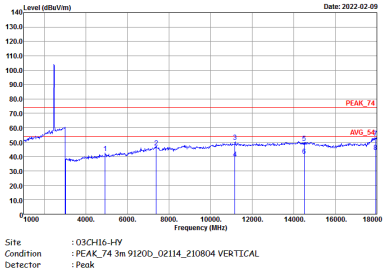
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
4	Horizontal	Vertical
Peak Avg.		

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

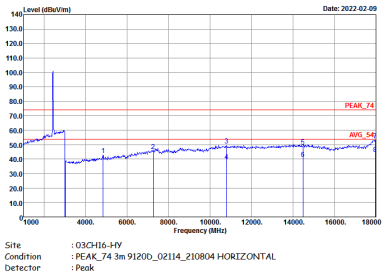
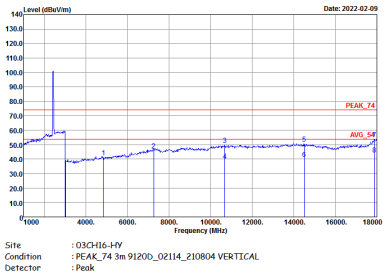
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
4	Horizontal	Vertical
Peak Avg.		

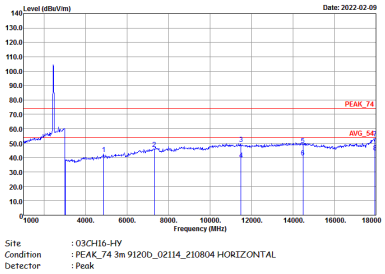
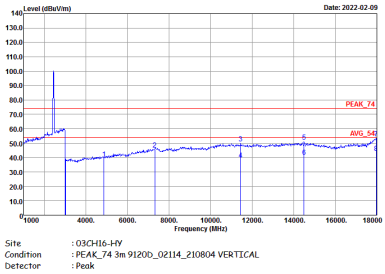
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
4	Horizontal	Vertical
Peak Avg.		

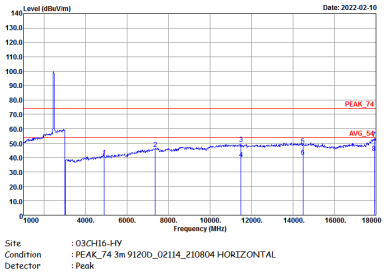
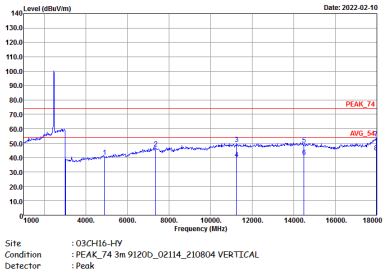
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
4	Horizontal	Vertical
Peak Avg.		

2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

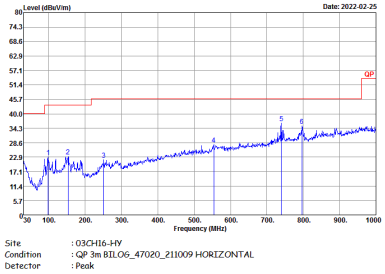
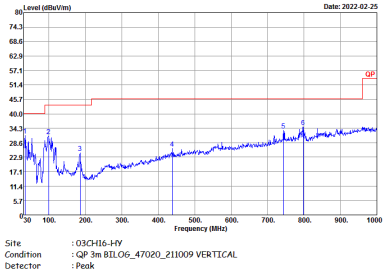
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH03 2422MHz	
4	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH06 2437MHz	
4	Horizontal	Vertical
Peak Avg.		

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH09 2452MHz	
4	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

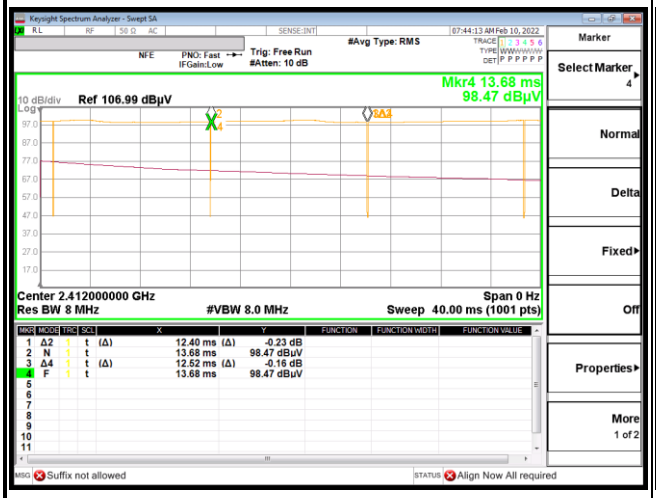
2.4GHz WIFI 802.11n HT20 (LF)

WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11n HT20 LF	
4	Horizontal	Vertical
QP / Peak		

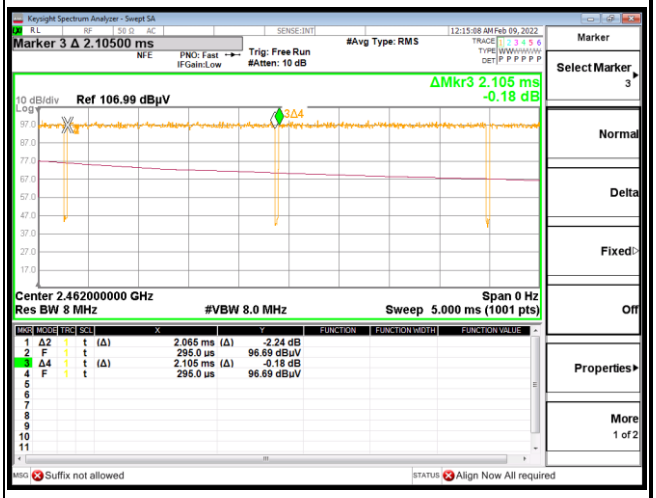
Appendix E. Duty Cycle Plots

Band	Duty Cycle (%)	T(us)	1/T(kHz)	VBW Setting
802.11b	99.04	-	-	10Hz
802.11g	98.10	-	-	10Hz
2.4GHz 802.11n HT20	98.21	-	-	10Hz
2.4GHz 802.11n HT40	92.67	948.00	1.05	3kHz

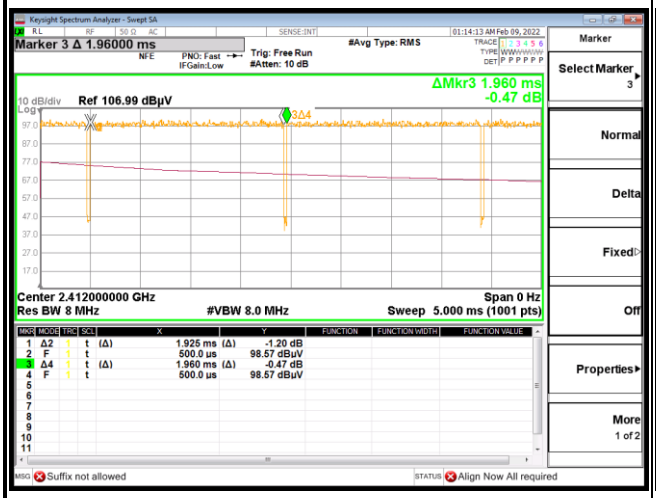
802.11b



802.11g



802.11n HT20



802.11n HT40