



FCC RADIO TEST REPORT

FCC ID : 2AXFL-4269
Equipment : Digital Media Receiver
Model Name : H6Y2A5
Applicant : Orthoclase Feldspar LLC
1202 NE McClain Road
Bentonville, AR 72712
Standard : FCC Part 15 Subpart C §15.247

The product was received on May 11, 2021 and testing was started from May 26, 2021 and completed on Jun. 25, 2021. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory

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



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Product Feature of Equipment Under Test.....	5
1.2 Product Specification of Equipment Under Test.....	5
1.3 Modification of EUT	6
1.4 Testing Location	6
1.5 Applicable Standards.....	6
2 Test Configuration of Equipment Under Test	7
2.1 Carrier Frequency and Channel	7
2.2 Test Mode.....	8
2.3 Connection Diagram of Test System.....	9
2.4 Support Unit used in test configuration and system	10
2.5 EUT Operation Test Setup	10
2.6 Measurement Results Explanation Example.....	11
3 Test Result	12
3.1 6dB and 99% Bandwidth Measurement	12
3.2 Output Power Measurement.....	14
3.3 Power Spectral Density Measurement	15
3.4 Conducted Band Edges and Spurious Emission Measurement	17
3.5 Radiated Band Edges and Spurious Emission Measurement	48
3.6 AC Conducted Emission Measurement.....	53
3.7 Antenna Requirements	55
4 List of Measuring Equipment.....	56
5 Uncertainty of Evaluation	58
Appendix A. Conducted Test Results	
Appendix B. AC Conducted Emission Test Result	
Appendix C. Radiated Spurious Emission	
Appendix D. Radiated Spurious Emission Plots	
Appendix E. Duty Cycle Plots	



History of this test report

Report No.	Version	Description	Issued Date
FR120234-01C	01	Initial issue of report	Jul. 07, 2021

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)
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
3.6	15.207	AC Conducted Emission	Pass
3.7	15.203 & 15.247(b)	Antenna Requirement	Pass

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Alan Liu

Report Producer: Ruby Zou

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Digital Media Receiver
Model Name	H6Y2A5
FCC ID	2AXFL-4269
EUT supports Radios application	WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE

Remark: The above EUT's information was declared by manufacturer.

1.2 Product Specification of Equipment Under Test

Product Specification subjective to this standard									
Tx/Rx Frequency Range		2412 MHz ~ 2472 MHz							
Maximum Average Output Power to antenna		MIMO <Ant. 1+2> 802.11b: 19.46 dBm / 0.0883 W 802.11g: 22.06 dBm / 0.1607 W 802.11n HT20: 21.31 dBm / 0.1352 W							
99% Occupied Bandwidth		MIMO <Ant. 1> 802.11b: 13.54 MHz 802.11g: 16.78 MHz 802.11n HT20: 17.73 MHz MIMO <Ant. 2> 802.11b: 13.44 MHz 802.11g: 16.68 MHz 802.11n HT20: 17.68 MHz							
Antenna Type / Gain		Ant. 1: PCB Dipole Antenna with gain 3.8 dBi Ant. 2: PCB Dipole Antenna with gain 5.0 dBi							
Type of Modulation		802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)							
Antenna Function Description		<table><tr><td></td><td>Ant. 1</td><td>Ant. 2</td></tr><tr><td>802.11 b/g/n MIMO</td><td>V</td><td>V</td></tr></table>			Ant. 1	Ant. 2	802.11 b/g/n MIMO	V	V
	Ant. 1	Ant. 2							
802.11 b/g/n MIMO	V	V							

Remark:

- The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.
- MIMO Ant. 1+2 is a calculated result from sum of the power MIMO Ant. 1 and MIMO Ant. 2

1.3 Modification of EUT

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

1.4 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. TH02-HY, CO05-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. 03CH15-HY (TAF Code: 3786)
Remark	The Radiated Spurious Emission test item subcontracted to Sporton International Inc. Wensan Laboratory.

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

FCC designation No.: TW1190 and TW3786

1.5 Applicable Standards

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

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

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

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

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	1	2412	8	2447
	2	2417	9	2452
	3	2422	10	2457
	4	2427	11	2462
	5	2432	12	2467
	6	2437	13	2472
	7	2442		

2.2 Test Mode

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

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

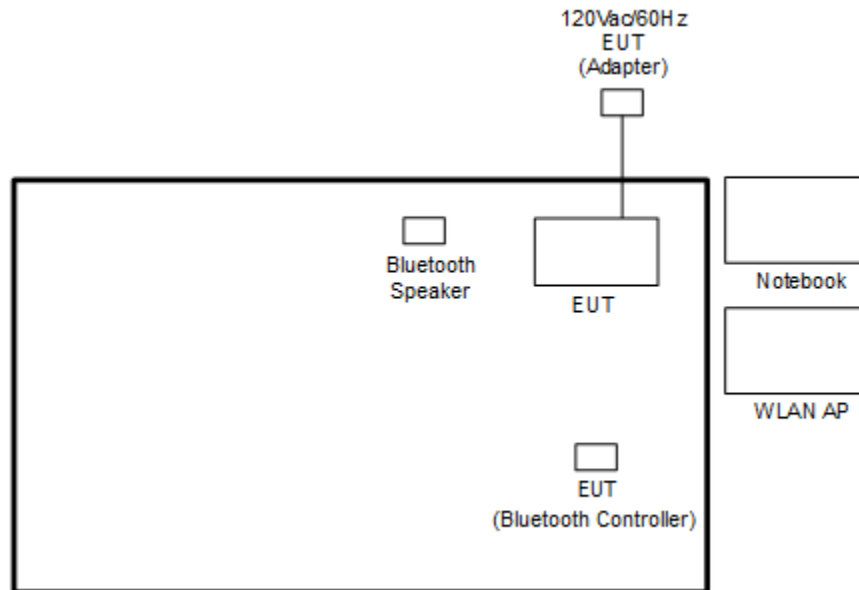
Test Cases	
AC Conducted Emission	Mode 1 :WLAN (2.4GHz) Link + Bluetooth Idle with Controller + MPEG4 + Adapter + Bluetooth Link with Speaker
Remark: For Radiated Test Cases, the tests were performed with Adapter	

Ch. #	2400-2483.5 MHz		
	802.11b	802.11g	802.11n HT20
Low	01	01	01
Middle	06	06	06
High	11	11	11
	12	12	12
	13	13	13

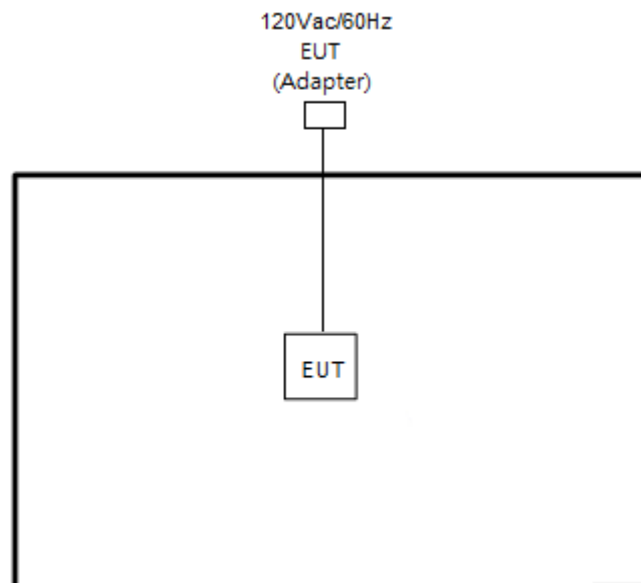
Remark: For radiation spurious emission, the final modulation and the worst data rate was reference the max RF conducted power.

2.3 Connection Diagram of Test System

<AC Conducted Emission Mode>



<WLAN Tx Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Speaker	JAWBONE	MINIJAMBOX	N/A	N/A	N/A
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
3.	Notebook	Dell	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Fixture 1	N/A	N/A	N/A	N/A	N/A
5.	Fixture 2	N/A	N/A	N/A	N/A	N/A
6.	Fixture 3	N/A	N/A	N/A	N/A	N/A
7.	Bluetooth controller	N/A	N/A	2AVZA-2374	N/A	N/A

Note: The removable plastic fixtures are used for verification during test.

2.5 EUT Operation Test Setup

The RF test items, utility “Compliance tool 1.0.1.4” 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

See list of measuring equipment of 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 was connected to the spectrum analyzer by RF cable and attenuator. The path loss was 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.

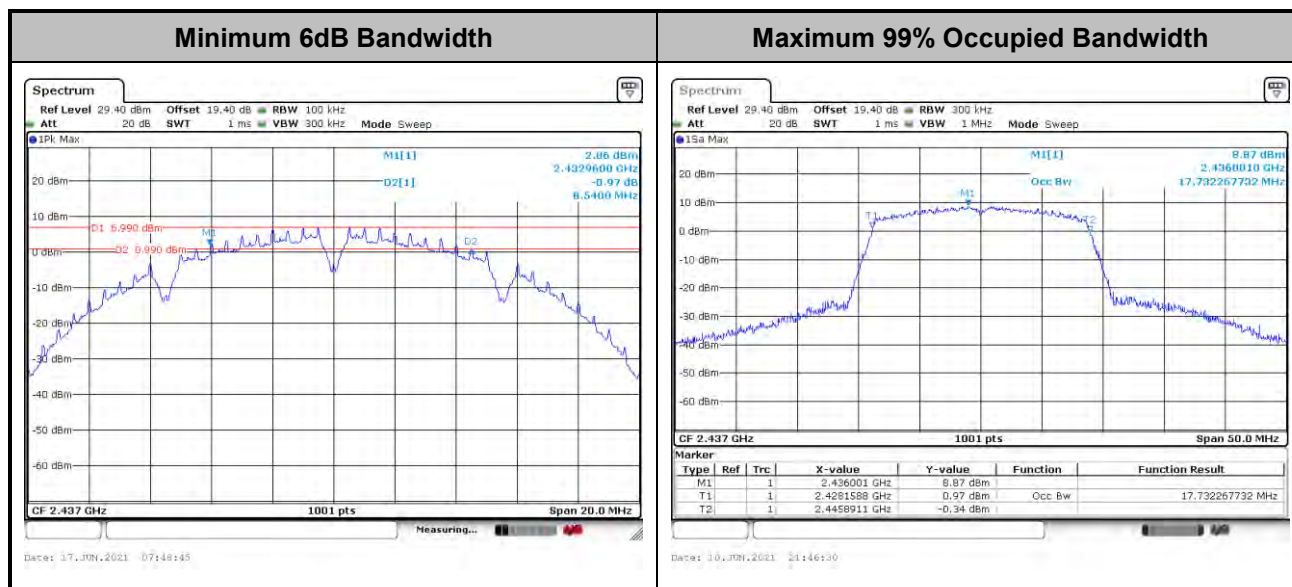
3.1.4 Test Setup





3.1.5 Test Result of 6dB and 99% Occupied Bandwidth

Please refer to Appendix A.



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

3.2 Output Power Measurement

3.2.1 Limit of Output Power

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

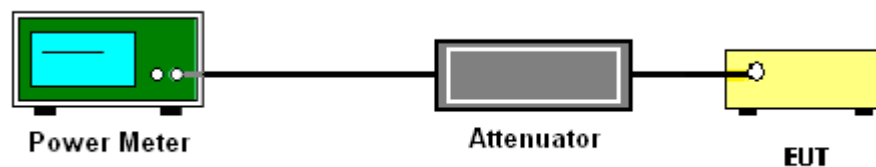
3.2.2 Measuring Instruments

See list of measuring equipment of 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 was connected to the power meter by RF cable and attenuator. The path loss was 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.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

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

See list of measuring equipment of 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 was connected to the spectrum analyzer by RF cable and attenuator. The path loss was 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.
7. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

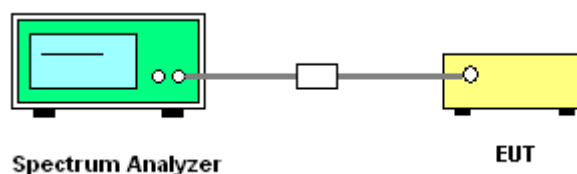
If measurements performed using method (2) plus $10 \log(N)$ exceeds the emission limit, the test should choose method (1) before declaring that the device fails the emission limit.

Method (1): Measure and sum the spectra across the outputs.

The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points, the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

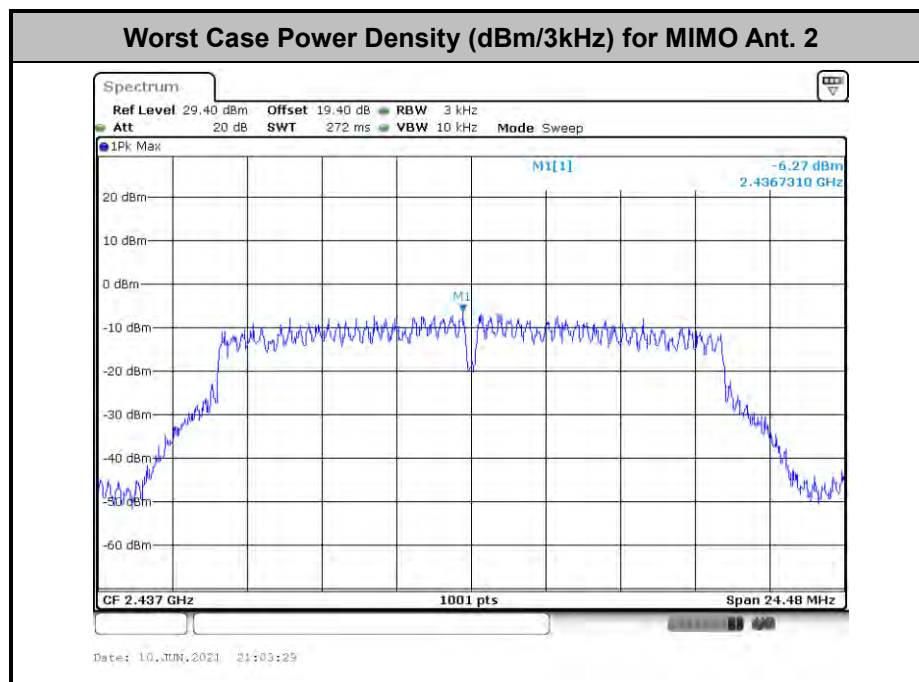
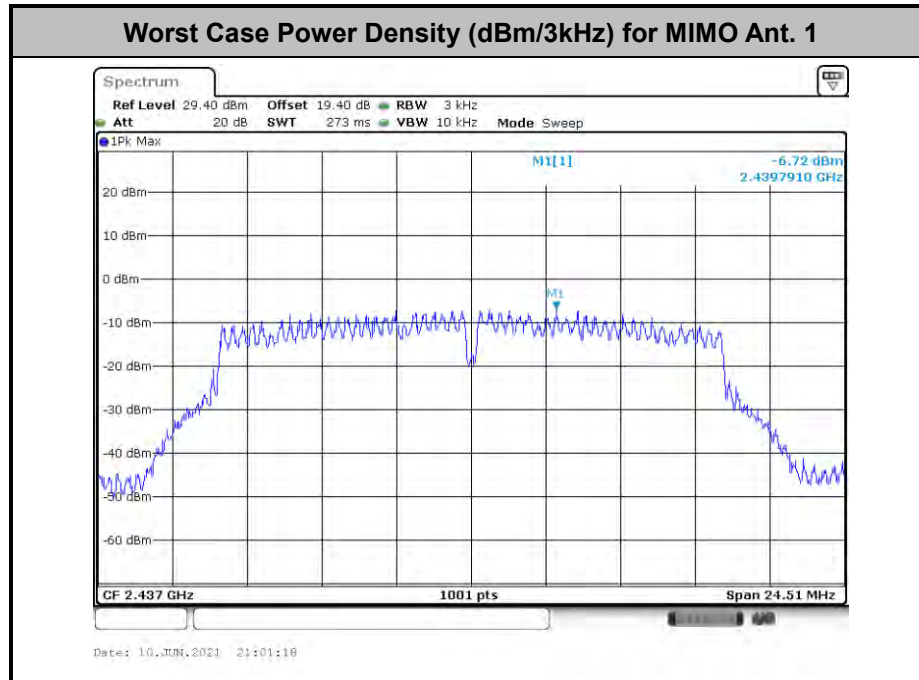
Method (2): Measure and add $10 \log(N)$ dB, where N is the number of outputs. (N=2)

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.

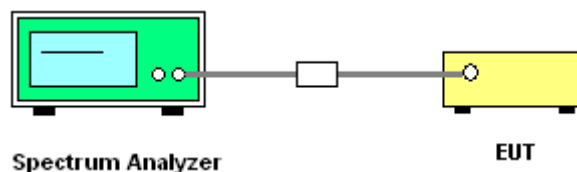
3.4.2 Measuring Instruments

See list of measuring equipment of 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 was connected to the spectrum analyzer by RF cable and attenuator. The path loss was 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



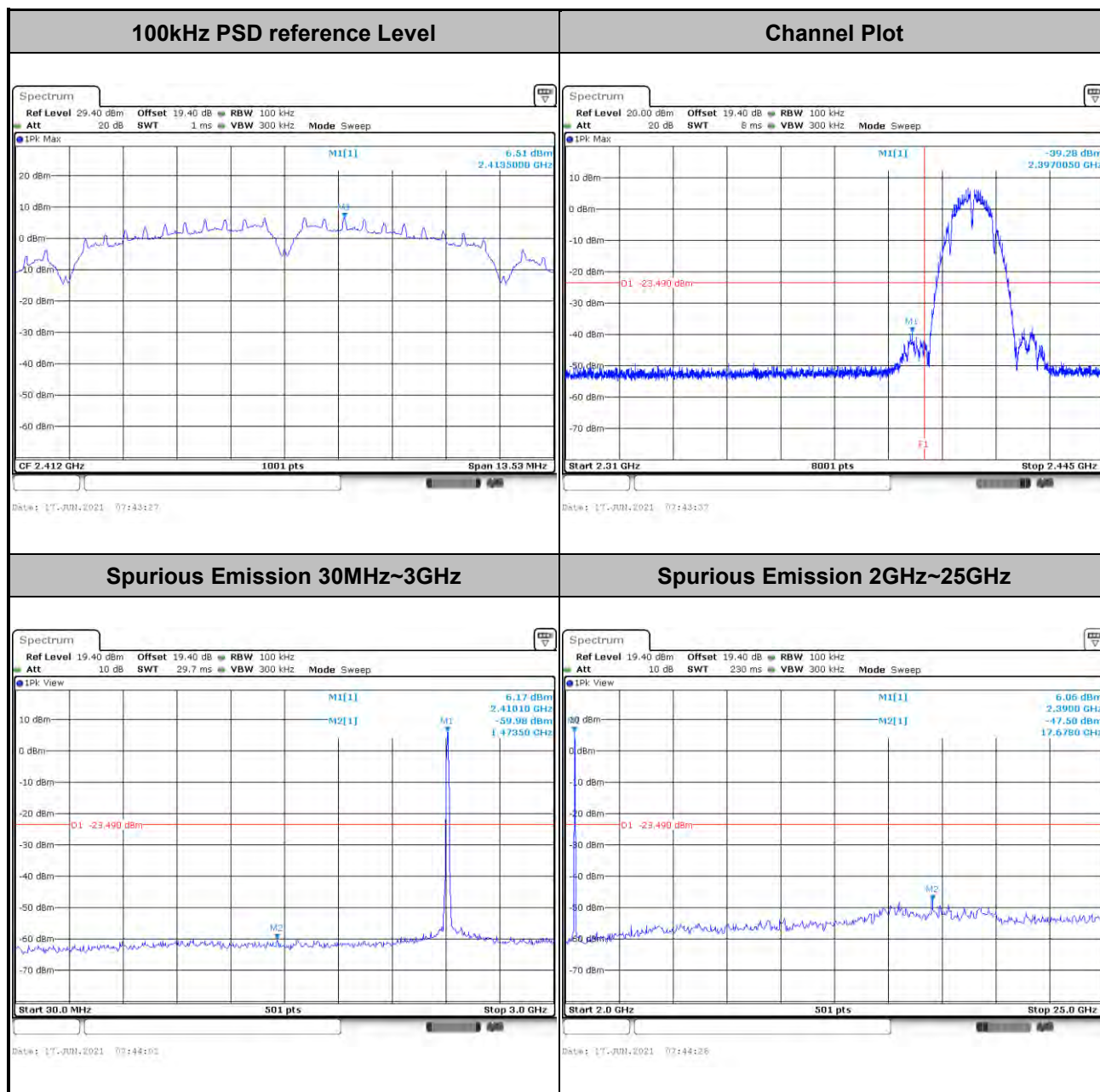


3.4.5 Test Result of Conducted Band Edges and Spurious Emission

Test Engineer :	Peter Liao and Hank Hsu	Temperature :	21~25°C
		Relative Humidity :	51~54%

Number of TX = 2, Ant. 1 (Measured)

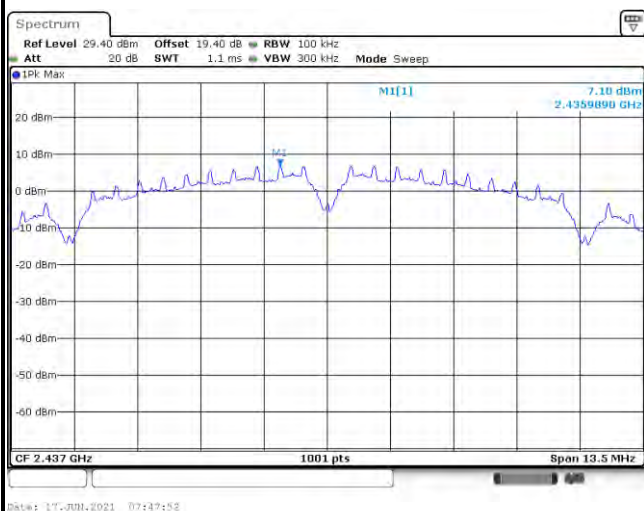
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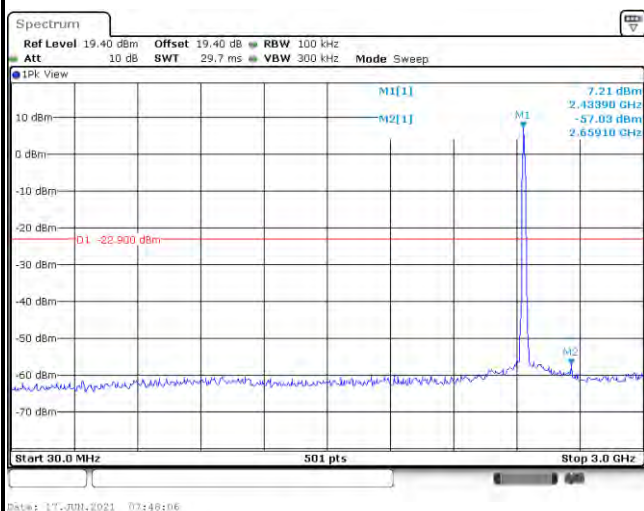
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100kHz PSD reference Level

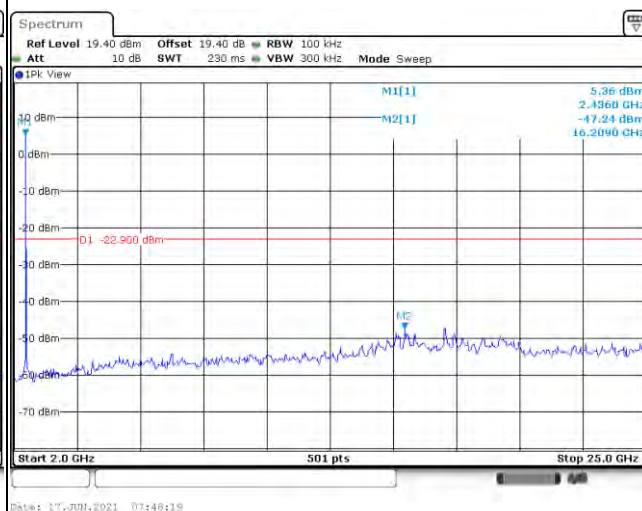


Channel Plot

Spurious Emission 30MHz~3GHz

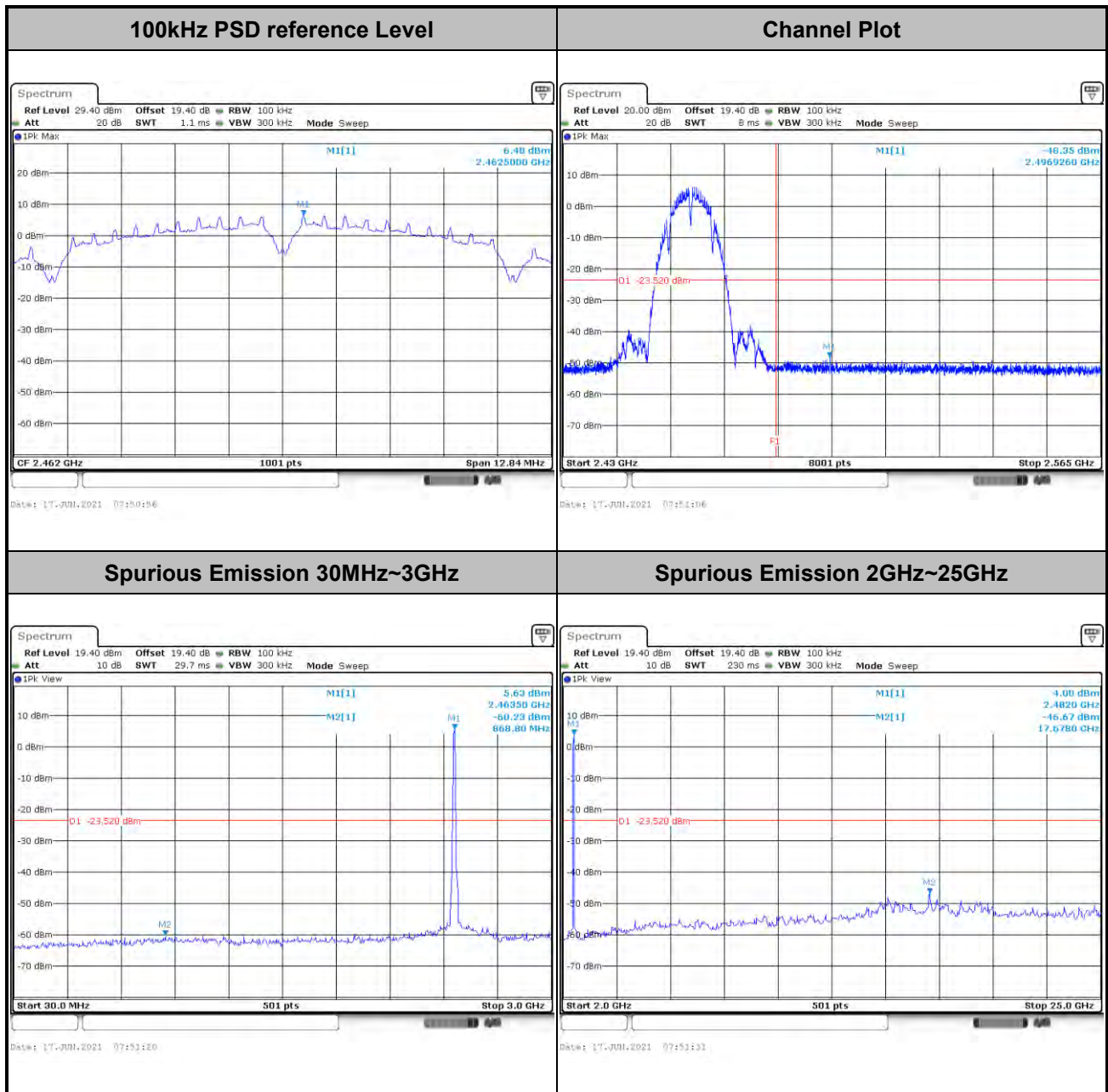


Spurious Emission 2GHz~25GHz



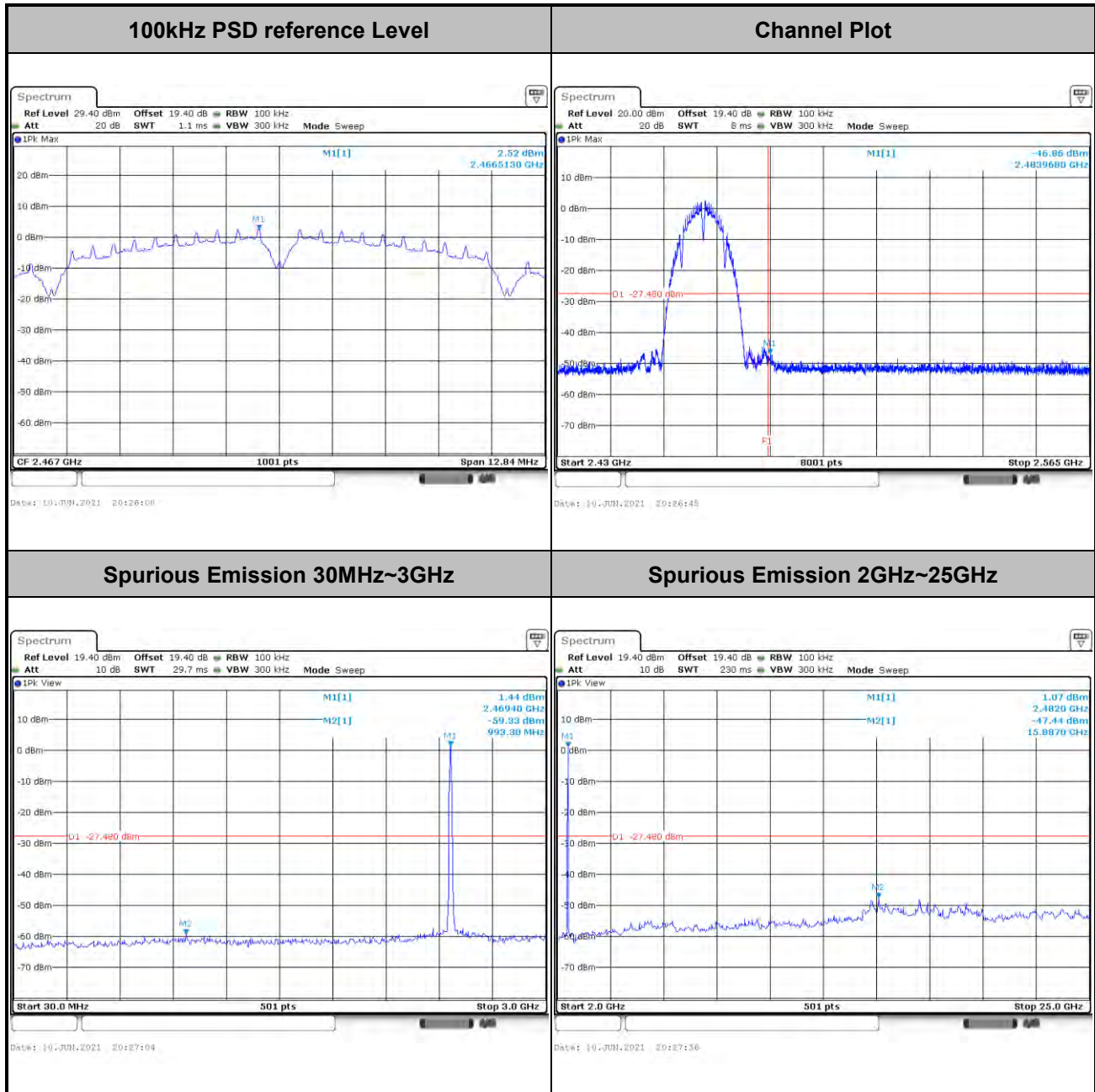


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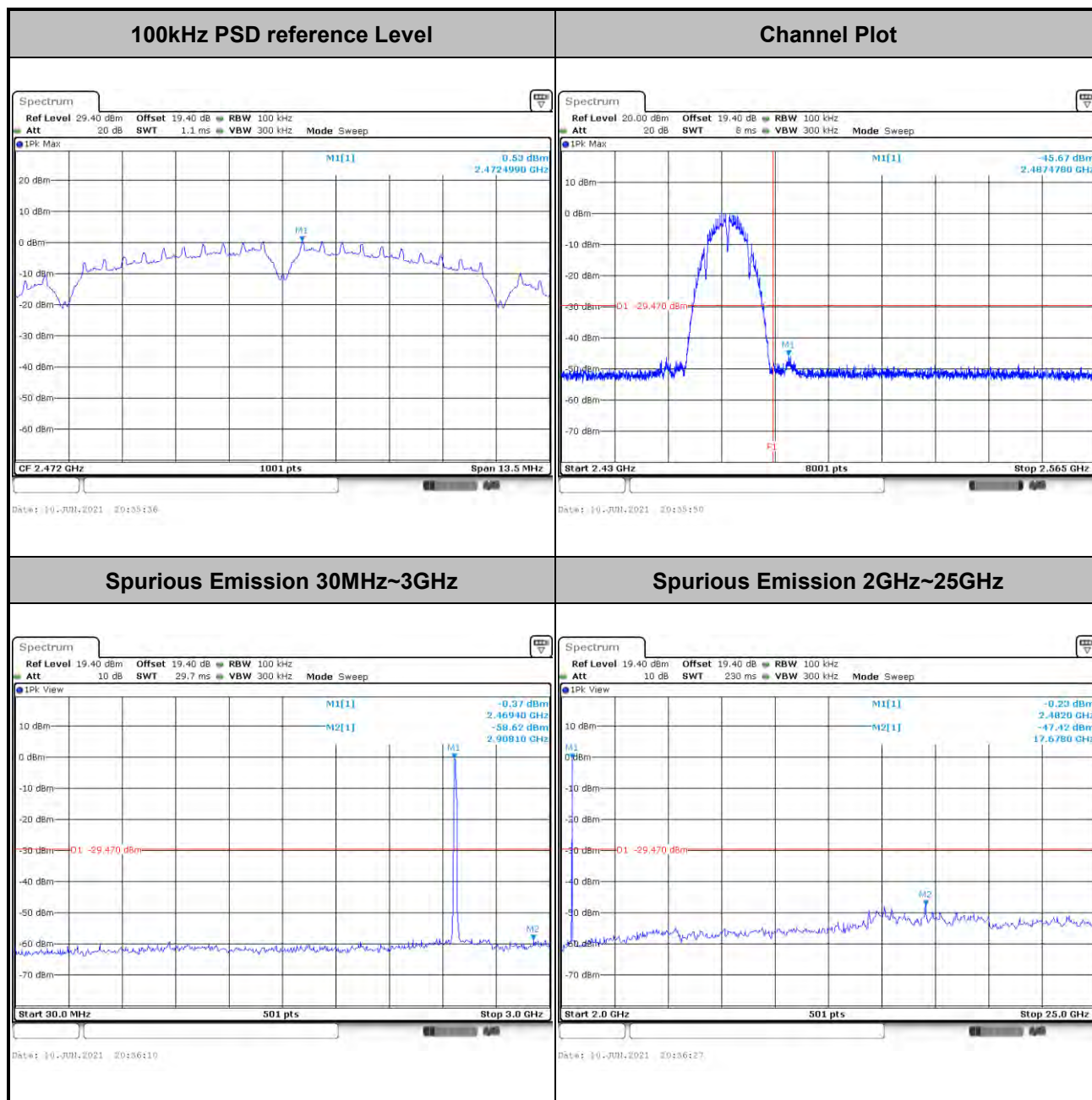


Test Mode :	802.11b	Test Channel :	12
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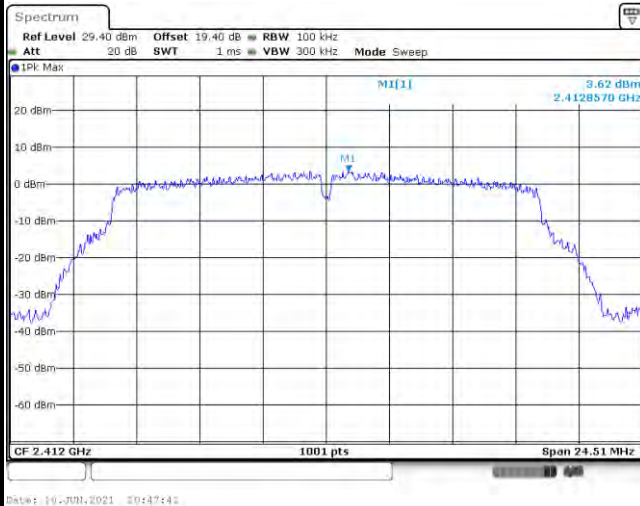
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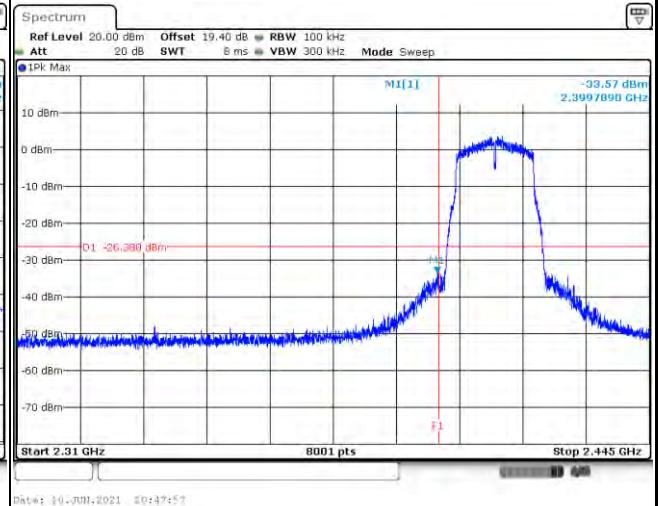


Test Mode :	802.11g	Test Channel :	01
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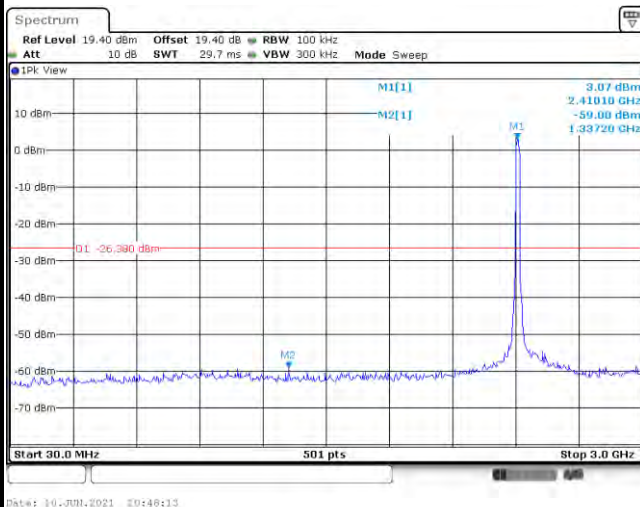
100kHz PSD reference Level



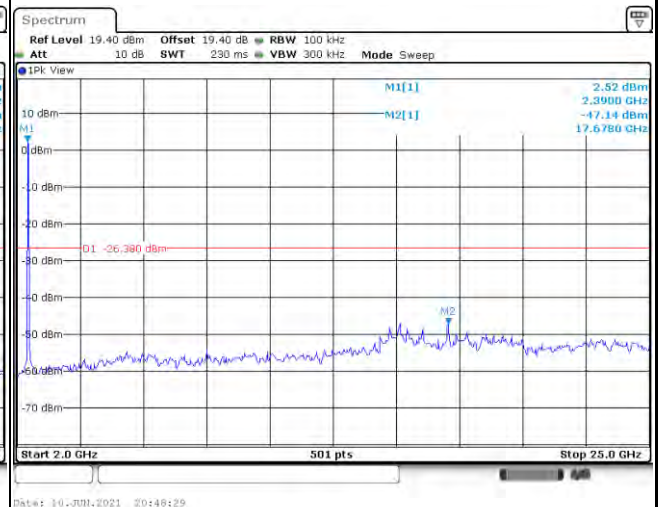
Channel Plot



Spurious Emission 30MHz~3GHz

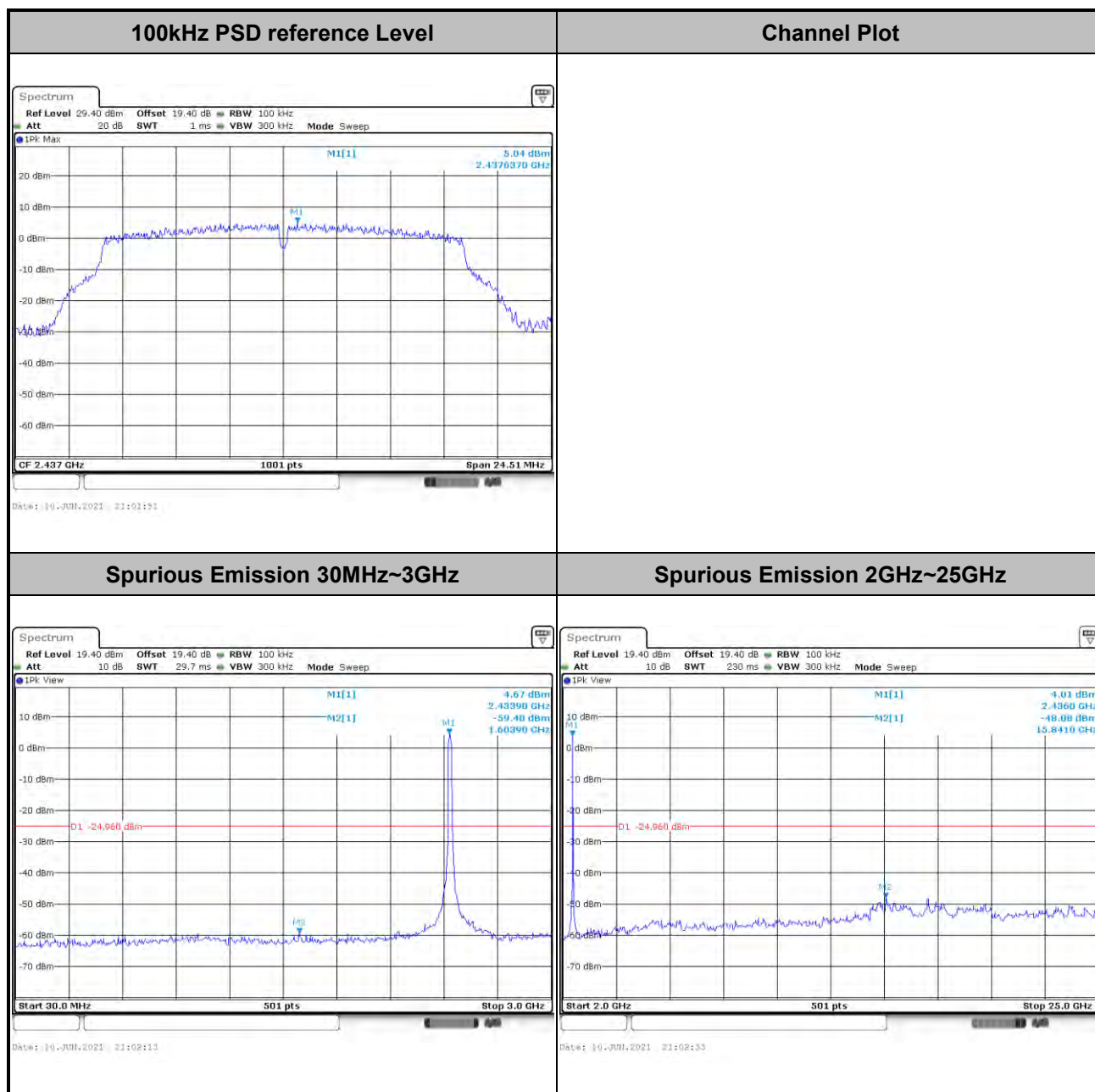


Spurious Emission 2GHz~25GHz



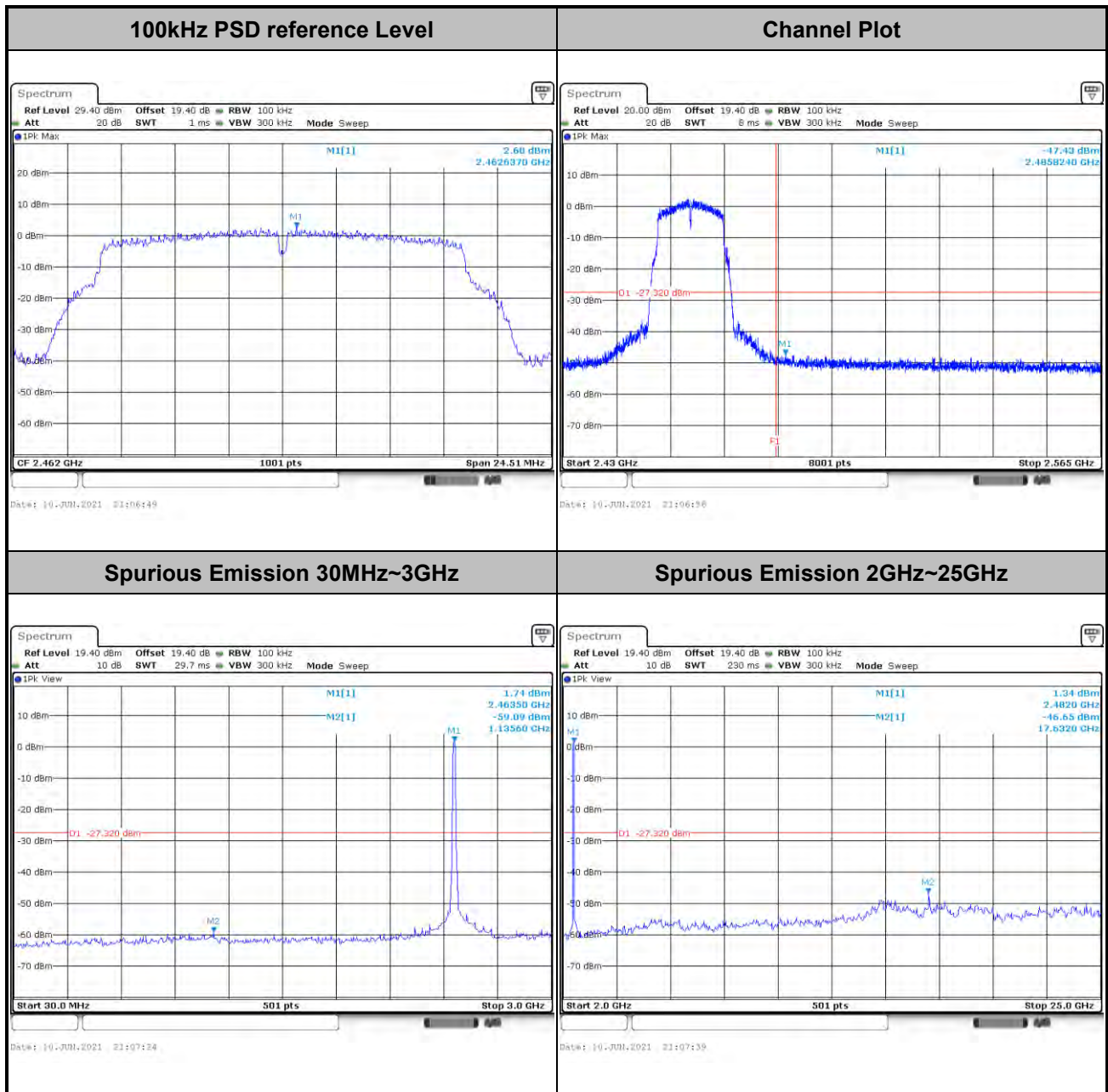


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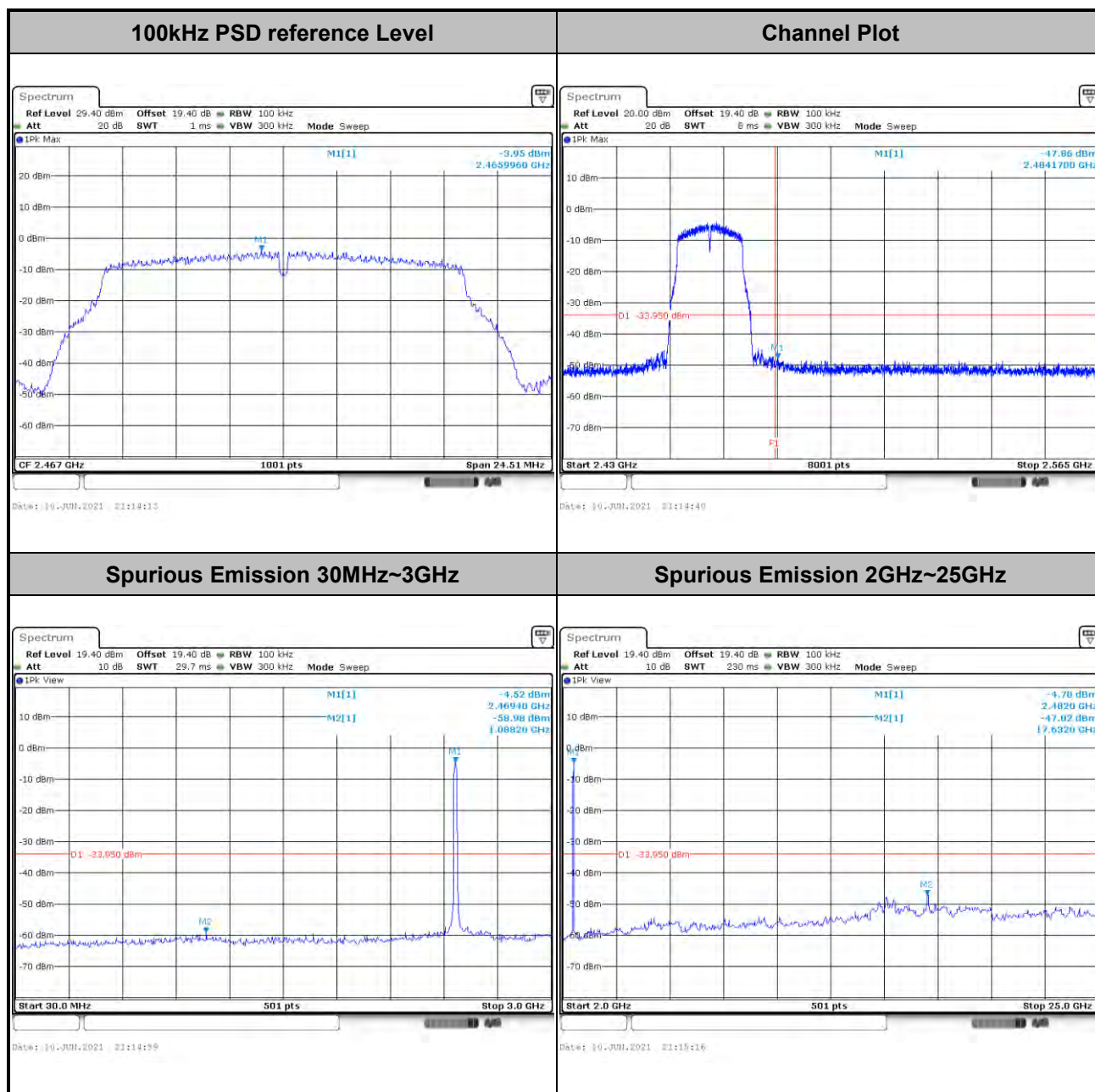


Test Mode :	802.11g	Test Channel :	11
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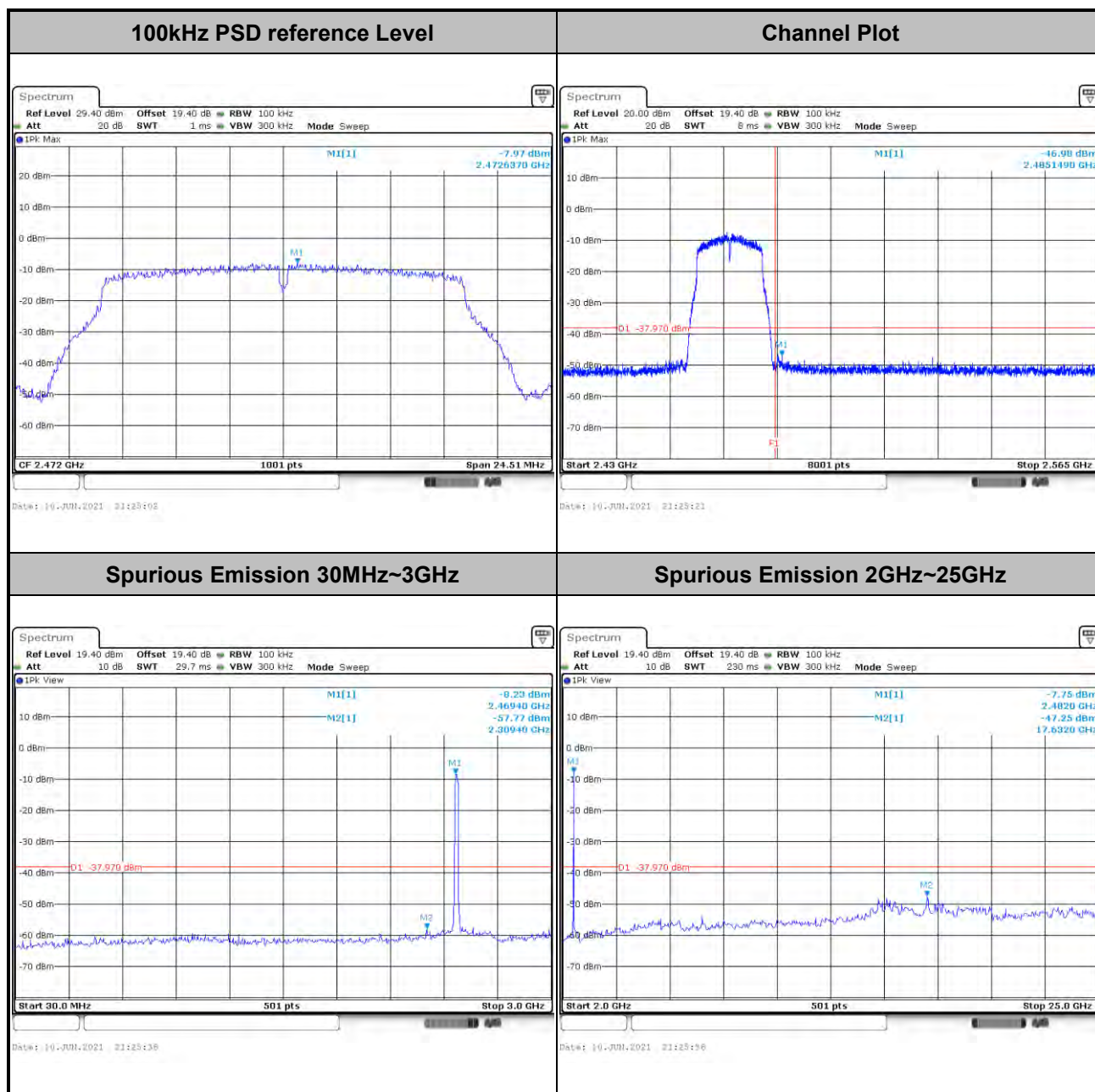


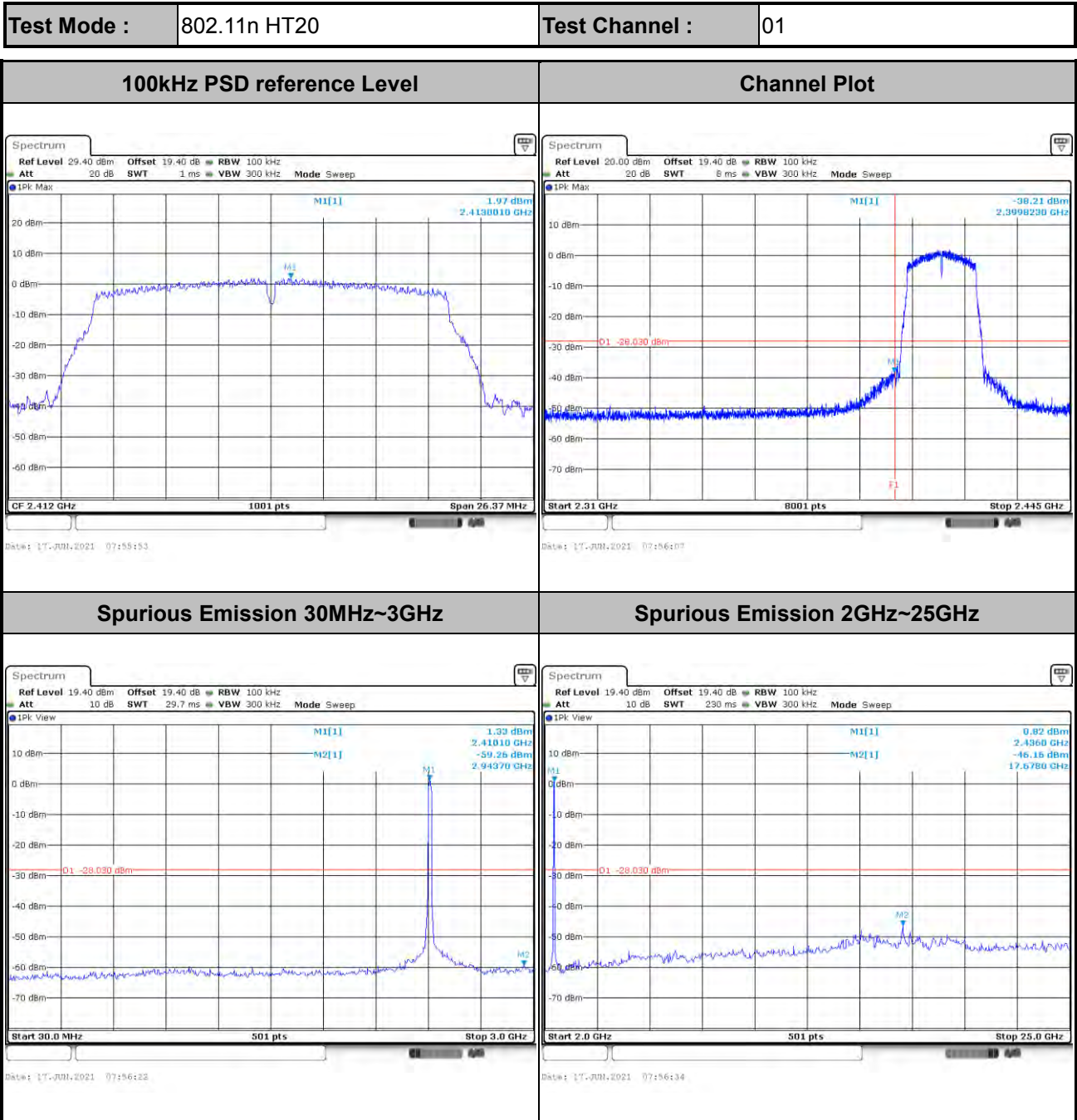
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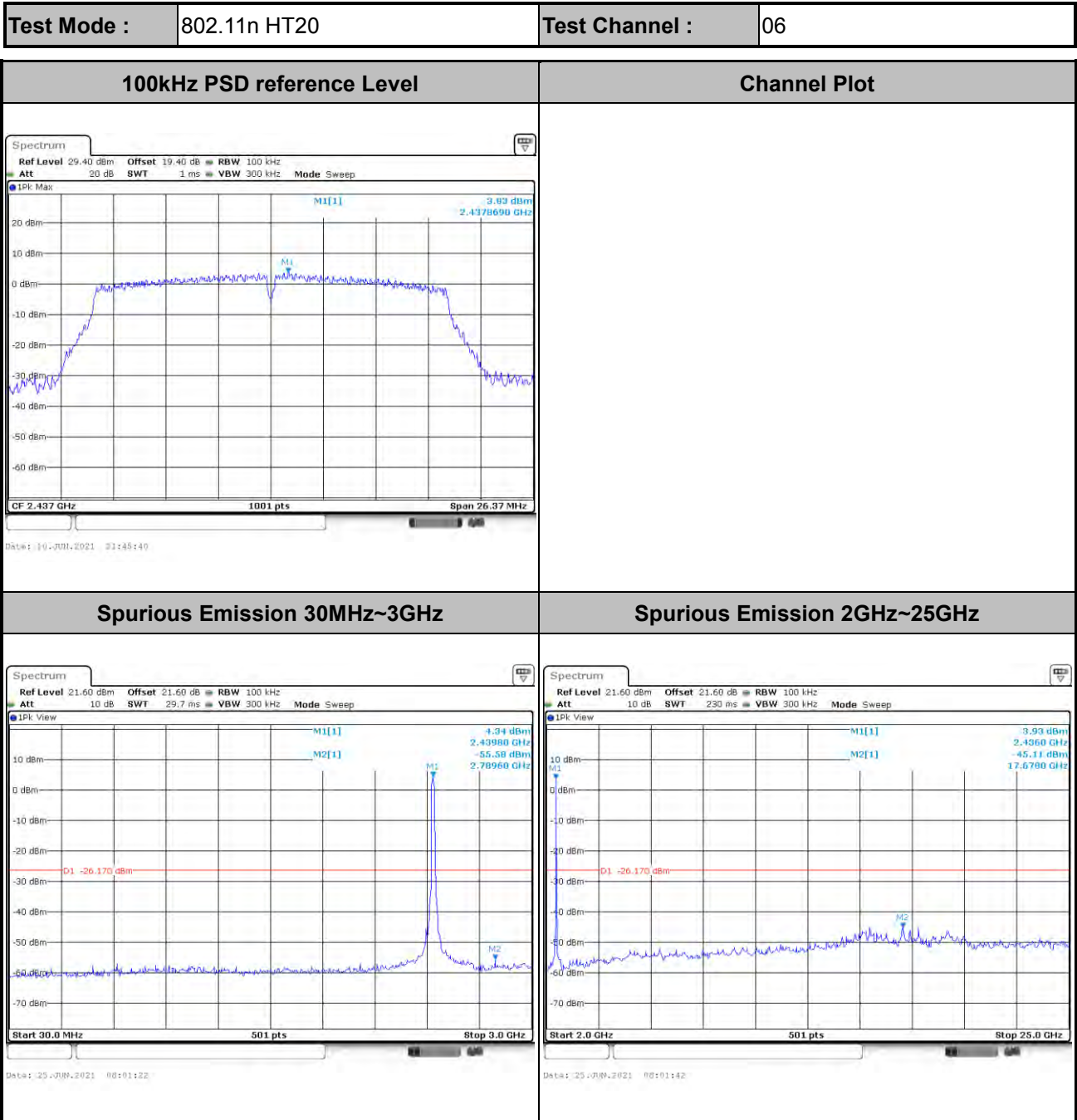


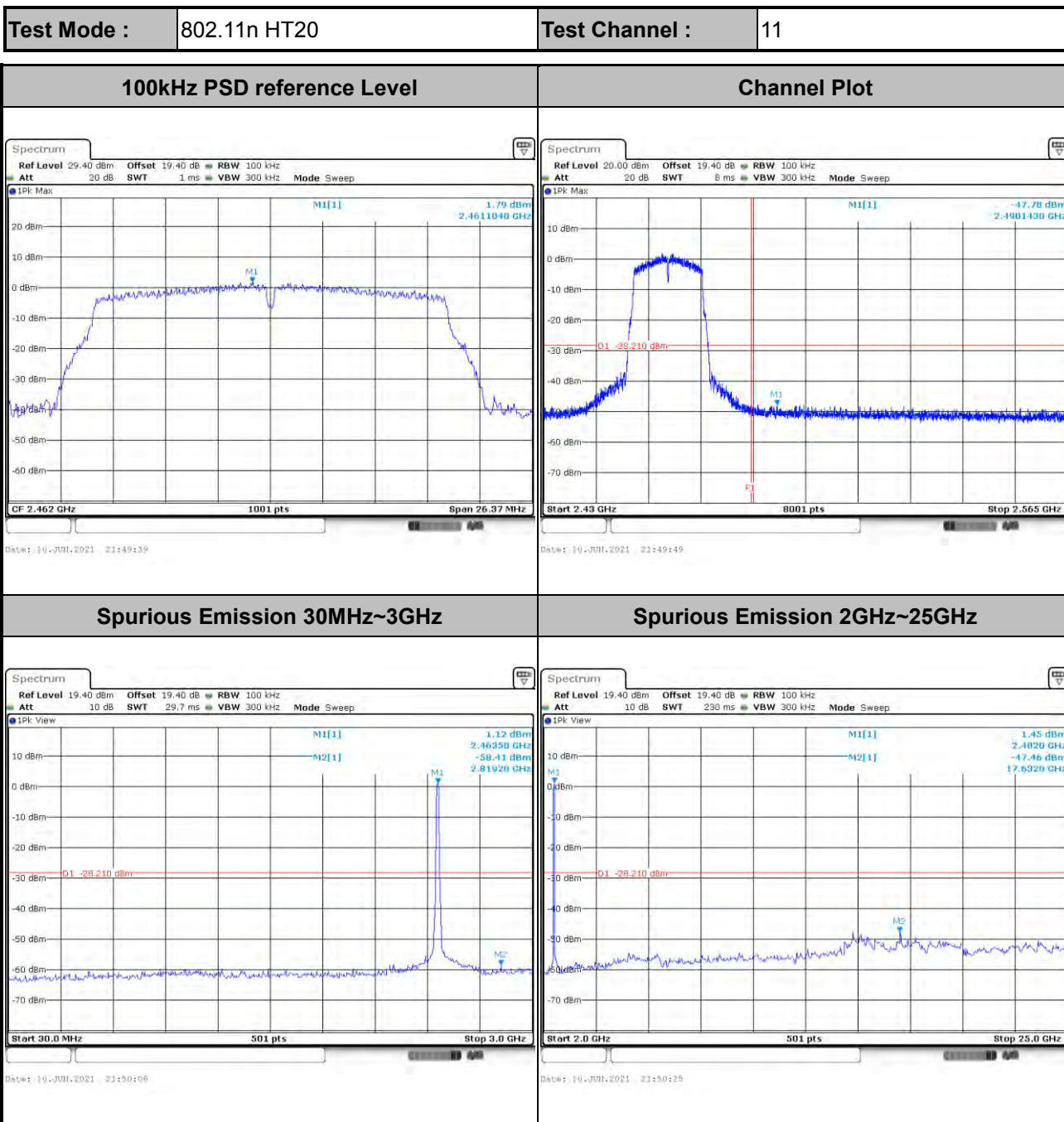


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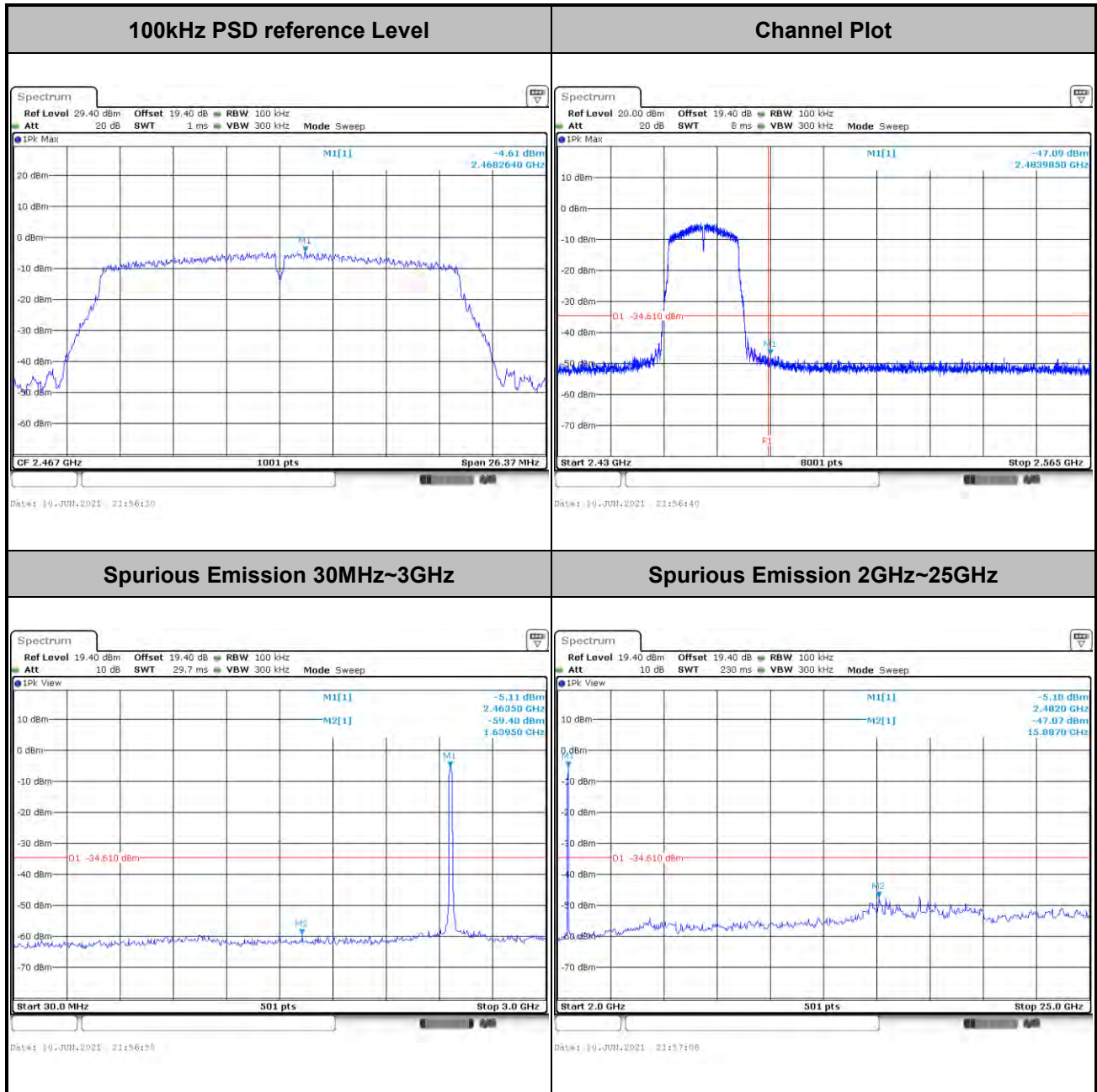






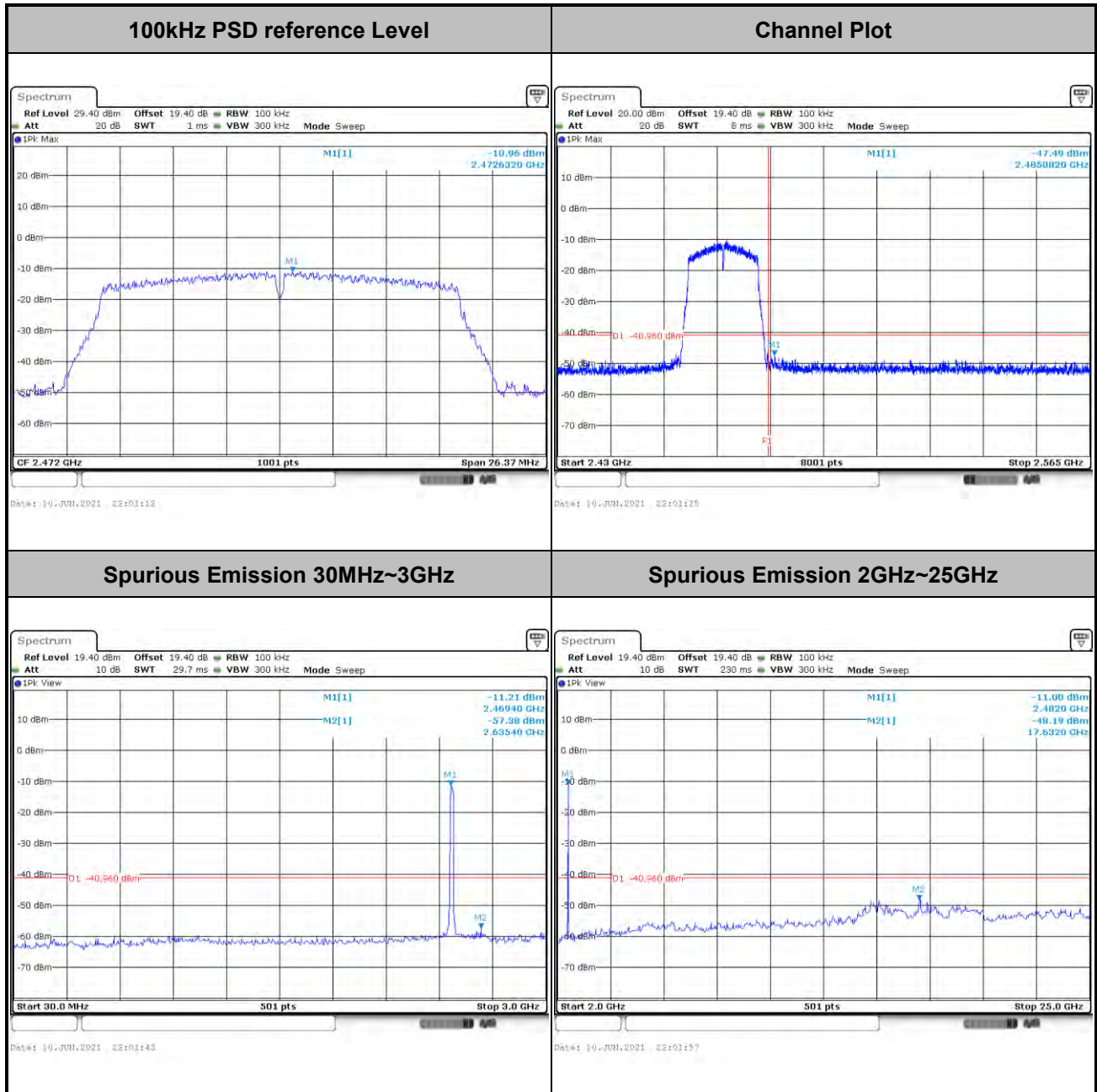


Test Mode :	802.11n HT20	Test Channel :	12
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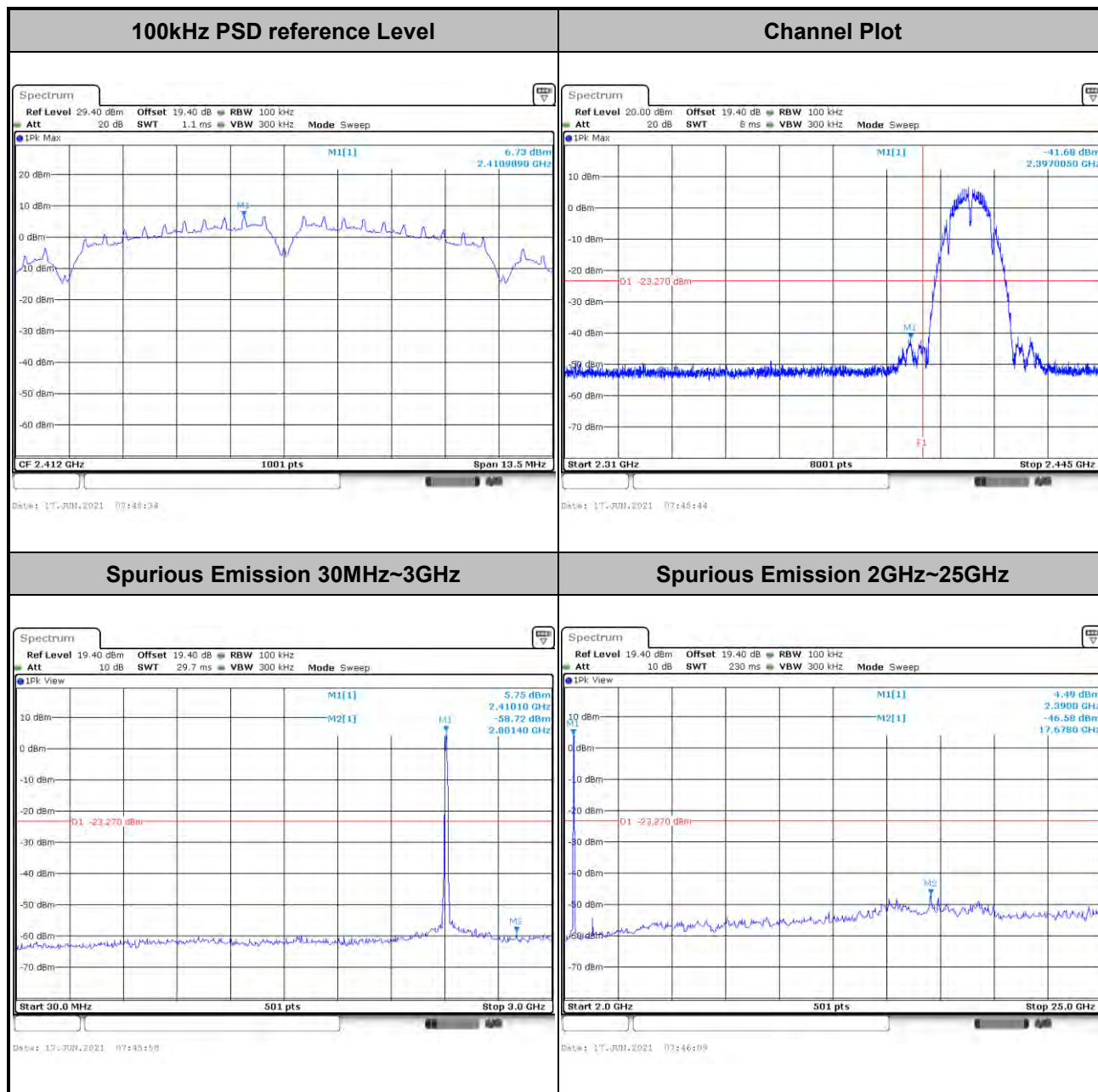
Test Mode :	802.11n HT20	Test Channel :	13
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Number of TX = 2, Ant. 2 (Measured)

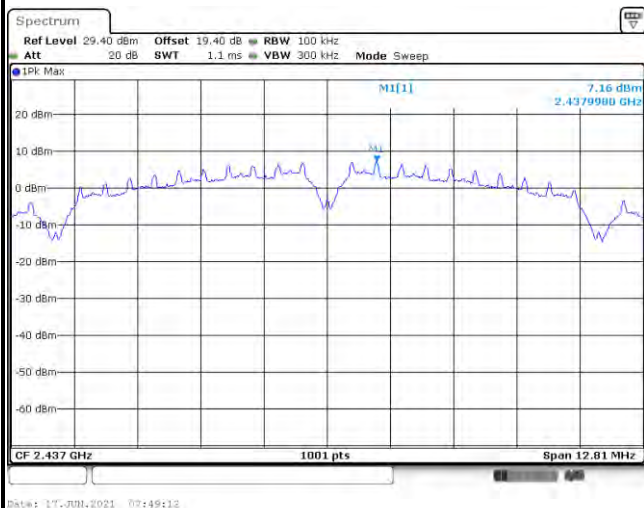
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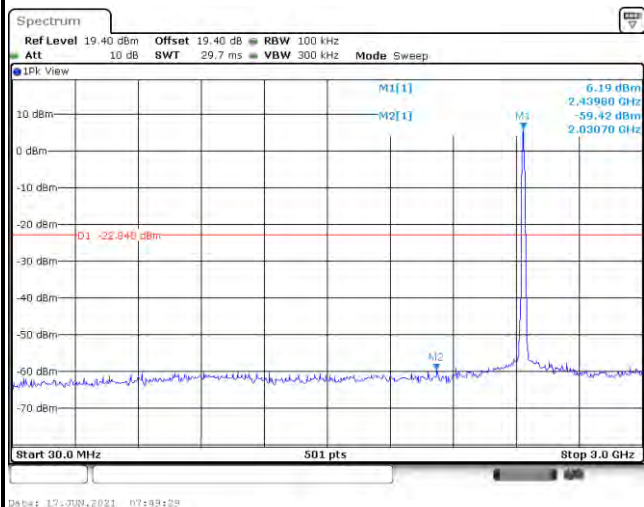
Test Mode :	802.11b	Test Channel :	06
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100kHz PSD reference Level

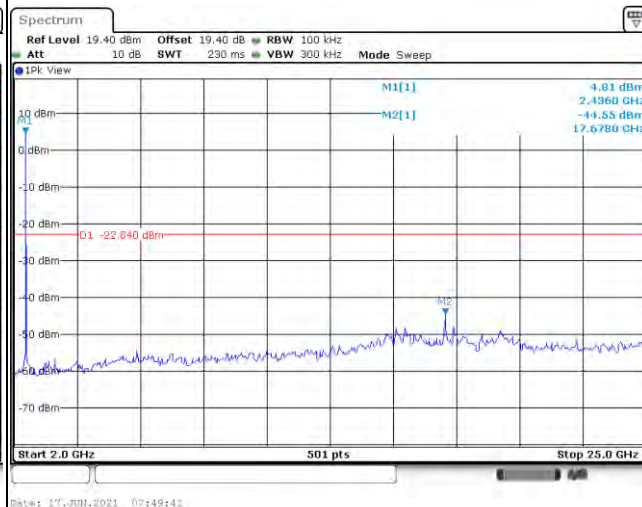


Channel Plot

Spurious Emission 30MHz~3GHz

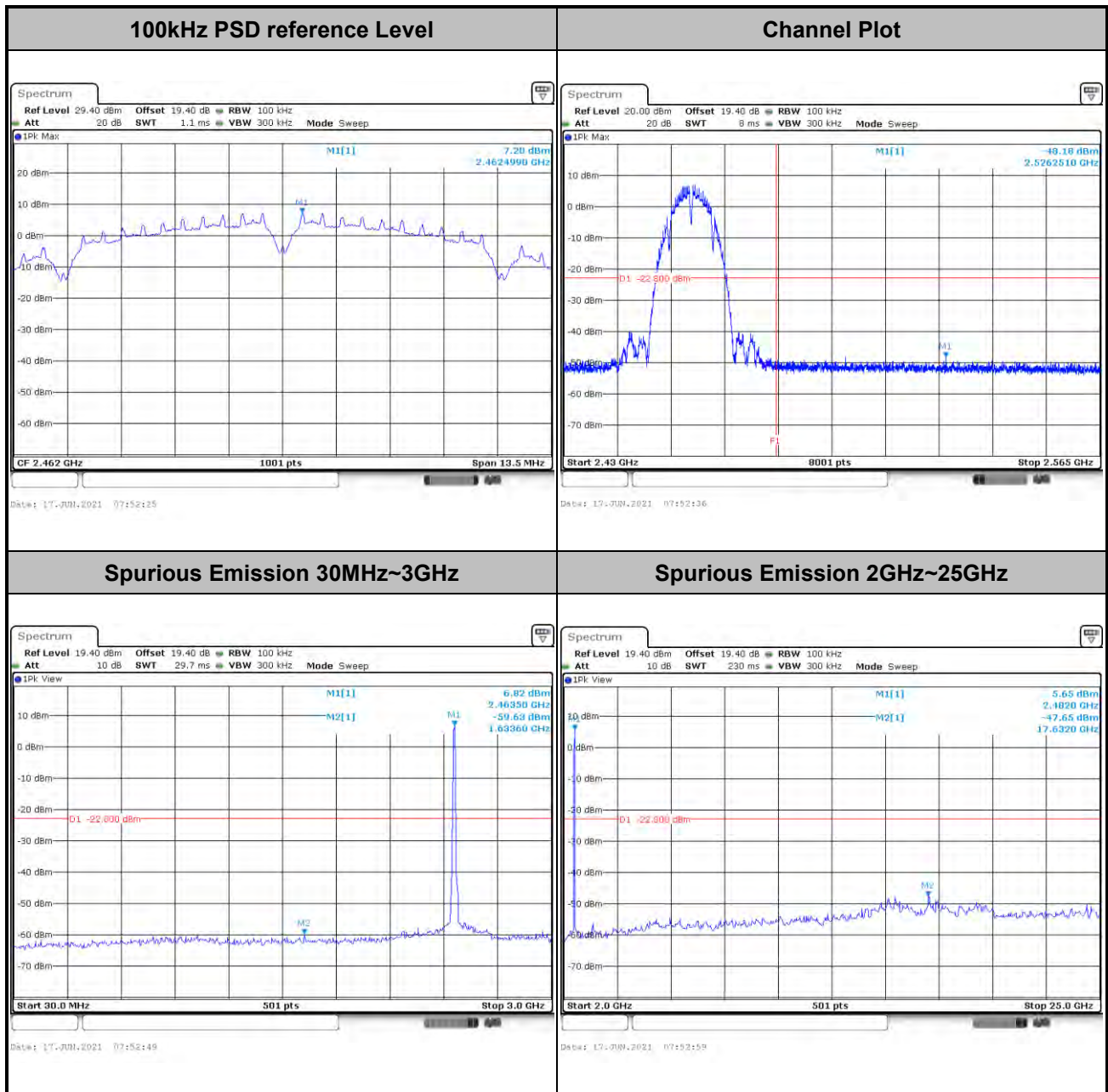


Spurious Emission 2GHz~25GHz



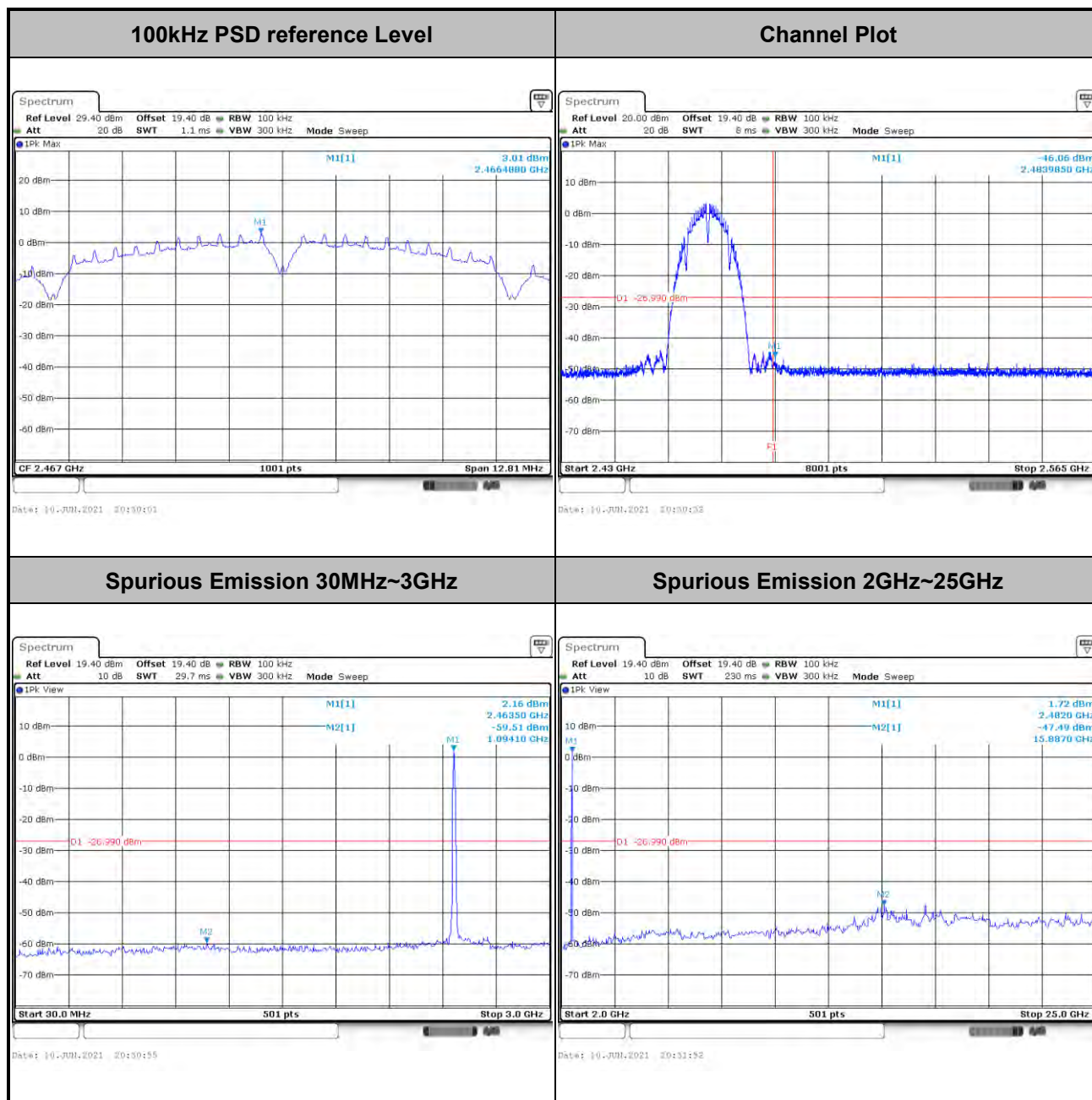


Test Mode :	802.11b	Test Channel :	11
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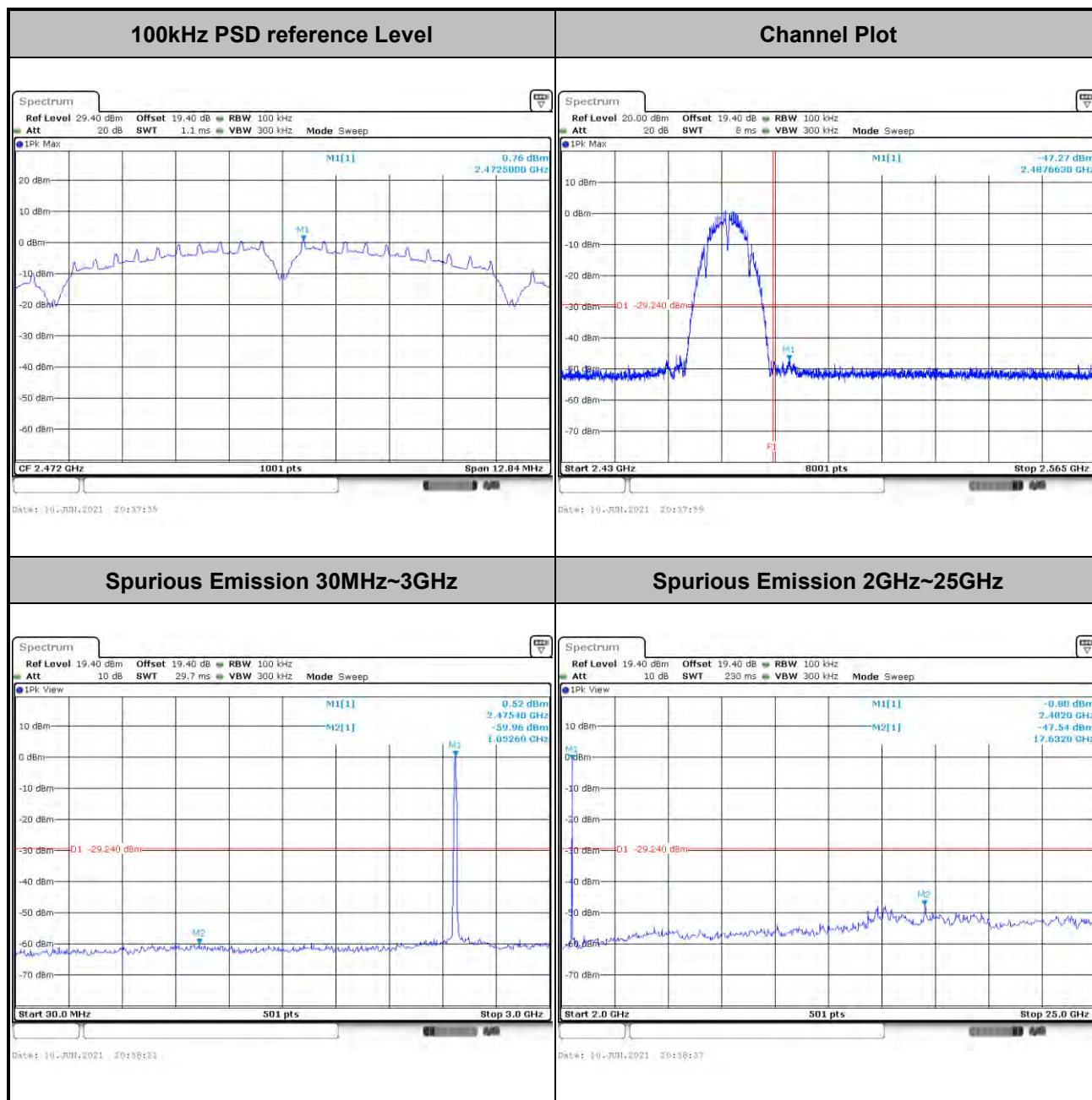


Test Mode :	802.11b	Test Channel :	12
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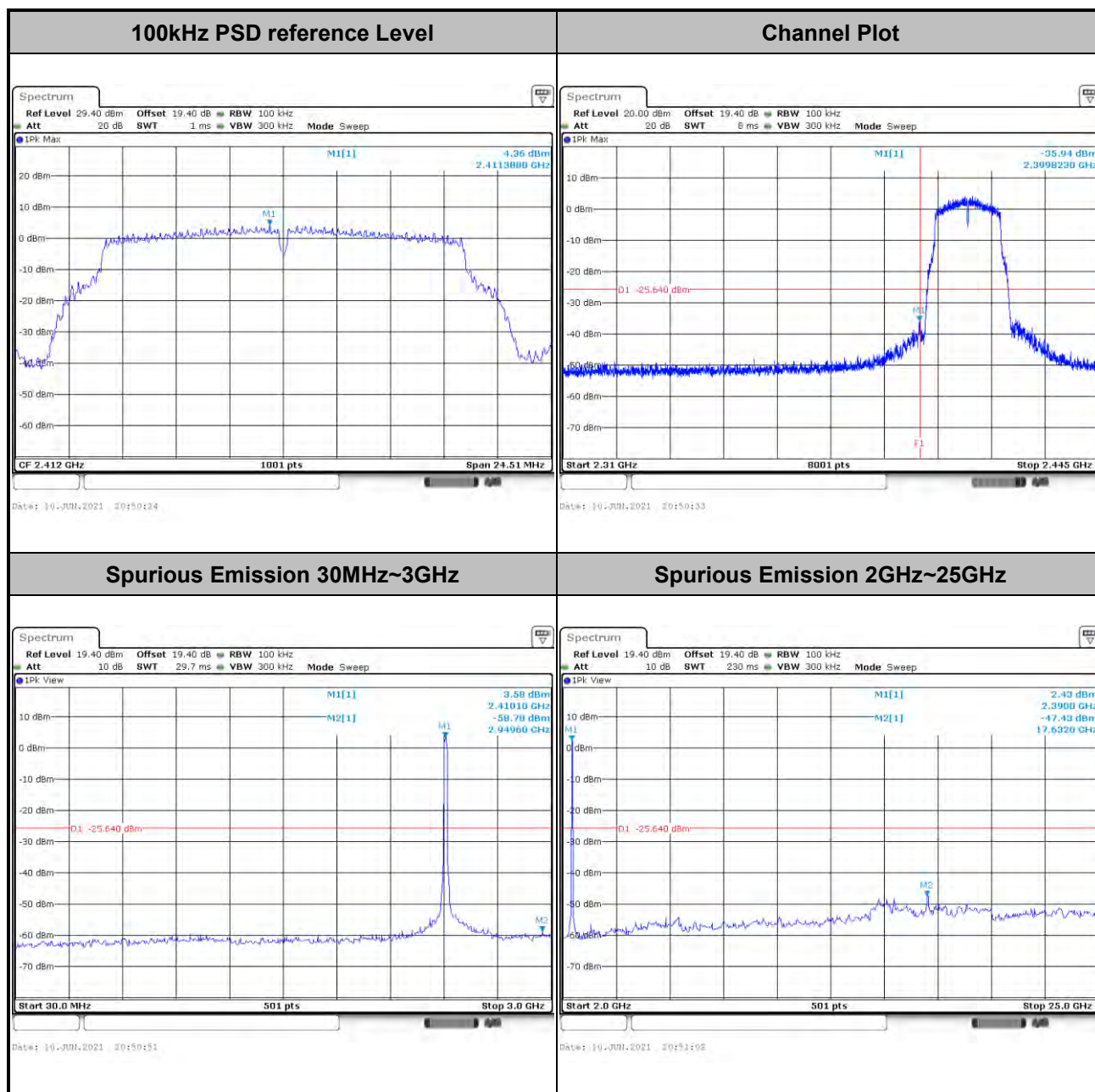


Test Mode :	802.11b	Test Channel :	13
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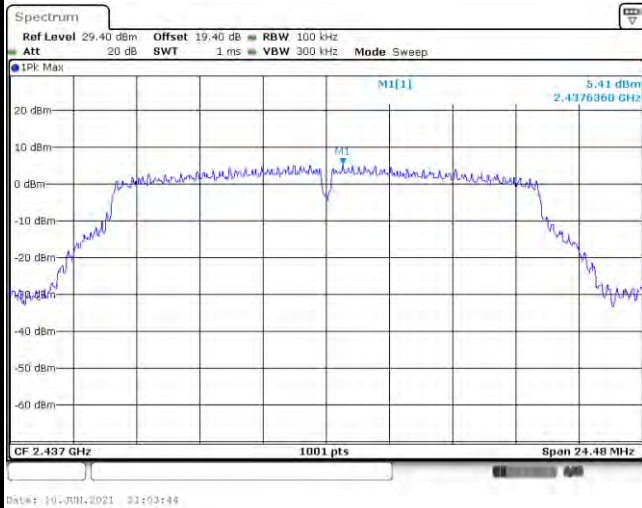
Test Mode :	802.11g	Test Channel :	01
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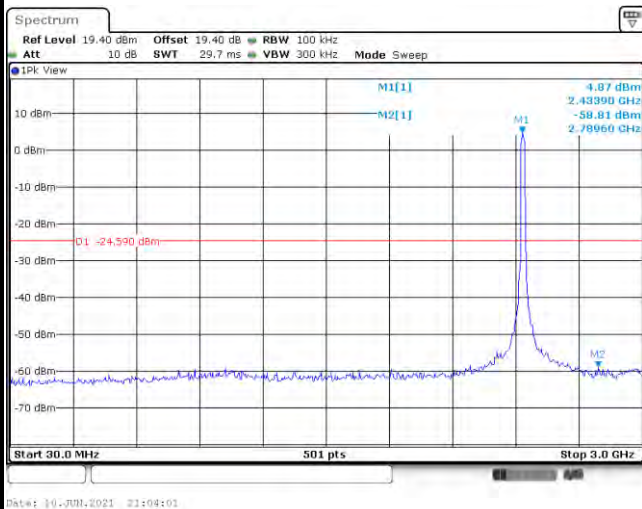
Test Mode :	802.11g	Test Channel :	06
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100kHz PSD reference Level

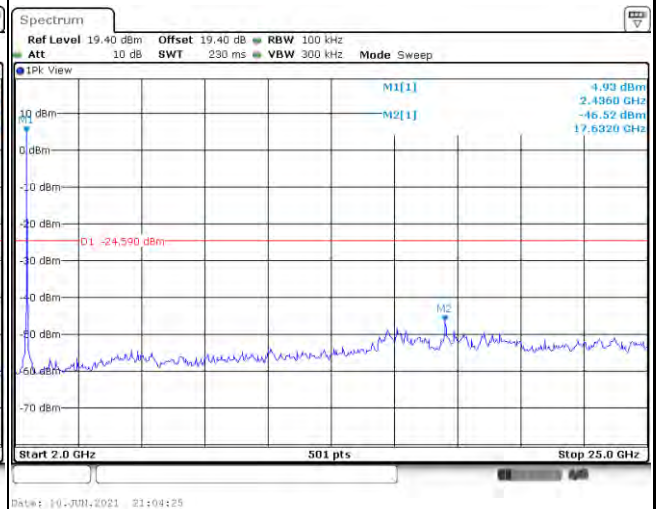


Channel Plot

Spurious Emission 30MHz~3GHz

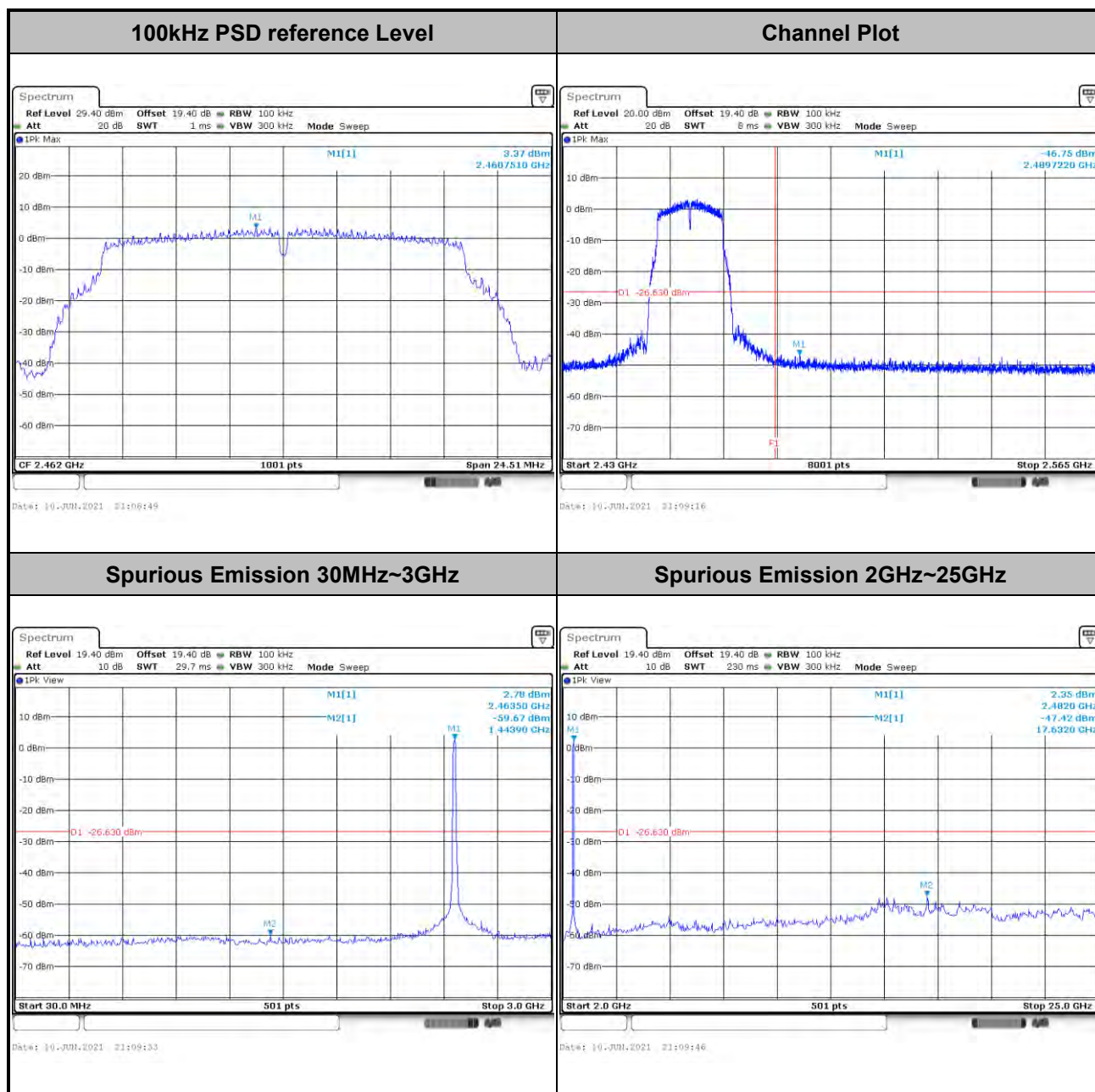


Spurious Emission 2GHz~25GHz



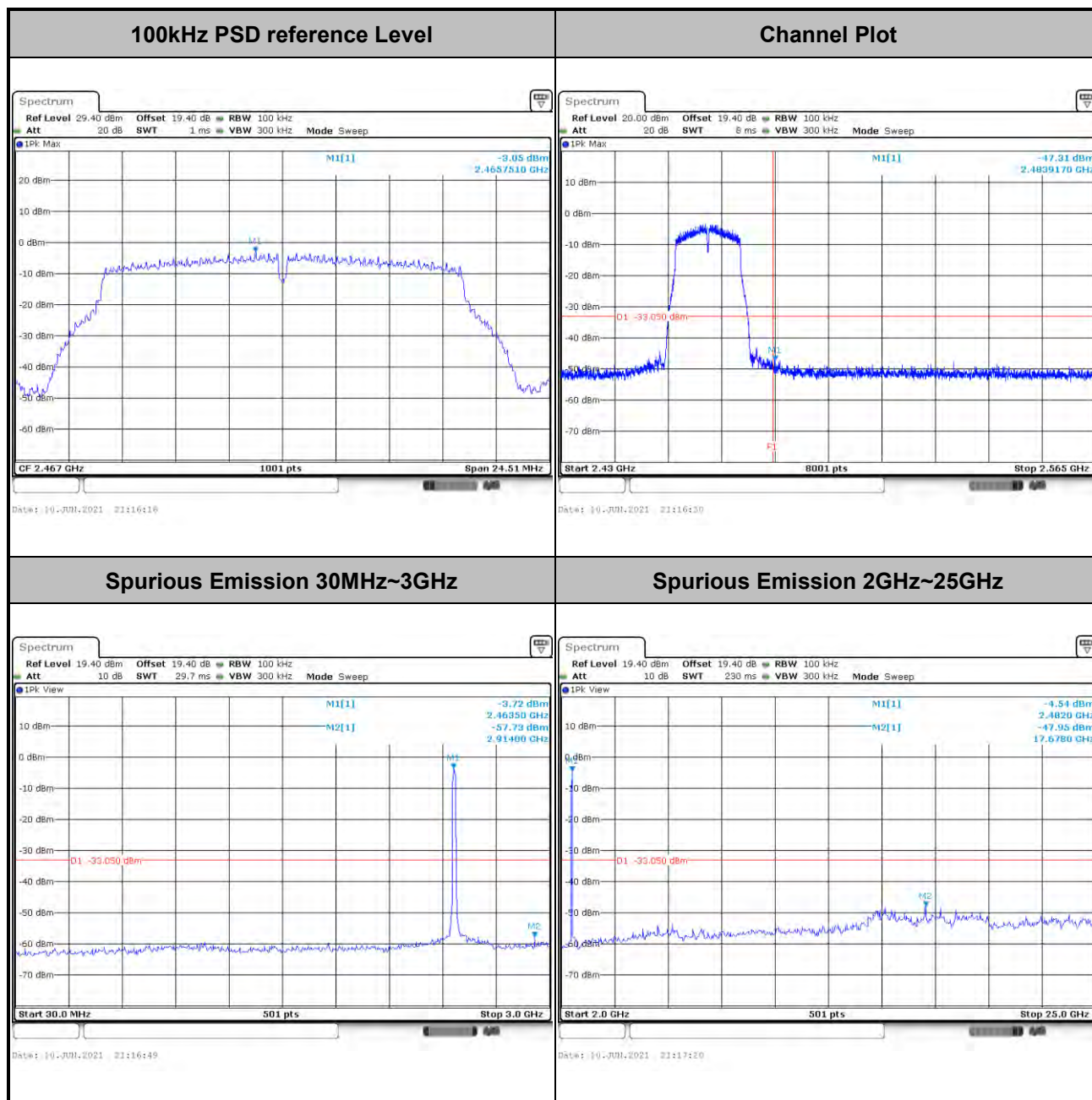


Test Mode :	802.11g	Test Channel :	11
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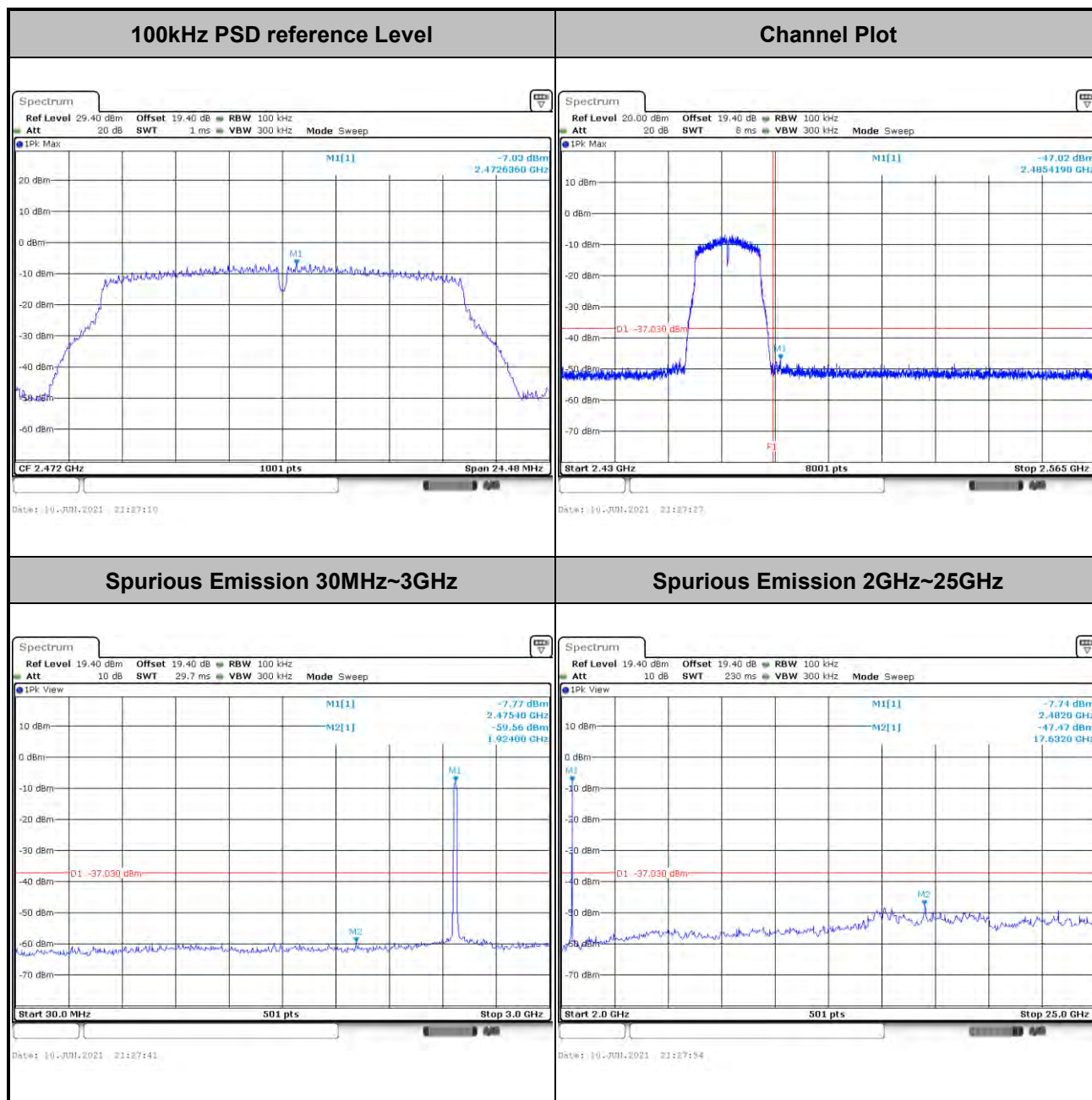


Test Mode :	802.11g	Test Channel :	12
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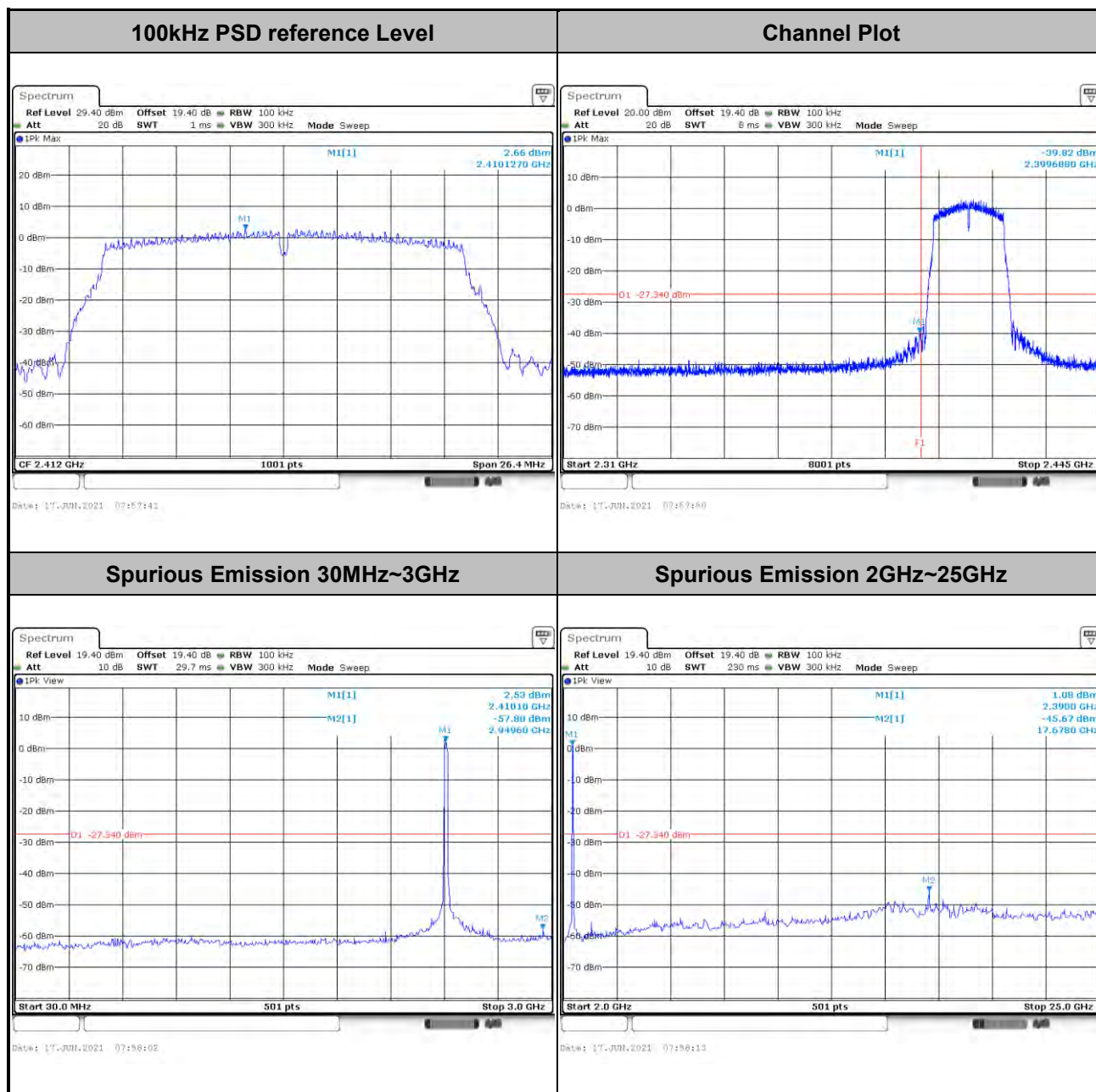


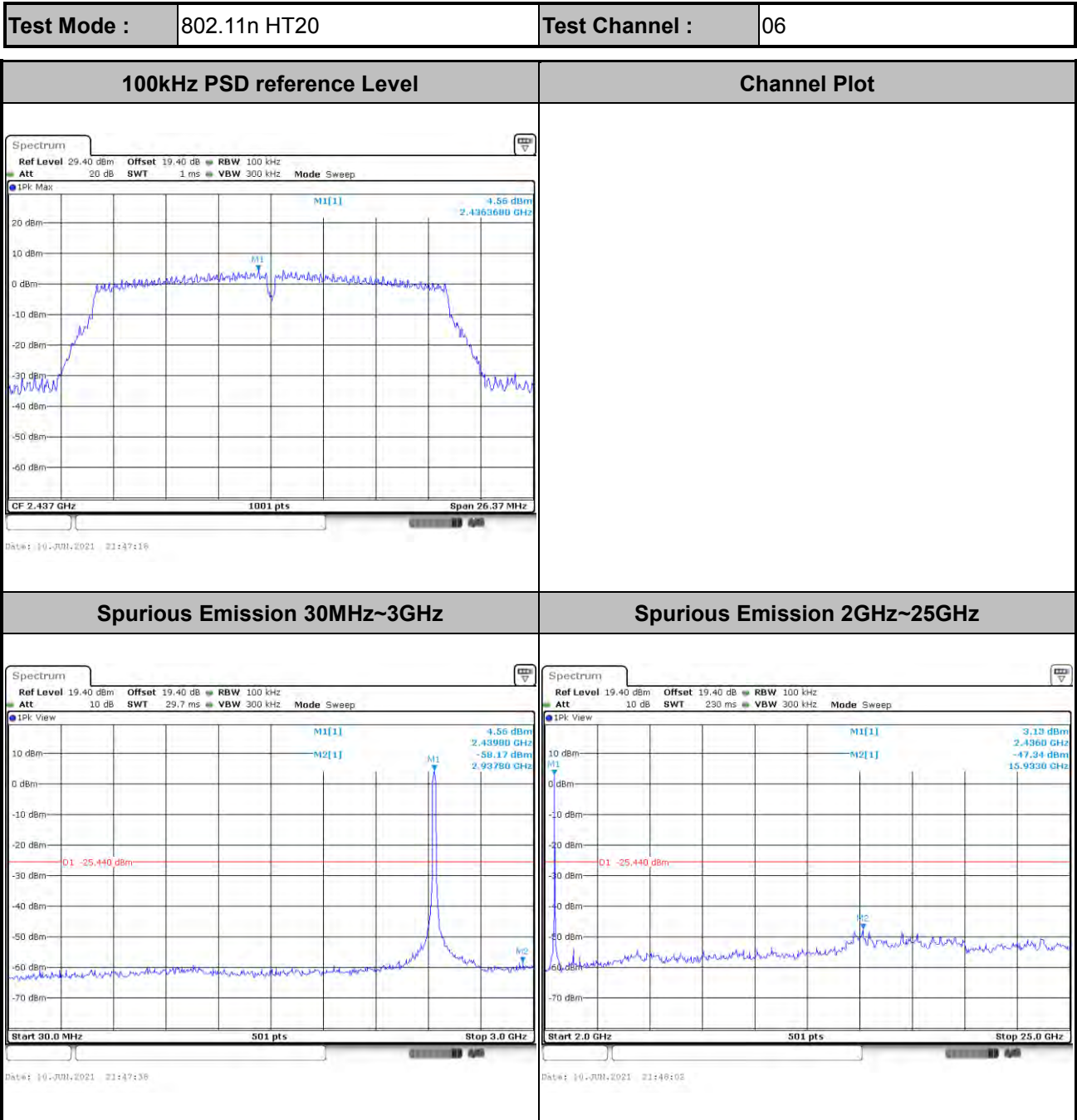
Test Mode :	802.11g	Test Channel :	13
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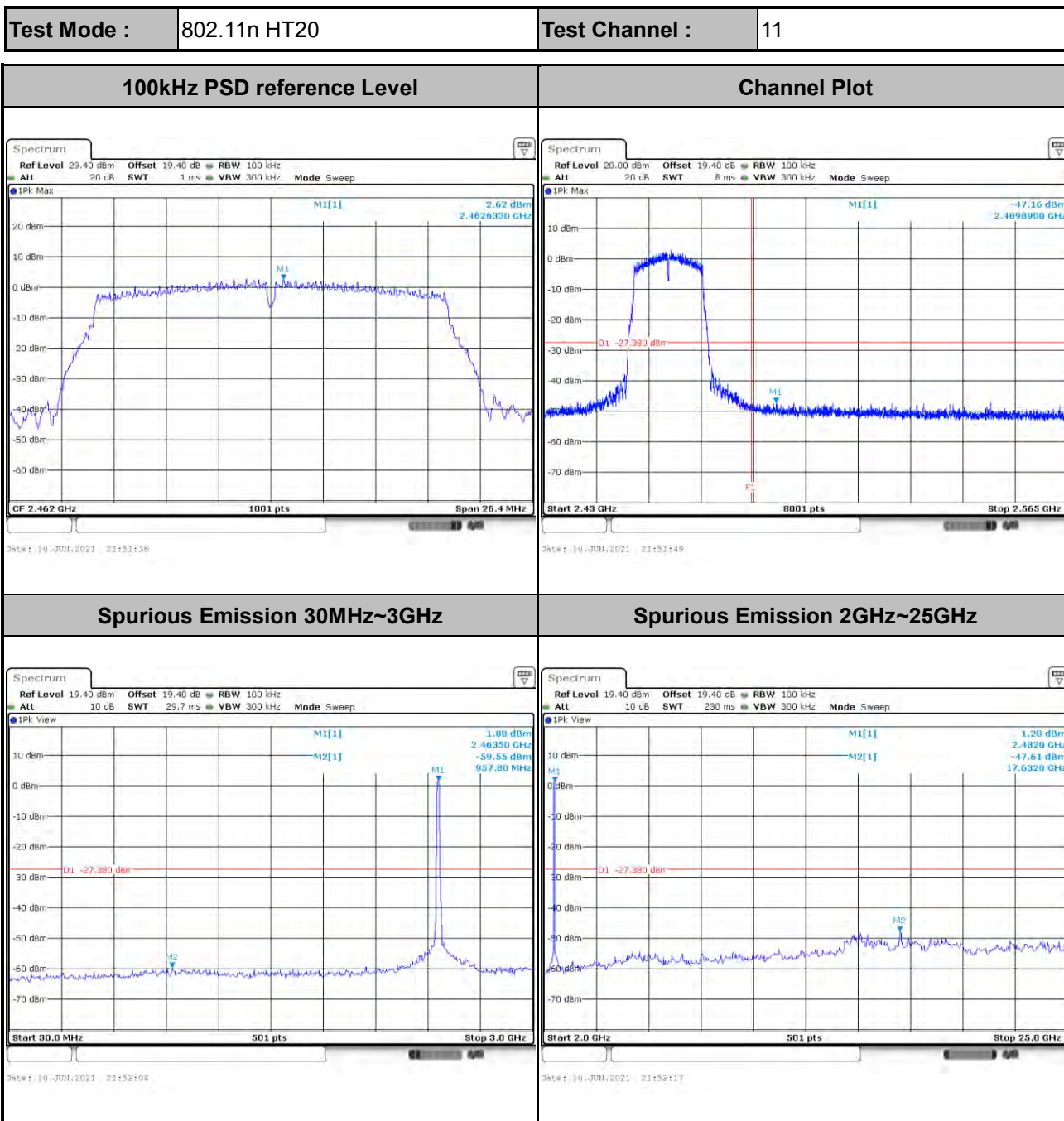


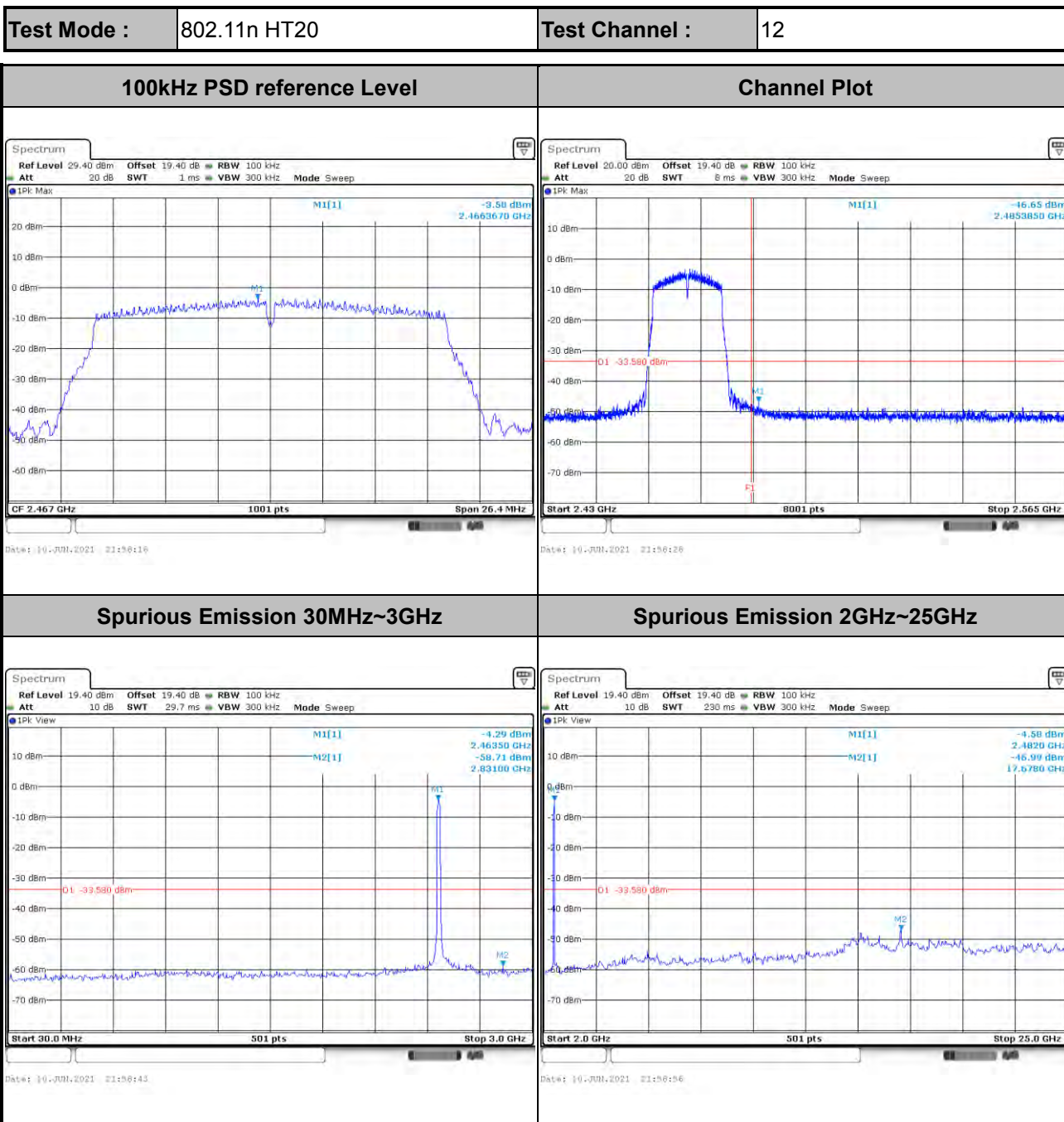


Test Mode :	802.11n HT20	Test Channel :	01
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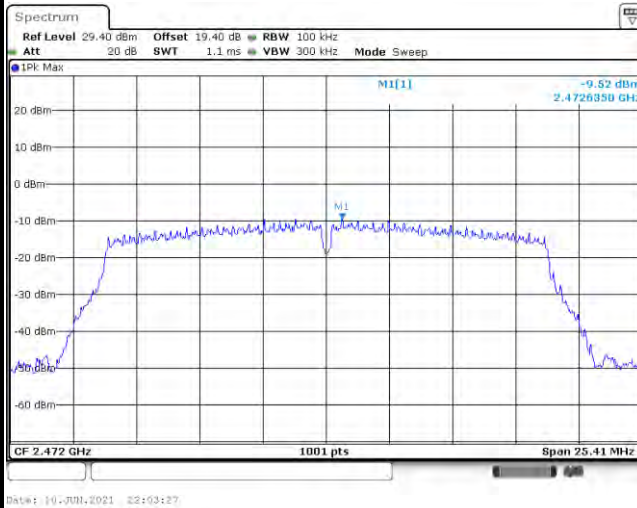




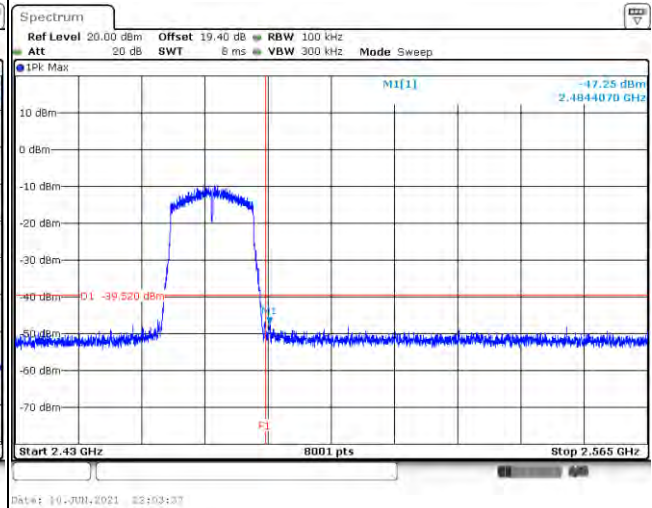
Test Mode : 802.11n HT20

Test Channel : 13

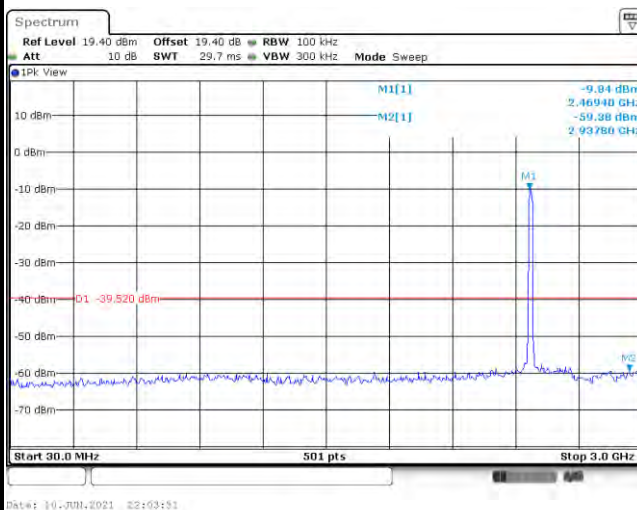
100kHz PSD reference Level



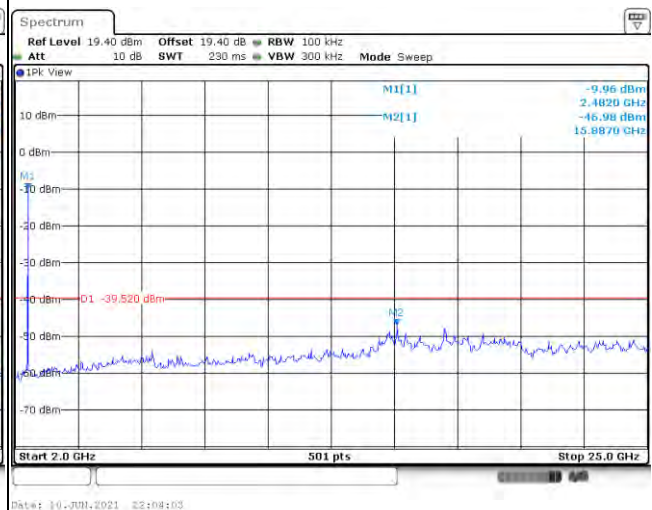
Channel Plot



Spurious Emission 30MHz~3GHz



Spurious Emission 2GHz~25GHz



3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 Limit of Radiated band edge and Spurious Emission Measurement

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

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.5.2 Measuring Instruments

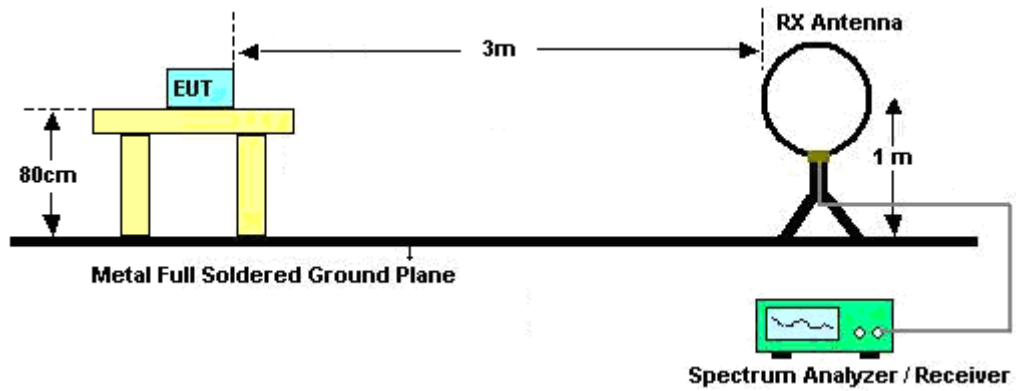
See list of measuring equipment of this test report.

3.5.3 Test Procedures

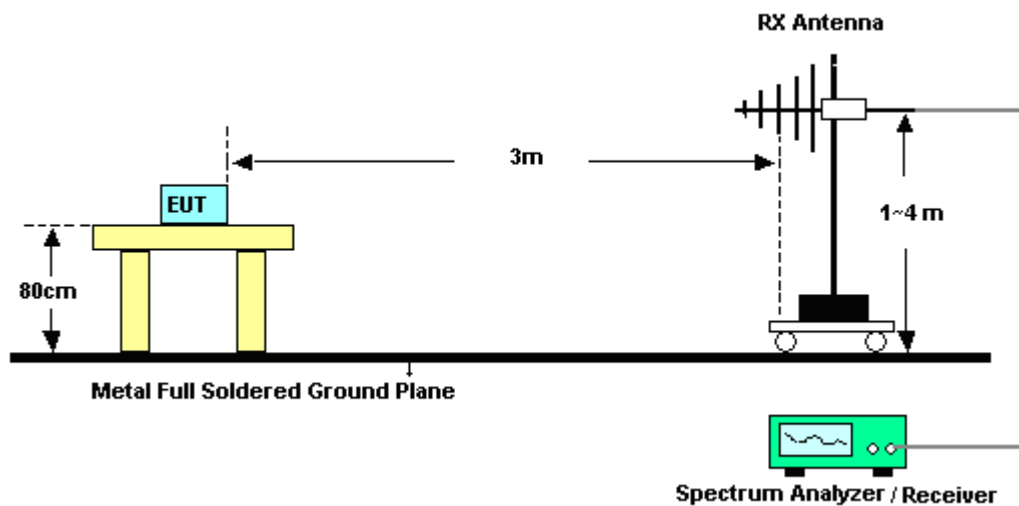
1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For testing below 1 GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1 GHz, the emission level of the EUT in peak mode was 20 dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
8. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW = 100 kHz for $f < 1$ GHz; VBW $\geq$ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3 MHz for $f \geq 1$ GHz for peak measurement.
For average measurement:
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.5.4 Test Setup

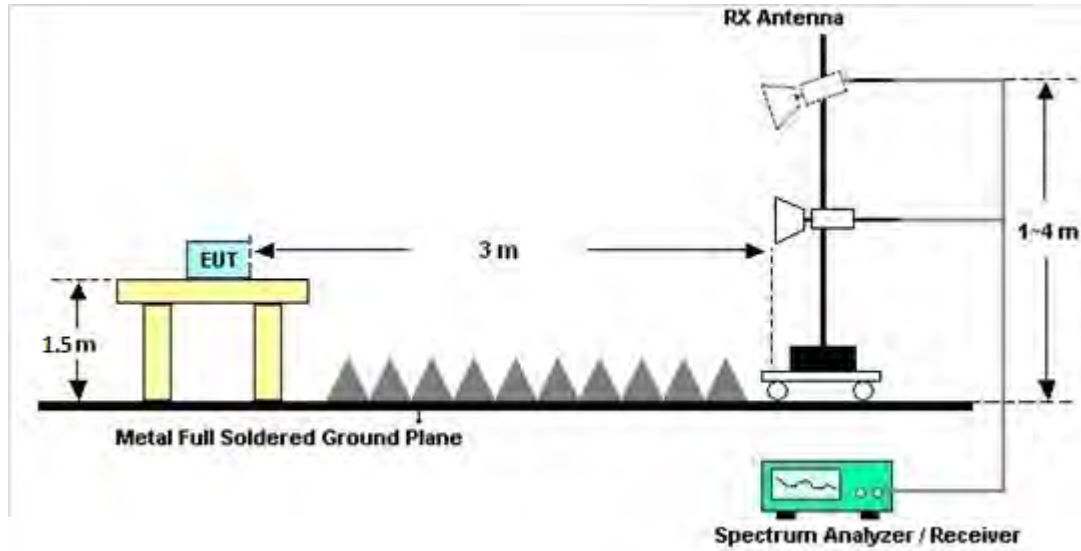
For radiated emissions below 30MHz



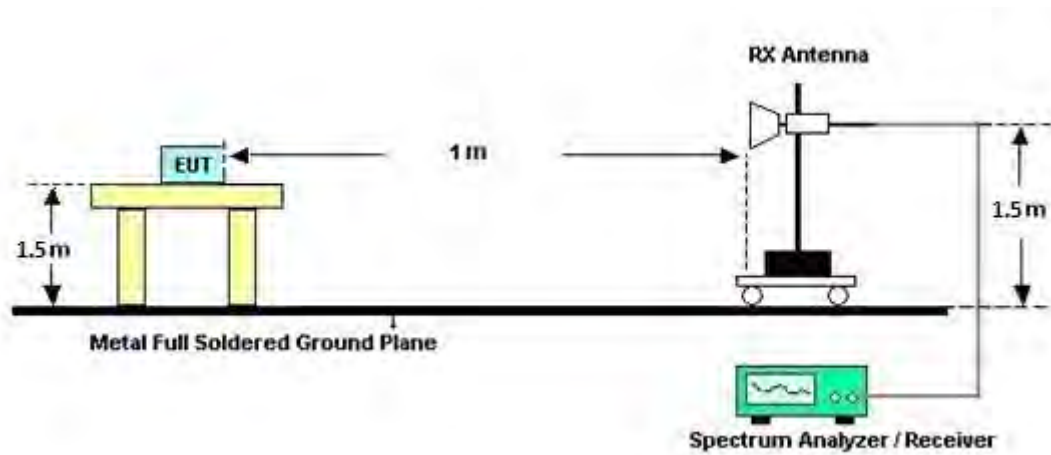
For radiated emissions from 30MHz to 1GHz



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

There is 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 came out very similar.

3.5.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.5.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.6 AC Conducted Emission Measurement

3.6.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

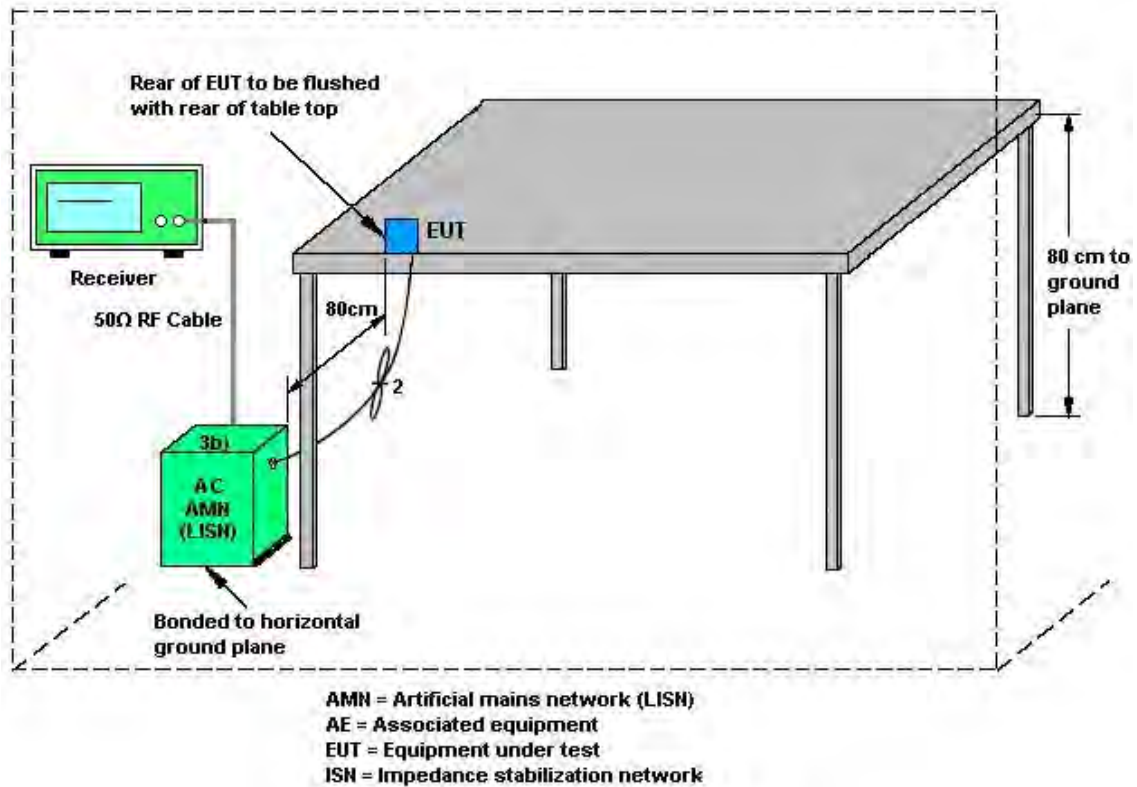
3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 Test Procedures

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

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.7 Antenna Requirements

3.7.1 Standard Applicable

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

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = $10 \log(N_{ANT}/N_{SS}=1)$ dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 v02r01.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain "DG" is calculated as following table.

<CDD Modes>						
			DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
	Ant. 1 (dBi)	Ant. 2 (dBi)				
2.4 GHz	3.80	5.00	5.00	7.43	0.00	1.43

Power Limit Reduction = $DG(\text{Power}) - 6\text{dBi}$, (min = 0)

PSD Limit Reduction = $DG(\text{PSD}) - 6\text{dBi}$, (min = 0)



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	Testo	608-H1	34893241	N/A	Mar. 03, 2021	May 28 2021~ Jun. 25, 2021	Mar. 02, 2022	Conducted (TH02-HY)
Power Sensor	DARE	RPR3006W	16I00054S NO10	10MHz~6GHz	Dec. 16, 2020	May 28 2021~ Jun. 25, 2021	Dec. 15, 2021	Conducted (TH02-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz ~ 40GHz	Jul. 22, 2020	May 28 2021~ Jun. 25, 2021	Jul. 21, 2021	Conducted (TH02-HY)
Switch Box & RF Cable	EM Electronics	EMSW18SE	SW200302	N/A	Mar. 17, 2021	May 28 2021~ Jun. 25, 2021	Mar. 16, 2022	Conducted (TH02-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jun. 25, 2021	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 30, 2020	Jun. 25, 2021	Nov. 29, 2021	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 18, 2020	Jun. 25, 2021	Nov. 17, 2021	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 01, 2020	Jun. 25, 2021	Nov. 30, 2021	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jun. 25, 2021	N/A	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Feb. 25, 2021	Jun. 25, 2021	Feb. 24, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 31, 2020	Jun. 25, 2021	Dec. 30, 2021	Conduction (CO05-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jul. 14, 2020	May 26, 2021~ Jun. 15, 2021	Jul. 13, 2021	Radiation (03CH15-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01 N-06	41912 & 05	30MHz~1GHz	Feb. 08, 2021	May 26, 2021~ Jun. 15, 2021	Feb. 07, 2022	Radiation (03CH15-HY)
Amplifier	SONOMA	310N	363440	9kHz~1GHz	Dec. 28, 2020	May 26, 2021~ Jun. 15, 2021	Dec. 27, 2021	Radiation (03CH15-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-016 20	1GHz~18GHz	Nov. 03, 2020	May 26, 2021~ Jun. 15, 2021	Nov. 02, 2021	Radiation (03CH15-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170 251	18GHz~40GHz	Dec. 02, 2020	May 26, 2021~ Jun. 15, 2021	Dec. 01, 2021	Radiation (03CH15-HY)
Preamplifier	Jet-Power	JPA0118-55-3 03	171000180 0055006	1GHz~18GHz	May 06, 2021	May 26, 2021~ Jun. 15, 2021	May 05, 2022	Radiation (03CH15-HY)
Preamplifier	Keysight	83017A	MY532701 95	1GHz~26.5GHz	Aug. 21, 2020	May 26, 2021~ Jun. 15, 2021	Aug. 20, 2021	Radiation (03CH15-HY)
Preamplifier	EMEC	EM18G40G	0600789	18-40GHz	Oct. 27, 2020	May 26, 2021~ Jun. 15, 2021	Oct. 26, 2021	Radiation (03CH15-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY541300 85	20MHz~8.4GHz	Nov. 02, 2020	May 26, 2021~ Jun. 15, 2021	Nov. 01, 2021	Radiation (03CH15-HY)
Spectrum Analyzer	Agilent	E4446A	MY501801 36	3Hz~44GHz	May 07, 2021	May 26, 2021~ Jun. 15, 2021	May 06, 2022	Radiation (03CH15-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	May 26, 2021~ Jun. 15, 2021	N/A	Radiation (03CH15-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	May 26, 2021~ Jun. 15, 2021	N/A	Radiation (03CH15-HY)
Software	Audix	E3 6.2009-8-24(k 5)	RK-00045 1	N/A	N/A	May 26, 2021~ Jun. 15, 2021	N/A	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104, 102E	MY36980/ 4, MY9838/4 PE,508405 /2E	30MHz~18G	Nov. 16, 2020	May 26, 2021~ Jun. 15, 2021	Nov. 15, 2021	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz-40GHz	Feb. 22, 2021	May 26, 2021~ Jun. 15, 2021	Feb. 21, 2022	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30MHz-40GHz	Feb. 22, 2021	May 26, 2021~ Jun. 15, 2021	Feb. 21, 2022	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4 PE	9kHz~30MHz	Mar. 11, 2021	May 26, 2021~ Jun. 15, 2021	Mar. 10, 2022	Radiation (03CH15-HY)
Filter	Wainwright	WLJ4-1000-1 530-6000-40S T	SN4	1.53GHz Low Pass Filter	Jul. 03, 2020	May 26, 2021~ Jun. 15, 2021	Jul. 02, 2021	Radiation (03CH15-HY)
Filter	Wainwright	WHKX12-270 0-3000-18000 -60ST	SN4	3GHz High Pass Filter	Sep. 16, 2020	May 26, 2021~ Jun. 15, 2021	Sep. 15, 2021	Radiation (03CH15-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.3 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

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

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

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

Test Engineer:	Peter Liao / Hank Hsu	Temperature:	21~25	°C
Test Date:	2021/5/28~2021/6/25	Relative Humidity:	51~54	%

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

2.4GHz Band MIMO										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
					Ant1	Ant2	Ant1	Ant2		
11b	1Mbps	2	1	2412	13.54	13.34	9.02	9.00	0.50	Pass
11b	1Mbps	2	6	2437	13.39	13.44	9.00	8.54	0.50	Pass
11b	1Mbps	2	11	2462	13.49	13.39	8.56	9.00	0.50	Pass
11b	1Mbps	2	12	2467	13.29	13.29	8.56	8.54	0.50	Pass
11b	1Mbps	2	13	2472	13.39	13.34	9.00	8.56	0.50	Pass
11g	6Mbps	2	1	2412	16.73	16.58	16.34	16.34	0.50	Pass
11g	6Mbps	2	6	2437	16.78	16.68	16.34	16.32	0.50	Pass
11g	6Mbps	2	11	2462	16.68	16.58	16.34	16.34	0.50	Pass
11g	6Mbps	2	12	2467	16.58	16.48	16.34	16.34	0.50	Pass
11g	6Mbps	2	13	2472	16.68	16.48	16.34	16.32	0.50	Pass
HT20	MCS0	2	1	2412	17.68	17.63	17.58	17.60	0.50	Pass
HT20	MCS0	2	6	2437	17.73	17.68	17.58	17.58	0.50	Pass
HT20	MCS0	2	11	2462	17.73	17.63	17.58	17.60	0.50	Pass
HT20	MCS0	2	12	2467	17.68	17.58	17.58	17.60	0.50	Pass
HT20	MCS0	2	13	2472	17.68	17.58	17.58	16.94	0.50	Pass

TEST RESULTS DATA
Average Output Power

2.4GHz Band MIMO																
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	2	1	2412	15.70	15.70	18.71	30.00		5.00		23.71		36.00	Pass	
11b	1Mbps	2	6	2437	16.40	16.50	19.46	30.00		5.00		24.46		36.00	Pass	
11b	1Mbps	2	11	2462	15.60	16.10	18.87	30.00		5.00		23.87		36.00	Pass	
11b	1Mbps	2	12	2467	11.80	12.40	15.12	30.00		5.00		20.12		36.00	Pass	
11b	1Mbps	2	13	2472	9.80	10.20	13.01	30.00		5.00		18.01		36.00	Pass	
11g	6Mbps	2	1	2412	17.80	18.10	20.96	30.00		5.00		25.96		36.00	Pass	
11g	6Mbps	2	6	2437	18.90	19.20	22.06	30.00		5.00		27.06		36.00	Pass	
11g	6Mbps	2	11	2462	16.40	17.20	19.83	30.00		5.00		24.83		36.00	Pass	
11g	6Mbps	2	12	2467	10.00	10.60	13.32	30.00		5.00		18.32		36.00	Pass	
11g	6Mbps	2	13	2472	6.40	7.00	9.72	30.00		5.00		14.72		36.00	Pass	
HT20	MCS0	2	1	2412	16.20	16.60	19.41	30.00		5.00		24.41		36.00	Pass	
HT20	MCS0	2	6	2437	18.20	18.40	21.31	30.00		5.00		26.31		36.00	Pass	
HT20	MCS0	2	11	2462	15.90	16.50	19.22	30.00		5.00		24.22		36.00	Pass	
HT20	MCS0	2	12	2467	9.90	10.50	13.22	30.00		5.00		18.22		36.00	Pass	
HT20	MCS0	2	13	2472	3.60	4.20	6.92	30.00		5.00		11.92		36.00	Pass	

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

TEST RESULTS DATA
Peak Power Spectral Density

2.4GHz Band MIMO												
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	2	1	2412	-7.22	-6.43	-3.42	7.43		6.57		Pass
11b	1Mbps	2	6	2437	-6.28	-7.07	-3.27	7.43		6.57		Pass
11b	1Mbps	2	11	2462	-7.45	-6.94	-3.93	7.43		6.57		Pass
11b	1Mbps	2	12	2467	-11.27	-11.13	-8.12	7.43		6.57		Pass
11b	1Mbps	2	13	2472	-12.53	-13.41	-9.52	7.43		6.57		Pass
11g	6Mbps	2	1	2412	-7.34	-7.74	-4.33	7.43		6.57		Pass
11g	6Mbps	2	6	2437	-6.72	-6.27	-3.26	7.43		6.57		Pass
11g	6Mbps	2	11	2462	-8.87	-8.68	-5.67	7.43		6.57		Pass
11g	6Mbps	2	12	2467	-15.96	-14.60	-11.59	7.43		6.57		Pass
11g	6Mbps	2	13	2472	-18.79	-18.27	-15.26	7.43		6.57		Pass
HT20	MCS0	2	1	2412	-6.64	-8.85	-3.63	7.43		6.57		Pass
HT20	MCS0	2	6	2437	-7.61	-7.66	-4.60	7.43		6.57		Pass
HT20	MCS0	2	11	2462	-10.22	-9.54	-6.53	7.43		6.57		Pass
HT20	MCS0	2	12	2467	-14.75	-14.78	-11.74	7.43		6.57		Pass
HT20	MCS0	2	13	2472	-21.29	-20.96	-17.95	7.43		6.57		Pass

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



Appendix B. AC Conducted Emission Test Results

Test Engineer :	Calvin Wang	Temperature :	23~26℃
		Relative Humidity :	40~50%

EUT Information

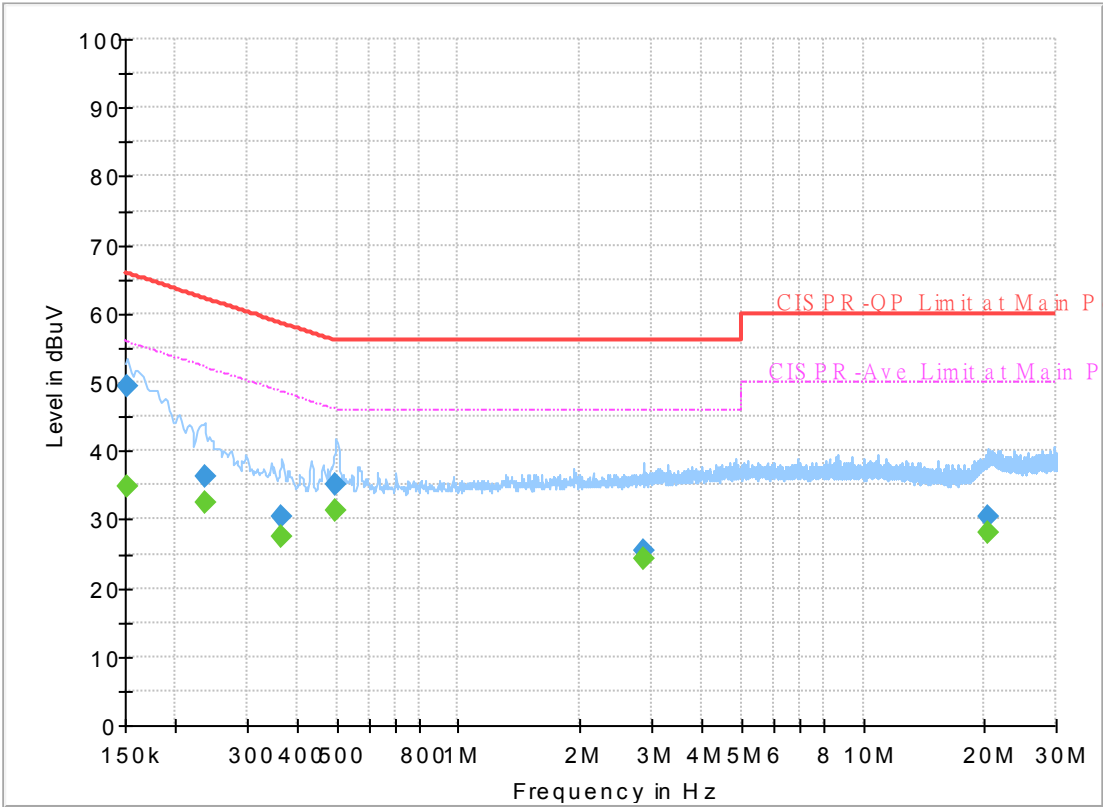
Report NO :120234-01

Test Mode :Mode 1

Test Voltage :120Vac/60Hz

Phase :Line

Full Spectrum



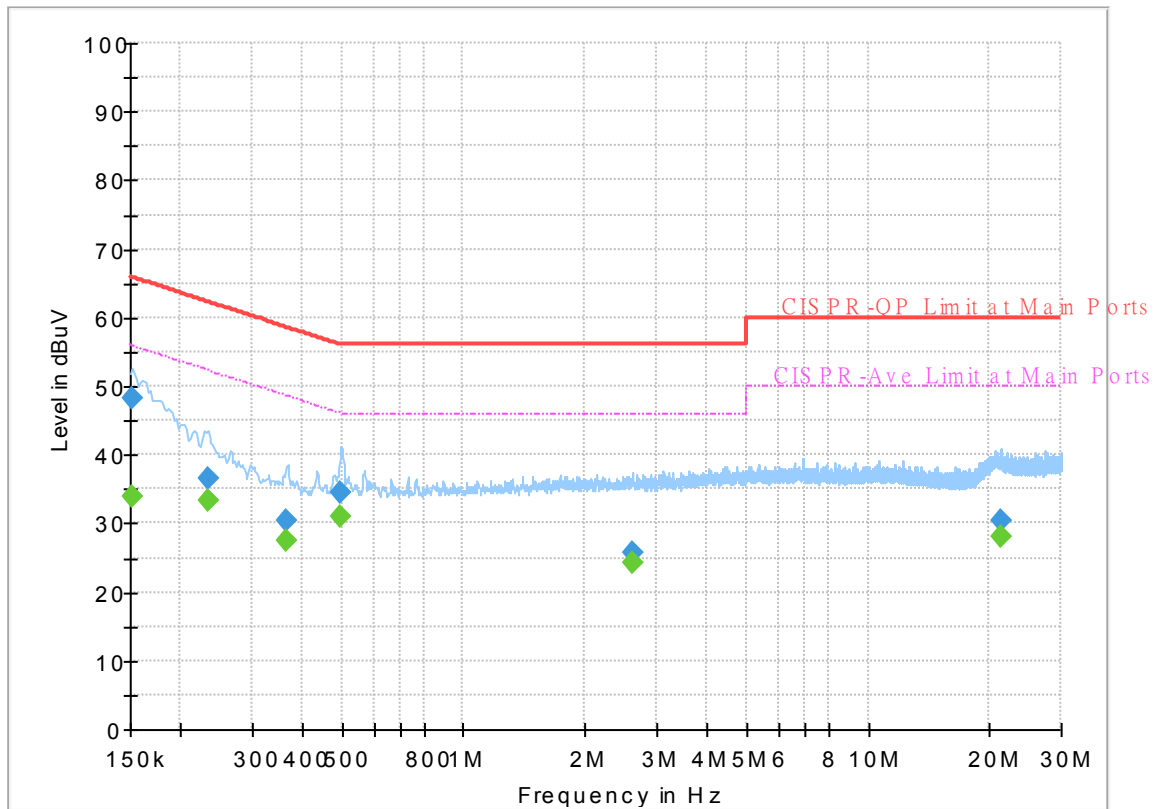
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	34.68	55.88	21.20	L1	OFF	19.5
0.152250	49.47	---	65.88	16.41	L1	OFF	19.5
0.235500	---	32.42	52.25	19.83	L1	OFF	19.5
0.235500	36.29	---	62.25	25.96	L1	OFF	19.5
0.366000	---	27.51	48.59	21.08	L1	OFF	19.5
0.366000	30.41	---	58.59	28.18	L1	OFF	19.5
0.498750	---	31.26	46.02	14.76	L1	OFF	19.7
0.498750	35.05	---	56.02	20.97	L1	OFF	19.7
2.861250	---	24.19	46.00	21.81	L1	OFF	19.9
2.861250	25.33	---	56.00	30.67	L1	OFF	19.9
20.343750	---	27.98	50.00	22.02	L1	OFF	20.4
20.343750	30.32	---	60.00	29.68	L1	OFF	20.4

EUT Information

Report NO : 120234-01
Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	33.91	55.88	21.97	N	OFF	19.5
0.152250	48.35	---	65.88	17.53	N	OFF	19.5
0.233250	---	33.33	52.33	19.00	N	OFF	19.5
0.233250	36.45	---	62.33	25.88	N	OFF	19.5
0.366000	---	27.62	48.59	20.97	N	OFF	19.6
0.366000	30.43	---	58.59	28.16	N	OFF	19.6
0.498750	---	31.09	46.02	14.93	N	OFF	19.7
0.498750	34.50	---	56.02	21.52	N	OFF	19.7
2.613750	---	24.20	46.00	21.80	N	OFF	20.0
2.613750	25.59	---	56.00	30.41	N	OFF	20.0
21.252750	---	27.97	50.00	22.03	N	OFF	20.6
21.252750	30.51	---	60.00	29.49	N	OFF	20.6



Appendix C. Radiated Spurious Emission

Test Engineer :	Leo Lee, Mancy Chou and Bigshow Wang	Temperature :	22.1~25.6°C
		Relative Humidity :	46~64%



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2385.6	57.32	-16.68	74	44.12	27.56	16.56	30.92	289	51	P	H
		2387.07	47.45	-6.55	54	34.26	27.55	16.56	30.92	289	51	A	H
	*	2412	114.86	-	-	101.67	27.5	16.6	30.91	289	51	P	H
	*	2412	111.95	-	-	98.76	27.5	16.6	30.91	289	51	A	H
		2386.965	57.74	-16.26	74	44.55	27.55	16.56	30.92	246	5	P	V
		2387.07	46.35	-7.65	54	33.16	27.55	16.56	30.92	246	5	A	V
	*	2412	115.4	-	-	102.21	27.5	16.6	30.91	246	5	P	V
	*	2412	112.43	-	-	99.24	27.5	16.6	30.91	246	5	A	V
802.11b CH 06 2437MHz		2388.71	56.06	-17.94	74	42.87	27.55	16.56	30.92	221	22	P	H
		2356.24	45.01	-8.99	54	31.75	27.68	16.51	30.93	221	22	A	H
	*	2437	113.99	-	-	100.75	27.5	16.64	30.9	221	22	P	H
	*	2437	111	-	-	97.76	27.5	16.64	30.9	221	22	A	H
		2497.93	56.33	-17.67	74	43.07	27.4	16.73	30.87	221	22	P	H
		2491.99	45.15	-8.85	54	31.88	27.42	16.72	30.87	221	22	A	H
		2383.27	55.24	-18.76	74	42.04	27.57	16.55	30.92	297	357	P	V
		2381.91	45.21	-8.79	54	32.01	27.57	16.55	30.92	297	357	A	V
	*	2437	114.4	-	-	101.16	27.5	16.64	30.9	297	357	P	V
	*	2437	111.32	-	-	98.08	27.5	16.64	30.9	297	357	A	V
		2497.03	55.57	-18.43	74	42.3	27.41	16.73	30.87	297	357	P	V
		2492.08	45.47	-8.53	54	32.2	27.42	16.72	30.87	297	357	A	V



802.11b CH 11 2462MHz	*	2462	114.82	-	-	101.55	27.48	16.68	30.89	247	51	P	H
	*	2462	111.77	-	-	98.5	27.48	16.68	30.89	247	51	A	H
		2485.96	57.1	-16.9	74	43.84	27.43	16.71	30.88	247	51	P	H
		2486.96	46.86	-7.14	54	33.6	27.43	16.71	30.88	247	51	A	H
	*	2462	115.92	-	-	102.65	27.48	16.68	30.89	321	330	P	V
	*	2462	112.97	-	-	99.7	27.48	16.68	30.89	321	330	A	V
		2486.48	58.13	-15.87	74	44.87	27.43	16.71	30.88	321	330	P	V
		2487.04	48.05	-5.95	54	34.79	27.43	16.71	30.88	321	330	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz	*	2467	108.13	-	-	94.86	27.47	16.68	30.88	250	23	P	H
	*	2467	105.19	-	-	91.92	27.47	16.68	30.88	250	23	A	H
		2484.4	58.2	-15.8	74	44.94	27.43	16.71	30.88	250	23	P	H
		2483.84	50.6	-3.4	54	37.34	27.43	16.71	30.88	250	23	A	H
	*	2467	108.5	-	-	95.23	27.47	16.68	30.88	239	352	P	V
	*	2467	105.41	-	-	92.14	27.47	16.68	30.88	239	352	A	V
		2483.92	58.32	-15.68	74	45.06	27.43	16.71	30.88	239	352	P	V
		2483.52	50.97	-3.03	54	37.71	27.43	16.71	30.88	239	352	P	V
802.11b CH 13 2472MHz	*	2472	104.98	-	-	91.71	27.46	16.69	30.88	250	24	P	H
	*	2472	102.04	-	-	88.77	27.46	16.69	30.88	250	24	A	H
		2487.88	57.37	-16.63	74	44.11	27.42	16.72	30.88	250	24	P	H
		2487.68	49.1	-4.9	54	35.84	27.42	16.72	30.88	250	24	A	H
	*	2472	106.63	-	-	93.36	27.46	16.69	30.88	240	353	P	V
	*	2472	103.54	-	-	90.27	27.46	16.69	30.88	240	353	A	V
		2487.84	58.02	-15.98	74	44.76	27.42	16.72	30.88	240	353	P	V
		2487.68	50.4	-3.6	54	37.14	27.42	16.72	30.88	240	353	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 802.11b (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	44.53	-29.47	74	62.22	31.1	10.07	58.86	100	0	P	H
		17985	59.74	-14.26	74	49.4	48.73	18.88	57.27	300	241	P	H
		17985	49.79	-4.21	54	39.45	48.73	18.88	57.27	300	241	A	H
		4824	44.69	-29.31	74	62.38	31.1	10.07	58.86	100	0	P	V
		18000	60	-14	74	49.35	49	18.89	57.24	100	129	P	V
		18000	50.18	-3.82	54	39.53	49	18.89	57.24	100	129	A	V
802.11b CH 06 2437MHz		4874	45.6	-28.4	74	63.34	31.05	10.11	58.9	100	0	P	H
		7311	49.24	-24.76	74	59.06	36.3	12.31	58.43	100	0	P	H
		18000	60.39	-13.61	74	49.74	49	18.89	57.24	100	29	P	H
		18000	50.31	-3.69	54	39.66	49	18.89	57.24	100	29	A	H
		4874	43.7	-30.3	74	61.44	31.05	10.11	58.9	100	0	P	V
		7311	48.93	-25.07	74	58.75	36.3	12.31	58.43	100	0	P	V
		18000	59.6	-14.4	74	48.95	49	18.89	57.24	100	19	P	V
		18000	49.51	-4.49	54	38.86	49	18.89	57.24	100	19	A	V
802.11b CH 11 2462MHz		4924	47.19	-26.81	74	64.9	31.1	10.14	58.95	100	0	P	H
		7386	48.91	-25.09	74	58.55	36.3	12.35	58.29	100	0	P	H
		17985	59.55	-14.45	74	49.21	48.73	18.88	57.27	300	263	P	H
		17985	49.74	-4.26	54	39.4	48.73	18.88	57.27	300	263	A	H
		4924	45.25	-28.75	74	62.96	31.1	10.14	58.95	100	0	P	V
		7386	47.98	-26.02	74	57.62	36.3	12.35	58.29	100	0	P	V
		18000	60.01	-13.99	74	49.36	49	18.89	57.24	100	123	P	V
		18000	50.22	-3.78	54	39.57	49	18.89	57.24	100	123	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz		4934	42.26	-31.74	74	59.92	31.14	10.15	58.95	100	0	P	H
		7401	46.52	-27.48	74	56.13	36.3	12.36	58.27	100	0	P	H
		17970	59.86	-14.14	74	49.84	48.46	18.87	57.31	300	231	P	H
		17970	49.97	-4.03	54	39.95	48.46	18.87	57.31	300	231	A	H
		4934	40.18	-33.82	74	57.84	31.14	10.15	58.95	100	0	P	V
		7401	47.29	-26.71	74	56.9	36.3	12.36	58.27	100	0	P	V
		18000	60.2	-13.8	74	49.55	49	18.89	57.24	100	147	P	V
		18000	50.38	-3.62	54	39.73	49	18.89	57.24	100	147	A	V
802.11b CH 13 2472MHz		4944	42.42	-31.58	74	60.04	31.18	10.16	58.96	100	0	P	H
		7416	45.54	-28.46	74	55.11	36.3	12.37	58.24	100	0	P	H
		18000	60.07	-13.93	74	49.42	49	18.89	57.24	300	265	P	H
		18000	50.16	-3.84	54	39.51	49	18.89	57.24	300	265	A	H
		4944	39.68	-34.32	74	57.3	31.18	10.16	58.96	100	0	P	V
		7416	45.22	-28.78	74	54.79	36.3	12.37	58.24	100	0	P	V
		17985	59.84	-14.16	74	49.5	48.73	18.88	57.27	100	146	P	V
		17985	49.94	-4.06	54	39.6	48.73	18.88	57.27	100	146	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 802.11g (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2386.23	60.42	-13.58	74	47.22	27.56	16.56	30.92	261	57	P	H
		2386.23	48.98	-5.02	54	35.78	27.56	16.56	30.92	261	57	A	H
	*	2412	114.75	-	-	101.56	27.5	16.6	30.91	261	57	P	H
	*	2412	107.48	-	-	94.29	27.5	16.6	30.91	261	57	A	H
		2389.695	61.26	-12.74	74	48.08	27.54	16.56	30.92	276	360	P	V
		2390	49.95	-4.05	54	36.77	27.54	16.56	30.92	276	360	A	V
	*	2412	115.41	-	-	102.22	27.5	16.6	30.91	276	360	P	V
	*	2412	107.67	-	-	94.48	27.5	16.6	30.91	276	360	A	V
802.11g CH 06 2437MHz		2388.03	59.89	-14.11	74	46.7	27.55	16.56	30.92	257	57	P	H
		2387.69	49.17	-4.83	54	35.98	27.55	16.56	30.92	257	57	A	H
	*	2438	116.22	-	-	102.98	27.5	16.64	30.9	257	57	P	H
	*	2438	109.02	-	-	95.78	27.5	16.64	30.9	257	57	A	H
		2486.77	59.27	-14.73	74	46.01	27.43	16.71	30.88	257	57	P	H
		2483.53	49.15	-4.85	54	35.89	27.43	16.71	30.88	257	57	A	H
		2388.03	59.41	-14.59	74	46.22	27.55	16.56	30.92	336	327	P	V
		2387.01	48.31	-5.69	54	35.12	27.55	16.56	30.92	336	327	A	V
	*	2436	116.69	-	-	103.45	27.5	16.64	30.9	336	327	P	V
	*	2436	109.81	-	-	96.57	27.5	16.64	30.9	336	327	A	V
		2486.32	59.49	-14.51	74	46.23	27.43	16.71	30.88	336	327	P	V
		2485.33	49.01	-4.99	54	35.75	27.43	16.71	30.88	336	327	A	V



802.11g CH 11 2462MHz	*	2462	114.4	-	-	101.13	27.48	16.68	30.89	248	58	P	H
	*	2462	107.31	-	-	94.04	27.48	16.68	30.89	248	58	A	H
		2483.8	63.67	-10.33	74	50.41	27.43	16.71	30.88	248	58	P	H
		2483.56	50.44	-3.56	54	37.18	27.43	16.71	30.88	248	58	A	H
	*	2460	114.84	-	-	101.58	27.48	16.67	30.89	238	359	P	V
	*	2460	107.19	-	-	93.93	27.48	16.67	30.89	238	359	A	V
		2483.8	61.94	-12.06	74	48.68	27.43	16.71	30.88	238	359	P	V
		2485.96	49.04	-4.96	54	35.78	27.43	16.71	30.88	238	359	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 12 2467MHz	*	2467	108.11	-	-	94.84	27.47	16.68	30.88	248	57	P	H
	*	2467	100.65	-	-	87.38	27.47	16.68	30.88	248	57	A	H
		2484.9	64.47	-9.53	74	51.21	27.43	16.71	30.88	248	57	P	H
		2483.95	50.64	-3.36	54	37.38	27.43	16.71	30.88	248	57	A	H
	*	2467	108.82	-	-	95.55	27.47	16.68	30.88	237	356	P	V
	*	2467	100.81	-	-	87.54	27.47	16.68	30.88	237	356	A	V
		2483.55	60.55	-13.45	74	47.29	27.43	16.71	30.88	237	356	P	V
		2483.5	49.32	-4.68	54	36.06	27.43	16.71	30.88	237	356	A	V
802.11g CH 13 2472MHz	*	2472	104.59	-	-	91.32	27.46	16.69	30.88	250	53	P	H
	*	2472	97.1	-	-	83.83	27.46	16.69	30.88	250	53	A	H
		2483.64	61.94	-12.06	74	48.68	27.43	16.71	30.88	250	53	P	H
		2484.08	50.47	-3.53	54	37.21	27.43	16.71	30.88	250	53	A	H
	*	2472	104.68	-	-	91.41	27.46	16.69	30.88	239	358	P	V
	*	2472	97.04	-	-	83.77	27.46	16.69	30.88	239	358	A	V
		2485.28	58.66	-15.34	74	45.4	27.43	16.71	30.88	239	358	P	V
		2485.24	48.92	-5.08	54	35.66	27.43	16.71	30.88	239	358	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 802.11g (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	42.02	-31.98	74	59.71	31.1	10.07	58.86	100	0	P	H
		18000	59.73	-14.27	74	49.08	49	18.89	57.24	100	35	P	H
		18000	50.35	-3.65	54	39.7	49	18.89	57.24	100	35	A	H
		4824	42.57	-31.43	74	60.26	31.1	10.07	58.86	100	0	P	V
		17985	59.12	-14.88	74	48.78	48.73	18.88	57.27	100	58	P	V
		17985	50.03	-3.97	54	39.69	48.73	18.88	57.27	100	58	A	V
802.11g CH 06 2437MHz		4874	41.39	-32.61	74	59.13	31.05	10.11	58.9	100	0	P	H
		7311	55.96	-18.04	74	65.78	36.3	12.31	58.43	300	5	P	H
		7311	40.37	-13.63	54	50.19	36.3	12.31	58.43	300	5	A	H
		18000	60.03	-13.97	74	49.38	49	18.89	57.24	100	44	P	H
		18000	50.53	-3.47	54	39.88	49	18.89	57.24	100	44	A	H
		4875	43.04	-30.96	74	60.78	31.05	10.11	58.9	100	0	P	V
		7311	53.99	-20.01	74	63.81	36.3	12.31	58.43	145	353	P	V
		7311	40.54	-13.46	54	50.36	36.3	12.31	58.43	145	353	A	V
		18000	59.99	-14.01	74	49.34	49	18.89	57.24	100	35	P	V
		18000	50.33	-3.67	54	39.68	49	18.89	57.24	100	35	A	V
802.11g CH 11 2462MHz		4924	43.8	-30.2	74	61.51	31.1	10.14	58.95	100	0	P	H
		7386	48.41	-25.59	74	58.05	36.3	12.35	58.29	100	0	P	H
		18000	59.02	-14.98	74	48.37	49	18.89	57.24	100	35	P	H
		18000	50.53	-3.47	54	39.88	49	18.89	57.24	100	35	A	H
		4924	42.55	-31.45	74	60.26	31.1	10.14	58.95	100	0	P	V
		7386	49.88	-24.12	74	59.52	36.3	12.35	58.29	100	0	P	V
		18000	59.98	-14.02	74	49.33	49	18.89	57.24	100	28	P	V
		18000	50.55	-3.45	54	39.9	49	18.89	57.24	100	28	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 12 2467MHz		4934	39.77	-34.23	74	57.43	31.14	10.15	58.95	100	0	P	H
		7401	44.73	-29.27	74	54.34	36.3	12.36	58.27	100	0	P	H
		17985	58.74	-15.26	74	48.4	48.73	18.88	57.27	100	28	P	H
		17985	49.3	-4.7	54	38.96	48.73	18.88	57.27	100	28	A	H
		4934	39.7	-34.3	74	57.36	31.14	10.15	58.95	100	0	P	V
		7401	45.6	-28.4	74	55.21	36.3	12.36	58.27	100	0	P	V
		17985	59.29	-14.71	74	48.95	48.73	18.88	57.27	100	35	P	V
		17985	50.21	-3.79	54	39.87	48.73	18.88	57.27	100	35	A	V
802.11g CH 13 2472MHz		4944	39.98	-34.02	74	57.6	31.18	10.16	58.96	100	0	P	H
		7416	45.97	-28.03	74	55.54	36.3	12.37	58.24	100	0	P	H
		18000	59.69	-14.31	74	49.04	49	18.89	57.24	300	247	P	H
		18000	49.86	-4.14	54	39.21	49	18.89	57.24	300	247	A	H
		4944	39.84	-34.16	74	57.46	31.18	10.16	58.96	100	0	P	V
		7416	45.61	-28.39	74	55.18	36.3	12.37	58.24	100	0	P	V
		18000	59.18	-14.82	74	48.53	49	18.89	57.24	100	159	P	V
		18000	49.4	-4.6	54	38.75	49	18.89	57.24	100	159	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 HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2389.905	61.48	-12.52	74	48.3	27.54	16.56	30.92	226	60	P	H
		2390	50.58	-3.42	54	37.4	27.54	16.56	30.92	226	60	A	H
	*	2412	115.38	-	-	102.19	27.5	16.6	30.91	226	60	P	H
	*	2412	107.74	-	-	94.55	27.5	16.6	30.91	226	60	A	H
		2389.275	59.32	-14.68	74	46.14	27.54	16.56	30.92	246	359	P	V
		2388.96	49.12	-4.88	54	35.94	27.54	16.56	30.92	246	359	A	V
	*	2412	114.6	-	-	101.41	27.5	16.6	30.91	246	359	P	V
	*	2412	107.22	-	-	94.03	27.5	16.6	30.91	246	359	A	V
802.11n HT20 CH 06 2437MHz		2385.65	58.65	-15.35	74	45.45	27.56	16.56	30.92	114	53	P	H
		2390	48.34	-5.66	54	35.16	27.54	16.56	30.92	114	53	A	H
	*	2437	114.95	-	-	101.71	27.5	16.64	30.9	114	53	P	H
	*	2437	107.69	-	-	94.45	27.5	16.64	30.9	114	53	A	H
		2495.14	58.54	-15.46	74	45.27	27.41	16.73	30.87	114	53	P	H
		2483.53	47.7	-6.3	54	34.44	27.43	16.71	30.88	114	53	A	H
		2389.9	58.85	-15.15	74	45.67	27.54	16.56	30.92	211	3	P	V
		2389.56	48.33	-5.67	54	35.15	27.54	16.56	30.92	211	3	A	V
	*	2437	115.06	-	-	101.82	27.5	16.64	30.9	211	3	P	V
	*	2437	108.31	-	-	95.07	27.5	16.64	30.9	211	3	A	V
		2484.07	61.22	-12.78	74	47.96	27.43	16.71	30.88	211	3	P	V
		2483.98	48.76	-5.24	54	35.5	27.43	16.71	30.88	211	3	A	V



802.11n HT20 CH 11 2462MHz	*	2462	113.55	-	-	100.28	27.48	16.68	30.89	243	56	P	H
	*	2462	106.68	-	-	93.41	27.48	16.68	30.89	243	56	A	H
		2486.24	62.97	-11.03	74	49.71	27.43	16.71	30.88	243	56	P	H
		2484.84	48.99	-5.01	54	35.73	27.43	16.71	30.88	243	56	A	H
	*	2462	115.52	-	-	102.25	27.48	16.68	30.89	236	358	P	V
	*	2462	108.16	-	-	94.89	27.48	16.68	30.89	236	358	A	V
		2483.84	64.37	-9.63	74	51.11	27.43	16.71	30.88	236	358	P	V
		2483.52	50.07	-3.93	54	36.81	27.43	16.71	30.88	236	358	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 12 2467MHz	*	2467	107.15	-	-	93.88	27.47	16.68	30.88	250	55	P	H
	*	2467	100.17	-	-	86.9	27.47	16.68	30.88	250	55	A	H
		2485.16	63	-11	74	49.74	27.43	16.71	30.88	250	55	P	H
		2484.92	50.83	-3.17	54	37.57	27.43	16.71	30.88	250	55	A	H
	*	2467	109.06	-	-	95.79	27.47	16.68	30.88	239	358	P	V
	*	2467	100.27	-	-	87	27.47	16.68	30.88	239	358	A	V
		2483.64	62.8	-11.2	74	49.54	27.43	16.71	30.88	239	358	P	V
		2483.52	50.74	-3.26	54	37.48	27.43	16.71	30.88	239	358	A	V
802.11n HT20 CH 13 2472MHz	*	2472	101.13	-	-	87.86	27.46	16.69	30.88	250	57	P	H
	*	2472	94.01	-	-	80.74	27.46	16.69	30.88	250	57	A	H
		2483.72	60.52	-13.48	74	47.26	27.43	16.71	30.88	250	57	P	H
		2483.52	50.74	-3.26	54	37.48	27.43	16.71	30.88	250	57	A	H
	*	2472	101.41	-	-	88.14	27.46	16.69	30.88	239	355	P	V
	*	2472	93.95	-	-	80.68	27.46	16.69	30.88	239	355	A	V
		2483.76	60.09	-13.91	74	46.83	27.43	16.71	30.88	239	355	P	V
		2484.16	48.58	-5.42	54	35.32	27.43	16.71	30.88	239	355	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 HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		4824	40.7	-33.3	74	58.39	31.1	10.07	58.86	100	0	P	H
		18000	59.32	-14.68	74	48.67	49	18.89	57.24	100	22	P	H
		18000	50.51	-3.49	54	39.86	49	18.89	57.24	100	22	A	H
		4824	40.11	-33.89	74	57.8	31.1	10.07	58.86	100	0	P	V
		18000	59.24	-14.76	74	48.59	49	18.89	57.24	100	62	P	V
		18000	50.55	-3.45	54	39.9	49	18.89	57.24	100	62	A	V
802.11n HT20 CH 06 2437MHz		4874	40.14	-33.86	74	57.88	31.05	10.11	58.9	100	0	P	H
		7311	48.86	-25.14	74	58.68	36.3	12.31	58.43	100	0	P	H
		18000	60.13	-13.87	74	49.48	49	18.89	57.24	100	55	P	H
		18000	50.24	-3.76	54	39.59	49	18.89	57.24	100	55	A	H
		4874	41.82	-32.18	74	59.56	31.05	10.11	58.9	100	0	P	V
		7311	52.59	-21.41	74	62.41	36.3	12.31	58.43	153	354	P	V
		7311	41.54	-12.46	54	51.36	36.3	12.31	58.43	153	354	A	V
		17985	59.03	-14.97	74	48.69	48.73	18.88	57.27	100	47	P	V
		17985	50	-4	54	39.66	48.73	18.88	57.27	100	47	A	V
802.11n HT20 CH 11 2462MHz		4924	40.15	-33.85	74	57.86	31.1	10.14	58.95	100	0	P	H
		7386	47.07	-26.93	74	56.71	36.3	12.35	58.29	100	0	P	H
		18000	59.58	-14.42	74	48.93	49	18.89	57.24	300	236	P	H
		18000	49.96	-4.04	54	39.31	49	18.89	57.24	300	236	A	H
		4924	40.12	-33.88	74	57.83	31.1	10.14	58.95	100	0	P	V
		7386	45.29	-28.71	74	54.93	36.3	12.35	58.29	100	0	P	V
		18000	60.03	-13.97	74	49.38	49	18.89	57.24	100	135	P	V
		18000	50.21	-3.79	54	39.56	49	18.89	57.24	100	135	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 12 2467MHz		4934	40.51	-33.49	74	58.17	31.14	10.15	58.95	100	0	P	H
		7401	45.66	-28.34	74	55.27	36.3	12.36	58.27	100	0	P	H
		17985	60.07	-13.93	74	49.73	48.73	18.88	57.27	100	28	P	H
		17985	50.08	-3.92	54	39.74	48.73	18.88	57.27	100	28	A	H
		4934	40.61	-33.39	74	58.27	31.14	10.15	58.95	100	0	P	V
		7401	45.21	-28.79	74	54.82	36.3	12.36	58.27	100	0	P	V
		18000	59.44	-14.56	74	48.79	49	18.89	57.24	100	18	P	V
		18000	49.41	-4.59	54	38.76	49	18.89	57.24	100	18	A	V
802.11n HT20 CH 13 2472MHz		4944	39.83	-34.17	74	57.45	31.18	10.16	58.96	100	0	P	H
		7416	45.39	-28.61	74	54.96	36.3	12.37	58.24	100	0	P	H
		18000	59.37	-14.63	74	48.72	49	18.89	57.24	100	31	P	H
		18000	49.41	-4.59	54	38.76	49	18.89	57.24	100	31	A	H
		4944	39.53	-34.47	74	57.15	31.18	10.16	58.96	100	0	P	V
		7416	45.17	-28.83	74	54.74	36.3	12.37	58.24	100	0	P	V
		18000	58.62	-15.38	74	47.97	49	18.89	57.24	100	21	P	V
		18000	48.61	-5.39	54	37.96	49	18.89	57.24	100	21	A	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	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11b CH 12		21640	38.63	-35.37	74	43.18	38.33	11.82	54.7	150	0	P	H
2467MHz SHF		20528	37.09	-36.91	74	41.9	38.86	11.22	54.89	150	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line. 3. Super High Frequency (SHF)												



Emission below 1GHz

2.4GHz WIFI 802.11b (LF)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
2.4GHz 802.11b LF		114.39	29.13	-14.37	43.5	43.08	17.06	1.53	32.54	-	-	P	H
		169.68	25	-18.5	43.5	39.98	15.64	1.87	32.49	-	-	P	H
		263.77	22.25	-23.75	46	32.4	19.95	2.32	32.42	-	-	P	H
		455.83	28.35	-17.65	46	34.63	23.27	2.88	32.43	-	-	P	H
		576.11	33.08	-12.92	46	36.49	25.82	3.31	32.54	-	-	P	H
		711.91	38.23	-7.77	46	40.5	26.56	3.62	32.45	100	0	P	H
		112.45	26.07	-17.43	43.5	40.02	17.06	1.52	32.53	-	-	P	V
		171.62	23.55	-19.95	43.5	38.67	15.48	1.89	32.49	-	-	P	V
		483.96	38.93	-7.07	46	44.75	23.7	3.01	32.53	-	-	P	V
		712.88	39.54	-6.46	46	41.79	26.58	3.62	32.45	100	0	P	V
		742.95	39.23	-6.77	46	40.16	27.82	3.7	32.45	-	-	P	V
		896.21	35.37	-10.63	46	34	28.87	4.15	31.65	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



<EUT with Fixture 1>

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 12 2467MHz	*	2467	106.16	-	-	92.89	27.47	16.68	30.88	307	49	P	H
	*	2467	103.22	-	-	89.95	27.47	16.68	30.88	307	49	A	H
		2483.7	57.03	-16.97	74	43.77	27.43	16.71	30.88	307	49	P	H
		2483.9	47.84	-6.16	54	34.58	27.43	16.71	30.88	307	49	A	H
	*	2467	107.78	-	-	94.51	27.47	16.68	30.88	100	2	P	V
	*	2467	104.71	-	-	91.44	27.47	16.68	30.88	100	2	A	V
		2483.8	58.21	-15.79	74	44.95	27.43	16.71	30.88	100	2	P	V
		2483.5	50.64	-3.36	54	37.38	27.43	16.71	30.88	100	2	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 802.11b (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz		4934	40.76	-33.24	74	58.42	31.14	10.15	58.95	100	0	P	H
		7401	47.02	-26.98	74	56.63	36.3	12.36	58.27	100	0	P	H
		18000	59.65	-14.35	74	49	49	18.89	57.24	100	28	P	H
		18000	49.59	-4.41	54	38.94	49	18.89	57.24	100	28	A	H
		4934	40.12	-33.88	74	57.78	31.14	10.15	58.95	100	0	P	V
		7401	45.11	-28.89	74	54.72	36.3	12.36	58.27	100	0	P	V
		18000	60.04	-13.96	74	49.39	49	18.89	57.24	100	18	P	V
		18000	50.27	-3.73	54	39.62	49	18.89	57.24	100	18	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



<EUT with Fixture 2>

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz	*	2467	107.31	-	-	94.04	27.47	16.68	30.88	258	51	P	H
	*	2467	104.2	-	-	90.93	27.47	16.68	30.88	258	51	A	H
		2483.6	58.06	-15.94	74	44.8	27.43	16.71	30.88	258	51	P	H
		2483.5	50.64	-3.36	54	37.38	27.43	16.71	30.88	258	51	A	H
	*	2467	106.81	-	-	93.54	27.47	16.68	30.88	100	316	P	V
	*	2467	103.87	-	-	90.6	27.47	16.68	30.88	100	316	A	V
		2483.5	57.34	-16.66	74	44.08	27.43	16.71	30.88	100	316	P	V
		2483.8	48.56	-5.44	54	35.3	27.43	16.71	30.88	100	316	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 802.11b (Harmonic @ 3m)**

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz		4934	41.12	-32.88	74	58.78	31.14	10.15	58.95	100	0	P	H
		7401	45.33	-28.67	74	54.94	36.3	12.36	58.27	100	0	P	H
		18000	60.11	-13.89	74	49.46	49	18.89	57.24	100	28	P	H
		18000	50.11	-3.89	54	39.46	49	18.89	57.24	100	28	A	H
		4934	40.37	-33.63	74	58.03	31.14	10.15	58.95	100	0	P	V
		7401	45.11	-28.89	74	54.72	36.3	12.36	58.27	100	0	P	V
		18000	60.68	-13.32	74	50.03	49	18.89	57.24	100	18	P	V
		18000	50.67	-3.33	54	40.02	49	18.89	57.24	100	18	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



<EUT with Fixture 3>

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 12 2467MHz		2467	103.6	-	-	90.33	27.47	16.68	30.88	100	359	P	H
		2467	100.66	-	-	87.39	27.47	16.68	30.88	100	359	P	H
		2489.75	56	-18	74	42.73	27.42	16.72	30.87	100	359	P	H
		2483.95	45.91	-8.09	54	32.65	27.43	16.71	30.88	100	359	P	H
		2467	106.35	-	-	93.08	27.47	16.68	30.88	100	5	P	V
		2467	103.29	-	-	90.02	27.47	16.68	30.88	100	5	P	V
		2483.7	58.29	-15.71	74	45.03	27.43	16.71	30.88	100	5	P	V
		2483.5	49.97	-4.03	54	36.71	27.43	16.71	30.88	100	5	P	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+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz		4934	41.47	-32.53	74	59.13	31.14	10.15	58.95	100	0	P	H
		7401	45.89	-28.11	74	55.5	36.3	12.36	58.27	100	0	P	H
		18000	60.17	-13.83	74	49.52	49	18.89	57.24	100	28	P	H
		18000	50.21	-3.79	54	39.56	49	18.89	57.24	100	28	A	H
		4934	40.99	-33.01	74	58.65	31.14	10.15	58.95	100	0	P	V
		7401	45.37	-28.63	74	54.98	36.3	12.36	58.27	100	0	P	V
		17985	60.13	-13.87	74	49.79	48.73	18.88	57.27	100	18	P	V
		17985	50.11	-3.89	54	39.77	48.73	18.88	57.27	100	18	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Note symbol

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



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

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

2. Level(dBμV/m) =

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

3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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



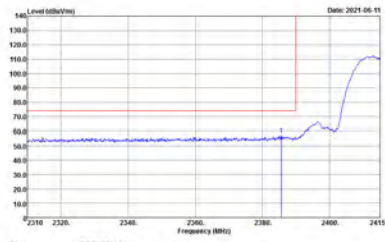
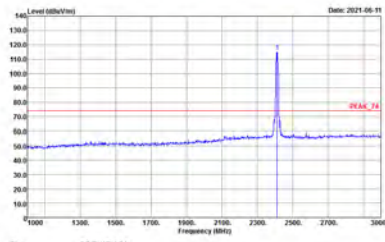
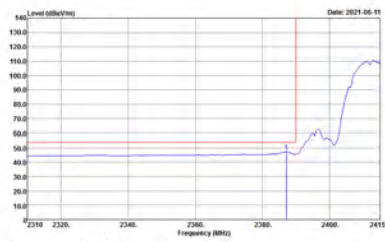
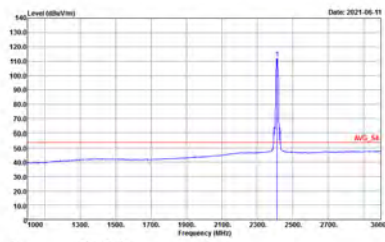
Appendix D. Radiated Spurious Emission Plots

Test Engineer :	Leo Lee, Mancy Chou and Bigshow Wang	Temperature :	22.1~25.6°C
		Relative Humidity :	46~64%

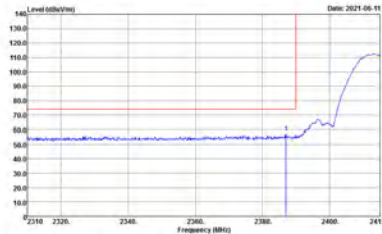
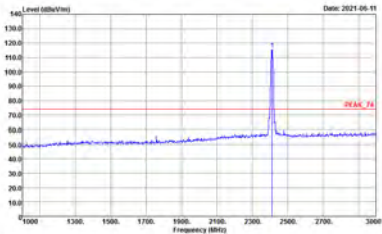
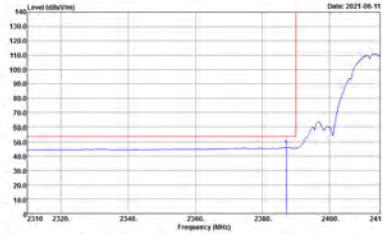
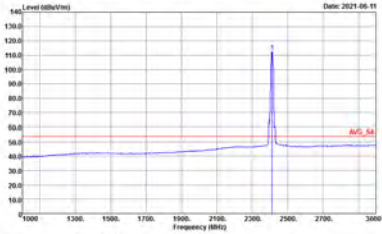
Note symbol

-L	Low channel location
-R	High channel location

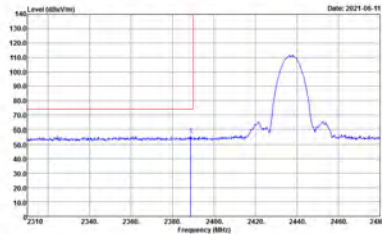
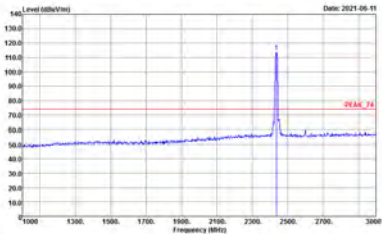
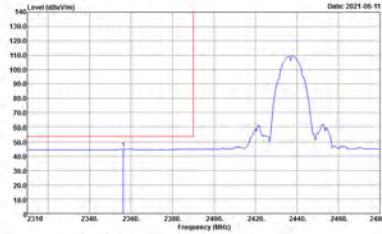
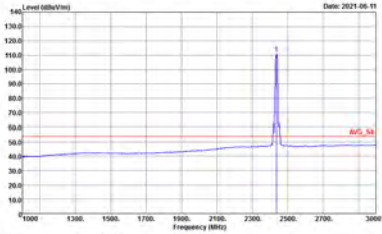
2.4GHz 2400~2483.5MHz
WIFI 802.11b (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto

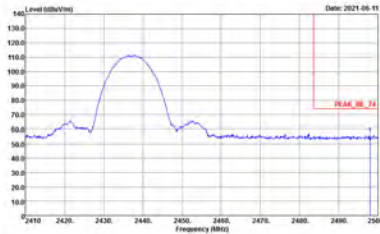


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PCAL_BE_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PCAL_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVIS_BE_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVIS_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto

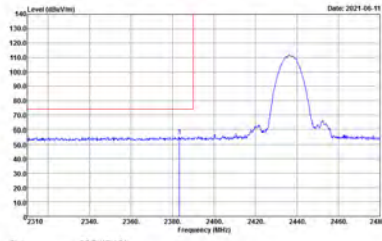
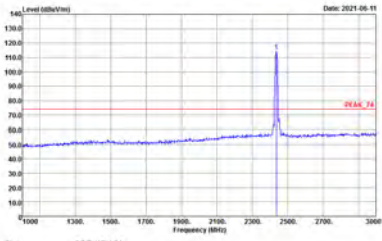
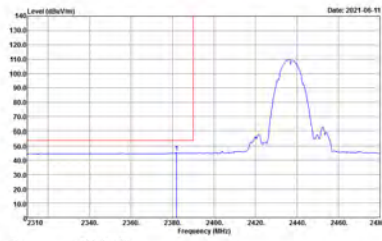
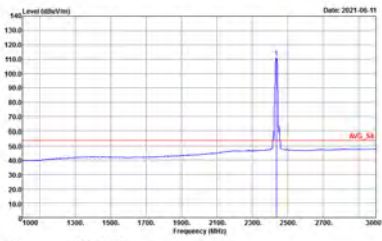


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_F74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_F54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto

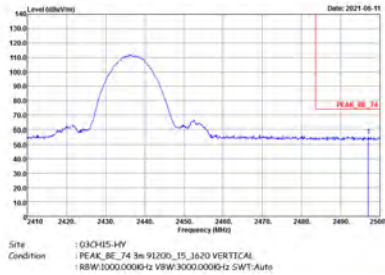
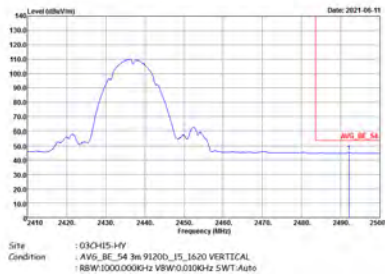


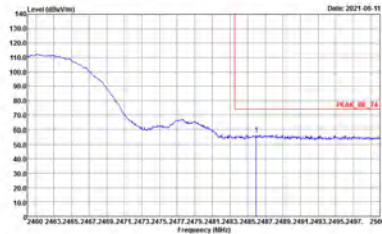
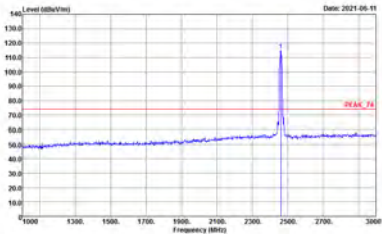
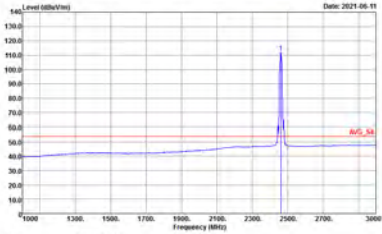
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

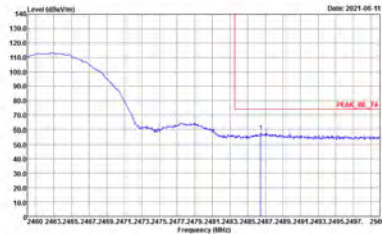
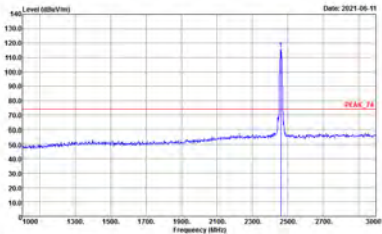
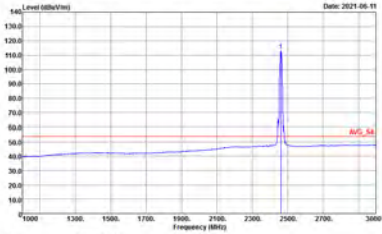


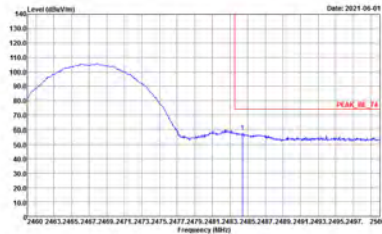
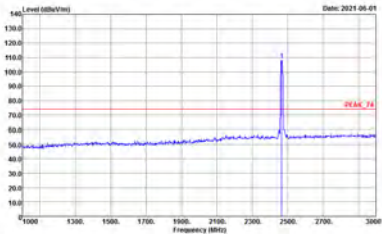
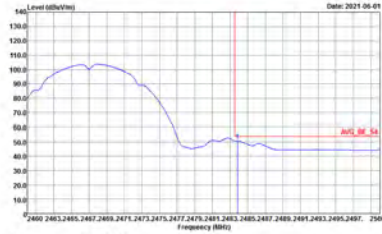
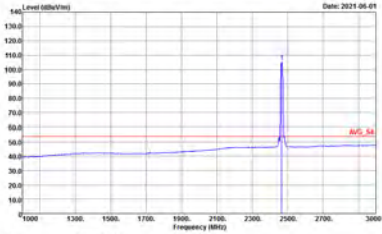
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PCAL_BE_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PCAL_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto

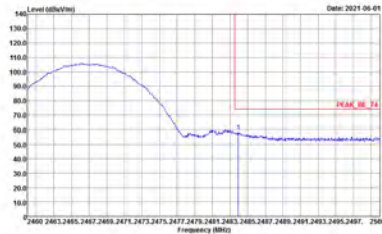
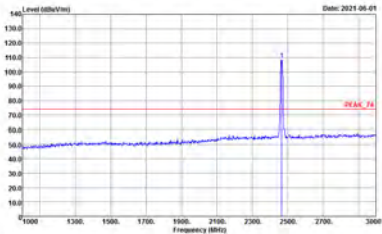
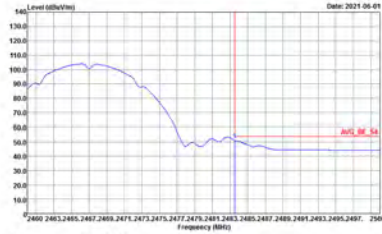
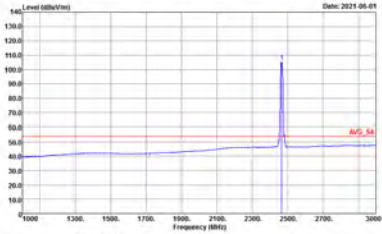


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1+2	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto

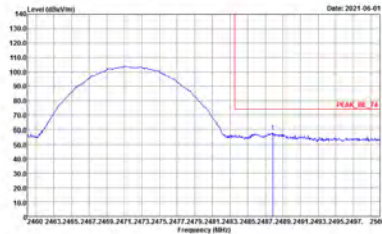
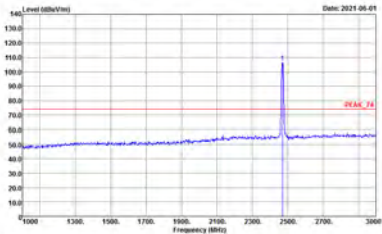
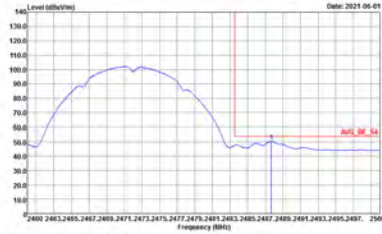
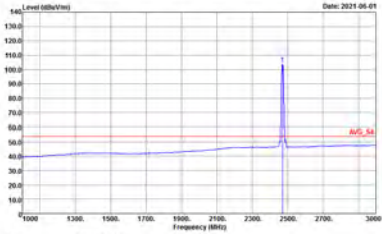
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto

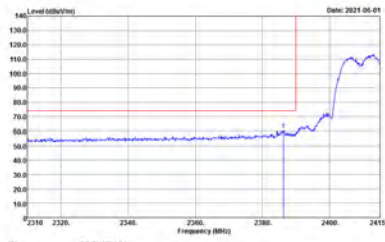
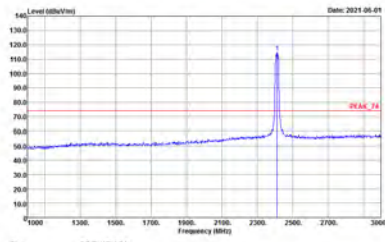
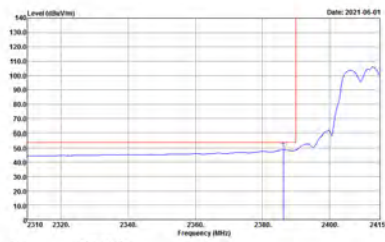
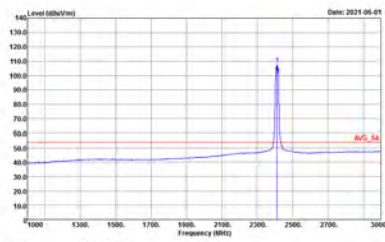


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
1+2	Horizontal	Fundamental
Peak	Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto
Avg.	Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto	Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto

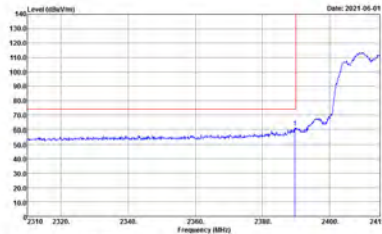
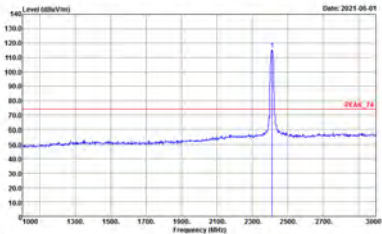
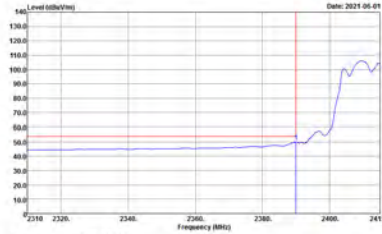
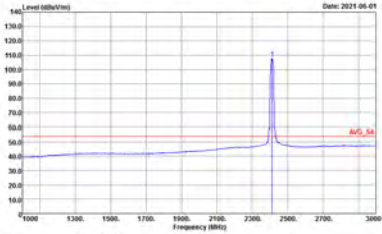


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_F4 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_F4 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto

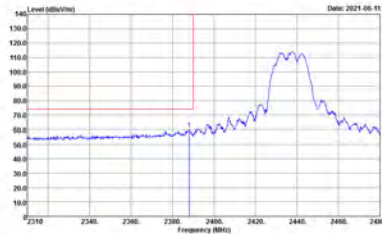
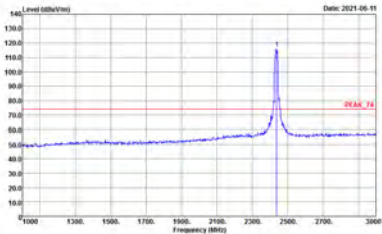
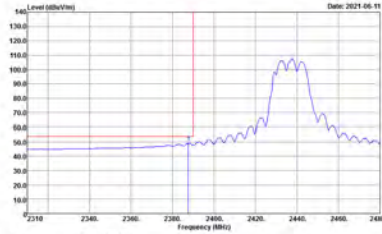
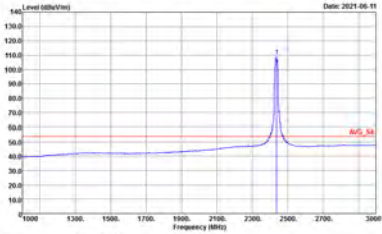
2.4GHz 2400~2483.5MHz
WIFI 802.11g (Band Edge @ 3m)

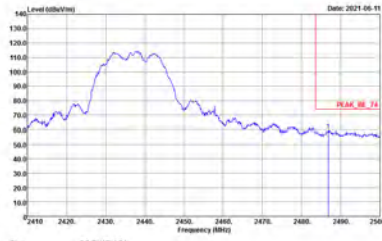
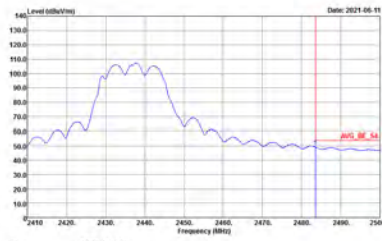
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto

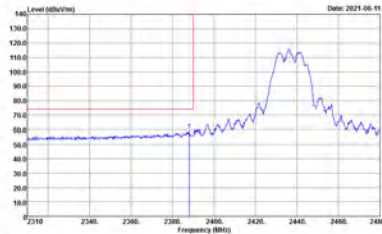
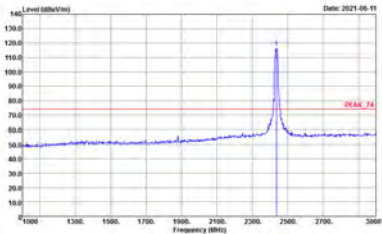
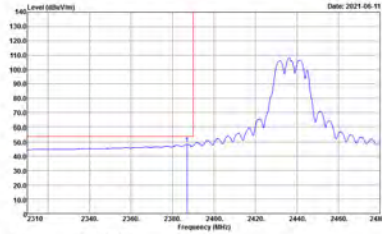
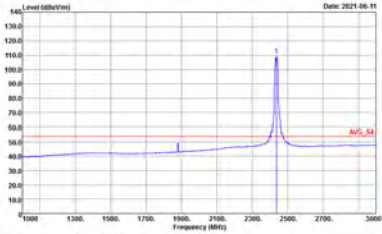


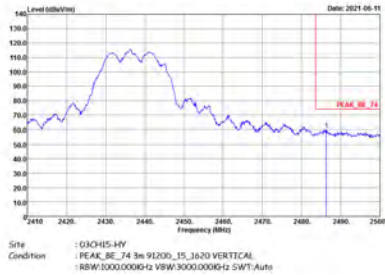
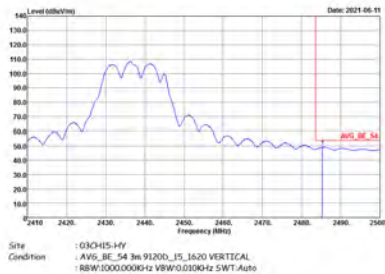
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto

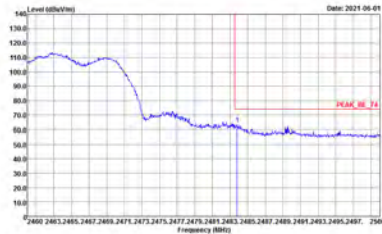
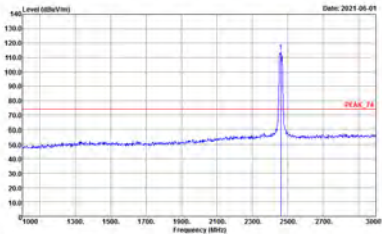
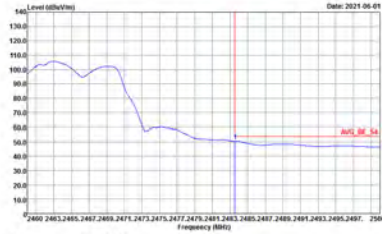
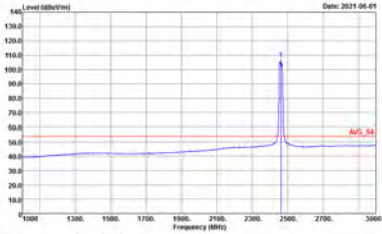


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PCAL_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto Date: 2021-06-11	 Site : 03CH15-HY Condition : PCAL_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto Date: 2021-06-11
Avg.	 Site : 03CH15-HY Condition : AVS_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VSW:0.0300Hz SWT:Auto Date: 2021-06-11	 Site : 03CH15-HY Condition : AVS_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VSW:0.0300Hz SWT:Auto Date: 2021-06-11

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PCAL_BE_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PCAL_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto

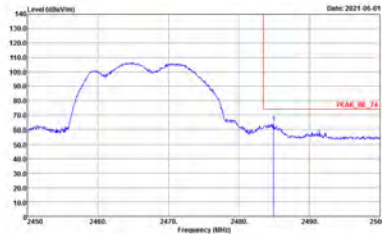
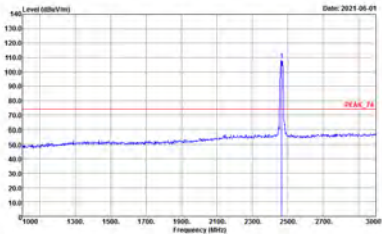
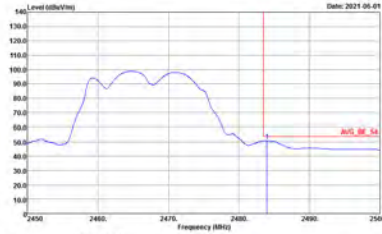
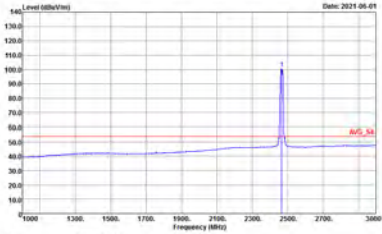
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1+2	Vertical	Fundamental
Peak		Left Blank
Avg.		Left Blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : :PEAK_BE_74 3m 91200_15_1620 HORIZONTAL :RBW:1000.0000Hz :VBW:3000.0000Hz :SWT:Auto	 Site : 03CH15-HY Condition : :PEAK_74 3m 91200_15_1620 HORIZONTAL :RBW:1000.0000Hz :VBW:3000.0000Hz :SWT:Auto
Avg.	 Site : 03CH15-HY Condition : :AVG_BE_54 3m 91200_15_1620 HORIZONTAL :RBW:1000.0000Hz :VBW:0.0100Hz :SWT:Auto	 Site : 03CH15-HY Condition : :AVG_54 3m 91200_15_1620 HORIZONTAL :RBW:1000.0000Hz :VBW:0.0100Hz :SWT:Auto

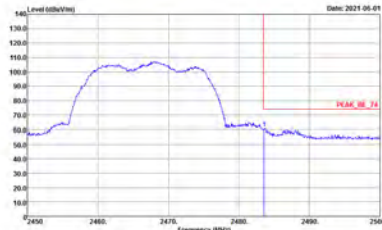
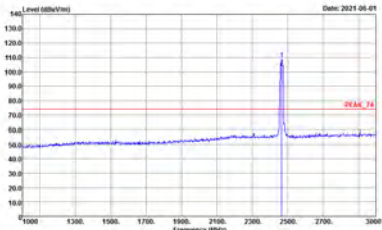
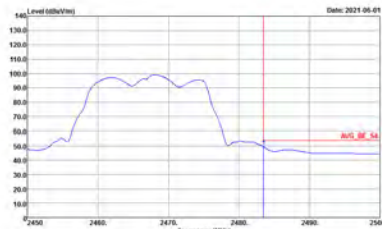
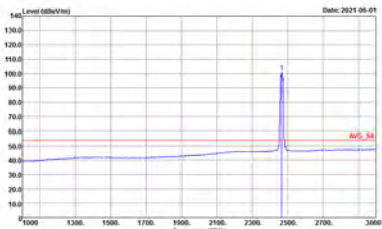


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1+2	Vertical	Fundamental
Peak	Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto
Avg.	Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto	Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto



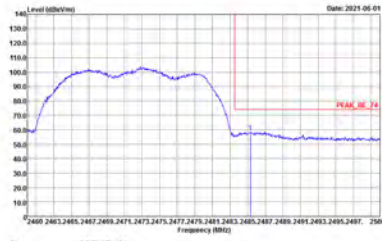
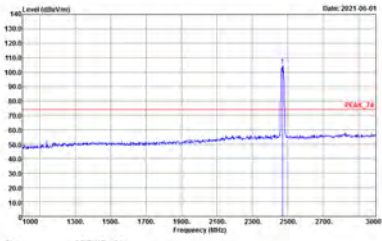
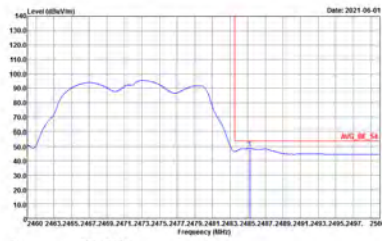
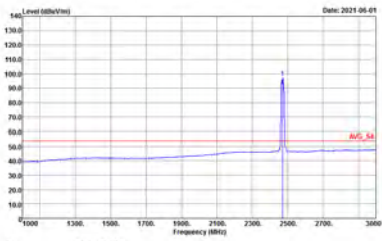
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH12 2467MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_08_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_08_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH12 2467MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_08_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_08_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto



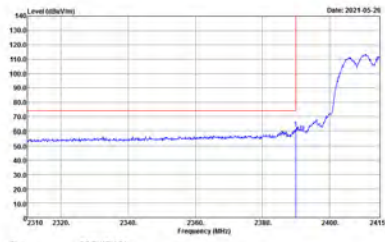
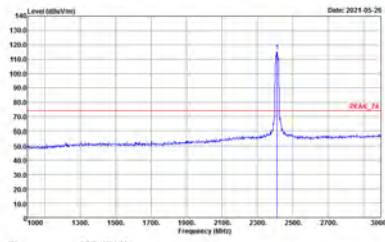
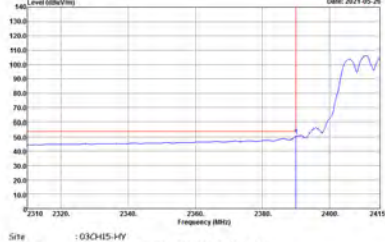
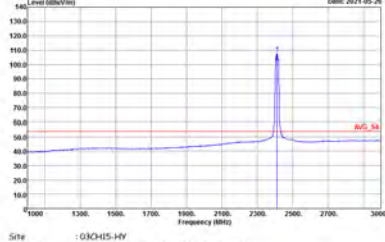
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH13 2472MHz	
1+2	Horizontal	Fundamental
Peak	Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000-Hz VSW:3000.0000-Hz SWT:Auto	Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000-Hz VSW:3000.0000-Hz SWT:Auto
Avg.	Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000-Hz VSW:0.0100-Hz SWT:Auto	Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000-Hz VSW:0.0100-Hz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH13 2472MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 VERTICAL RBW:1000.0000-Hz VSW:3000.0000-Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL RBW:1000.0000-Hz VSW:3000.0000-Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL RBW:1000.0000-Hz VSW:0.0100-Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 VERTICAL RBW:1000.0000-Hz VSW:0.0100-Hz SWT:Auto



2.4GHz 2400~2483.5MHz

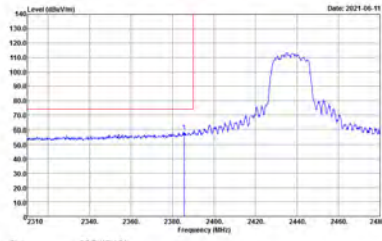
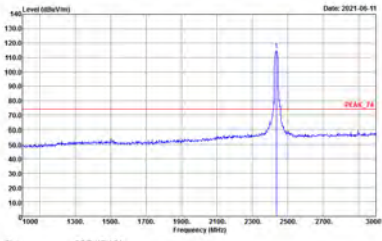
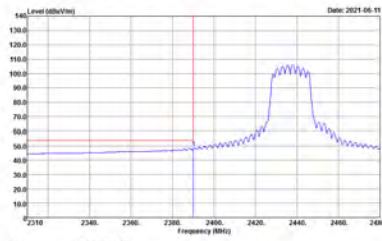
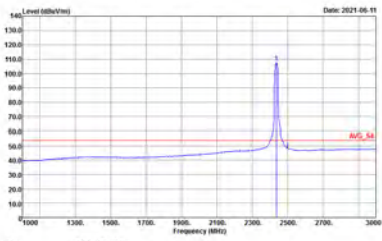
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : : PEAK_BE_24 3m 91200_15_1620 HORIZONTAL : RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : : PEAK_F4 3m 91200_15_1620 HORIZONTAL : RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : : AVG_BE_54 3m 91200_15_1620 HORIZONTAL : RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : : AVG_F4 3m 91200_15_1620 HORIZONTAL : RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto

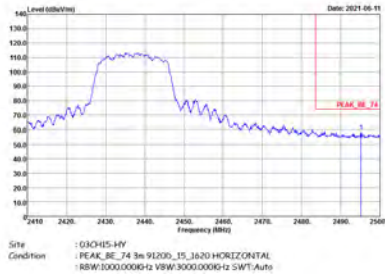
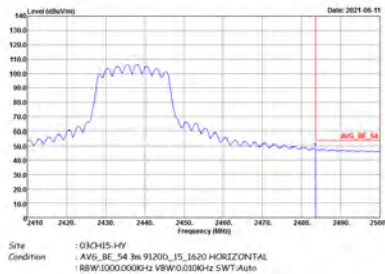


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

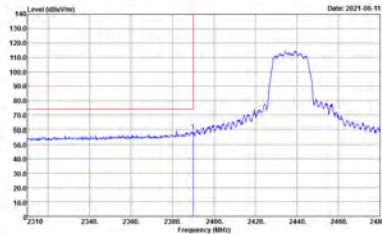
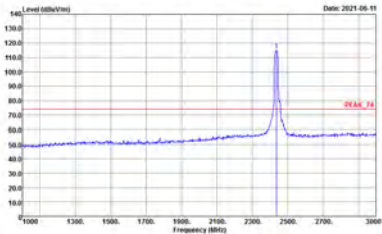
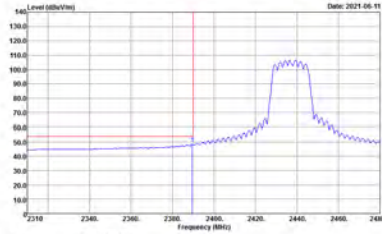
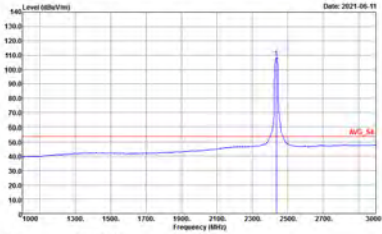


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PCAL_BE_74 3m 91200_15_1620 HORIZONTAL : RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PCAL_74 3m 91200_15_1620 HORIZONTAL : RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVIS_BE_54 3m 91200_15_1620 HORIZONTAL : RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVIS_54 3m 91200_15_1620 HORIZONTAL : RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto

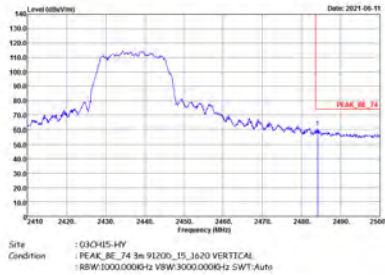
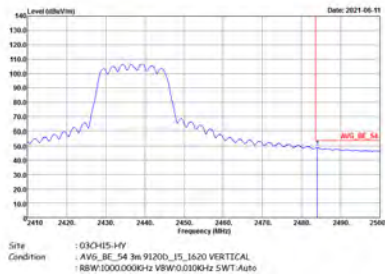


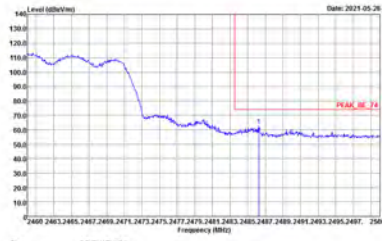
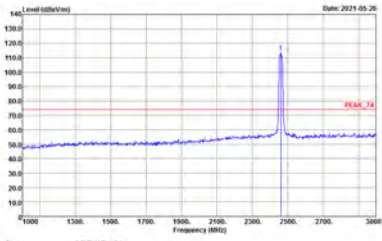
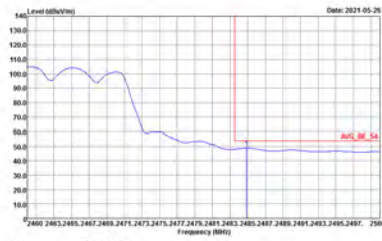
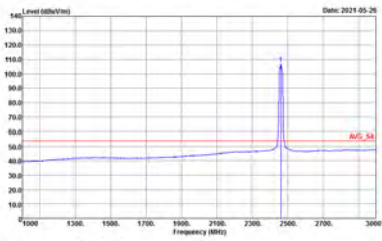
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

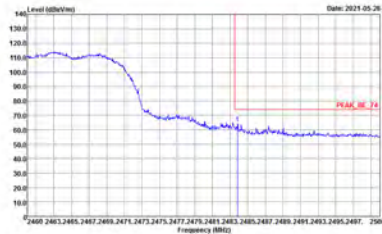
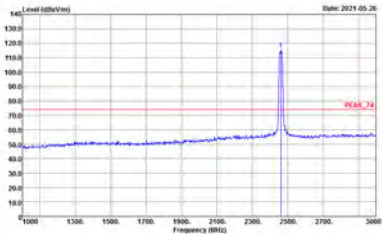
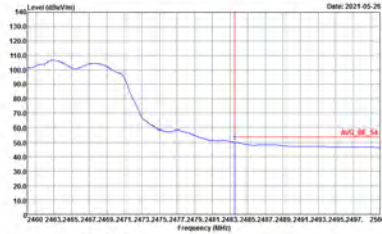
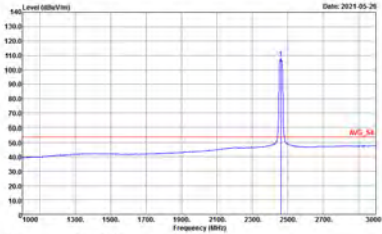


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PCAL_BE_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PCAL_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto

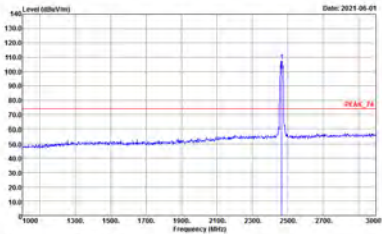
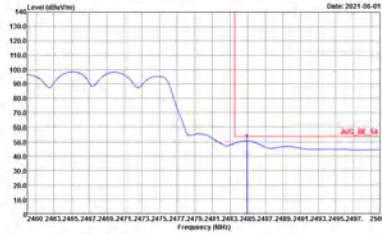
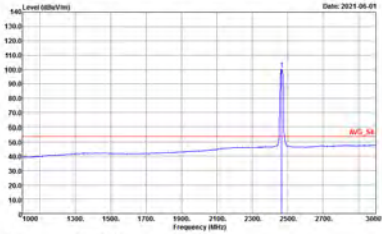


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - R	
1+2	Vertical	Fundamental
Peak		Left Blank
Avg.		Left Blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : :PCAK_BE_74 3m 91200_15_1620 HORIZONTAL :RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : :PCAK_74 3m 91200_15_1620 HORIZONTAL :RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : :AVG_BE_54 3m 91200_15_1620 HORIZONTAL :RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : :AVG_54 3m 91200_15_1620 HORIZONTAL :RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto



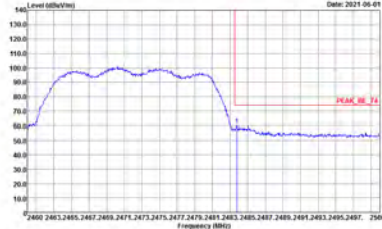
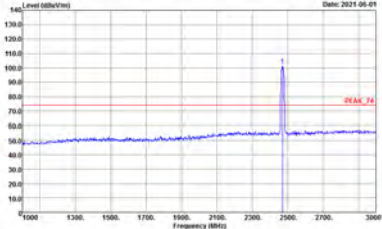
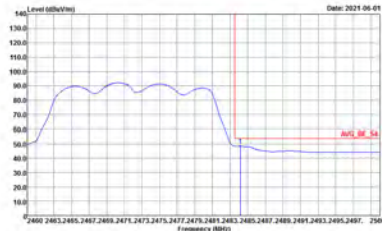
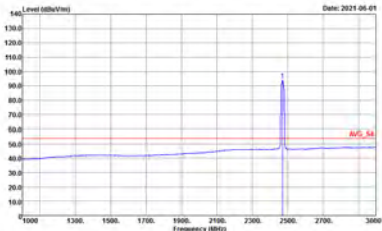
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH12 2467MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH12 2467MHz	
1+2	Vertical	Fundamental
Peak	Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto	Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto
Avg.	Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto	Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto



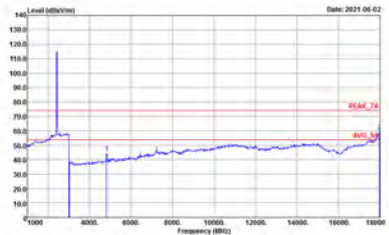
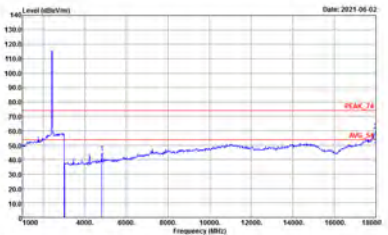
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
1+2	Horizontal	Fundamental
Peak	Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto
Avg.	Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto	Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		

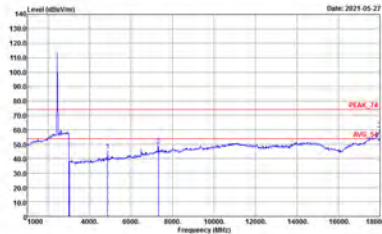
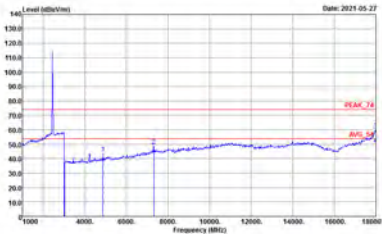


2.4GHz 2400~2483.5MHz

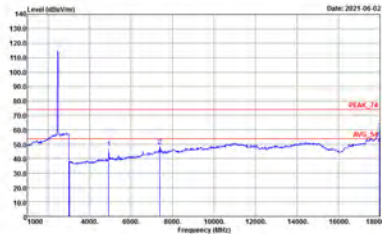
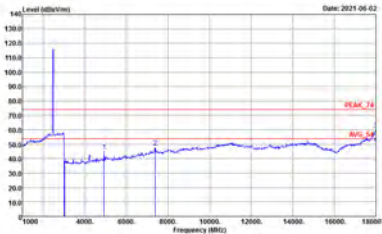
WIFI 802.11b (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000-Hz VBW:3000.0000-Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL RBW:1000.0000-Hz VBW:3000.0000-Hz SWT:Auto

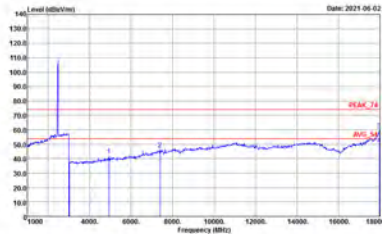
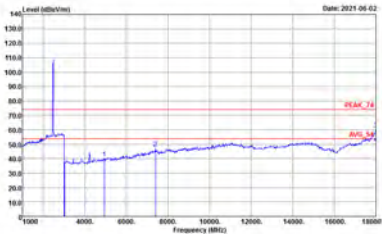


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 3m 9120D_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : PEAK_74 3m 9120D_15_1620 VERTICAL Detector : Peak

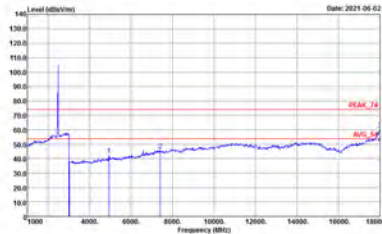
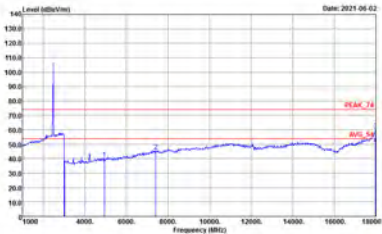


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 3m 9120D_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : PEAK_74 3m 9120D_15_1620 VERTICAL Detector : Peak



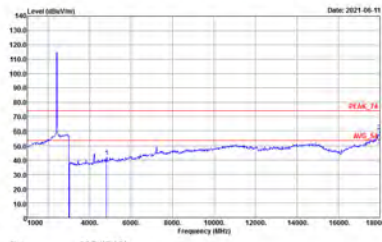
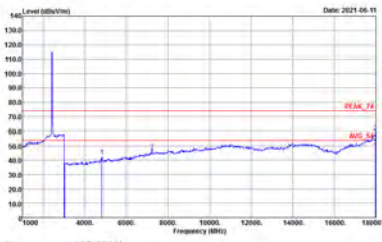
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH12 2467MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HF Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HF Condition : PEAK_74 3m 91200_15_1620 VERTICAL Detector : Peak



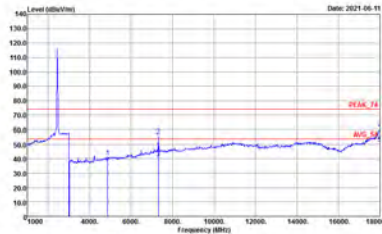
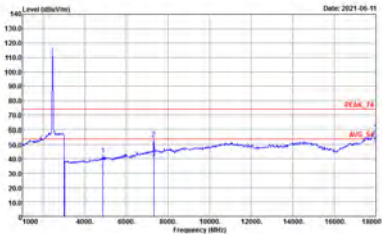
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH13 2472MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HF Condition : PEAK_74 3m 9120D_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HF Condition : PEAK_74 3m 9120D_15_1620 VERTICAL Detector : Peak



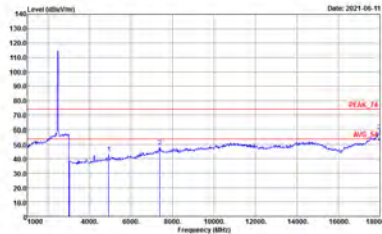
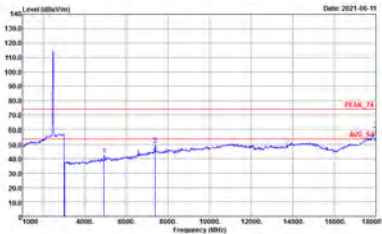
2.4GHz 2400~2483.5MHz
WIFI 802.11g (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH01 2412MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL Detector : Peak

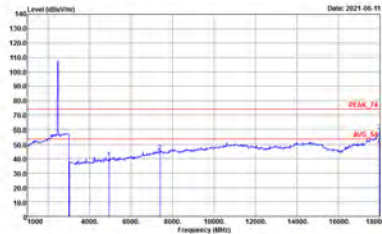
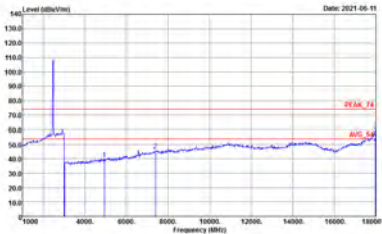


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL Detector : Peak

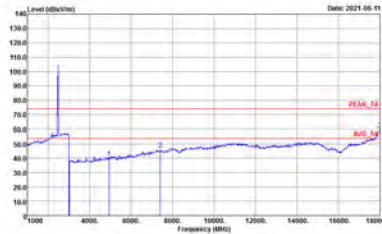
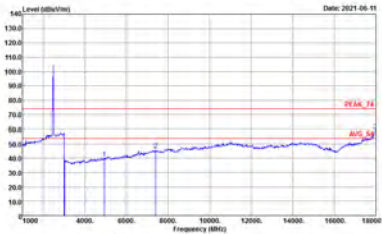


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH11 2462MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL Detector : Peak



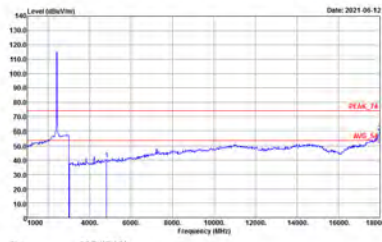
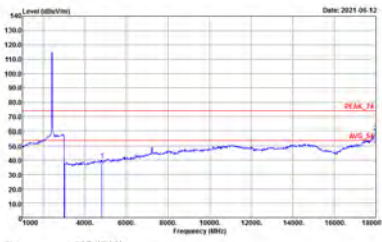
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH12 2467MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL Detector : Peak



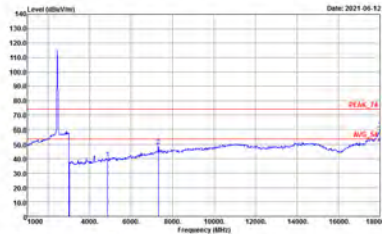
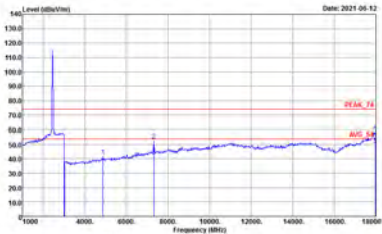
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH13 2472MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL Detector : Peak



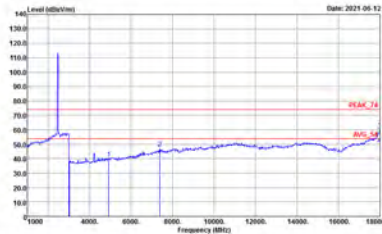
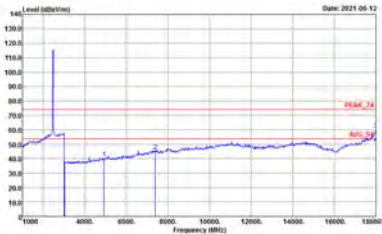
2.4GHz 2400~2483.5MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL Detector : Peak

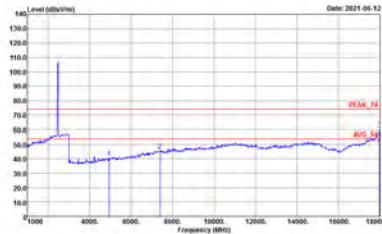
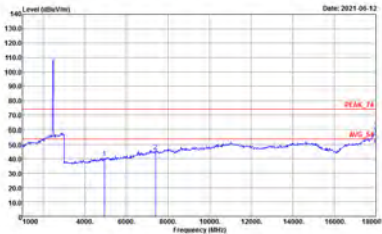


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH06 2437MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL Detector : Peak

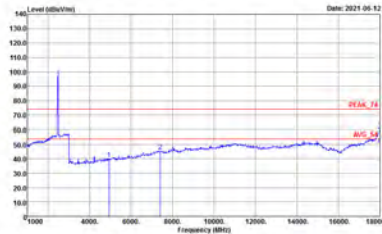
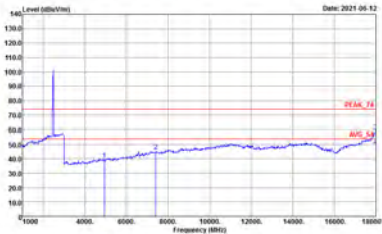


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH11 2462MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HF Condition : PEAK_74 3m 9120D_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HF Condition : PEAK_74 3m 9120D_15_1620 VERTICAL Detector : Peak

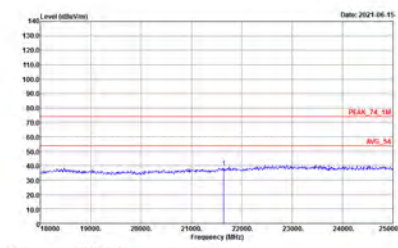
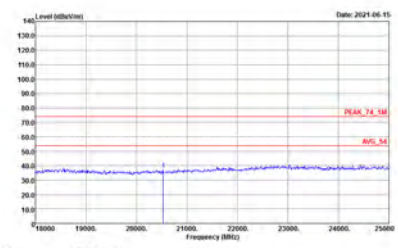


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH12 2462MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL Detector : Peak

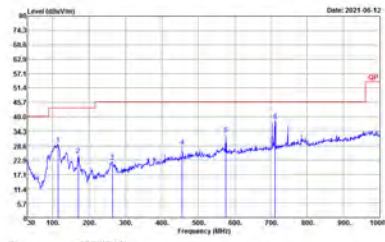
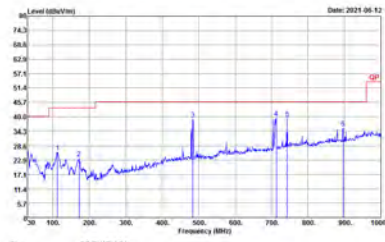


WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11n HT20 CH13 2472MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL Detector : Peak

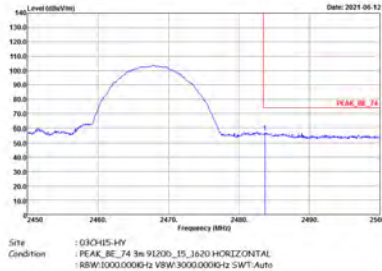
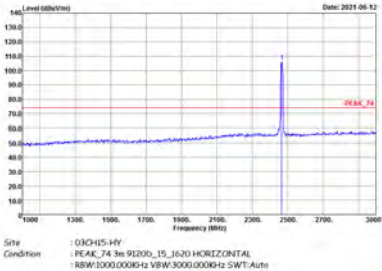
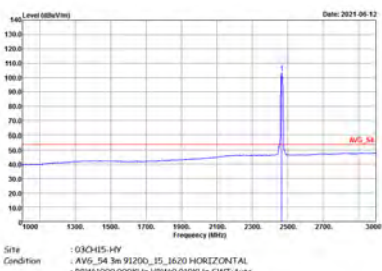
Emission above 18GHz
2.4GHz WIFI 802.11b (SHF)

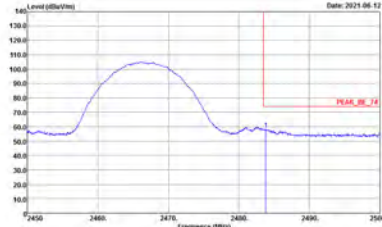
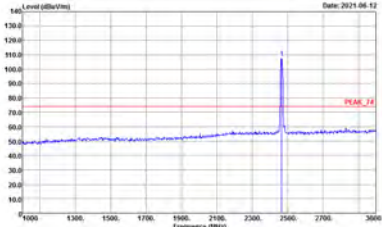
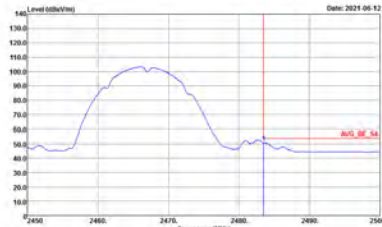
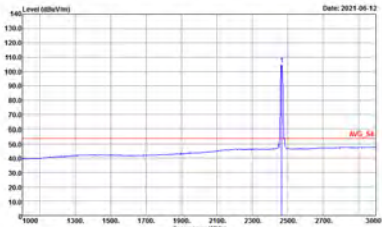
WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11b Ch12 Super High Frequency (SHF)	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 In SHF ANT_9170_00994 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : PEAK_74 In SHF ANT_9170_00994 VERTICAL Detector : Peak

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

WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11b LF	
1+2	Horizontal	Vertical
QP / Peak	 Site : 03CH15-HY Condition : QP 3m 81L06_41912_20210208 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : QP 3m 81L06_41912_20210208 VERTICAL Detector : Peak

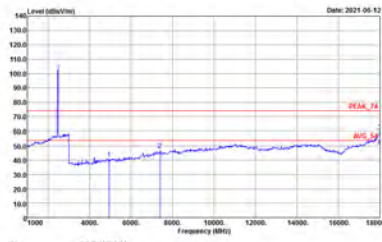
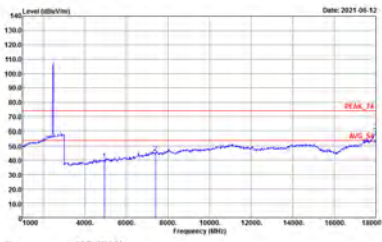
<EUT with Fixture 1>
2.4GHz 2400~2483.5MHz
WIFI 802.11b (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto Detector : Peak Project : 120234-01 Setting : 10.5	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto Detector : Peak Project : 120234-01 Setting : 10.5
	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto
Avg.		



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

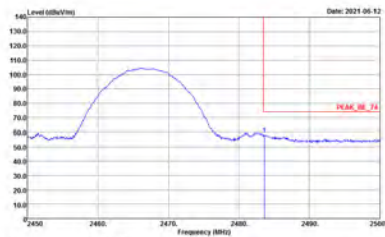
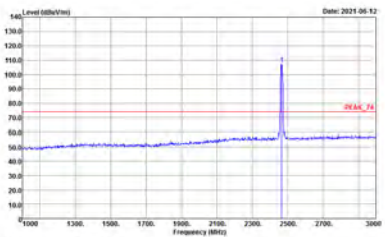
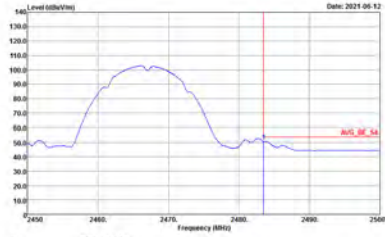
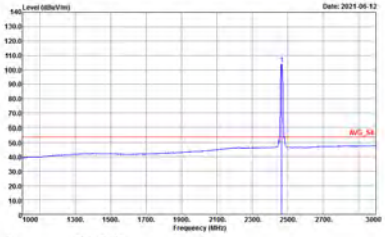
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH12 2467MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL Detector : Peak

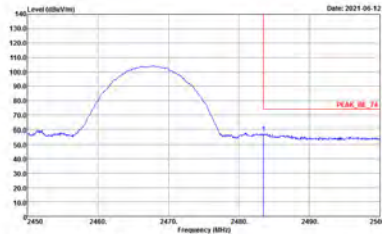
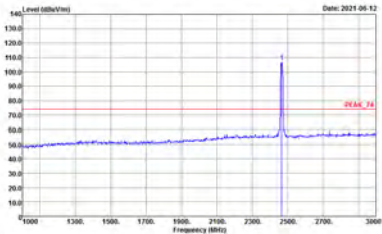
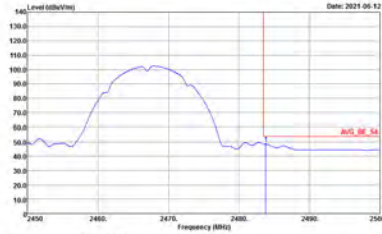
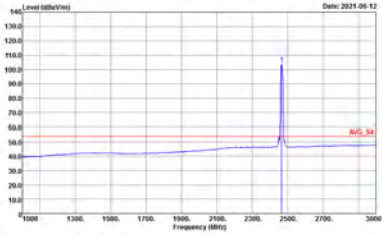


<EUT with Fixture 2>

2.4GHz 2400~2483.5MHz

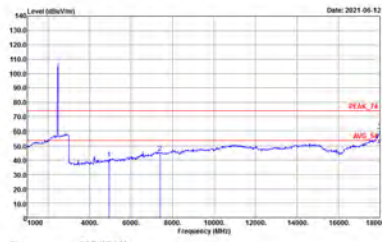
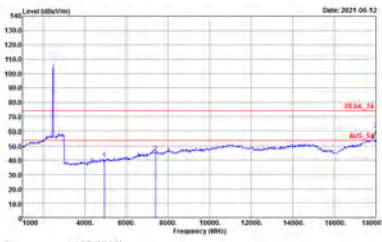
WIFI 802.11b (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000-Hz VBW:3000.0000-Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL RBW:1000.0000-Hz VBW:3000.0000-Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000-Hz VBW:0.0100-Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 HORIZONTAL RBW:1000.0000-Hz VBW:0.0100-Hz SWT:Auto

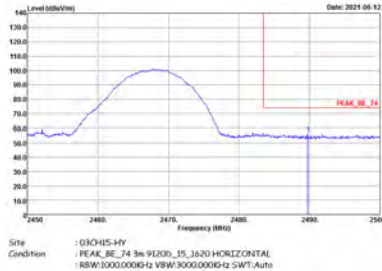
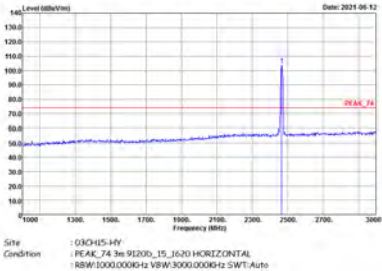
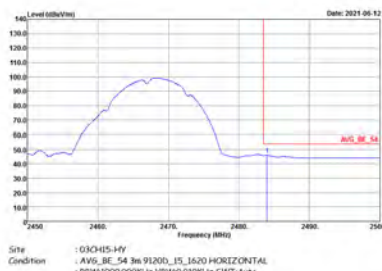
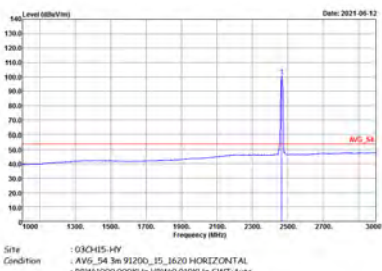
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VBW:0.0100Hz SWT:Auto

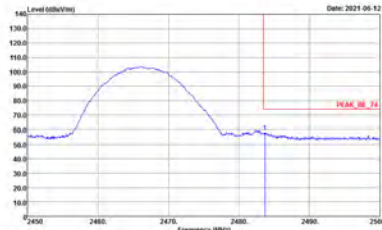
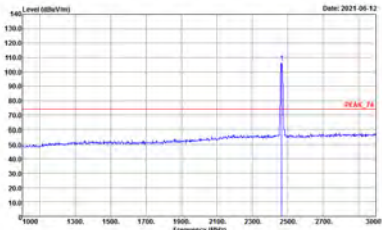
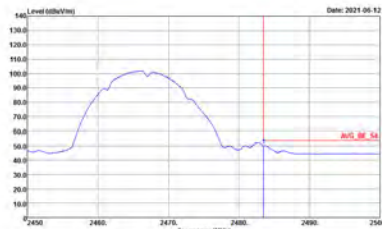
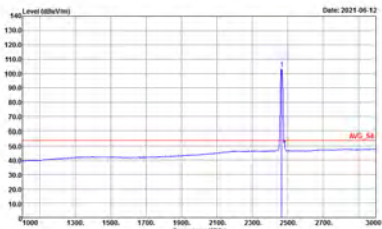


2.4GHz 2400~2483.5MHz
WIFI 802.11b (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH12 2467MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL Detector : Peak

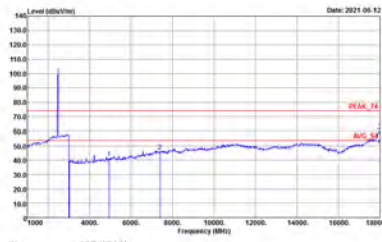
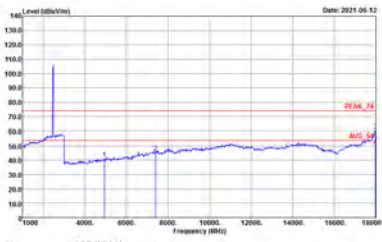
<EUT with Fixture 3>
2.4GHz 2400~2483.5MHz
WIFI 802.11b (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1+2	Horizontal	Fundamental
Peak		
Avg.		

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PEAK_08_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:3000.0000Hz SWT:Auto
Avg.	 Site : 03CH15-HY Condition : AVG_08_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto	 Site : 03CH15-HY Condition : AVG_54 3m 91200_15_1620 VERTICAL RBW:1000.0000Hz VSW:0.0100Hz SWT:Auto



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

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH12 2467MHz	
1+2	Horizontal	Vertical
Peak Avg.	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 HORIZONTAL Detector : Peak	 Site : 03CH15-HY Condition : PEAK_74 3m 91200_15_1620 VERTICAL Detector : Peak



Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1+2	802.11b	99.29	-	-	10Hz	0.03
1+2	802.11g	100.00	-	-	10Hz	0.00
1+2	2.4GHz 802.11n HT20	100.00	-	-	10Hz	0.00

MIMO <Ant. 1+2>

