



FCC RADIO TEST REPORT

FCC ID : APYHRO00327
Equipment : Smart phone
Brand Name : SHARP
Model Name : APYHRO00327
Applicant : SHARP CORPORATION
1 Takumi-Cho, Sakai-Ku, Sakai-Shi,
Osaka 590-8522, Japan
Manufacturer : SHARP CORPORATION
1 Takumi-Cho, Sakai-Ku, Sakai-Shi,
Osaka 590-8522, Japan
Standard : FCC Part 15 Subpart C §15.247

The product was received on Mar. 14, 2023 and testing was performed from Mar. 31, 2023 to Apr. 25, 2023. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Louis Wu

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory

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



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History of this test report

Report No.	Version	Description	Issue Date
FR322209C	01	Initial issue of report	May 11, 2023

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.247(a)(2)	6dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.247(b)	Power Output Measurement	Pass	-
3.3	15.247(e)	Power Spectral Density	Pass	-
3.4	15.247(d)	Conducted Band Edges	Pass	-
		Conducted Spurious Emission	Pass	-
3.5	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	Pass	3.03 dB under the limit at 4824.000 MHz
3.6	15.207	AC Conducted Emission	Pass	9.57 dB under the limit at 0.499 MHz
3.7	15.203	Antenna Requirement	Pass	-

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty".

Disclaimer:

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

Reviewed by: Keven Cheng

Report Producer: Clio Lo



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature		
General Specs GSM/WCDMA/LTE, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n, Wi-Fi 5GHz 802.11a/n/ac, FM Receiver, NFC, and GNSS.		
Antenna Type WWAN: <Ant. 0>: Monopole Antenna <Ant. 1>: PIFA Antenna <Ant. 2>: Monopole Antenna WLAN: Loop Antenna Bluetooth: Loop Antenna GPS / Glonass / BDS / Galileo: PIFA Antenna NFC: Loop Antenna FM: Using earphone as antenna		
Antenna information		
2400 MHz ~ 2483.5 MHz	Peak Gain (dBi)	-1.36

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

SKU List				
Item	Main		2nd Source	
	Main Sample		Sample 2	
	Vendor	Model Number	Vendor	Model Number
Battery	SCUD	BPSX1000010	UTL	BPSX300001S
Main PCB	Wuzhu	SB0SX31BW0C	ZDT	SB0SX31BK0C
CPU	MTK	SA06833V010 (MT6833V_NZA)	MTK	SA06833V010 (MT6833V_NZA)
G- sensor	Bosch	SA0MI320020(BMI320)	TDK	SA042670020(ICM-42670-N)
rear housing	DY	MESX361010A	LF	MESX361011A
FPC_USB	SUNFLEX	MESX114012A	PBH	MESX314004A
FPC_AJ	SUNFLEX	MESX114013A	PBH	MESX314003A
FPC_Main	SUNFLEX	MESX314002A	PBH	MESX314012A
FPC_SPK	AKM	MESX114005A	PBH	MESX314005A
FPC_Side_Key	SUNFLEX	MESX314001A	PBH	MESX314011A
Memory	SAMSUNG	KM5P9001DM-B424	SAMSUNG	KM5P9001DM-B424



SKU List				
Item	2nd Source			
	Sample 3		Sample 4	
	Vendor	Model Number	Vendor	Model Number
Battery	SCUD	BPSX1000010	SCUD	BPSX1000010
Main PCB	Wuzhu	SB0SX31BW0C	Wuzhu	SB0SX31BW0C
CPU	MTK	SA06833V011 (MT6833V_ZA)	MTK	SA06833V010 (MT6833V_NZA)
G- sensor	Bosch	SA0MI320020(BMI320)	Bosch	SA0MI320020(BMI320)
rear housing	DY	MESX361030A	DY	MESX361010A
FPC_USB	PBH	MESX314004A	PBH	MESX314004A
FPC_AJ	PBH	MESX314003A	PBH	MESX314003A
FPC_Main	SUNFLEX	MESX314002A	SUNFLEX	MESX314002A
FPC_SPK	AKM	MESX114005A	AKM	MESX114005A
FPC_Side_Key	SUNFLEX	MESX314001A	SUNFLEX	MESX314001A
Memory	SAMSUNG	KM5P9001DM-B424	Hynix	H9QG9G5AN6X154

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

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

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

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No. TH05-HY, 03CH23-HY

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

FCC designation No.: TW1190 and TW3786



1.4 Applicable Standards

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

- ♦ FCC Part 15 Subpart C §15.247
- ♦ FCC KDB Publication No. 558074 D01 15.247 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 final test modes include the worst data rates for each modulation shown in the table below.

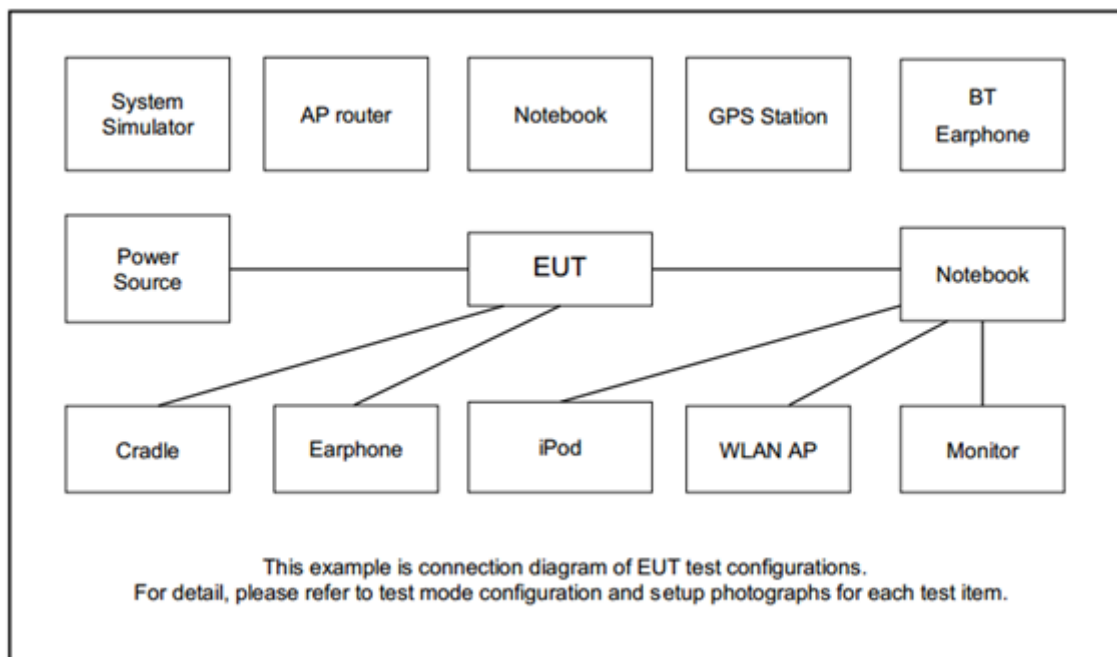
Modulation	Data Rate
802.11b	1 Mbps
802.11g	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0

Test Cases	
AC Conducted Emission	Mode 1 :Bluetooth Link + WLAN (2.4GHz) Link + USB Cable (Charging from AC Adapter) + MPEG4 + Battery 1 for Main Sample
Remark: For Radiated Test Cases, the tests were performed with Battery 1 and Main Sample.	

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

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

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Earphone	Sony Ericsson	MW600	PY700A2029	N/A	N/A
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
3.	Notebook	DELL	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.5 EUT Operation Test Setup

The RF test items, utility “wifi FW version:2022-12-16-112901” 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.

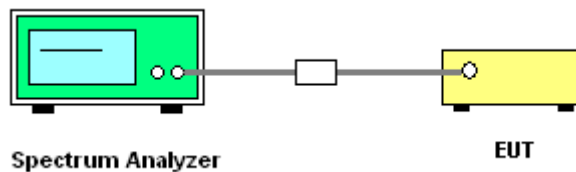
3.1.2 Measuring Instruments

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.

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.

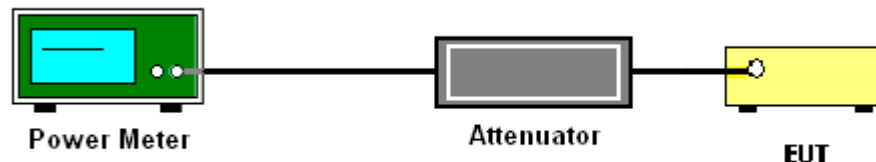
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

1. For Peak Power, the testing follows ANSI C63.10 Section 11.9.1.3 PKPM1
2. For Average Power, the testing follows ANSI C63.10 Section 11.9.2.3.2 Method AVGPM-G
3. 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.
4. Set the maximum power setting and enable the EUT to transmit continuously.
5. Measure the conducted output power and record the results in the test report.

3.2.4 Test Setup



3.2.5 Test Result of Peak Output Power

Please refer to Appendix A.

3.2.6 Test Result of Average Output Power (Reporting Only)

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.

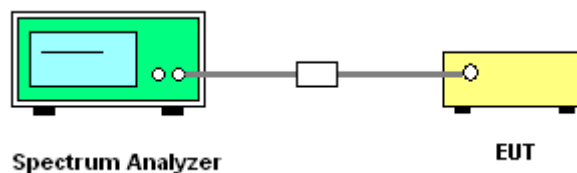
3.3.2 Measuring Instruments

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.

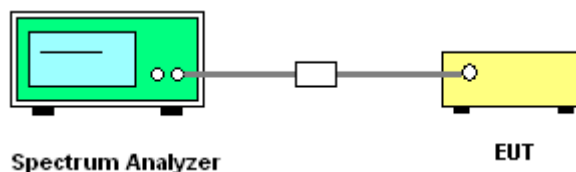
3.4.2 Measuring Instruments

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

Please refer to Appendix A.

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 “-”.

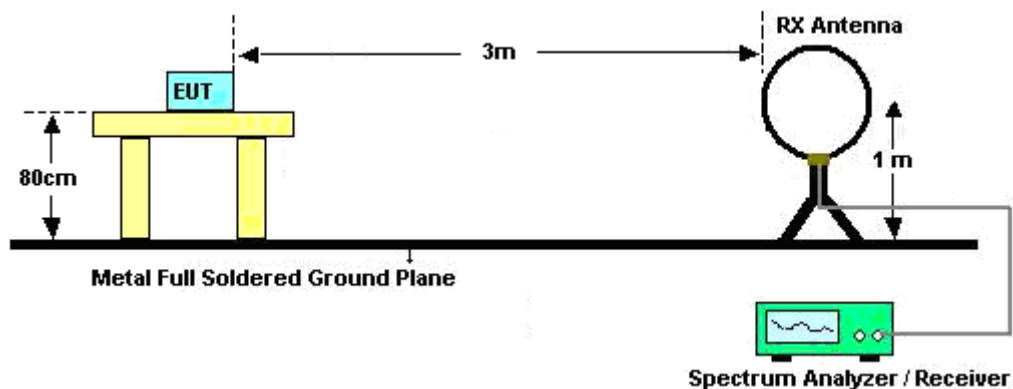
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with 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:

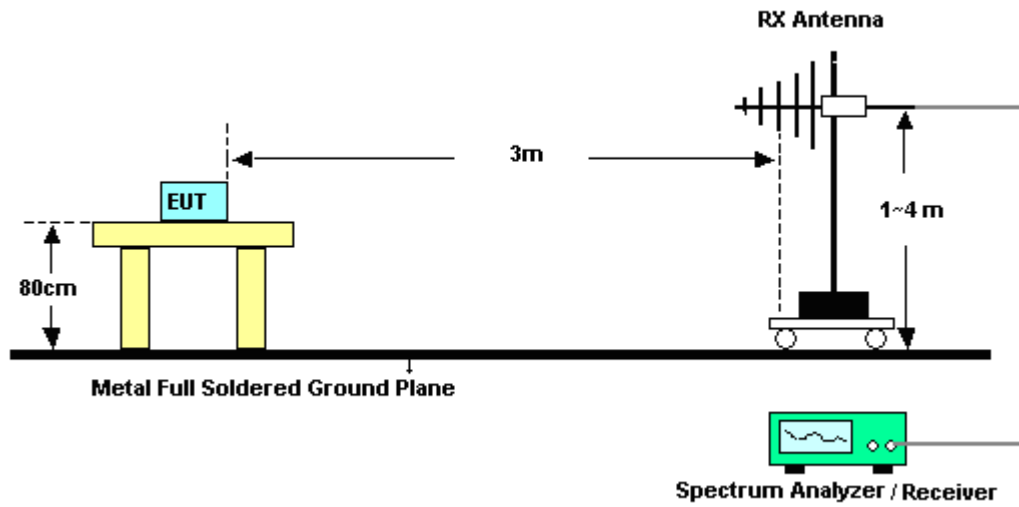
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.5.4 Test Setup

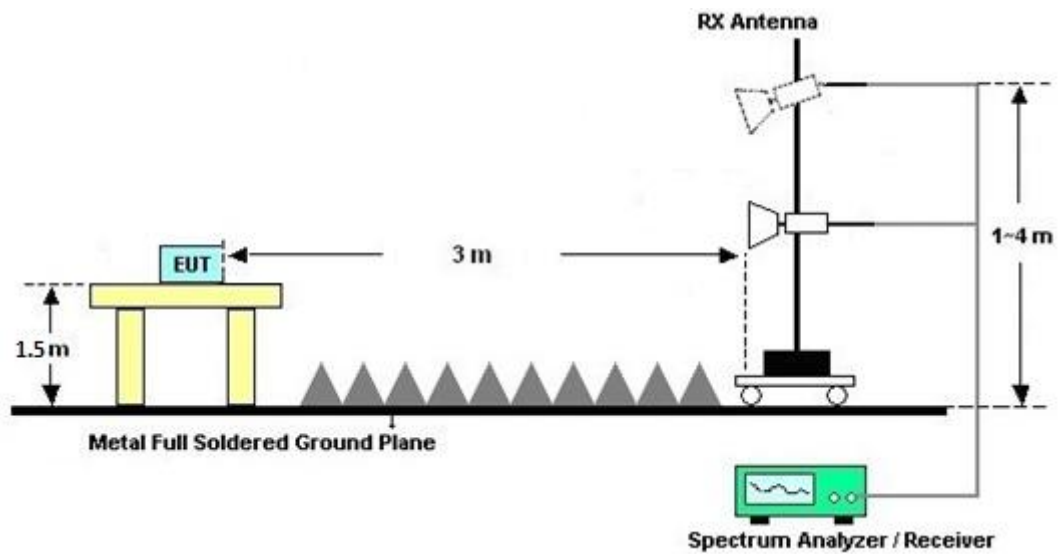
For radiated emissions below 30MHz



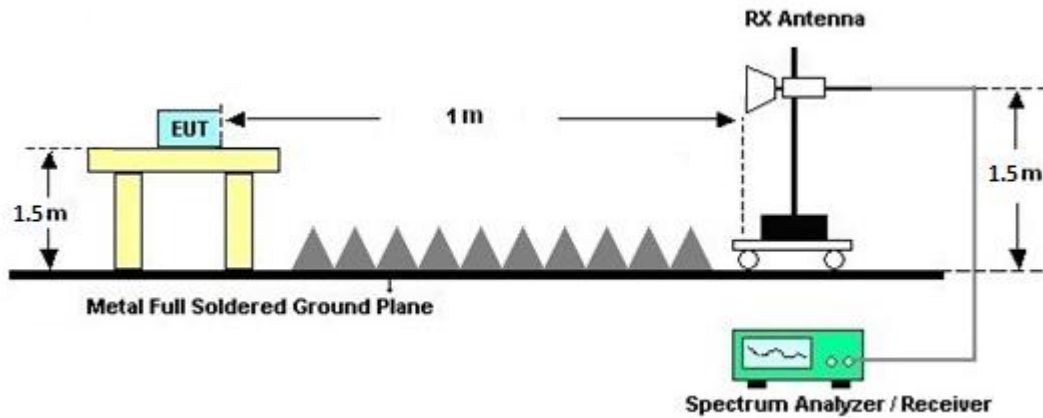
For radiated emissions from 30MHz to 1GHz



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

*Decreases with the logarithm of the frequency.

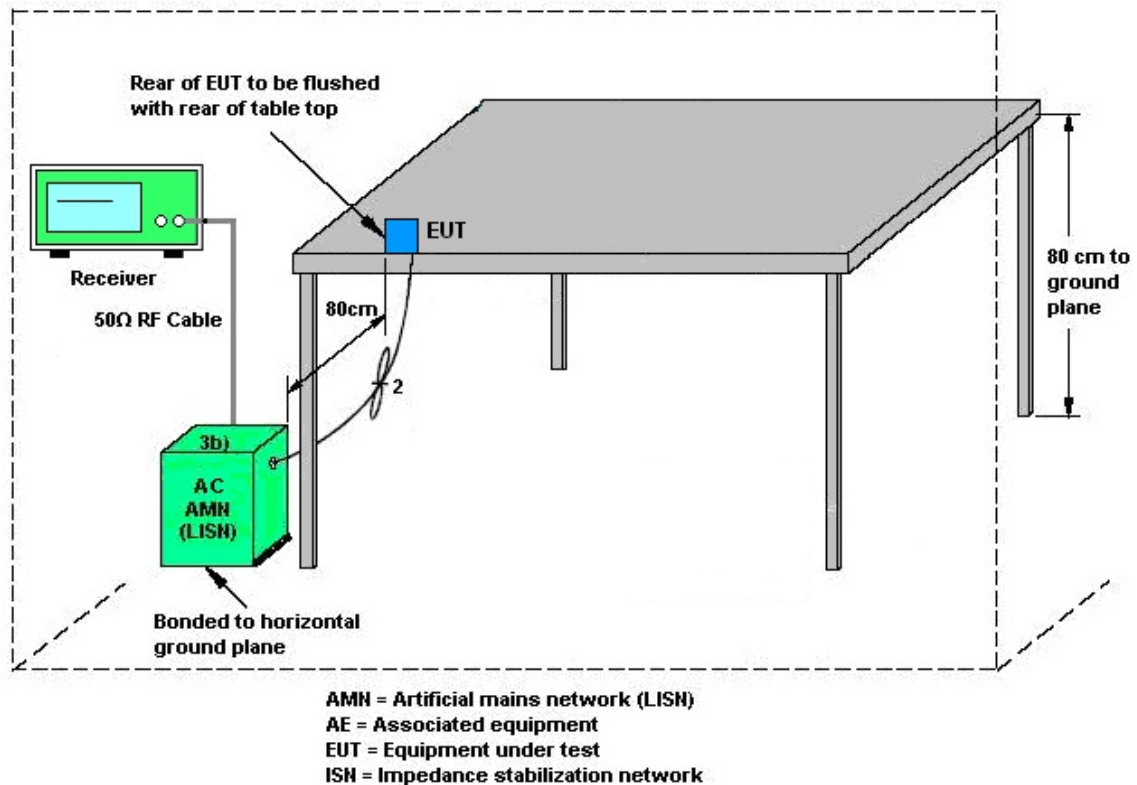
3.6.2 Measuring Instruments

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

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.



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 20, 2022	Apr. 17, 2023~ Apr. 25, 2023	Sep. 19, 2023	Radiation (03CH23-HY)
Bilog Antenna with 6dB pad	TESEQ & WOKEN	CBL 6111D & 00802N1D-06	62028 & 003	N/A	Oct. 11, 2022	Apr. 17, 2023~ Apr. 25, 2023	Oct. 10, 2023	Radiation (03CH23-HY)
Amplifier	SONOMA	310N	421582	N/A	Jul. 16, 2022	Apr. 17, 2023~ Apr. 25, 2023	Jul. 15, 2023	Radiation (03CH23-HY)
Double Ridged Guide Horn Antenna	RFSPIN	DRH18-E	LE2C05A18EN	1GHz~18GHz	Jul. 06, 2022	Apr. 17, 2023~ Apr. 25, 2023	Jul. 05, 2023	Radiation (03CH23-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA9170	00991	18GHz~40GHz	May 14, 2022	Apr. 17, 2023~ Apr. 25, 2023	May 13, 2023	Radiation (03CH23-HY)
Amplifier	EMEC	EM01G18GA	060877	N/A	Sep. 29, 2022	Apr. 17, 2023~ Apr. 25, 2023	Sep. 28, 2023	Radiation (03CH23-HY)
Preamplifier	EMEC	EM18G40G	060872	18-40GHz	Sep. 28, 2022	Apr. 17, 2023~ Apr. 25, 2023	Sep. 27, 2023	Radiation (03CH23-HY)
Signal Analyzer	Keysight	N9010B	MY62170337	N/A	Sep. 11, 2022	Apr. 17, 2023~ Apr. 25, 2023	Sep. 10, 2023	Radiation (03CH23-HY)
Hygrometer	TECPEL	DTM-303B	TP211542	N/A	Nov. 17, 2022	Apr. 17, 2023~ Apr. 25, 2023	Nov. 16, 2023	Radiation (03CH23-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Apr. 17, 2023~ Apr. 25, 2023	N/A	Radiation (03CH23-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Apr. 17, 2023~ Apr. 25, 2023	N/A	Radiation (03CH23-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Apr. 17, 2023~ Apr. 25, 2023	N/A	Radiation (03CH23-HY)
Software	Audix	E3 6.09824_2019 122	RK-002347	N/A	N/A	Apr. 17, 2023~ Apr. 25, 2023	N/A	Radiation (03CH23-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9kHz~30MHz	Mar. 07, 2023	Apr. 17, 2023~ Apr. 25, 2023	Mar. 06, 2024	Radiation (03CH23-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804392/2,8046 10/2,804613/2	N/A	Oct. 25, 2022	Apr. 17, 2023~ Apr. 25, 2023	Oct. 24, 2023	Radiation (03CH23-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 17, 2022	Mar. 31, 2023~ Apr. 25, 2023	Nov. 16, 2023	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO 12 (NO:113)	10MHz~6GHz	Dec. 13, 2022	Mar. 31, 2023~ Apr. 25, 2023	Dec. 12, 2023	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101905	10Hz - 40GHz(amp)	Aug. 03, 2022	Mar. 31, 2023~ Apr. 25, 2023	Aug. 02, 2023	Conducted (TH05-HY)
Power Meter	Anritsu	ML2495A	1218006	N/A	Oct. 06, 2022	Mar. 31, 2023~ Apr. 25, 2023	Oct. 05, 2023	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1207363	300MHz~40GHz	Oct. 06, 2022	Mar. 31, 2023~ Apr. 25, 2023	Oct. 05, 2023	Conducted (TH05-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Apr. 11, 2023	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2022	Apr. 11, 2023	Nov. 30, 2023	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2022	Apr. 11, 2023	Nov. 16, 2023	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 17, 2022	Apr. 11, 2023	Nov. 16, 2023	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	Apr. 11, 2023	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Aug. 01, 2022	Apr. 11, 2023	Jul. 31, 2023	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 29, 2022	Apr. 11, 2023	Dec. 28, 2023	Conduction (CO05-HY)



5 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.5 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.8 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.4 dB
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Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.3 dB
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.2 dB
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	River Tsai and Sylvia Li	Temperature:	21~25	°C
Test Date:	2023/03/31~2023/04/25	Relative Humidity:	51~54	%

TEST RESULTS DATA
Average Output Power (Reporting Only)

2.4GHz Band Single Antenna																
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant4	Ant2	SUM	Ant4	Ant2	Ant4	Ant2	Ant4	Ant2	Ant4	Ant2	
11b	1Mbps	1	1	2412	15.30	-		30.00	-	-1.36	-	13.94	-	36.00	-	Pass
11b	1Mbps	1	6	2437	15.30	-		30.00	-	-1.36	-	13.94	-	36.00	-	Pass
11b	1Mbps	1	11	2462	16.10	-		30.00	-	-1.36	-	14.74	-	36.00	-	Pass
11g	6Mbps	1	1	2412	17.30	-		30.00	-	-1.36	-	15.94	-	36.00	-	Pass
11g	6Mbps	1	6	2437	18.70	-		30.00	-	-1.36	-	17.34	-	36.00	-	Pass
11g	6Mbps	1	11	2462	15.60	-		30.00	-	-1.36	-	14.24	-	36.00	-	Pass
HT20	MCS 0	1	1	2412	15.90	-		30.00	-	-1.36	-	14.54	-	36.00	-	Pass
HT20	MCS 0	1	6	2437	18.60	-		30.00	-	-1.36	-	17.24	-	36.00	-	Pass
HT20	MCS 0	1	11	2462	14.50	-		30.00	-	-1.36	-	13.14	-	36.00	-	Pass
HT40	MCS 0	1	3	2422	14.70	-		30.00	-	-1.36	-	13.34	-	36.00	-	Pass
HT40	MCS 0	1	6	2437	17.10	-	30.00	-	-1.36	-	15.74	-	36.00	-	Pass	
HT40	MCS 0	1	9	2452	13.30	-	30.00	-	-1.36	-	11.94	-	36.00	-	Pass	

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

TEST RESULTS DATA
Peak Output Power

2.4GHz Band Single Antenna																
Mod.	Data Rate	Nrx	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant4	Ant2	SUM	Ant4	Ant2	Ant4	Ant2	Ant4	Ant2	Ant4	Ant2	
11b	1Mbps	1	1	2412	17.47	-		30.00	-	-1.36	-	16.11	-	36.00	-	Pass
11b	1Mbps	1	6	2437	17.52	-		30.00	-	-1.36	-	16.16	-	36.00	-	Pass
11b	1Mbps	1	11	2462	18.28	-		30.00	-	-1.36	-	16.92	-	36.00	-	Pass
11g	6Mbps	1	1	2412	23.90	-		30.00	-	-1.36	-	22.54	-	36.00	-	Pass
11g	6Mbps	1	6	2437	21.62	-		30.00	-	-1.36	-	20.26	-	36.00	-	Pass
11g	6Mbps	1	11	2462	23.76	-		30.00	-	-1.36	-	22.40	-	36.00	-	Pass
HT20	MCS 0	1	1	2412	23.87	-		30.00	-	-1.36	-	22.51	-	36.00	-	Pass
HT20	MCS 0	1	6	2437	24.75	-		30.00	-	-1.36	-	23.39	-	36.00	-	Pass
HT20	MCS 0	1	11	2462	23.83	-		30.00	-	-1.36	-	22.47	-	36.00	-	Pass
HT40	MCS 0	1	3	2422	23.67	-		30.00	-	-1.36	-	22.31	-	36.00	-	Pass
HT40	MCS 0	1	6	2437	24.20	-		30.00	-	-1.36	-	22.84	-	36.00	-	Pass
HT40	MCS 0	1	9	2452	23.78	-		30.00	-	-1.36	-	22.42	-	36.00	-	Pass

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

2.4GHz Band Single Antenna										
Mod.	Data Rate	Nrx	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
					Ant4	Ant2	Ant4	Ant2		
11b	1Mbps	1	1	2412	13.09	-	8.08	-	0.50	Pass
11b	1Mbps	1	6	2437	13.19	-	7.60	-	0.50	Pass
11b	1Mbps	1	11	2462	13.19	-	8.10	-	0.50	Pass
11g	6Mbps	1	1	2412	18.08	-	15.18	-	0.50	Pass
11g	6Mbps	1	6	2437	18.13	-	15.18	-	0.50	Pass
11g	6Mbps	1	11	2462	17.68	-	15.30	-	0.50	Pass
HT20	MCS 0	1	1	2412	18.73	-	15.50	-	0.50	Pass
HT20	MCS 0	1	6	2437	19.08	-	15.18	-	0.50	Pass
HT20	MCS 0	1	11	2462	18.38	-	15.98	-	0.50	Pass
HT40	MCS 0	1	3	2422	36.56	-	35.16	-	0.50	Pass
HT40	MCS 0	1	6	2437	37.06	-	35.24	-	0.50	Pass
HT40	MCS 0	1	9	2452	36.56	-	35.24	-	0.50	Pass

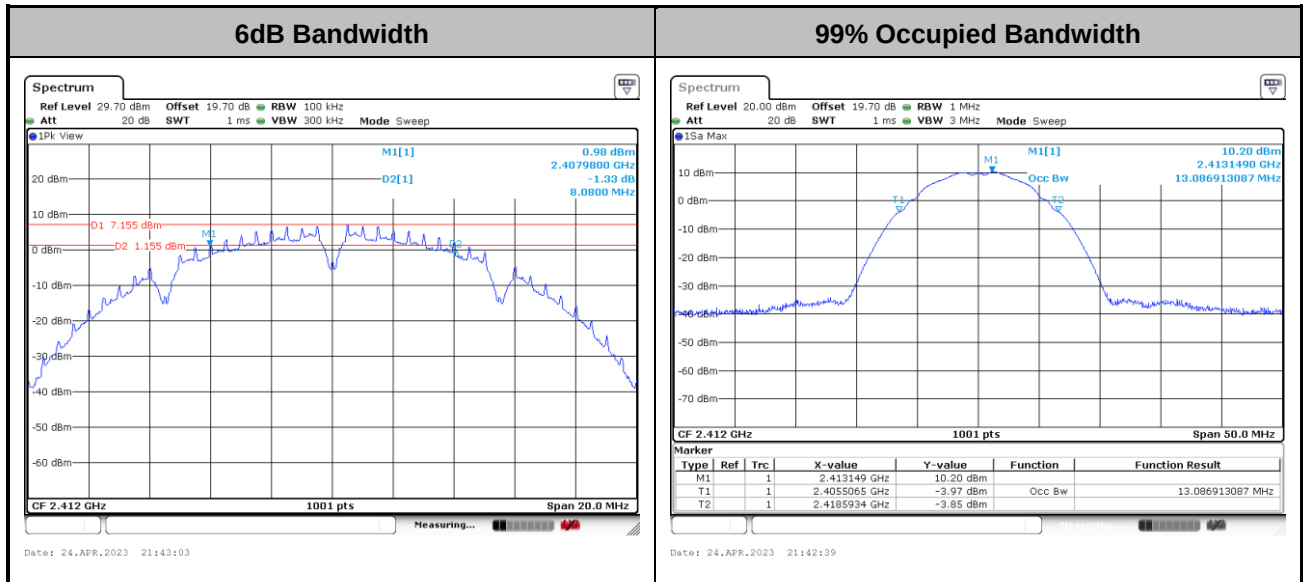
TEST RESULTS DATA
Peak Power Spectral Density

2.4GHz Band Single Antenna												
Mod.	Data Rate	Nrx	CH.	Freq. (MHz)	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Ant4	Ant2	Worse + 3.01	Ant4	Ant2	Ant4	Ant2	
11b	1Mbps	1	1	2412	-6.86	-		-1.36	-	8.00	-	Pass
11b	1Mbps	1	6	2437	-7.07	-		-1.36	-	8.00	-	Pass
11b	1Mbps	1	11	2462	-4.69	-		-1.36	-	8.00	-	Pass
11g	6Mbps	1	1	2412	-7.48	-		-1.36	-	8.00	-	Pass
11g	6Mbps	1	6	2437	-6.29	-		-1.36	-	8.00	-	Pass
11g	6Mbps	1	11	2462	-8.97	-		-1.36	-	8.00	-	Pass
HT20	MCS 0	1	1	2412	-9.10	-		-1.36	-	8.00	-	Pass
HT20	MCS 0	1	6	2437	-6.02	-		-1.36	-	8.00	-	Pass
HT20	MCS 0	1	11	2462	-9.52	-		-1.36	-	8.00	-	Pass
HT40	MCS 0	1	3	2422	-13.31	-		-1.36	-	8.00	-	Pass
HT40	MCS 0	1	6	2437	-10.66	-		-1.36	-	8.00	-	Pass
HT40	MCS 0	1	9	2452	-13.93	-		-1.36	-	8.00	-	Pass

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

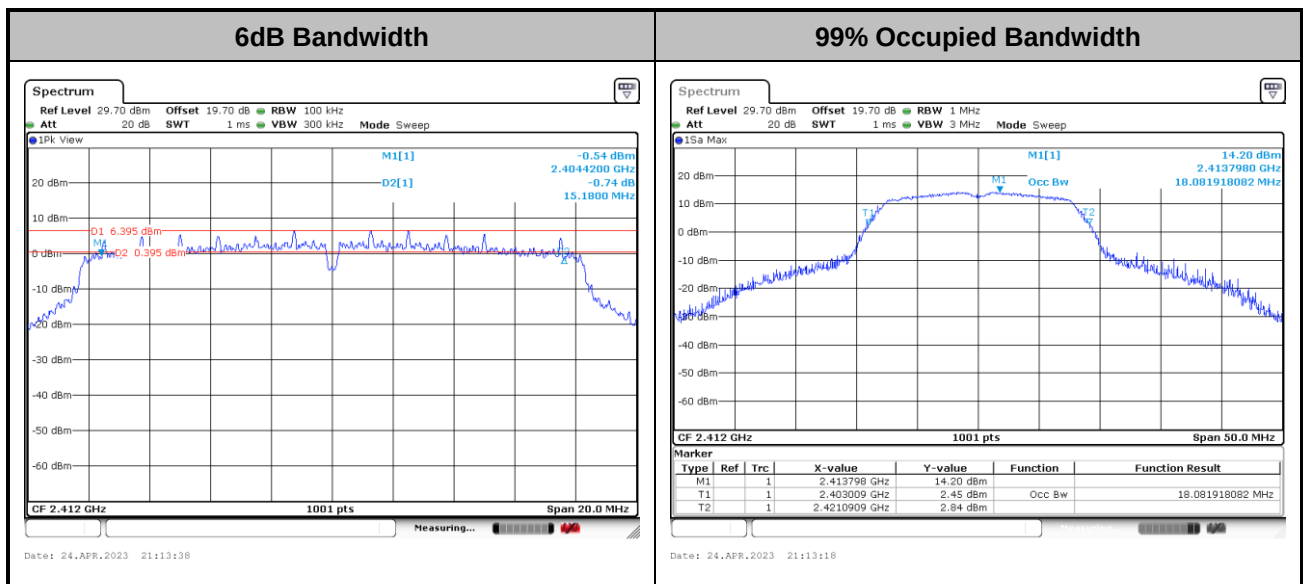
6dB and 99% Occupied Bandwidth

<802.11b>



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

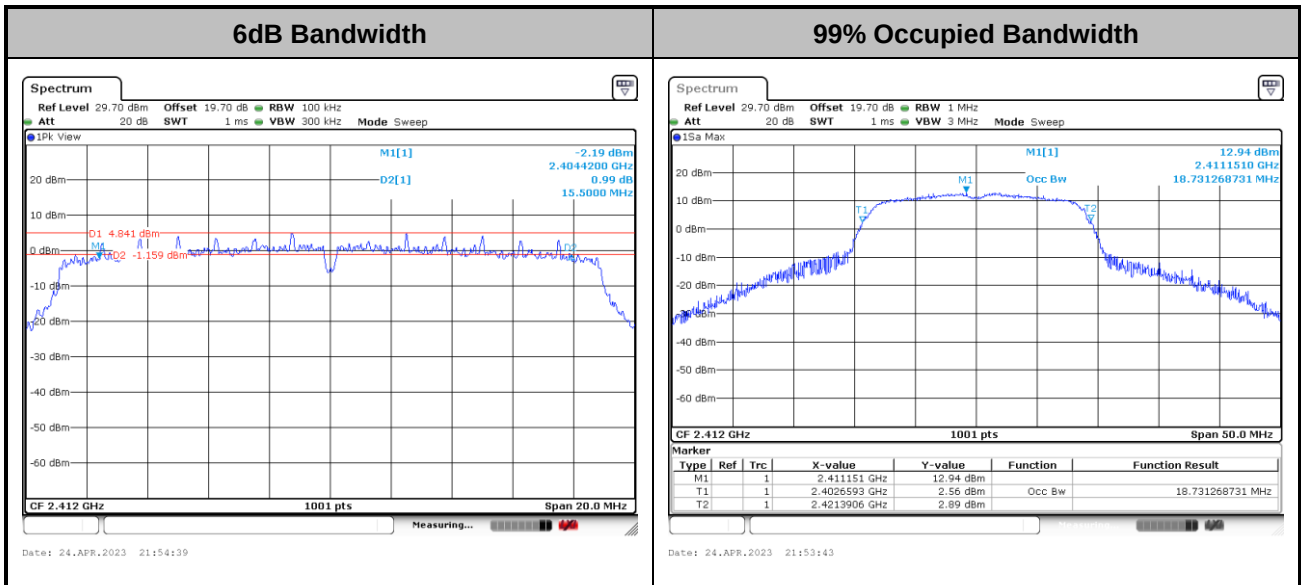
<802.11g>



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

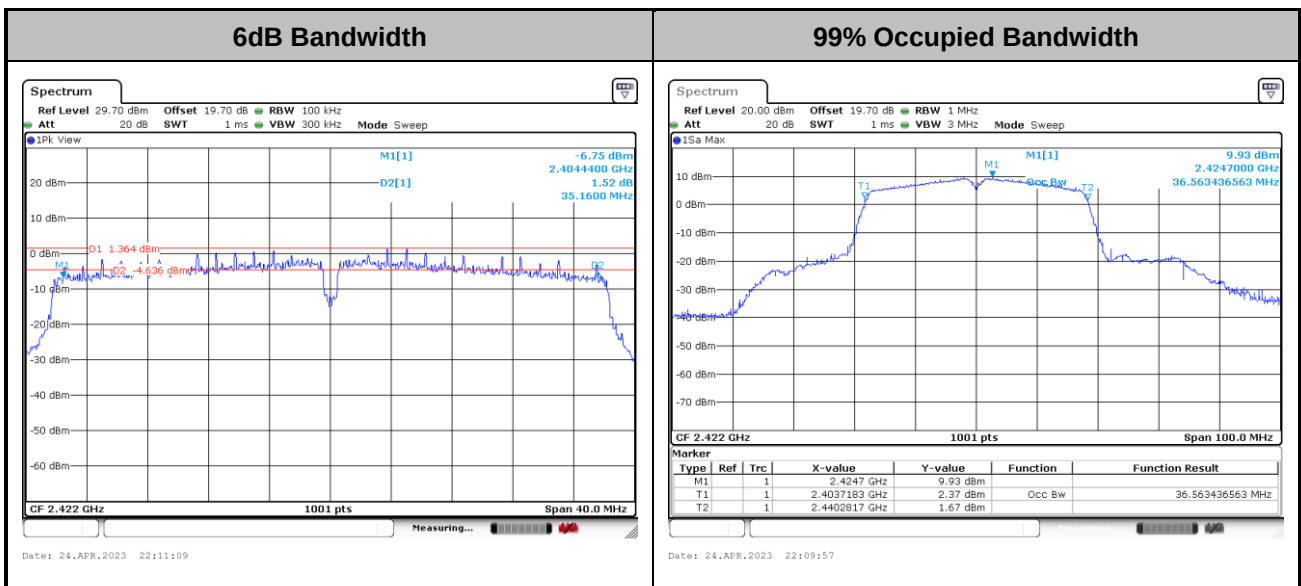


<802.11n HT20>



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

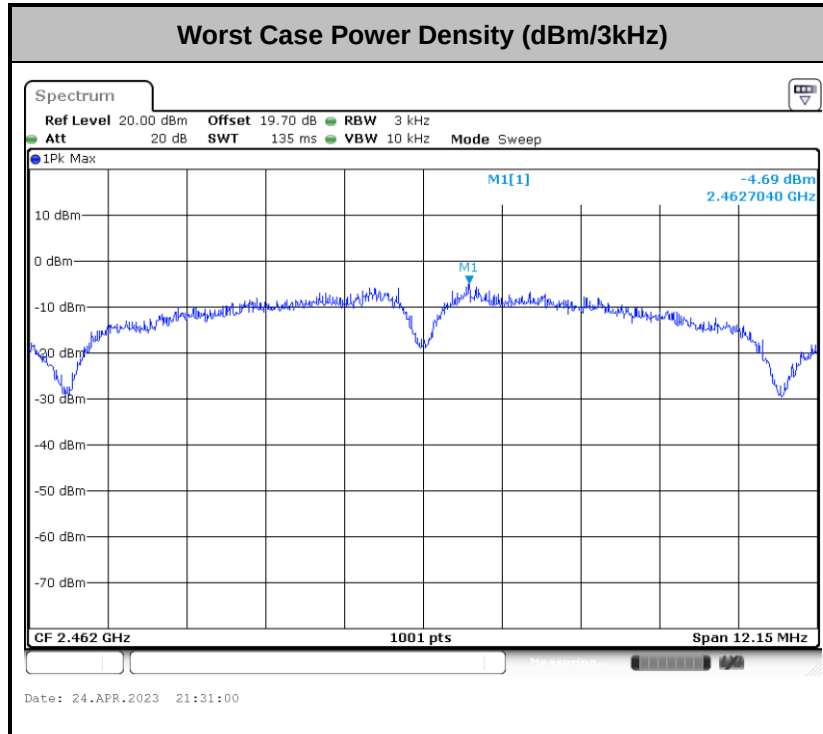
<802.11n HT40>



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

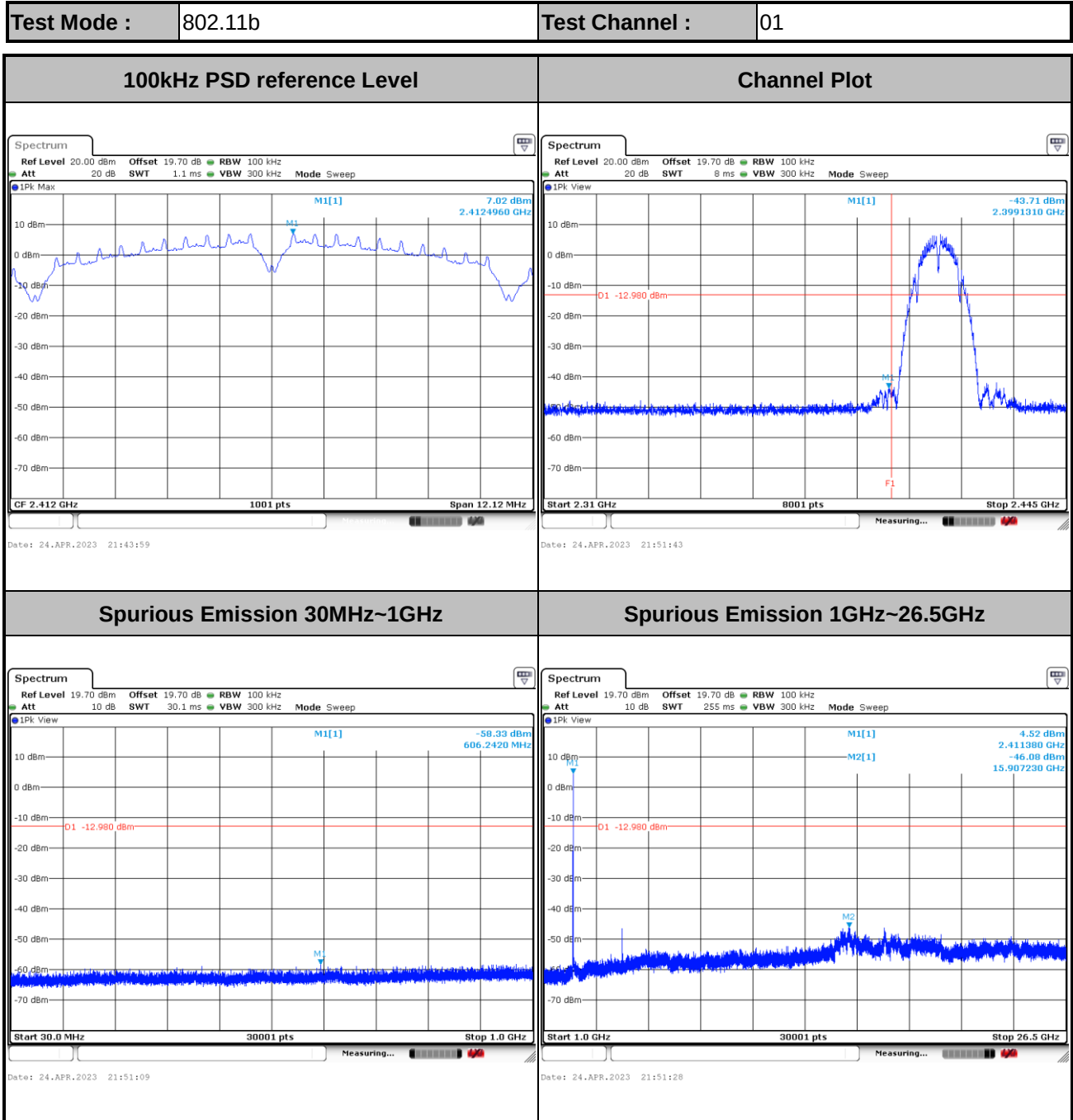


Power Spectral Density(dBm/3kHz)



**Band Edges and Spurious Emission**

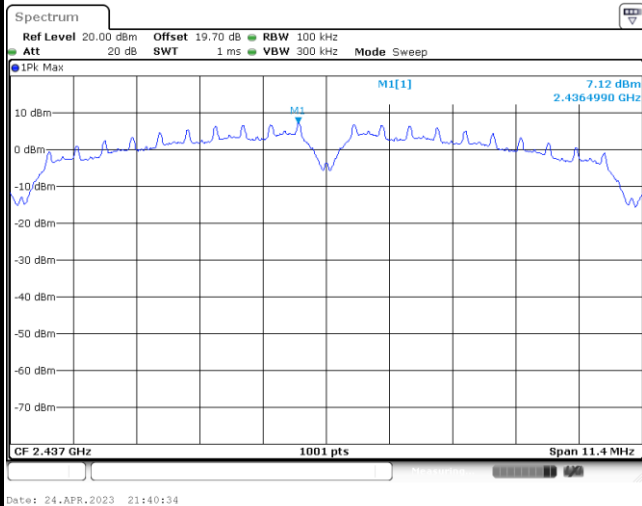
Number of TX = 1, Ant. 4 (Measured)





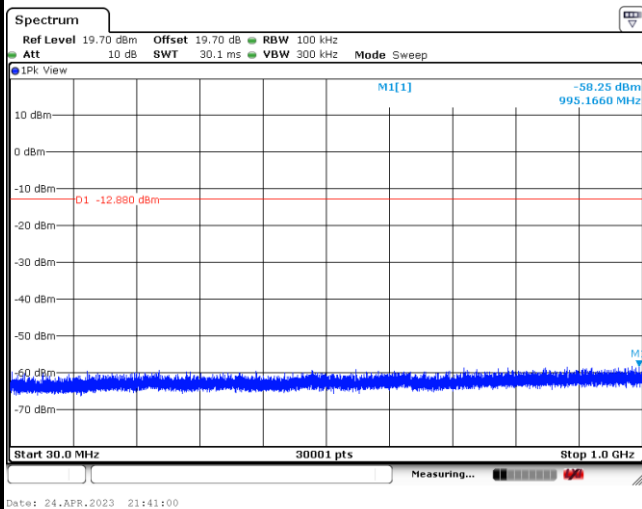
Test Mode :	802.11b	Test Channel :	06
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100kHz PSD reference Level

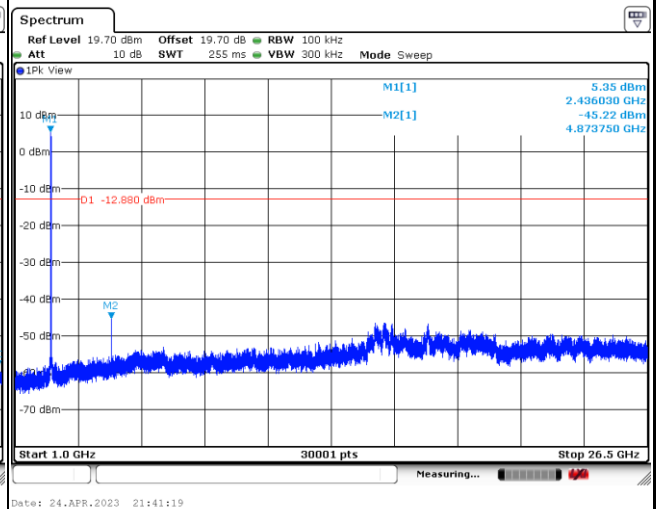


Channel Plot

Spurious Emission 30MHz~1GHz

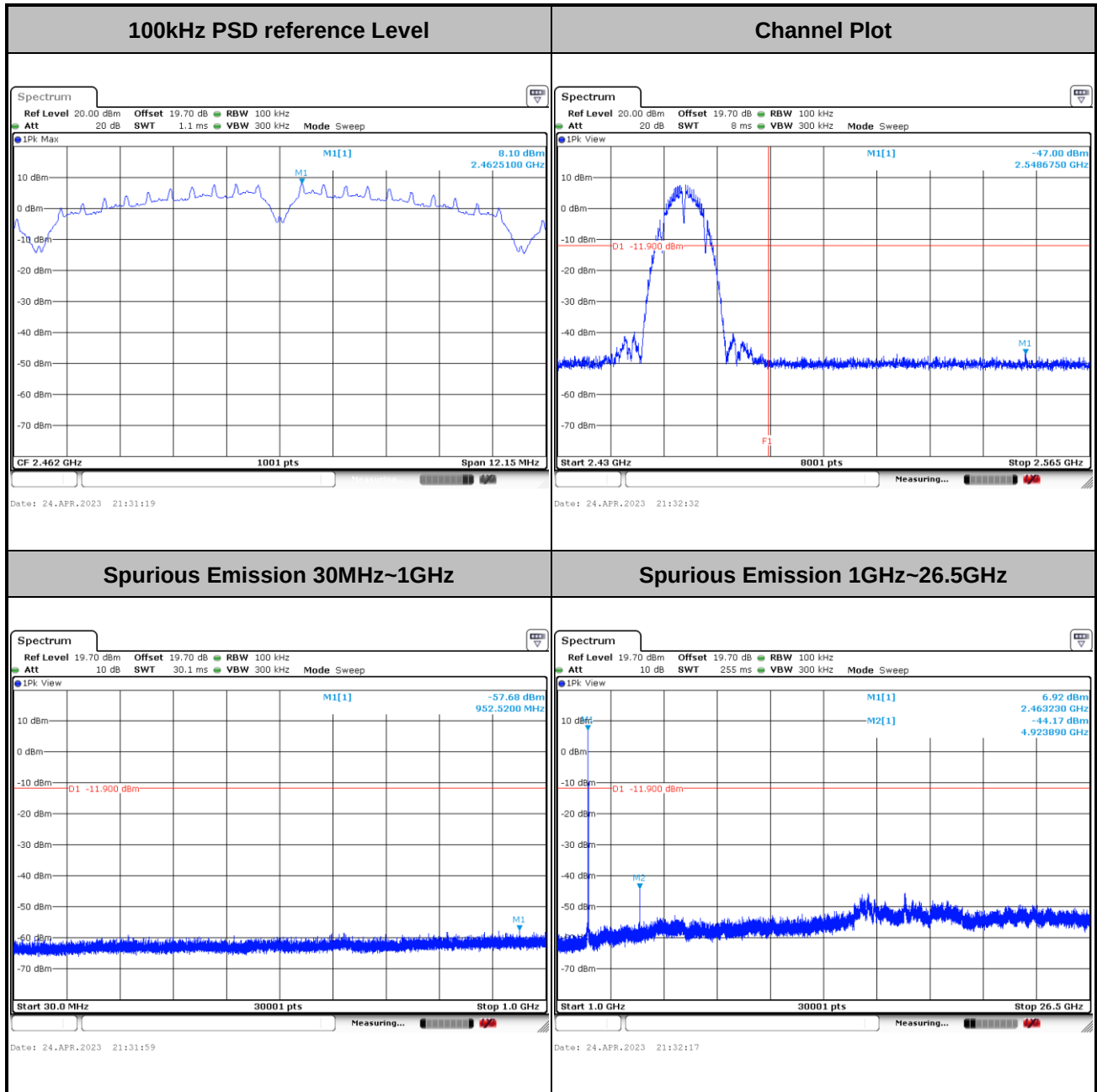


Spurious Emission 1GHz~26.5GHz



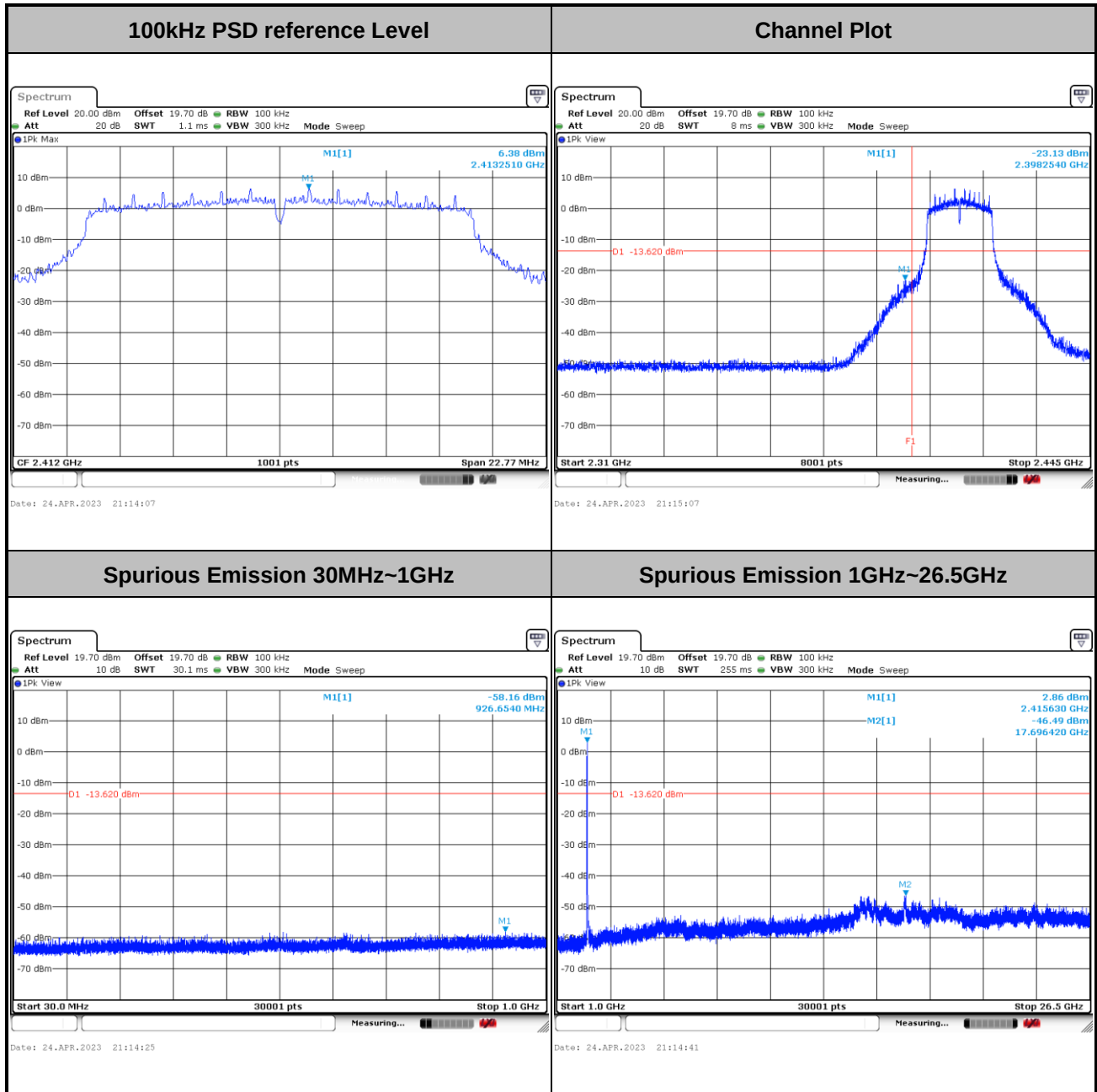


Test Mode :	802.11b	Test Channel :	11
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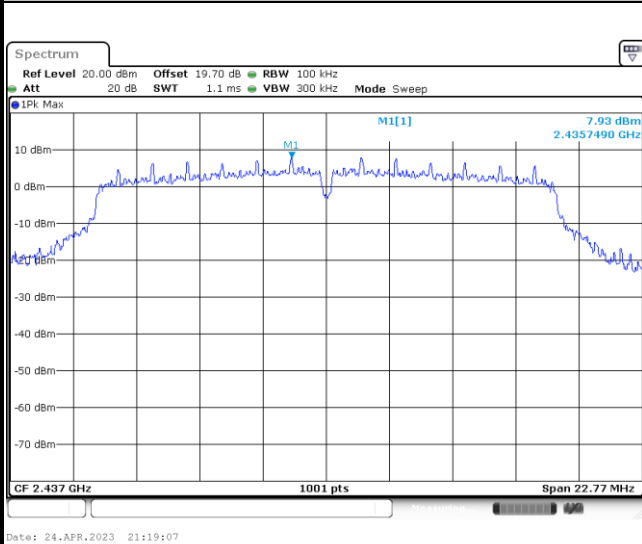
Test Mode :	802.11g	Test Channel :	01
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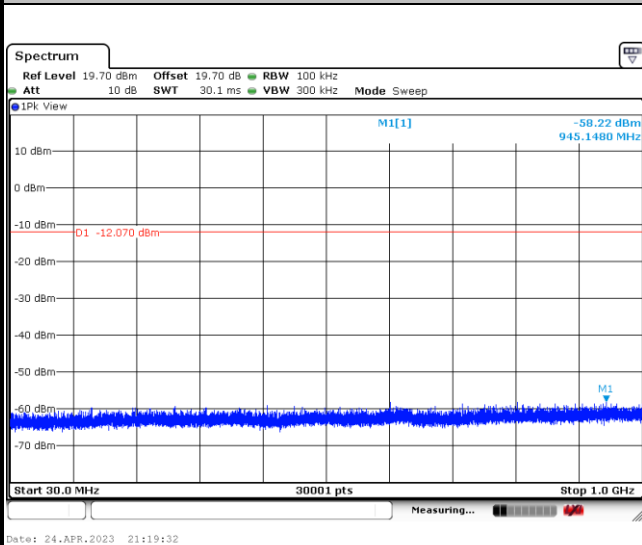
Test Mode :	802.11g	Test Channel :	06
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100kHz PSD reference Level

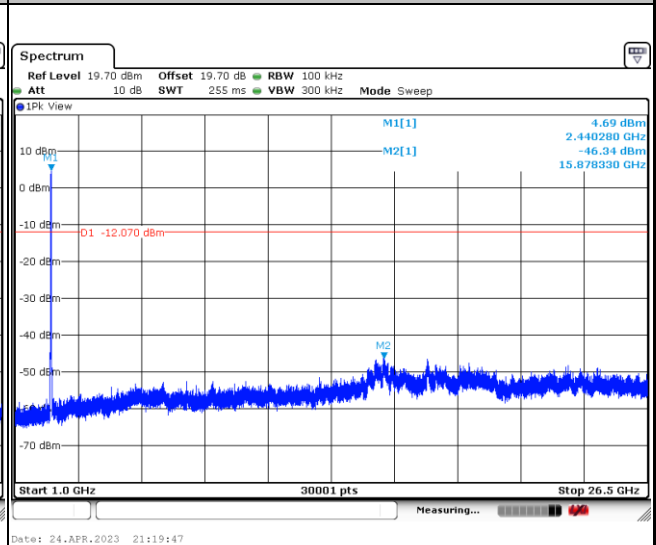


Channel Plot

Spurious Emission 30MHz~1GHz

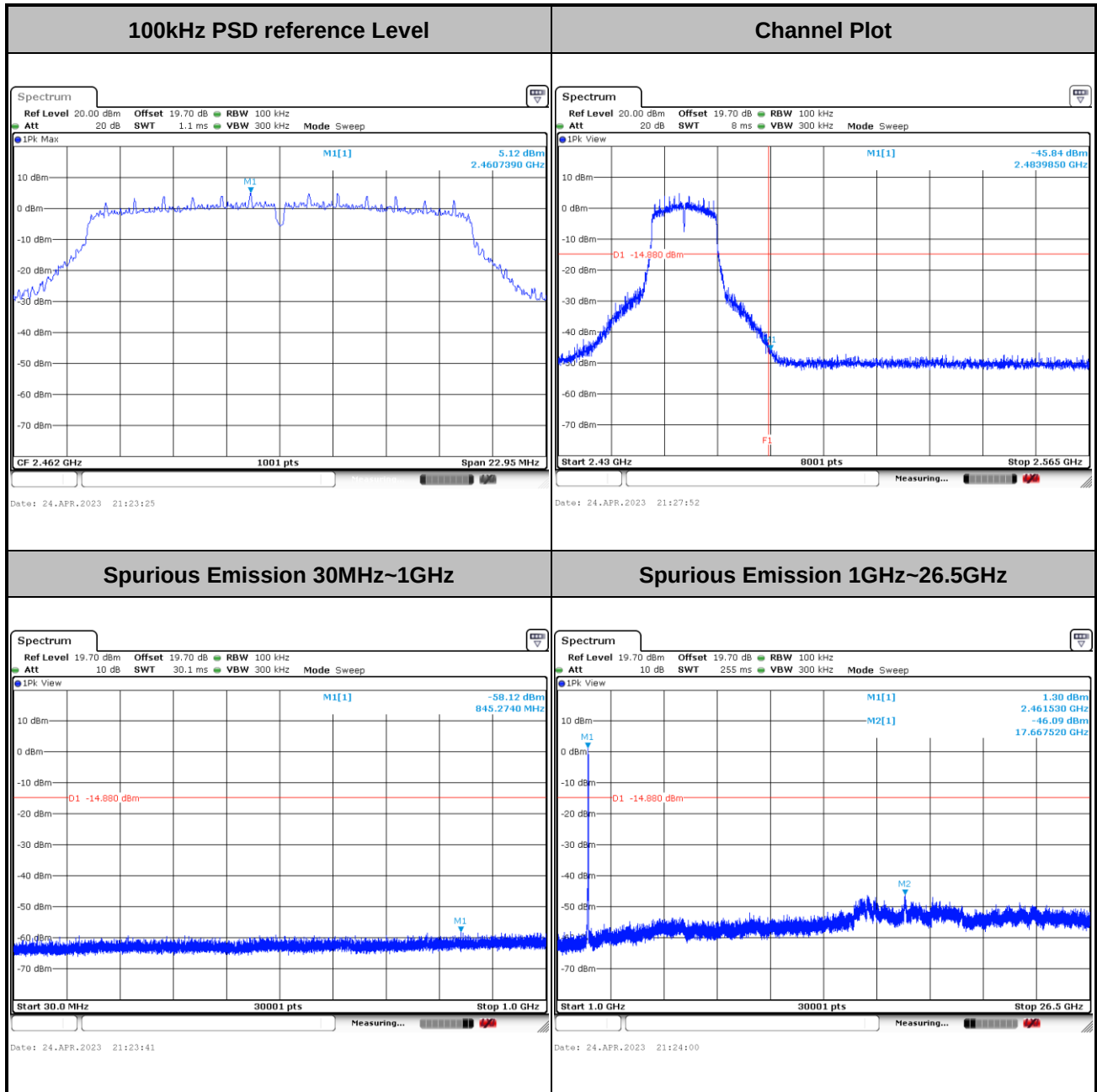


Spurious Emission 1GHz~26.5GHz



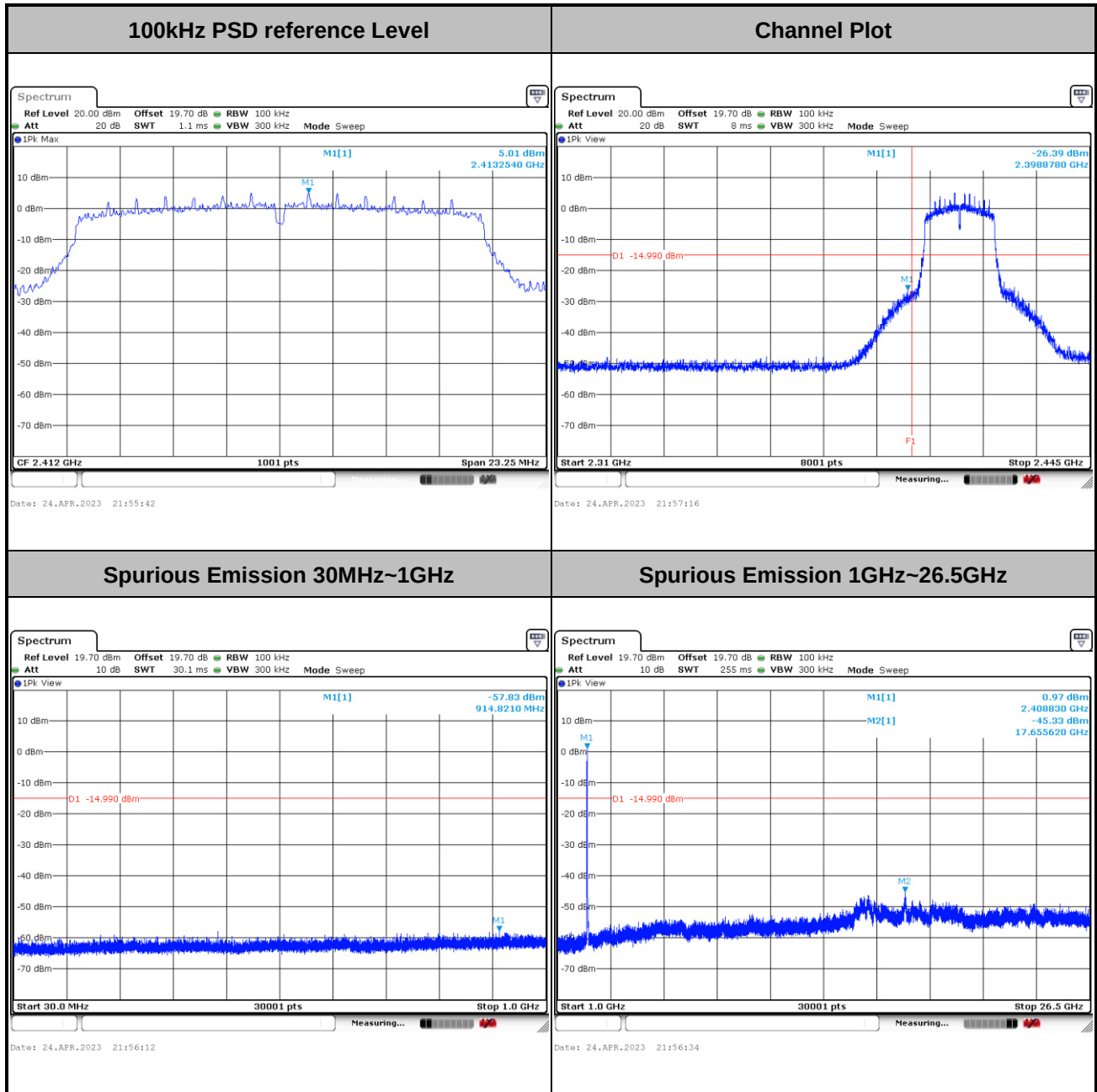


Test Mode :	802.11g	Test Channel :	11
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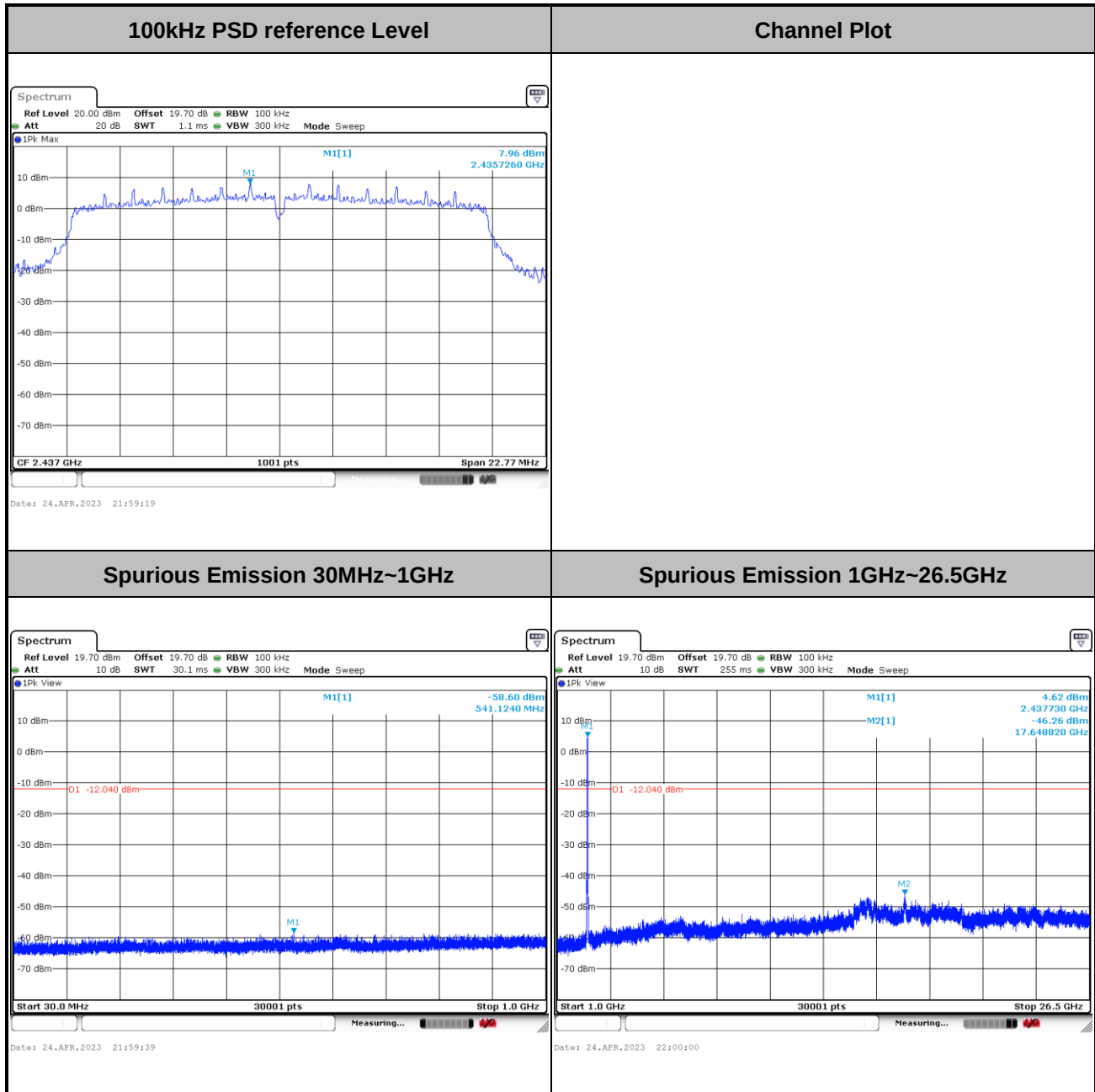


Test Mode :	802.11n HT20	Test Channel :	01
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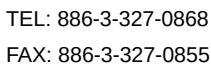


Test Mode :	802.11n HT20	Test Channel :	06
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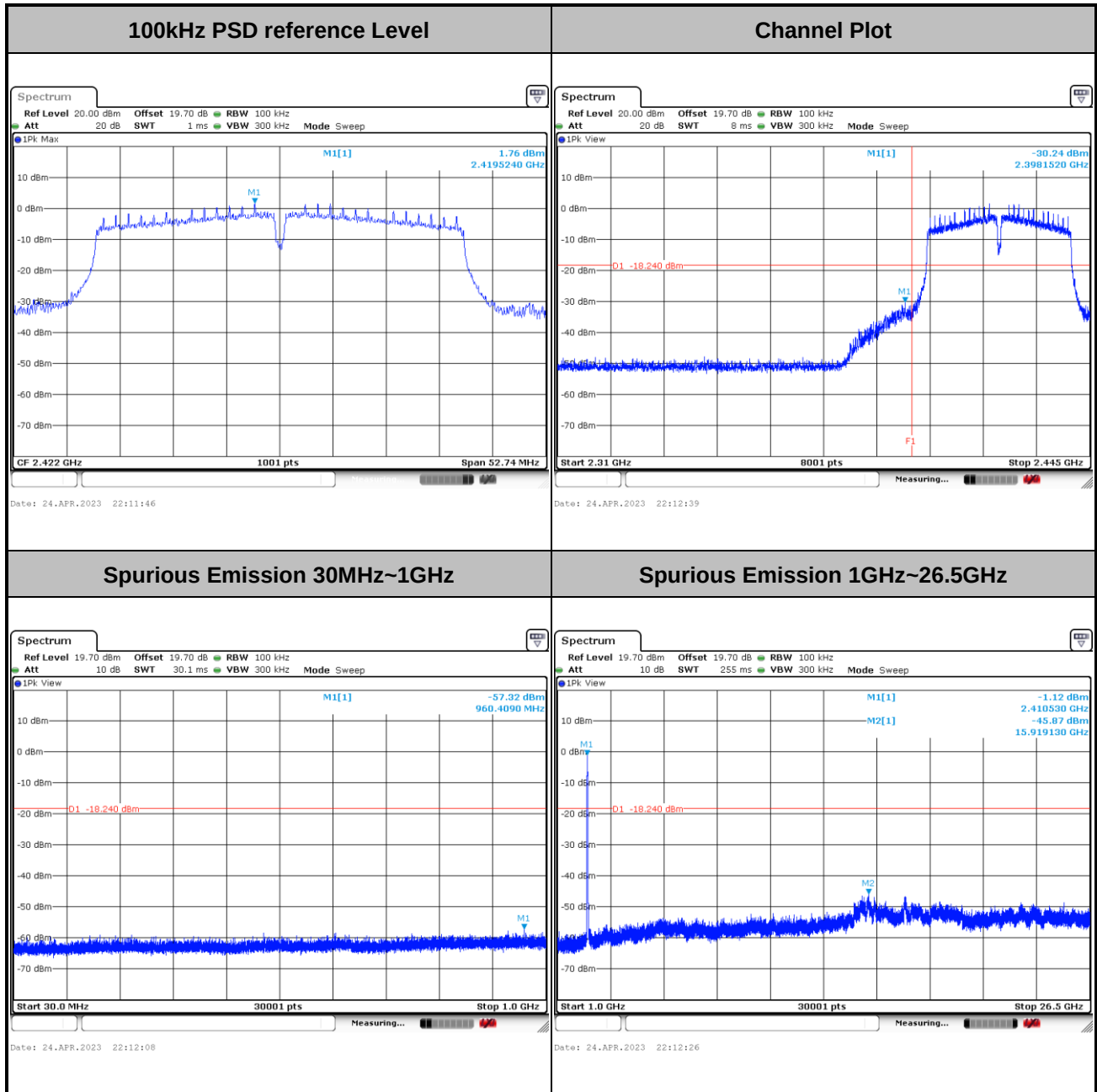


Test Mode :	802.11n HT20	Test Channel :	11
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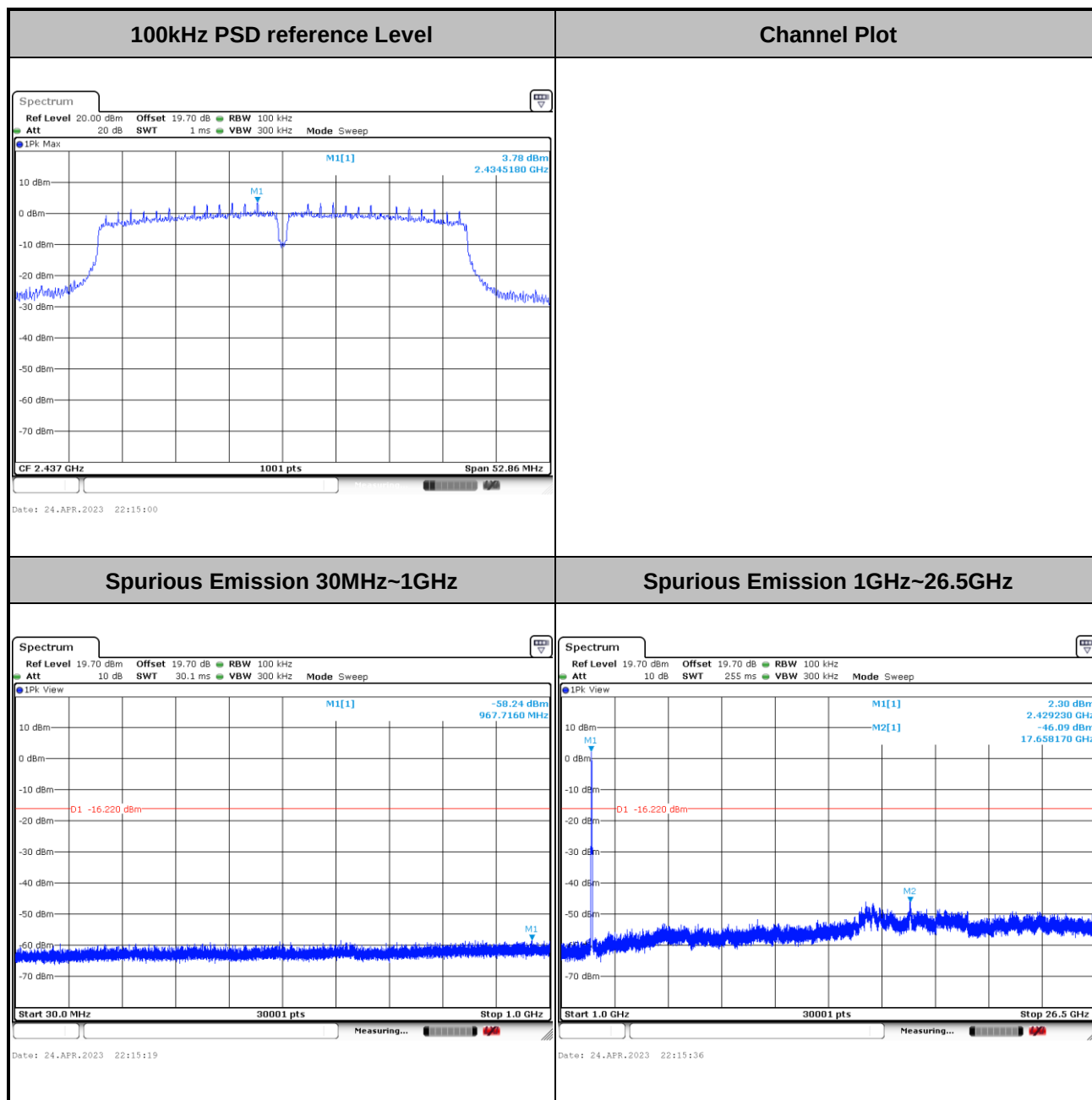


Test Mode :	802.11n HT40	Test Channel :	03
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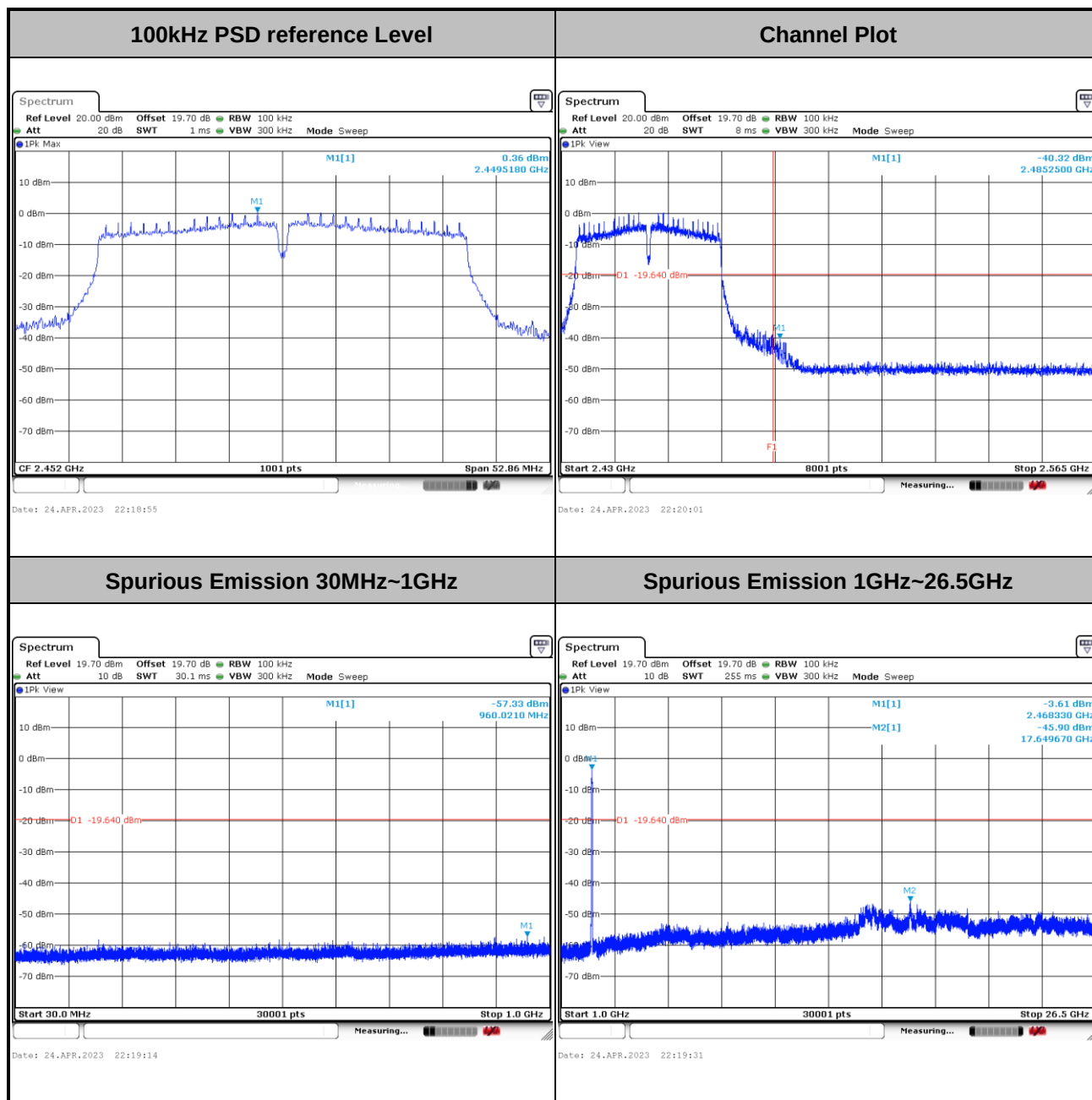


Test Mode :	802.11n HT40	Test Channel :	06
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Test Mode :	802.11n HT40	Test Channel :	09
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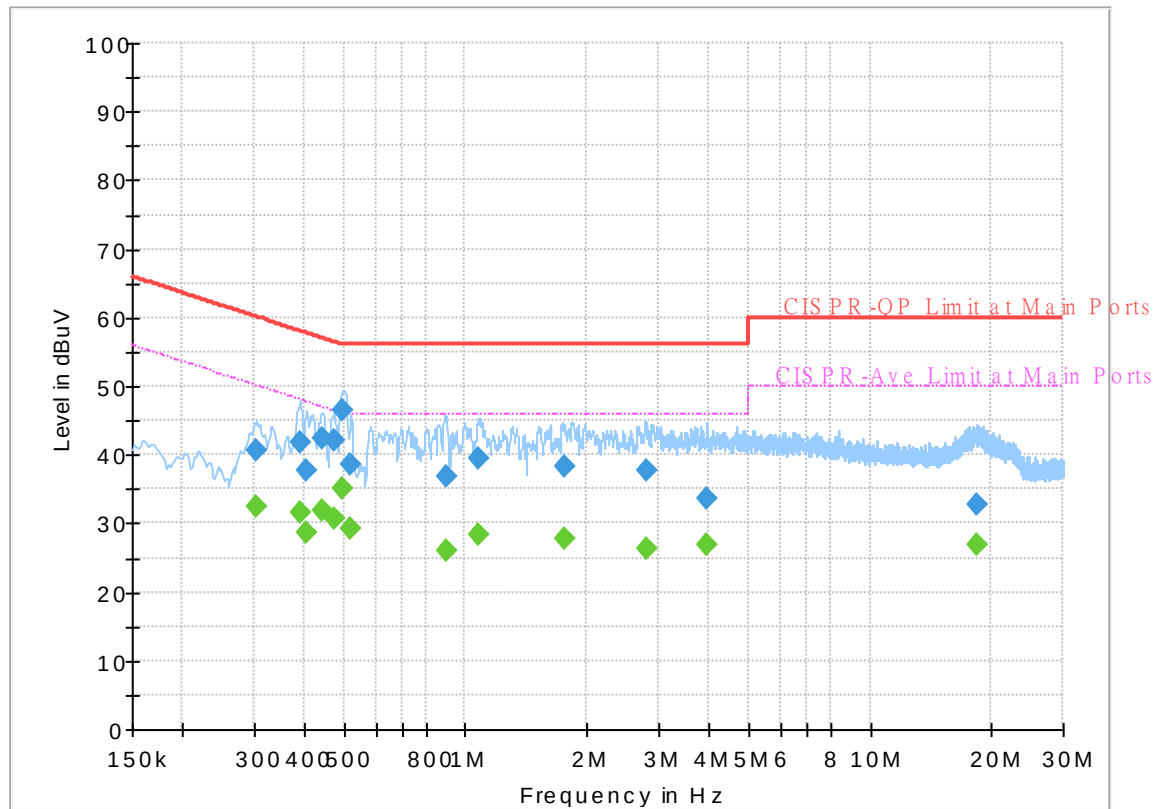
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Calvin Wang	Temperature :	23~26°C
		Relative Humidity :	45~55%

EUT Information

Report NO : 322209
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



Final Result

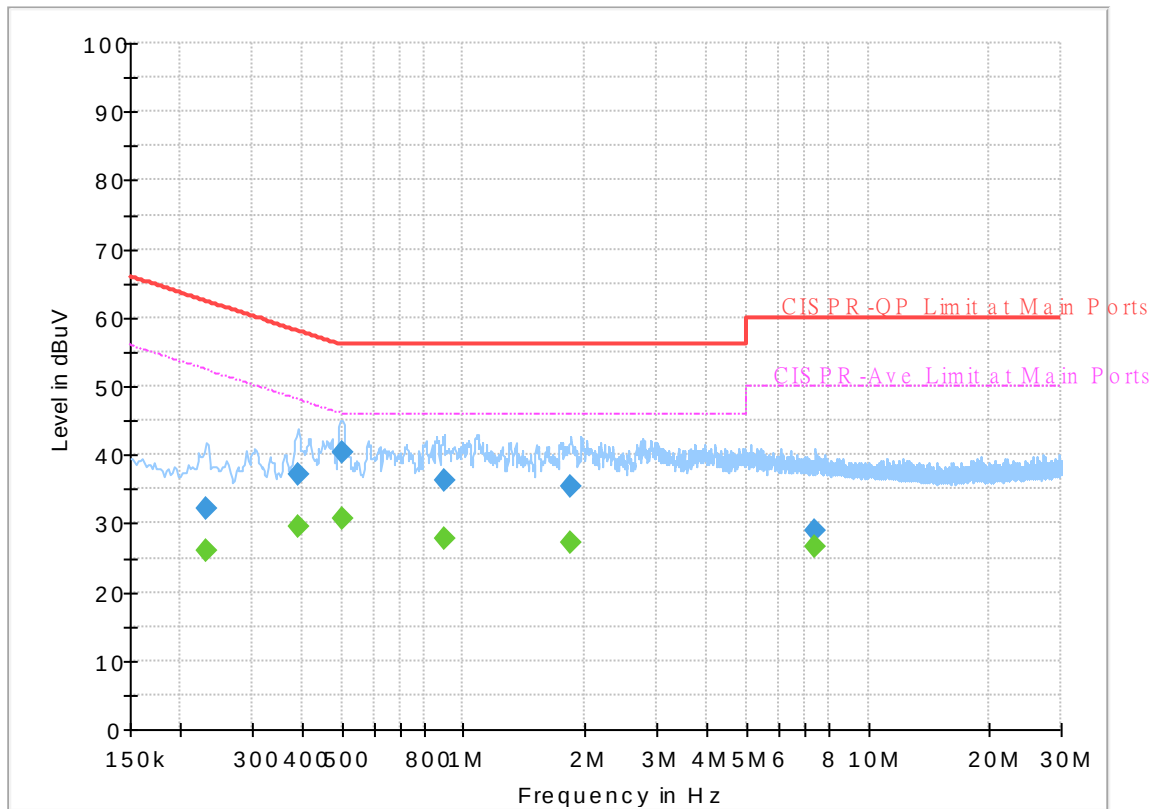
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.305250	---	32.35	50.10	17.75	L1	OFF	19.9
0.305250	40.59	---	60.10	19.51	L1	OFF	19.9
0.388500	---	31.72	48.10	16.38	L1	OFF	19.9
0.388500	41.75	---	58.10	16.35	L1	OFF	19.9
0.406500	---	28.51	47.72	19.21	L1	OFF	19.9
0.406500	37.70	---	57.72	20.02	L1	OFF	19.9
0.442500	---	32.02	47.02	15.00	L1	OFF	19.9
0.442500	42.47	---	57.02	14.55	L1	OFF	19.9
0.474000	---	30.83	46.44	15.61	L1	OFF	19.9
0.474000	42.01	---	56.44	14.43	L1	OFF	19.9
0.498750	---	35.20	46.02	10.82	L1	OFF	19.9
0.498750	46.45	---	56.02	9.57	L1	OFF	19.9
0.521250	---	29.23	46.00	16.77	L1	OFF	19.9
0.521250	38.73	---	56.00	17.27	L1	OFF	19.9
0.897000	---	25.94	46.00	20.06	L1	OFF	19.9
0.897000	36.86	---	56.00	19.14	L1	OFF	19.9
1.079250	---	28.46	46.00	17.54	L1	OFF	19.9
1.079250	39.55	---	56.00	16.45	L1	OFF	19.9
1.749750	---	27.77	46.00	18.23	L1	OFF	19.9
1.749750	38.22	---	56.00	17.78	L1	OFF	19.9
2.789250	---	26.21	46.00	19.79	L1	OFF	19.9

2.789250	37.86	---	56.00	18.14	L1	OFF	19.9
3.930000	---	26.97	46.00	19.03	L1	OFF	20.0
3.930000	33.61	---	56.00	22.39	L1	OFF	20.0
18.397500	---	27.03	50.00	22.97	L1	OFF	20.5
18.397500	32.83	---	60.00	27.17	L1	OFF	20.5

EUT Information

Report NO : 322209
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)
0.231000	---	26.11	52.41	26.30	N	OFF	19.9
0.231000	32.28	---	62.41	30.13	N	OFF	19.9
0.388500	---	29.67	48.10	18.43	N	OFF	19.9
0.388500	37.01	---	58.10	21.09	N	OFF	19.9
0.503250	---	30.76	46.00	15.24	N	OFF	19.9
0.503250	40.30	---	56.00	15.70	N	OFF	19.9
0.894750	---	27.82	46.00	18.18	N	OFF	19.9
0.894750	36.24	---	56.00	19.76	N	OFF	19.9
1.844250	---	27.33	46.00	18.67	N	OFF	19.9
1.844250	35.28	---	56.00	20.72	N	OFF	19.9
7.426500	---	26.54	50.00	23.46	N	OFF	20.1
7.426500	28.89	---	60.00	31.11	N	OFF	20.1



Appendix C. Radiated Spurious Emission

Test Engineer :	Leo Li	Temperature :	18.3~24.5°C
		Relative Humidity :	42.3~68.5%

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.	
4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2328.06	52.24	-21.76	74	38.17	27.1	18.75	31.78	197	18	P	H
		2389.905	40.55	-13.45	54	26.4	27.1	18.87	31.82	197	18	A	H
	*	2412	101.07	-	-	86.92	27.08	18.91	31.84	197	18	P	H
	*	2412	97.93	-	-	83.78	27.08	18.91	31.84	197	18	A	H
													H
													H
		2328.27	51.92	-22.08	74	37.85	27.1	18.75	31.78	273	72	P	V
		2387.385	40.57	-13.43	54	26.42	27.1	18.87	31.82	273	72	A	V
	*	2412	100.54	-	-	86.39	27.08	18.91	31.84	273	72	P	V
	*	2412	97.38	-	-	83.23	27.08	18.91	31.84	273	72	A	V
													V
													V
802.11b CH 06 2437MHz		2356.24	52.31	-21.69	74	38.21	27.1	18.8	31.8	194	20	P	H
		2390	40.51	-13.49	54	26.36	27.1	18.87	31.82	194	20	A	H
	*	2437	101.72	-	-	87.6	27.03	18.95	31.86	194	20	P	H
	*	2437	98.6	-	-	84.48	27.03	18.95	31.86	194	20	A	H
		2490.4	51.51	-22.49	74	37.51	26.84	19.05	31.89	194	20	P	H
		2483.76	40.54	-13.46	54	26.53	26.86	19.04	31.89	194	20	A	H
		2367.12	51.19	-22.81	74	37.07	27.1	18.83	31.81	241	75	P	V
		2388.56	40.46	-13.54	54	26.31	27.1	18.87	31.82	241	75	A	V
	*	2437	100.92	-	-	86.8	27.03	18.95	31.86	241	75	P	V
	*	2437	97.77	-	-	83.65	27.03	18.95	31.86	241	75	A	V
		2485.76	51.49	-22.51	74	37.48	26.86	19.04	31.89	241	75	P	V
		2483.76	40.36	-13.64	54	26.35	26.86	19.04	31.89	241	75	A	V



802.11b CH 11 2462MHz	*	2462	102.82	-	-	88.74	26.95	19	31.87	202	20	P	H
	*	2462	99.72	-	-	85.64	26.95	19	31.87	202	20	A	H
		2483.68	51.39	-22.61	74	37.37	26.87	19.04	31.89	202	20	P	H
		2483.52	40.78	-13.22	54	26.76	26.87	19.04	31.89	202	20	A	H
													H
													H
	*	2462	101.91	-	-	87.83	26.95	19	31.87	292	70	P	V
	*	2462	98.84	-	-	84.76	26.95	19	31.87	292	70	A	V
		2483.68	51.23	-22.77	74	37.21	26.87	19.04	31.89	292	70	P	V
		2483.6	40.52	-13.48	54	26.5	26.87	19.04	31.89	292	70	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBμV/m)	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	54.11	-19.89	74	41.54	32.65	12.96	33.04	195	339	P	H
		4824	50.97	-3.03	54	38.4	32.65	12.96	33.04	195	339	A	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		4824	49.11	-24.89	74	36.54	32.65	12.96	33.04	100	288	P	V
		4824	44.08	-9.92	54	31.51	32.65	12.96	33.04	100	288	A	V
													V
													V
													V
													V
													V
													V
													V



WIFI Ant. 4	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	53.73	-20.27	74	40.99	32.75	13.02	33.03	193	360	P	H
		4874	50.9	-3.1	54	38.16	32.75	13.02	33.03	193	360	A	H
		7311	49.77	-24.23	74	32.06	37.42	15.89	35.6	200	296	P	H
		7311	40.49	-13.51	54	22.78	37.42	15.89	35.6	200	296	A	H
													H
													H
													H
													H
													H
													H
													H
													H
		4874	49.06	-24.94	74	36.32	32.75	13.02	33.03	100	284	P	V
		4874	45.74	-8.26	54	33	32.75	13.02	33.03	100	284	A	V
		7311	49.88	-24.12	74	32.17	37.42	15.89	35.6	300	34	P	V
		7311	40.46	-13.54	54	22.75	37.42	15.89	35.6	300	34	A	V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 4	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	53.48	-20.52	74	40.63	32.8	13.07	33.02	177	334	P	H
		4924	50.81	-3.19	54	37.96	32.8	13.07	33.02	177	334	A	H
		7386	50.77	-23.23	74	33.2	37.28	15.96	35.67	100	354	P	H
		7386	43.72	-10.28	54	26.15	37.28	15.96	35.67	100	354	A	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		4924	49.72	-24.28	74	36.87	32.8	13.07	33.02	392	266	P	V
		4924	44.99	-9.01	54	32.14	32.8	13.07	33.02	392	266	A	V
		7386	51.38	-22.62	74	33.81	37.28	15.96	35.67	111	282	P	V
		7386	43.89	-10.11	54	26.32	37.28	15.96	35.67	111	282	A	V
													V
													V
													V
													V
													V
													V
													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 (Band Edge @ 3m)

WIFI Ant. 4	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	63.59	-10.41	74	49.44	27.1	18.87	31.82	157	360	P	H
		2390	49.53	-4.47	54	35.38	27.1	18.87	31.82	157	360	A	H
	*	2412	103.79	-	-	89.64	27.08	18.91	31.84	157	360	P	H
	*	2412	96.36	-	-	82.21	27.08	18.91	31.84	157	360	A	H
													H
													H
		2388.96	63.17	-10.83	74	49.02	27.1	18.87	31.82	278	72	P	V
		2390	50.32	-3.68	54	36.17	27.1	18.87	31.82	278	72	A	V
	*	2412	104.03	-	-	89.88	27.08	18.91	31.84	278	72	P	V
	*	2412	96.17	-	-	82.02	27.08	18.91	31.84	278	72	A	V
													V
													V
802.11g CH 06 2437MHz		2389.68	52.32	-21.68	74	38.17	27.1	18.87	31.82	151	20	P	H
		2390	41.74	-12.26	54	27.59	27.1	18.87	31.82	151	20	A	H
	*	2437	107.58	-	-	93.46	27.03	18.95	31.86	151	20	P	H
	*	2437	100.27	-	-	86.15	27.03	18.95	31.86	151	20	A	H
		2484.32	51.71	-22.29	74	37.7	26.86	19.04	31.89	151	20	P	H
		2483.52	42.28	-11.72	54	28.26	26.87	19.04	31.89	151	20	A	H
		2387.28	51.53	-22.47	74	37.38	27.1	18.87	31.82	243	69	P	V
		2389.52	41.66	-12.34	54	27.51	27.1	18.87	31.82	243	69	A	V
	*	2437	106.22	-	-	92.1	27.03	18.95	31.86	243	69	P	V
	*	2437	98.36	-	-	84.24	27.03	18.95	31.86	243	69	A	V
		2487.04	51.16	-22.84	74	37.16	26.85	19.04	31.89	243	69	P	V
		2484.16	41.84	-12.16	54	27.83	26.86	19.04	31.89	243	69	A	V



802.11g CH 11 2462MHz	*	2462	105.92	-	-	91.84	26.95	19	31.87	185	20	P	H
	*	2462	98.18	-	-	84.1	26.95	19	31.87	185	20	A	H
		2483.68	62.97	-11.03	74	48.95	26.87	19.04	31.89	185	20	P	H
		2483.52	49.64	-4.36	54	35.62	26.87	19.04	31.89	185	20	A	H
													H
													H
	*	2462	104.94	-	-	90.86	26.95	19	31.87	191	126	P	V
	*	2462	97.33	-	-	83.25	26.95	19	31.87	191	126	A	V
		2483.72	64.16	-9.84	74	50.14	26.87	19.04	31.89	191	126	P	V
		2483.56	49.68	-4.32	54	35.66	26.87	19.04	31.89	191	126	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBμV/m)	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		4824	50.28	-23.72	74	37.71	32.65	12.96	33.04	177	340	P	H
		4824	40.12	-13.88	54	27.55	32.65	12.96	33.04	177	340	A	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		4824	45.39	-28.61	74	32.82	32.65	12.96	33.04	400	300	P	V
		4824	35.63	-18.37	54	23.06	32.65	12.96	33.04	400	300	A	V
													V
													V
													V
													V
													V
													V
													V



WIFI Ant. 4	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	50.83	-23.17	74	38.09	32.75	13.02	33.03	178	343	P	H
		4874	39.77	-14.23	54	27.03	32.75	13.02	33.03	178	343	A	H
		7311	55.34	-18.66	74	37.63	37.42	15.89	35.6	135	349	P	H
		7311	44.43	-9.57	54	26.72	37.42	15.89	35.6	135	349	A	H
													H
													H
													H
													H
													H
													H
													H
													H
		4874	47.45	-26.55	74	34.71	32.75	13.02	33.03	400	301	P	V
		4874	36.45	-17.55	54	23.71	32.75	13.02	33.03	400	301	A	V
		7311	55.08	-18.92	74	37.37	37.42	15.89	35.6	207	38	P	V
		7311	44.15	-9.85	54	26.44	37.42	15.89	35.6	207	38	A	V
													V
													V
													V
													V
													V
													V
													V

[illegible]



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 4	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)
802.11n HT20 CH 01 2412MHz		2389.695	61.39	-12.61	74	47.24	27.1	18.87	31.82	197	7	P	H
		2390	49.75	-4.25	54	35.6	27.1	18.87	31.82	197	7	A	H
	*	2412	103.84	-	-	89.69	27.08	18.91	31.84	197	7	P	H
	*	2412	96.58	-	-	82.43	27.08	18.91	31.84	197	7	A	H
													H
													H
		2390	61.77	-12.23	74	47.62	27.1	18.87	31.82	301	78	P	V
		2389.695	47.8	-6.2	54	33.65	27.1	18.87	31.82	301	78	A	V
	*	2412	100.75	-	-	86.6	27.08	18.91	31.84	301	78	P	V
	*	2412	93.05	-	-	78.9	27.08	18.91	31.84	301	78	A	V
													V
													V
802.11n HT20 CH 06 2437MHz		2354.64	51.05	-22.95	74	36.95	27.1	18.8	31.8	195	61	P	H
		2387.44	41.47	-12.53	54	27.32	27.1	18.87	31.82	195	61	A	H
	*	2437	100.39	-	-	86.27	27.03	18.95	31.86	195	61	P	H
	*	2437	92.64	-	-	78.52	27.03	18.95	31.86	195	61	A	H
		2486.16	51.27	-22.73	74	37.26	26.86	19.04	31.89	195	61	P	H
		2485.92	41.37	-12.63	54	27.36	26.86	19.04	31.89	195	61	A	H
		2387.28	51.6	-22.4	74	37.45	27.1	18.87	31.82	243	69	P	V
		2388.08	41.72	-12.28	54	27.57	27.1	18.87	31.82	243	69	A	V
	*	2437	105.85	-	-	91.73	27.03	18.95	31.86	243	69	P	V
	*	2437	98.37	-	-	84.25	27.03	18.95	31.86	243	69	A	V
		2483.84	51.39	-22.61	74	37.38	26.86	19.04	31.89	243	69	P	V
		2483.68	41.99	-12.01	54	27.97	26.87	19.04	31.89	243	69	A	V



802.11n HT20 CH 11 2462MHz	*	2462	103.53	-	-	89.45	26.95	19	31.87	183	360	P	H
	*	2462	95.55	-	-	81.47	26.95	19	31.87	183	360	A	H
		2483.88	63.73	-10.27	74	49.72	26.86	19.04	31.89	183	360	P	H
		2483.52	48.35	-5.65	54	34.33	26.87	19.04	31.89	183	360	A	H
													H
													H
	*	2462	101.96	-	-	87.88	26.95	19	31.87	226	77	P	V
	*	2462	94.34	-	-	80.26	26.95	19	31.87	226	77	A	V
		2483.52	63.68	-10.32	74	49.66	26.87	19.04	31.89	226	77	P	V
		2483.52	47.57	-6.43	54	33.55	26.87	19.04	31.89	226	77	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

[illegible]



WIFI Ant. 4	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)
802.11n HT20 CH 06 2437MHz		4874	51.38	-22.62	74	38.64	32.75	13.02	33.03	152	343	P	H
		4874	39.62	-14.38	54	26.88	32.75	13.02	33.03	152	343	A	H
		7311	53.67	-20.33	74	35.96	37.42	15.89	35.6	398	300	P	H
		7311	42.66	-11.34	54	24.95	37.42	15.89	35.6	398	300	A	H
													H
													H
													H
													H
													H
													H
													H
													H
		4874	46.59	-27.41	74	33.85	32.75	13.02	33.03	398	300	P	V
		4874	36.35	-17.65	54	23.61	32.75	13.02	33.03	398	300	A	V
		7311	53.7	-20.3	74	35.99	37.42	15.89	35.6	178	36	P	V
		7311	43.04	-10.96	54	25.33	37.42	15.89	35.6	178	36	A	V
													V
													V
													V
													V
													V
													V
													V
													V

[illegible]



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 4	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)
802.11n HT40 CH 03 2422MHz		2389.68	63.59	-10.41	74	49.44	27.1	18.87	31.82	136	15	P	H
		2389.68	50.3	-3.7	54	36.15	27.1	18.87	31.82	136	15	A	H
	*	2422	99.25	-	-	85.11	27.06	18.93	31.85	136	15	P	H
	*	2422	91.96	-	-	77.82	27.06	18.93	31.85	136	15	A	H
		2484.88	52.19	-21.81	74	38.18	26.86	19.04	31.89	136	15	P	H
		2483.6	42.89	-11.11	54	28.87	26.87	19.04	31.89	136	15	A	H
		2389.68	63.44	-10.56	74	49.29	27.1	18.87	31.82	311	76	P	V
		2389.36	50.05	-3.95	54	35.9	27.1	18.87	31.82	311	76	A	V
	*	2422	97	-	-	82.86	27.06	18.93	31.85	311	76	P	V
	*	2422	89.87	-	-	75.73	27.06	18.93	31.85	311	76	A	V
		2485.6	51.08	-22.92	74	37.07	26.86	19.04	31.89	311	76	P	V
		2486.96	42.21	-11.79	54	28.21	26.85	19.04	31.89	311	76	A	V
802.11n HT40 CH 06 2437MHz		2388.24	55.48	-18.52	74	41.33	27.1	18.87	31.82	230	24	P	H
		2390	45.45	-8.55	54	31.3	27.1	18.87	31.82	230	24	A	H
	*	2437	100.79	-	-	86.67	27.03	18.95	31.86	230	24	P	H
	*	2437	93.4	-	-	79.28	27.03	18.95	31.86	230	24	A	H
		2483.84	61.74	-12.26	74	47.73	26.86	19.04	31.89	230	24	P	H
		2483.6	49.59	-4.41	54	35.57	26.87	19.04	31.89	230	24	A	H
		2387.92	55	-19	74	40.85	27.1	18.87	31.82	227	93	P	V
		2390	45.85	-8.15	54	31.7	27.1	18.87	31.82	227	93	A	V
	*	2437	99.92	-	-	85.8	27.03	18.95	31.86	227	93	P	V
	*	2437	92.7	-	-	78.58	27.03	18.95	31.86	227	93	A	V
		2485.12	61.03	-12.97	74	47.02	26.86	19.04	31.89	227	93	P	V
		2483.52	50.18	-3.82	54	36.16	26.87	19.04	31.89	227	93	A	V



802.11n HT40 CH 09 2452MHz		2384.88	52.83	-21.17	74	38.69	27.1	18.86	31.82	196	21	P	H
		2372.56	42.24	-11.76	54	28.11	27.1	18.84	31.81	196	21	A	H
	*	2452	99.56	-	-	85.46	26.99	18.98	31.87	196	21	P	H
	*	2452	92.02	-	-	77.92	26.99	18.98	31.87	196	21	A	H
		2483.6	65.92	-8.08	74	51.9	26.87	19.04	31.89	196	21	P	H
		2483.52	50.5	-3.5	54	36.48	26.87	19.04	31.89	196	21	A	H
		2319.92	51.24	-22.76	74	37.18	27.1	18.73	31.77	253	73	P	V
		2381.36	42.16	-11.84	54	28.03	27.1	18.85	31.82	253	73	A	V
	*	2452	96.89	-	-	82.79	26.99	18.98	31.87	253	73	P	V
	*	2452	89.43	-	-	75.33	26.99	18.98	31.87	253	73	A	V
		2484.56	63.95	-10.05	74	49.94	26.86	19.04	31.89	253	73	P	V
		2484.4	48.81	-5.19	54	34.8	26.86	19.04	31.89	253	73	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBμV/m)	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)
802.11n HT40 CH 03 2422MHz		4844	44.45	-29.55	74	31.81	32.69	12.98	33.03	-	-	P	H
		7266	49.17	-24.83	74	31.54	37.33	15.86	35.56	215	189	P	H
		7266	40.52	-13.48	54	22.89	37.33	15.86	35.56	215	189	A	H
													H
													H
													H
		4844	45.18	-28.82	74	32.54	32.69	12.98	33.03	-	-	P	V
		7266	49.02	-24.98	74	31.39	37.33	15.86	35.56	107	203	P	V
		7266	40.26	-13.74	54	22.63	37.33	15.86	35.56	107	203	A	V
													V
													V
													V



WIFI Ant. 4	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)
802.11n HT40 CH 06 2437MHz		4874	46.37	-27.63	74	33.63	32.75	13.02	33.03	-	-	P	H
		7311	51.98	-22.02	74	34.27	37.42	15.89	35.6	100	346	P	H
		7311	43.92	-10.08	54	26.21	37.42	15.89	35.6	100	346	A	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		4874	46.32	-27.68	74	33.58	32.75	13.02	33.03	-	-	P	V
		7311	50.31	-23.69	74	32.6	37.42	15.89	35.6	100	289	P	V
		7311	42.83	-11.17	54	25.12	37.42	15.89	35.6	100	289	A	V
													V
													V
													V
													V
													V
													V

[illegible]

Emission below 1GHz

2.4GHz WIFI 802.11b (LF)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11b LF		31.94	23.15	-16.85	40	30.86	24.02	1.02	32.75	-	-	P	H
		131.85	22.08	-21.42	43.5	35.22	17.41	2.13	32.68	-	-	P	H
		247.28	29.02	-16.98	46	40.62	18.17	2.97	32.74	-	-	P	H
		339.43	26.33	-19.67	46	35.72	19.99	3.43	32.81	-	-	P	H
		770.11	31.8	-14.2	46	31.17	28.3	5.07	32.74	-	-	P	H
		953.44	35.63	-10.37	46	30.23	31.17	5.7	31.47	-	-	P	H
													H
													H
													H
													H
													H
													H
		30	26.33	-13.67	40	33.09	25	0.99	32.75	-	-	P	V
		167.74	19.53	-23.97	43.5	33.99	15.73	2.5	32.69	-	-	P	V
		247.28	22.23	-23.77	46	33.83	18.17	2.97	32.74	-	-	P	V
		435.46	25.45	-20.55	46	31.8	22.71	3.82	32.88	-	-	P	V
		560.59	28.07	-17.93	46	30.4	26.3	4.37	33	-	-	P	V
		949.56	35.48	-10.52	46	30.23	31.07	5.69	31.51	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found.												
	2. All results are PASS against limit line.												
	3. The emission position marked as “-” means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.												



Note symbol

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is Margin 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.	
4		(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 :	Leo Li	Temperature :	18.3~24.5°C
		Relative Humidity :	42.3~68.5%

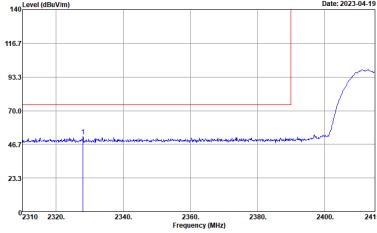
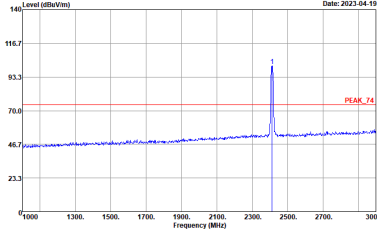
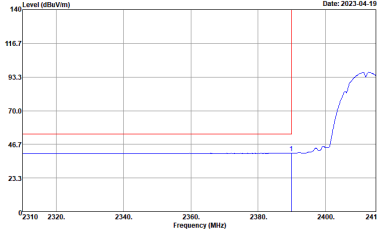
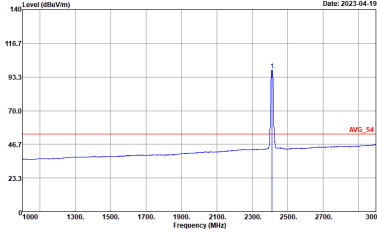
Note symbol

-L	Low channel location
-R	High channel location

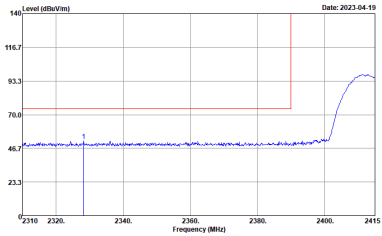
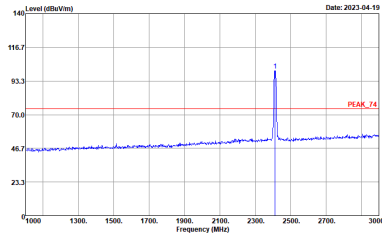
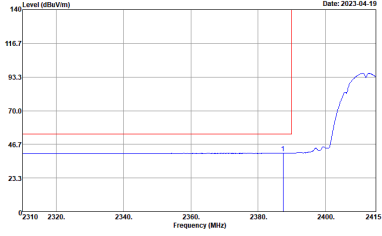
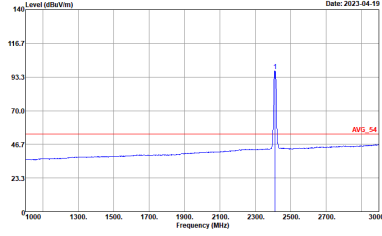


2.4GHz 2400~2483.5MHz

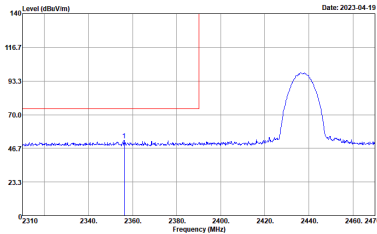
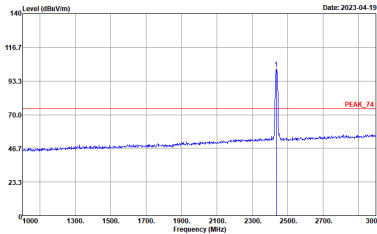
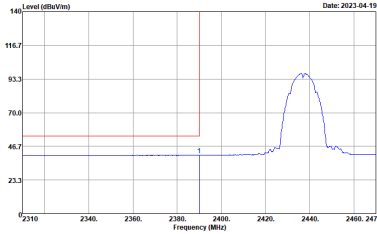
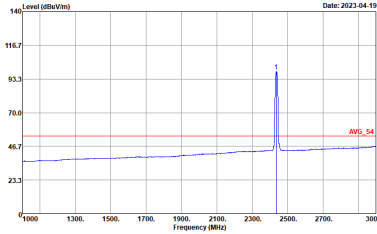
WIFI 802.11b (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
4	Horizontal	Fundamental
Peak	 Site : 03CH23-HV Condition : PEAK_BE_74 3m LE2C05A18EN_230705 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HV Condition : PEAK_74 3m LE2C05A18EN_230705 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH23-HV Condition : AVG_BE_54 3m LE2C05A18EN_230705 HORIZONTAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH23-HV Condition : AVG_54 3m LE2C05A18EN_230705 HORIZONTAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto

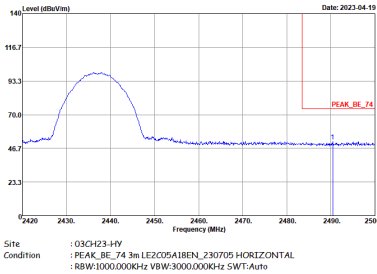
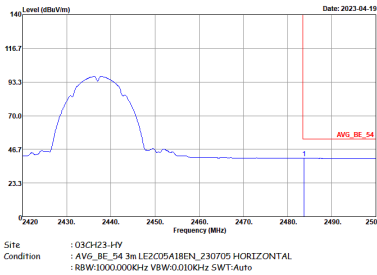


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
4	Vertical	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto
Avg.		

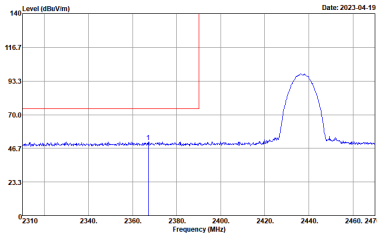
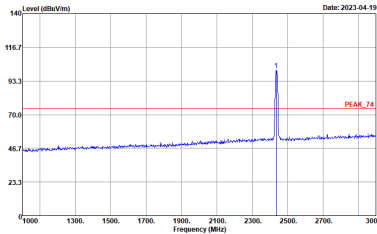
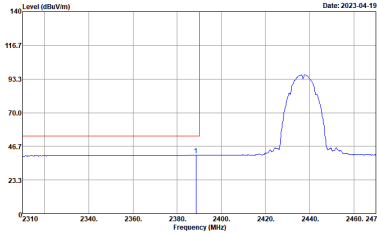
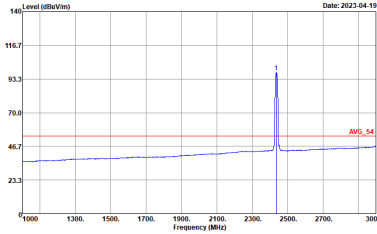


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
4	Horizontal	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto
Avg.		

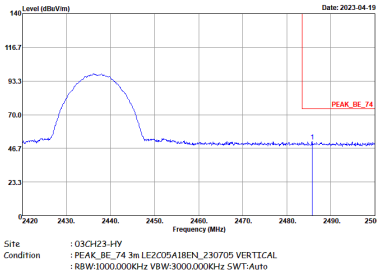
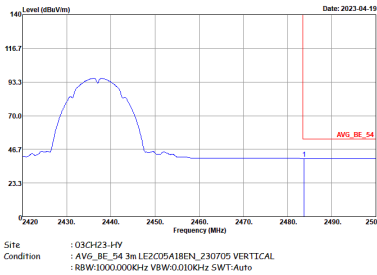


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

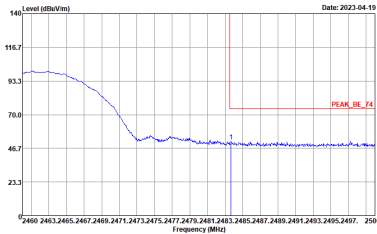
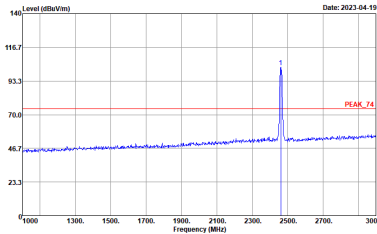
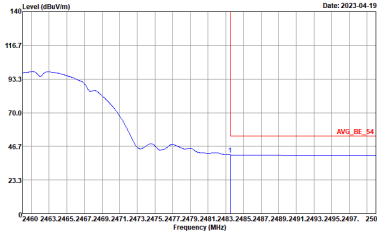
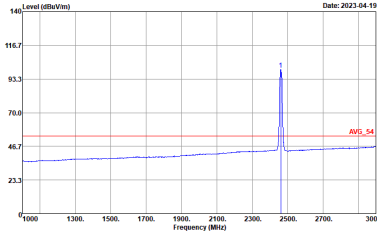


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
4	Vertical	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

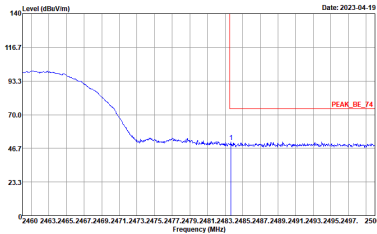
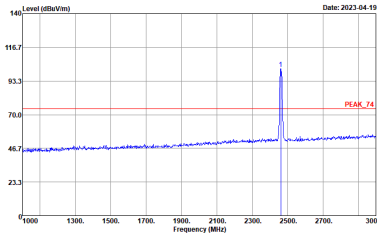
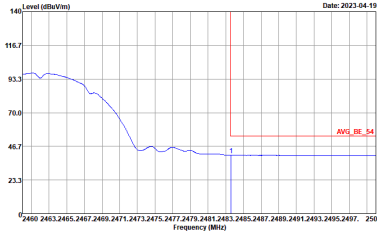
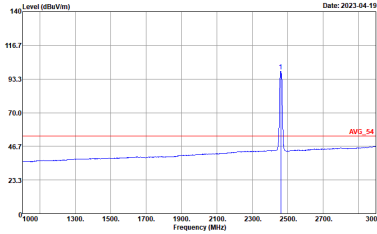


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
4	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank



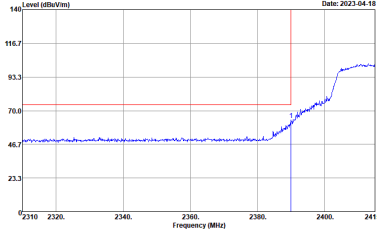
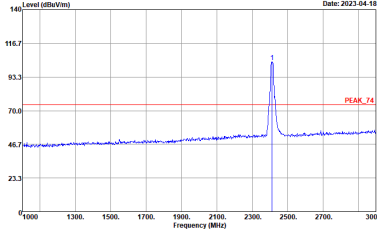
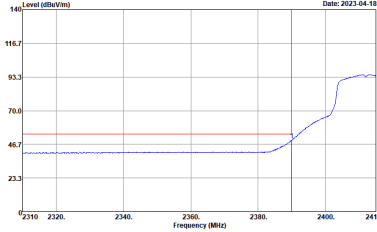
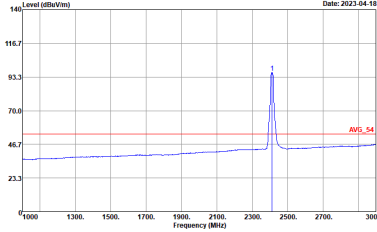
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
4	Horizontal	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto
Avg.		



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
4	Vertical	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto



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

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
4	Horizontal	Fundamental
Peak	 Site : 03CH23-HV Condition : PEAK_BE_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HV Condition : PEAK_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH23-HV Condition : AVG_BE_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH23-HV Condition : AVG_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto

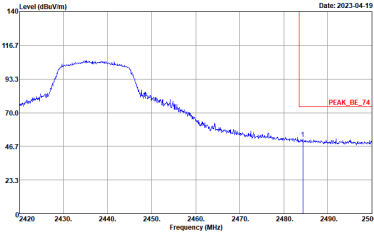
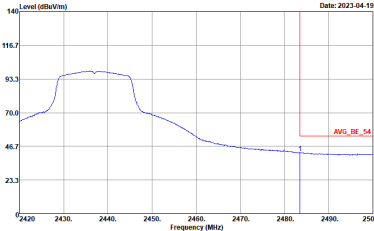


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
4	Vertical	Fundamental
Peak	Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto

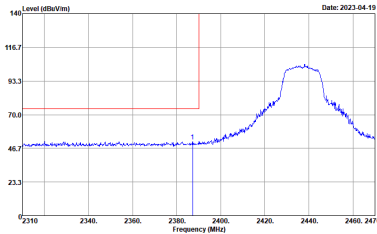
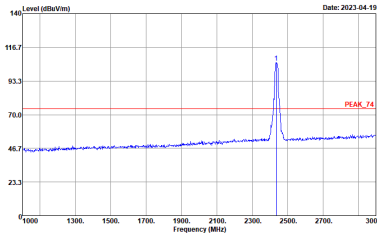
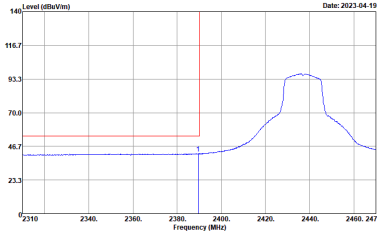
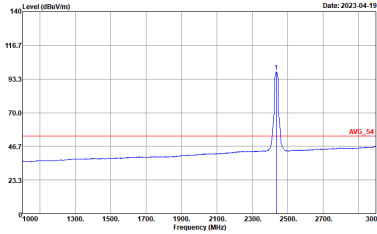


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
4	Horizontal	Fundamental
Peak	Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto
Avg.		

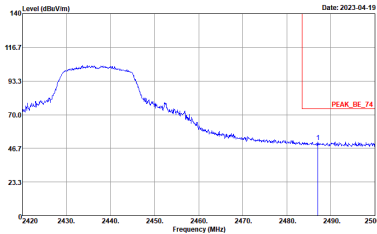
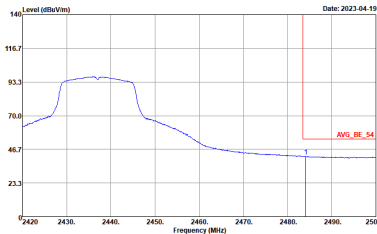


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
4	Horizontal	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	Left blank

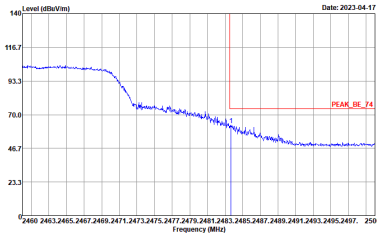
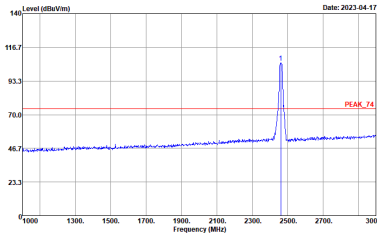
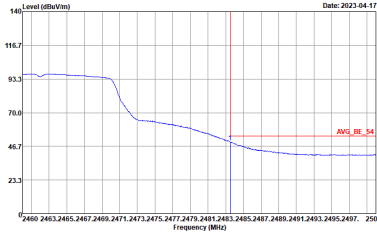
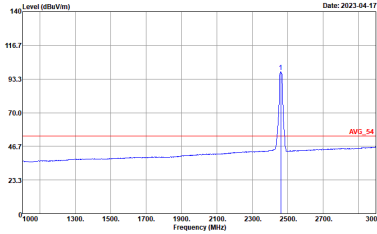


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
4	Vertical	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto
Avg.		

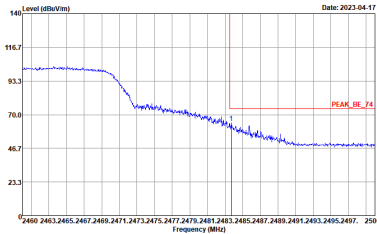
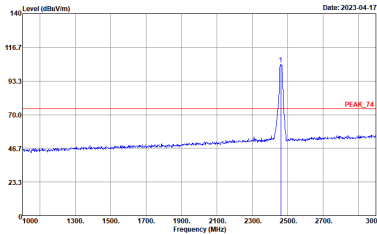
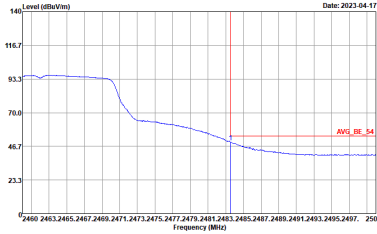
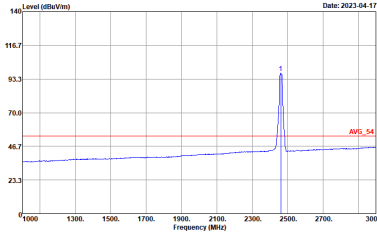


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
4	Vertical	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left Blank
Avg.	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL RBW:1000.000KHz VBW:1000KHz SWT:Auto	Left Blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
4	Horizontal	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto

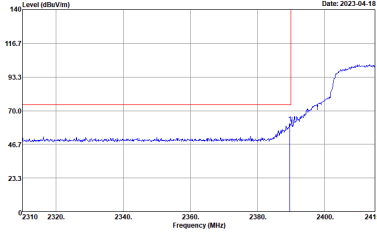
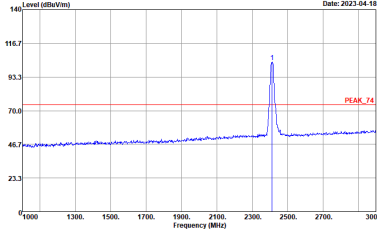
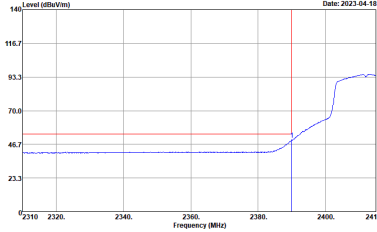
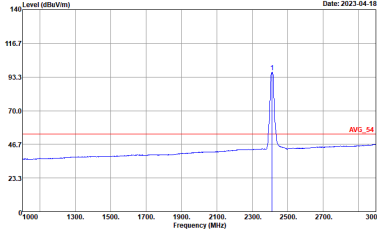


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
4	Vertical	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto
Avg.		

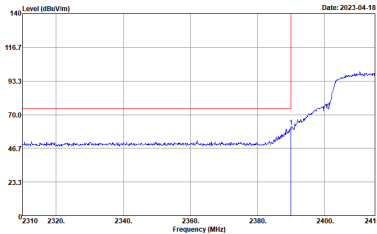
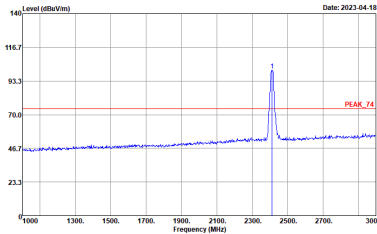
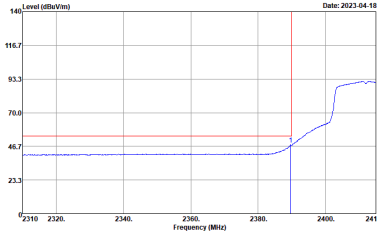
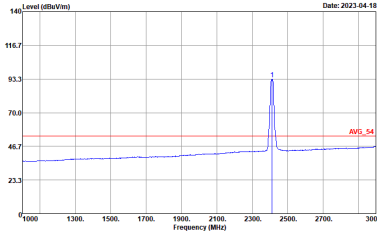


2.4GHz 2400~2483.5MHz

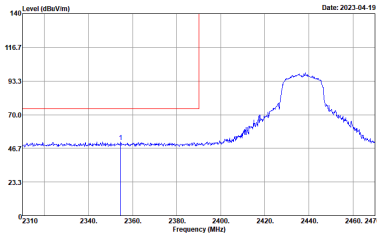
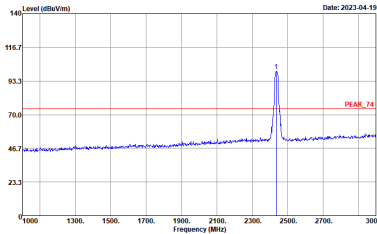
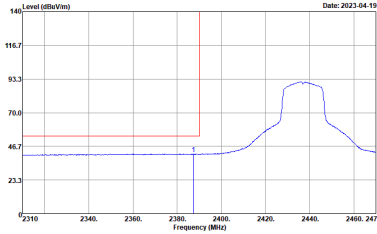
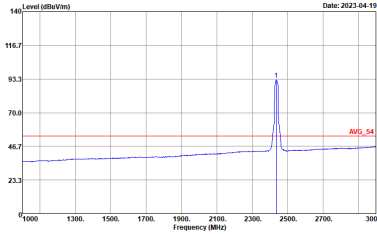
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
4	Horizontal	Fundamental
Peak	 Site : 03CH23-HV Condition : PEAK_BE_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HV Condition : PEAK_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH23-HV Condition : AVG_BE_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH23-HV Condition : AVG_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto

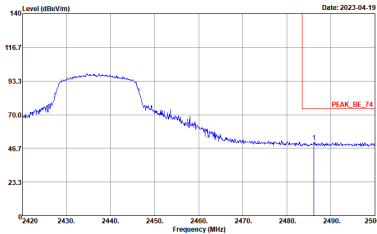
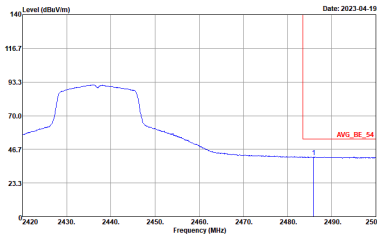


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
4	Vertical	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
4	Horizontal	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto

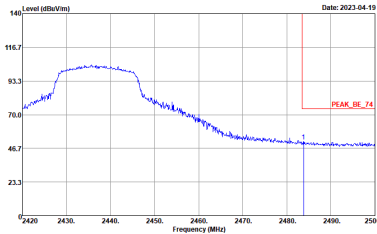
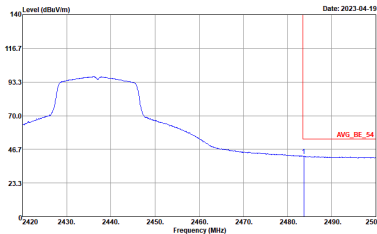


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
4	Horizontal	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	Left blank

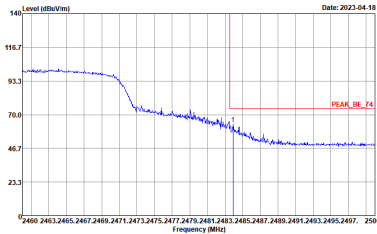
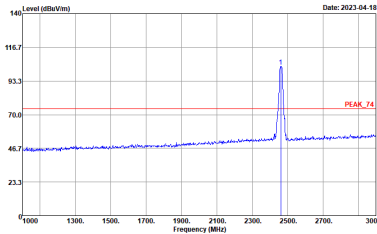
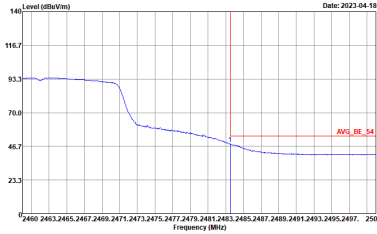
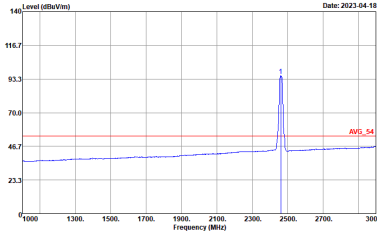


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
4	Vertical	Fundamental
Peak	Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto

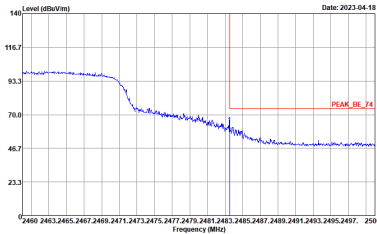
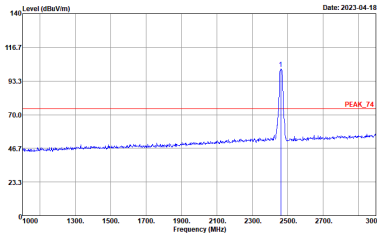
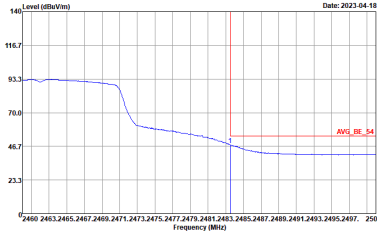
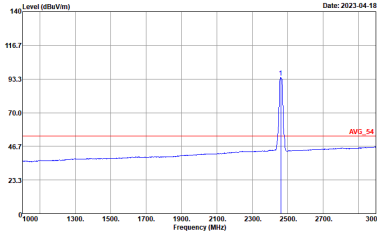


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
4	Vertical	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left Blank
Avg.	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	Left Blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
4	Horizontal	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto
Avg.		

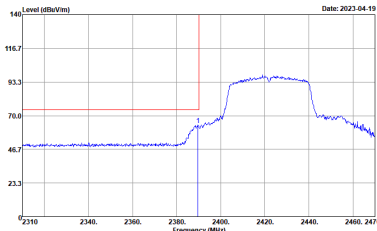
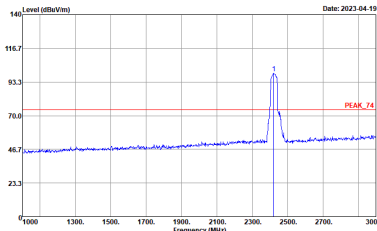
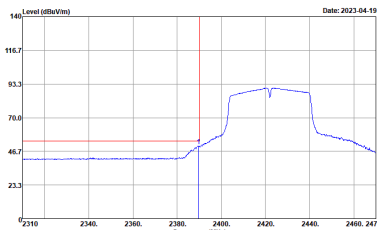
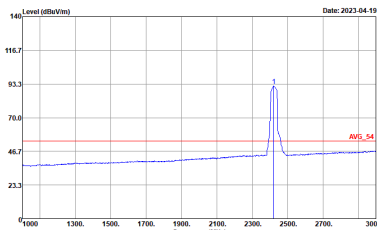


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
4	Vertical	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:1000KHz SWT:Auto
Avg.		

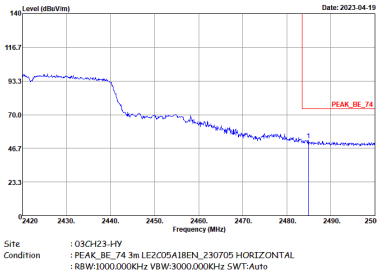
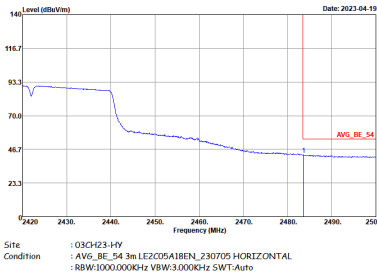


2.4GHz 2400~2483.5MHz

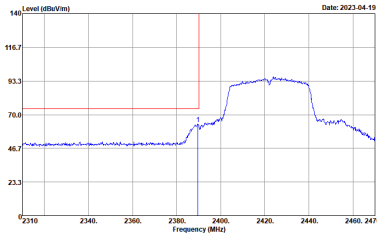
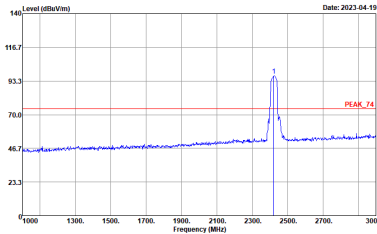
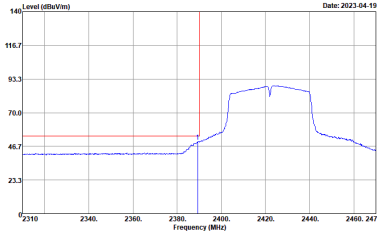
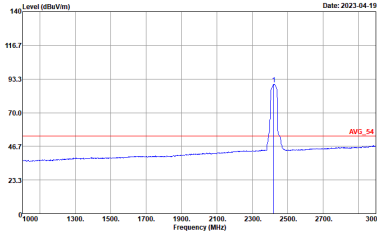
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
4	Horizontal	Fundamental
Peak	 Site : 03CH23-HV Condition : PEAK_BE_74 3m LEZC05A18EN_230705 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HV Condition : PEAK_74 3m LEZC05A18EN_230705 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HV Condition : AVG_BE_54 3m LEZC05A18EN_230705 HORIZONTAL RBW:1000.000KHz VBW:3.000KHz SWT:Auto	 Site : 03CH23-HV Condition : AVG_54 3m LEZC05A18EN_230705 HORIZONTAL RBW:1000.000KHz VBW:3.000KHz SWT:Auto

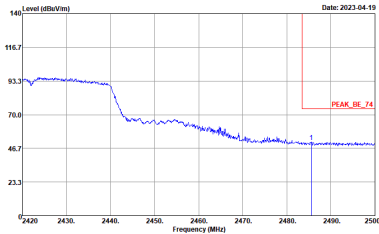
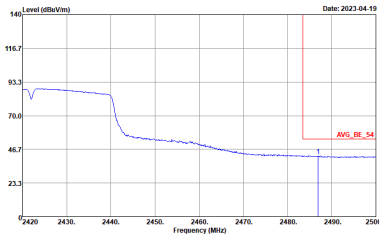


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
4	Horizontal	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Date: 2023-04-19	Left Blank
Avg.	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Date: 2023-04-19	Left Blank

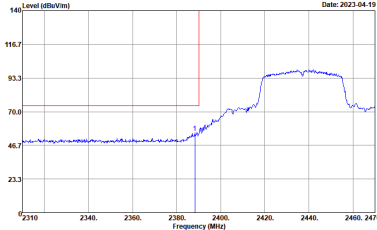
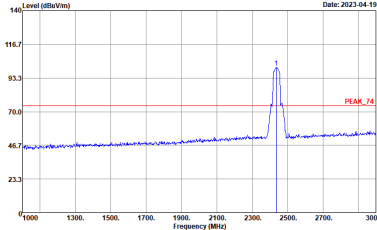
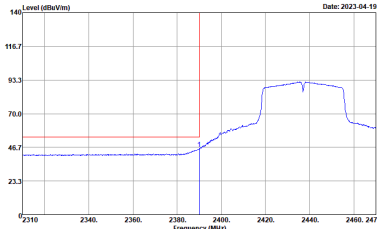
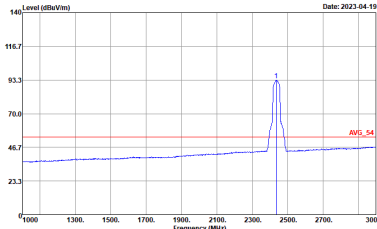


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
4	Vertical	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

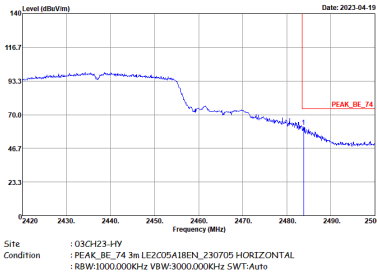
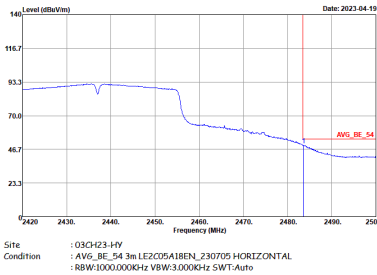


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
4	Vertical	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Left blank

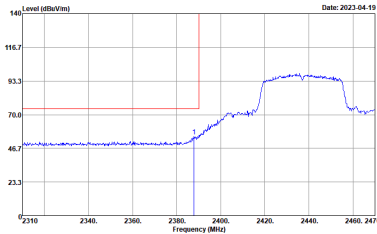
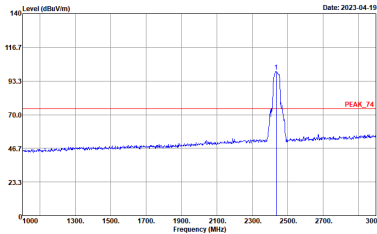
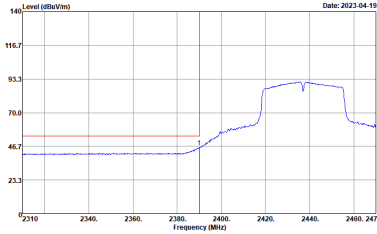
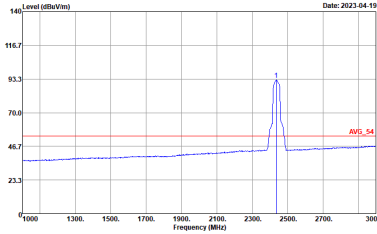


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - L	
4	Horizontal	Fundamental
Peak	 Level (dBuV/m) Frequency (MHz) Date: 2023-04-19 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Level (dBuV/m) Frequency (MHz) Date: 2023-04-19 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.	 Level (dBuV/m) Frequency (MHz) Date: 2023-04-19 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Level (dBuV/m) Frequency (MHz) Date: 2023-04-19 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

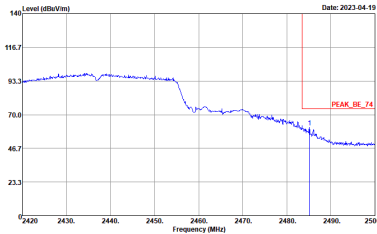
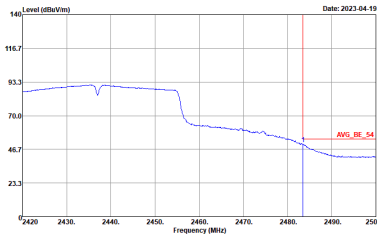


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - R	
4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

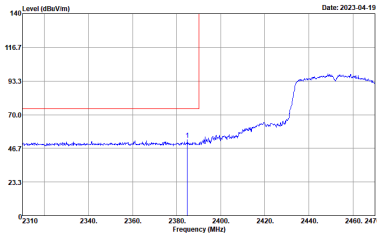
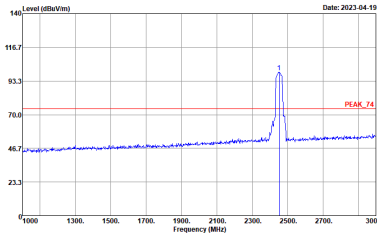
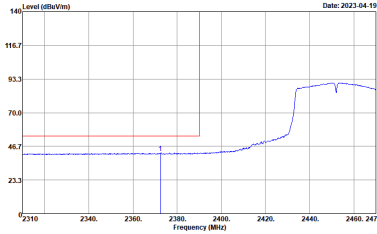
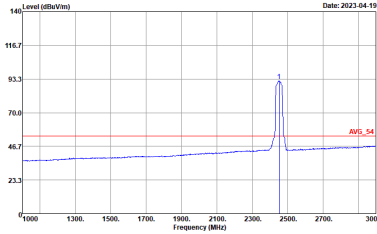


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - L	
4	Vertical	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto

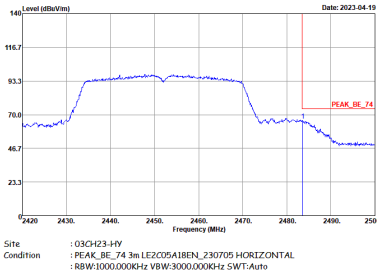
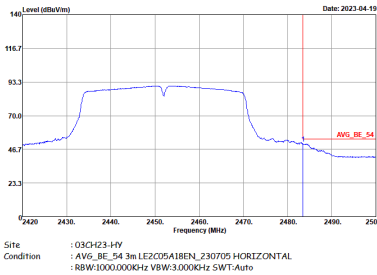


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - R	
4	Horizontal	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Date: 2023-04-19	Left blank
Avg.	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Date: 2023-04-19	Left blank

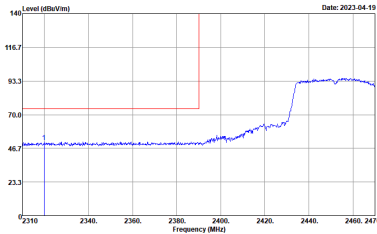
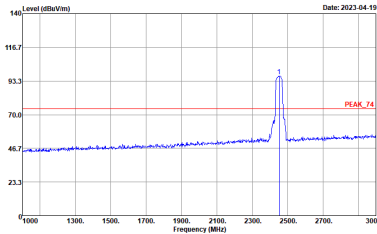
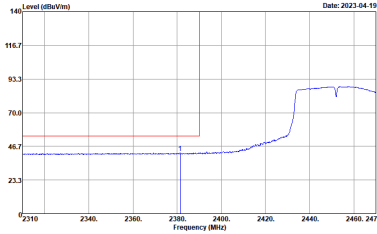
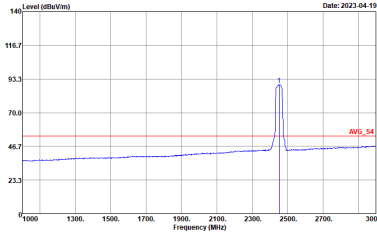


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
4	Horizontal	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.		

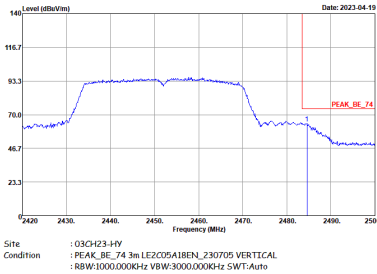
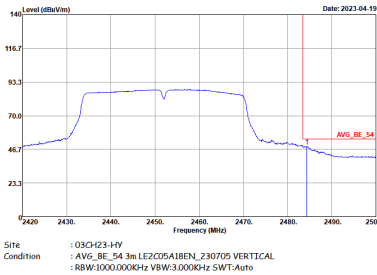


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - R	
4	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
4	Vertical	Fundamental
Peak	 Site : 03CH23-HY Condition : PEAK_BE_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH23-HY Condition : AVG_BE_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH23-HY Condition : AVG_54 3m LEZC05A18EN_230705 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
Avg.		



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

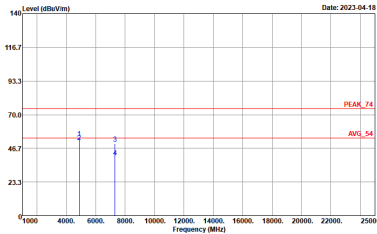
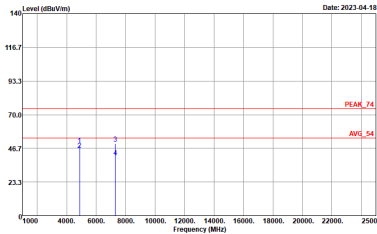


2.4GHz 2400~2483.5MHz

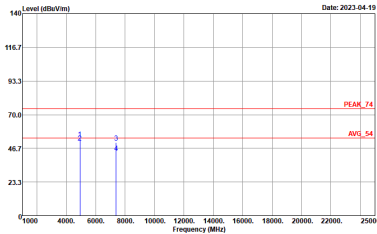
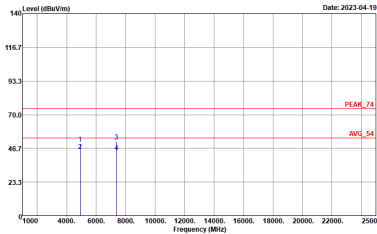
WIFI 802.11b (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
4	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2023-04-18 Site : 03CH23-1HY Condition : PEAK_74 3m LEZC05A18EN_230705 HORIZONTAL	Level (dBuV/m) Date: 2023-04-18 Site : 03CH23-1HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
4	Horizontal	Vertical
Peak Avg.	 Site : 03CH23-HY Condition : PEAK_74 3m LE2C05A18EN_230705 HORIZONTAL :	 Site : 03CH23-HY Condition : PEAK_74 3m LE2C05A18EN_230705 VERTICAL :



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
4	Horizontal	Vertical
Peak Avg.	 Site : 03CH23-HY Condition : PEAK_74 3m LE2C05A18EN_230705 HORIZONTAL :	 Site : 03CH23-HY Condition : PEAK_74 3m LE2C05A18EN_230705 VERTICAL :



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
4	Horizontal	Vertical
Peak Avg.	Level (dBu/V/m) Date: 2023-04-19 PEAK_74 AVG_54 Site : 03CH23-1HY Condition : PEAK_74 3m LEZC05A18EN_230705 HORIZONTAL	Level (dBu/V/m) Date: 2023-04-19 PEAK_74 AVG_54 Site : 03CH23-1HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
4	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2023-04-19 Site : 03CH23-HY Condition : PEAK_74 3m LE2C05A18EN_230705 HORIZONTAL :	Level (dBuV/m) Date: 2023-04-19 Site : 03CH23-HY Condition : PEAK_74 3m LE2C05A18EN_230705 VERTICAL :



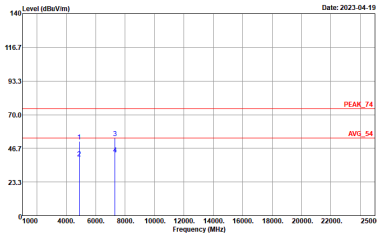
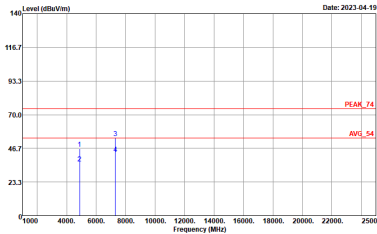
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
4	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2023-04-19 Site : 03CH23-IHY Condition : PEAK_74 3m LE2C05A18EN_230705 HORIZONTAL :	Level (dBuV/m) Date: 2023-04-19 Site : 03CH23-IHY Condition : PEAK_74 3m LE2C05A18EN_230705 VERTICAL :



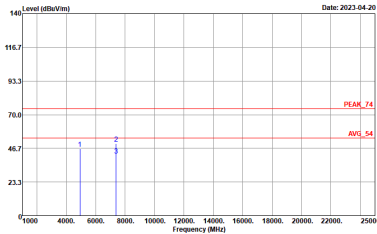
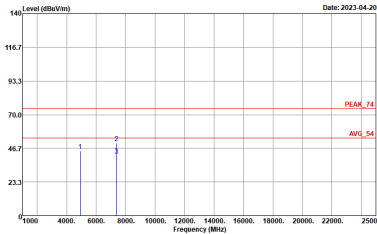
2.4GHz 2400~2483.5MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
4	Horizontal	Vertical
Peak Avg.	Level (dBu/V/m) Date: 2023-04-19 Frequency (MHz) Site : 03CH23-1HY Condition : PEAK_74 3m LEZC05A18EN_230705 HORIZONTAL	Level (dBu/V/m) Date: 2023-04-19 Frequency (MHz) Site : 03CH23-1HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
4	Horizontal	Vertical
Peak Avg.	 Site : 03CH23-HY Condition : PEAK_74 3m LE2C05A18EN_230705 HORIZONTAL :	 Site : 03CH23-HY Condition : PEAK_74 3m LE2C05A18EN_230705 VERTICAL :



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
4	Horizontal	Vertical
Peak Avg.	 Site : 03CH23-HY Condition : PEAK_74 3m LE2C05A18EN_230705 HORIZONTAL :	 Site : 03CH23-HY Condition : PEAK_74 3m LE2C05A18EN_230705 VERTICAL :

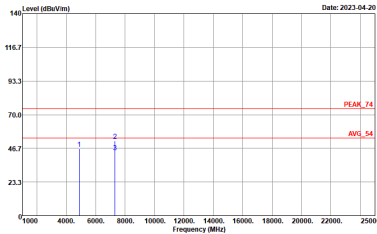
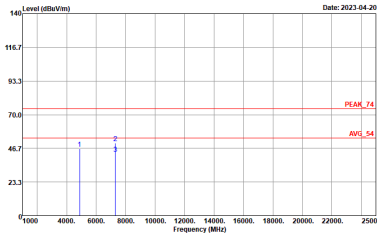


2.4GHz 2400~2483.5MHz

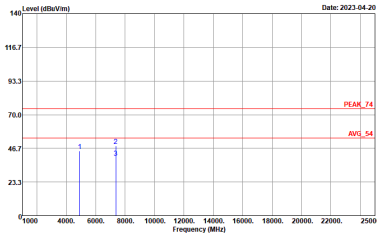
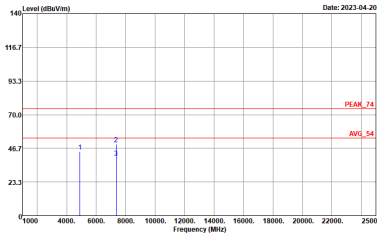
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH03 2422MHz	
4	Horizontal	Vertical
Peak Avg.	Level (dBuV/m) Date: 2023-04-20 Frequency (MHz) Site : 03CH23-1HY Condition : PEAK_74 3m LEZC05A18EN_230705 HORIZONTAL :	Level (dBuV/m) Date: 2023-04-20 Frequency (MHz) Site : 03CH23-1HY Condition : PEAK_74 3m LEZC05A18EN_230705 VERTICAL :



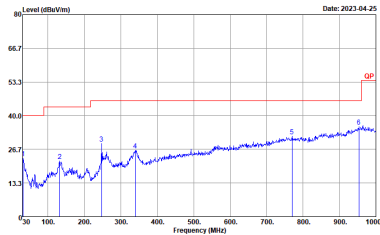
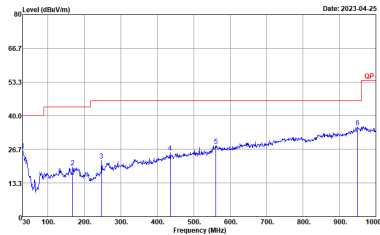
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH06 2437MHz	
4	Horizontal	Vertical
Peak Avg.	 Site : 03CH23-HY Condition : PEAK_74 3m LE2C05A18EN_230705 HORIZONTAL :	 Site : 03CH23-HY Condition : PEAK_74 3m LE2C05A18EN_230705 VERTICAL :



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH09 2452MHz	
4	Horizontal	Vertical
Peak Avg.	 Site : 03CH23-HY Condition : PEAK_74 3m LE2C05A18EN_230705 HORIZONTAL :	 Site : 03CH23-HY Condition : PEAK_74 3m LE2C05A18EN_230705 VERTICAL :



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

WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11b LF	
4	Horizontal	Vertical
QP / Peak	 Site : 03CH23-1HY Condition : QP 3m BIL06_62028_231010 HORIZONTAL	 Site : 03CH23-1HY Condition : QP 3m BIL06_62028_231010 VERTICAL



Appendix E. Duty Cycle Plots

Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
802.11b	99.64	-	-	10Hz
802.11g	97.55	1395	0.72	1kHz
2.4GHz 802.11n HT20	97.38	1300	0.77	1kHz
2.4GHz 802.11n HT40	94.99	648.5	1.54	3kHz

