

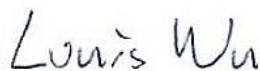


FCC RADIO TEST REPORT

FCC ID : 2A7DJ-2346766867652
Equipment : Smart Radio LTE with Walkie-Talkie
Brand Name : weavix
Model Name : walt
Applicant : PK Solutions LLC
10811 E Harry St. Wichita, KS 67207, USA
Manufacturer : Arima Communications (Jiangsu) Co., Ltd
No.168, Jiaotong North Road, Economic and
Technological Development Zone, Wujiang District
Suzhou City, Jiangsu Province, P.R.China
Standard : FCC Part 15 Subpart C §15.247

The product was received on Jun. 17, 2022 and testing was performed from Jul. 12, 2022 to Aug. 17, 2022. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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



Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory

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



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Product Feature of Equipment Under Test.....	5
1.2 Modification of EUT	5
1.3 Testing Location	6
1.4 Applicable Standards.....	6
2 Test Configuration of Equipment Under Test	7
2.1 Carrier Frequency and Channel	7
2.2 Test Mode.....	8
2.3 Connection Diagram of Test System.....	9
2.4 Support Unit used in test configuration and system	9
2.5 EUT Operation Test Setup	10
2.6 Measurement Results Explanation Example.....	10
3 Test Result	11
3.1 6dB and 99% Bandwidth Measurement	11
3.2 Output Power Measurement.....	14
3.3 Power Spectral Density Measurement	15
3.4 Conducted Band Edges and Spurious Emission Measurement	17
3.5 Radiated Band Edges and Spurious Emission Measurement	30
3.6 AC Conducted Emission Measurement.....	35
3.7 Antenna Requirements.....	37
4 List of Measuring Equipment.....	38
5 Uncertainty of Evaluation	40
Appendix A. Conducted Test Results	
Appendix B. AC Conducted Emission Test Result	
Appendix C. Radiated Spurious Emission	
Appendix D. Radiated Spurious Emission Plots	
Appendix E. Duty Cycle Plots	
Appendix F. Setup Photographs	



History of this test report

Report No.	Version	Description	Issue Date
FR261611C	01	Initial issue of report	Sep. 22, 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	-
0	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	Pass	2.03 dB under the limit at 2490.460 MHz
3.6	15.207	AC Conducted Emission	Pass	8.79 dB under the limit at 0.542 MHz
3.7	15.203 & 15.247(b)	Antenna Requirement	Pass	-

Declaration of Conformity:

- 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.
- The measurement uncertainty please refer to report "Uncertainty of Evaluation".

Comments and Explanations:

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

Reviewed by: Avis Chuang

Report Producer: Dewi Huang

1 General Description

1.1 Product Feature of Equipment Under Test

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

Product Feature	
HW Version	0910MB-003
SW Version	2.A.0025
Antenna Type	WWAN: PIFA Antenna WLAN: Loop Antenna Bluetooth: Loop Antenna GPS / Glonass / BDS / Galileo: PIFA Antenna NFC: Loop Antenna

Antenna information		
2412 MHz ~ 2462 MHz	Peak Gain (dBi)	0.8

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

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

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

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

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No. TH05-HY (TAF Code: 3786)
Remark	The Conducted test item subcontracted to Sporton International Inc. Wensan Laboratory.

FCC designation No.: TW1190 and TW3786

1.4 Applicable Standards

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

- ♦ FCC Part 15 Subpart 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 only the worst case emissions were reported in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	1	2412	7	2442
	2	2417	8	2447
	3	2422	9	2452
	4	2427	10	2457
	5	2432	11	2462
	6	2437		

2.2 Test Mode

The power for 802.11n mode is smaller than 802.11ac mode, so all other conducted and radiated test is covered by 802.11ac mode.

The final test modes include the worst data rates for each modulation shown in the table below.

Single Antenna

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

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

Ch. #	2400-2483.5 MHz			
	802.11b	802.11g	802.11ac VHT20	802.11ac VHT40
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	PY700A2029	N/A	N/A
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8m
3.	Notebook	Dell	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A



2.5 EUT Operation Test Setup

The RF test items, utility "QRCT 4.0.00158.0" 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.

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

3 Test Result

3.1 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) $\geq 3 * RBW$.
6. Measure and record the results in the test report.

3.1.4 Test Setup

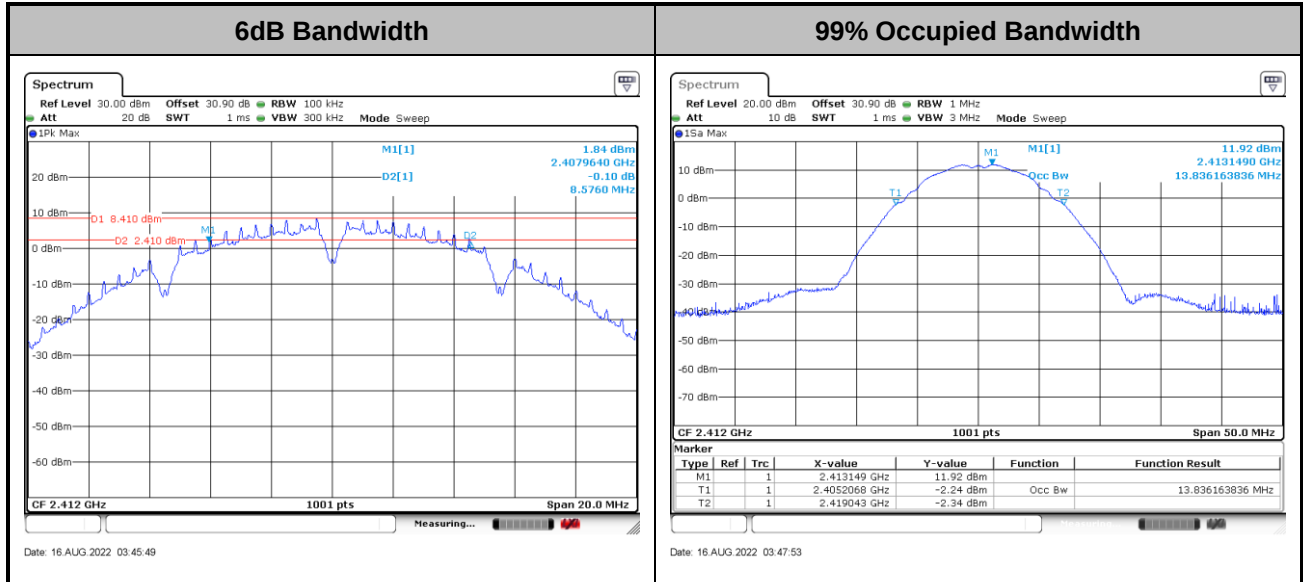




3.1.5 Test Result of 6dB and 99% Occupied Bandwidth

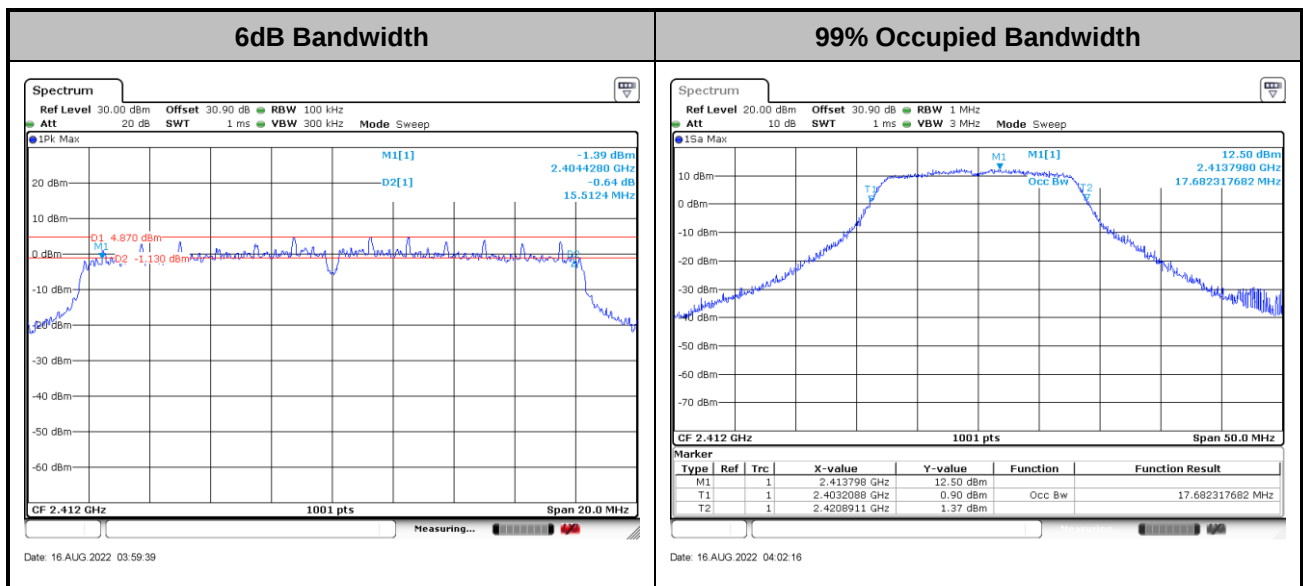
Please refer to Appendix A.

<802.11b>



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

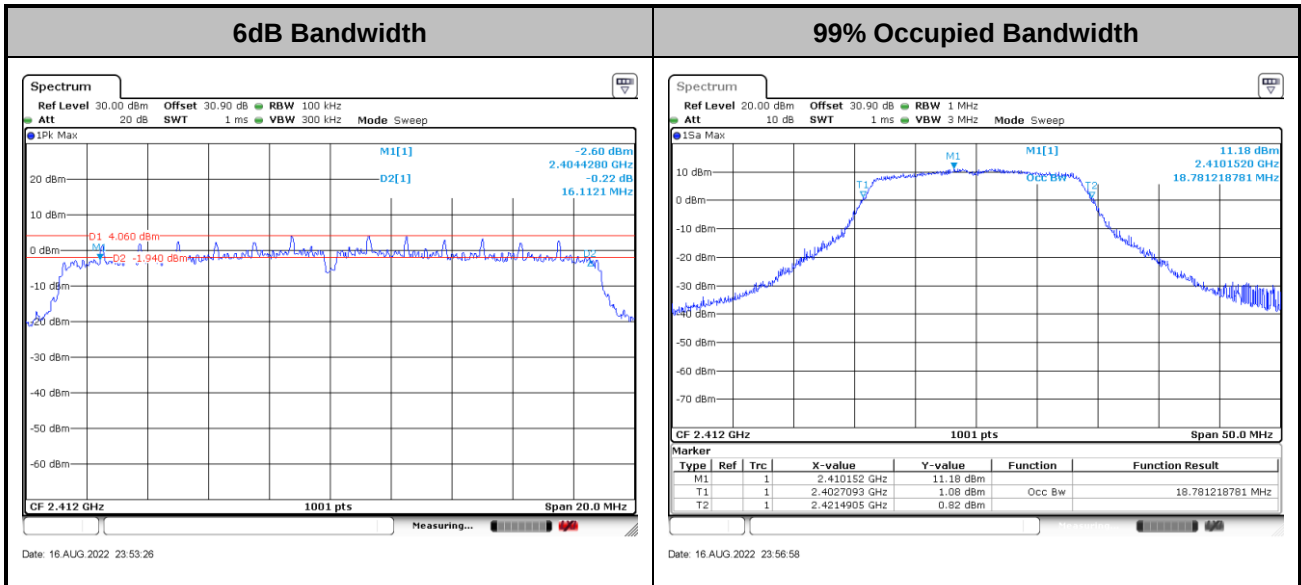
<802.11g>



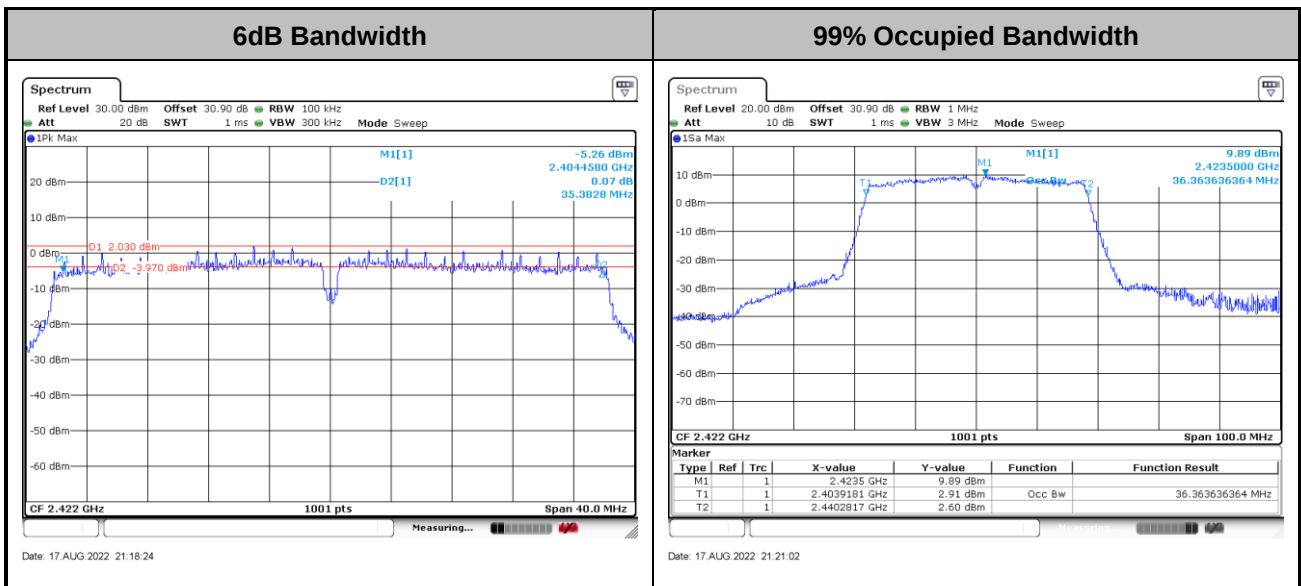
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



<802.11ac VHT20>



<802.11ac VHT40>



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.

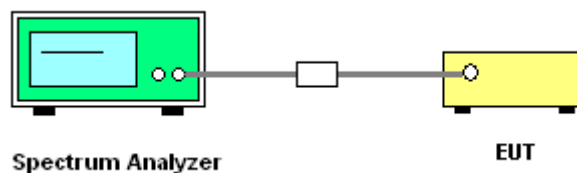
3.3.2 Measuring Instruments

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.

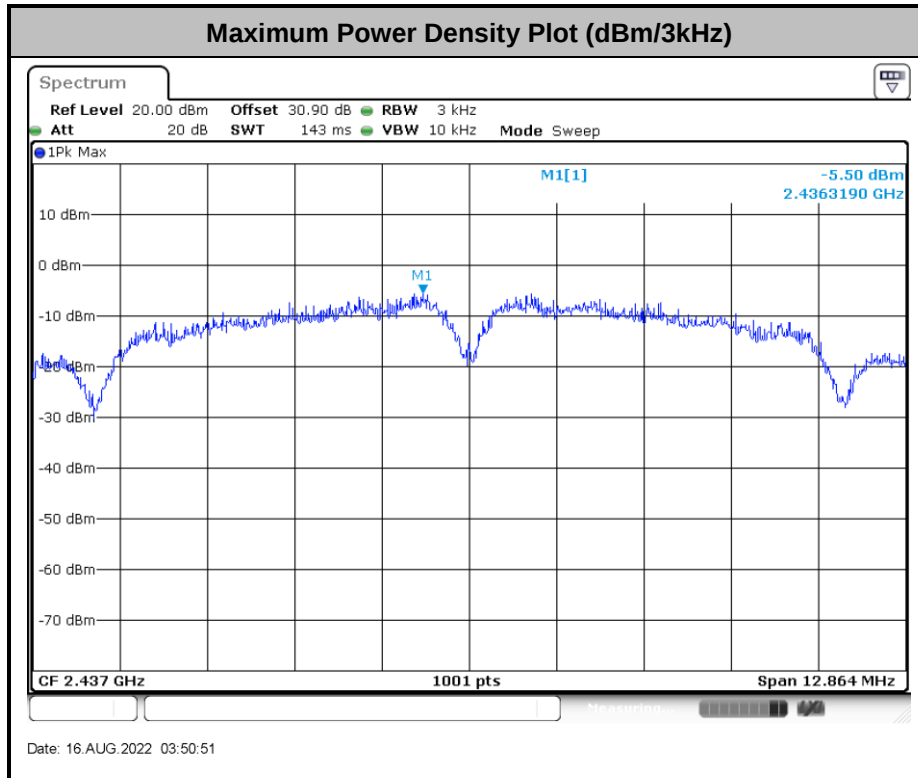
3.3.4 Test Setup





3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



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.

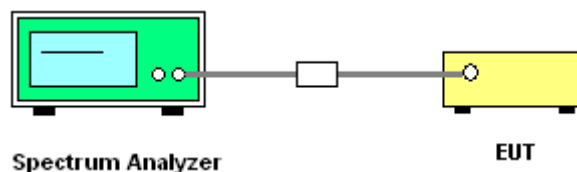
3.4.2 Measuring Instruments

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.

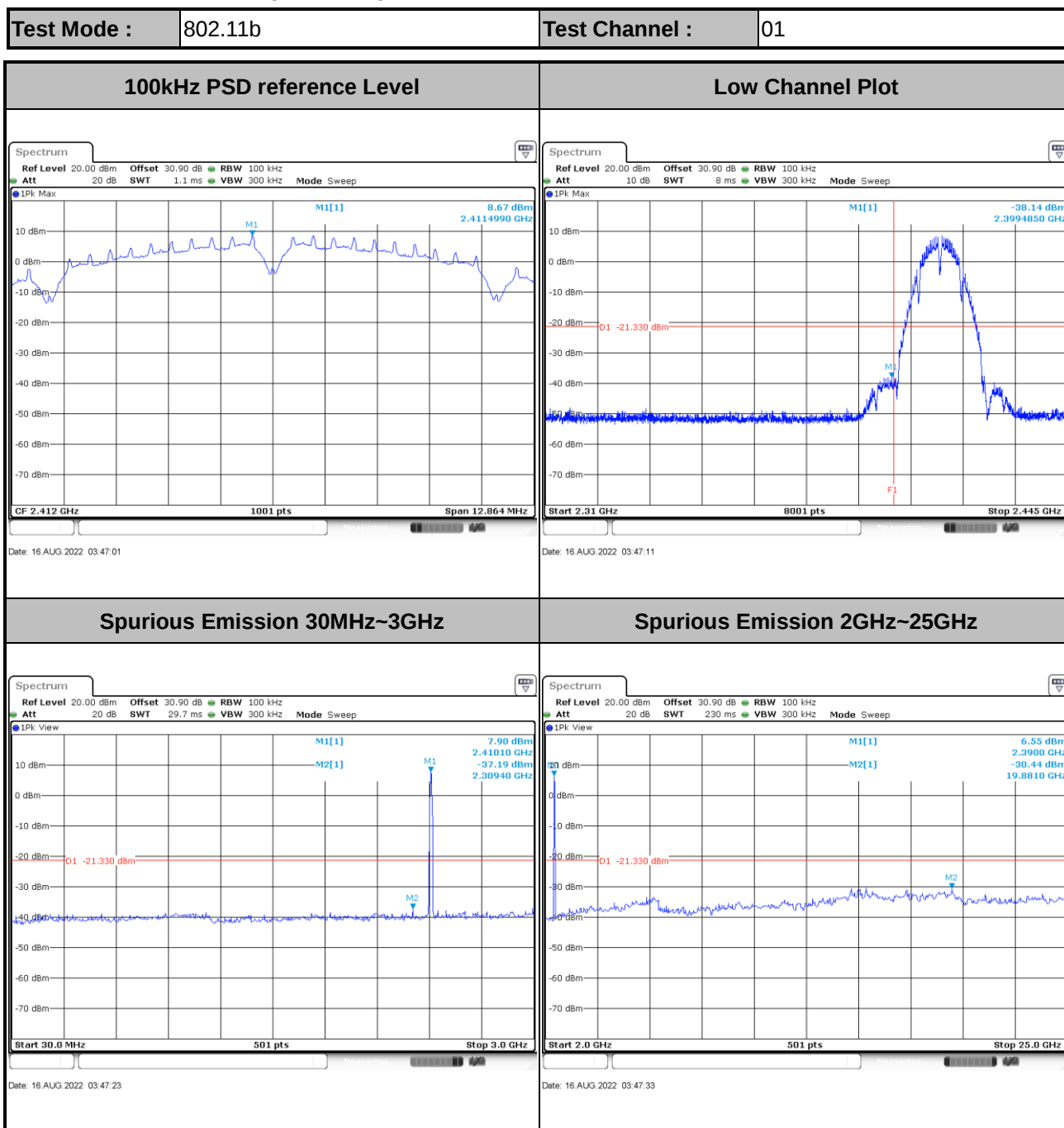
3.4.4 Test Setup





3.4.5 Test Result of Conducted Band Edges and Spurious Emission

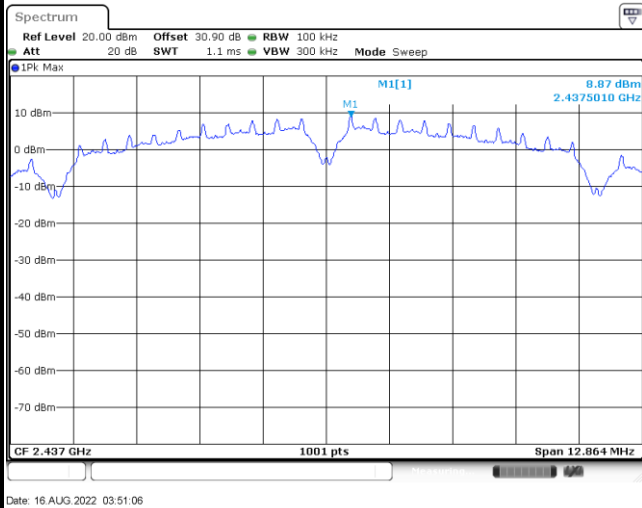
Number of TX = 1, Ant. 1 (Measured)





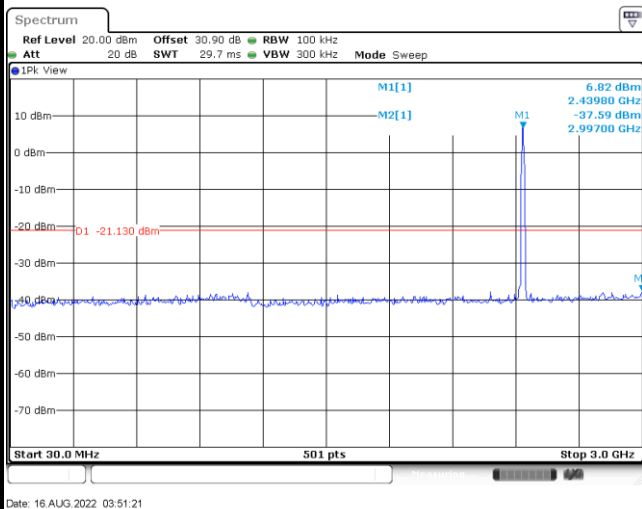
Test Mode :	802.11b	Test Channel :	06
-------------	---------	----------------	----

100kHz PSD reference Level

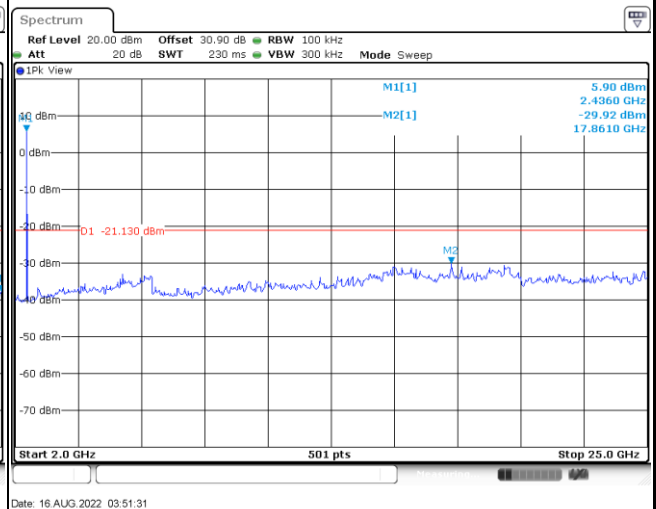


Mid Channel Plot

Spurious Emission 30MHz~3GHz

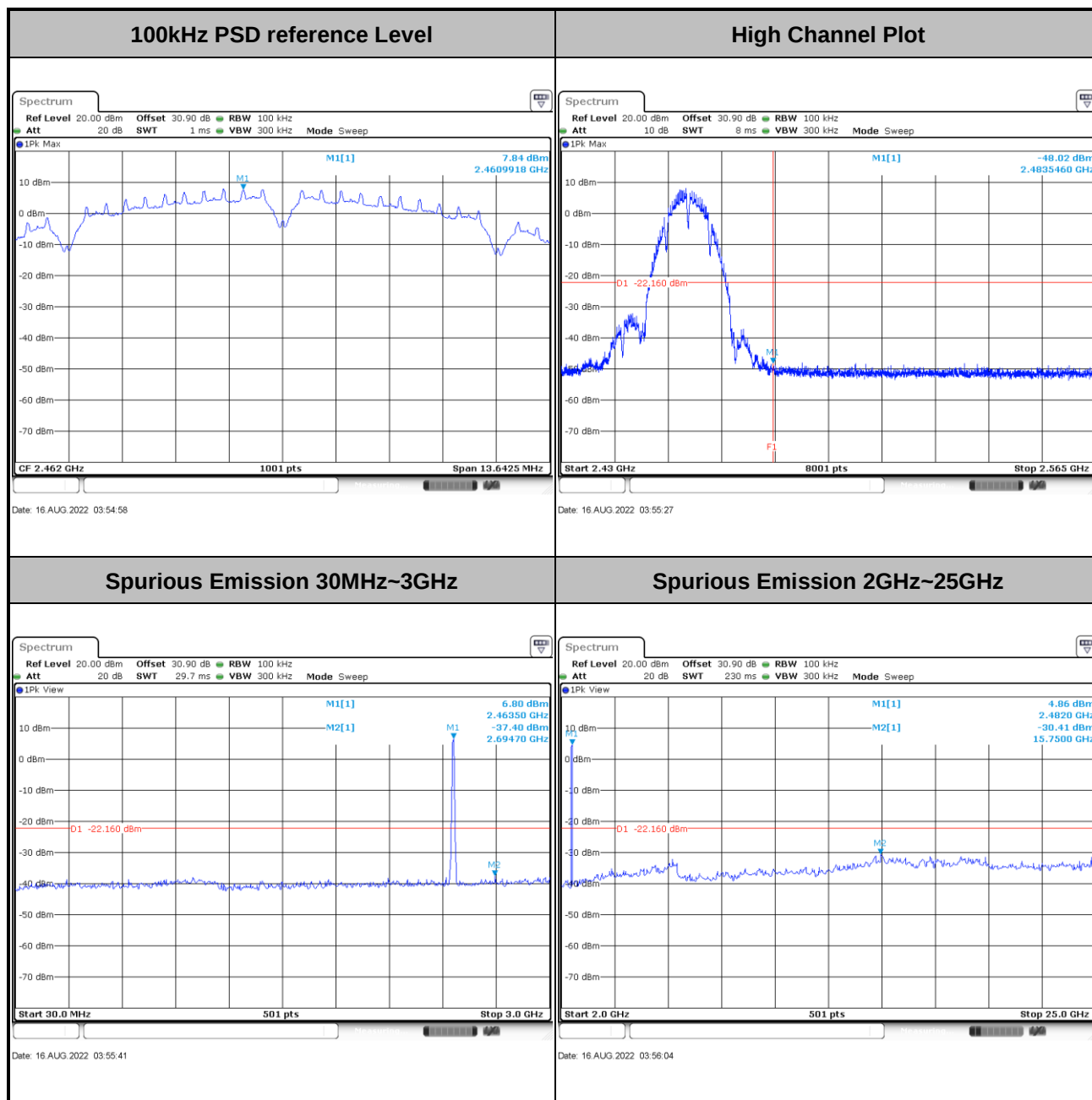


Spurious Emission 2GHz~25GHz



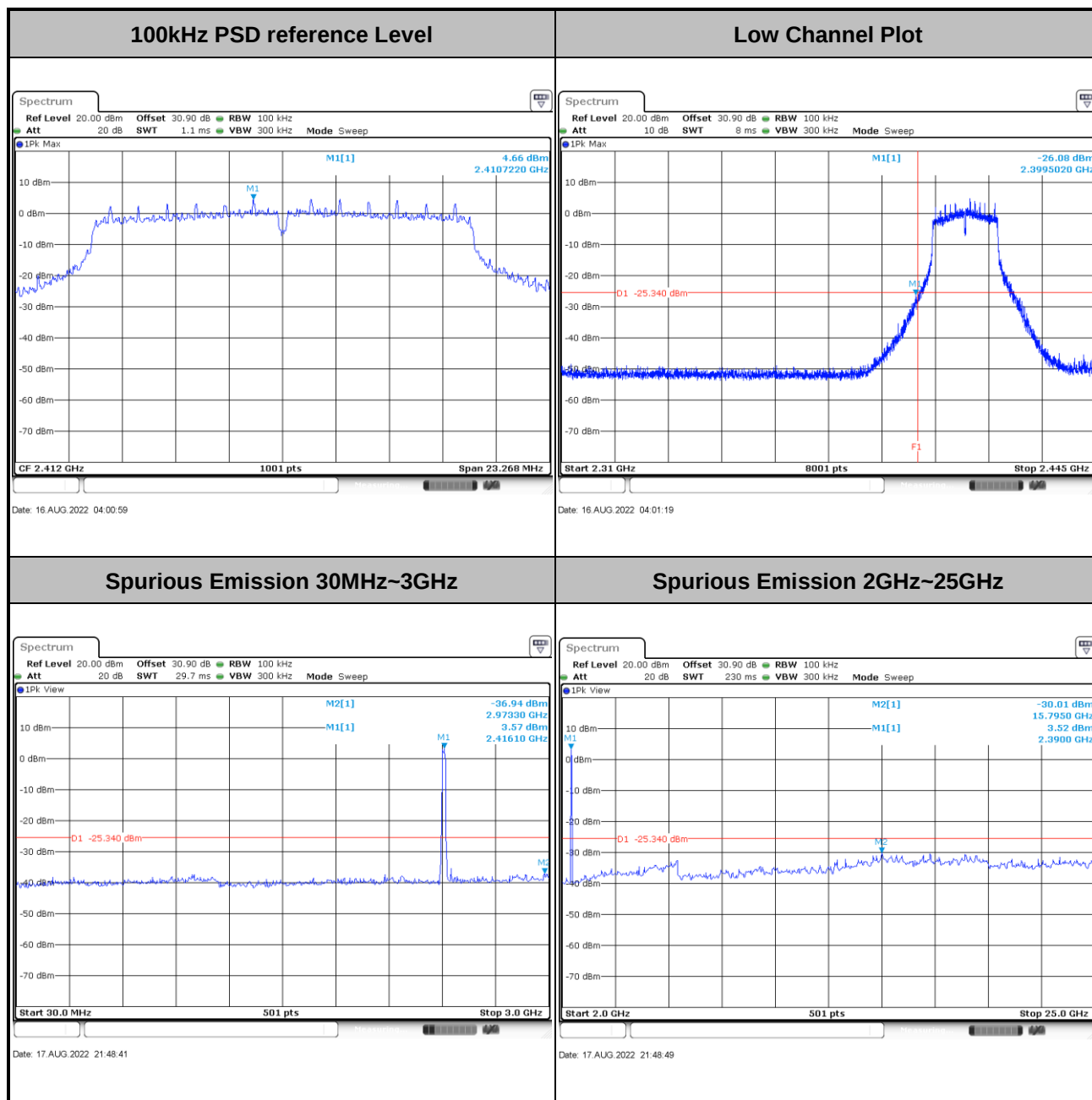


Test Mode :	802.11b	Test Channel :	11
-------------	---------	----------------	----





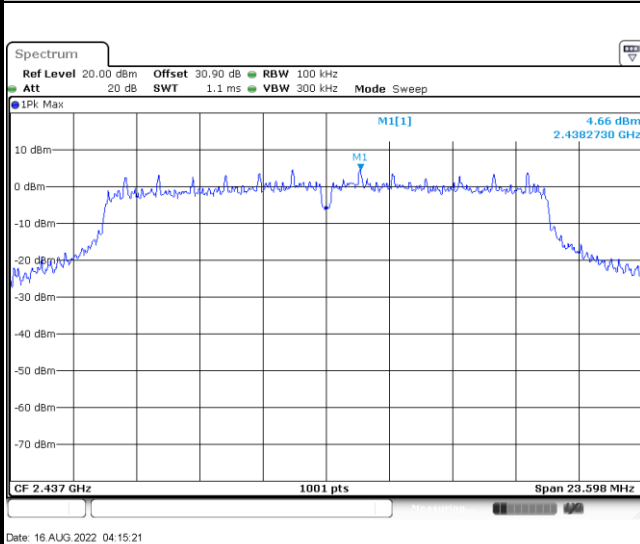
Test Mode :	802.11g	Test Channel :	01
-------------	---------	----------------	----





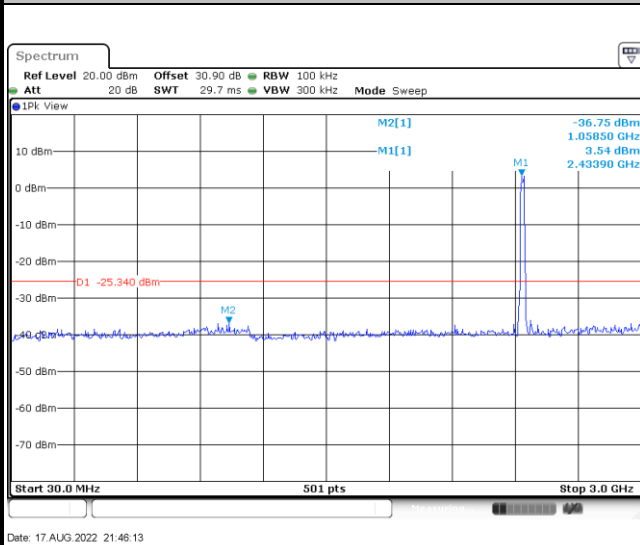
Test Mode :	802.11g	Test Channel :	06
-------------	---------	----------------	----

100kHz PSD reference Level

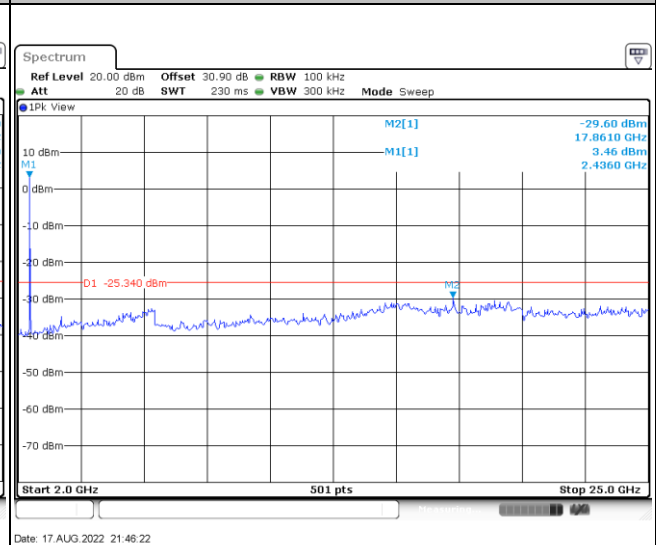


Mid Channel Plot

Spurious Emission 30MHz~3GHz



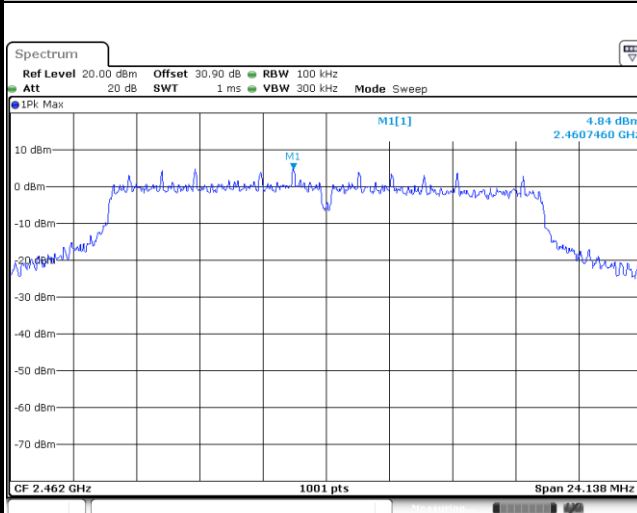
Spurious Emission 2GHz~25GHz



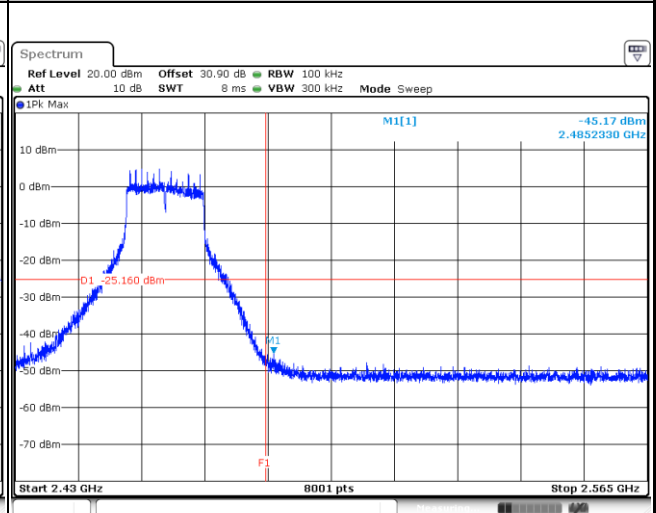


Test Mode :	802.11g	Test Channel :	11
-------------	---------	----------------	----

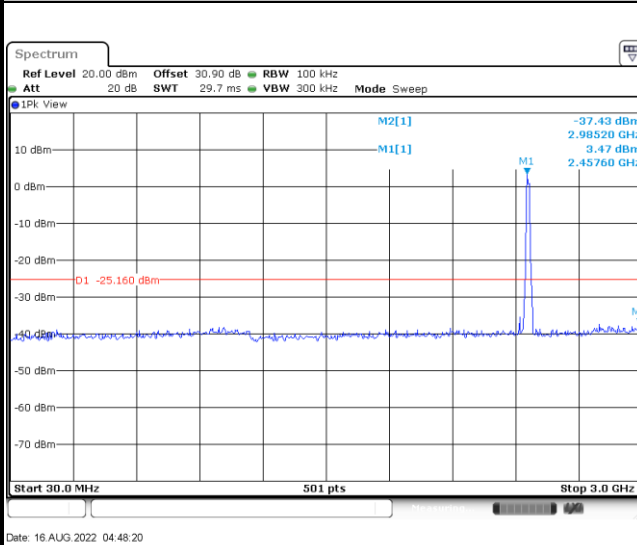
100kHz PSD reference Level



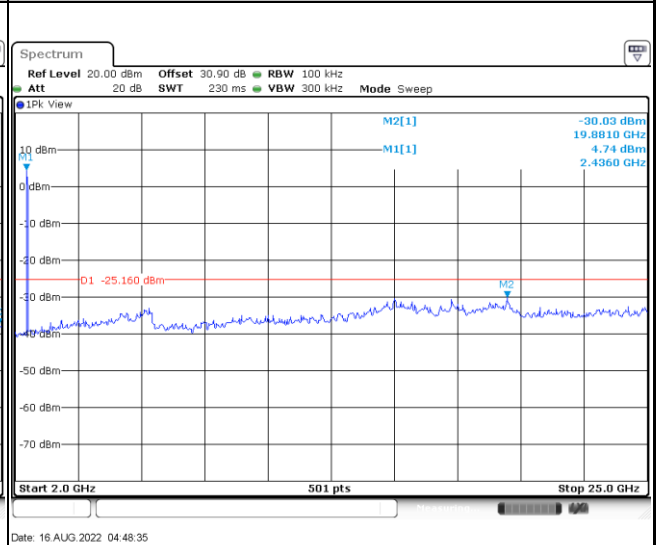
High Channel Plot



Spurious Emission 30MHz~3GHz

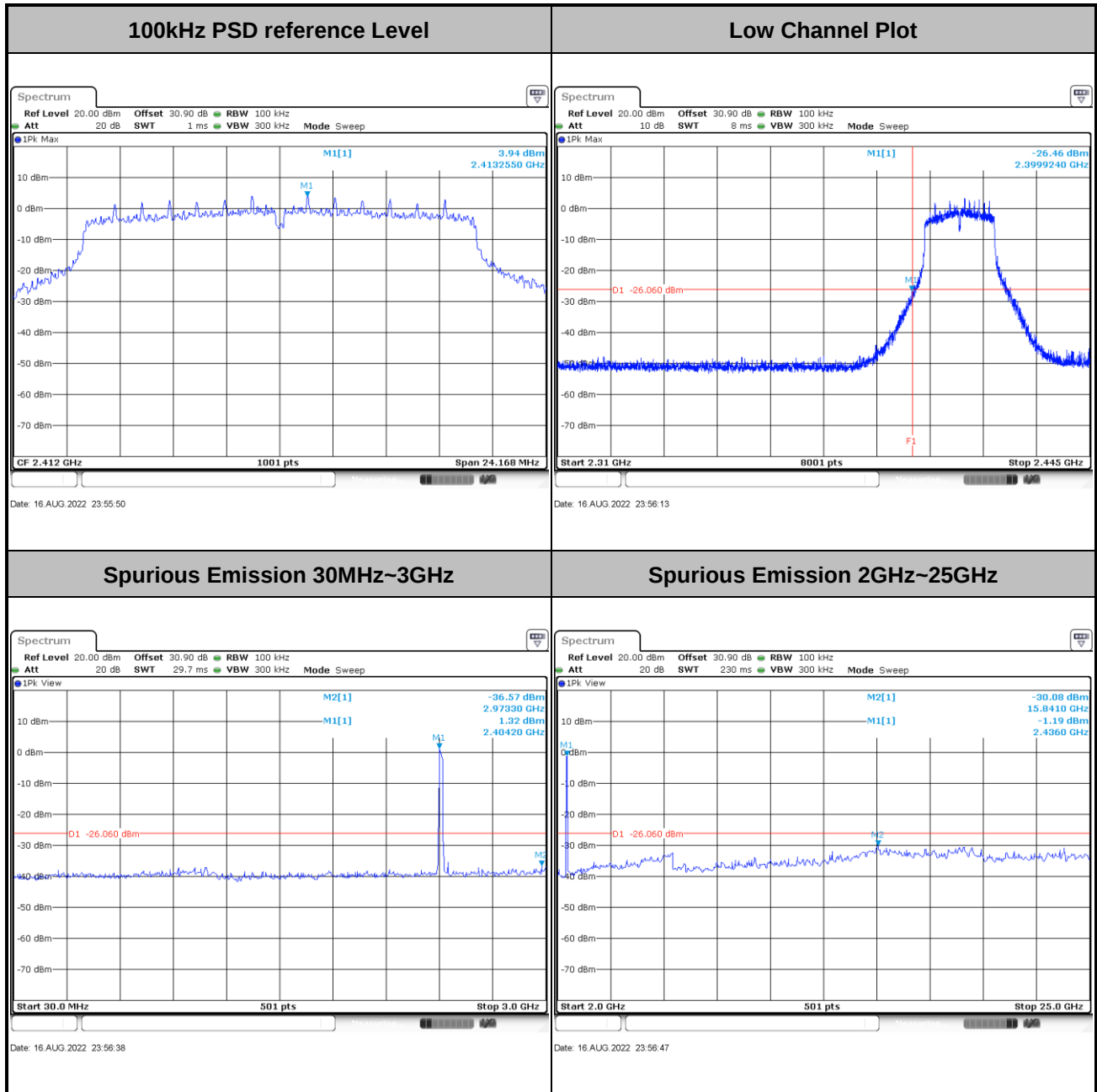


Spurious Emission 2GHz~25GHz



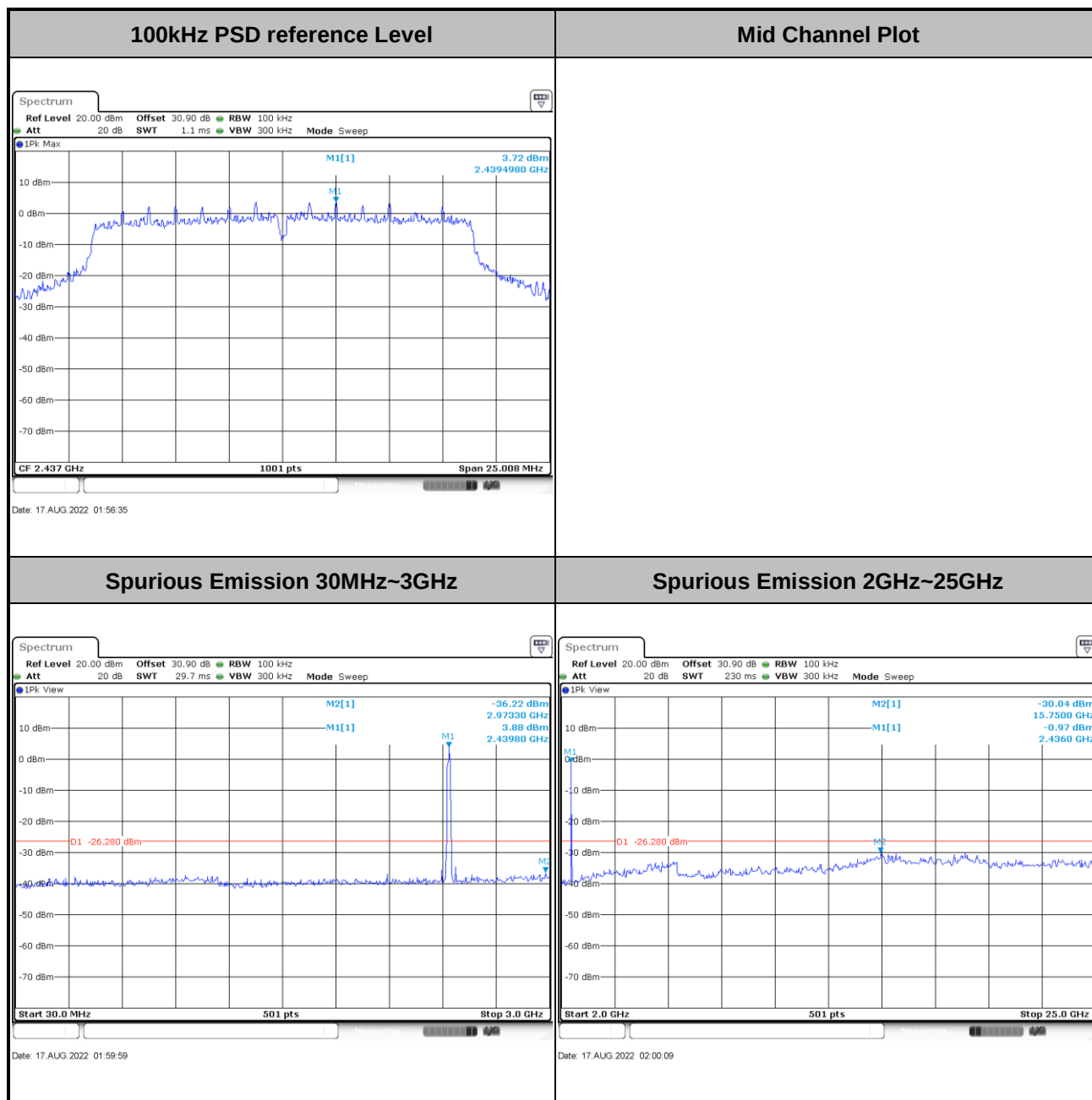


Test Mode :	802.11ac VHT20	Test Channel :	01
-------------	----------------	----------------	----



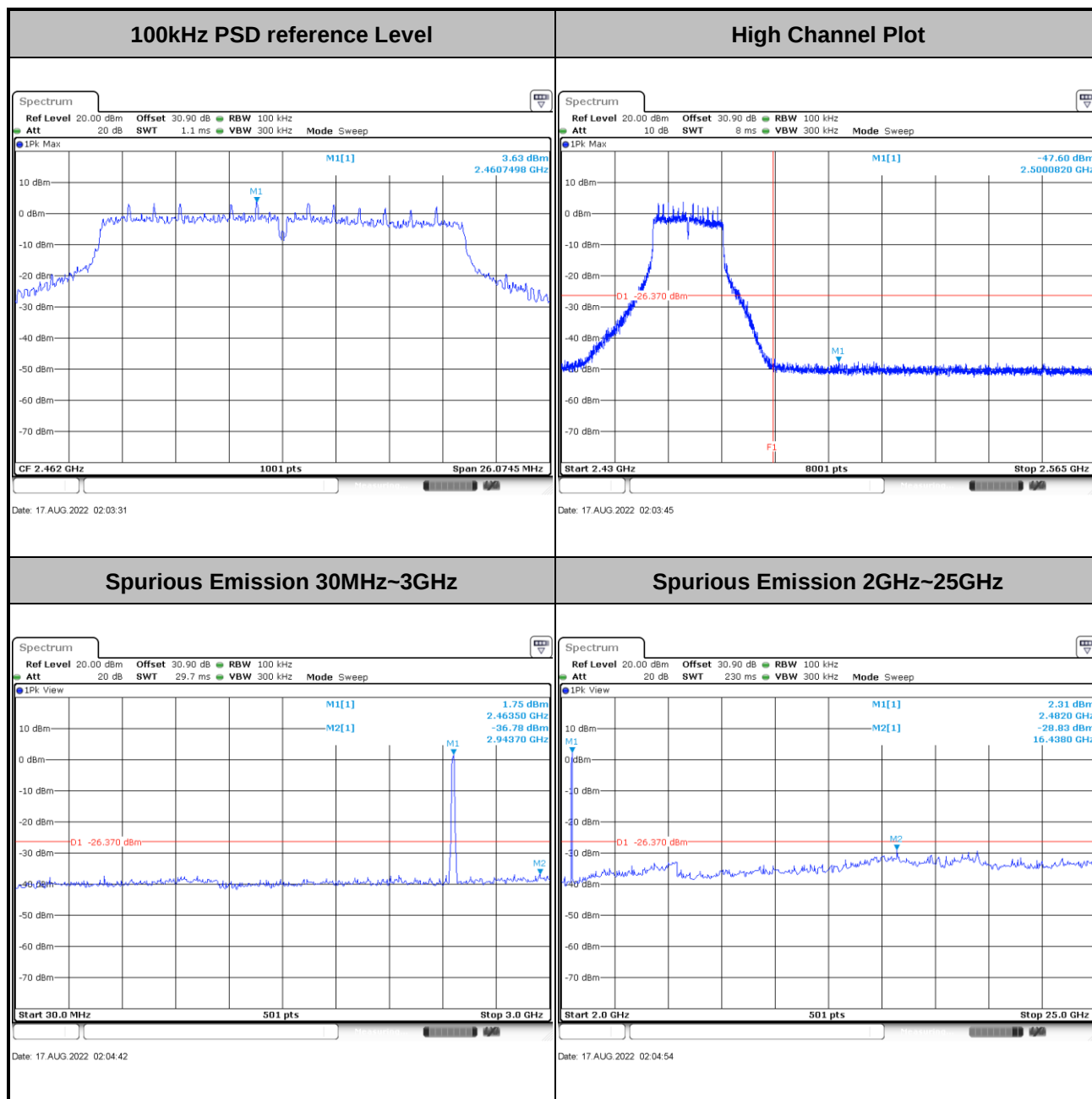


Test Mode :	802.11ac VHT20	Test Channel :	06
-------------	----------------	----------------	----



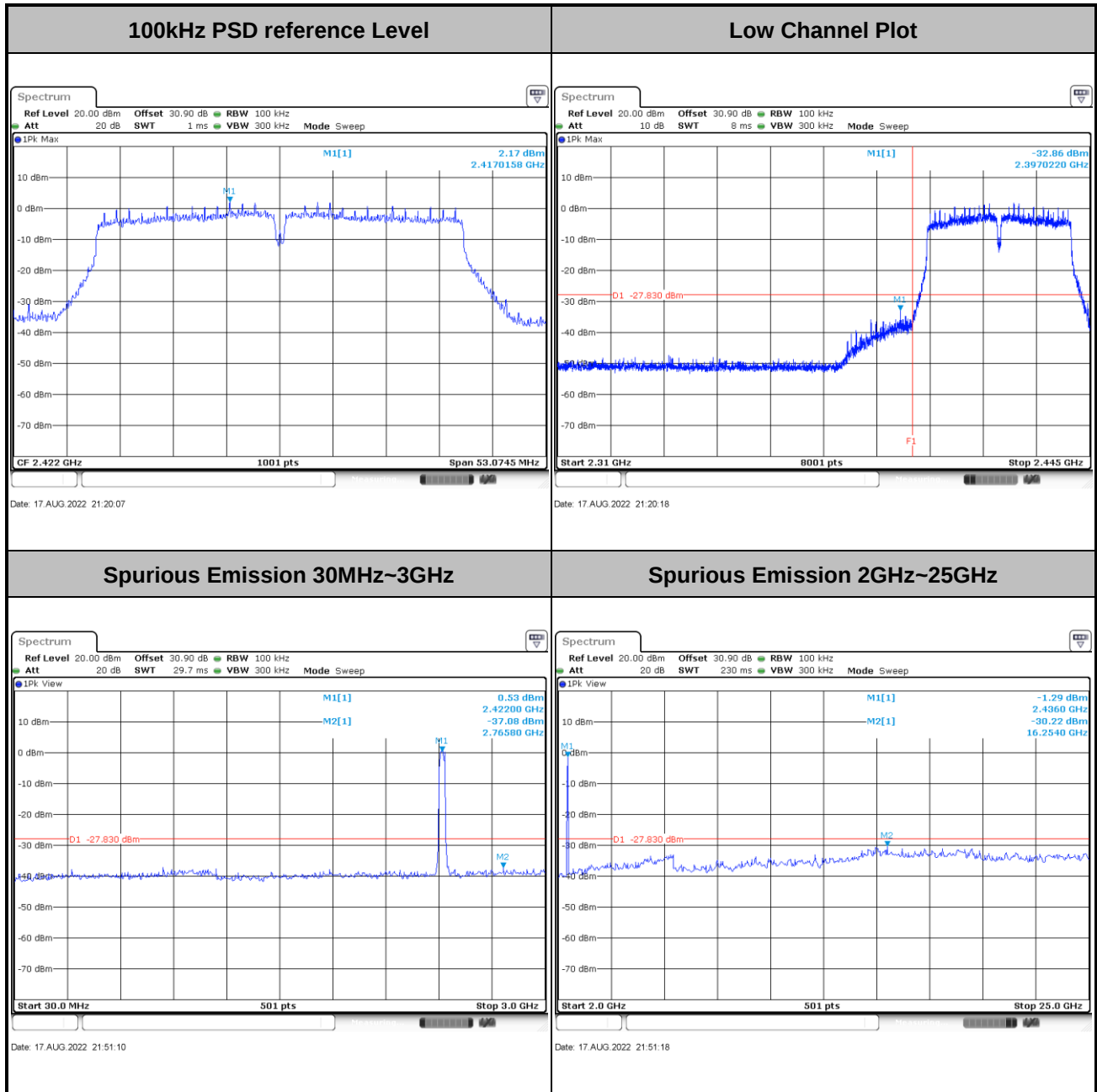


Test Mode :	802.11ac VHT20	Test Channel :	11
-------------	----------------	----------------	----



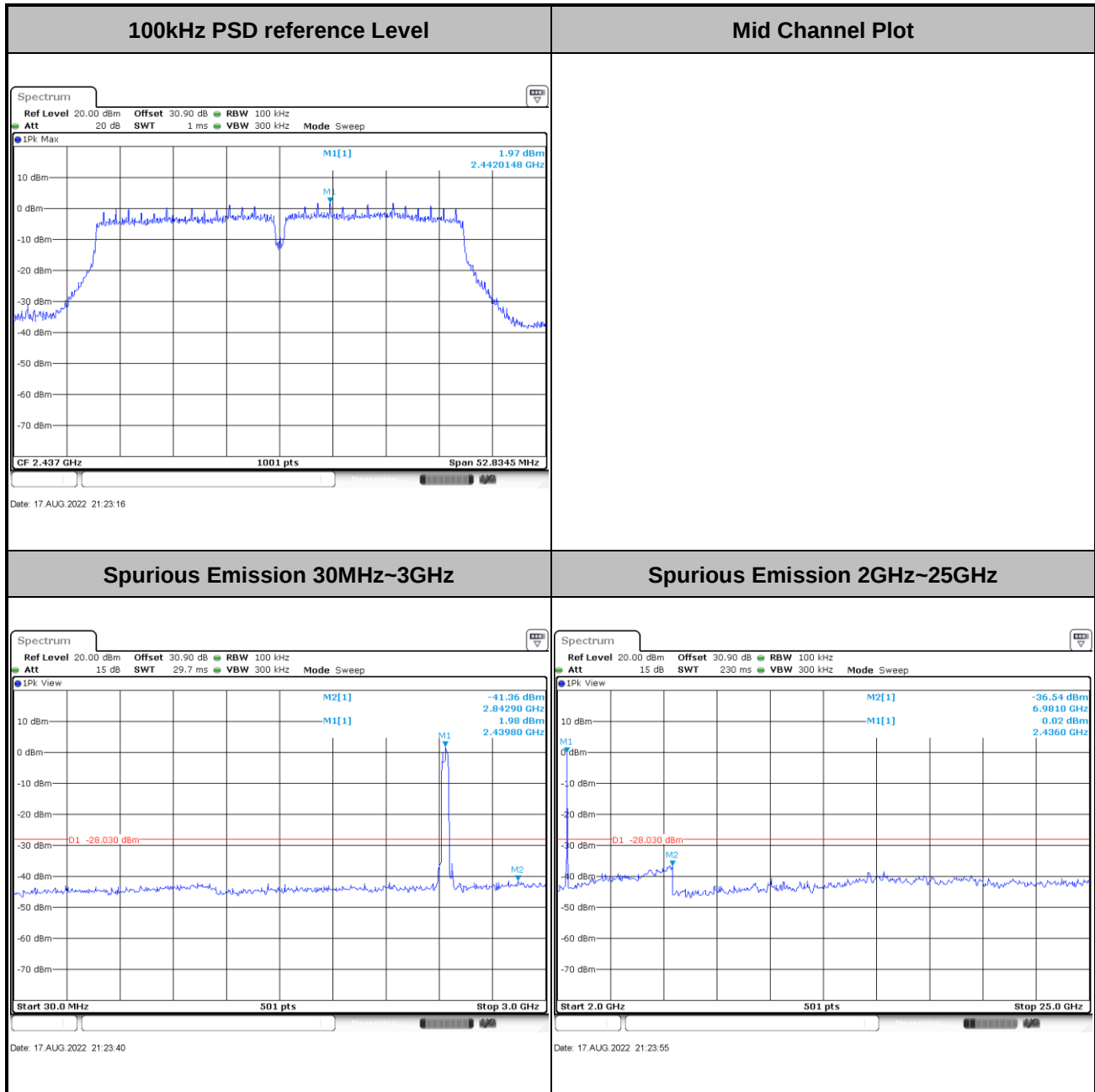


Test Mode :	802.11ac VHT40	Test Channel :	03
--------------------	----------------	-----------------------	----





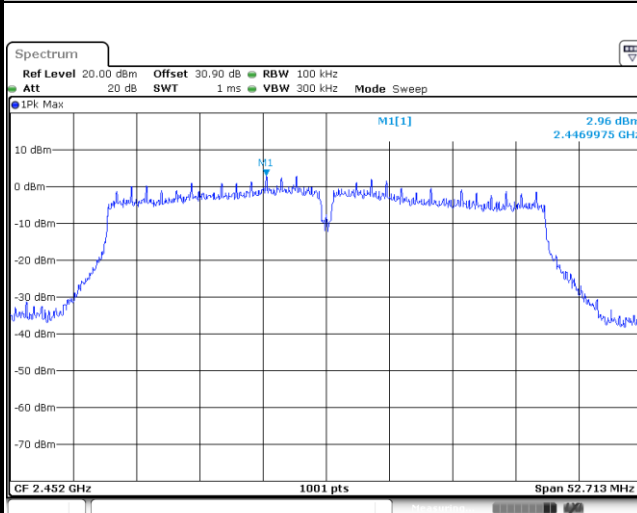
Test Mode :	802.11ac VHT40	Test Channel :	06
-------------	----------------	----------------	----



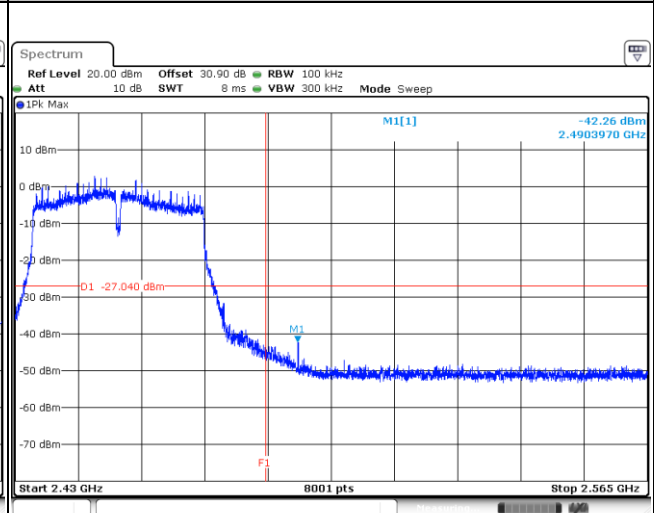


Test Mode :	802.11ac VHT40	Test Channel :	09
-------------	----------------	----------------	----

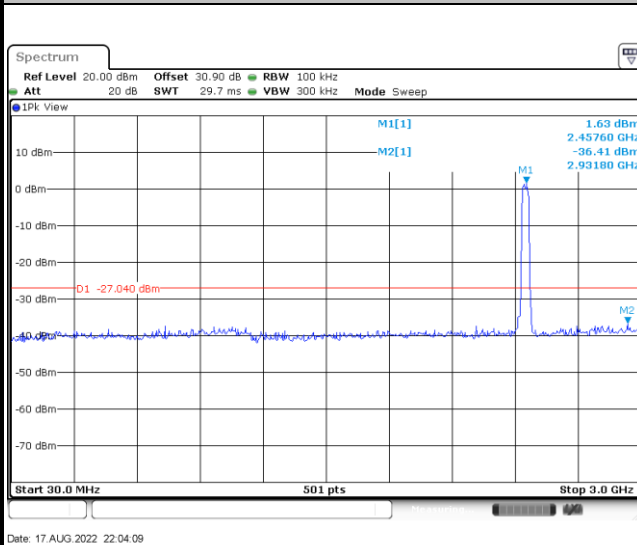
100kHz PSD reference Level



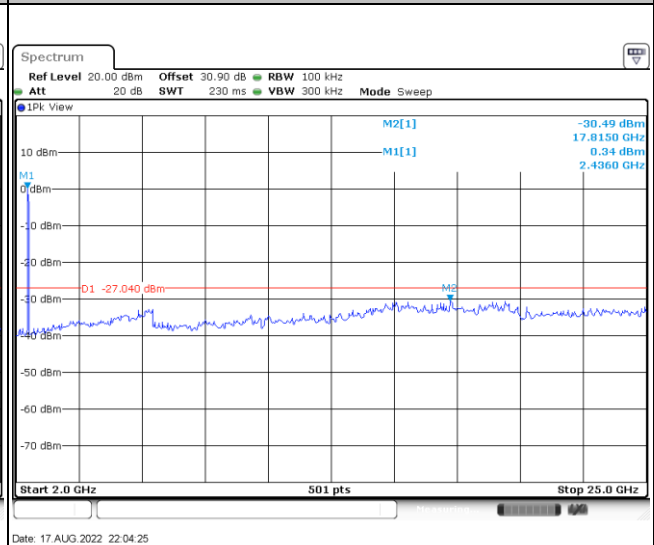
High Channel Plot



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

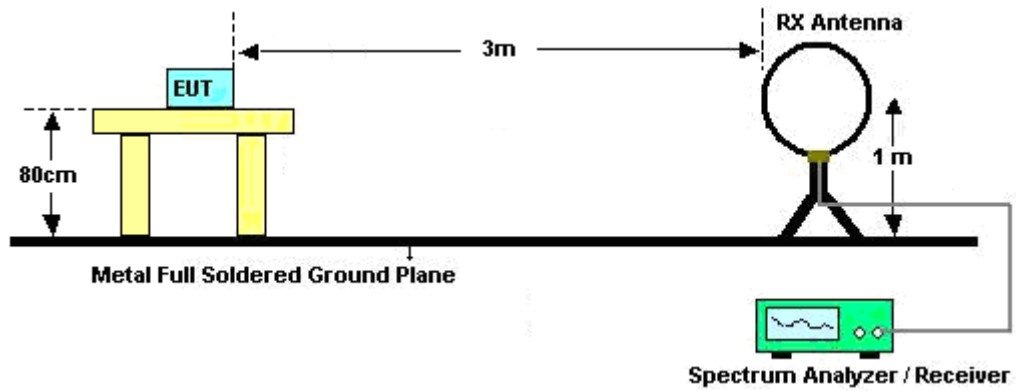
Please refer to the measuring equipment list in this test report.

3.5.3 Test Procedures

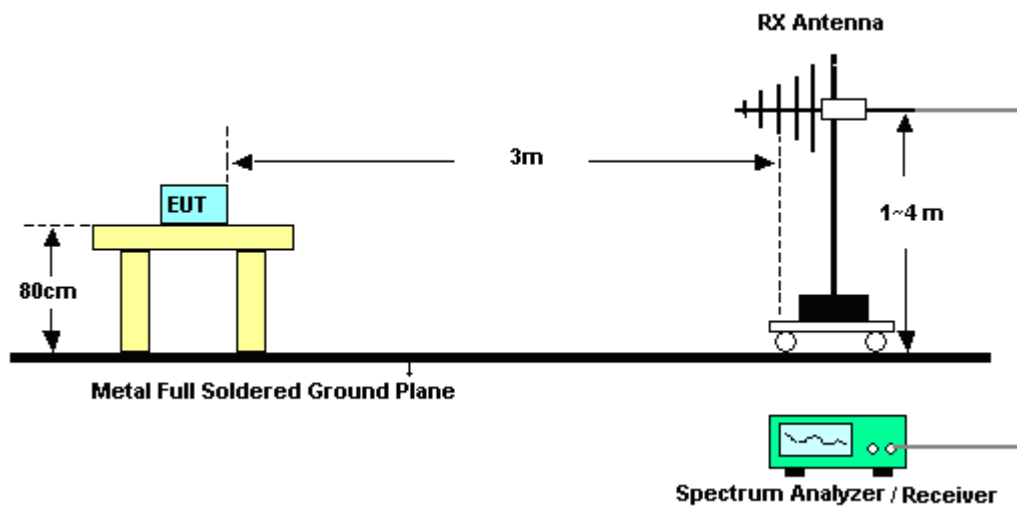
1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT is arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the 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 $\geq$ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3 MHz for $f \geq 1$ GHz for peak measurement.For average measurement:
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.5.4 Test Setup

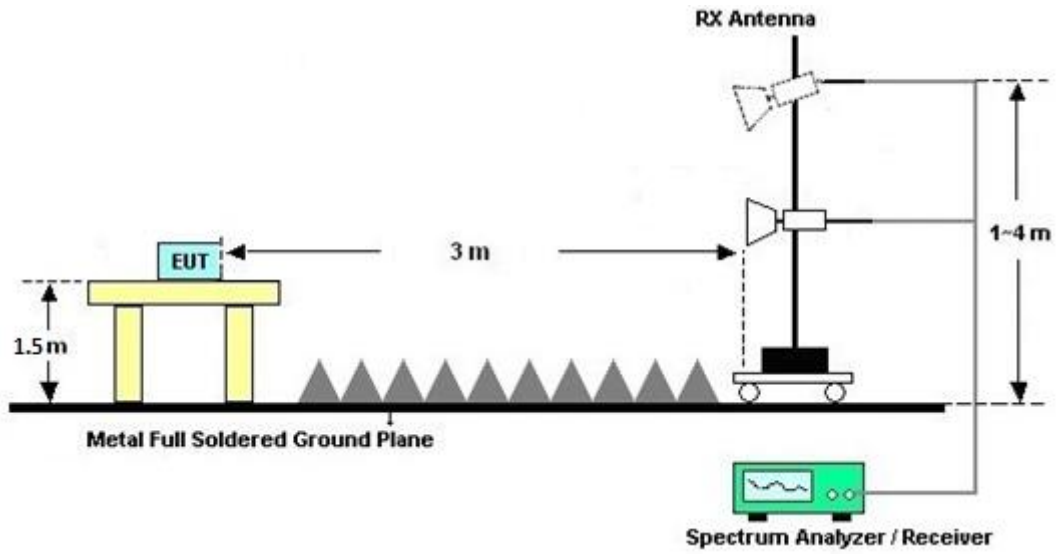
For radiated emissions below 30MHz



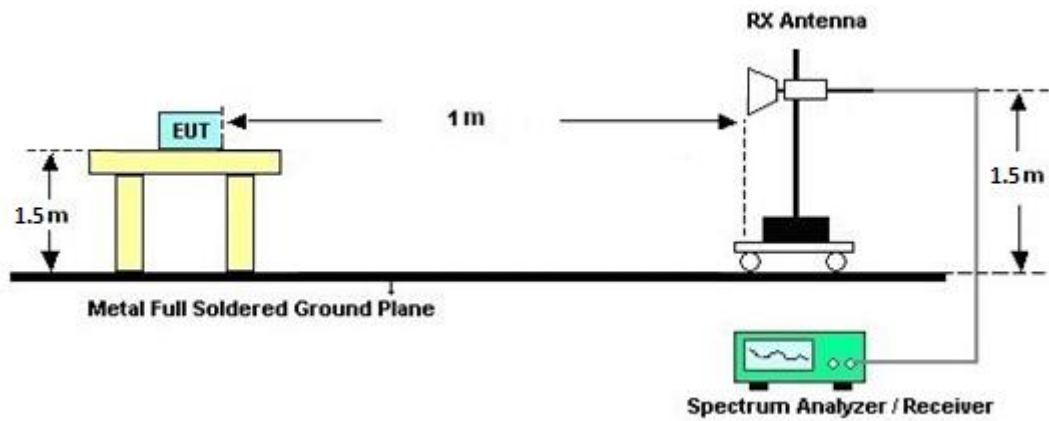
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



**3.5.5 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.

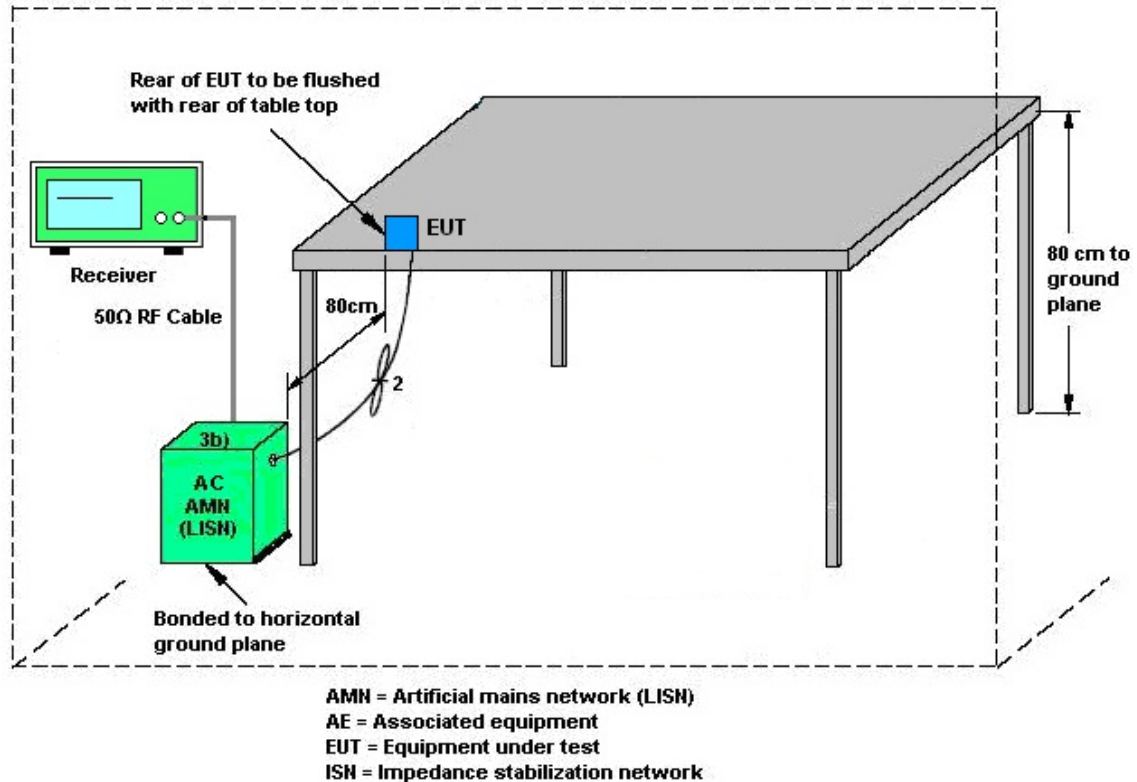
3.6.2 Measuring Instruments

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



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
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	35419 & 03	30MHz~1GHz	Apr. 24, 2022	Jul. 19, 2022~ Aug. 16, 2022	Apr. 23, 2023	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 03, 2021	Jul. 19, 2022~ Aug. 16, 2022	Dec. 02, 2022	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 21, 2022	Jul. 19, 2022~ Aug. 16, 2022	Apr. 20, 2023	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 04, 2021	Jul. 19, 2022~ Aug. 16, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Oct. 04, 2021	Jul. 19, 2022~ Aug. 16, 2022	Oct. 03, 2022	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	060715	18-40GHz	Dec. 24, 2021	Jul. 19, 2022~ Jul. 20, 2022	Dec. 23, 2022	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 21, 2022	Jul. 21, 2022~ Aug. 16, 2022	Jul. 20, 2023	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9038A(MXE)	MY53290053	20Hz~26.5GHz	May 27, 2022	Jul. 19, 2022~ Jul. 27, 2022	May 26, 2023	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Jul. 22, 2022	Jul. 28, 2022~ Aug. 16, 2022	Jul. 21, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682/4	30MHz to 18GHz	Feb. 23, 2022	Jul. 19, 2022~ Aug. 16, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4	9kHz to 18GHz	Feb. 23, 2022	Jul. 19, 2022~ Aug. 16, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4	9kHz to 18GHz	Feb. 23, 2022	Jul. 19, 2022~ Aug. 16, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 17, 2021	Jul. 19, 2022~ Aug. 16, 2022	Sep. 16, 2022	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 23, 2022	Jul. 19, 2022~ Aug. 16, 2022	Feb. 22, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	Apr. 14, 2022	Jul. 19, 2022~ Aug. 16, 2022	Apr. 13, 2023	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	Jul. 19, 2022~ Aug. 16, 2022	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	Jul. 19, 2022~ Aug. 16, 2022	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Jul. 19, 2022~ Aug. 16, 2022	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Jul. 19, 2022~ Aug. 16, 2022	N/A	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	Jul. 19, 2022~ Aug. 16, 2022	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	Mar. 07, 2022	Jul. 19, 2022~ Aug. 16, 2022	Mar. 06, 2023	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 30, 2021	Jul. 19, 2022~ Aug. 16, 2022	Nov. 29, 2022	Radiation (03CH07-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	Jul. 12, 2022	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2021	Jul. 12, 2022	Nov. 30, 2022	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2021	Jul. 12, 2022	Nov. 16, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 03, 2021	Jul. 12, 2022	Dec. 02, 2022	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	Jul. 12, 2022	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Jul. 28, 2021	Jul. 12, 2022	Jul. 27, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 30, 2021	Jul. 12, 2022	Dec. 29, 2022	Conduction (CO05-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 16, 2021	Jul. 15, 2022~ Aug. 17, 2022	Nov. 15, 2022	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	15I00041SNO 10 (NO:248)	10MHz~6GHz	Dec. 29, 2021	Jul. 15, 2022~ Aug. 17, 2022	Dec. 28, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101907	10Hz - 40GHz	Aug. 13, 2021	Jul. 15, 2022~ Aug. 07, 2022	Aug. 12, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101905	10Hz - 40GHz	Aug. 03, 2022	Aug. 08, 2022~ Aug. 17, 2022	Aug. 02, 2023	Conducted (TH05-HY)



5 Uncertainty of Evaluation

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

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

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

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

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

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

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

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

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Mina Liu	Temperature:	21~25	°C
Test Date:	2022/7/15~2022/8/16	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
					Ant1	Ant2	Ant1	Ant2		
11b	1Mbps	1	1	2412	13.84	-	8.58	-	0.50	Pass
11b	1Mbps	1	6	2437	13.99	-	8.58	-	0.50	Pass
11b	1Mbps	1	11	2462	14.39	-	9.10	-	0.50	Pass
11g	6Mbps	1	1	2412	17.68	-	15.51	-	0.50	Pass
11g	6Mbps	1	6	2437	17.88	-	15.73	-	0.50	Pass
11g	6Mbps	1	11	2462	18.33	-	16.09	-	0.50	Pass
VHT20	MCS0	1	1	2412	18.78	-	16.11	-	0.50	Pass
VHT20	MCS0	1	6	2437	18.93	-	16.67	-	0.50	Pass
VHT20	MCS0	1	11	2462	19.28	-	17.38	-	0.50	Pass
VHT40	MCS0	1	3	2422	36.36	-	35.38	-	0.50	Pass
VHT40	MCS0	1	6	2437	36.46	-	35.22	-	0.50	Pass
VHT40	MCS0	1	9	2452	36.36	-	35.14	-	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
					Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
11b	1Mbps	1	1	2412	17.50	-		30.00	-	0.80	-	18.30	-	36.00	-	Pass
11b	1Mbps	1	6	2437	18.00	-		30.00	-	0.80	-	18.80	-	36.00	-	Pass
11b	1Mbps	1	11	2462	17.70	-		30.00	-	0.80	-	18.50	-	36.00	-	Pass
11g	6Mbps	1	1	2412	15.50	-		30.00	-	0.80	-	16.30	-	36.00	-	Pass
11g	6Mbps	1	6	2437	15.80	-		30.00	-	0.80	-	16.60	-	36.00	-	Pass
11g	6Mbps	1	11	2462	15.70	-		30.00	-	0.80	-	16.50	-	36.00	-	Pass
HT20	MCS0	1	1	2412	13.70	-		30.00	-	0.80	-	14.50	-	36.00	-	Pass
HT20	MCS0	1	6	2437	13.90	-		30.00	-	0.80	-	14.70	-	36.00	-	Pass
HT20	MCS0	1	11	2462	14.00	-		30.00	-	0.80	-	14.80	-	36.00	-	Pass
HT40	MCS0	1	3	2422	15.70	-		30.00	-	0.80	-	16.50	-	36.00	-	Pass
HT40	MCS0	1	6	2437	15.50	-		30.00	-	0.80	-	16.30	-	36.00	-	Pass
HT40	MCS0	1	9	2452	15.80	-		30.00	-	0.80	-	16.60	-	36.00	-	Pass
VHT20	MCS0	1	1	2412	13.80	-		30.00	-	0.80	-	14.60	-	36.00	-	Pass
VHT20	MCS0	1	6	2437	14.00	-		30.00	-	0.80	-	14.80	-	36.00	-	Pass
VHT20	MCS0	1	11	2462	14.10	-		30.00	-	0.80	-	14.90	-	36.00	-	Pass
VHT40	MCS0	1	3	2422	15.80	-		30.00	-	0.80	-	16.60	-	36.00	-	Pass
VHT40	MCS0	1	6	2437	15.60	-		30.00	-	0.80	-	16.40	-	36.00	-	Pass
VHT40	MCS0	1	9	2452	15.90	-		30.00	-	0.80	-	16.70	-	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
					Ant1	Ant2	Worse + 3.01	Ant1	Ant2	Ant1	Ant2	
11b	1Mbps	1	1	2412	-5.56	-		0.80	-	8.00	-	Pass
11b	1Mbps	1	6	2437	-5.50	-		0.80	-	8.00	-	Pass
11b	1Mbps	1	11	2462	-5.82	-		0.80	-	8.00	-	Pass
11g	6Mbps	1	1	2412	-9.84	-		0.80	-	8.00	-	Pass
11g	6Mbps	1	6	2437	-9.57	-		0.80	-	8.00	-	Pass
11g	6Mbps	1	11	2462	-9.87	-		0.80	-	8.00	-	Pass
VHT20	MCS0	1	1	2412	-11.58	-		0.80	-	8.00	-	Pass
VHT20	MCS0	1	6	2437	-11.79	-		0.80	-	8.00	-	Pass
VHT20	MCS0	1	11	2462	-11.96	-		0.80	-	8.00	-	Pass
VHT40	MCS0	1	3	2422	-10.67	-		0.80	-	8.00	-	Pass
VHT40	MCS0	1	6	2437	-10.65	-		0.80	-	8.00	-	Pass
VHT40	MCS0	1	9	2452	-10.20	-		0.80	-	8.00	-	Pass

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



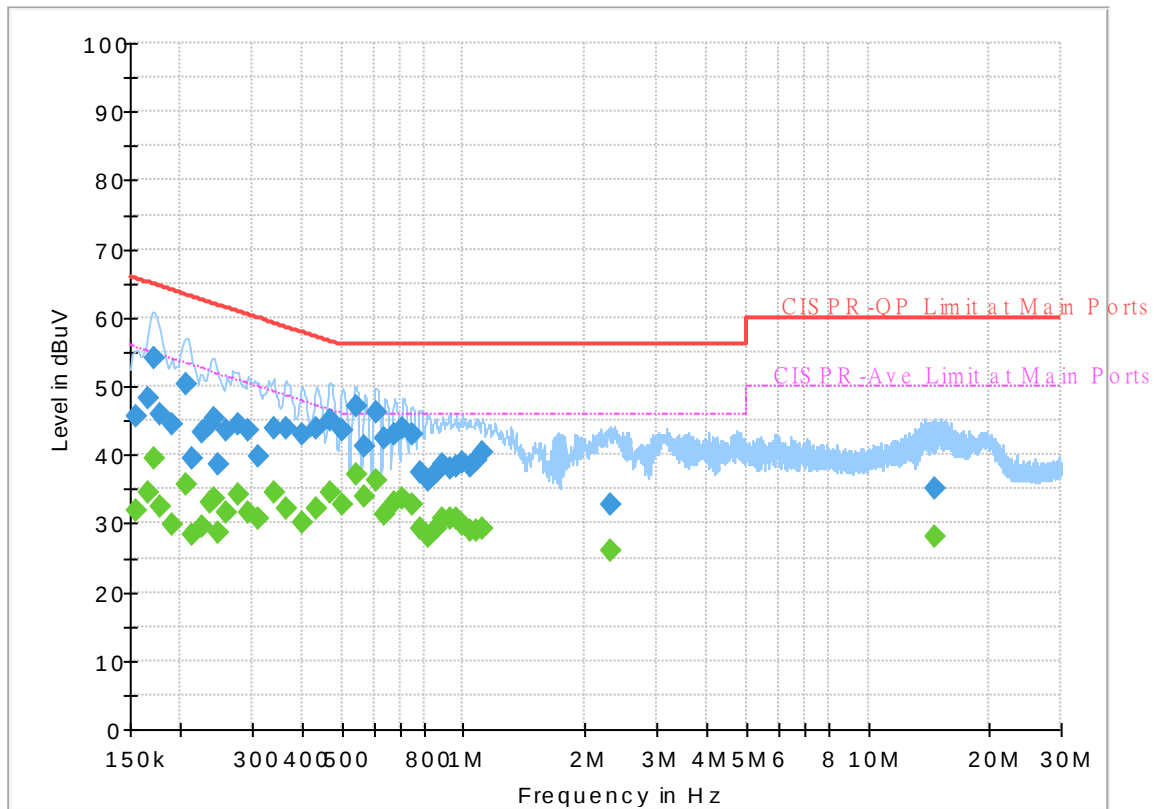
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Tom Lee	Temperature :	23~26℃
		Relative Humidity :	45~55%

EUT Information

Report NO : 261611
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



Final_Result

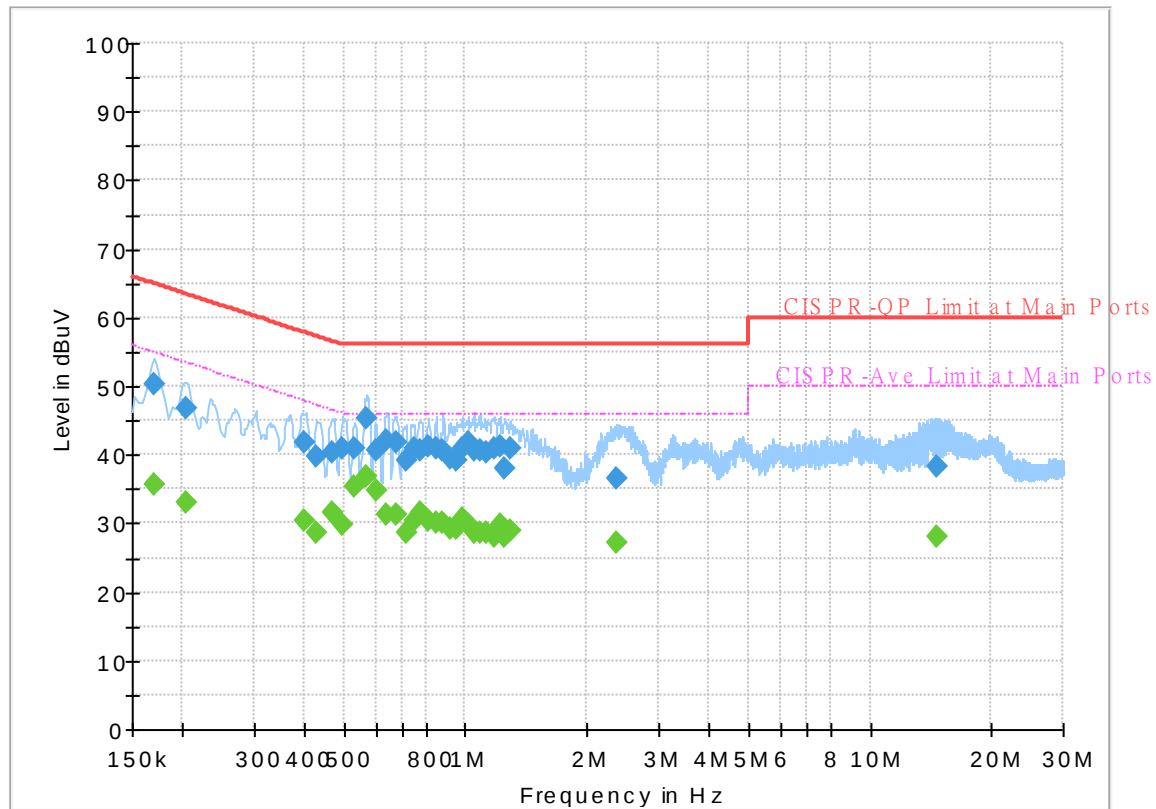
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.154500	---	31.83	55.75	23.92	L1	OFF	19.6
0.154500	45.56	---	65.75	20.19	L1	OFF	19.6
0.165750	---	34.36	55.17	20.81	L1	OFF	19.6
0.165750	48.13	---	65.17	17.04	L1	OFF	19.6
0.172500	---	39.36	54.84	15.48	L1	OFF	19.6
0.172500	54.17	---	64.84	10.67	L1	OFF	19.6
0.177000	---	32.35	54.63	22.28	L1	OFF	19.6
0.177000	46.03	---	64.63	18.60	L1	OFF	19.6
0.190500	---	29.78	54.02	24.24	L1	OFF	19.6
0.190500	44.37	---	64.02	19.65	L1	OFF	19.6
0.206250	---	35.53	53.36	17.83	L1	OFF	19.6
0.206250	50.22	---	63.36	13.14	L1	OFF	19.6
0.213000	---	28.30	53.09	24.79	L1	OFF	19.6
0.213000	39.50	---	63.09	23.59	L1	OFF	19.6
0.226500	---	29.48	52.58	23.10	L1	OFF	19.6
0.226500	43.31	---	62.58	19.27	L1	OFF	19.6
0.235500	---	33.02	52.25	19.23	L1	OFF	19.6
0.235500	44.54	---	62.25	17.71	L1	OFF	19.6
0.242250	---	33.73	52.02	18.29	L1	OFF	19.6
0.242250	45.37	---	62.02	16.65	L1	OFF	19.6
0.246750	---	28.72	51.87	23.15	L1	OFF	19.6

0.246750	38.55	---	61.87	23.32	L1	OFF	19.6
0.260250	---	31.49	51.42	19.93	L1	OFF	19.6
0.260250	43.65	---	61.42	17.77	L1	OFF	19.6
0.276000	---	34.26	50.94	16.68	L1	OFF	19.6
0.276000	44.43	---	60.94	16.51	L1	OFF	19.6
0.294000	---	31.70	50.41	18.71	L1	OFF	19.6
0.294000	43.45	---	60.41	16.96	L1	OFF	19.6
0.312000	---	30.72	49.92	19.20	L1	OFF	19.6
0.312000	39.68	---	59.92	20.24	L1	OFF	19.6
0.339000	---	34.65	49.23	14.58	L1	OFF	19.6
0.339000	43.91	---	59.23	15.32	L1	OFF	19.6
0.363750	---	32.14	48.64	16.50	L1	OFF	19.6
0.363750	43.93	---	58.64	14.71	L1	OFF	19.6
0.399750	---	30.13	47.86	17.73	L1	OFF	19.6
0.399750	43.01	---	57.86	14.85	L1	OFF	19.6
0.433500	---	32.24	47.19	14.95	L1	OFF	19.6
0.433500	43.75	---	57.19	13.44	L1	OFF	19.6
0.467250	---	34.59	46.56	11.97	L1	OFF	19.6
0.467250	45.11	---	56.56	11.45	L1	OFF	19.6
0.503250	---	32.88	46.00	13.12	L1	OFF	19.6
0.503250	43.67	---	56.00	12.33	L1	OFF	19.6
0.541500	---	37.06	46.00	8.94	L1	OFF	19.6
0.541500	47.21	---	56.00	8.79	L1	OFF	19.6
0.570750	---	33.83	46.00	12.17	L1	OFF	19.6
0.570750	41.12	---	56.00	14.88	L1	OFF	19.6
0.609000	---	36.24	46.00	9.76	L1	OFF	19.6
0.609000	46.07	---	56.00	9.93	L1	OFF	19.6
0.640500	---	31.26	46.00	14.74	L1	OFF	19.6
0.640500	42.52	---	56.00	13.48	L1	OFF	19.6
0.674250	---	32.91	46.00	13.09	L1	OFF	19.6
0.674250	42.89	---	56.00	13.11	L1	OFF	19.6
0.710250	---	33.70	46.00	12.30	L1	OFF	19.6
0.710250	43.86	---	56.00	12.14	L1	OFF	19.6
0.744000	---	32.85	46.00	13.15	L1	OFF	19.6
0.744000	42.86	---	56.00	13.14	L1	OFF	19.6
0.786750	---	29.31	46.00	16.69	L1	OFF	19.6
0.786750	37.54	---	56.00	18.46	L1	OFF	19.6
0.822750	---	28.12	46.00	17.88	L1	OFF	19.6
0.822750	36.24	---	56.00	19.76	L1	OFF	19.6
0.856500	---	29.36	46.00	16.64	L1	OFF	19.6
0.856500	37.50	---	56.00	18.50	L1	OFF	19.6
0.890250	---	30.82	46.00	15.18	L1	OFF	19.6
0.890250	38.50	---	56.00	17.50	L1	OFF	19.6
0.924000	---	30.62	46.00	15.38	L1	OFF	19.6
0.924000	38.08	---	56.00	17.92	L1	OFF	19.6
0.957750	---	30.56	46.00	15.44	L1	OFF	19.6
0.957750	38.18	---	56.00	17.82	L1	OFF	19.6
0.993750	---	29.94	46.00	16.06	L1	OFF	19.6
0.993750	38.86	---	56.00	17.14	L1	OFF	19.6
1.043250	---	29.01	46.00	16.99	L1	OFF	19.7
1.043250	38.42	---	56.00	17.58	L1	OFF	19.7
1.077000	---	28.81	46.00	17.19	L1	OFF	19.7
1.077000	39.21	---	56.00	16.79	L1	OFF	19.7
1.117500	---	29.36	46.00	16.64	L1	OFF	19.7
1.117500	40.25	---	56.00	15.75	L1	OFF	19.7
2.312250	---	25.89	46.00	20.11	L1	OFF	19.7
2.312250	32.83	---	56.00	23.17	L1	OFF	19.7
14.655750	---	28.16	50.00	21.84	L1	OFF	20.3
14.655750	35.10	---	60.00	24.90	L1	OFF	20.3

EUT Information

Report NO : 261611
 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)
0.170250	---	35.75	54.95	19.20	N	OFF	19.6
0.170250	50.35	---	64.95	14.60	N	OFF	19.6
0.204000	---	32.96	53.45	20.49	N	OFF	19.6
0.204000	46.90	---	63.45	16.55	N	OFF	19.6
0.399750	---	30.48	47.86	17.38	N	OFF	19.6
0.399750	41.69	---	57.86	16.17	N	OFF	19.6
0.429000	---	28.51	47.27	18.76	N	OFF	19.6
0.429000	39.91	---	57.27	17.36	N	OFF	19.6
0.467250	---	31.48	46.56	15.08	N	OFF	19.6
0.467250	40.29	---	56.56	16.27	N	OFF	19.6
0.496500	---	29.74	46.06	16.32	N	OFF	19.6
0.496500	40.87	---	56.06	15.19	N	OFF	19.6
0.532500	---	35.43	46.00	10.57	N	OFF	19.6
0.532500	40.95	---	56.00	15.05	N	OFF	19.6
0.570750	---	36.88	46.00	9.12	N	OFF	19.6
0.570750	45.25	---	56.00	10.75	N	OFF	19.6
0.600000	---	34.78	46.00	11.22	N	OFF	19.6
0.600000	40.71	---	56.00	15.29	N	OFF	19.6
0.638250	---	31.27	46.00	14.73	N	OFF	19.6
0.638250	42.06	---	56.00	13.94	N	OFF	19.6
0.674250	---	31.38	46.00	14.62	N	OFF	19.6

0.674250	41.83	---	56.00	14.17	N	OFF	19.6
0.712500	---	28.74	46.00	17.26	N	OFF	19.6
0.712500	39.21	---	56.00	16.79	N	OFF	19.6
0.744000	---	30.38	46.00	15.62	N	OFF	19.6
0.744000	41.02	---	56.00	14.98	N	OFF	19.6
0.771000	---	31.47	46.00	14.53	N	OFF	19.6
0.771000	40.75	---	56.00	15.25	N	OFF	19.6
0.811500	---	30.43	46.00	15.57	N	OFF	19.6
0.811500	41.35	---	56.00	14.65	N	OFF	19.6
0.847500	---	30.11	46.00	15.89	N	OFF	19.6
0.847500	41.06	---	56.00	14.94	N	OFF	19.6
0.881250	---	30.01	46.00	15.99	N	OFF	19.6
0.881250	40.74	---	56.00	15.26	N	OFF	19.6
0.915000	---	29.30	46.00	16.70	N	OFF	19.6
0.915000	39.41	---	56.00	16.59	N	OFF	19.6
0.948750	---	29.29	46.00	16.71	N	OFF	19.6
0.948750	39.21	---	56.00	16.79	N	OFF	19.6
0.978000	---	30.60	46.00	15.40	N	OFF	19.6
0.978000	40.87	---	56.00	15.13	N	OFF	19.6
1.014000	---	29.87	46.00	16.13	N	OFF	19.6
1.014000	41.72	---	56.00	14.28	N	OFF	19.6
1.050000	---	28.76	46.00	17.24	N	OFF	19.6
1.050000	40.69	---	56.00	15.31	N	OFF	19.6
1.083750	---	28.66	46.00	17.34	N	OFF	19.6
1.083750	40.69	---	56.00	15.31	N	OFF	19.6
1.131000	---	28.67	46.00	17.33	N	OFF	19.6
1.131000	40.28	---	56.00	15.72	N	OFF	19.6
1.173750	---	28.22	46.00	17.78	N	OFF	19.6
1.173750	40.82	---	56.00	15.18	N	OFF	19.6
1.214250	---	29.78	46.00	16.22	N	OFF	19.6
1.214250	41.33	---	56.00	14.67	N	OFF	19.6
1.254750	---	27.93	46.00	18.07	N	OFF	19.6
1.254750	37.95	---	56.00	18.05	N	OFF	19.6
1.286250	---	29.09	46.00	16.91	N	OFF	19.7
1.286250	41.00	---	56.00	15.00	N	OFF	19.7
2.370750	---	27.16	46.00	18.84	N	OFF	19.7
2.370750	36.42	---	56.00	19.58	N	OFF	19.7
14.601750	---	28.03	50.00	21.97	N	OFF	20.3
14.601750	38.20	---	60.00	21.80	N	OFF	20.3



Appendix C. Radiated Spurious Emission

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

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2384.655	53.95	-20.05	74	39.53	31.4	18.43	35.41	120	251	P	H
		2390	43.25	-10.75	54	28.82	31.4	18.45	35.42	120	251	A	H
	*	2412	105.34	-	-	90.76	31.5	18.5	35.42	120	251	P	H
	*	2412	102.26	-	-	87.68	31.5	18.5	35.42	120	251	A	H
													H
													H
		2376.57	54.85	-19.15	74	40.46	31.4	18.4	35.41	185	331	P	V
		2389.485	42.86	-11.14	54	28.42	31.4	18.45	35.41	185	331	A	V
	*	2412	100.64	-	-	86.06	31.5	18.5	35.42	185	331	P	V
	*	2412	97.53	-	-	82.95	31.5	18.5	35.42	185	331	A	V
													V
													V
802.11b CH 06 2437MHz		2359.14	53.11	-20.89	74	38.76	31.4	18.35	35.4	100	251	P	H
		2387	42.16	-11.84	54	27.73	31.4	18.44	35.41	100	251	A	H
	*	2437	103.52	-	-	88.72	31.7	18.53	35.43	100	251	P	H
	*	2437	100.53	-	-	85.73	31.7	18.53	35.43	100	251	A	H
		2496.64	53.39	-20.61	74	38.06	32.17	18.62	35.46	100	251	P	H
		2485.58	43.11	-10.89	54	27.87	32.08	18.61	35.45	100	251	A	H
		2322.74	53.03	-20.97	74	38.66	31.51	18.25	35.39	158	333	P	V
		2389.66	42.09	-11.91	54	27.65	31.4	18.45	35.41	158	333	A	V
	*	2437	100.13	-	-	85.33	31.7	18.53	35.43	158	333	P	V
	*	2437	95.52	-	-	80.72	31.7	18.53	35.43	158	333	A	V
		2498.6	53.46	-20.54	74	38.1	32.19	18.63	35.46	158	333	P	V
		2495.03	42.97	-11.03	54	27.65	32.16	18.62	35.46	158	333	A	V



802.11b CH 11 2462MHz	*	2462	106.86	-	-	91.83	31.9	18.57	35.44	122	250	P	H
	*	2462	103.65	-	-	88.62	31.9	18.57	35.44	122	250	A	H
		2492.16	55.02	-18.98	74	39.73	32.14	18.61	35.46	122	250	P	H
		2483.84	44.34	-9.66	54	29.12	32.07	18.6	35.45	122	250	A	H
													H
													H
	*	2462	103.7	-	-	88.67	31.9	18.57	35.44	100	285	P	V
	*	2462	100.66	-	-	85.63	31.9	18.57	35.44	100	285	A	V
		2486.28	54.56	-19.44	74	39.31	32.09	18.61	35.45	100	285	P	V
		2484.04	44.19	-9.81	54	28.97	32.07	18.6	35.45	100	285	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. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	42.18	-31.82	74	54.36	34.05	12.2	58.96	-	-	P	H
		14490	47.33	-26.67	74	43.62	39.58	20.83	57.52	-	-	P	H
		16005	47.98	-26.02	74	40.36	41.01	21.67	55.99	-	-	P	H
		17940	50.69	-23.31	74	40.66	41.44	22.74	55.08	-	-	P	H
		17940	37.61	-16.39	54	27.58	41.44	22.74	55.08	-	-	A	H
													H
													H
													H
													H
													H
													H
													H
		4824	43.83	-30.17	74	56.01	34.05	12.2	58.96	-	-	P	V
		14490	47.02	-26.98	74	43.31	39.58	20.83	57.52	-	-	P	V
		15810	48.56	-25.44	74	41.65	40.72	21.57	56.3	-	-	P	V
		15810	35.33	-18.67	54	28.42	40.72	21.57	56.3	-	-	A	V
		17850	50.27	-23.73	74	40.27	41.5	22.69	55.12	-	-	P	V
		17850	38.05	-15.95	54	28.05	41.5	22.69	55.12	-	-	A	V
													V
													V
													V
													V
													V
													V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 06 2437MHz		4874	42.99	-31.01	74	55.06	34.05	12.25	58.87	-	-	P	H
		7311	40.99	-33.01	74	47.81	35.64	14.42	57.5	-	-	P	H
		14481	46.24	-27.76	74	42.56	39.56	20.83	57.53	-	-	P	H
		16028	48	-26	74	40.34	41.06	21.68	56.01	-	-	P	H
		17949	47.79	-26.21	74	37.73	41.45	22.75	55.07	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
		4874	44.82	-29.18	74	56.89	34.05	12.25	58.87	-	-	P	V
		7311	40.85	-33.15	74	47.67	35.64	14.42	57.5	-	-	P	V
		14481	46.81	-27.19	74	43.13	39.56	20.83	57.53	-	-	P	V
		15920	45.54	-28.46	74	38.19	40.92	21.63	56.12	-	-	P	V
		17711	48.78	-25.22	74	38.9	41.51	22.62	55.18	-	-	P	V
		17711	38.29	-15.71	54	28.41	41.51	22.62	55.18	-	-	A	V
													V
													V
													V
													V
													V
													V

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 11 2462MHz		4924	44.51	-29.49	74	56.45	34.05	12.31	58.78	-	-	P	H
		7386	40.83	-33.17	74	47.51	35.87	14.42	57.55	-	-	P	H
		12630	46.36	-27.64	74	44.37	39.13	19.08	57.03	-	-	P	H
		16110	48.84	-25.16	74	41.03	41.2	21.74	56.06	-	-	P	H
		16110	38.55	-15.45	54	30.74	41.2	21.74	56.06	-	-	A	H
		17745	50.64	-23.36	74	40.7	41.54	22.64	55.17	-	-	P	H
		17745	40.47	-13.53	54	30.53	41.54	22.64	55.17	-	-	A	H
													H
													H
													H
													H
													H
													H
		4924	44.07	-29.93	74	56.01	34.05	12.31	58.78	-	-	P	V
		7386	40.68	-33.32	74	47.36	35.87	14.42	57.55	-	-	P	V
		12570	46.49	-27.51	74	44.46	39.1	19.01	56.89	-	-	P	V
		15855	49.23	-24.77	74	42.14	40.81	21.59	56.23	-	-	P	V
		15855	38.09	-15.91	54	31	40.81	21.59	56.23	-	-	A	V
		17865	50.96	-23.04	74	40.96	41.47	22.71	55.11	-	-	P	V
		17865	40.17	-13.83	54	30.17	41.47	22.71	55.11	-	-	A	V
													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 802.11g (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2390	54.44	-19.56	74	40.01	31.4	18.45	35.42	120	253	P	H
		2390	44.9	-9.1	54	30.47	31.4	18.45	35.42	120	253	A	H
	*	2412	105.25	-	-	90.67	31.5	18.5	35.42	120	253	P	H
	*	2412	97.38	-	-	82.8	31.5	18.5	35.42	120	253	A	H
													H
													H
		2332.995	53.64	-20.36	74	39.29	31.47	18.27	35.39	185	331	P	V
		2390	43.09	-10.91	54	28.66	31.4	18.45	35.42	185	331	A	V
	*	2412	100.14	-	-	85.56	31.5	18.5	35.42	185	331	P	V
	*	2412	92.57	-	-	77.99	31.5	18.5	35.42	185	331	A	V
													V
													V
802.11g CH 06 2437MHz		2389.8	54.3	-19.7	74	39.87	31.4	18.45	35.42	105	250	P	H
		2389.52	43.06	-10.94	54	28.62	31.4	18.45	35.41	105	250	A	H
	*	2437	105.91	-	-	91.11	31.7	18.53	35.43	105	250	P	H
	*	2437	98.01	-	-	83.21	31.7	18.53	35.43	105	250	A	H
		2483.9	57.19	-16.81	74	41.97	32.07	18.6	35.45	105	250	P	H
		2483.5	44.23	-9.77	54	29.01	32.07	18.6	35.45	105	250	A	H
		2374.82	53.72	-20.28	74	39.33	31.4	18.4	35.41	100	331	P	V
		2385.46	42.89	-11.11	54	28.46	31.4	18.44	35.41	100	331	A	V
	*	2437	102.43	-	-	87.63	31.7	18.53	35.43	100	331	P	V
	*	2437	94.24	-	-	79.44	31.7	18.53	35.43	100	331	A	V
		2483.62	55.35	-18.65	74	40.13	32.07	18.6	35.45	100	331	P	V
		2484.74	43.95	-10.05	54	28.71	32.08	18.61	35.45	100	331	A	V



802.11g CH 11 2462MHz	*	2462	106.17	-	-	91.14	31.9	18.57	35.44	100	250	P	H
	*	2462	98.44	-	-	83.41	31.9	18.57	35.44	100	250	A	H
		2483.84	62.32	-11.68	74	47.1	32.07	18.6	35.45	100	250	P	H
		2483.52	46.65	-7.35	54	31.43	32.07	18.6	35.45	100	250	A	H
													H
													H
	*	2462	103.96	-	-	88.93	31.9	18.57	35.44	100	285	P	V
	*	2462	96.22	-	-	81.19	31.9	18.57	35.44	100	285	A	V
		2483.76	61.05	-12.95	74	45.83	32.07	18.6	35.45	100	285	P	V
		2483.52	46.07	-7.93	54	30.85	32.07	18.6	35.45	100	285	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. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 06 2437MHz		4874	41.86	-32.14	74	53.93	34.05	12.25	58.87	-	-	P	H
		7311	40.69	-33.31	74	47.51	35.64	14.42	57.5	-	-	P	H
		14490	47.62	-26.38	74	43.91	39.58	20.83	57.52	-	-	P	H
		16170	48.85	-25.15	74	41.06	41.2	21.76	56.1	-	-	P	H
		16170	38.44	-15.56	54	30.65	41.2	21.76	56.1	-	-	A	H
		17910	50.28	-23.72	74	40.3	41.41	22.73	55.09	-	-	P	H
		17910	40.62	-13.38	54	30.64	41.41	22.73	55.09	-	-	A	H
													H
													H
													H
													H
													H
		4874	42.94	-31.06	74	55.01	34.05	12.25	58.87	-	-	P	V
		7311	41.9	-32.1	74	48.72	35.64	14.42	57.5	-	-	P	V
		14475	47.19	-26.81	74	43.52	39.55	20.83	57.53	-	-	P	V
		16170	48.1	-25.9	74	40.31	41.2	21.76	56.1	-	-	P	V
		16170	38.58	-15.42	54	30.79	41.2	21.76	56.1	-	-	A	V
		17735	49.74	-24.26	74	39.82	41.53	22.63	55.17	-	-	P	V
		17735	40.43	-13.57	54	30.51	41.53	22.63	55.17	-	-	A	V
													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 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 01 2412MHz		2344.125	54.22	-19.78	74	39.89	31.42	18.31	35.4	100	251	P	H
		2390	44.55	-9.45	54	30.12	31.4	18.45	35.42	100	251	A	H
	*	2412	102.06	-	-	87.48	31.5	18.5	35.42	100	251	P	H
	*	2412	94.08	-	-	79.5	31.5	18.5	35.42	100	251	A	H
													H
													H
		2343.915	54.83	-19.17	74	40.5	31.42	18.31	35.4	185	331	P	V
		2390	43.05	-10.95	54	28.62	31.4	18.45	35.42	185	331	A	V
	*	2412	98.57	-	-	83.99	31.5	18.5	35.42	185	331	P	V
	*	2412	90.62	-	-	76.04	31.5	18.5	35.42	185	331	A	V
													V
													V
802.11ac VHT20 CH 06 2437MHz		2389.24	54.8	-19.2	74	40.37	31.4	18.44	35.41	100	250	P	H
		2389.8	43.17	-10.83	54	28.74	31.4	18.45	35.42	100	250	A	H
	*	2437	103.57	-	-	88.77	31.7	18.53	35.43	100	250	P	H
	*	2437	95.73	-	-	80.93	31.7	18.53	35.43	100	250	A	H
		2483.97	58	-16	74	42.78	32.07	18.6	35.45	100	250	P	H
		2483.62	44.35	-9.65	54	29.13	32.07	18.6	35.45	100	250	A	H
		2382.24	54.18	-19.82	74	39.76	31.4	18.43	35.41	100	331	P	V
		2387.84	42.91	-11.09	54	28.48	31.4	18.44	35.41	100	331	A	V
	*	2437	99.53	-	-	84.73	31.7	18.53	35.43	100	331	P	V
	*	2437	91.98	-	-	77.18	31.7	18.53	35.43	100	331	A	V
		2485.72	54.6	-19.4	74	39.35	32.09	18.61	35.45	100	331	P	V
		2483.9	43.99	-10.01	54	28.77	32.07	18.6	35.45	100	331	A	V



802.11ac VHT20 CH 11 2462MHz	*	2462	104.48	-	-	89.45	31.9	18.57	35.44	100	250	P	H
	*	2462	97	-	-	81.97	31.9	18.57	35.44	100	250	A	H
		2484.68	61.77	-12.23	74	46.53	32.08	18.61	35.45	100	250	P	H
		2483.52	45.77	-8.23	54	30.55	32.07	18.6	35.45	100	250	A	H
													H
													H
	*	2462	101.65	-	-	86.62	31.9	18.57	35.44	100	281	P	V
	*	2462	94.12	-	-	79.09	31.9	18.57	35.44	100	281	A	V
		2485.76	57.34	-16.66	74	42.09	32.09	18.61	35.45	100	281	P	V
		2483.52	44.87	-9.13	54	29.65	32.07	18.6	35.45	100	281	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 802.11ac VHT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	Factor	Loss	Factor	Pos	Pos	Avg.	
1							(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT20 CH 06 2437MHz		4874	40.42	-33.58	74	52.49	34.05	12.25	58.87	-	-	P	H
		7311	41.03	-32.97	74	47.85	35.64	14.42	57.5	-	-	P	H
		12135	46	-28	74	44.08	38.87	18.55	56.32	-	-	P	H
		16020	48.54	-25.46	74	40.88	41.04	21.69	56	-	-	P	H
		16020	38.39	-15.61	54	30.73	41.04	21.69	56	-	-	A	H
		17850	49.43	-24.57	74	39.43	41.5	22.69	55.12	-	-	P	H
		17850	40.55	-13.45	54	30.55	41.5	22.69	55.12	-	-	A	H
													H
													H
													H
													H
													H
													H
													H
		4874	41.11	-32.89	74	53.18	34.05	12.25	58.87	-	-	P	V
		7311	42.3	-31.7	74	49.12	35.64	14.42	57.5	-	-	P	V
		12180	46.58	-27.42	74	44.72	38.82	18.59	56.37	-	-	P	V
		15675	47.65	-26.35	74	41.42	40.35	21.49	56.52	-	-	P	V
		17880	49.22	-24.78	74	39.24	41.44	22.72	55.11	-	-	P	V
		17880	40.29	-13.71	54	30.31	41.44	22.72	55.11	-	-	A	V
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	
												V	



2.4GHz 2400~2483.5MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 03 2422MHz		2388.45	58.38	-15.62	74	43.95	31.4	18.44	35.41	118	249	P	H
		2389.5	50.01	-3.99	54	35.57	31.4	18.45	35.41	118	249	A	H
	*	2422	102.15	-	-	87.49	31.58	18.51	35.43	118	249	P	H
	*	2422	93.91	-	-	79.25	31.58	18.51	35.43	118	249	A	H
		2484.34	59.42	-14.58	74	44.19	32.07	18.61	35.45	118	249	P	H
		2483.98	46.46	-7.54	54	31.24	32.07	18.6	35.45	118	249	A	H
		2388.6	54.28	-19.72	74	39.85	31.4	18.44	35.41	100	239	P	V
		2383.8	45.13	-8.87	54	30.71	31.4	18.43	35.41	100	239	A	V
	*	2422	98.59	-	-	83.93	31.58	18.51	35.43	100	239	P	V
	*	2422	90.41	-	-	75.75	31.58	18.51	35.43	100	239	A	V
		2484.43	56.55	-17.45	74	41.31	32.08	18.61	35.45	100	239	P	V
		2489.92	45.49	-8.51	54	30.21	32.12	18.61	35.45	100	239	A	V
802.11ac VHT40 CH 06 2437MHz		2389.65	53.74	-20.26	74	39.3	31.4	18.45	35.41	224	250	P	H
		2386.65	44.9	-9.1	54	30.47	31.4	18.44	35.41	224	250	A	H
	*	2437	102.33	-	-	87.53	31.7	18.53	35.43	224	250	P	H
	*	2437	94.77	-	-	79.97	31.7	18.53	35.43	224	250	A	H
		2483.62	59.28	-14.72	74	44.06	32.07	18.6	35.45	224	250	P	H
		2484.52	46.91	-7.09	54	31.67	32.08	18.61	35.45	224	250	A	H
		2324.55	53.59	-20.41	74	39.23	31.5	18.25	35.39	100	238	P	V
		2386.65	45.04	-8.96	54	30.61	31.4	18.44	35.41	100	238	A	V
	*	2437	100.46	-	-	85.66	31.7	18.53	35.43	100	238	P	V
	*	2437	92.1	-	-	77.3	31.7	18.53	35.43	100	238	A	V
		2484.25	56.7	-17.3	74	41.47	32.07	18.61	35.45	100	238	P	V
		2483.89	46.31	-7.69	54	31.09	32.07	18.6	35.45	100	238	A	V



802.11ac VHT40 CH 09 2452MHz		2374.95	54.35	-19.65	74	39.96	31.4	18.4	35.41	252	252	P	H
		2388.45	44.7	-9.3	54	30.27	31.4	18.44	35.41	252	252	A	H
	*	2452	102.24	-	-	87.31	31.82	18.55	35.44	252	252	P	H
	*	2452	94.73	-	-	79.8	31.82	18.55	35.44	252	252	A	H
		2485.06	60.51	-13.49	74	45.27	32.08	18.61	35.45	252	252	P	H
		2490.46	51.97	-2.03	54	36.69	32.12	18.61	35.45	252	252	A	H
		2370.3	54	-20	74	39.62	31.4	18.39	35.41	103	238	P	V
		2373.9	44.54	-9.46	54	30.15	31.4	18.4	35.41	103	238	A	V
	*	2452	100.14	-	-	85.21	31.82	18.55	35.44	103	238	P	V
	*	2452	92.81	-	-	77.88	31.82	18.55	35.44	103	238	A	V
		2484.61	58.22	-15.78	74	42.98	32.08	18.61	35.45	103	238	P	V
		2490.46	49.71	-4.29	54	34.43	32.12	18.61	35.45	103	238	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 802.11ac VHT40 (Harmonic @ 3m)

[illegible]

Emission above 18GHz

2.4GHz WIFI 802.11ac VHT40 (SHF)

[illegible]

Emission below 1GHz

2.4GHz WIFI 802.11ac VHT40 (LF)

[illegible]



Note symbol

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



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

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

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)

2. Level(dBμV/m) =

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

3. Margin(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. Margin(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. Margin(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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



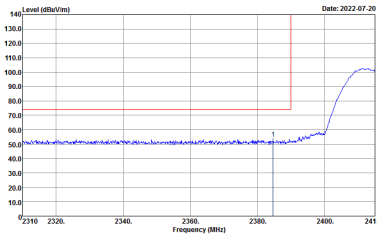
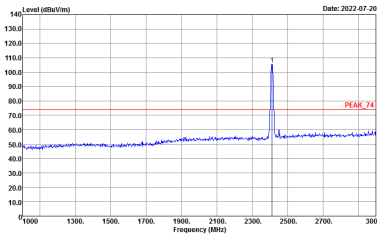
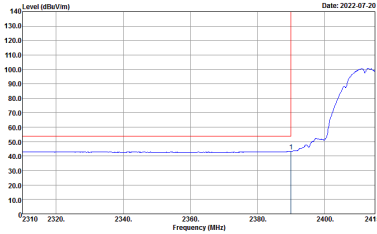
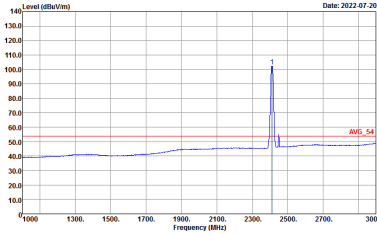
Appendix D. Radiated Spurious Emission Plots

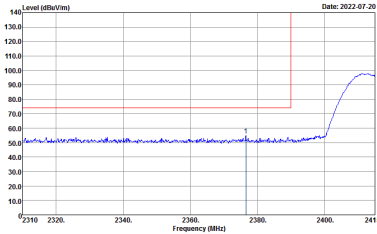
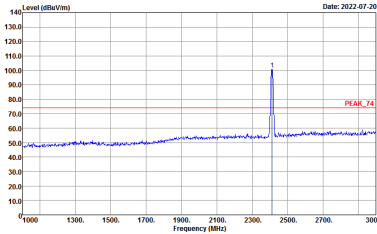
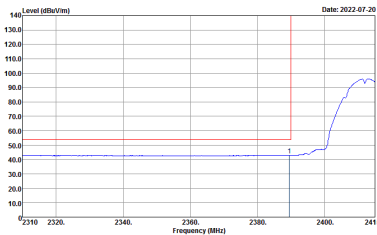
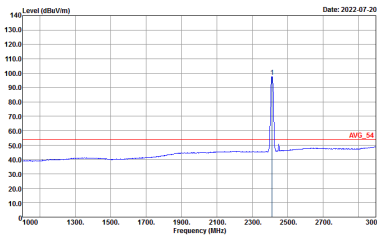
Test Engineer :	Jesse Wang, Stan Hsieh, Ken Wu and Howard Huang	Temperature :	22~28.1°C
		Relative Humidity :	53.3~67.5%

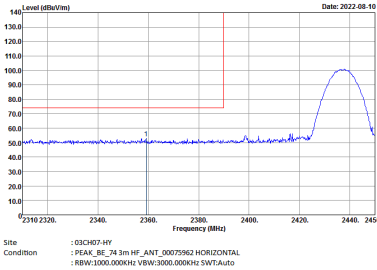
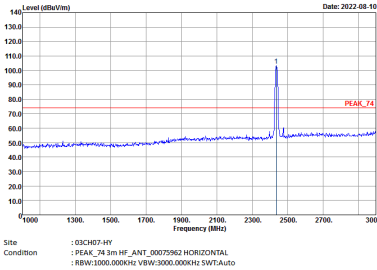
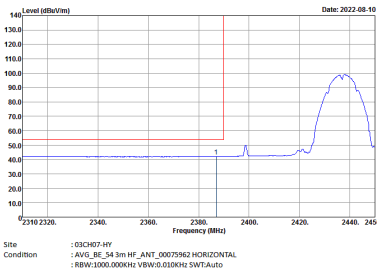
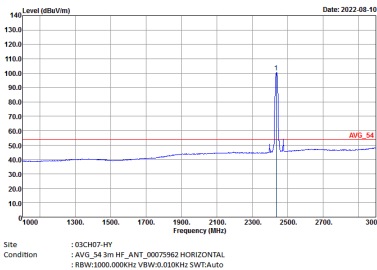
Note symbol

-L	Low channel location
-R	High channel location

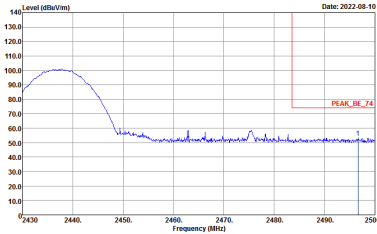
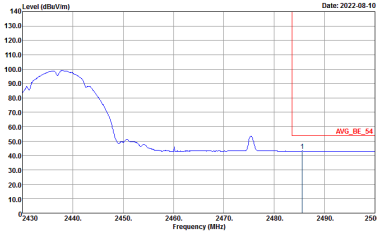
2.4GHz 2400~2483.5MHz
WIFI 802.11b (Band Edge @ 3m)

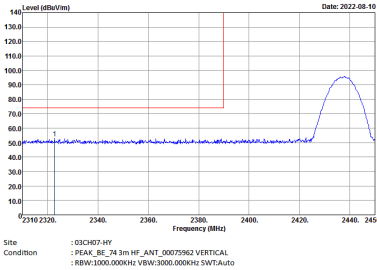
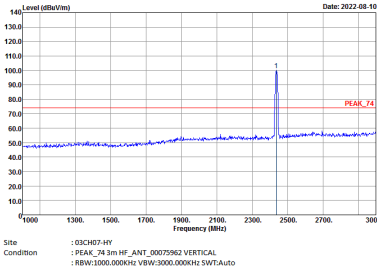
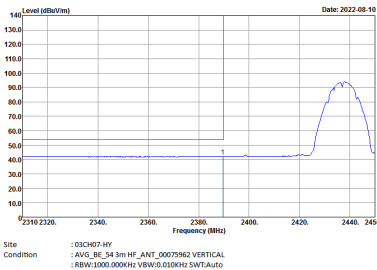
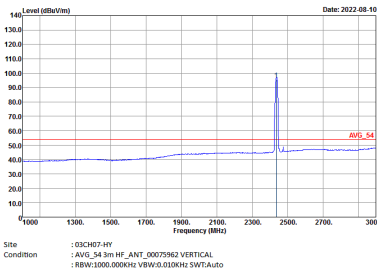
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11b CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_SE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_SE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:5.000kHz SWT:Auto	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:5.000kHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11b CH01 2412MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto

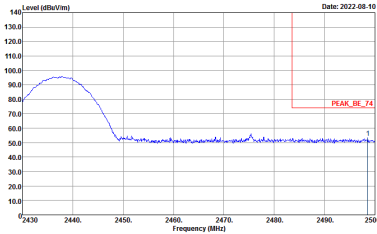
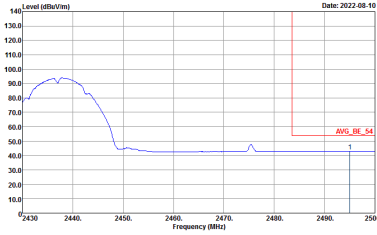
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11b CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto

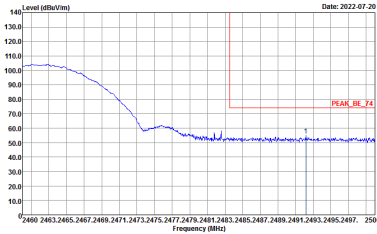
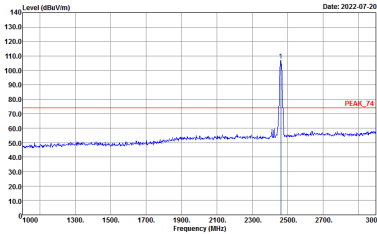
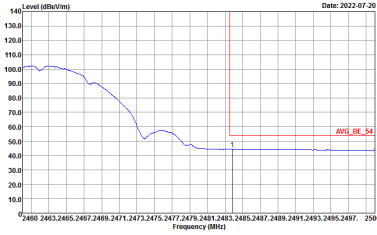
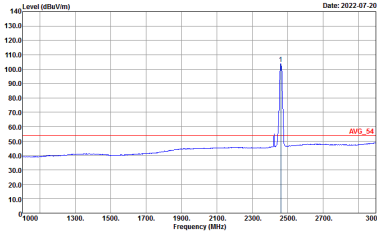


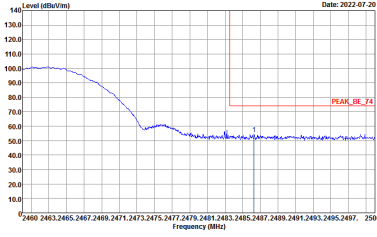
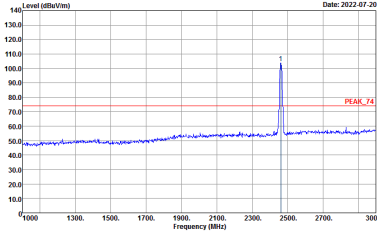
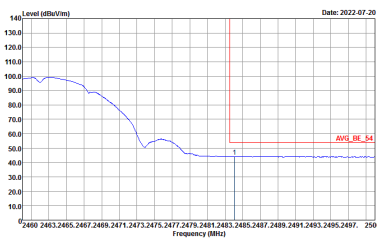
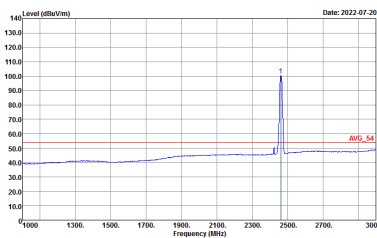
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11b CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11b CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto

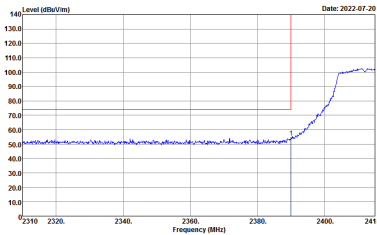
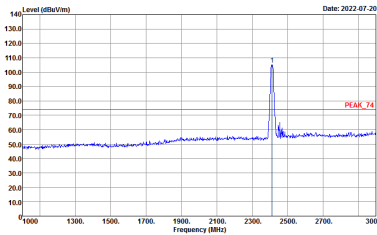
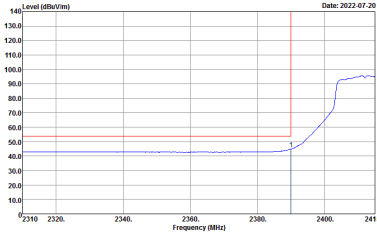
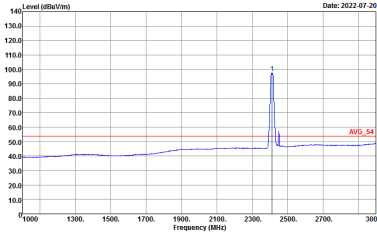


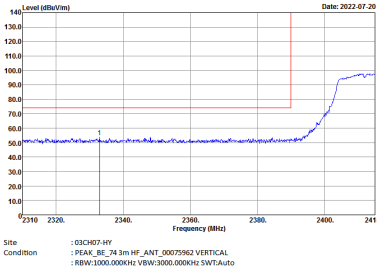
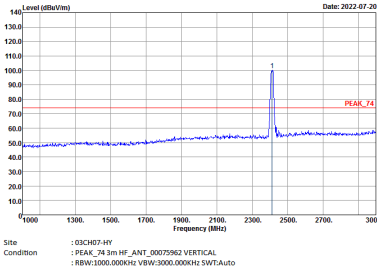
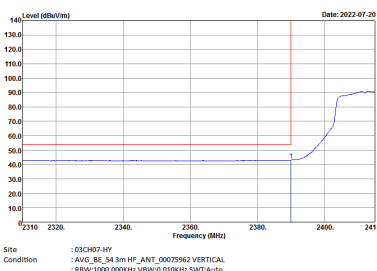
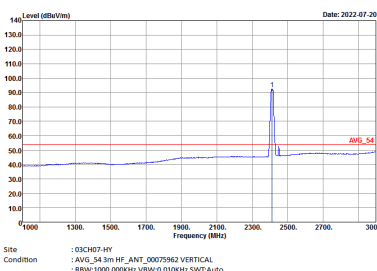
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11b CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

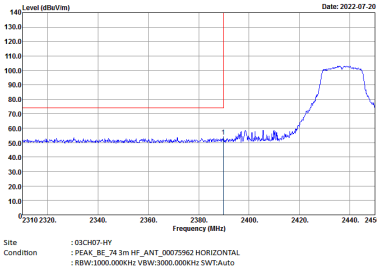
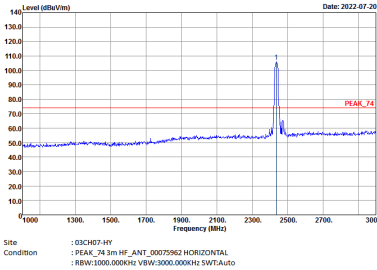
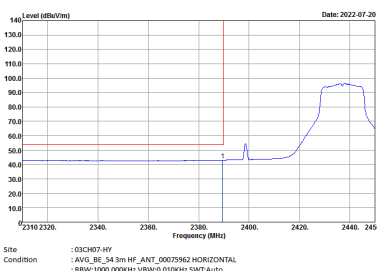
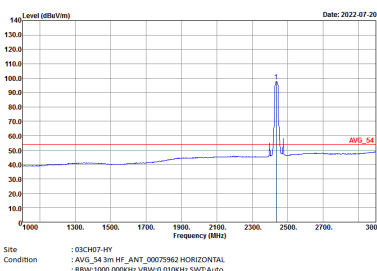
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11b CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11b CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto

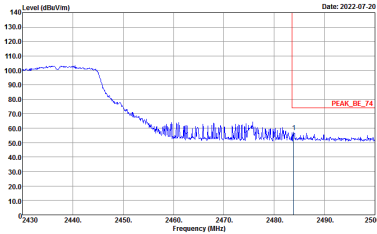
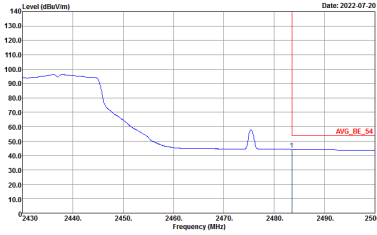
2.4GHz 2400~2483.5MHz
WIFI 802.11g (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11g CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:5.000kHz SWT:Auto	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:5.000kHz SWT:Auto

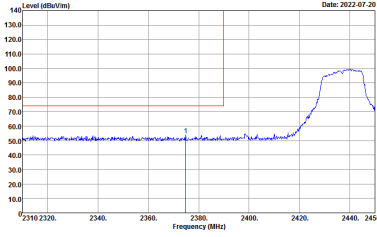
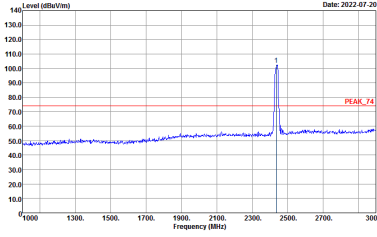
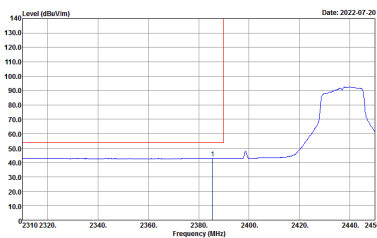
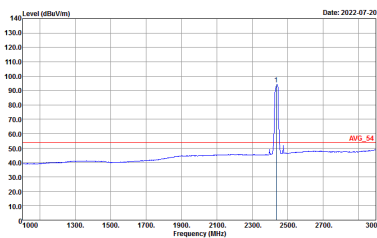
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11g CH01 2412MHz	
1	Vertical	Fundamental
Peak	 Site Condition : 03CH07-HY : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site Condition : 03CH07-HY : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site Condition : 03CH07-HY : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site Condition : 03CH07-HY : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11g CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto

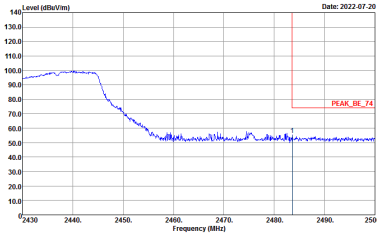
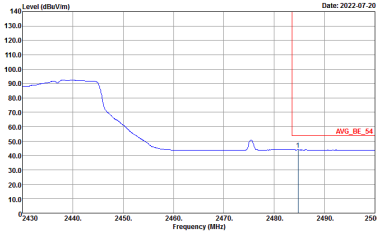


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11g CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

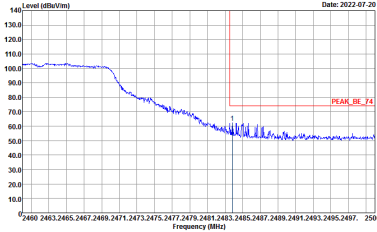
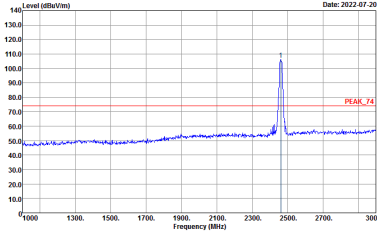
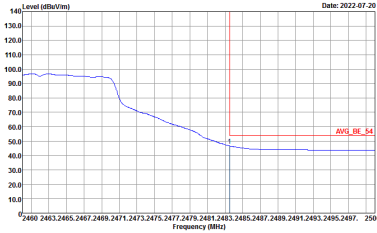
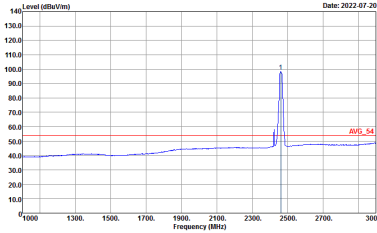


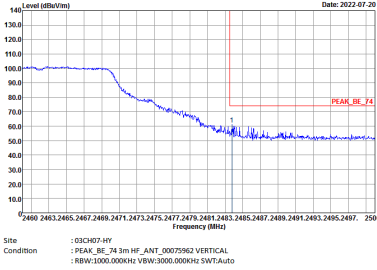
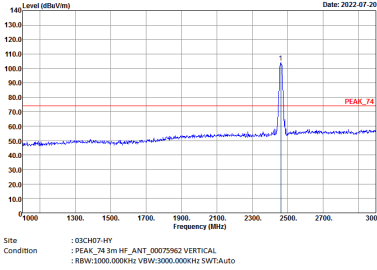
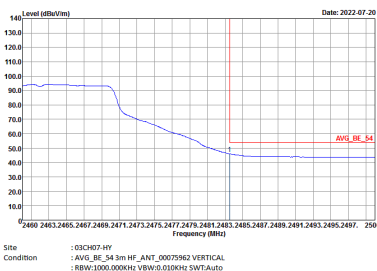
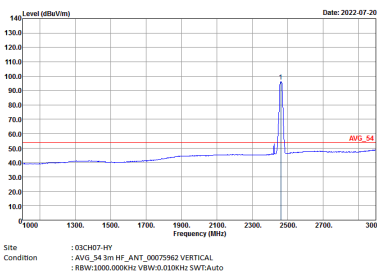
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11g CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto



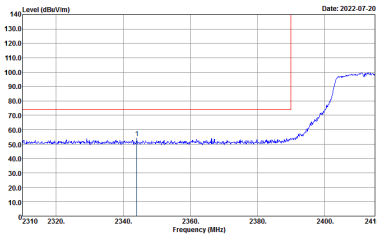
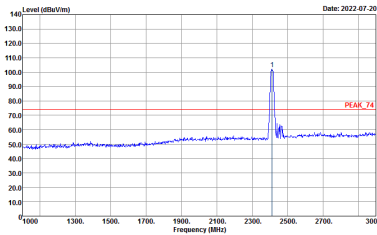
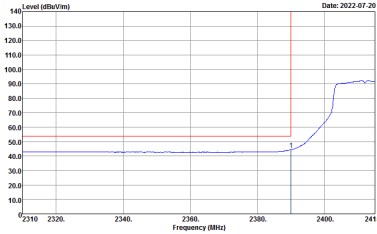
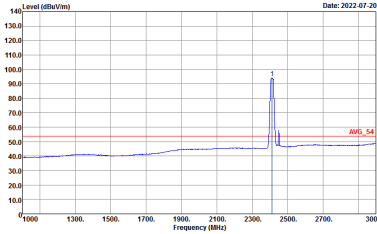
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11g CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left Blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left Blank

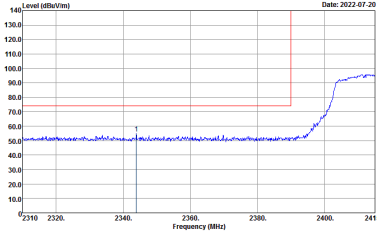
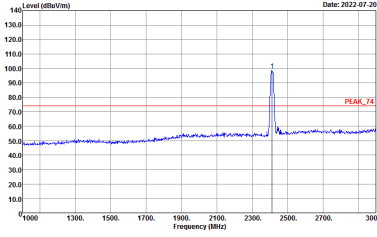
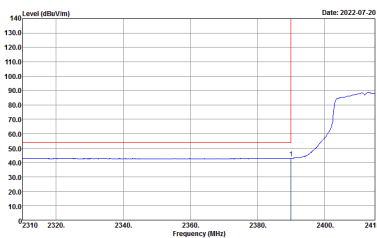
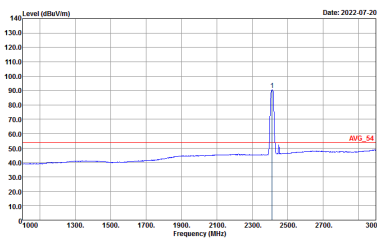


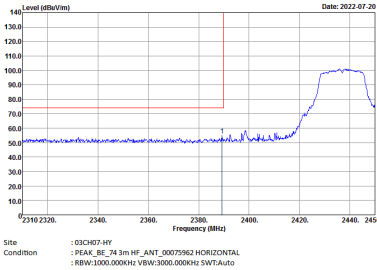
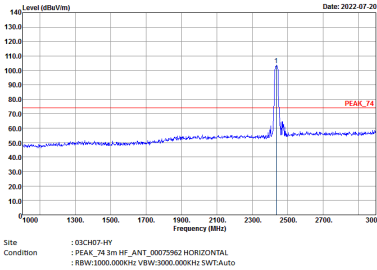
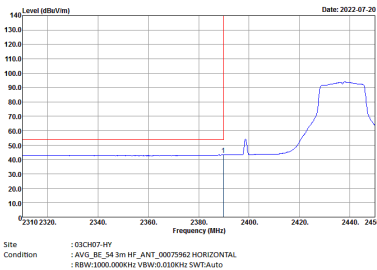
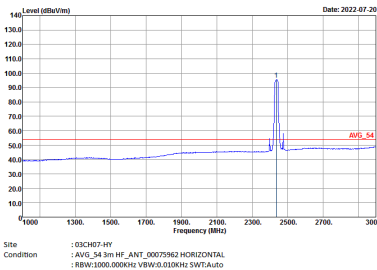
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11g CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : : PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site : 03CH07-HY Condition : : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11g CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto

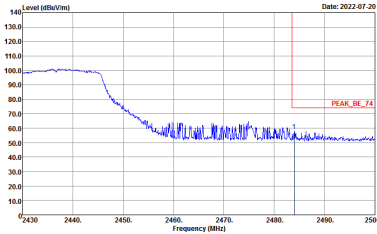
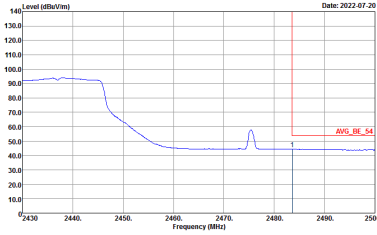
2.4GHz 2400~2483.5MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

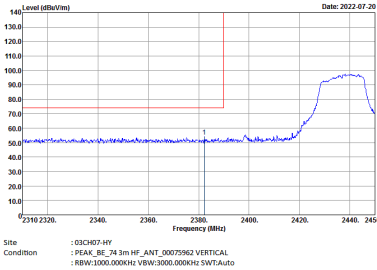
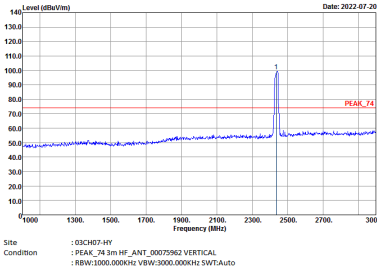
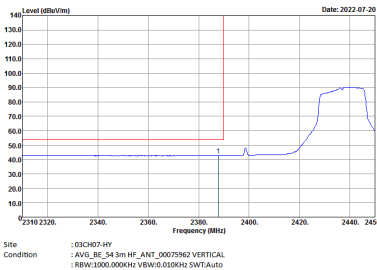
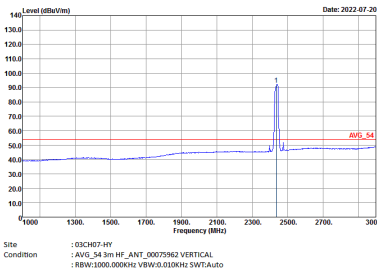
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VHT20 CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_S4_3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK_T4_3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_S4_3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:5.000kHz SWT:Auto	 Site : 03CH07-HY Condition : AVG_S4_3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:5.000kHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VHT20 CH01 2412MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto

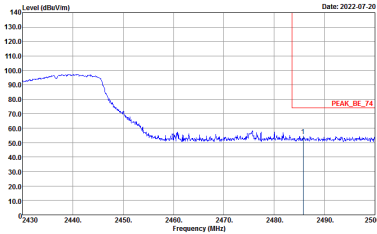
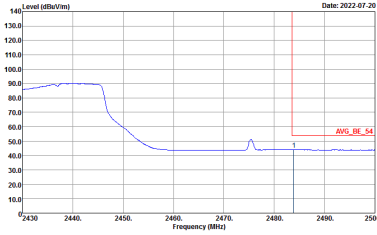
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VHT20 CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto

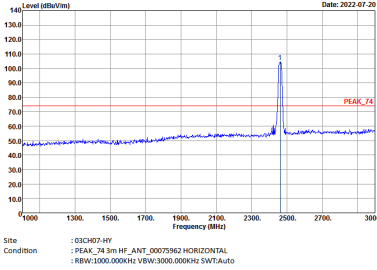
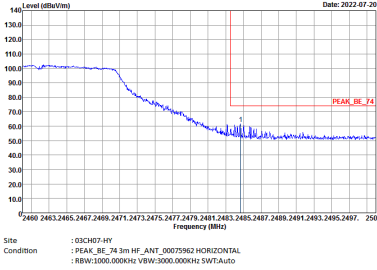
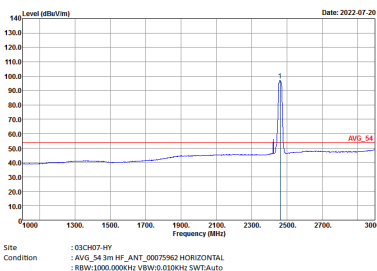
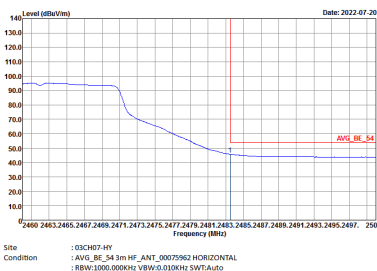


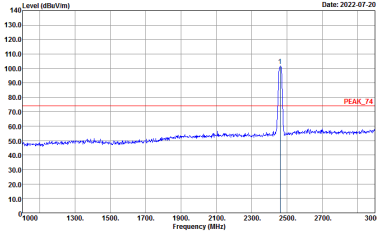
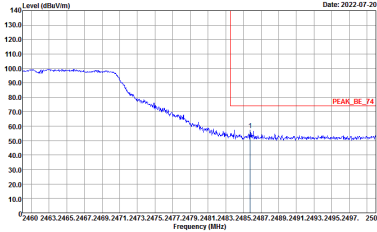
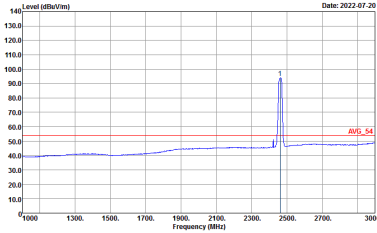
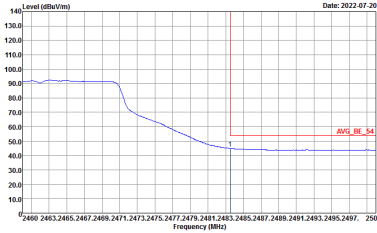
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH20 CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH20 CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH20 CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

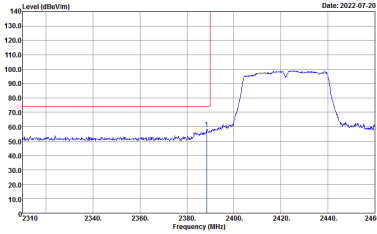
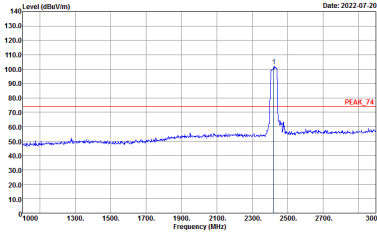
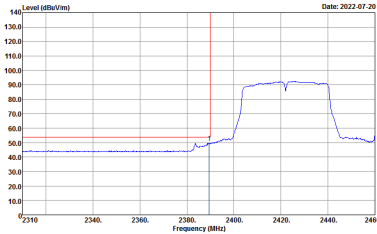
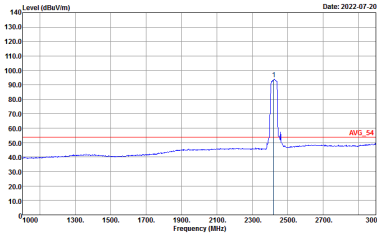
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH20 CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : : PEAK_26.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : : PEAK_BE_24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : : AVG_24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : : AVG_BE_24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH20 CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : : PEAK_26.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : : PEAK_BE_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : : AVG_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : : AVG_BE_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto

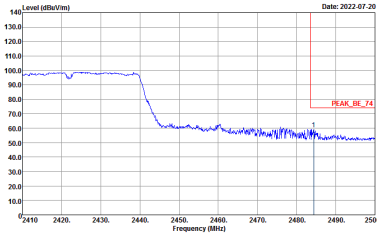
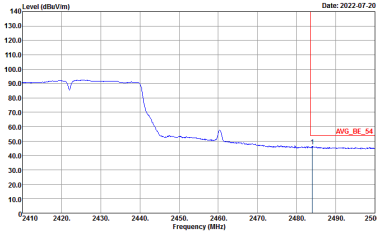


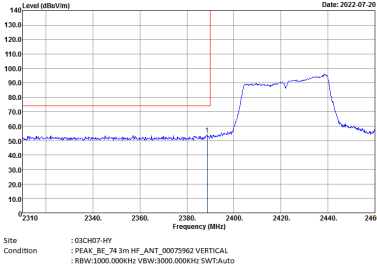
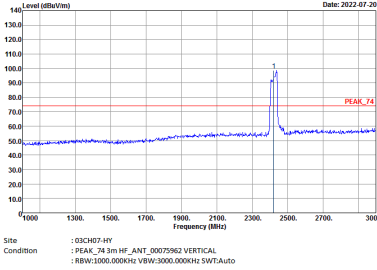
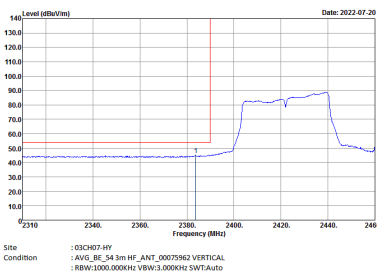
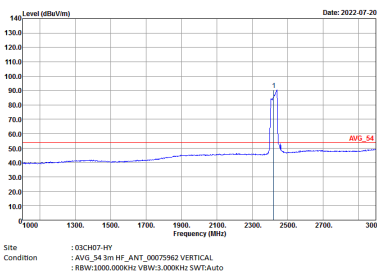
2.4GHz 2400~2483.5MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

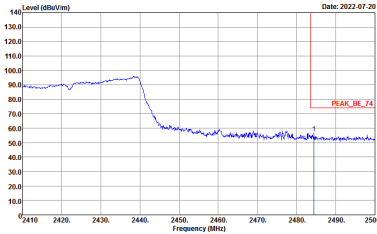
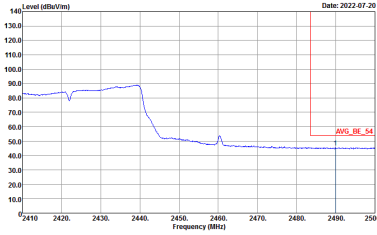
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH40 CH03 2422MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_S4 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH07-HY Condition : PEAK_S4 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto	 Site : 03CH07-HY Condition : AVG_S4 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto

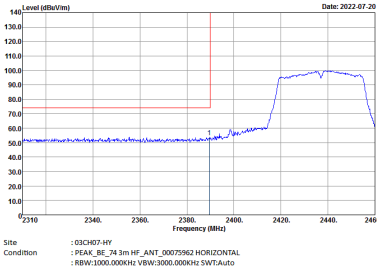
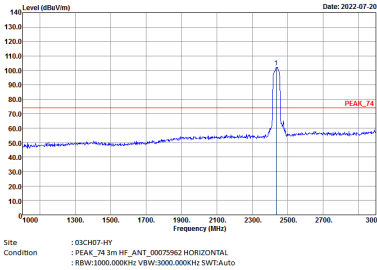
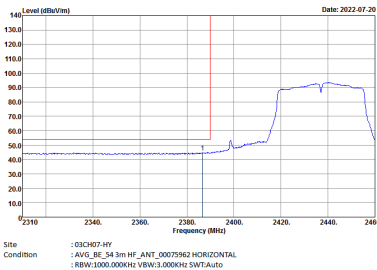
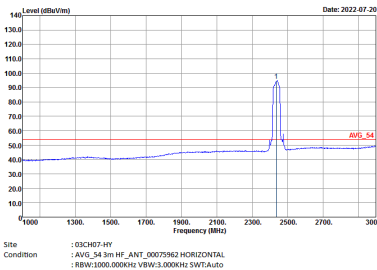


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH40 CH03 2422MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto	Left blank

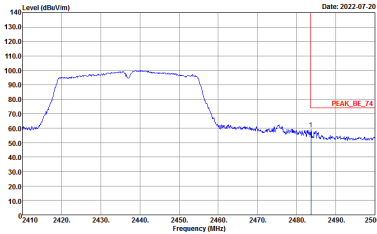
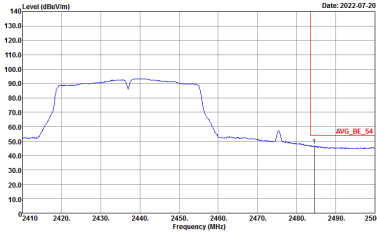
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH40 CH03 2422MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWTAuto	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWTAuto

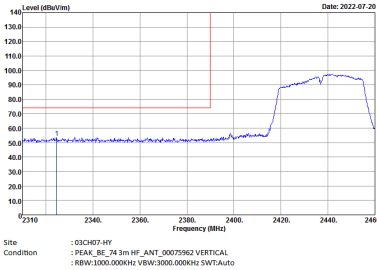
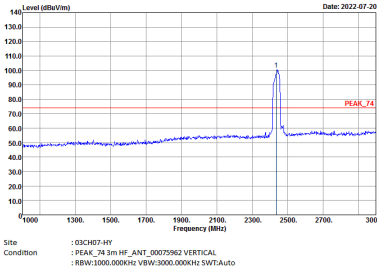
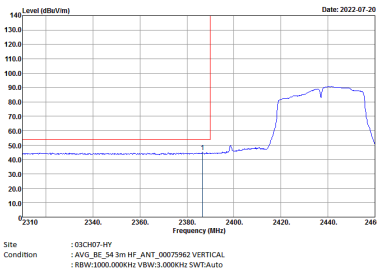
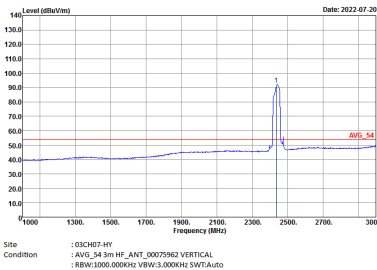


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH40 CH03 2422MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto	Left blank

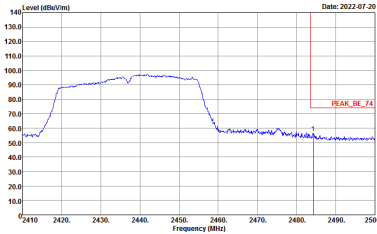
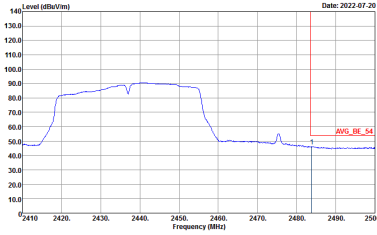
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH40 CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site Condition : 03CH07-HY : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site Condition : 03CH07-HY : PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site Condition : 03CH07-HY : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWTAuto	 Site Condition : 03CH07-HY : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWTAuto

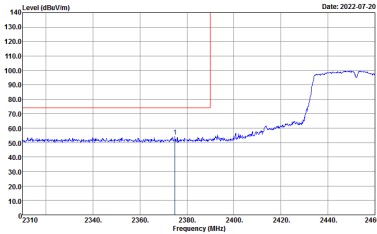
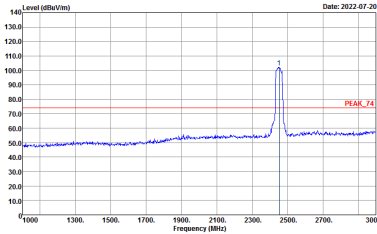
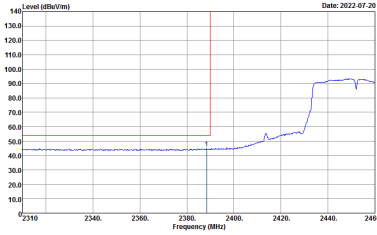
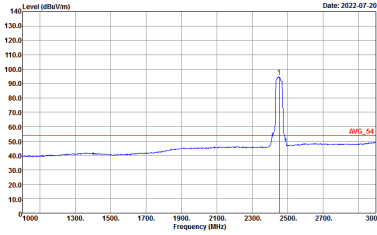


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH40 CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto	Left blank

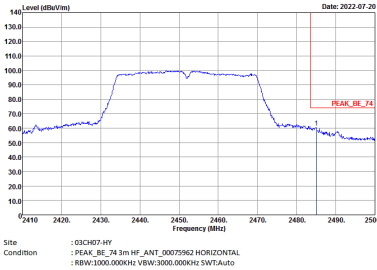
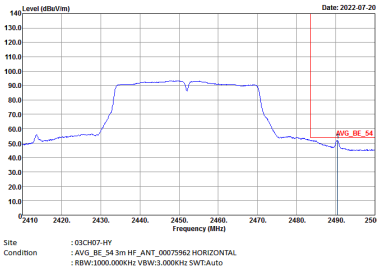
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH40 CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWTAuto	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWTAuto

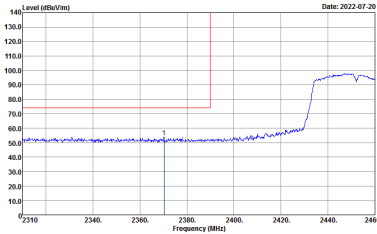
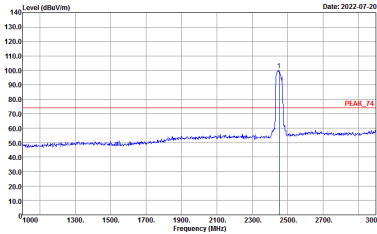
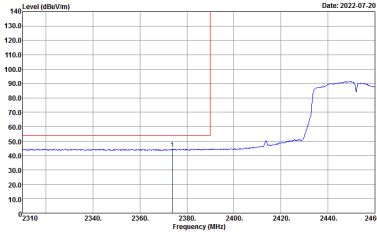
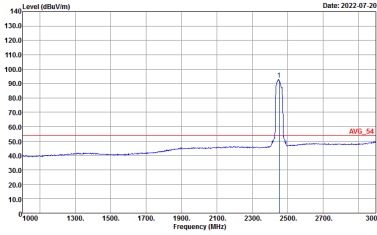


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH40 CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto	Left blank

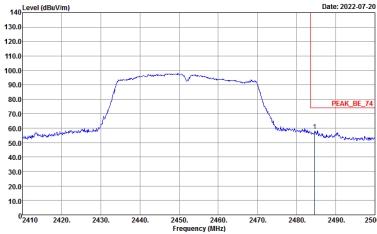
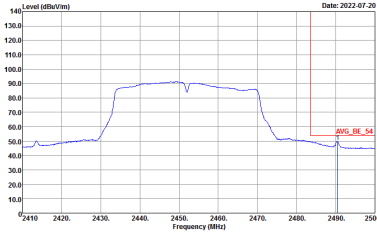
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH40 CH09 2452MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site : 03CH07-HY Condition : : PEAK_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site : 03CH07-HY Condition : : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWTAuto	 Site : 03CH07-HY Condition : : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3.000kHz SWTAuto



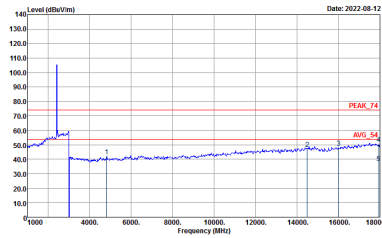
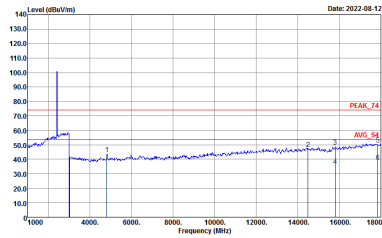
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH40 CH09 2452MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH40 CH09 2452MHz - L	
1	Vertical	Fundamental
Peak	 Site Condition : 03CH07-HY : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto	 Site Condition : 03CH07-HY : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTAuto
Avg.	 Site Condition : 03CH07-HY : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWTAuto	 Site Condition : 03CH07-HY : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWTAuto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ac VH40 CH09 2452MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWT:Auto	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	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH07-HY Condition : PEAK_74 3m HP_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition : PEAK_74 3m HP_ANT_00075962 VERTICAL



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
Ant.	802.11b CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2022-08-12 PEAK_74 Avg_54 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL	Level (dBuV/m) Date: 2022-08-12 PEAK_74 Avg_54 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL

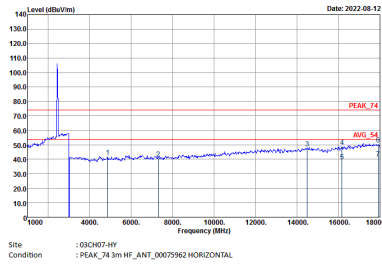
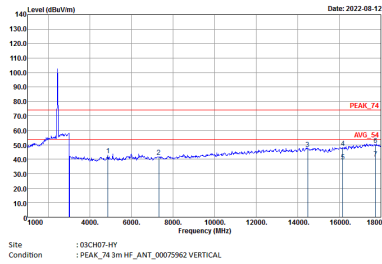


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
Ant.	802.11b CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2022-08-12 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL	Level (dBuV/m) Date: 2022-08-12 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL



2.4GHz 2400~2483.5MHz

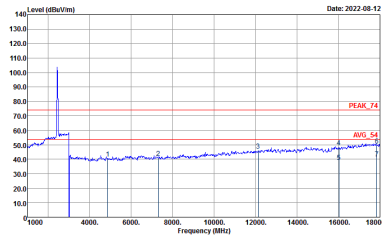
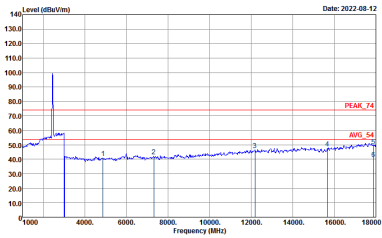
WIFI 802.11g (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
Ant.	802.11g CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH07-HY Condition : PEAK_74 3m HP_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition : PEAK_74 3m HP_ANT_00075962 VERTICAL

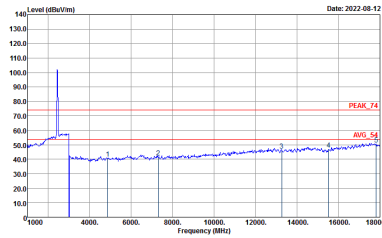
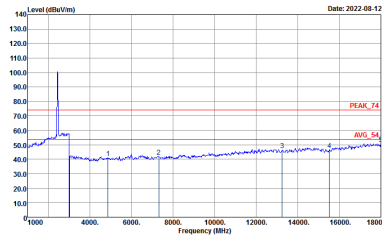


2.4GHz 2400~2483.5MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

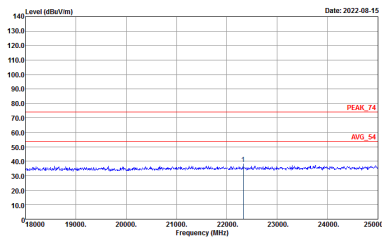
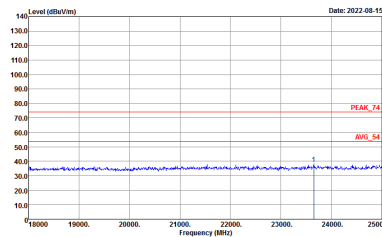
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
Ant.	802.11ac VHT20 CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH07-HY Condition : PEAK_74 3m HP_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition : PEAK_74 3m HP_ANT_00075962 VERTICAL

2.4GHz 2400~2483.5MHz
WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
Ant.	802.11ac VHT40 CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH07-HY Condition : PEAK_74 3m HP_ANT_00075962 HORIZONTAL	 Site : 03CH07-HY Condition : PEAK_74 3m HP_ANT_00075962 VERTICAL

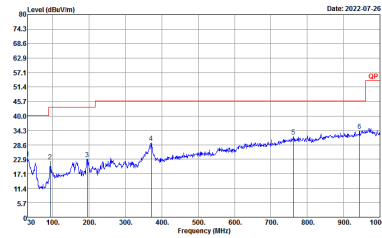
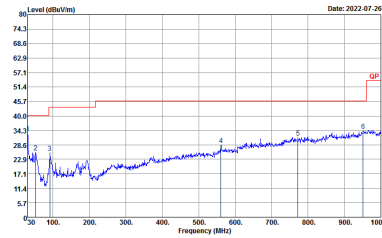


Emission above 18GHz
2.4GHz WIFI 802.11ac VHT40 (SHF @ 1m)

WIFI	2.4GHz 2400~2483.5MHz	
Ant.	802.11ac VHT40 SHF	
1	Horizontal	Vertical
Peak Avg.	 Site : 03CH07-HY Condition : PEAK_74 1m SHF-EHF_9170251 HORIZONTAL	 Site : 03CH07-HY Condition : PEAK_74 1m SHF-EHF_9170251 VERTICAL



Emission below 1GHz
2.4GHz WIFI 802.11ac VHT40 (LF)

WIFI	2.4GHz 2400~2483.5MHz	
Ant.	802.11ac VHT40 LF	
1	Horizontal	Vertical
QP / Peak	 Site : 03CH07-HY Condition : QP 3m LF-ANT-JS419(s) HORIZONTAL	 Site : 03CH07-HY Condition : QP 3m LF-ANT-JS419(s) VERTICAL



Appendix E. Duty Cycle Plots

Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
802.11b	99.12	-	-	10Hz
802.11g	98.33	-	-	10Hz
2.4GHz 802.11ac VHT20	98.22	-	-	10Hz
2.4GHz 802.11ac VHT40	94.63	951	1.05	3kHz

