



FCC RADIO TEST REPORT

FCC ID : 2AY4J-TK23
Equipment : Tack GPS Location Tracker
Brand Name : Tack
Model Name : TK23
Marketing Name : Tackgps Plus
Applicant : Tack One Private Limited
22 SIN MING LANE #06-76, SINGAPORE 573969
Manufacturer : Tack One Private Limited
22 SIN MING LANE #06-76, SINGAPORE 573969
Standard : FCC Part 15 Subpart C §15.247

The product was received on May 05, 2023 and testing was performed from May 24, 2023 to Jul. 28, 2023. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Louis Wu

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issue Date
FR342615B	01	Initial issue of report	Aug. 03, 2023
FR342615B	02	Revise Appendix D This report is an updated version, replacing the report issued on Aug. 03, 2023.	Sep. 08, 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	3.07 dB under the limit at 4924.00 MHz
3.6	15.207	AC Conducted Emission	Pass	3.15 dB under the limit at 0.15 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/manufacturer 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: Alan Liu

Report Producer: Rachel Hsieh



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
General Specs LTE, Bluetooth-LE, Wi-Fi 2.4GHz 802.11b/g/n, and GPS.	
Antenna Type WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth-LE: PIFA Antenna GPS: PIFA Antenna	

Antenna information		
2400 MHz ~ 2483.5 MHz	Peak Gain (dBi)	-0.36

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

1.2 Modification of EUT

No modifications made to the EUT during the testing.



1.3 Testing Location

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

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

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

FCC designation No.: TW1190 and TW3786

1.4 Applicable Standards

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

- ♦ FCC Part 15 Subpart C §15.247
- ♦ FCC KDB Publication No. 558074 D01 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.

Single Antenna

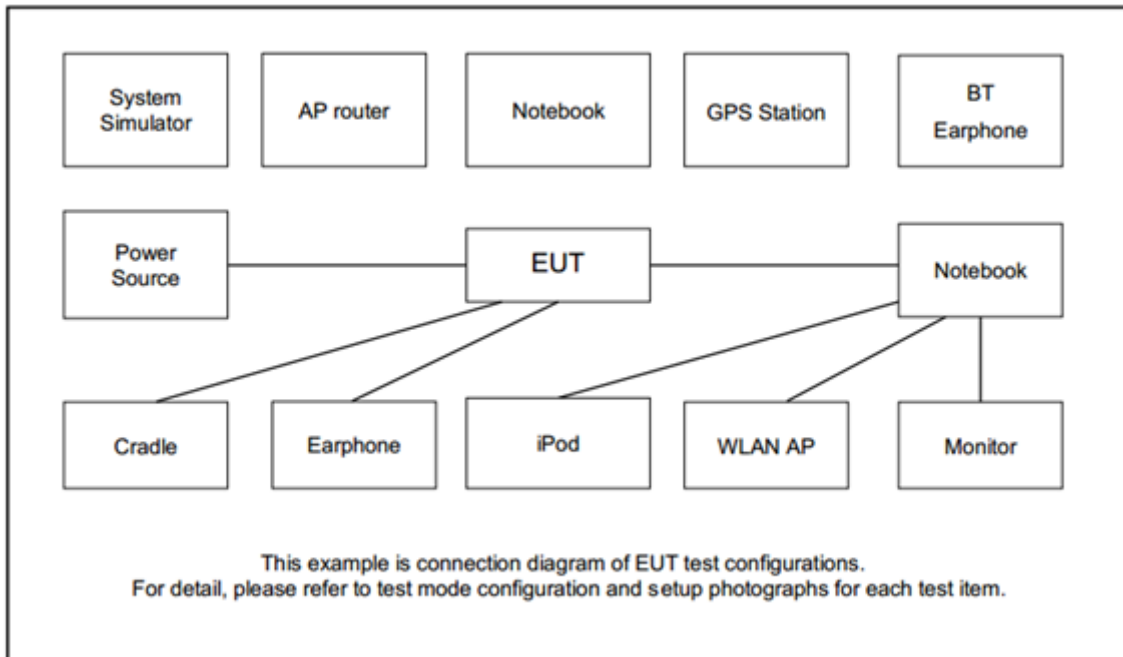
Modulation	Data Rate
802.11b	1 Mbps
802.11g	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0

Test Cases	
AC Conducted Emission	Mode 1: WLAN (2.4GHz) Link + Battery 1 + USB Cable (Charging/Data Link from Laptop) Mode 2: Bluetooth Tx + Battery 1 + USB Cable (Charging/Data Link from Laptop)
Remark: 1. The worst case of Conducted Emission is mode 1; only the test data of it was reported. 2. For Radiated Test Cases, the tests were performed with Battery 1. 3. Data Link with Notebook means data application transferred mode between EUT and Notebook.	

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.	Notebook	DELL	Latitude 3340	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
3.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “EspRFTestTool_v2.8_Manual” 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.

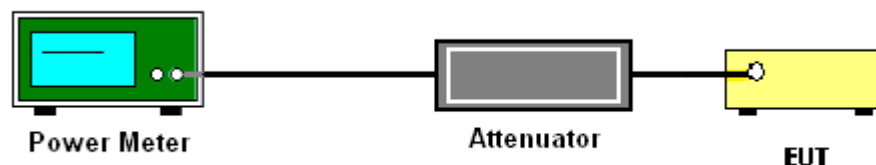
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup



3.2.5 Test Result of Average Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

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

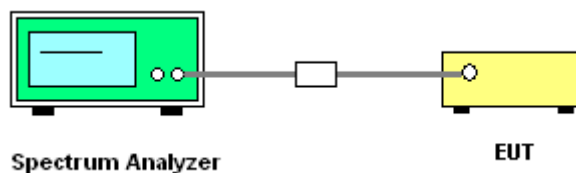
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

3.4 Conducted Band Edges and Spurious Emission Measurement

3.4.1 Limit of Conducted Band Edges and Spurious Emission Measurement

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

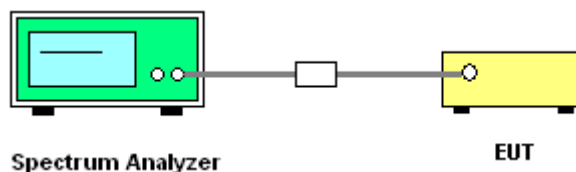
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

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

3.4.4 Test Setup



3.4.5 Test Result of Conducted Band Edges and Spurious Emission

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.

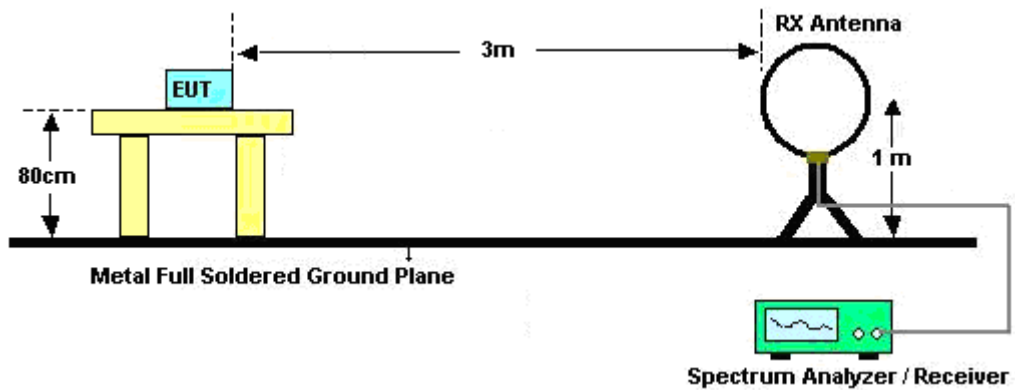
3.5.3 Test Procedures

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 “-“.

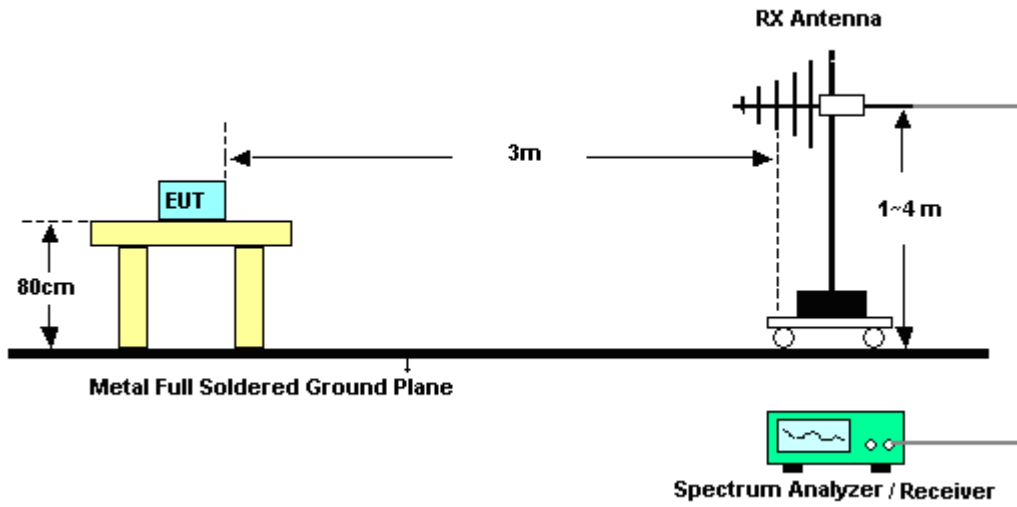
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with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

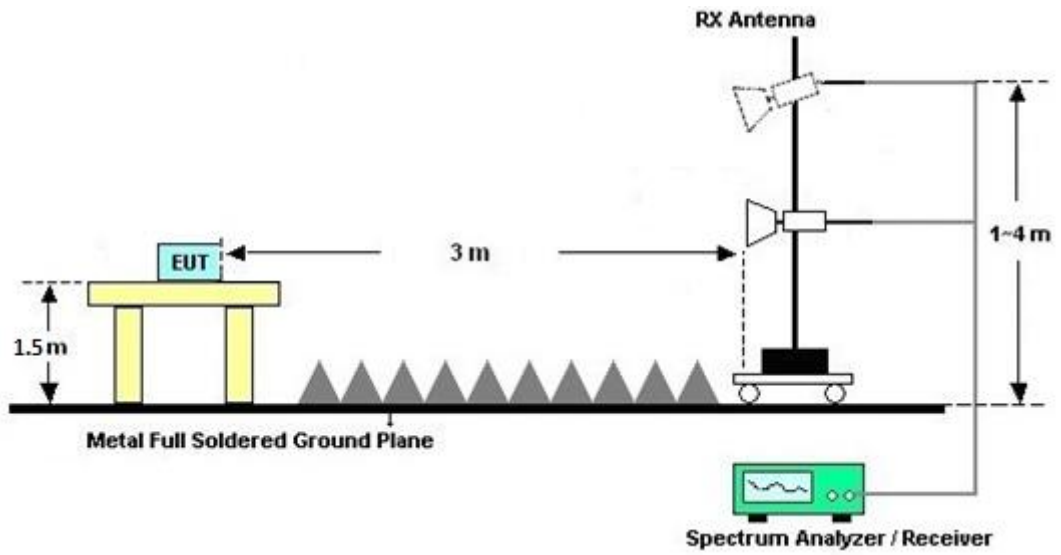
For radiated emissions below 30MHz



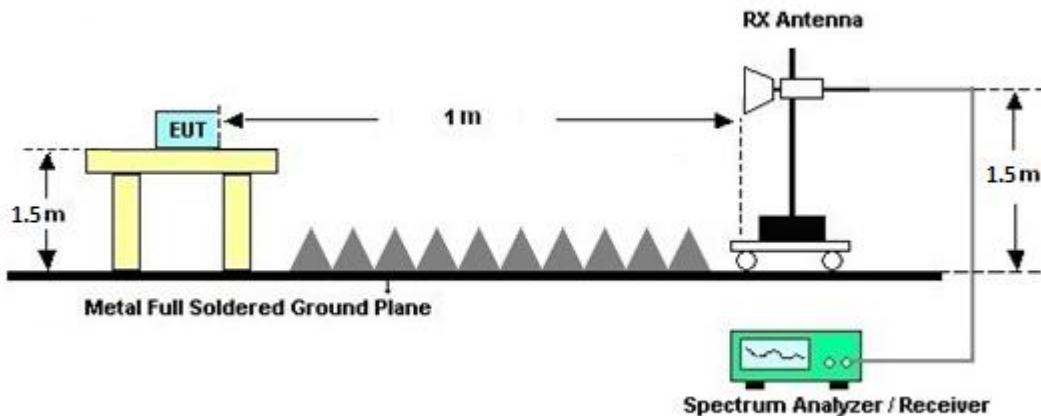
For radiated emissions from 30MHz to 1GHz



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

*Decreases with the logarithm of the frequency.

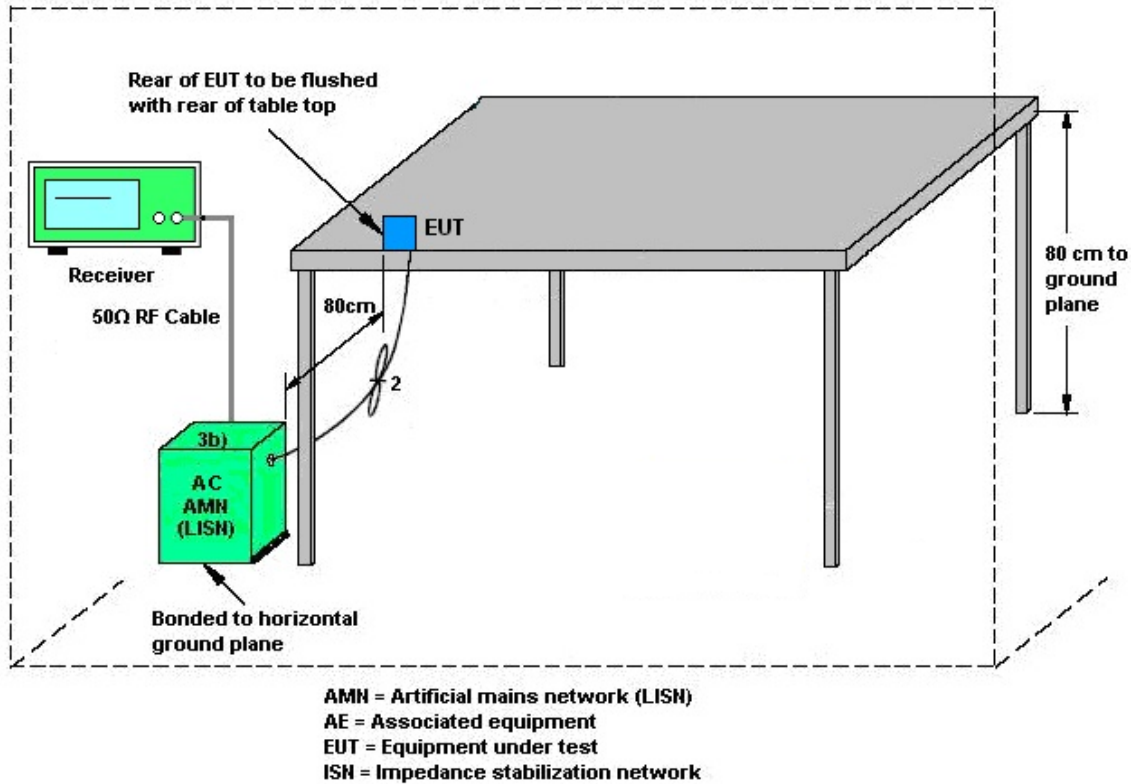
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

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

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



3.7 Antenna Requirements

3.7.1 Standard Applicable

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
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	35419 & 03	30MHz~1GHz	Apr. 23, 2023	Jun. 13, 2023~Jun. 29, 2023	Apr. 22, 2024	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 01, 2022	Jun. 13, 2023~Jun. 29, 2023	Nov. 30, 2023	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Feb. 28, 2023	Jun. 13, 2023~Jun. 29, 2023	Feb. 27, 2024	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 20, 2023	Jun. 13, 2023~Jun. 29, 2023	Apr. 19, 2024	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	Oct. 03, 2022	Jun. 13, 2023~Jun. 29, 2023	Oct. 02, 2023	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Mar. 24, 2023	Jun. 13, 2023~Jun. 29, 2023	Mar. 23, 2024	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Jul. 21, 2022	Jun. 13, 2023~Jun. 29, 2023	Jul. 20, 2023	Radiation (03CH07-HY)
Spectrum Analyzer	Keysight	Keysight	MY60241058	10Hz~44GHz	Jul. 07, 2022	Jun. 13, 2023~Jun. 29, 2023	Jul. 06, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY15682/4	30MHz to 18GHz	Feb. 22, 2023	Jun. 13, 2023~Jun. 29, 2023	Feb. 21, 2024	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4	9kHz to 18GHz	Feb. 22, 2023	Jun. 13, 2023~Jun. 29, 2023	Feb. 21, 2024	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4	9kHz to 18GHz	Feb. 22, 2023	Jun. 13, 2023~Jun. 29, 2023	Feb. 21, 2024	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126	532078/126E	30MHz~18GHz	Sep. 16, 2022	Jun. 13, 2023~Jun. 29, 2023	Sep. 15, 2023	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 22, 2023	Jun. 13, 2023~Jun. 29, 2023	Feb. 21, 2024	Radiation (03CH07-HY)
Controller	EMEC	EM1000	N/A	Control Ant Mast	N/A	Jun. 13, 2023~Jun. 29, 2023	N/A	Radiation (03CH07-HY)
Controller	MF	MF-7802	N/A	Control Turn table	N/A	Jun. 13, 2023~Jun. 29, 2023	N/A	Radiation (03CH07-HY)
Antenna Mast	EMEC	AM-BS-4500E	N/A	Boresight mast 1M~4M	N/A	Jun. 13, 2023~Jun. 29, 2023	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Jun. 13, 2023~Jun. 29, 2023	N/A	Radiation (03CH07-HY)
Software	Audix	E3	N/A	N/A	N/A	Jun. 13, 2023~Jun. 29, 2023	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	Mar. 14, 2023	Jun. 13, 2023~Jun. 29, 2023	Mar. 13, 2024	Radiation (03CH07-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Feb. 13, 2023	Jun. 13, 2023~Jun. 29, 2023	Feb. 12, 2024	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 24, 2022	Jun. 13, 2023~Jun. 29, 2023	Nov. 23, 2023	Radiation (03CH07-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECEPEL	DTM-303A	TP201996	N/A	Nov. 17, 2022	May 24, 2023~ Jul. 28, 2023	Nov. 16, 2023	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO 12 (NO:113)	10MHz~6GHz	Dec. 13, 2022	May 24, 2023~ Jul. 28, 2023	Dec. 12, 2023	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101905	10Hz - 40GHz	Aug. 03, 2022	May 24, 2023~ Jul. 28, 2023	Aug. 02, 2023	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jul. 05, 2023	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2022	Jul. 05, 2023	Nov. 30, 2023	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2022	Jul. 05, 2023	Nov. 16, 2023	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 01, 2022	Jul. 05, 2023	Nov. 30, 2023	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 17, 2022	Jul. 05, 2023	Nov. 16, 2023	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	Jul. 05, 2023	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Aug. 01, 2022	Jul. 05, 2023	Jul. 31, 2023	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 29, 2022	Jul. 05, 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% ($U = 2Uc(y)$)	6.5 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.5 dB
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Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.2 dB
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.3 dB
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	James Li	Temperature:	21~25	°C
Test Date:	2023/5/24~2023/7/28	Relative Humidity:	51~54	%

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

2.4GHz Band Single Antenna										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
					Ant1	Ant2	Ant1	Ant2		
11b	1Mbps	1	1	2412	13.34	-	10.04	-	0.50	Pass
11b	1Mbps	1	6	2437	13.34	-	9.60	-	0.50	Pass
11b	1Mbps	1	11	2462	13.34	-	9.64	-	0.50	Pass
11g	6Mbps	1	1	2412	18.78	-	16.38	-	0.50	Pass
11g	6Mbps	1	6	2437	18.73	-	16.40	-	0.50	Pass
11g	6Mbps	1	11	2462	18.78	-	16.38	-	0.50	Pass
HT20	MCS0	1	1	2412	19.28	-	17.62	-	0.50	Pass
HT20	MCS0	1	6	2437	19.28	-	17.64	-	0.50	Pass
HT20	MCS0	1	11	2462	19.18	-	17.66	-	0.50	Pass
HT40	MCS0	1	3	2422	34.77	-	32.68	-	0.50	Pass
HT40	MCS0	1	6	2437	34.77	-	32.72	-	0.50	Pass
HT40	MCS0	1	9	2452	34.77	-	31.68	-	0.50	Pass

TEST RESULTS DATA
Average Output Power

2.4GHz Band Single Antenna																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
11b	1Mbps	1	1	2412	7.45	-		30.00	-	-0.36	-	7.09	-	36.00	-	Pass
11b	1Mbps	1	6	2437	6.55	-		30.00	-	-0.36	-	6.19	-	36.00	-	Pass
11b	1Mbps	1	11	2462	6.75	-		30.00	-	-0.36	-	6.39	-	36.00	-	Pass
11g	6Mbps	1	1	2412	9.45	-		30.00	-	-0.36	-	9.09	-	36.00	-	Pass
11g	6Mbps	1	6	2437	9.35	-		30.00	-	-0.36	-	8.99	-	36.00	-	Pass
11g	6Mbps	1	11	2462	9.65	-		30.00	-	-0.36	-	9.29	-	36.00	-	Pass
HT20	MCS0	1	1	2412	9.75	-		30.00	-	-0.36	-	9.39	-	36.00	-	Pass
HT20	MCS0	1	6	2437	9.35	-		30.00	-	-0.36	-	8.99	-	36.00	-	Pass
HT20	MCS0	1	11	2462	9.65	-		30.00	-	-0.36	-	9.29	-	36.00	-	Pass
HT40	MCS0	1	3	2422	9.45	-		30.00	-	-0.36	-	9.09	-	36.00	-	Pass
HT40	MCS0	1	6	2437	9.75	-		30.00	-	-0.36	-	9.39	-	36.00	-	Pass
HT40	MCS0	1	9	2452	9.55	-		30.00	-	-0.36	-	9.19	-	36.00	-	Pass

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

TEST RESULTS DATA
Peak Power Spectral Density

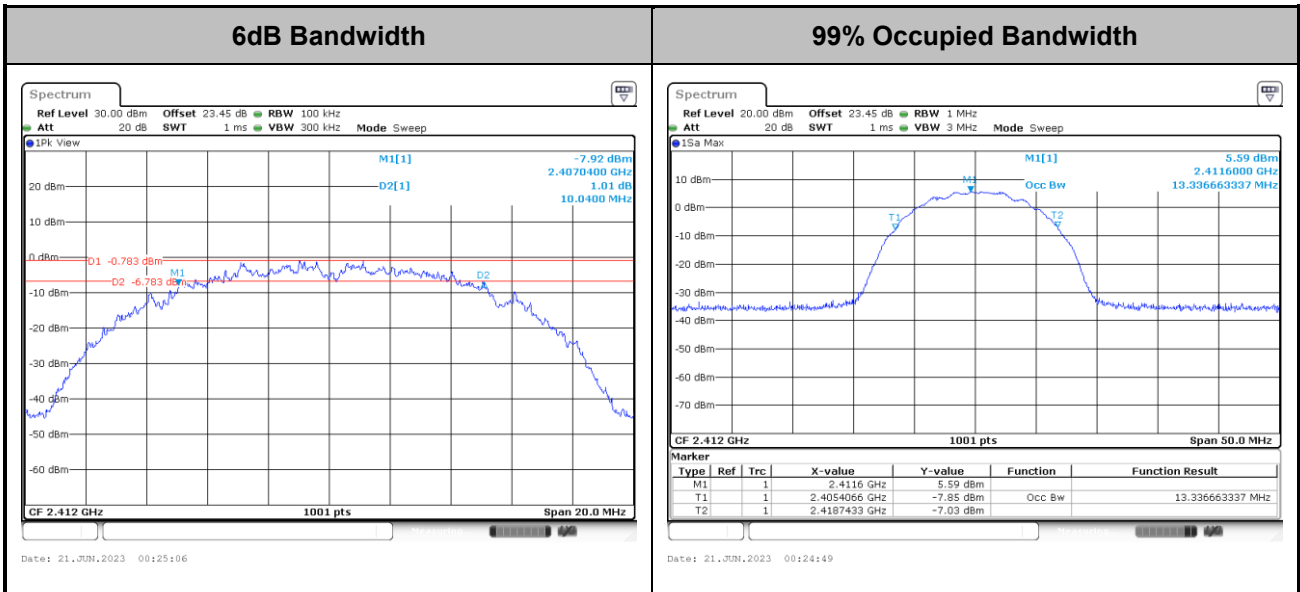
2.4GHz Band Single Antenna												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Ant1	Ant2	Worse + 3.01	Ant1	Ant2	Ant1	Ant2	
11b	1Mbps	1	1	2412	-14.50	-		-0.36	-	8.00	-	Pass
11b	1Mbps	1	6	2437	-16.68	-		-0.36	-	8.00	-	Pass
11b	1Mbps	1	11	2462	-15.07	-		-0.36	-	8.00	-	Pass
11g	6Mbps	1	1	2412	-15.78	-		-0.36	-	8.00	-	Pass
11g	6Mbps	1	6	2437	-16.85	-		-0.36	-	8.00	-	Pass
11g	6Mbps	1	11	2462	-15.58	-		-0.36	-	8.00	-	Pass
HT20	MCS0	1	1	2412	-15.69	-		-0.36	-	8.00	-	Pass
HT20	MCS0	1	6	2437	-15.63	-		-0.36	-	8.00	-	Pass
HT20	MCS0	1	11	2462	-15.46	-		-0.36	-	8.00	-	Pass
HT40	MCS0	1	3	2422	-17.18	-		-0.36	-	8.00	-	Pass
HT40	MCS0	1	6	2437	-17.41	-		-0.36	-	8.00	-	Pass
HT40	MCS0	1	9	2452	-17.69	-		-0.36	-	8.00	-	Pass

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



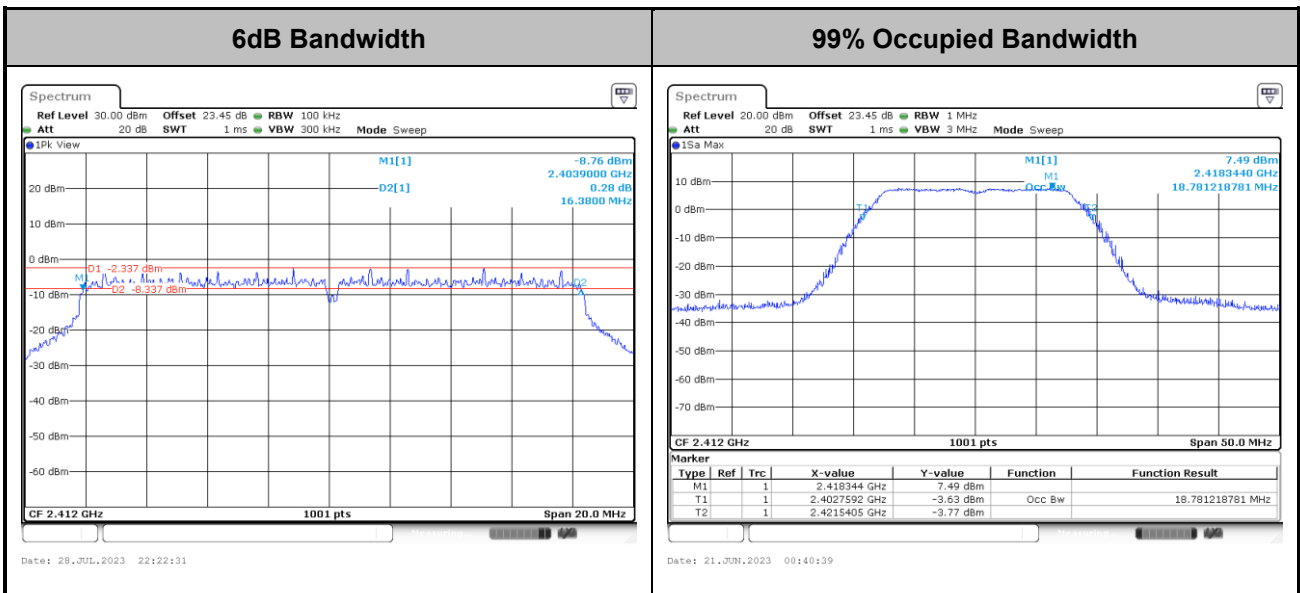
6dB and 99% Occupied Bandwidth

<802.11b>



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

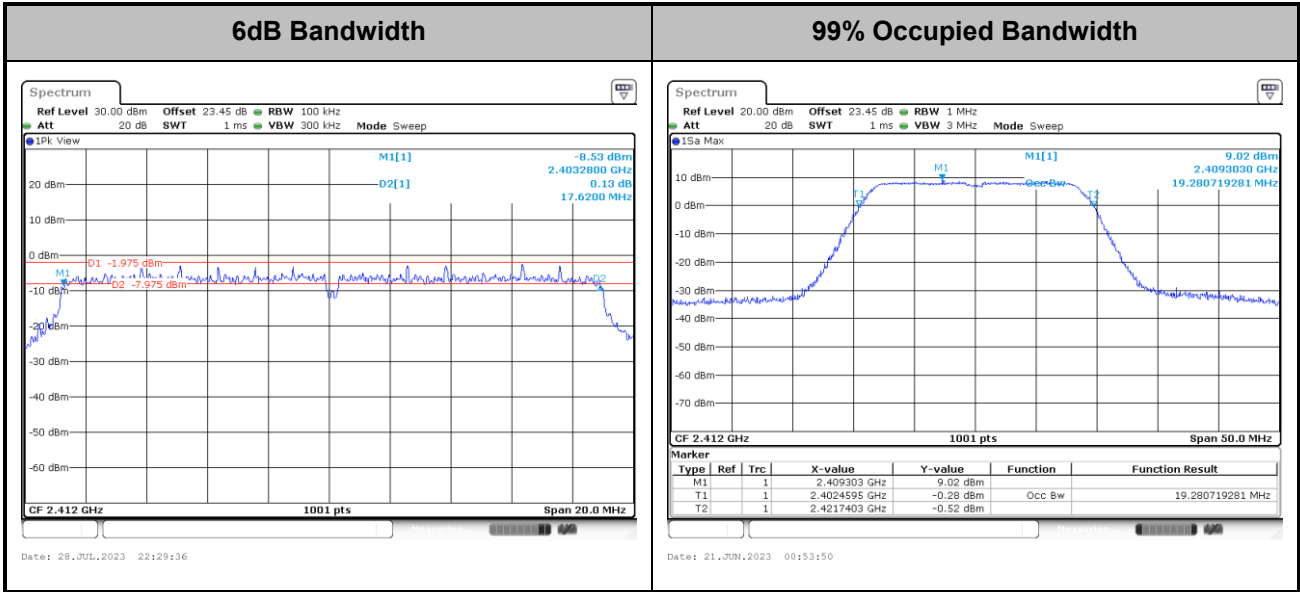
<802.11g>



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

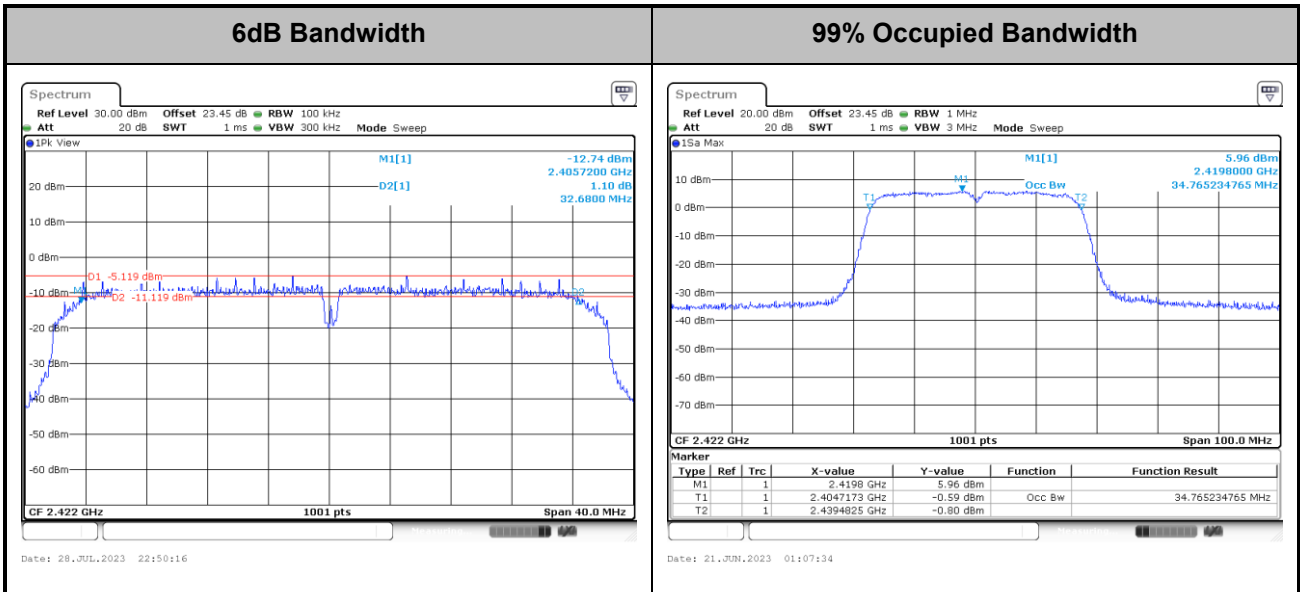


<802.11n HT20>



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

<802.11n HT40>

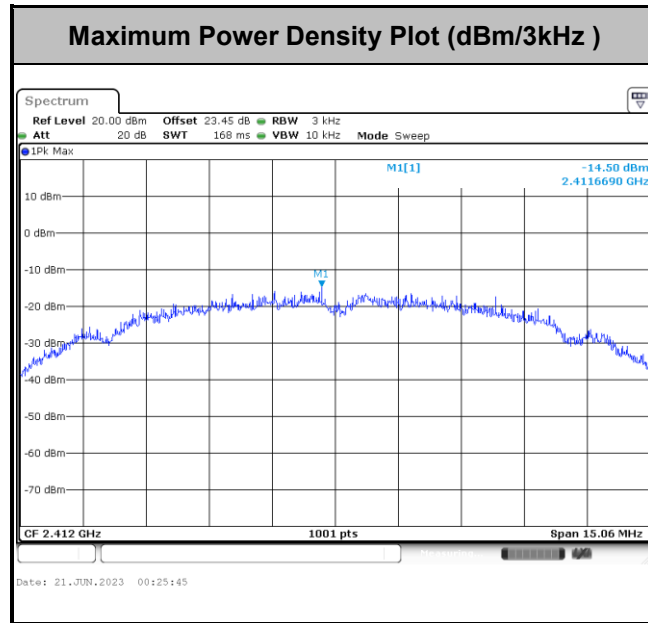


Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

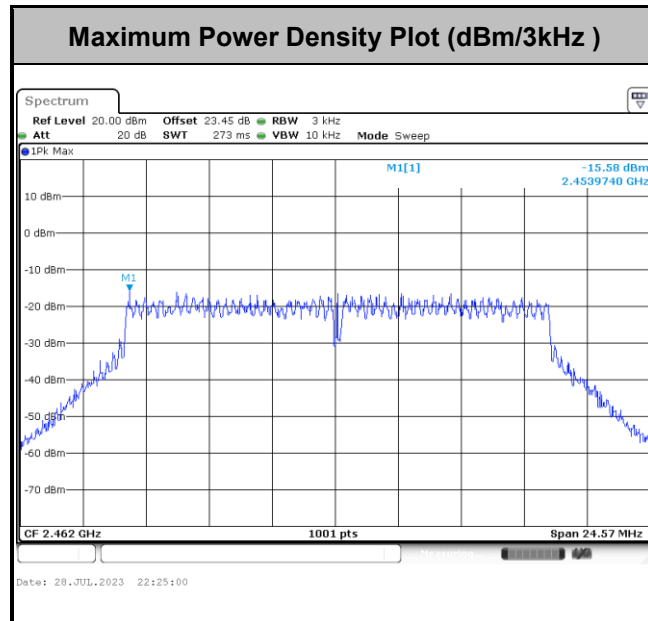


Power Spectral Density(dBm/3kHz)

<802.11b>

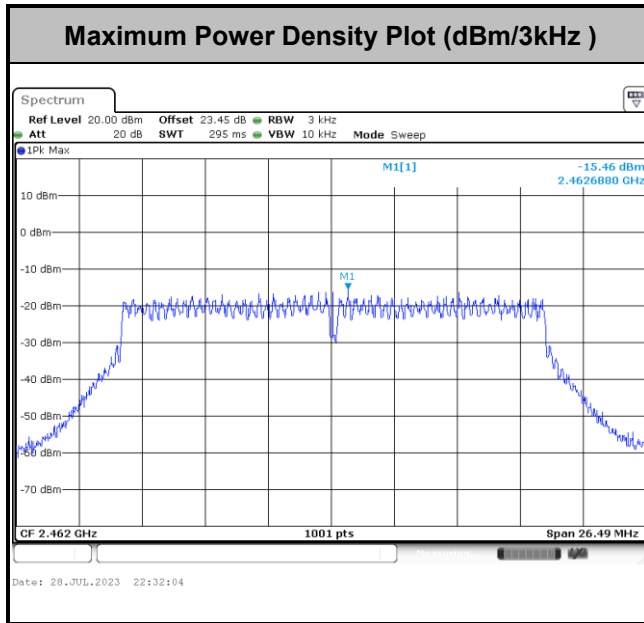


<802.11g>

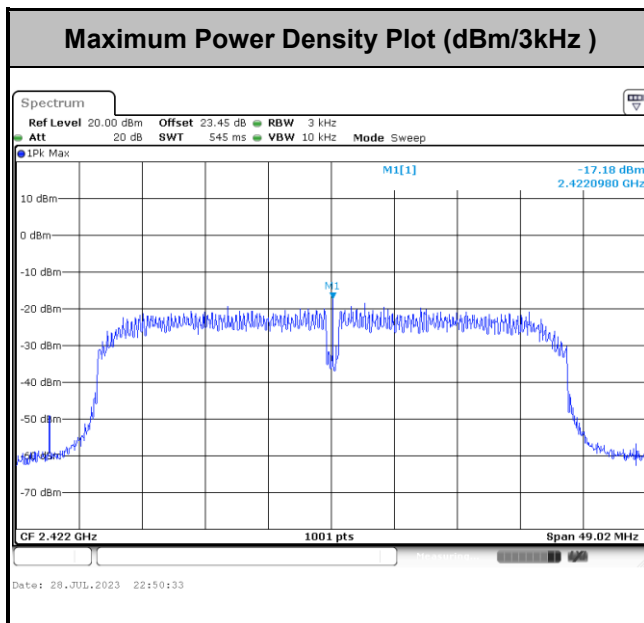




<802.11n HT20>



<802.11n HT40>

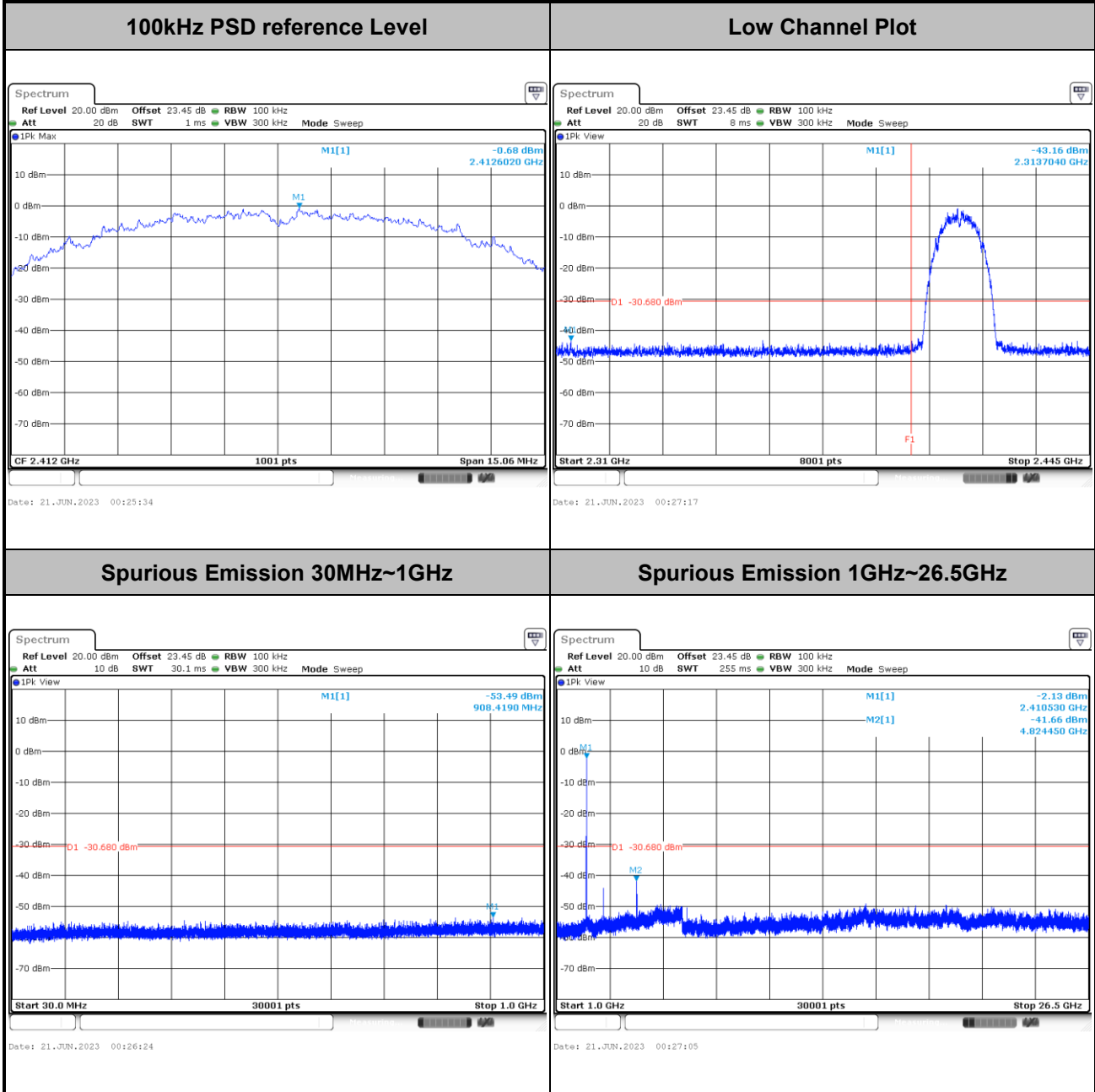




Band Edges and Spurious Emission

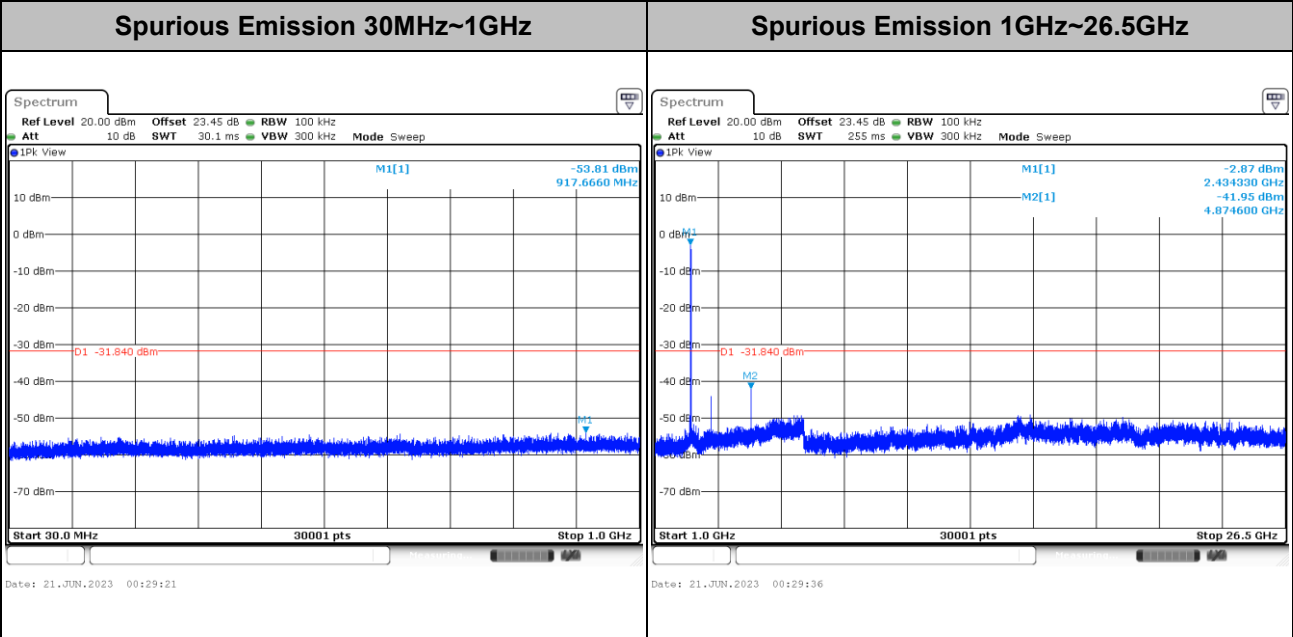
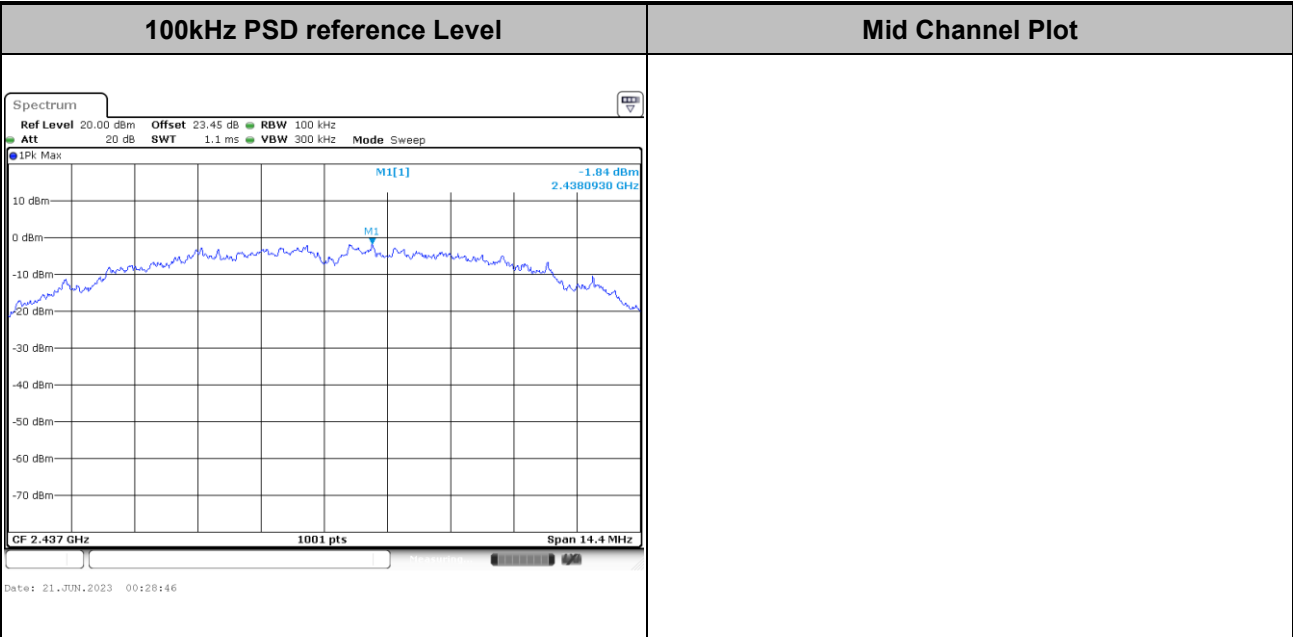
Number of TX = 1, Ant. 1 (Measured)

Test Mode :	802.11b	Test Channel :	01
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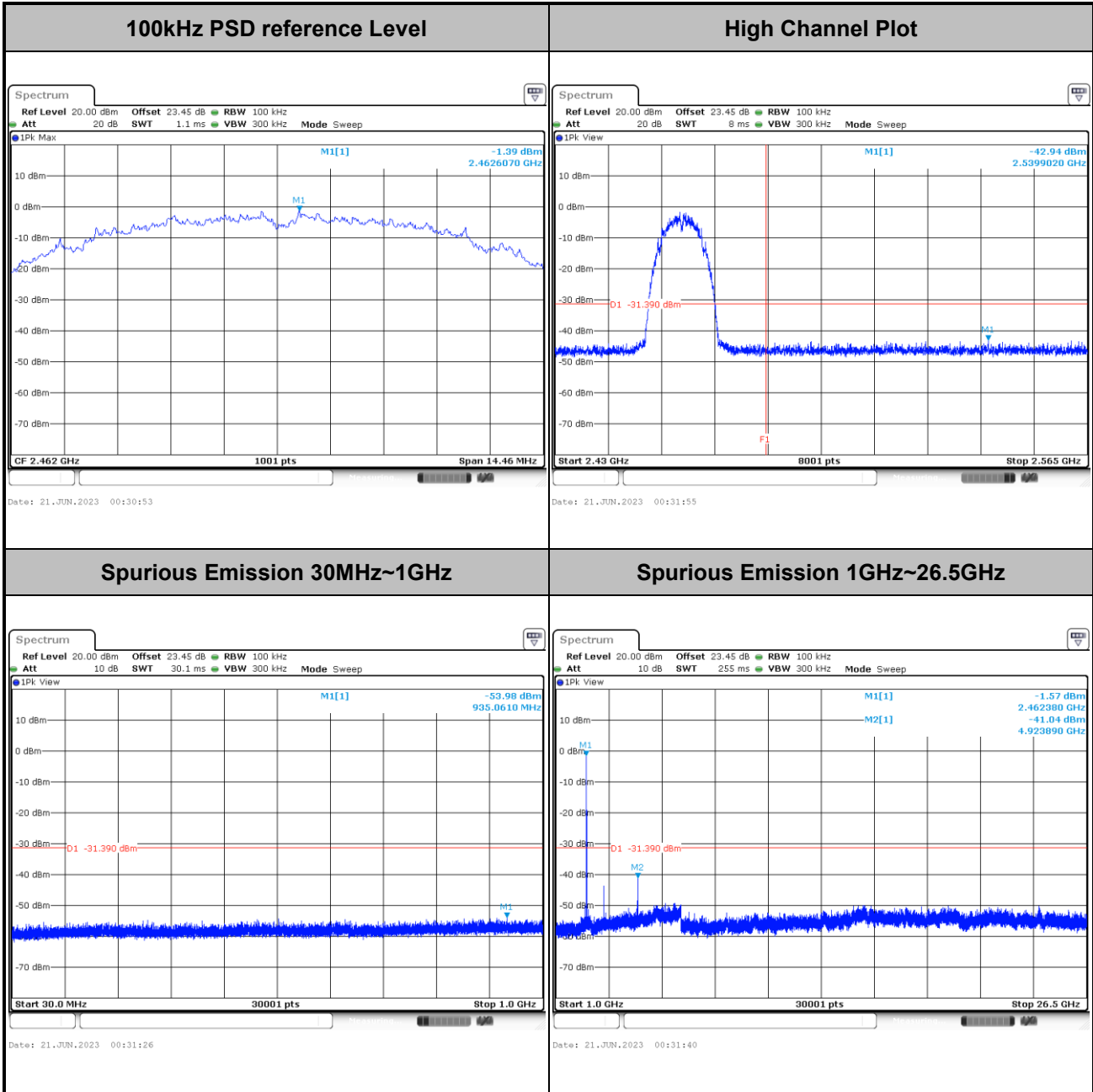


Test Mode :	802.11b	Test Channel :	06
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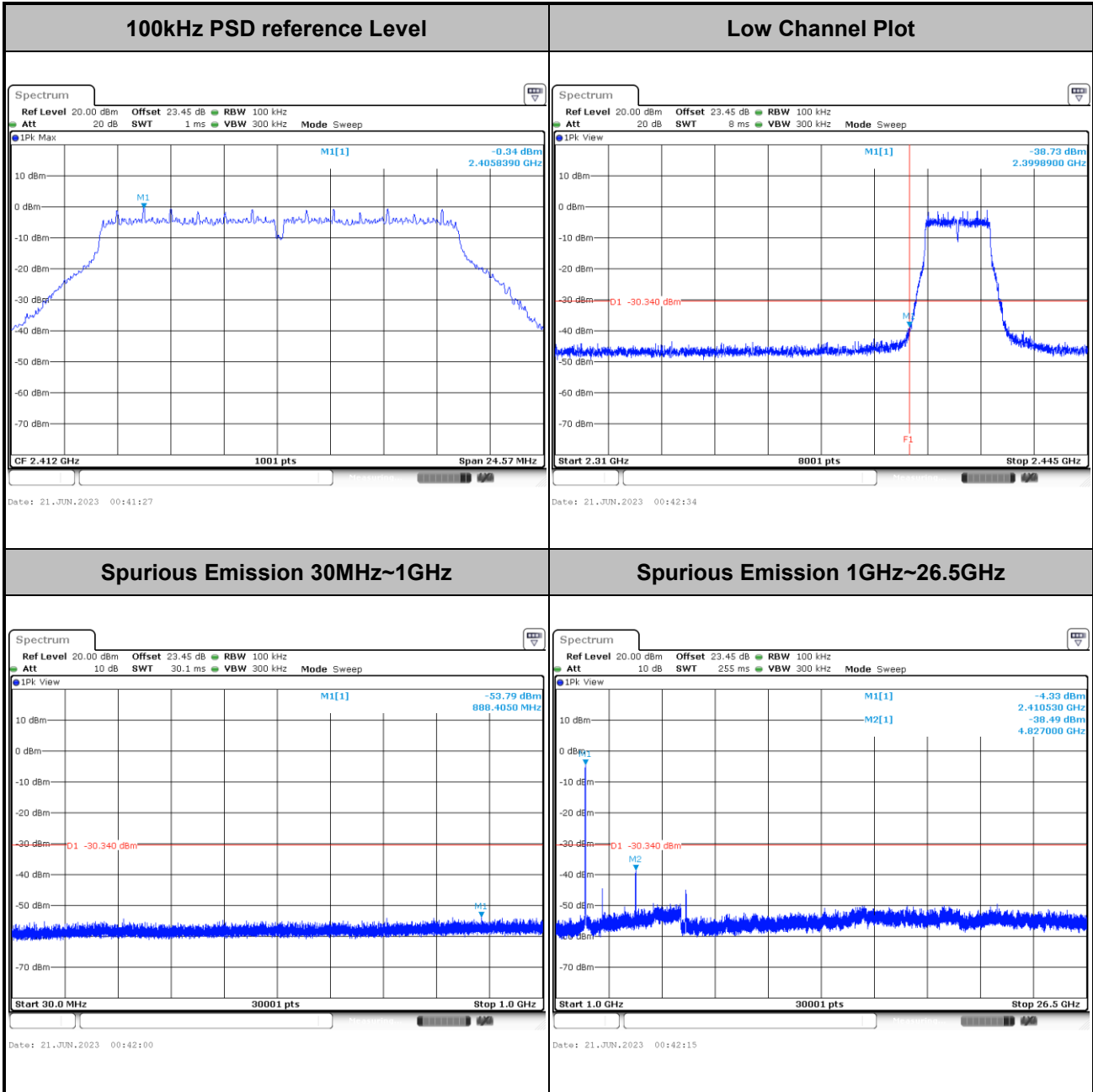


Test Mode :	802.11b	Test Channel :	11
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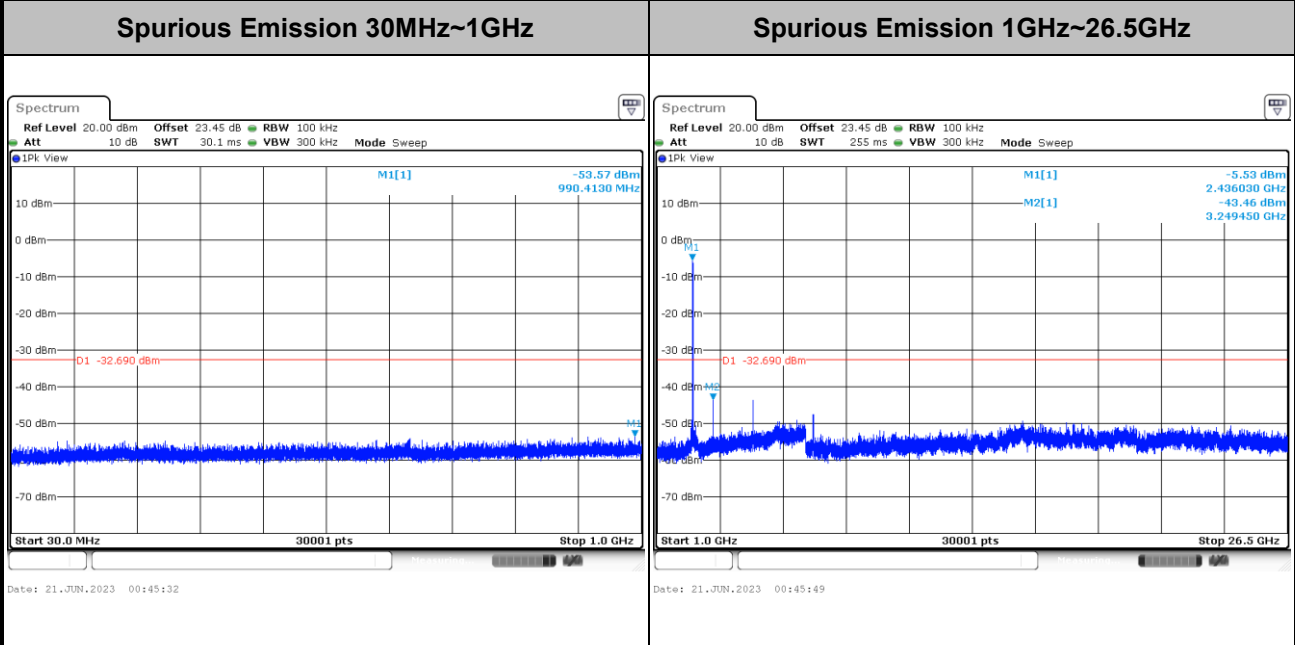
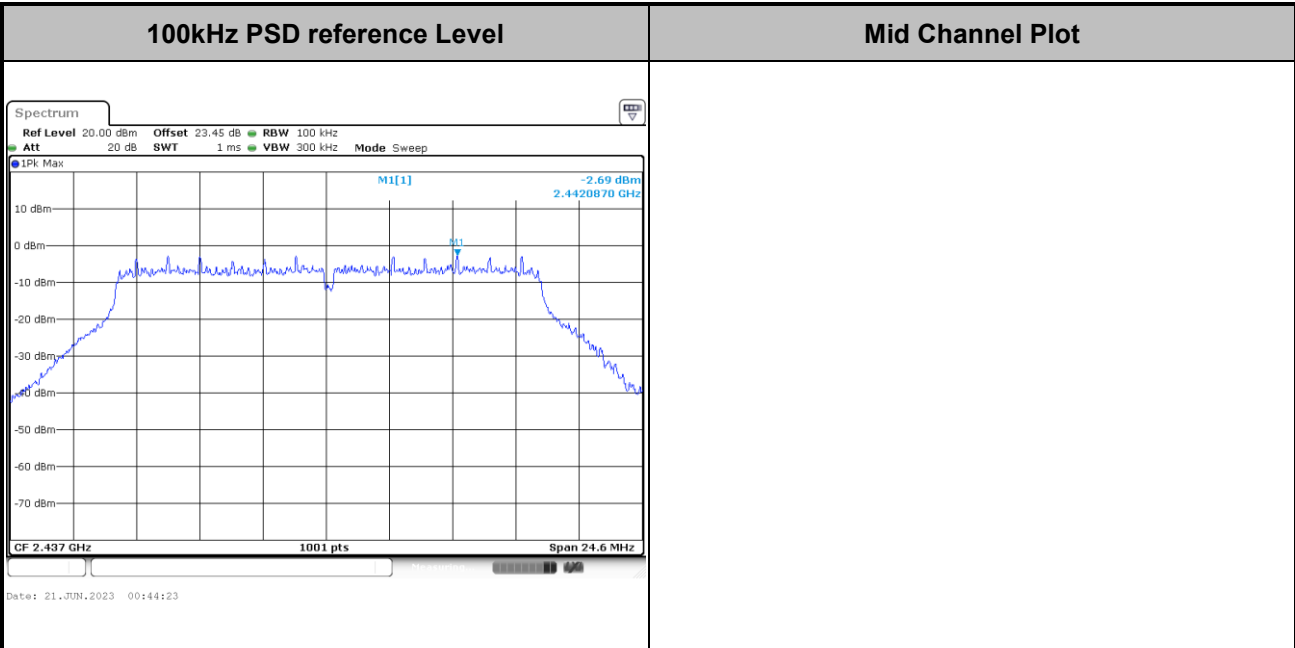


Test Mode :	802.11g	Test Channel :	01
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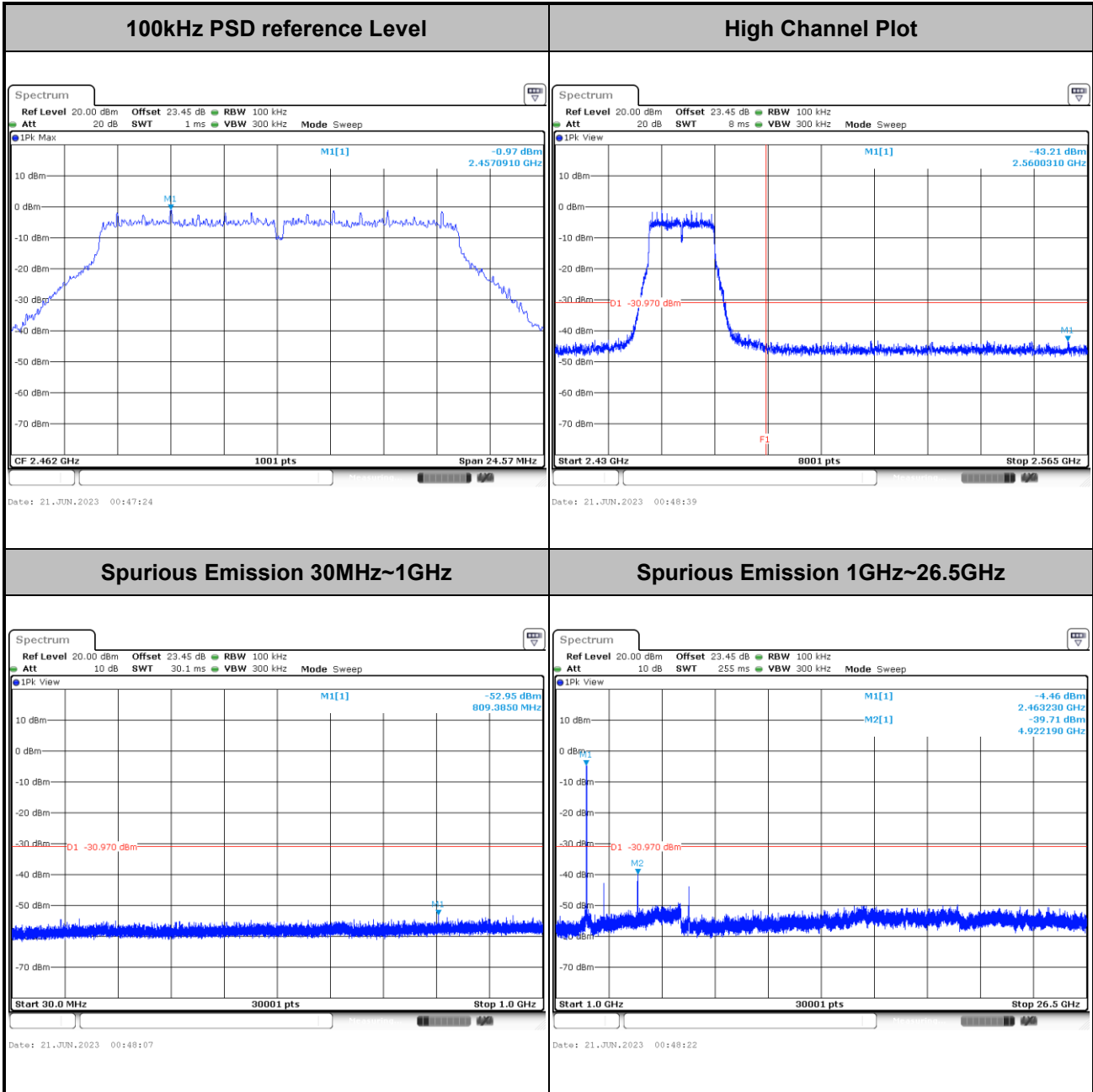


Test Mode :	802.11g	Test Channel :	06
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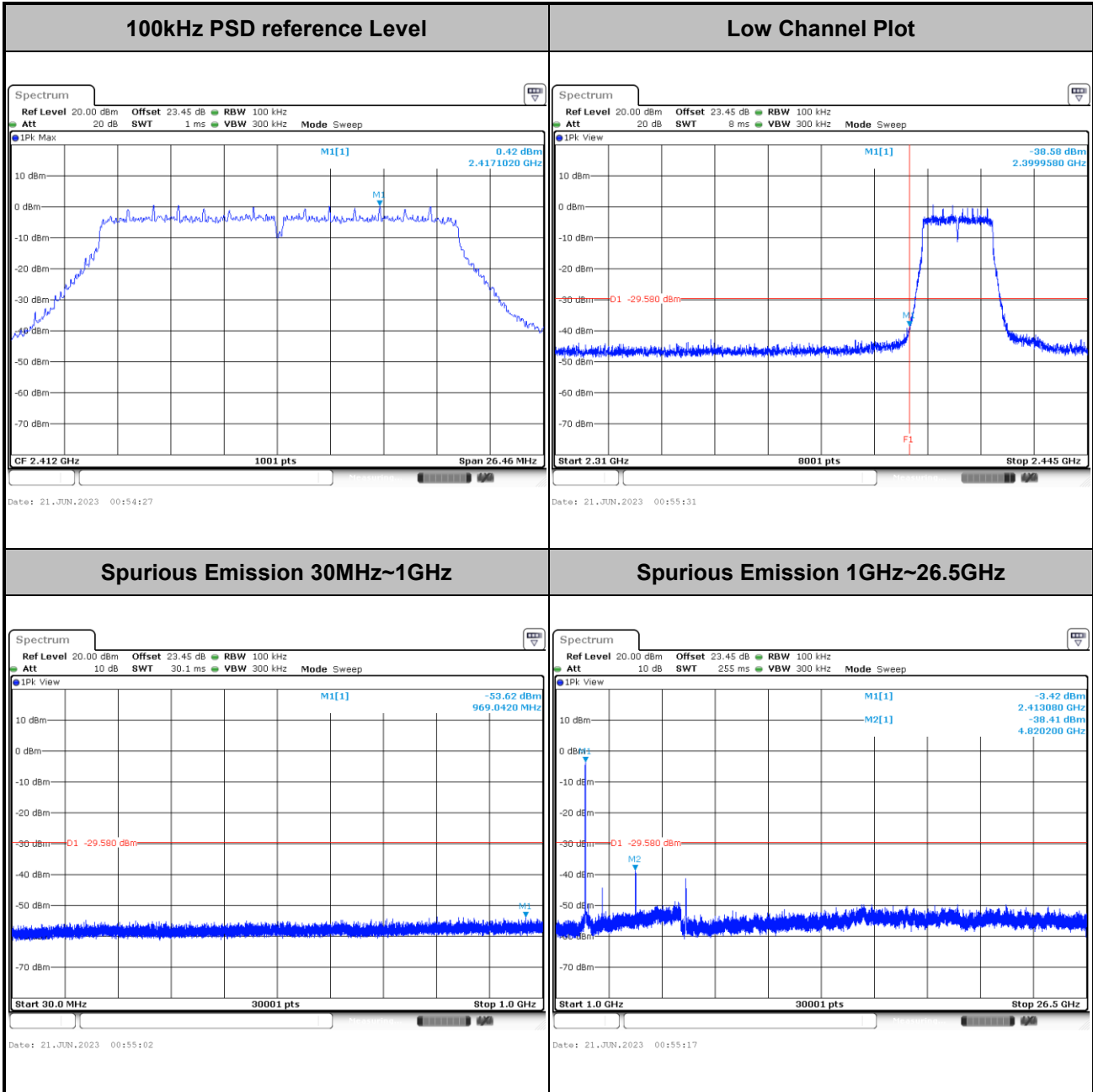


Test Mode :	802.11g	Test Channel :	11
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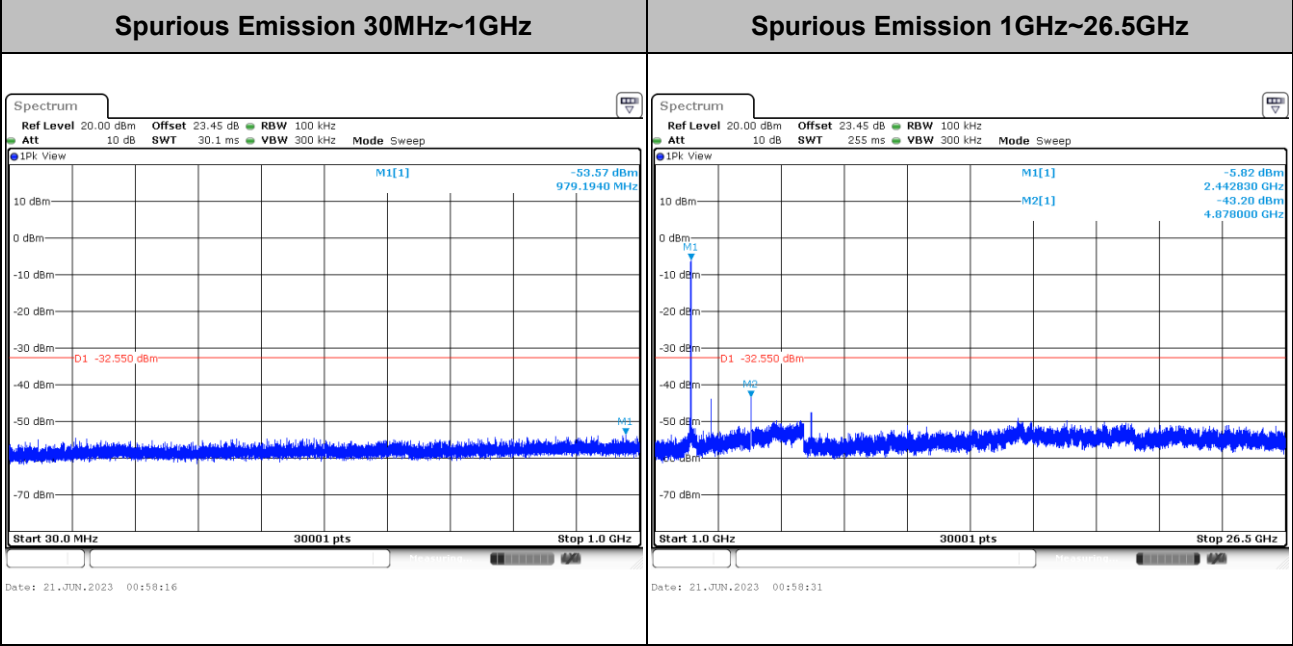
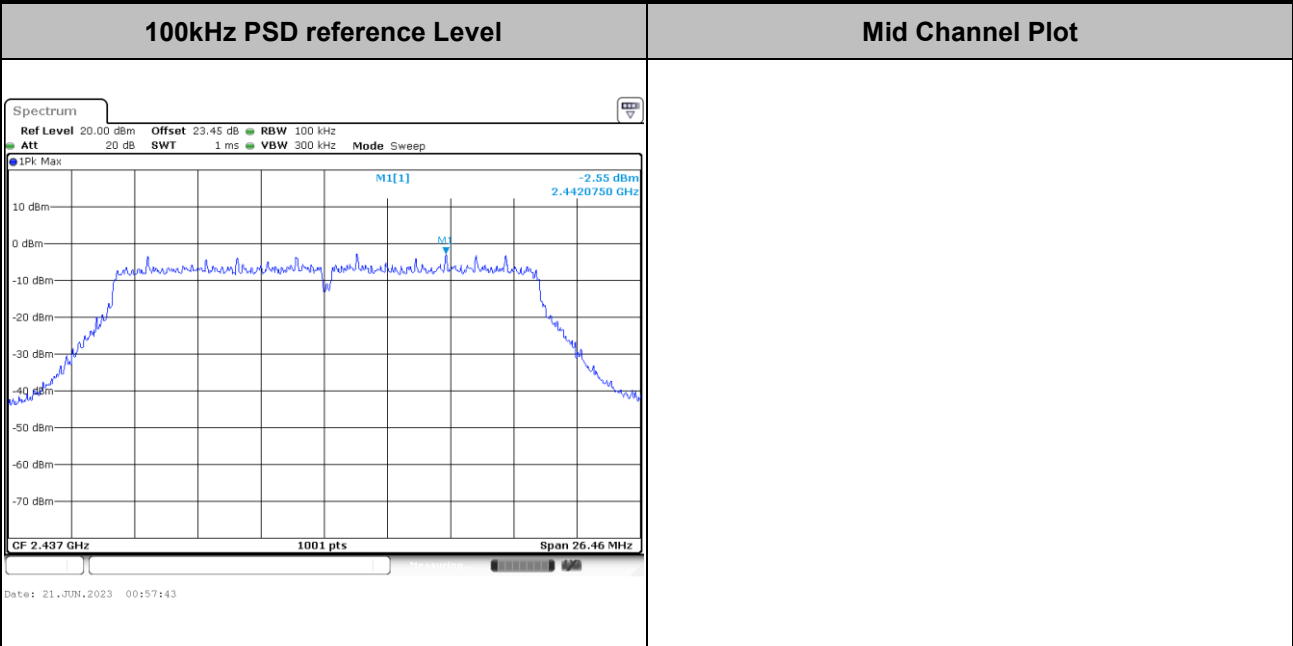


Test Mode :	802.11n HT20	Test Channel :	01
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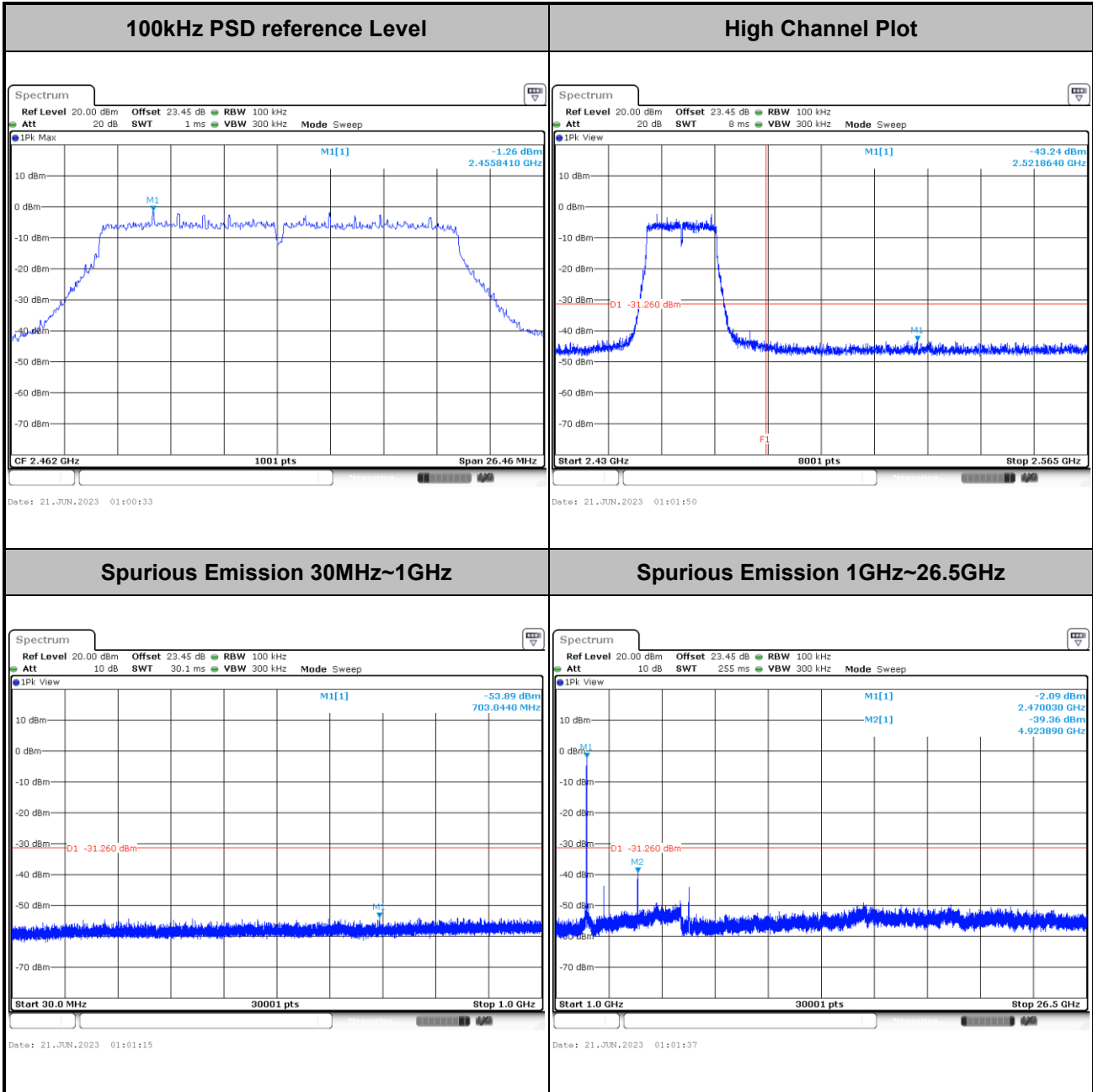


Test Mode :	802.11n HT20	Test Channel :	06
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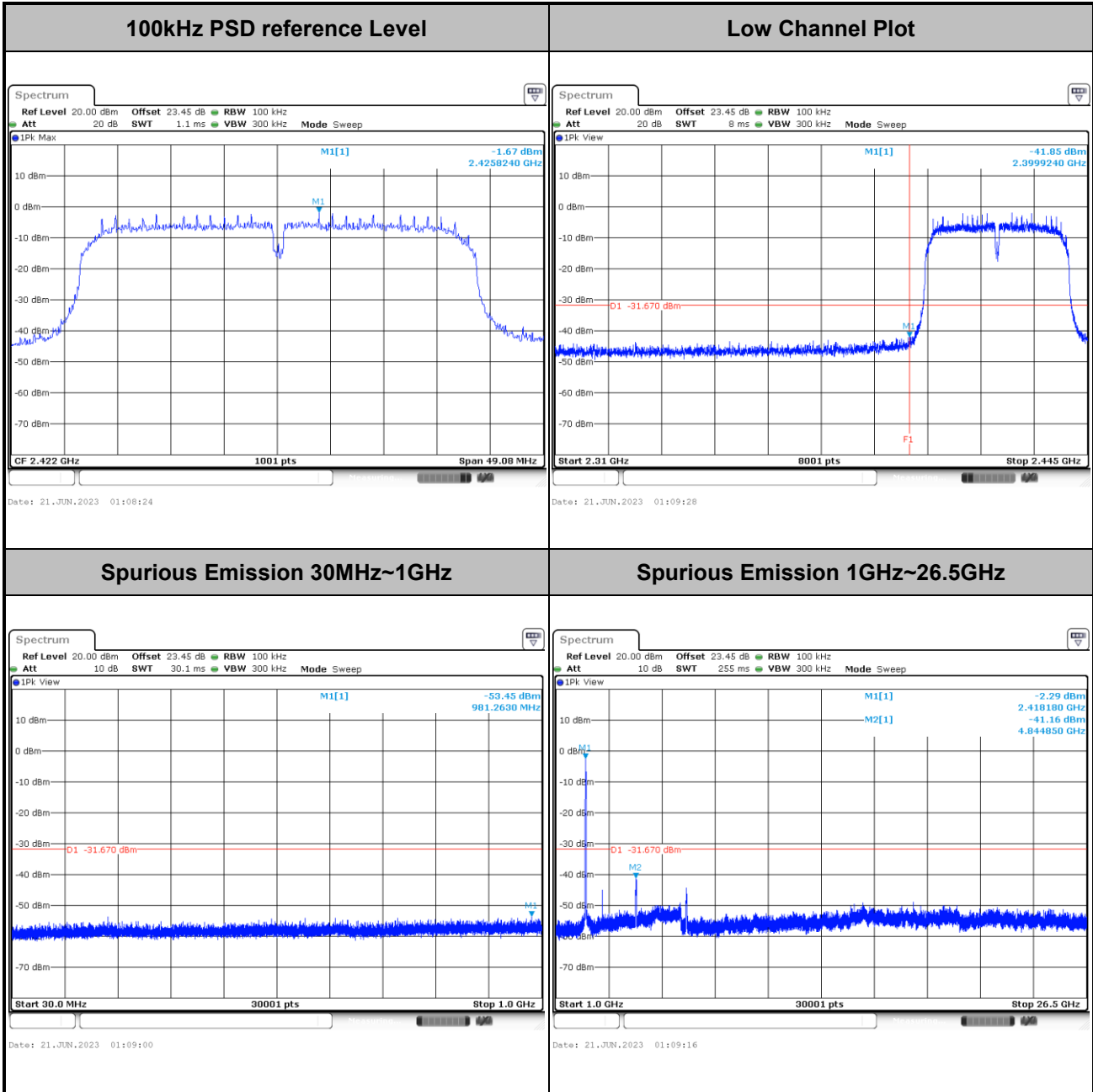


Test Mode :	802.11n HT20	Test Channel :	11
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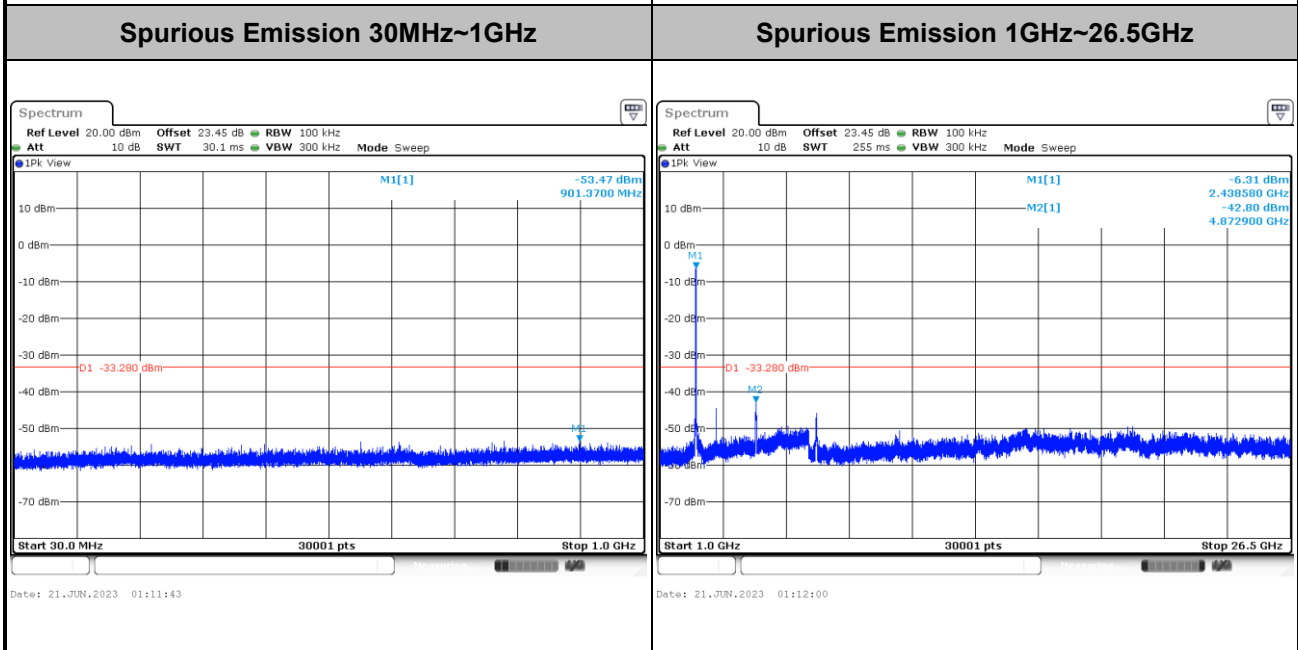
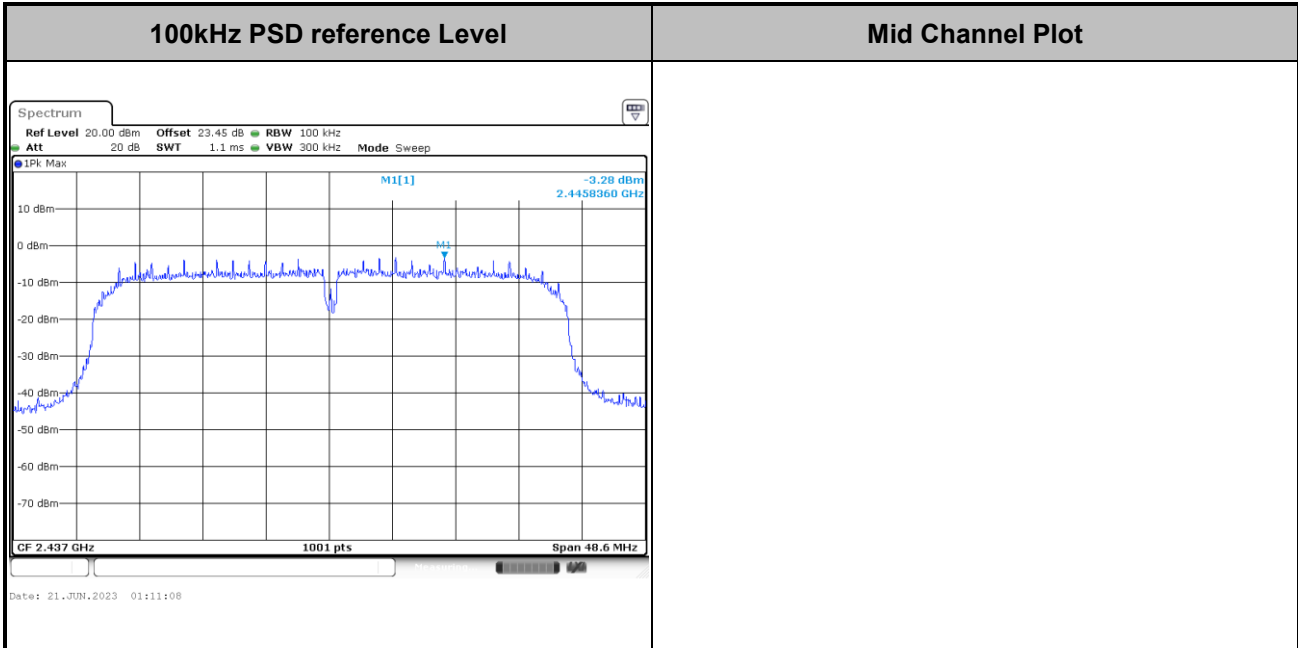


Test Mode :	802.11n HT40	Test Channel :	03
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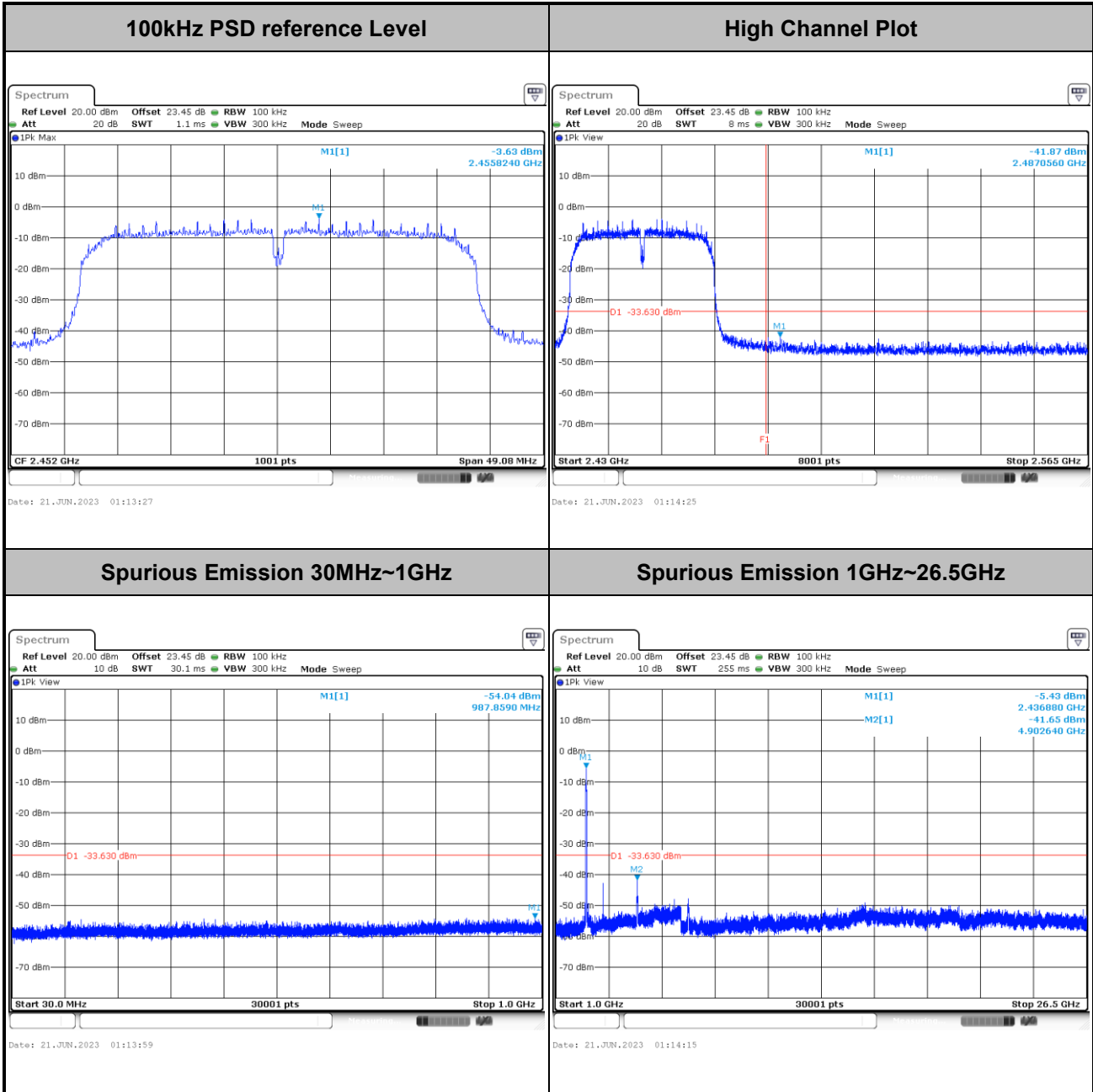


Test Mode :	802.11n HT40	Test Channel :	06
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Test Mode :	802.11n HT40	Test Channel :	09
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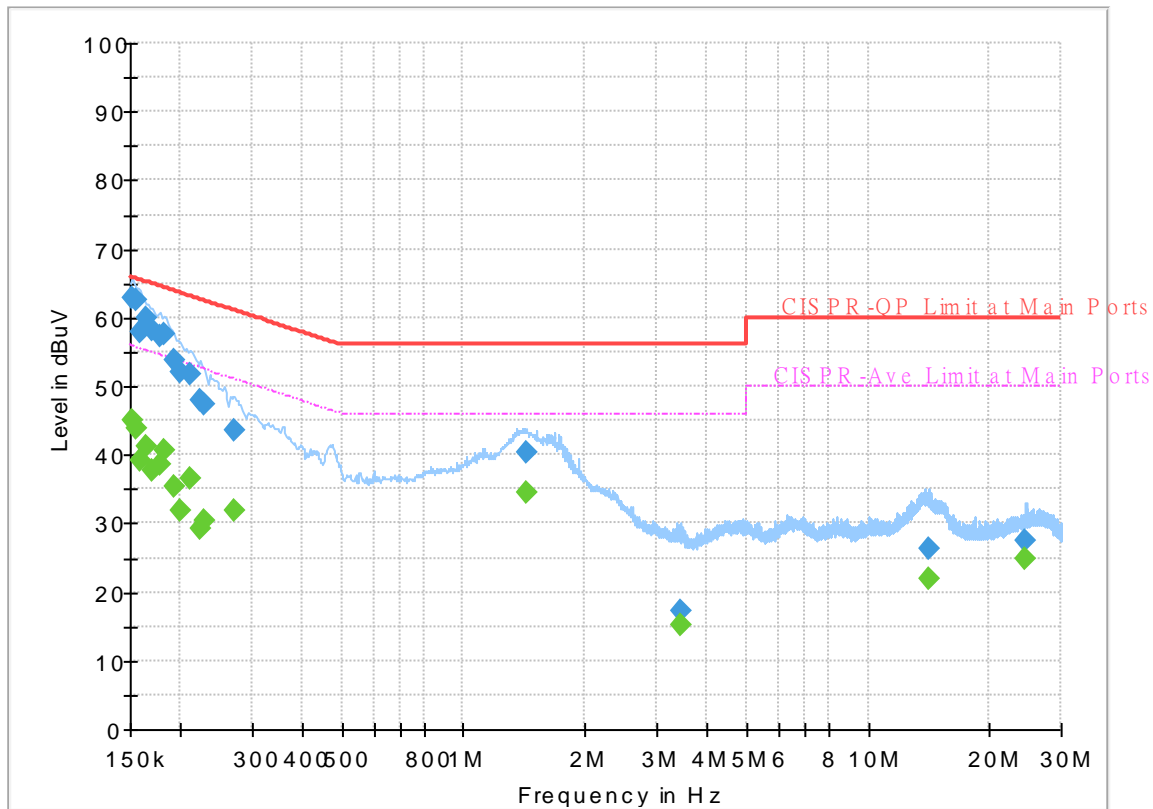
Appendix B. AC Conducted Emission Test Results

Test Engineer :	LI YAN-XUN	Temperature :	23~26°C
		Relative Humidity :	45~55%

EUT Information

Report NO : 342615
 Test Mode : Mode 1
 Test Voltage : Power From System
 Phase : Line

Full Spectrum



Final_Result

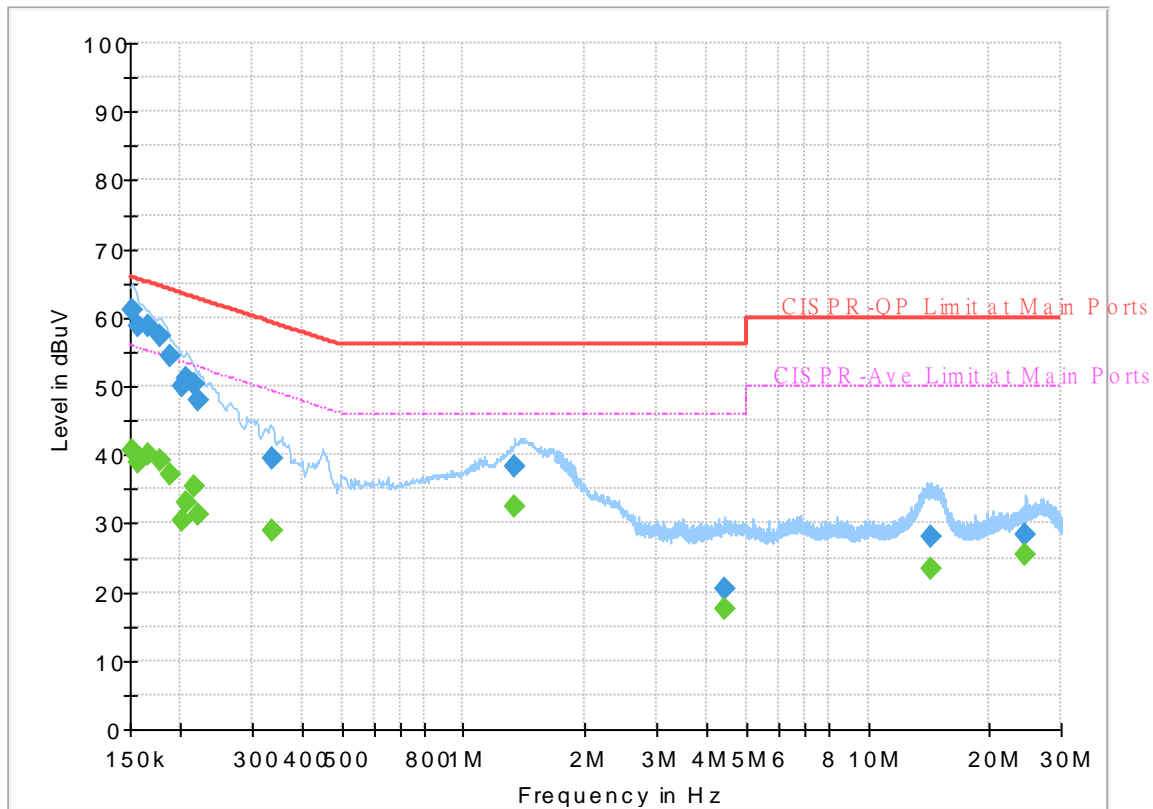
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	44.91	55.88	10.97	L1	OFF	19.8
0.152250	62.73	---	65.88	3.15	L1	OFF	19.8
0.154500	---	43.74	55.75	12.01	L1	OFF	19.8
0.154500	62.52	---	65.75	3.23	L1	OFF	19.8
0.159000	---	39.16	55.52	16.36	L1	OFF	19.8
0.159000	58.02	---	65.52	7.50	L1	OFF	19.8
0.163500	---	41.18	55.28	14.10	L1	OFF	19.8
0.163500	59.97	---	65.28	5.31	L1	OFF	19.8
0.170250	---	37.73	54.95	17.22	L1	OFF	19.8
0.170250	58.13	---	64.95	6.82	L1	OFF	19.8
0.177000	---	38.69	54.63	15.94	L1	OFF	19.8
0.177000	57.34	---	64.63	7.29	L1	OFF	19.8
0.181500	---	40.52	54.42	13.90	L1	OFF	19.8
0.181500	57.51	---	64.42	6.91	L1	OFF	19.8
0.192750	---	35.48	53.92	18.44	L1	OFF	19.8
0.192750	53.76	---	63.92	10.16	L1	OFF	19.8
0.199500	---	31.99	53.63	21.64	L1	OFF	19.8
0.199500	51.96	---	63.63	11.67	L1	OFF	19.8
0.210750	---	36.57	53.18	16.61	L1	OFF	19.8
0.210750	51.86	---	63.18	11.32	L1	OFF	19.8
0.224250	---	29.23	52.66	23.43	L1	OFF	19.8

0.224250	47.97	---	62.66	14.69	L1	OFF	19.8
0.228750	---	30.31	52.50	22.19	L1	OFF	19.8
0.228750	47.39	---	62.50	15.11	L1	OFF	19.8
0.271500	---	31.81	51.07	19.26	L1	OFF	19.8
0.271500	43.55	---	61.07	17.52	L1	OFF	19.8
1.425750	---	34.53	46.00	11.47	L1	OFF	19.8
1.425750	40.31	---	56.00	15.69	L1	OFF	19.8
3.439500	---	15.28	46.00	30.72	L1	OFF	19.9
3.439500	17.20	---	56.00	38.80	L1	OFF	19.9
14.138250	---	21.79	50.00	28.21	L1	OFF	20.0
14.138250	26.19	---	60.00	33.81	L1	OFF	20.0
24.576000	---	24.98	50.00	25.02	L1	OFF	20.0
24.576000	27.46	---	60.00	32.54	L1	OFF	20.0

EUT Information

Report NO : 342615
 Test Mode : Mode 1
 Test Voltage : Power From System
 Phase : Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	40.54	55.88	15.34	N	OFF	19.8
0.152250	61.21	---	65.88	4.67	N	OFF	19.8
0.156750	---	38.96	55.63	16.67	N	OFF	19.8
0.156750	58.66	---	65.63	6.97	N	OFF	19.8
0.165750	---	40.07	55.17	15.10	N	OFF	19.8
0.165750	58.71	---	65.17	6.46	N	OFF	19.8
0.177000	---	39.10	54.63	15.53	N	OFF	19.8
0.177000	57.19	---	64.63	7.44	N	OFF	19.8
0.188250	---	37.01	54.11	17.10	N	OFF	19.8
0.188250	54.35	---	64.11	9.76	N	OFF	19.8
0.201750	---	30.55	53.54	22.99	N	OFF	19.8
0.201750	50.06	---	63.54	13.48	N	OFF	19.8
0.206250	---	32.91	53.36	20.45	N	OFF	19.8
0.206250	51.15	---	63.36	12.21	N	OFF	19.8
0.215250	---	35.43	53.00	17.57	N	OFF	19.8
0.215250	50.33	---	63.00	12.67	N	OFF	19.8
0.222000	---	31.29	52.74	21.45	N	OFF	19.8
0.222000	47.82	---	62.74	14.92	N	OFF	19.8
0.336750	---	29.03	49.28	20.25	N	OFF	19.8
0.336750	39.59	---	59.28	19.69	N	OFF	19.8
1.335750	---	32.40	46.00	13.60	N	OFF	19.8

1.335750	38.27	---	56.00	17.73	N	OFF	19.8
4.400250	---	17.54	46.00	28.46	N	OFF	19.9
4.400250	20.37	---	56.00	35.63	N	OFF	19.9
14.352000	---	23.31	50.00	26.69	N	OFF	20.1
14.352000	28.08	---	60.00	31.92	N	OFF	20.1
24.576000	---	25.36	50.00	24.64	N	OFF	20.2
24.576000	28.32	---	60.00	31.68	N	OFF	20.2



Appendix C. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	23.8~26.7°C
		Relative Humidity :	46.8~65%

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	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		2355.465	56.22	-17.78	74	40.15	32.1	18.16	34.19	344	228	P	H	
		2389.59	44.76	-9.24	54	28.59	32.1	18.27	34.2	344	228	A	H	
	*	2412	102.83	-	-	86.68	32.08	18.27	34.2	344	228	P	H	
	*	2412	96.23	-	-	80.08	32.08	18.27	34.2	344	228	A	H	
													H	
			2340.975	55.36	-18.64	74	39.35	32.05	18.15	34.19	384	310	P	V
			2389.905	44.37	-9.63	54	28.2	32.1	18.27	34.2	384	310	A	V
	*		2412	99.53	-	-	83.38	32.08	18.27	34.2	384	310	P	V
	*		2412	92.57	-	-	76.42	32.08	18.27	34.2	384	310	A	V
														V
802.11b CH 06 2437MHz		2339.4	55.86	-18.14	74	39.96	32.04	18.05	34.19	121	222	P	H	
		2389.24	44.67	-9.33	54	28.5	32.1	18.27	34.2	121	222	A	H	
	*	2437	101.59	-	-	85.43	32.03	18.34	34.21	121	222	P	H	
	*	2437	94.77	-	-	78.61	32.03	18.34	34.21	121	222	A	H	
			2483.97	54.76	-19.24	74	38.59	32	18.39	34.22	121	222	P	H
			2493.14	44.5	-9.5	54	28.33	32	18.39	34.22	121	222	A	H
			2356.62	54.93	-19.07	74	38.86	32.1	18.16	34.19	334	293	P	V
			2388.82	44.28	-9.72	54	28.11	32.1	18.27	34.2	334	293	A	V
	*		2437	97.06	-	-	80.9	32.03	18.34	34.21	334	293	P	V
	*		2437	90.27	-	-	74.11	32.03	18.34	34.21	334	293	A	V
			2484.81	54.34	-19.66	74	38.17	32	18.39	34.22	334	293	P	V
			2494.05	44.32	-9.68	54	28.15	32	18.39	34.22	334	293	A	V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 11 2462MHz	*	2462	100.64	-	-	84.44	32	18.41	34.21	366	239	P	H
	*	2462	93.82	-	-	77.62	32	18.41	34.21	366	239	A	H
		2487.24	54.46	-19.54	74	38.29	32	18.39	34.22	366	239	P	H
		2483.72	44.52	-9.48	54	28.35	32	18.39	34.22	366	239	A	H
													H
													H
	*	2462	95.26	-	-	79.06	32	18.41	34.21	370	340	P	V
	*	2462	88.45	-	-	72.25	32	18.41	34.21	370	340	A	V
		2496.96	55.12	-18.88	74	38.95	32	18.39	34.22	370	340	P	V
		2487.4	44.36	-9.64	54	28.19	32	18.39	34.22	370	340	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11b CH 01 2412MHz		4824	55.48	-18.52	74	67.36	34.1	13.03	59.01	110	120	P	H	
		4824	50.18	-3.82	54	62.06	34.1	13.03	59.01	110	120	A	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			4824	54.39	-19.61	74	66.27	34.1	13.03	59.01	300	179	P	V
			4824	48.89	-5.11	54	60.77	34.1	13.03	59.01	300	179	A	V
														V
														V
														V
														V
													V	
													V	
													V	
													V	



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 06 2437MHz		4874	55.6	-18.4	74	67.33	34.15	13.04	58.92	106	333	P	H
		4874	50.56	-3.44	54	62.29	34.15	13.04	58.92	106	333	A	H
		7311	51.11	-22.89	74	57.59	35.7	15.38	57.56	100	308	P	H
		7311	42.65	-11.35	54	49.13	35.7	15.38	57.56	100	308	A	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
			4874	55.14	-18.86	74	66.87	34.15	13.04	58.92	100	220	P
		4874	49.65	-4.35	54	61.38	34.15	13.04	58.92	100	220	A	V
		7311	49.74	-24.26	74	56.22	35.7	15.38	57.56	311	355	P	V
		7311	43.89	-10.11	54	50.37	35.7	15.38	57.56	311	355	A	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 11 2462MHz		4924	53.58	-20.42	74	65.19	34.2	13.03	58.84	260	340	P	H
		4924	50.93	-3.07	54	62.54	34.2	13.03	58.84	260	340	A	H
		7386	52.72	-21.28	74	59.39	35.63	15.34	57.64	106	217	P	H
		7386	45.61	-8.39	54	52.28	35.63	15.34	57.64	106	217	A	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
			4924	52.69	-21.31	74	64.3	34.2	13.03	58.84	100	218	P
		4924	47.49	-6.51	54	59.1	34.2	13.03	58.84	100	218	A	V
		7386	53.67	-20.33	74	60.34	35.63	15.34	57.64	361	134	P	V
		7386	47.52	-6.48	54	54.19	35.63	15.34	57.64	361	134	A	V
													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. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11g CH 01 2412MHz		2380.84	55.48	-18.52	74	39.31	32.1	18.27	34.2	100	226	P	H	
		2389.94	46.42	-7.58	54	30.25	32.1	18.27	34.2	100	226	A	H	
	*	2412	104.88	-	-	88.73	32.08	18.27	34.2	100	226	P	H	
	*	2412	97.26	-	-	81.11	32.08	18.27	34.2	100	226	A	H	
													H	
														H
			2372.02	55.42	-18.58	74	39.35	32.1	18.16	34.19	385	313	P	V
			2389.8	45.19	-8.81	54	29.02	32.1	18.27	34.2	385	313	A	V
	*		2412	100.35	-	-	84.2	32.08	18.27	34.2	385	313	P	V
	*		2412	92.78	-	-	76.63	32.08	18.27	34.2	385	313	A	V
														V
														V
802.11g CH 06 2437MHz		2376.64	55.92	-18.08	74	39.85	32.1	18.17	34.2	332	226	P	H	
		2386.58	44.63	-9.37	54	28.46	32.1	18.27	34.2	332	226	A	H	
	*	2437	101.93	-	-	85.77	32.03	18.34	34.21	332	226	P	H	
	*	2437	94.32	-	-	78.16	32.03	18.34	34.21	332	226	A	H	
			2486.63	55.06	-18.94	74	38.89	32	18.39	34.22	332	226	P	H
			2484.11	44.57	-9.43	54	28.4	32	18.39	34.22	332	226	A	H
			2333.66	54.89	-19.11	74	39.04	32	18.04	34.19	378	294	P	V
			2350.46	44.4	-9.6	54	28.34	32.1	18.15	34.19	378	294	A	V
	*		2437	97.53	-	-	81.37	32.03	18.34	34.21	378	294	P	V
	*		2437	89.79	-	-	73.63	32.03	18.34	34.21	378	294	A	V
			2496.71	54.73	-19.27	74	38.56	32	18.39	34.22	378	294	P	V
			2494.75	44.36	-9.64	54	28.19	32	18.39	34.22	378	294	A	V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 11 2462MHz	*	2462	101.63	-	-	85.43	32	18.41	34.21	282	221	P	H
	*	2462	94.38	-	-	78.18	32	18.41	34.21	282	221	A	H
		2484.24	56.74	-17.26	74	40.57	32	18.39	34.22	282	221	P	H
		2483.56	45.58	-8.42	54	29.41	32	18.39	34.22	282	221	A	H
													H
													H
	*	2462	96.75	-	-	80.55	32	18.41	34.21	372	339	P	V
	*	2462	89.25	-	-	73.05	32	18.41	34.21	372	339	A	V
		2487.64	54.68	-19.32	74	38.51	32	18.39	34.22	372	339	P	V
		2483.56	44.73	-9.27	54	28.56	32	18.39	34.22	372	339	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11g CH 01 2412MHz		4824	61.11	-12.89	74	72.99	34.1	13.03	59.01	100	262	P	H	
		4824	50.4	-3.6	54	62.28	34.1	13.03	59.01	100	262	A	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			4824	57.38	-16.62	74	69.26	34.1	13.03	59.01	102	219	P	V
			4824	48.77	-5.23	54	60.65	34.1	13.03	59.01	102	219	A	V
														V
														V
														V
														V
														V
													V	
													V	



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11g CH 06 2437MHz		4874	57.96	-16.04	74	69.69	34.15	13.04	58.92	100	265	P	H	
		4874	48.66	-5.34	54	60.39	34.15	13.04	58.92	100	265	A	H	
		7311	59.52	-14.48	74	66	35.7	15.38	57.56	383	46	P	H	
		7311	49.01	-4.99	54	55.49	35.7	15.38	57.56	383	46	A	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			4874	56.76	-17.24	74	68.49	34.15	13.04	58.92	308	218	P	V
			4874	47.09	-6.91	54	58.82	34.15	13.04	58.92	308	218	A	V
			7311	60	-14	74	66.48	35.7	15.38	57.56	385	132	P	V
			7311	50.61	-3.39	54	57.09	35.7	15.38	57.56	385	132	A	V
														V
														V
														V
														V
													V	
													V	
													V	



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 11 2462MHz		4924	57.09	-16.91	74	68.7	34.2	13.03	58.84	100	337	P	H
		4924	49.62	-4.38	54	61.23	34.2	13.03	58.84	100	337	A	H
		7386	52.36	-21.64	74	59.03	35.63	15.34	57.64	400	159	P	H
		7386	42.62	-11.38	54	49.29	35.63	15.34	57.64	400	159	A	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
			4924	54.4	-19.6	74	66.01	34.2	13.03	58.84	100	224	P
		4924	46.99	-7.01	54	58.6	34.2	13.03	58.84	100	224	A	V
		7386	56.54	-17.46	74	63.21	35.63	15.34	57.64	400	332	P	V
		7386	50.52	-3.48	54	57.19	35.63	15.34	57.64	400	332	A	V
													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 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 01 2412MHz		2389.695	58.58	-15.42	74	42.41	32.1	18.27	34.2	100	226	P	H	
		2390	47.15	-6.85	54	30.98	32.1	18.27	34.2	100	226	A	H	
	*	2412	105.81	-	-	89.66	32.08	18.27	34.2	100	226	P	H	
	*	2412	98.05	-	-	81.9	32.08	18.27	34.2	100	226	A	H	
													H	
														H
			2389.905	56.91	-17.09	74	40.74	32.1	18.27	34.2	385	313	P	V
			2390	45.59	-8.41	54	29.42	32.1	18.27	34.2	385	313	A	V
		*	2412	100.89	-	-	84.74	32.08	18.27	34.2	385	313	P	V
		*	2412	93.21	-	-	77.06	32.08	18.27	34.2	385	313	A	V
													V	
													V	
802.11n HT20 CH 06 2437MHz		2387	54.68	-19.32	74	38.51	32.1	18.27	34.2	332	226	P	H	
		2388.4	44.62	-9.38	54	28.45	32.1	18.27	34.2	332	226	A	H	
	*	2437	101.37	-	-	85.21	32.03	18.34	34.21	332	226	P	H	
	*	2437	93.66	-	-	77.5	32.03	18.34	34.21	332	226	A	H	
			2486.42	55.5	-18.5	74	39.33	32	18.39	34.22	332	226	P	H
			2483.69	44.63	-9.37	54	28.46	32	18.39	34.22	332	226	A	H
			2344.72	55.83	-18.17	74	39.8	32.07	18.15	34.19	378	294	P	V
			2351.72	44.43	-9.57	54	28.37	32.1	18.15	34.19	378	294	A	V
		*	2437	96.73	-	-	80.57	32.03	18.34	34.21	378	294	P	V
		*	2437	89.1	-	-	72.94	32.03	18.34	34.21	378	294	A	V
		2490.69	54.65	-19.35	74	38.48	32	18.39	34.22	378	294	P	V	
		2491.32	44.36	-9.64	54	28.19	32	18.39	34.22	378	294	A	V	



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 11 2462MHz	*	2462	100.7	-	-	84.5	32	18.41	34.21	282	221	P	H
	*	2462	93.37	-	-	77.17	32	18.41	34.21	282	221	A	H
		2484.44	55.24	-18.76	74	39.07	32	18.39	34.22	282	221	P	H
		2483.52	45.49	-8.51	54	29.32	32	18.39	34.22	282	221	A	H
													H
													H
	*	2462	97.33	-	-	81.13	32	18.41	34.21	372	330	P	V
	*	2462	90.79	-	-	74.59	32	18.41	34.21	372	330	A	V
		2484.2	54.75	-19.25	74	38.58	32	18.39	34.22	372	330	P	V
		2483.52	44.74	-9.26	54	28.57	32	18.39	34.22	372	330	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 01 2412MHz		4824	60.82	-13.18	74	72.7	34.1	13.03	59.01	100	260	P	H	
		4824	50.6	-3.4	54	62.48	34.1	13.03	59.01	100	260	A	H	
													H	
													H	
													H	
													H	
			4824	57.52	-16.48	74	69.4	34.1	13.03	59.01	200	216	P	V
			4824	47.67	-6.33	54	59.55	34.1	13.03	59.01	200	216	A	V
														V
														V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 06 2437MHz		4874	58.74	-15.26	74	70.47	34.15	13.04	58.92	100	249	P	H	
		4874	47.76	-6.24	54	59.49	34.15	13.04	58.92	100	249	A	H	
		7311	58.93	-15.07	74	65.41	35.7	15.38	57.56	100	211	P	H	
		7311	48.41	-5.59	54	54.89	35.7	15.38	57.56	100	211	A	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			4874	58.62	-15.38	74	70.35	34.15	13.04	58.92	274	207	P	V
			4874	46.68	-7.32	54	58.41	34.15	13.04	58.92	274	207	A	V
			7311	61.24	-12.76	74	67.72	35.7	15.38	57.56	197	201	P	V
			7311	50.48	-3.52	54	56.96	35.7	15.38	57.56	197	201	A	V
														V
														V
														V
													V	
													V	
													V	



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 11 2462MHz		4924	60.86	-13.14	74	72.47	34.2	13.03	58.84	265	144	P	H	
		4924	48.76	-5.24	54	60.37	34.2	13.03	58.84	265	144	A	H	
		7386	55.9	-18.1	74	62.57	35.63	15.34	57.64	100	95	P	H	
		7386	41.02	-12.98	54	47.69	35.63	15.34	57.64	100	95	A	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			4924	57.5	-16.5	74	69.11	34.2	13.03	58.84	400	302	P	V
			4924	46.12	-7.88	54	57.73	34.2	13.03	58.84	400	302	A	V
			7386	62.82	-11.18	74	69.49	35.63	15.34	57.64	360	113	P	V
			7386	49.98	-4.02	54	56.65	35.63	15.34	57.64	360	113	A	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 802.11n HT40 (Band Edge @ 3m)**

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		2388.6	67.36	-6.64	74	51.19	32.1	18.27	34.2	301	235	P	H
		2389.65	50.41	-3.59	54	34.24	32.1	18.27	34.2	301	235	A	H
	*	2422	102.65	-	-	86.44	32.06	18.35	34.2	301	235	P	H
	*	2422	94.3	-	-	78.09	32.06	18.35	34.2	301	235	A	H
		2492.71	55.92	-18.08	74	39.75	32	18.39	34.22	301	235	P	H
		2485.33	45.27	-8.73	54	29.1	32	18.39	34.22	301	235	A	H
		2389.05	62.04	-11.96	74	45.87	32.1	18.27	34.2	311	330	P	V
		2389.95	46.88	-7.12	54	30.71	32.1	18.27	34.2	311	330	A	V
	*	2422	98.29	-	-	82.08	32.06	18.35	34.2	311	330	P	V
	*	2422	90.68	-	-	74.47	32.06	18.35	34.2	311	330	A	V
		2489.38	55.57	-18.43	74	39.4	32	18.39	34.22	311	330	P	V
		2493.79	44.97	-9.03	54	28.8	32	18.39	34.22	311	330	A	V
802.11n HT40 CH 06 2437MHz		2382.1	56.02	-17.98	74	39.85	32.1	18.27	34.2	294	242	P	H
		2389.66	46.01	-7.99	54	29.84	32.1	18.27	34.2	294	242	A	H
	*	2437	100.8	-	-	84.64	32.03	18.34	34.21	294	242	P	H
	*	2437	93.16	-	-	77	32.03	18.34	34.21	294	242	A	H
		2492.58	55.96	-18.04	74	39.79	32	18.39	34.22	294	242	P	H
		2484.25	45.18	-8.82	54	29.01	32	18.39	34.22	294	242	A	H
		2313.36	54.75	-19.25	74	39.02	31.88	18.03	34.18	391	0	P	V
		2389.8	44.74	-9.26	54	28.57	32.1	18.27	34.2	391	0	A	V
	*	2437	95.12	-	-	78.96	32.03	18.34	34.21	391	0	P	V
	*	2437	87.52	-	-	71.36	32.03	18.34	34.21	391	0	A	V
		2498.88	54.87	-19.13	74	38.7	32	18.39	34.22	391	0	P	V
		2492.72	44.58	-9.42	54	28.41	32	18.39	34.22	391	0	A	V



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 09 2452MHz		2367.96	55.81	-18.19	74	39.74	32.1	18.16	34.19	361	221	P	H
		2346.26	45.44	-8.56	54	29.4	32.08	18.15	34.19	361	221	A	H
	*	2452	99.32	-	-	83.2	32	18.33	34.21	361	221	P	H
	*	2452	90.6	-	-	74.48	32	18.33	34.21	361	221	A	H
		2489.78	56.2	-17.8	74	40.03	32	18.39	34.22	361	221	P	H
		2483.83	46	-8	54	29.83	32	18.39	34.22	361	221	A	H
		2387.98	56.52	-17.48	74	40.35	32.1	18.27	34.2	340	304	P	V
		2389.1	44.9	-9.1	54	28.73	32.1	18.27	34.2	340	304	A	V
	*	2452	94.87	-	-	78.75	32	18.33	34.21	340	304	P	V
	*	2452	87.15	-	-	71.03	32	18.33	34.21	340	304	A	V
		2491.32	55.76	-18.24	74	39.59	32	18.39	34.22	340	304	P	V
		2495.17	44.72	-9.28	54	28.55	32	18.39	34.22	340	304	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. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT40 CH 03 2422MHz		4844	59.11	-14.89	74	70.89	34.18	13.01	58.97	100	267	P	H	
		4844	47.86	-6.14	54	59.64	34.18	13.01	58.97	100	267	A	H	
		7266	57.24	-16.76	74	63.59	35.77	15.4	57.52	100	167	P	H	
		7266	45.33	-8.67	54	51.68	35.77	15.4	57.52	100	167	A	H	
													H	
														H
			4844	59.35	-14.65	74	71.13	34.18	13.01	58.97	275	209	P	V
			4844	47.38	-6.62	54	59.16	34.18	13.01	58.97	275	209	A	V
			7266	61.09	-12.91	74	67.44	35.77	15.4	57.52	300	349	P	V
			7266	48.03	-5.97	54	54.38	35.77	15.4	57.52	300	349	A	V
													V	
													V	



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT40 CH 06 2437MHz		4874	58.56	-15.44	74	70.29	34.15	13.04	58.92	104	207	P	H	
		4874	47.74	-6.26	54	59.47	34.15	13.04	58.92	104	207	A	H	
		7311	62.77	-11.23	74	69.25	35.7	15.38	57.56	100	216	P	H	
		7311	50.22	-3.78	54	56.7	35.7	15.38	57.56	100	216	A	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			4874	57.95	-16.05	74	69.68	34.15	13.04	58.92	284	315	P	V
			4874	45.98	-8.02	54	57.71	34.15	13.04	58.92	284	315	A	V
			7311	60.69	-13.31	74	67.17	35.7	15.38	57.56	262	345	P	V
			7311	48.35	-5.65	54	54.83	35.7	15.38	57.56	262	345	A	V
														V
														V
														V
													V	
													V	
													V	



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT40 CH 09 2452MHz		4904	56.95	-17.05	74	68.66	34.12	13.04	58.87	100	138	P	H	
		4904	46.74	-7.26	54	58.45	34.12	13.04	58.87	100	138	A	H	
		7356	57.32	-16.68	74	63.89	35.69	15.35	57.61	100	213	P	H	
		7356	48.12	-5.88	54	54.69	35.69	15.35	57.61	100	213	A	H	
													H	
													H	
													H	
													H	
													H	
													H	
													H	
			4904	54.3	-19.7	74	66.01	34.12	13.04	58.87	100	205	P	V
			4904	45.46	-8.54	54	57.17	34.12	13.04	58.87	100	205	A	V
			7356	59.69	-14.31	74	66.26	35.69	15.35	57.61	100	126	P	V
			7356	50.12	-3.88	54	56.69	35.69	15.35	57.61	100	126	A	V
														V
														V
														V
													V	
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Emission above 18GHz

2.4GHz WIFI 802.11b (SHF)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11b SHF		18126	43.38	-30.62	74	52.73	37.7	12.58	59.63	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
			18273	42.29	-31.71	74	52.15	37.67	12.12	59.65	-	-	P
													V
													V
													V
													V
													V
													V
													V
													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 with sufficient margin against limit line or noise floor only.												



Emission below 1GHz

2.4GHz WIFI 802.11b (LF)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
2.4GHz 802.11b LF		69.42	33.05	-6.95	40	49.03	12.21	1.68	29.87	-	-	P	H	
		228.18	33.18	-12.82	46	44.38	16.09	2.68	29.97	-	-	P	H	
		280.83	33.29	-12.71	46	41.5	18.82	2.9	29.93	-	-	P	H	
		320.3	33.05	-12.95	46	40.49	19.41	3.06	29.91	-	-	P	H	
		410.6	31.08	-14.92	46	35.09	22.33	3.53	29.87	-	-	P	H	
		953.1	34.71	-11.29	46	27.65	30.36	5.51	28.81	-	-	P	H	
														H
														H
														H
														H
														H
														H
														H
														H
			30	33.09	-6.91	40	37.66	24.11	1.4	30.08	-	-	P	V
			39.18	31.28	-8.72	40	39.8	20.01	1.43	29.96	-	-	P	V
			68.61	31.29	-8.71	40	47.37	12.13	1.68	29.89	-	-	P	V
			517.7	30.68	-15.32	46	32.94	23.82	3.89	29.97	-	-	P	V
			871.9	33.83	-12.17	46	28.66	29	5.34	29.17	-	-	P	V
			955.9	35.47	-10.53	46	28.34	30.42	5.51	28.8	-	-	P	V
													V	
													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.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) =
Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Margin (dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)
= 55.45 (dBμV/m)
2. Margin (dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 55.45(dBμV/m) – 74(dBμV/m)
= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)
= 43.54 (dBμV/m)
2. Margin (dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 43.54(dBμV/m) – 54(dBμV/m)
= -10.46(dB)

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



Appendix D. Radiated Spurious Emission Plots

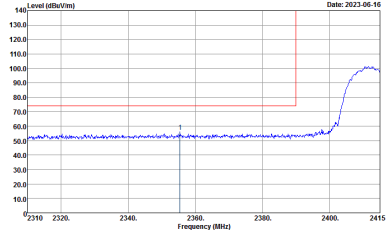
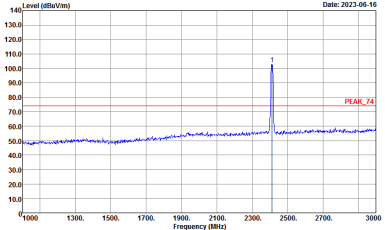
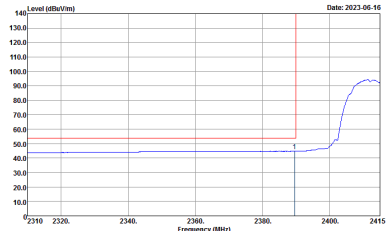
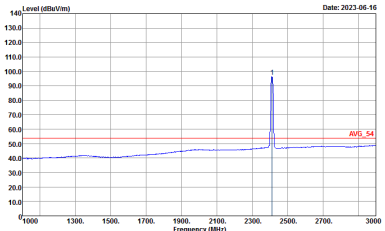
Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	23.8~26.7°C
		Relative Humidity :	46.8~65%

Note symbol

-L	Low channel location
-R	High channel location



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

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE_24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK_24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Site : 03CH07-HY Condition : AVG_BE_24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : AVG_24 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>

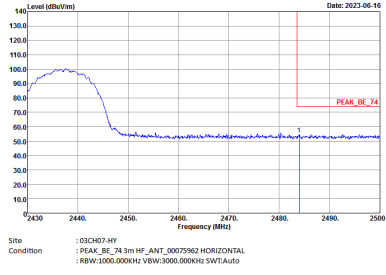
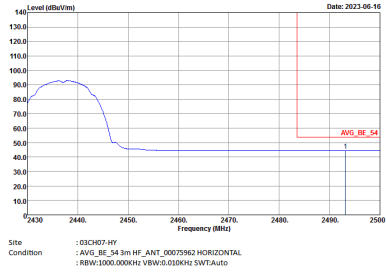


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Vertical	Fundamental
Peak	<p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical Peak. The y-axis ranges from 10.0 to 140.0 dBuV/m, and the x-axis ranges from 2310 to 2415 MHz. A red line indicates a peak level of approximately 100 dBuV/m at 2412 MHz. A blue line shows the noise floor around 50 dBuV/m. A red box highlights the peak area.</p> <p>Site : 03CH07-HY Condition : :PEAK_BE_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Level (dBuV/m) vs Frequency (MHz) plot for Fundamental Peak. The y-axis ranges from 10.0 to 140.0 dBuV/m, and the x-axis ranges from 1000 to 3000 MHz. A red line indicates a peak level of approximately 100 dBuV/m at 2412 MHz. A blue line shows the noise floor around 50 dBuV/m. A red box highlights the peak area.</p> <p>Site : 03CH07-HY Condition : :PEAK_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	<p>Level (dBuV/m) vs Frequency (MHz) plot for Vertical Avg. The y-axis ranges from 10.0 to 140.0 dBuV/m, and the x-axis ranges from 2310 to 2415 MHz. A red line indicates an average level of approximately 50 dBuV/m. A blue line shows the noise floor around 40 dBuV/m. A red box highlights the average level area.</p> <p>Site : 03CH07-HY Condition : :AVG_BE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	<p>Level (dBuV/m) vs Frequency (MHz) plot for Fundamental Avg. The y-axis ranges from 10.0 to 140.0 dBuV/m, and the x-axis ranges from 1000 to 3000 MHz. A red line indicates an average level of approximately 50 dBuV/m. A blue line shows the noise floor around 40 dBuV/m. A red box highlights the average level area.</p> <p>Site : 03CH07-HY Condition : :AVG_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : :PEAK_BE_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : :PEAK_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	<p>Site : 03CH07-HY Condition : :AVG_BE_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : :AVG_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



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

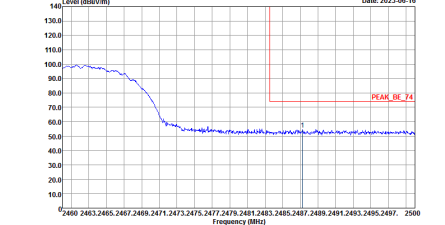
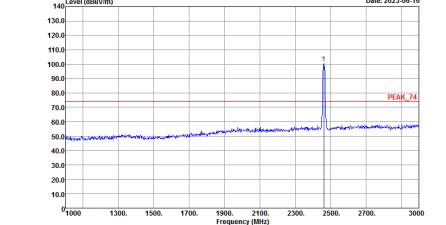
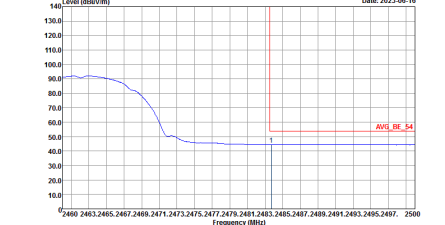
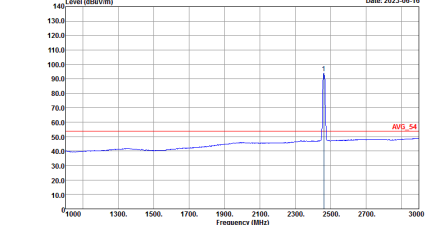


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	<p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :PEAK_BE_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :PEAK_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	<p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :AVG_BE_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	<p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :AVG_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>

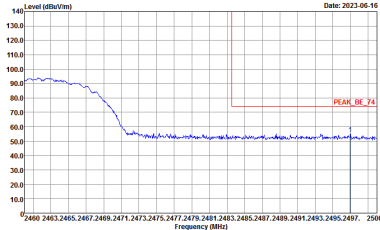
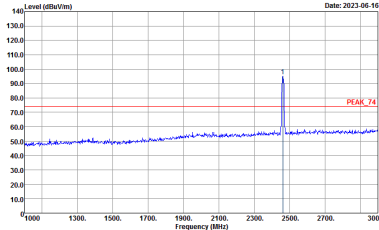
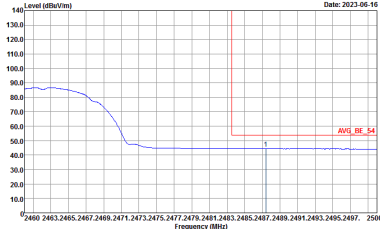
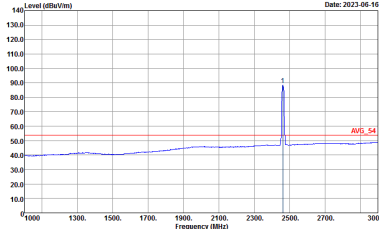


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWFAuto</p>	Left blank
Avg.	<p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.0100kHz SWFAuto</p>	Left blank



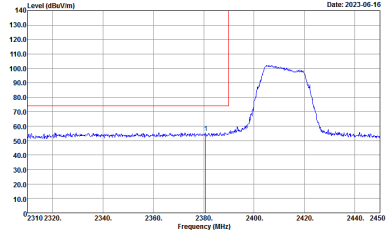
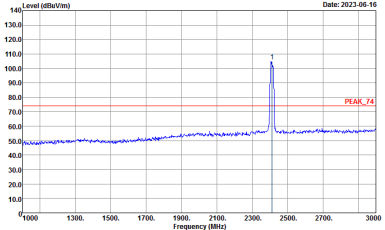
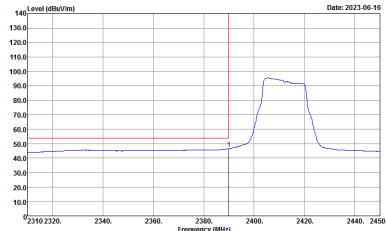
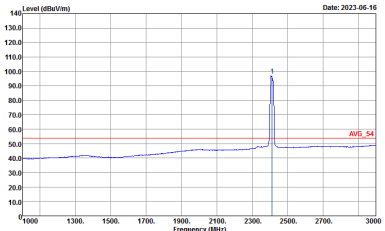
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 <p>Date: 2023-06-16</p> <p>Level (dBuV/m)</p> <p>Frequency (MHz)</p> <p>PEAK_BE_Y4</p> <p>Site : 03CH07-HY Condition : :PEAK_BE_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Date: 2023-06-16</p> <p>Level (dBuV/m)</p> <p>Frequency (MHz)</p> <p>PEAK_Y4</p> <p>Site : 03CH07-HY Condition : :PEAK_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Date: 2023-06-16</p> <p>Level (dBuV/m)</p> <p>Frequency (MHz)</p> <p>AVG_BE_S4</p> <p>Site : 03CH07-HY Condition : :AVG_BE_S4.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	 <p>Date: 2023-06-16</p> <p>Level (dBuV/m)</p> <p>Frequency (MHz)</p> <p>AVG_Y4</p> <p>Site : 03CH07-HY Condition : :AVG_S4.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



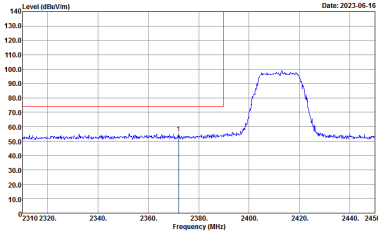
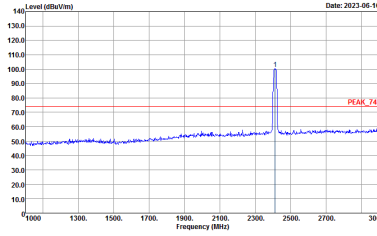
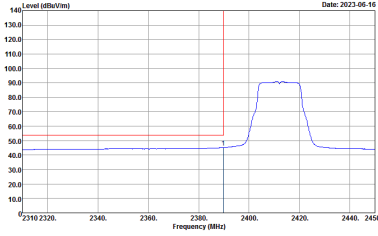
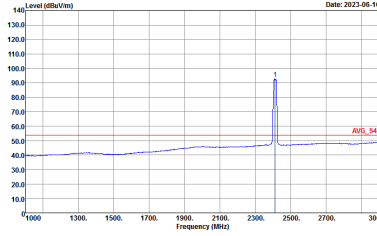
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :PEAK_BE_74 3m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :PEAK_74 3m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	 <p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



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

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 <p>Site Condition : 03CH07-HY : PEAK_BE_78.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site Condition : 03CH07-HY : PEAK_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Site Condition : 03CH07-HY : AVG_BE_54.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	 <p>Site Condition : 03CH07-HY : AVG_54.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>

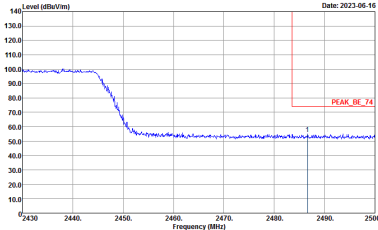
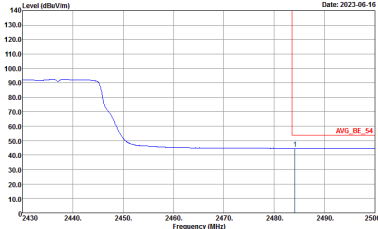


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Vertical	Fundamental
Peak	 <p>Level (dBu/m) vs Frequency (MHz) plot showing a peak at 2412 MHz. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 2310 to 2450 MHz. A red vertical line marks the peak at 2412 MHz. The plot shows a blue signal line with a peak at approximately 100 dBu/m.</p> <p>Site : 03CH07-HY Condition : :PEAK_BE_24.3m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Level (dBu/m) vs Frequency (MHz) plot showing a peak at 2412 MHz. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 1000 to 3000 MHz. A red vertical line marks the peak at 2412 MHz. The plot shows a blue signal line with a peak at approximately 100 dBu/m.</p> <p>Site : 03CH07-HY Condition : :PEAK_24.3m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Level (dBu/m) vs Frequency (MHz) plot showing an average signal at 2412 MHz. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 2310 to 2450 MHz. A red vertical line marks the peak at 2412 MHz. The plot shows a blue signal line with a peak at approximately 80 dBu/m.</p> <p>Site : 03CH07-HY Condition : :AVG_BE_24.3m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	 <p>Level (dBu/m) vs Frequency (MHz) plot showing an average signal at 2412 MHz. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 1000 to 3000 MHz. A red vertical line marks the peak at 2412 MHz. The plot shows a blue signal line with a peak at approximately 80 dBu/m.</p> <p>Site : 03CH07-HY Condition : :AVG_24.3m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : :PEAK_BE_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : :PEAK_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	<p>Site : 03CH07-HY Condition : :AVG_BE_54.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : :AVG_54.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 <p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTA:Auto</p>	Left blank
Avg.	 <p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.0100kHz SWTA:Auto</p>	Left blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	<p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :PEAK_BE_24.3m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :PEAK_24.3m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	<p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :AVG_BE_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	<p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :AVG_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>

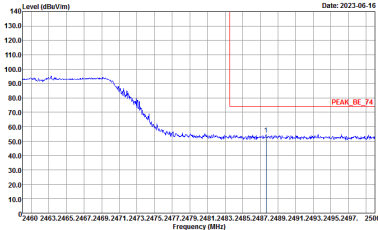
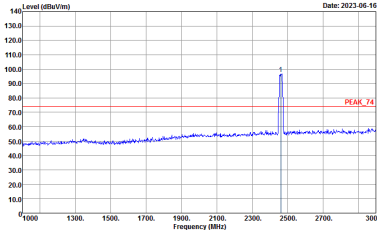
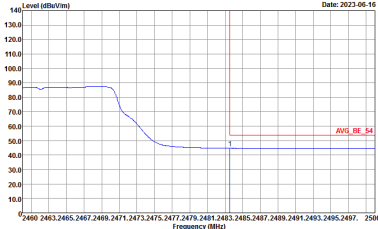
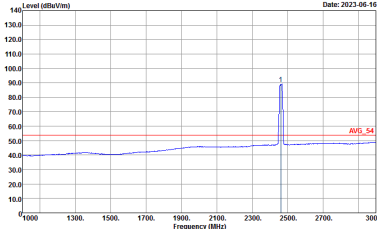


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWFAuto</p>	Left Blank
Avg.	<p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.0100kHz SWFAuto</p>	Left Blank



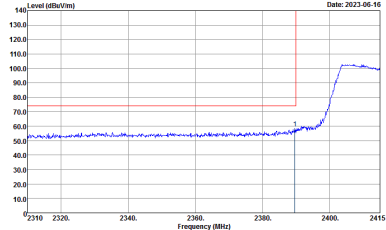
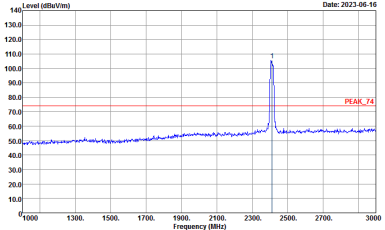
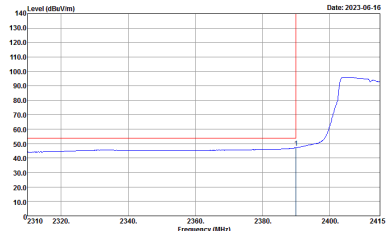
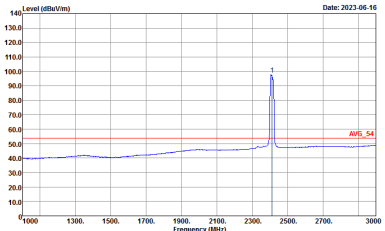
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : :PEAK_BE_34 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : :PEAK_34 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	<p>Site : 03CH07-HY Condition : :AVG_BE_S4 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : :AVG_S4 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :PEAK_BE_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :PEAK_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :AVG_BE_S4.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	 <p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :AVG_S4.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



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	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : PEAK_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Site : 03CH07-HY Condition : AVG_BE_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : AVG_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Vertical	Fundamental
Peak	<p>Level (dBm/100kHz) vs Frequency (MHz) - Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :PEAK_BE_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Level (dBm/100kHz) vs Frequency (MHz) - Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :PEAK_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	<p>Level (dBm/100kHz) vs Frequency (MHz) - Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :AVG_BE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	<p>Level (dBm/100kHz) vs Frequency (MHz) - Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :AVG_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : :PEAK_BE_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : :PEAK_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	<p>Site : 03CH07-HY Condition : :AVG_BE_54.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : :AVG_54.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	<p>Site : 03CH07-HY Condition : :PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWFAuto</p>	Left blank
Avg.	<p>Site : 03CH07-HY Condition : :AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.0100kHz SWFAuto</p>	Left blank

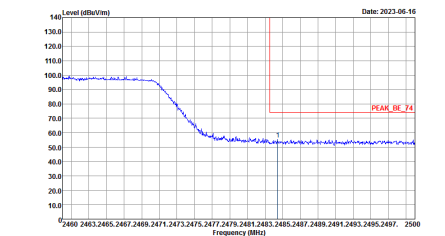
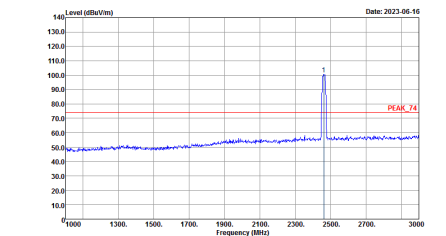
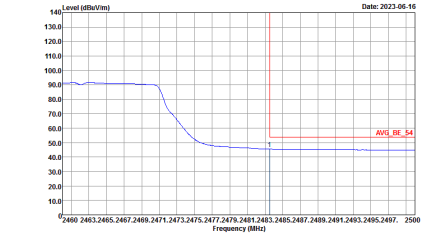
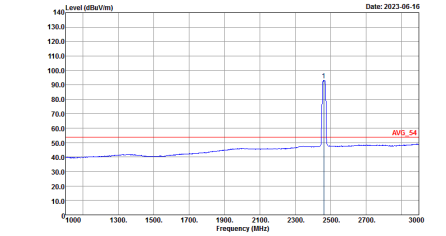


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	<p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :PEAK_BE_24.3m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :PEAK_24.3m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	<p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :AVG_BE_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	<p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : :AVG_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>

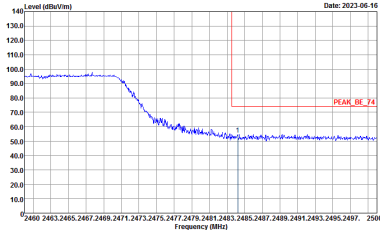
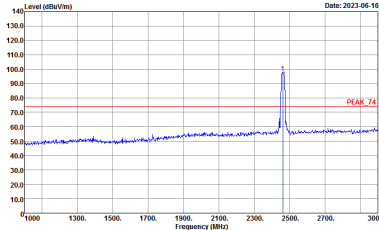
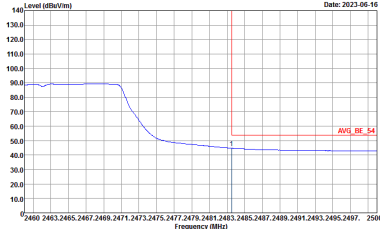
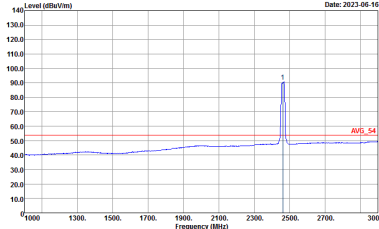


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto</p>	Left Blank
Avg.	<p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SWF:Auto</p>	Left Blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : :PEAK_BE_34 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : :PEAK_34 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Site : 03CH07-HY Condition : :AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : :AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



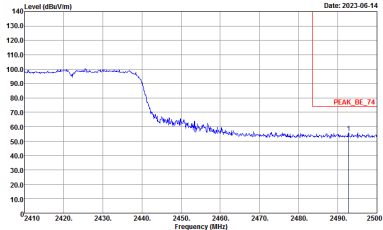
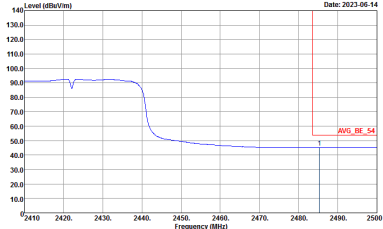
WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Vertical	Fundamental
Peak	 <p>Date: 2023-06-16</p> <p>Level (dBuV/m)</p> <p>Frequency (MHz)</p> <p>PEAK_BE_Y4</p> <p>Site : 03CH07-HY Condition : :PEAK_BE_74 3m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Date: 2023-06-16</p> <p>Level (dBuV/m)</p> <p>Frequency (MHz)</p> <p>PEAK_Y4</p> <p>Site : 03CH07-HY Condition : :PEAK_74 3m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Date: 2023-06-16</p> <p>Level (dBuV/m)</p> <p>Frequency (MHz)</p> <p>AVG_BE_S4</p> <p>Site : 03CH07-HY Condition : :AVG_BE_S4 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	 <p>Date: 2023-06-16</p> <p>Level (dBuV/m)</p> <p>Frequency (MHz)</p> <p>AVG_Y4</p> <p>Site : 03CH07-HY Condition : :AVG_S4 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



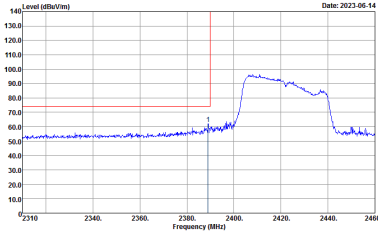
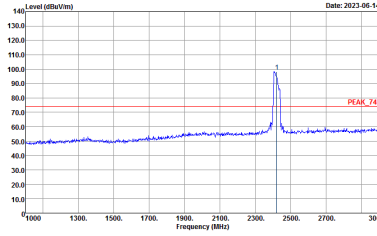
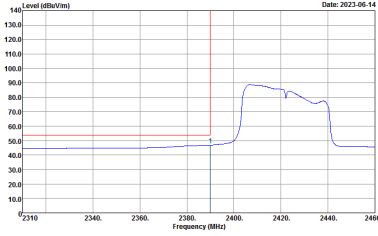
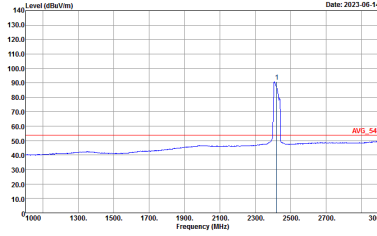
2.4GHz 2400~2483.5MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

Table with 4 columns: WIFI, ANT, Peak, Avg. and 2 columns for Horizontal and Fundamental plots. Each plot shows Level (dBu/m) vs Frequency (MHz) with technical details like Site, Condition, and measurement parameters.

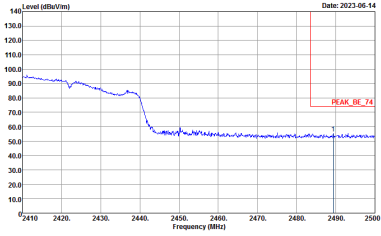
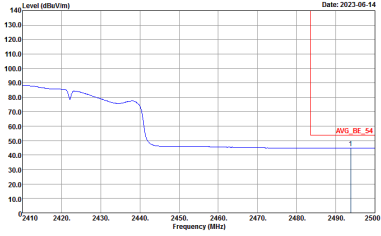


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
1	Horizontal	Fundamental
Peak	 <p>Date: 2023-06-14</p> <p>Site : 03CH07-HY Condition : :PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTA:Auto</p>	Left Blank
Avg.	 <p>Date: 2023-06-14</p> <p>Site : 03CH07-HY Condition : :AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.0100kHz SWTA:Auto</p>	Left Blank

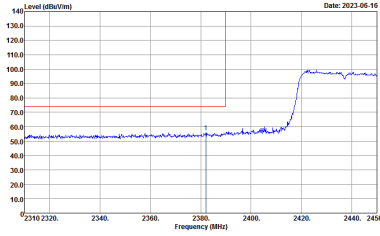
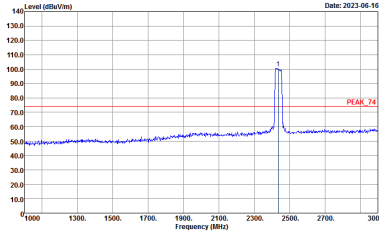
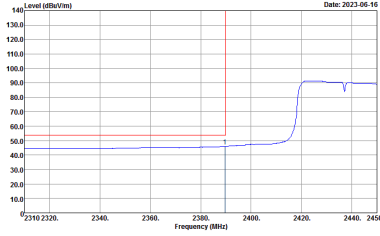
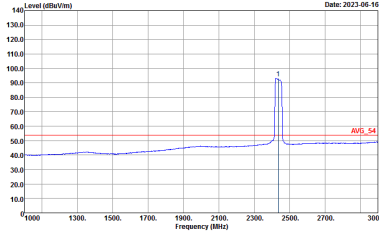


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - L	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : :PEAK_BE_24.2m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : :PEAK_24.2m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Site : 03CH07-HY Condition : :AVG_BE_24.2m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	 <p>Site : 03CH07-HY Condition : :AVG_24.2m HF_ANT_00075963 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH03 2422MHz - R	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH07-HY Condition : PEAK_BE_74.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWFAuto</p>	Left blank
Avg.	 <p>Site : 03CH07-HY Condition : AVG_BE_54.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.0100kHz SWFAuto</p>	Left blank

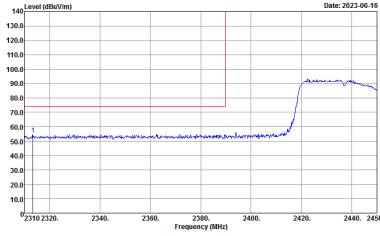
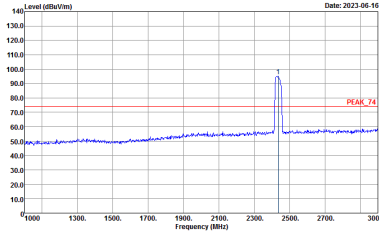
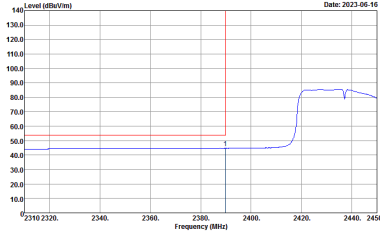
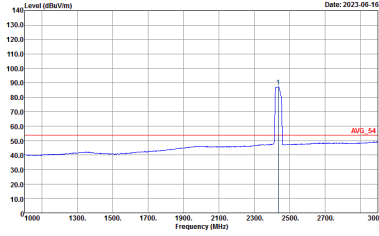


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 <p>Level (dBu/m) vs Frequency (MHz) plot showing a peak at approximately 2437 MHz. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 2310 to 2450 MHz. A red vertical line marks the peak at 2437 MHz. The plot shows a sharp rise in signal level starting around 2420 MHz and leveling off at approximately 100 dBu/m after 2437 MHz.</p> <p>Site : 03CH07-HY Condition : :PEAK_BE_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Level (dBu/m) vs Frequency (MHz) plot showing a peak at approximately 2437 MHz. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 1000 to 3000 MHz. A red vertical line marks the peak at 2437 MHz. The plot shows a sharp peak at 2437 MHz with a level of approximately 100 dBu/m.</p> <p>Site : 03CH07-HY Condition : :PEAK_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Level (dBu/m) vs Frequency (MHz) plot showing an average signal level. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 2310 to 2450 MHz. A red vertical line marks the peak at 2437 MHz. The plot shows a relatively flat signal level around 50 dBu/m until 2420 MHz, where it rises to approximately 100 dBu/m and remains constant thereafter.</p> <p>Site : 03CH07-HY Condition : :AVG_BE_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	 <p>Level (dBu/m) vs Frequency (MHz) plot showing an average signal level. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 1000 to 3000 MHz. A red vertical line marks the peak at 2437 MHz. The plot shows a sharp peak at 2437 MHz with a level of approximately 100 dBu/m.</p> <p>Site : 03CH07-HY Condition : :AVG_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>

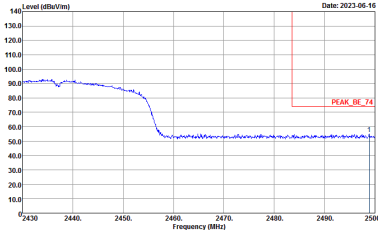
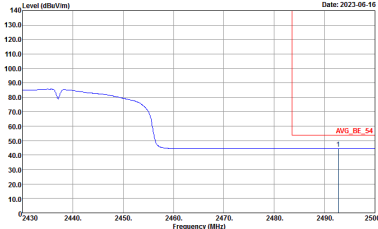


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	<p>Level (dBm/100kHz)</p> <p>Date: 2023-06-16</p> <p>PEAK_BE_74</p> <p>Site : 03CH07-HY Condition : PEAK_BE_74.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTA:Auto</p>	Left blank
Avg.	<p>Level (dBm/100kHz)</p> <p>Date: 2023-06-16</p> <p>AVG_BE_54</p> <p>Site : 03CH07-HY Condition : AVG_BE_54.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.0100kHz SWTA:Auto</p>	Left blank

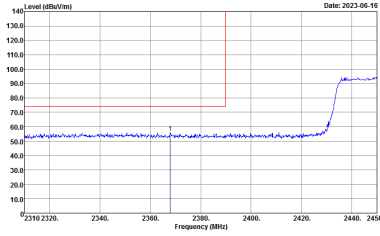
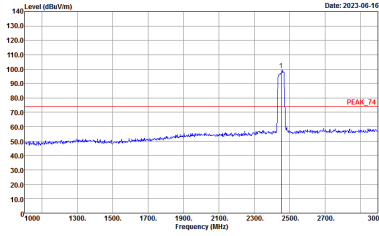
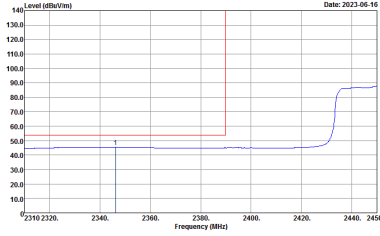
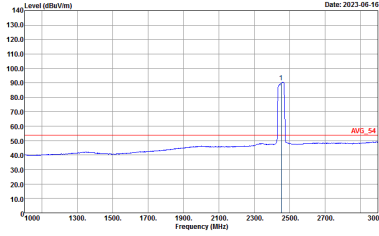


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 <p>Level (dBu/m) vs Frequency (MHz) plot for Vertical Peak. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 2310 to 2450 MHz. A red horizontal line is at approximately 75 dBu/m. A blue trace shows a signal that rises from 50 dBu/m at 2400 MHz to about 90 dBu/m at 2437 MHz. A red vertical line is at 2437 MHz.</p> <p>Site : 03CH07-HY Condition : :PEAK_BE_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Level (dBu/m) vs Frequency (MHz) plot for Fundamental Peak. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 1000 to 3000 MHz. A red horizontal line is at approximately 75 dBu/m. A blue trace shows a sharp peak at 2437 MHz reaching about 100 dBu/m. A red label 'PEAK_24' is next to the peak.</p> <p>Site : 03CH07-HY Condition : :PEAK_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Level (dBu/m) vs Frequency (MHz) plot for Vertical Avg. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 2310 to 2450 MHz. A red horizontal line is at approximately 50 dBu/m. A blue trace shows a signal that rises from 45 dBu/m at 2400 MHz to about 80 dBu/m at 2437 MHz. A red vertical line is at 2437 MHz.</p> <p>Site : 03CH07-HY Condition : :AVG_BE_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	 <p>Level (dBu/m) vs Frequency (MHz) plot for Fundamental Avg. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 1000 to 3000 MHz. A red horizontal line is at approximately 50 dBu/m. A blue trace shows a peak at 2437 MHz reaching about 85 dBu/m. A red label 'AVG_24' is next to the peak.</p> <p>Site : 03CH07-HY Condition : :AVG_24.3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>

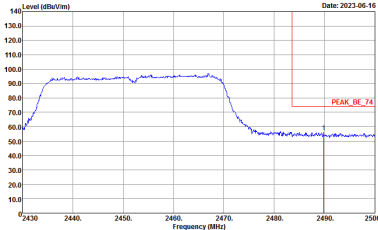
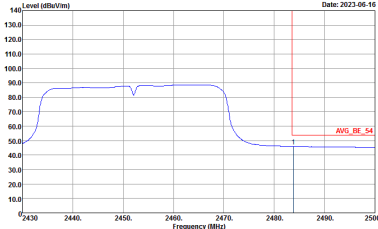


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 <p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWFAuto</p>	Left blank
Avg.	 <p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.0100kHz SWFAuto</p>	Left blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
1	Horizontal	Fundamental
Peak	 <p>Level (dBu/m) vs Frequency (MHz) plot showing a peak at 2452 MHz. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 2310 to 2450 MHz. A red horizontal line is drawn at approximately 75 dBu/m. A vertical red line marks the peak at 2452 MHz. The plot shows a sharp increase in level starting around 2440 MHz.</p> <p>Site : 03CH07-HY Condition : :PEAK_BE_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	 <p>Level (dBu/m) vs Frequency (MHz) plot showing a peak at 2452 MHz. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 1000 to 3000 MHz. A red horizontal line is drawn at approximately 75 dBu/m. A vertical red line marks the peak at 2452 MHz. The plot shows a sharp peak at 2452 MHz.</p> <p>Site : 03CH07-HY Condition : :PEAK_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	 <p>Level (dBu/m) vs Frequency (MHz) plot showing an average level. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 2310 to 2450 MHz. A red horizontal line is drawn at approximately 50 dBu/m. A vertical red line marks the peak at 2452 MHz. The plot shows a relatively flat level around 50 dBu/m with a slight increase starting around 2440 MHz.</p> <p>Site : 03CH07-HY Condition : :AVG_BE_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	 <p>Level (dBu/m) vs Frequency (MHz) plot showing an average level. The y-axis ranges from 10.0 to 140.0 dBu/m, and the x-axis ranges from 1000 to 3000 MHz. A red horizontal line is drawn at approximately 50 dBu/m. A vertical red line marks the peak at 2452 MHz. The plot shows a relatively flat level around 50 dBu/m with a sharp peak at 2452 MHz.</p> <p>Site : 03CH07-HY Condition : :AVG_24.3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - R	
1	Horizontal	Fundamental
Peak	 <p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWTA:Auto</p>	Left blank
Avg.	 <p>Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:0.0100kHz SWTA:Auto</p>	Left blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - L	
1	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : :PEAK_BE_24.3m HF_ANT_00075962 VERTICAL :RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : :PEAK_24.3m HF_ANT_00075962 VERTICAL :RBW:1000.000kHz VBW:3000.000kHz SWT:Auto</p>
Avg.	<p>Site : 03CH07-HY Condition : :AVG_BE_54.3m HF_ANT_00075962 VERTICAL :RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>	<p>Site : 03CH07-HY Condition : :AVG_54.3m HF_ANT_00075962 VERTICAL :RBW:1000.000kHz VBW:0.010kHz SWT:Auto</p>



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT40 CH09 2452MHz - R	
1	Vertical	Fundamental
Peak	<p>Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWTA:Auto</p>	Left blank
Avg.	<p>Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:0.0100kHz SWTA:Auto</p>	Left blank

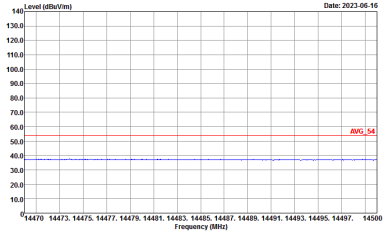
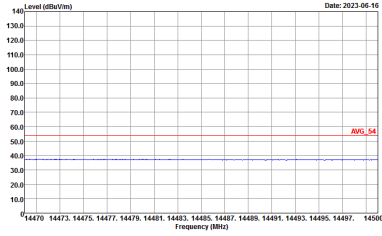
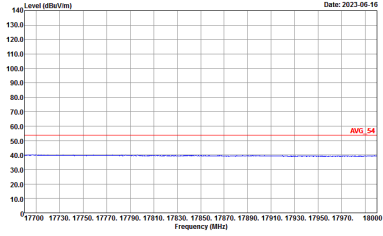
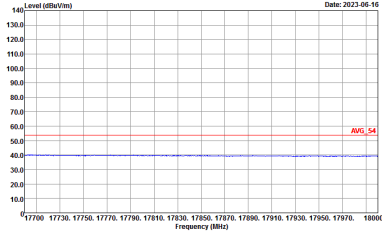


2.4GHz 2400~2483.5MHz
WIFI 802.11b (Harmonic @ 3m)

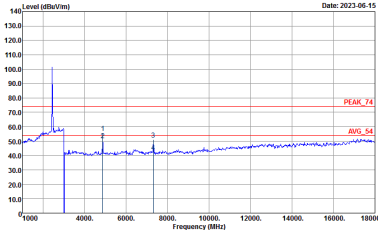
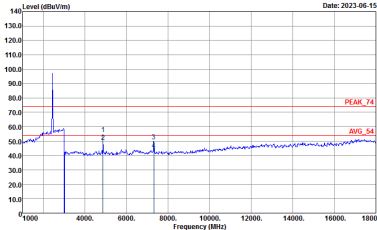
Table with 2 columns: WIFI (2.4GHz 2400~2483.5MHz Harmonic @ 3m), ANT (802.11b CH01 2412MHz). Row 1: 1, Horizontal, Vertical. Includes two spectral plots with Peak and Avg. markers and a red arrow pointing to an unwanted signal.

Remark: The unwanted signal of red marks in plot falls within the non-restricted band and meet the requirements of 15.247 (d).

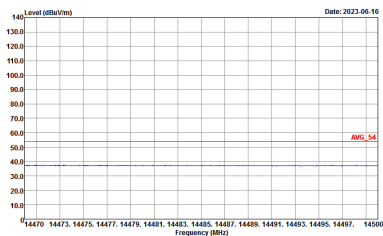
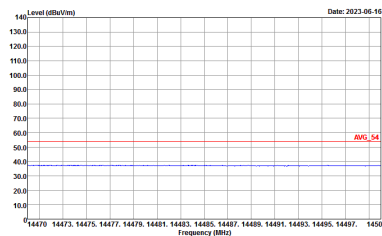
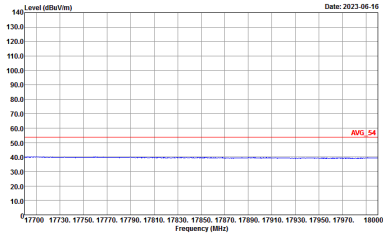
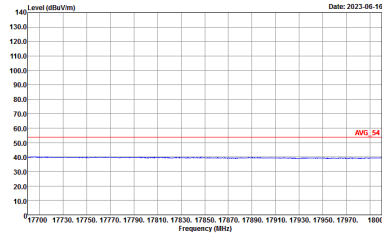


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	 <p>Site : 03CH07-HY Condition : :PEAK_74 3m HF_ANT_00075962 HORIZONTAL :</p>	 <p>Site : 03CH07-HY Condition : :PEAK_74 3m HF_ANT_00075962 VERTICAL :</p>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>



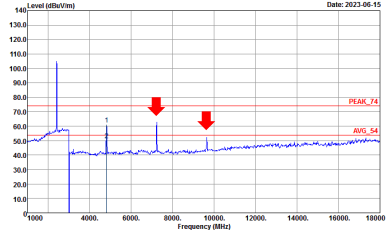
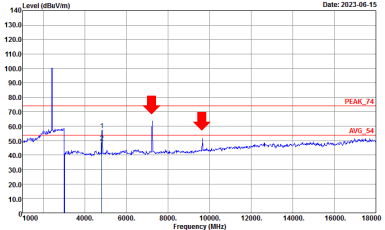
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : :PEAK_24 3m HF_ANT_00075962 HORIZONTAL :</p>	<p>Site : 03CH07-HY Condition : :PEAK_24 3m HF_ANT_00075962 VERTICAL :</p>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>



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

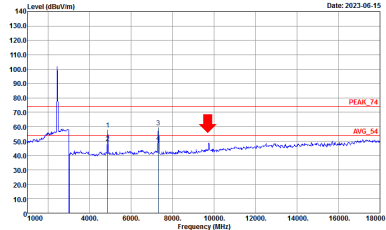
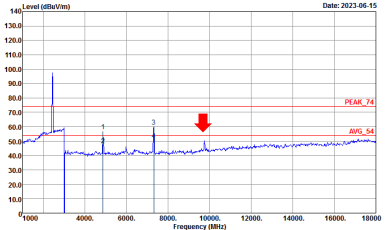
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Vertical
Peak Avg.	 <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL ..</p>	 <p>Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL ..</p>

Note: The unwanted signal of red marks in plot falls within the non-restricted band and meet the requirements of 15.247 (d).



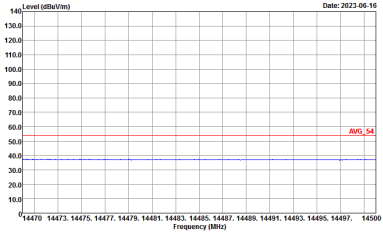
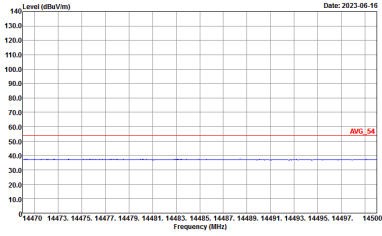
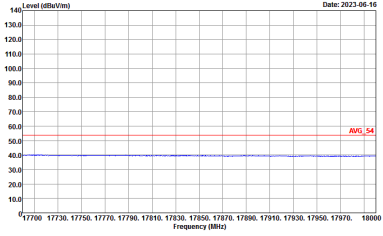
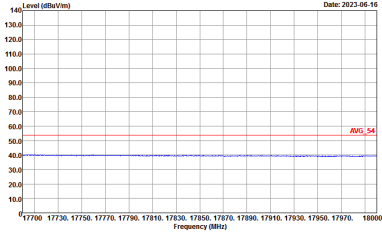
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	<p>Level (dBuV/m) Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Level (dBuV/m) Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	<p>Level (dBuV/m) Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Level (dBuV/m) Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>



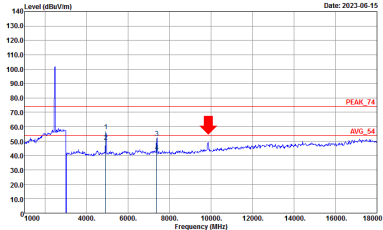
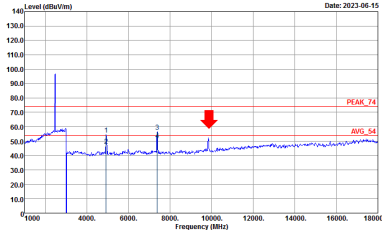
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	 <p>Site : 03CH07-HY Condition : :PEAK_74 3m HF_ANT_00075962 HORIZONTAL :</p>	 <p>Site : 03CH07-HY Condition : :PEAK_74 3m HF_ANT_00075962 VERTICAL :</p>

Note: The unwanted signal of red marks in plot falls within the non-restricted band and meet the requirements of 15.247 (d).



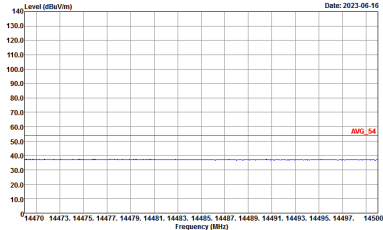
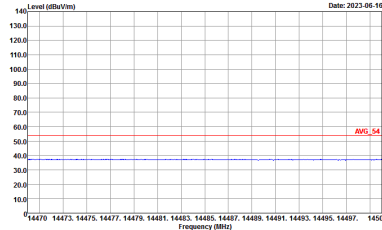
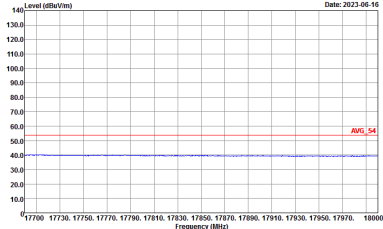
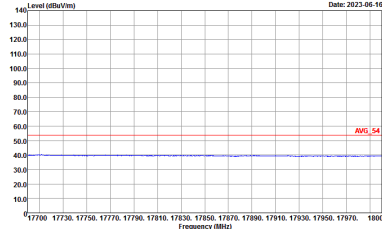
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Vertical
Peak Avg.	 <p>Site : 03CH07-RY Condition : :PEAK_24 3m HF_ANT_00075962 HORIZONTAL :</p>	 <p>Site : 03CH07-RY Condition : :PEAK_24 3m HF_ANT_00075962 VERTICAL :</p>

Note: The unwanted signal of red marks in plot falls within the non-restricted band and meet the requirements of 15.247 (d).



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>



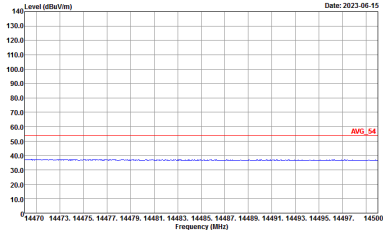
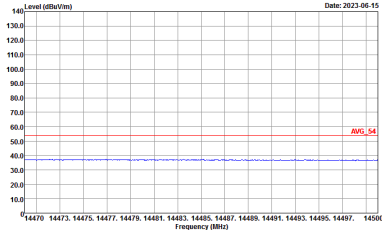
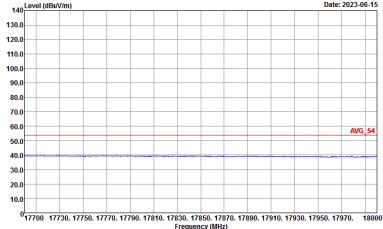
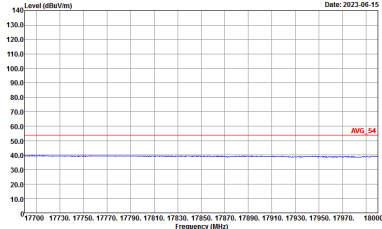
2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

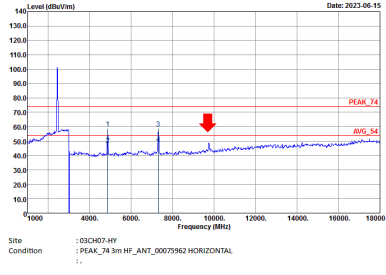
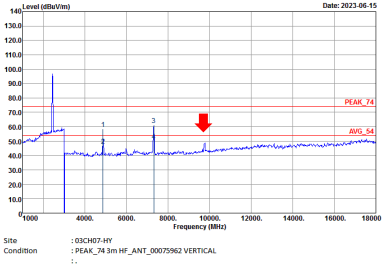
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : PEAK_28 3m HF_ANT_00075982 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto</p>	<p>Site : 03CH07-HY Condition : PEAK_28 3m HF_ANT_00075982 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWF:Auto</p>

Note: The unwanted signal of red marks in plot falls within the non-restricted band and meet the requirements of 15.247 (d).



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	 <p>Date: 2023-06-15</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWTA:Auto</p>	 <p>Date: 2023-06-15</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWTA:Auto</p>
<p>17.7G ~18G Avg</p>	 <p>Date: 2023-06-15</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWTA:Auto</p>	 <p>Date: 2023-06-15</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWTA:Auto</p>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	 <p>Site : 03CH07-HY Condition : :PEAK_74 3m HF_ANT_00075962 HORIZONTAL :</p>	 <p>Site : 03CH07-HY Condition : :PEAK_74 3m HF_ANT_00075962 VERTICAL :</p>

Note: The unwanted signal of red marks in plot falls within the non-restricted band and meet the requirements of 15.247 (d).



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>



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

Note: The unwanted signal of red marks in plot falls within the non-restricted band and meet the requirements of 15.247 (d).



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	<p>Date: 2023-06-15</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Date: 2023-06-15</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	<p>Date: 2023-06-15</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Date: 2023-06-15</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>

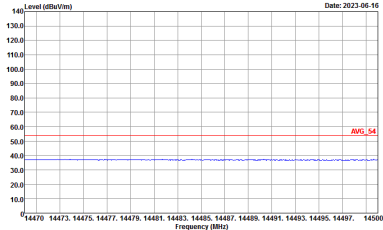
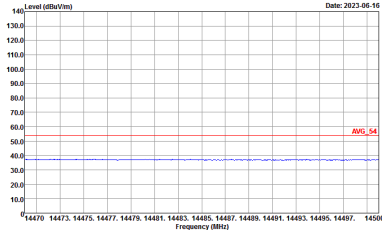
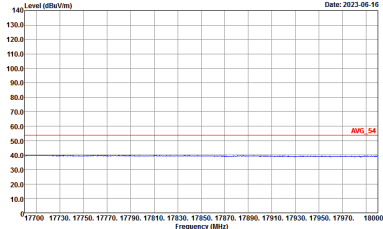
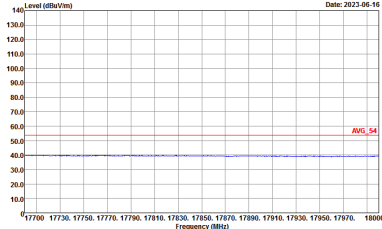


2.4GHz 2400~2483.5MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

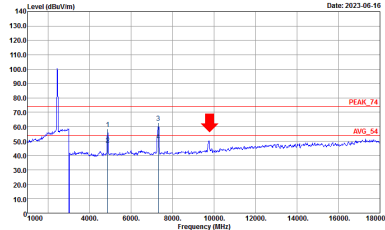
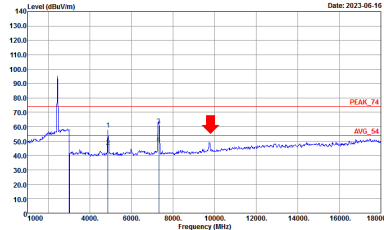
Table with 2 columns: Horizontal and Vertical. Each column contains a spectral plot showing Level (dBu/Vm) vs Frequency (MHz) with a red arrow pointing to a peak at approximately 9.5 MHz. The table also includes site and condition information for both plots.

Note: The unwanted signal of red marks in plot falls within the non-restricted band and meet the requirements of 15.247 (d).



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH03 2422MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH06 2437MHz	
1	Horizontal	Vertical
Peak Avg.	 <p>Site : 03CH07-HY Condition : :PEAK_24 3m HF_ANT_00075962 HORIZONTAL :</p>	 <p>Site : 03CH07-HY Condition : :PEAK_24 3m HF_ANT_00075962 VERTICAL :</p>

Note: The unwanted signal of red marks in plot falls within the non-restricted band and meet the requirements of 15.247 (d).



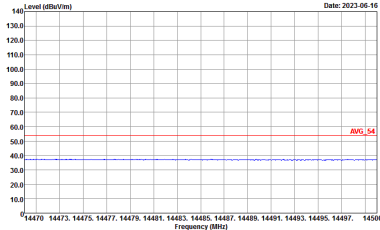
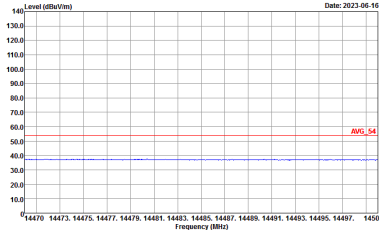
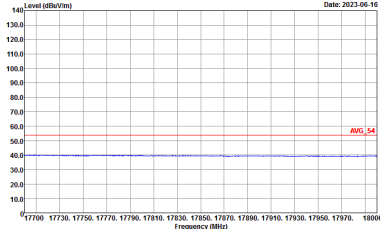
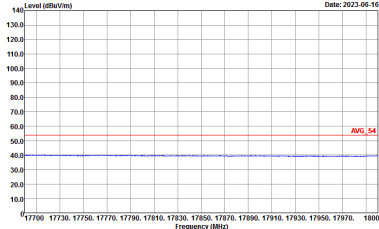
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH06 2437MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	<p>Level (dBuV/m) Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Level (dBuV/m) Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	<p>Level (dBuV/m) Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	<p>Level (dBuV/m) Date: 2023-06-16</p> <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH09 2452MHz	
1	Horizontal	Vertical
Peak Avg.	<p>Site : 03CH07-HY Condition : :PEAK_74 3m HF_ANT_00075962 HORIZONTAL :</p>	<p>Site : 03CH07-HY Condition : :PEAK_74 3m HF_ANT_00075962 VERTICAL :</p>

Note: The unwanted signal of red marks in plot falls within the non-restricted band and meet the requirements of 15.247 (d).



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT40 CH09 2452MHz	
1	Horizontal	Vertical
<p>14.47G ~14.5G Avg.</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>
<p>17.7G ~18G Avg</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL</p>	 <p>Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL</p>



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

Table with 2 columns: WIFI (2.4GHz 2400~2483.5MHz), ANT (802.11b SHF). Row 1: 1, Horizontal, Vertical. Includes two graphs showing Level (dBuV/m) vs Frequency (MHz) for Peak and Avg. measurements.



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

WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11b LF	
1	Horizontal	Vertical
QP / Peak	<p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419[G]_H HORIZONTAL</p>	<p>Site : 03CH07-HY Condition : QP 3m LF-ANT-35419[G]_H VERTICAL</p>



Appendix E. Duty Cycle Plots

Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
802.11b	100.00	-	-	10Hz
802.11g	99.64	-	-	10Hz
2.4GHz 802.11n HT20	99.61	-	-	10Hz
2.4GHz 802.11n HT40	98.80	-	-	10Hz

